LONGHORN ARMY AMMUNITION PLANT KARNACK, TEXAS

ADMINISTRATIVE RECORD

Volume 31

2022

Bate Stamp Numbers
01129724 – 01131791

Prepared for

Department of the Army
Longhorn Army Ammunition Plant

1976–2022

LONGHORN ARMY AMMUNITION PLANT
KARNACK, TEXAS
ADMINISTRATIVE RECORD – CHRONOLOGICAL INDEX

VOLUME 31

2022

A.	Title:	(Cont'd) Report, File 2 – Final Pre-Design Investigation Report, LHAAP-29 Former TNT Production Area Group 2, Longhorn Army Ammunition Plant, Karnack, Texas
	Author(s):	Department of the Army
	Recipient:	U.S. Environmental Protection Agency and Texas Commission on Environmental Quality
	Date:	November 8, 2022
	Bate Stamp:	01129724 – 01131717
B.	Title:	Minutes – Final Monthly Managers' Meeting, Longhorn Army Ammunition Plant, October 19, 2022
	Author(s):	Department of the Army
	Recipient:	All Parties
	Date:	November 10, 2022
	Bate Stamp:	01131718 – 01131732
C.	Title:	Minutes – Final Minutes, Quarterly Restoration Advisory Board (RAB) Meeting, Longhorn Army Ammunition Plant, June 2022
	Author(s):	Bhate Environmental Associates, Inc.
	Recipient:	All Parties
	Date:	November 16, 2022
	Bate Stamp:	01131733 – 01131777
D.	Title:	Minutes – Final Monthly Managers' Meeting, Longhorn Army Ammunition Plant, November 16, 2022
	Author(s):	Department of the Army
	Recipient:	All Parties
	Date:	December 12, 2022
	Bate Stamp:	01131778 – 01131791

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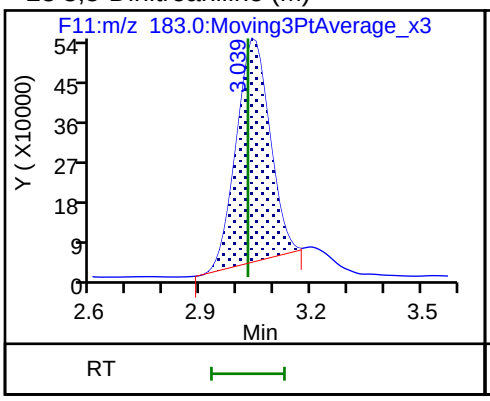
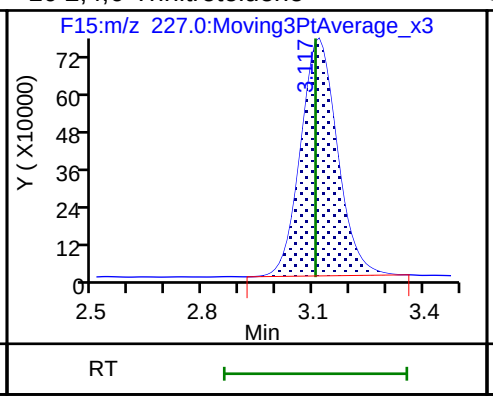
28 3,5-Dinitroaniline (M)



10 2,4,6-Trinitrotoluene



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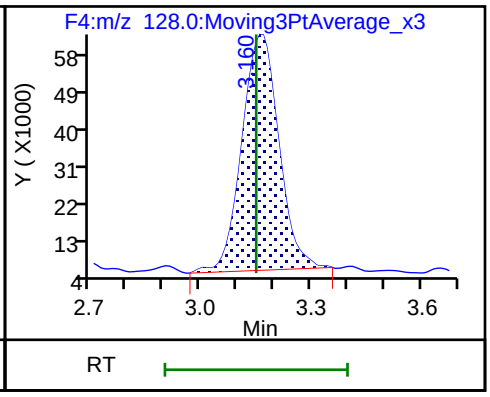

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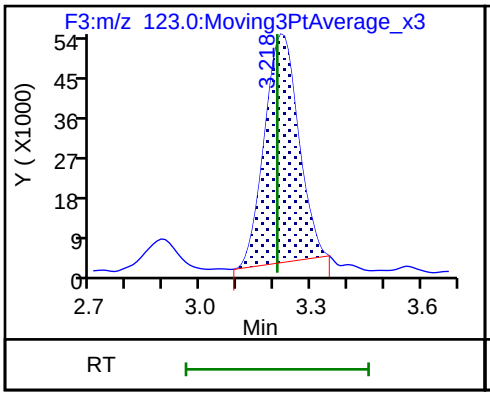

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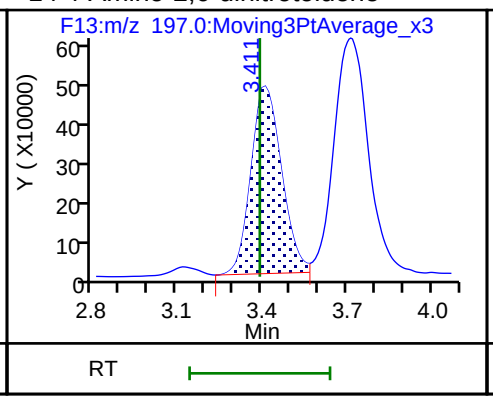

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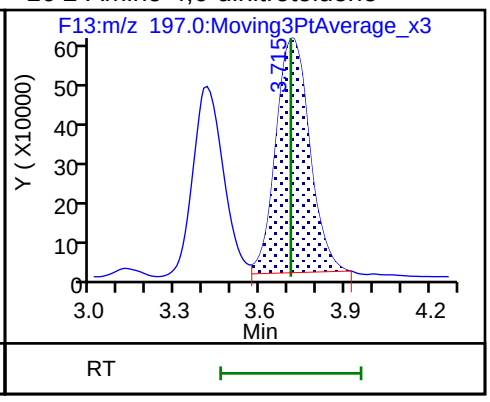

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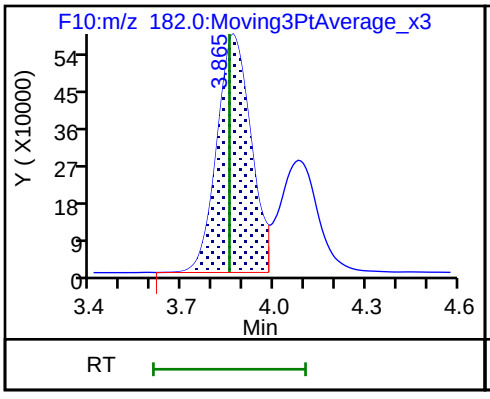

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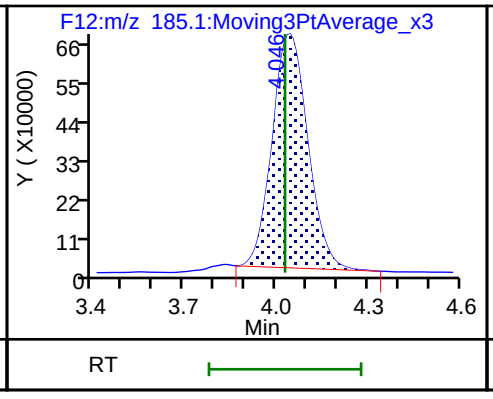

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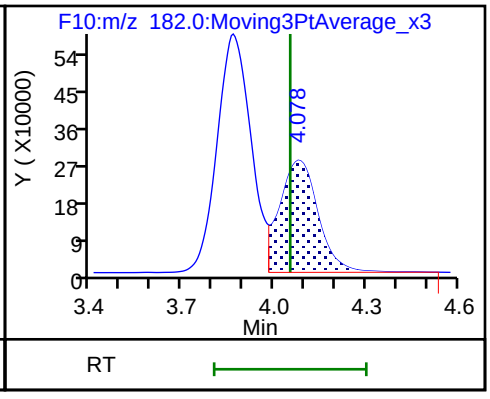

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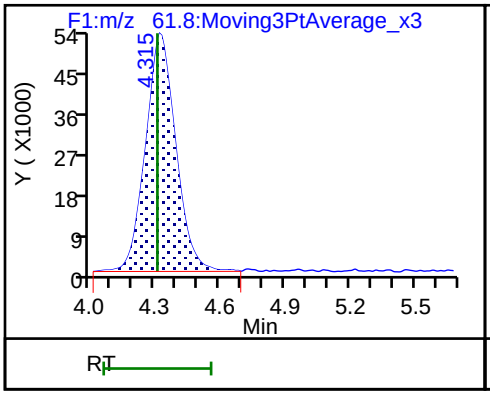

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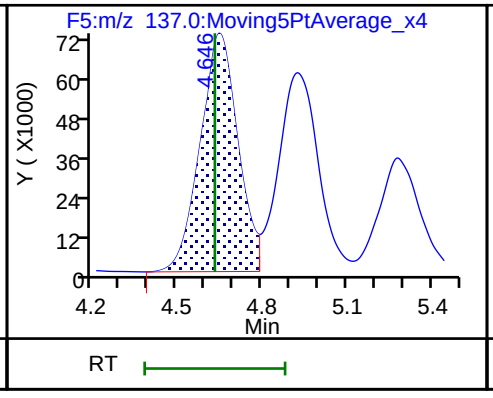

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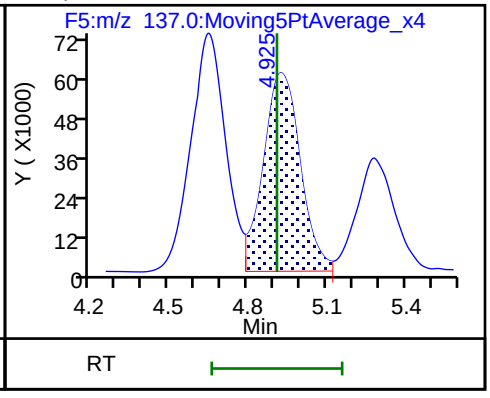

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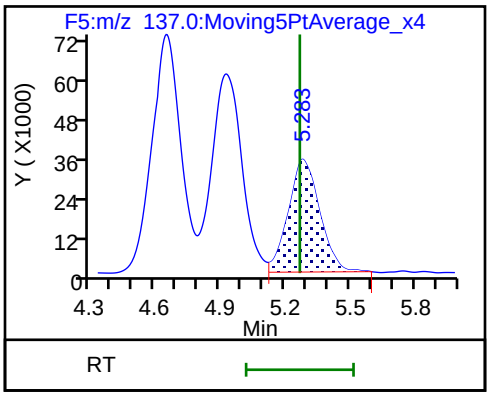
24 m-Nitrotoluene



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Eurofins Denver

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Injection Date: 05-Apr-2022 11:56:26 Instrument ID: LC_LCMS7
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 18
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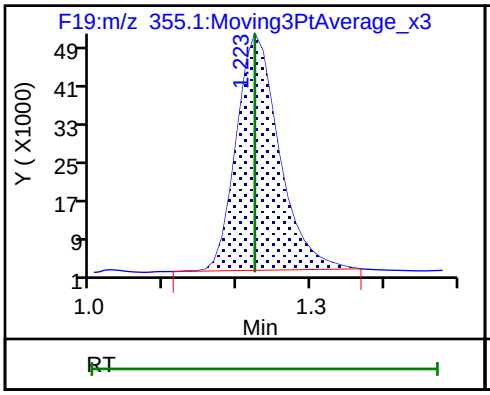
2 HMX



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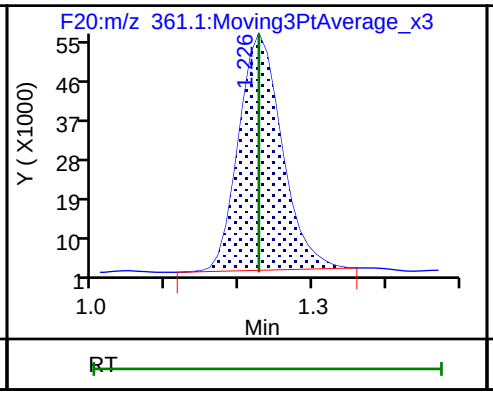

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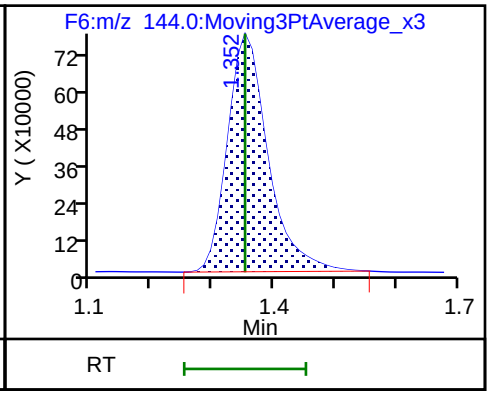

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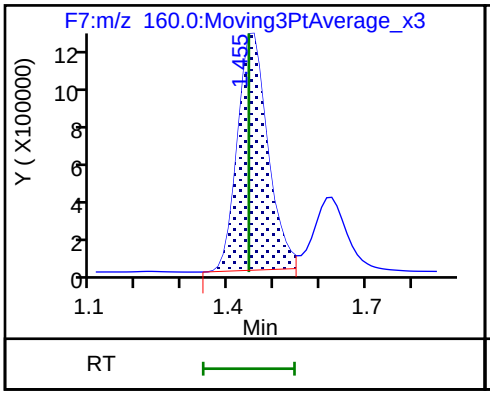

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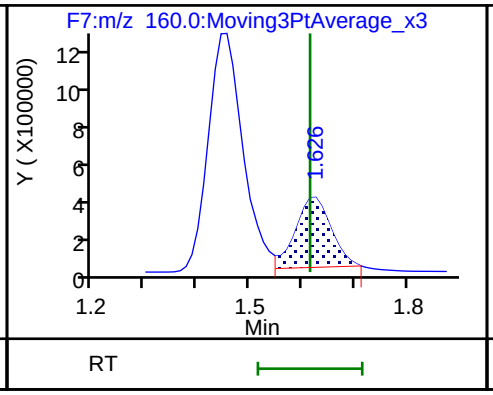

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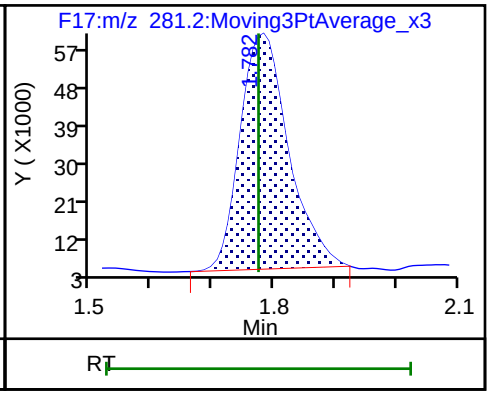

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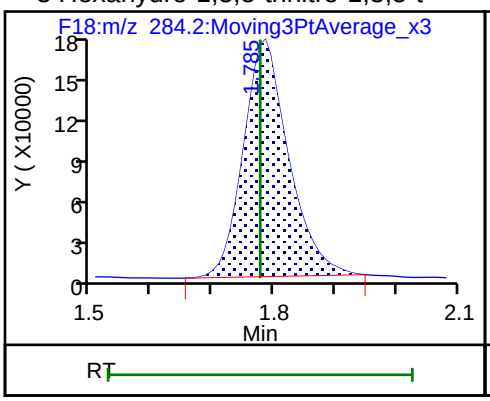
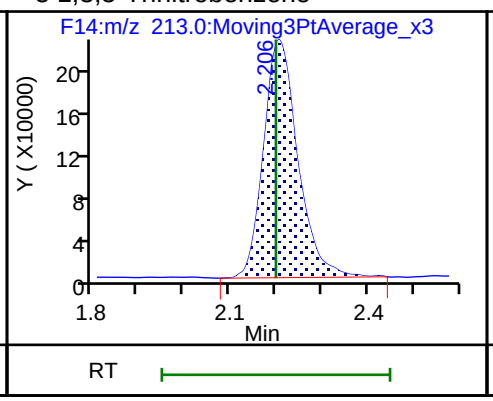
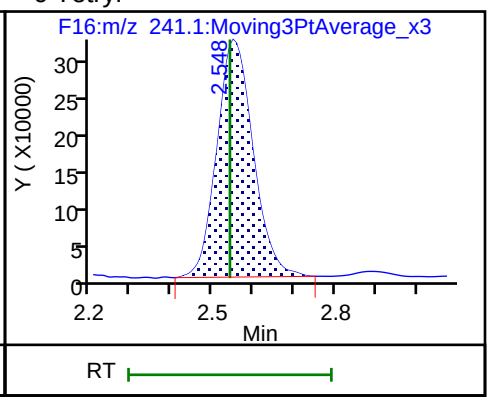


5 1,3,5-Trinitrobenzene



6 Tetryl



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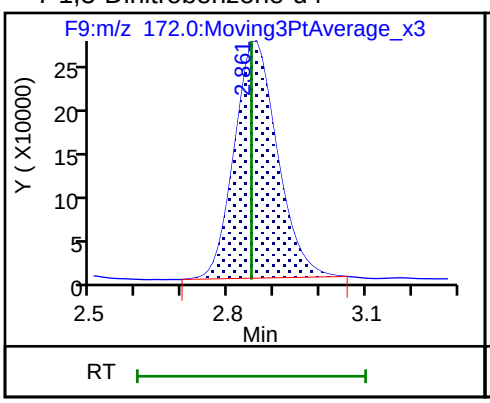

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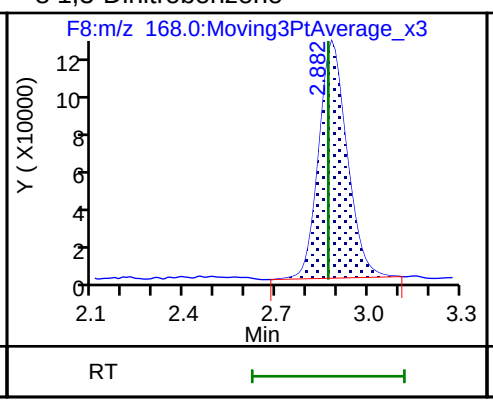
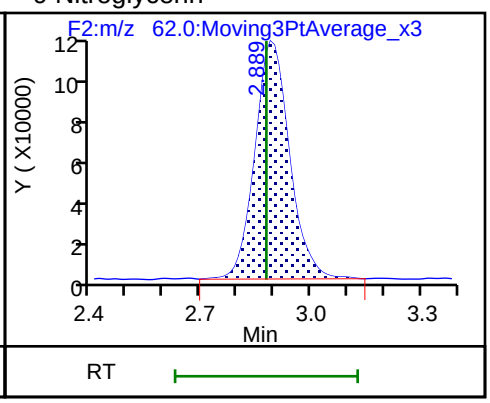


9 Nitroglycerin



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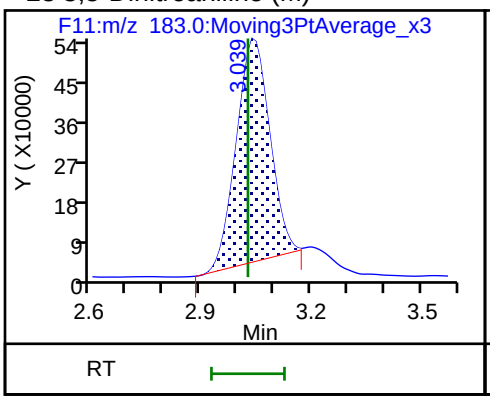
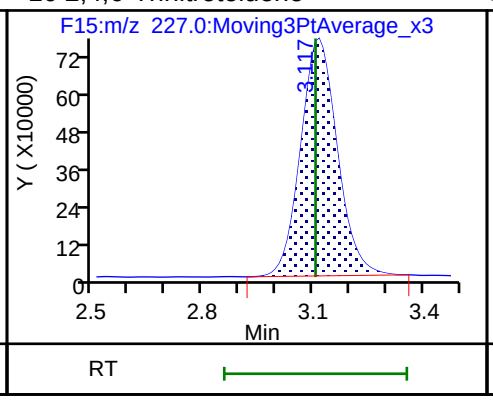
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05021.d

28 3,5-Dinitroaniline (M)



10 2,4,6-Trinitrotoluene



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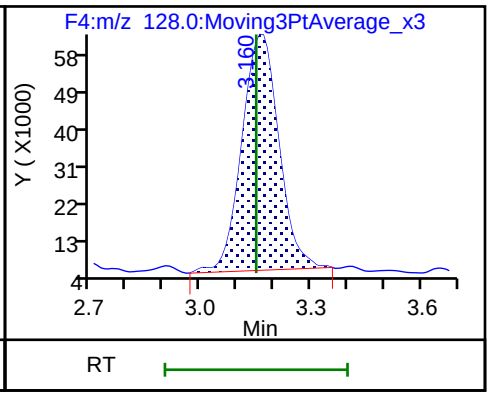

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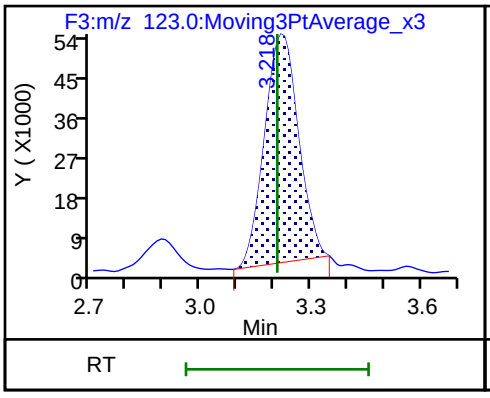

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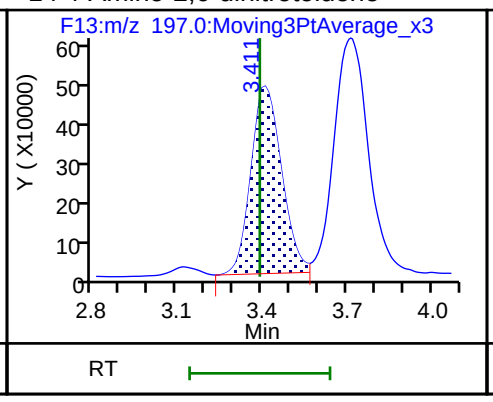

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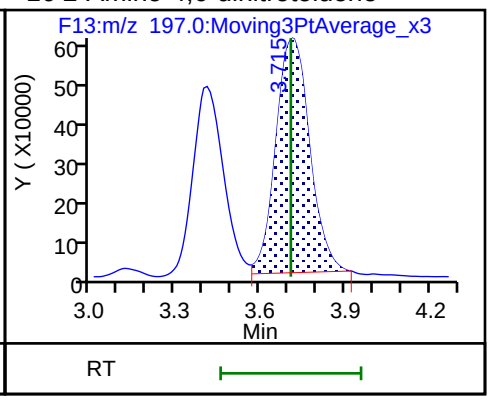

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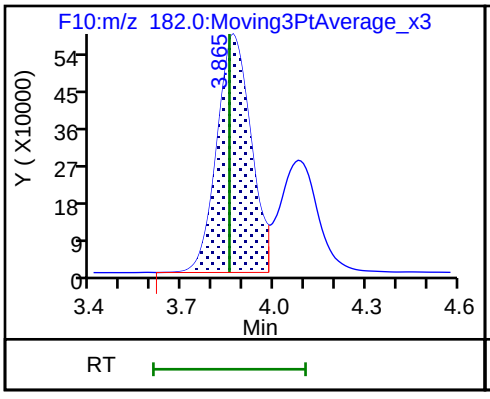

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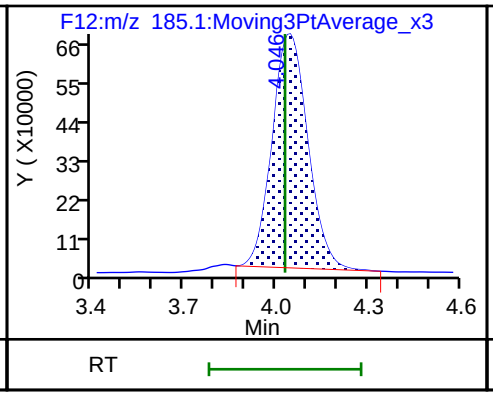

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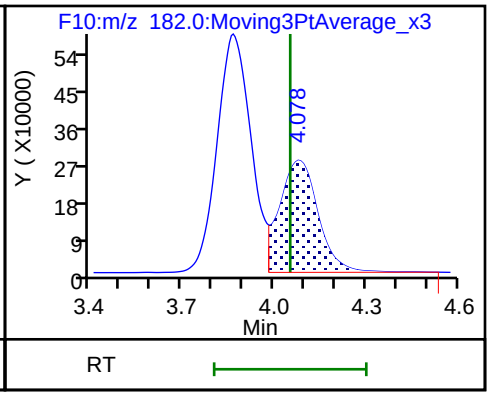

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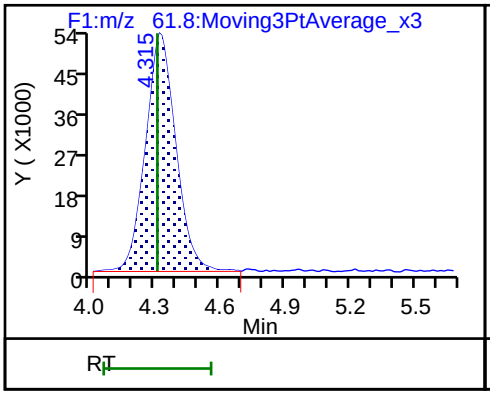
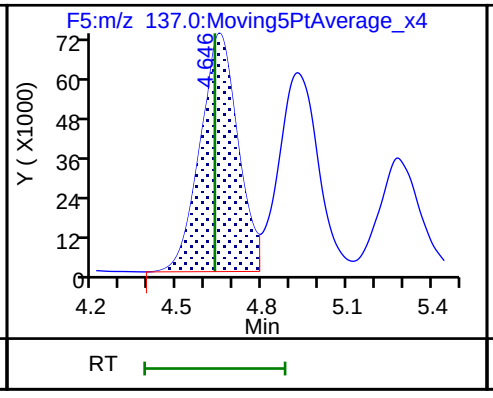


22 o-Nitrotoluene



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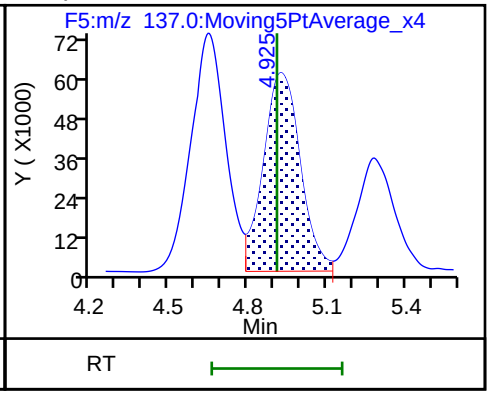

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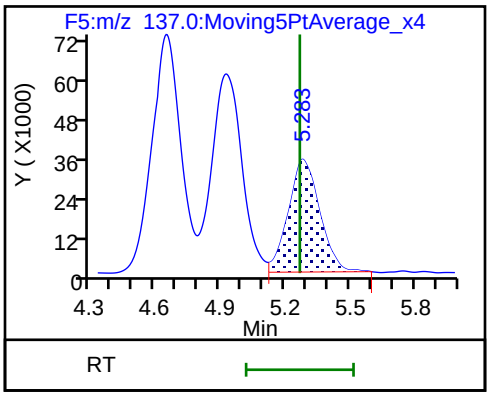
24 m-Nitrotoluene



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Chrom Revision: 2.3 18-Mar-2022 09:07:22
Manual Integration/User Assign Peak Report

Eurofins Denver

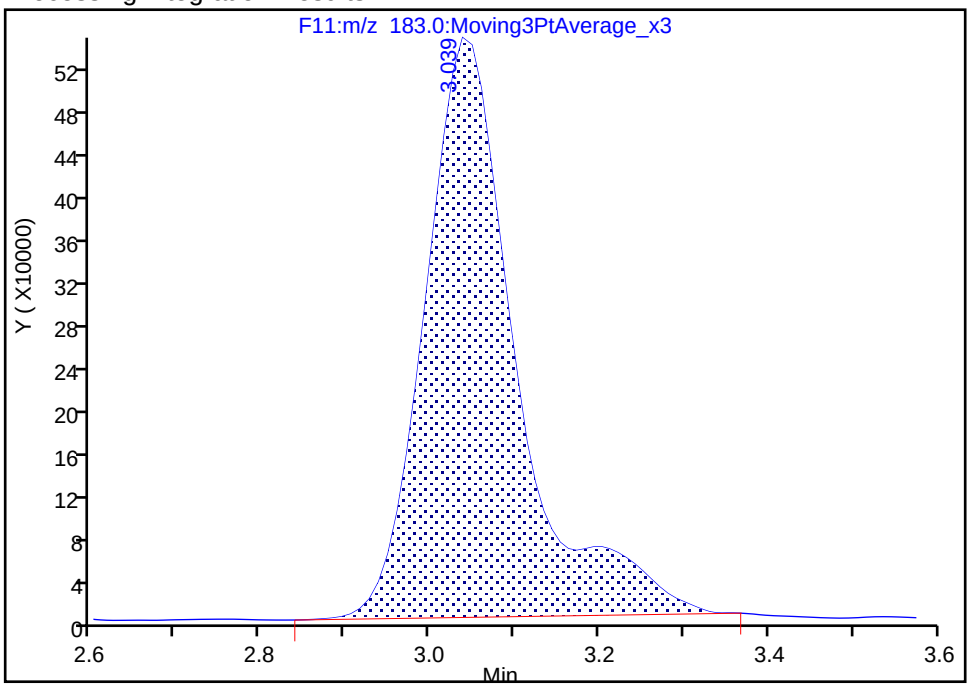
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05021.d
Injection Date: 05-Apr-2022 11:56:26 Instrument ID: LC_LCMS7
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 18
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F11:SIR

28 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

Processing Integration Results

RT: 3.04
Area: 4105082
Amount: 64.243198
Amount Units: ug/l



Manual Integration Results

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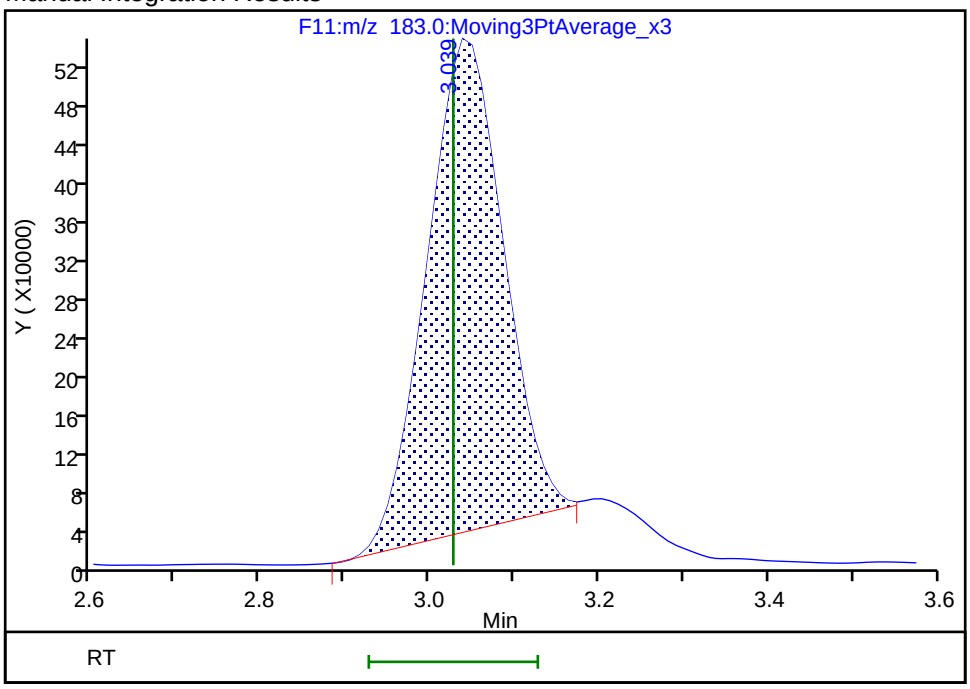

Reviewer: meyera, 05-Apr-2022 12:48:24
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 06-Apr-2022 06:44:13 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05021.d

Injection Date:	05-Apr-2022 11:56:26	Instrument ID:	LC_LCMS7
Lims ID:	CCV		
Client ID:			
Operator ID:	acm	ALS Bottle#:	5 Worklist Smp#: 18
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F11:SIR

28 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

Processing Integration Results

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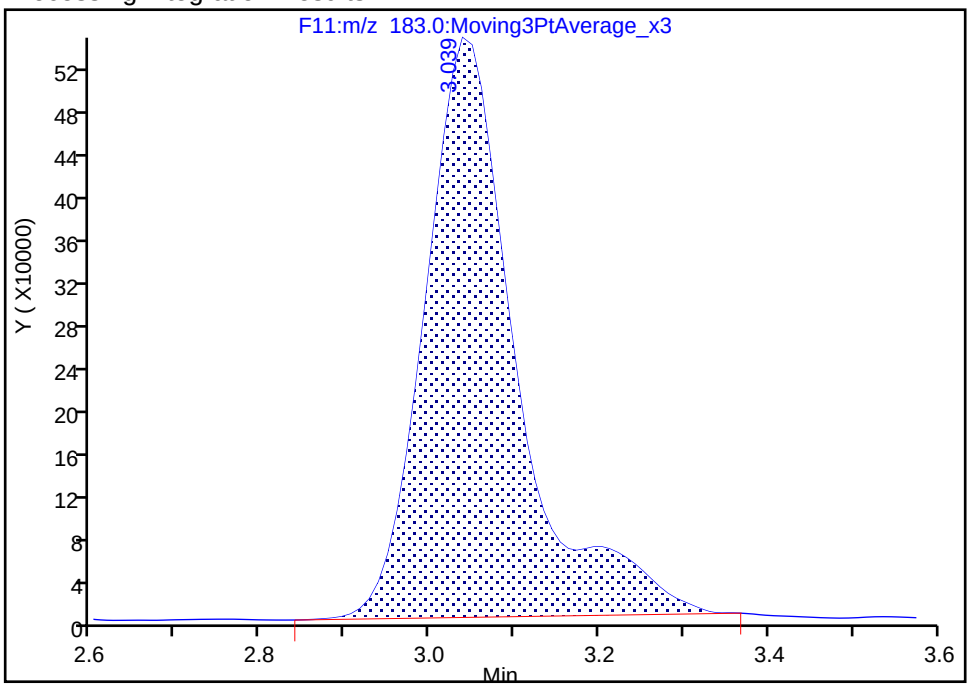
Amount Units: ug/l



Manual Integration Results

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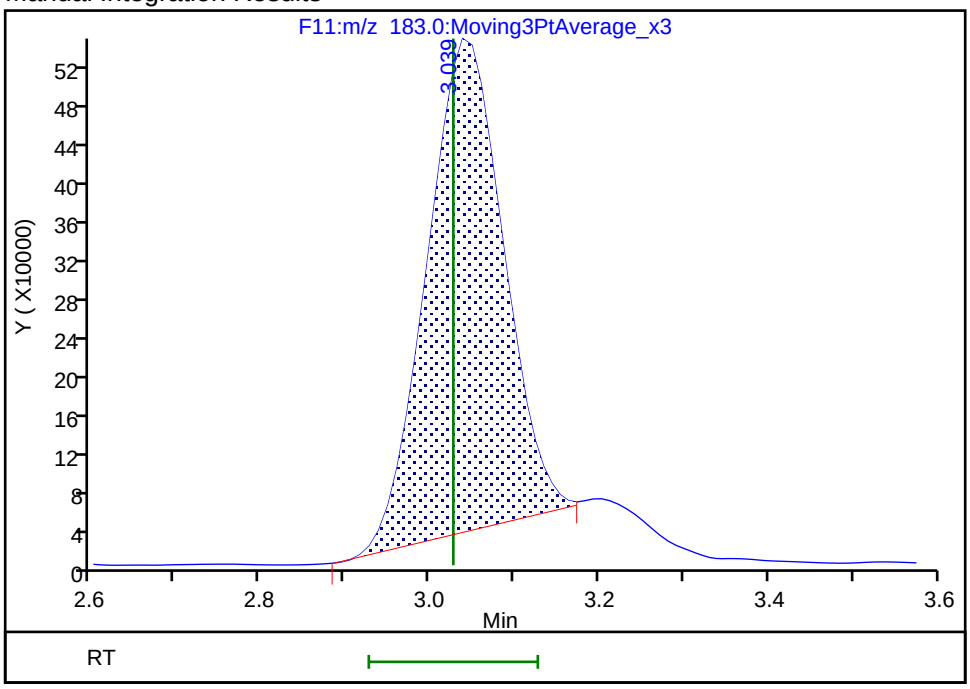


Reviewer: meyera, 05-Apr-2022 12:48:24

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-160187-1

SDG No.:

Lab Sample ID: CCV 280-570785/28 Calibration Date: 04/05/2022 13:00

Instrument ID: LC_LCMS7 Calib Start Date: 04/05/2022 10:20

GC Column: Synergi Hydro ID: Calib End Date: 04/05/2022 10:58

Lab File ID: ex722D05031.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin1		2.027		92.1	100	-7.9	30.0
TNX	Lin1		5.102		98.0	100	-2.1	30.0
DNX	Lin1		7.930		99.6	100	-0.5	30.0
MNX	Lin1		2.068		120	117	3.2	30.0
RDX	Lin1		0.8516		110	100	10.2	30.0
1,3,5-Trinitrobenzene	Lin1		1.706		97.8	100	-2.4	30.0
Tetryl	Lin1		2.765		97.5	100	-2.7	30.0
1,3-Dinitrobenzene	Lin1		1.074		98.8	100	-1.4	30.0
Nitroglycerin	Lin1		1.064		102	101	1.4	30.0
3,5-Dinitroaniline	Lin1		1.464		100	100	0.3	30.0
2,4,6-Trinitrotoluene	Lin1		7.756		98.4	100	-1.9	30.0
Nitrobenzene	Lin1		0.5097		95.4	100	-4.9	30.0
4-Amino-2,6-dinitrotoluene	Lin1		1.636		99.4	100	-0.7	30.0
2-Amino-4,6-dinitrotoluene	Lin1		2.298		101	100	1.1	30.0
2,6-Dinitrotoluene	Lin1		2.016		101	100	0.4	30.0
2,4-Dinitrotoluene	Lin1		1.059		101	100	0.5	30.0
PETN	Lin1		0.2461		106	99.6	6.3	30.0
o-Nitrotoluene	Lin1		0.3057		98.6	100	-1.4	30.0
p-Nitrotoluene	Lin1		0.2660		99.0	100	-1.2	30.0
m-Nitrotoluene	Lin1		0.1565		97.6	100	-2.5	30.0
Nitrobenzene-d5	Lin1		0.5944		94.2	100	-5.8	30.0

Report Date: 06-Apr-2022 07:09:52 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05031.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 05-Apr-2022 13:00:25 ALS Bottle#: 6 Worklist Smp#: 28
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:09:52 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 13:36:05
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.223	1.223	0.0	0.998	412247	92.1	94.9	
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		254189	125.0	190	
36 TNX								
144.0	1.352	1.365	0.0	0.757	7247371	98.0	808	
33 DNX								
160.0	1.444	1.458	0.0	0.809	11263408	99.6	252	
34 MNX								
160.0	1.626	1.630	0.011	0.911	3424815	120.5	74.7	
4 RDX								
281.2	1.774	1.791	0.0	0.994	656165	110.2	85.8	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.785	1.777	0.008		963118	125.0	138	
5 1,3,5-Trinitrobenzene								
213.0	2.206	2.216	0.007	0.771	2425103	97.8	184	
6 Tetryl								
241.1	2.548	2.560	0.008	0.891	3931674	97.5	118	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1835590	129.4	205	
8 1,3-Dinitrobenzene								
168.0	2.882	2.893	0.011	1.007	1526561	98.8	185	
9 Nitroglycerin								
62.0	2.889	2.900	0.011	1.010	1518637	102.0	722	
28 3,5-Dinitroaniline								
183.0	3.039	3.051	0.012	1.062	6590653	100.3	49.5	

Report Date: 06-Apr-2022 07:09:52 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05031.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.117	3.134	0.010	0.770	11049576	98.4	1603	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	843598	94.2	104	
12 Nitrobenzene								
123.0	3.218	3.236	0.010	0.795	726124	95.4	38.4	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.411	3.420	0.020	0.843	7373660	99.4	68.0	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.715	3.740	0.007	0.918	10388274	101.5	91.9	
17 2,6-Dinitrotoluene								
182.0	3.865	3.885	0.013	0.955	9113768	100.8	653	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		5628167	125.0	122	
19 2,4-Dinitrotoluene								
182.0	4.078	4.087	0.026	1.008	4785470	100.9	317	
20 PETN								
61.8	4.305	4.342	0.0	1.064	1103670	105.9	442	
22 o-Nitrotoluene								
137.0	4.641	4.671	0.010	1.147	1376632	98.6	340	
23 p-Nitrotoluene								
137.0	4.930	4.952	0.020	1.218	1200233	99.0	291	
24 m-Nitrotoluene								
137.0	5.283	5.314	0.015	1.306	705411	97.6	160	

QC Flag Legend

Processing Flags

Reagents:

8321EXcalprim_00029	Amount Added: 10.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 10.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 06-Apr-2022 07:09:52 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05031.d

Injection Date: 05-Apr-2022 13:00:25 Instrument ID: LC_LCMS7

Lims ID: CCV

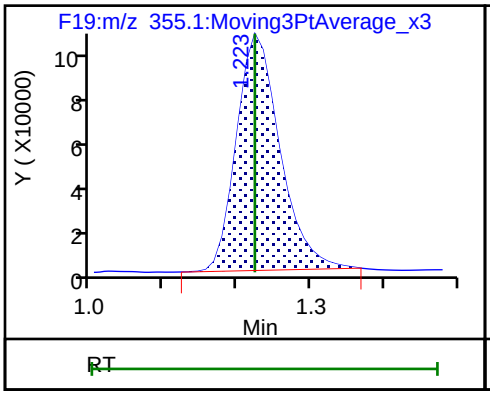
Client ID:

Operator ID: acm ALS Bottle#: 6 Worklist Smp#: 28

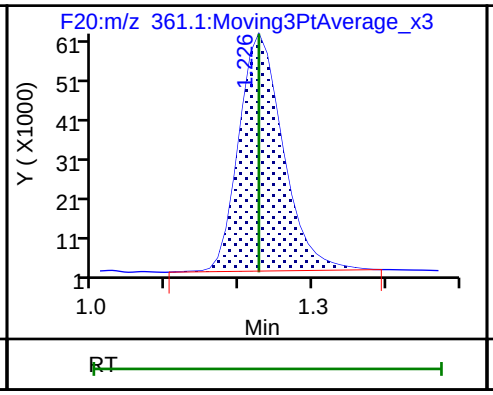
Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

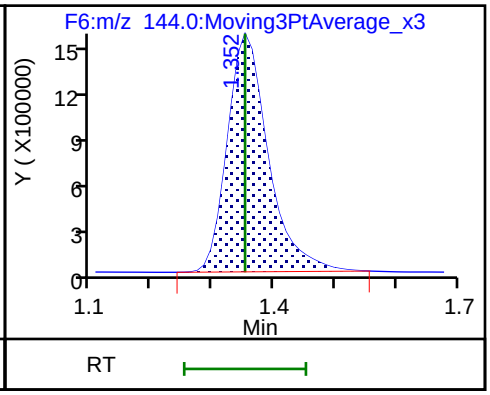
2 HMX



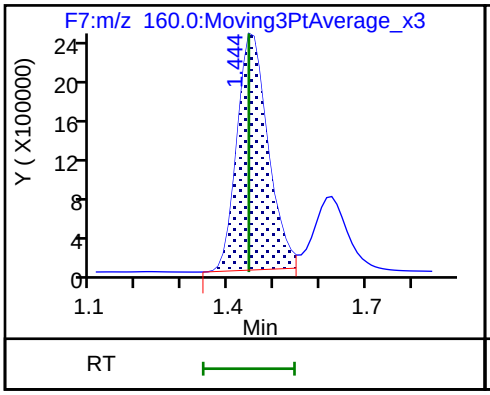
* 1 HMX-13C4



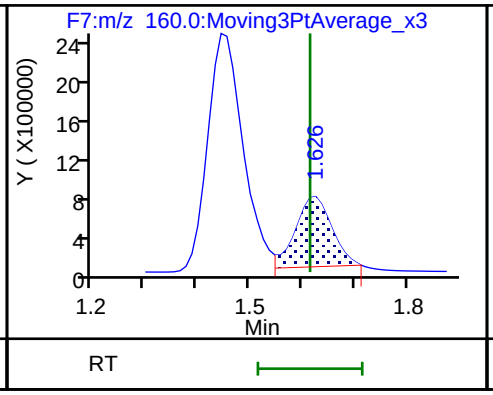
36 TNX



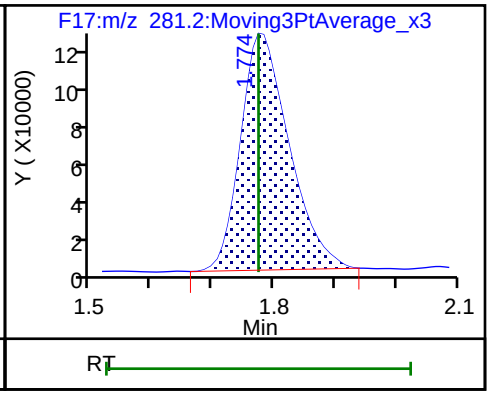
33 DNX



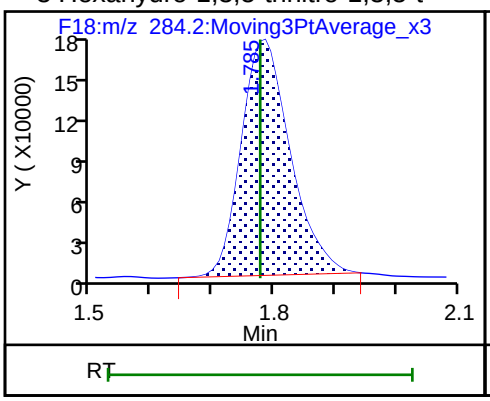
34 MNX



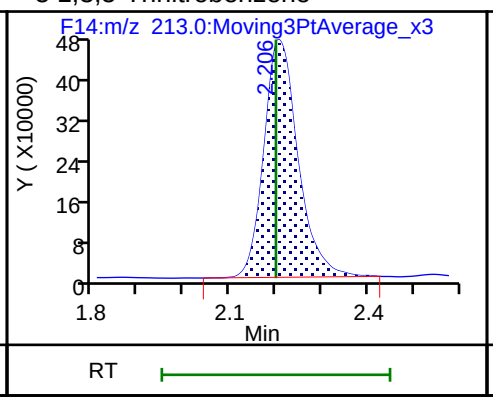
4 RDX



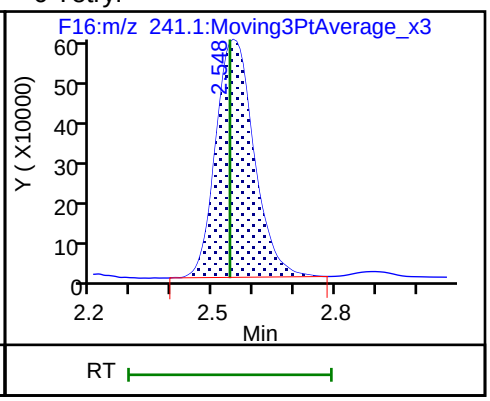
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



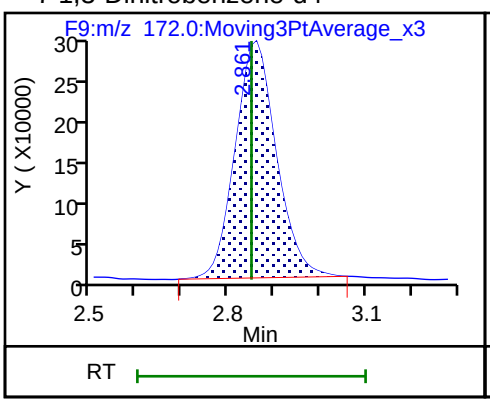
5 1,3,5-Trinitrobenzene



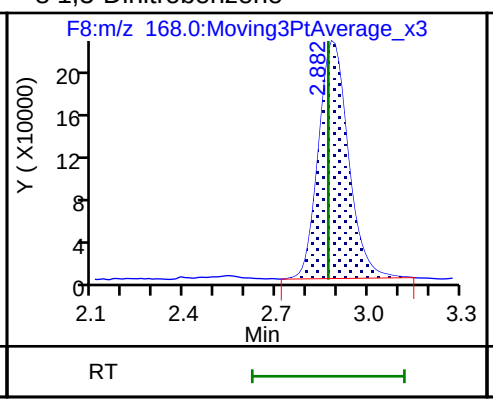
6 Tetryl



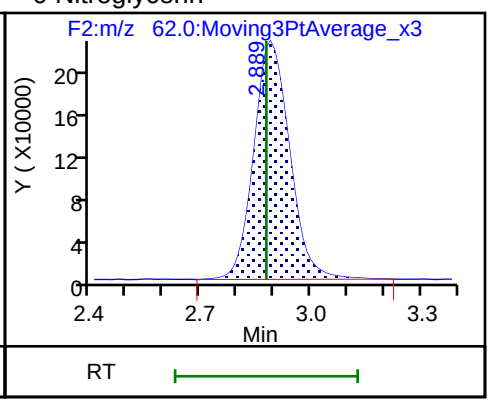
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

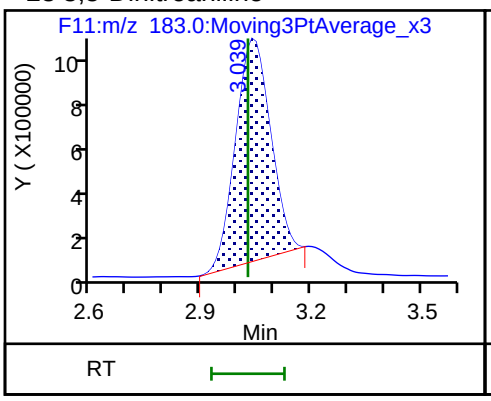


9 Nitroglycerin

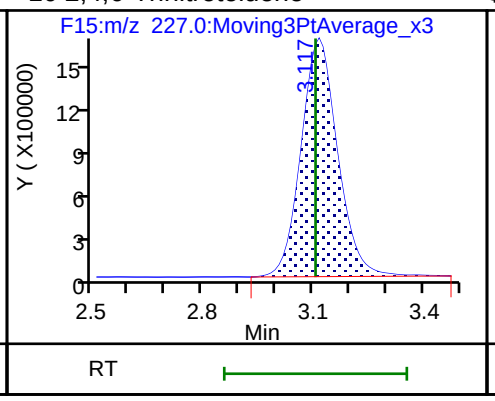


Report Date: 06-Apr-2022 07:09:52 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05031.d

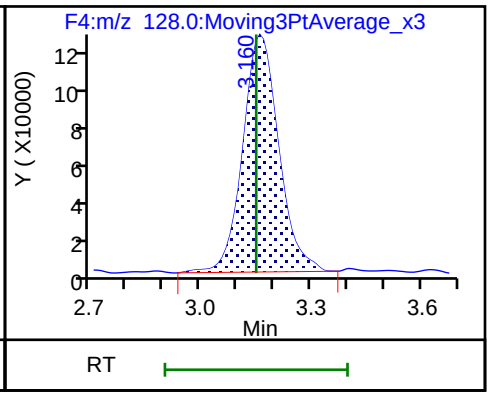
28 3,5-Dinitroaniline



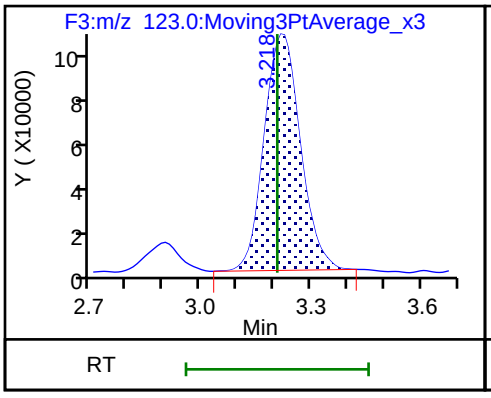
10 2,4,6-Trinitrotoluene



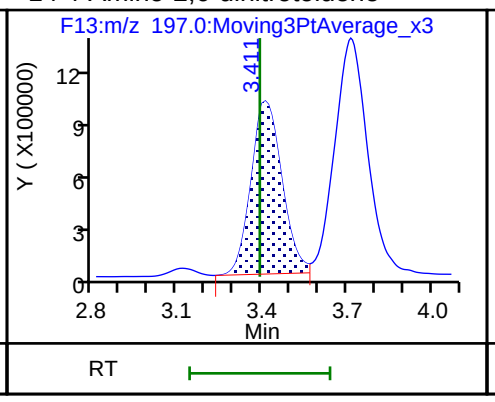
$ 11 Nitrobenzene-d5



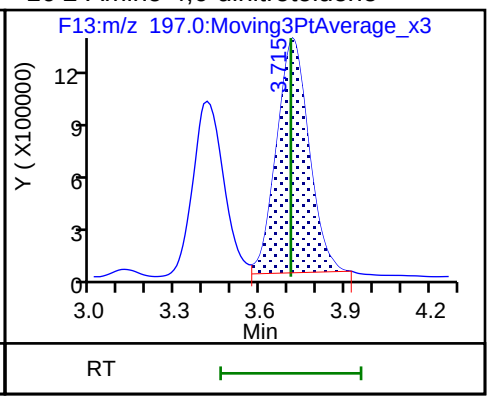
12 Nitrobenzene



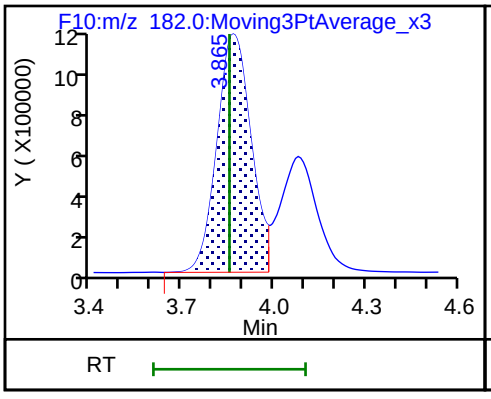
14 4-Amino-2,6-dinitrotoluene



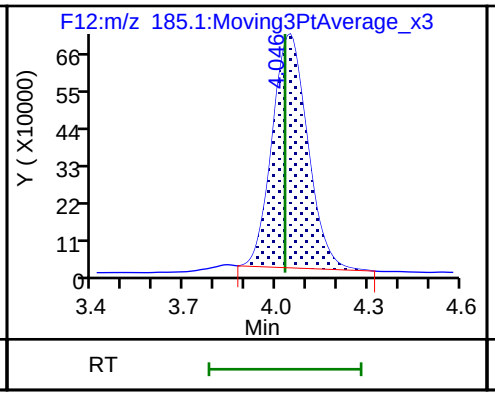
16 2-Amino-4,6-dinitrotoluene



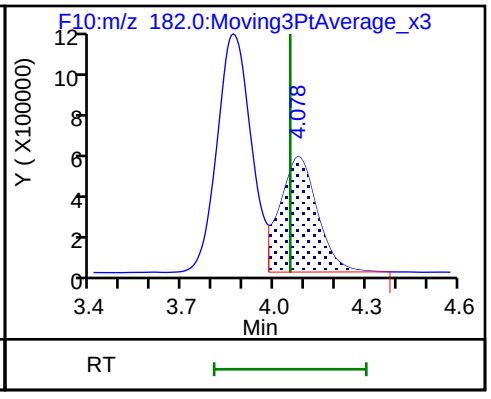
17 2,6-Dinitrotoluene



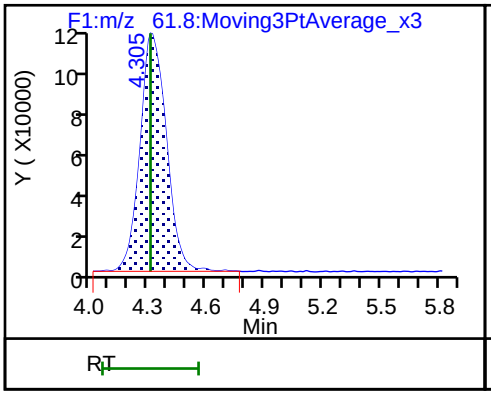
* 18 2,4-dinitrotoluene-d3



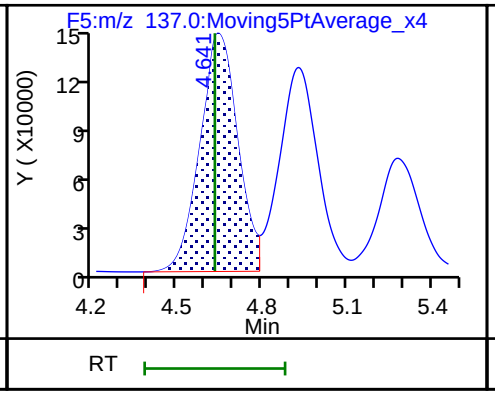
19 2,4-Dinitrotoluene



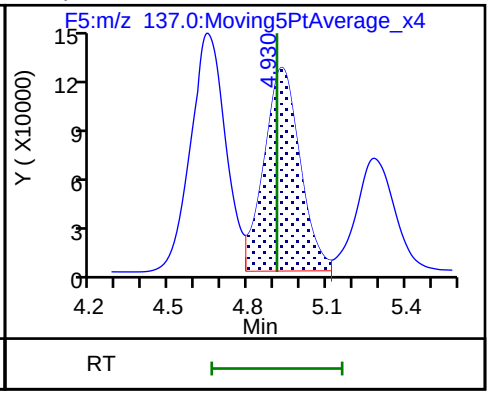
20 PETN



22 o-Nitrotoluene



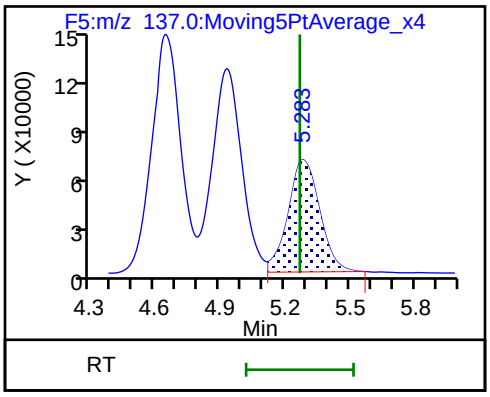
23 p-Nitrotoluene



Report Date: 06-Apr-2022 07:09:52 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05031.d

24 m-Nitrotoluene



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-160187-1

SDG No.:

Lab Sample ID: CCV 280-570785/39 Calibration Date: 04/05/2022 14:10

Instrument ID: LC_LCMS7 Calib Start Date: 04/05/2022 10:20

GC Column: Synergi Hydro ID: Calib End Date: 04/05/2022 10:58

Lab File ID: ex722D05042.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin1		2.263		51.1	50.0	2.2	30.0
TNX	Lin1		5.307		51.0	50.1	1.8	30.0
DNX	Lin1		8.241		51.3	50.1	2.6	30.0
MNX	Lin1		2.115		60.4	58.4	3.5	30.0
RDX	Lin1		0.8539		54.3	50.0	8.5	30.0
1,3,5-Trinitrobenzene	Lin1		1.615		46.2	50.1	-7.7	30.0
Tetryl	Lin1		2.923		51.8	50.1	3.3	30.0
1,3-Dinitrobenzene	Lin1		1.148		52.9	50.1	5.5	30.0
Nitroglycerin	Lin1		1.052		50.3	50.3	0.0	30.0
3,5-Dinitroaniline	Lin1		1.500		51.1	50.0	2.1	30.0
2,4,6-Trinitrotoluene	Lin1		7.679		48.6	50.2	-3.2	30.0
Nitrobenzene	Lin1		0.5544		52.4	50.2	4.3	30.0
4-Amino-2,6-dinitrotoluene	Lin1		1.677		50.9	50.1	1.7	30.0
2-Amino-4,6-dinitrotoluene	Lin1		2.334		51.5	50.2	2.5	30.0
2,6-Dinitrotoluene	Lin1		2.078		51.8	50.2	3.1	30.0
2,4-Dinitrotoluene	Lin1		1.050		49.6	50.2	-1.1	30.0
PETN	Lin1		0.2425		52.5	49.8	5.4	30.0
o-Nitrotoluene	Lin1		0.3194		51.6	50.0	3.2	30.0
p-Nitrotoluene	Lin1		0.2728		50.6	50.1	1.0	30.0
m-Nitrotoluene	Lin1		0.1596		49.8	50.1	-0.5	30.0
Nitrobenzene-d5	Lin1		0.6103		47.9	50.0	-4.2	30.0

Report Date: 06-Apr-2022 07:10:00 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05042.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 05-Apr-2022 14:10:49 ALS Bottle#: 5 Worklist Smp#: 39
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:10:00 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 14:53:58
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.223	1.223	0.0	0.998	215441	51.1	66.6	
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		238032	125.0	256	
36 TNX								
144.0	1.352	1.365	0.0	0.757	3825397	51.0	482	
33 DNX								
160.0	1.444	1.458	0.0	0.809	5939869	51.3	257	
34 MNX								
160.0	1.626	1.630	0.011	0.911	1776928	60.4	74.5	
4 RDX								
281.2	1.782	1.791	0.008	0.998	293221	54.3	50.0	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.785	1.777	0.008		858513	125.0	163	
5 1,3,5-Trinitrobenzene								
213.0	2.202	2.216	0.003	0.773	1165411	46.2	148	
6 Tetryl								
241.1	2.548	2.560	0.008	0.894	2108677	51.8	90.7	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.850	2.850	0.0		1862929	129.4	259	
8 1,3-Dinitrobenzene								
168.0	2.882	2.893	0.011	1.011	828391	52.9	177	
9 Nitroglycerin								
62.0	2.889	2.900	0.011	1.014	761902	50.3	238	
28 3,5-Dinitroaniline								
183.0	3.039	3.051	0.012	1.066	3471879	51.1	54.4	

Report Date: 06-Apr-2022 07:10:00 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05042.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.117	3.134	0.010	0.772	5551463	48.6	394	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.783	439574	47.9	64.8	
12 Nitrobenzene								
123.0	3.218	3.236	0.010	0.797	400787	52.4	36.3	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.411	3.420	0.020	0.845	3885663	50.9	66.1	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.721	3.740	0.013	0.922	5423092	51.5	87.7	
17 2,6-Dinitrotoluene								M
182.0	3.858	3.885	0.006	0.956	4828075	51.8	451	M
* 18 2,4-dinitrotoluene-d3								
185.1	4.037	4.028	0.009		5786136	125.0	109	
19 2,4-Dinitrotoluene								M
182.0	4.078	4.087	0.026	1.010	2438892	49.6	221	M
20 PETN								
61.8	4.315	4.342	0.010	1.069	559092	52.5	201	
22 o-Nitrotoluene								
137.0	4.641	4.671	0.010	1.150	739173	51.6	197	
23 p-Nitrotoluene								
137.0	4.930	4.952	0.020	1.221	632683	50.6	161	
24 m-Nitrotoluene								
137.0	5.283	5.314	0.015	1.309	369832	49.8	88.1	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

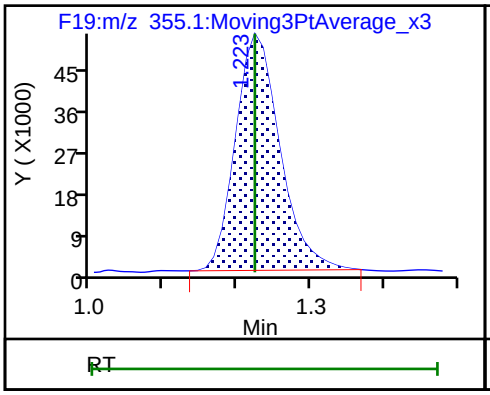
8321EXcalprim_00029	Amount Added: 5.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 5.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 06-Apr-2022 07:10:00 Chrom Revision: 2.3 18-Mar-2022 09:07:22

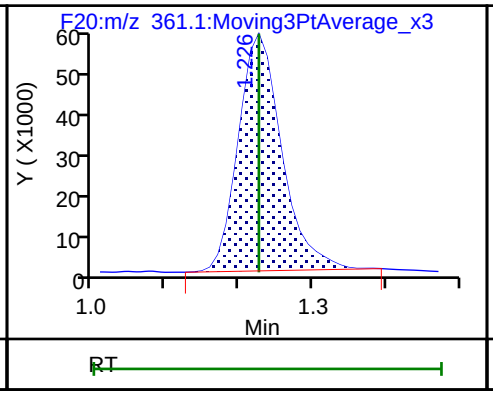
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05042.d
Injection Date: 05-Apr-2022 14:10:49 Instrument ID: LC_LCMS7
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 39
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

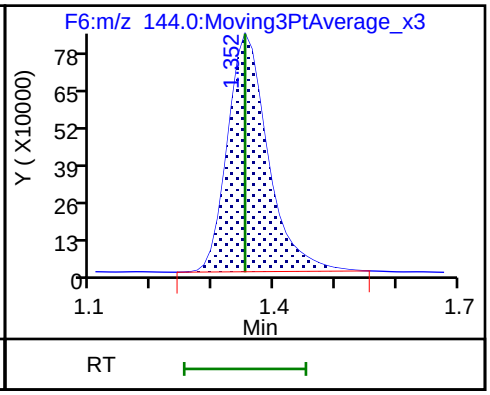
2 HMX



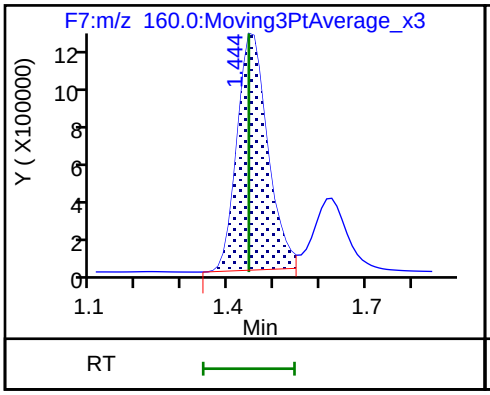
* 1 HMX-13C4



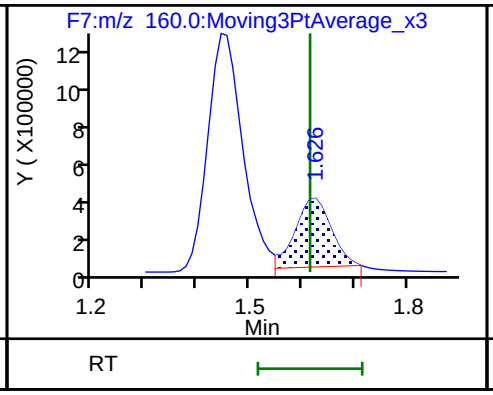
36 TNX



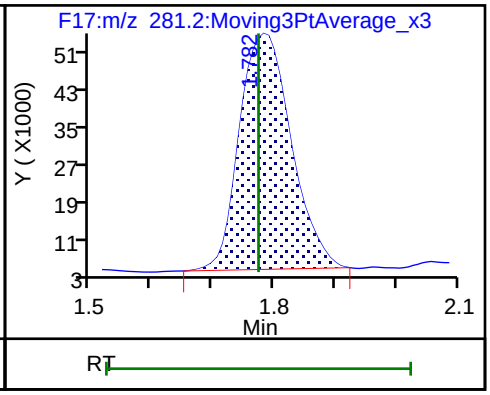
33 DNX



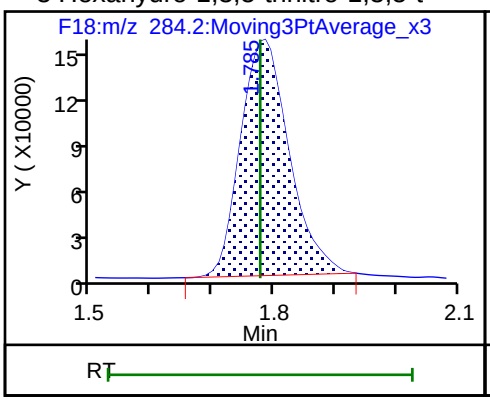
34 MNX



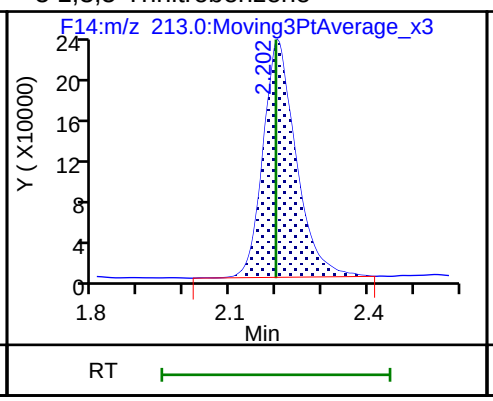
4 RDX



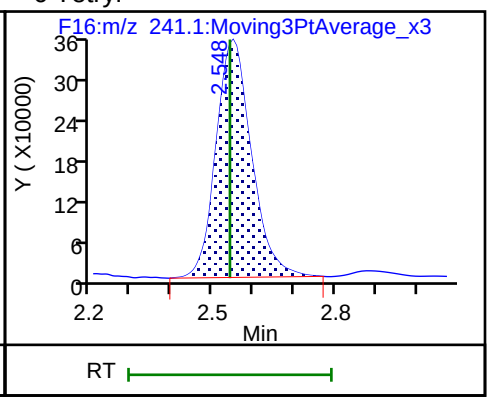
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



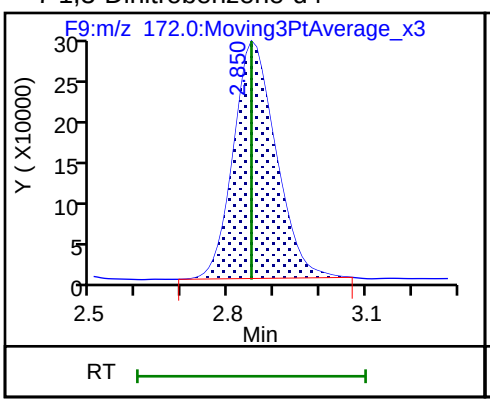
5 1,3,5-Trinitrobenzene



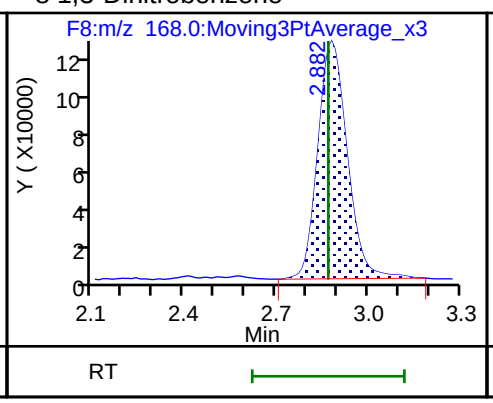
6 Tetryl



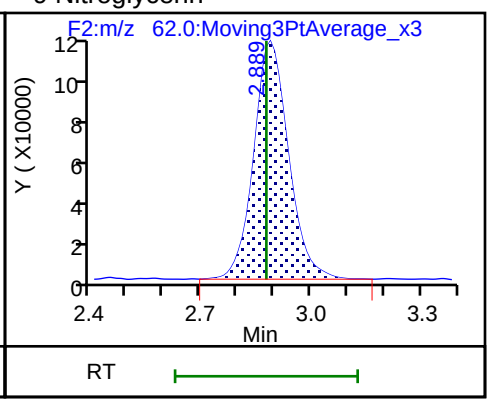
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



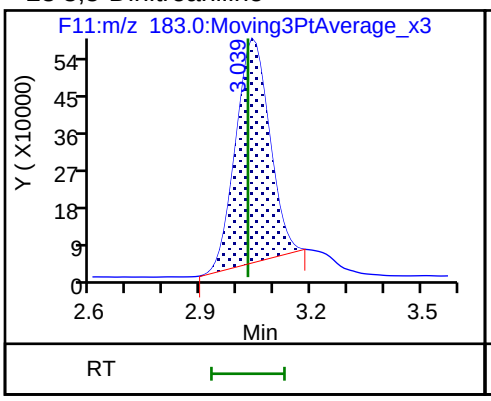
9 Nitroglycerin



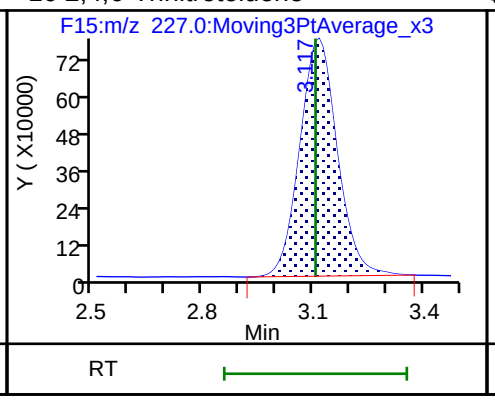
Report Date: 06-Apr-2022 07:10:00 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05042.d

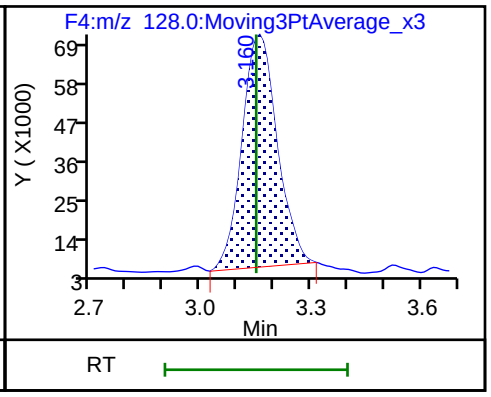
28 3,5-Dinitroaniline



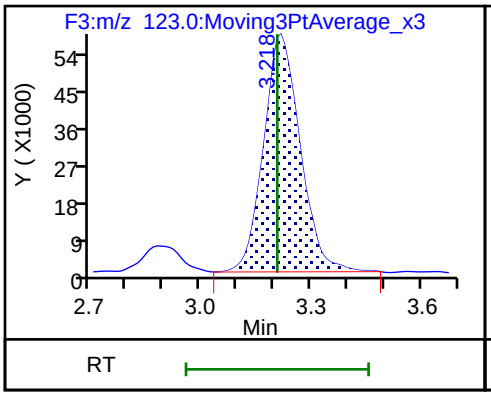
10 2,4,6-Trinitrotoluene



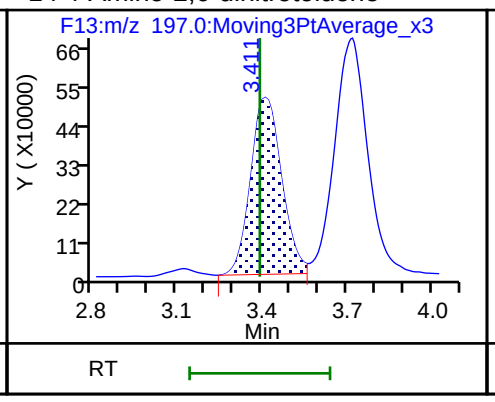
$ 11 Nitrobenzene-d5



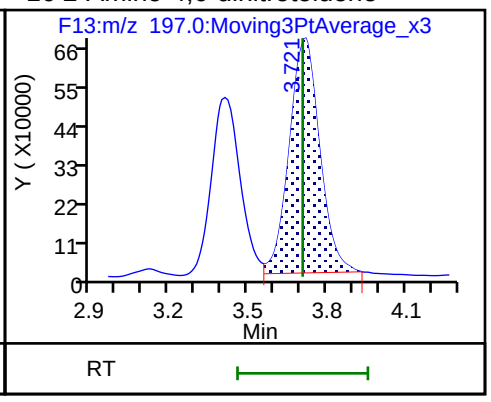
12 Nitrobenzene



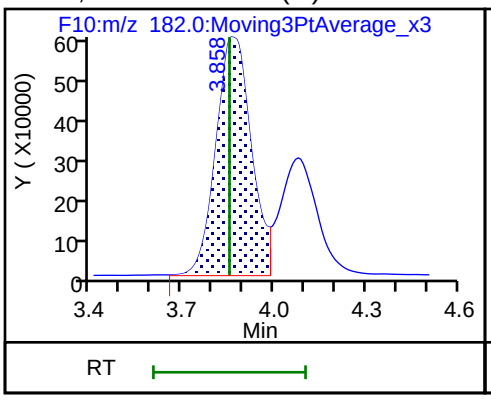
14 4-Amino-2,6-dinitrotoluene



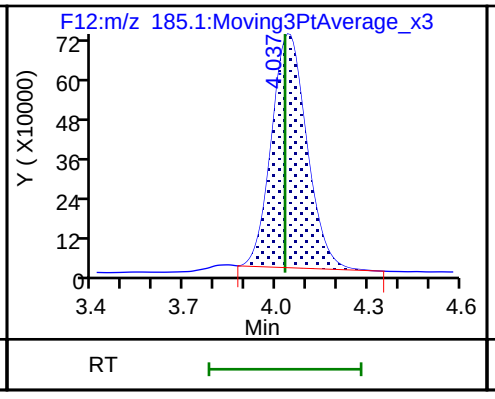
16 2-Amino-4,6-dinitrotoluene



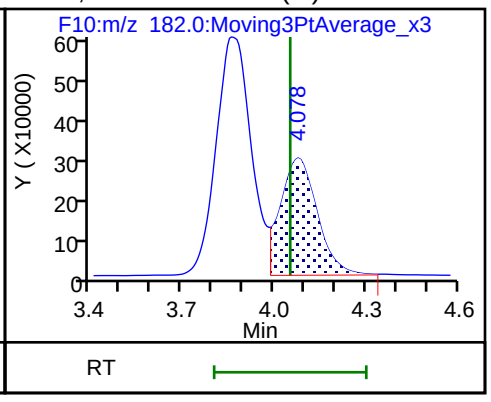
17 2,6-Dinitrotoluene (M)



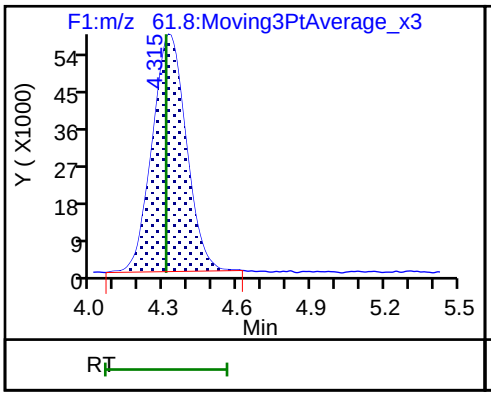
* 18 2,4-dinitrotoluene-d3



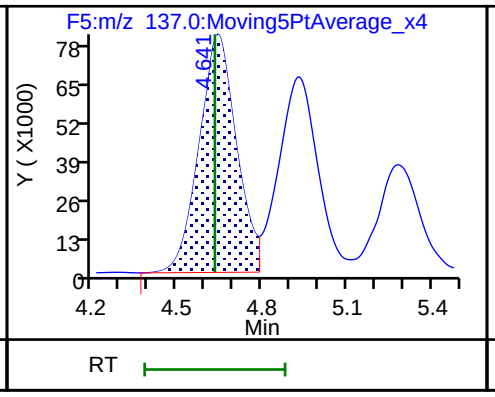
19 2,4-Dinitrotoluene (M)



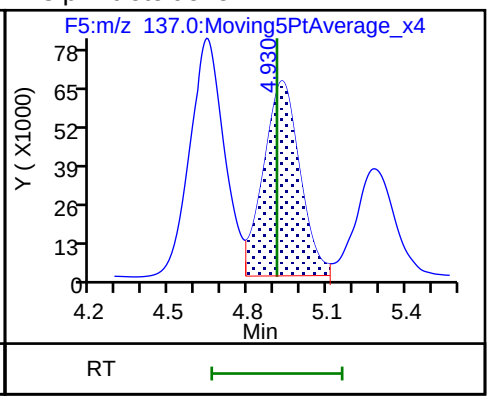
20 PETN



22 o-Nitrotoluene



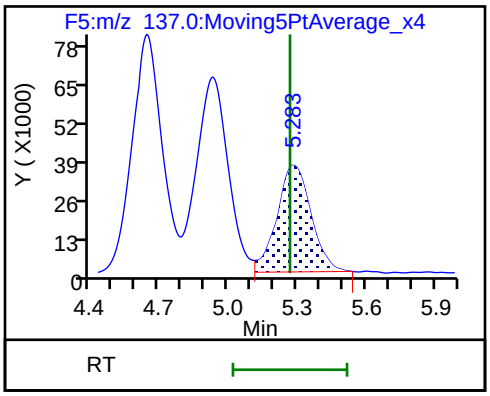
23 p-Nitrotoluene



Report Date: 06-Apr-2022 07:10:00 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05042.d

24 m-Nitrotoluene



Report Date: 06-Apr-2022 07:10:00 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05042.d

Injection Date: 05-Apr-2022 14:10:49 Instrument ID: LC_LCMS7

Lims ID: CCV

Client ID:

Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 39

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

Column: Detector F10:SIR

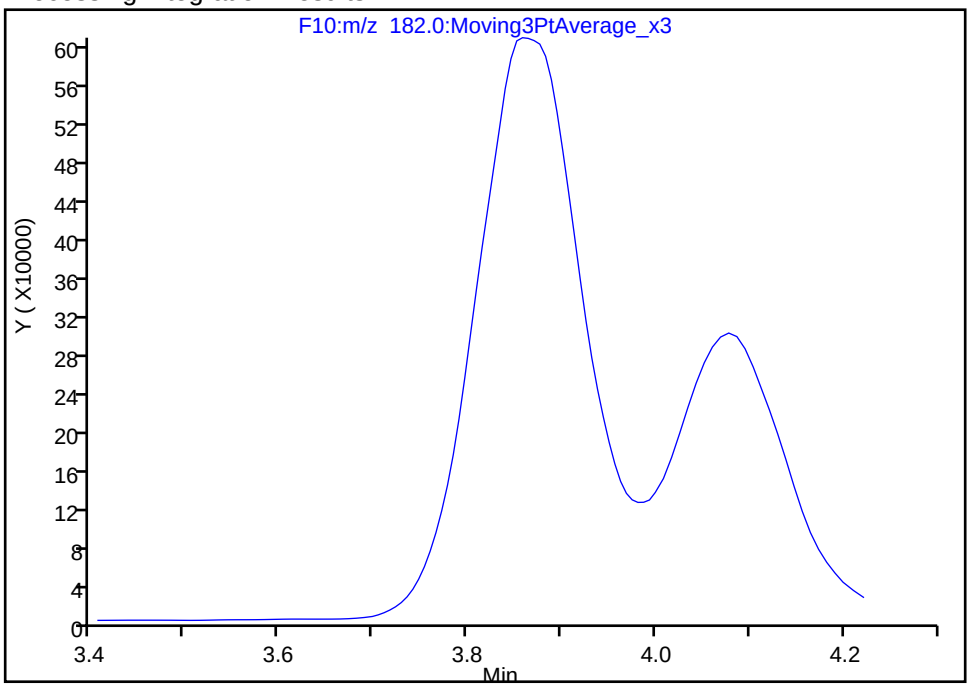
17 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

Not Detected

Expected RT: 3.85

Processing Integration Results



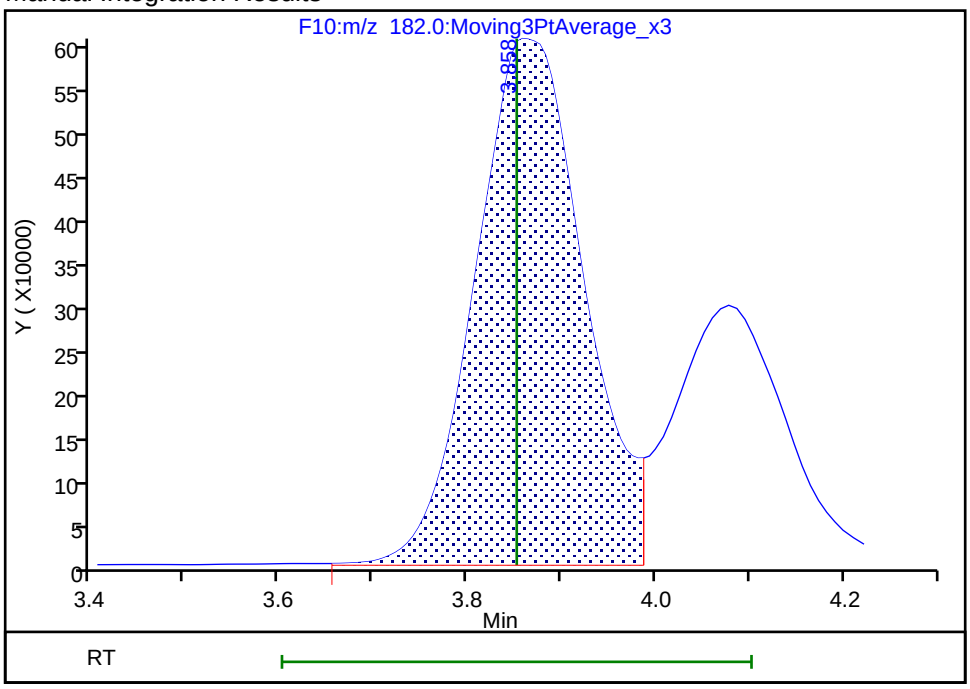
Manual Integration Results

RT: 3.86

Area: 4828075

Amount: 51.766704

Amount Units: ug/l



Reviewer: meyera, 05-Apr-2022 14:53:05

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 06-Apr-2022 07:10:00 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05042.d

Injection Date:	05-Apr-2022 14:10:49	Instrument ID:	LC_LCMS7		
Lims ID:	CCV				
Client ID:					
Operator ID:	acm	ALS Bottle#:	5	Worklist Smp#:	39
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F10:SIR		

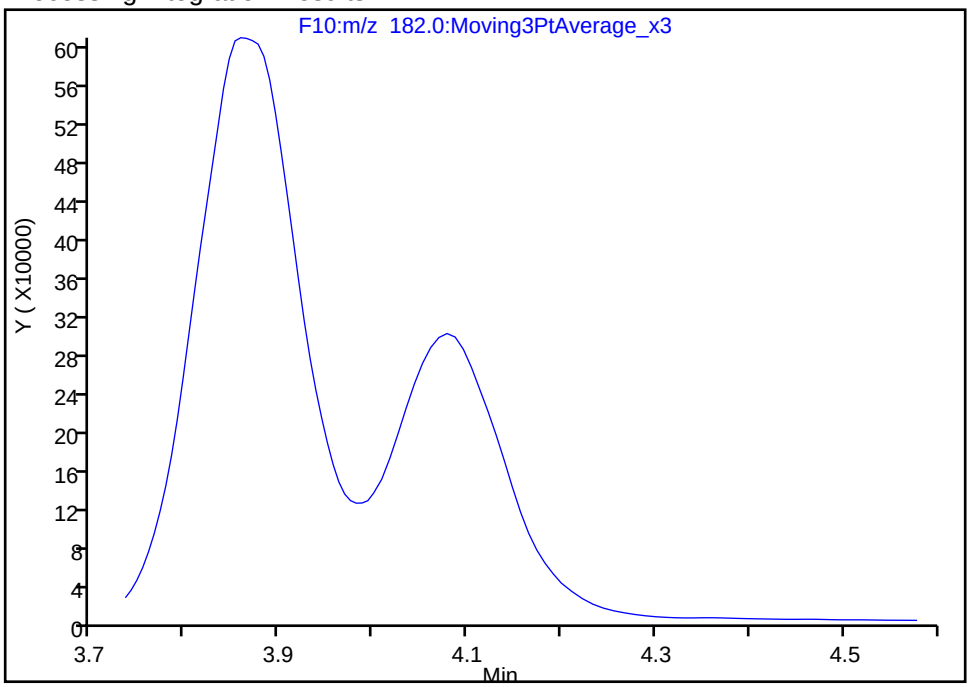
19 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

Not Detected

Expected RT: 4.05

Processing Integration Results



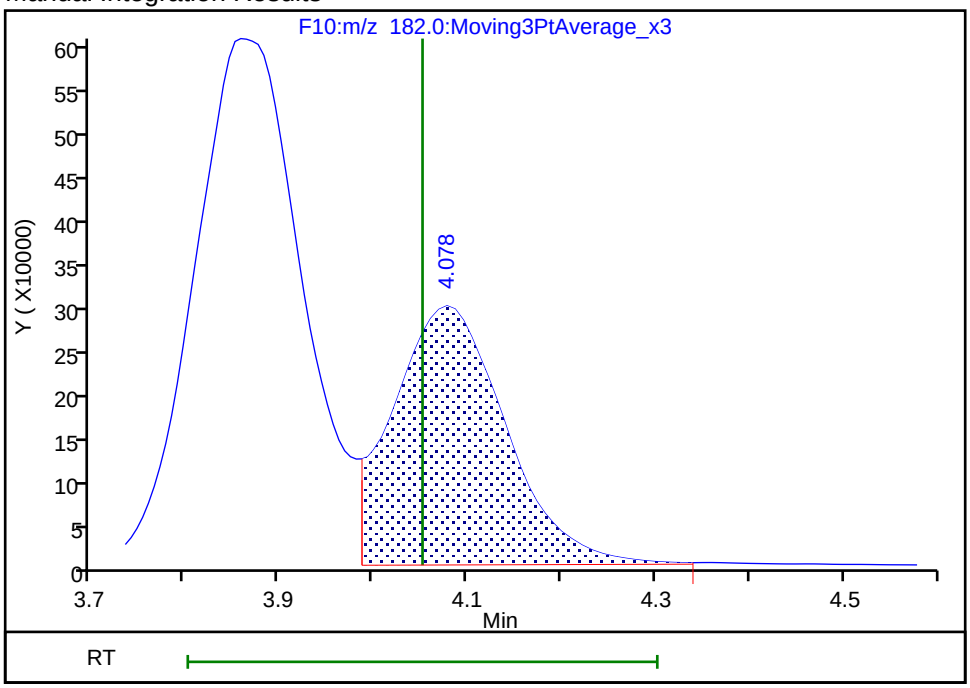
Manual Integration Results

RT: 4.08

Area: 2438892

Amount: 49.640028

Amount Units: ug/l



Reviewer: meyera, 05-Apr-2022 14:52:59

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-160187-1

SDG No.:

Lab Sample ID: CCV 280-570785/50 Calibration Date: 04/05/2022 15:21

Instrument ID: LC_LCMS7 Calib Start Date: 04/05/2022 10:20

GC Column: Synergi Hydro ID: Calib End Date: 04/05/2022 10:58

Lab File ID: ex722D05053.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin1		1.927		87.5	100	-12.5	30.0
TNX	Lin1		5.190		99.7	100	-0.4	30.0
DNX	Lin1		8.132		102	100	2.1	30.0
MNX	Lin1		2.063		120	117	3.0	30.0
RDX	Lin1		0.8258		107	100	6.8	30.0
1,3,5-Trinitrobenzene	Lin1		1.761		101	100	0.7	30.0
Tetryl	Lin1		2.973		105	100	4.6	30.0
1,3-Dinitrobenzene	Lin1		1.117		103	100	2.6	30.0
Nitroglycerin	Lin1		0.998		95.7	101	-4.9	30.0
3,5-Dinitroaniline	Lin1		1.374		94.2	100	-5.8	30.0
2,4,6-Trinitrotoluene	Lin1		8.095		103	100	2.3	30.0
Nitrobenzene	Lin1		0.5294		99.1	100	-1.3	30.0
4-Amino-2,6-dinitrotoluene	Lin1		1.553		94.3	100	-5.8	30.0
2-Amino-4,6-dinitrotoluene	Lin1		2.144		94.7	100	-5.7	30.0
2,6-Dinitrotoluene	Lin1		1.942		97.1	100	-3.3	30.0
2,4-Dinitrotoluene	Lin1		0.9739		92.7	100	-7.6	30.0
PETN	Lin1		0.2387		103	99.6	3.1	30.0
o-Nitrotoluene	Lin1		0.2959		95.4	100	-4.6	30.0
p-Nitrotoluene	Lin1		0.2539		94.5	100	-5.7	30.0
m-Nitrotoluene	Lin1		0.1527		95.2	100	-4.9	30.0
Nitrobenzene-d5	Lin1		0.6347		101	100	0.7	30.0

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-160187-1

SDG No.:

Lab Sample ID: CCV 280-570786/50 Calibration Date: 04/05/2022 15:21

Instrument ID: LC_LCMS7 Calib Start Date: 04/05/2022 10:20

GC Column: Synergi Hydro ID: Calib End Date: 04/05/2022 10:58

Lab File ID: ex722D05053.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin1		1.927		87.5	100	-12.5	30.0
TNX	Lin1		5.190		99.7	100	-0.4	30.0
DNX	Lin1		8.132		102	100	2.1	30.0
MNX	Lin1		2.063		120	117	3.0	30.0
RDX	Lin1		0.8258		107	100	6.8	30.0
1,3,5-Trinitrobenzene	Lin1		1.761		101	100	0.7	30.0
Tetryl	Lin1		2.973		105	100	4.6	30.0
1,3-Dinitrobenzene	Lin1		1.117		103	100	2.6	30.0
Nitroglycerin	Lin1		0.998		95.7	101	-4.9	30.0
3,5-Dinitroaniline	Lin1		1.374		94.2	100	-5.8	30.0
2,4,6-Trinitrotoluene	Lin1		8.095		103	100	2.3	30.0
Nitrobenzene	Lin1		0.5294		99.1	100	-1.3	30.0
4-Amino-2,6-dinitrotoluene	Lin1		1.553		94.3	100	-5.8	30.0
2-Amino-4,6-dinitrotoluene	Lin1		2.144		94.7	100	-5.7	30.0
2,6-Dinitrotoluene	Lin1		1.942		97.1	100	-3.3	30.0
2,4-Dinitrotoluene	Lin1		0.9739		92.7	100	-7.6	30.0
PETN	Lin1		0.2387		103	99.6	3.1	30.0
o-Nitrotoluene	Lin1		0.2959		95.4	100	-4.6	30.0
p-Nitrotoluene	Lin1		0.2539		94.5	100	-5.7	30.0
m-Nitrotoluene	Lin1		0.1527		95.2	100	-4.9	30.0
Nitrobenzene-d5	Lin1		0.6347		101	100	0.7	30.0

Report Date: 06-Apr-2022 07:10:08 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05053.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 05-Apr-2022 15:21:12 ALS Bottle#: 6 Worklist Smp#: 50
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:10:08 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 06-Apr-2022 06:54:28
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.223	1.223	0.0	0.998	424792	87.5	104	
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		275499	125.0	162	
36 TNX								
144.0	1.352	1.365	0.0	0.761	7273463	99.7	585	
33 DNX								
160.0	1.444	1.458	0.0	0.813	11395952	102.2	252	
34 MNX								
160.0	1.626	1.630	0.011	0.915	3371237	120.2	71.5	
4 RDX								
281.2	1.774	1.791	0.0	0.998	633368	106.8	76.8	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		958739	125.0	235	
5 1,3,5-Trinitrobenzene								
213.0	2.202	2.216	0.003	0.770	2470104	100.9	205	
6 Tetryl								
241.1	2.548	2.560	0.008	0.891	4171177	104.8	137	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1811059	129.4	222	
8 1,3-Dinitrobenzene								
168.0	2.882	2.893	0.011	1.007	1567281	102.8	194	
9 Nitroglycerin								
62.0	2.889	2.900	0.011	1.010	1405057	95.7	661	
28 3,5-Dinitroaniline								
183.0	3.039	3.051	0.012	1.062	6636402	94.2	50.2	

Report Date: 06-Apr-2022 07:10:08 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05053.d

Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.117	3.134	0.010	0.770	11378179	102.8	466	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	888778	100.7	117	
12 Nitrobenzene								
123.0	3.218	3.236	0.010	0.795	744161	99.1	44.0	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.411	3.420	0.020	0.843	7506466	94.3	63.5	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.721	3.740	0.013	0.920	10396131	94.7	88.0	
17 2,6-Dinitrotoluene								
182.0	3.865	3.885	0.013	0.955	9416603	97.1	622	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		6035894	125.0	118	
19 2,4-Dinitrotoluene								
182.0	4.078	4.087	0.026	1.008	4721324	92.7	283	
20 PETN								
61.8	4.325	4.342	0.020	1.069	1147782	102.7	326	
22 o-Nitrotoluene								
137.0	4.646	4.671	0.015	1.148	1428687	95.4	485	
23 p-Nitrotoluene								
137.0	4.930	4.952	0.020	1.218	1228634	94.5	404	
24 m-Nitrotoluene								
137.0	5.293	5.314	0.025	1.308	738141	95.2	229	

QC Flag Legend

Processing Flags

Reagents:

8321EXcalprim_00029	Amount Added: 10.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 10.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 06-Apr-2022 07:10:08 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05053.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 05-Apr-2022 15:21:12 ALS Bottle#: 6 Worklist Smp#: 50
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:10:08 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 06-Apr-2022 06:54:28
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
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* 1 HMX-13C4								
361.1	1.226	1.226	0.0		275499	125.0	162	
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144.0	1.352	1.365	0.0	0.761	7273463	99.7	585	
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160.0	1.444	1.458	0.0	0.813	11395952	102.2	252	
34 MNX								
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8 1,3-Dinitrobenzene								
168.0	2.882	2.893	0.011	1.007	1567281	102.8	194	
9 Nitroglycerin								
62.0	2.889	2.900	0.011	1.010	1405057	95.7	661	
28 3,5-Dinitroaniline								
183.0	3.039	3.051	0.012	1.062	6636402	94.2	50.2	

Report Date: 06-Apr-2022 07:10:08 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05053.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.117	3.134	0.010	0.770	11378179	102.8	466	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	888778	100.7	117	
12 Nitrobenzene								
123.0	3.218	3.236	0.010	0.795	744161	99.1	44.0	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.411	3.420	0.020	0.843	7506466	94.3	63.5	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.721	3.740	0.013	0.920	10396131	94.7	88.0	
17 2,6-Dinitrotoluene								
182.0	3.865	3.885	0.013	0.955	9416603	97.1	622	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		6035894	125.0	118	
19 2,4-Dinitrotoluene								
182.0	4.078	4.087	0.026	1.008	4721324	92.7	283	
20 PETN								
61.8	4.325	4.342	0.020	1.069	1147782	102.7	326	
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137.0	4.646	4.671	0.015	1.148	1428687	95.4	485	
23 p-Nitrotoluene								
137.0	4.930	4.952	0.020	1.218	1228634	94.5	404	
24 m-Nitrotoluene								
137.0	5.293	5.314	0.025	1.308	738141	95.2	229	

QC Flag Legend

Processing Flags

Reagents:

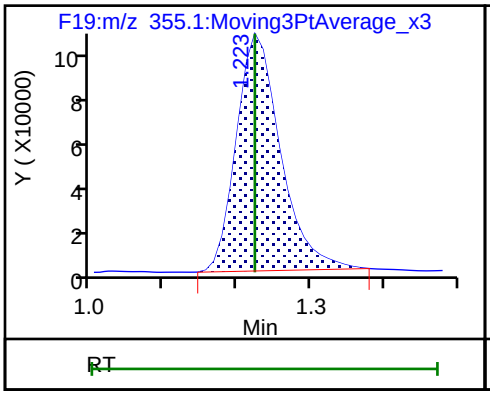
8321EXcalprim_00029	Amount Added: 10.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 10.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 06-Apr-2022 07:10:08 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05053.d
Injection Date: 05-Apr-2022 15:21:12 Instrument ID: LC_LCMS7
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 6 Worklist Smp#: 50
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

2 HMX



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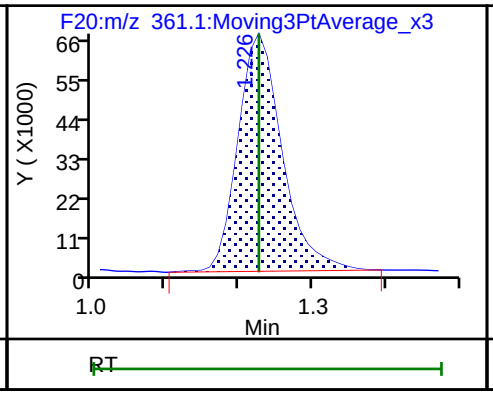
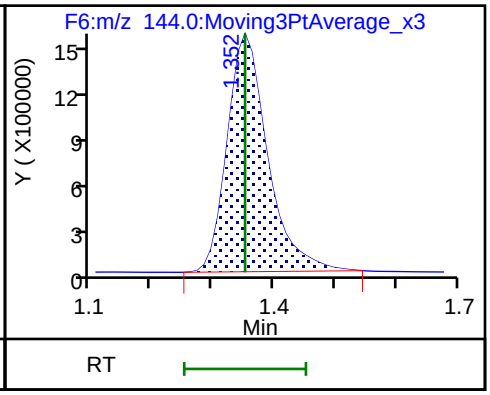
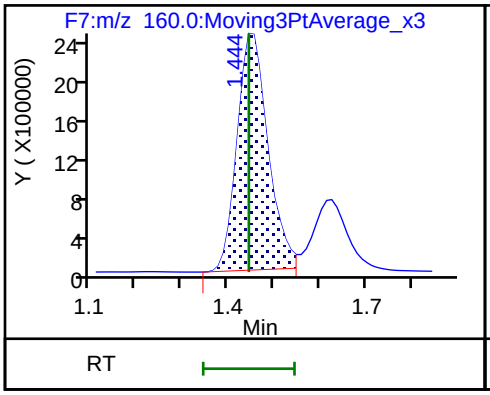


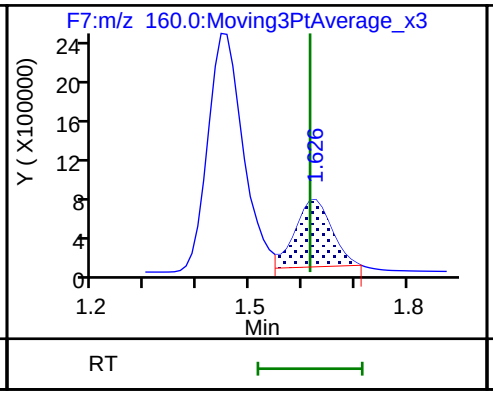
36 TNX



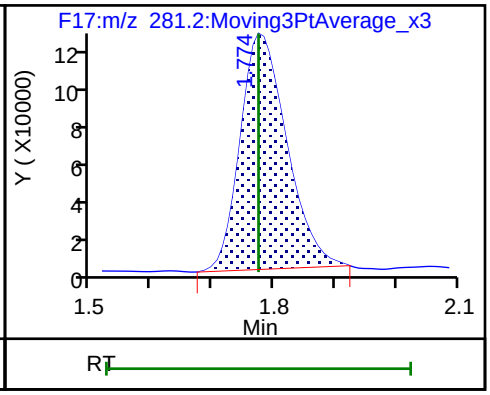
33 DNX



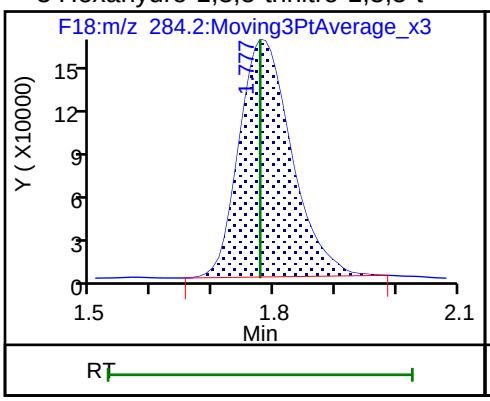
34 MNX



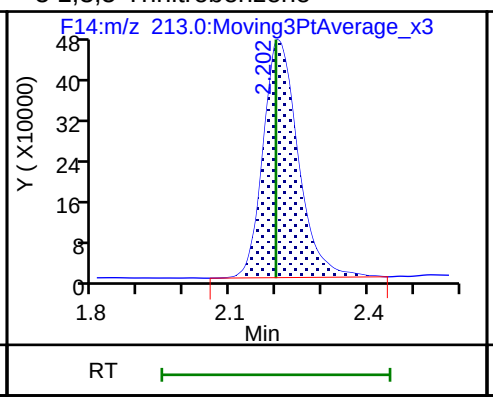
4 RDX



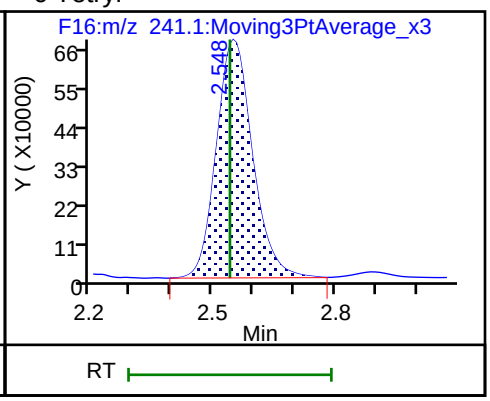
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



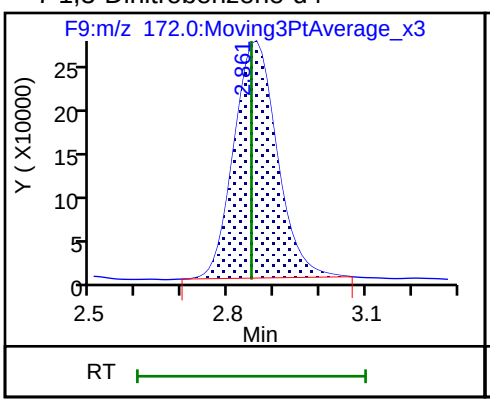
5 1,3,5-Trinitrobenzene



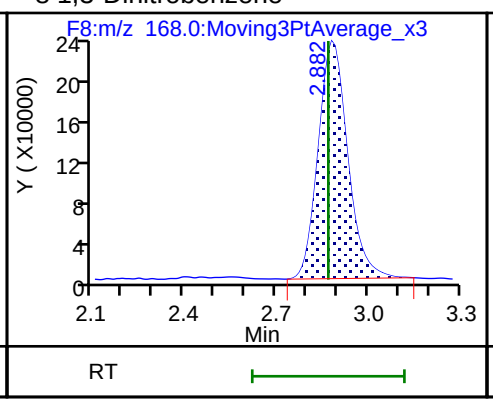
6 Tetryl



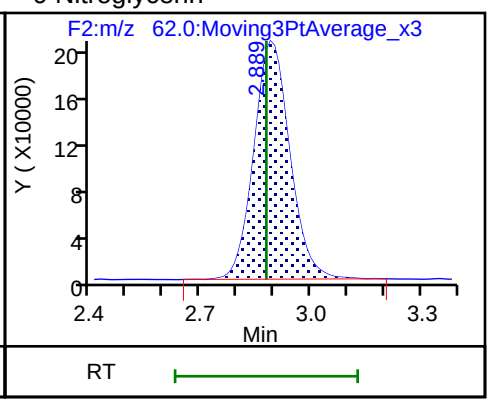
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



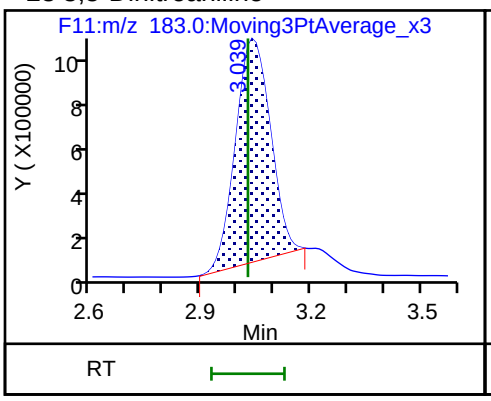
9 Nitroglycerin



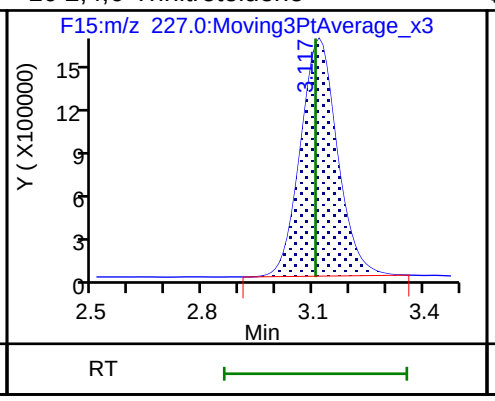
Report Date: 06-Apr-2022 07:10:08 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05053.d

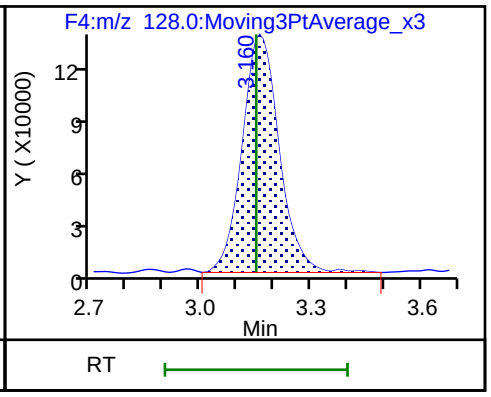
28 3,5-Dinitroaniline



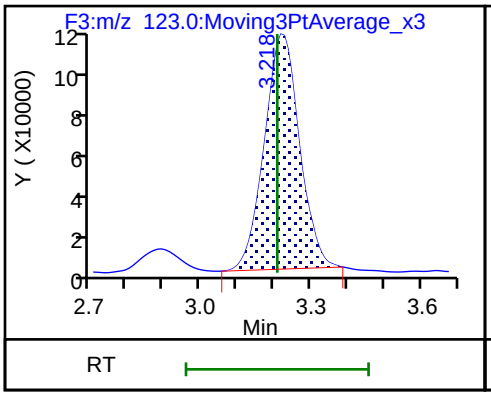
10 2,4,6-Trinitrotoluene



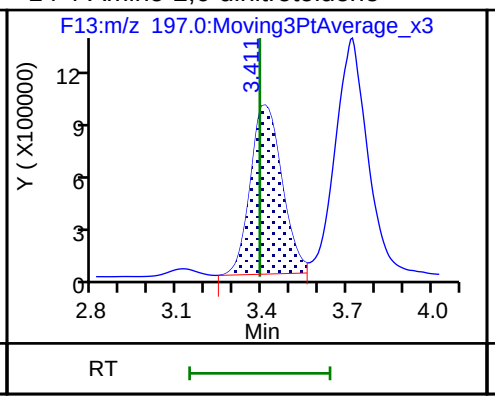
$ 11 Nitrobenzene-d5



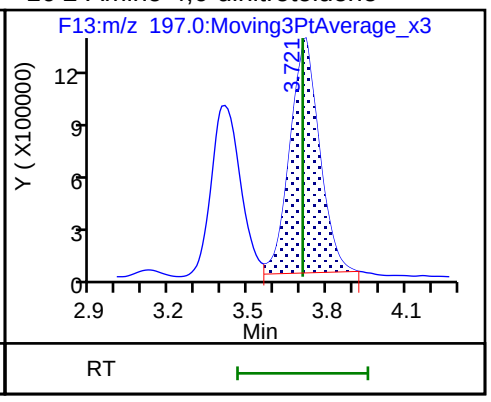
12 Nitrobenzene



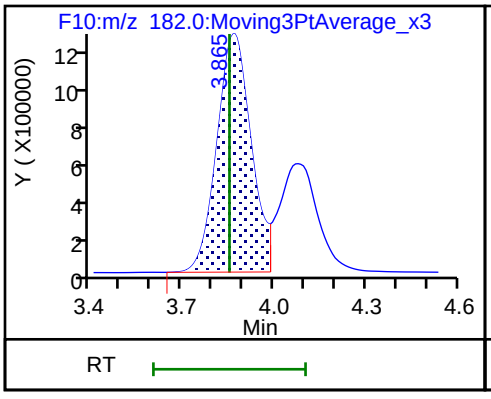
14 4-Amino-2,6-dinitrotoluene



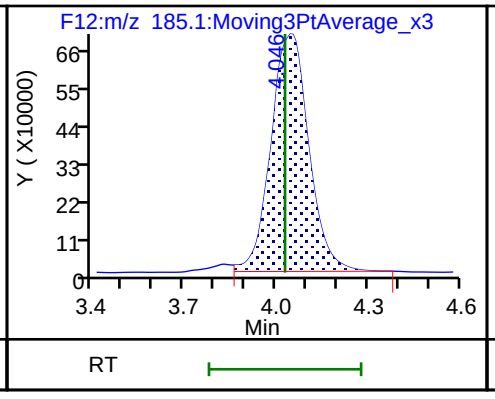
16 2-Amino-4,6-dinitrotoluene



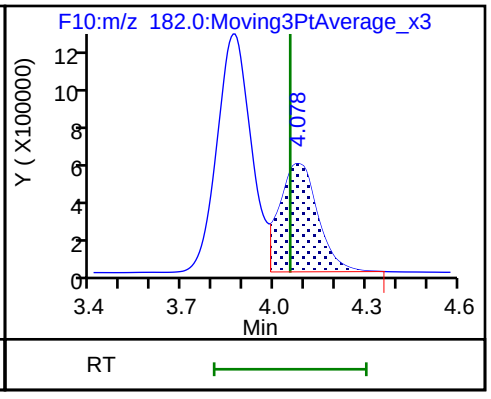
17 2,6-Dinitrotoluene



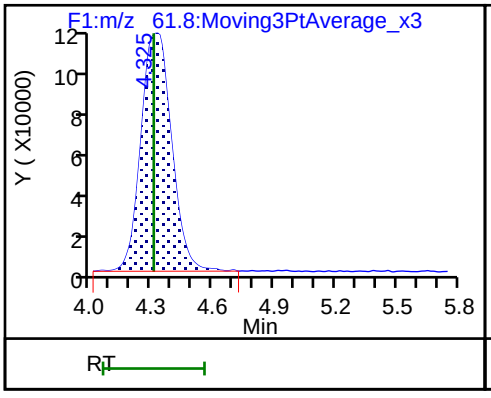
* 18 2,4-dinitrotoluene-d3



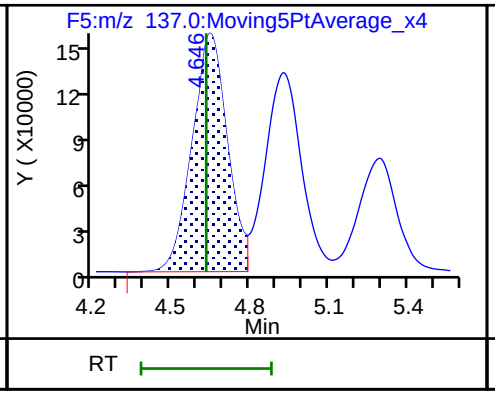
19 2,4-Dinitrotoluene



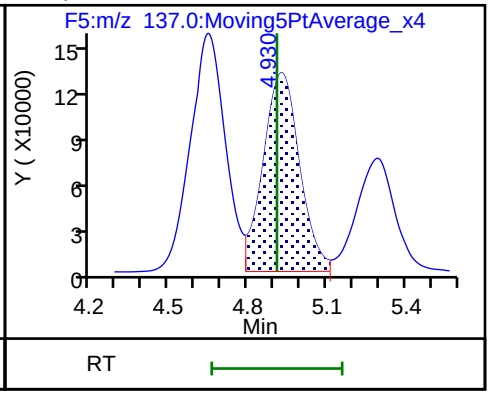
20 PETN



22 o-Nitrotoluene



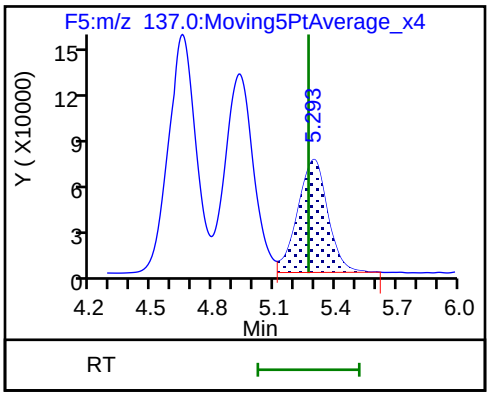
23 p-Nitrotoluene



Report Date: 06-Apr-2022 07:10:08 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05053.d

24 m-Nitrotoluene

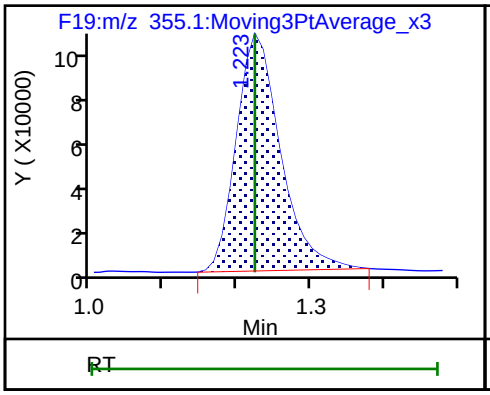


Report Date: 06-Apr-2022 07:10:08 Chrom Revision: 2.3 18-Mar-2022 09:07:22

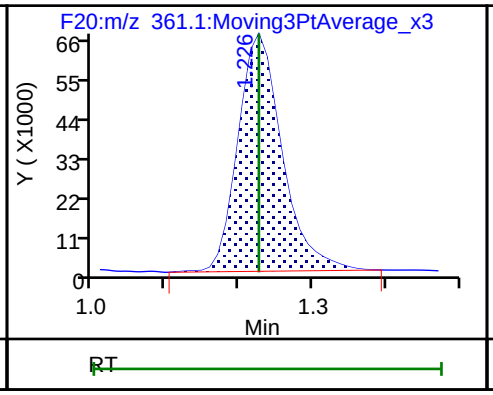
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05053.d
Injection Date: 05-Apr-2022 15:21:12 Instrument ID: LC_LCMS7
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 6 Worklist Smp#: 50
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

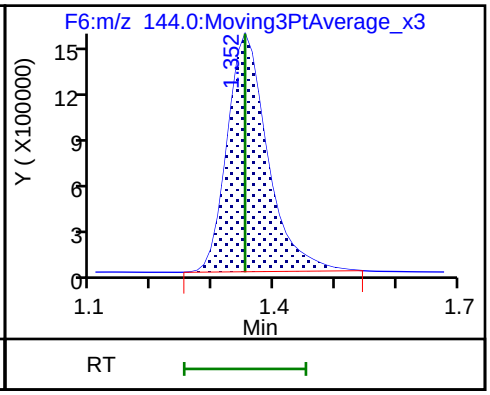
2 HMX



* 1 HMX-13C4



36 TNX



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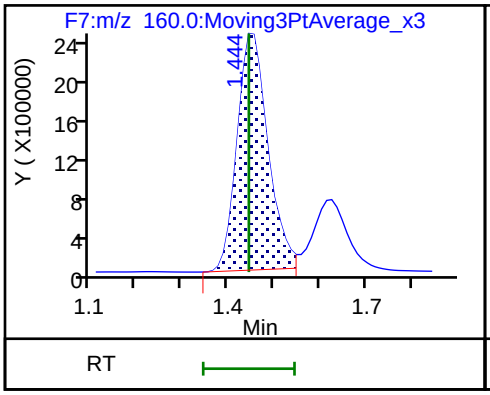
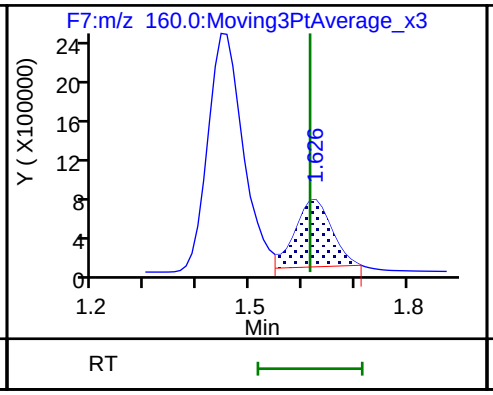
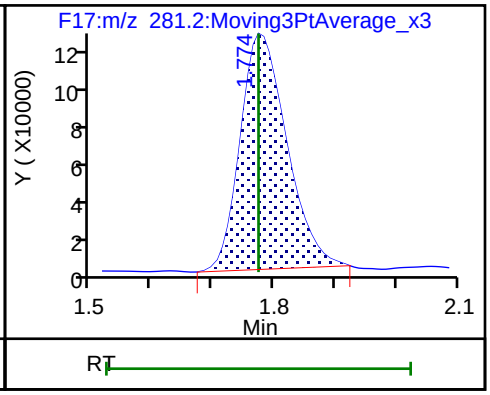


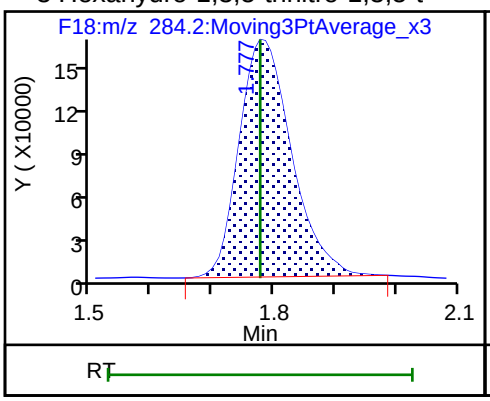
34 MNX



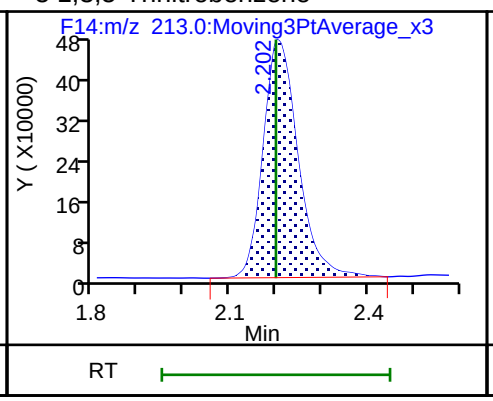
4 RDX



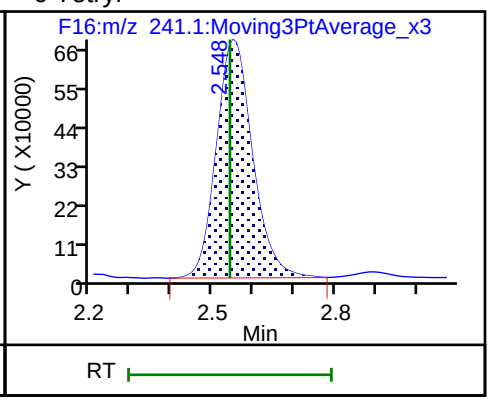
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



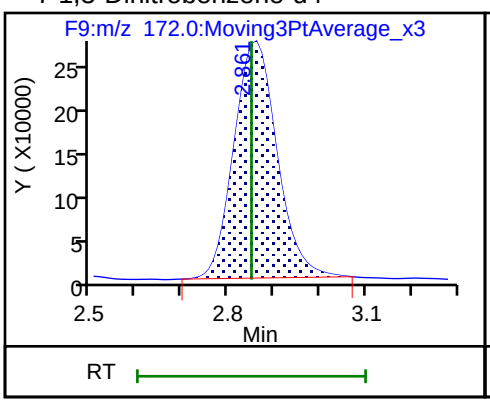
5 1,3,5-Trinitrobenzene



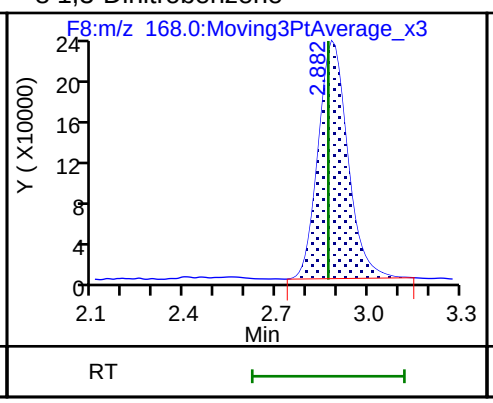
6 Tetryl



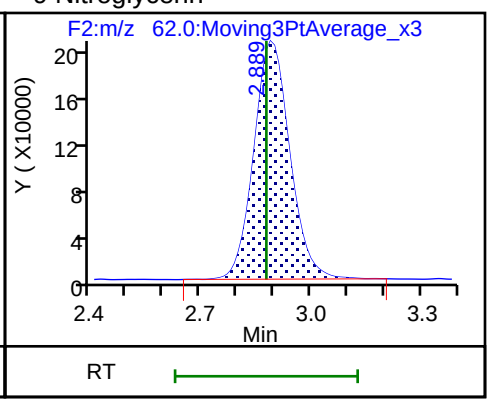
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



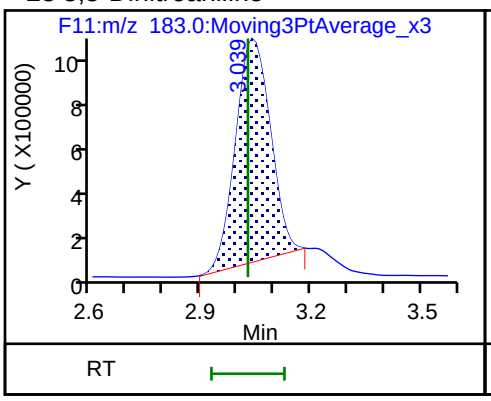
9 Nitroglycerin



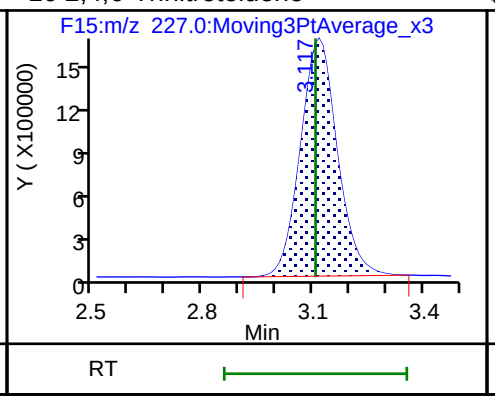
Report Date: 06-Apr-2022 07:10:08 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05053.d

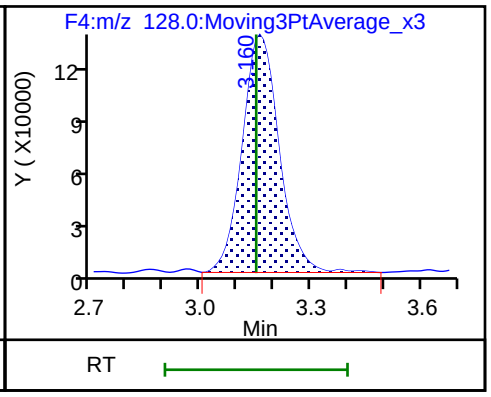
28 3,5-Dinitroaniline



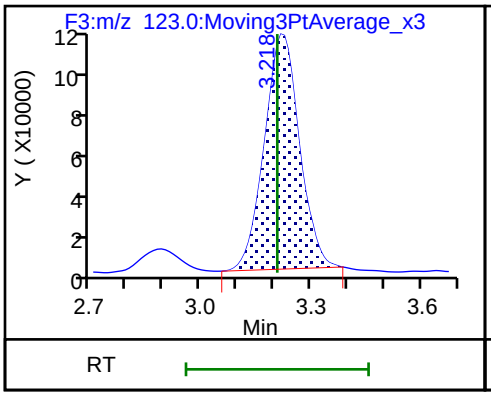
10 2,4,6-Trinitrotoluene



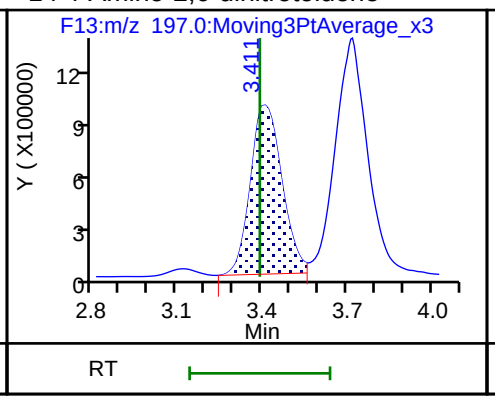
$ 11 Nitrobenzene-d5



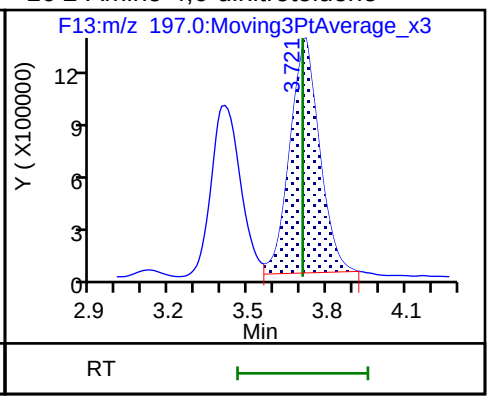
12 Nitrobenzene



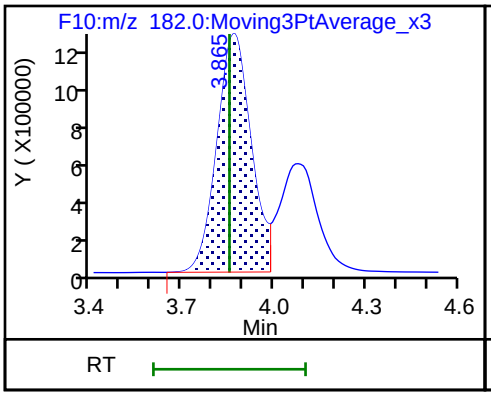
14 4-Amino-2,6-dinitrotoluene



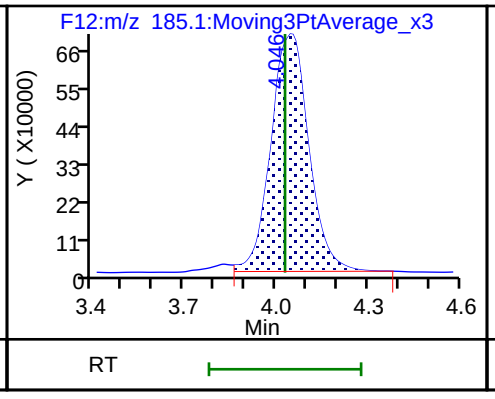
16 2-Amino-4,6-dinitrotoluene



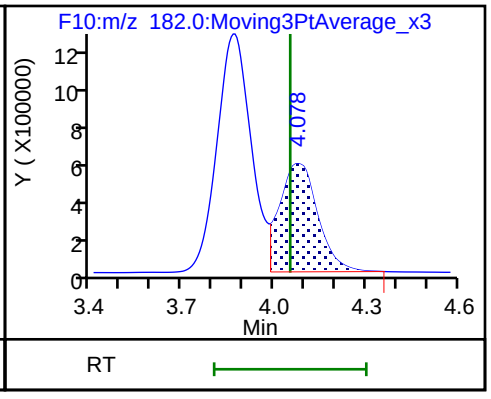
17 2,6-Dinitrotoluene



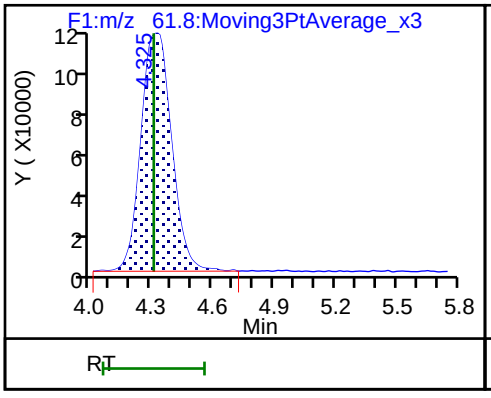
* 18 2,4-dinitrotoluene-d3



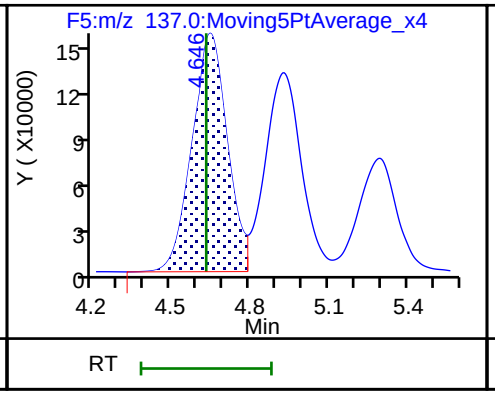
19 2,4-Dinitrotoluene



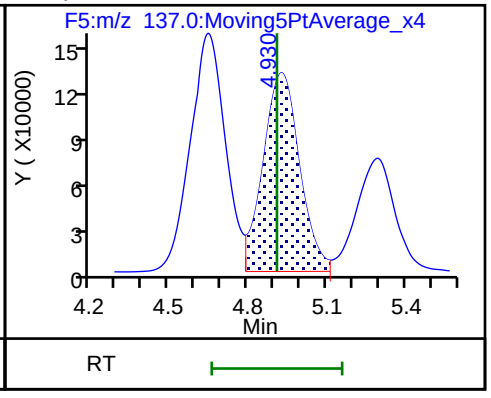
20 PETN



22 o-Nitrotoluene



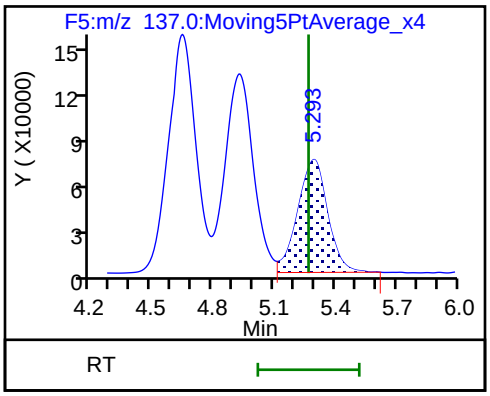
23 p-Nitrotoluene



Report Date: 06-Apr-2022 07:10:08 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05053.d

24 m-Nitrotoluene



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-160187-1

SDG No.:

Lab Sample ID: CCV 280-570786/61 Calibration Date: 04/05/2022 16:31

Instrument ID: LC_LCMS7 Calib Start Date: 04/05/2022 10:20

GC Column: Synergi Hydro ID: Calib End Date: 04/05/2022 10:58

Lab File ID: ex722D05064.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin1		1.922		43.3	50.0	-13.3	30.0
TNX	Lin1		5.396		51.8	50.1	3.5	30.0
DNX	Lin1		8.539		53.2	50.1	6.3	30.0
MNX	Lin1		2.171		62.0	58.4	6.3	30.0
RDX	Lin1		0.8192		52.0	50.0	3.9	30.0
1,3,5-Trinitrobenzene	Lin1		1.760		50.4	50.1	0.6	30.0
Tetryl	Lin1		2.952		52.3	50.1	4.4	30.0
1,3-Dinitrobenzene	Lin1		1.101		50.7	50.1	1.2	30.0
Nitroglycerin	Lin1		1.084		51.9	50.3	3.2	30.0
3,5-Dinitroaniline	Lin1		1.409		47.9	50.0	-4.2	30.0
2,4,6-Trinitrotoluene	Lin1		7.977		50.5	50.2	0.6	30.0
Nitrobenzene	Lin1		0.5291		50.0	50.2	-0.4	30.0
4-Amino-2,6-dinitrotoluene	Lin1		1.717		52.1	50.1	4.2	30.0
2-Amino-4,6-dinitrotoluene	Lin1		2.336		51.5	50.2	2.6	30.0
2,6-Dinitrotoluene	Lin1		2.131		53.1	50.2	5.8	30.0
2,4-Dinitrotoluene	Lin1		1.043		49.3	50.2	-1.8	30.0
PETN	Lin1		0.2426		52.5	49.8	5.4	30.0
o-Nitrotoluene	Lin1		0.3190		51.5	50.0	3.1	30.0
p-Nitrotoluene	Lin1		0.2778		51.5	50.1	2.9	30.0
m-Nitrotoluene	Lin1		0.1675		52.3	50.1	4.5	30.0
Nitrobenzene-d5	Lin1		0.5449		42.7	50.0	-14.7	30.0

Report Date: 06-Apr-2022 07:10:15 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05064.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 05-Apr-2022 16:31:36 ALS Bottle#: 5 Worklist Smp#: 61
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:10:15 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 06-Apr-2022 06:57:02
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.223	1.223	0.0	0.998	202348	43.3	59.2	
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		263140	125.0	141	
36 TNX								
144.0	1.352	1.365	0.0	0.761	3668518	51.8	448	
33 DNX								
160.0	1.455	1.458	0.011	0.819	5805280	53.2	246	
34 MNX								
160.0	1.615	1.630	0.0	0.909	1720458	62.0	68.4	
4 RDX								
281.2	1.782	1.791	0.008	1.003	321553	52.0	73.1	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		981347	125.0	242	
5 1,3,5-Trinitrobenzene								
213.0	2.202	2.216	0.003	0.770	1197771	50.4	153	
6 Tetryl								
241.1	2.548	2.560	0.008	0.891	2009092	52.3	99.6	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1757130	129.4	294	
8 1,3-Dinitrobenzene								
168.0	2.882	2.893	0.011	1.007	748942	50.7	161	
9 Nitroglycerin								
62.0	2.889	2.900	0.011	1.010	740824	51.9	498	
28 3,5-Dinitroaniline								M
183.0	3.039	3.051	0.012	1.062	3092496	47.9	47.9	M

Report Date: 06-Apr-2022 07:10:15 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05064.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.117	3.134	0.010	0.772	5439538	50.5	360	
$ 11 Nitrobenzene-d5								
128.0	3.170	3.164	0.020	0.785	370188	42.7	35.7	
12 Nitrobenzene								
123.0	3.218	3.236	0.010	0.797	360761	50.0	34.9	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.411	3.420	0.020	0.845	3772600	52.1	69.8	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.715	3.740	0.007	0.920	5148769	51.5	93.3	
17 2,6-Dinitrotoluene								
182.0	3.871	3.885	0.019	0.959	4695964	53.1	956	
* 18 2,4-dinitrotoluene-d3								
185.1	4.037	4.028	0.009		5487519	125.0	114	
19 2,4-Dinitrotoluene								
182.0	4.078	4.087	0.026	1.010	2297553	49.3	422	
20 PETN								
61.8	4.325	4.342	0.020	1.071	530286	52.5	174	
22 o-Nitrotoluene								
137.0	4.651	4.671	0.020	1.152	700213	51.5	254	
23 p-Nitrotoluene								
137.0	4.930	4.952	0.020	1.221	611046	51.5	210	
24 m-Nitrotoluene								
137.0	5.293	5.314	0.025	1.311	368135	52.3	120	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

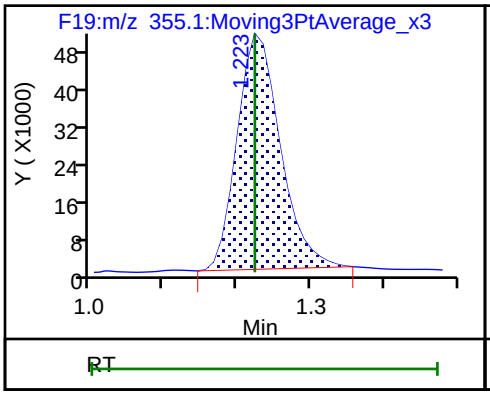
8321EXcalprim_00029	Amount Added: 5.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 5.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 06-Apr-2022 07:10:16 Chrom Revision: 2.3 18-Mar-2022 09:07:22

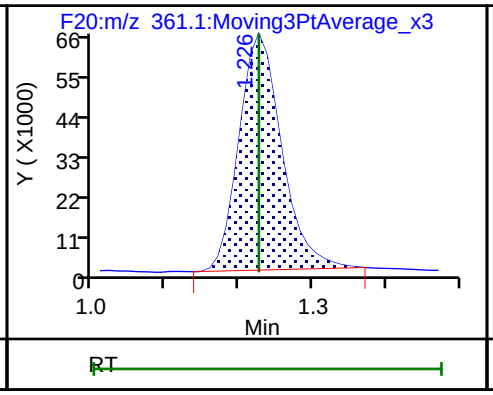
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05064.d
Injection Date: 05-Apr-2022 16:31:36 Instrument ID: LC_LCMS7
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 61
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

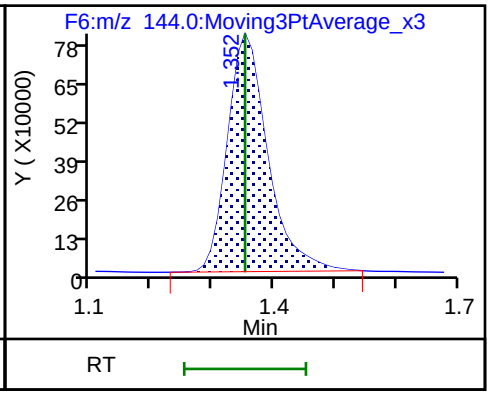
2 HMX



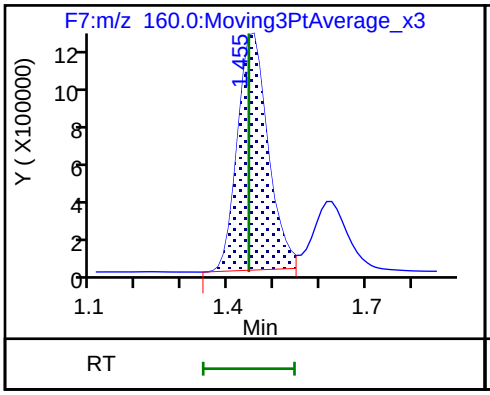
* 1 HMX-13C4



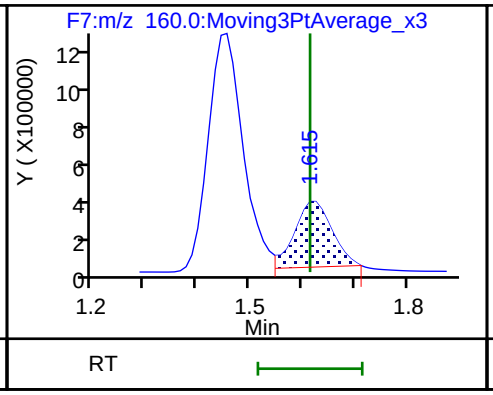
36 TNX



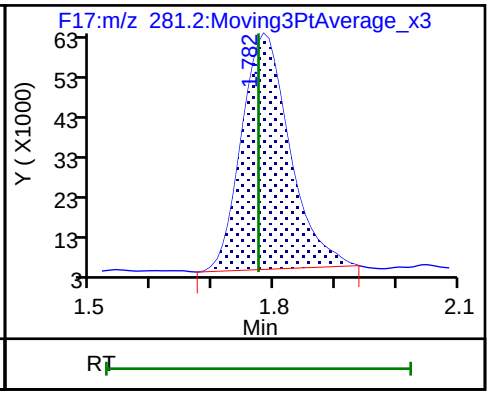
33 DNX



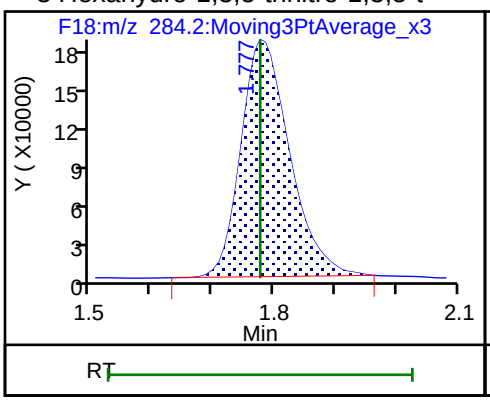
34 MNX



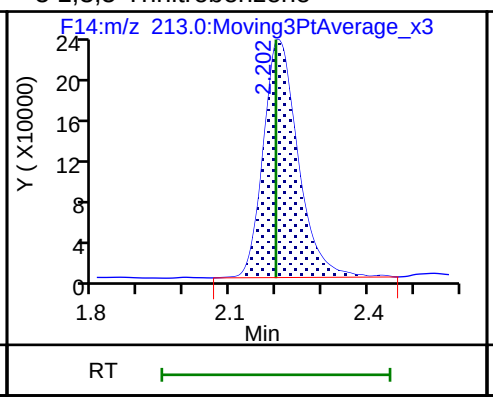
4 RDX



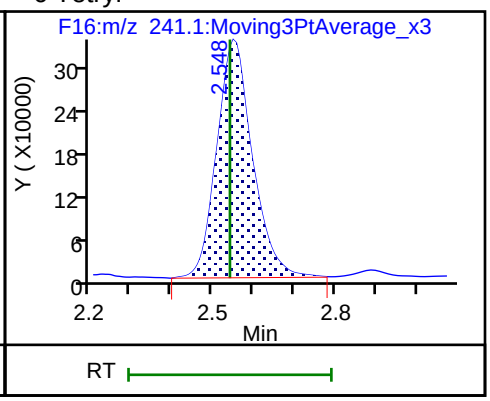
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



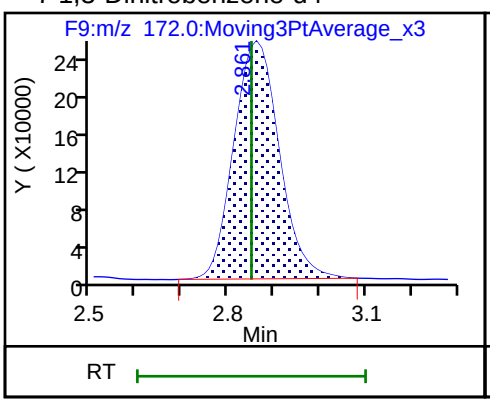
5 1,3,5-Trinitrobenzene



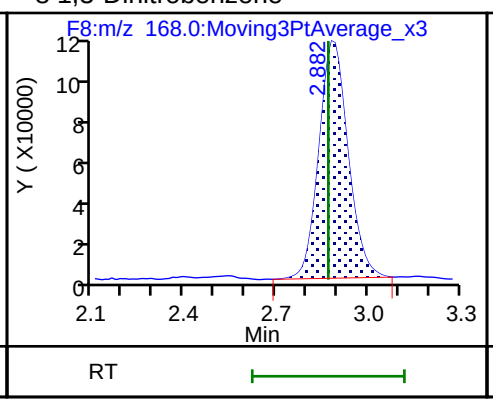
6 Tetryl



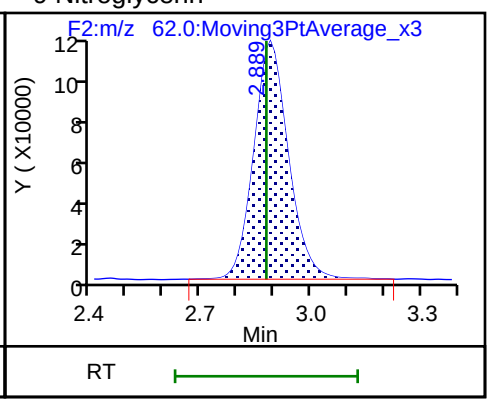
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



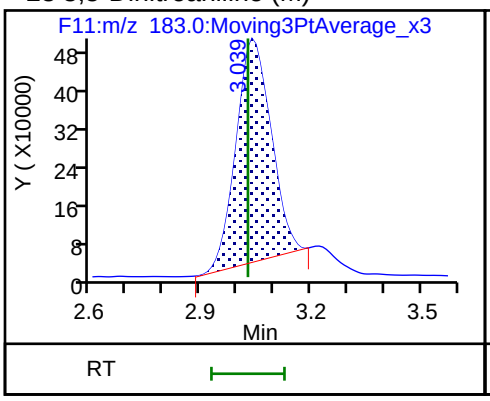
9 Nitroglycerin



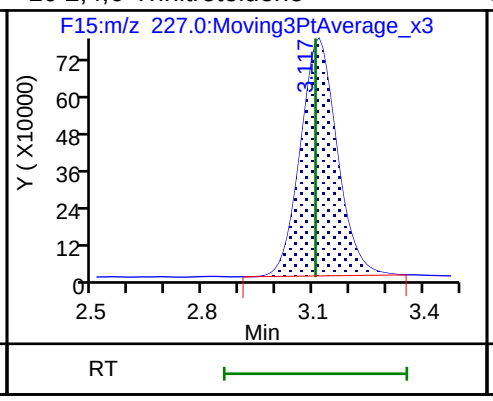
Report Date: 06-Apr-2022 07:10:16 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05064.d

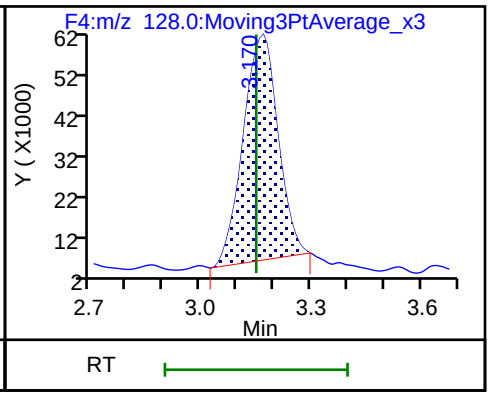
28 3,5-Dinitroaniline (M)



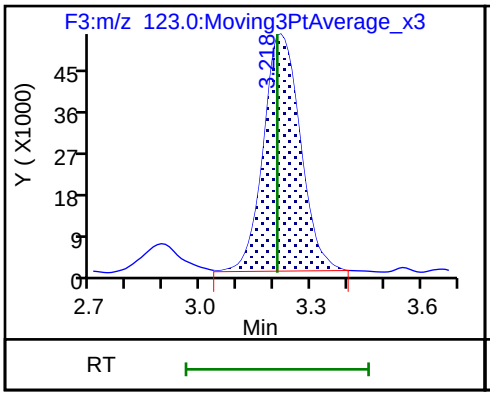
10 2,4,6-Trinitrotoluene



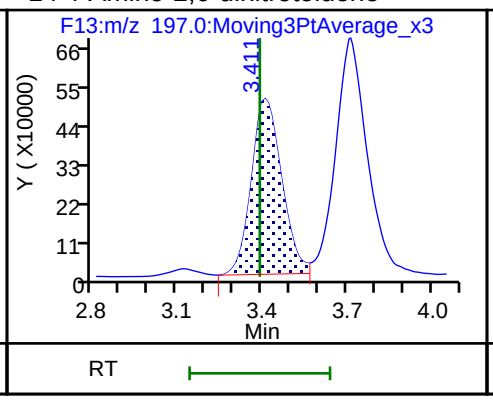
$ 11 Nitrobenzene-d5



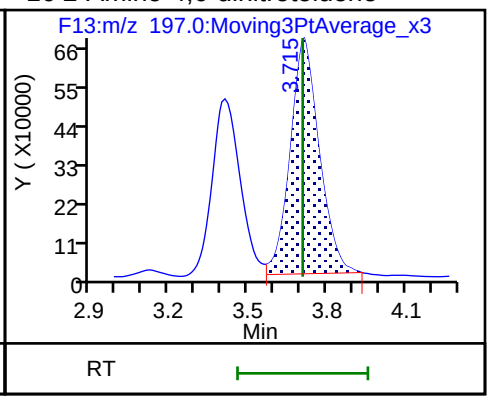
12 Nitrobenzene



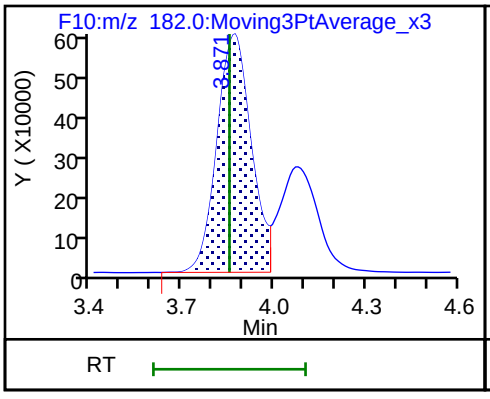
14 4-Amino-2,6-dinitrotoluene



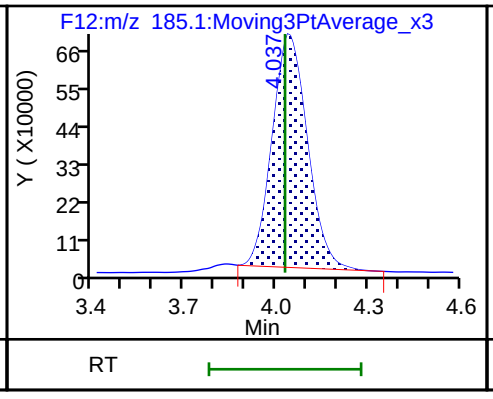
16 2-Amino-4,6-dinitrotoluene



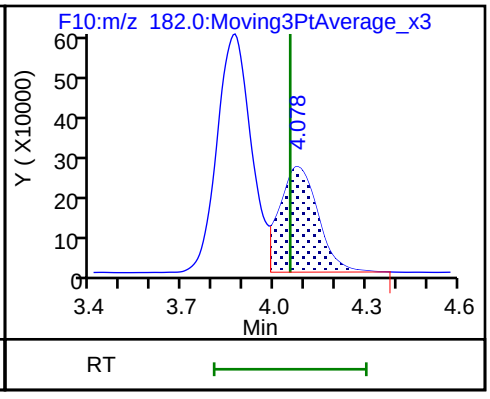
17 2,6-Dinitrotoluene



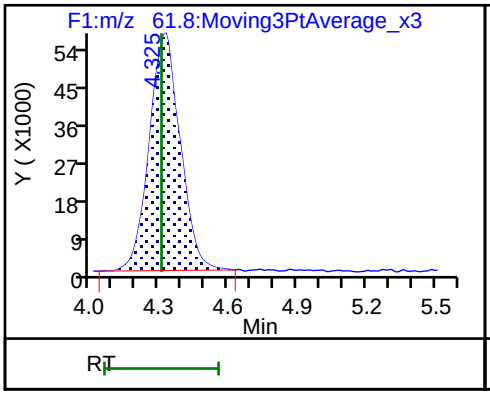
* 18 2,4-dinitrotoluene-d3



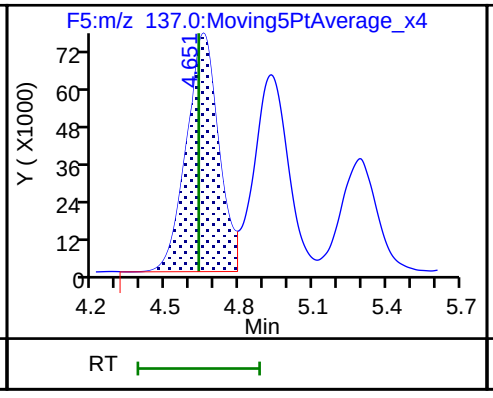
19 2,4-Dinitrotoluene



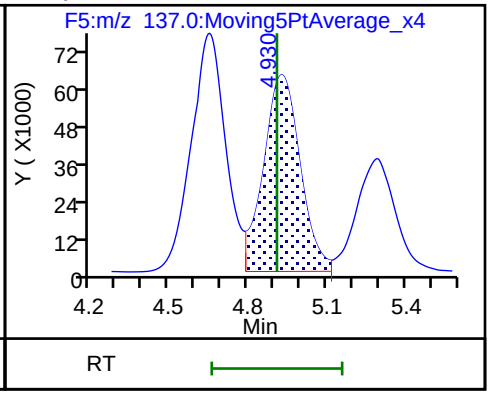
20 PETN



22 o-Nitrotoluene



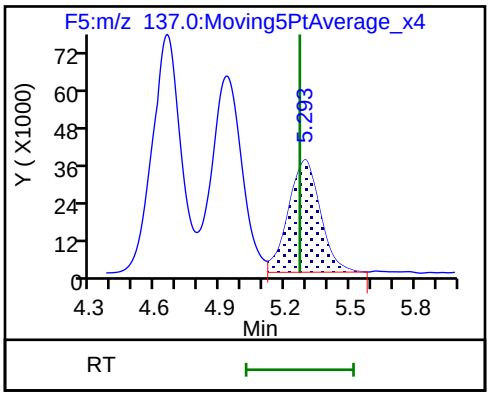
23 p-Nitrotoluene



Report Date: 06-Apr-2022 07:10:16 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05064.d

24 m-Nitrotoluene



Report Date: 06-Apr-2022 07:10:16

Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05064.d

Injection Date: 05-Apr-2022 16:31:36 Instrument ID: LC_LCMS7

Lims ID: CCV

Client ID:

Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 61

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

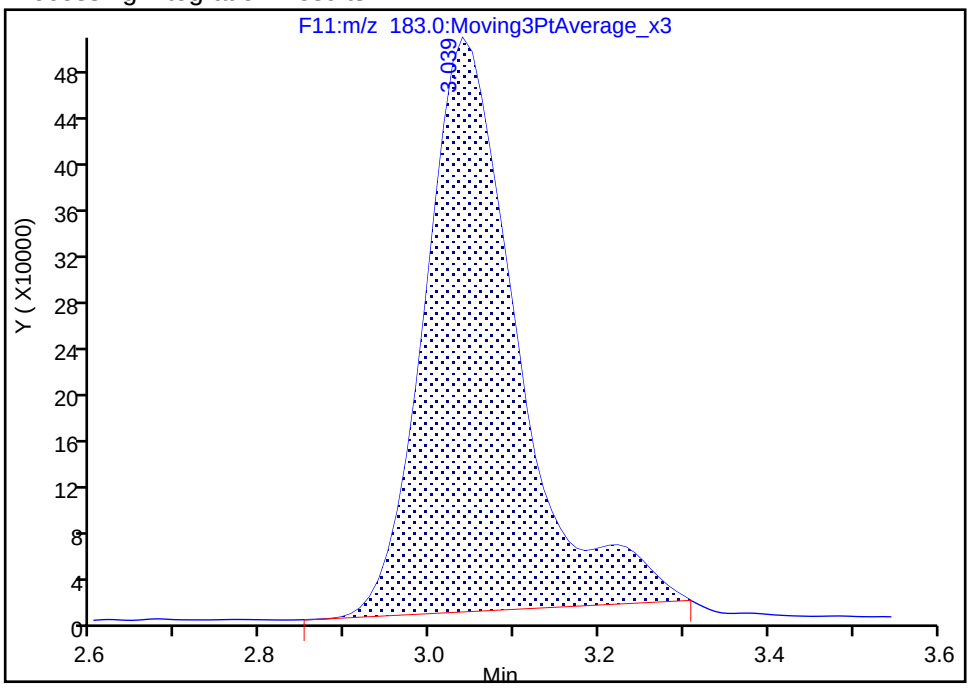
Column: Detector F11:SIR

28 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

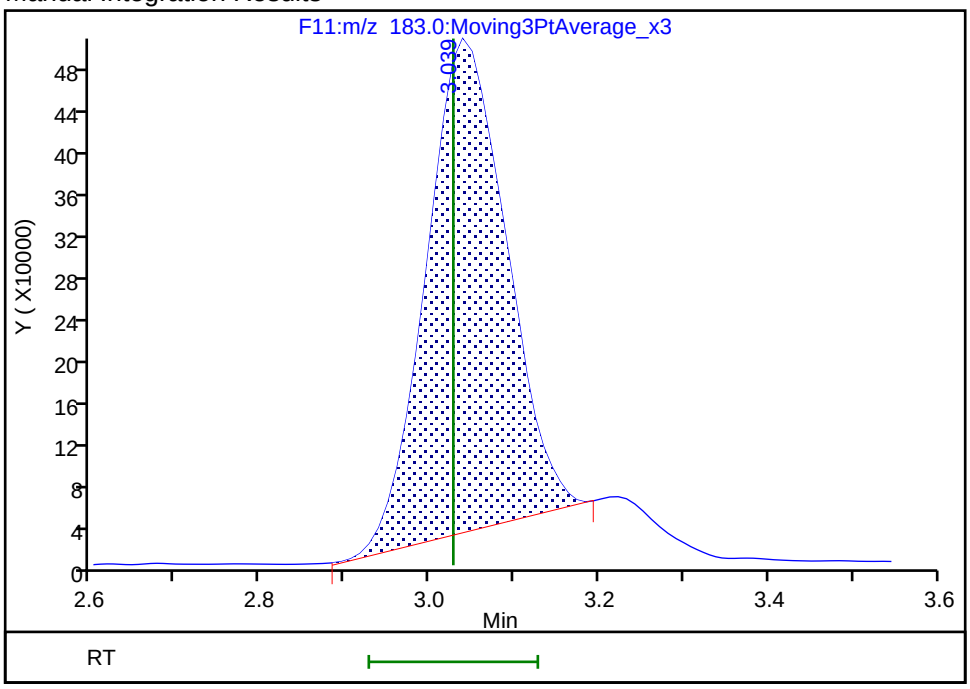
Processing Integration Results

RT: 3.04
Area: 3740134
Amount: 58.105322
Amount Units: ug/l



Manual Integration Results

RT: 3.04
Area: 3092496
Amount: 47.923212
Amount Units: ug/l



Reviewer: meyera, 06-Apr-2022 06:56:52

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-160187-1

SDG No.:

Lab Sample ID: CCV 280-570786/72 Calibration Date: 04/05/2022 17:42

Instrument ID: LC_LCMS7 Calib Start Date: 04/05/2022 10:20

GC Column: Synergi Hydro ID: Calib End Date: 04/05/2022 10:58

Lab File ID: ex722D05075.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin1		2.145		97.5	100	-2.5	30.0
TNX	Lin1		5.267		101	100	1.0	30.0
DNX	Lin1		7.924		99.5	100	-0.5	30.0
MNX	Lin1		1.928		112	117	-3.9	30.0
RDX	Lin1		0.8259		107	100	6.8	30.0
1,3,5-Trinitrobenzene	Lin1		1.722		98.7	100	-1.5	30.0
Tetryl	Lin1		2.951		104	100	3.8	30.0
1,3-Dinitrobenzene	Lin1		1.114		103	100	2.3	30.0
Nitroglycerin	Lin1		0.997		95.6	101	-4.9	30.0
3,5-Dinitroaniline	Lin1		1.383		94.8	100	-5.2	30.0
2,4,6-Trinitrotoluene	Lin1		7.962		101	100	0.7	30.0
Nitrobenzene	Lin1		0.5395		101	100	0.6	30.0
4-Amino-2,6-dinitrotoluene	Lin1		1.603		97.3	100	-2.8	30.0
2-Amino-4,6-dinitrotoluene	Lin1		2.216		97.8	100	-2.6	30.0
2,6-Dinitrotoluene	Lin1		2.006		100	100	-0.0	30.0
2,4-Dinitrotoluene	Lin1		1.040		99.1	100	-1.3	30.0
PETN	Lin1		0.2377		102	99.6	2.7	30.0
o-Nitrotoluene	Lin1		0.3093		99.7	100	-0.3	30.0
p-Nitrotoluene	Lin1		0.2686		99.9	100	-0.3	30.0
m-Nitrotoluene	Lin1		0.1587		98.9	100	-1.2	30.0
Nitrobenzene-d5	Lin1		0.6307		100	100	0.0	30.0

Report Date: 06-Apr-2022 07:10:22 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05075.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 05-Apr-2022 17:42:00 ALS Bottle#: 6 Worklist Smp#: 72
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:10:22 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 06-Apr-2022 06:59:00
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.223	1.223	0.0	0.998	433913	97.5	95.4	
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		252840	125.0	122	
36 TNX								
144.0	1.352	1.365	0.0	0.761	7234182	101.1	580	
33 DNX								
160.0	1.455	1.458	0.011	0.819	10884794	99.5	247	
34 MNX								
160.0	1.615	1.630	0.0	0.909	3086812	112.1	69.8	
4 RDX								
281.2	1.782	1.791	0.008	1.003	643063	106.8	50.9	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		973301	125.0	213	
5 1,3,5-Trinitrobenzene								
213.0	2.206	2.216	0.007	0.771	2367023	98.7	230	
6 Tetryl								
241.1	2.556	2.560	0.016	0.894	4058134	104.1	135	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1775077	129.4	232	
8 1,3-Dinitrobenzene								
168.0	2.882	2.893	0.011	1.007	1532173	102.5	200	
9 Nitroglycerin								
62.0	2.900	2.900	0.022	1.014	1376659	95.6	560	
28 3,5-Dinitroaniline								
183.0	3.050	3.051	0.023	1.066	6167979	94.8	62.8	

Report Date: 06-Apr-2022 07:10:22 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05075.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.117	3.134	0.010	0.770	10969059	101.1	542	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	865642	100.0	126	
12 Nitrobenzene								
123.0	3.218	3.236	0.010	0.795	743293	101.0	36.4	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.411	3.420	0.020	0.843	7155125	97.3	59.0	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.721	3.740	0.013	0.920	9923171	97.8	82.2	
17 2,6-Dinitrotoluene								
182.0	3.871	3.885	0.019	0.957	8982690	100.3	641	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		5574967	125.0	204	
19 2,4-Dinitrotoluene								
182.0	4.078	4.087	0.026	1.008	4657670	99.1	313	
20 PETN								
61.8	4.315	4.342	0.010	1.067	1055691	102.3	410	
22 o-Nitrotoluene								
137.0	4.646	4.671	0.015	1.148	1379325	99.7	389	
23 p-Nitrotoluene								
137.0	4.930	4.952	0.020	1.218	1200242	99.9	332	
24 m-Nitrotoluene								
137.0	5.293	5.314	0.025	1.308	708379	98.9	185	

QC Flag Legend

Processing Flags

Reagents:

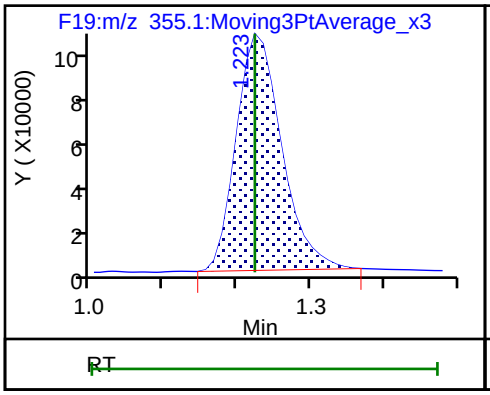
8321EXcalprim_00029	Amount Added: 10.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 10.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 06-Apr-2022 07:10:22 Chrom Revision: 2.3 18-Mar-2022 09:07:22

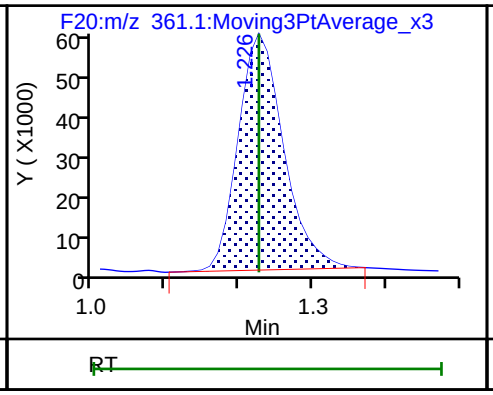
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05075.d
Injection Date: 05-Apr-2022 17:42:00 Instrument ID: LC_LCMS7
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 6 Worklist Smp#: 72
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

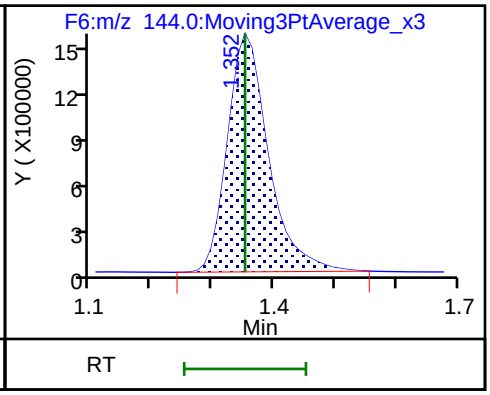
2 HMX



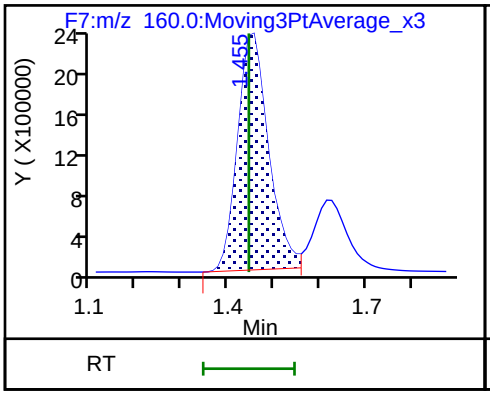
* 1 HMX-13C4



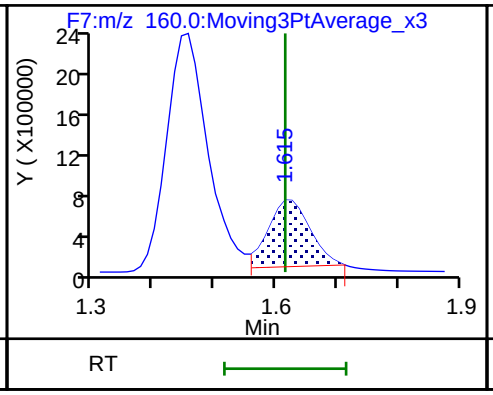
36 TNX



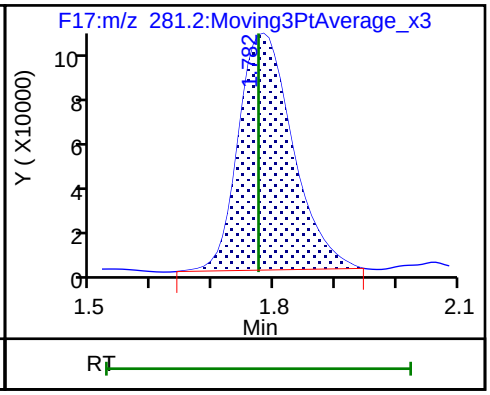
33 DNX



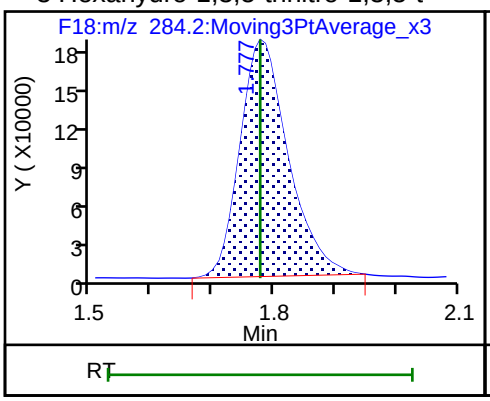
34 MNX



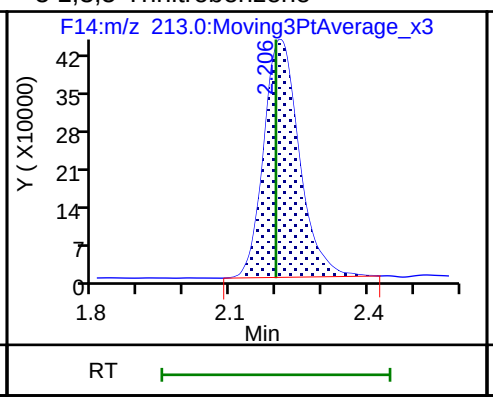
4 RDX



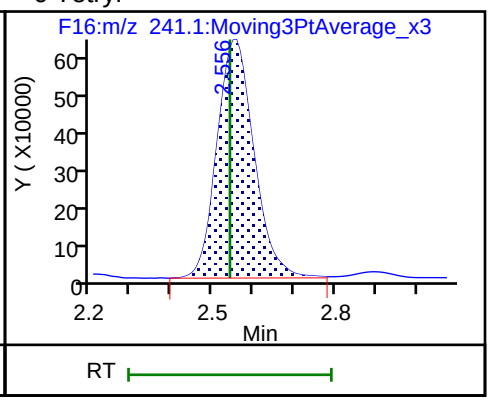
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



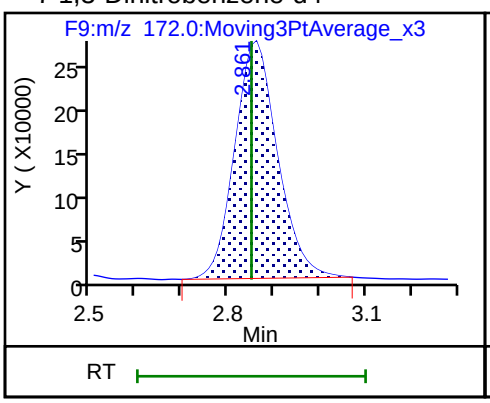
5 1,3,5-Trinitrobenzene



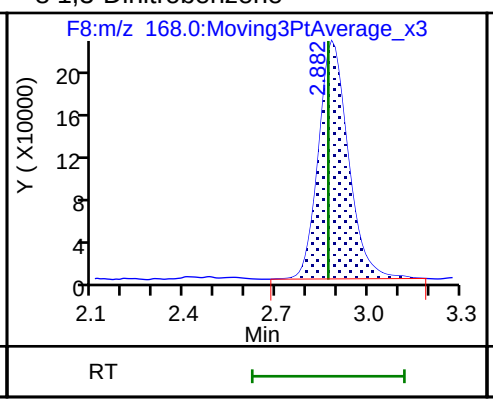
6 Tetryl



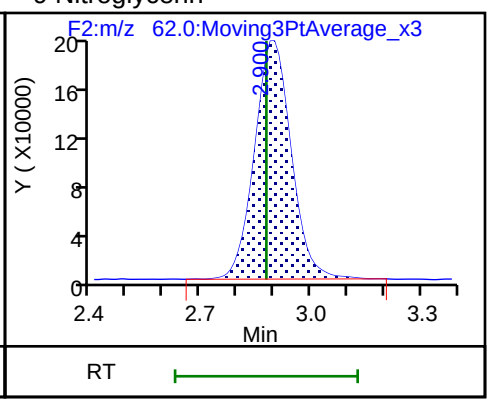
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



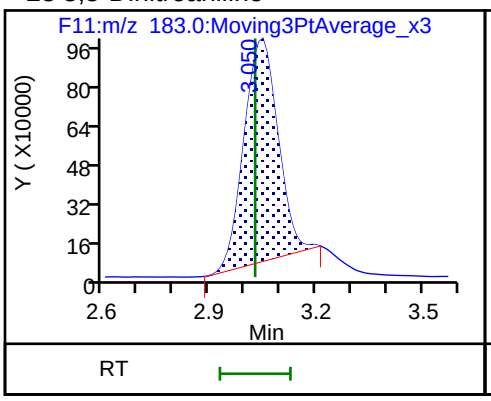
9 Nitroglycerin



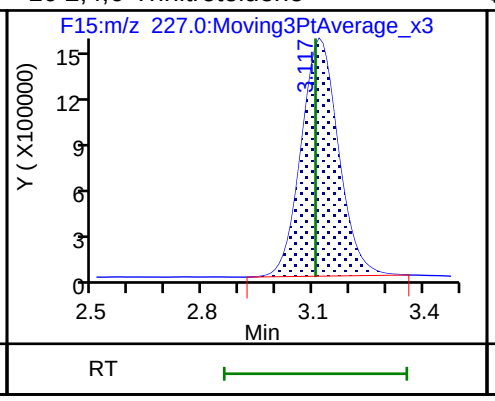
Report Date: 06-Apr-2022 07:10:22 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05075.d

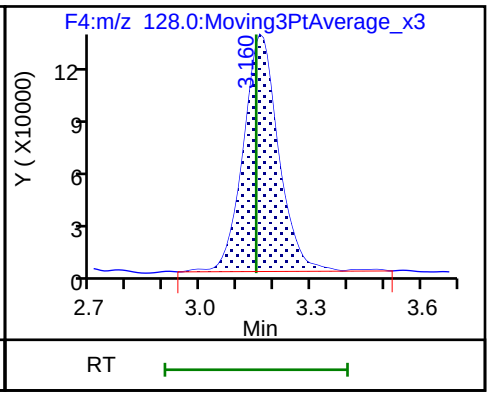
28 3,5-Dinitroaniline



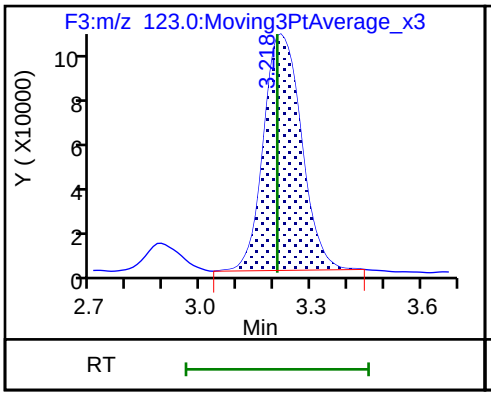
10 2,4,6-Trinitrotoluene



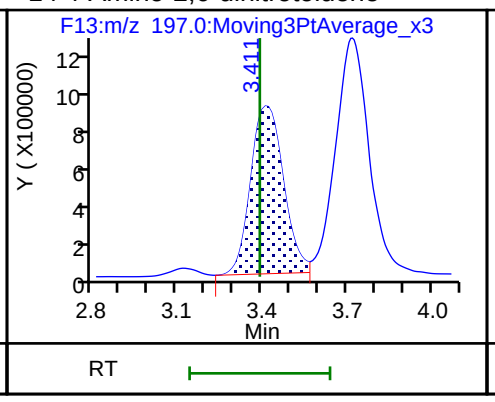
$ 11 Nitrobenzene-d5



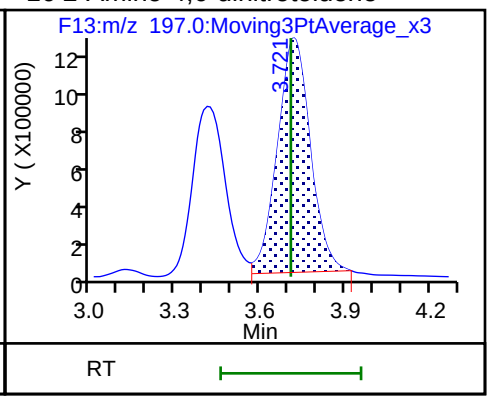
12 Nitrobenzene



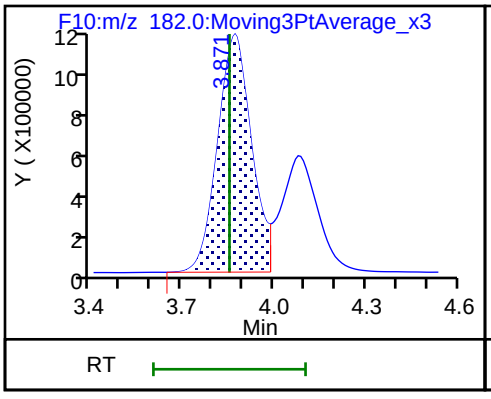
14 4-Amino-2,6-dinitrotoluene



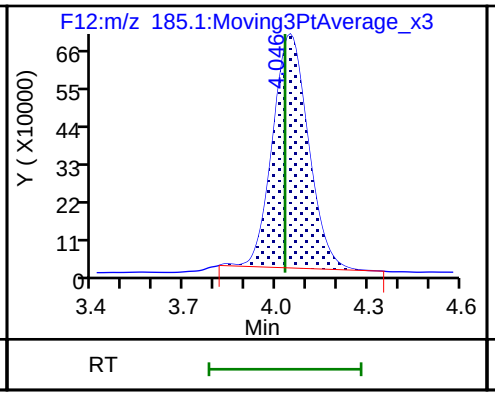
16 2-Amino-4,6-dinitrotoluene



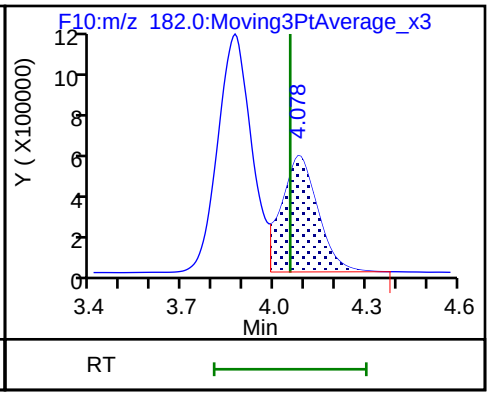
17 2,6-Dinitrotoluene



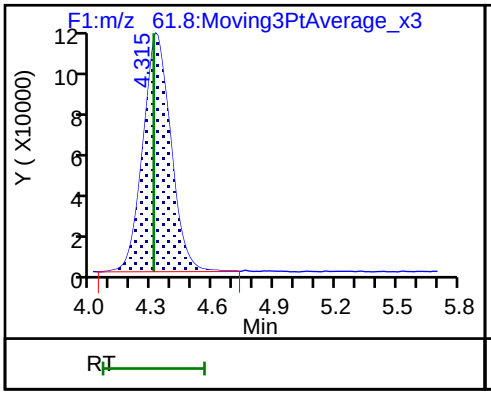
* 18 2,4-dinitrotoluene-d3



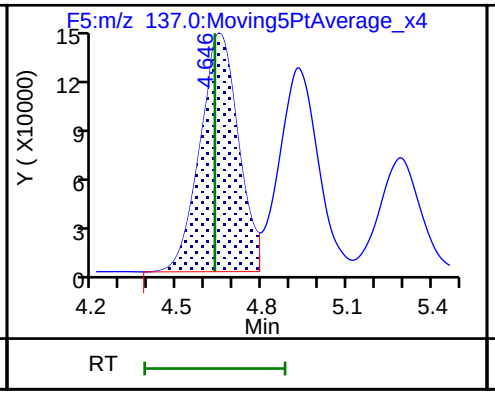
19 2,4-Dinitrotoluene



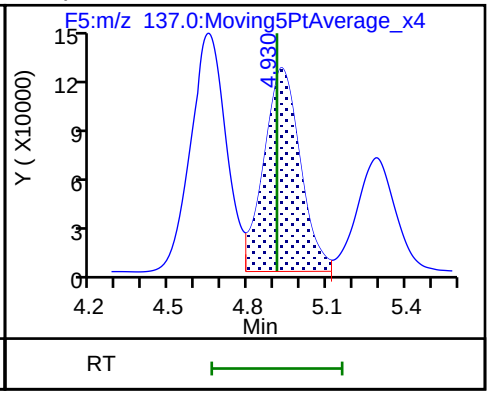
20 PETN



22 o-Nitrotoluene



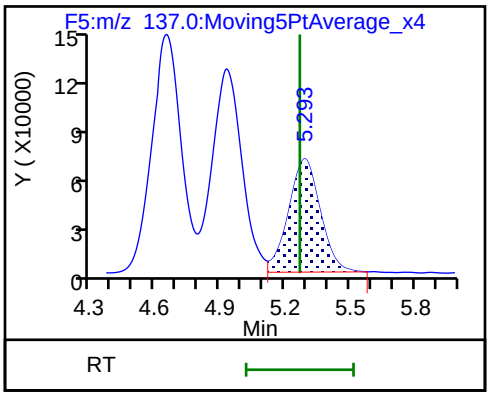
23 p-Nitrotoluene



Report Date: 06-Apr-2022 07:10:22 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05075.d

24 m-Nitrotoluene



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-160187-1

SDG No.:

Lab Sample ID: CCV 280-570786/82 Calibration Date: 04/05/2022 18:45

Instrument ID: LC_LCMS7 Calib Start Date: 04/05/2022 10:20

GC Column: Synergi Hydro ID: Calib End Date: 04/05/2022 10:58

Lab File ID: ex722D05085.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin1		2.179		49.2	50.0	-1.6	30.0
TNX	Lin1		5.258		50.5	50.1	0.9	30.0
DNX	Lin1		8.130		50.6	50.1	1.2	30.0
MNX	Lin1		1.988		56.6	58.4	-3.0	30.0
RDX	Lin1		0.8677		55.2	50.0	10.3	30.0
1,3,5-Trinitrobenzene	Lin1		1.744		49.9	50.1	-0.3	30.0
Tetryl	Lin1		2.989		52.9	50.1	5.6	30.0
1,3-Dinitrobenzene	Lin1		1.116		51.4	50.1	2.6	30.0
Nitroglycerin	Lin1		1.032		49.4	50.3	-1.8	30.0
3,5-Dinitroaniline	Lin1		1.344		45.7	50.0	-8.7	30.0
2,4,6-Trinitrotoluene	Lin1		7.805		49.4	50.2	-1.6	30.0
Nitrobenzene	Lin1		0.5319		50.3	50.2	0.2	30.0
4-Amino-2,6-dinitrotoluene	Lin1		1.658		50.3	50.1	0.5	30.0
2-Amino-4,6-dinitrotoluene	Lin1		2.194		48.4	50.2	-3.6	30.0
2,6-Dinitrotoluene	Lin1		1.970		49.1	50.2	-2.2	30.0
2,4-Dinitrotoluene	Lin1		0.996		47.1	50.2	-6.2	30.0
PETN	Lin1		0.2146		46.5	49.8	-6.6	30.0
o-Nitrotoluene	Lin1		0.2946		47.6	50.0	-4.8	30.0
p-Nitrotoluene	Lin1		0.2521		46.7	50.1	-6.7	30.0
m-Nitrotoluene	Lin1		0.1449		45.2	50.1	-9.6	30.0
Nitrobenzene-d5	Lin1		0.6149		48.3	50.0	-3.5	30.0

Report Date: 06-Apr-2022 07:10:29 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05085.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 05-Apr-2022 18:45:59 ALS Bottle#: 5 Worklist Smp#: 82
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:10:29 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 06-Apr-2022 07:02:21
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.223	1.223	0.0	0.998	233793	49.2	67.5	
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		268250	125.0	187	
36 TNX								
144.0	1.352	1.365	0.0	0.761	3702691	50.5	990	
33 DNX								
160.0	1.455	1.458	0.011	0.819	5724553	50.6	242	
34 MNX								
160.0	1.626	1.630	0.011	0.915	1632088	56.6	69.5	
4 RDX								
281.2	1.782	1.791	0.008	1.003	334287	55.2	59.6	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		963190	125.0	350	
5 1,3,5-Trinitrobenzene								
213.0	2.211	2.216	0.012	0.773	1229478	49.9	170	
6 Tetryl								
241.1	2.548	2.560	0.008	0.891	2106854	52.9	124	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1819985	129.4	271	
8 1,3-Dinitrobenzene								
168.0	2.882	2.893	0.011	1.007	786318	51.4	149	
9 Nitroglycerin								
62.0	2.889	2.900	0.011	1.010	730384	49.4	426	
28 3,5-Dinitroaniline								
183.0	3.050	3.051	0.023	1.066	3214174	45.7	52.7	

Report Date: 06-Apr-2022 07:10:29 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05085.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.117	3.134	0.010	0.770	5512419	49.4	445	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	432647	48.3	66.7	
12 Nitrobenzene								
123.0	3.218	3.236	0.010	0.795	375696	50.3	36.2	
14 4-Amino-2,6-dinitrotoluene								M
197.0	3.411	3.420	0.020	0.843	3969114	50.3	69.7	M
16 2-Amino-4,6-dinitrotoluene								M
197.0	3.715	3.740	0.007	0.918	5270262	48.4	82.3	M
17 2,6-Dinitrotoluene								
182.0	3.871	3.885	0.019	0.957	4732571	49.1	587	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		5980576	125.0	107	
19 2,4-Dinitrotoluene								
182.0	4.087	4.087	0.035	1.010	2391934	47.1	282	
20 PETN								
61.8	4.325	4.342	0.020	1.069	511204	46.5	155	
22 o-Nitrotoluene								
137.0	4.651	4.671	0.020	1.150	704633	47.6	236	
23 p-Nitrotoluene								
137.0	4.935	4.952	0.025	1.220	604367	46.7	202	
24 m-Nitrotoluene								
137.0	5.288	5.314	0.020	1.307	346887	45.2	106	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

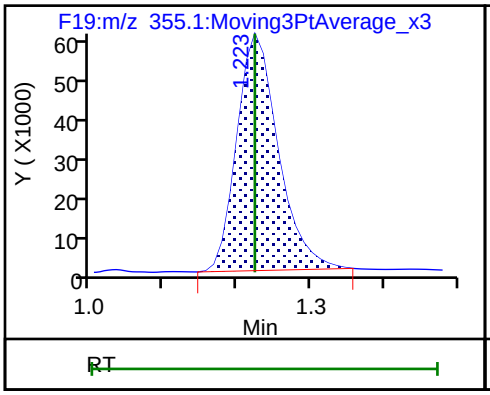
8321EXcalprim_00029	Amount Added: 5.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 5.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 06-Apr-2022 07:10:29 Chrom Revision: 2.3 18-Mar-2022 09:07:22

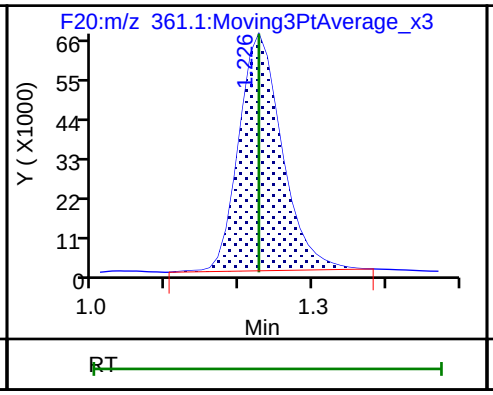
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05085.d
Injection Date: 05-Apr-2022 18:45:59 Instrument ID: LC_LCMS7
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 82
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

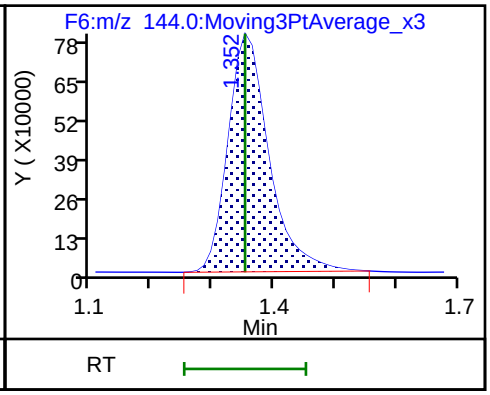
2 HMX



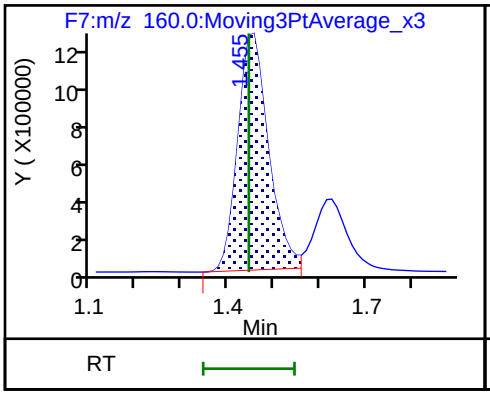
* 1 HMX-13C4



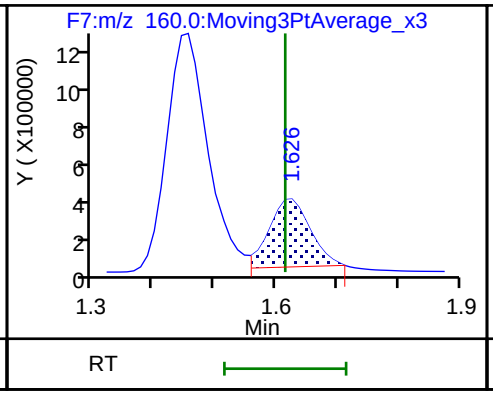
36 TNX



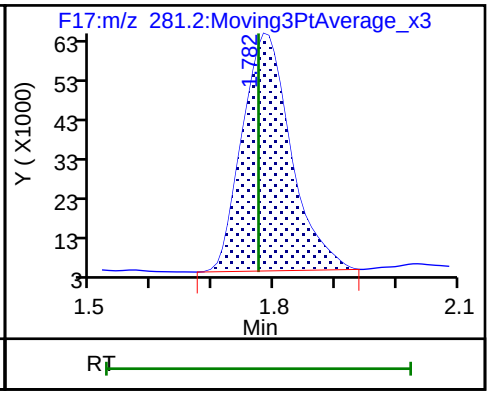
33 DNX



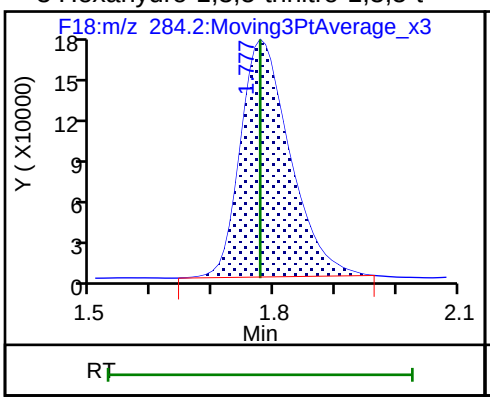
34 MNX



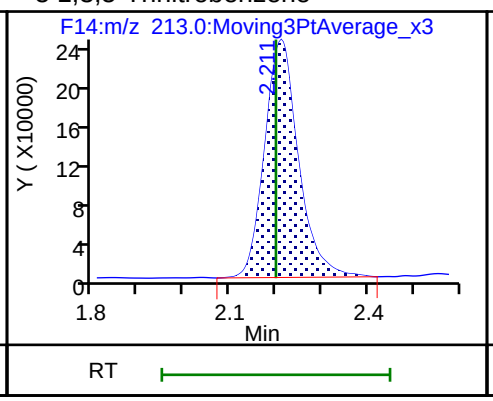
4 RDX



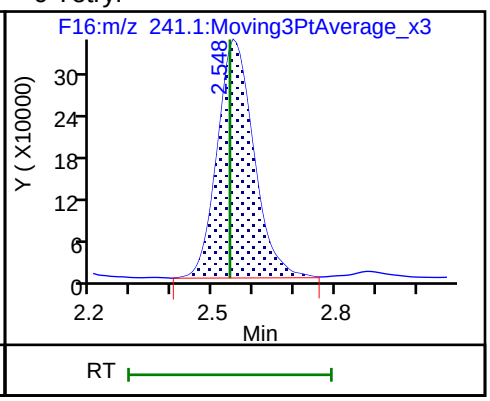
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



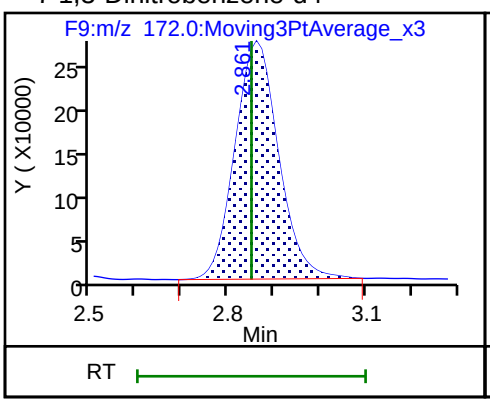
5 1,3,5-Trinitrobenzene



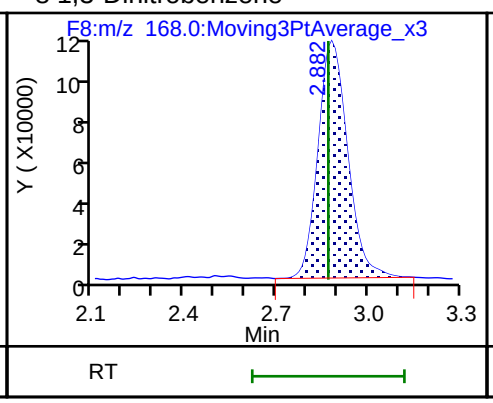
6 Tetryl



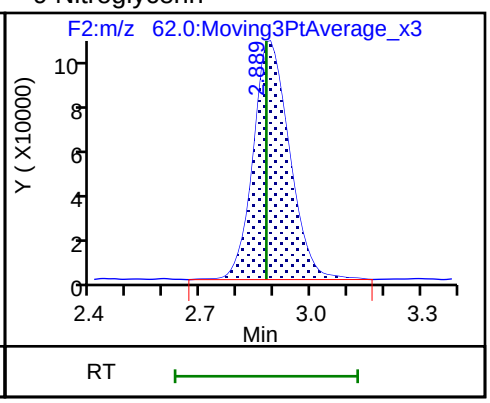
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



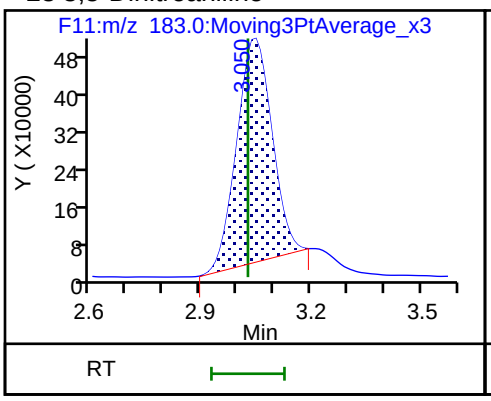
9 Nitroglycerin



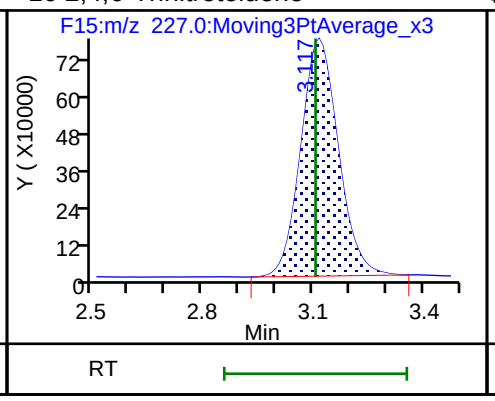
Report Date: 06-Apr-2022 07:10:29 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05085.d

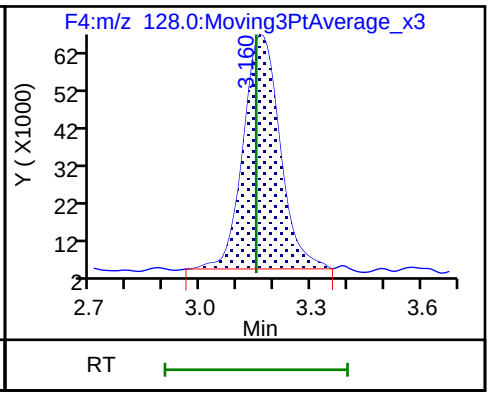
28 3,5-Dinitroaniline



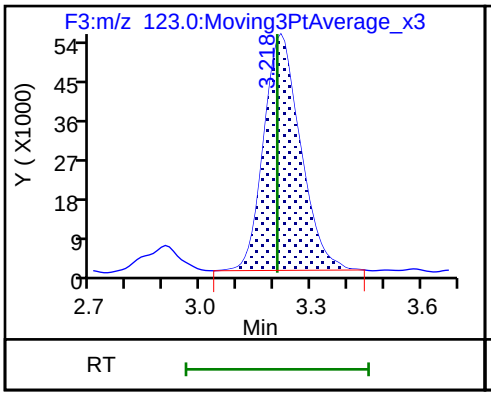
10 2,4,6-Trinitrotoluene



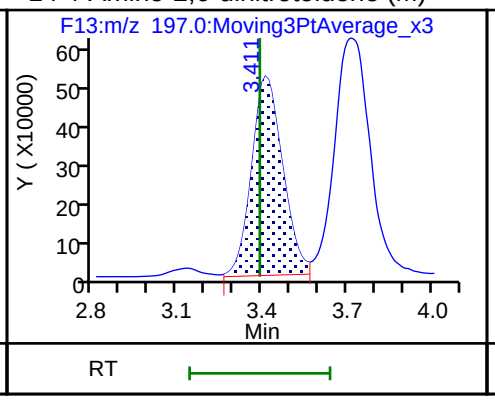
$ 11 Nitrobenzene-d5



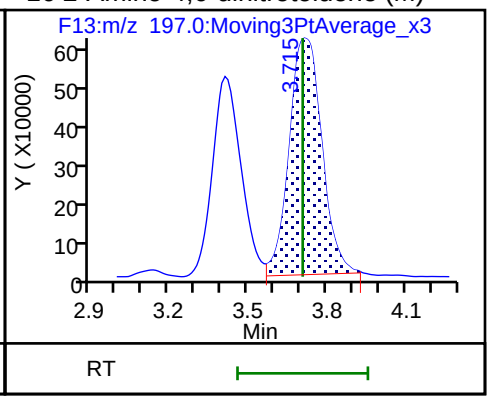
12 Nitrobenzene



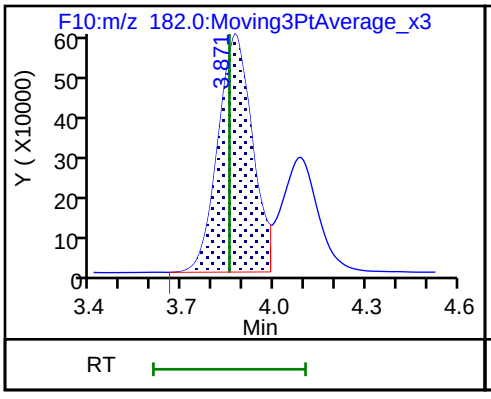
14 4-Amino-2,6-dinitrotoluene (M)



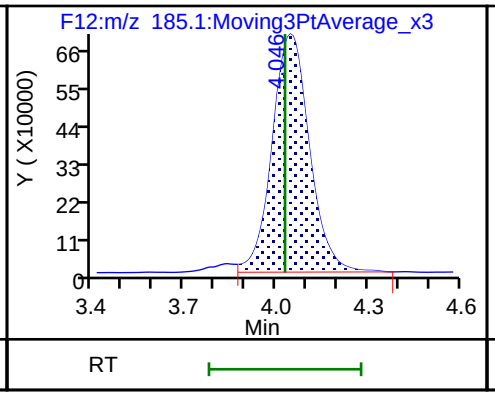
16 2-Amino-4,6-dinitrotoluene (M)



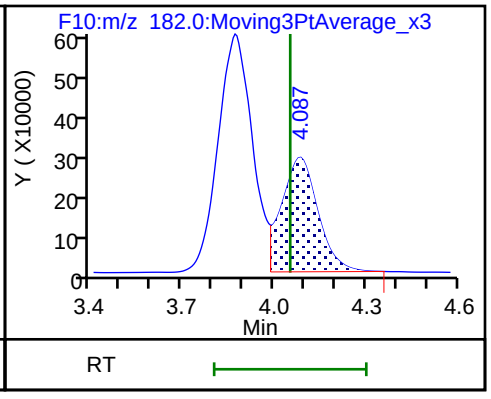
17 2,6-Dinitrotoluene



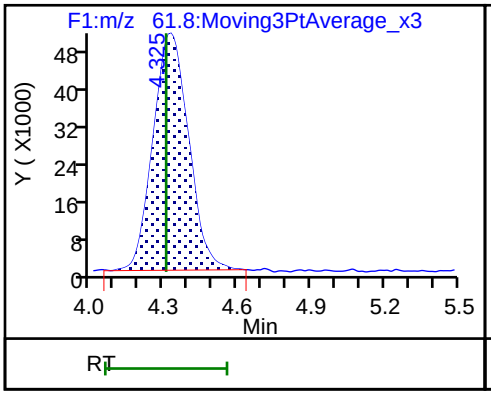
* 18 2,4-dinitrotoluene-d3



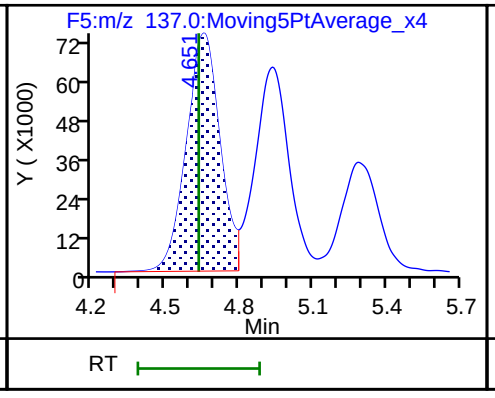
19 2,4-Dinitrotoluene



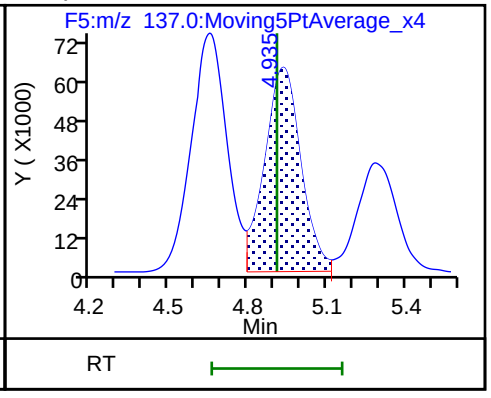
20 PETN



22 o-Nitrotoluene



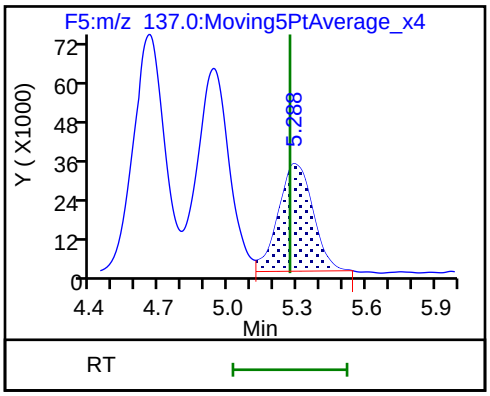
23 p-Nitrotoluene



Report Date: 06-Apr-2022 07:10:29 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05085.d

24 m-Nitrotoluene



Report Date: 06-Apr-2022 07:10:29 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

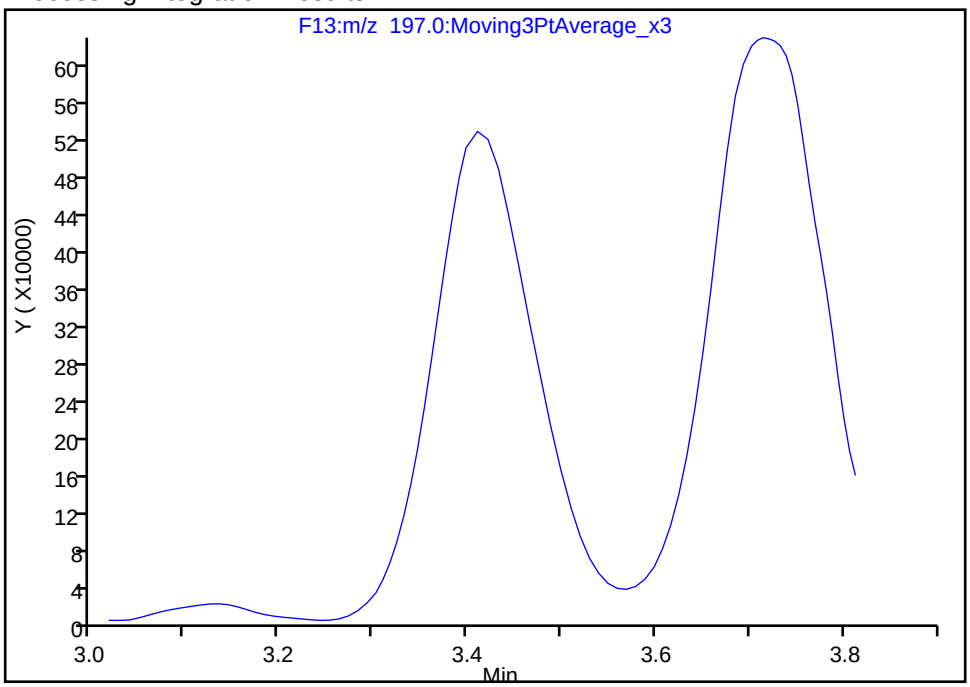
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05085.d				
Injection Date:	05-Apr-2022 18:45:59	Instrument ID:	LC_LCMS7		
Lims ID:	CCV				
Client ID:					
Operator ID:	acm	ALS Bottle#:	5	Worklist Smp#:	82
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

14 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

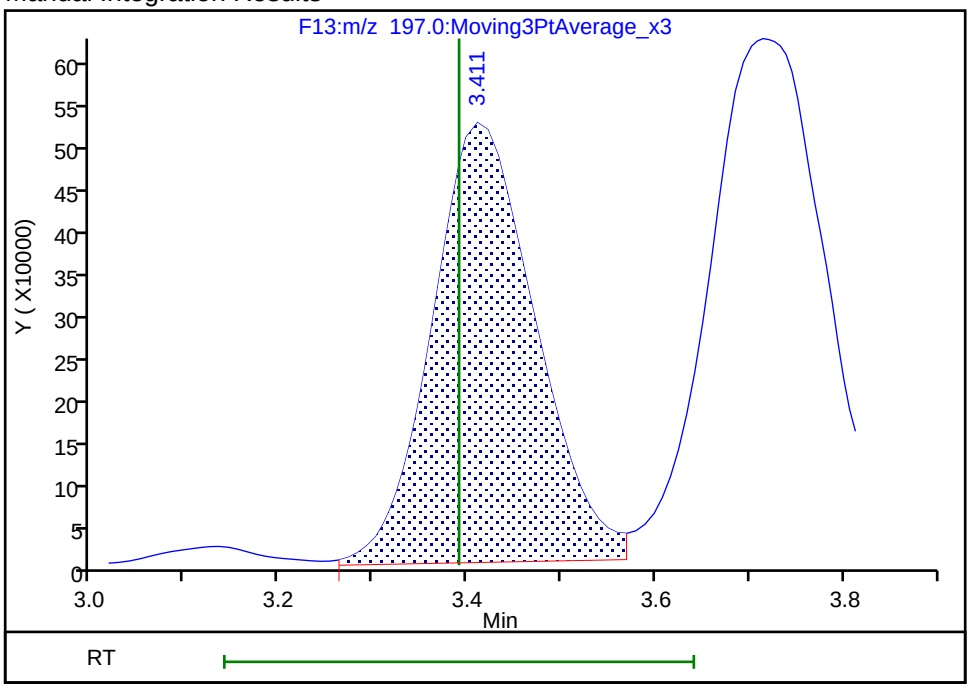
Not Detected
Expected RT: 3.39

Processing Integration Results



Manual Integration Results

RT: 3.41
Area: 3969114
Amount: 50.321375
Amount Units: ug/l



Reviewer: meyera, 06-Apr-2022 07:02:11
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 06-Apr-2022 07:10:29 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05085.d

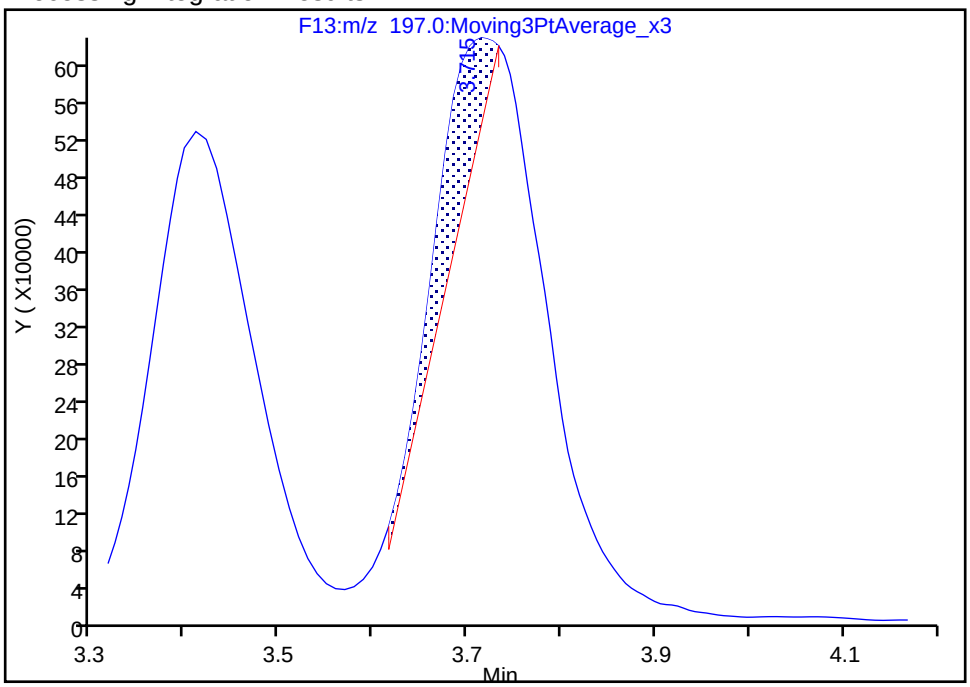
Injection Date:	05-Apr-2022 18:45:59	Instrument ID:	LC_LCMS7
Lims ID:	CCV		
Client ID:			
Operator ID:	acm	ALS Bottle#:	5 Worklist Smp#: 82
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F13:SIR

16 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

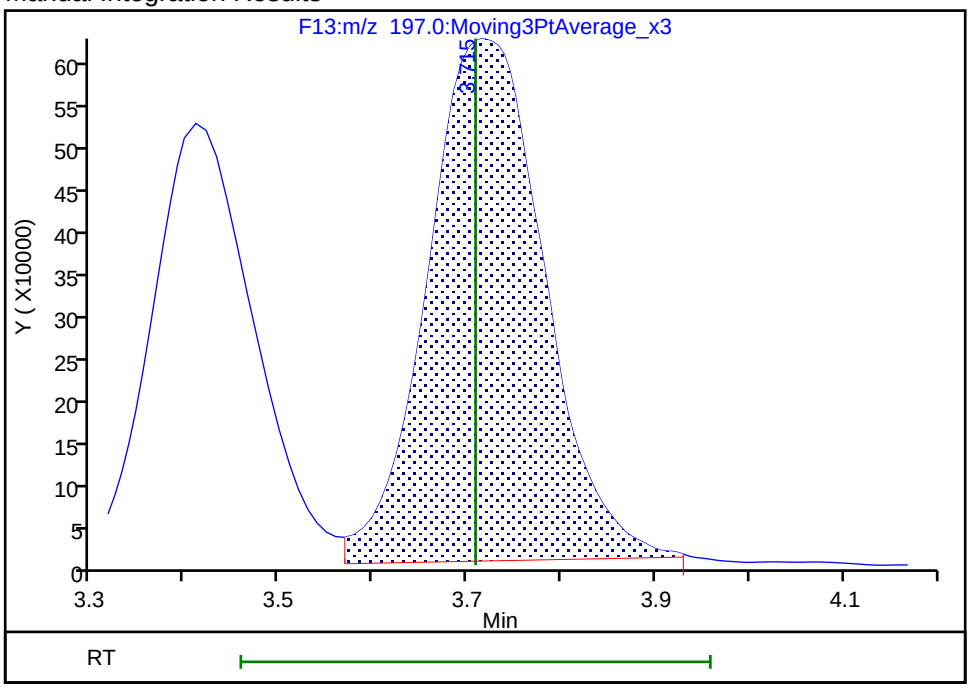
Processing Integration Results

RT: 3.71
Area: 585087
Amount: 5.257422
Amount Units: ug/l



Manual Integration Results

RT: 3.71
Area: 5270262
Amount: 48.374886
Amount Units: ug/l



Reviewer: meyera, 06-Apr-2022 07:02:11

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-160187-1

SDG No.:

Lab Sample ID: ICV 280-571107/11 Calibration Date: 04/07/2022 11:32

Instrument ID: LC_LCMS7 Calib Start Date: 04/07/2022 10:39

GC Column: Synergi Hydro ID: Calib End Date: 04/07/2022 11:18

Lab File ID: ex722D07011.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Qua1		2.138		107	100	7.1	30.0
TNX	Lin1		4.403		99.7	100	-0.4	30.0
DNX	Lin1		6.541		99.0	100	-1.1	30.0
MNX	Lin1		1.721		117	117	0.0	30.0
RDX	Lin1		0.8052		116	100	16.5	30.0
1,3,5-Trinitrobenzene	Lin1		1.469		96.4	100	-3.6	30.0
Tetryl	Lin1		2.023		95.7	100	-4.3	30.0
1,3-Dinitrobenzene	Lin1		1.105		102	100	2.3	30.0
Nitroglycerin	Lin1		0.9315		97.1	100	-2.9	30.0
3,5-Dinitroaniline	Lin1		1.499		101	100	1.4	30.0
2,4,6-Trinitrotoluene	Lin1		6.666		98.3	100	-1.7	30.0
Nitrobenzene	Lin1		0.4901		90.3	100	-9.7	30.0
4-Amino-2,6-dinitrotoluene	Lin1		1.584		102	100	2.2	30.0
2-Amino-4,6-dinitrotoluene	Lin1		1.992		99.3	100	-0.7	30.0
2,6-Dinitrotoluene	Lin1		2.103		102	100	2.1	30.0
2,4-Dinitrotoluene	Lin1		1.074		102	100	2.5	30.0
PETN	Lin1		0.1663		102	100	2.1	30.0
o-Nitrotoluene	Lin1		0.3201		102	100	1.6	30.0
p-Nitrotoluene	Lin1		0.2745		101	100	0.7	30.0
m-Nitrotoluene	Lin1		0.1640		99.8	100	-0.2	30.0
Nitrobenzene-d5	Lin1		0.5970		95.1	100	-4.9	30.0

Report Date: 08-Apr-2022 07:32:21 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07011.d
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 07-Apr-2022 11:32:00 ALS Bottle#: 9 Worklist Smp#: 11
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7
Sublist:

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:21 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 12:34:24
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	185604	107.1	57.8	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		108491	125.0	257	
36 TNX								
144.0	1.385	1.385	0.0	0.751	4613118	99.7	709	
33 DNX								
160.0	1.489	1.489	0.0	0.807	6852623	99.0	446	
34 MNX								
160.0	1.670	1.670	0.0	0.906	2101786	116.8	131	
4 RDX								
281.2	1.841	1.841	0.0	0.998	239781	116.5	70.0	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		372231	125.0	182	
5 1,3,5-Trinitrobenzene								
213.0	2.317	2.317	0.0	0.767	1537170	96.4	155	
6 Tetryl								
241.1	2.712	2.712	0.0	0.898	2117668	95.7	124	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.030	-0.011		1353932	129.4	342	
8 1,3-Dinitrobenzene								
168.0	3.051	3.051	0.0	1.011	1156915	102.3	171	
9 Nitroglycerin								
62.0	3.080	3.080	0.0	1.020	974981	97.1	300	
28 3,5-Dinitroaniline								M
183.0	3.230	3.230	0.0	1.070	4869332	101.4	49.2	M

Report Date: 08-Apr-2022 07:32:21 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07011.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.321	3.321	0.0	0.766	6977340	98.3	156	
$ 11 Nitrobenzene-d5								
128.0	3.370	3.370	0.0	0.778	624988	95.1	80.0	
12 Nitrobenzene								
123.0	3.421	3.431	-0.010	0.790	512934	90.3	36.0	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.652	3.645	0.007	0.843	5143279	102.2	33.4	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.976	3.976	0.0	0.918	6469154	99.3	39.1	
17 2,6-Dinitrotoluene								
182.0	4.144	4.150	-0.006	0.957	6830238	102.1	633	
* 18 2,4-dinitrotoluene-d3								
185.1	4.332	4.341	-0.009		4059996	125.0	108	
19 2,4-Dinitrotoluene								
182.0	4.382	4.373	0.009	1.011	3489320	102.5	292	
20 PETN								
61.8	4.706	4.716	-0.010	1.086	540209	102.1	125	
22 o-Nitrotoluene								
137.0	4.997	5.002	-0.005	1.153	1039603	101.6	247	
23 p-Nitrotoluene								
137.0	5.306	5.311	-0.005	1.225	891709	100.7	202	
24 m-Nitrotoluene								
137.0	5.689	5.704	-0.015	1.313	532674	99.8	119	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

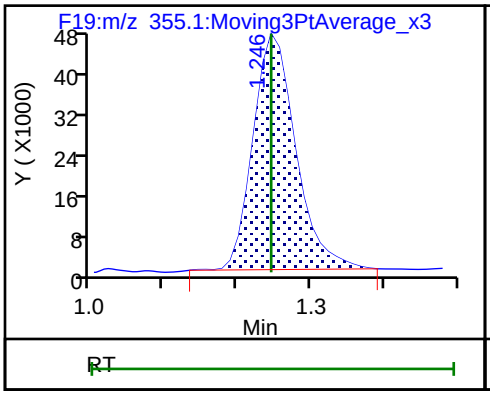
8321NB-D5-cal_00021	Amount Added: 10.00	Units: uL	
8321expICV_00019	Amount Added: 10.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 08-Apr-2022 07:32:21 Chrom Revision: 2.3 18-Mar-2022 09:07:22

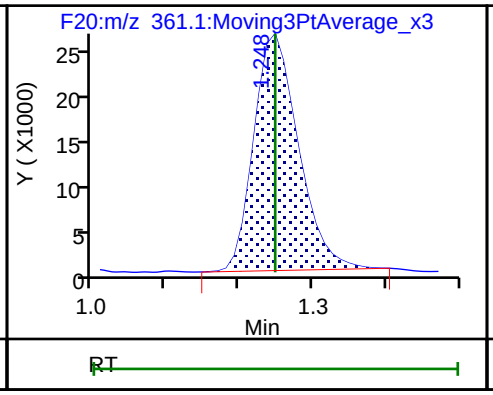
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07011.d
Injection Date: 07-Apr-2022 11:32:00 Instrument ID: LC_LCMS7
Lims ID: ICV
Client ID:
Operator ID: acm ALS Bottle#: 9 Worklist Smp#: 11
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

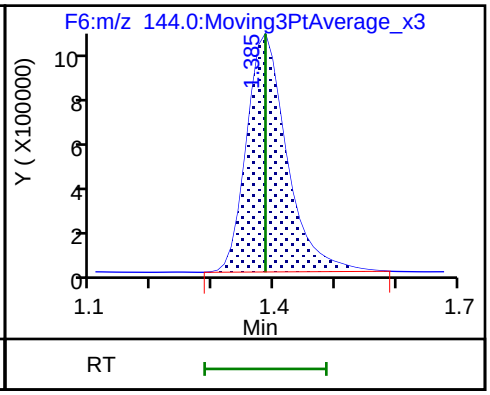
2 HMX



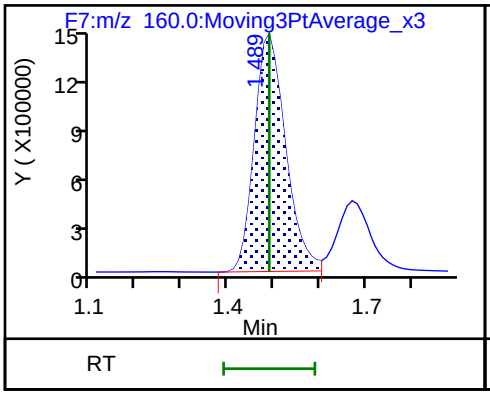
* 1 HMX-13C4



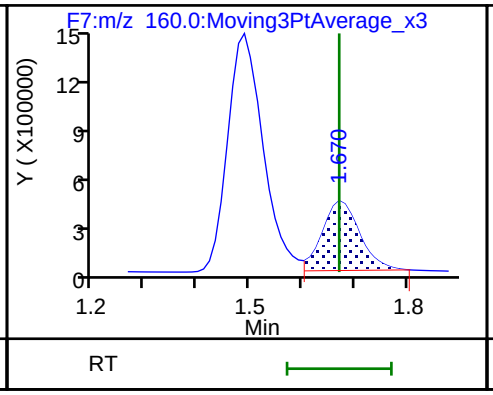
36 TNX



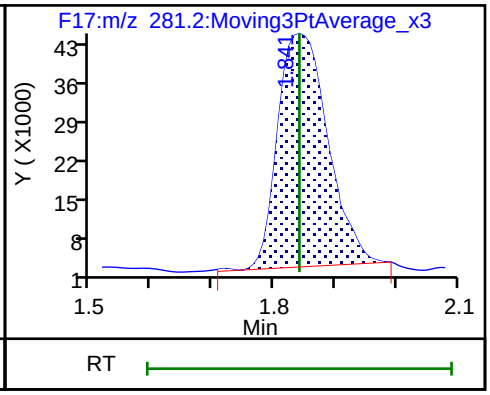
33 DNX



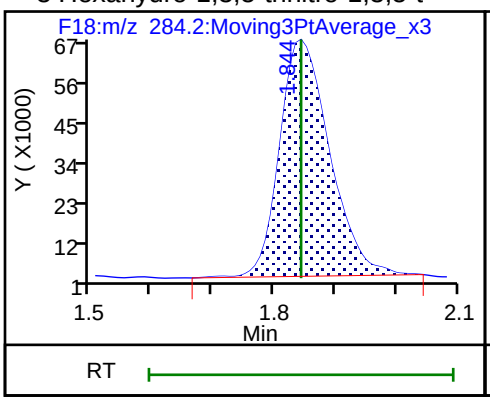
34 MNX



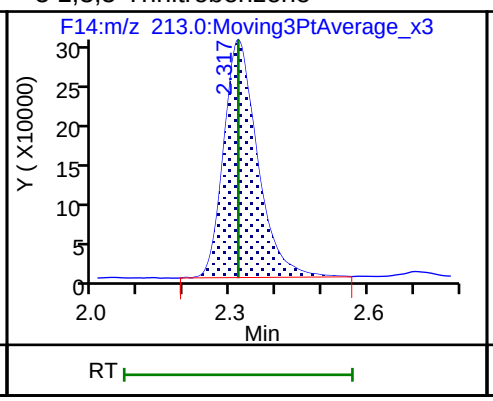
4 RDX



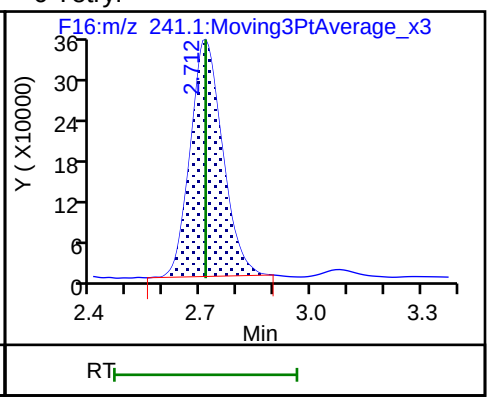
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



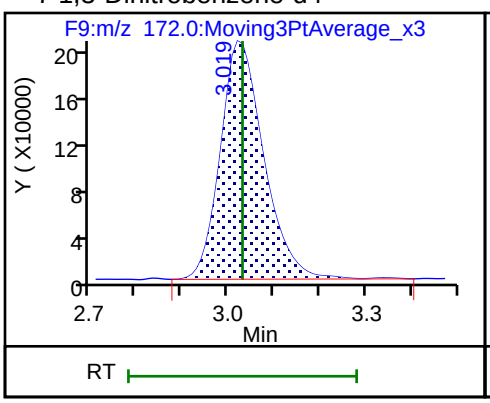
5 1,3,5-Trinitrobenzene



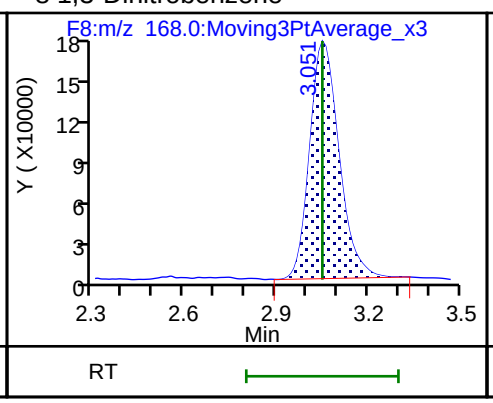
6 Tetryl



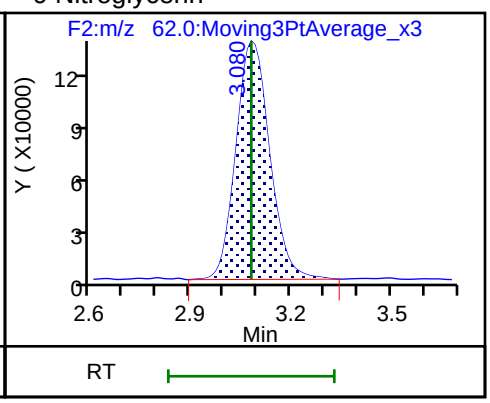
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



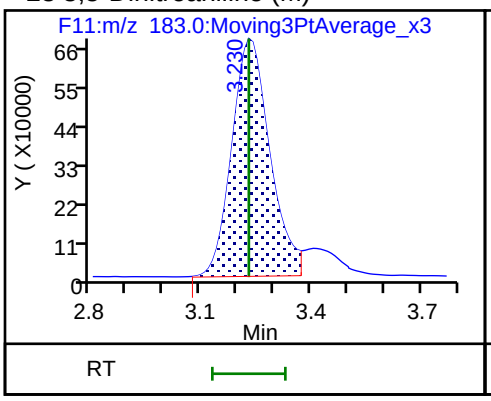
9 Nitroglycerin



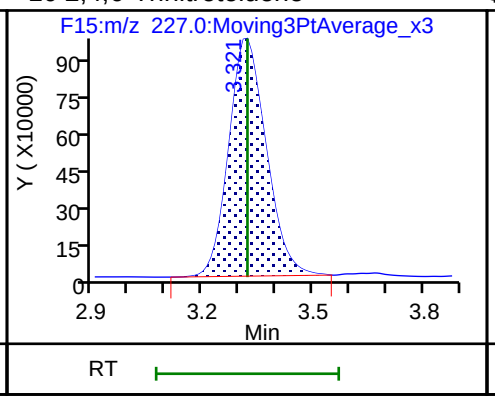
Report Date: 08-Apr-2022 07:32:21 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07011.d

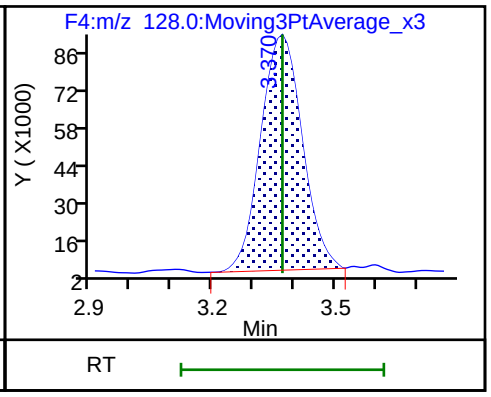
28 3,5-Dinitroaniline (M)



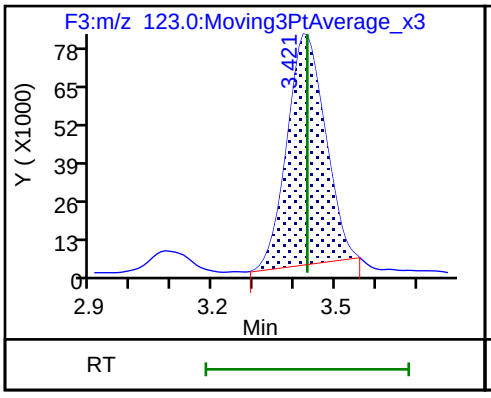
10 2,4,6-Trinitrotoluene



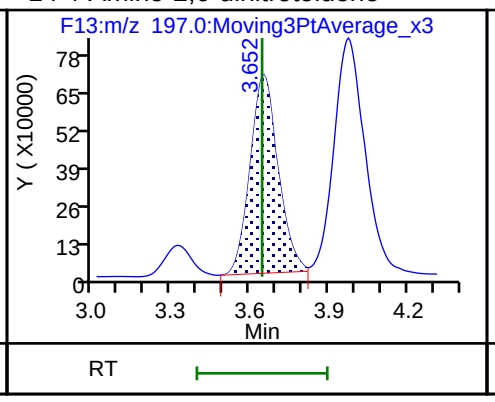
$ 11 Nitrobenzene-d5



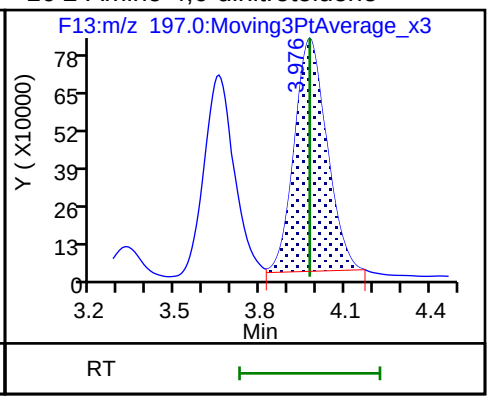
12 Nitrobenzene



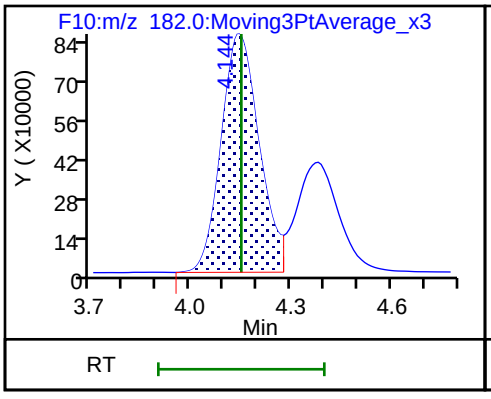
14 4-Amino-2,6-dinitrotoluene



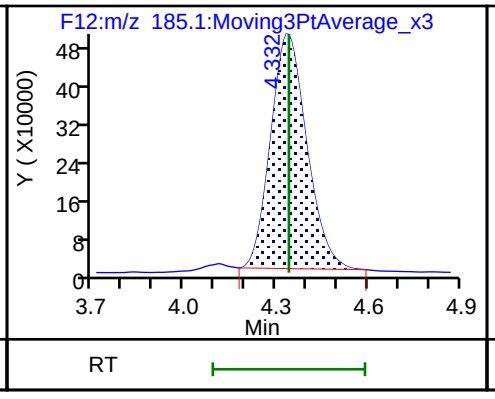
16 2-Amino-4,6-dinitrotoluene



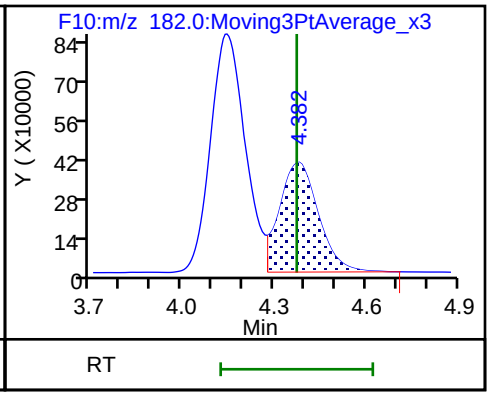
17 2,6-Dinitrotoluene



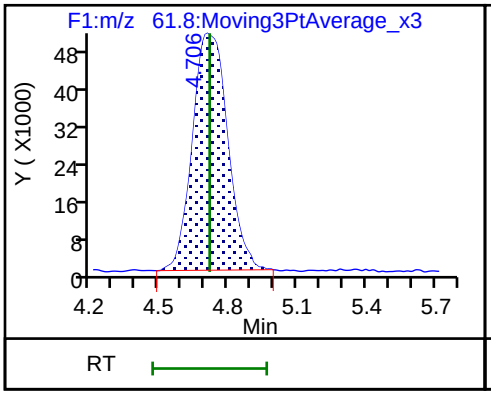
* 18 2,4-dinitrotoluene-d3



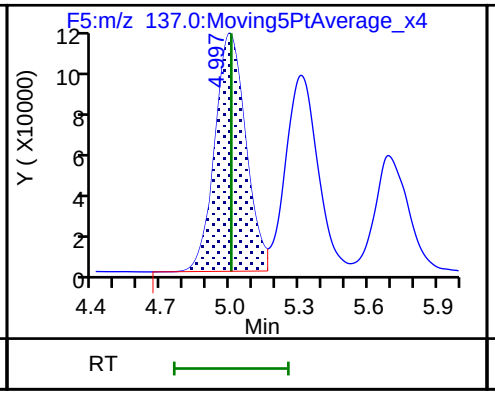
19 2,4-Dinitrotoluene



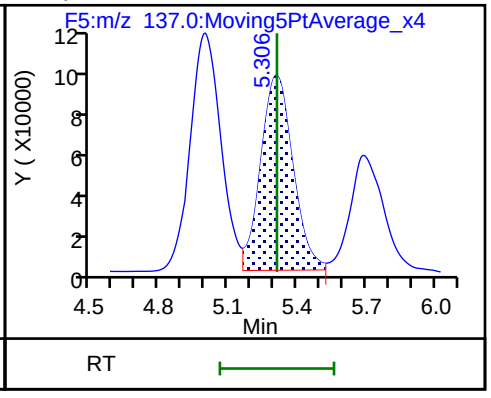
20 PETN



22 o-Nitrotoluene



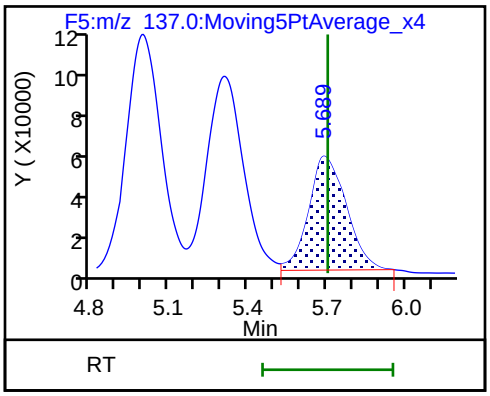
23 p-Nitrotoluene



Report Date: 08-Apr-2022 07:32:21 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07011.d

24 m-Nitrotoluene



Report Date: 08-Apr-2022 07:32:21

Chrom Revision: 2.3 18-Mar-2022 09:07:22
Manual Integration/User Assign Peak Report

Eurofins Denver

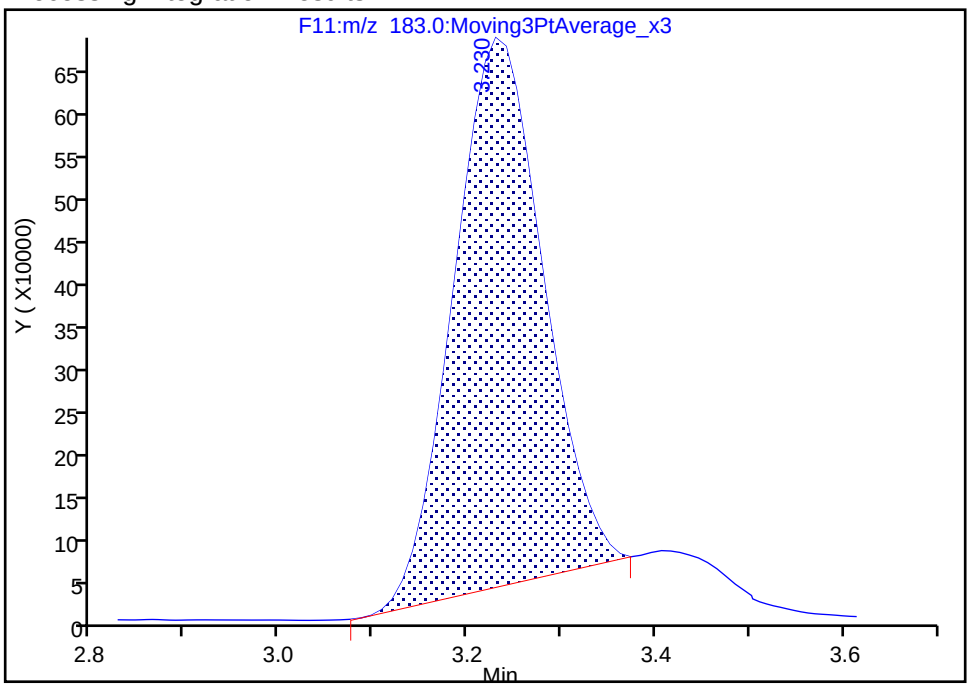
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07011.d
Injection Date: 07-Apr-2022 11:32:00 Instrument ID: LC_LCMS7
Lims ID: ICV
Client ID:
Operator ID: acm ALS Bottle#: 9 Worklist Smp#: 11
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F11:SIR

28 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

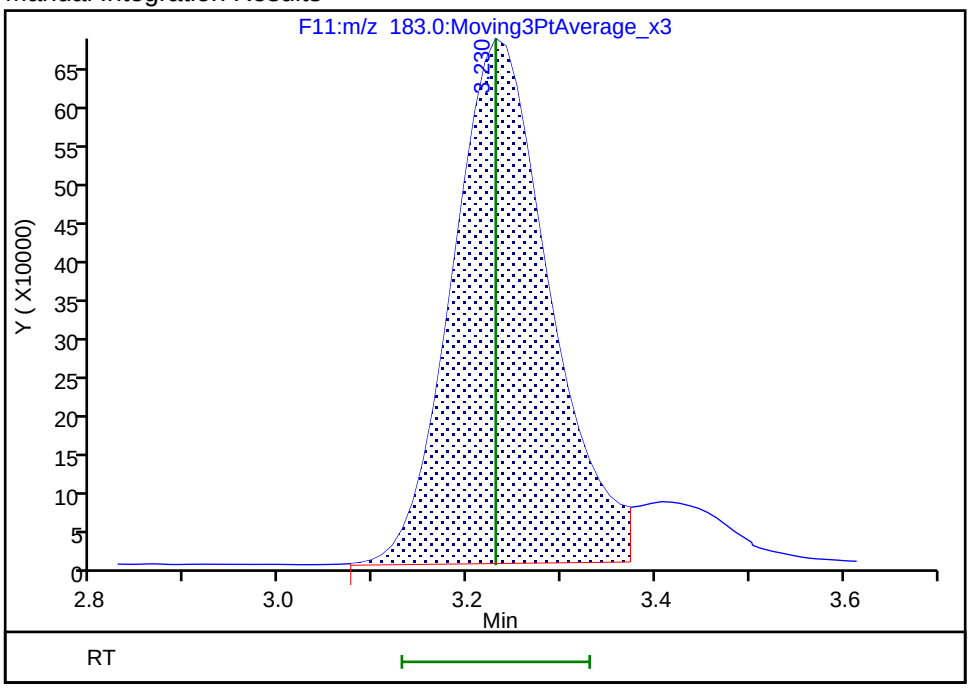
Processing Integration Results

RT: 3.23
Area: 4233098
Amount: 88.145289
Amount Units: ug/l



Manual Integration Results

RT: 3.23
Area: 4869332
Amount: 101.4453
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 12:34:13
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-160187-1

SDG No.:

Lab Sample ID: CCV 280-571108/21 Calibration Date: 04/07/2022 12:38

Instrument ID: LC_LCMS7 Calib Start Date: 04/07/2022 10:39

GC Column: Synergi Hydro ID: Calib End Date: 04/07/2022 11:18

Lab File ID: ex722D07021.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Qua1		2.051		53.8	50.0	7.7	30.0
TNX	Lin1		4.505		50.5	50.1	1.0	30.0
DNX	Lin1		6.445		48.5	50.1	-3.1	30.0
MNX	Lin1		1.697		57.5	58.4	-1.4	30.0
RDX	Lin1		0.8319		59.6	50.0	19.2	30.0
1,3,5-Trinitrobenzene	Lin1		1.499		49.2	50.1	-1.8	30.0
Tetryl	Lin1		2.040		48.7	50.1	-2.8	30.0
1,3-Dinitrobenzene	Lin1		1.121		51.8	50.1	3.4	30.0
Nitroglycerin	Lin1		0.9688		50.2	50.3	-0.1	30.0
3,5-Dinitroaniline	Lin1		1.519		51.2	50.0	2.4	30.0
2,4,6-Trinitrotoluene	Lin1		6.622		48.8	50.2	-2.7	30.0
Nitrobenzene	Lin1		0.5677		52.1	50.2	3.7	30.0
4-Amino-2,6-dinitrotoluene	Lin1		1.520		48.9	50.1	-2.4	30.0
2-Amino-4,6-dinitrotoluene	Lin1		2.010		50.1	50.2	-0.1	30.0
2,6-Dinitrotoluene	Lin1		2.101		51.0	50.2	1.6	30.0
2,4-Dinitrotoluene	Lin1		1.039		49.4	50.2	-1.5	30.0
PETN	Lin1		0.1529		47.3	49.8	-5.1	30.0
o-Nitrotoluene	Lin1		0.3261		51.6	50.0	3.1	30.0
p-Nitrotoluene	Lin1		0.2964		54.2	50.1	8.2	30.0
m-Nitrotoluene	Lin1		0.1716		52.1	50.1	4.1	30.0
Nitrobenzene-d5	Lin1		0.6566		53.1	50.0	6.1	30.0

Report Date: 08-Apr-2022 07:32:28 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07021.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 07-Apr-2022 12:38:00 ALS Bottle#: 5 Worklist Smp#: 21
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:27 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 13:11:31
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	95477	53.8	48.0	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		116352	125.0	128	
36 TNX								
144.0	1.385	1.385	0.0	0.751	2376135	50.5	599	
33 DNX								
160.0	1.489	1.489	0.0	0.807	3399735	48.5	383	
34 MNX								
160.0	1.670	1.670	0.0	0.906	1043310	57.5	114	
4 RDX								
281.2	1.849	1.841	0.008	1.003	126380	59.6	64.7	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								M
284.2	1.844	1.844	0.0		379799	125.0	142	M
5 1,3,5-Trinitrobenzene								
213.0	2.317	2.317	0.0	0.765	791544	49.2	136	
6 Tetryl								
241.1	2.719	2.712	0.007	0.897	1076914	48.7	125	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.030	3.030	0.0		1363291	129.4	218	
8 1,3-Dinitrobenzene								
168.0	3.051	3.051	0.0	1.007	591711	51.8	129	
9 Nitroglycerin								
62.0	3.069	3.080	-0.011	1.013	513538	50.2	277	
28 3,5-Dinitroaniline								M
183.0	3.230	3.230	0.0	1.066	2559035	51.2	46.5	M

Report Date: 08-Apr-2022 07:32:28 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07021.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.321	3.321	0.0	0.765	3503507	48.8	146	
$ 11 Nitrobenzene-d5								
128.0	3.370	3.370	0.0	0.776	346067	53.1	32.2	
12 Nitrobenzene								
123.0	3.431	3.431	0.0	0.790	300353	52.1	34.2	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.652	3.645	0.007	0.841	2563529	48.9	33.6	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.976	3.976	0.0	0.916	3400873	50.1	39.4	
17 2,6-Dinitrotoluene								
182.0	4.138	4.150	-0.012	0.953	3554093	51.0	586	
* 18 2,4-dinitrotoluene-d3								
185.1	4.341	4.341	0.0		4212185	125.0	115	
19 2,4-Dinitrotoluene								
182.0	4.382	4.373	0.009	1.009	1757600	49.4	262	
20 PETN								
61.8	4.716	4.716	0.0	1.086	256578	47.3	43.3	
22 o-Nitrotoluene								
137.0	4.992	5.002	-0.010	1.150	549455	51.6	180	
23 p-Nitrotoluene								
137.0	5.306	5.311	-0.005	1.222	500471	54.2	162	
24 m-Nitrotoluene								
137.0	5.704	5.704	0.0	1.314	289332	52.1	82.4	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

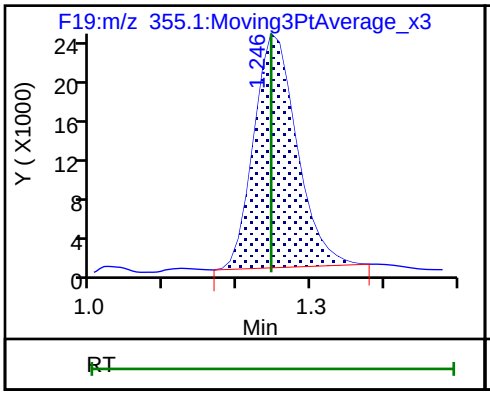
8321EXcalprim_00029	Amount Added: 5.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 5.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 08-Apr-2022 07:32:28 Chrom Revision: 2.3 18-Mar-2022 09:07:22

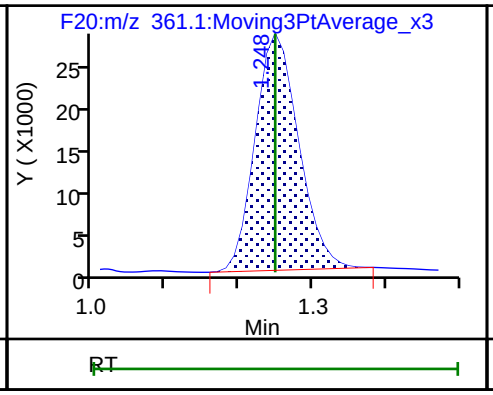
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07021.d
Injection Date: 07-Apr-2022 12:38:00 Instrument ID: LC_LCMS7
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 21
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

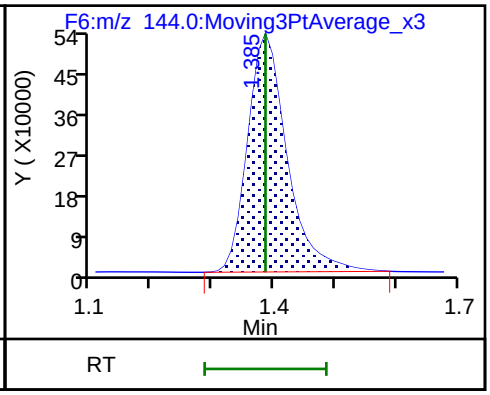
2 HMX



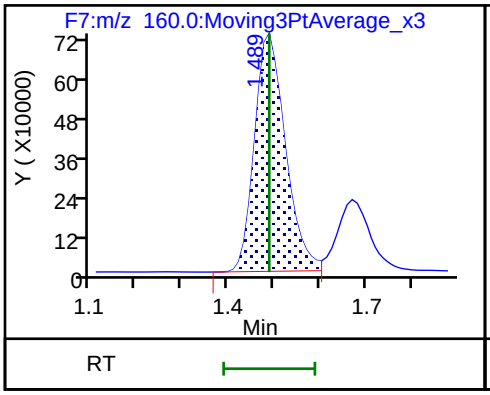
* 1 HMX-13C4



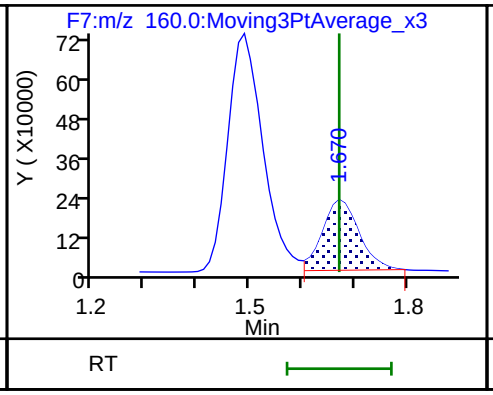
36 TNX



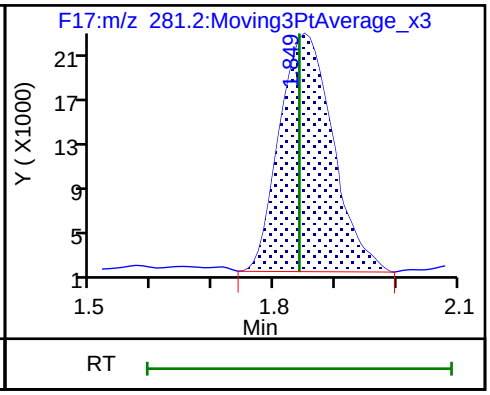
33 DNX



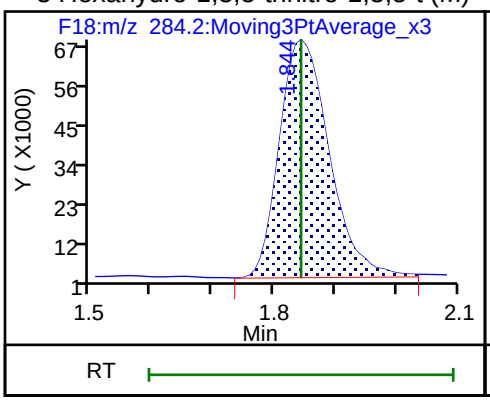
34 MNX



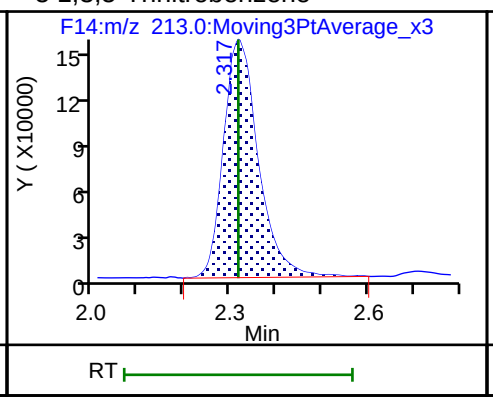
4 RDX



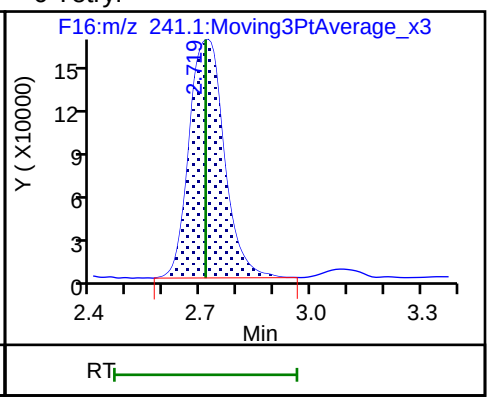
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t (M)



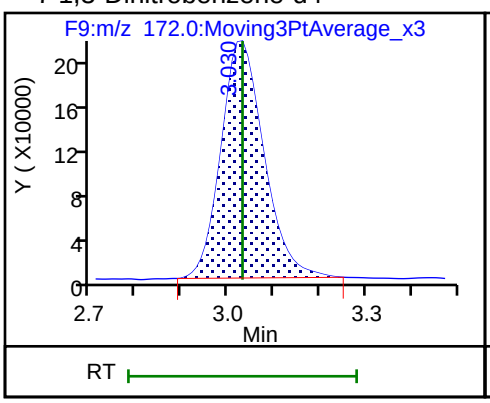
5 1,3,5-Trinitrobenzene



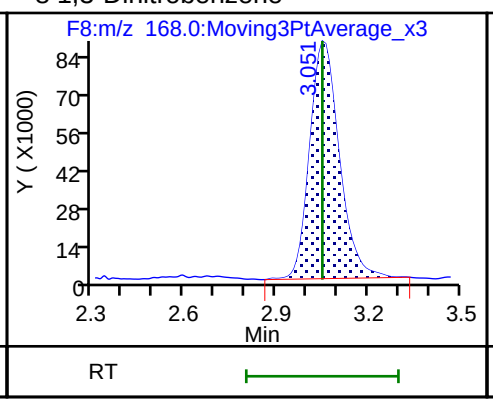
6 Tetryl



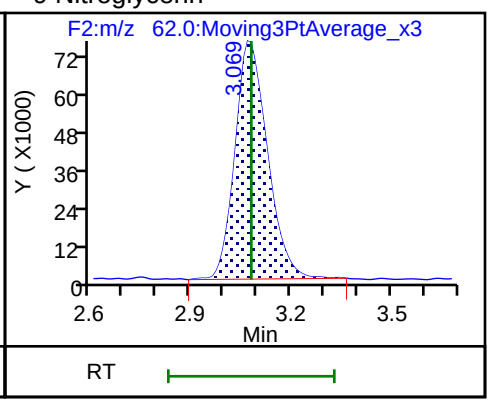
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

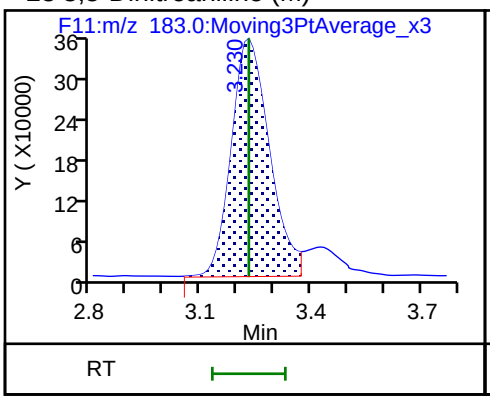


9 Nitroglycerin

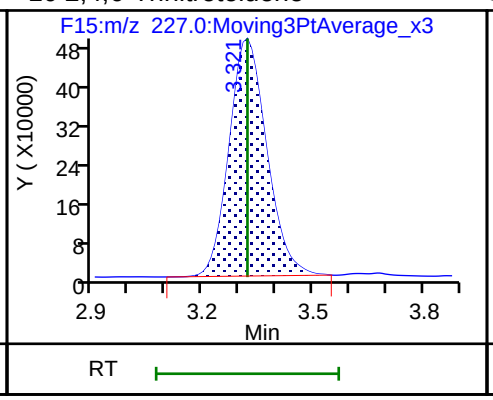


Report Date: 08-Apr-2022 07:32:28 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07021.d

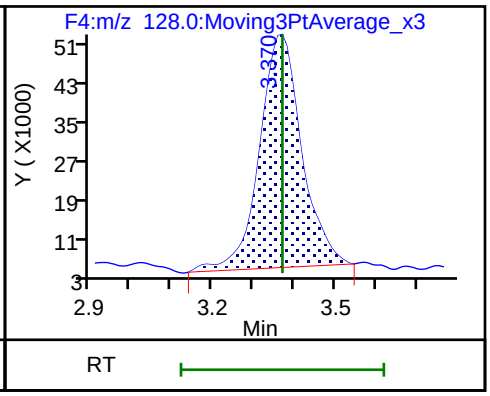
28 3,5-Dinitroaniline (M)



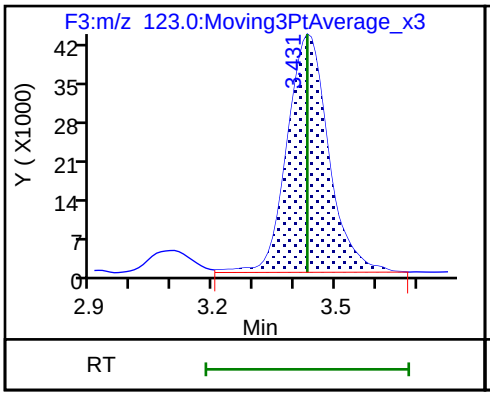
10 2,4,6-Trinitrotoluene



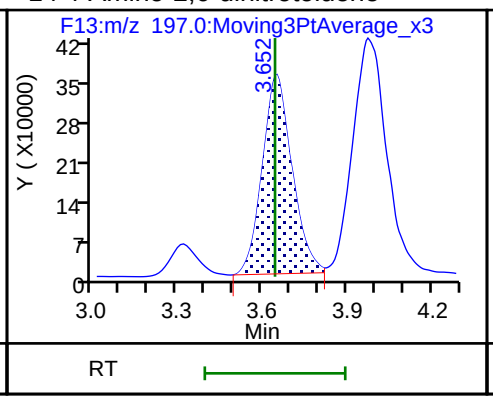
$ 11 Nitrobenzene-d5



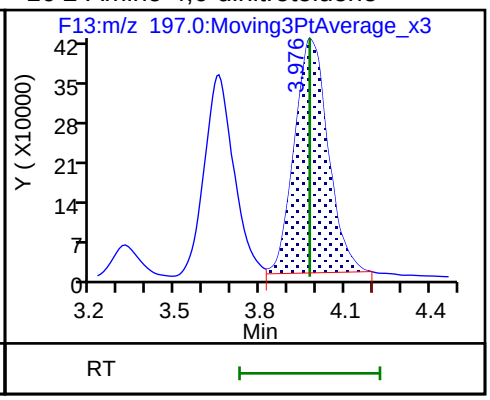
12 Nitrobenzene



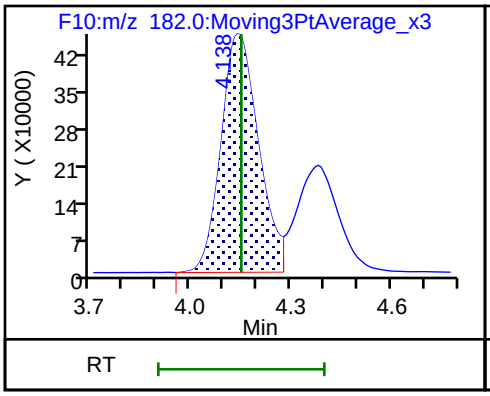
14 4-Amino-2,6-dinitrotoluene



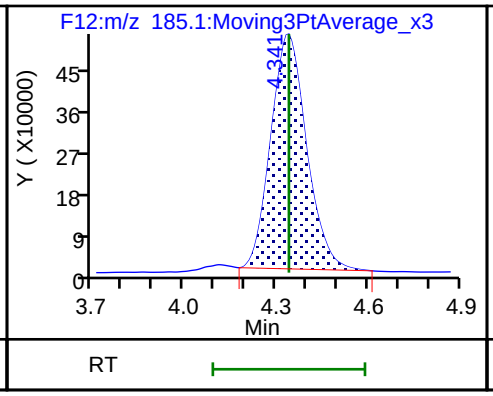
16 2-Amino-4,6-dinitrotoluene



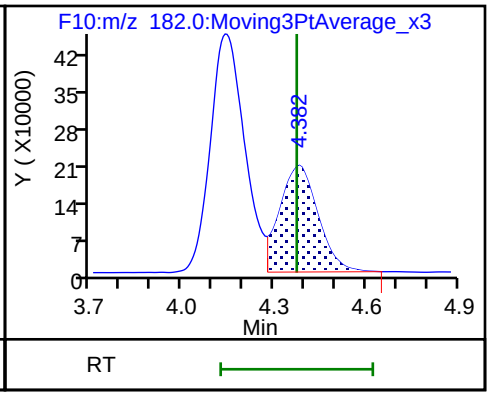
17 2,6-Dinitrotoluene



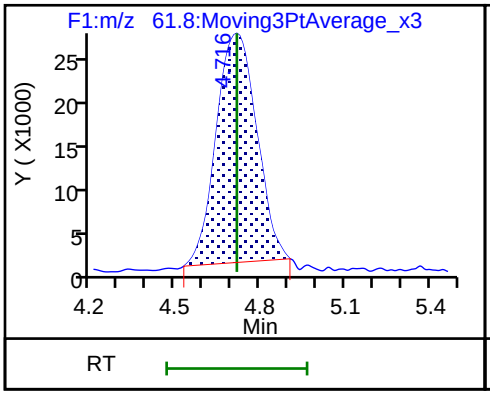
* 18 2,4-dinitrotoluene-d3



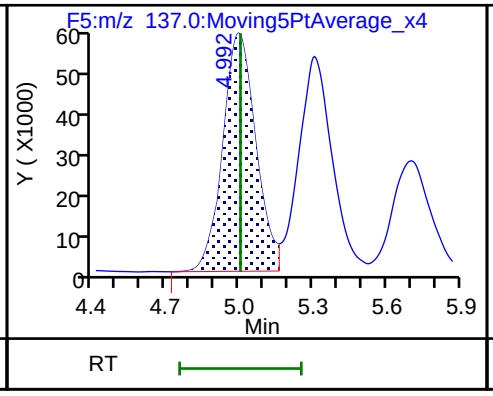
19 2,4-Dinitrotoluene



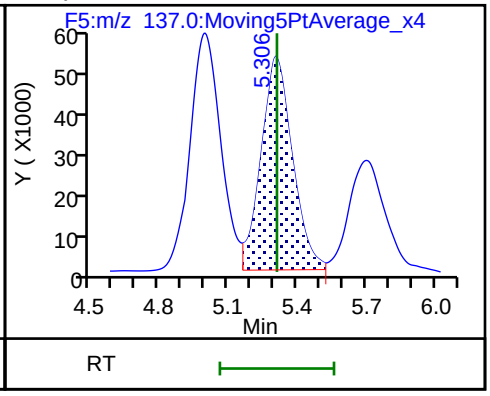
20 PETN



22 o-Nitrotoluene



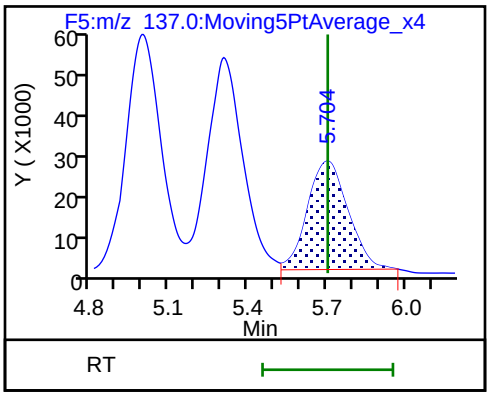
23 p-Nitrotoluene



Report Date: 08-Apr-2022 07:32:28 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07021.d

24 m-Nitrotoluene



Report Date: 08-Apr-2022 07:32:28

Chrom Revision: 2.3 18-Mar-2022 09:07:22
Manual Integration/User Assign Peak Report

Eurofins Denver

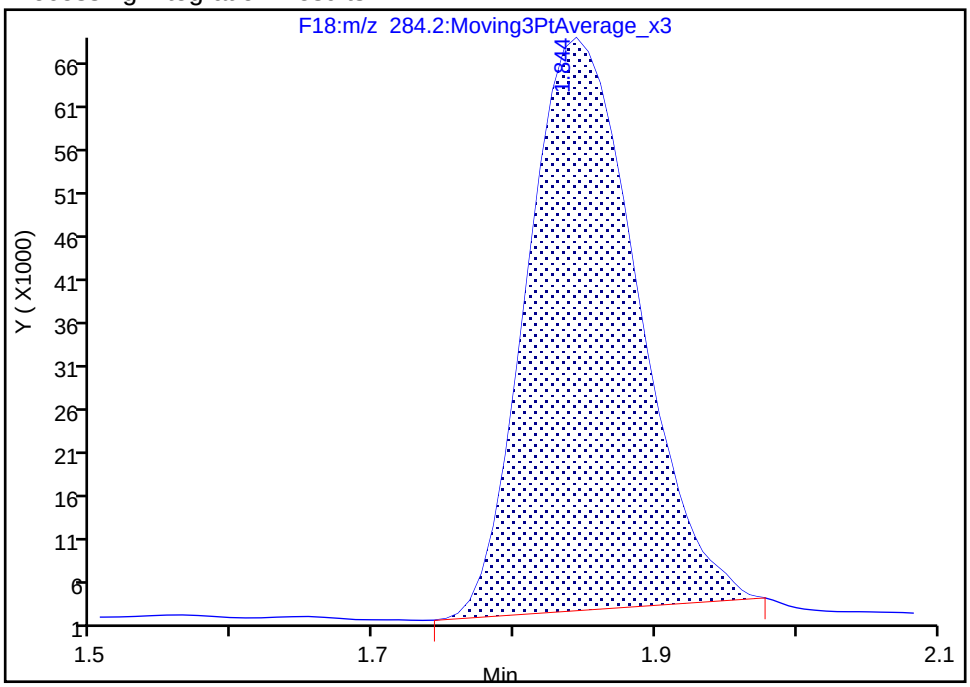
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07021.d
Injection Date: 07-Apr-2022 12:38:00 Instrument ID: LC_LCMS7
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 21
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F18:SIR

* 3 Hexahydro-1,3,5-trinitro-1,3,5-t, CAS: STL00205

Signal: 1

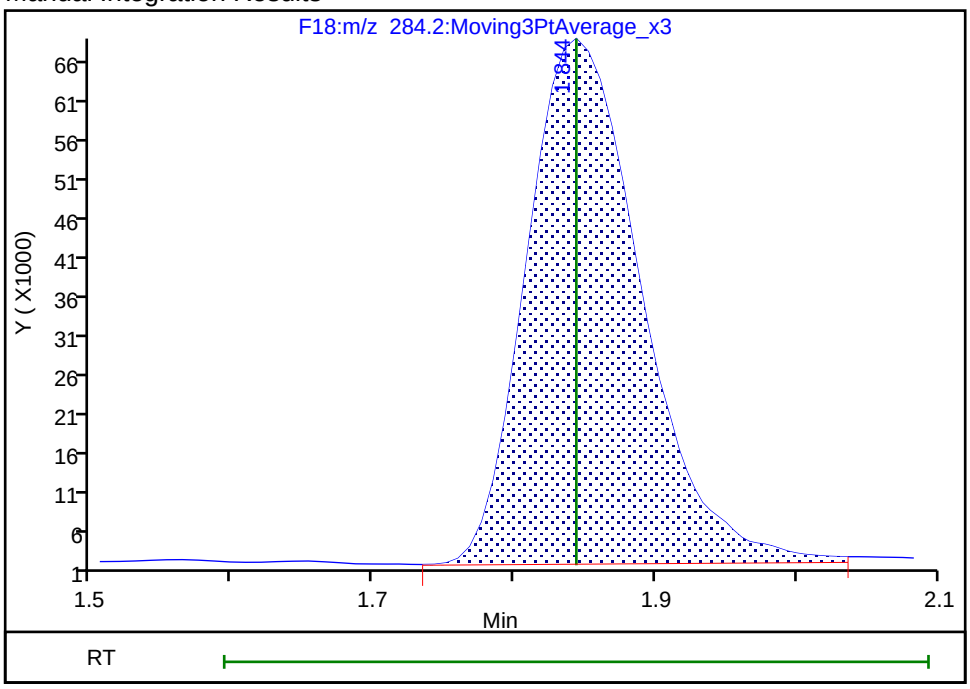
Processing Integration Results

RT: 1.84
Area: 358078
Amount: 125.0000
Amount Units: ug/l



Manual Integration Results

RT: 1.84
Area: 379799
Amount: 125.0000
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 13:11:02
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 08-Apr-2022 07:32:28 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07021.d

Injection Date: 07-Apr-2022 12:38:00 Instrument ID: LC_LCMS7

Lims ID: CCV

Client ID:

Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 21

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

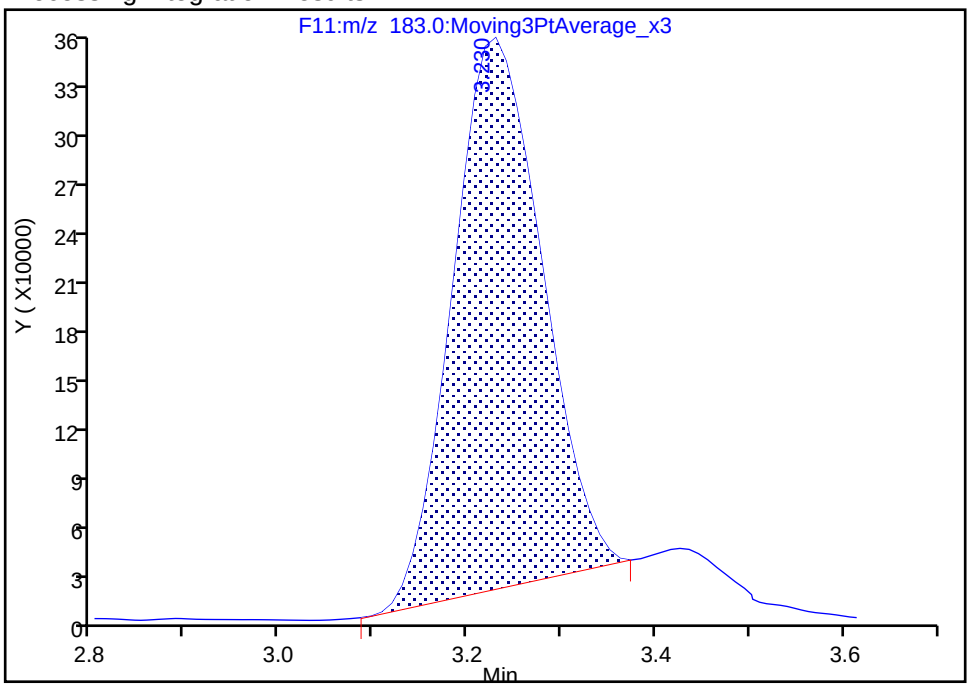
Column: Detector F11:SIR

28 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

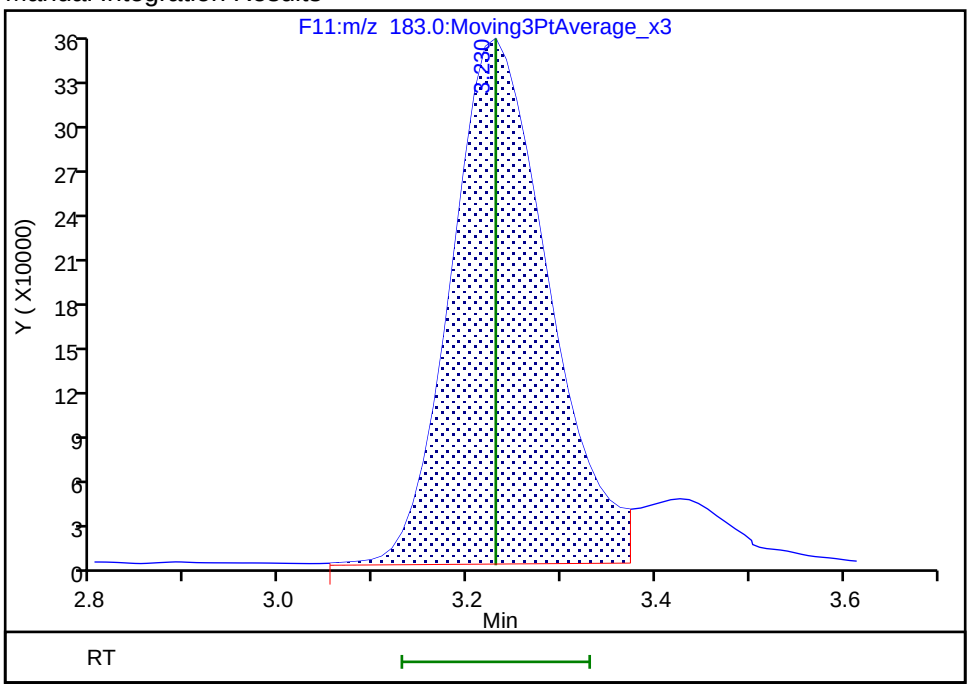
Processing Integration Results

RT: 3.23
Area: 2225063
Amount: 44.488196
Amount Units: ug/l



Manual Integration Results

RT: 3.23
Area: 2559035
Amount: 51.217398
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 13:10:34

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-160187-1

SDG No.:

Lab Sample ID: CCV 280-571108/32 Calibration Date: 04/07/2022 13:50

Instrument ID: LC_LCMS7 Calib Start Date: 04/07/2022 10:39

GC Column: Synergi Hydro ID: Calib End Date: 04/07/2022 11:18

Lab File ID: ex722D07032.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Qua1		1.897		95.9	100	-4.1	30.0
TNX	Lin1		4.407		99.8	100	-0.3	30.0
DNX	Lin1		6.515		98.6	100	-1.5	30.0
MNX	Lin1		1.659		113	117	-3.5	30.0
RDX	Lin1		0.7319		106	100	5.8	30.0
1,3,5-Trinitrobenzene	Lin1		1.488		97.9	100	-2.3	30.0
Tetryl	Lin1		2.154		102	100	1.8	30.0
1,3-Dinitrobenzene	Lin1		1.031		95.5	100	-4.6	30.0
Nitroglycerin	Lin1		0.9251		97.0	101	-3.6	30.0
3,5-Dinitroaniline	Lin1		1.406		95.1	100	-4.9	30.0
2,4,6-Trinitrotoluene	Lin1		6.322		93.5	100	-6.8	30.0
Nitrobenzene	Lin1		0.5147		95.3	100	-5.1	30.0
4-Amino-2,6-dinitrotoluene	Lin1		1.490		96.3	100	-3.8	30.0
2-Amino-4,6-dinitrotoluene	Lin1		1.901		95.2	100	-5.2	30.0
2,6-Dinitrotoluene	Lin1		2.011		98.0	100	-2.4	30.0
2,4-Dinitrotoluene	Lin1		1.027		98.3	100	-2.1	30.0
PETN	Lin1		0.1673		102	99.6	2.6	30.0
o-Nitrotoluene	Lin1		0.3069		97.4	100	-2.6	30.0
p-Nitrotoluene	Lin1		0.2640		97.0	100	-3.2	30.0
m-Nitrotoluene	Lin1		0.1537		93.6	100	-6.4	30.0
Nitrobenzene-d5	Lin1		0.6083		96.9	100	-3.1	30.0

Report Date: 08-Apr-2022 07:32:35 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07032.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 07-Apr-2022 13:50:34 ALS Bottle#: 6 Worklist Smp#: 32
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:34 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 14:40:56
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	167191	95.9	106	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		110145	125.0	103	
36 TNX								
144.0	1.385	1.385	0.0	0.751	4561969	99.8	660	
33 DNX								
160.0	1.489	1.489	0.0	0.807	6744511	98.6	485	
34 MNX								
160.0	1.670	1.670	0.0	0.906	2002793	112.6	137	
4 RDX								M
281.2	1.841	1.841	0.0	0.998	221340	105.8	71.4	M
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		378008	125.0	79.6	
5 1,3,5-Trinitrobenzene								
213.0	2.320	2.317	0.003	0.768	1542300	97.9	170	
6 Tetryl								
241.1	2.705	2.712	-0.007	0.896	2231892	102.0	159	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.030	-0.011		1337884	129.4	291	
8 1,3-Dinitrobenzene								
168.0	3.051	3.051	0.0	1.011	1067993	95.5	177	
9 Nitroglycerin								
62.0	3.080	3.080	0.0	1.020	962556	97.0	458	
28 3,5-Dinitroaniline								M
183.0	3.230	3.230	0.0	1.070	4602237	95.1	46.0	M

Report Date: 08-Apr-2022 07:32:35 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07032.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.321	3.321	0.0	0.766	6564540	93.5	168	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.775	629263	96.9	117	
12 Nitrobenzene								
123.0	3.431	3.431	0.0	0.792	534449	95.3	38.1	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.652	3.645	0.007	0.843	4884170	96.3	33.8	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.982	3.976	0.006	0.919	6248611	95.2	40.9	
17 2,6-Dinitrotoluene								
182.0	4.144	4.150	-0.006	0.957	6610465	98.0	559	
* 18 2,4-dinitrotoluene-d3								
185.1	4.332	4.341	-0.009		4093045	125.0	107	
19 2,4-Dinitrotoluene								
182.0	4.382	4.373	0.009	1.011	3375052	98.3	266	
20 PETN								
61.8	4.696	4.716	-0.020	1.084	545483	102.2	118	
22 o-Nitrotoluene								
137.0	4.992	5.002	-0.010	1.152	1004835	97.4	284	
23 p-Nitrotoluene								
137.0	5.306	5.311	-0.005	1.225	866044	97.0	234	
24 m-Nitrotoluene								
137.0	5.704	5.704	0.0	1.317	503882	93.6	130	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

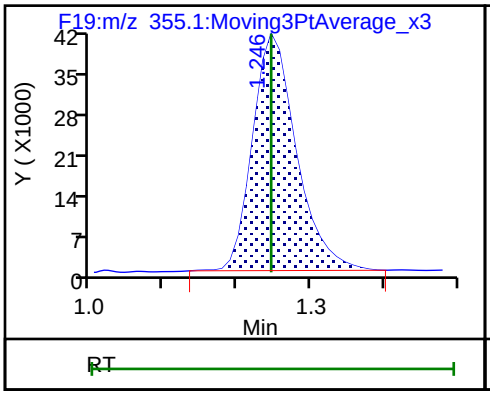
8321EXcalprim_00029	Amount Added: 10.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 10.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 08-Apr-2022 07:32:35 Chrom Revision: 2.3 18-Mar-2022 09:07:22

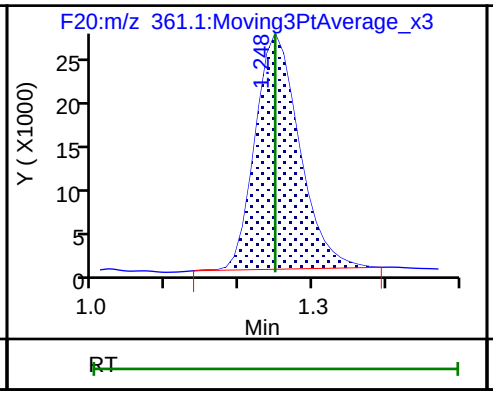
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07032.d
Injection Date: 07-Apr-2022 13:50:34 Instrument ID: LC_LCMS7
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 6 Worklist Smp#: 32
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

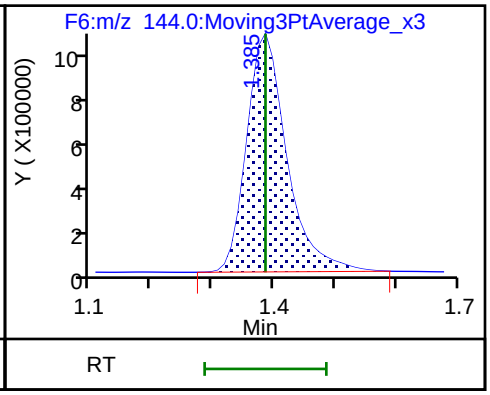
2 HMX



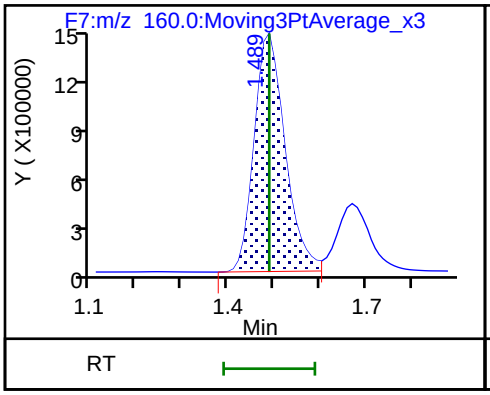
* 1 HMX-13C4



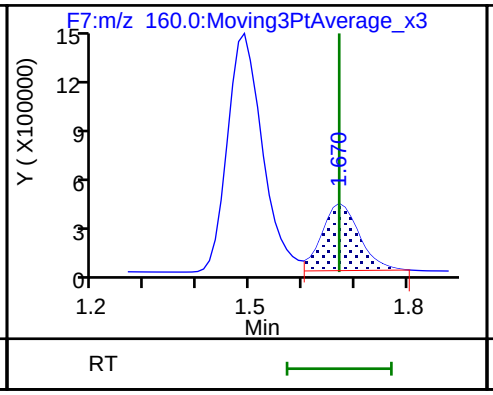
36 TNX



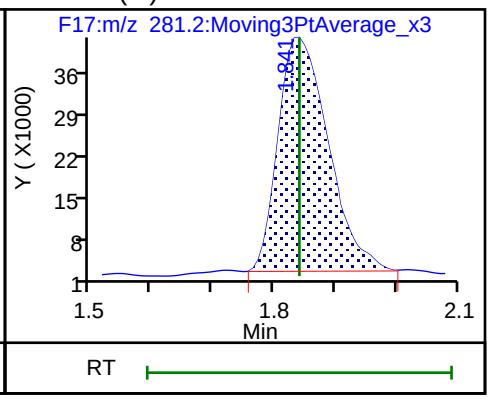
33 DNX



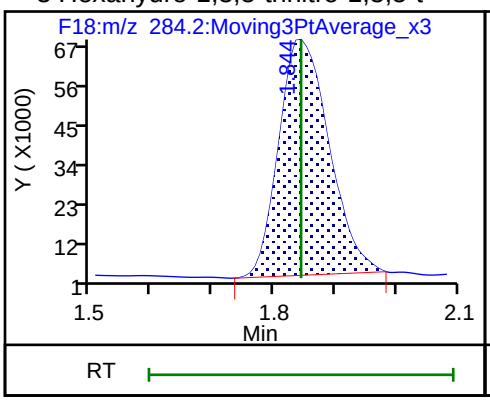
34 MNX



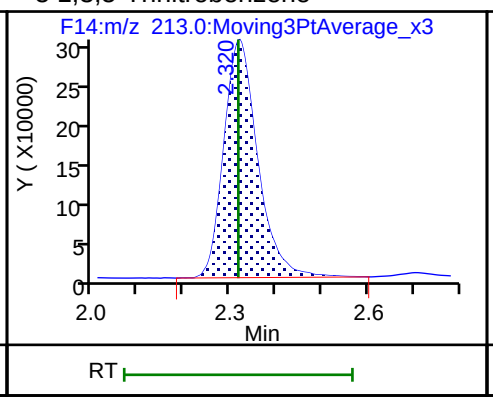
4 RDX (M)



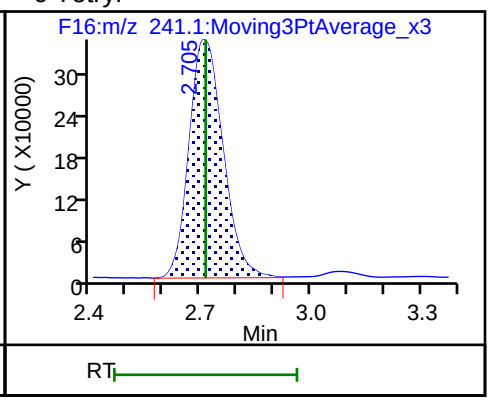
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



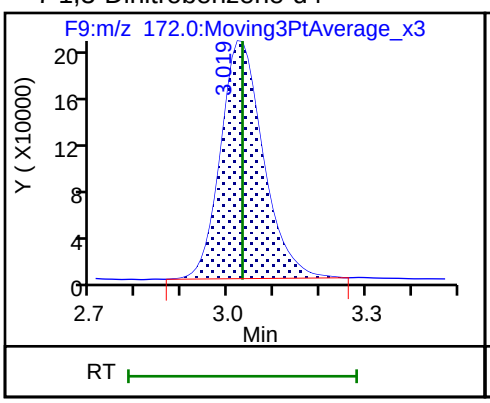
5 1,3,5-Trinitrobenzene



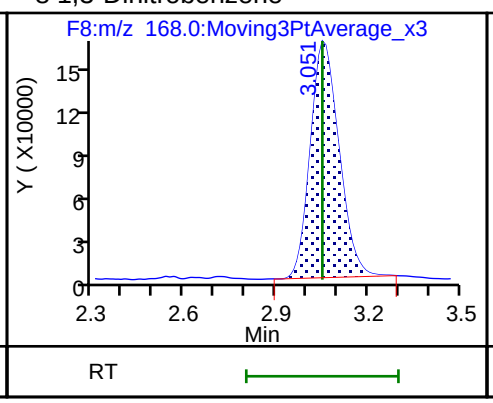
6 Tetryl



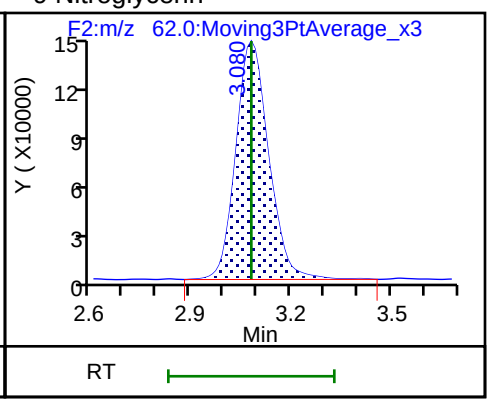
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



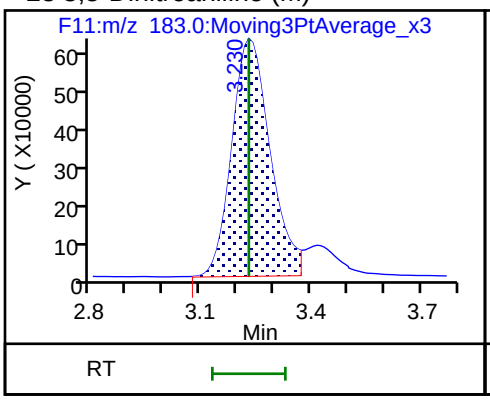
9 Nitroglycerin



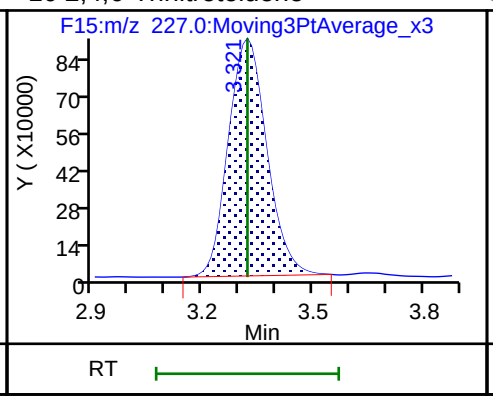
Report Date: 08-Apr-2022 07:32:35 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07032.d

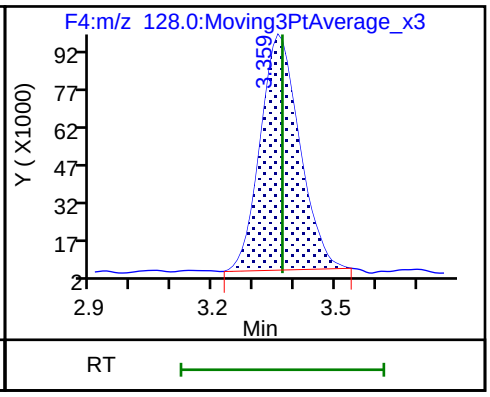
28 3,5-Dinitroaniline (M)



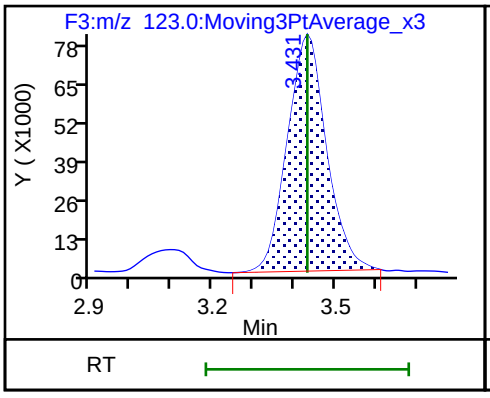
10 2,4,6-Trinitrotoluene



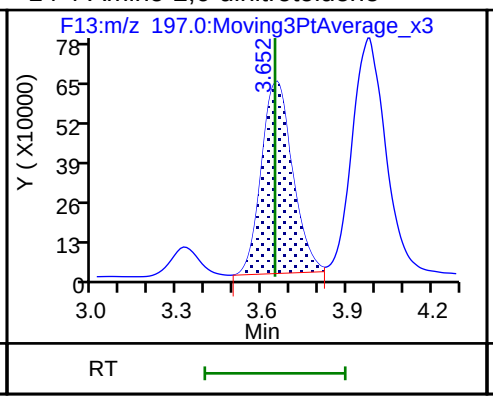
$ 11 Nitrobenzene-d5



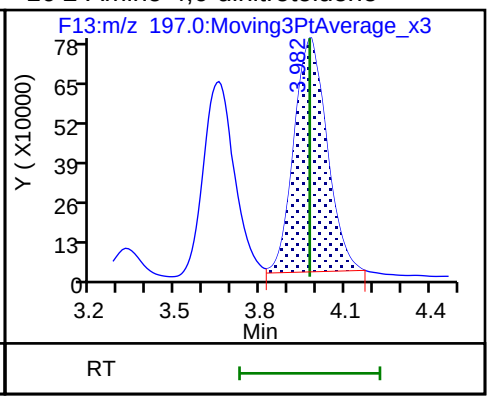
12 Nitrobenzene



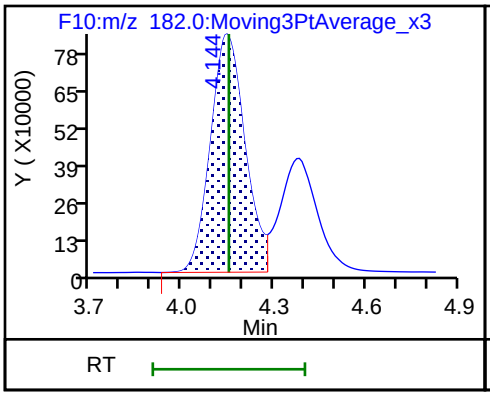
14 4-Amino-2,6-dinitrotoluene



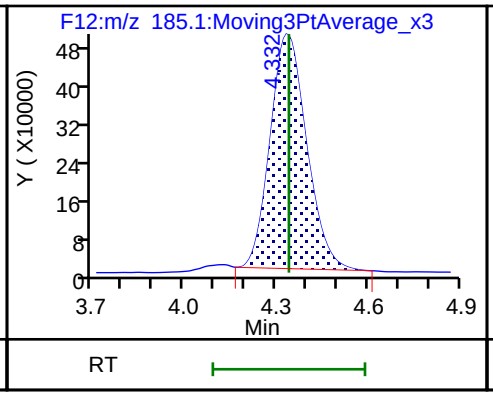
16 2-Amino-4,6-dinitrotoluene



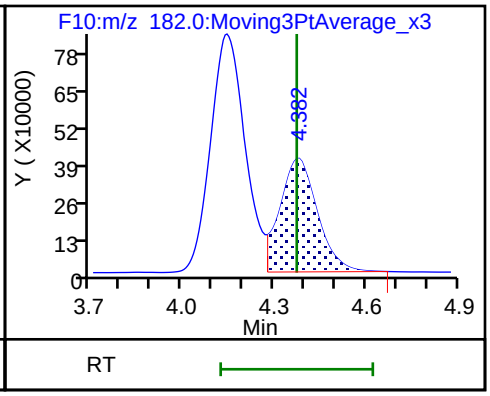
17 2,6-Dinitrotoluene



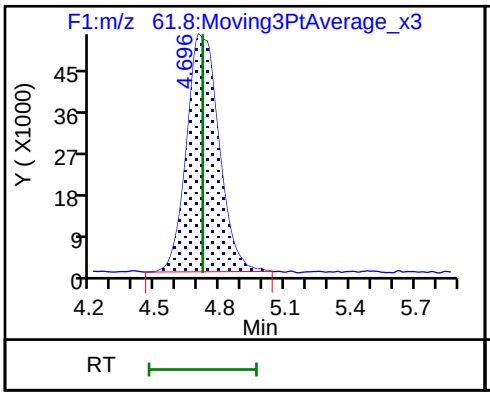
* 18 2,4-dinitrotoluene-d3



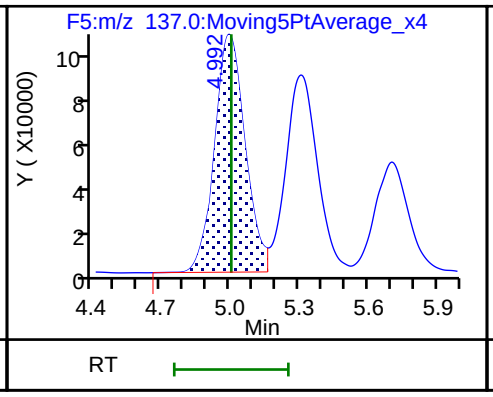
19 2,4-Dinitrotoluene



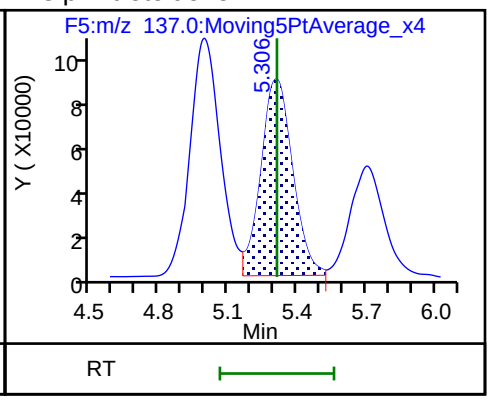
20 PETN



22 o-Nitrotoluene



23 p-Nitrotoluene

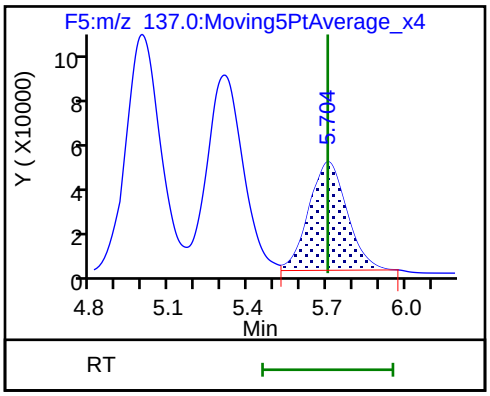


Report Date: 08-Apr-2022 07:32:35

Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07032.d

24 m-Nitrotoluene



Report Date: 08-Apr-2022 07:32:35 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07032.d

Injection Date: 07-Apr-2022 13:50:34 Instrument ID: LC_LCMS7

Lims ID: CCV

Client ID:

Operator ID: acm ALS Bottle#: 6 Worklist Smp#: 32

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

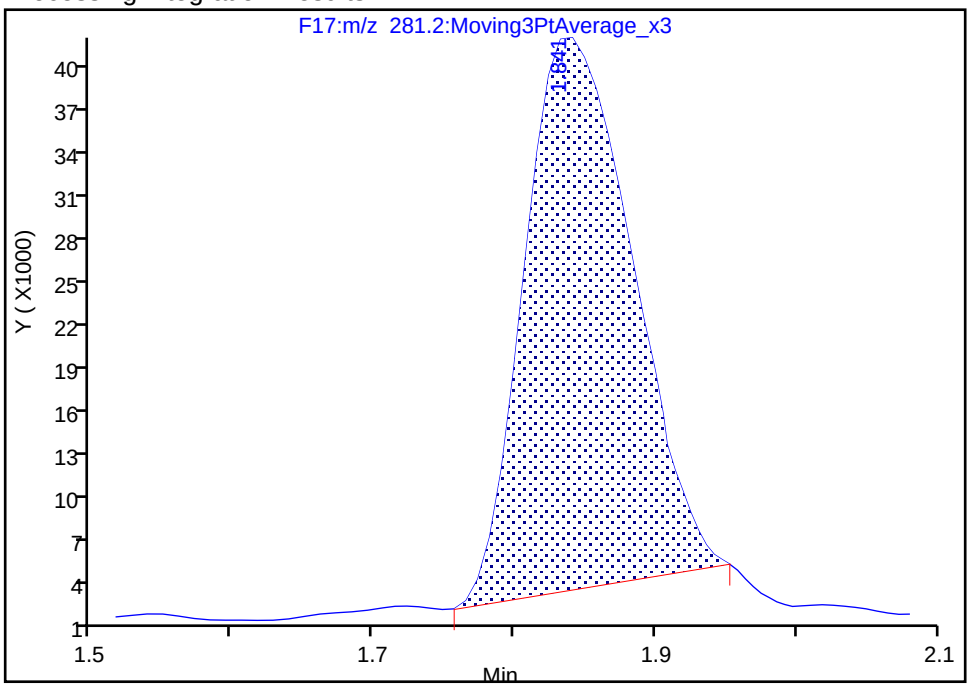
Column: Detector F17:SIR

4 RDX, CAS: 121-82-4

Signal: 1

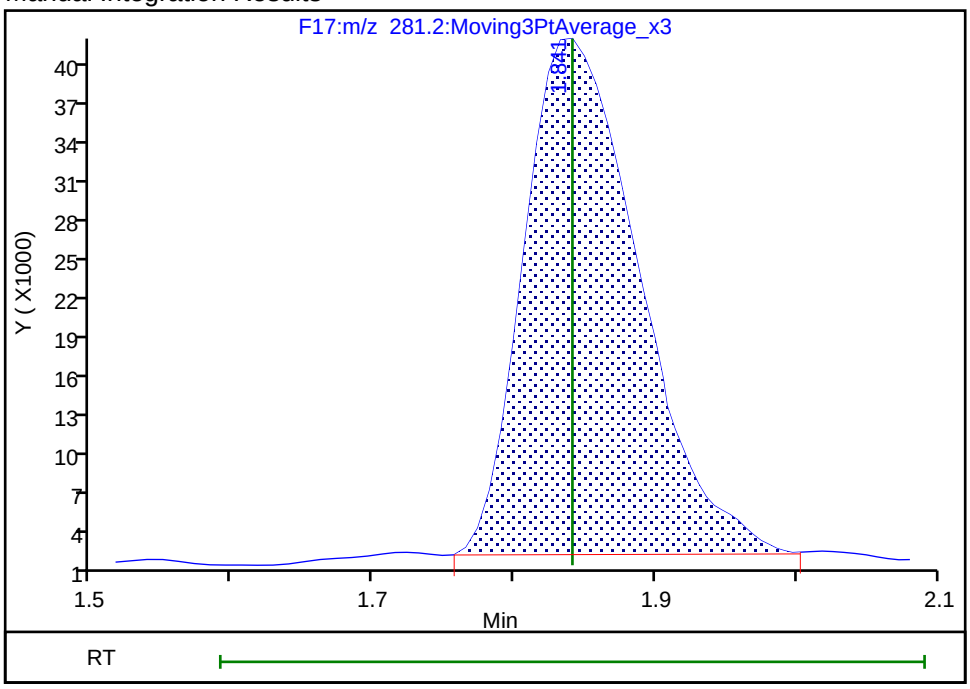
Processing Integration Results

RT: 1.84
Area: 200656
Amount: 95.762541
Amount Units: ug/l



Manual Integration Results

RT: 1.84
Area: 221340
Amount: 105.7508
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 14:40:53

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 08-Apr-2022 07:32:35 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07032.d

Injection Date: 07-Apr-2022 13:50:34 Instrument ID: LC_LCMS7

Lims ID: CCV

Client ID:

Operator ID: acm ALS Bottle#: 6 Worklist Smp#: 32

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

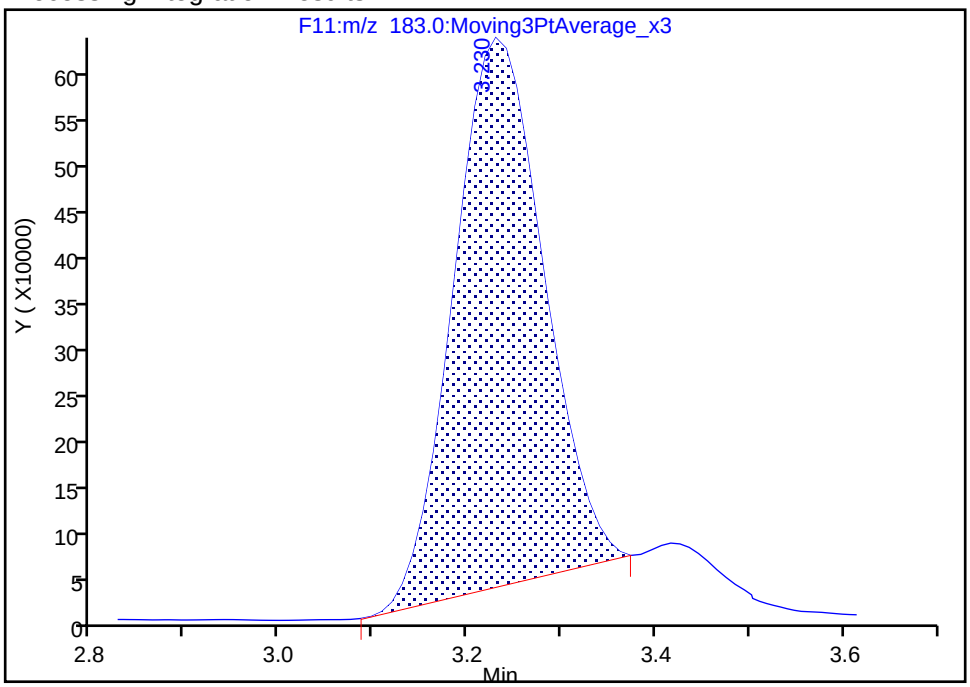
Column: Detector F11:SIR

28 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

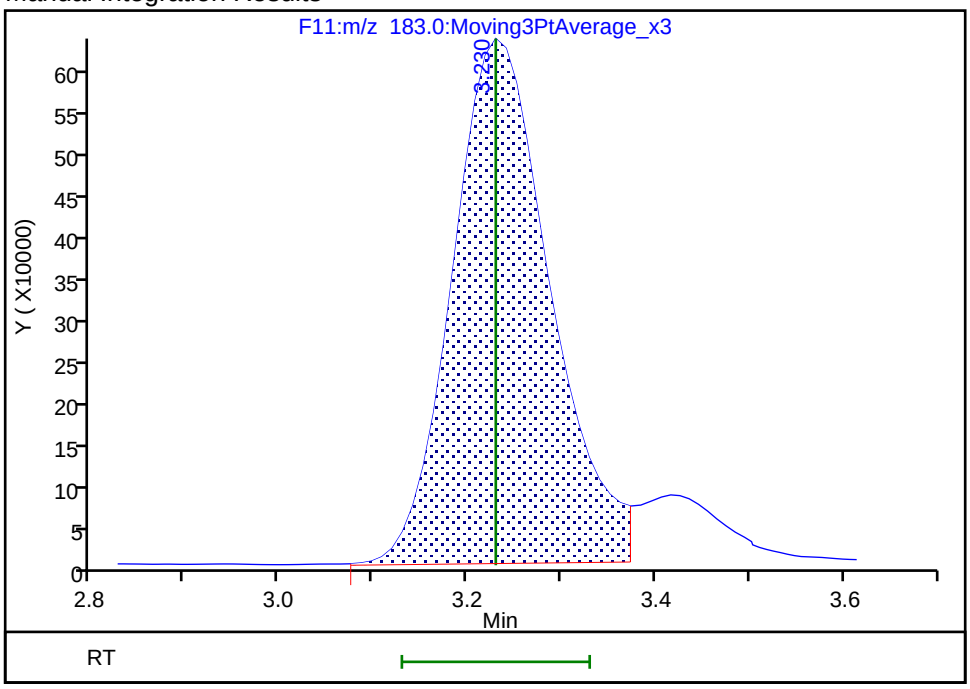
Processing Integration Results

RT: 3.23
Area: 4004629
Amount: 82.693366
Amount Units: ug/l



Manual Integration Results

RT: 3.23
Area: 4602237
Amount: 95.085063
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 14:40:42

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-160187-1

SDG No.:

Lab Sample ID: CCV 280-571108/43 Calibration Date: 04/07/2022 15:03

Instrument ID: LC_LCMS7 Calib Start Date: 04/07/2022 10:39

GC Column: Synergi Hydro ID: Calib End Date: 04/07/2022 11:18

Lab File ID: ex722D07043.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Qua1		2.210		57.8	50.0	15.6	30.0
TNX	Lin1		4.523		50.7	50.1	1.4	30.0
DNX	Lin1		6.719		50.6	50.1	1.0	30.0
MNX	Lin1		1.703		57.7	58.4	-1.1	30.0
RDX	Lin1		0.8254		59.1	50.0	18.3	30.0
1,3,5-Trinitrobenzene	Lin1		1.498		49.1	50.1	-1.9	30.0
Tetryl	Lin1		2.219		52.9	50.1	5.6	30.0
1,3-Dinitrobenzene	Lin1		1.111		51.4	50.1	2.5	30.0
Nitroglycerin	Lin1		0.9814		50.9	50.3	1.2	30.0
3,5-Dinitroaniline	Lin1		1.490		50.3	50.0	0.5	30.0
2,4,6-Trinitrotoluene	Lin1		6.708		49.5	50.2	-1.4	30.0
Nitrobenzene	Lin1		0.4935		45.1	50.2	-10.1	30.0
4-Amino-2,6-dinitrotoluene	Lin1		1.589		51.1	50.1	2.1	30.0
2-Amino-4,6-dinitrotoluene	Lin1		2.054		51.2	50.2	2.1	30.0
2,6-Dinitrotoluene	Lin1		2.106		51.1	50.2	1.8	30.0
2,4-Dinitrotoluene	Lin1		1.046		49.8	50.2	-0.9	30.0
PETN	Lin1		0.1666		51.4	49.8	3.2	30.0
o-Nitrotoluene	Lin1		0.3410		53.9	50.0	7.9	30.0
p-Nitrotoluene	Lin1		0.2936		53.7	50.1	7.2	30.0
m-Nitrotoluene	Lin1		0.1765		53.6	50.1	7.1	30.0
Nitrobenzene-d5	Lin1		0.6677		53.9	50.0	7.9	30.0

Report Date: 08-Apr-2022 07:32:42 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07043.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 07-Apr-2022 15:03:10 ALS Bottle#: 5 Worklist Smp#: 43
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:42 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 08-Apr-2022 07:20:02
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	89875	57.8	51.5	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		101680	125.0	97.8	
36 TNX								
144.0	1.385	1.385	0.0	0.751	2294647	50.7	628	
33 DNX								
160.0	1.489	1.489	0.0	0.807	3408401	50.6	429	
34 MNX								
160.0	1.670	1.670	0.0	0.906	1006935	57.7	120	
4 RDX								
281.2	1.849	1.841	0.008	1.003	118672	59.1	58.8	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		359456	125.0	128	
5 1,3,5-Trinitrobenzene								
213.0	2.320	2.317	0.003	0.766	760613	49.1	148	
6 Tetryl								
241.1	2.712	2.712	0.0	0.895	1126977	52.9	135	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.030	3.030	0.0		1311201	129.4	294	
8 1,3-Dinitrobenzene								
168.0	3.051	3.051	0.0	1.007	564385	51.4	121	
9 Nitroglycerin								
62.0	3.080	3.080	0.0	1.017	500368	50.9	212	
28 3,5-Dinitroaniline								M
183.0	3.230	3.230	0.0	1.066	2383001	50.3	46.6	M

Report Date: 08-Apr-2022 07:32:42 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07043.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.321	3.321	0.0	0.765	3413373	49.5	168	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.774	338483	53.9	29.5	
12 Nitrobenzene								
123.0	3.421	3.431	-0.010	0.788	251120	45.1	36.3	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.652	3.645	0.007	0.841	2542473	51.1	35.5	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.982	3.976	0.006	0.917	3296988	51.2	43.4	
17 2,6-Dinitrotoluene								
182.0	4.144	4.150	-0.006	0.955	3380440	51.1	599	
* 18 2,4-dinitrotoluene-d3								
185.1	4.341	4.341	0.0		3997245	125.0	120	
19 2,4-Dinitrotoluene								
182.0	4.373	4.373	0.0	1.007	1678979	49.8	265	
20 PETN								
61.8	4.716	4.716	0.0	1.086	265365	51.4	62.1	
22 o-Nitrotoluene								
137.0	4.992	5.002	-0.010	1.150	545208	53.9	150	
23 p-Nitrotoluene								
137.0	5.306	5.311	-0.005	1.222	470413	53.7	122	
24 m-Nitrotoluene								
137.0	5.709	5.704	0.005	1.315	282487	53.6	69.7	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

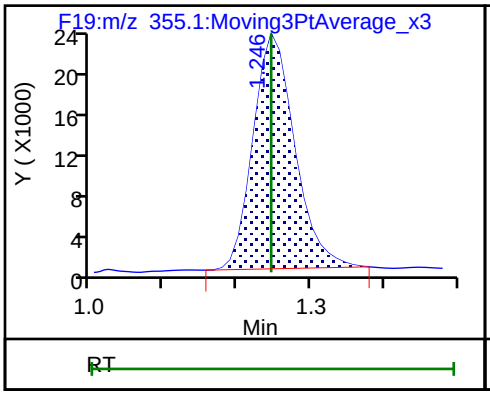
8321EXcalprim_00029	Amount Added: 5.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 5.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 08-Apr-2022 07:32:42 Chrom Revision: 2.3 18-Mar-2022 09:07:22

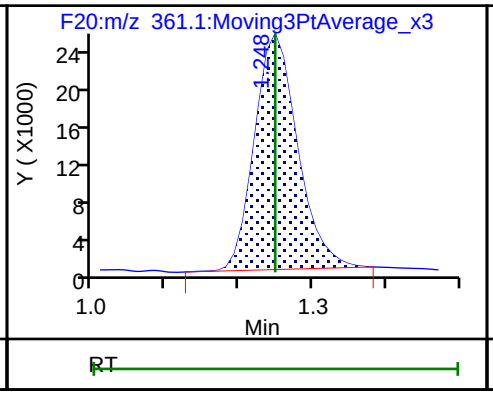
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07043.d
Injection Date: 07-Apr-2022 15:03:10 Instrument ID: LC_LCMS7
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 43
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

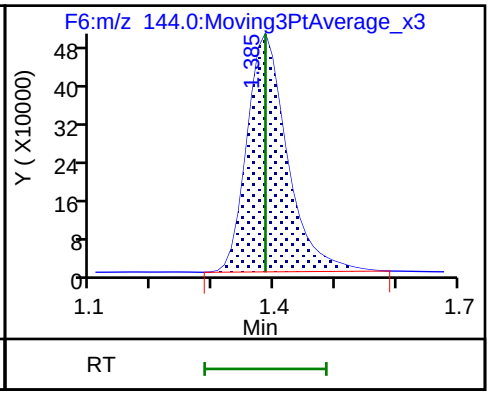
2 HMX



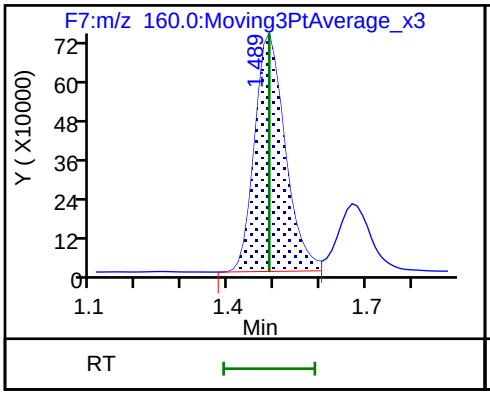
* 1 HMX-13C4



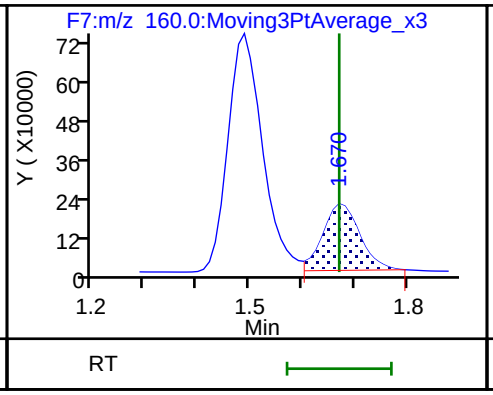
36 TNX



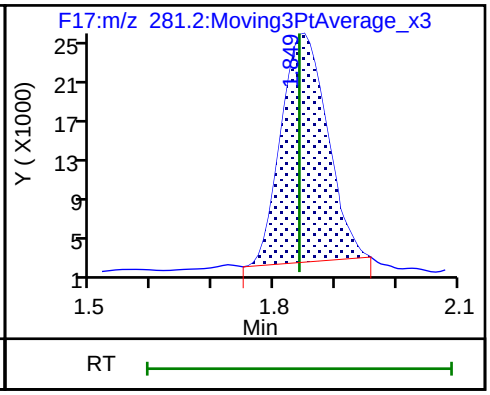
33 DNX



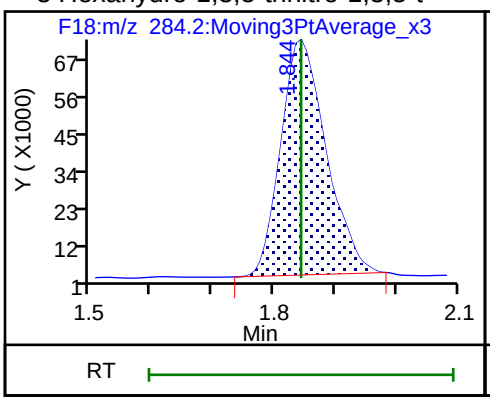
34 MNX



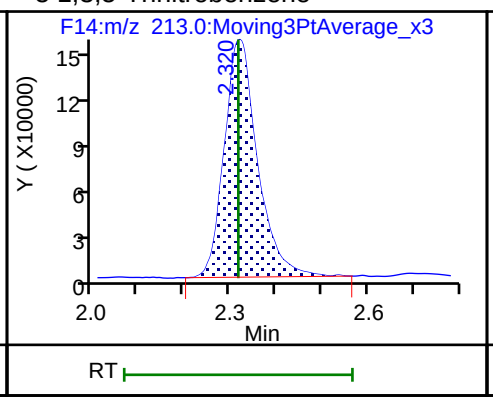
4 RDX



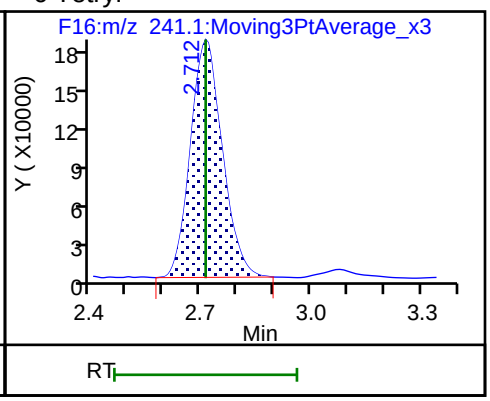
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



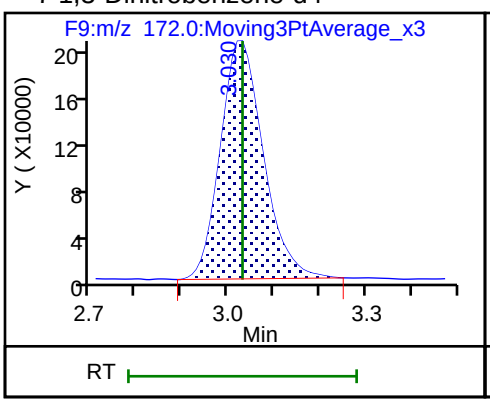
5 1,3,5-Trinitrobenzene



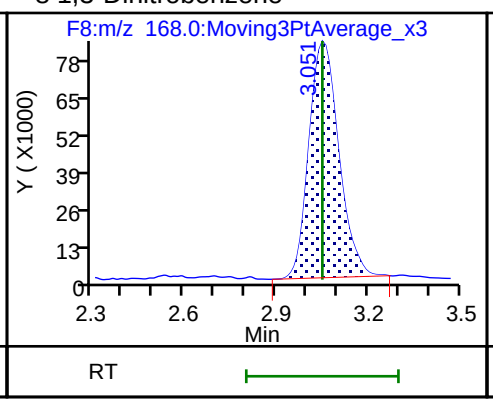
6 Tetryl



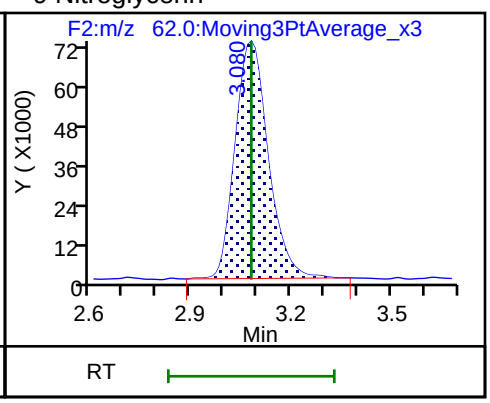
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

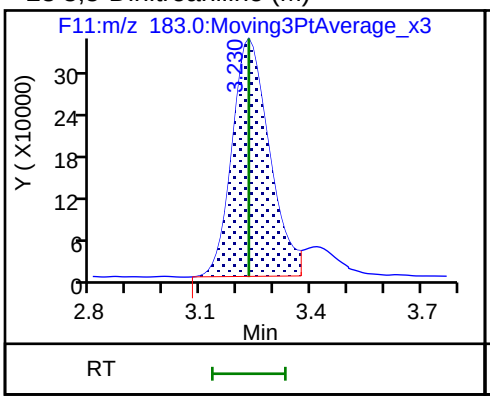


9 Nitroglycerin

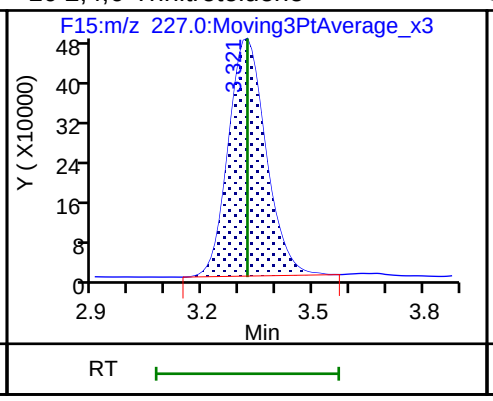


Report Date: 08-Apr-2022 07:32:42 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07043.d

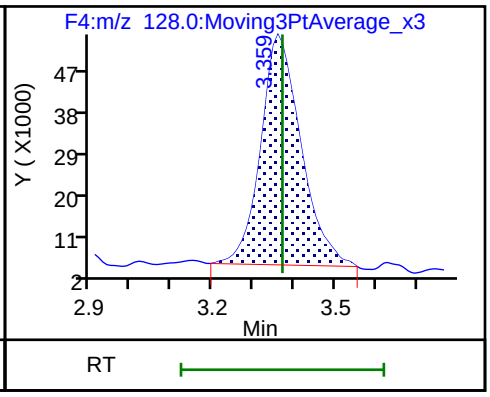
28 3,5-Dinitroaniline (M)



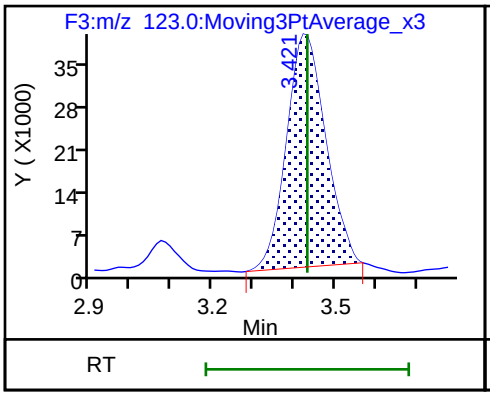
10 2,4,6-Trinitrotoluene



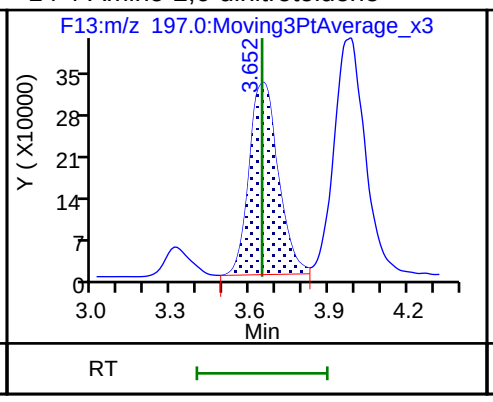
$ 11 Nitrobenzene-d5



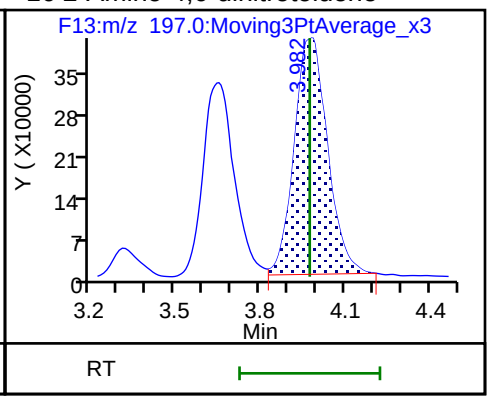
12 Nitrobenzene



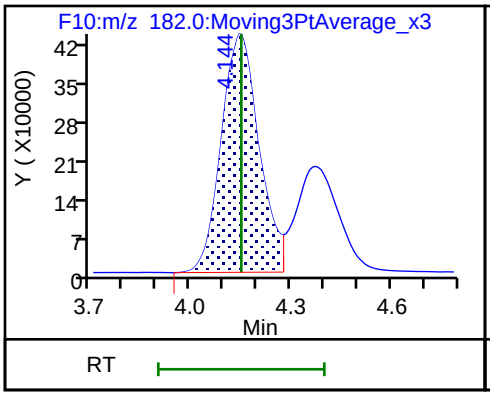
14 4-Amino-2,6-dinitrotoluene



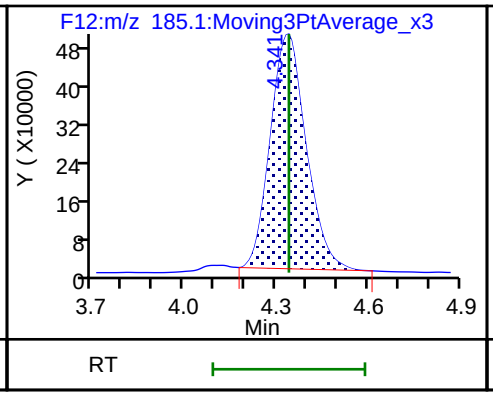
16 2-Amino-4,6-dinitrotoluene



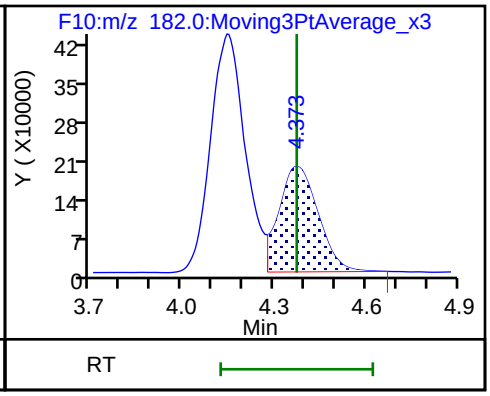
17 2,6-Dinitrotoluene



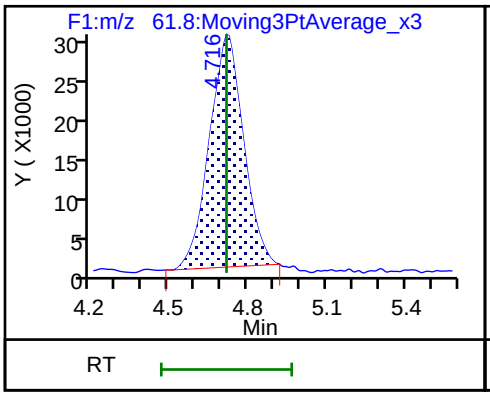
* 18 2,4-dinitrotoluene-d3



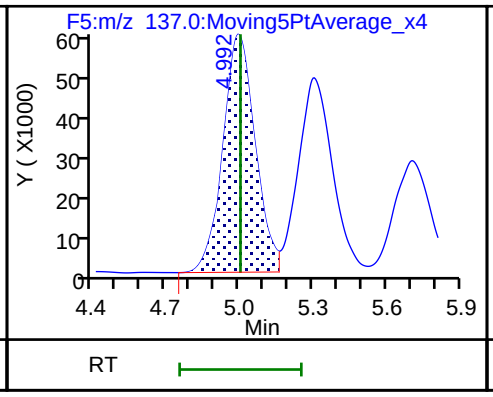
19 2,4-Dinitrotoluene



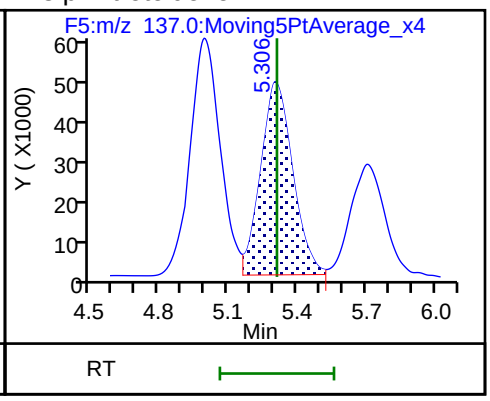
20 PETN



22 o-Nitrotoluene



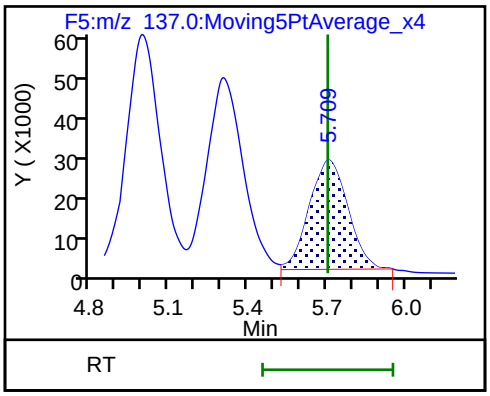
23 p-Nitrotoluene



Report Date: 08-Apr-2022 07:32:42 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07043.d

24 m-Nitrotoluene



Report Date: 08-Apr-2022 07:32:42 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07043.d

Injection Date: 07-Apr-2022 15:03:10 Instrument ID: LC_LCMS7

Lims ID: CCV

Client ID:

Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 43

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

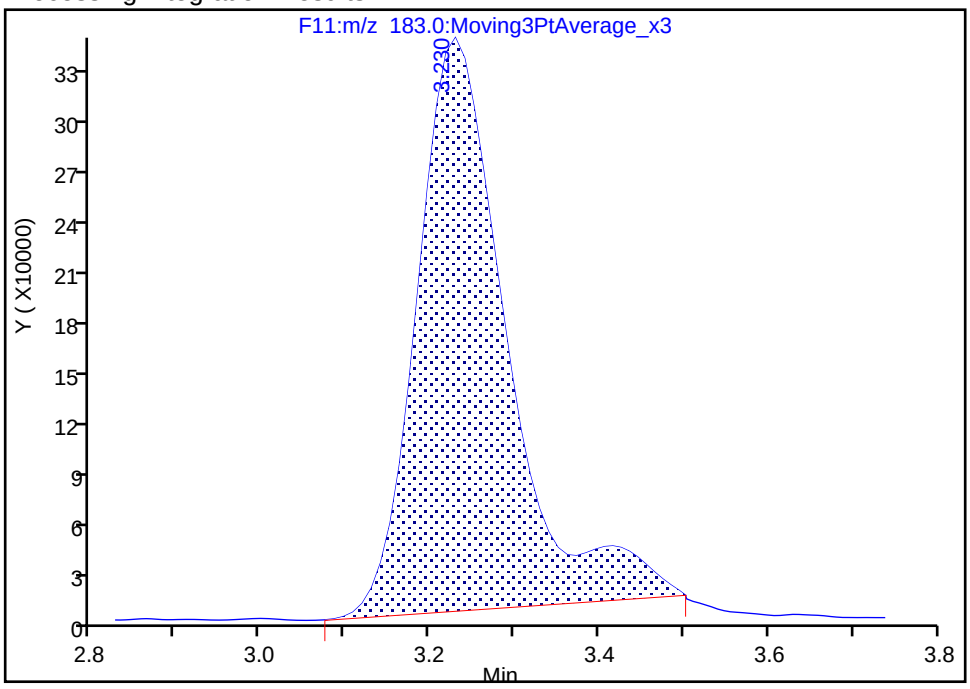
Column: Detector F11:SIR

28 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

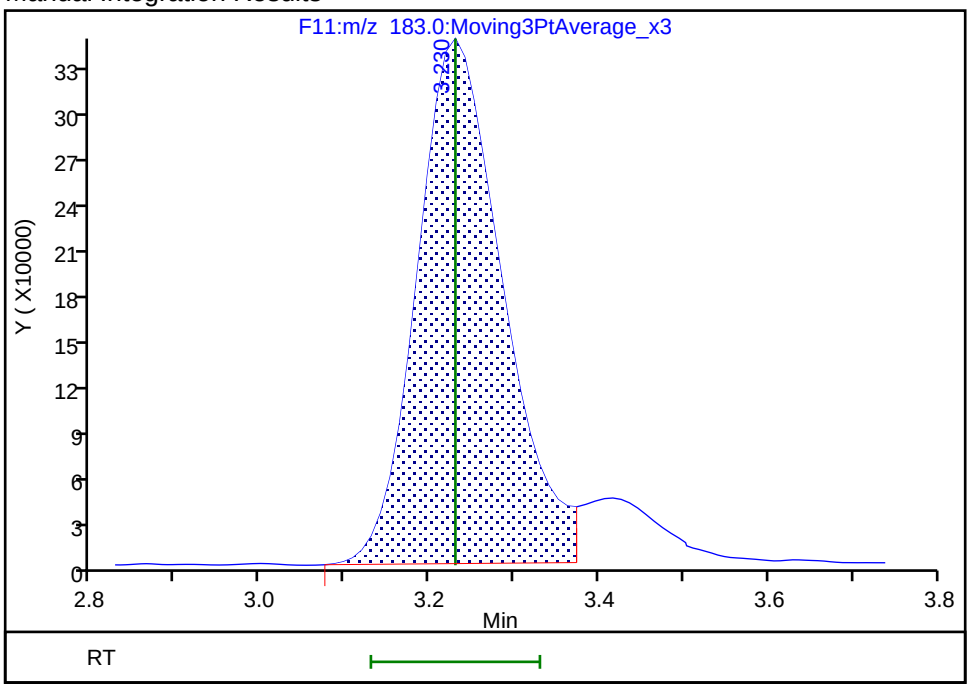
Processing Integration Results

RT: 3.23
Area: 2477846
Amount: 52.266149
Amount Units: ug/l



Manual Integration Results

RT: 3.23
Area: 2383001
Amount: 50.252358
Amount Units: ug/l



Reviewer: meyera, 08-Apr-2022 07:19:55

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-570053/1-A

Matrix: Water | Lab File ID: ex722D05012.d

Analysis Method: 8321A | Date Collected:

Extraction Method: 3535 | Date Extracted: 03/29/2022 13:01

Sample wt/vol: 1000(mL) | Date Analyzed: 04/05/2022 11:18

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

Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:

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

Analysis Batch No.: 570784 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.060	U	0.10	0.060	0.023
99-65-0	1,3-Dinitrobenzene	0.060	U	0.10	0.060	0.022
118-96-7	2,4,6-Trinitrotoluene	0.060	U	0.10	0.060	0.030
121-14-2	2,4-Dinitrotoluene	0.060	U	0.10	0.060	0.027
606-20-2	2,6-Dinitrotoluene	0.060	U	0.10	0.060	0.025
35572-78-2	2-Amino-4,6-dinitrotoluene	0.060	U	0.10	0.060	0.030
19406-51-0	4-Amino-2,6-dinitrotoluene	0.060	U	0.10	0.060	0.039
2691-41-0	HMX	0.060	U M	0.10	0.060	0.033
99-08-1	m-Nitrotoluene	0.060	U	0.10	0.060	0.028
98-95-3	Nitrobenzene	0.060	U	0.15	0.060	0.028
55-63-0	Nitroglycerin	0.060	U	0.15	0.060	0.029
88-72-2	o-Nitrotoluene	0.060	U	0.10	0.060	0.032
78-11-5	PETN	0.060	U	0.10	0.060	0.035
99-99-0	p-Nitrotoluene	0.060	U	0.10	0.060	0.029
121-82-4	RDX	0.060	U	0.10	0.060	0.027
479-45-8	Tetryl	0.060	U	0.10	0.060	0.028

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	89		48-130

Report Date: 06-Apr-2022 06:44:09 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05012.d
Lims ID: MB 280-570053/1-A
Client ID:
Sample Type: MB
Inject. Date: 05-Apr-2022 11:18:02 ALS Bottle#: 10 Worklist Smp#: 12
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-570053/1-A
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 06:44:08 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 12:47:06
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		243274	125.0	212	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.785	1.777	0.008		858885	125.0	103	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1840007	129.4	176	
$ 11 Nitrobenzene-d5								
128.0	3.170	3.150	0.020	0.782	802039	89.3	89.6	
* 18 2,4-dinitrotoluene-d3								
185.1	4.054	4.028	0.026		5602028	125.0	112	

QC Flag Legend
Processing Flags

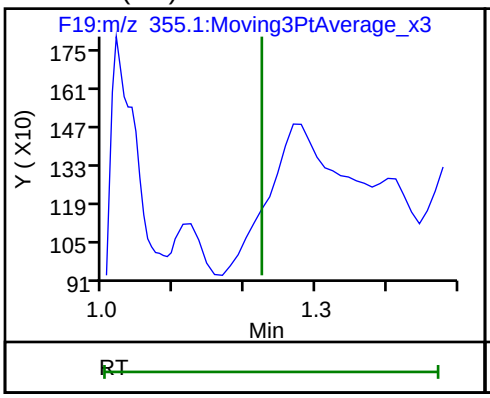
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 06:44:09 Chrom Revision: 2.3 18-Mar-2022 09:07:22

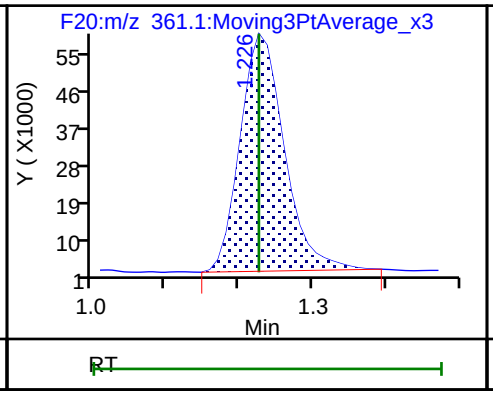
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05012.d
Injection Date: 05-Apr-2022 11:18:02 Instrument ID: LC_LCMS7
Lims ID: MB 280-570053/1-A
Client ID:
Operator ID: acm ALS Bottle#: 10 Worklist Smp#: 12
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

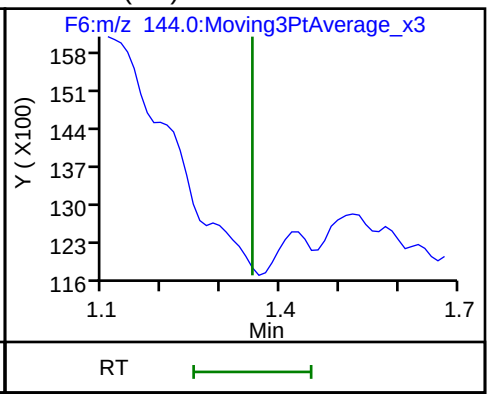
2 HMX (ND)



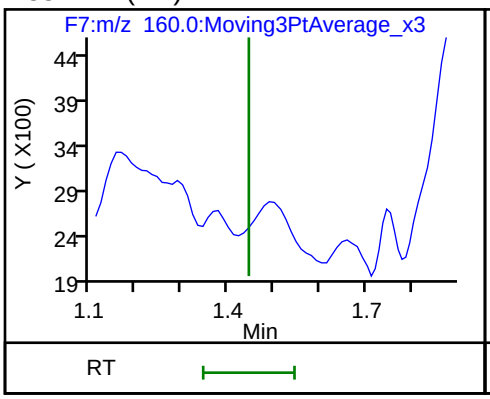
* 1 HMX-13C4



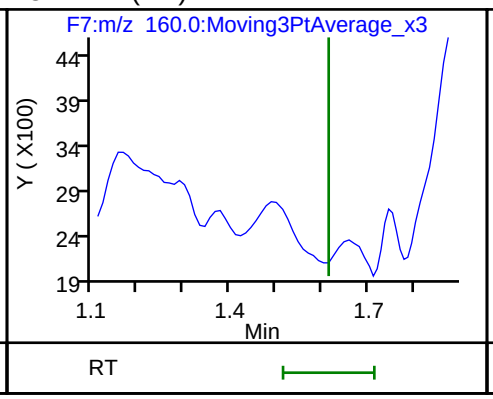
36 TNX (ND)



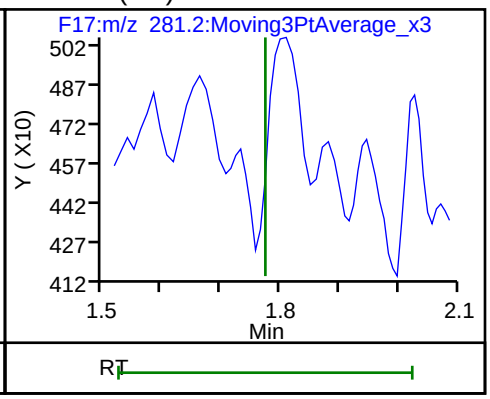
33 DNX (ND)



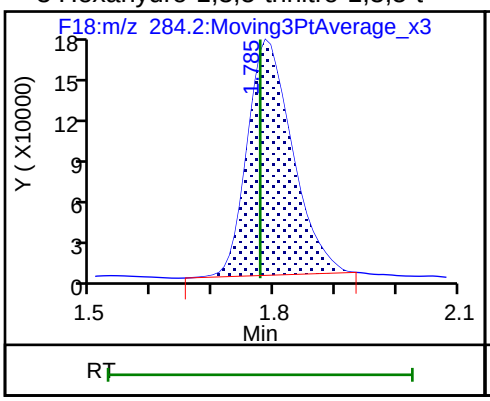
34 MNX (ND)



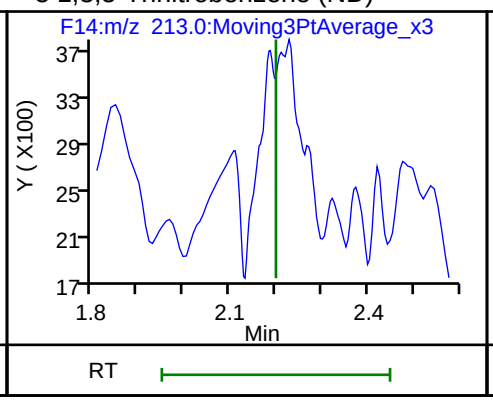
4 RDX (ND)



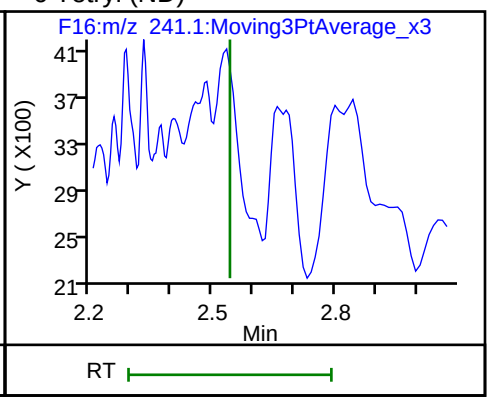
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



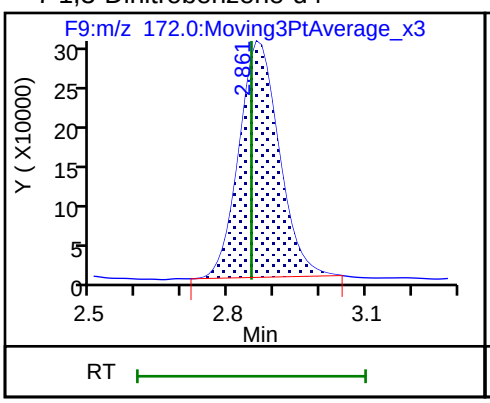
5 1,3,5-Trinitrobenzene (ND)



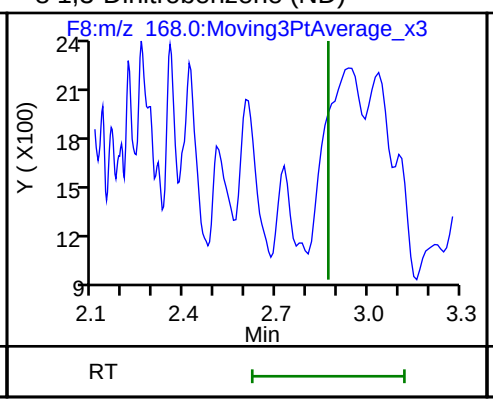
6 Tetryl (ND)



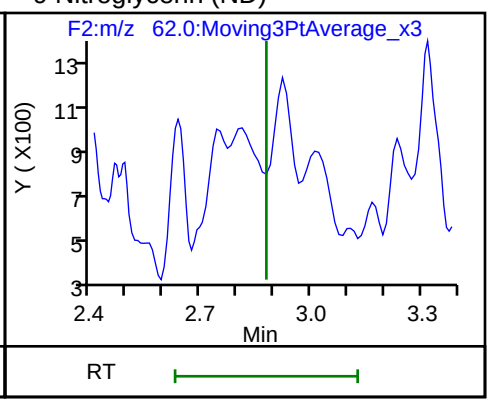
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



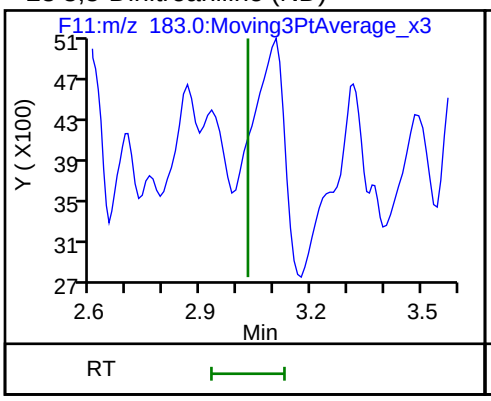
9 Nitroglycerin (ND)



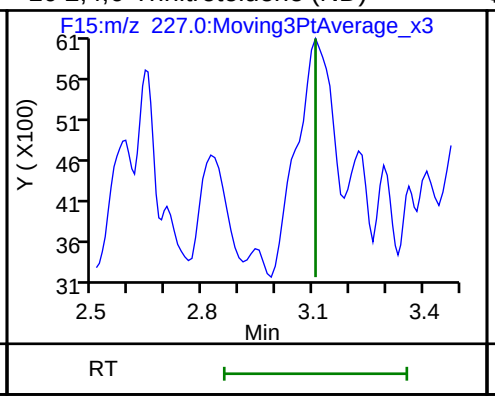
Report Date: 06-Apr-2022 06:44:09 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05012.d

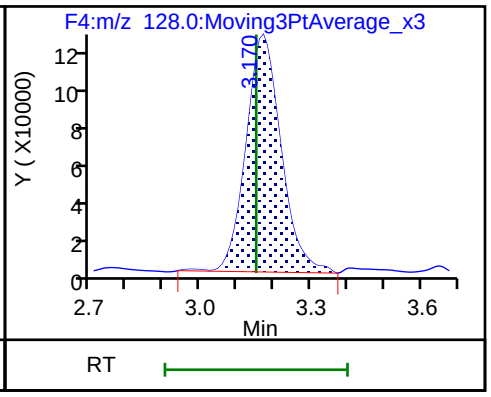
28 3,5-Dinitroaniline (ND)



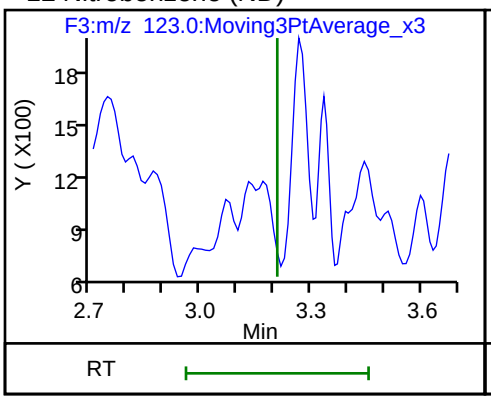
10 2,4,6-Trinitrotoluene (ND)



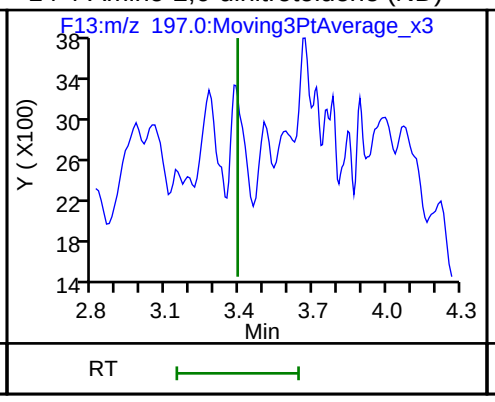
$ 11 Nitrobenzene-d5



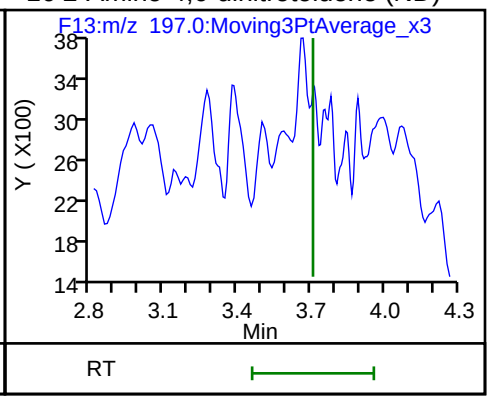
12 Nitrobenzene (ND)



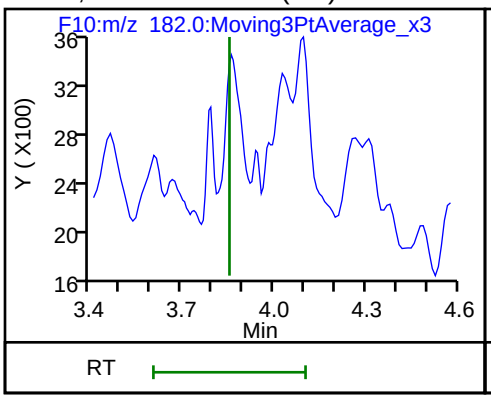
14 4-Amino-2,6-dinitrotoluene (ND)



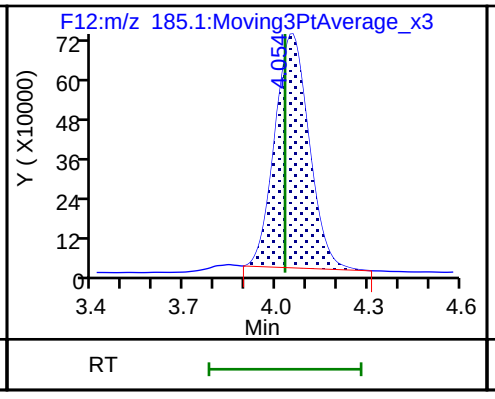
16 2-Amino-4,6-dinitrotoluene (ND)



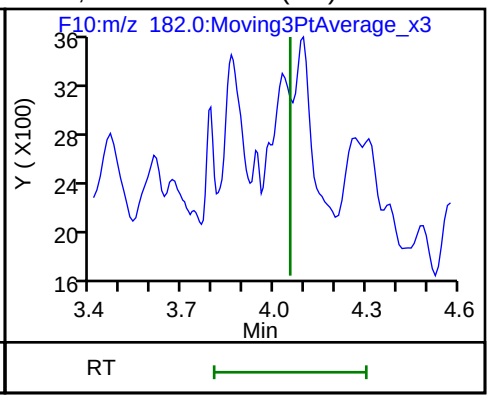
17 2,6-Dinitrotoluene (ND)



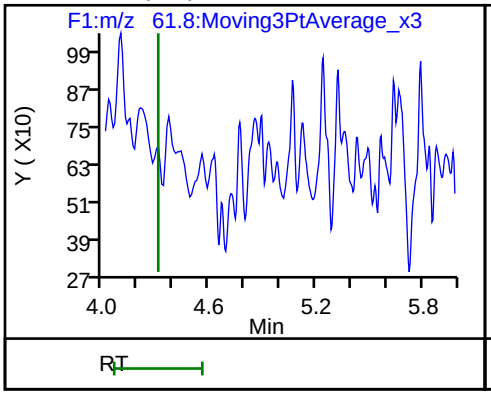
* 18 2,4-dinitrotoluene-d3



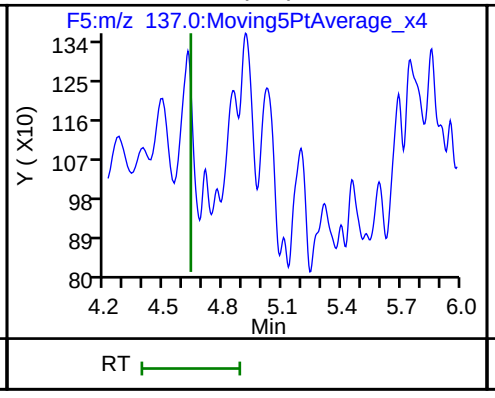
19 2,4-Dinitrotoluene (ND)



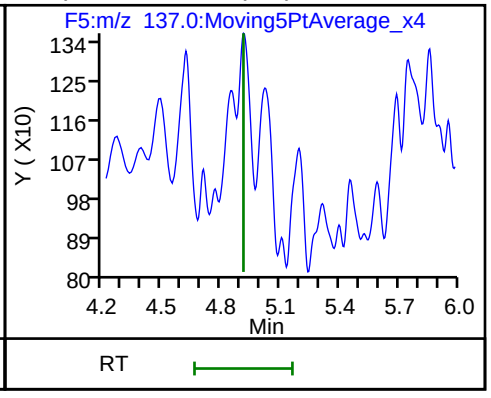
20 PETN (ND)



22 o-Nitrotoluene (ND)



23 p-Nitrotoluene (ND)

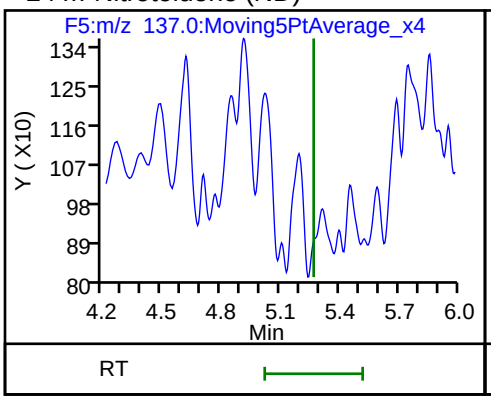


Report Date: 06-Apr-2022 06:44:09

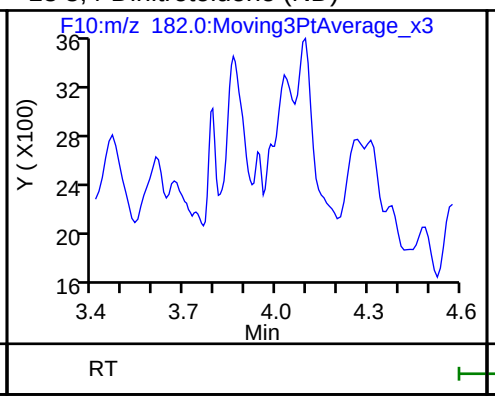
Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05012.d

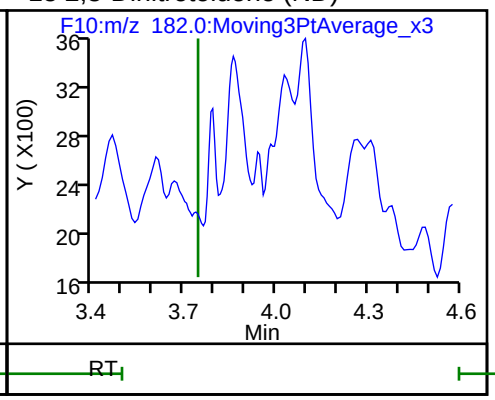
24 m-Nitrotoluene (ND)



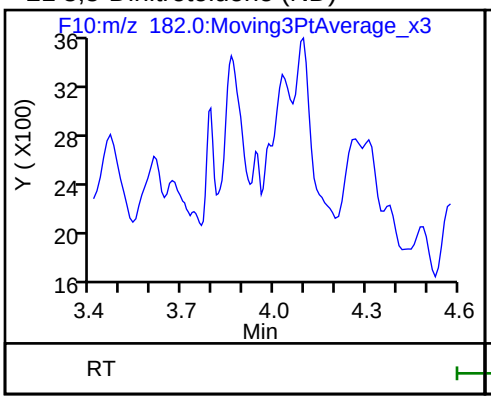
13 3,4-Dinitrotoluene (ND)



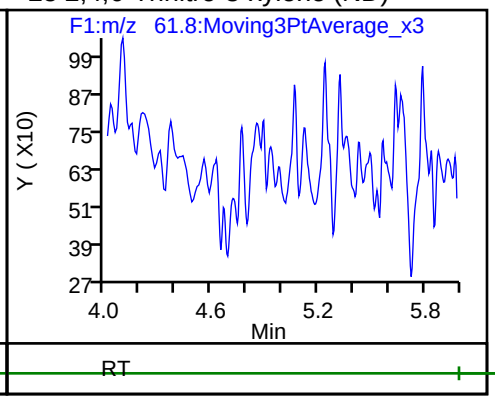
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 06-Apr-2022 06:44:09 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05012.d
Lims ID: MB 280-570053/1-A
Client ID:
Sample Type: MB
Inject. Date: 05-Apr-2022 11:18:02 ALS Bottle#: 10 Worklist Smp#: 12
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-570053/1-A
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 06:44:08 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 12:47:06

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	89.3	89.03

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-570516/1-A

Matrix: Solid | Lab File ID: ex722D05022.d

Analysis Method: 8321A | Date Collected:

Extraction Method: 8330B | Date Extracted: 04/01/2022 16:56

Sample wt/vol: 10(g) | Date Analyzed: 04/05/2022 12:02

Con. Extract Vol.: 40(mL) | Dilution Factor: 1

Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:

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

Analysis Batch No.: 570785 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.050	U	0.10	0.050	0.045
99-65-0	1,3-Dinitrobenzene	0.050	U	0.10	0.050	0.045
118-96-7	2,4,6-Trinitrotoluene	0.050	U	0.10	0.050	0.037
121-14-2	2,4-Dinitrotoluene	0.050	U	0.10	0.050	0.047
606-20-2	2,6-Dinitrotoluene	0.050	U	0.10	0.050	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.050	U	0.10	0.050	0.050
19406-51-0	4-Amino-2,6-dinitrotoluene	0.050	U	0.10	0.050	0.031
2691-41-0	HMX	0.050	U M	0.10	0.050	0.046
99-08-1	m-Nitrotoluene	0.050	U	0.10	0.050	0.043
98-95-3	Nitrobenzene	0.050	U	0.11	0.050	0.038
55-63-0	Nitroglycerin	0.050	U	0.10	0.050	0.029
88-72-2	o-Nitrotoluene	0.050	U	0.10	0.050	0.043
78-11-5	PETN	0.050	U	0.10	0.050	0.034
99-99-0	p-Nitrotoluene	0.050	U	0.10	0.050	0.049
121-82-4	RDX	0.050	U	0.12	0.050	0.043
479-45-8	Tetryl	0.050	U	0.10	0.050	0.039

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	90		68-140

Report Date: 06-Apr-2022 07:09:45 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05022.d
Lims ID: MB 280-570516/1-A
Client ID:
Sample Type: MB
Inject. Date: 05-Apr-2022 12:02:50 ALS Bottle#: 16 Worklist Smp#: 19
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-570516/1-A
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:08:09 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 12:48:45
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		259023	125.0	201	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		913276	125.0	216	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.850	2.850	0.0		1773310	129.4	284	
10 2,4,6-Trinitrotoluene								
227.0	3.085	3.134	-0.022	0.764	8207	-0.1884	2.0	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.783	784403	90.7	83.6	
* 18 2,4-dinitrotoluene-d3								
185.1	4.037	4.028	0.009		5814306	125.0	126	

QC Flag Legend

Processing Flags

Reagents:

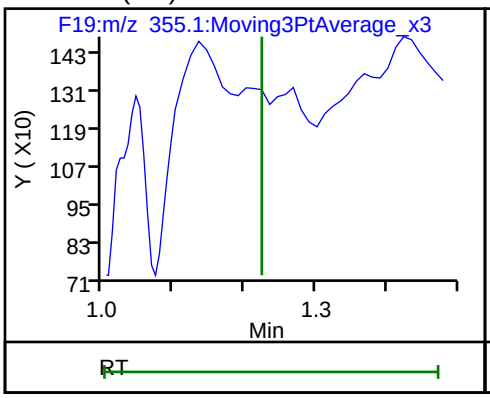
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:09:45 Chrom Revision: 2.3 18-Mar-2022 09:07:22

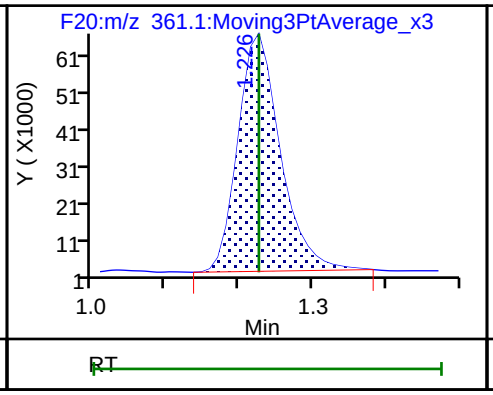
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05022.d
Injection Date: 05-Apr-2022 12:02:50 Instrument ID: LC_LCMS7
Lims ID: MB 280-570516/1-A
Client ID:
Operator ID: acm ALS Bottle#: 16 Worklist Smp#: 19
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

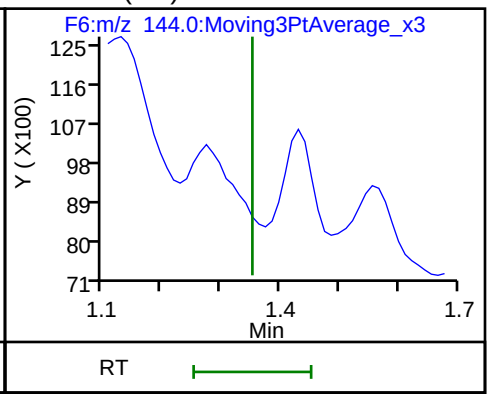
2 HMX (ND)



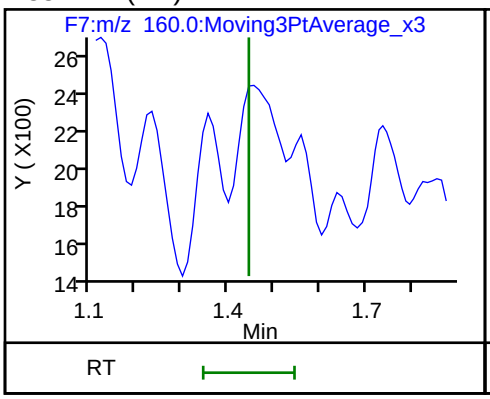
* 1 HMX-13C4



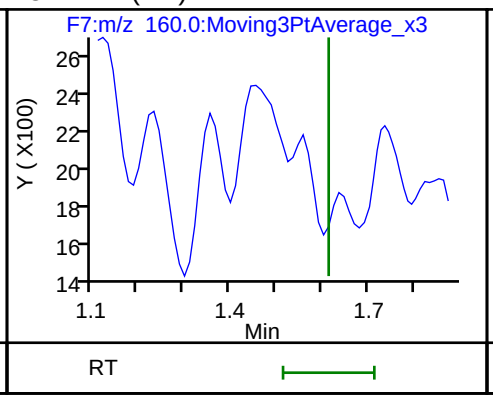
36 TNX (ND)



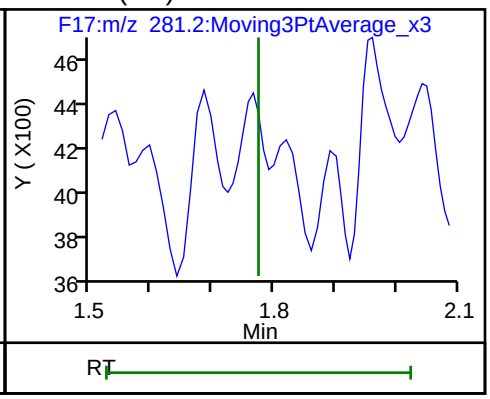
33 DNX (ND)



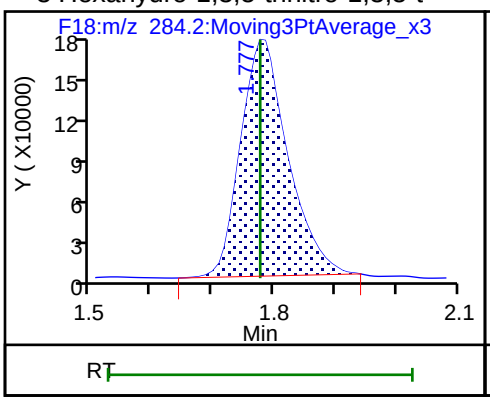
34 MNX (ND)



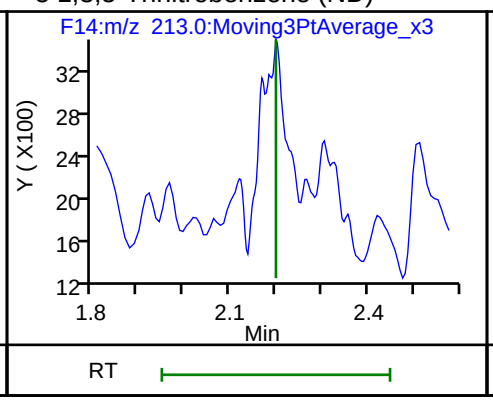
4 RDX (ND)



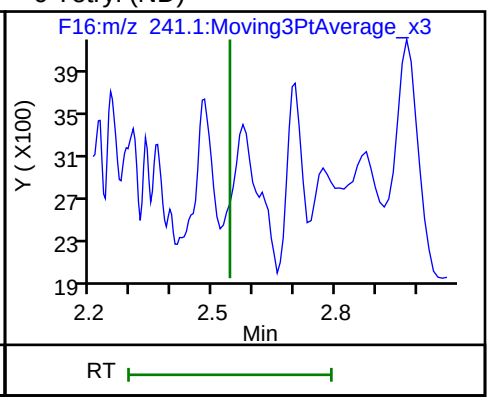
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



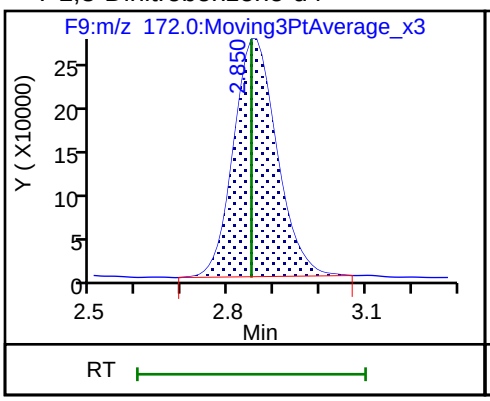
5 1,3,5-Trinitrobenzene (ND)



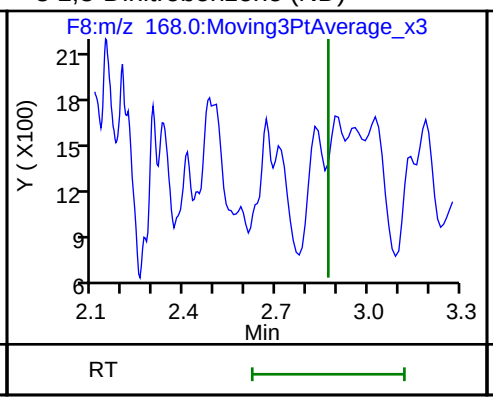
6 Tetryl (ND)



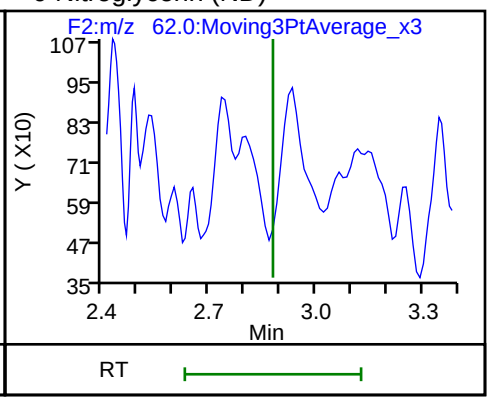
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



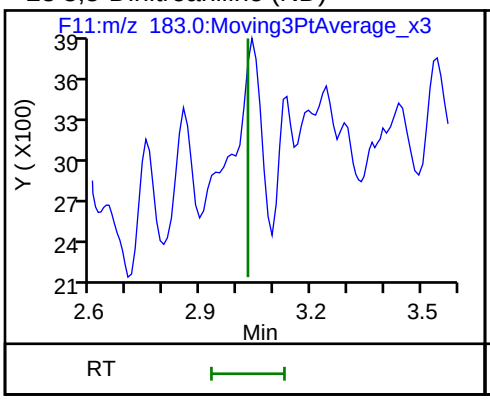
9 Nitroglycerin (ND)



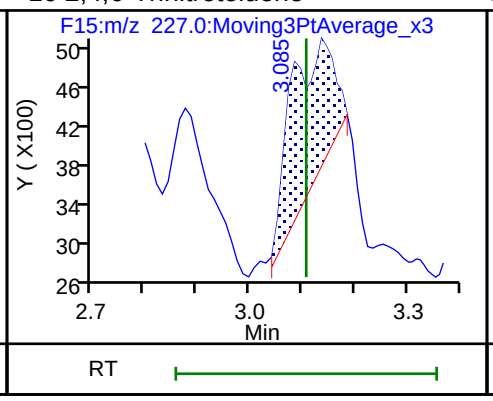
Report Date: 06-Apr-2022 07:09:46 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05022.d

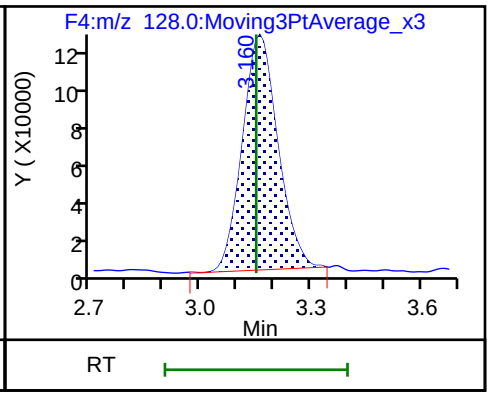
28 3,5-Dinitroaniline (ND)



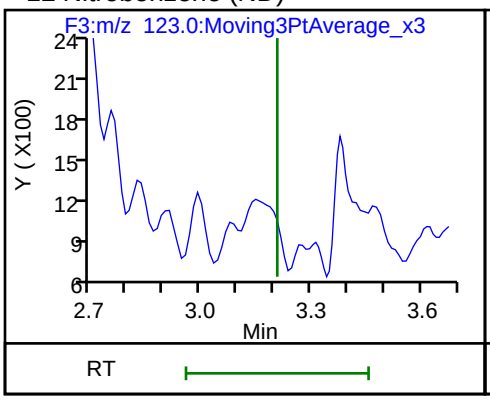
10 2,4,6-Trinitrotoluene



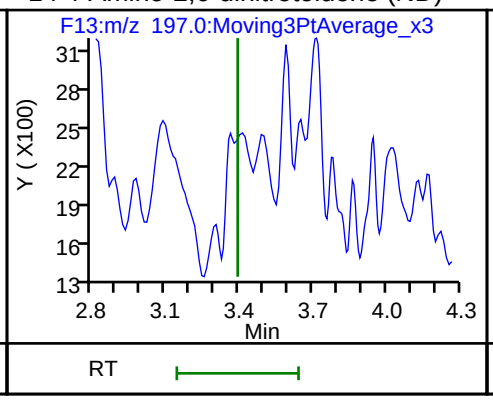
$ 11 Nitrobenzene-d5



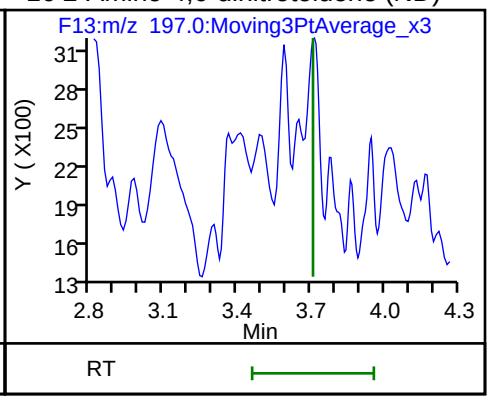
12 Nitrobenzene (ND)



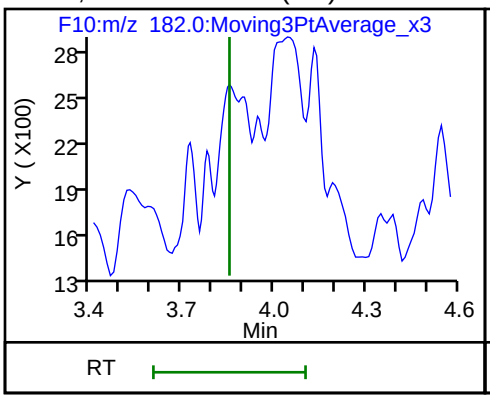
14 4-Amino-2,6-dinitrotoluene (ND)



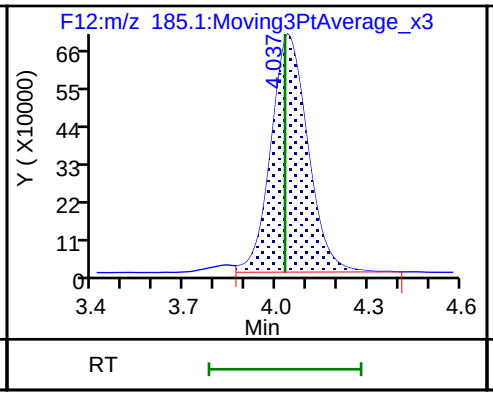
16 2-Amino-4,6-dinitrotoluene (ND)



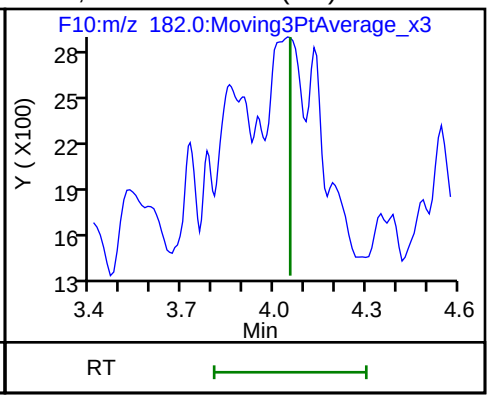
17 2,6-Dinitrotoluene (ND)



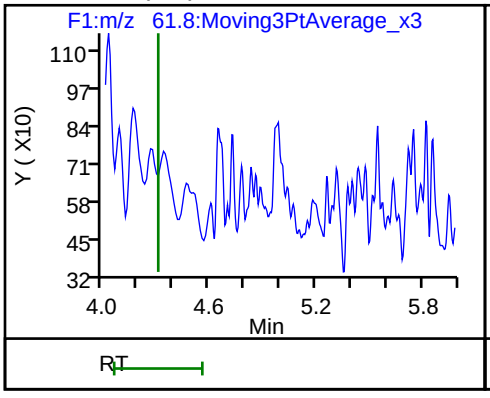
* 18 2,4-dinitrotoluene-d3



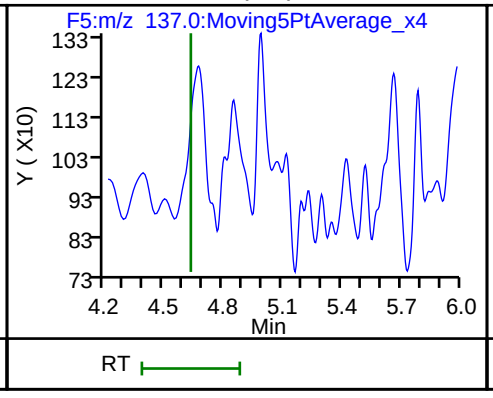
19 2,4-Dinitrotoluene (ND)



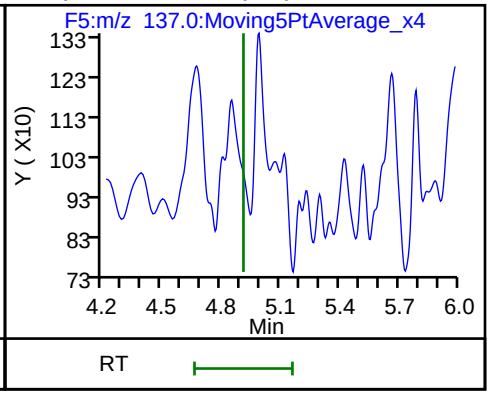
20 PETN (ND)



22 o-Nitrotoluene (ND)



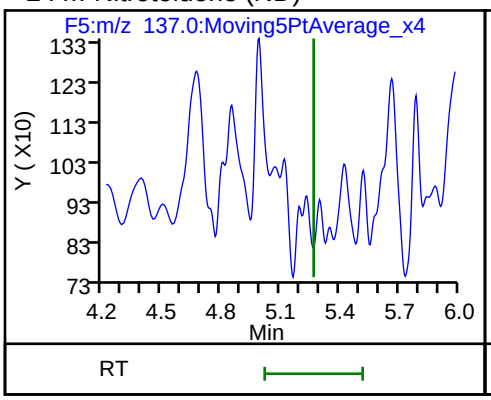
23 p-Nitrotoluene (ND)



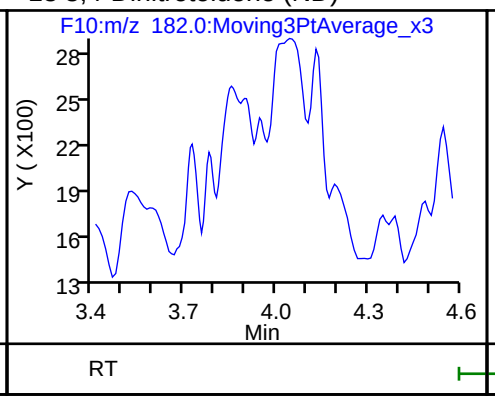
Report Date: 06-Apr-2022 07:09:46 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05022.d

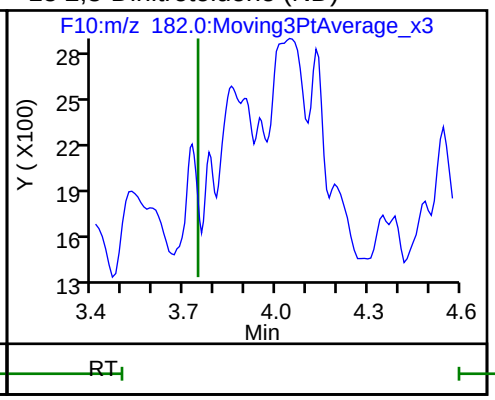
24 m-Nitrotoluene (ND)



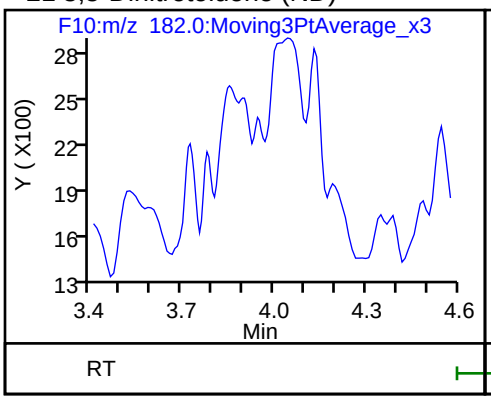
13 3,4-Dinitrotoluene (ND)



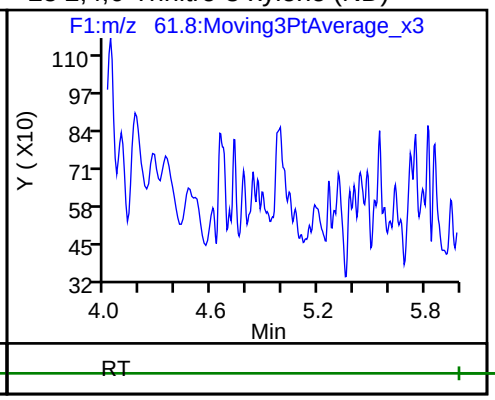
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 06-Apr-2022 07:09:45 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05022.d
Lims ID: MB 280-570516/1-A
Client ID:
Sample Type: MB
Inject. Date: 05-Apr-2022 12:02:50 ALS Bottle#: 16 Worklist Smp#: 19
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-570516/1-A
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:08:09 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 12:48:45

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	90.7	90.36

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-570543/1-A

Matrix: Solid | Lab File ID: ex722D05054.d

Analysis Method: 8321A | Date Collected:

Extraction Method: 8330B | Date Extracted: 04/01/2022 16:54

Sample wt/vol: 10(g) | Date Analyzed: 04/05/2022 15:27

Con. Extract Vol.: 40(mL) | Dilution Factor: 1

Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:

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

Analysis Batch No.: 570786 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.050	U	0.10	0.050	0.045
99-65-0	1,3-Dinitrobenzene	0.050	U	0.10	0.050	0.045
118-96-7	2,4,6-Trinitrotoluene	0.050	U	0.10	0.050	0.037
121-14-2	2,4-Dinitrotoluene	0.050	U	0.10	0.050	0.047
606-20-2	2,6-Dinitrotoluene	0.050	U	0.10	0.050	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.050	U	0.10	0.050	0.050
19406-51-0	4-Amino-2,6-dinitrotoluene	0.050	U	0.10	0.050	0.031
2691-41-0	HMX	0.050	U M	0.10	0.050	0.046
99-08-1	m-Nitrotoluene	0.050	U	0.10	0.050	0.043
98-95-3	Nitrobenzene	0.050	U	0.11	0.050	0.038
55-63-0	Nitroglycerin	0.050	U	0.10	0.050	0.029
88-72-2	o-Nitrotoluene	0.050	U	0.10	0.050	0.043
78-11-5	PETN	0.050	U	0.10	0.050	0.034
99-99-0	p-Nitrotoluene	0.050	U	0.10	0.050	0.049
121-82-4	RDX	0.050	U	0.12	0.050	0.043
479-45-8	Tetryl	0.050	U	0.10	0.050	0.039

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	101		68-140

Report Date: 06-Apr-2022 07:10:09 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05054.d
Lims ID: MB 280-570543/1-A
Client ID:
Sample Type: MB
Inject. Date: 05-Apr-2022 15:27:36 ALS Bottle#: 45 Worklist Smp#: 51
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-570543/1-A
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:10:08 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 06-Apr-2022 06:54:40
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		282722	125.0	175	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		1022162	125.0	209	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.850	2.850	0.0		1852878	129.4	219	
28 3,5-Dinitroaniline								
183.0	3.039	3.051	0.012	1.066	9044	-0.5613	4.4	
10 2,4,6-Trinitrotoluene								
227.0	3.137	3.134	0.030	0.775	15129	-0.1304	3.9	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	919185	101.8	165	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		5758520	125.0	136	

QC Flag Legend

Processing Flags

Reagents:

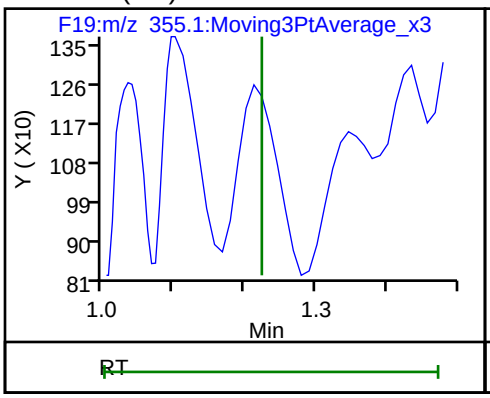
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:10:09 Chrom Revision: 2.3 18-Mar-2022 09:07:22

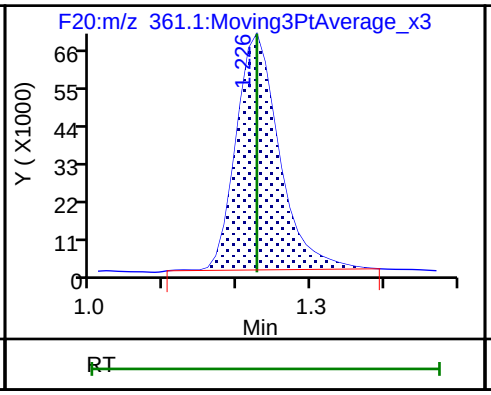
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05054.d
Injection Date: 05-Apr-2022 15:27:36 Instrument ID: LC_LCMS7
Lims ID: MB 280-570543/1-A
Client ID:
Operator ID: acm ALS Bottle#: 45 Worklist Smp#: 51
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

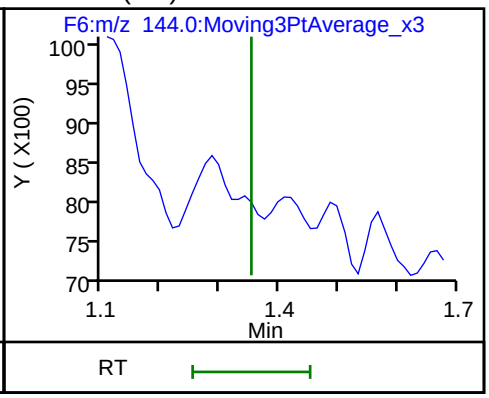
2 HMX (ND)



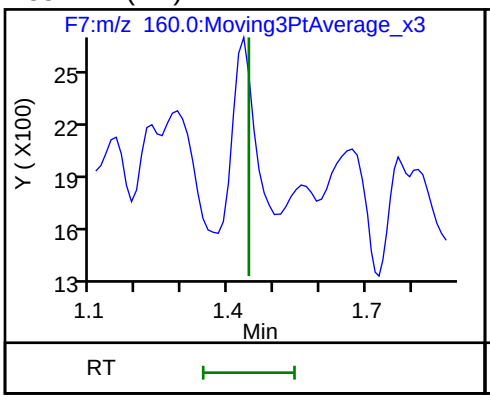
* 1 HMX-13C4



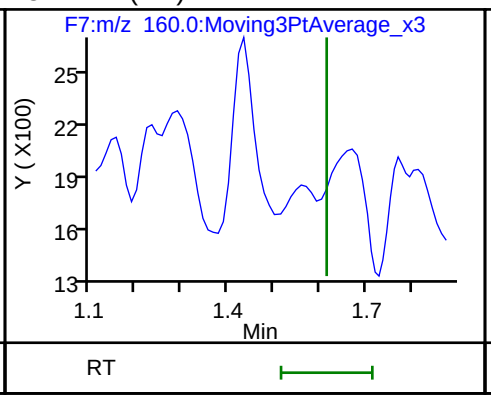
36 TNX (ND)



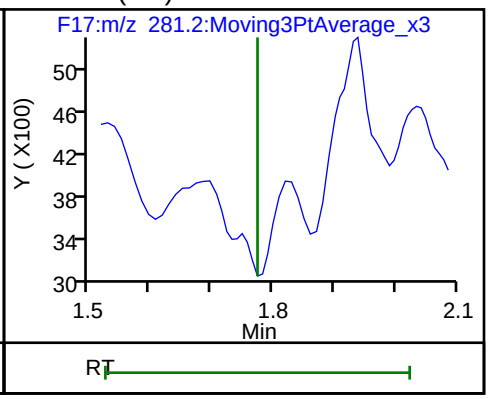
33 DNX (ND)



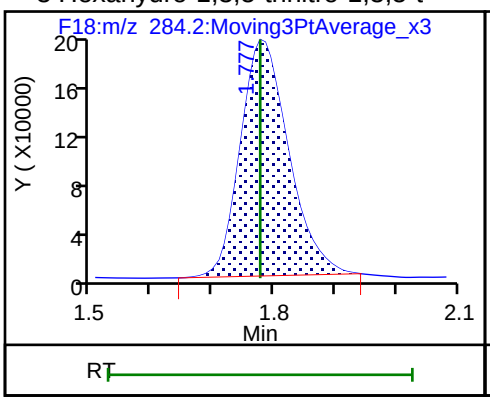
34 MNX (ND)



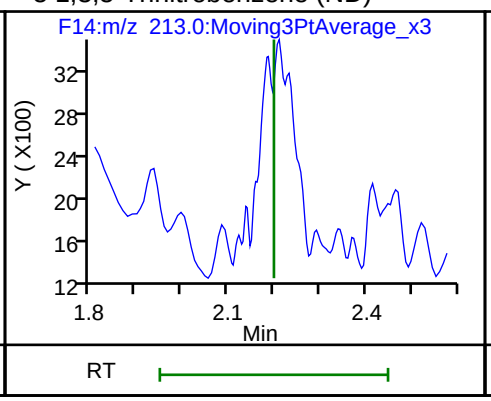
4 RDX (ND)



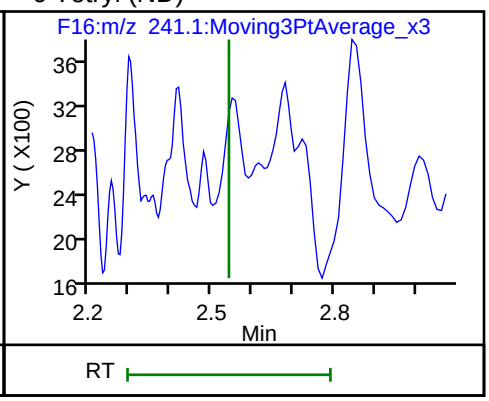
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



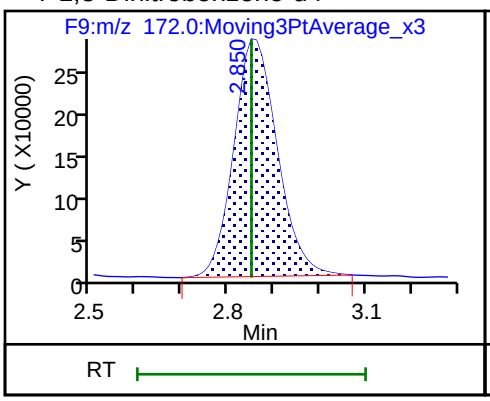
5 1,3,5-Trinitrobenzene (ND)



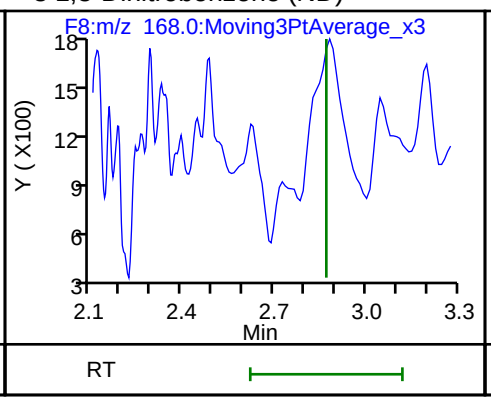
6 Tetryl (ND)



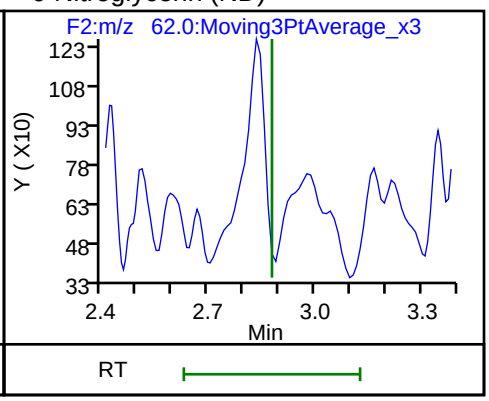
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

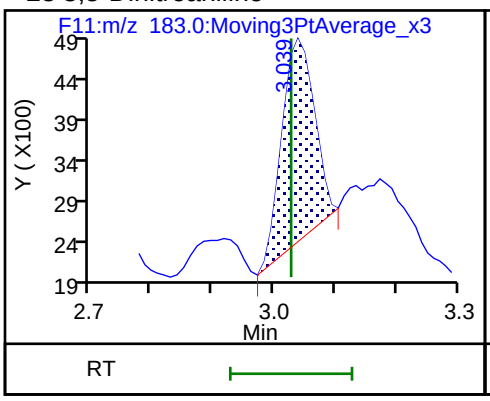


9 Nitroglycerin (ND)

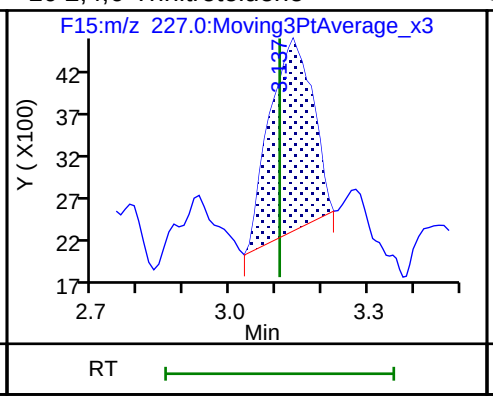


Report Date: 06-Apr-2022 07:10:09 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05054.d

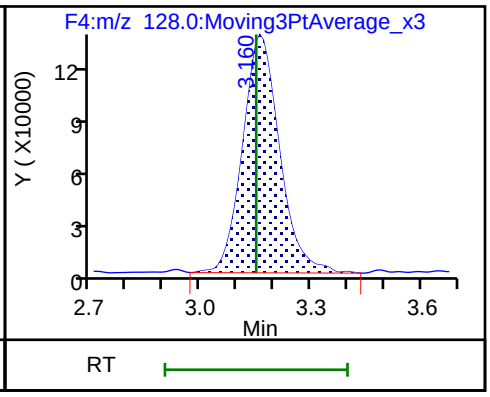
28 3,5-Dinitroaniline



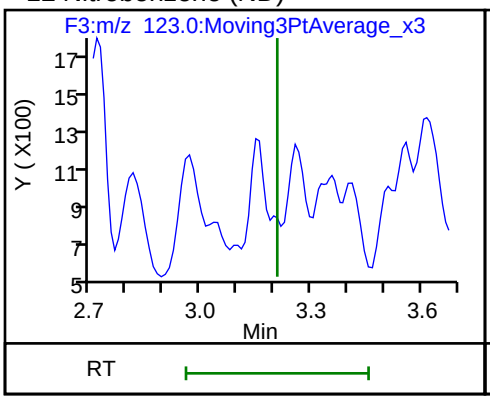
10 2,4,6-Trinitrotoluene



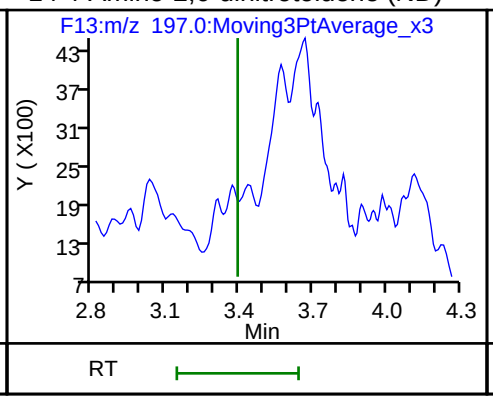
$ 11 Nitrobenzene-d5



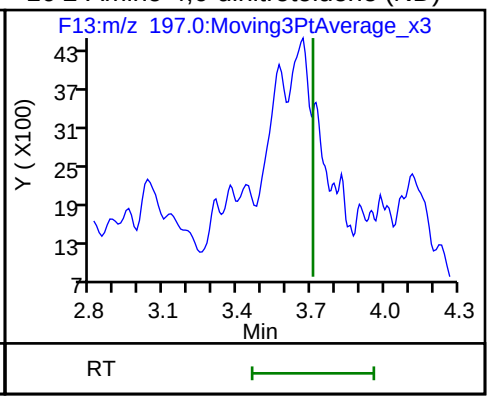
12 Nitrobenzene (ND)



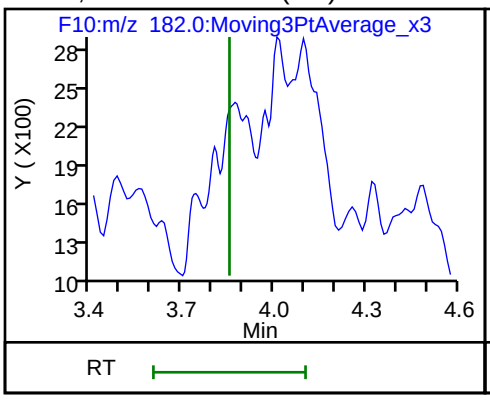
14 4-Amino-2,6-dinitrotoluene (ND)



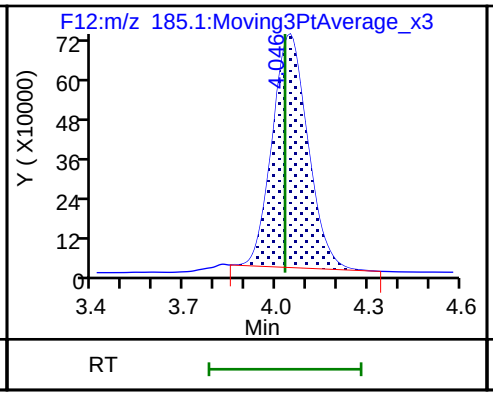
16 2-Amino-4,6-dinitrotoluene (ND)



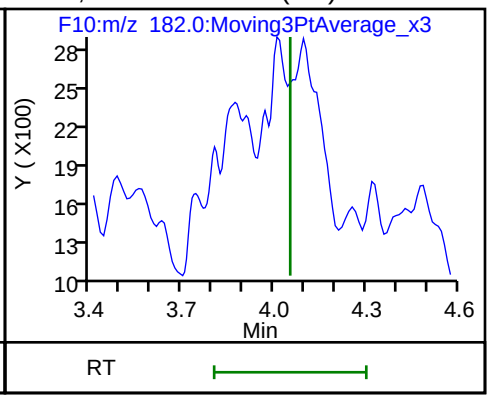
17 2,6-Dinitrotoluene (ND)



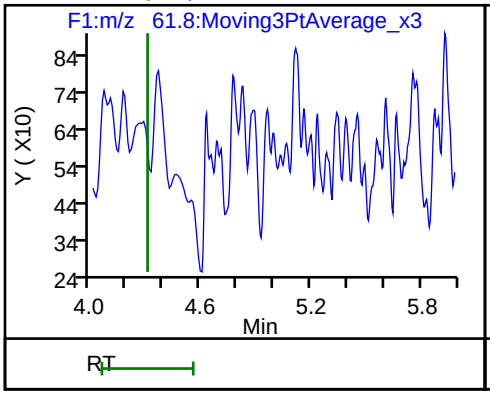
* 18 2,4-dinitrotoluene-d3



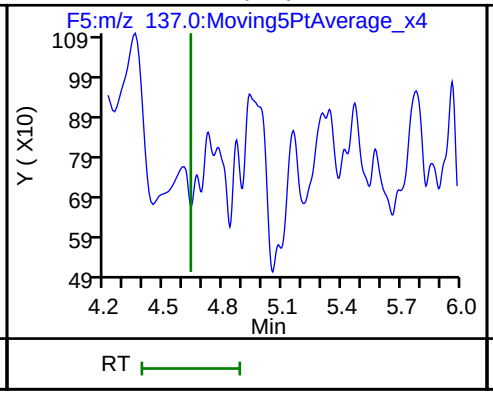
19 2,4-Dinitrotoluene (ND)



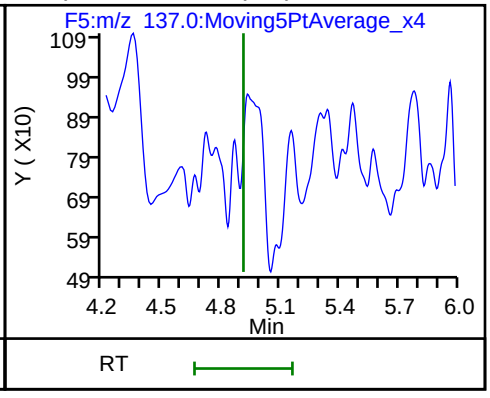
20 PETN (ND)



22 o-Nitrotoluene (ND)



23 p-Nitrotoluene (ND)

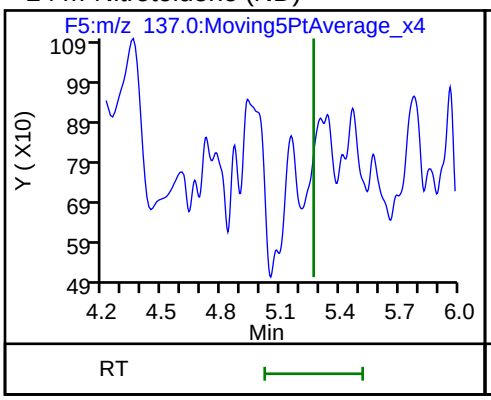


Report Date: 06-Apr-2022 07:10:09

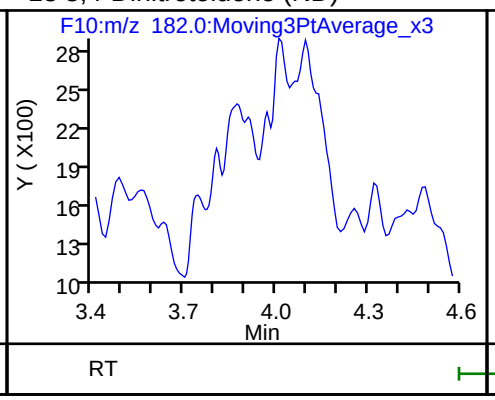
Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05054.d

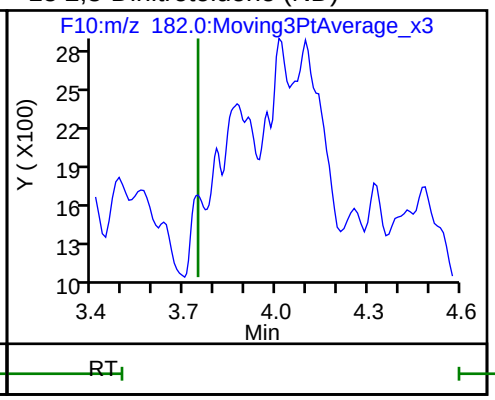
24 m-Nitrotoluene (ND)



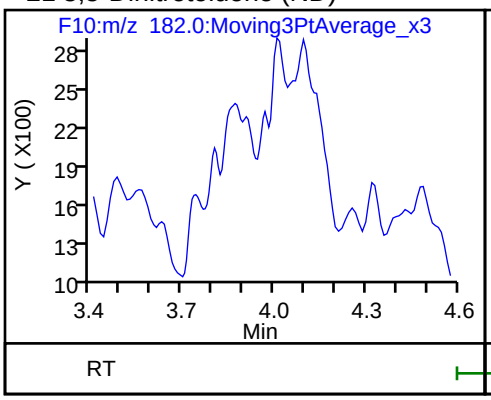
13 3,4-Dinitrotoluene (ND)



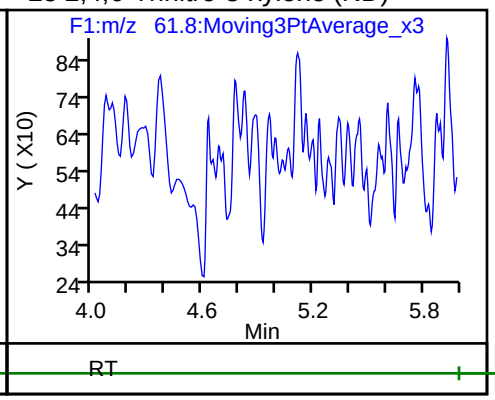
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 06-Apr-2022 07:10:09 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05054.d
Lims ID: MB 280-570543/1-A
Client ID:
Sample Type: MB
Inject. Date: 05-Apr-2022 15:27:36 ALS Bottle#: 45 Worklist Smp#: 51
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-570543/1-A
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:10:08 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 06-Apr-2022 06:54:40

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	101.8	101.46

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-570718/1-A

Matrix: Solid | Lab File ID: ex722D07012.d

Analysis Method: 8321A | Date Collected:

Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57

Sample wt/vol: 10(g) | Date Analyzed: 04/07/2022 11:38

Con. Extract Vol.: 40(mL) | Dilution Factor: 1

Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:

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

Analysis Batch No.: 571108 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.050	U	0.10	0.050	0.045
99-65-0	1,3-Dinitrobenzene	0.050	U	0.10	0.050	0.045
118-96-7	2,4,6-Trinitrotoluene	0.050	U	0.10	0.050	0.037
121-14-2	2,4-Dinitrotoluene	0.050	U	0.10	0.050	0.047
606-20-2	2,6-Dinitrotoluene	0.050	U	0.10	0.050	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.050	U	0.10	0.050	0.050
19406-51-0	4-Amino-2,6-dinitrotoluene	0.050	U	0.10	0.050	0.031
2691-41-0	HMX	0.050	U M	0.10	0.050	0.046
99-08-1	m-Nitrotoluene	0.050	U	0.10	0.050	0.043
98-95-3	Nitrobenzene	0.050	U M	0.11	0.050	0.038
55-63-0	Nitroglycerin	0.050	U	0.10	0.050	0.029
88-72-2	o-Nitrotoluene	0.050	U	0.10	0.050	0.043
78-11-5	PETN	0.050	U	0.10	0.050	0.034
99-99-0	p-Nitrotoluene	0.050	U	0.10	0.050	0.049
121-82-4	RDX	0.050	U	0.12	0.050	0.043
479-45-8	Tetryl	0.050	U M	0.10	0.050	0.039

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	98		68-140

Report Date: 08-Apr-2022 07:32:22 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07012.d
Lims ID: MB 280-570718/1-A
Client ID:
Sample Type: MB
Inject. Date: 07-Apr-2022 11:38:36 ALS Bottle#: 10 Worklist Smp#: 12
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-570718/1-A
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:21 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 12:34:38
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		132705	125.0	129	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		371603	125.0	98.6	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.030	3.030	0.0		1290098	129.4	239	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.774	616031	98.3	102	
* 18 2,4-dinitrotoluene-d3								
185.1	4.341	4.341	0.0		4070990	125.0	110	

QC Flag Legend
Processing Flags

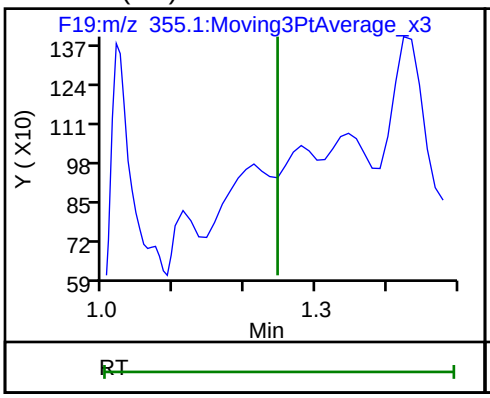
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 08-Apr-2022 07:32:22 Chrom Revision: 2.3 18-Mar-2022 09:07:22

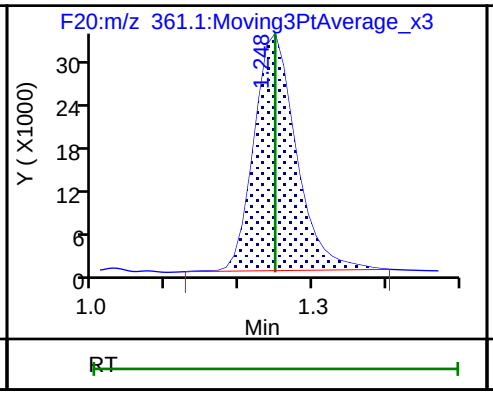
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07012.d
Injection Date: 07-Apr-2022 11:38:36 Instrument ID: LC_LCMS7
Lims ID: MB 280-570718/1-A
Client ID:
Operator ID: acm ALS Bottle#: 10 Worklist Smp#: 12
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

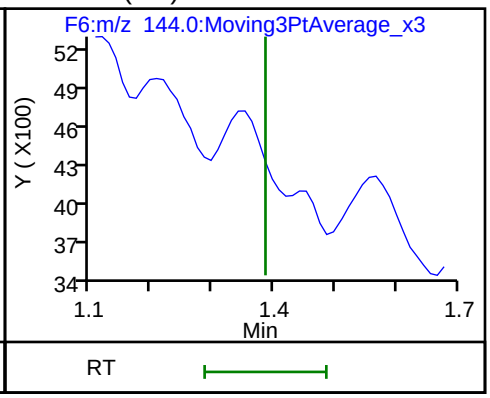
2 HMX (ND)



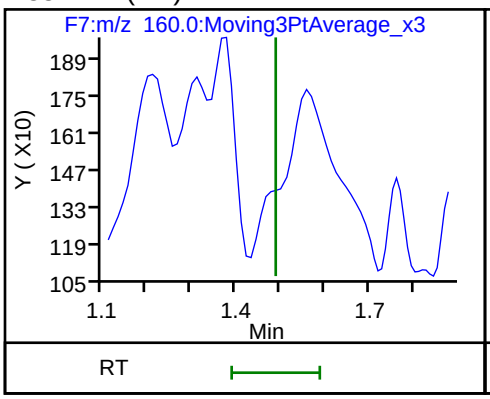
* 1 HMX-13C4



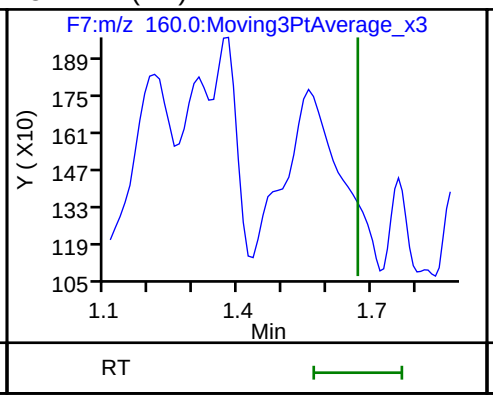
36 TNX (ND)



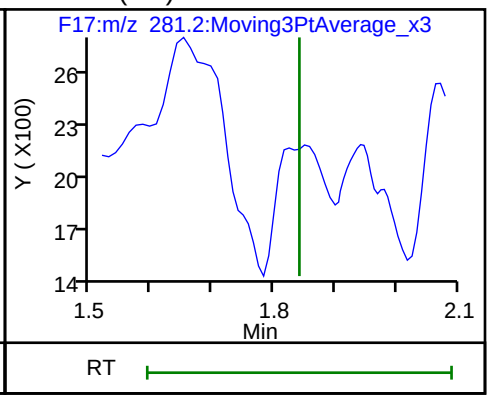
33 DNX (ND)



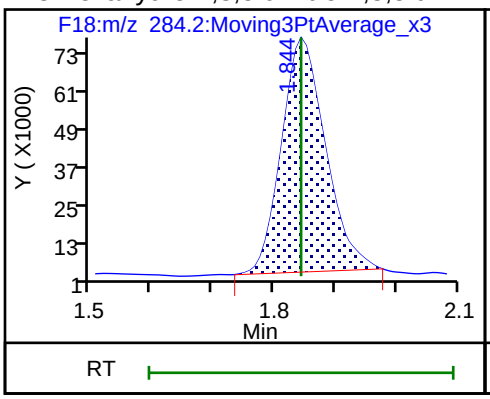
34 MNX (ND)



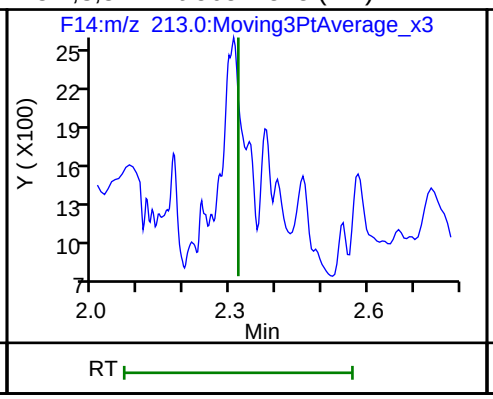
4 RDX (ND)



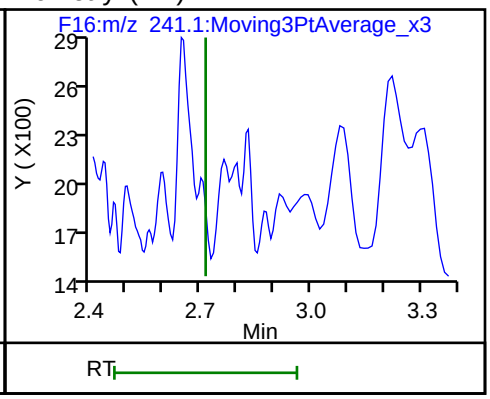
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



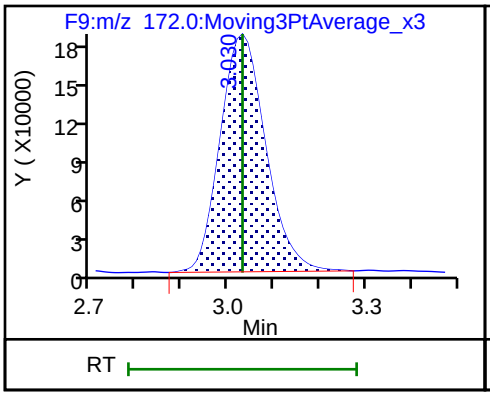
5 1,3,5-Trinitrobenzene (ND)



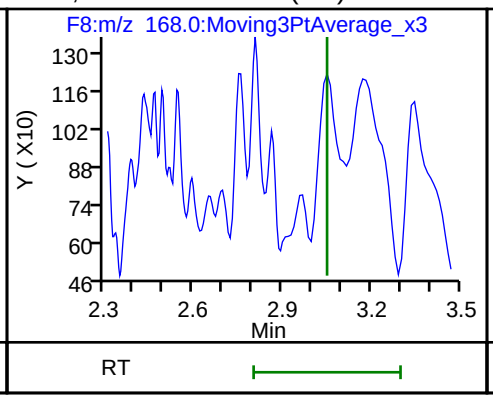
6 Tetryl (ND)



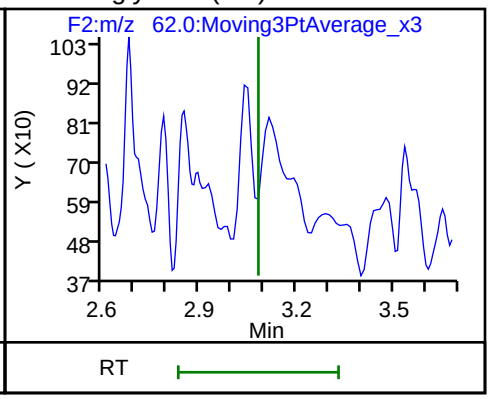
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

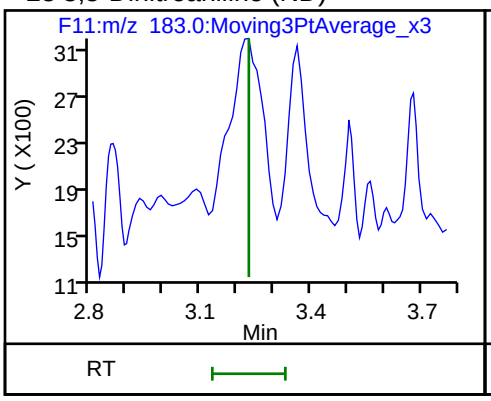


9 Nitroglycerin (ND)

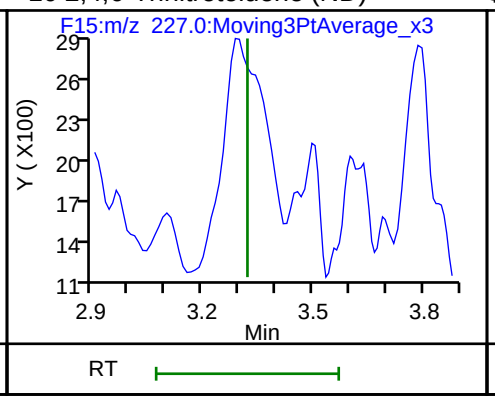


Report Date: 08-Apr-2022 07:32:22 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07012.d

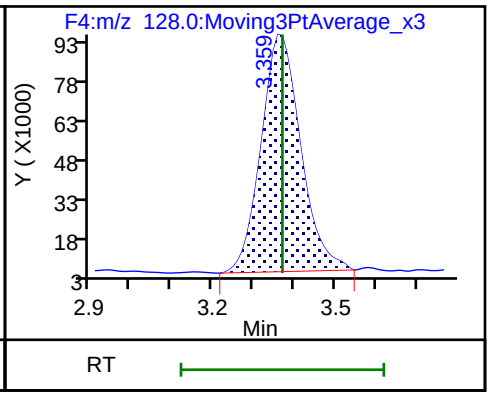
28 3,5-Dinitroaniline (ND)



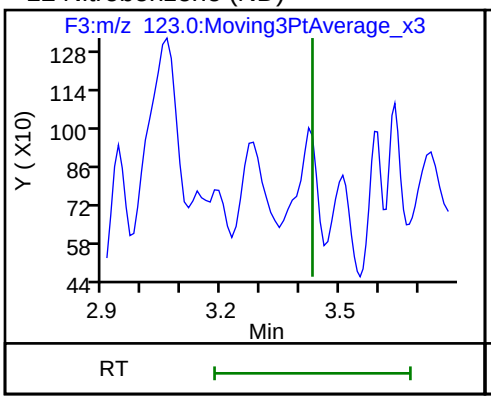
10 2,4,6-Trinitrotoluene (ND)



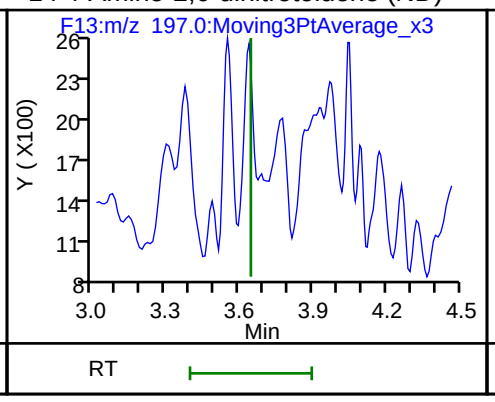
$ 11 Nitrobenzene-d5



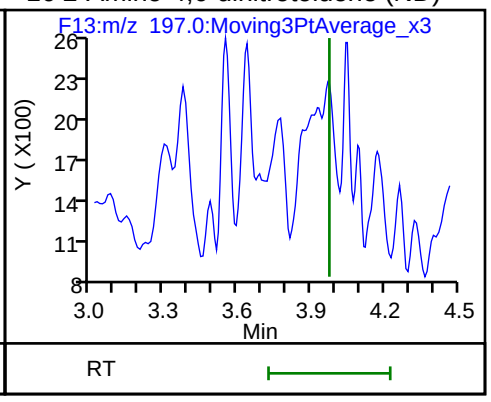
12 Nitrobenzene (ND)



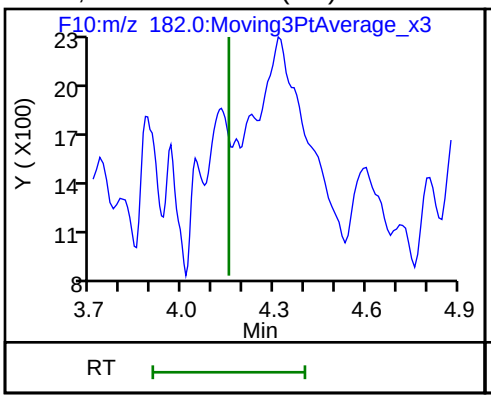
14 4-Amino-2,6-dinitrotoluene (ND)



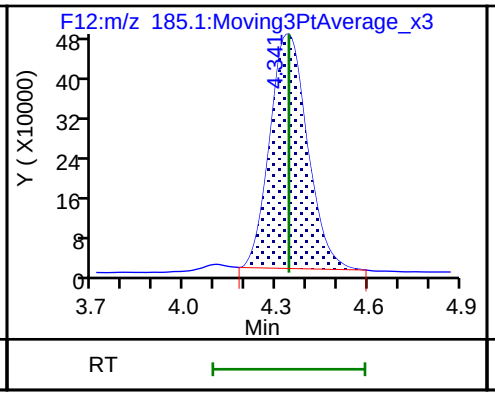
16 2-Amino-4,6-dinitrotoluene (ND)



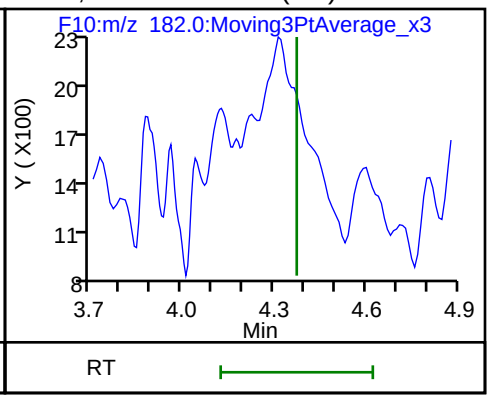
17 2,6-Dinitrotoluene (ND)



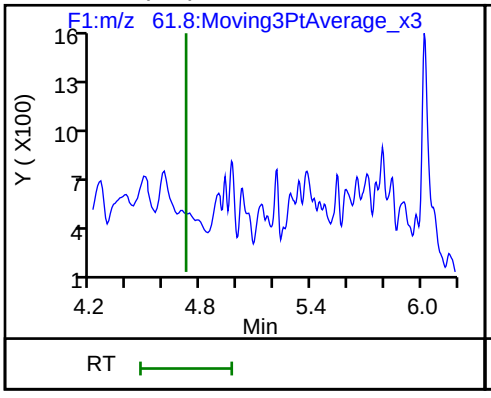
* 18 2,4-dinitrotoluene-d3



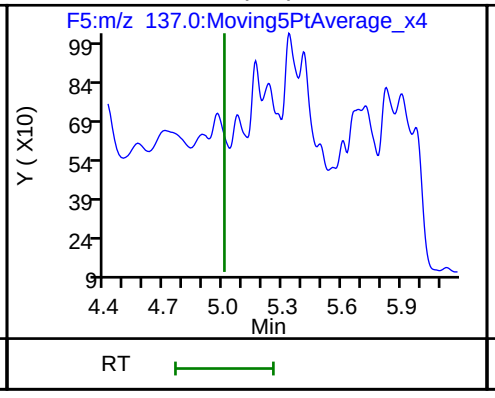
19 2,4-Dinitrotoluene (ND)



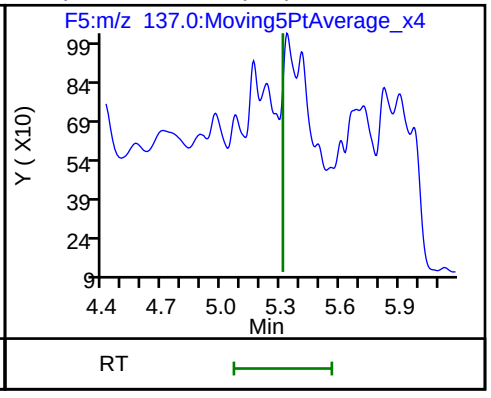
20 PETN (ND)



22 o-Nitrotoluene (ND)



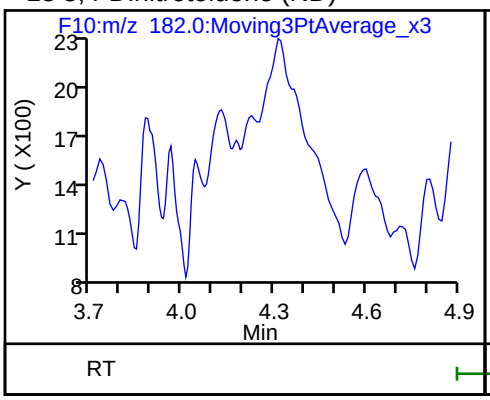
23 p-Nitrotoluene (ND)



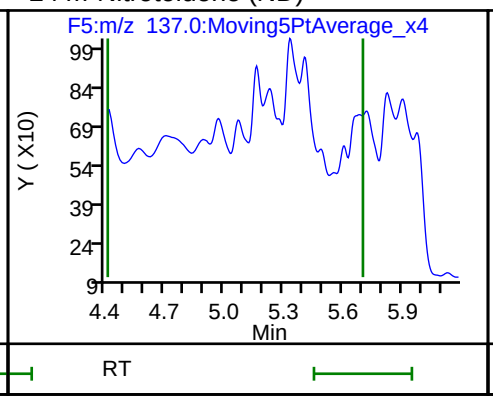
Report Date: 08-Apr-2022 07:32:22 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07012.d

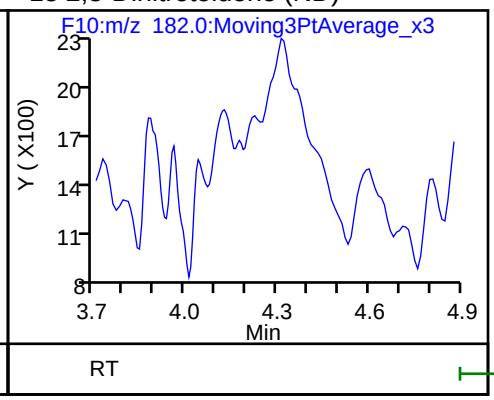
13 3,4-Dinitrotoluene (ND)



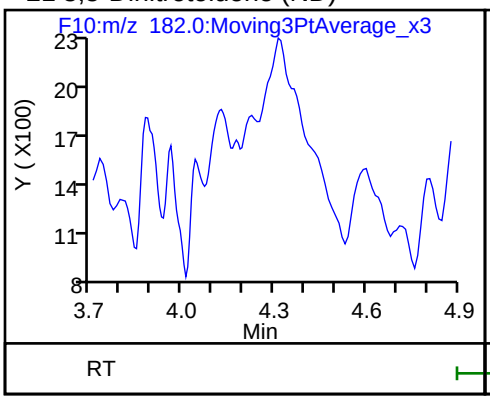
24 m-Nitrotoluene (ND)



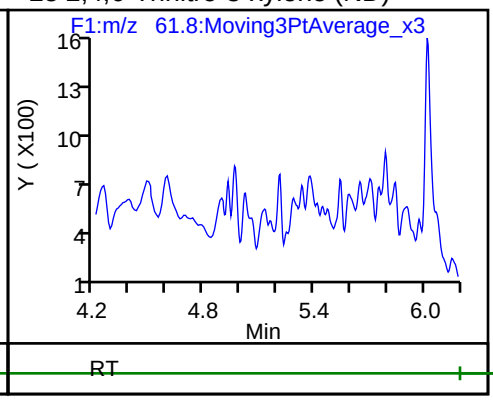
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 08-Apr-2022 07:32:22 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07012.d
Lims ID: MB 280-570718/1-A
Client ID:
Sample Type: MB
Inject. Date: 07-Apr-2022 11:38:36 ALS Bottle#: 10 Worklist Smp#: 12
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-570718/1-A
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:21 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 12:34:38

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	98.3	98.02

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1

SDG No.:

Client Sample ID: | Lab Sample ID: GB 280-570095/1-B

Matrix: Solid | Lab File ID: ex722D05025.d

Analysis Method: 8321A | Date Collected:

Extraction Method: 8330B | Date Extracted: 04/01/2022 16:56

Sample wt/vol: 10.44(g) | Date Analyzed: 04/05/2022 12:22

Con. Extract Vol.: 40(mL) | Dilution Factor: 1

Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:

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

Analysis Batch No.: 570785 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.048	U	0.096	0.048	0.043
99-65-0	1,3-Dinitrobenzene	0.048	U	0.096	0.048	0.043
118-96-7	2,4,6-Trinitrotoluene	0.048	U M	0.096	0.048	0.035
121-14-2	2,4-Dinitrotoluene	0.048	U	0.096	0.048	0.045
606-20-2	2,6-Dinitrotoluene	0.048	U	0.096	0.048	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.048	U	0.096	0.048	0.048
19406-51-0	4-Amino-2,6-dinitrotoluene	0.048	U	0.096	0.048	0.030
2691-41-0	HMX	0.048	U M	0.096	0.048	0.044
99-08-1	m-Nitrotoluene	0.048	U	0.096	0.048	0.041
98-95-3	Nitrobenzene	0.048	U	0.11	0.048	0.036
55-63-0	Nitroglycerin	0.048	U M	0.096	0.048	0.028
88-72-2	o-Nitrotoluene	0.048	U	0.096	0.048	0.041
78-11-5	PETN	0.048	U	0.096	0.048	0.033
99-99-0	p-Nitrotoluene	0.048	U	0.096	0.048	0.047
121-82-4	RDX	0.048	U	0.11	0.048	0.041
479-45-8	Tetryl	0.048	U	0.096	0.048	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	98		68-140

Report Date: 06-Apr-2022 07:09:48 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05025.d
Lims ID: GB 280-570095/1-B
Client ID:
Sample Type: GB
Inject. Date: 05-Apr-2022 12:22:01 ALS Bottle#: 19 Worklist Smp#: 22
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: GB 280-570095/1-B
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:08:09 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 12:49:30
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		258960	125.0	256	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		964513	125.0	196	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.850	2.850	0.0		1853112	129.4	309	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.783	890737	98.6	119	
* 18 2,4-dinitrotoluene-d3								
185.1	4.037	4.028	0.009		5613353	125.0	112	

QC Flag Legend
Processing Flags

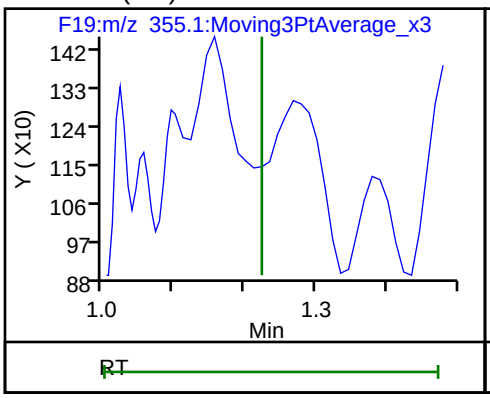
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:09:48 Chrom Revision: 2.3 18-Mar-2022 09:07:22

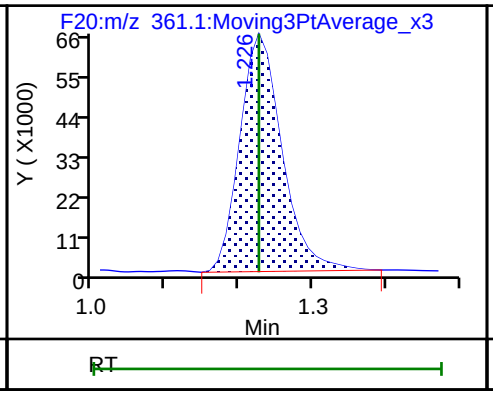
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05025.d
Injection Date: 05-Apr-2022 12:22:01 Instrument ID: LC_LCMS7
Lims ID: GB 280-570095/1-B
Client ID:
Operator ID: acm ALS Bottle#: 19 Worklist Smp#: 22
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

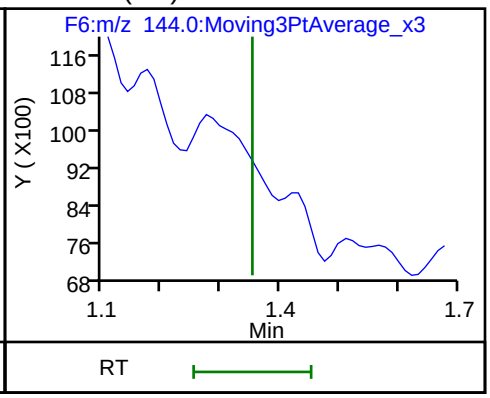
2 HMX (ND)



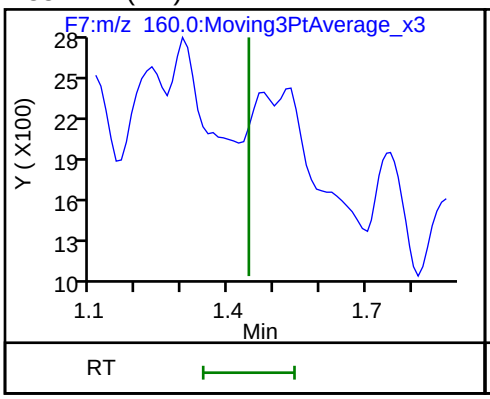
* 1 HMX-13C4



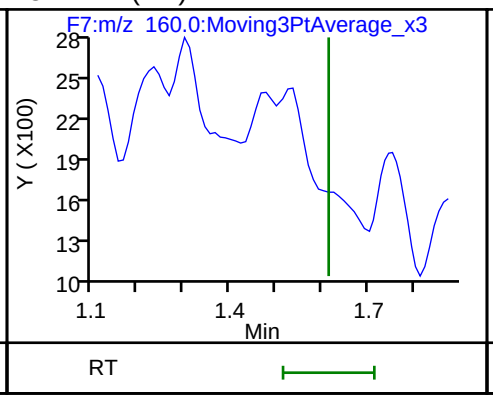
36 TNX (ND)



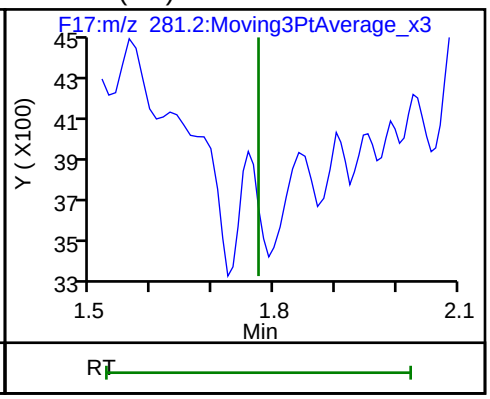
33 DNX (ND)



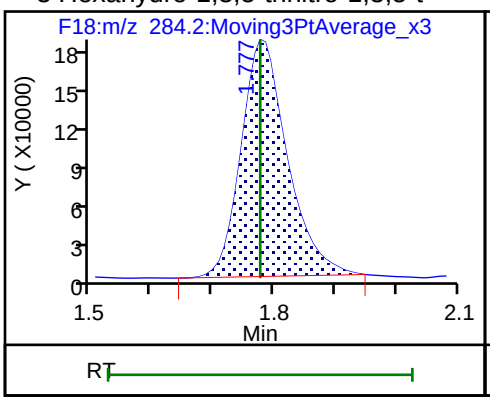
34 MNX (ND)



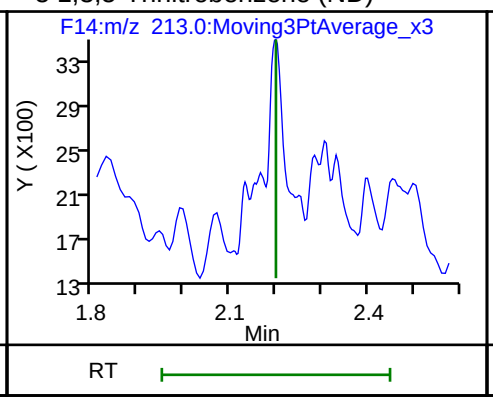
4 RDX (ND)



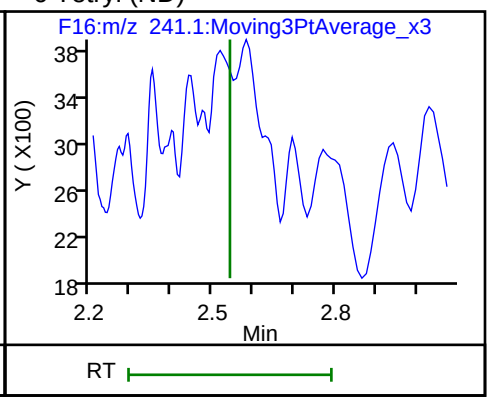
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



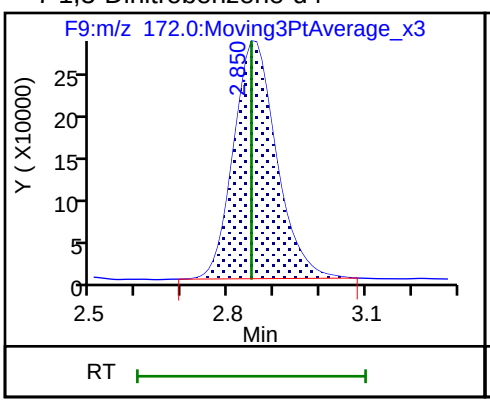
5 1,3,5-Trinitrobenzene (ND)



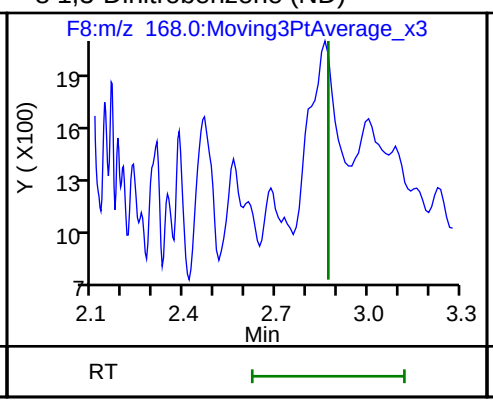
6 Tetryl (ND)



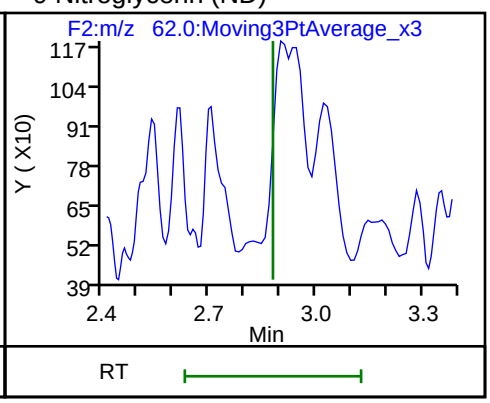
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

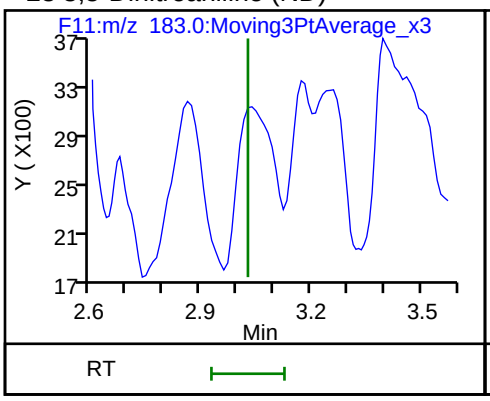


9 Nitroglycerin (ND)

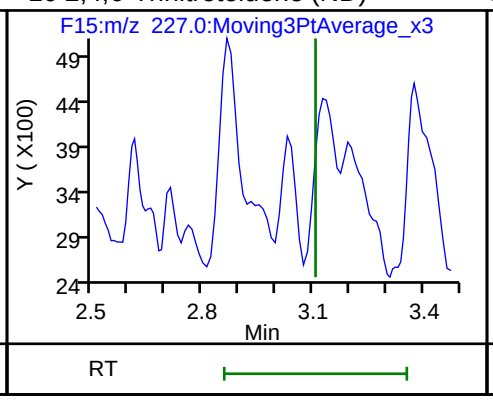


Report Date: 06-Apr-2022 07:09:48 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05025.d

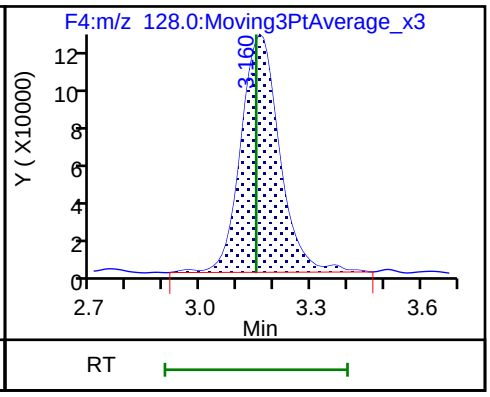
28 3,5-Dinitroaniline (ND)



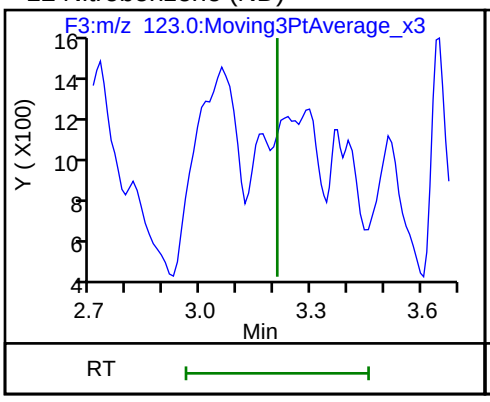
10 2,4,6-Trinitrotoluene (ND)



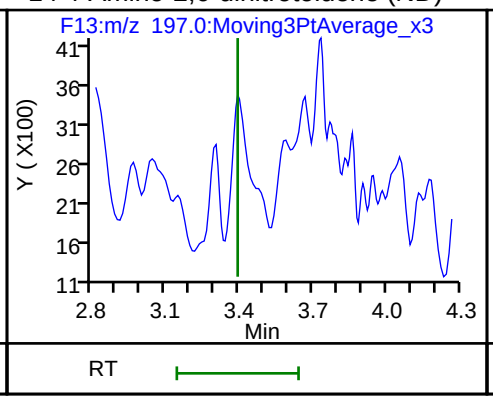
$ 11 Nitrobenzene-d5



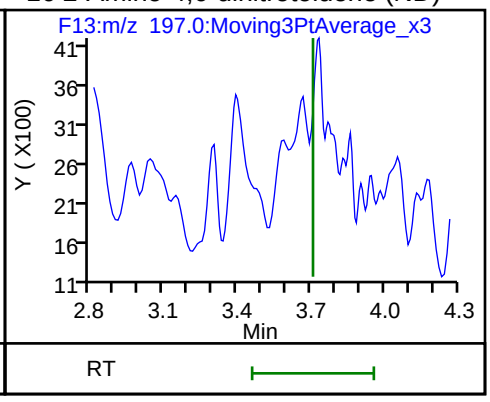
12 Nitrobenzene (ND)



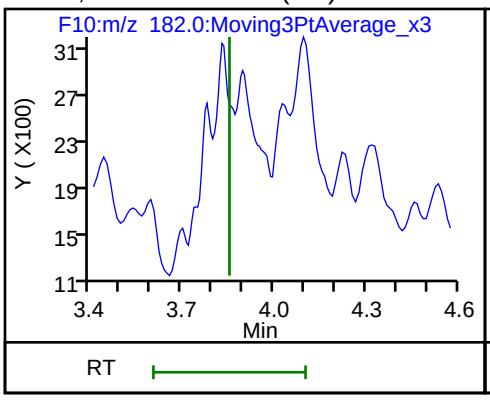
14 4-Amino-2,6-dinitrotoluene (ND)



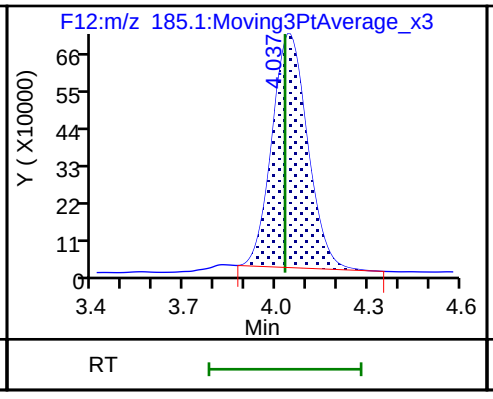
16 2-Amino-4,6-dinitrotoluene (ND)



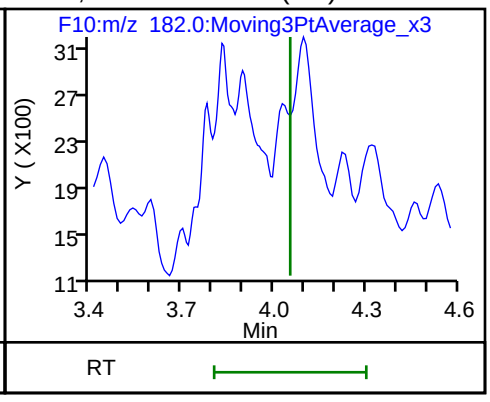
17 2,6-Dinitrotoluene (ND)



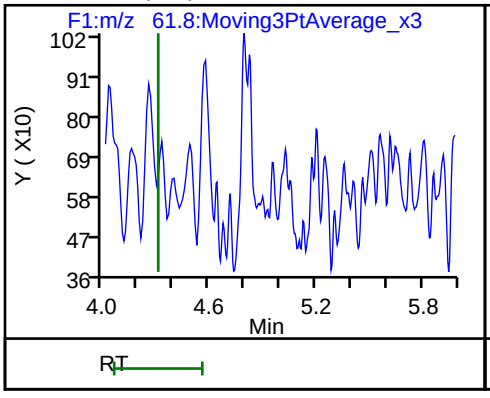
* 18 2,4-dinitrotoluene-d3



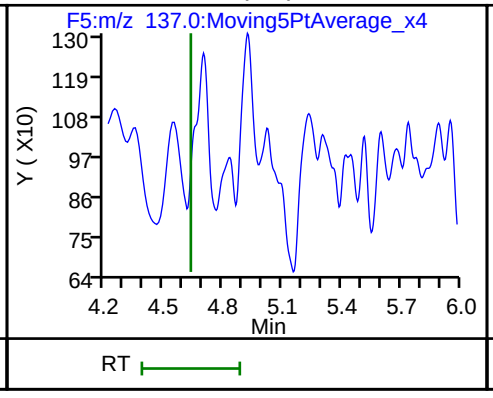
19 2,4-Dinitrotoluene (ND)



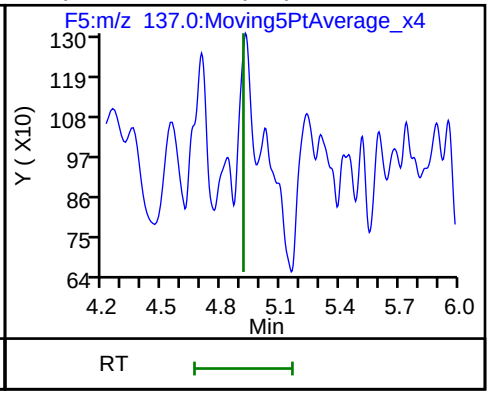
20 PETN (ND)



22 o-Nitrotoluene (ND)

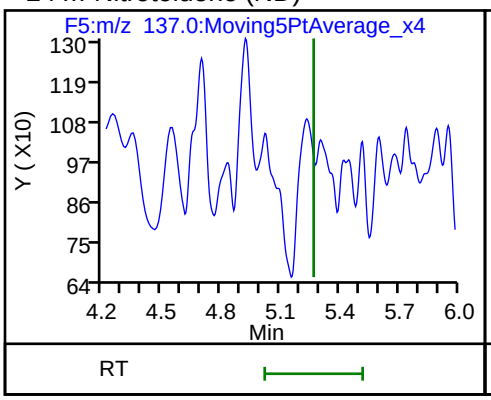


23 p-Nitrotoluene (ND)

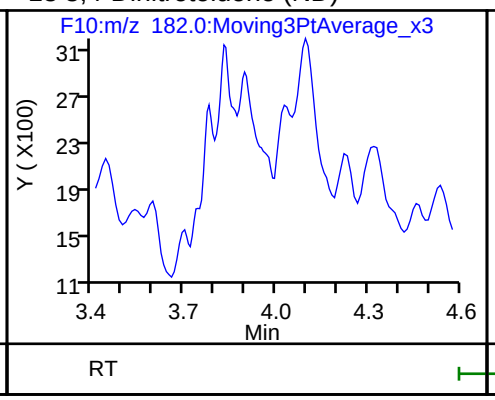


Report Date: 06-Apr-2022 07:09:48 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05025.d

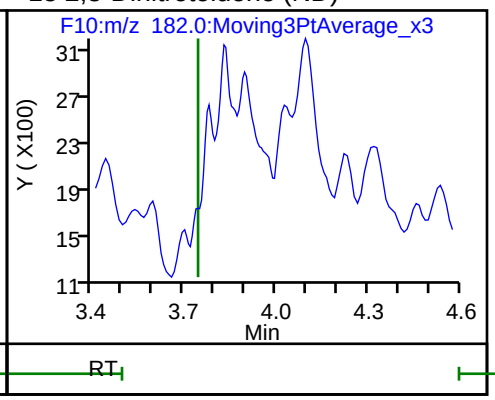
24 m-Nitrotoluene (ND)



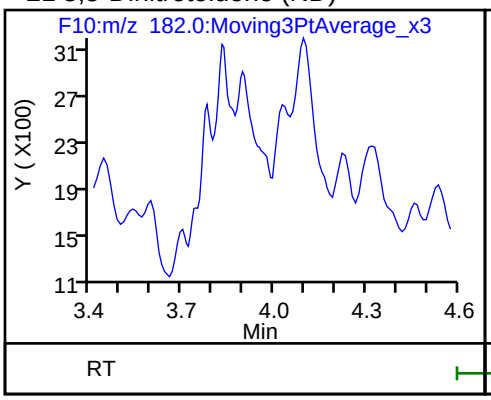
13 3,4-Dinitrotoluene (ND)



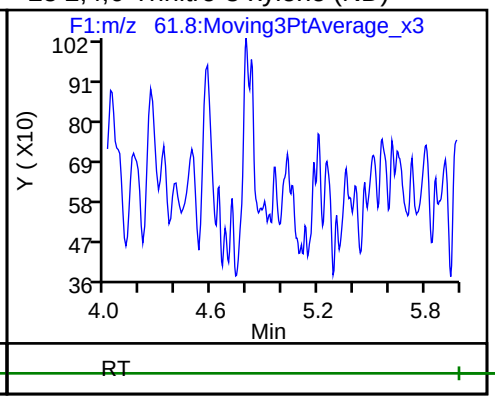
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 06-Apr-2022 07:09:48 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05025.d
Lims ID: GB 280-570095/1-B
Client ID:
Sample Type: GB
Inject. Date: 05-Apr-2022 12:22:01 ALS Bottle#: 19 Worklist Smp#: 22
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: GB 280-570095/1-B
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:08:09 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 12:49:30

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	98.6	98.28

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: | Lab Sample ID: GB 280-570100/1-B
Matrix: Solid | Lab File ID: ex722D05057.d
Analysis Method: 8321A | Date Collected:
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:54
Sample wt/vol: 10.35(g) | Date Analyzed: 04/05/2022 15:46
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 570786 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.048	U M	0.097	0.048	0.043
99-65-0	1,3-Dinitrobenzene	0.048	U	0.097	0.048	0.043
118-96-7	2,4,6-Trinitrotoluene	0.048	U	0.097	0.048	0.036
121-14-2	2,4-Dinitrotoluene	0.048	U	0.097	0.048	0.045
606-20-2	2,6-Dinitrotoluene	0.048	U	0.097	0.048	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.048	U	0.097	0.048	0.048
19406-51-0	4-Amino-2,6-dinitrotoluene	0.048	U	0.097	0.048	0.030
2691-41-0	HMX	0.048	U M	0.097	0.048	0.045
99-08-1	m-Nitrotoluene	0.048	U	0.097	0.048	0.042
98-95-3	Nitrobenzene	0.048	U	0.11	0.048	0.037
55-63-0	Nitroglycerin	0.048	U	0.097	0.048	0.028
88-72-2	o-Nitrotoluene	0.048	U	0.097	0.048	0.041
78-11-5	PETN	0.048	U	0.097	0.048	0.033
99-99-0	p-Nitrotoluene	0.048	U	0.097	0.048	0.048
121-82-4	RDX	0.048	U	0.12	0.048	0.042
479-45-8	Tetryl	0.048	U M	0.097	0.048	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	94		68-140

Report Date: 06-Apr-2022 07:10:11 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05057.d
Lims ID: GB 280-570100/1-B
Client ID:
Sample Type: GB
Inject. Date: 05-Apr-2022 15:46:48 ALS Bottle#: 48 Worklist Smp#: 54
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: GB 280-570100/1-B
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:10:08 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 06-Apr-2022 06:55:19
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		359075	125.0	248	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.785	1.777	0.008		1192359	125.0	158	
5 1,3,5-Trinitrobenzene								M
213.0	2.180	2.216	-0.019	0.765	14688	0.3539	7.2	M
* 7 1,3-Dinitrobenzene-d4								
172.0	2.850	2.850	0.0		2235187	129.4	296	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	1032848	94.7	142	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		6163231	125.0	117	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

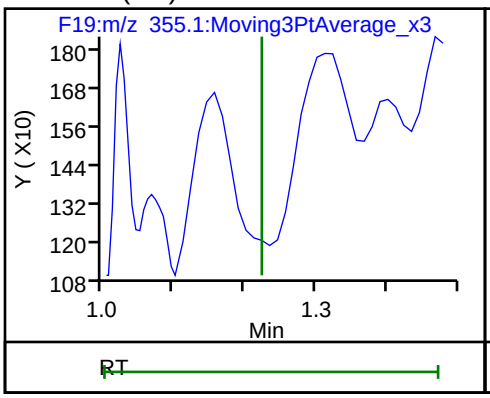
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:10:11 Chrom Revision: 2.3 18-Mar-2022 09:07:22

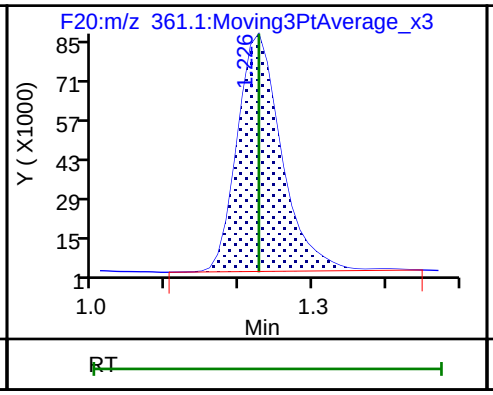
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05057.d
Injection Date: 05-Apr-2022 15:46:48 Instrument ID: LC_LCMS7
Lims ID: GB 280-570100/1-B
Client ID:
Operator ID: acm ALS Bottle#: 48 Worklist Smp#: 54
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

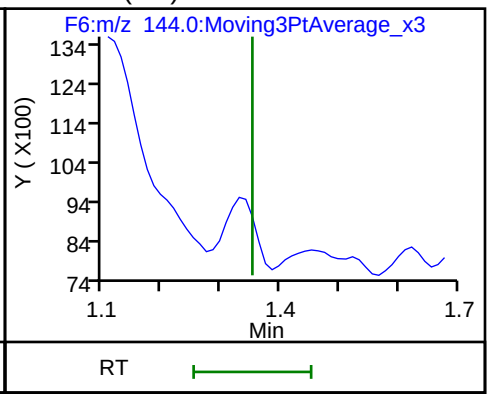
2 HMX (ND)



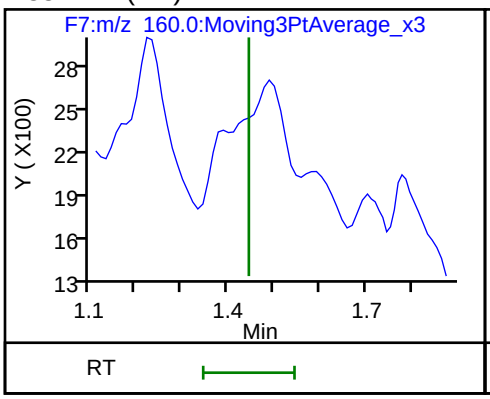
* 1 HMX-13C4



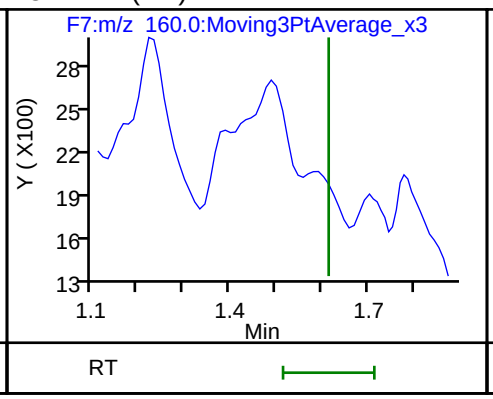
36 TNX (ND)



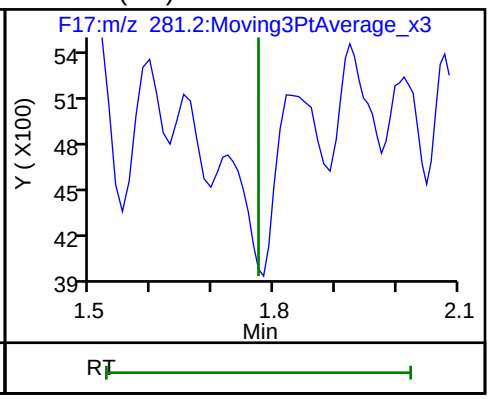
33 DNX (ND)



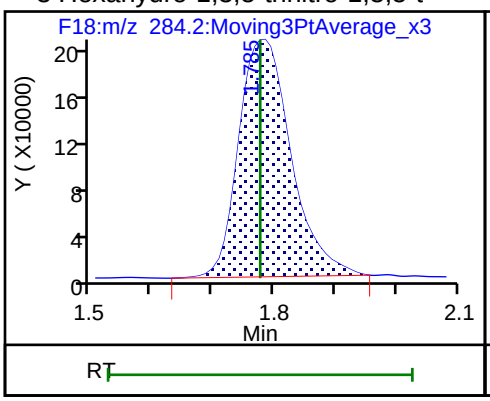
34 MNX (ND)



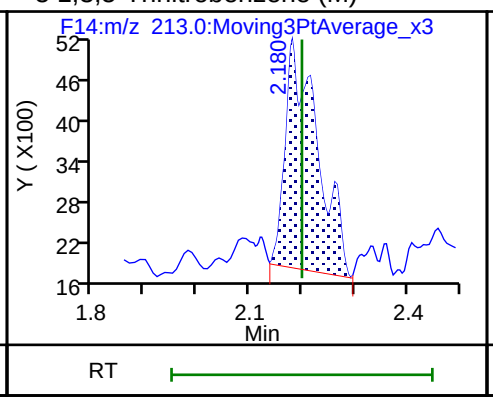
4 RDX (ND)



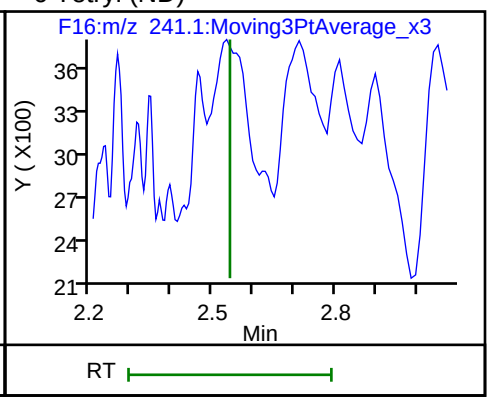
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



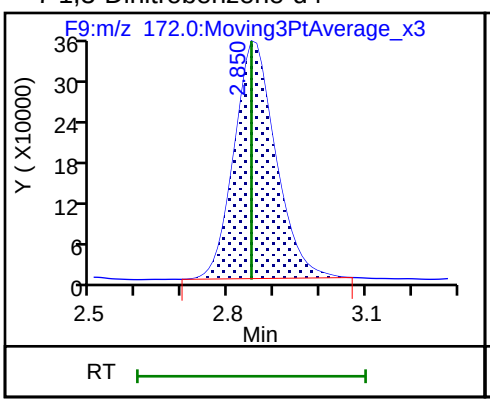
5 1,3,5-Trinitrobenzene (M)



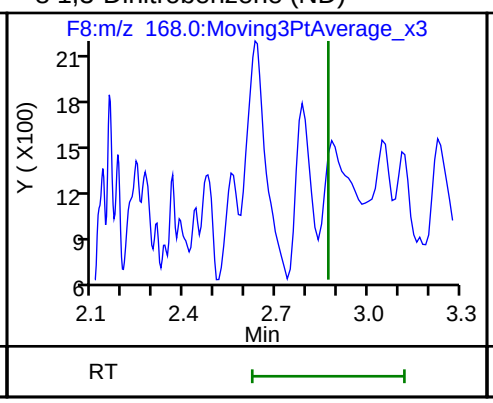
6 Tetryl (ND)



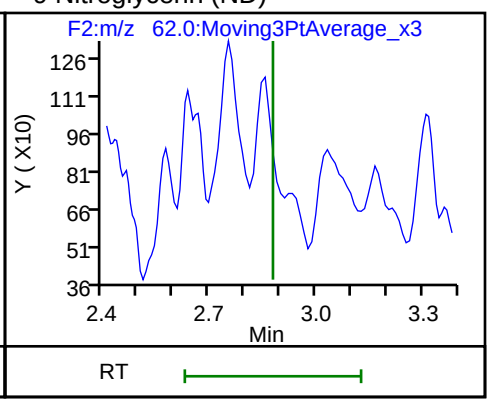
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

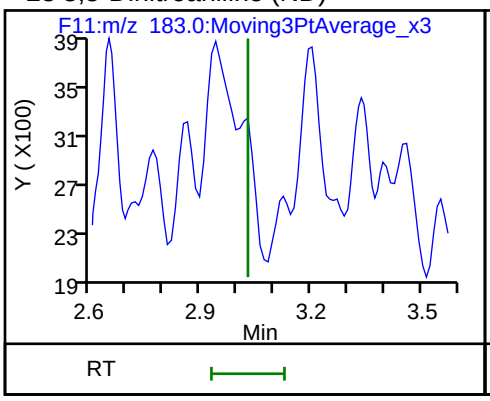


9 Nitroglycerin (ND)

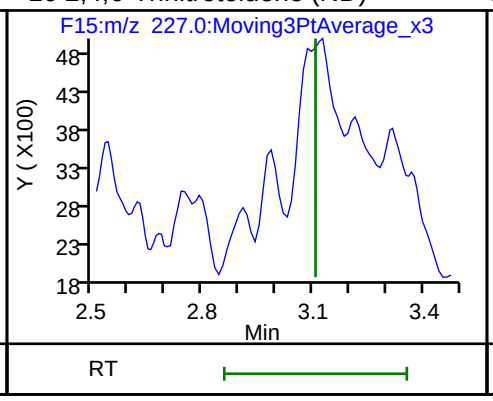


Report Date: 06-Apr-2022 07:10:11 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05057.d

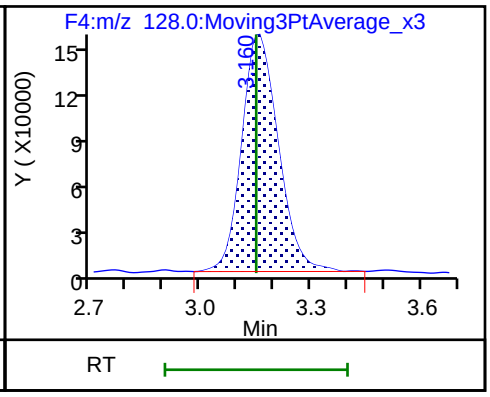
28 3,5-Dinitroaniline (ND)



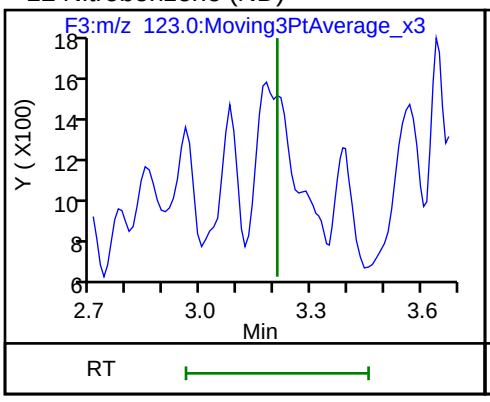
10 2,4,6-Trinitrotoluene (ND)



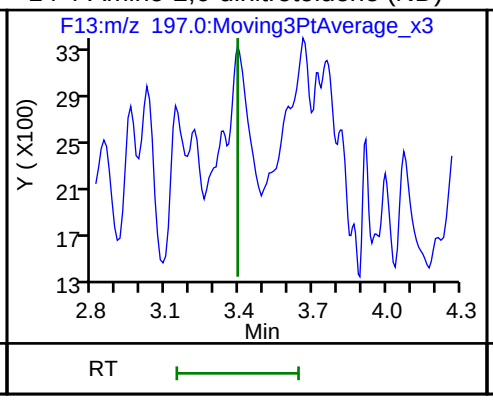
$ 11 Nitrobenzene-d5



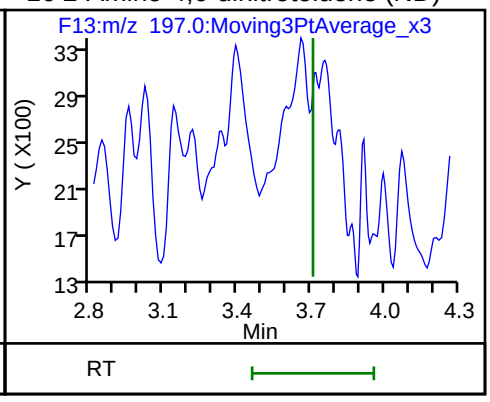
12 Nitrobenzene (ND)



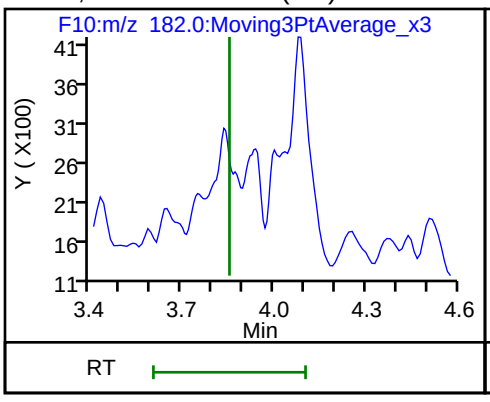
14 4-Amino-2,6-dinitrotoluene (ND)



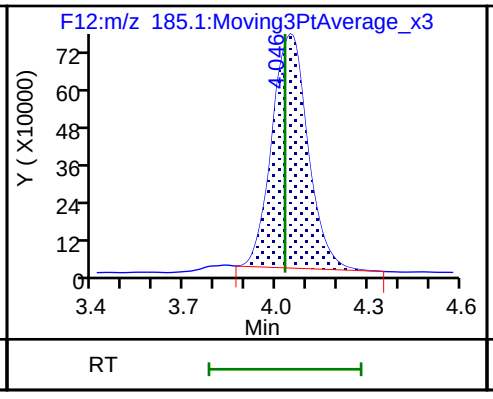
16 2-Amino-4,6-dinitrotoluene (ND)



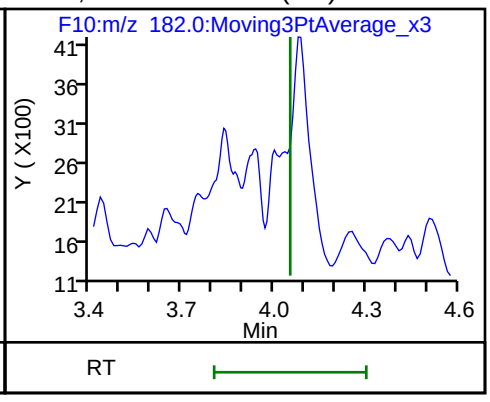
17 2,6-Dinitrotoluene (ND)



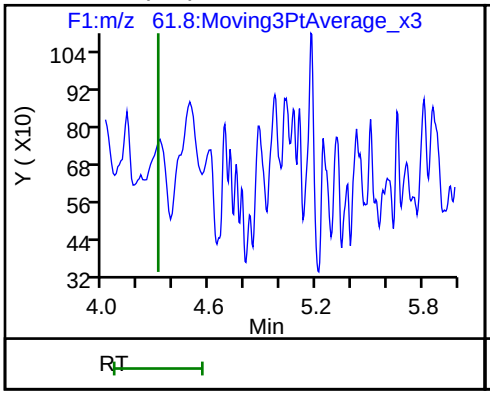
* 18 2,4-dinitrotoluene-d3



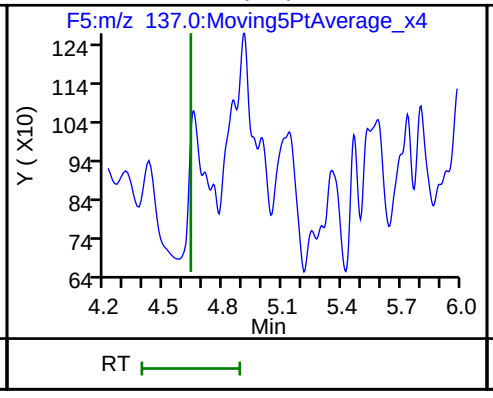
19 2,4-Dinitrotoluene (ND)



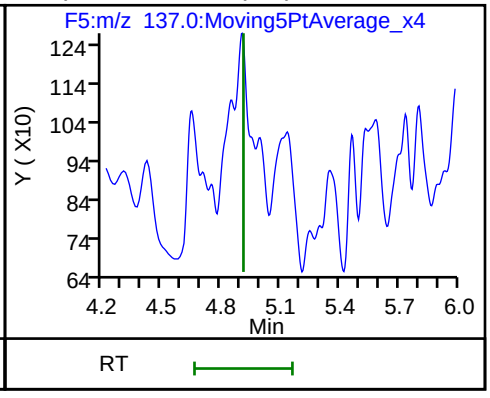
20 PETN (ND)



22 o-Nitrotoluene (ND)



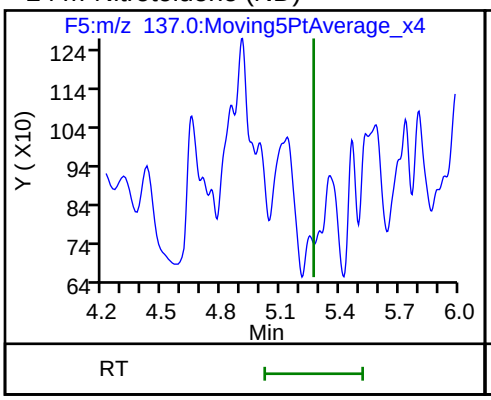
23 p-Nitrotoluene (ND)



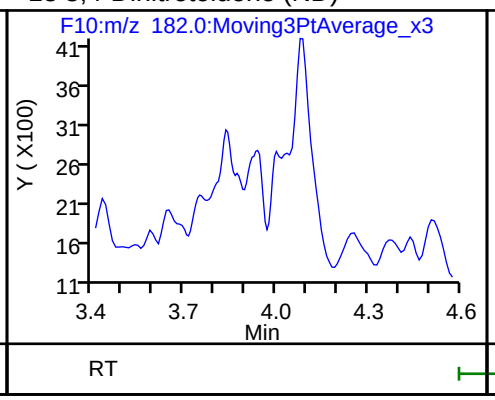
Report Date: 06-Apr-2022 07:10:11 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05057.d

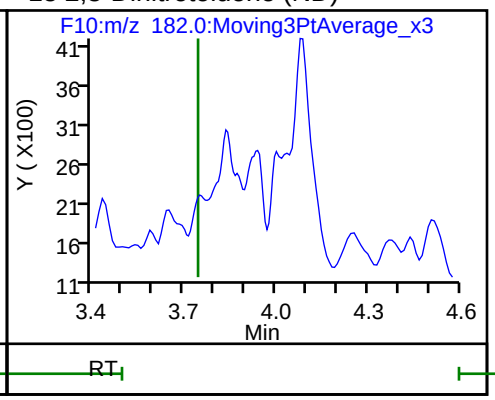
24 m-Nitrotoluene (ND)



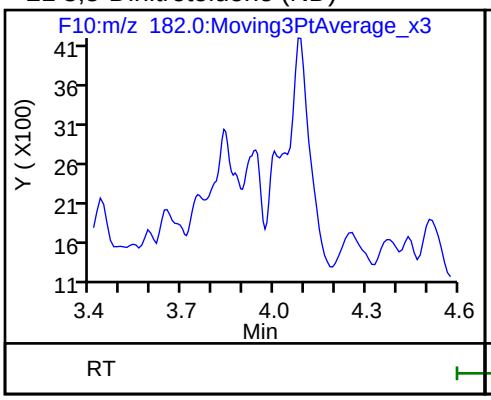
13 3,4-Dinitrotoluene (ND)



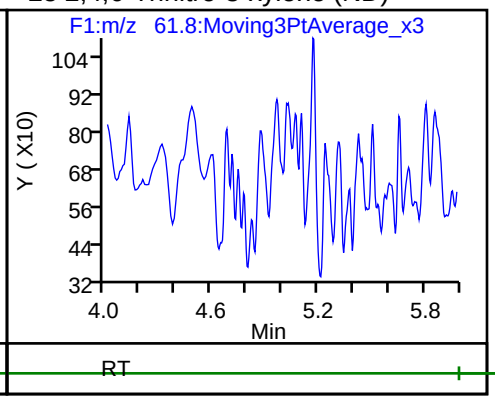
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 06-Apr-2022 07:10:11 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05057.d
Lims ID: GB 280-570100/1-B
Client ID:
Sample Type: GB
Inject. Date: 05-Apr-2022 15:46:48 ALS Bottle#: 48 Worklist Smp#: 54
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: GB 280-570100/1-B
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:10:08 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 06-Apr-2022 06:55:19

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	94.7	94.44

Report Date: 06-Apr-2022 07:10:11 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

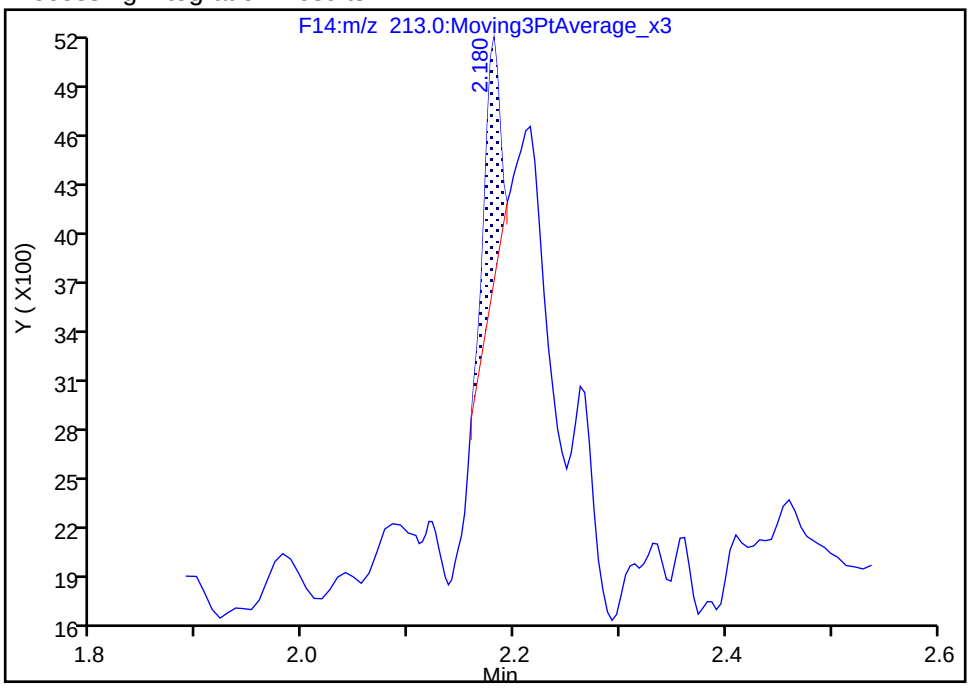
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05057.d
Injection Date: 05-Apr-2022 15:46:48 Instrument ID: LC_LCMS7
Lims ID: GB 280-570100/1-B
Client ID:
Operator ID: acm ALS Bottle#: 48 Worklist Smp#: 54
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F14:SIR

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

Signal: 1

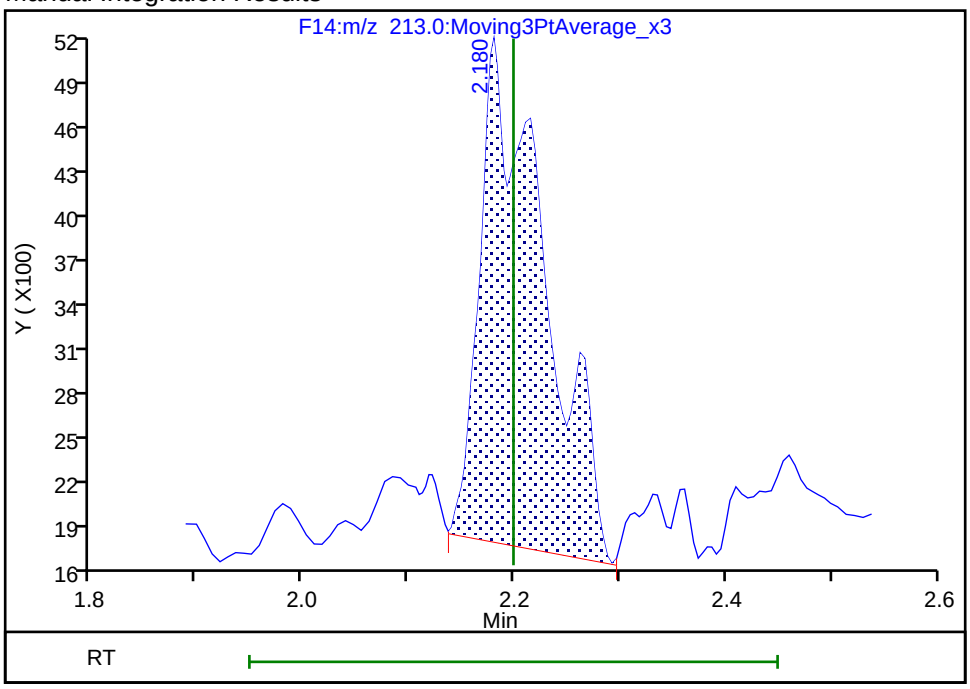
Processing Integration Results

RT: 2.18
Area: 1474
Amount: -0.084243
Amount Units: ug/l



Manual Integration Results

RT: 2.18
Area: 14688
Amount: 0.353871
Amount Units: ug/l



Reviewer: meyera, 06-Apr-2022 06:55:11
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: | Lab Sample ID: GB 280-570105/1-B
Matrix: Solid | Lab File ID: ex722D07015.d
Analysis Method: 8321A | Date Collected:
Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57
Sample wt/vol: 10.29(g) | Date Analyzed: 04/07/2022 11:58
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571108 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.049	U	0.097	0.049	0.044
99-65-0	1,3-Dinitrobenzene	0.049	U	0.097	0.049	0.043
118-96-7	2,4,6-Trinitrotoluene	0.049	U	0.097	0.049	0.036
121-14-2	2,4-Dinitrotoluene	0.049	U	0.097	0.049	0.045
606-20-2	2,6-Dinitrotoluene	0.049	U M	0.097	0.049	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.049	U	0.097	0.049	0.048
19406-51-0	4-Amino-2,6-dinitrotoluene	0.049	U	0.097	0.049	0.030
2691-41-0	HMX	0.049	U M	0.097	0.049	0.045
99-08-1	m-Nitrotoluene	0.049	U	0.097	0.049	0.042
98-95-3	Nitrobenzene	0.049	U	0.11	0.049	0.037
55-63-0	Nitroglycerin	0.049	U	0.097	0.049	0.028
88-72-2	o-Nitrotoluene	0.049	U	0.097	0.049	0.042
78-11-5	PETN	0.049	U	0.097	0.049	0.033
99-99-0	p-Nitrotoluene	0.049	U	0.097	0.049	0.048
121-82-4	RDX	0.049	U	0.12	0.049	0.042
479-45-8	Tetryl	0.049	U	0.097	0.049	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	95		68-140

Report Date: 08-Apr-2022 07:32:24 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07015.d
Lims ID: GB 280-570105/1-B
Client ID:
Sample Type: GB
Inject. Date: 07-Apr-2022 11:58:24 ALS Bottle#: 13 Worklist Smp#: 15
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: GB 280-570105/1-B
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:21 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 12:35:13
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		107593	125.0	110	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		386530	125.0	134	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.030	-0.011		1335869	129.4	216	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.775	616070	95.0	158	
* 18 2,4-dinitrotoluene-d3								
185.1	4.332	4.341	-0.009		4222723	125.0	118	

QC Flag Legend
Processing Flags

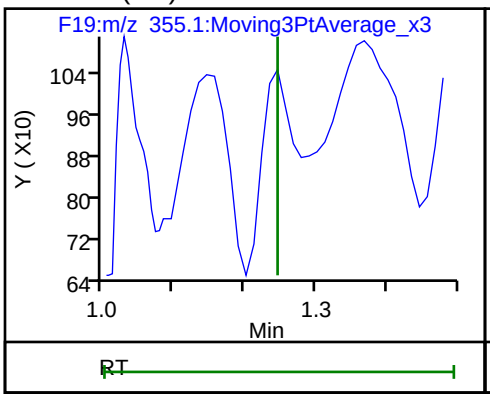
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 08-Apr-2022 07:32:24 Chrom Revision: 2.3 18-Mar-2022 09:07:22

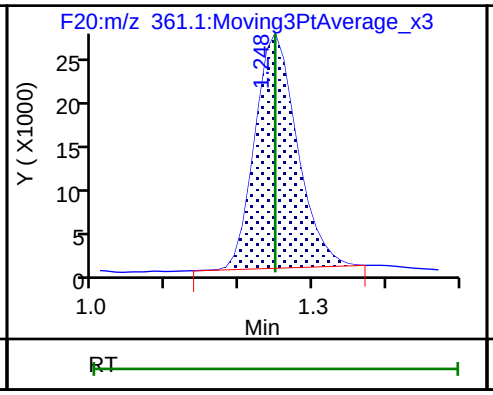
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07015.d
Injection Date: 07-Apr-2022 11:58:24 Instrument ID: LC_LCMS7
Lims ID: GB 280-570105/1-B
Client ID:
Operator ID: acm ALS Bottle#: 13 Worklist Smp#: 15
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

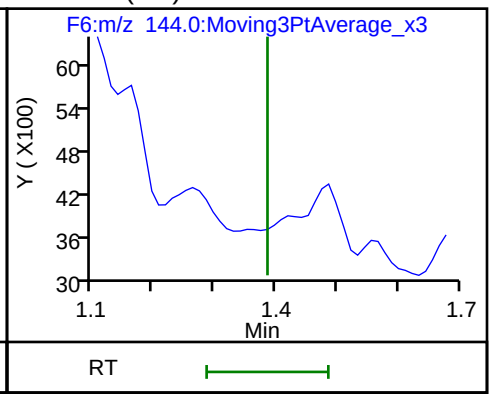
2 HMX (ND)



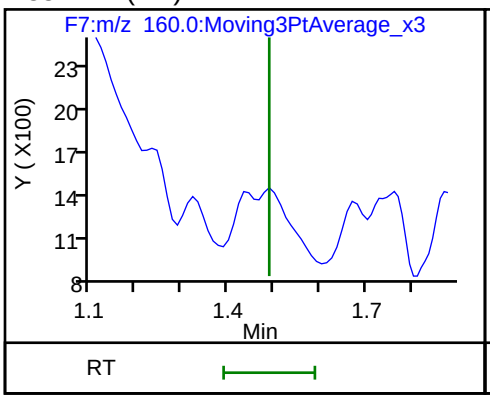
* 1 HMX-13C4



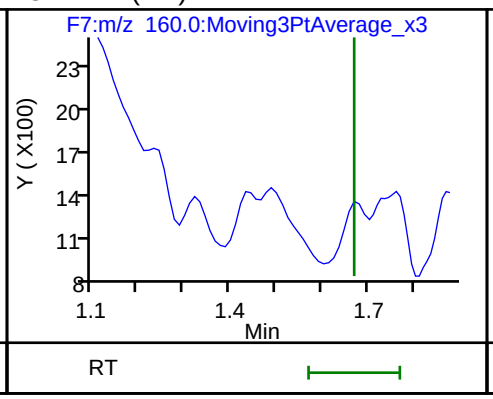
36 TNX (ND)



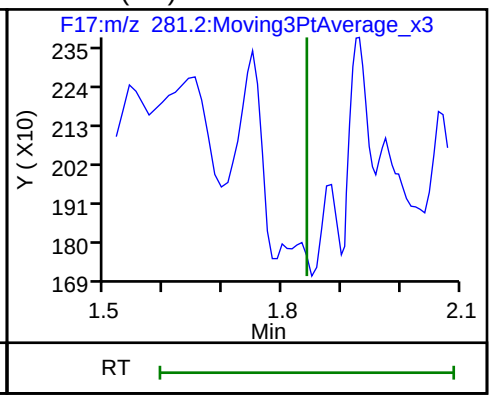
33 DNX (ND)



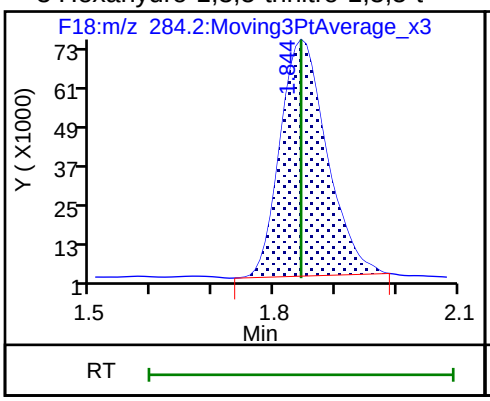
34 MNX (ND)



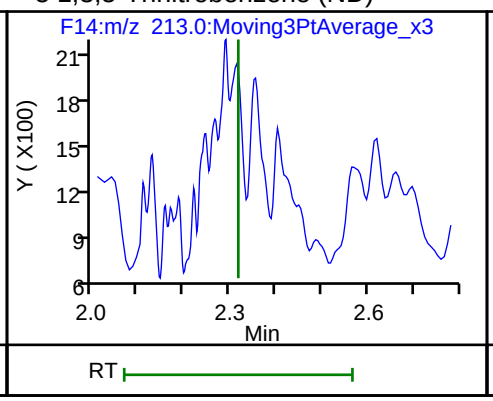
4 RDX (ND)



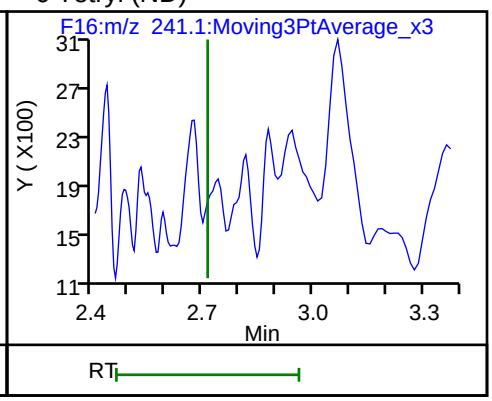
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



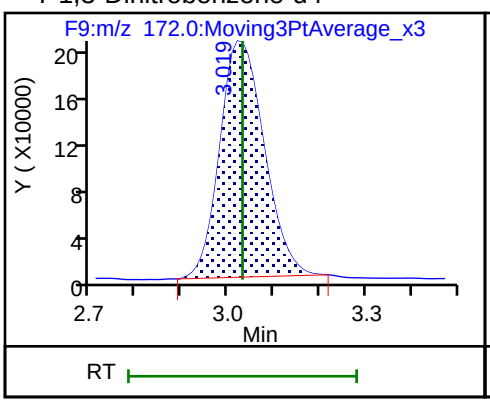
5 1,3,5-Trinitrobenzene (ND)



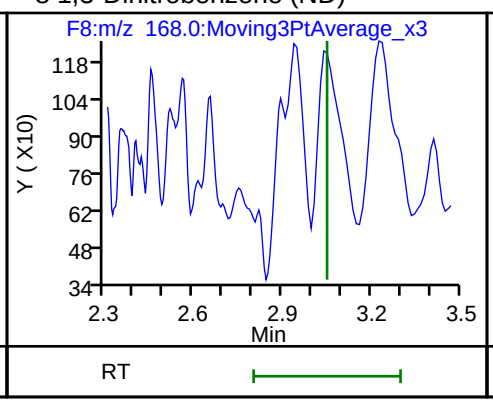
6 Tetryl (ND)



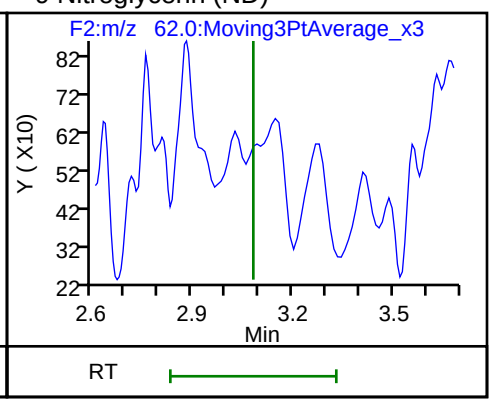
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

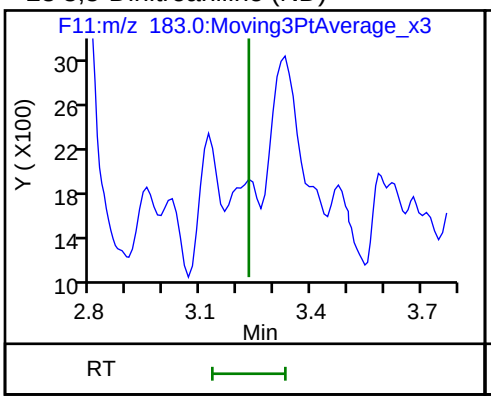


9 Nitroglycerin (ND)

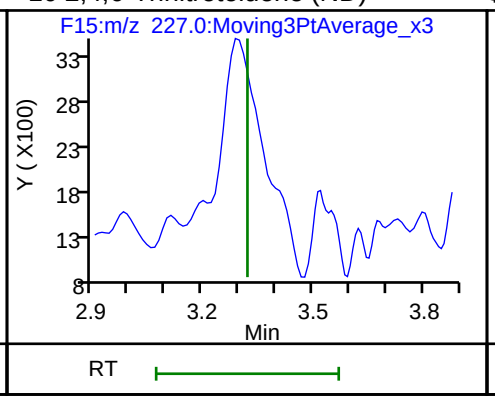


Report Date: 08-Apr-2022 07:32:24 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07015.d

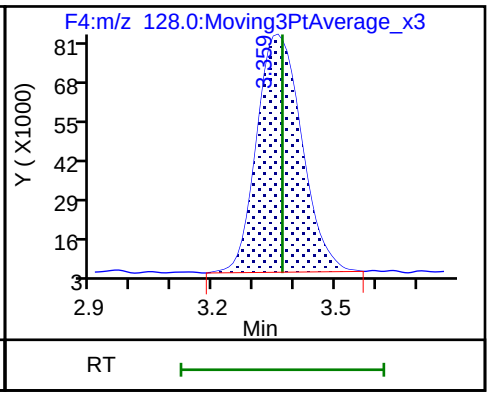
28 3,5-Dinitroaniline (ND)



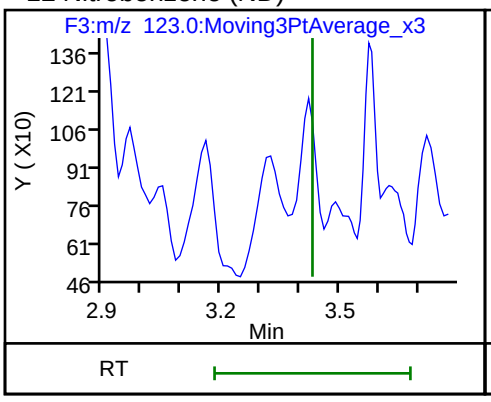
10 2,4,6-Trinitrotoluene (ND)



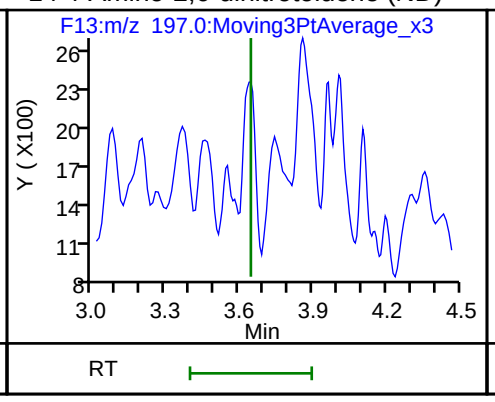
$ 11 Nitrobenzene-d5



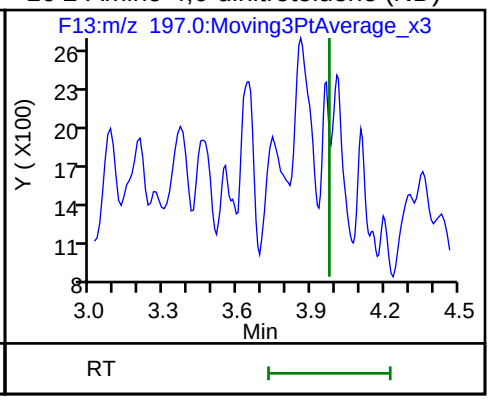
12 Nitrobenzene (ND)



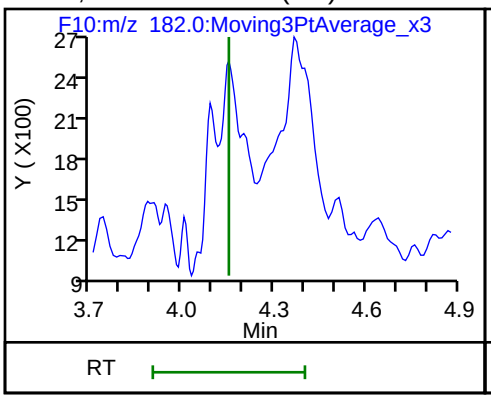
14 4-Amino-2,6-dinitrotoluene (ND)



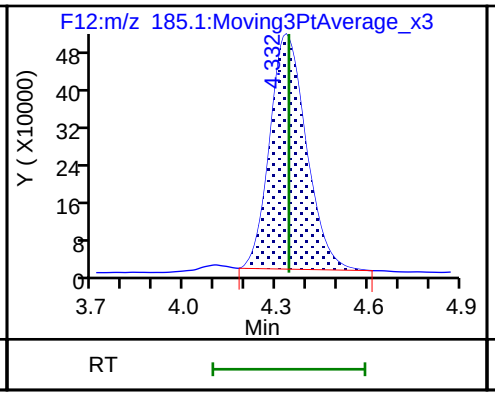
16 2-Amino-4,6-dinitrotoluene (ND)



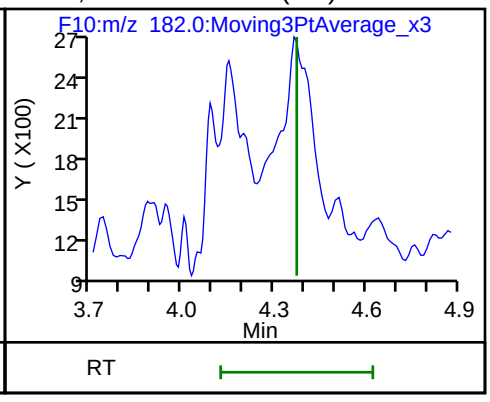
17 2,6-Dinitrotoluene (ND)



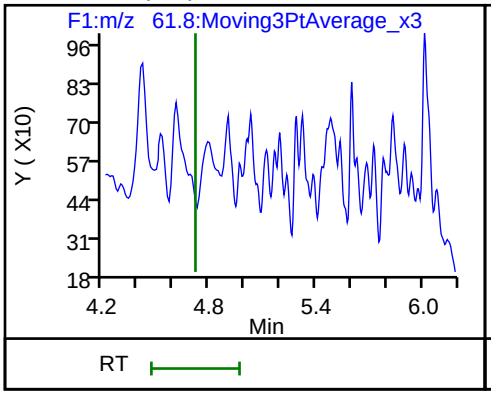
* 18 2,4-dinitrotoluene-d3



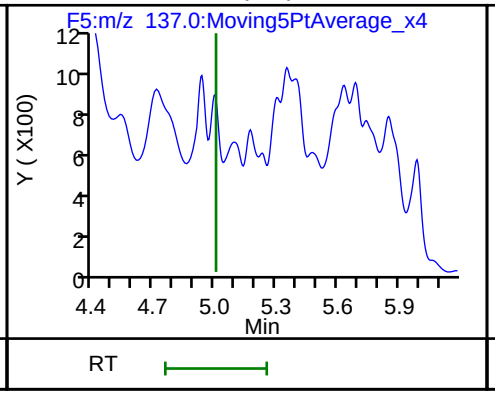
19 2,4-Dinitrotoluene (ND)



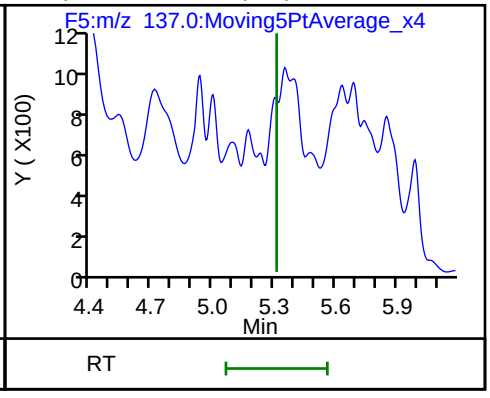
20 PETN (ND)



22 o-Nitrotoluene (ND)



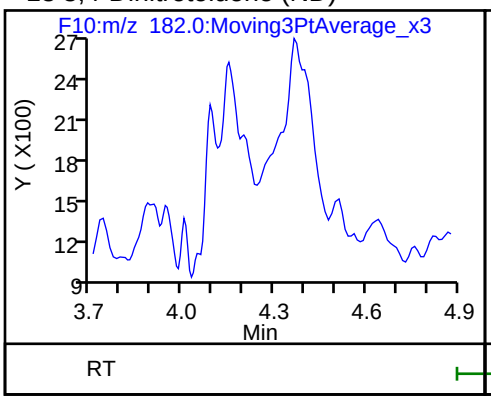
23 p-Nitrotoluene (ND)



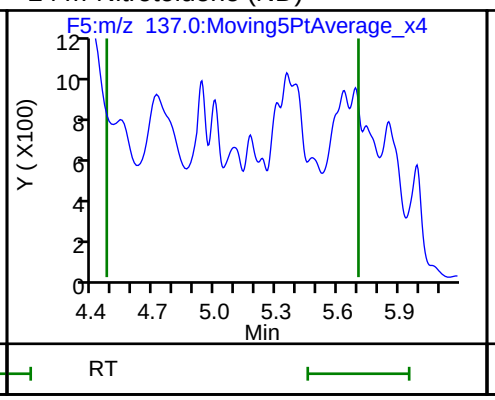
Report Date: 08-Apr-2022 07:32:24 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07015.d

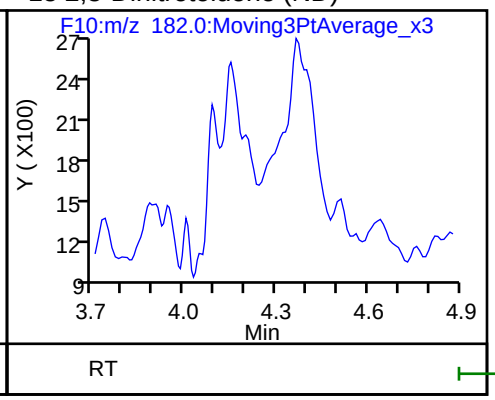
13 3,4-Dinitrotoluene (ND)



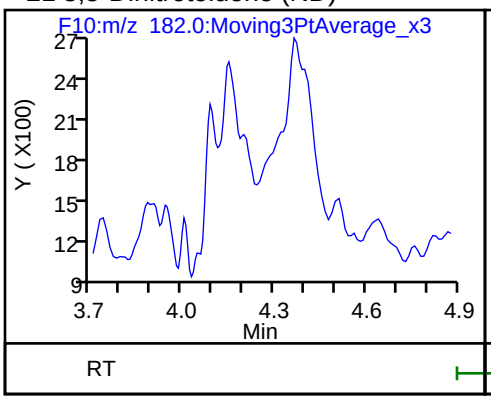
24 m-Nitrotoluene (ND)



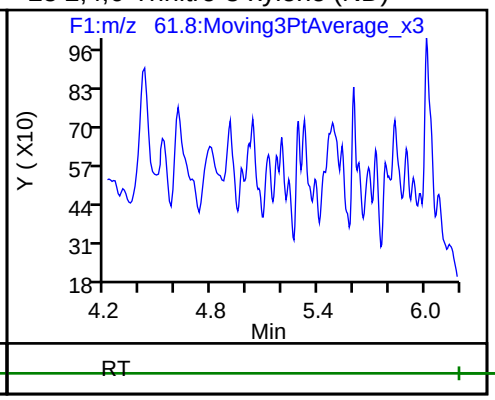
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 08-Apr-2022 07:32:24 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07015.d
Lims ID: GB 280-570105/1-B
Client ID:
Sample Type: GB
Inject. Date: 07-Apr-2022 11:58:24 ALS Bottle#: 13 Worklist Smp#: 15
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: GB 280-570105/1-B
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:21 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 12:35:13

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	95.0	94.72

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: | Lab Sample ID: ICB 280-570784/10
Matrix: Water | Lab File ID: ex722D05010.d
Analysis Method: 8321A | Date Collected:
Extraction Method: | Date Extracted:
Sample wt/vol: 0(mL) | Date Analyzed: 04/05/2022 11:05
Con. Extract Vol.: | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 570784 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	12	U	20	12	4.6
99-65-0	1,3-Dinitrobenzene	12	U	20	12	4.4
118-96-7	2,4,6-Trinitrotoluene	12	U	20	12	6.0
121-14-2	2,4-Dinitrotoluene	12	U	20	12	3.4
606-20-2	2,6-Dinitrotoluene	12	U	20	12	5.0
35572-78-2	2-Amino-4,6-dinitrotoluene	12	U	20	12	6.0
19406-51-0	4-Amino-2,6-dinitrotoluene	12	U	20	12	7.8
2691-41-0	HMX	12	U M	20	12	6.6
99-08-1	m-Nitrotoluene	12	U	20	12	5.6
98-95-3	Nitrobenzene	12	U	20	12	5.6
55-63-0	Nitroglycerin	12	U	28	12	5.8
88-72-2	o-Nitrotoluene	12	U	20	12	6.4
78-11-5	PETN	12	U	20	12	7.0
99-99-0	p-Nitrotoluene	12	U	20	12	5.8
121-82-4	RDX	12	U	20	12	5.4
479-45-8	Tetryl	12	U M	20	12	5.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	115		48-130

Report Date: 06-Apr-2022 06:44:07 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05010.d
Lims ID: ICB
Client ID:
Sample Type: ICB
Inject. Date: 05-Apr-2022 11:05:14 ALS Bottle#: 1 Worklist Smp#: 10
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: ICB
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 05-Apr-2022 14:54:04 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 11:44:12
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		244466	125.0	89.6	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		848727	125.0	117	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.850	2.850	0.0		1739742	129.4	205	
$ 11 Nitrobenzene-d5								
128.0	3.150	3.150	0.0	0.780	490244	57.4	82.0	
* 18 2,4-dinitrotoluene-d3								
185.1	4.037	4.028	0.009		5452943	125.0	112	

QC Flag Legend
Processing Flags

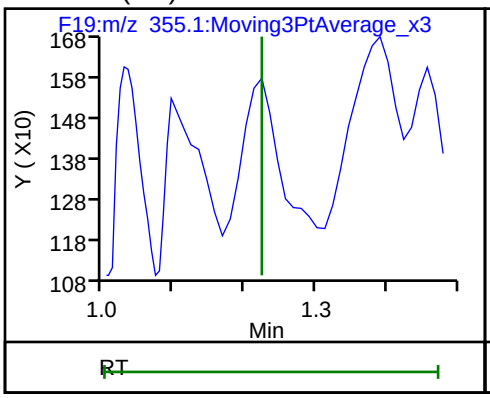
Reagents:
8321NB-D5-cal_00021 Amount Added: 5.00 Units: uL
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 06:44:07 Chrom Revision: 2.3 18-Mar-2022 09:07:22

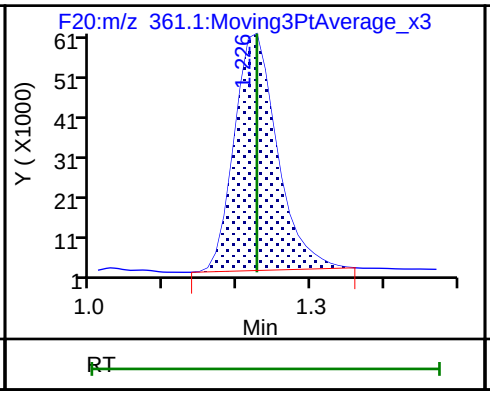
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05010.d
Injection Date: 05-Apr-2022 11:05:14 Instrument ID: LC_LCMS7
Lims ID: ICB
Client ID:
Operator ID: acm ALS Bottle#: 1 Worklist Smp#: 10
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

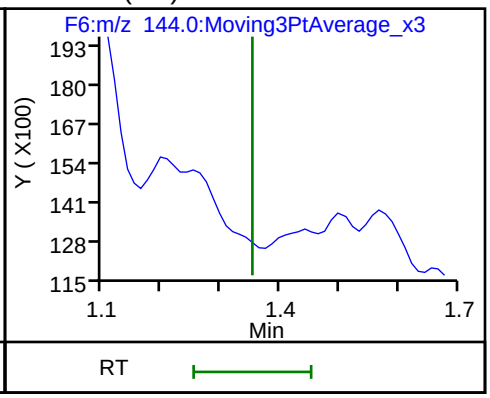
2 HMX (ND)



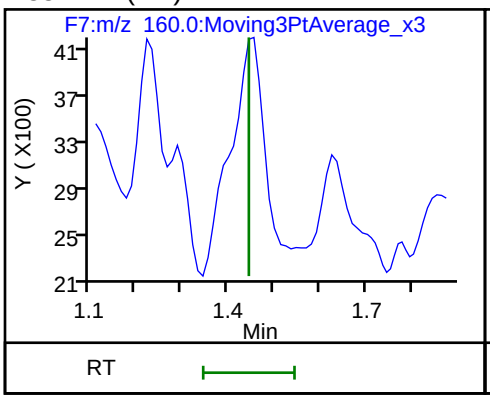
* 1 HMX-13C4



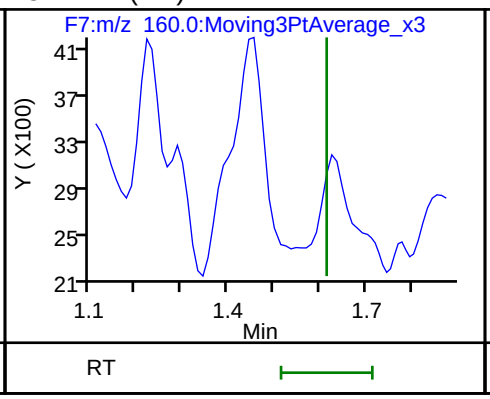
36 TNX (ND)



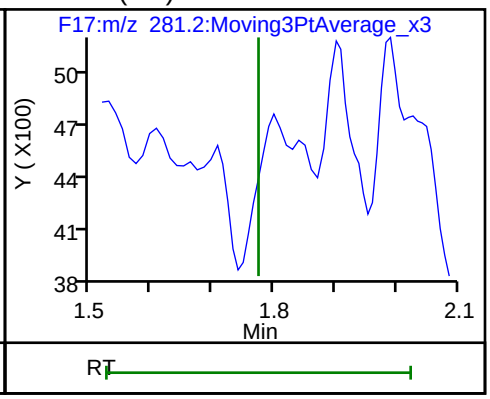
33 DNX (ND)



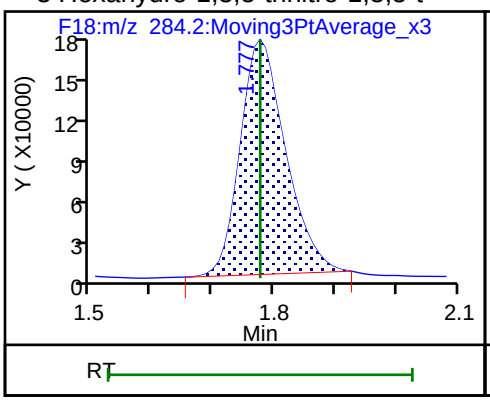
34 MNX (ND)



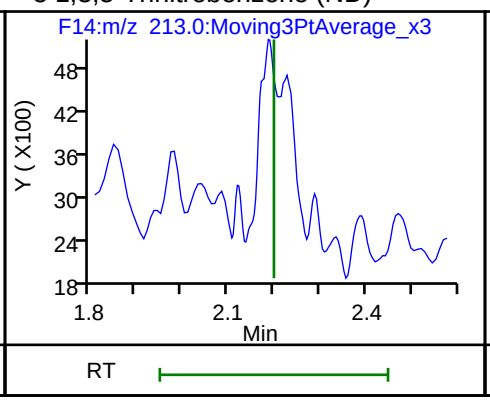
4 RDX (ND)



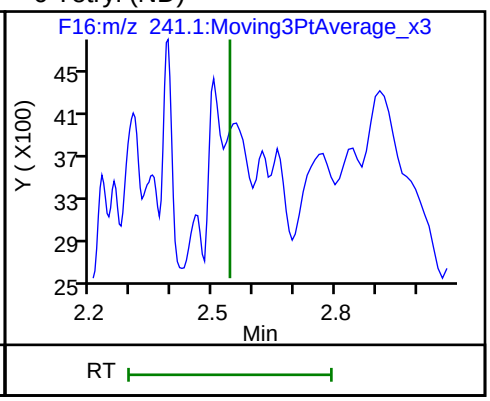
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



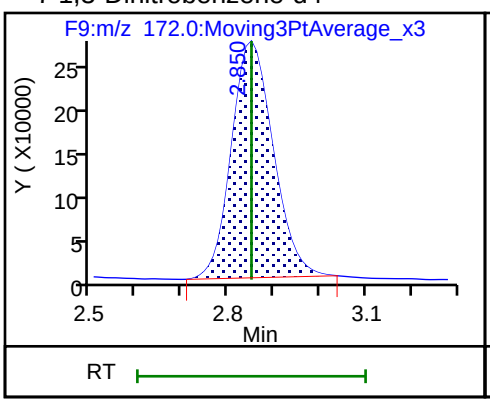
5 1,3,5-Trinitrobenzene (ND)



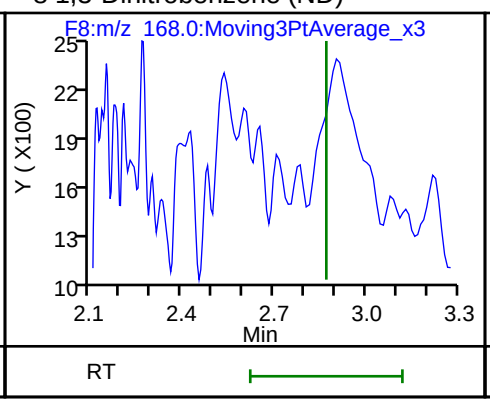
6 Tetryl (ND)



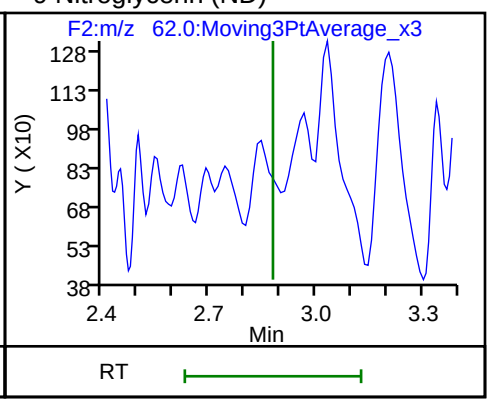
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



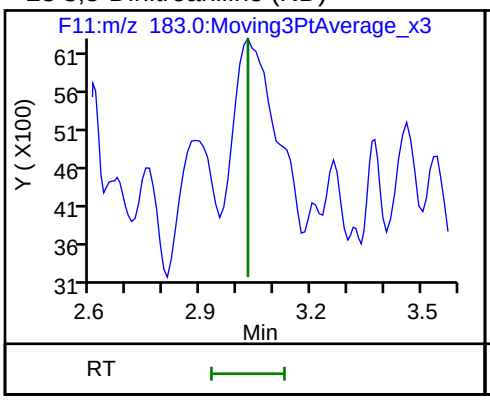
9 Nitroglycerin (ND)



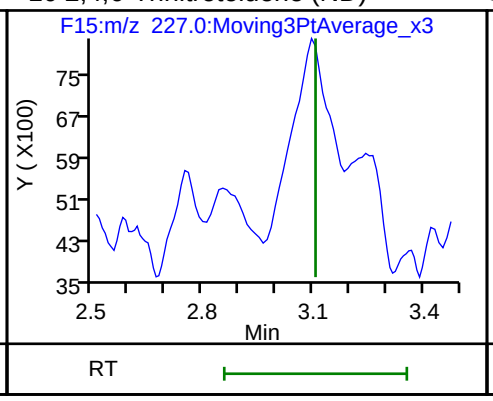
Report Date: 06-Apr-2022 06:44:07 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05010.d

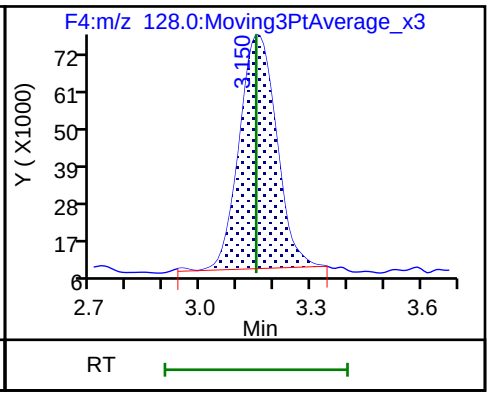
28 3,5-Dinitroaniline (ND)



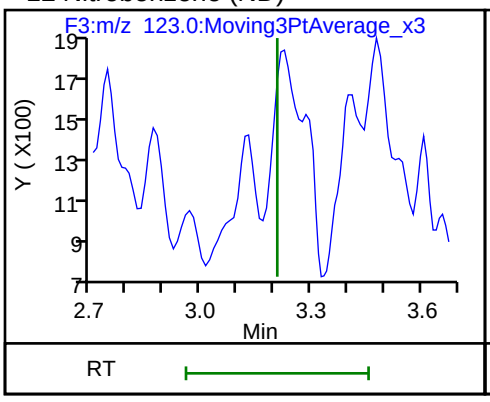
10 2,4,6-Trinitrotoluene (ND)



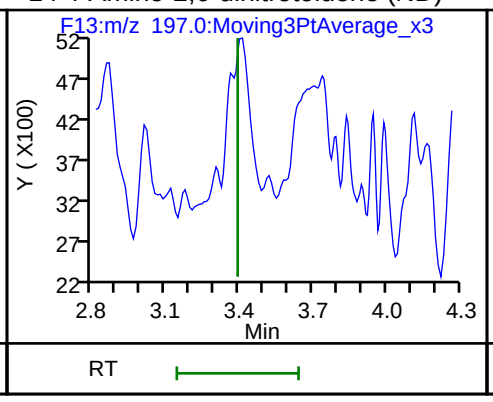
$ 11 Nitrobenzene-d5



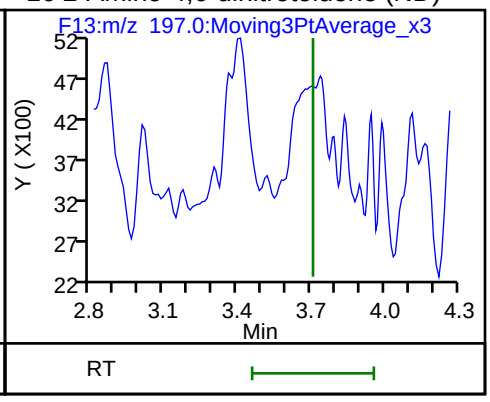
12 Nitrobenzene (ND)



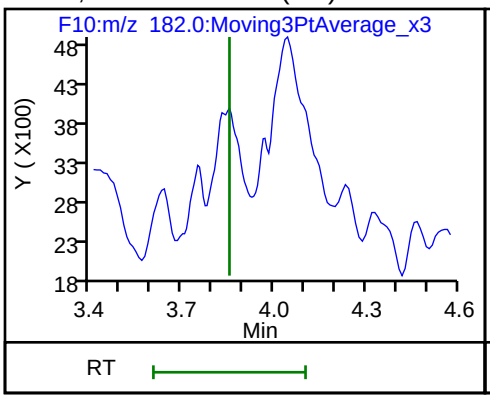
14 4-Amino-2,6-dinitrotoluene (ND)



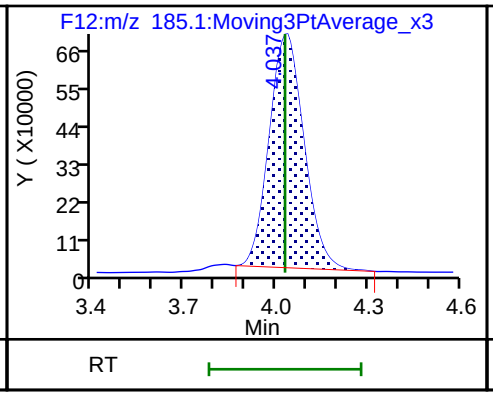
16 2-Amino-4,6-dinitrotoluene (ND)



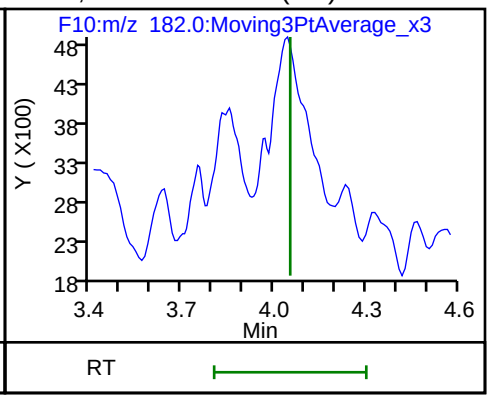
17 2,6-Dinitrotoluene (ND)



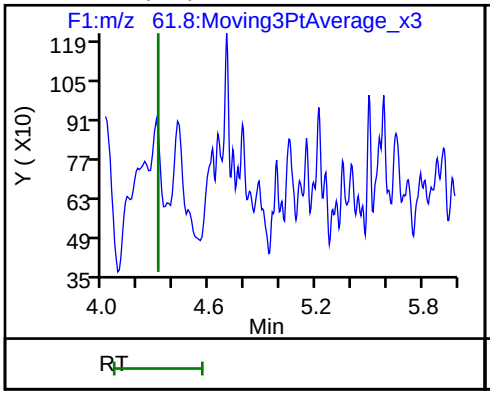
* 18 2,4-dinitrotoluene-d3



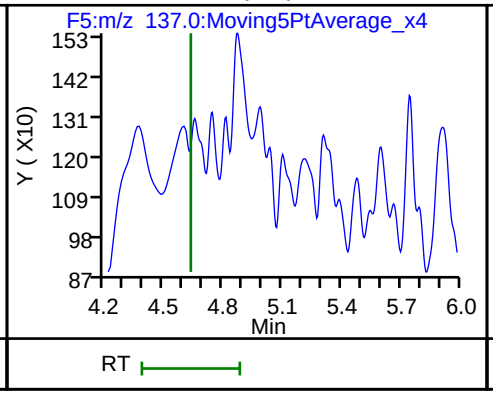
19 2,4-Dinitrotoluene (ND)



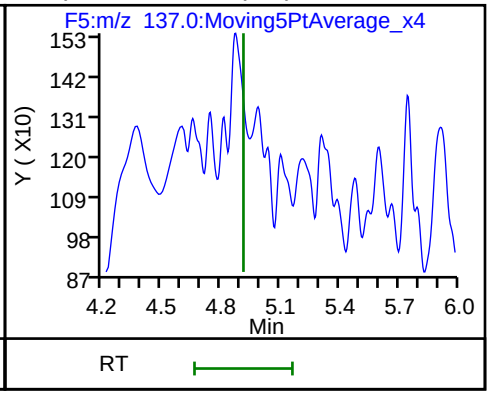
20 PETN (ND)



22 o-Nitrotoluene (ND)



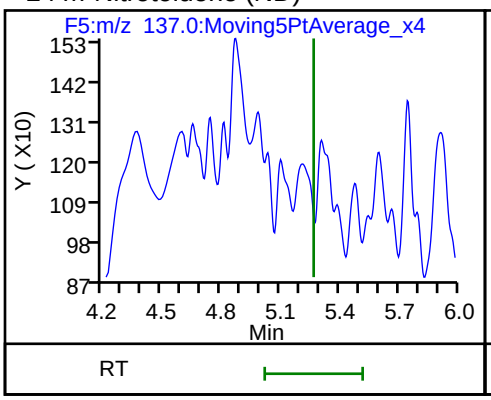
23 p-Nitrotoluene (ND)



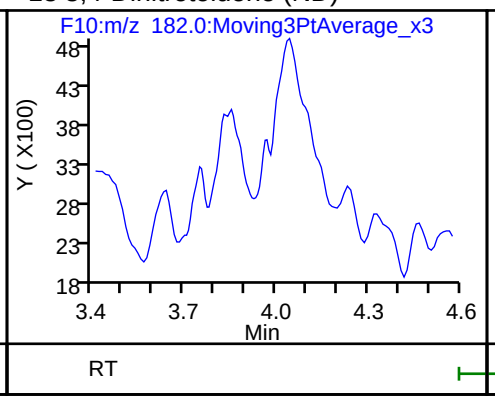
Report Date: 06-Apr-2022 06:44:07 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05010.d

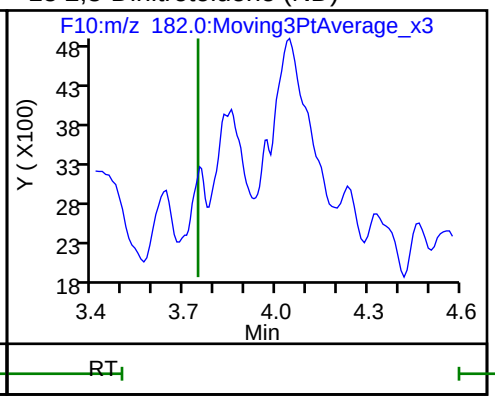
24 m-Nitrotoluene (ND)



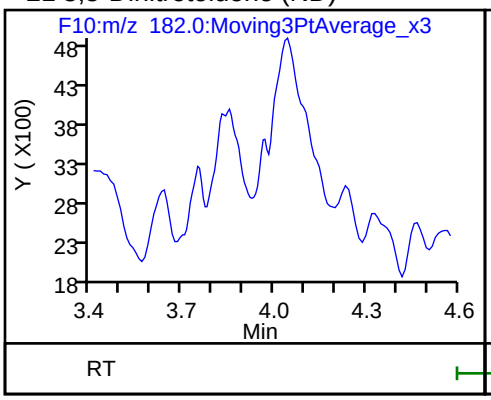
13 3,4-Dinitrotoluene (ND)



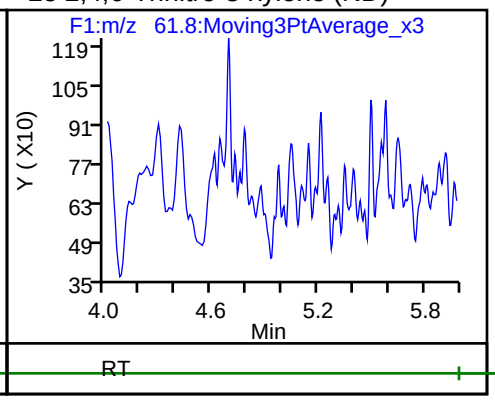
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 06-Apr-2022 06:44:07 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05010.d
Lims ID: ICB
Client ID:
Sample Type: ICB
Inject. Date: 05-Apr-2022 11:05:14 ALS Bottle#: 1 Worklist Smp#: 10
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: ICB
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 05-Apr-2022 14:54:04 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 11:44:12

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	50.0	57.4	114.75

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: | Lab Sample ID: ICB 280-571107/10
Matrix: Solid | Lab File ID: ex722D07010.d
Analysis Method: 8321A | Date Collected:
Extraction Method: | Date Extracted:
Sample wt/vol: 0(mL) | Date Analyzed: 04/07/2022 11:25
Con. Extract Vol.: | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571107 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	12	U	20	12	4.6
99-65-0	1,3-Dinitrobenzene	12	U	20	12	4.4
118-96-7	2,4,6-Trinitrotoluene	12	U	20	12	6.0
121-14-2	2,4-Dinitrotoluene	12	U	20	12	3.4
606-20-2	2,6-Dinitrotoluene	12	U	20	12	5.0
35572-78-2	2-Amino-4,6-dinitrotoluene	12	U	20	12	6.0
19406-51-0	4-Amino-2,6-dinitrotoluene	12	U	20	12	7.8
2691-41-0	HMX	12	U M	20	12	6.6
99-08-1	m-Nitrotoluene	12	U	20	12	5.6
98-95-3	Nitrobenzene	12	U	20	12	5.6
55-63-0	Nitroglycerin	12	U	28	12	5.8
88-72-2	o-Nitrotoluene	12	U	20	12	6.4
78-11-5	PETN	12	U	20	12	7.0
99-99-0	p-Nitrotoluene	12	U	20	12	5.8
121-82-4	RDX	12	U	20	12	5.4
479-45-8	Tetryl	12	U	20	12	5.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	110		68-140

Report Date: 08-Apr-2022 07:32:20 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07010.d
Lims ID: ICB
Client ID:
Sample Type: ICB
Inject. Date: 07-Apr-2022 11:25:24 ALS Bottle#: 1 Worklist Smp#: 10
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: ICB
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:31:50 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 12:34:00
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		110048	125.0	102	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		376855	125.0	168	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.030	3.030	0.0		1387389	129.4	453	
10 2,4,6-Trinitrotoluene								
227.0	3.332	3.321	0.011	0.767	19864	-0.0323	4.4	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.774	364749	54.9	45.5	
17 2,6-Dinitrotoluene								
182.0	4.126	4.150	-0.024	0.950	4105	-0.3981	2.8	
* 18 2,4-dinitrotoluene-d3								
185.1	4.341	4.341	0.0		4099845	125.0	114	
19 2,4-Dinitrotoluene								
182.0	4.373	4.373	0.0	1.007	5368	-0.4593	2.1	

QC Flag Legend

Processing Flags

Reagents:

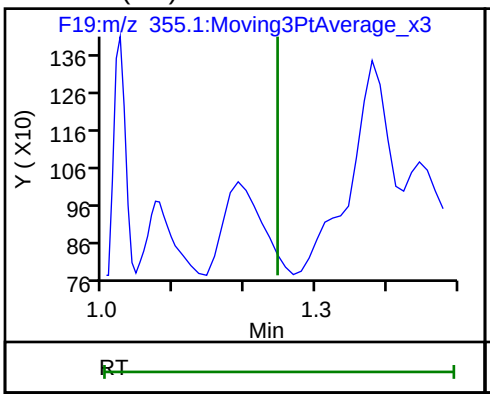
8321NB-D5-cal_00021	Amount Added: 5.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 08-Apr-2022 07:32:20 Chrom Revision: 2.3 18-Mar-2022 09:07:22

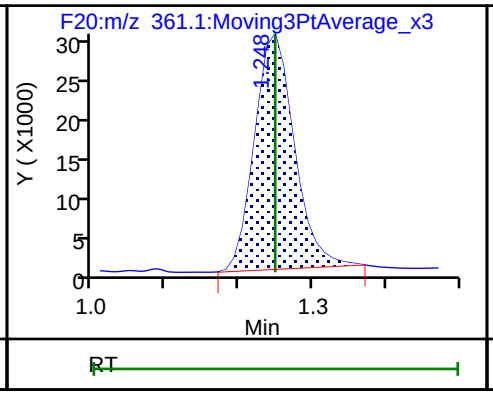
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07010.d
Injection Date: 07-Apr-2022 11:25:24 Instrument ID: LC_LCMS7
Lims ID: ICB
Client ID:
Operator ID: acm ALS Bottle#: 1 Worklist Smp#: 10
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

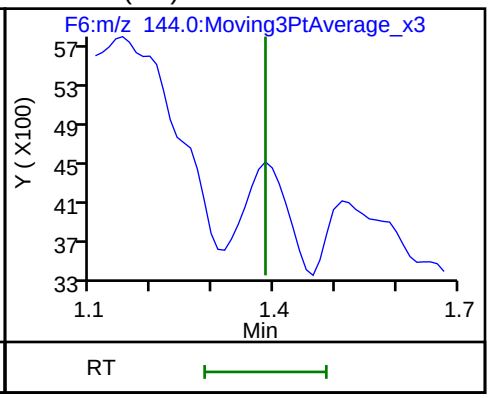
2 HMX (ND)



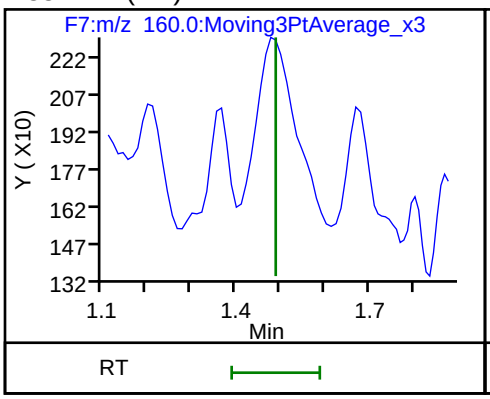
* 1 HMX-13C4



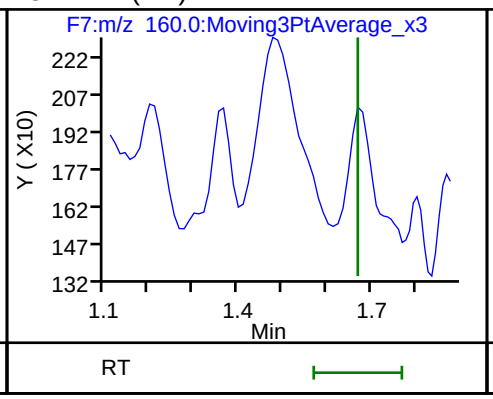
36 TNX (ND)



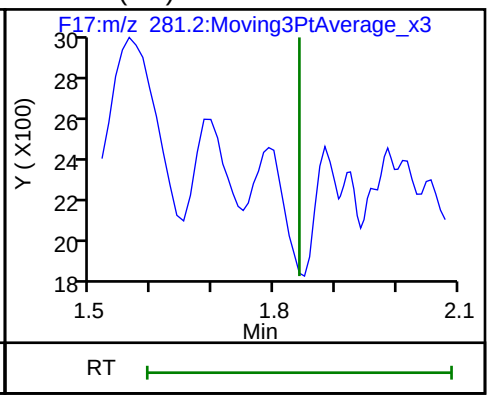
33 DNX (ND)



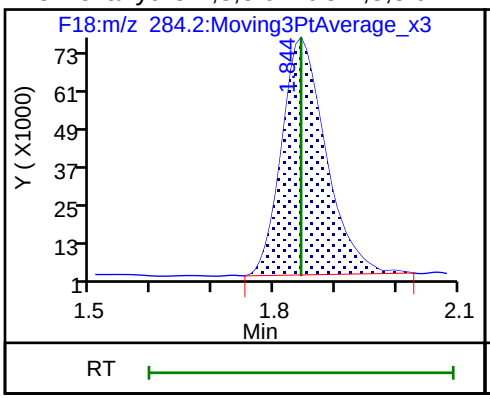
34 MNX (ND)



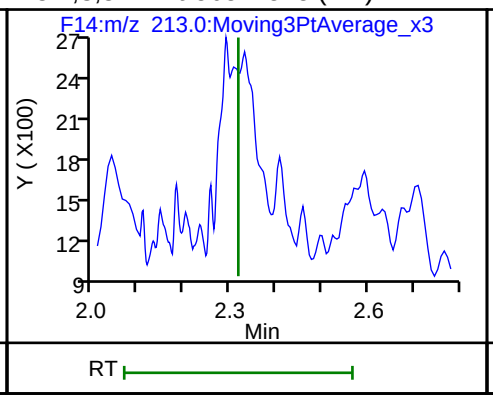
4 RDX (ND)



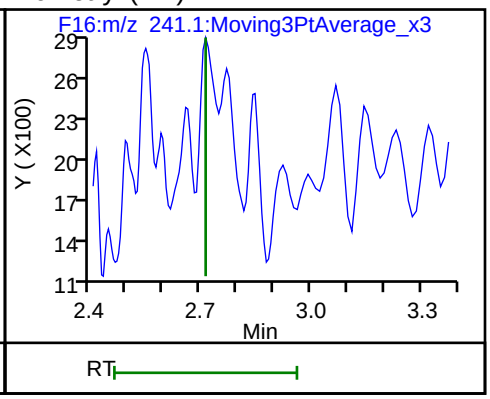
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



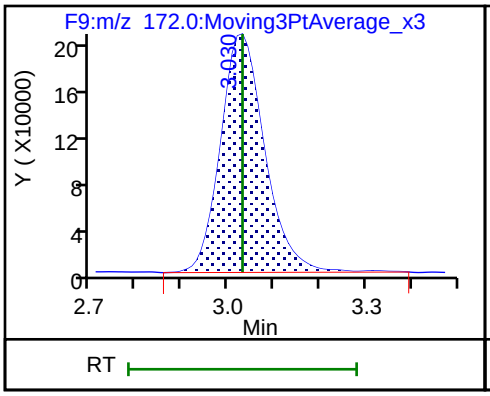
5 1,3,5-Trinitrobenzene (ND)



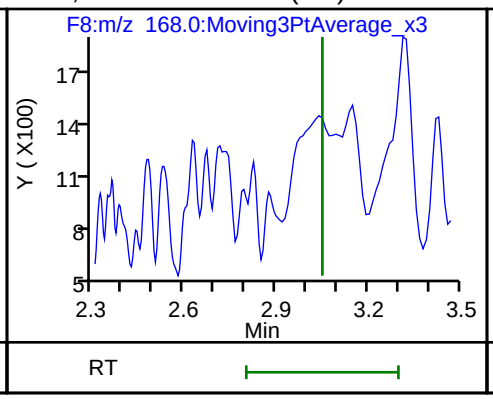
6 Tetryl (ND)



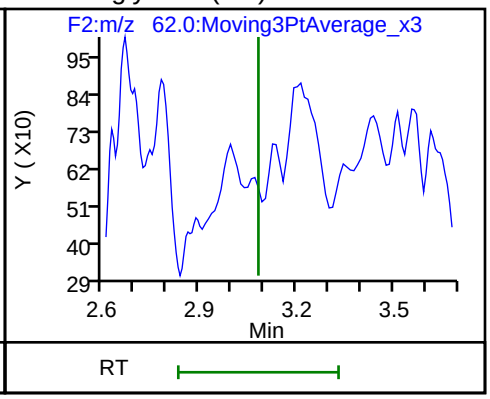
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

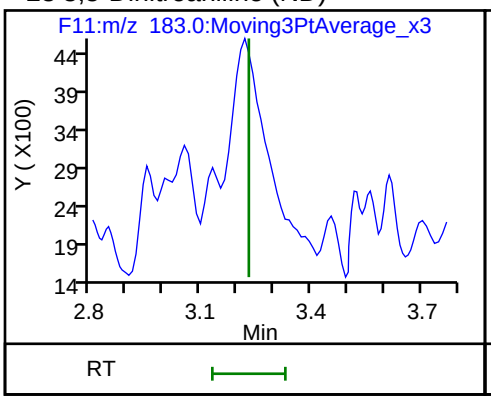


9 Nitroglycerin (ND)

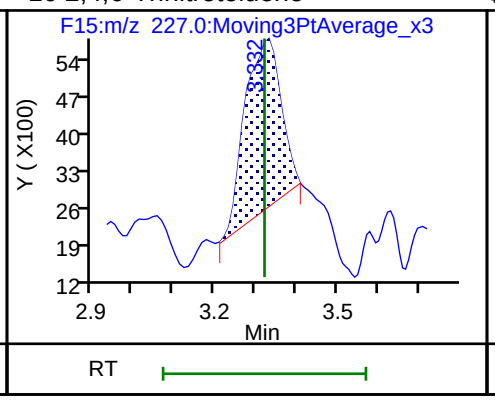


Report Date: 08-Apr-2022 07:32:20 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07010.d

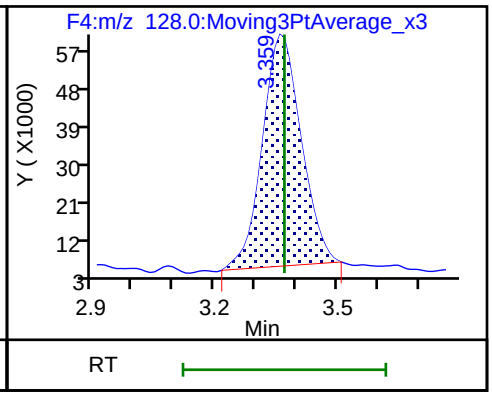
28 3,5-Dinitroaniline (ND)



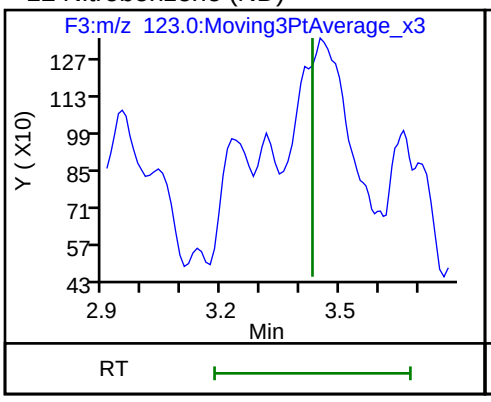
10 2,4,6-Trinitrotoluene



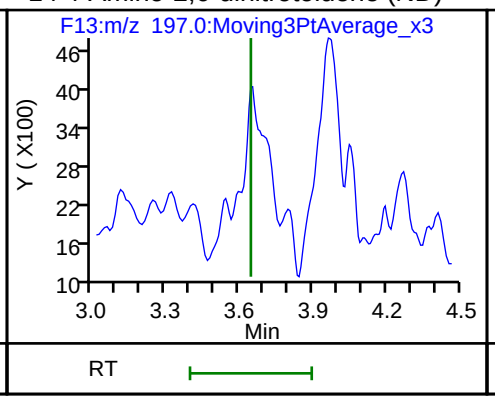
$ 11 Nitrobenzene-d5



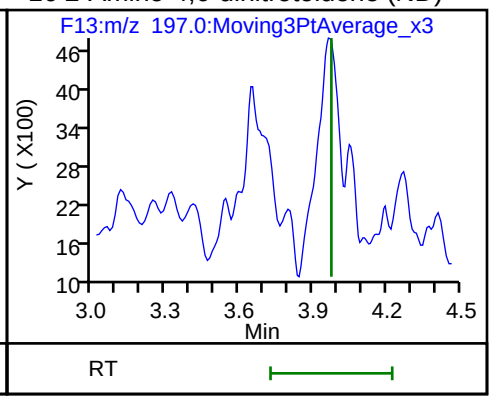
12 Nitrobenzene (ND)



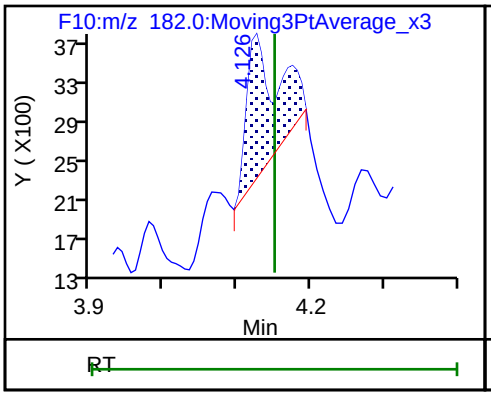
14 4-Amino-2,6-dinitrotoluene (ND)



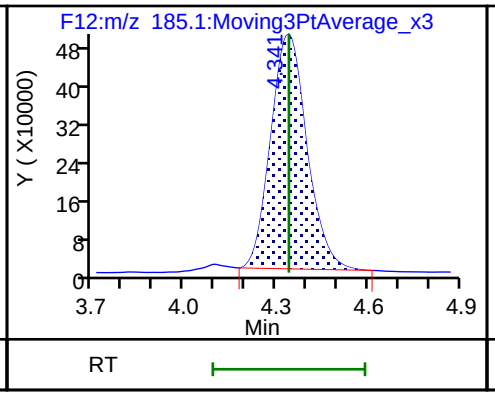
16 2-Amino-4,6-dinitrotoluene (ND)



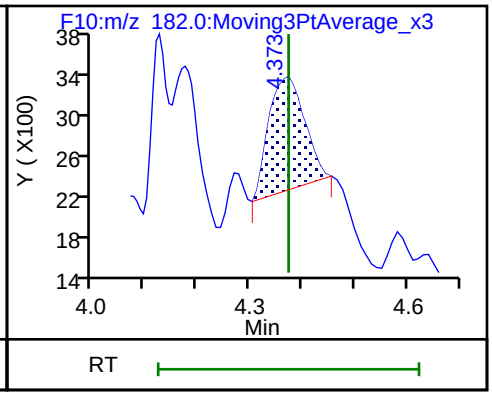
17 2,6-Dinitrotoluene



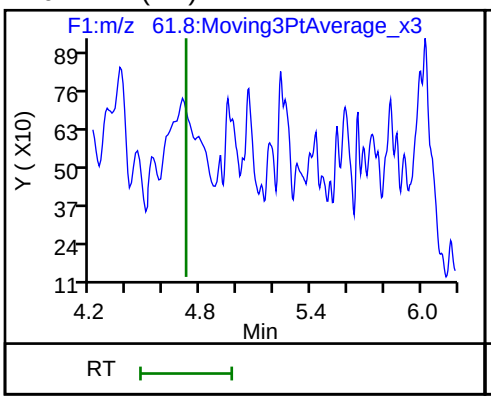
* 18 2,4-dinitrotoluene-d3



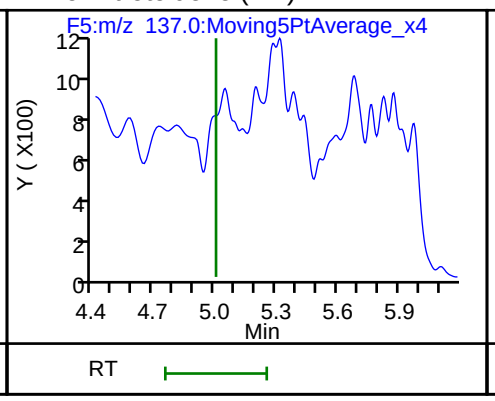
19 2,4-Dinitrotoluene



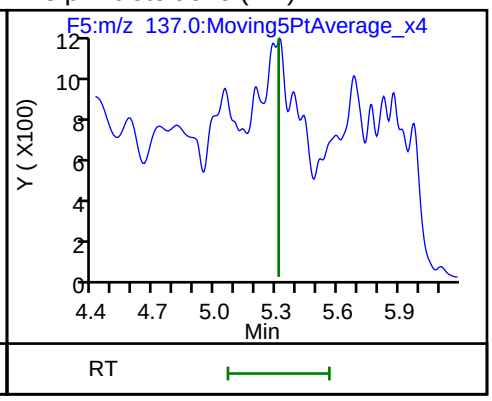
20 PETN (ND)



22 o-Nitrotoluene (ND)



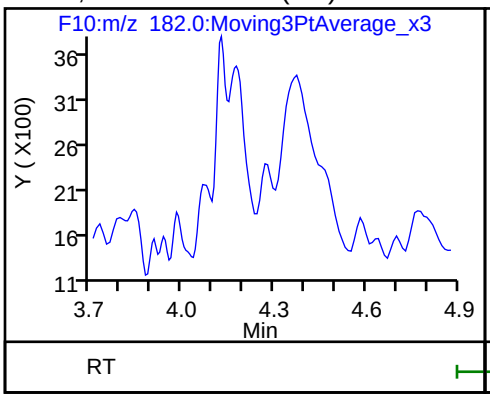
23 p-Nitrotoluene (ND)



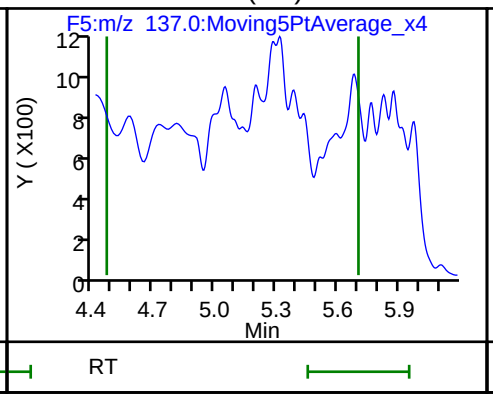
Report Date: 08-Apr-2022 07:32:20 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07010.d

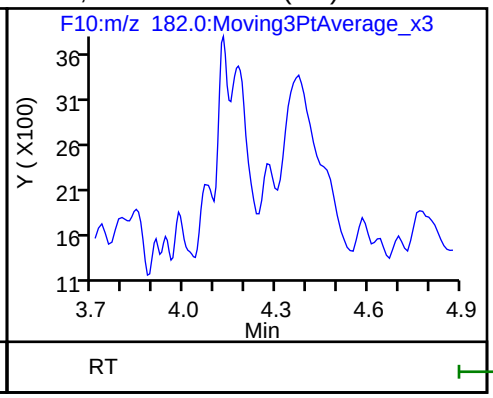
13 3,4-Dinitrotoluene (ND)



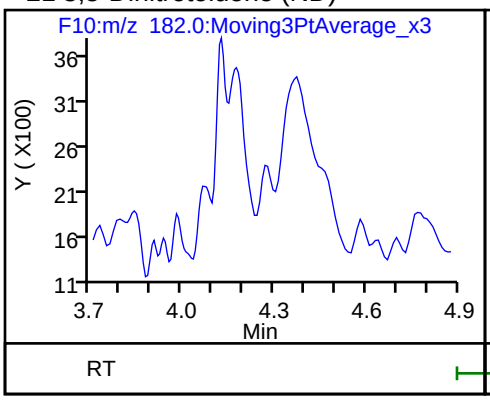
24 m-Nitrotoluene (ND)



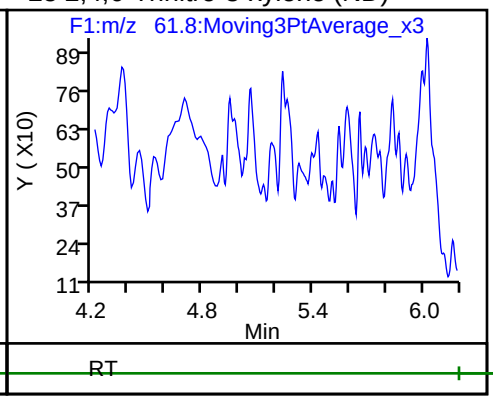
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 08-Apr-2022 07:32:20 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07010.d
Lims ID: ICB
Client ID:
Sample Type: ICB
Inject. Date: 07-Apr-2022 11:25:24 ALS Bottle#: 1 Worklist Smp#: 10
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: ICB
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:31:50 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 12:34:00

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	50.0	54.9	109.80

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-570053/2-A

Matrix: Water | Lab File ID: ex722D05013.d

Analysis Method: 8321A | Date Collected:

Extraction Method: 3535 | Date Extracted: 03/29/2022 13:01

Sample wt/vol: 1000(mL) | Date Analyzed: 04/05/2022 11:24

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

Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:

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

Analysis Batch No.: 570784 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.434		0.10	0.060	0.023
99-65-0	1,3-Dinitrobenzene	0.446		0.10	0.060	0.022
118-96-7	2,4,6-Trinitrotoluene	0.470		0.10	0.060	0.030
121-14-2	2,4-Dinitrotoluene	0.431		0.10	0.060	0.027
606-20-2	2,6-Dinitrotoluene	0.463		0.10	0.060	0.025
35572-78-2	2-Amino-4,6-dinitrotoluene	0.468		0.10	0.060	0.030
19406-51-0	4-Amino-2,6-dinitrotoluene	0.455		0.10	0.060	0.039
2691-41-0	HMX	0.420		0.10	0.060	0.033
99-08-1	m-Nitrotoluene	0.423		0.10	0.060	0.028
98-95-3	Nitrobenzene	0.414		0.15	0.060	0.028
55-63-0	Nitroglycerin	0.498		0.15	0.060	0.029
88-72-2	o-Nitrotoluene	0.425		0.10	0.060	0.032
78-11-5	PETN	0.505		0.10	0.060	0.035
99-99-0	p-Nitrotoluene	0.435		0.10	0.060	0.029
121-82-4	RDX	0.483		0.10	0.060	0.027
479-45-8	Tetryl	0.680		0.10	0.060	0.028

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	90		48-130

Report Date: 06-Apr-2022 06:44:10 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05013.d
Lims ID: LCS 280-570053/2-A
Client ID:
Sample Type: LCS
Inject. Date: 05-Apr-2022 11:24:26 ALS Bottle#: 11 Worklist Smp#: 13
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-570053/2-A
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 06:44:08 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 12:47:15
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.223	1.223	0.0	0.998	334501	84.0	95.4	
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		225882	125.0	108	
4 RDX								
281.2	1.791	1.774	0.017	0.998	494199	96.6	112	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.793	1.777	0.016		825906	125.0	157	
5 1,3,5-Trinitrobenzene								
213.0	2.215	2.199	0.016	0.774	2119024	86.9	145	
6 Tetryl								
241.1	2.556	2.540	0.016	0.894	5401111	136.0	204	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1805318	129.4	244	
8 1,3-Dinitrobenzene								
168.0	2.893	2.871	0.022	1.011	1356930	89.3	126	
9 Nitroglycerin								
62.0	2.900	2.878	0.022	1.014	1456589	99.5	606	
10 2,4,6-Trinitrotoluene								
227.0	3.127	3.107	0.020	0.771	10383660	94.1	435	
$ 11 Nitrobenzene-d5								
128.0	3.170	3.150	0.020	0.782	791675	89.9	127	
12 Nitrobenzene								
123.0	3.227	3.208	0.019	0.796	617817	82.7	39.1	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.422	3.391	0.031	0.844	6668676	91.0	64.4	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.721	3.708	0.013	0.918	9466908	93.7	87.2	

Report Date: 06-Apr-2022 06:44:10 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05013.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
17 2,6-Dinitrotoluene								
182.0	3.877	3.852	0.025	0.956	8273149	92.7	494	
* 18 2,4-dinitrotoluene-d3								
185.1	4.054	4.028	0.026		5555557	125.0	116	
19 2,4-Dinitrotoluene								
182.0	4.087	4.052	0.035	1.008	4039062	86.1	222	
20 PETN								
61.8	4.325	4.305	0.020	1.067	1038604	101.0	341	
22 o-Nitrotoluene								
137.0	4.661	4.631	0.030	1.150	1171377	85.0	353	
23 p-Nitrotoluene								
137.0	4.935	4.910	0.025	1.217	1041219	86.9	303	
24 m-Nitrotoluene								
137.0	5.293	5.268	0.025	1.306	603004	84.5	163	

QC Flag Legend

Processing Flags

Reagents:

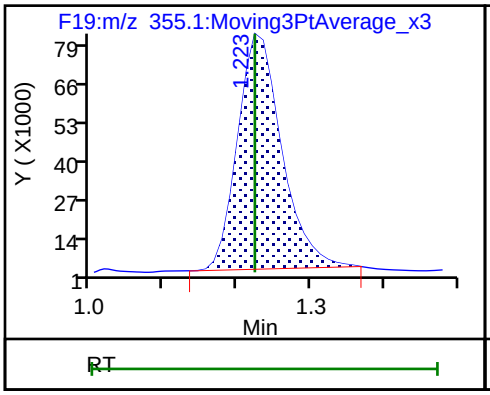
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 06:44:10 Chrom Revision: 2.3 18-Mar-2022 09:07:22

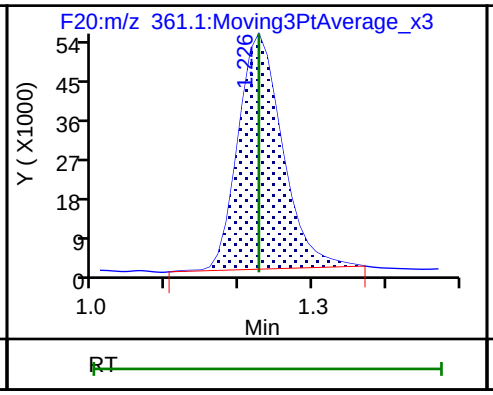
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05013.d
Injection Date: 05-Apr-2022 11:24:26 Instrument ID: LC_LCMS7
Lims ID: LCS 280-570053/2-A
Client ID:
Operator ID: acm ALS Bottle#: 11 Worklist Smp#: 13
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

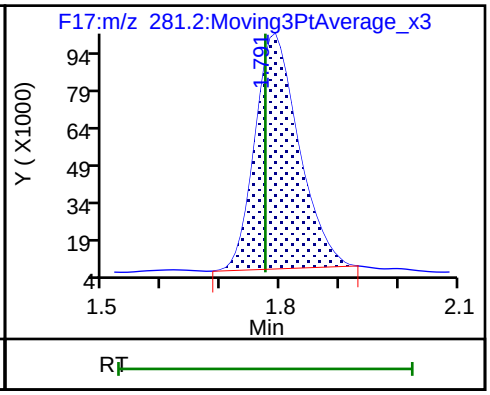
2 HMX



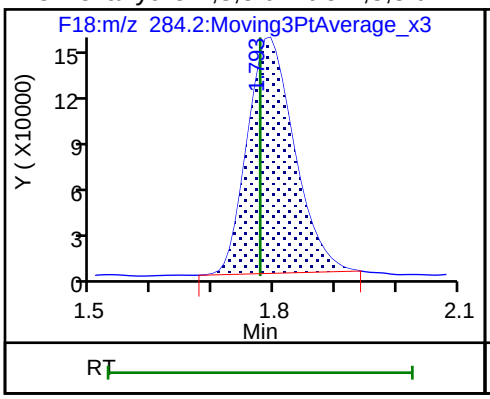
* 1 HMX-13C4



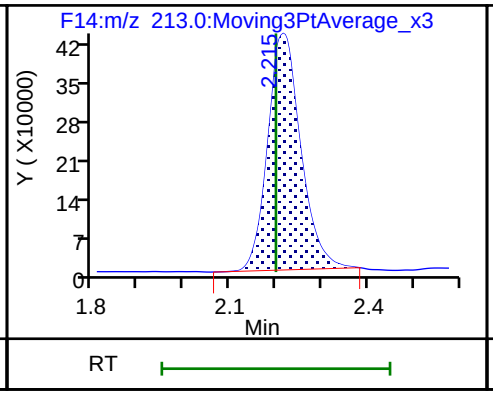
4 RDX



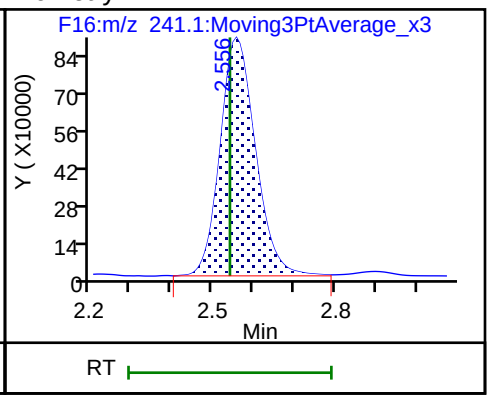
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



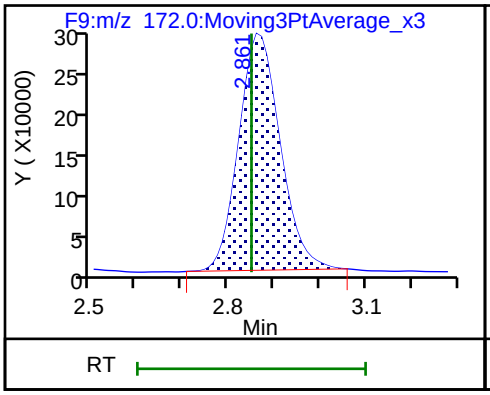
5 1,3,5-Trinitrobenzene



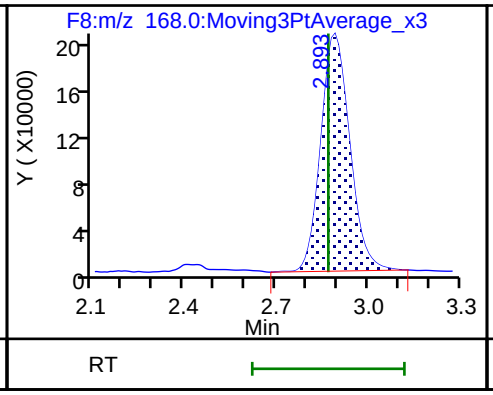
6 Tetryl



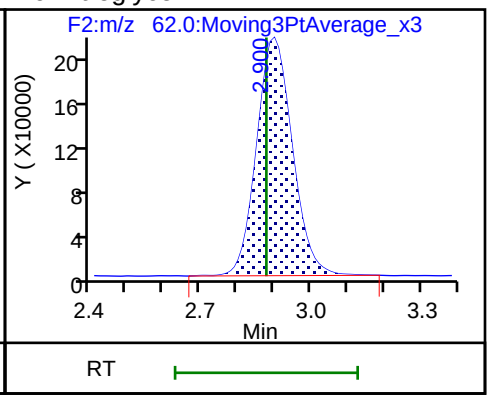
* 7 1,3-Dinitrobenzene-d4



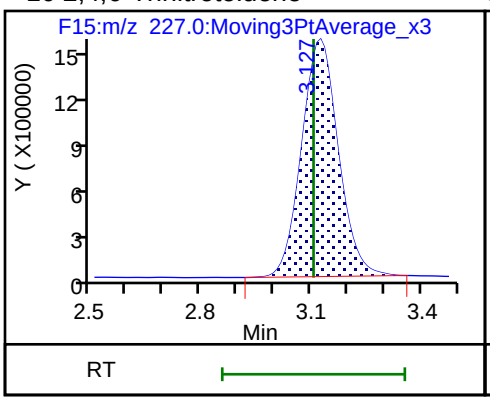
8 1,3-Dinitrobenzene



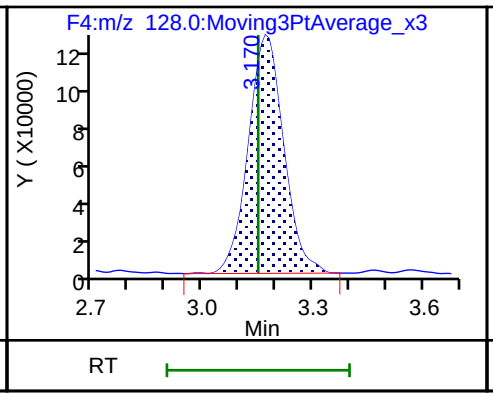
9 Nitroglycerin



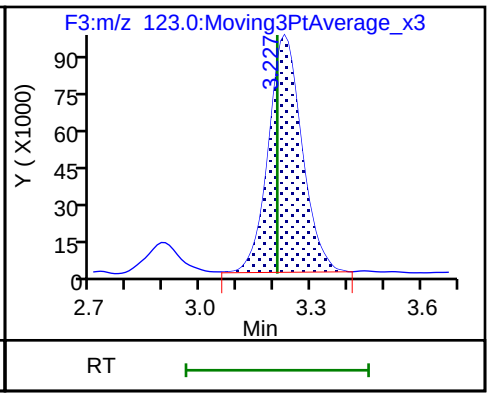
10 2,4,6-Trinitrotoluene



$ 11 Nitrobenzene-d5



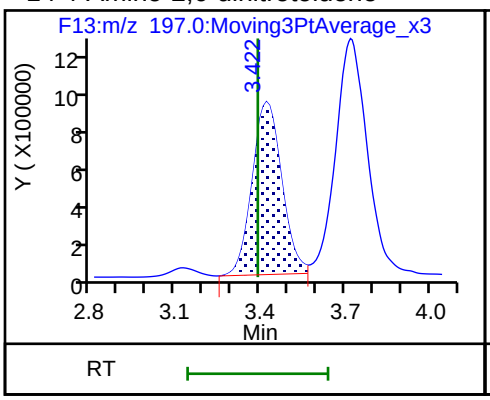
12 Nitrobenzene



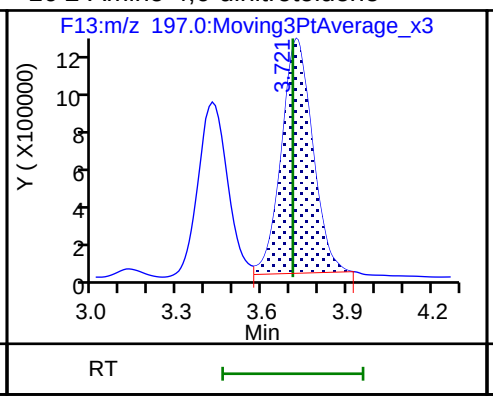
Report Date: 06-Apr-2022 06:44:10 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05013.d

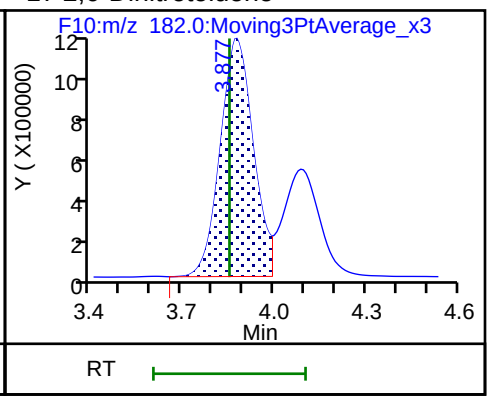
14 4-Amino-2,6-dinitrotoluene



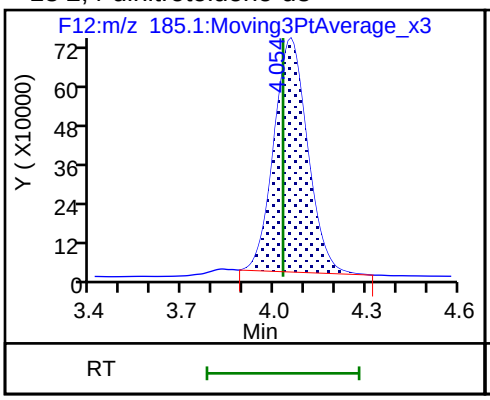
16 2-Amino-4,6-dinitrotoluene



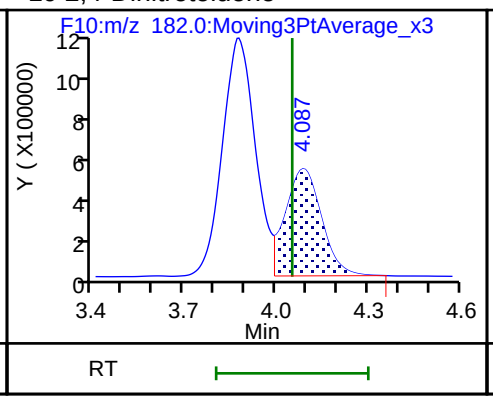
17 2,6-Dinitrotoluene



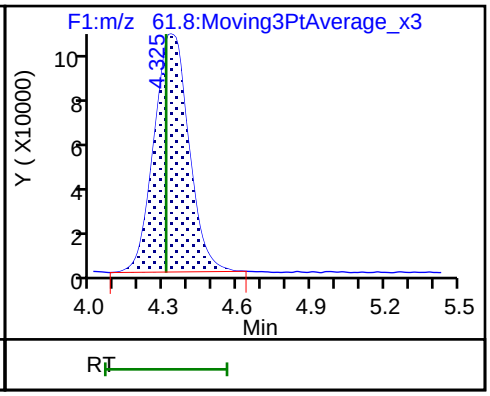
* 18 2,4-dinitrotoluene-d3



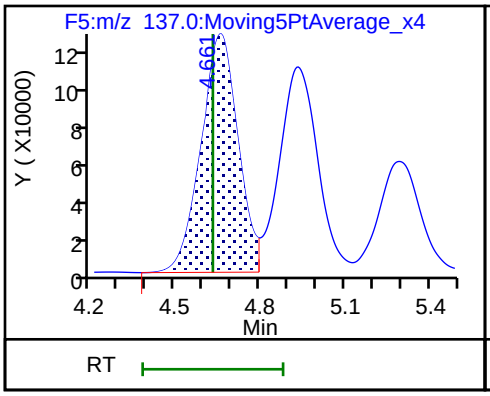
19 2,4-Dinitrotoluene



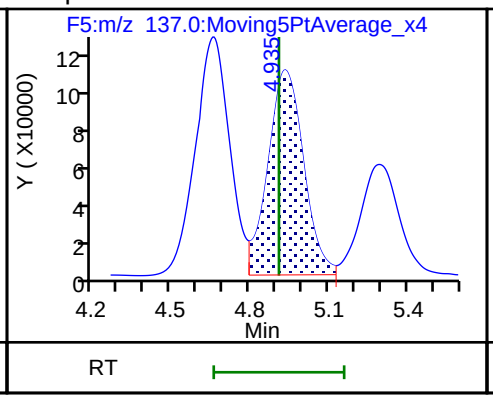
20 PETN



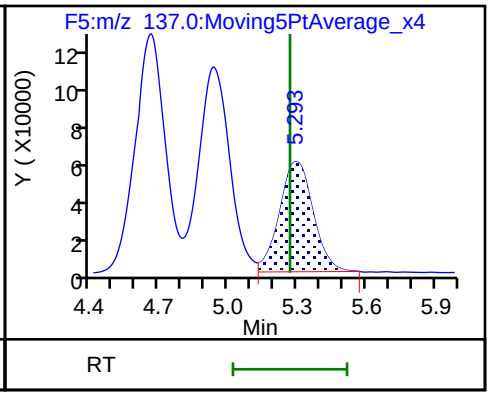
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



Report Date: 06-Apr-2022 06:44:10 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05013.d
Lims ID: LCS 280-570053/2-A
Client ID:
Sample Type: LCS
Inject. Date: 05-Apr-2022 11:24:26 ALS Bottle#: 11 Worklist Smp#: 13
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-570053/2-A
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 06:44:08 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 12:47:15

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	89.9	89.57

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCS 280-570516/2-A
Matrix: Solid | Lab File ID: ex722D05023.d
Analysis Method: 8321A | Date Collected:
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:56
Sample wt/vol: 10(g) | Date Analyzed: 04/05/2022 12:09
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 570785 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.394		0.10	0.050	0.045
99-65-0	1,3-Dinitrobenzene	0.372		0.10	0.050	0.045
118-96-7	2,4,6-Trinitrotoluene	0.417		0.10	0.050	0.037
121-14-2	2,4-Dinitrotoluene	0.377		0.10	0.050	0.047
606-20-2	2,6-Dinitrotoluene	0.390		0.10	0.050	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.400		0.10	0.050	0.050
19406-51-0	4-Amino-2,6-dinitrotoluene	0.379		0.10	0.050	0.031
2691-41-0	HMX	0.378		0.10	0.050	0.046
99-08-1	m-Nitrotoluene	0.378		0.10	0.050	0.043
98-95-3	Nitrobenzene	0.372		0.11	0.050	0.038
55-63-0	Nitroglycerin	0.415		0.10	0.050	0.029
88-72-2	o-Nitrotoluene	0.382		0.10	0.050	0.043
78-11-5	PETN	0.417		0.10	0.050	0.034
99-99-0	p-Nitrotoluene	0.392		0.10	0.050	0.049
121-82-4	RDX	0.362		0.12	0.050	0.043
479-45-8	Tetryl	0.595	Q	0.10	0.050	0.039

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	94		68-140

Report Date: 06-Apr-2022 07:09:46 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05023.d
Lims ID: LCS 280-570516/2-A
Client ID:
Sample Type: LCS
Inject. Date: 05-Apr-2022 12:09:13 ALS Bottle#: 17 Worklist Smp#: 20
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-570516/2-A
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:08:09 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 12:48:56
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.223	1.223	0.0	0.998	398485	94.5	94.0	
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		239390	125.0	142	
4 RDX								
281.2	1.782	1.791	0.008	1.003	548347	90.4	251	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		977824	125.0	312	
5 1,3,5-Trinitrobenzene								
213.0	2.206	2.216	0.007	0.771	2389907	98.4	163	
6 Tetryl								
241.1	2.548	2.560	0.008	0.891	5879200	148.7	214	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1797572	129.4	274	
8 1,3-Dinitrobenzene								
168.0	2.882	2.893	0.011	1.007	1406848	93.0	146	
9 Nitroglycerin								
62.0	2.900	2.900	0.022	1.014	1511087	103.7	543	
10 2,4,6-Trinitrotoluene								
227.0	3.117	3.134	0.010	0.770	11447337	104.2	582	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	823045	93.9	98.9	
12 Nitrobenzene								
123.0	3.218	3.236	0.010	0.795	692035	92.9	27.4	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.411	3.420	0.020	0.843	6988731	94.8	64.5	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.721	3.740	0.013	0.920	10161946	99.9	87.2	

Report Date: 06-Apr-2022 07:09:46 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05023.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
17 2,6-Dinitrotoluene								
182.0	3.865	3.885	0.013	0.955	8762050	97.6	588	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		5591152	125.0	119	
19 2,4-Dinitrotoluene								
182.0	4.078	4.087	0.026	1.008	4445581	94.3	268	
20 PETN								
61.8	4.325	4.342	0.020	1.069	1079028	104.2	355	
22 o-Nitrotoluene								
137.0	4.641	4.671	0.010	1.147	1325583	95.6	411	
23 p-Nitrotoluene								
137.0	4.930	4.952	0.020	1.218	1179438	97.9	352	
24 m-Nitrotoluene								
137.0	5.288	5.314	0.020	1.307	679305	94.6	190	

QC Flag Legend

Processing Flags

Reagents:

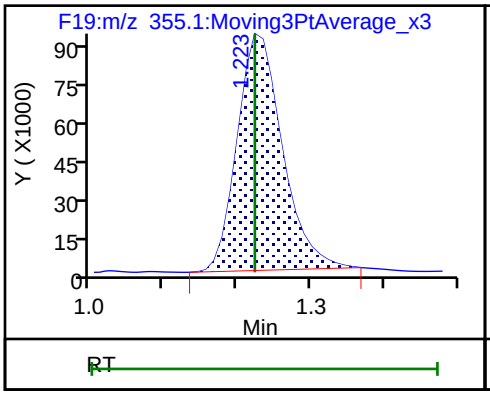
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:09:46 Chrom Revision: 2.3 18-Mar-2022 09:07:22

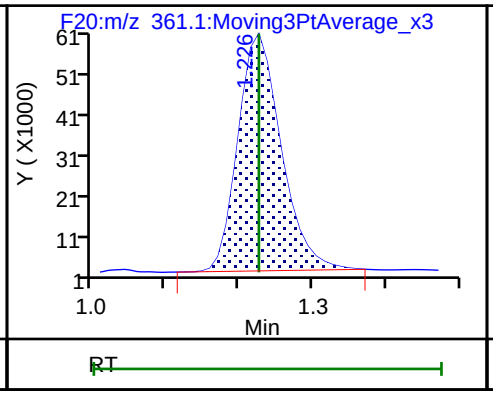
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05023.d
Injection Date: 05-Apr-2022 12:09:13 Instrument ID: LC_LCMS7
Lims ID: LCS 280-570516/2-A
Client ID:
Operator ID: acm ALS Bottle#: 17 Worklist Smp#: 20
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

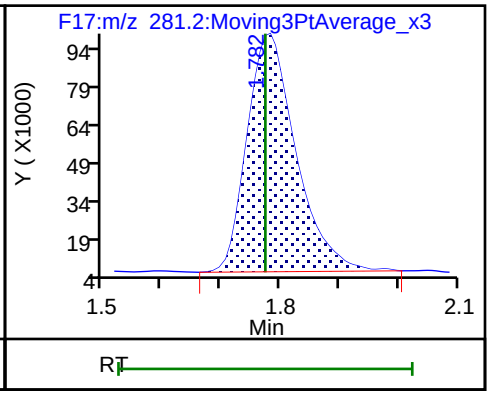
2 HMX



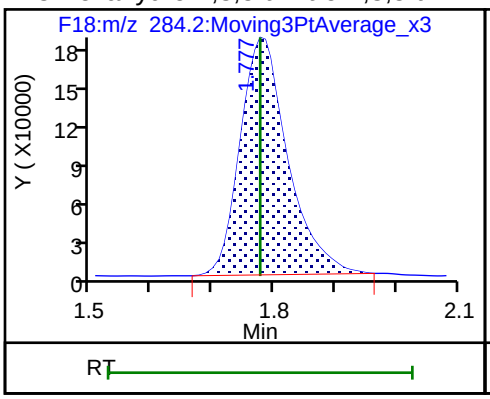
* 1 HMX-13C4



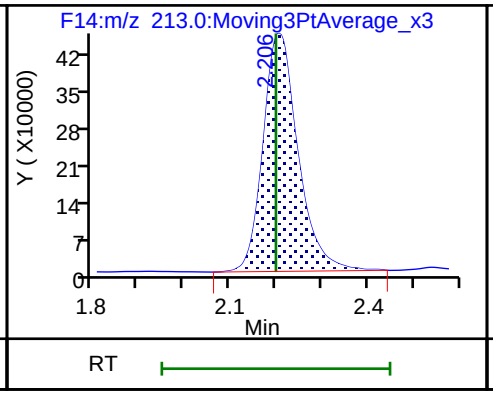
4 RDX



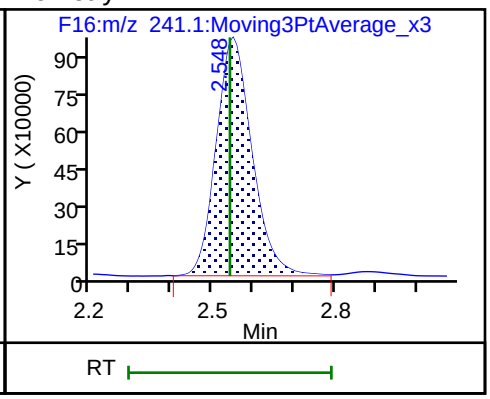
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



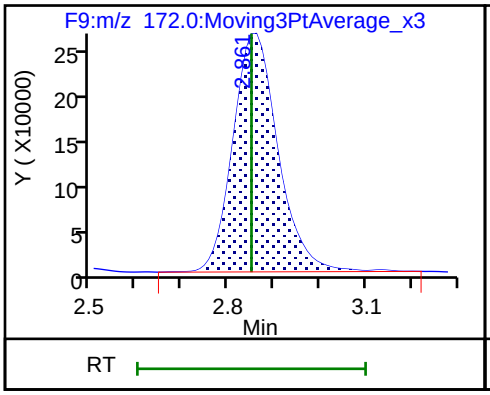
5 1,3,5-Trinitrobenzene



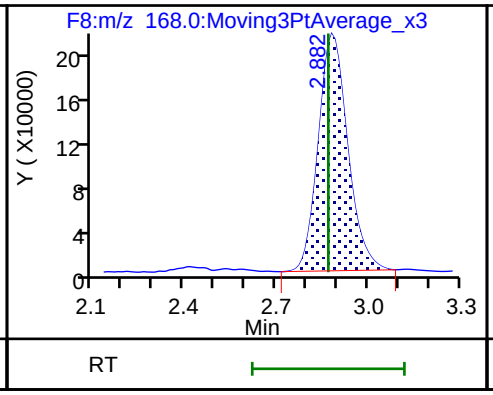
6 Tetryl



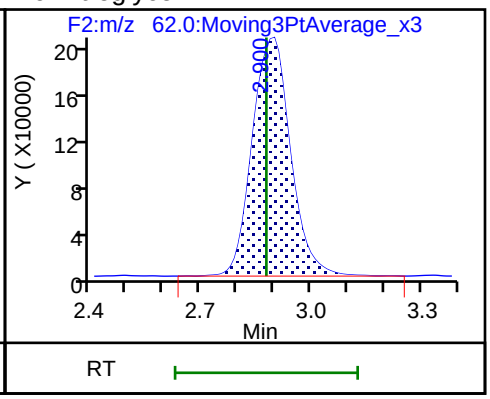
* 7 1,3-Dinitrobenzene-d4



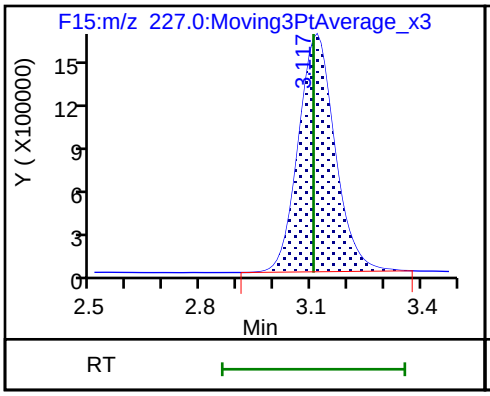
8 1,3-Dinitrobenzene



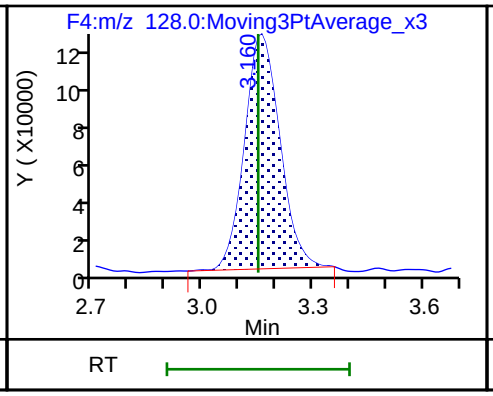
9 Nitroglycerin



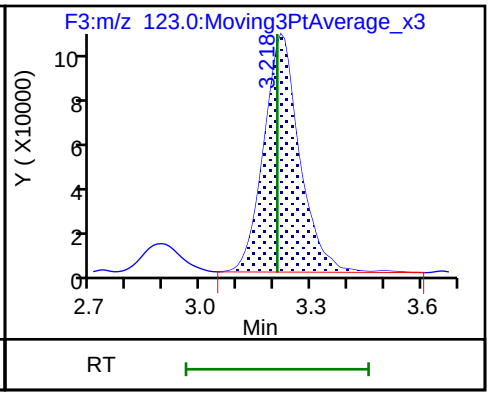
10 2,4,6-Trinitrotoluene



$ 11 Nitrobenzene-d5



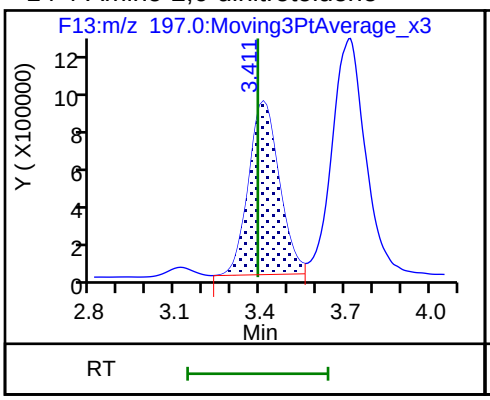
12 Nitrobenzene



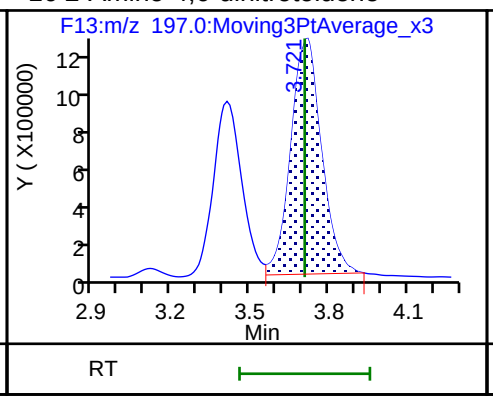
Report Date: 06-Apr-2022 07:09:46 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05023.d

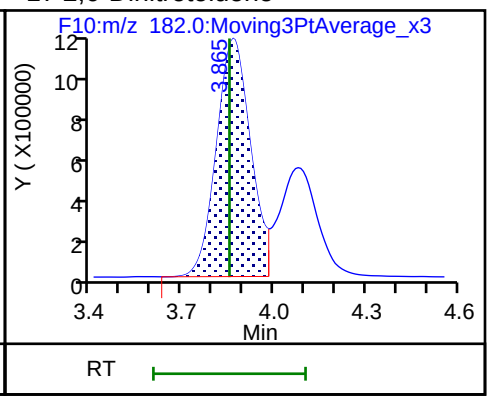
14 4-Amino-2,6-dinitrotoluene



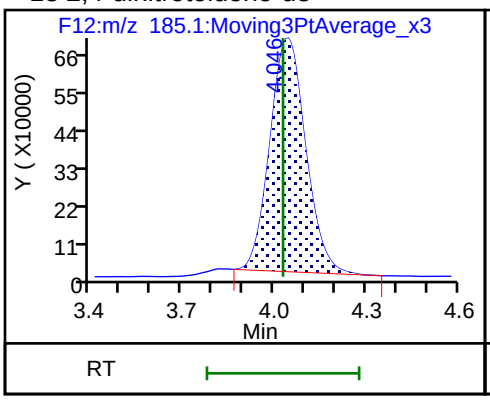
16 2-Amino-4,6-dinitrotoluene



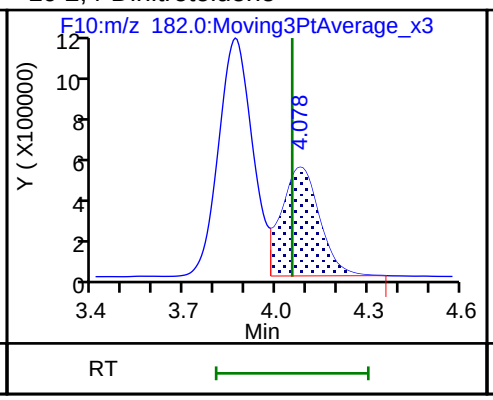
17 2,6-Dinitrotoluene



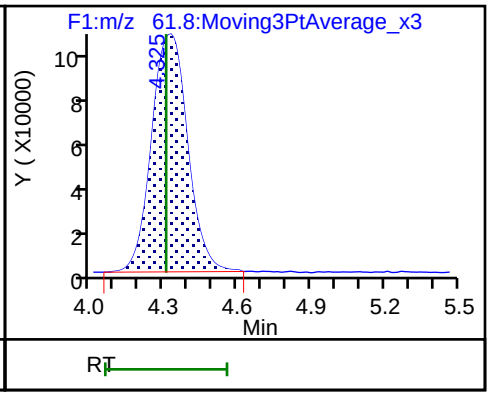
* 18 2,4-dinitrotoluene-d3



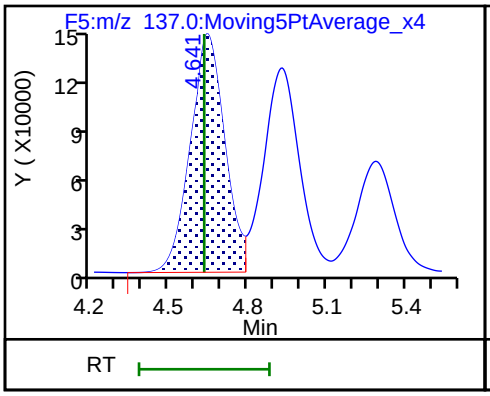
19 2,4-Dinitrotoluene



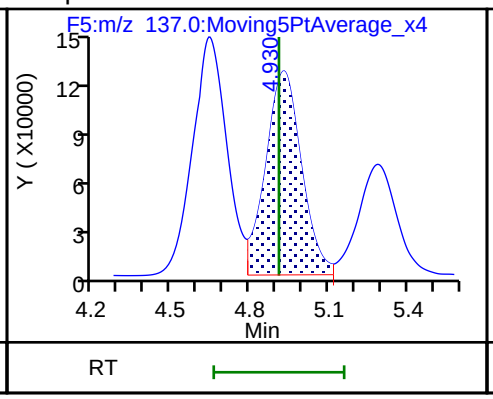
20 PETN



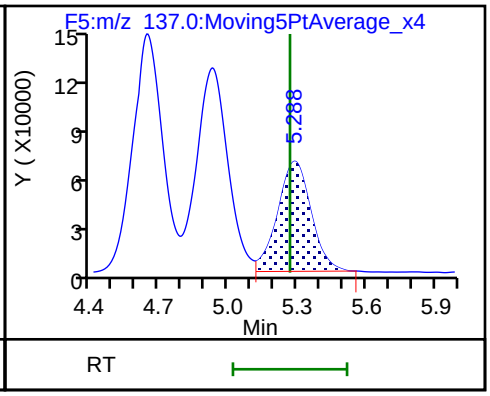
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



Report Date: 06-Apr-2022 07:09:46 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05023.d
Lims ID: LCS 280-570516/2-A
Client ID:
Sample Type: LCS
Inject. Date: 05-Apr-2022 12:09:13 ALS Bottle#: 17 Worklist Smp#: 20
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-570516/2-A
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:08:09 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 12:48:56

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	93.9	93.57

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCS 280-570543/2-A
Matrix: Solid | Lab File ID: ex722D05055.d
Analysis Method: 8321A | Date Collected:
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:54
Sample wt/vol: 10(g) | Date Analyzed: 04/05/2022 15:34
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 570786 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.382		0.10	0.050	0.045
99-65-0	1,3-Dinitrobenzene	0.370		0.10	0.050	0.045
118-96-7	2,4,6-Trinitrotoluene	0.405		0.10	0.050	0.037
121-14-2	2,4-Dinitrotoluene	0.355		0.10	0.050	0.047
606-20-2	2,6-Dinitrotoluene	0.380		0.10	0.050	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.368		0.10	0.050	0.050
19406-51-0	4-Amino-2,6-dinitrotoluene	0.369		0.10	0.050	0.031
2691-41-0	HMX	0.355		0.10	0.050	0.046
99-08-1	m-Nitrotoluene	0.362		0.10	0.050	0.043
98-95-3	Nitrobenzene	0.372		0.11	0.050	0.038
55-63-0	Nitroglycerin	0.375		0.10	0.050	0.029
88-72-2	o-Nitrotoluene	0.373		0.10	0.050	0.043
78-11-5	PETN	0.414		0.10	0.050	0.034
99-99-0	p-Nitrotoluene	0.369		0.10	0.050	0.049
121-82-4	RDX	0.340		0.12	0.050	0.043
479-45-8	Tetryl	0.597	Q	0.10	0.050	0.039

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	99		68-140

Report Date: 06-Apr-2022 07:10:10 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05055.d
Lims ID: LCS 280-570543/2-A
Client ID:
Sample Type: LCS
Inject. Date: 05-Apr-2022 15:34:00 ALS Bottle#: 46 Worklist Smp#: 52
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-570543/2-A
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:10:08 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 06-Apr-2022 06:54:49
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.223	1.223	0.0	0.998	400033	88.9	93.8	
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		255604	125.0	139	
4 RDX								
281.2	1.774	1.791	0.0	0.998	537433	84.9	90.3	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		1018733	125.0	192	
5 1,3,5-Trinitrobenzene								
213.0	2.206	2.216	0.007	0.771	2318879	95.5	147	
6 Tetryl								
241.1	2.548	2.560	0.008	0.891	5902832	149.4	170	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1796248	129.4	267	
8 1,3-Dinitrobenzene								
168.0	2.882	2.893	0.011	1.007	1397647	92.4	183	
9 Nitroglycerin								
62.0	2.889	2.900	0.011	1.010	1365968	93.8	608	
10 2,4,6-Trinitrotoluene								
227.0	3.117	3.134	0.010	0.772	11129730	101.3	486	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.783	868943	99.2	96.5	
12 Nitrobenzene								
123.0	3.218	3.236	0.010	0.797	692408	93.0	35.7	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.411	3.420	0.020	0.845	6936190	92.3	65.7	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.708	3.740	0.0	0.919	9548611	92.0	83.8	

Report Date: 06-Apr-2022 07:10:10 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05055.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
17 2,6-Dinitrotoluene								
182.0	3.871	3.885	0.019	0.959	8699886	95.0	562	
* 18 2,4-dinitrotoluene-d3								
185.1	4.037	4.028	0.009		5701496	125.0	110	
19 2,4-Dinitrotoluene								
182.0	4.078	4.087	0.026	1.010	4265090	88.6	262	
20 PETN								
61.8	4.335	4.342	0.030	1.074	1092604	103.5	468	
22 o-Nitrotoluene								
137.0	4.641	4.671	0.010	1.150	1319896	93.3	415	
23 p-Nitrotoluene								
137.0	4.925	4.952	0.015	1.220	1134649	92.3	344	
24 m-Nitrotoluene								
137.0	5.283	5.314	0.015	1.309	663048	90.5	190	

QC Flag Legend

Processing Flags

Reagents:

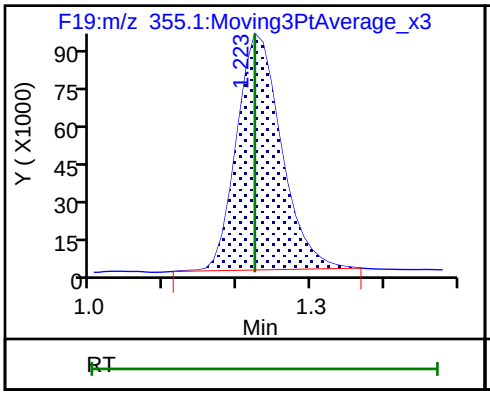
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:10:10 Chrom Revision: 2.3 18-Mar-2022 09:07:22

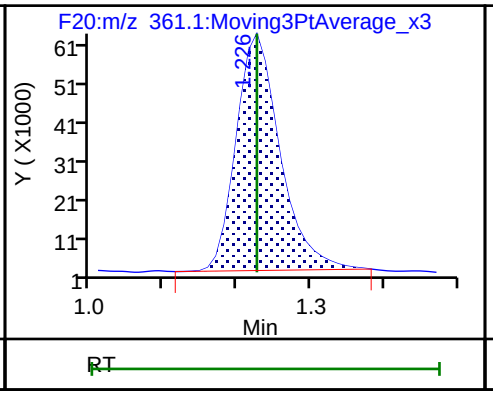
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05055.d
Injection Date: 05-Apr-2022 15:34:00 Instrument ID: LC_LCMS7
Lims ID: LCS 280-570543/2-A
Client ID:
Operator ID: acm ALS Bottle#: 46 Worklist Smp#: 52
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

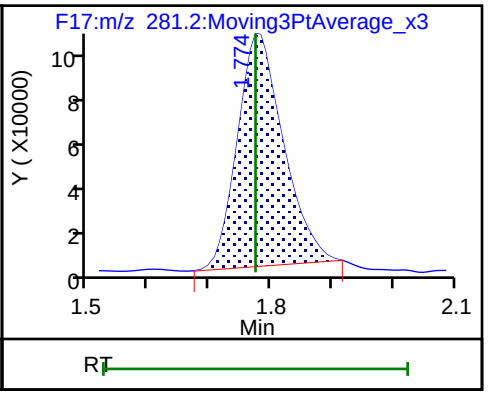
2 HMX



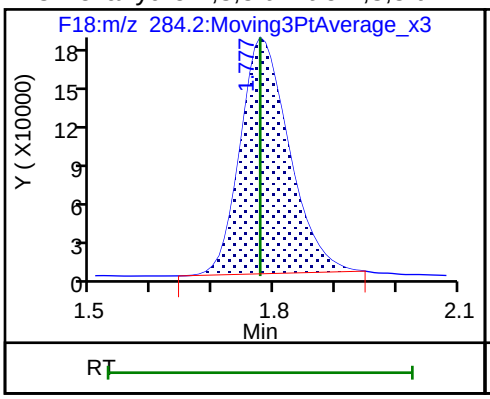
* 1 HMX-13C4



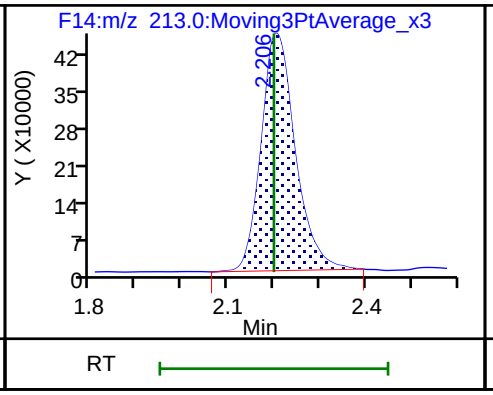
4 RDX



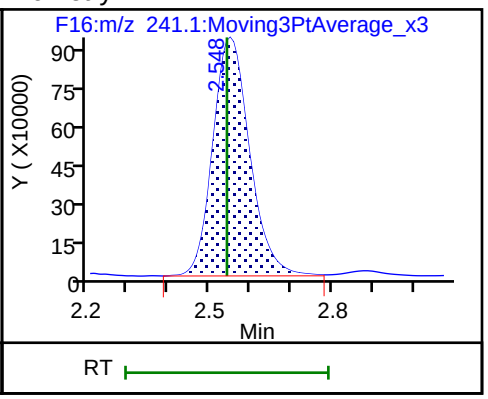
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



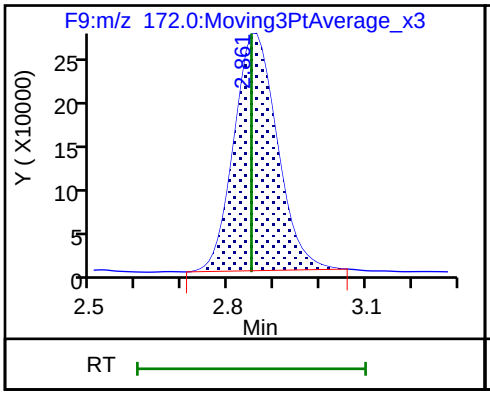
5 1,3,5-Trinitrobenzene



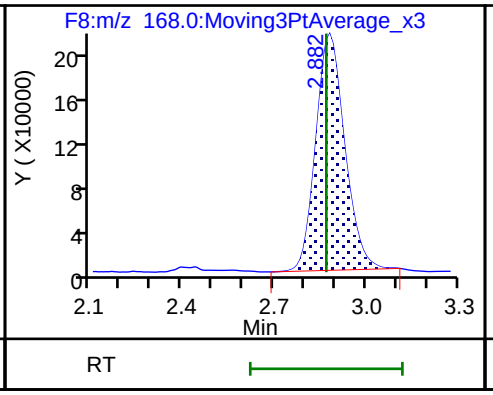
6 Tetryl



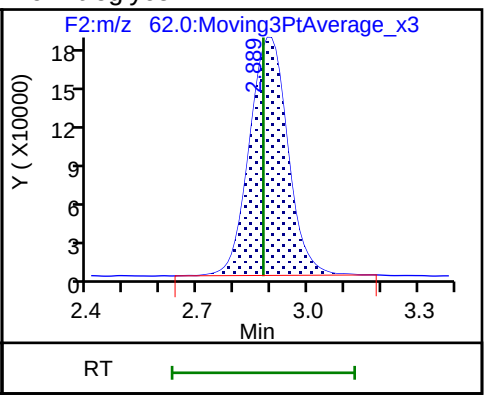
* 7 1,3-Dinitrobenzene-d4



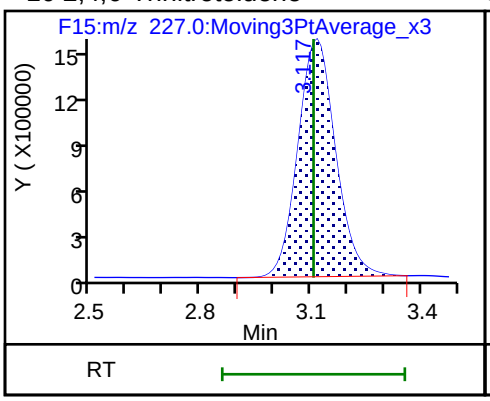
8 1,3-Dinitrobenzene



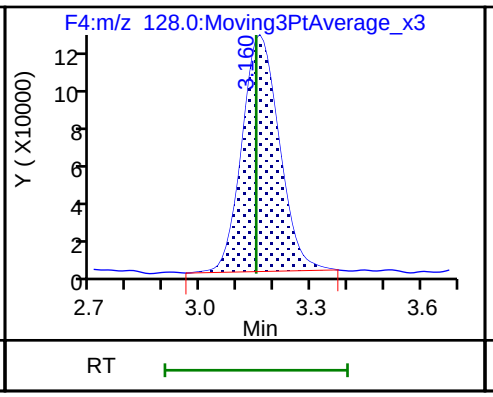
9 Nitroglycerin



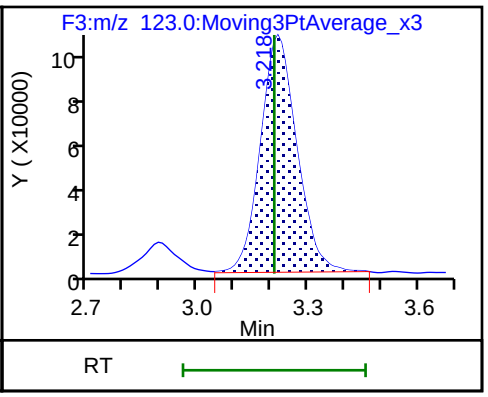
10 2,4,6-Trinitrotoluene



$ 11 Nitrobenzene-d5



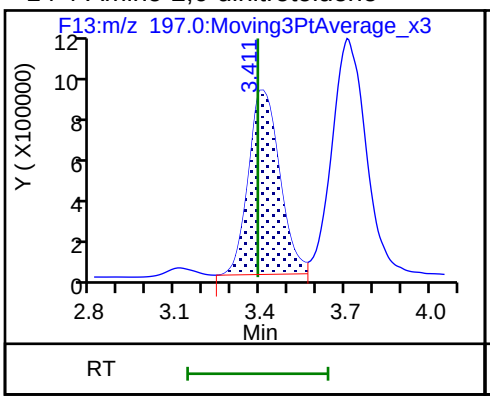
12 Nitrobenzene



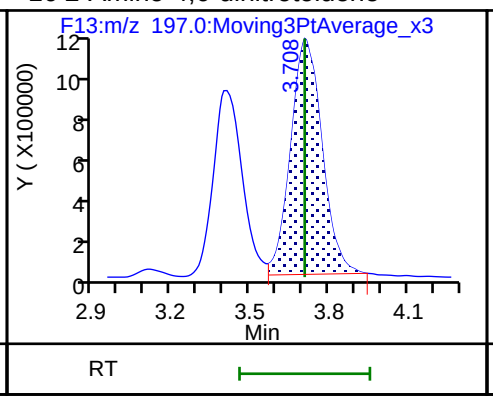
Report Date: 06-Apr-2022 07:10:10 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05055.d

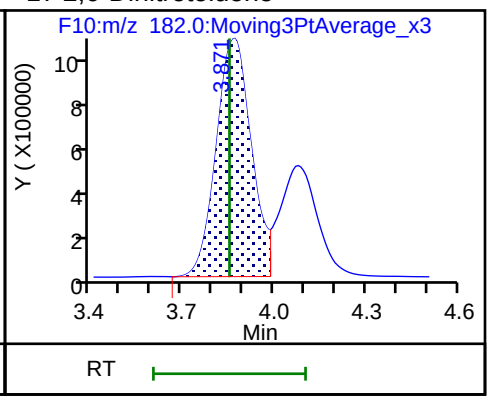
14 4-Amino-2,6-dinitrotoluene



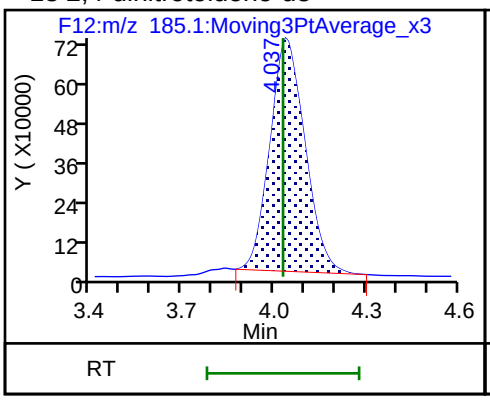
16 2-Amino-4,6-dinitrotoluene



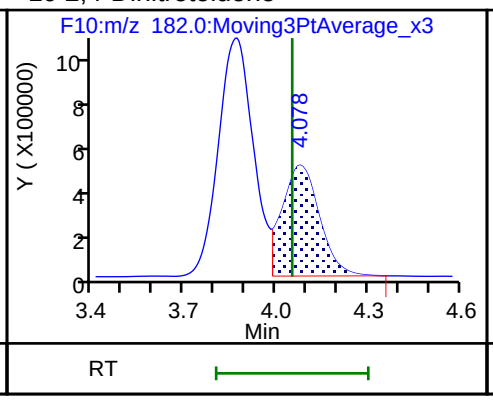
17 2,6-Dinitrotoluene



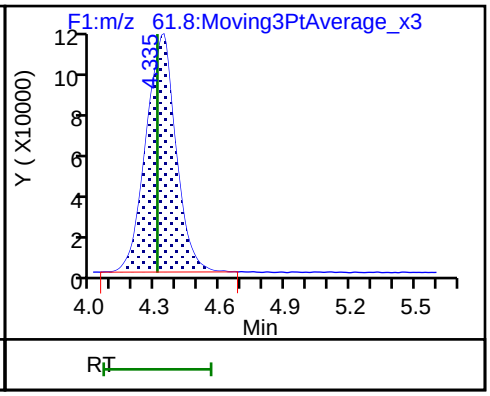
* 18 2,4-dinitrotoluene-d3



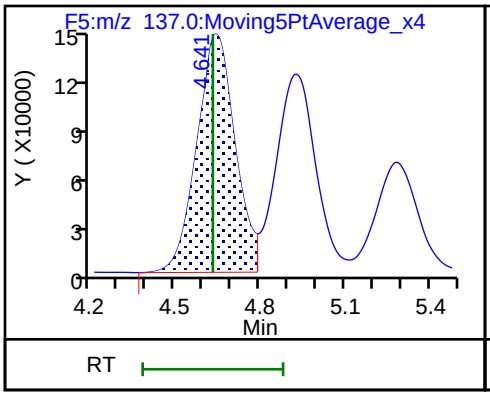
19 2,4-Dinitrotoluene



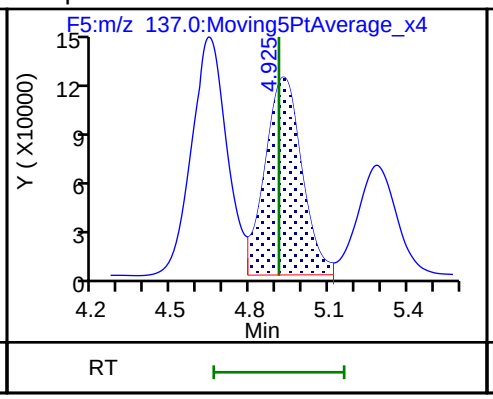
20 PETN



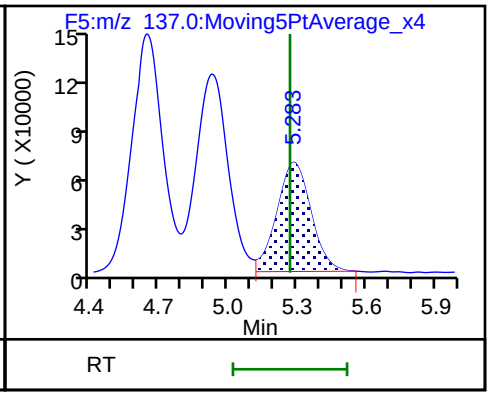
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



Report Date: 06-Apr-2022 07:10:10 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05055.d
Lims ID: LCS 280-570543/2-A
Client ID:
Sample Type: LCS
Inject. Date: 05-Apr-2022 15:34:00 ALS Bottle#: 46 Worklist Smp#: 52
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-570543/2-A
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:10:08 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 06-Apr-2022 06:54:49

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	99.2	98.91

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-570718/2-A

Matrix: Solid | Lab File ID: ex722D07013.d

Analysis Method: 8321A | Date Collected:

Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57

Sample wt/vol: 10(g) | Date Analyzed: 04/07/2022 11:45

Con. Extract Vol.: 40(mL) | Dilution Factor: 1

Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:

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

Analysis Batch No.: 571108 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.384		0.10	0.050	0.045
99-65-0	1,3-Dinitrobenzene	0.384		0.10	0.050	0.045
118-96-7	2,4,6-Trinitrotoluene	0.415		0.10	0.050	0.037
121-14-2	2,4-Dinitrotoluene	0.388		0.10	0.050	0.047
606-20-2	2,6-Dinitrotoluene	0.403		0.10	0.050	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.412		0.10	0.050	0.050
19406-51-0	4-Amino-2,6-dinitrotoluene	0.399		0.10	0.050	0.031
2691-41-0	HMX	0.397		0.10	0.050	0.046
99-08-1	m-Nitrotoluene	0.380		0.10	0.050	0.043
98-95-3	Nitrobenzene	0.385		0.11	0.050	0.038
55-63-0	Nitroglycerin	0.431		0.10	0.050	0.029
88-72-2	o-Nitrotoluene	0.406		0.10	0.050	0.043
78-11-5	PETN	0.442		0.10	0.050	0.034
99-99-0	p-Nitrotoluene	0.407		0.10	0.050	0.049
121-82-4	RDX	0.401		0.12	0.050	0.043
479-45-8	Tetryl	0.578	Q	0.10	0.050	0.039

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	98		68-140

Report Date: 08-Apr-2022 07:32:22 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07013.d
Lims ID: LCS 280-570718/2-A
Client ID:
Sample Type: LCS
Inject. Date: 07-Apr-2022 11:45:12 ALS Bottle#: 11 Worklist Smp#: 13
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-570718/2-A
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:21 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 12:34:48
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	165306	99.2	63.6	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		105009	125.0	126	
4 RDX								
281.2	1.849	1.841	0.008	1.008	225775	100.3	70.3	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		406169	125.0	160	
5 1,3,5-Trinitrobenzene								
213.0	2.320	2.317	0.003	0.766	1562000	95.9	126	
6 Tetryl								
241.1	2.705	2.712	-0.007	0.893	3276681	144.6	189	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.030	3.030	0.0		1382250	129.4	388	
8 1,3-Dinitrobenzene								
168.0	3.051	3.051	0.0	1.007	1107815	95.9	127	
9 Nitroglycerin								
62.0	3.080	3.080	0.0	1.017	1104830	107.9	550	
10 2,4,6-Trinitrotoluene								
227.0	3.321	3.321	0.0	0.766	7526363	103.8	165	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.775	661970	98.6	85.2	
12 Nitrobenzene								
123.0	3.421	3.431	-0.010	0.790	557331	96.2	33.8	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.645	3.645	0.0	0.841	5191485	99.8	30.8	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.970	3.976	-0.006	0.916	6929784	103.0	39.9	

Report Date: 08-Apr-2022 07:32:22 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07013.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
17 2,6-Dinitrotoluene								
182.0	4.144	4.150	-0.006	0.957	6959702	100.7	674	
* 18 2,4-dinitrotoluene-d3								
185.1	4.332	4.341	-0.009		4195665	125.0	107	
19 2,4-Dinitrotoluene								
182.0	4.373	4.373	0.0	1.009	3418990	97.1	297	
20 PETN								
61.8	4.706	4.716	-0.010	1.086	604402	110.4	126	
22 o-Nitrotoluene								
137.0	4.997	5.002	-0.005	1.153	1074491	101.6	266	
23 p-Nitrotoluene								
137.0	5.311	5.311	0.0	1.226	931698	101.8	220	
24 m-Nitrotoluene								
137.0	5.704	5.704	0.0	1.317	523982	95.0	120	

QC Flag Legend

Processing Flags

Reagents:

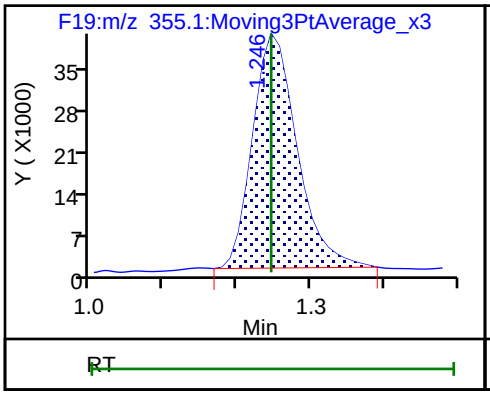
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 08-Apr-2022 07:32:22 Chrom Revision: 2.3 18-Mar-2022 09:07:22

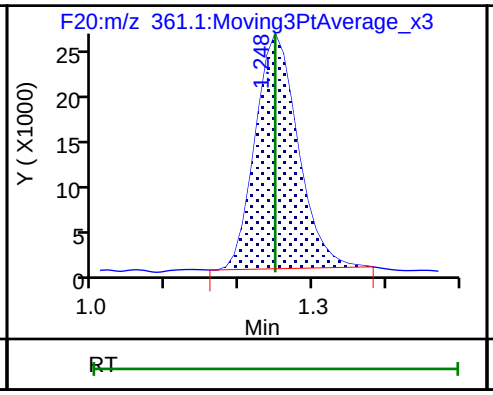
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07013.d
Injection Date: 07-Apr-2022 11:45:12 Instrument ID: LC_LCMS7
Lims ID: LCS 280-570718/2-A
Client ID:
Operator ID: acm ALS Bottle#: 11 Worklist Smp#: 13
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

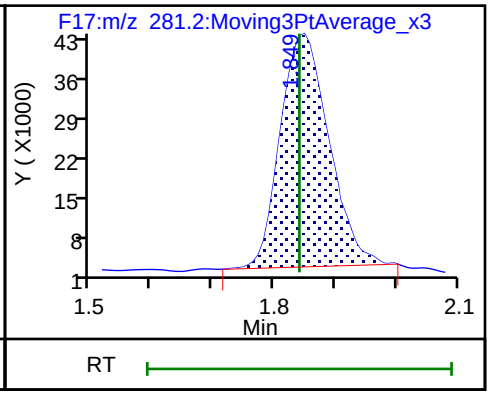
2 HMX



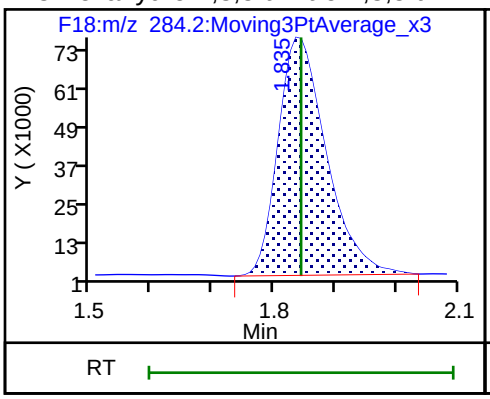
* 1 HMX-13C4



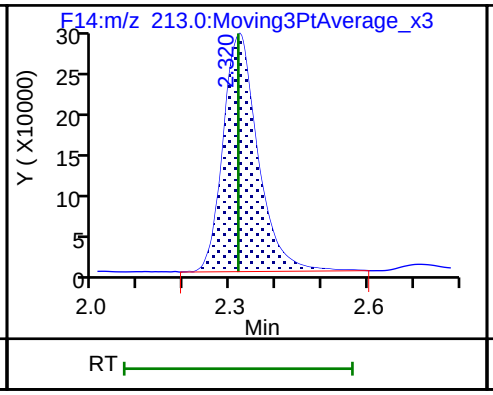
4 RDX



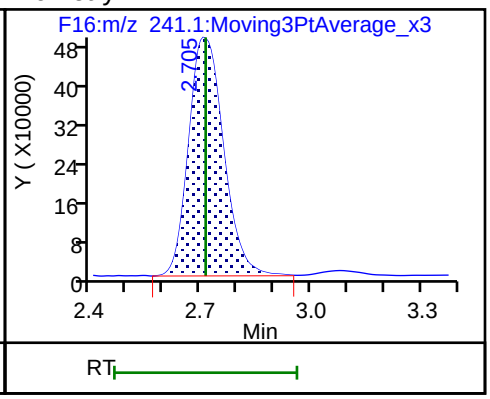
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



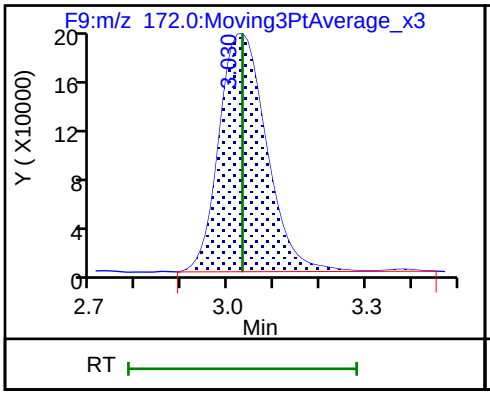
5 1,3,5-Trinitrobenzene



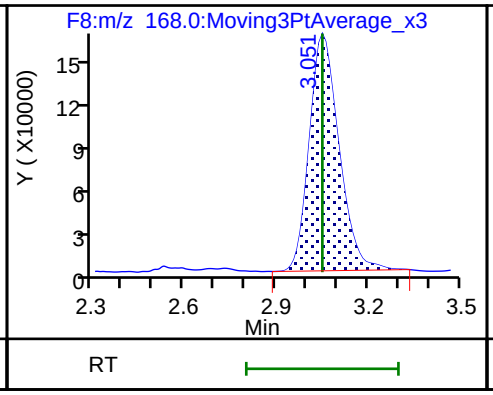
6 Tetryl



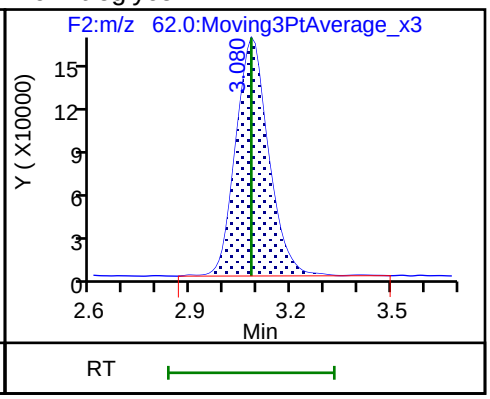
* 7 1,3-Dinitrobenzene-d4



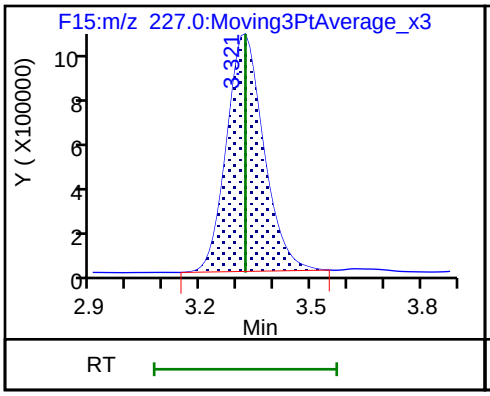
8 1,3-Dinitrobenzene



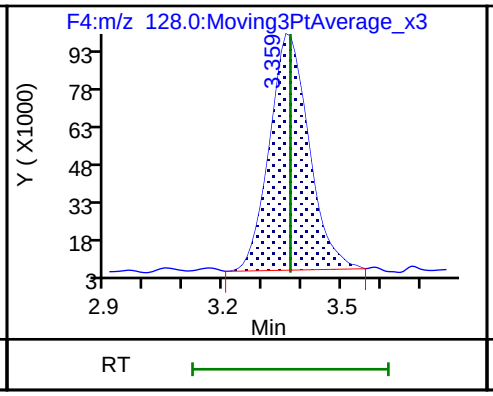
9 Nitroglycerin



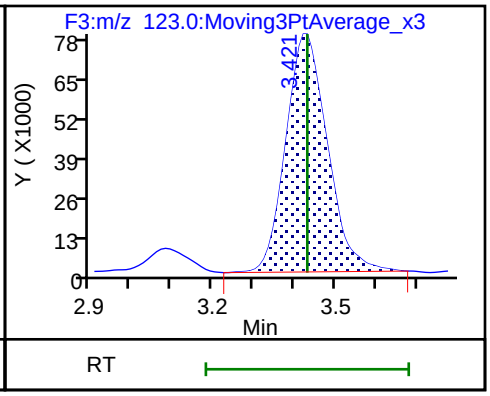
10 2,4,6-Trinitrotoluene



$ 11 Nitrobenzene-d5



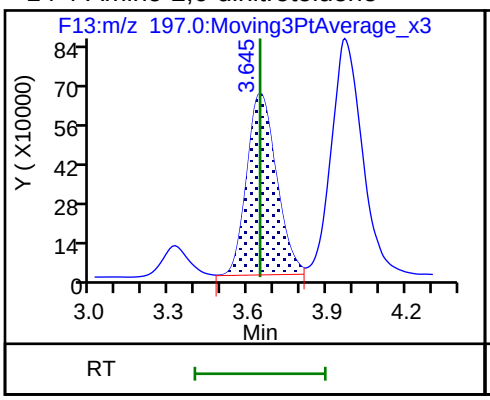
12 Nitrobenzene



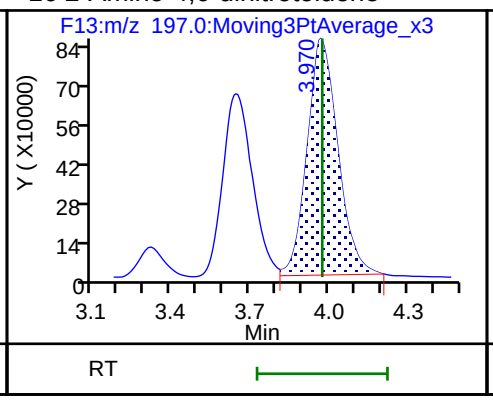
Report Date: 08-Apr-2022 07:32:22 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07013.d

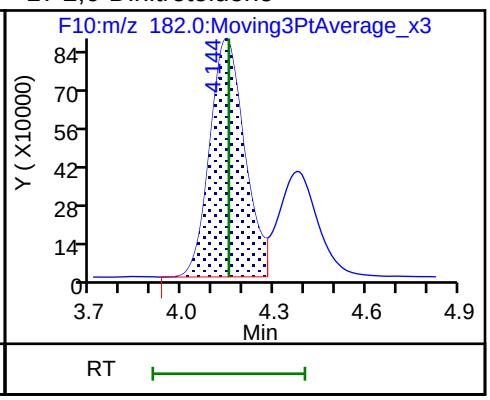
14 4-Amino-2,6-dinitrotoluene



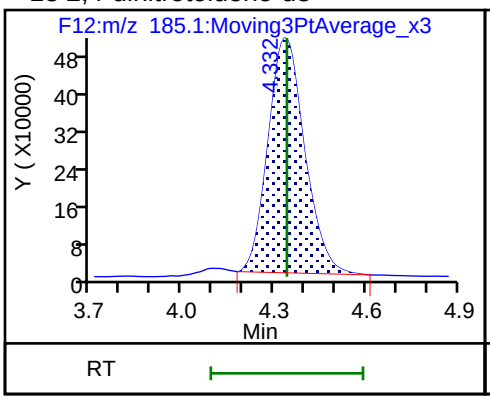
16 2-Amino-4,6-dinitrotoluene



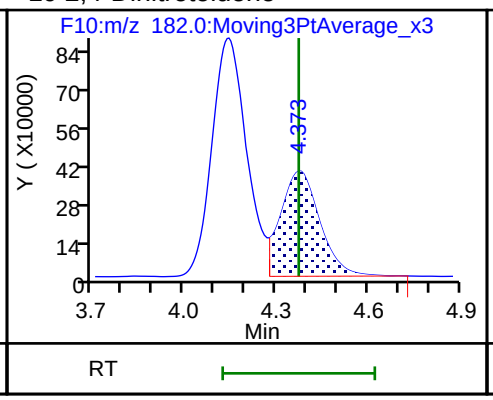
17 2,6-Dinitrotoluene



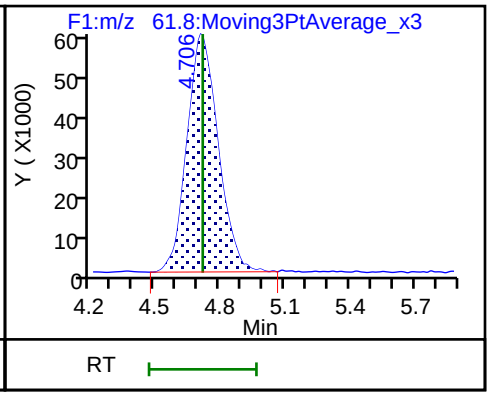
* 18 2,4-dinitrotoluene-d3



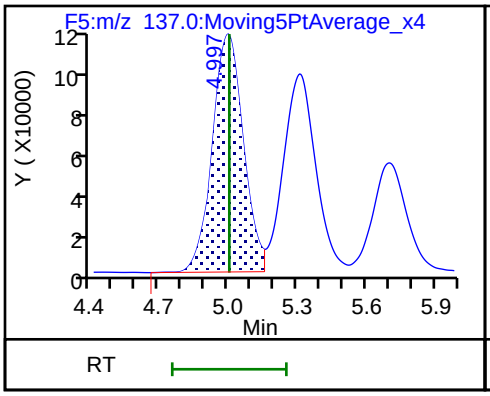
19 2,4-Dinitrotoluene



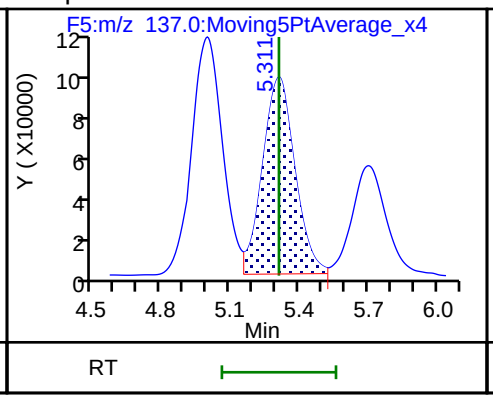
20 PETN



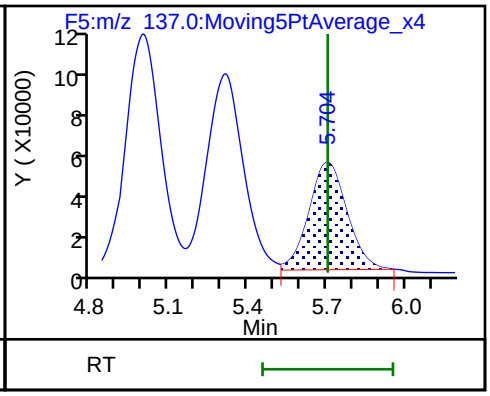
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



Report Date: 08-Apr-2022 07:32:22 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07013.d
Lims ID: LCS 280-570718/2-A
Client ID:
Sample Type: LCS
Inject. Date: 07-Apr-2022 11:45:12 ALS Bottle#: 11 Worklist Smp#: 13
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-570718/2-A
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:21 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 12:34:48

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	98.6	98.30

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCSD 280-570053/3-A
Matrix: Water | Lab File ID: ex722D05014.d
Analysis Method: 8321A | Date Collected:
Extraction Method: 3535 | Date Extracted: 03/29/2022 13:01
Sample wt/vol: 1000(mL) | Date Analyzed: 04/05/2022 11:30
Con. Extract Vol.: 5(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 570784 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.477		0.10	0.060	0.023
99-65-0	1,3-Dinitrobenzene	0.501		0.10	0.060	0.022
118-96-7	2,4,6-Trinitrotoluene	0.522		0.10	0.060	0.030
121-14-2	2,4-Dinitrotoluene	0.456		0.10	0.060	0.027
606-20-2	2,6-Dinitrotoluene	0.490		0.10	0.060	0.025
35572-78-2	2-Amino-4,6-dinitrotoluene	0.492		0.10	0.060	0.030
19406-51-0	4-Amino-2,6-dinitrotoluene	0.493		0.10	0.060	0.039
2691-41-0	HMX	0.452		0.10	0.060	0.033
99-08-1	m-Nitrotoluene	0.431		0.10	0.060	0.028
98-95-3	Nitrobenzene	0.435		0.15	0.060	0.028
55-63-0	Nitroglycerin	0.556		0.15	0.060	0.029
88-72-2	o-Nitrotoluene	0.441		0.10	0.060	0.032
78-11-5	PETN	0.556		0.10	0.060	0.035
99-99-0	p-Nitrotoluene	0.434		0.10	0.060	0.029
121-82-4	RDX	0.515		0.10	0.060	0.027
479-45-8	Tetryl	0.724	Q	0.10	0.060	0.028

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	91		48-130

Report Date: 06-Apr-2022 06:44:10 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05014.d
Lims ID: LCSD 280-570053/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 05-Apr-2022 11:30:50 ALS Bottle#: 12 Worklist Smp#: 14
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-570053/3-A
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 06:44:08 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 12:47:23
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.223	1.223	0.0	0.998	373556	90.5	95.8	
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		234377	125.0	144	
4 RDX								
281.2	1.791	1.774	0.017	0.998	533710	103.0	217	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.793	1.777	0.016		836989	125.0	189	
5 1,3,5-Trinitrobenzene								
213.0	2.215	2.199	0.016	0.771	2246490	95.4	146	
6 Tetryl								
241.1	2.556	2.540	0.016	0.890	5551969	144.8	173	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.872	2.850	0.022		1743098	129.4	155	
8 1,3-Dinitrobenzene								
168.0	2.893	2.871	0.022	1.007	1470250	100.2	140	
9 Nitroglycerin								
62.0	2.900	2.878	0.022	1.010	1572624	111.3	780	
10 2,4,6-Trinitrotoluene								
227.0	3.127	3.107	0.020	0.771	11128214	104.4	553	
$ 11 Nitrobenzene-d5								
128.0	3.170	3.150	0.020	0.782	773989	91.0	108	
12 Nitrobenzene								
123.0	3.227	3.208	0.019	0.796	628319	87.1	38.3	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.422	3.391	0.031	0.844	7102558	98.6	66.0	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.721	3.708	0.013	0.918	9783689	98.4	86.9	

Report Date: 06-Apr-2022 06:44:10 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05014.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
17 2,6-Dinitrotoluene								
182.0	3.877	3.852	0.025	0.956	8606381	98.1	584	
* 18 2,4-dinitrotoluene-d3								
185.1	4.054	4.028	0.026		5463650	125.0	125	
19 2,4-Dinitrotoluene								
182.0	4.087	4.052	0.035	1.008	4204289	91.2	272	
20 PETN								
61.8	4.325	4.305	0.020	1.067	1126303	111.3	354	
22 o-Nitrotoluene								
137.0	4.656	4.631	0.025	1.148	1194397	88.1	710	
23 p-Nitrotoluene								
137.0	4.945	4.910	0.035	1.220	1022692	86.8	598	
24 m-Nitrotoluene								
137.0	5.298	5.268	0.030	1.307	605430	86.3	325	

QC Flag Legend

Processing Flags

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 06:44:10 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05014.d

Injection Date: 05-Apr-2022 11:30:50 Instrument ID: LC_LCMS7

Lims ID: LCSD 280-570053/3-A

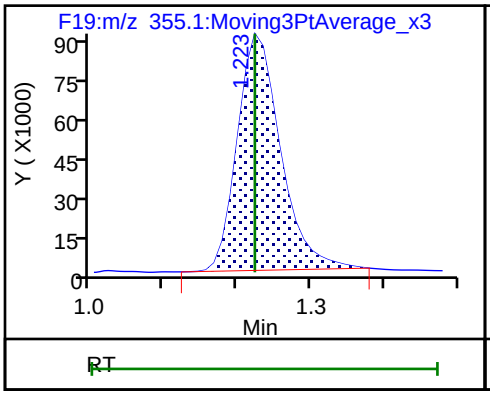
Client ID:

Operator ID: acm ALS Bottle#: 12 Worklist Smp#: 14

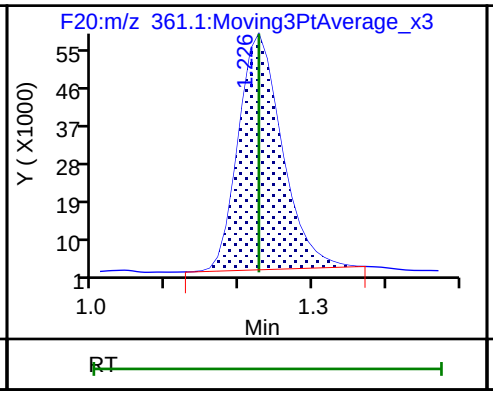
Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

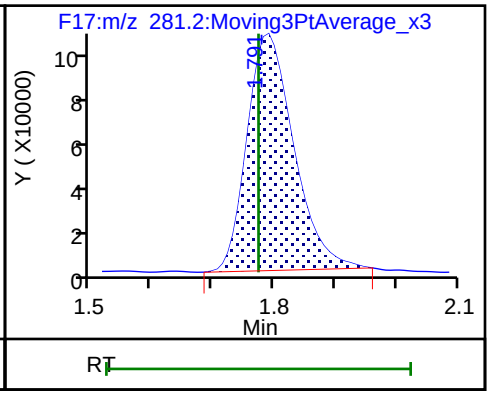
2 HMX



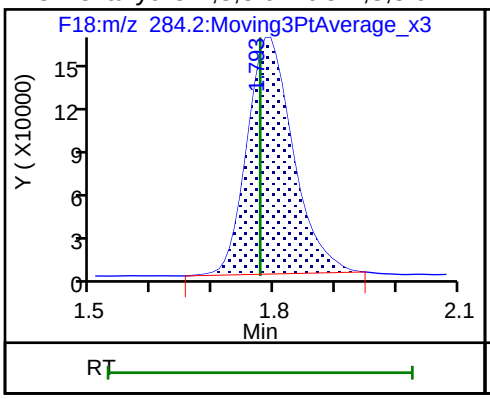
* 1 HMX-13C4



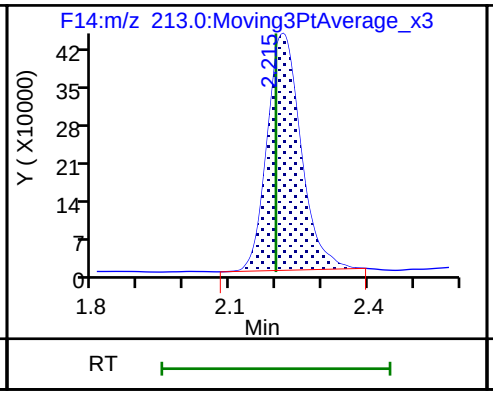
4 RDX



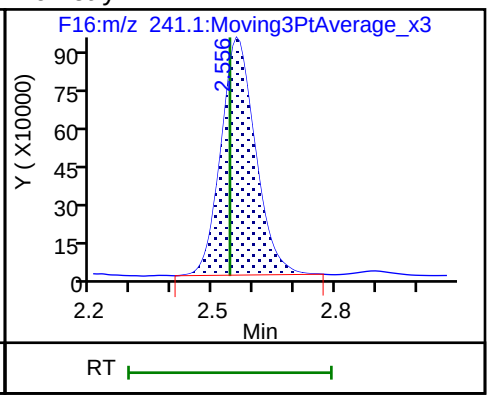
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



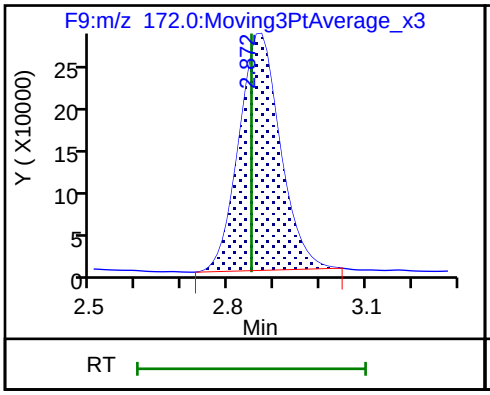
5 1,3,5-Trinitrobenzene



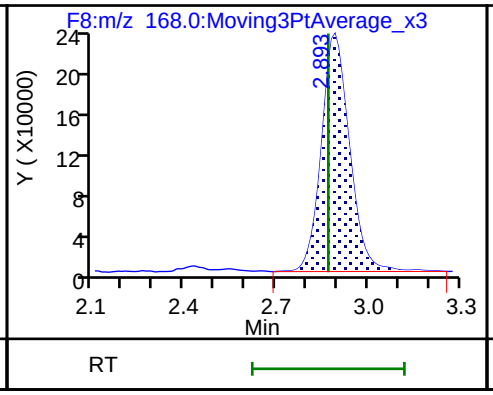
6 Tetryl



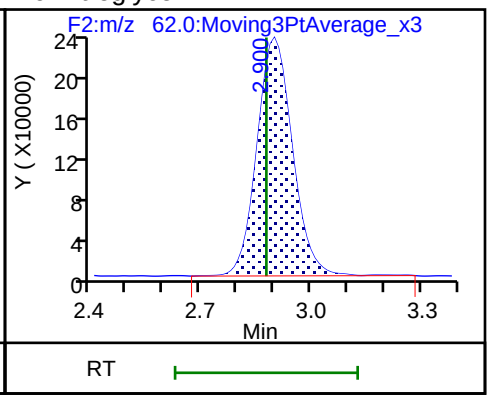
* 7 1,3-Dinitrobenzene-d4



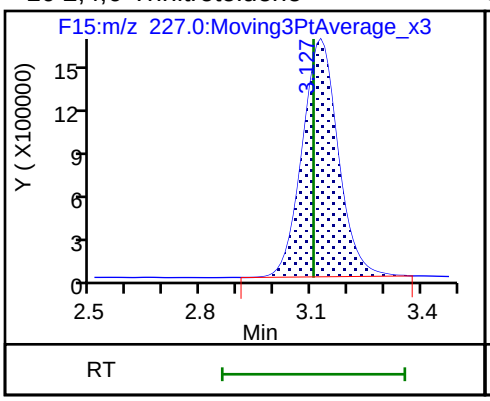
8 1,3-Dinitrobenzene



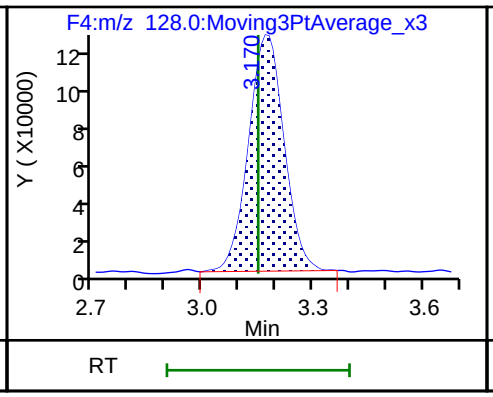
9 Nitroglycerin



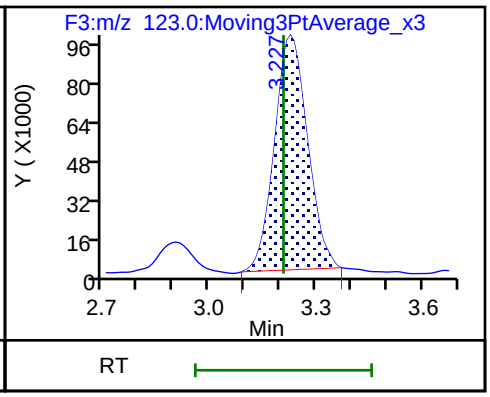
10 2,4,6-Trinitrotoluene



$ 11 Nitrobenzene-d5



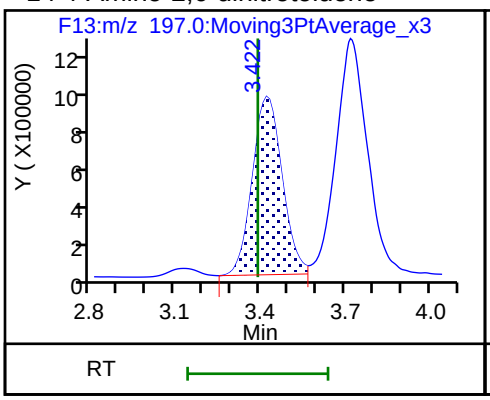
12 Nitrobenzene



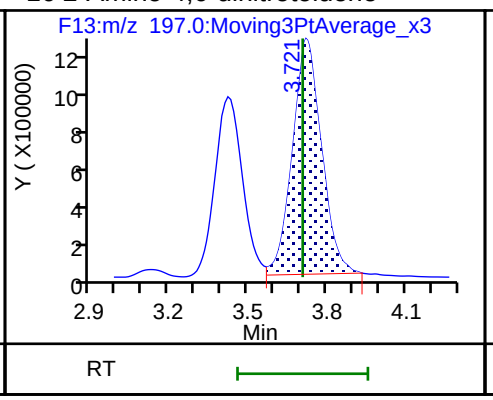
Report Date: 06-Apr-2022 06:44:10 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05014.d

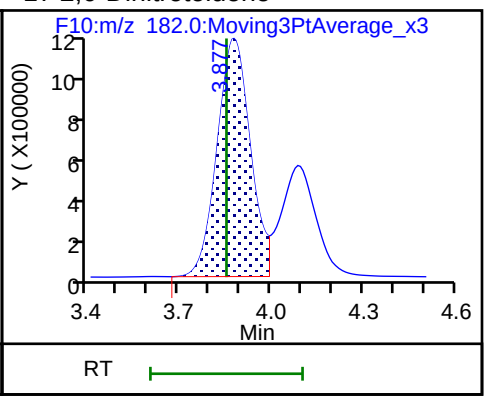
14 4-Amino-2,6-dinitrotoluene



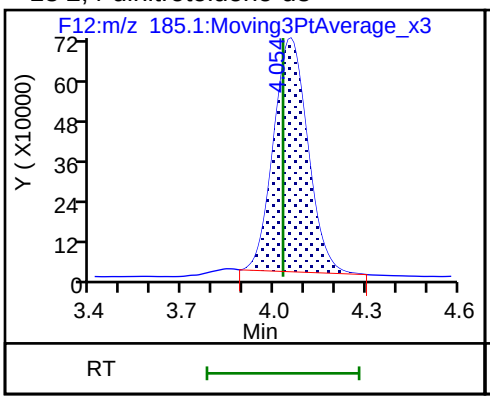
16 2-Amino-4,6-dinitrotoluene



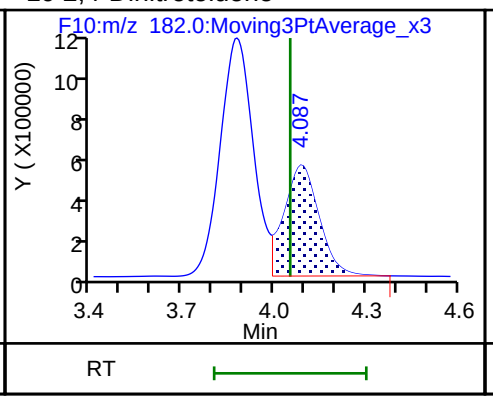
17 2,6-Dinitrotoluene



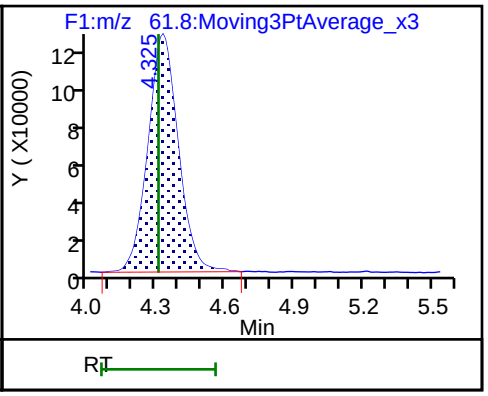
* 18 2,4-dinitrotoluene-d3



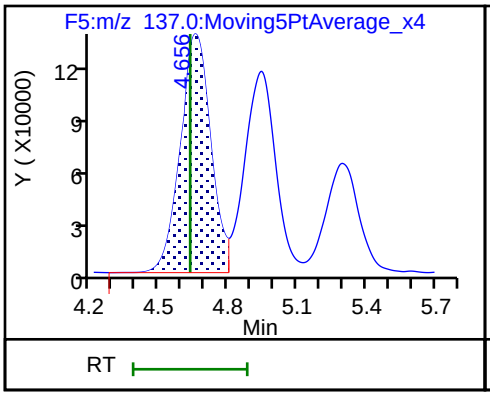
19 2,4-Dinitrotoluene



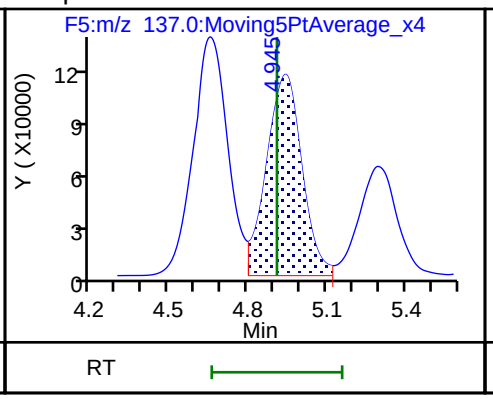
20 PETN



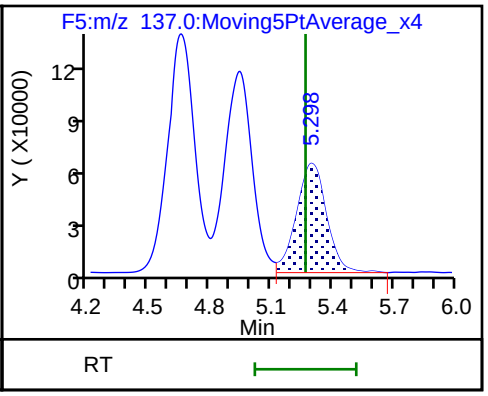
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05014.d
Lims ID: LCSD 280-570053/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 05-Apr-2022 11:30:50 ALS Bottle#: 12 Worklist Smp#: 14
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-570053/3-A
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 06:44:08 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 12:47:23

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	91.0	90.71

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCSD 280-570516/3-A
Matrix: Solid | Lab File ID: ex722D05024.d
Analysis Method: 8321A | Date Collected:
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:56
Sample wt/vol: 10(g) | Date Analyzed: 04/05/2022 12:15
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 570785 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.388		0.10	0.050	0.045
99-65-0	1,3-Dinitrobenzene	0.383		0.10	0.050	0.045
118-96-7	2,4,6-Trinitrotoluene	0.408		0.10	0.050	0.037
121-14-2	2,4-Dinitrotoluene	0.345		0.10	0.050	0.047
606-20-2	2,6-Dinitrotoluene	0.359		0.10	0.050	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.359		0.10	0.050	0.050
19406-51-0	4-Amino-2,6-dinitrotoluene	0.357		0.10	0.050	0.031
2691-41-0	HMX	0.342		0.10	0.050	0.046
99-08-1	m-Nitrotoluene	0.338		0.10	0.050	0.043
98-95-3	Nitrobenzene	0.373		0.11	0.050	0.038
55-63-0	Nitroglycerin	0.404		0.10	0.050	0.029
88-72-2	o-Nitrotoluene	0.353		0.10	0.050	0.043
78-11-5	PETN	0.395		0.10	0.050	0.034
99-99-0	p-Nitrotoluene	0.350		0.10	0.050	0.049
121-82-4	RDX	0.397		0.12	0.050	0.043
479-45-8	Tetryl	0.584	Q	0.10	0.050	0.039

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	98		68-140

Report Date: 06-Apr-2022 07:09:47 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05024.d
Lims ID: LCSD 280-570516/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 05-Apr-2022 12:15:37 ALS Bottle#: 18 Worklist Smp#: 21
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-570516/3-A
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:08:09 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 12:49:10
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.223	1.223	0.0	0.998	361028	85.4	104	
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		239796	125.0	140	
4 RDX								
281.2	1.774	1.791	0.0	0.998	555698	99.2	266	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		904600	125.0	171	
5 1,3,5-Trinitrobenzene								
213.0	2.202	2.216	0.003	0.773	2283805	97.0	156	
6 Tetryl								
241.1	2.548	2.560	0.008	0.894	5599048	146.1	206	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.850	2.850	0.0		1742268	129.4	184	
8 1,3-Dinitrobenzene								
168.0	2.882	2.893	0.011	1.011	1403088	95.7	156	
9 Nitroglycerin								
62.0	2.889	2.900	0.011	1.014	1425808	100.9	427	
10 2,4,6-Trinitrotoluene								
227.0	3.117	3.134	0.010	0.772	10858047	101.9	569	
$ 11 Nitrobenzene-d5								
128.0	3.150	3.164	0.0	0.780	835733	98.4	99.1	
12 Nitrobenzene								
123.0	3.218	3.236	0.010	0.797	673079	93.2	38.2	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.411	3.420	0.020	0.845	6914894	89.3	61.0	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.715	3.740	0.007	0.920	9592020	89.7	80.9	

Report Date: 06-Apr-2022 07:09:47 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05024.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
17 2,6-Dinitrotoluene								
182.0	3.865	3.885	0.013	0.957	8480027	89.8	499	
* 18 2,4-dinitrotoluene-d3								
185.1	4.037	4.028	0.009		5874037	125.0	115	
19 2,4-Dinitrotoluene								
182.0	4.078	4.087	0.026	1.010	4270961	86.1	230	
20 PETN								
61.8	4.315	4.342	0.010	1.069	1073808	98.7	349	
22 o-Nitrotoluene								
137.0	4.646	4.671	0.015	1.151	1286332	88.3	301	
23 p-Nitrotoluene								
137.0	4.920	4.952	0.010	1.219	1108816	87.6	254	
24 m-Nitrotoluene								
137.0	5.288	5.314	0.020	1.310	638098	84.6	140	

QC Flag Legend

Processing Flags

Reagents:

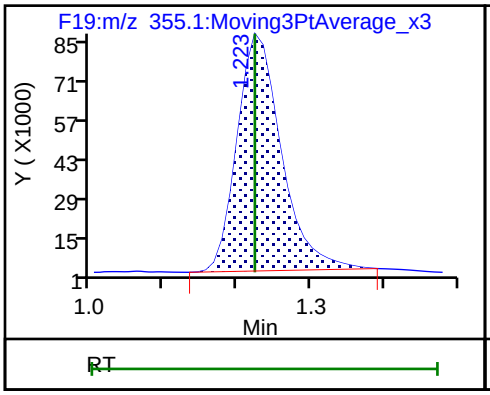
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:09:47 Chrom Revision: 2.3 18-Mar-2022 09:07:22

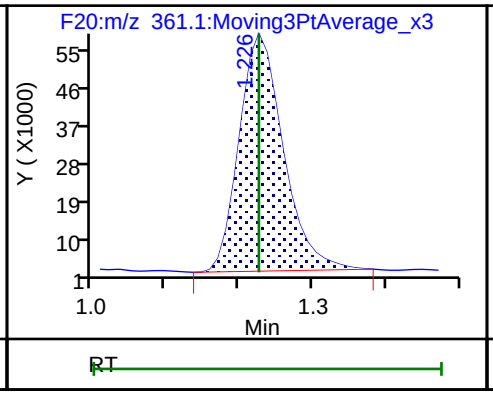
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05024.d
Injection Date: 05-Apr-2022 12:15:37 Instrument ID: LC_LCMS7
Lims ID: LCSD 280-570516/3-A
Client ID:
Operator ID: acm ALS Bottle#: 18 Worklist Smp#: 21
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

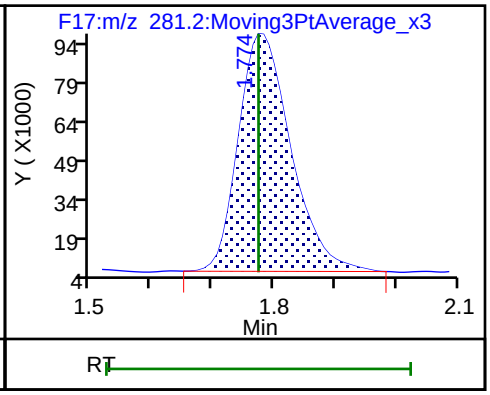
2 HMX



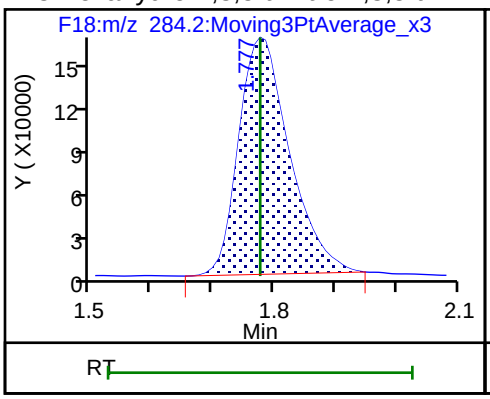
* 1 HMX-13C4



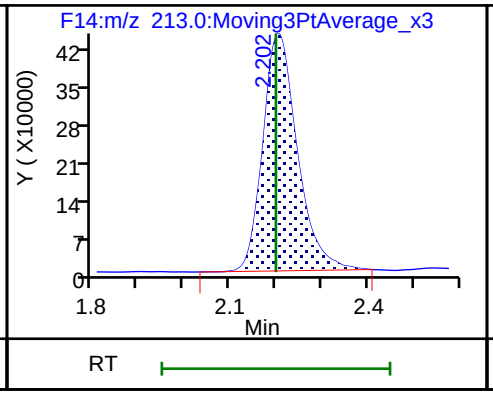
4 RDX



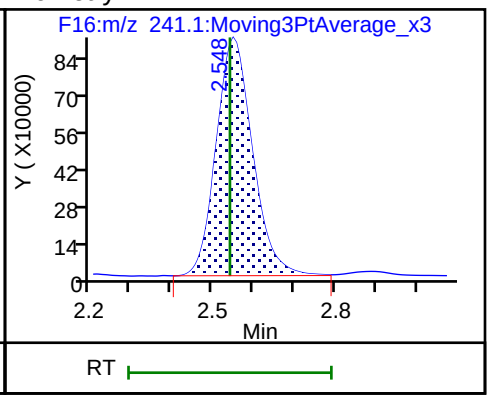
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



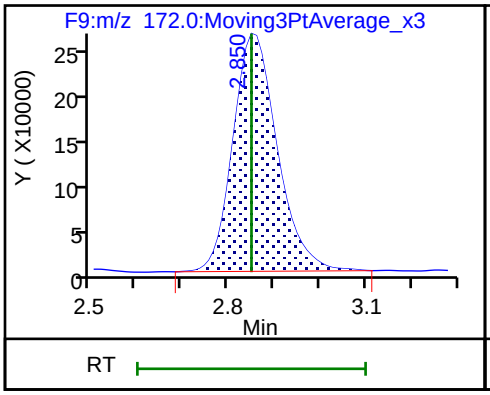
5 1,3,5-Trinitrobenzene



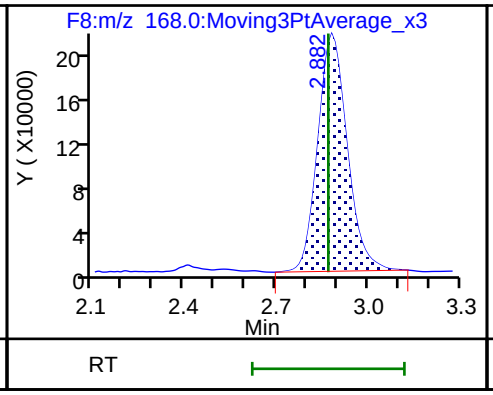
6 Tetryl



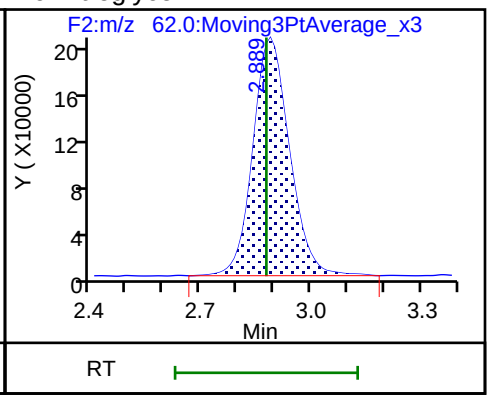
* 7 1,3-Dinitrobenzene-d4



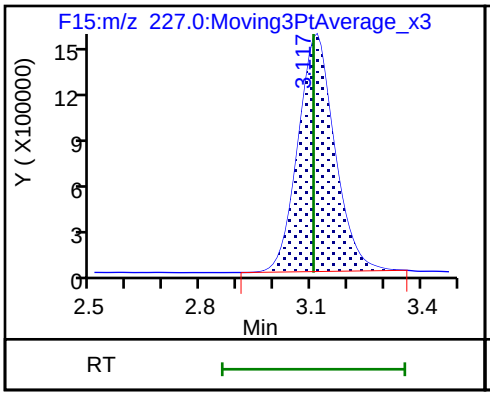
8 1,3-Dinitrobenzene



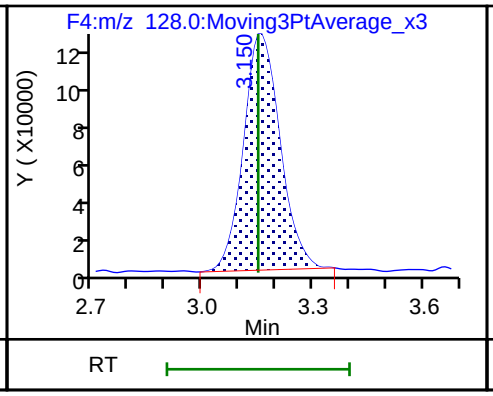
9 Nitroglycerin



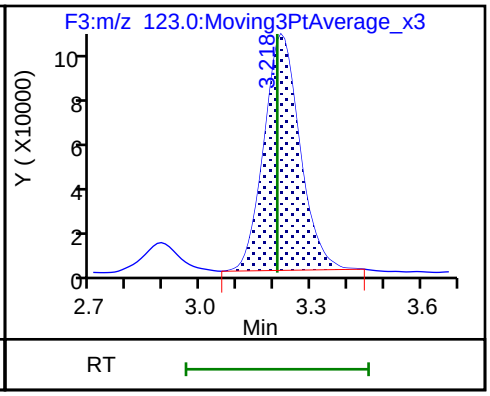
10 2,4,6-Trinitrotoluene



$ 11 Nitrobenzene-d5



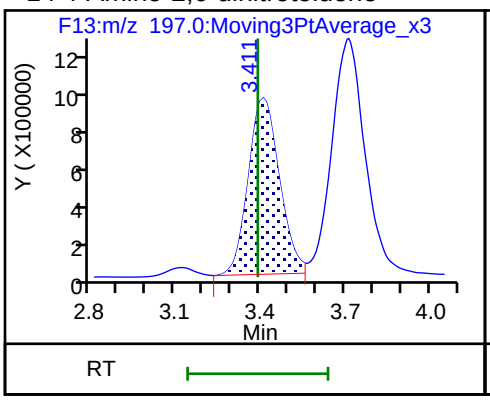
12 Nitrobenzene



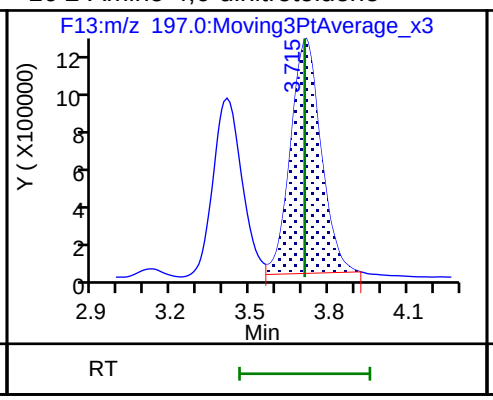
Report Date: 06-Apr-2022 07:09:47 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05024.d

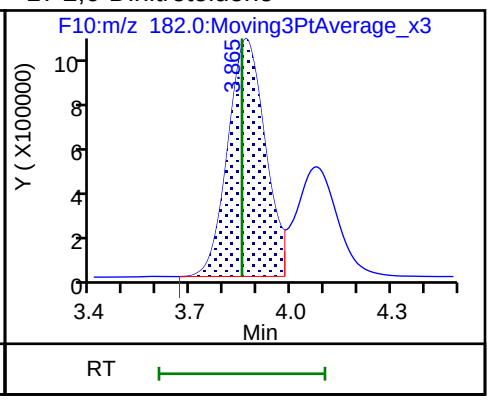
14 4-Amino-2,6-dinitrotoluene



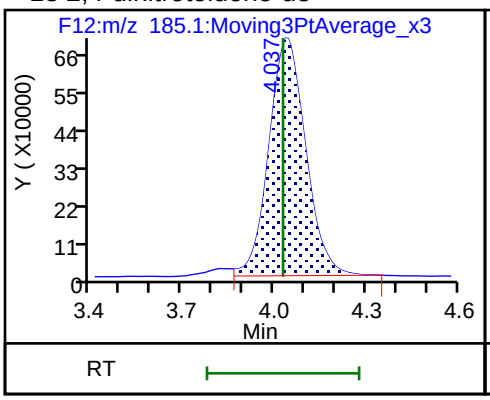
16 2-Amino-4,6-dinitrotoluene



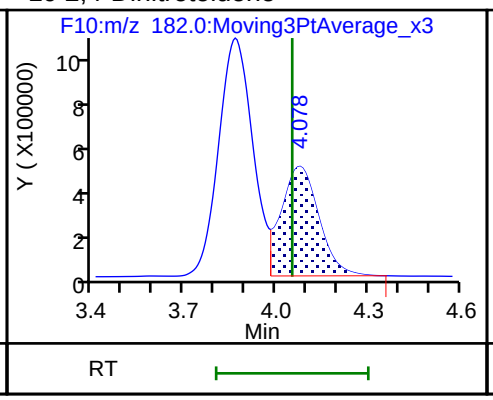
17 2,6-Dinitrotoluene



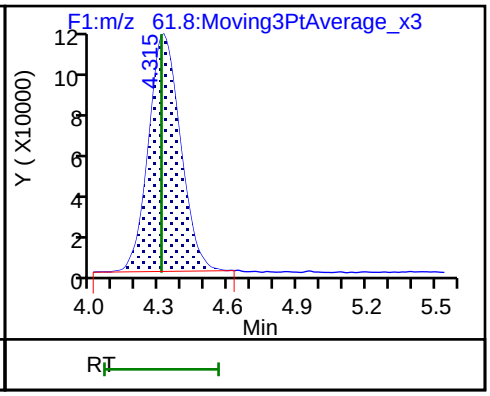
* 18 2,4-dinitrotoluene-d3



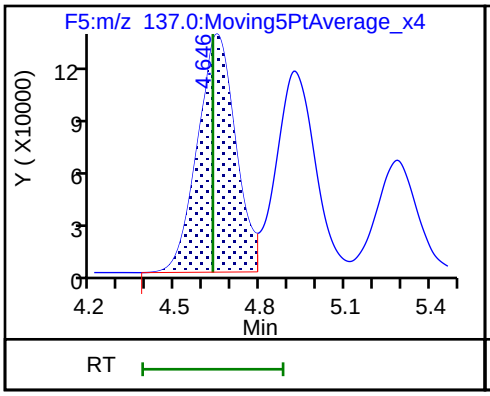
19 2,4-Dinitrotoluene



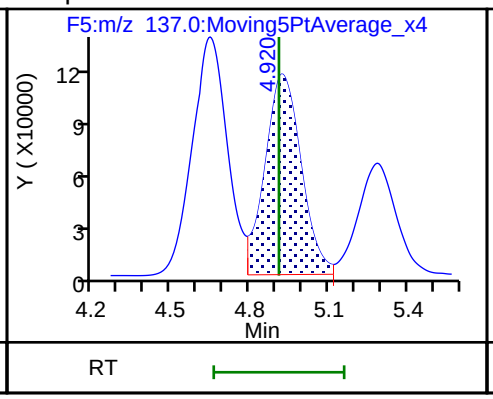
20 PETN



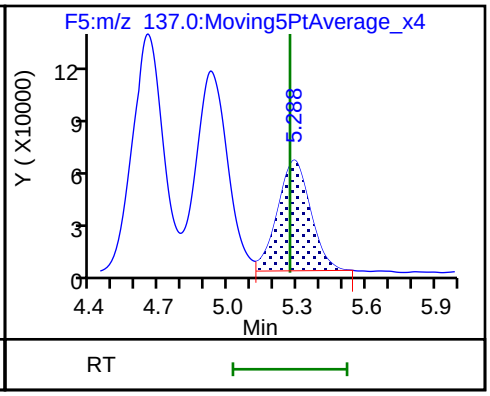
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



Report Date: 06-Apr-2022 07:09:47 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05024.d
Lims ID: LCSD 280-570516/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 05-Apr-2022 12:15:37 ALS Bottle#: 18 Worklist Smp#: 21
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-570516/3-A
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:08:09 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 12:49:10

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	98.4	98.07

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCSD 280-570543/3-A
Matrix: Solid | Lab File ID: ex722D05056.d
Analysis Method: 8321A | Date Collected:
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:54
Sample wt/vol: 10(g) | Date Analyzed: 04/05/2022 15:40
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 570786 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.365		0.10	0.050	0.045
99-65-0	1,3-Dinitrobenzene	0.345		0.10	0.050	0.045
118-96-7	2,4,6-Trinitrotoluene	0.387		0.10	0.050	0.037
121-14-2	2,4-Dinitrotoluene	0.344		0.10	0.050	0.047
606-20-2	2,6-Dinitrotoluene	0.306	Q	0.10	0.050	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.301		0.10	0.050	0.050
19406-51-0	4-Amino-2,6-dinitrotoluene	0.285	Q	0.10	0.050	0.031
2691-41-0	HMX	0.347		0.10	0.050	0.046
99-08-1	m-Nitrotoluene	0.360		0.10	0.050	0.043
98-95-3	Nitrobenzene	0.362		0.11	0.050	0.038
55-63-0	Nitroglycerin	0.380		0.10	0.050	0.029
88-72-2	o-Nitrotoluene	0.362		0.10	0.050	0.043
78-11-5	PETN	0.448		0.10	0.050	0.034
99-99-0	p-Nitrotoluene	0.368		0.10	0.050	0.049
121-82-4	RDX	0.360		0.12	0.050	0.043
479-45-8	Tetryl	0.549	Q	0.10	0.050	0.039

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	94		68-140

Report Date: 06-Apr-2022 07:10:10 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05056.d
Lims ID: LCSD 280-570543/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 05-Apr-2022 15:40:24 ALS Bottle#: 47 Worklist Smp#: 53
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-570543/3-A
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:10:08 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 06-Apr-2022 06:54:58
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.223	1.223	0.0	0.998	409759	86.7	109	
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		268276	125.0	146	
4 RDX								
281.2	1.782	1.791	0.008	0.998	564974	90.1	126	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.785	1.777	0.008		1011016	125.0	356	
5 1,3,5-Trinitrobenzene								
213.0	2.206	2.216	0.007	0.774	2353280	91.3	192	
6 Tetryl								
241.1	2.548	2.560	0.008	0.894	5755893	137.3	193	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.850	2.850	0.0		1906552	129.4	224	
8 1,3-Dinitrobenzene								
168.0	2.882	2.893	0.011	1.011	1385676	86.3	166	
9 Nitroglycerin								
62.0	2.889	2.900	0.011	1.014	1467756	94.9	571	
10 2,4,6-Trinitrotoluene								
227.0	3.117	3.134	0.010	0.770	11275039	96.7	457	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	880974	94.7	155	
12 Nitrobenzene								
123.0	3.218	3.236	0.010	0.795	714431	90.5	38.6	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.411	3.420	0.020	0.843	6885368	71.2	55.8	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.715	3.740	0.007	0.918	10030075	75.2	75.4	

Report Date: 06-Apr-2022 07:10:10 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05056.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
17 2,6-Dinitrotoluene								
182.0	3.865	3.885	0.013	0.955	9019363	76.5	383	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		7331486	125.0	134	
19 2,4-Dinitrotoluene								
182.0	4.078	4.087	0.026	1.008	5325429	86.1	222	
20 PETN								
61.8	4.315	4.342	0.010	1.067	1521145	112.0	305	
22 o-Nitrotoluene								
137.0	4.646	4.671	0.015	1.148	1647950	90.6	589	
23 p-Nitrotoluene								
137.0	4.925	4.952	0.015	1.217	1455431	92.1	496	
24 m-Nitrotoluene								
137.0	5.288	5.314	0.020	1.307	846764	89.9	269	

QC Flag Legend

Processing Flags

Reagents:

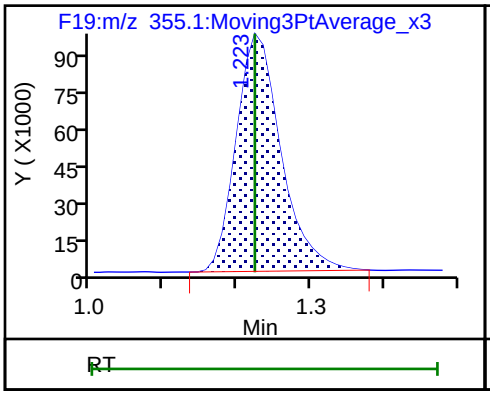
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:10:10 Chrom Revision: 2.3 18-Mar-2022 09:07:22

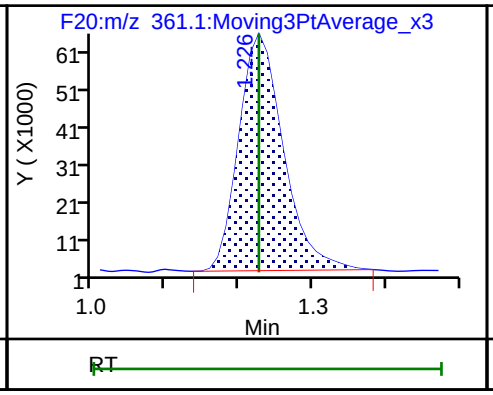
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05056.d
Injection Date: 05-Apr-2022 15:40:24 Instrument ID: LC_LCMS7
Lims ID: LCSD 280-570543/3-A
Client ID:
Operator ID: acm ALS Bottle#: 47 Worklist Smp#: 53
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

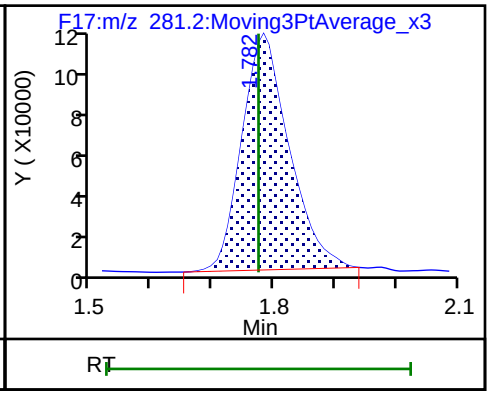
2 HMX



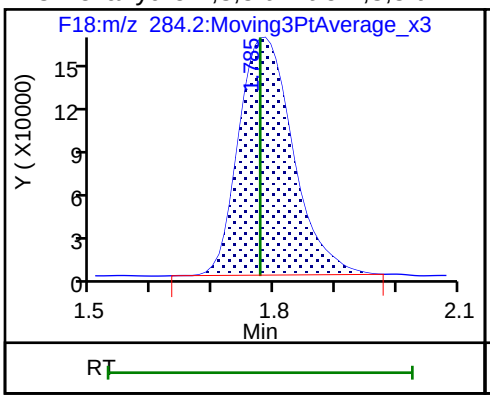
* 1 HMX-13C4



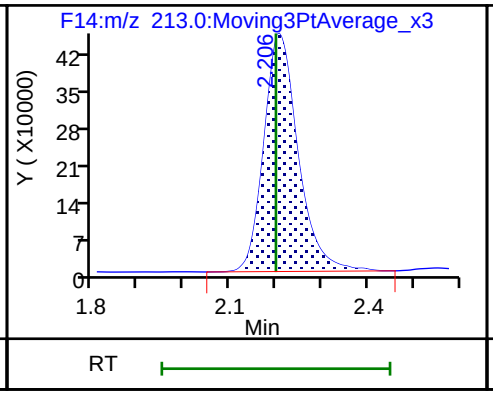
4 RDX



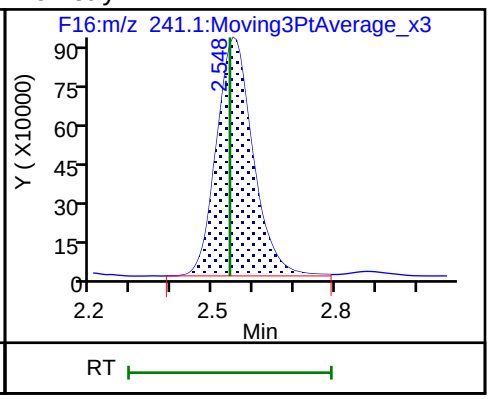
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



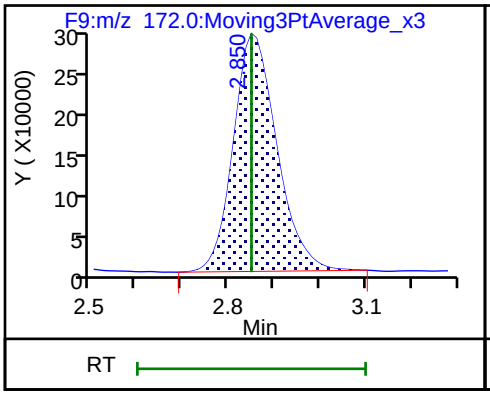
5 1,3,5-Trinitrobenzene



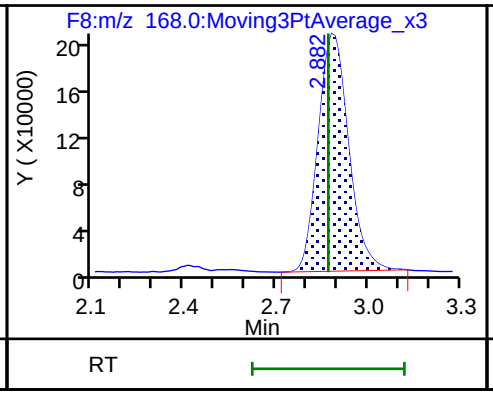
6 Tetryl



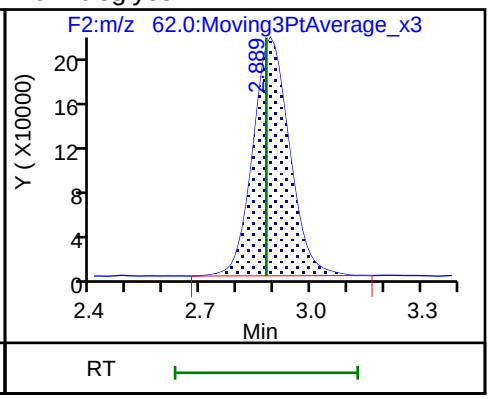
* 7 1,3-Dinitrobenzene-d4



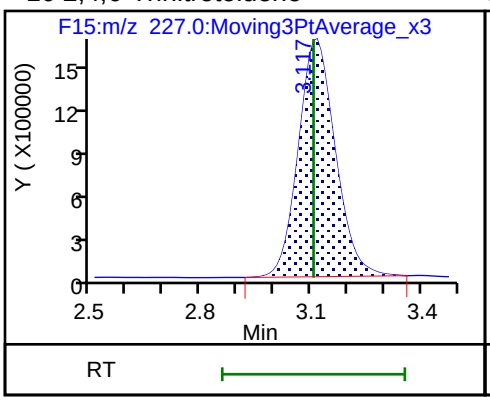
8 1,3-Dinitrobenzene



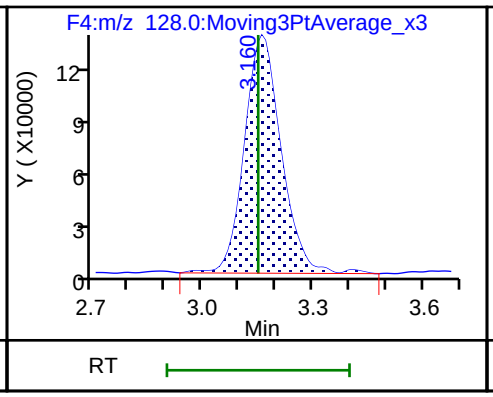
9 Nitroglycerin



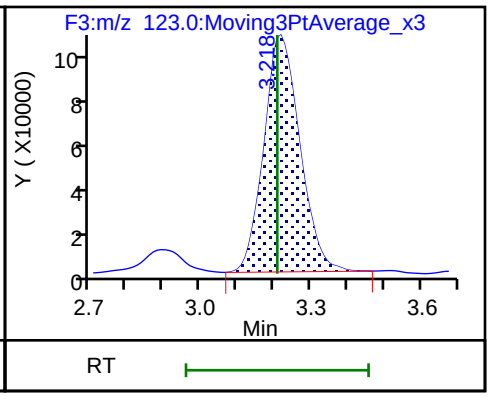
10 2,4,6-Trinitrotoluene



$ 11 Nitrobenzene-d5



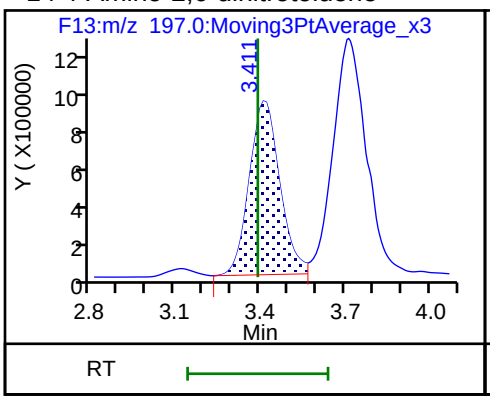
12 Nitrobenzene



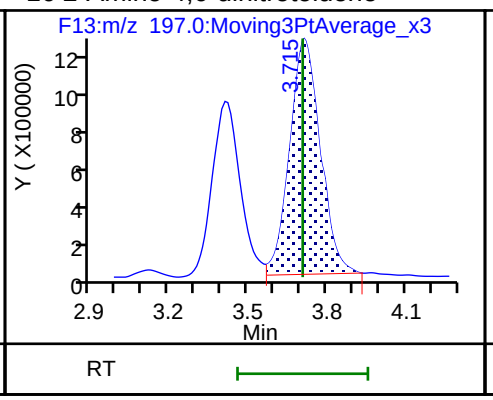
Report Date: 06-Apr-2022 07:10:10 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05056.d

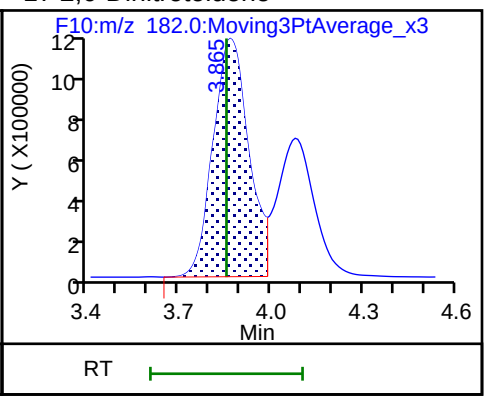
14 4-Amino-2,6-dinitrotoluene



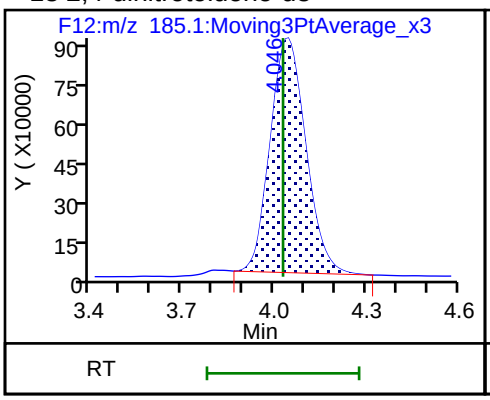
16 2-Amino-4,6-dinitrotoluene



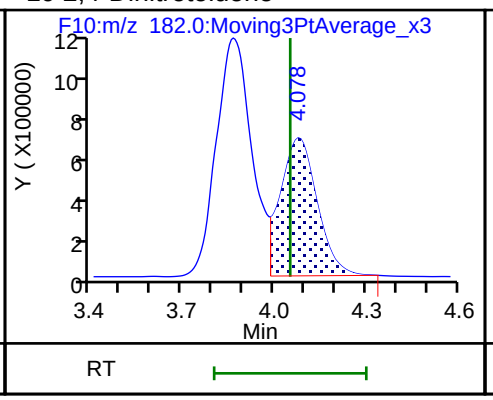
17 2,6-Dinitrotoluene



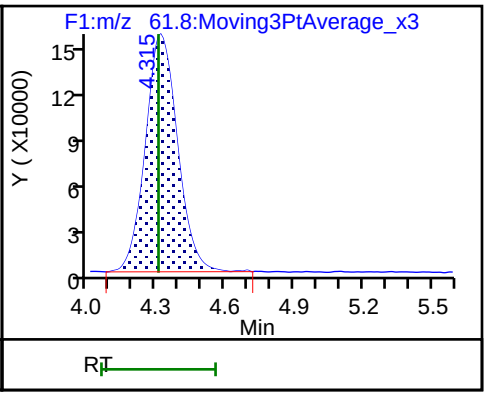
* 18 2,4-dinitrotoluene-d3



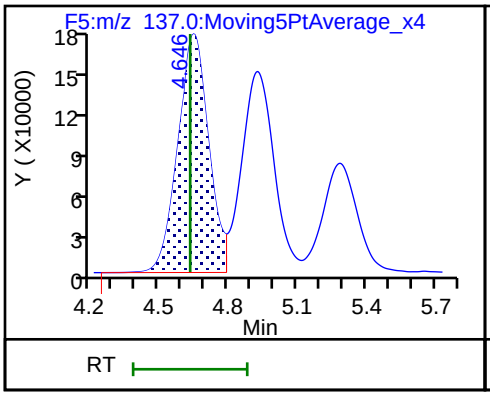
19 2,4-Dinitrotoluene



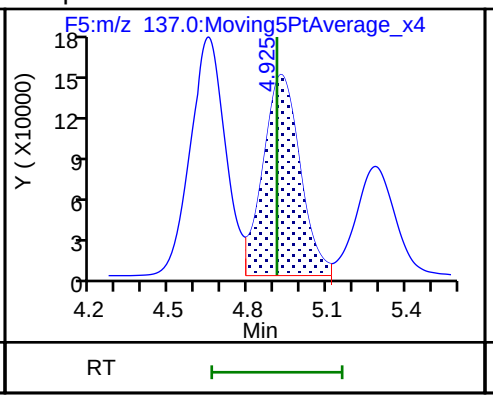
20 PETN



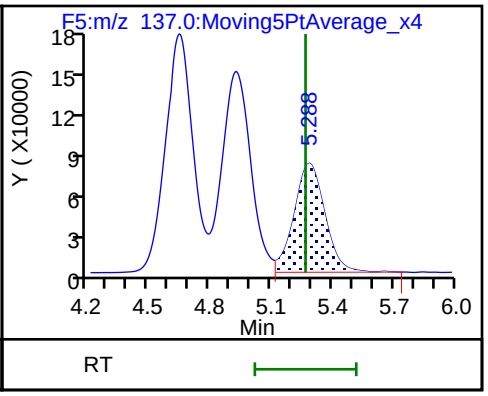
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05056.d				
Lims ID:	LCSD 280-570543/3-A				
Client ID:					
Sample Type:	LCSD				
Inject. Date:	05-Apr-2022 15:40:24	ALS Bottle#:	47	Worklist Smp#:	53
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCSD 280-570543/3-A				
Misc. Info.:	ex722D05				
Operator ID:	acm	Instrument ID:	LC_LCMS7		
Method:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m				
Limit Group:	LC - 8321A Expl				
Last Update:	06-Apr-2022 07:10:08	Calib Date:	05-Apr-2022 10:58:50		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1632				
First Level Reviewer: meyera		Date:	06-Apr-2022 06:54:58		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	94.7	94.44

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCSD 280-570718/3-A
Matrix: Solid | Lab File ID: ex722D07014.d
Analysis Method: 8321A | Date Collected:
Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57
Sample wt/vol: 10(g) | Date Analyzed: 04/07/2022 11:51
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571108 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.398		0.10	0.050	0.045
99-65-0	1,3-Dinitrobenzene	0.391		0.10	0.050	0.045
118-96-7	2,4,6-Trinitrotoluene	0.421		0.10	0.050	0.037
121-14-2	2,4-Dinitrotoluene	0.393		0.10	0.050	0.047
606-20-2	2,6-Dinitrotoluene	0.411		0.10	0.050	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.405		0.10	0.050	0.050
19406-51-0	4-Amino-2,6-dinitrotoluene	0.404		0.10	0.050	0.031
2691-41-0	HMX	0.400		0.10	0.050	0.046
99-08-1	m-Nitrotoluene	0.395		0.10	0.050	0.043
98-95-3	Nitrobenzene	0.390		0.11	0.050	0.038
55-63-0	Nitroglycerin	0.404		0.10	0.050	0.029
88-72-2	o-Nitrotoluene	0.403		0.10	0.050	0.043
78-11-5	PETN	0.451		0.10	0.050	0.034
99-99-0	p-Nitrotoluene	0.414		0.10	0.050	0.049
121-82-4	RDX	0.438		0.12	0.050	0.043
479-45-8	Tetryl	0.595	Q	0.10	0.050	0.039

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	101		68-140

Report Date: 08-Apr-2022 07:32:23 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07014.d
Lims ID: LCSD 280-570718/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 07-Apr-2022 11:51:48 ALS Bottle#: 12 Worklist Smp#: 14
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-570718/3-A
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:21 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 12:35:00
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	170287	100.1	48.6	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		107169	125.0	126	
4 RDX								
281.2	1.841	1.841	0.0	0.998	249985	109.6	77.6	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		412142	125.0	269	
5 1,3,5-Trinitrobenzene								
213.0	2.317	2.317	0.0	0.765	1619126	99.6	120	
6 Tetryl								
241.1	2.705	2.712	-0.007	0.893	3366326	148.8	201	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.030	3.030	0.0		1380244	129.4	342	
8 1,3-Dinitrobenzene								
168.0	3.051	3.051	0.0	1.007	1126663	97.7	145	
9 Nitroglycerin								
62.0	3.080	3.080	0.0	1.017	1032974	100.9	392	
10 2,4,6-Trinitrotoluene								
227.0	3.321	3.321	0.0	0.765	7611814	105.2	186	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.774	679747	101.4	97.1	
12 Nitrobenzene								
123.0	3.421	3.431	-0.010	0.788	564086	97.5	45.7	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.652	3.645	0.007	0.841	5193762	101.0	31.8	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.970	3.976	-0.006	0.914	6732232	101.2	38.5	

Report Date: 08-Apr-2022 07:32:23 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07014.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
17 2,6-Dinitrotoluene								
182.0	4.138	4.150	-0.012	0.953	7012838	102.6	414	
* 18 2,4-dinitrotoluene-d3								
185.1	4.341	4.341	0.0		4148312	125.0	110	
19 2,4-Dinitrotoluene								
182.0	4.373	4.373	0.0	1.007	3415815	98.1	186	
20 PETN								
61.8	4.716	4.716	0.0	1.086	609850	112.7	133	
22 o-Nitrotoluene								
137.0	4.992	5.002	-0.010	1.150	1054878	100.9	254	
23 p-Nitrotoluene								
137.0	5.306	5.311	-0.005	1.222	935903	103.4	216	
24 m-Nitrotoluene								
137.0	5.704	5.704	0.0	1.314	539000	98.9	114	

QC Flag Legend

Processing Flags

Reagents:

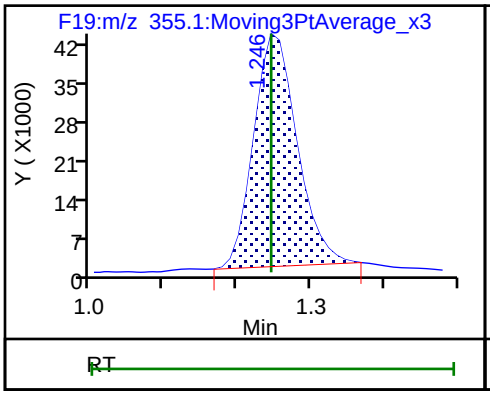
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 08-Apr-2022 07:32:23 Chrom Revision: 2.3 18-Mar-2022 09:07:22

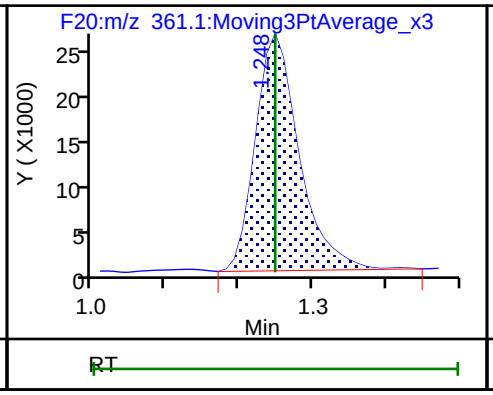
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07014.d
Injection Date: 07-Apr-2022 11:51:48 Instrument ID: LC_LCMS7
Lims ID: LCSD 280-570718/3-A
Client ID:
Operator ID: acm ALS Bottle#: 12 Worklist Smp#: 14
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

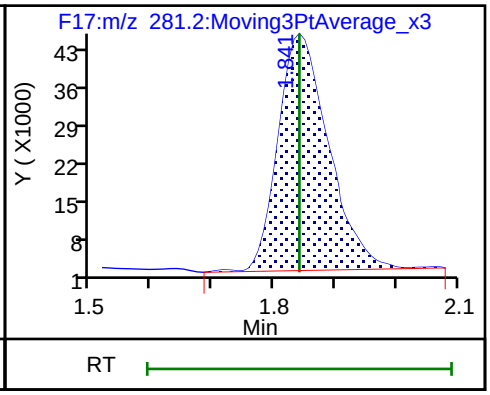
2 HMX



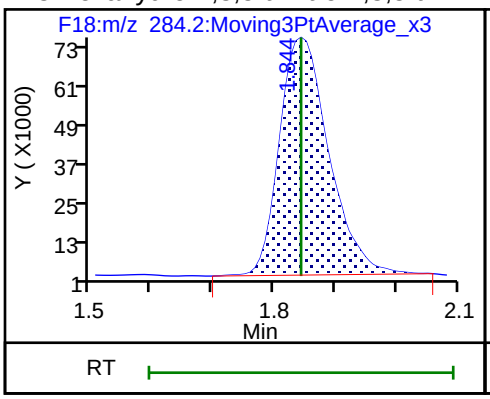
* 1 HMX-13C4



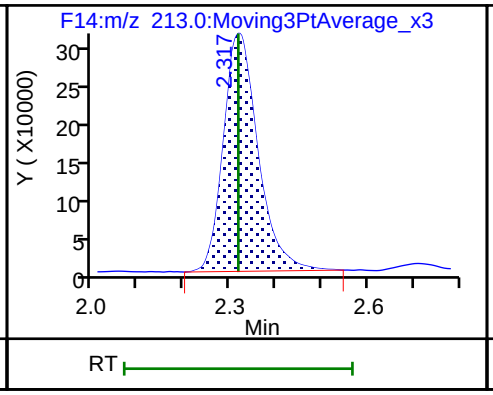
4 RDX



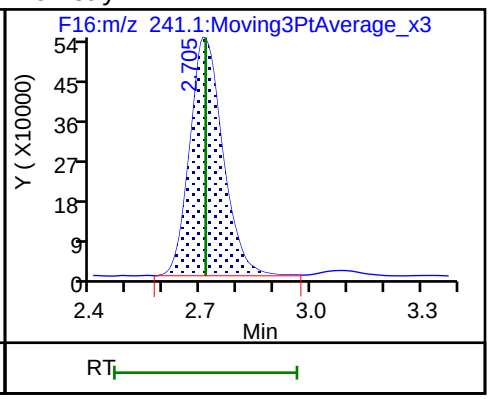
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



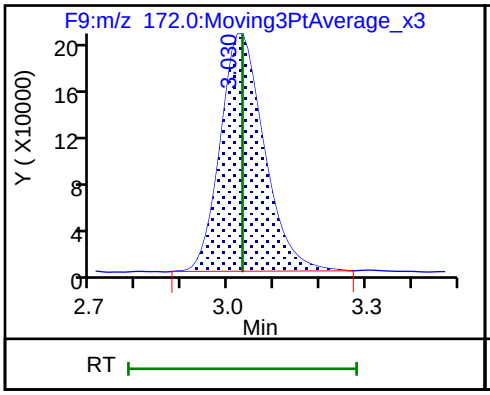
5 1,3,5-Trinitrobenzene



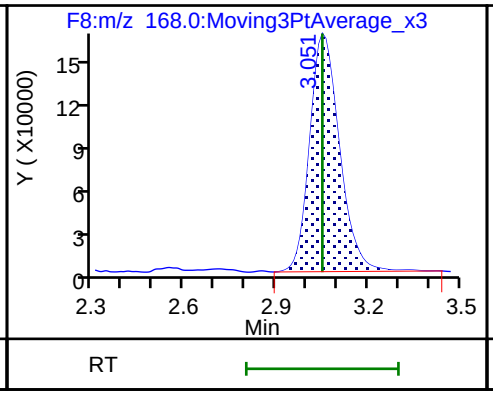
6 Tetryl



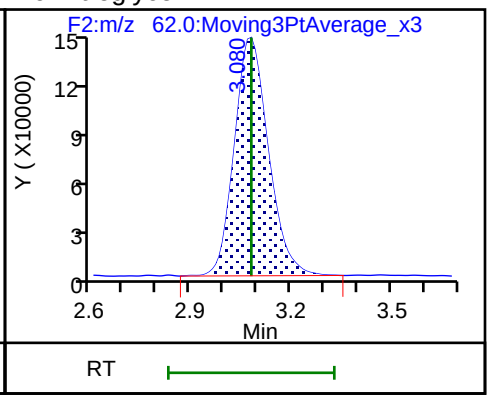
* 7 1,3-Dinitrobenzene-d4



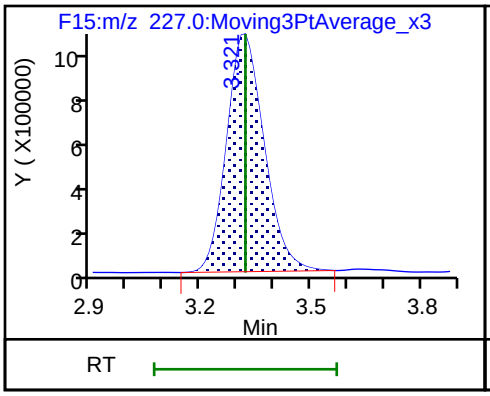
8 1,3-Dinitrobenzene



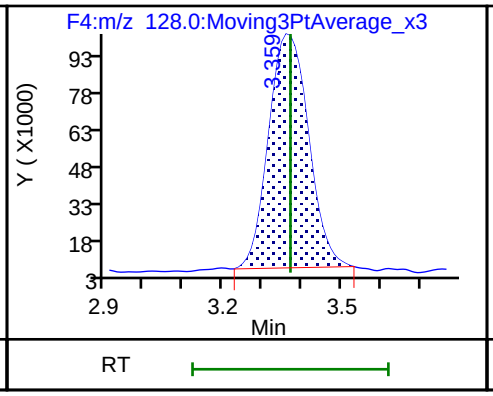
9 Nitroglycerin



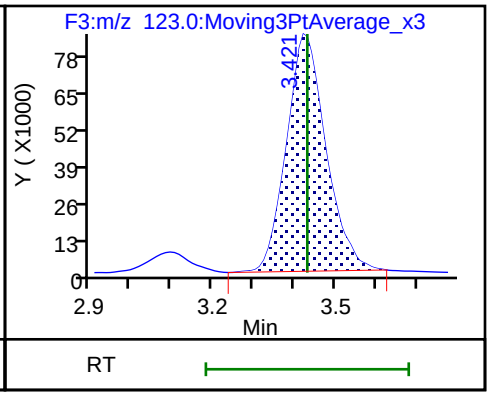
10 2,4,6-Trinitrotoluene



$ 11 Nitrobenzene-d5



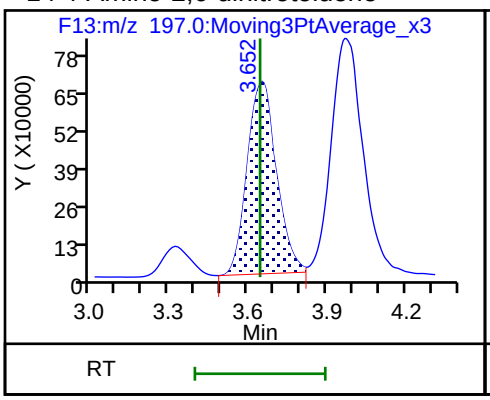
12 Nitrobenzene



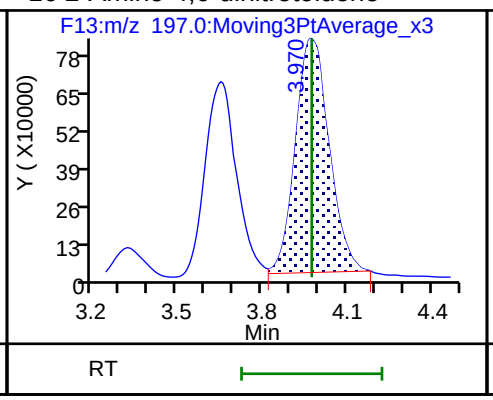
Report Date: 08-Apr-2022 07:32:23 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07014.d

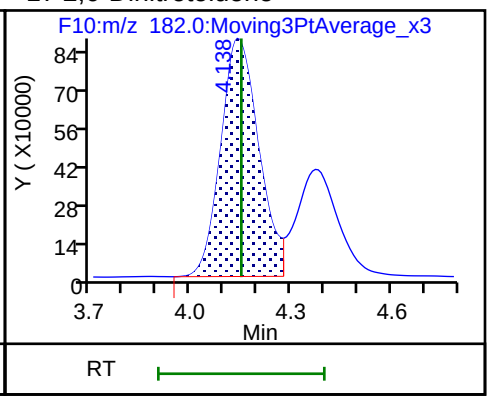
14 4-Amino-2,6-dinitrotoluene



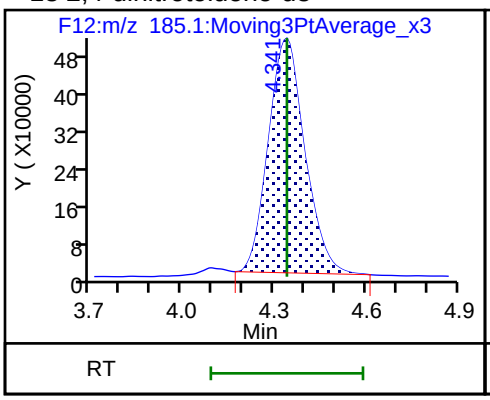
16 2-Amino-4,6-dinitrotoluene



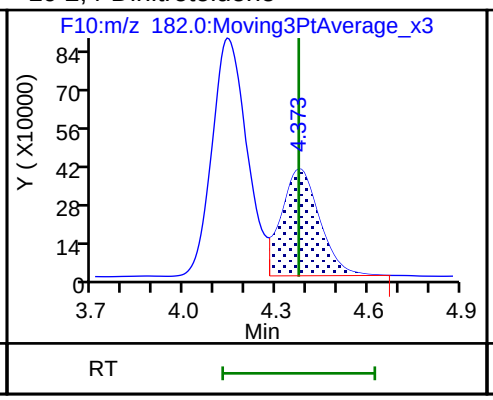
17 2,6-Dinitrotoluene



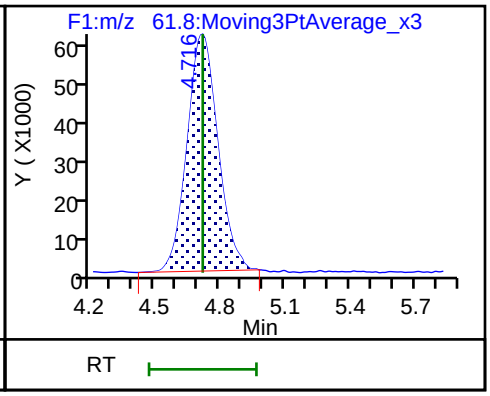
* 18 2,4-dinitrotoluene-d3



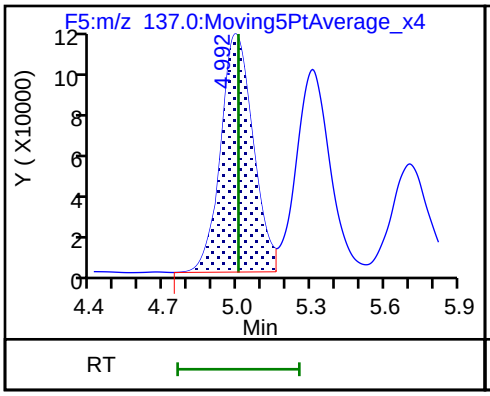
19 2,4-Dinitrotoluene



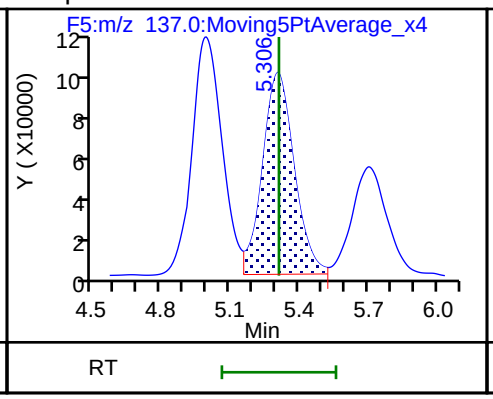
20 PETN



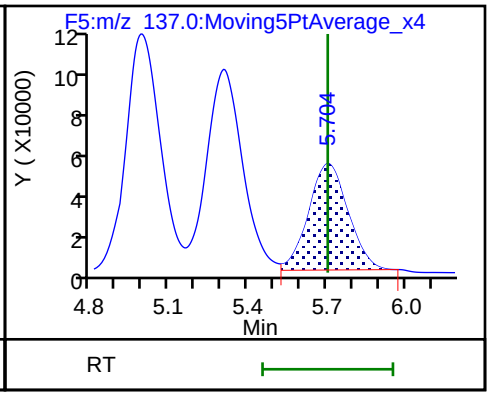
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



Report Date: 08-Apr-2022 07:32:23 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07014.d
Lims ID: LCSD 280-570718/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 07-Apr-2022 11:51:48 ALS Bottle#: 12 Worklist Smp#: 14
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-570718/3-A
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:21 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 12:35:00

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	101.4	101.04

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCSSRM 280-570095/2-B
Matrix: Solid | Lab File ID: ex722D05026.d
Analysis Method: 8321A | Date Collected:
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:56
Sample wt/vol: 10.66(g) | Date Analyzed: 04/05/2022 12:28
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 570785 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.569		0.094	0.047	0.042
99-65-0	1,3-Dinitrobenzene	0.564		0.094	0.047	0.042
118-96-7	2,4,6-Trinitrotoluene	0.429		0.094	0.047	0.035
121-14-2	2,4-Dinitrotoluene	0.501		0.094	0.047	0.044
606-20-2	2,6-Dinitrotoluene	0.543		0.094	0.047	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.479		0.094	0.047	0.047
19406-51-0	4-Amino-2,6-dinitrotoluene	0.423		0.094	0.047	0.029
2691-41-0	HMX	0.521		0.094	0.047	0.043
99-08-1	m-Nitrotoluene	0.528		0.094	0.047	0.041
98-95-3	Nitrobenzene	0.534		0.10	0.047	0.036
55-63-0	Nitroglycerin	0.556		0.094	0.047	0.027
88-72-2	o-Nitrotoluene	0.523		0.094	0.047	0.040
78-11-5	PETN	0.505		0.094	0.047	0.032
99-99-0	p-Nitrotoluene	0.512		0.094	0.047	0.046
121-82-4	RDX	0.463		0.11	0.047	0.040
479-45-8	Tetryl	0.357		0.094	0.047	0.036

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	97		68-140

Report Date: 06-Apr-2022 07:09:49 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05026.d
Lims ID: LCSSRM 280-570095/2-B
Client ID:
Sample Type: LCSSRM
Inject. Date: 05-Apr-2022 12:28:25 ALS Bottle#: 20 Worklist Smp#: 23
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCSSRM 280-570095/2-B
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:08:09 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.223	1.223	0.0	0.998	538835	138.8	129	
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		220935	125.0	179	
4 RDX								
281.2	1.782	1.791	0.008	1.003	739842	123.3	145	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		972383	125.0	221	
5 1,3,5-Trinitrobenzene								
213.0	2.206	2.216	0.007	0.771	3638386	151.7	221	
6 Tetryl								
241.1	2.548	2.560	0.008	0.891	3706306	95.0	84.7	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1776045	129.4	230	
8 1,3-Dinitrobenzene								
168.0	2.882	2.893	0.011	1.007	2250548	150.4	393	
9 Nitroglycerin								
62.0	2.889	2.900	0.011	1.010	2132991	148.2	877	
28 3,5-Dinitroaniline								
183.0	3.039	3.051	0.012	1.062	8547225	124.0	47.1	
10 2,4,6-Trinitrotoluene								
227.0	3.117	3.134	0.010	0.772	12405547	114.3	533	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.783	839363	96.9	97.3	
12 Nitrobenzene								
123.0	3.218	3.236	0.010	0.797	1051040	142.3	41.4	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.411	3.420	0.020	0.845	8793328	112.8	67.2	

Report Date: 06-Apr-2022 07:09:49 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05026.d

Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
16 2-Amino-4,6-dinitrotoluene								
197.0	3.715	3.740	0.007	0.920	13730446	127.7	97.2	
17 2,6-Dinitrotoluene								
182.0	3.865	3.885	0.013	0.957	13724293	144.7	827	
* 18 2,4-dinitrotoluene-d3								
185.1	4.037	4.028	0.009		5914082	125.0	124	
19 2,4-Dinitrotoluene								
182.0	4.078	4.087	0.026	1.010	6649366	133.6	364	
20 PETN								
61.8	4.325	4.342	0.020	1.071	1475691	134.5	515	
22 o-Nitrotoluene								
137.0	4.646	4.671	0.015	1.151	2046599	139.4	593	
23 p-Nitrotoluene								
137.0	4.930	4.952	0.020	1.221	1736942	136.4	474	
24 m-Nitrotoluene								
137.0	5.288	5.314	0.020	1.310	1069326	140.7	276	

Reagents:

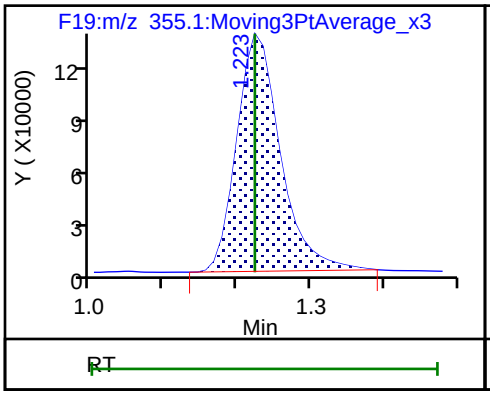
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:09:49 Chrom Revision: 2.3 18-Mar-2022 09:07:22

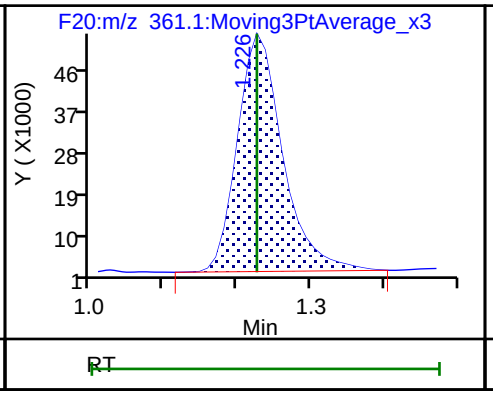
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05026.d
Injection Date: 05-Apr-2022 12:28:25 Instrument ID: LC_LCMS7
Lims ID: LCSSRM 280-570095/2-B
Client ID:
Operator ID: acm ALS Bottle#: 20 Worklist Smp#: 23
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

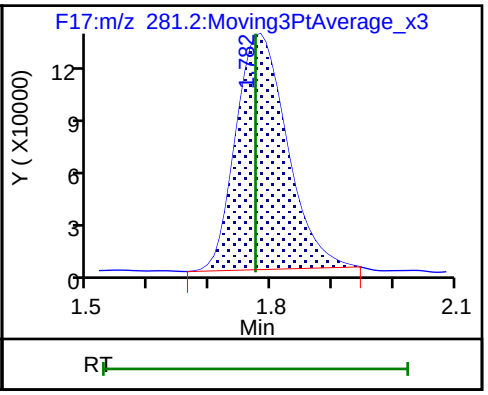
2 HMX



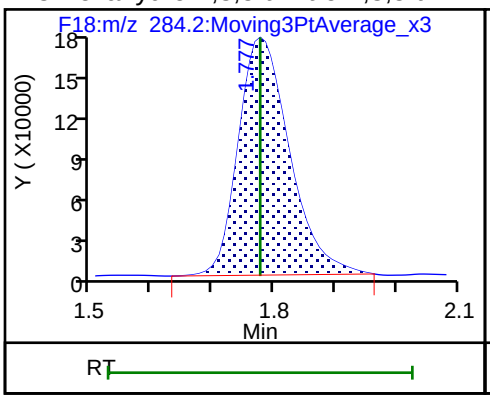
* 1 HMX-13C4



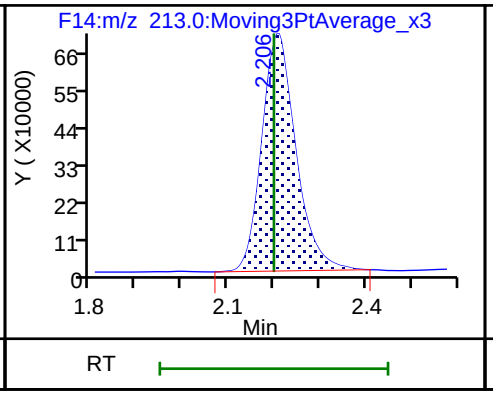
4 RDX



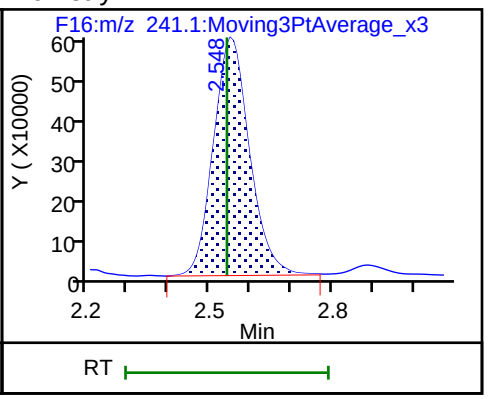
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



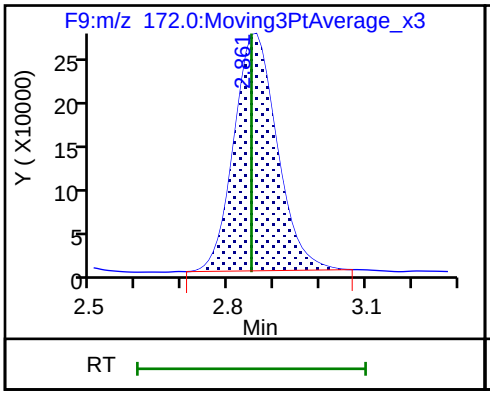
5 1,3,5-Trinitrobenzene



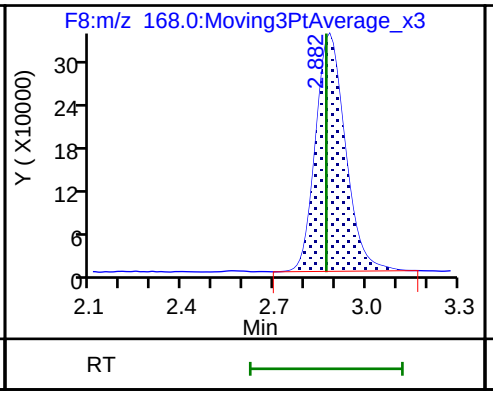
6 Tetryl



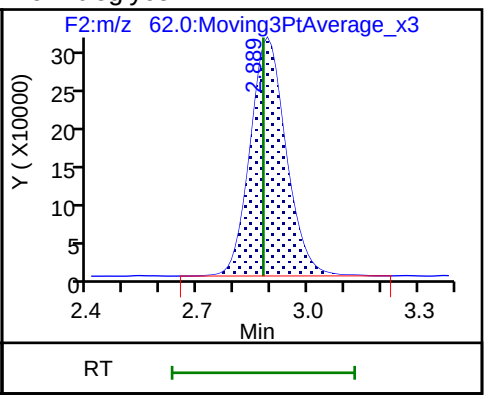
* 7 1,3-Dinitrobenzene-d4



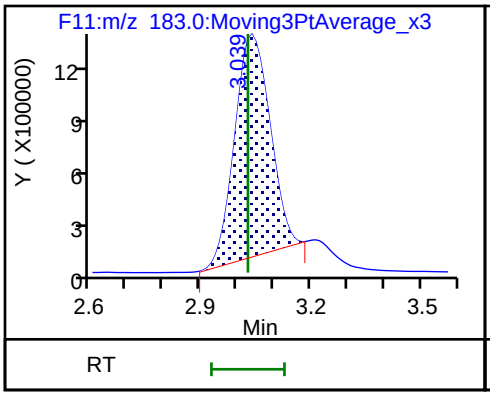
8 1,3-Dinitrobenzene



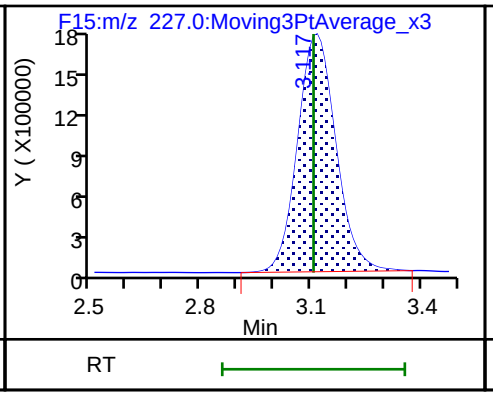
9 Nitroglycerin



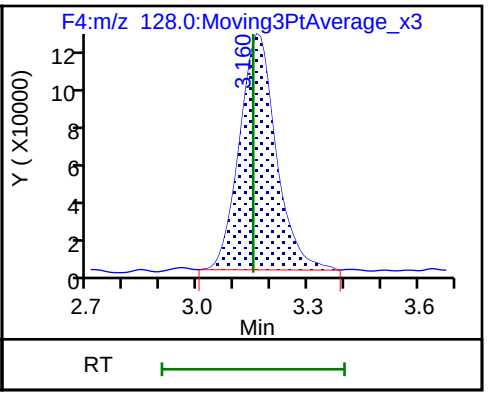
28 3,5-Dinitroaniline



10 2,4,6-Trinitrotoluene

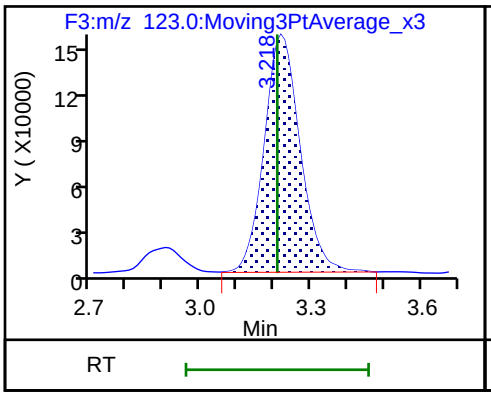


$ 11 Nitrobenzene-d5

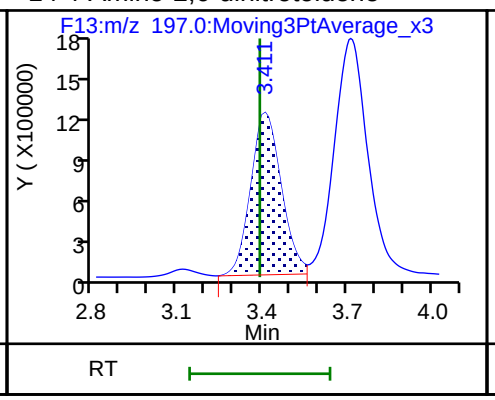


Report Date: 06-Apr-2022 07:09:49 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05026.d

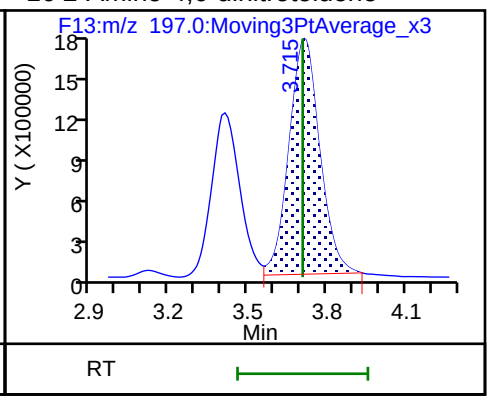
12 Nitrobenzene



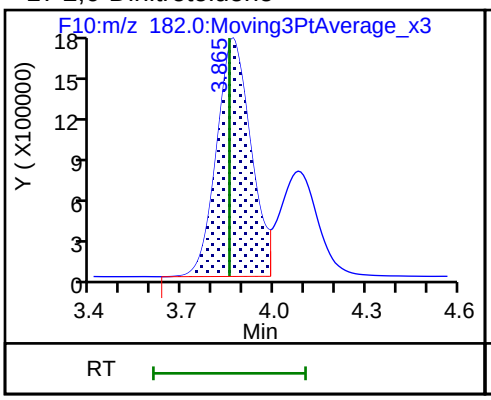
14 4-Amino-2,6-dinitrotoluene



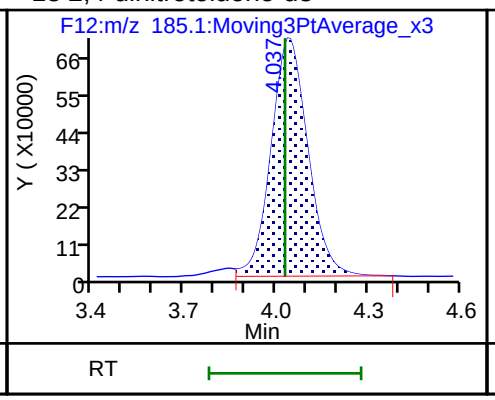
16 2-Amino-4,6-dinitrotoluene



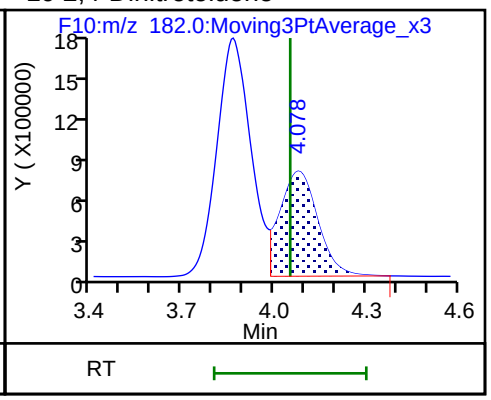
17 2,6-Dinitrotoluene



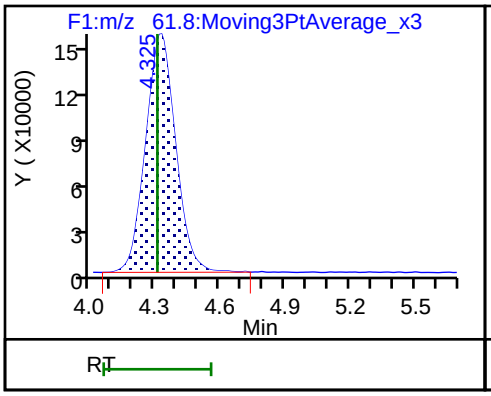
* 18 2,4-dinitrotoluene-d3



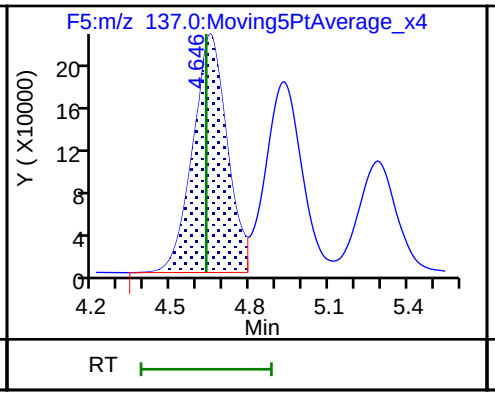
19 2,4-Dinitrotoluene



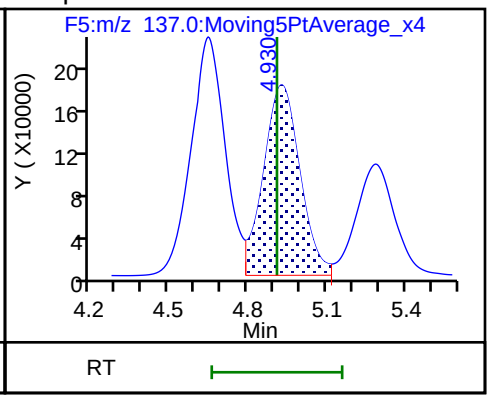
20 PETN



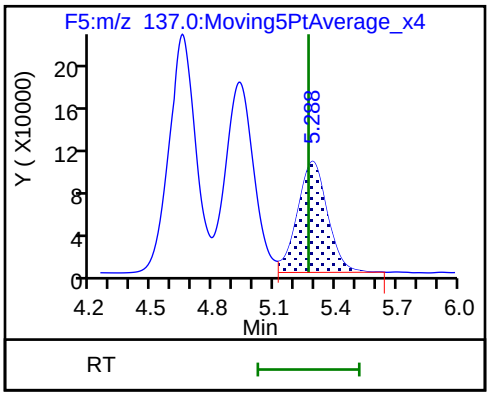
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



Report Date: 06-Apr-2022 07:09:49 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05026.d				
Lims ID:	LCSSRM 280-570095/2-B				
Client ID:					
Sample Type:	LCSSRM				
Inject. Date:	05-Apr-2022 12:28:25	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCSSRM 280-570095/2-B				
Misc. Info.:	ex722D05				
Operator ID:	acm	Instrument ID:	LC_LCMS7		
Method:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m				
Limit Group:	LC - 8321A Expl				
Last Update:	06-Apr-2022 07:08:09	Calib Date:	05-Apr-2022 10:58:50		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1632				

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	96.9	96.61

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSSRM 280-570100/2-B

Matrix: Solid | Lab File ID: ex722D05058.d

Analysis Method: 8321A | Date Collected:

Extraction Method: 8330B | Date Extracted: 04/01/2022 16:54

Sample wt/vol: 10.75(g) | Date Analyzed: 04/05/2022 15:53

Con. Extract Vol.: 40(mL) | Dilution Factor: 1

Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:

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

Analysis Batch No.: 570786 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.547		0.093	0.047	0.042
99-65-0	1,3-Dinitrobenzene	0.529		0.093	0.047	0.042
118-96-7	2,4,6-Trinitrotoluene	0.428		0.093	0.047	0.034
121-14-2	2,4-Dinitrotoluene	0.494		0.093	0.047	0.043
606-20-2	2,6-Dinitrotoluene	0.541		0.093	0.047	0.037
35572-78-2	2-Amino-4,6-dinitrotoluene	0.474		0.093	0.047	0.046
19406-51-0	4-Amino-2,6-dinitrotoluene	0.413		0.093	0.047	0.029
2691-41-0	HMX	0.545		0.093	0.047	0.043
99-08-1	m-Nitrotoluene	0.542		0.093	0.047	0.040
98-95-3	Nitrobenzene	0.521		0.10	0.047	0.035
55-63-0	Nitroglycerin	0.540		0.093	0.047	0.027
88-72-2	o-Nitrotoluene	0.525		0.093	0.047	0.040
78-11-5	PETN	0.490		0.093	0.047	0.032
99-99-0	p-Nitrotoluene	0.522		0.093	0.047	0.046
121-82-4	RDX	0.473		0.11	0.047	0.040
479-45-8	Tetryl	0.333		0.093	0.047	0.036

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	93		68-140

Report Date: 06-Apr-2022 07:10:12 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05058.d
Lims ID: LCSSRM 280-570100/2-B
Client ID:
Sample Type: LCSSRM
Inject. Date: 05-Apr-2022 15:53:12 ALS Bottle#: 1 Worklist Smp#: 55
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCSSRM 280-570100/2-B
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:10:08 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 06-Apr-2022 06:55:30
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.223	1.223	0.0	0.998	562845	146.4	166	
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		218925	125.0	113	
4 RDX								
281.2	1.782	1.791	0.008	1.003	788117	127.2	169	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		1005030	125.0	209	
5 1,3,5-Trinitrobenzene								
213.0	2.202	2.216	0.003	0.773	3639441	147.0	234	
6 Tetryl								
241.1	2.548	2.560	0.008	0.894	3607519	89.6	76.1	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.850	2.850	0.0		1833620	129.4	321	
8 1,3-Dinitrobenzene								
168.0	2.882	2.893	0.011	1.011	2197885	142.3	429	
9 Nitroglycerin								
62.0	2.889	2.900	0.011	1.014	2155384	145.1	1166	
28 3,5-Dinitroaniline								
183.0	3.039	3.051	0.012	1.066	8240957	120.5	46.6	
10 2,4,6-Trinitrotoluene								
227.0	3.117	3.134	0.010	0.770	12905030	115.1	501	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	835977	93.5	97.9	
12 Nitrobenzene								
123.0	3.218	3.236	0.010	0.795	1067370	140.0	32.0	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.411	3.420	0.020	0.843	8589108	111.0	66.2	

Report Date: 06-Apr-2022 07:10:12 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05058.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
16 2-Amino-4,6-dinitrotoluene								
197.0	3.715	3.740	0.007	0.918	13591926	127.4	98.3	
17 2,6-Dinitrotoluene								
182.0	3.865	3.885	0.013	0.955	13691297	145.5	865	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		5866970	125.0	105	
19 2,4-Dinitrotoluene								
182.0	4.078	4.087	0.026	1.008	6555486	132.8	374	
20 PETN								
61.8	4.315	4.342	0.010	1.067	1433747	131.8	597	
22 o-Nitrotoluene								
137.0	4.641	4.671	0.010	1.147	2055930	141.1	1325	
23 p-Nitrotoluene								
137.0	4.930	4.952	0.020	1.218	1771563	140.3	1110	
24 m-Nitrotoluene								
137.0	5.288	5.314	0.020	1.307	1097548	145.6	632	

QC Flag Legend

Processing Flags

Reagents:

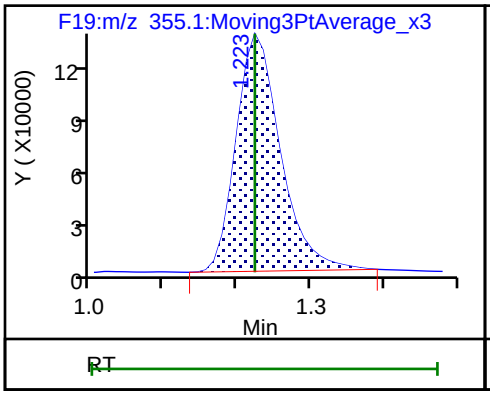
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:10:12 Chrom Revision: 2.3 18-Mar-2022 09:07:22

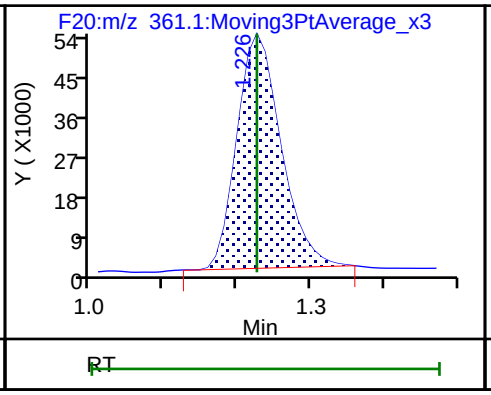
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05058.d
Injection Date: 05-Apr-2022 15:53:12 Instrument ID: LC_LCMS7
Lims ID: LCSSRM 280-570100/2-B
Client ID:
Operator ID: acm ALS Bottle#: 1 Worklist Smp#: 55
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

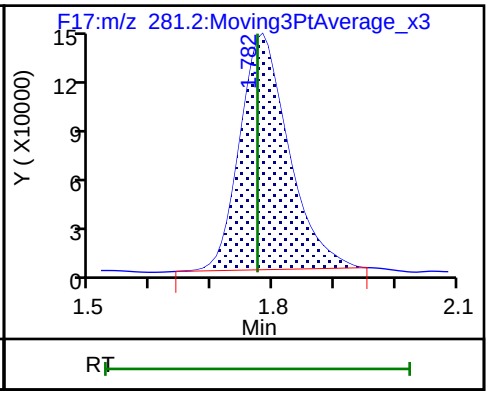
2 HMX



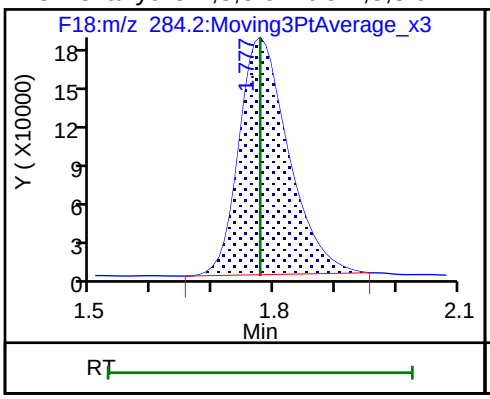
* 1 HMX-13C4



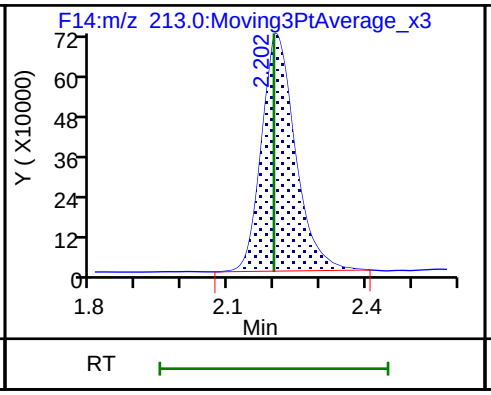
4 RDX



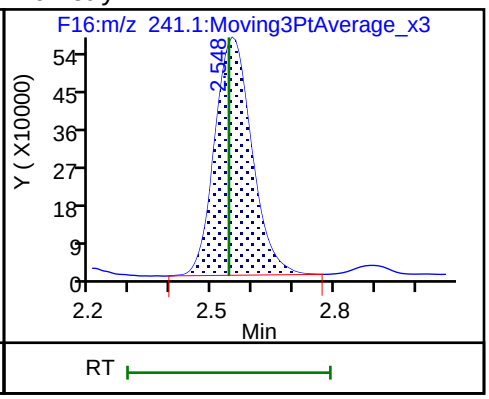
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



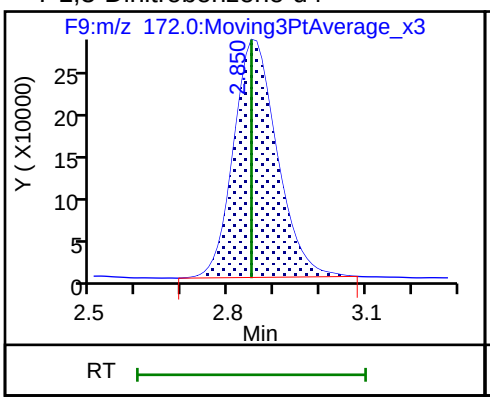
5 1,3,5-Trinitrobenzene



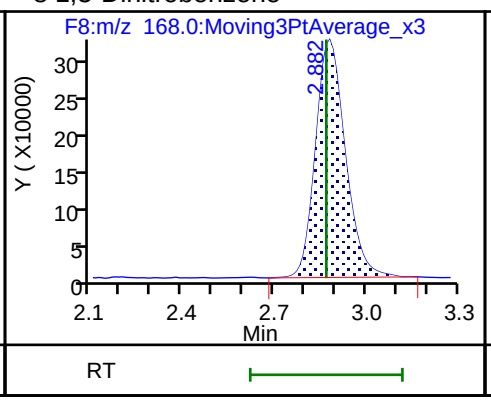
6 Tetryl



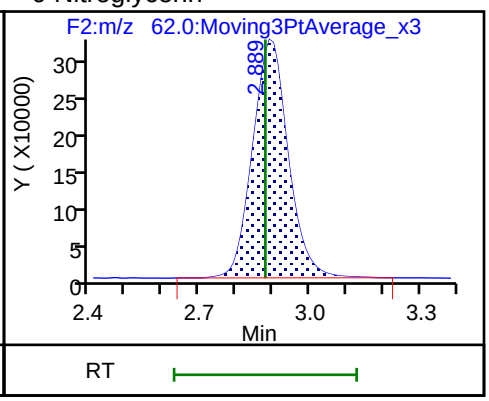
* 7 1,3-Dinitrobenzene-d4



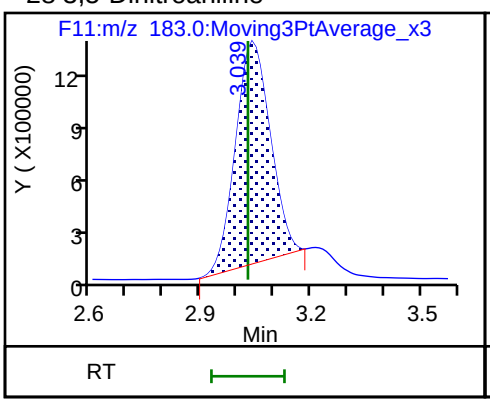
8 1,3-Dinitrobenzene



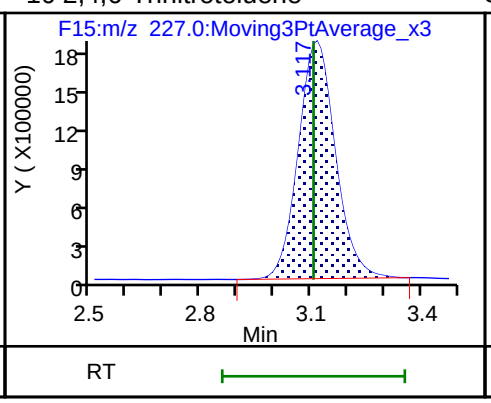
9 Nitroglycerin



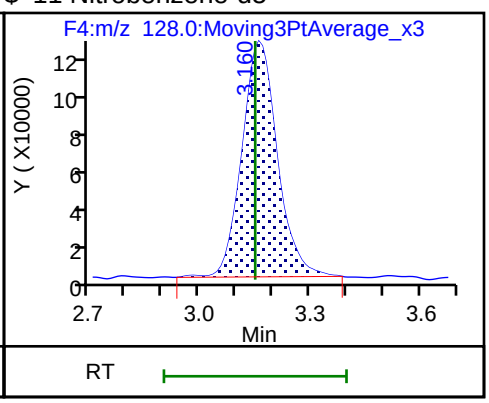
28 3,5-Dinitroaniline



10 2,4,6-Trinitrotoluene



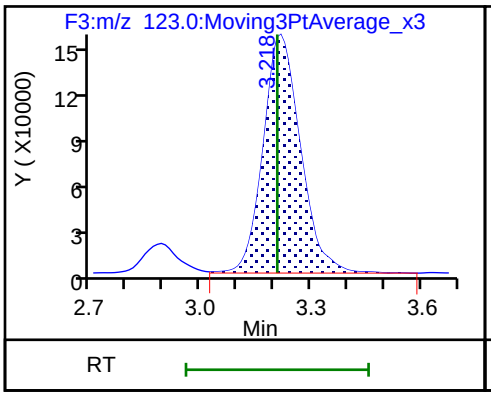
$ 11 Nitrobenzene-d5



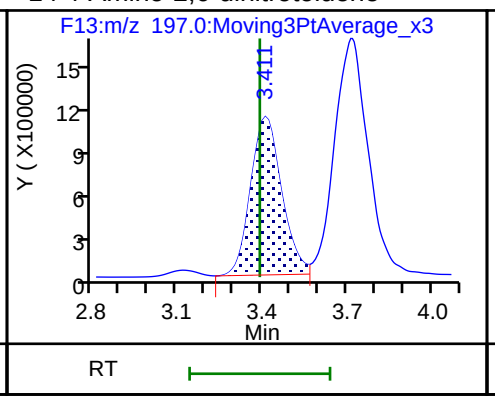
Report Date: 06-Apr-2022 07:10:12 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05058.d

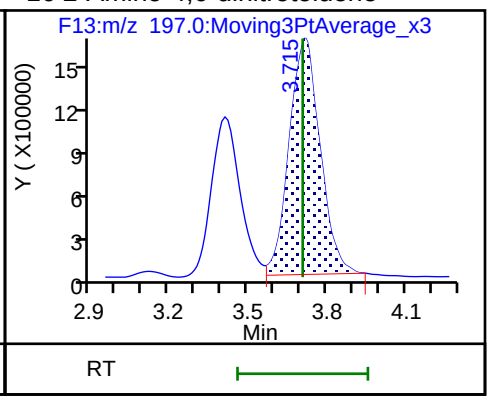
12 Nitrobenzene



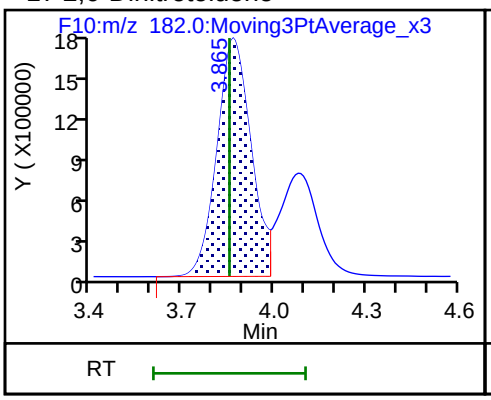
14 4-Amino-2,6-dinitrotoluene



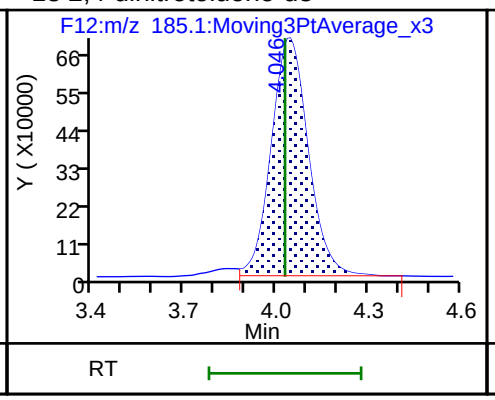
16 2-Amino-4,6-dinitrotoluene



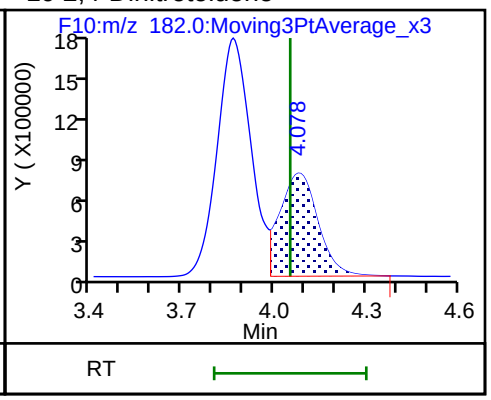
17 2,6-Dinitrotoluene



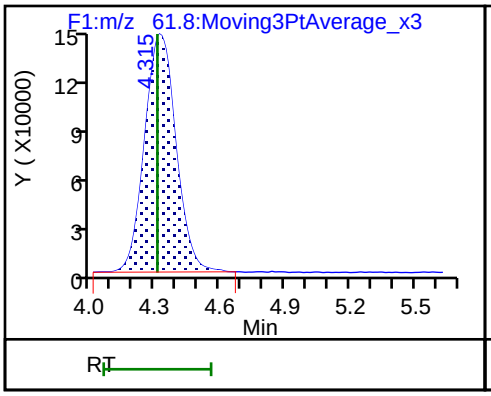
* 18 2,4-dinitrotoluene-d3



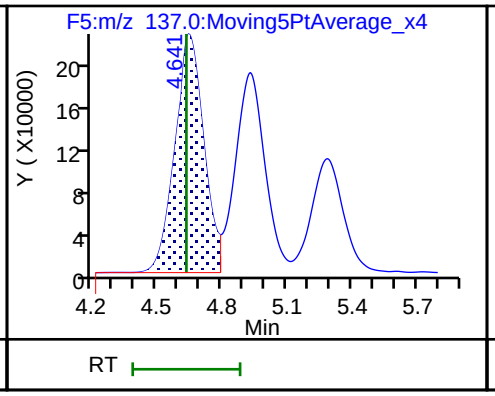
19 2,4-Dinitrotoluene



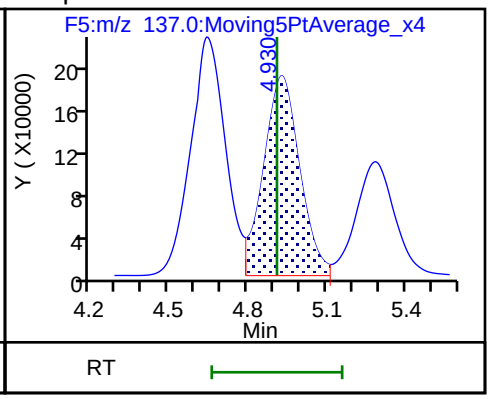
20 PETN



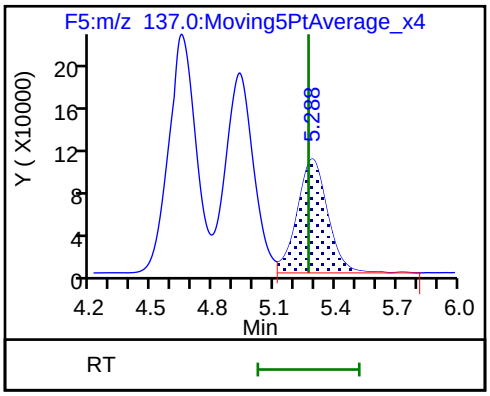
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



Report Date: 06-Apr-2022 07:10:12 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05058.d
Lims ID: LCSSRM 280-570100/2-B
Client ID:
Sample Type: LCSSRM
Inject. Date: 05-Apr-2022 15:53:12 ALS Bottle#: 1 Worklist Smp#: 55
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCSSRM 280-570100/2-B
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:10:08 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 06-Apr-2022 06:55:30

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	93.5	93.16

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCSSRM 280-570105/2-B
Matrix: Solid | Lab File ID: ex722D07016.d
Analysis Method: 8321A | Date Collected:
Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57
Sample wt/vol: 10.49(g) | Date Analyzed: 04/07/2022 12:05
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571108 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.523		0.095	0.048	0.043
99-65-0	1,3-Dinitrobenzene	0.555		0.095	0.048	0.043
118-96-7	2,4,6-Trinitrotoluene	0.395	Q	0.095	0.048	0.035
121-14-2	2,4-Dinitrotoluene	0.534		0.095	0.048	0.044
606-20-2	2,6-Dinitrotoluene	0.559		0.095	0.048	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.517		0.095	0.048	0.047
19406-51-0	4-Amino-2,6-dinitrotoluene	0.475		0.095	0.048	0.030
2691-41-0	HMX	0.521		0.095	0.048	0.044
99-08-1	m-Nitrotoluene	0.578		0.095	0.048	0.041
98-95-3	Nitrobenzene	0.511		0.10	0.048	0.036
55-63-0	Nitroglycerin	0.527		0.095	0.048	0.028
88-72-2	o-Nitrotoluene	0.571		0.095	0.048	0.041
78-11-5	PETN	0.544		0.095	0.048	0.032
99-99-0	p-Nitrotoluene	0.555		0.095	0.048	0.047
121-82-4	RDX	0.508		0.11	0.048	0.041
479-45-8	Tetryl	0.349		0.095	0.048	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	91		68-140

Report Date: 08-Apr-2022 07:32:24 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07016.d
Lims ID: LCSSRM 280-570105/2-B
Client ID:
Sample Type: LCSSRM
Inject. Date: 07-Apr-2022 12:05:00 ALS Bottle#: 14 Worklist Smp#: 16
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCSSRM 280-570105/2-B
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:21 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 12:35:38
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	240926	136.7	90.8	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		107476	125.0	102	
4 RDX								
281.2	1.841	1.841	0.0	1.003	304939	133.1	73.7	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		414553	125.0	143	
5 1,3,5-Trinitrobenzene								
213.0	2.317	2.317	0.0	0.765	2204566	137.1	178	
6 Tetryl								
241.1	2.705	2.712	-0.007	0.893	2046549	91.6	103	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.030	3.030	0.0		1366388	129.4	373	
8 1,3-Dinitrobenzene								
168.0	3.051	3.051	0.0	1.007	1659457	145.6	431	
9 Nitroglycerin								
62.0	3.080	3.080	0.0	1.017	1395564	138.1	530	
28 3,5-Dinitroaniline								M
183.0	3.241	3.230	0.011	1.070	6809265	138.1	48.6	M
10 2,4,6-Trinitrotoluene								
227.0	3.310	3.321	-0.011	0.764	7428984	103.7	151	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.775	607679	91.7	77.7	
12 Nitrobenzene								
123.0	3.421	3.431	-0.010	0.790	764806	134.0	43.4	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.645	3.645	0.0	0.841	6445262	124.7	36.3	

Report Date: 08-Apr-2022 07:32:24 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07016.d

Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
16 2-Amino-4,6-dinitrotoluene								
197.0	3.988	3.976	0.012	0.921	9076393	135.7	46.7	
17 2,6-Dinitrotoluene								
182.0	4.144	4.150	-0.006	0.957	10062720	146.5	859	
* 18 2,4-dinitrotoluene-d3								
185.1	4.332	4.341	-0.009		4175240	125.0	106	
19 2,4-Dinitrotoluene								
182.0	4.373	4.373	0.0	1.009	4895210	140.0	384	
20 PETN								
61.8	4.706	4.716	-0.010	1.086	778380	142.6	149	
22 o-Nitrotoluene								
137.0	4.992	5.002	-0.010	1.152	1575312	149.8	537	
23 p-Nitrotoluene								
137.0	5.311	5.311	0.0	1.226	1324039	145.6	434	
24 m-Nitrotoluene								
137.0	5.694	5.704	-0.010	1.314	831196	151.7	260	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

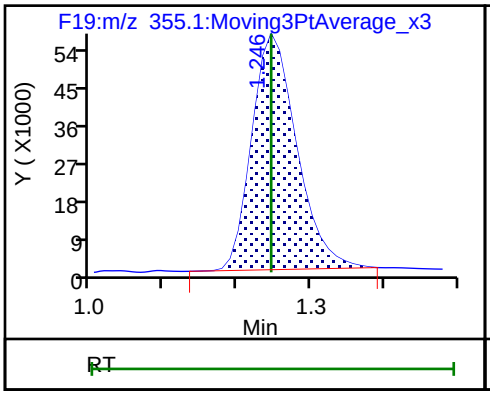
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 08-Apr-2022 07:32:24 Chrom Revision: 2.3 18-Mar-2022 09:07:22

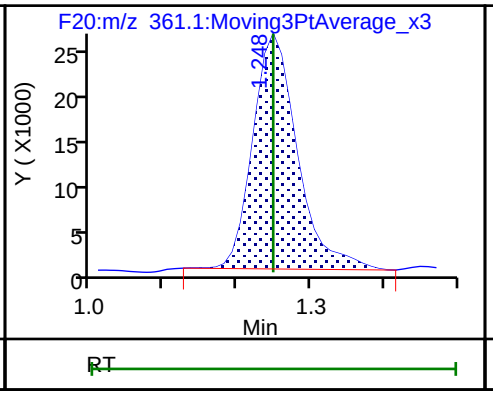
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07016.d
Injection Date: 07-Apr-2022 12:05:00 Instrument ID: LC_LCMS7
Lims ID: LCSSRM 280-570105/2-B
Client ID:
Operator ID: acm ALS Bottle#: 14 Worklist Smp#: 16
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

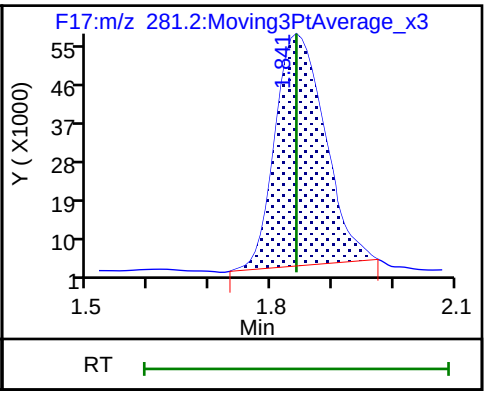
2 HMX



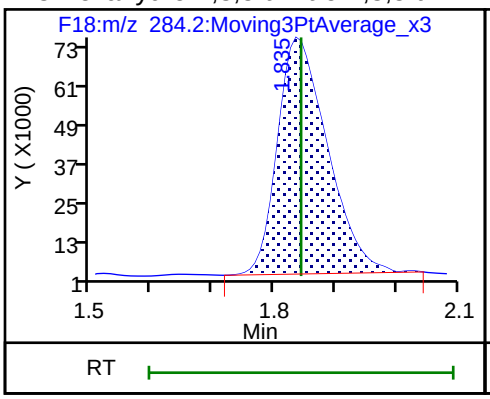
* 1 HMX-13C4



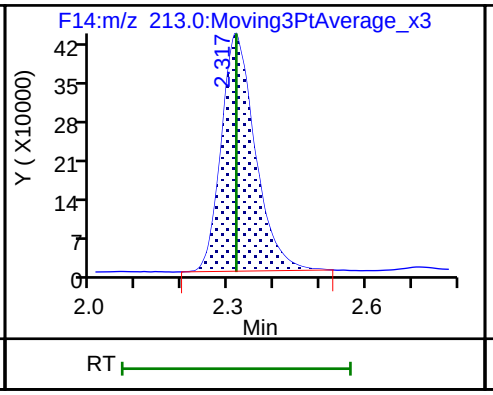
4 RDX



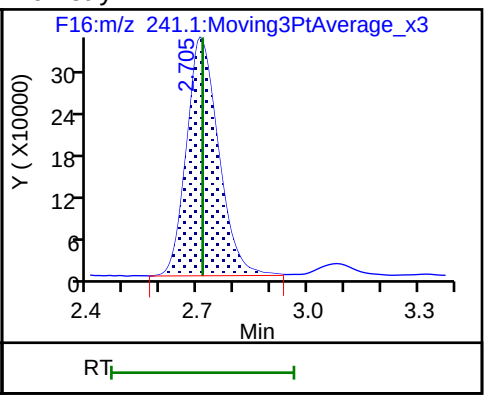
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



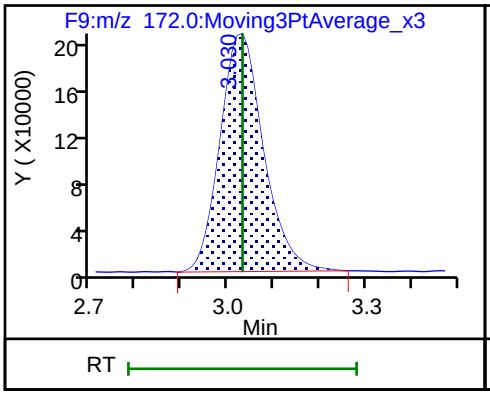
5 1,3,5-Trinitrobenzene



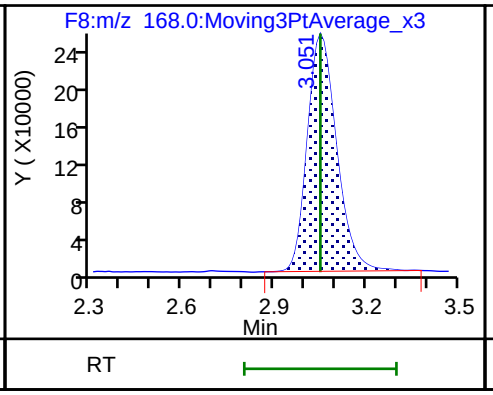
6 Tetryl



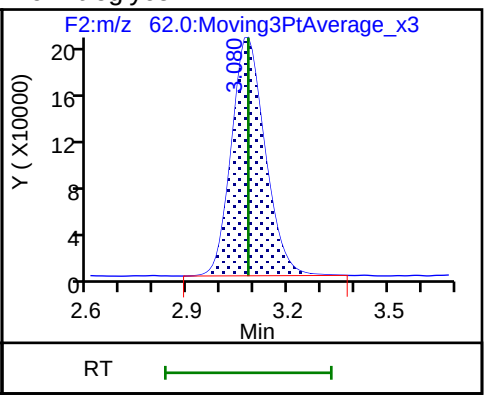
* 7 1,3-Dinitrobenzene-d4



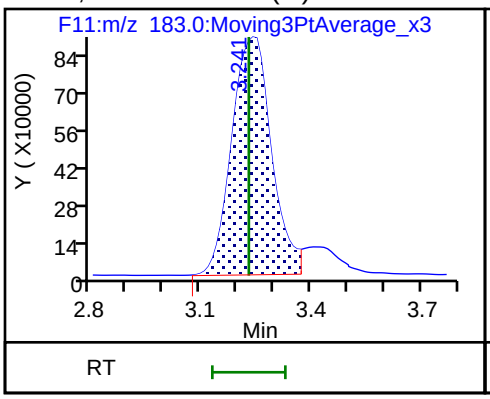
8 1,3-Dinitrobenzene



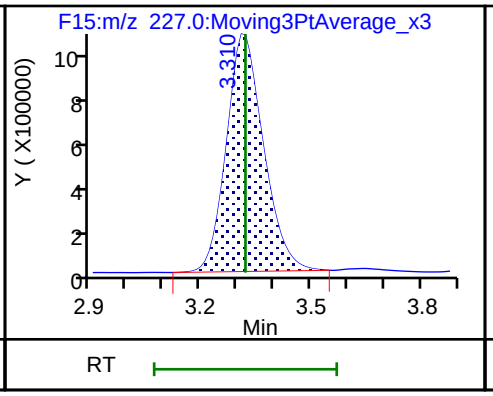
9 Nitroglycerin



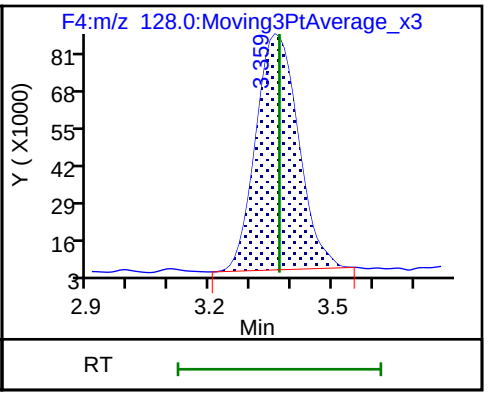
28 3,5-Dinitroaniline (M)



10 2,4,6-Trinitrotoluene



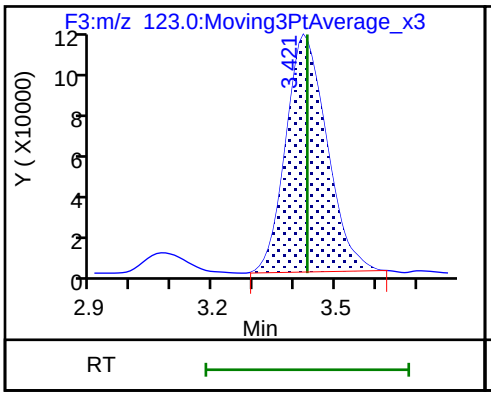
$ 11 Nitrobenzene-d5



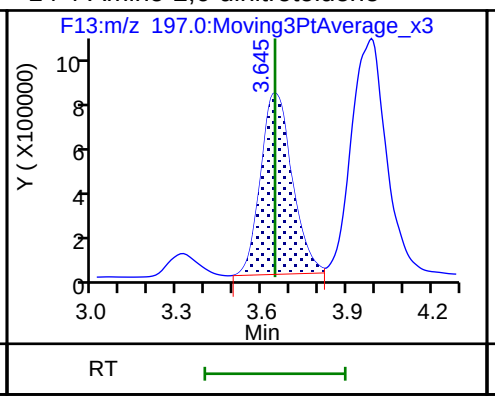
Report Date: 08-Apr-2022 07:32:24 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07016.d

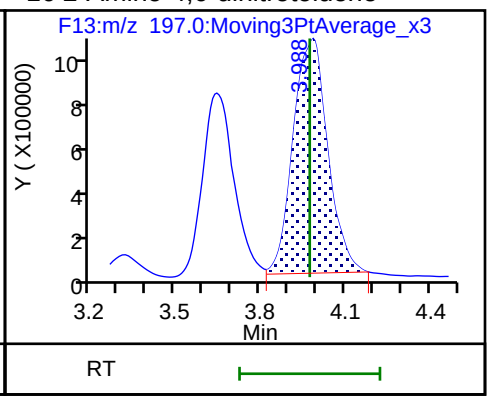
12 Nitrobenzene



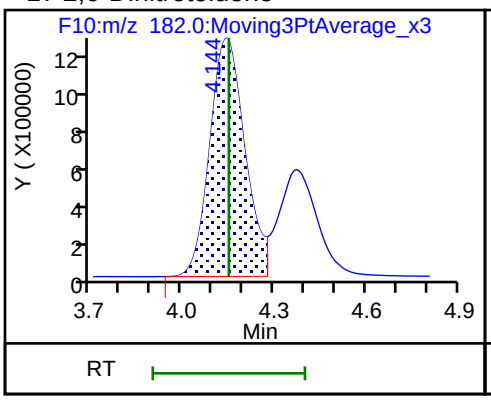
14 4-Amino-2,6-dinitrotoluene



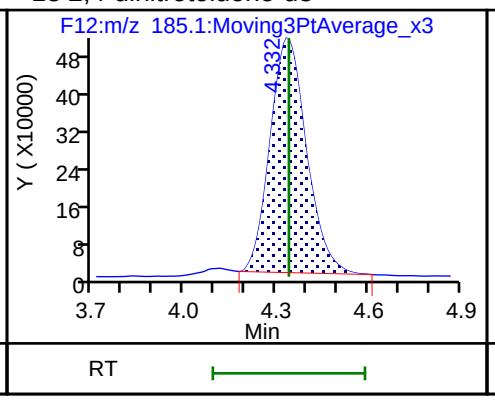
16 2-Amino-4,6-dinitrotoluene



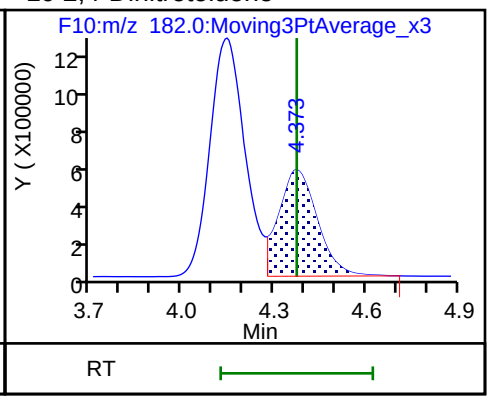
17 2,6-Dinitrotoluene



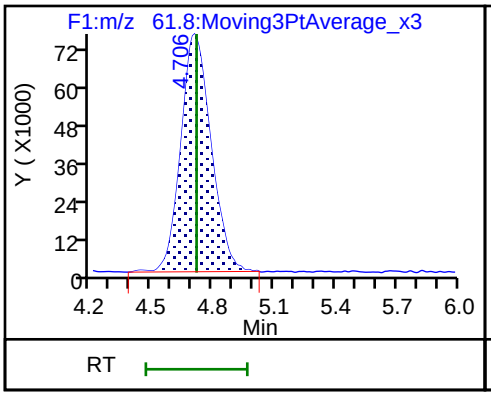
* 18 2,4-dinitrotoluene-d3



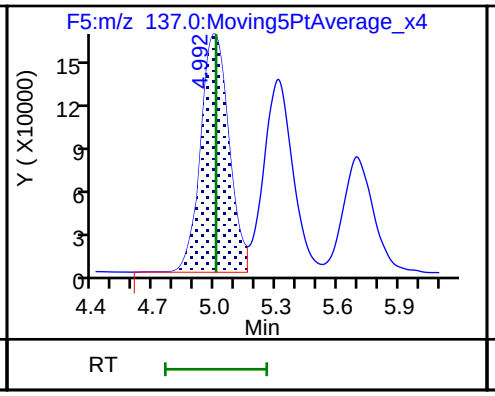
19 2,4-Dinitrotoluene



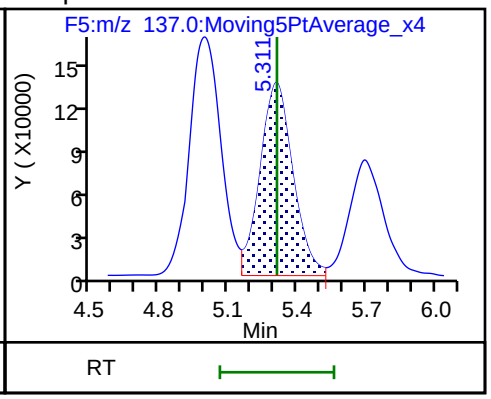
20 PETN



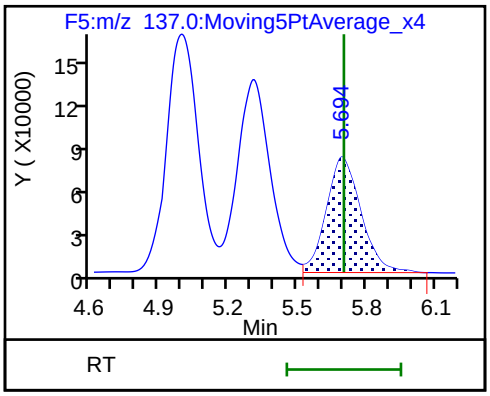
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



Report Date: 08-Apr-2022 07:32:24 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07016.d
Lims ID: LCSSRM 280-570105/2-B
Client ID:
Sample Type: LCSSRM
Inject. Date: 07-Apr-2022 12:05:00 ALS Bottle#: 14 Worklist Smp#: 16
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCSSRM 280-570105/2-B
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:21 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 12:35:38

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	91.7	91.41

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB183 (3-4) MS | Lab Sample ID: 280-160187-2 MS
Matrix: Solid | Lab File ID: ex722D05029.d
Analysis Method: 8321A | Date Collected: 03/22/2022 12:30
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:56
Sample wt/vol: 10.11(g) | Date Analyzed: 04/05/2022 12:47
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 570785 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.368		0.099	0.049	0.044
99-65-0	1,3-Dinitrobenzene	0.360		0.099	0.049	0.044
118-96-7	2,4,6-Trinitrotoluene	0.396		0.099	0.049	0.036
121-14-2	2,4-Dinitrotoluene	0.363		0.099	0.049	0.046
606-20-2	2,6-Dinitrotoluene	0.390		0.099	0.049	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.384		0.099	0.049	0.049
19406-51-0	4-Amino-2,6-dinitrotoluene	0.384		0.099	0.049	0.031
2691-41-0	HMX	0.359		0.099	0.049	0.046
99-08-1	m-Nitrotoluene	0.343		0.099	0.049	0.043
98-95-3	Nitrobenzene	0.348		0.11	0.049	0.038
55-63-0	Nitroglycerin	0.409		0.099	0.049	0.029
88-72-2	o-Nitrotoluene	0.372		0.099	0.049	0.042
78-11-5	PETN	0.435		0.099	0.049	0.034
99-99-0	p-Nitrotoluene	0.373		0.099	0.049	0.049
121-82-4	RDX	0.341		0.12	0.049	0.043
479-45-8	Tetryl	0.518	J1	0.099	0.049	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	92		68-140

Report Date: 06-Apr-2022 07:09:50 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05029.d
Lims ID: 280-160187-A-2-G MS
Client ID: 29SB183 (3-4)
Sample Type: MS
Inject. Date: 05-Apr-2022 12:47:37 ALS Bottle#: 23 Worklist Smp#: 26
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-2-G MS
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:08:09 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 13:34:41
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.223	1.223	0.0	0.998	387699	90.7	85.4	
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		242807	125.0	137	
4 RDX								
281.2	1.782	1.791	0.008	0.998	488747	86.1	100	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.785	1.777	0.008		913949	125.0	293	
5 1,3,5-Trinitrobenzene								
213.0	2.202	2.216	0.003	0.770	2331091	93.0	160	
6 Tetryl								
241.1	2.548	2.560	0.008	0.891	5346393	131.0	164	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1855703	129.4	251	
8 1,3-Dinitrobenzene								
168.0	2.882	2.893	0.011	1.007	1420450	90.9	141	
9 Nitroglycerin								
62.0	2.889	2.900	0.011	1.010	1554190	103.3	730	
10 2,4,6-Trinitrotoluene								
227.0	3.117	3.134	0.010	0.770	11352247	100.0	538	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	837824	92.5	83.5	
12 Nitrobenzene								
123.0	3.218	3.236	0.010	0.795	676261	88.0	32.2	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.411	3.420	0.020	0.843	7218114	97.1	64.8	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.708	3.740	0.0	0.917	9946428	97.0	81.6	

Report Date: 06-Apr-2022 07:09:50 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05029.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
17 2,6-Dinitrotoluene								
182.0	3.871	3.885	0.019	0.957	8918496	98.5	659	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		5636927	125.0	109	
19 2,4-Dinitrotoluene								
182.0	4.078	4.087	0.026	1.008	4361135	91.7	302	
20 PETN								
61.8	4.325	4.342	0.020	1.069	1147634	109.9	317	
22 o-Nitrotoluene								
137.0	4.646	4.671	0.015	1.148	1314303	94.0	355	
23 p-Nitrotoluene								
137.0	4.925	4.952	0.015	1.217	1145577	94.3	307	
24 m-Nitrotoluene								
137.0	5.283	5.314	0.015	1.306	627242	86.6	150	

QC Flag Legend

Processing Flags

Reagents:

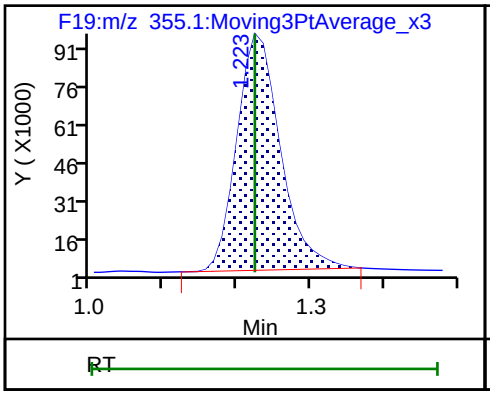
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:09:51 Chrom Revision: 2.3 18-Mar-2022 09:07:22

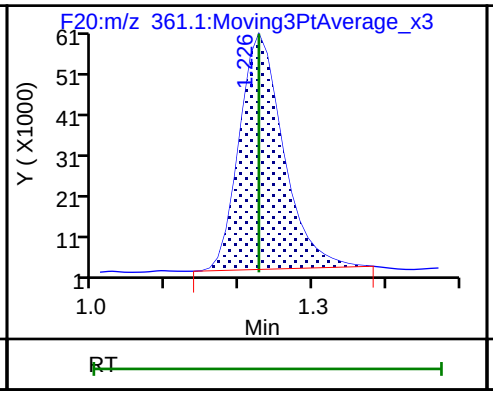
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05029.d
Injection Date: 05-Apr-2022 12:47:37 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-2-G MS
Client ID: 29SB183 (3-4)
Operator ID: acm ALS Bottle#: 23 Worklist Smp#: 26
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

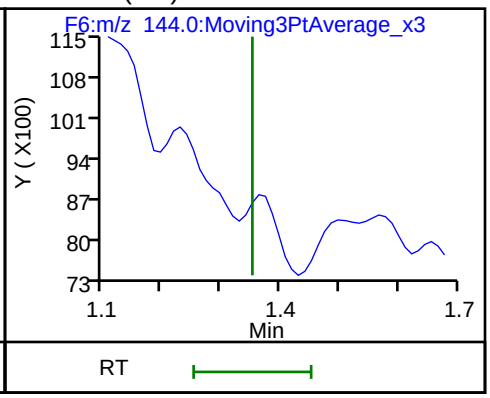
2 HMX



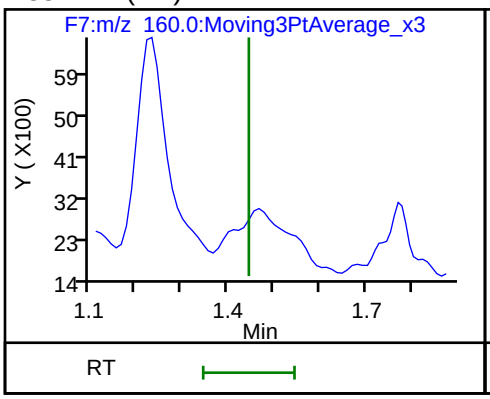
* 1 HMX-13C4



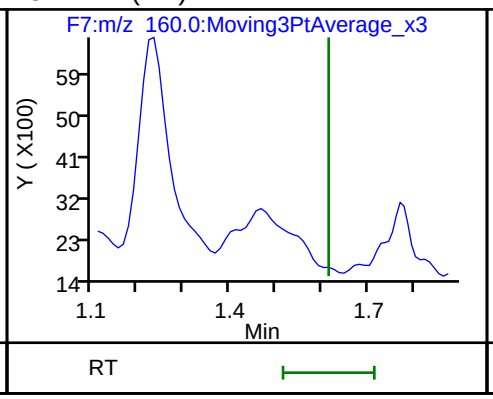
36 TNX (ND)



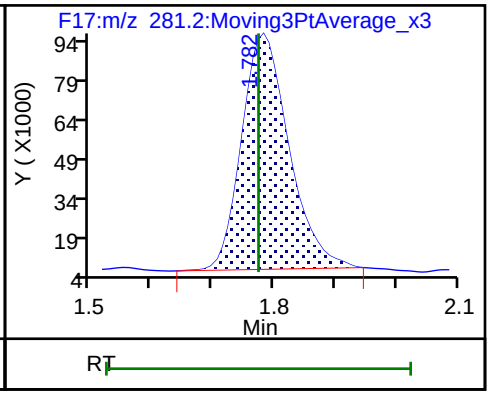
33 DNX (ND)



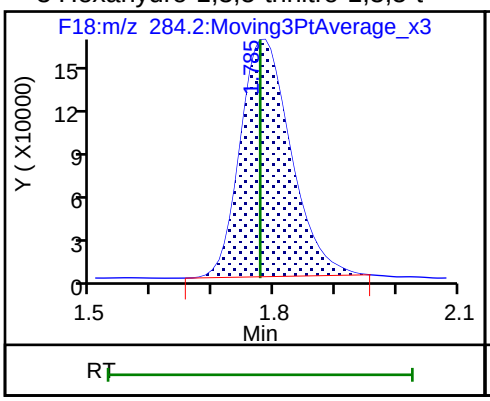
34 MNX (ND)



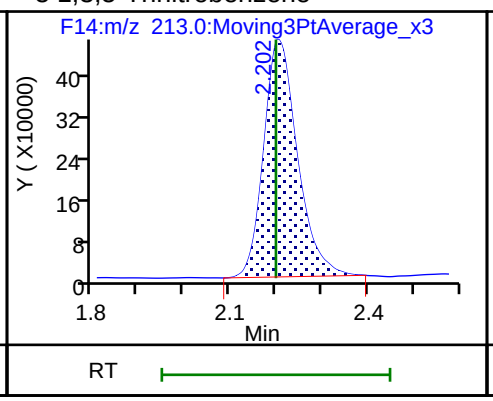
4 RDX



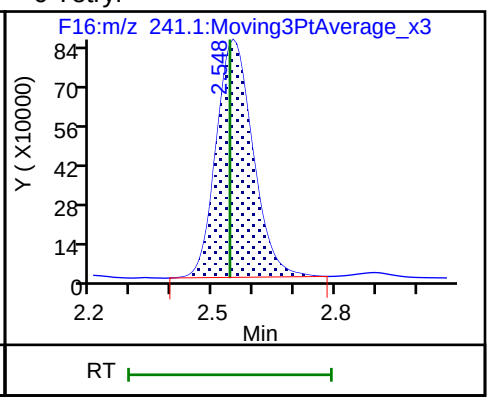
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



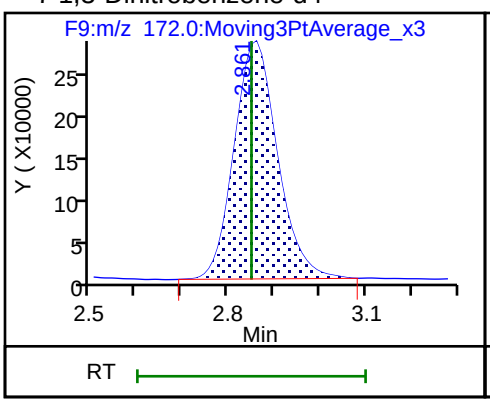
5 1,3,5-Trinitrobenzene



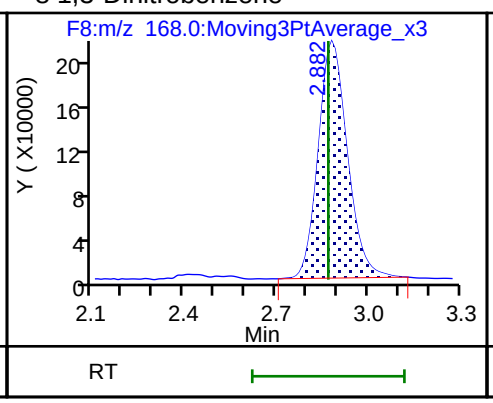
6 Tetryl



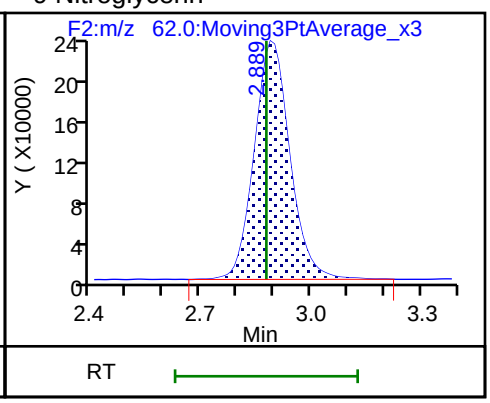
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



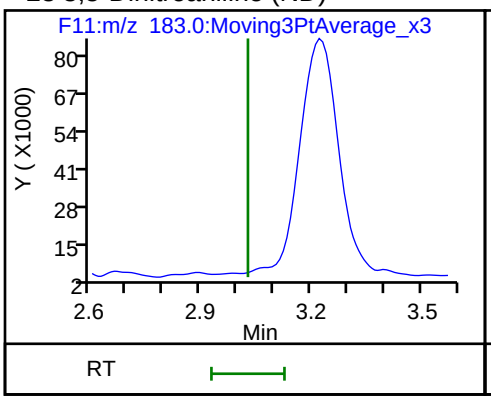
9 Nitroglycerin



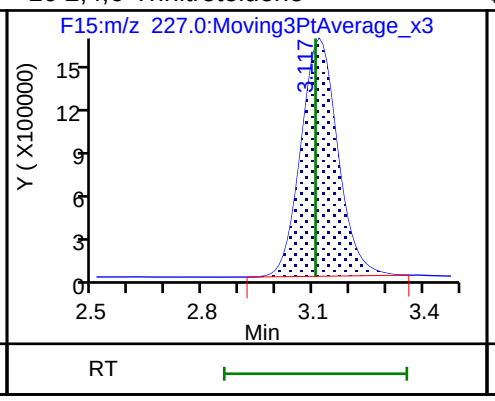
Report Date: 06-Apr-2022 07:09:51 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05029.d

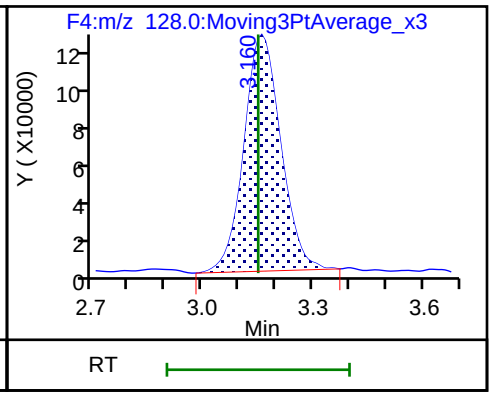
28 3,5-Dinitroaniline (ND)



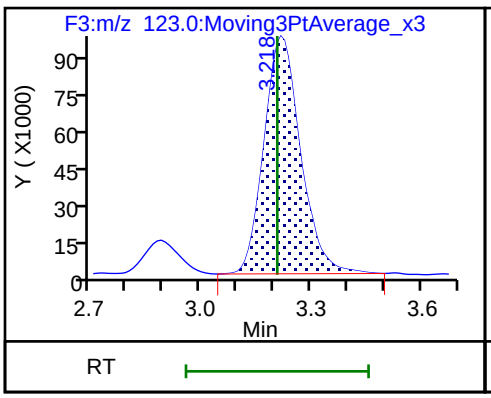
10 2,4,6-Trinitrotoluene



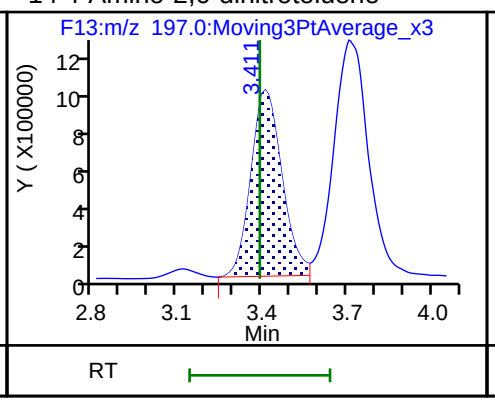
$ 11 Nitrobenzene-d5



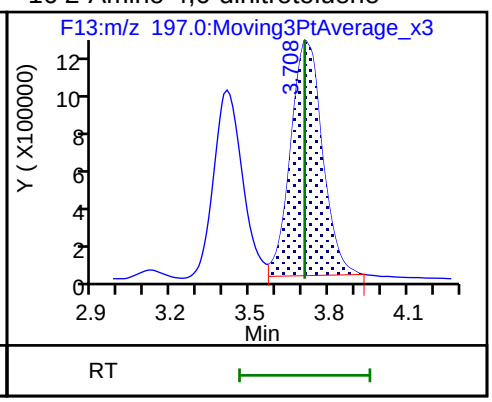
12 Nitrobenzene



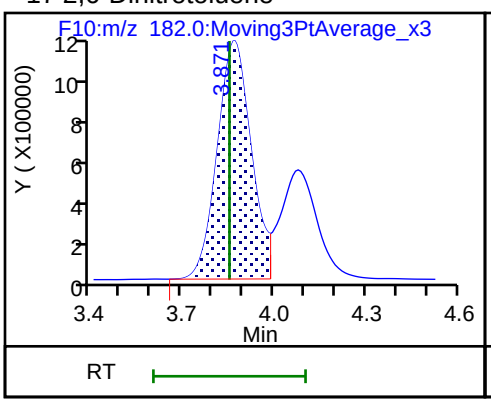
14 4-Amino-2,6-dinitrotoluene



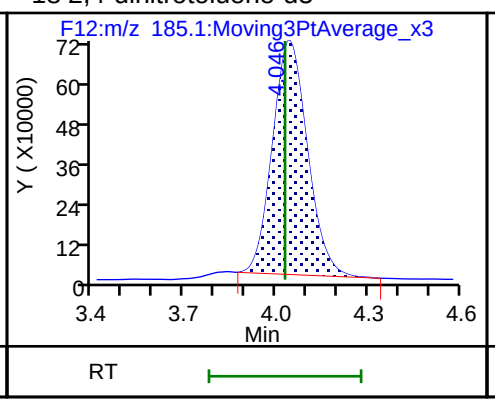
16 2-Amino-4,6-dinitrotoluene



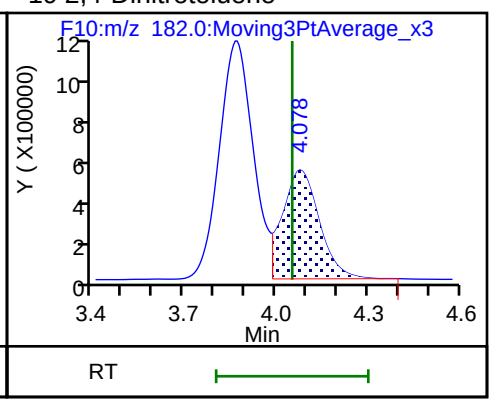
17 2,6-Dinitrotoluene



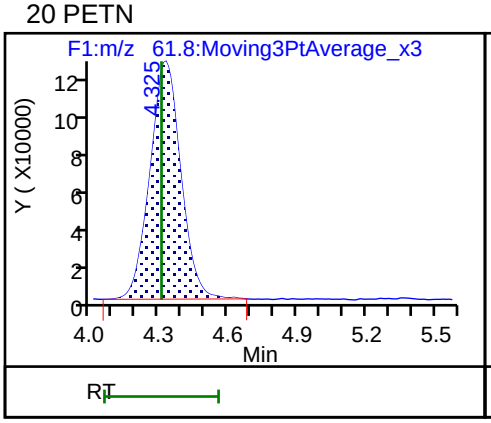
* 18 2,4-dinitrotoluene-d3



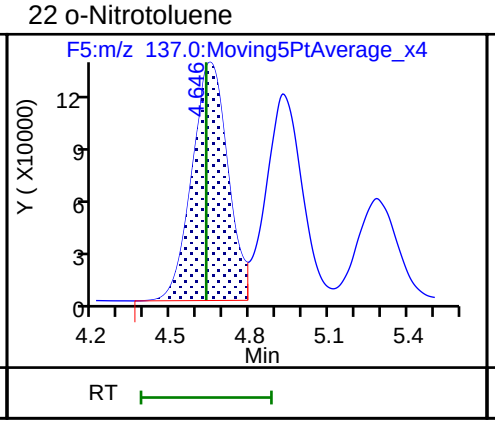
19 2,4-Dinitrotoluene



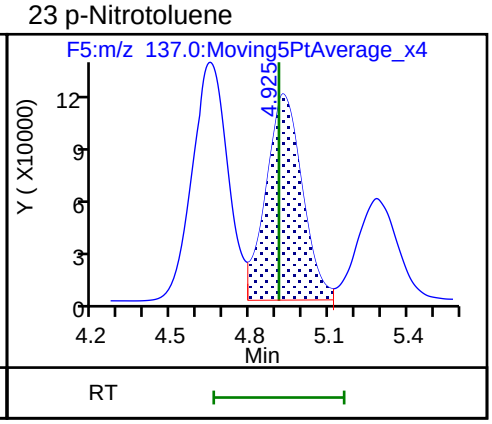
20 PETN



22 o-Nitrotoluene

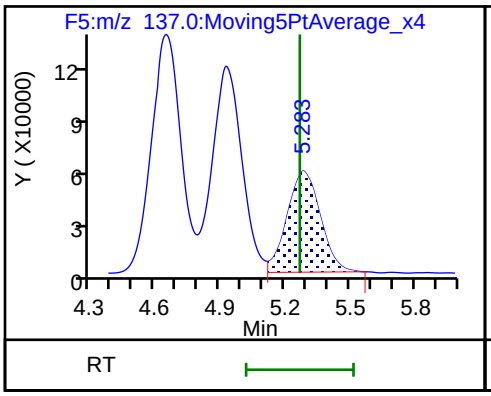


23 p-Nitrotoluene

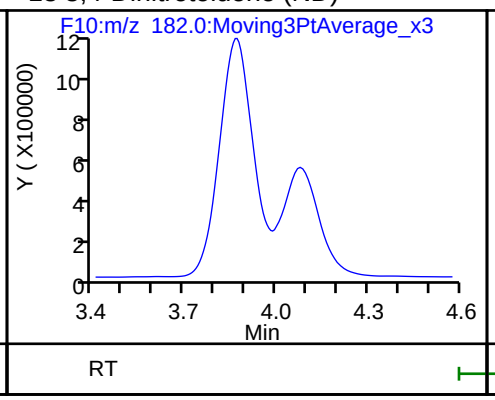


Report Date: 06-Apr-2022 07:09:51
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05029.d

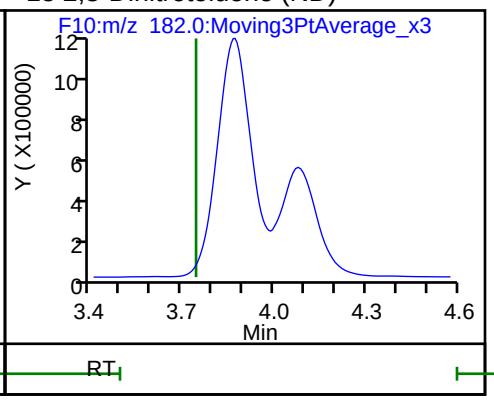
24 m-Nitrotoluene



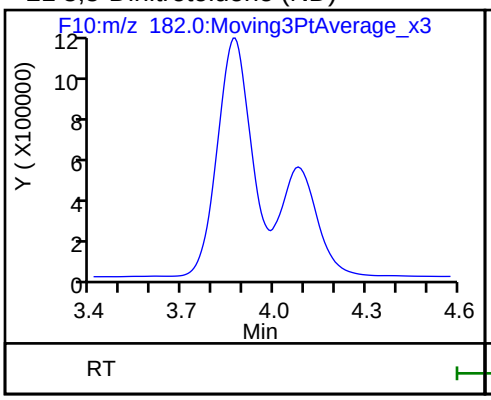
13 3,4-Dinitrotoluene (ND)



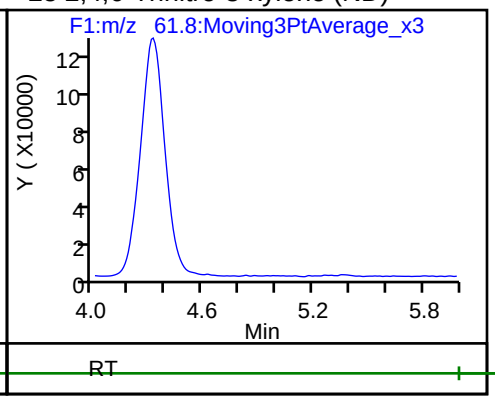
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 06-Apr-2022 07:09:51 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05029.d				
Lims ID:	280-160187-A-2-G MS				
Client ID:	29SB183 (3-4)				
Sample Type:	MS				
Inject. Date:	05-Apr-2022 12:47:37	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160187-A-2-G MS				
Misc. Info.:	ex722D05				
Operator ID:	acm	Instrument ID:	LC_LCMS7		
Method:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m				
Limit Group:	LC - 8321A Expl				
Last Update:	06-Apr-2022 07:08:09	Calib Date:	05-Apr-2022 10:58:50		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1632				
First Level Reviewer: meyera		Date:	05-Apr-2022 13:34:41		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	92.5	92.25

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB201(11-12) MS | Lab Sample ID: 280-160187-26 MS
Matrix: Solid | Lab File ID: ex722D05066.d
Analysis Method: 8321A | Date Collected: 03/22/2022 17:20
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:54
Sample wt/vol: 10.33(g) | Date Analyzed: 04/05/2022 16:44
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 570786 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.370		0.097	0.048	0.043
99-65-0	1,3-Dinitrobenzene	0.375		0.097	0.048	0.043
118-96-7	2,4,6-Trinitrotoluene	0.396		0.097	0.048	0.036
121-14-2	2,4-Dinitrotoluene	0.337		0.097	0.048	0.045
606-20-2	2,6-Dinitrotoluene	0.358		0.097	0.048	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.354		0.097	0.048	0.048
19406-51-0	4-Amino-2,6-dinitrotoluene	0.341		0.097	0.048	0.030
2691-41-0	HMX	0.338		0.097	0.048	0.045
99-08-1	m-Nitrotoluene	0.345		0.097	0.048	0.042
98-95-3	Nitrobenzene	0.360		0.11	0.048	0.037
55-63-0	Nitroglycerin	0.375		0.097	0.048	0.028
88-72-2	o-Nitrotoluene	0.348		0.097	0.048	0.041
78-11-5	PETN	0.392		0.097	0.048	0.033
99-99-0	p-Nitrotoluene	0.348		0.097	0.048	0.048
121-82-4	RDX	0.347		0.12	0.048	0.042
479-45-8	Tetryl	0.581	J1	0.097	0.048	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	99		68-140

Report Date: 06-Apr-2022 07:10:17 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05066.d
Lims ID: 280-160187-A-26-G MS
Client ID: 29SB201(11-12)
Sample Type: MS
Inject. Date: 05-Apr-2022 16:44:24 ALS Bottle#: 8 Worklist Smp#: 63
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-26-G MS
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:10:15 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 06-Apr-2022 06:57:20
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.223	1.223	0.0	0.998	367326	87.3	96.5	
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		238777	125.0	176	
4 RDX								
281.2	1.782	1.791	0.008	1.003	494522	89.6	65.0	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		889446	125.0	151	
5 1,3,5-Trinitrobenzene								
213.0	2.202	2.216	0.003	0.770	2318409	95.6	149	
6 Tetryl								
241.1	2.548	2.560	0.008	0.891	5923588	150.1	179	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1793864	129.4	228	
8 1,3-Dinitrobenzene								
168.0	2.882	2.893	0.011	1.007	1463963	96.9	167	
9 Nitroglycerin								
62.0	2.889	2.900	0.011	1.010	1407636	96.8	538	
10 2,4,6-Trinitrotoluene								
227.0	3.107	3.134	0.0	0.768	11225016	102.3	512	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	870345	99.5	226	
12 Nitrobenzene								
123.0	3.218	3.236	0.010	0.795	691947	93.1	34.1	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.411	3.420	0.020	0.843	6875792	88.1	63.3	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.715	3.740	0.007	0.918	9830852	91.3	85.1	

Report Date: 06-Apr-2022 07:10:17 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05066.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
17 2,6-Dinitrotoluene								
182.0	3.865	3.885	0.013	0.955	8781162	92.4	537	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		5916588	125.0	127	
19 2,4-Dinitrotoluene								
182.0	4.078	4.087	0.026	1.008	4344396	87.0	239	
20 PETN								
61.8	4.315	4.342	0.010	1.067	1110173	101.3	335	
22 o-Nitrotoluene								
137.0	4.646	4.671	0.015	1.148	1320143	90.0	386	
23 p-Nitrotoluene								
137.0	4.925	4.952	0.015	1.217	1146611	89.9	328	
24 m-Nitrotoluene								
137.0	5.283	5.314	0.015	1.306	677133	89.1	179	

QC Flag Legend

Processing Flags

Reagents:

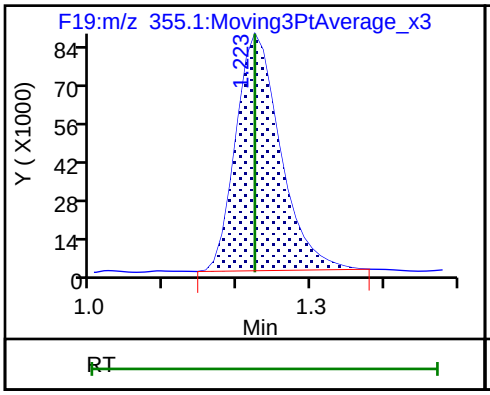
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:10:17 Chrom Revision: 2.3 18-Mar-2022 09:07:22

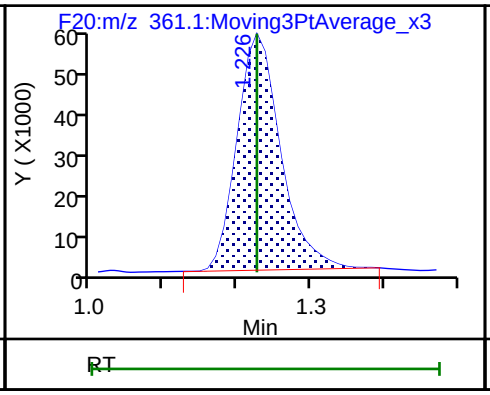
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05066.d
Injection Date: 05-Apr-2022 16:44:24 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-26-G MS
Client ID: 29SB201(11-12)
Operator ID: acm ALS Bottle#: 8 Worklist Smp#: 63
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

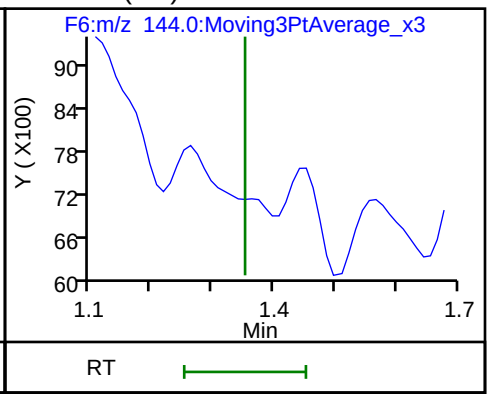
2 HMX



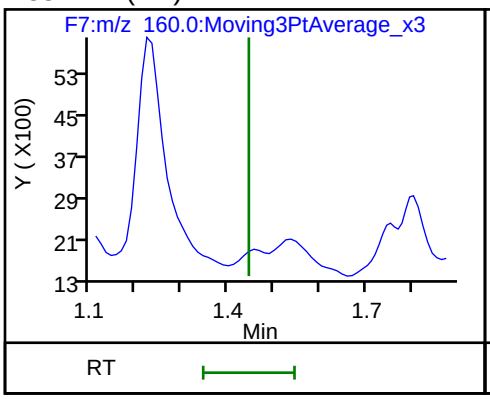
* 1 HMX-13C4



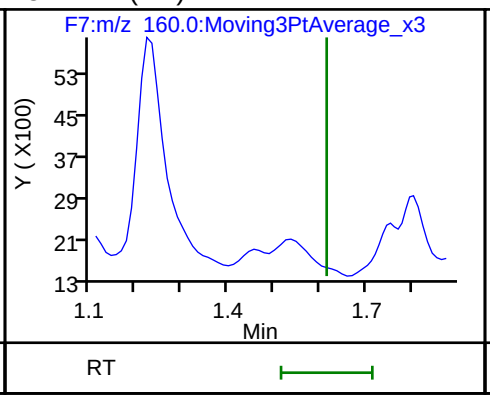
36 TNX (ND)



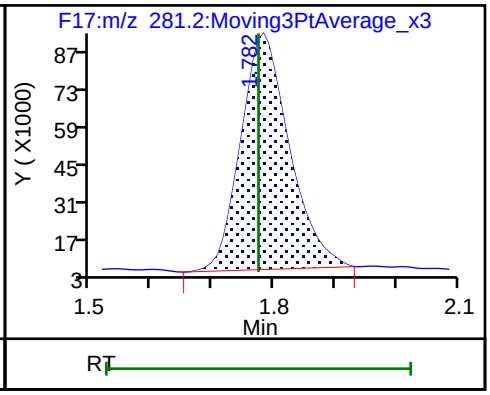
33 DNX (ND)



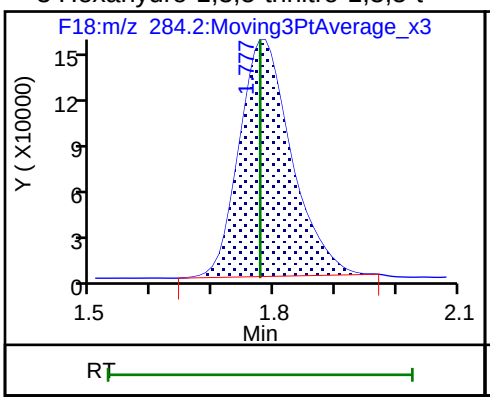
34 MNX (ND)



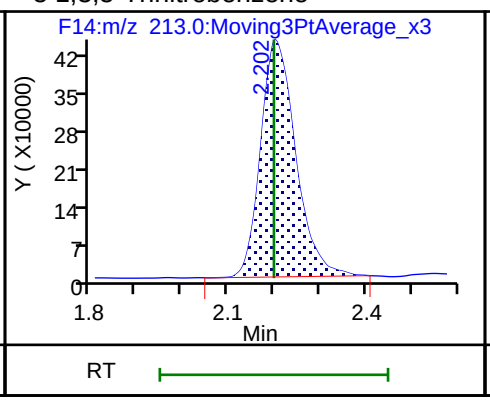
4 RDX



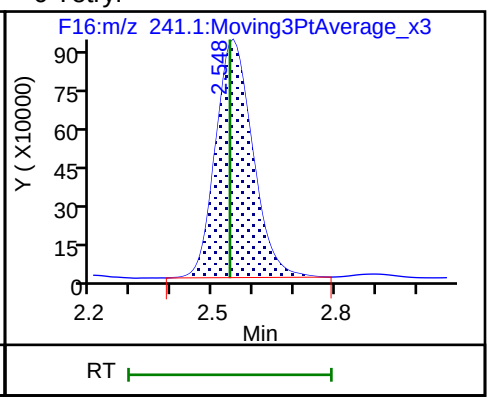
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



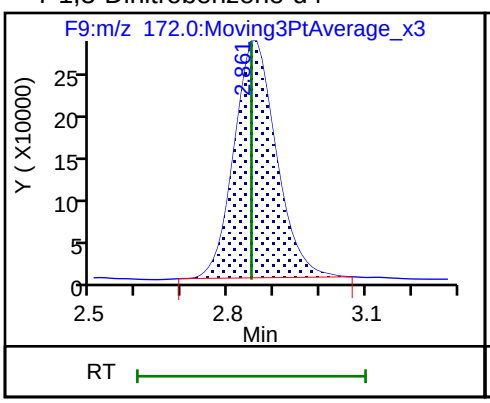
5 1,3,5-Trinitrobenzene



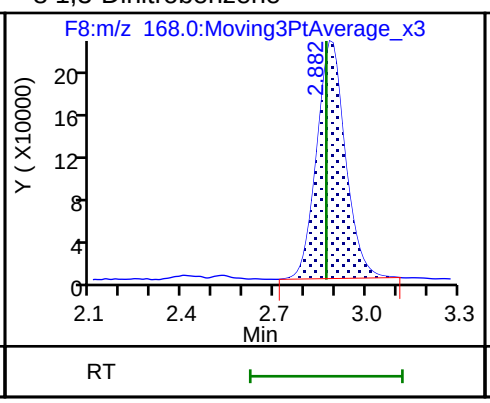
6 Tetryl



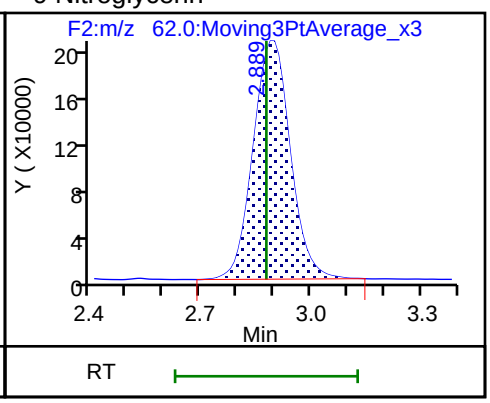
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



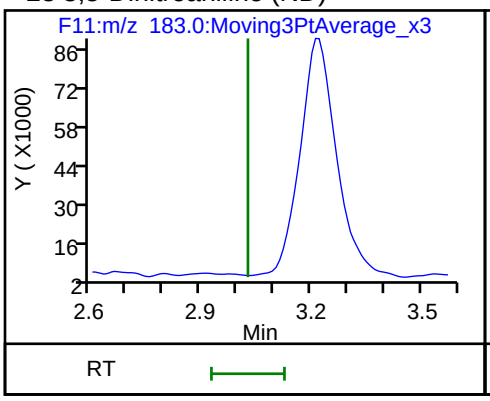
9 Nitroglycerin



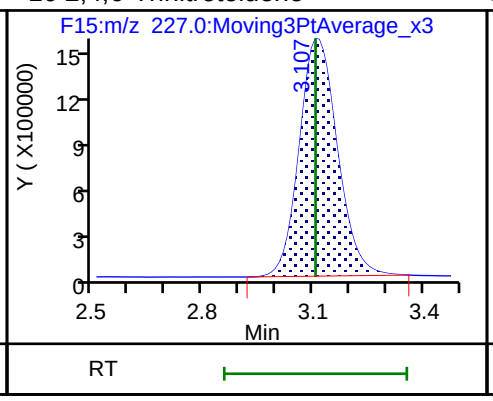
Report Date: 06-Apr-2022 07:10:17 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05066.d

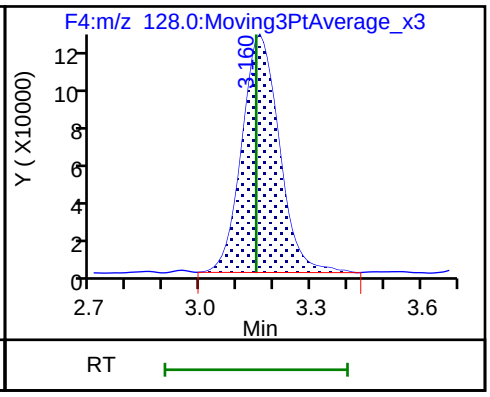
28 3,5-Dinitroaniline (ND)



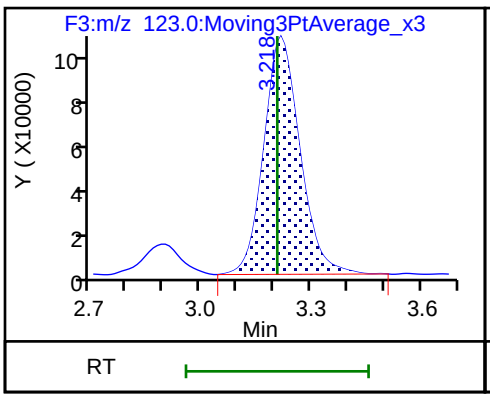
10 2,4,6-Trinitrotoluene



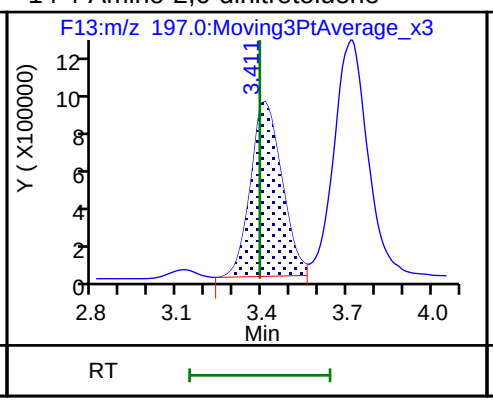
$ 11 Nitrobenzene-d5



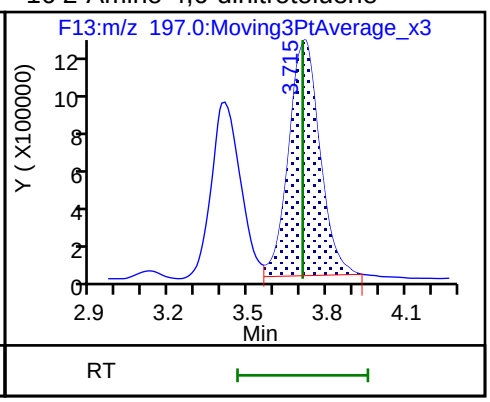
12 Nitrobenzene



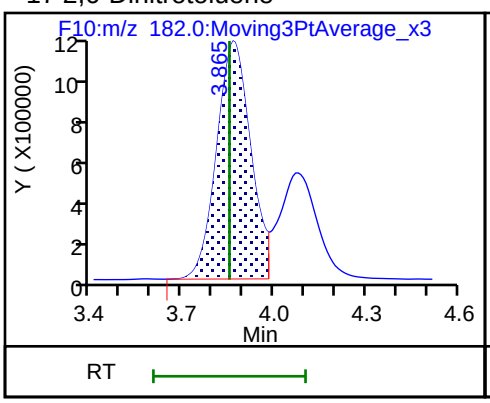
14 4-Amino-2,6-dinitrotoluene



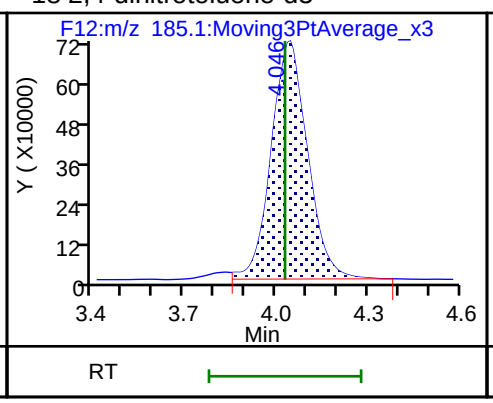
16 2-Amino-4,6-dinitrotoluene



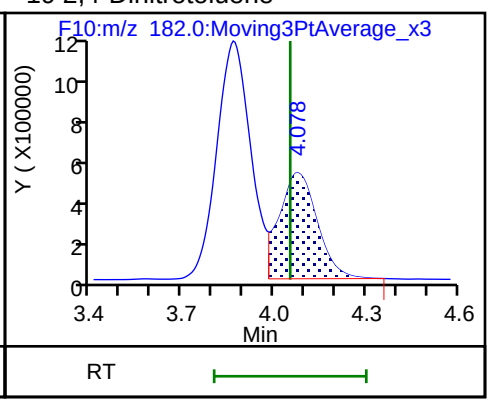
17 2,6-Dinitrotoluene



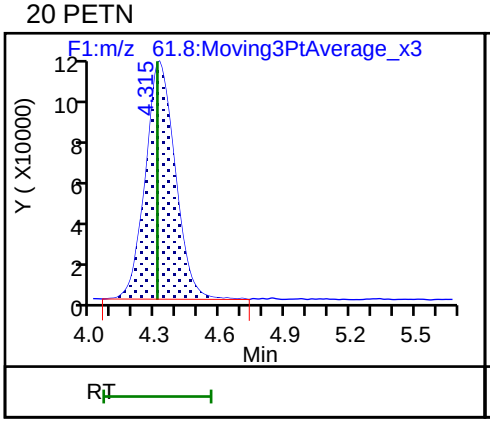
* 18 2,4-dinitrotoluene-d3



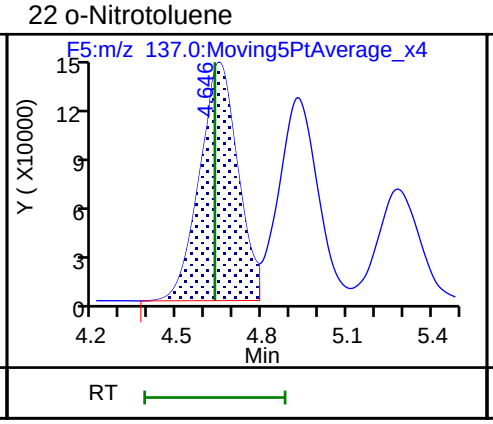
19 2,4-Dinitrotoluene



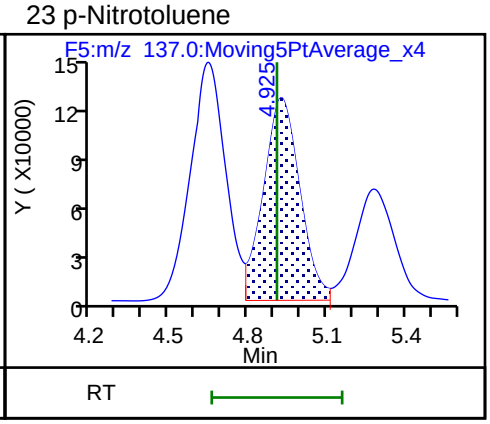
20 PETN



22 o-Nitrotoluene



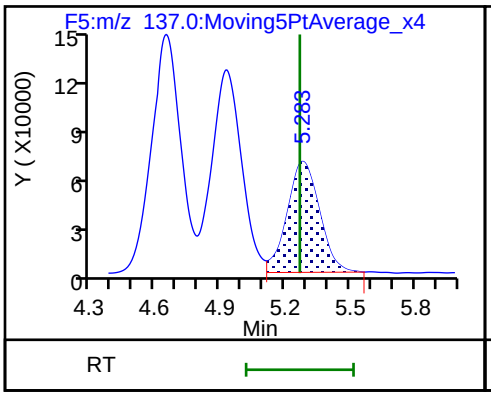
23 p-Nitrotoluene



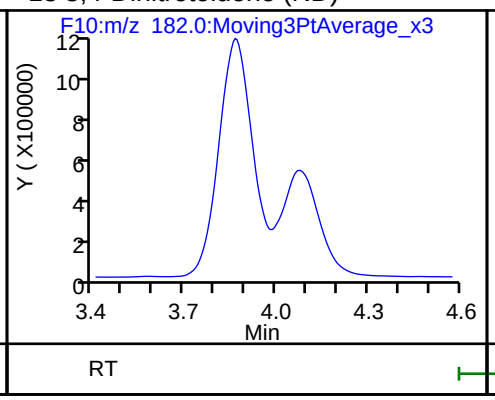
Report Date: 06-Apr-2022 07:10:17 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05066.d

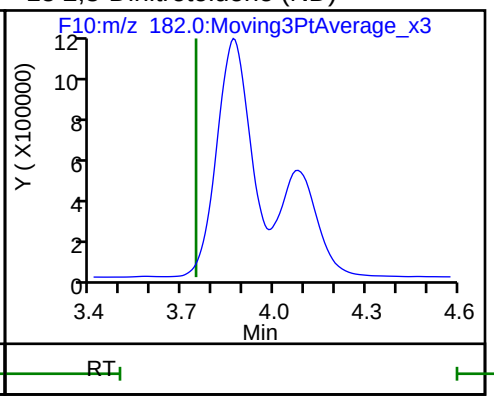
24 m-Nitrotoluene



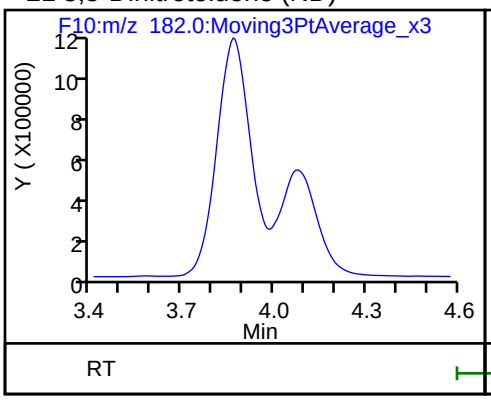
13 3,4-Dinitrotoluene (ND)



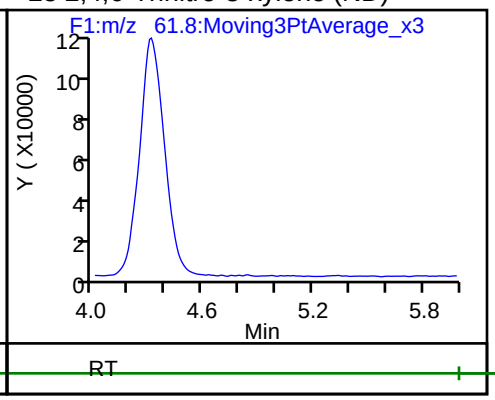
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 06-Apr-2022 07:10:17 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05066.d
Lims ID: 280-160187-A-26-G MS
Client ID: 29SB201(11-12)
Sample Type: MS
Inject. Date: 05-Apr-2022 16:44:24 ALS Bottle#: 8 Worklist Smp#: 63
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-26-G MS
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:10:15 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 06-Apr-2022 06:57:20

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	99.5	99.21

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB197 (3-4) MS | Lab Sample ID: 280-160187-43 MS
Matrix: Solid | Lab File ID: ex722D07019.d
Analysis Method: 8321A | Date Collected: 03/23/2022 11:35
Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57
Sample wt/vol: 10.76(g) | Date Analyzed: 04/07/2022 12:24
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571108 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.333		0.093	0.046	0.042
99-65-0	1,3-Dinitrobenzene	0.340		0.093	0.046	0.042
118-96-7	2,4,6-Trinitrotoluene	0.365		0.093	0.046	0.034
121-14-2	2,4-Dinitrotoluene	0.347		0.093	0.046	0.043
606-20-2	2,6-Dinitrotoluene	0.354		0.093	0.046	0.037
35572-78-2	2-Amino-4,6-dinitrotoluene	0.364		0.093	0.046	0.046
19406-51-0	4-Amino-2,6-dinitrotoluene	0.340		0.093	0.046	0.029
2691-41-0	HMX	0.339		0.093	0.046	0.043
99-08-1	m-Nitrotoluene	0.343		0.093	0.046	0.040
98-95-3	Nitrobenzene	0.324		0.10	0.046	0.035
55-63-0	Nitroglycerin	0.363		0.093	0.046	0.027
88-72-2	o-Nitrotoluene	0.368		0.093	0.046	0.040
78-11-5	PETN	0.408		0.093	0.046	0.032
99-99-0	p-Nitrotoluene	0.355		0.093	0.046	0.046
121-82-4	RDX	0.345		0.11	0.046	0.040
479-45-8	Tetryl	0.513	J1	0.093	0.046	0.036

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	96		68-140

Report Date: 08-Apr-2022 07:32:26 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07019.d
Lims ID: 280-160187-A-43-G MS
Client ID: 29SB197 (3-4)
Sample Type: MS
Inject. Date: 07-Apr-2022 12:24:48 ALS Bottle#: 17 Worklist Smp#: 19
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-43-G MS
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:21 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 13:09:38
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	162974	91.3	71.4	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		113305	125.0	144	
4 RDX								
281.2	1.841	1.841	0.0	0.998	224581	92.9	91.7	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								M
284.2	1.844	1.844	0.0		435904	125.0	274	M
5 1,3,5-Trinitrobenzene								
213.0	2.317	2.317	0.0	0.767	1469296	89.6	128	
6 Tetryl								
241.1	2.705	2.712	-0.007	0.896	3147602	138.0	209	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.030	-0.011		1392070	129.4	282	
8 1,3-Dinitrobenzene								
168.0	3.051	3.051	0.0	1.011	1064986	91.6	122	
9 Nitroglycerin								
62.0	3.080	3.080	0.0	1.020	1008183	97.6	434	
10 2,4,6-Trinitrotoluene								
227.0	3.321	3.321	0.0	0.766	7169433	98.2	155	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.775	653345	96.7	72.5	
12 Nitrobenzene								
123.0	3.421	3.431	-0.010	0.790	508501	87.1	34.6	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.652	3.645	0.007	0.843	4987368	91.4	32.2	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.988	3.976	0.012	0.921	6912313	97.9	41.3	

Report Date: 08-Apr-2022 07:32:26 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07019.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
17 2,6-Dinitrotoluene								
182.0	4.138	4.150	-0.012	0.955	6907016	95.3	431	
* 18 2,4-dinitrotoluene-d3								
185.1	4.332	4.341	-0.009		4400888	125.0	111	
19 2,4-Dinitrotoluene								
182.0	4.373	4.373	0.0	1.009	3448135	93.4	195	
20 PETN								
61.8	4.726	4.716	0.010	1.091	629876	109.7	93.7	
22 o-Nitrotoluene								
137.0	4.987	5.002	-0.015	1.151	1098461	99.0	308	
23 p-Nitrotoluene								
137.0	5.306	5.311	-0.005	1.225	916449	95.4	249	
24 m-Nitrotoluene								
137.0	5.699	5.704	-0.005	1.316	534542	92.4	137	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

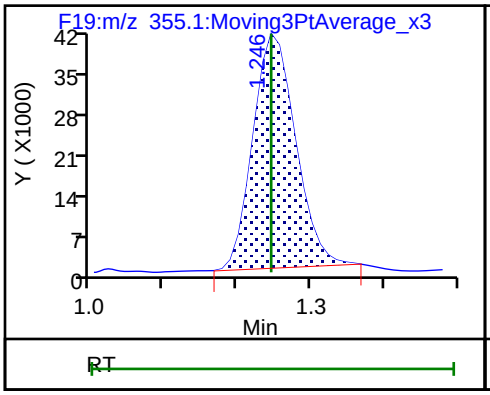
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 08-Apr-2022 07:32:26 Chrom Revision: 2.3 18-Mar-2022 09:07:22

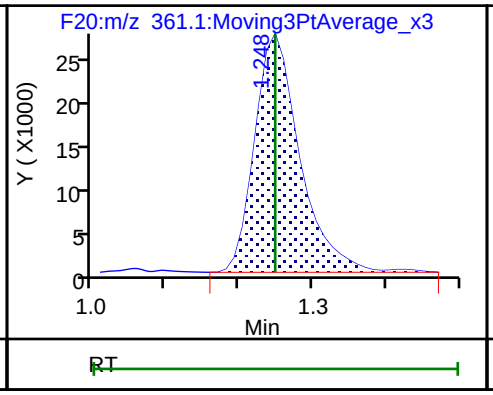
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07019.d
Injection Date: 07-Apr-2022 12:24:48 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-43-G MS
Client ID: 29SB197 (3-4)
Operator ID: acm ALS Bottle#: 17 Worklist Smp#: 19
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

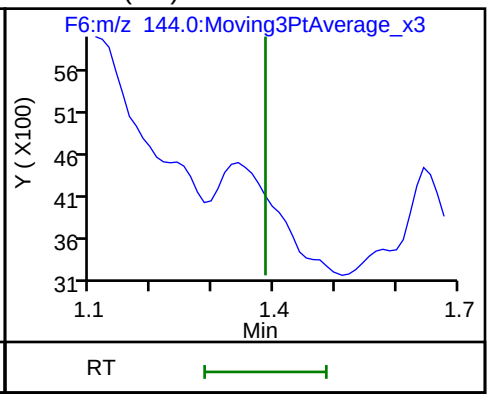
2 HMX



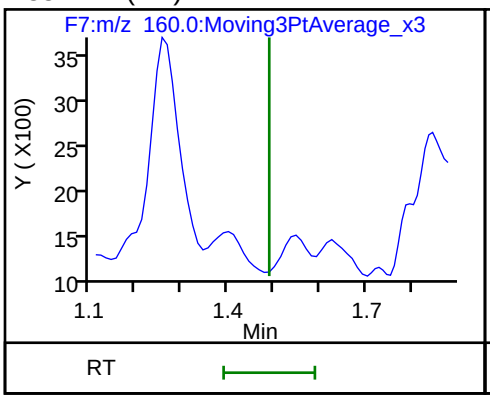
* 1 HMX-13C4



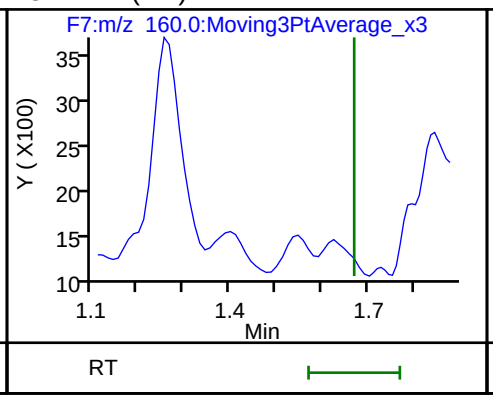
36 TNX (ND)



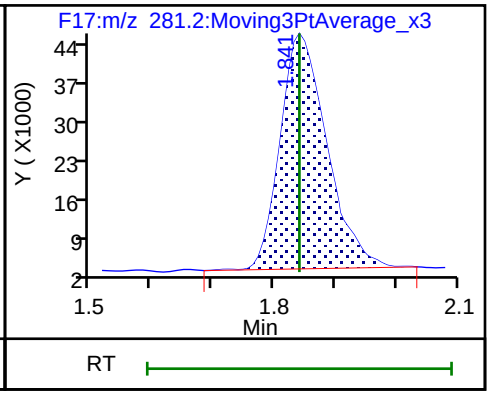
33 DNX (ND)



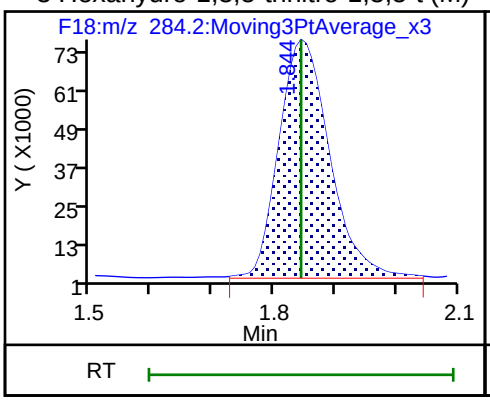
34 MNX (ND)



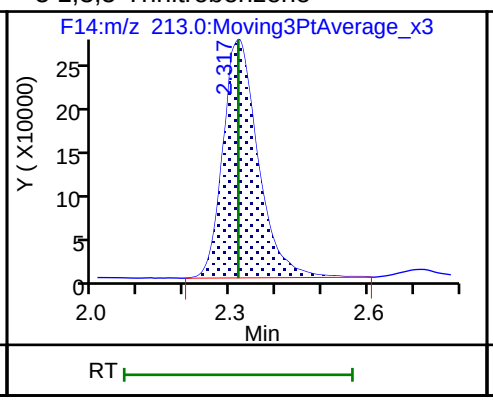
4 RDX



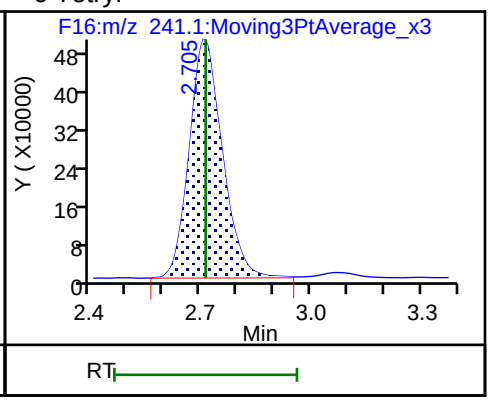
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t (M)



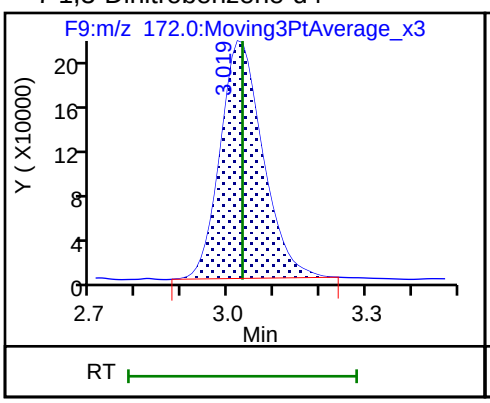
5 1,3,5-Trinitrobenzene



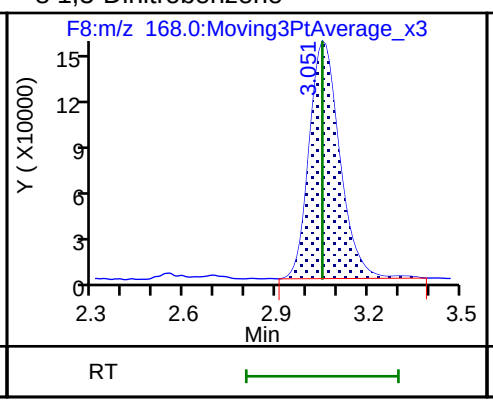
6 Tetryl



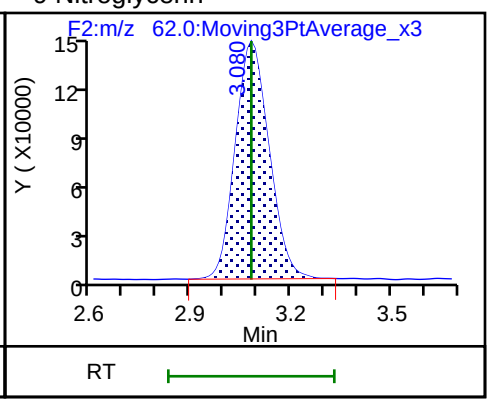
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

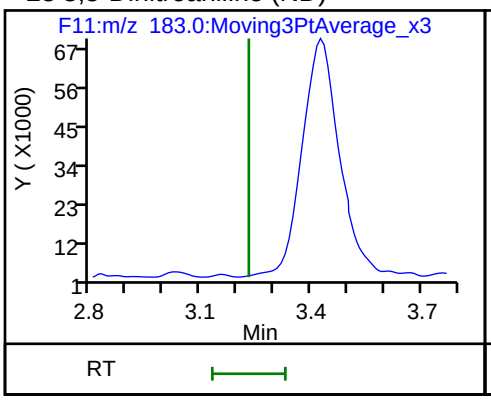


9 Nitroglycerin

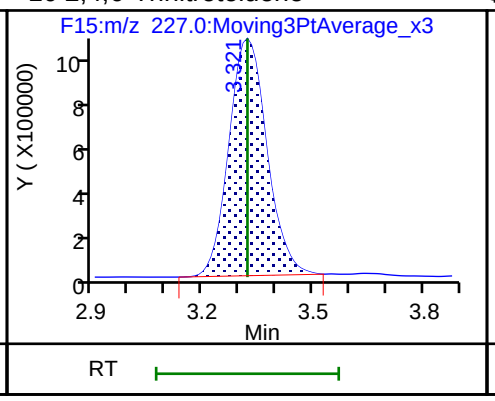


Report Date: 08-Apr-2022 07:32:26 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07019.d

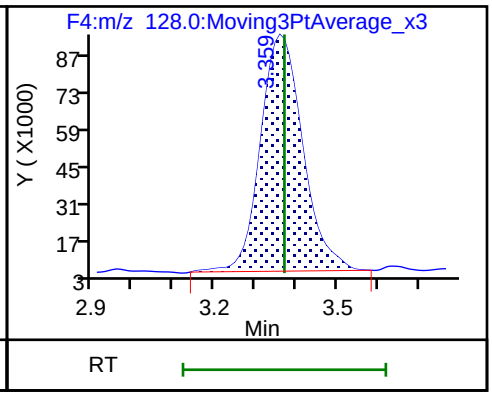
28 3,5-Dinitroaniline (ND)



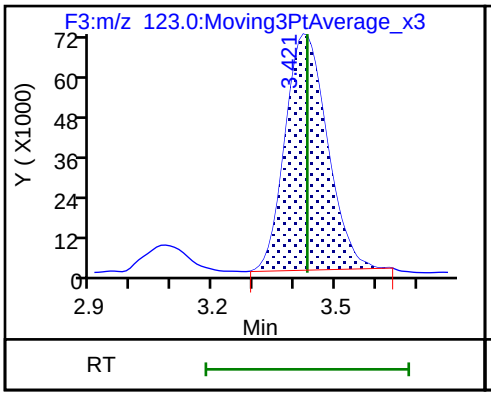
10 2,4,6-Trinitrotoluene



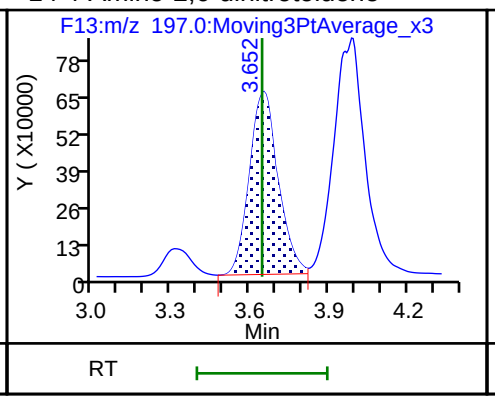
$ 11 Nitrobenzene-d5



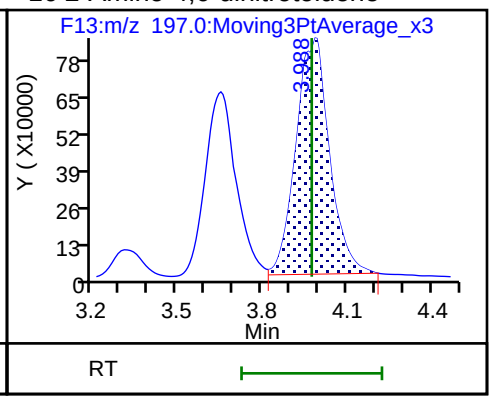
12 Nitrobenzene



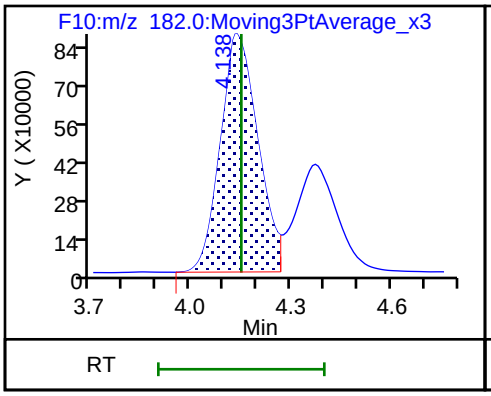
14 4-Amino-2,6-dinitrotoluene



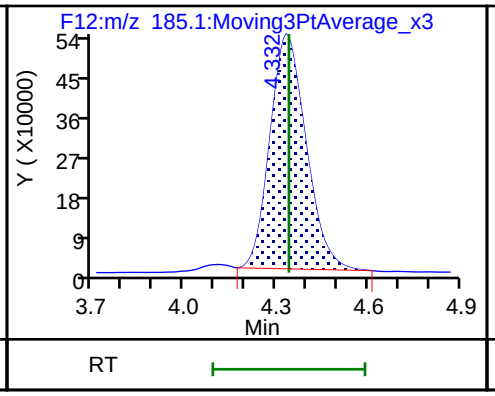
16 2-Amino-4,6-dinitrotoluene



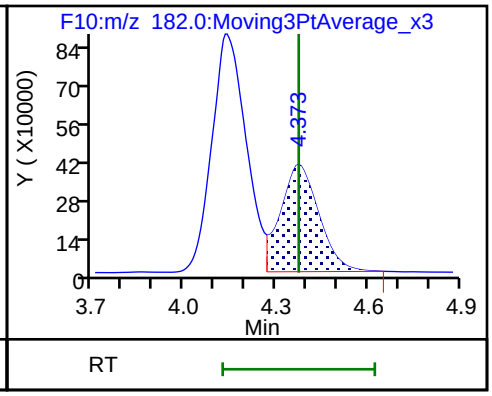
17 2,6-Dinitrotoluene



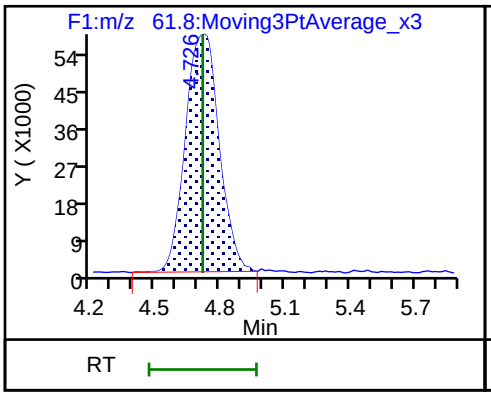
* 18 2,4-dinitrotoluene-d3



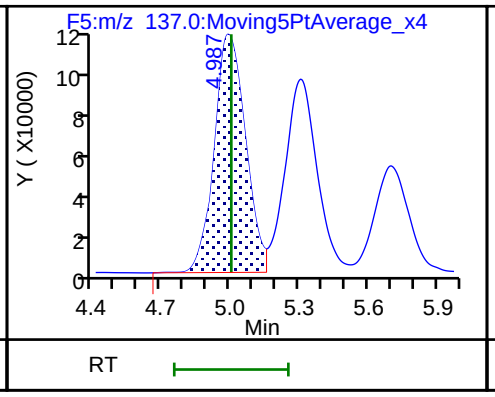
19 2,4-Dinitrotoluene



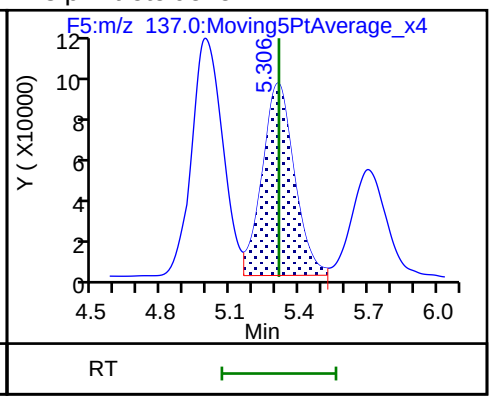
20 PETN



22 o-Nitrotoluene



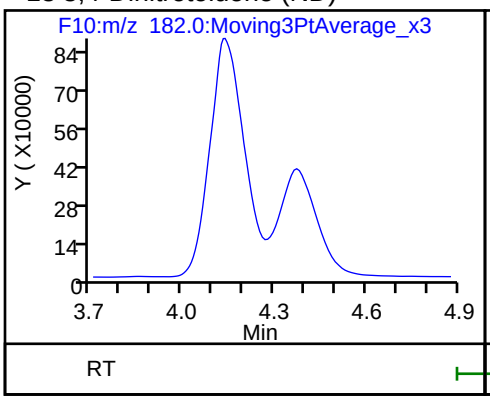
23 p-Nitrotoluene



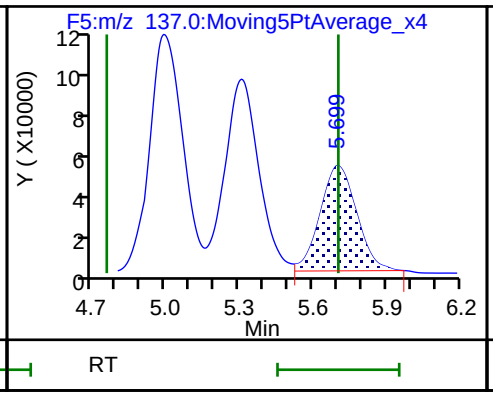
Report Date: 08-Apr-2022 07:32:26 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07019.d

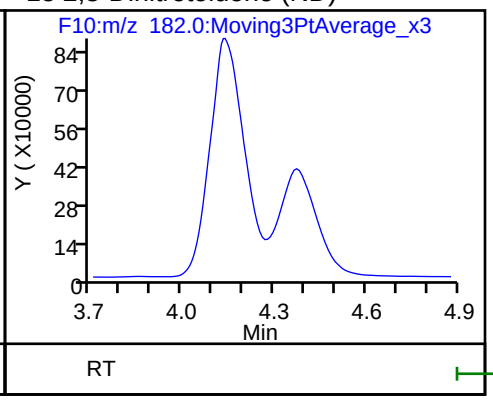
13 3,4-Dinitrotoluene (ND)



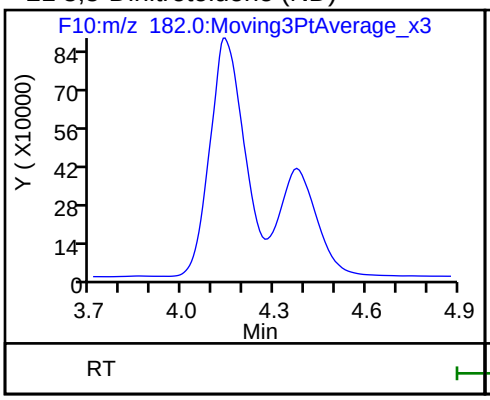
24 m-Nitrotoluene



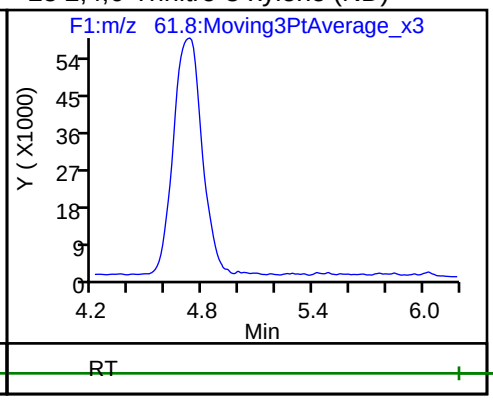
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 08-Apr-2022 07:32:26 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07019.d
Lims ID: 280-160187-A-43-G MS
Client ID: 29SB197 (3-4)
Sample Type: MS
Inject. Date: 07-Apr-2022 12:24:48 ALS Bottle#: 17 Worklist Smp#: 19
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-43-G MS
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:21 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 13:09:38

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	96.7	96.37

Report Date: 08-Apr-2022 07:32:26 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

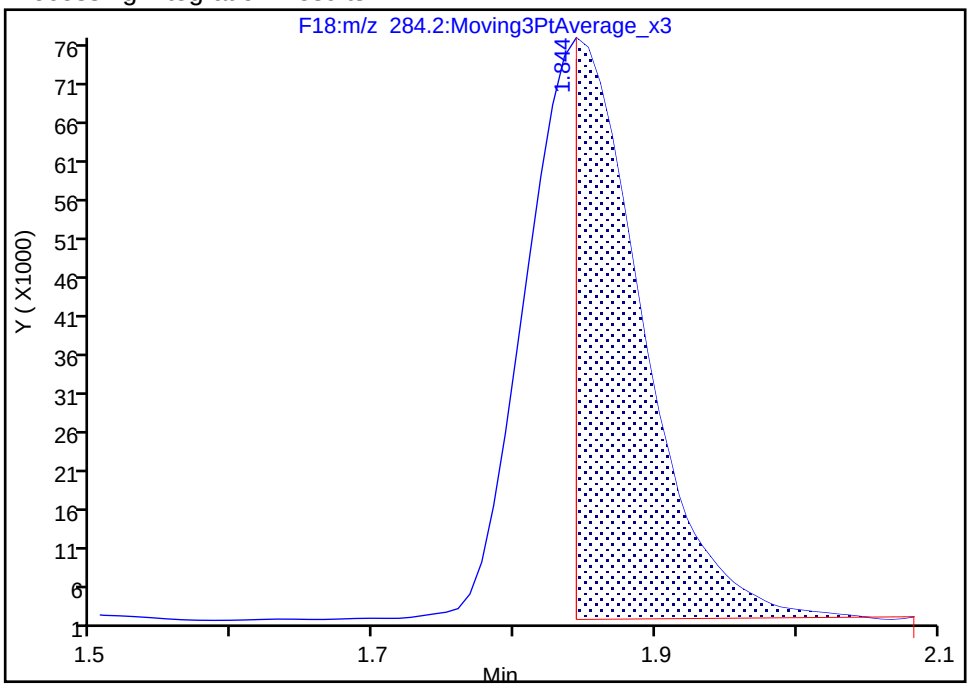
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07019.d
Injection Date: 07-Apr-2022 12:24:48 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-43-G MS
Client ID: 29SB197 (3-4)
Operator ID: acm ALS Bottle#: 17 Worklist Smp#: 19
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F18:SIR

* 3 Hexahydro-1,3,5-trinitro-1,3,5-t, CAS: STL00205

Signal: 1

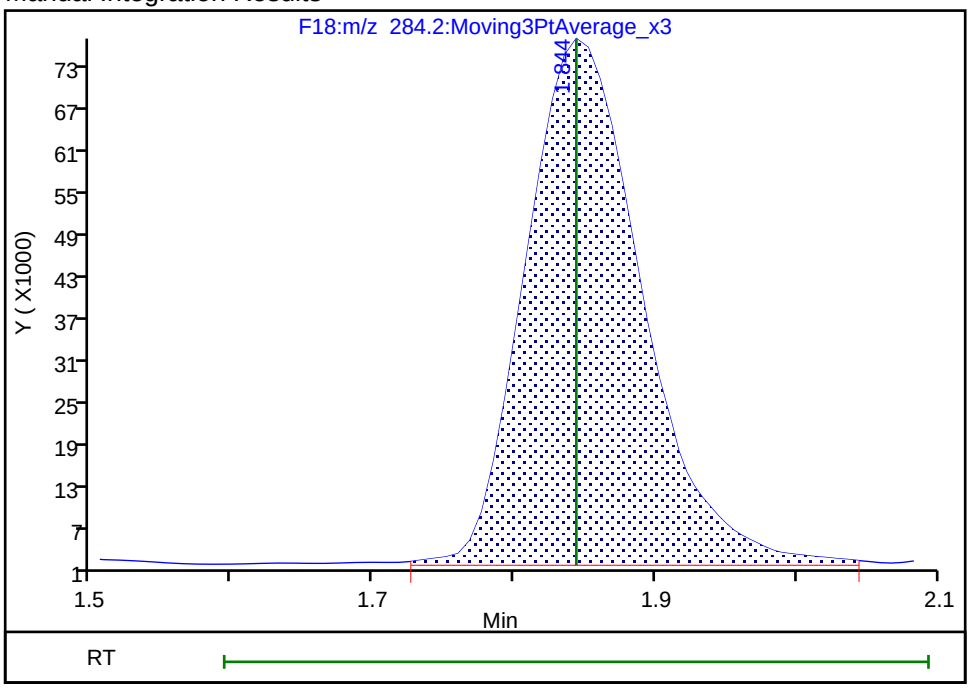
Processing Integration Results

RT: 1.84
Area: 243038
Amount: 125.0000
Amount Units: ug/l



Manual Integration Results

RT: 1.84
Area: 435904
Amount: 125.0000
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 13:09:34
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB183 (3-4) MSD | Lab Sample ID: 280-160187-2 MSD
Matrix: Solid | Lab File ID: ex722D05030.d
Analysis Method: 8321A | Date Collected: 03/22/2022 12:30
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:56
Sample wt/vol: 10.59(g) | Date Analyzed: 04/05/2022 12:54
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 570785 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.350		0.094	0.047	0.042
99-65-0	1,3-Dinitrobenzene	0.355		0.094	0.047	0.042
118-96-7	2,4,6-Trinitrotoluene	0.386		0.094	0.047	0.035
121-14-2	2,4-Dinitrotoluene	0.322		0.094	0.047	0.044
606-20-2	2,6-Dinitrotoluene	0.347		0.094	0.047	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.352	M	0.094	0.047	0.047
19406-51-0	4-Amino-2,6-dinitrotoluene	0.296	M J1	0.094	0.047	0.029
2691-41-0	HMX	0.309		0.094	0.047	0.044
99-08-1	m-Nitrotoluene	0.344		0.094	0.047	0.041
98-95-3	Nitrobenzene	0.348		0.10	0.047	0.036
55-63-0	Nitroglycerin	0.387		0.094	0.047	0.027
88-72-2	o-Nitrotoluene	0.334		0.094	0.047	0.040
78-11-5	PETN	0.393		0.094	0.047	0.032
99-99-0	p-Nitrotoluene	0.345		0.094	0.047	0.047
121-82-4	RDX	0.299	M	0.11	0.047	0.041
479-45-8	Tetryl	0.514	J1	0.094	0.047	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	98		68-140

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05030.d
Lims ID: 280-160187-A-2-H MSD
Client ID: 29SB183 (3-4)
Sample Type: MSD
Inject. Date: 05-Apr-2022 12:54:01 ALS Bottle#: 24 Worklist Smp#: 27
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-2-H MSD
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:45:42 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 06-Apr-2022 07:45:42
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.223	1.223	0.0	0.998	389060	81.8	99.9	
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		269718	125.0	69.0	
4 RDX								M
281.2	1.774	1.774	0.0	0.994	483491	79.2	74.1	M
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.785	1.777	0.008		980540	125.0	132	
5 1,3,5-Trinitrobenzene								
213.0	2.206	2.216	0.007	0.771	2296214	92.7	164	
6 Tetryl								
241.1	2.548	2.560	0.008	0.891	5485166	136.1	177	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1832635	129.4	195	
8 1,3-Dinitrobenzene								
168.0	2.882	2.893	0.011	1.007	1448260	93.9	166	
9 Nitroglycerin								
62.0	2.889	2.900	0.011	1.010	1522520	102.5	409	
28 3,5-Dinitroaniline								
183.0	3.027	3.051	0.0	1.058	14556	-0.4887	0.2	
10 2,4,6-Trinitrotoluene								
227.0	3.117	3.134	0.010	0.770	11441979	102.1	1349	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	882320	98.8	89.6	
12 Nitrobenzene								
123.0	3.218	3.236	0.010	0.795	698936	92.1	32.5	
14 4-Amino-2,6-dinitrotoluene								M
197.0	3.398	3.398	0.007	0.840	6238082	78.4	54.5	M

Report Date: 06-Apr-2022 07:45:42 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05030.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
16 2-Amino-4,6-dinitrotoluene								M
197.0	3.708	3.708	0.0	0.917	10236956	93.2	86.3	M
17 2,6-Dinitrotoluene								
182.0	3.865	3.885	0.013	0.955	8915503	91.9	514	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		6035038	125.0	116	
19 2,4-Dinitrotoluene								
182.0	4.078	4.087	0.026	1.008	4348703	85.4	225	
20 PETN								
61.8	4.325	4.342	0.020	1.069	1161789	103.9	414	
22 o-Nitrotoluene								
137.0	4.651	4.671	0.020	1.150	1325371	88.5	386	
23 p-Nitrotoluene								
137.0	4.930	4.952	0.020	1.218	1187744	91.3	328	
24 m-Nitrotoluene								
137.0	5.293	5.314	0.025	1.308	706327	91.1	184	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

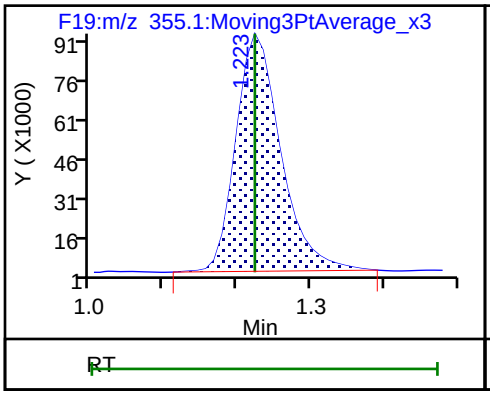
Report Date: 06-Apr-2022 07:45:42

Chrom Revision: 2.3 18-Mar-2022 09:07:22

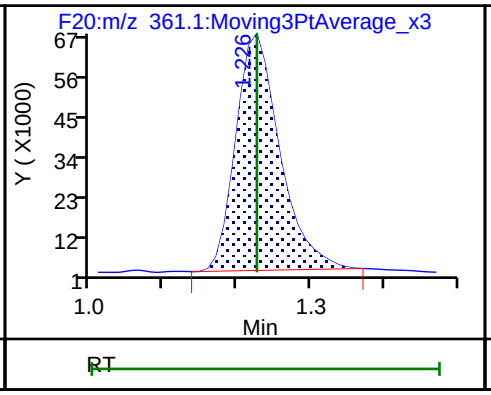
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05030.d
Injection Date: 05-Apr-2022 12:54:01 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-2-H MSD
Client ID: 29SB183 (3-4)
Operator ID: acm ALS Bottle#: 24 Worklist Smp#: 27
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

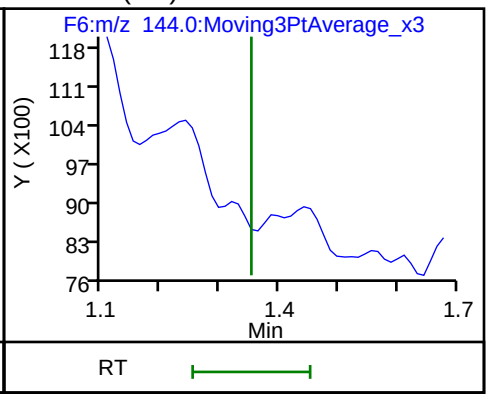
2 HMX



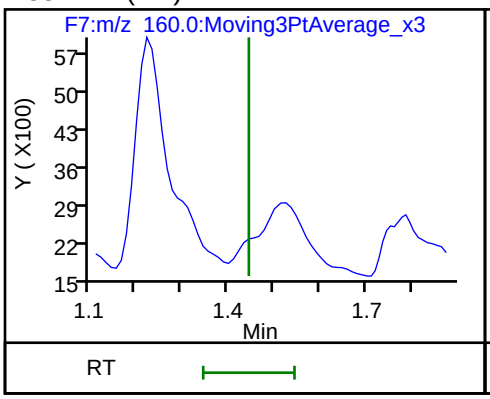
* 1 HMX-13C4



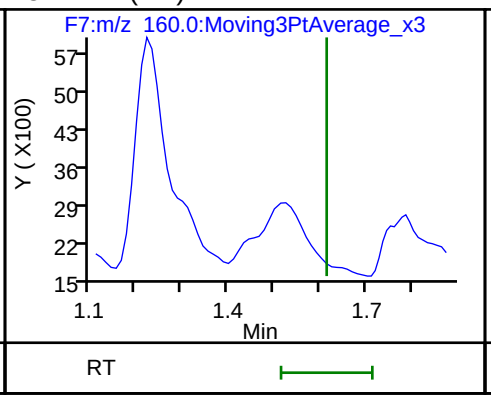
36 TNX (ND)



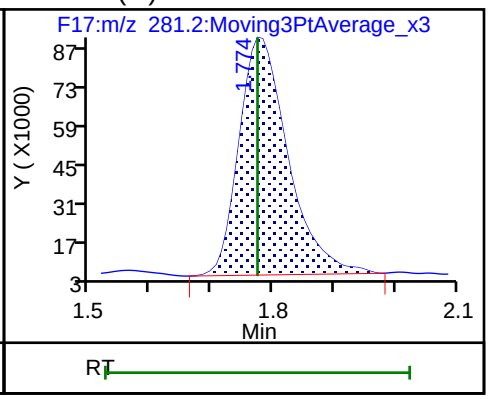
33 DNX (ND)



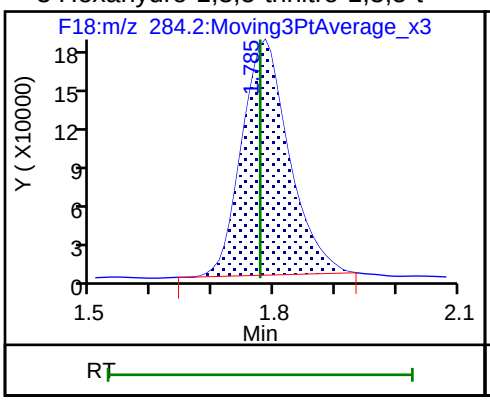
34 MNX (ND)



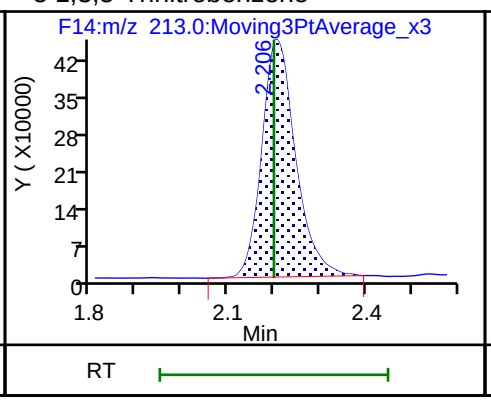
4 RDX (M)



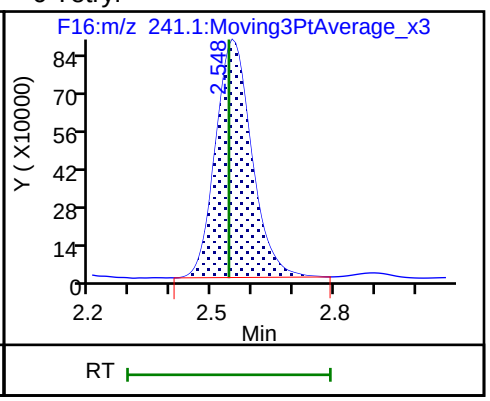
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



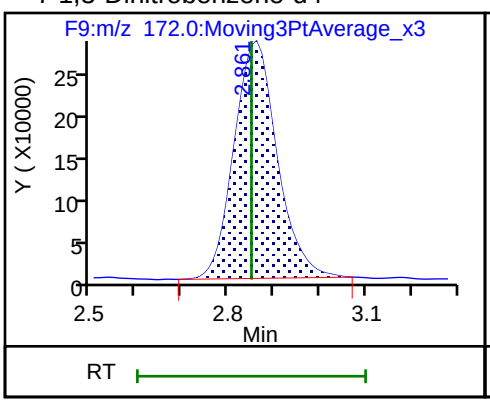
5 1,3,5-Trinitrobenzene



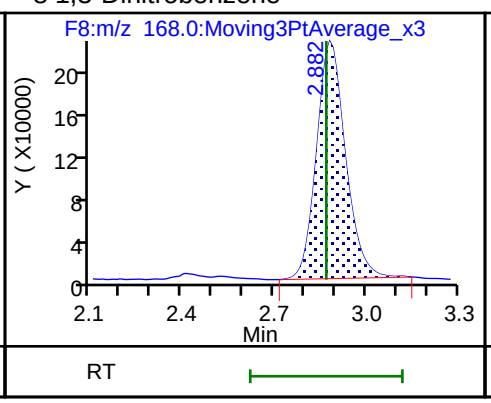
6 Tetryl



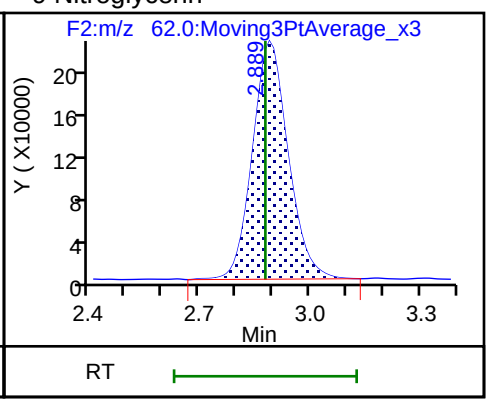
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



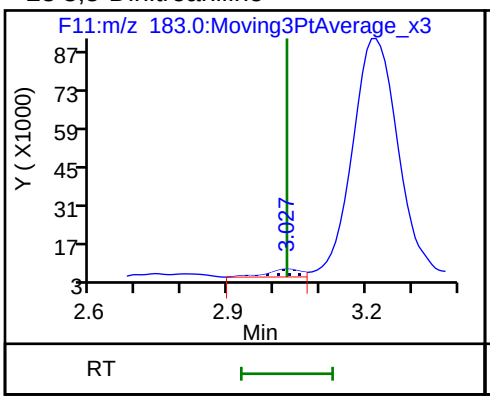
9 Nitroglycerin



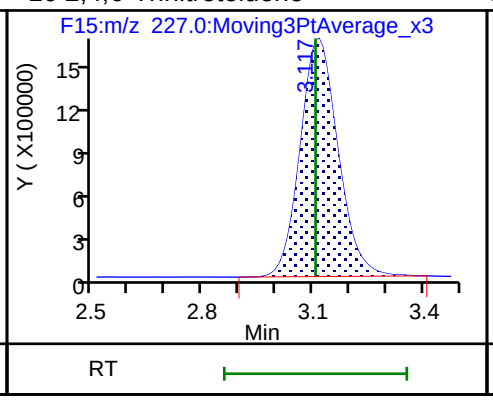
Report Date: 06-Apr-2022 07:45:42 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05030.d

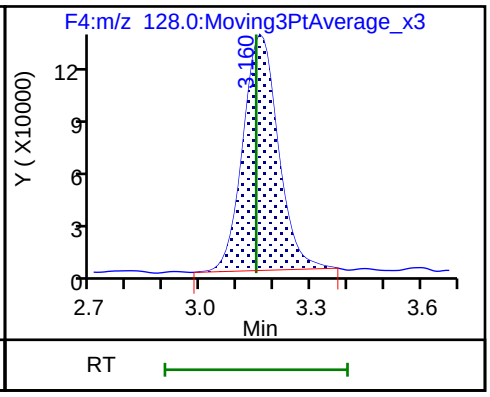
28 3,5-Dinitroaniline



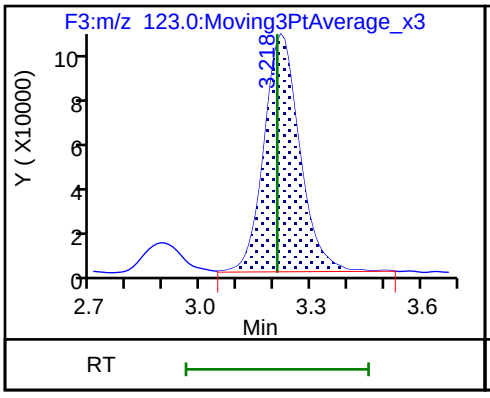
10 2,4,6-Trinitrotoluene



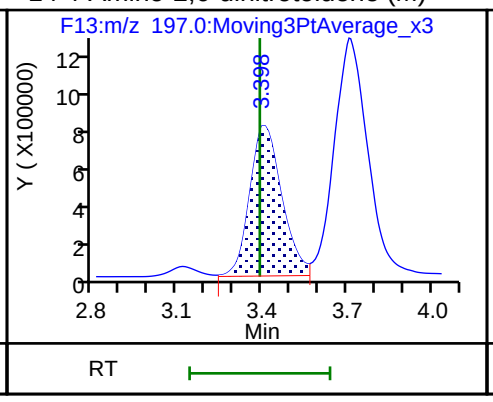
$ 11 Nitrobenzene-d5



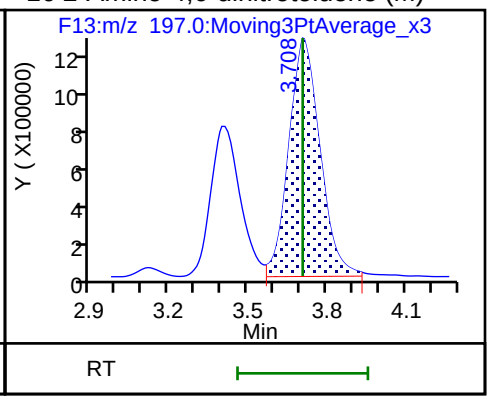
12 Nitrobenzene



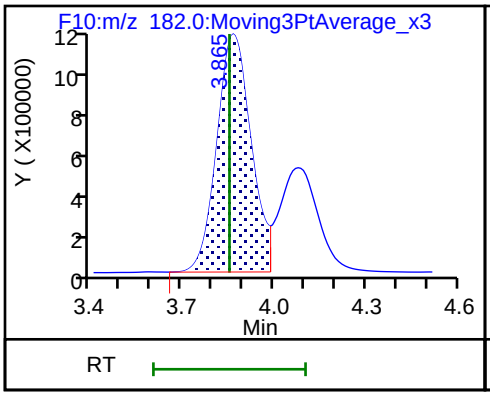
14 4-Amino-2,6-dinitrotoluene (M)



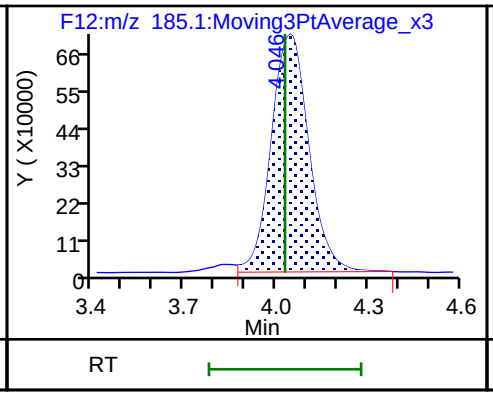
16 2-Amino-4,6-dinitrotoluene (M)



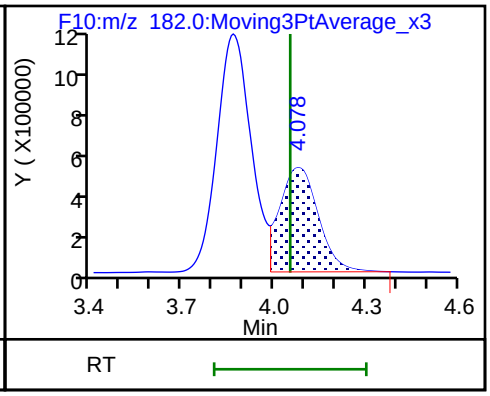
17 2,6-Dinitrotoluene



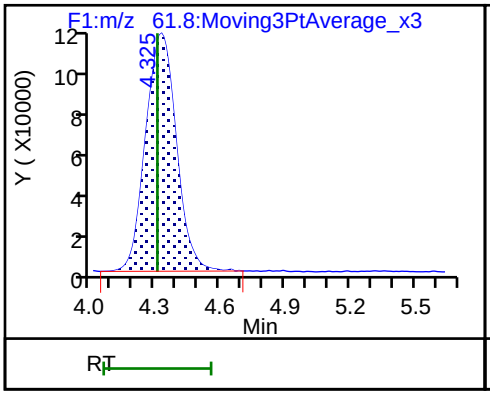
* 18 2,4-dinitrotoluene-d3



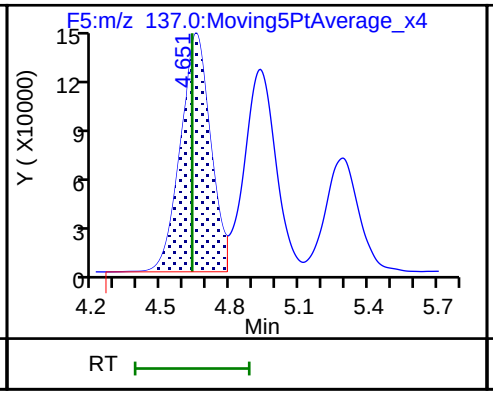
19 2,4-Dinitrotoluene



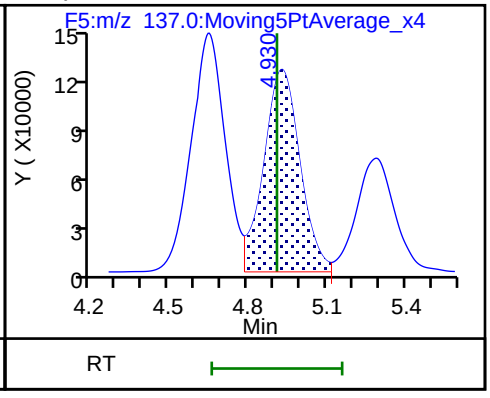
20 PETN



22 o-Nitrotoluene



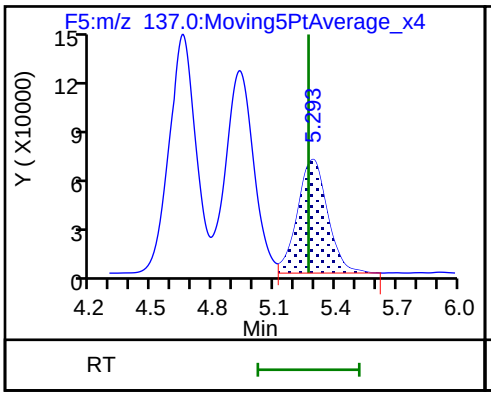
23 p-Nitrotoluene



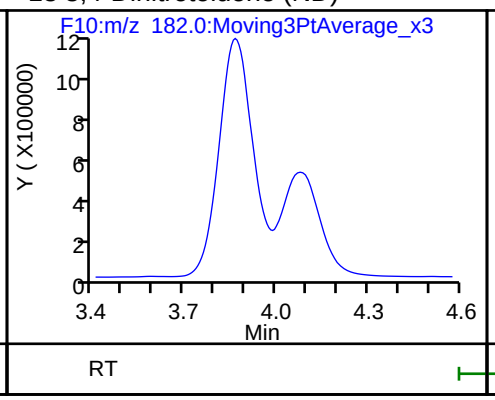
Report Date: 06-Apr-2022 07:45:42 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05030.d

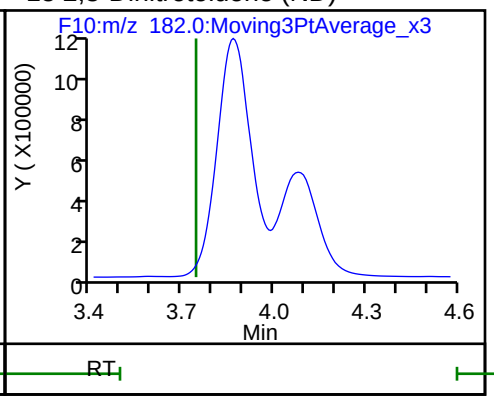
24 m-Nitrotoluene



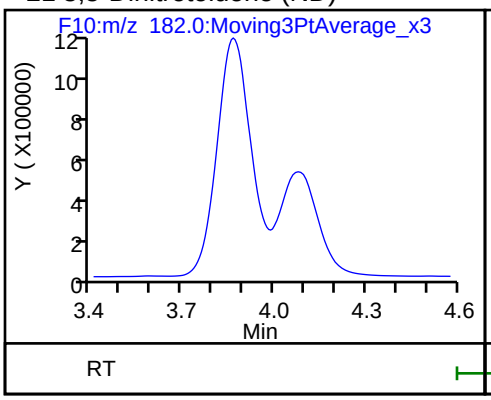
13 3,4-Dinitrotoluene (ND)



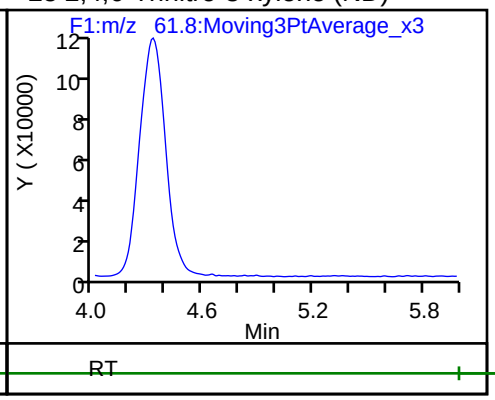
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 06-Apr-2022 07:45:42 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05030.d				
Lims ID:	280-160187-A-2-H MSD				
Client ID:	29SB183 (3-4)				
Sample Type:	MSD				
Inject. Date:	05-Apr-2022 12:54:01	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160187-A-2-H MSD				
Misc. Info.:	ex722D05				
Operator ID:	acm	Instrument ID:	LC_LCMS7		
Method:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m				
Limit Group:	LC - 8321A Expl				
Last Update:	06-Apr-2022 07:45:42	Calib Date:	05-Apr-2022 10:58:50		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1632				
First Level Reviewer: meyera		Date:	06-Apr-2022 07:45:42		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	98.8	98.44

Report Date: 06-Apr-2022 07:45:42 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

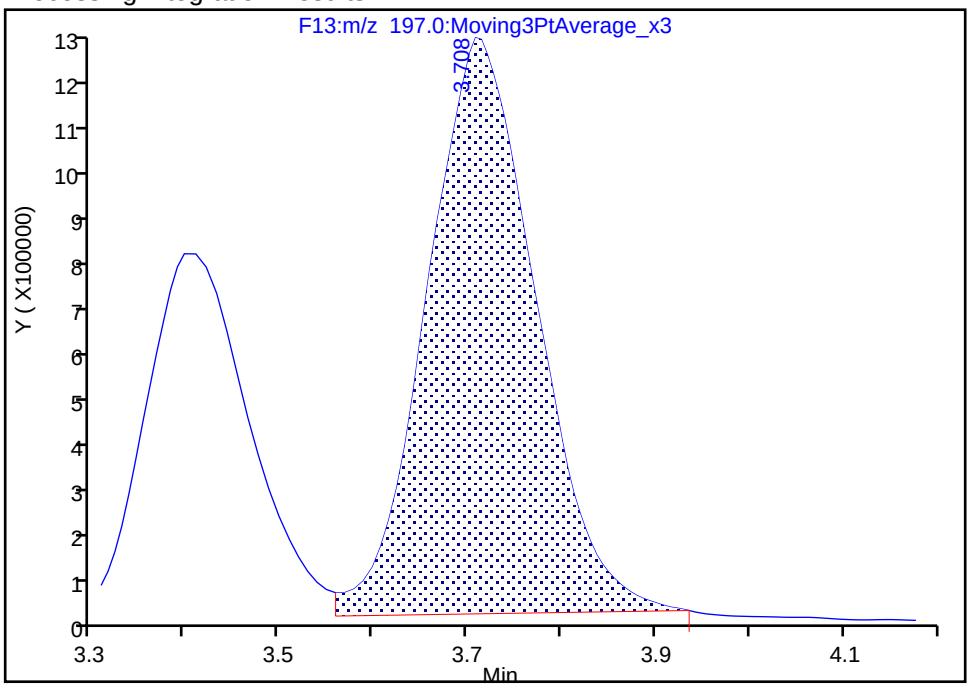
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05030.d				
Injection Date:	05-Apr-2022 12:54:01	Instrument ID:	LC_LCMS7		
Lims ID:	280-160187-A-2-H MSD				
Client ID:	29SB183 (3-4)				
Operator ID:	acm	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

16 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

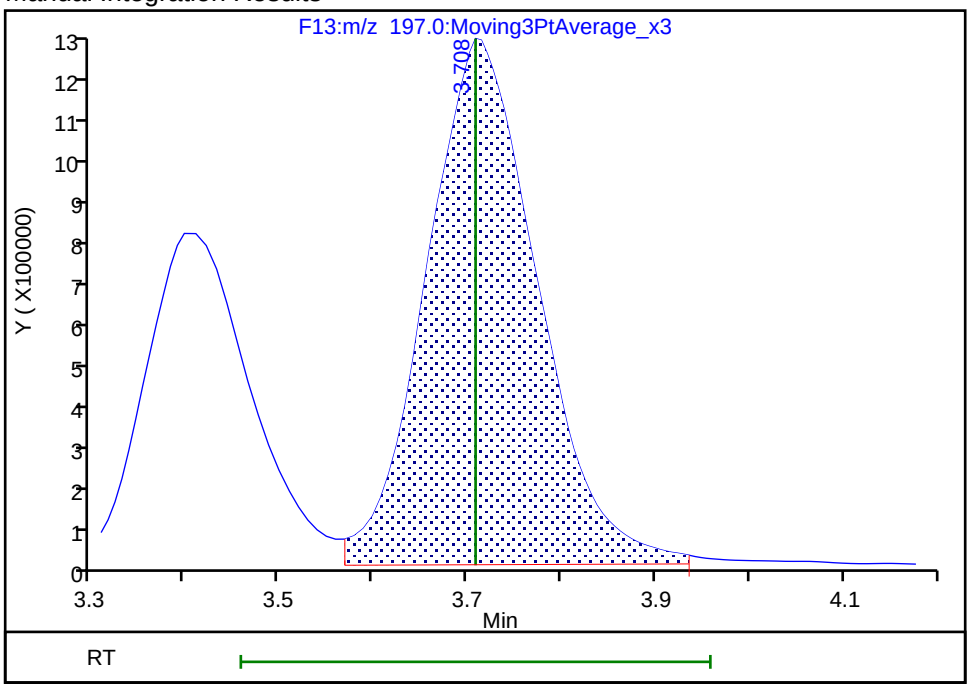
Processing Integration Results

RT: 3.71
Area: 9906978
Amount: 90.223606
Amount Units: ug/l



Manual Integration Results

RT: 3.71
Area: 10236956
Amount: 93.232975
Amount Units: ug/l



Reviewer: meyera, 06-Apr-2022 07:45:25

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 06-Apr-2022 07:45:42 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

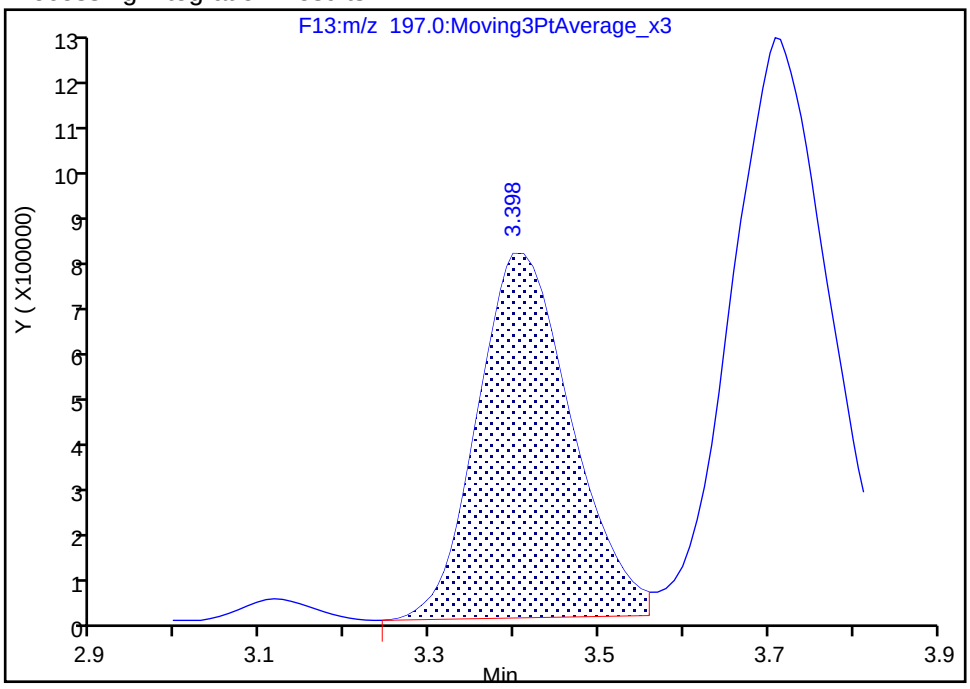
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05030.d				
Injection Date:	05-Apr-2022 12:54:01	Instrument ID:	LC_LCMS7		
Lims ID:	280-160187-A-2-H MSD				
Client ID:	29SB183 (3-4)				
Operator ID:	acm	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

14 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

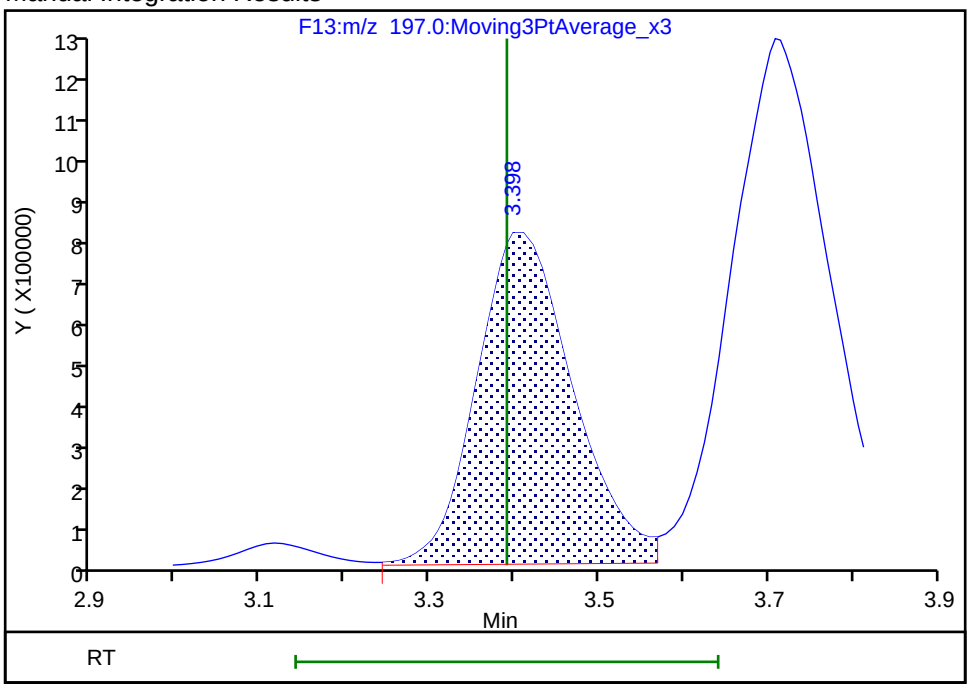
Processing Integration Results

RT: 3.40
Area: 6024866
Amount: 75.707764
Amount Units: ug/l



Manual Integration Results

RT: 3.40
Area: 6238082
Amount: 78.387881
Amount Units: ug/l



Reviewer: meyera, 06-Apr-2022 07:45:25

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 06-Apr-2022 07:45:42 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05030.d

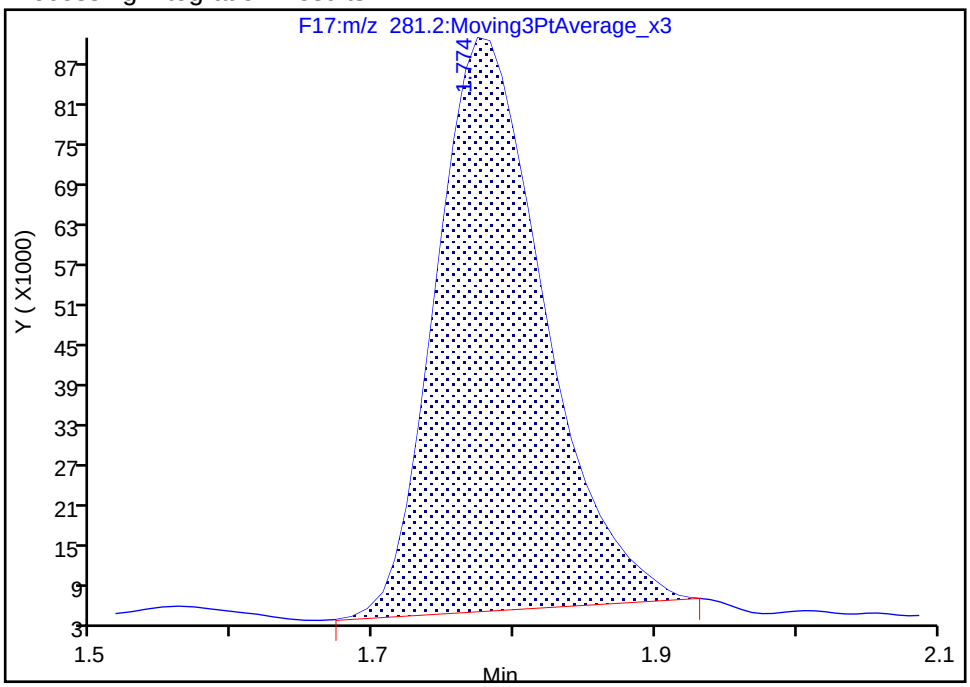
Injection Date:	05-Apr-2022 12:54:01	Instrument ID:	LC_LCMS7
Lims ID:	280-160187-A-2-H MSD		
Client ID:	29SB183 (3-4)		
Operator ID:	acm	ALS Bottle#:	24 Worklist Smp#: 27
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F17:SIR

4 RDX, CAS: 121-82-4

Signal: 1

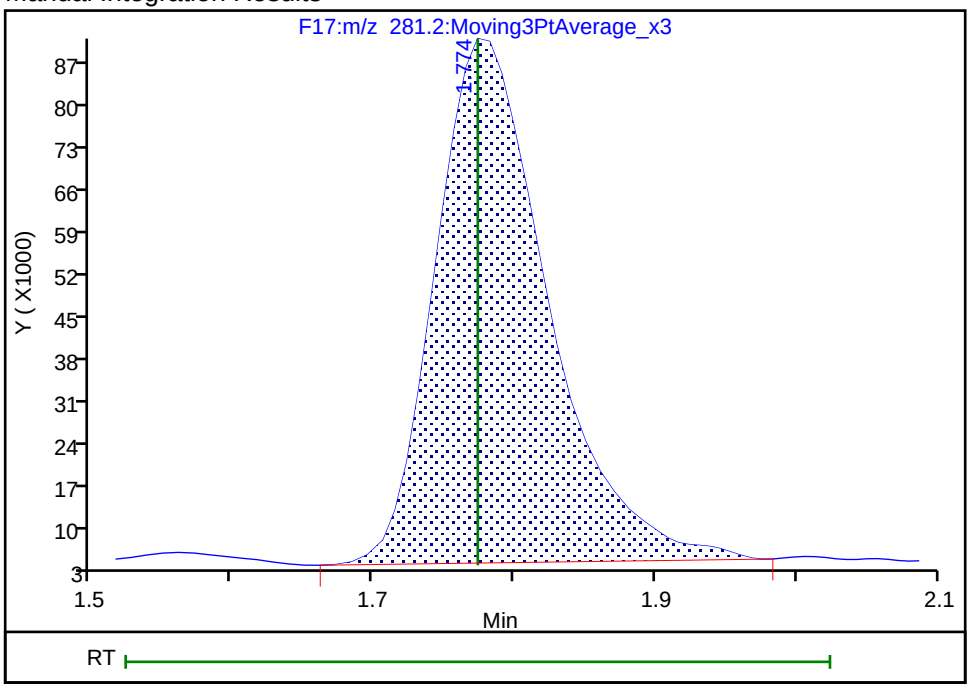
Processing Integration Results

RT: 1.77
Area: 461687
Amount: 75.563860
Amount Units: ug/l



Manual Integration Results

RT: 1.77
Area: 483491
Amount: 79.227632
Amount Units: ug/l



Reviewer: meyera, 06-Apr-2022 07:44:41

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB201(11-12) MSD | Lab Sample ID: 280-160187-26 MSD
Matrix: Solid | Lab File ID: ex722D05067.d
Analysis Method: 8321A | Date Collected: 03/22/2022 17:20
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:54
Sample wt/vol: 10.21(g) | Date Analyzed: 04/05/2022 16:50
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 570786 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.368		0.098	0.049	0.044
99-65-0	1,3-Dinitrobenzene	0.366		0.098	0.049	0.044
118-96-7	2,4,6-Trinitrotoluene	0.382		0.098	0.049	0.036
121-14-2	2,4-Dinitrotoluene	0.351		0.098	0.049	0.046
606-20-2	2,6-Dinitrotoluene	0.373		0.098	0.049	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.360		0.098	0.049	0.049
19406-51-0	4-Amino-2,6-dinitrotoluene	0.355		0.098	0.049	0.030
2691-41-0	HMX	0.348		0.098	0.049	0.045
99-08-1	m-Nitrotoluene	0.356		0.098	0.049	0.042
98-95-3	Nitrobenzene	0.352		0.11	0.049	0.037
55-63-0	Nitroglycerin	0.391		0.098	0.049	0.028
88-72-2	o-Nitrotoluene	0.368		0.098	0.049	0.042
78-11-5	PETN	0.460		0.098	0.049	0.033
99-99-0	p-Nitrotoluene	0.368		0.098	0.049	0.048
121-82-4	RDX	0.333		0.12	0.049	0.042
479-45-8	Tetryl	0.554	J1	0.098	0.049	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	94		68-140

Report Date: 06-Apr-2022 07:10:17 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05067.d
Lims ID: 280-160187-A-26-H MSD
Client ID: 29SB201(11-12)
Sample Type: MSD
Inject. Date: 05-Apr-2022 16:50:48 ALS Bottle#: 9 Worklist Smp#: 64
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-26-H MSD
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:10:15 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 06-Apr-2022 06:57:30
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.223	1.223	0.0	0.998	387900	89.0	124	
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		247573	125.0	192	
4 RDX								
281.2	1.782	1.791	0.008	1.003	521774	85.1	268	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		986779	125.0	219	
5 1,3,5-Trinitrobenzene								
213.0	2.202	2.216	0.003	0.773	2303252	94.0	165	
6 Tetryl								
241.1	2.548	2.560	0.008	0.894	5640240	141.4	169	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.850	2.850	0.0		1812926	129.4	248	
8 1,3-Dinitrobenzene								
168.0	2.882	2.893	0.011	1.011	1425147	93.4	148	
9 Nitroglycerin								
62.0	2.889	2.900	0.011	1.014	1468577	99.9	565	
10 2,4,6-Trinitrotoluene								
227.0	3.117	3.134	0.010	0.770	10817542	97.6	523	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	833390	94.2	126	
12 Nitrobenzene								
123.0	3.218	3.236	0.010	0.795	675206	89.9	33.1	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.411	3.420	0.020	0.843	6820780	90.7	59.3	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.715	3.740	0.007	0.918	9538264	91.9	81.8	

Report Date: 06-Apr-2022 07:10:17 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05067.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
17 2,6-Dinitrotoluene								
182.0	3.871	3.885	0.019	0.957	8719977	95.2	547	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		5703778	125.0	106	
19 2,4-Dinitrotoluene								
182.0	4.078	4.087	0.026	1.008	4316616	89.7	261	
20 PETN								
61.8	4.315	4.342	0.010	1.067	1242439	117.5	358	
22 o-Nitrotoluene								
137.0	4.646	4.671	0.015	1.148	1327735	93.8	426	
23 p-Nitrotoluene								
137.0	4.930	4.952	0.020	1.218	1154514	93.9	354	
24 m-Nitrotoluene								
137.0	5.293	5.314	0.025	1.308	666384	91.0	187	

QC Flag Legend

Processing Flags

Reagents:

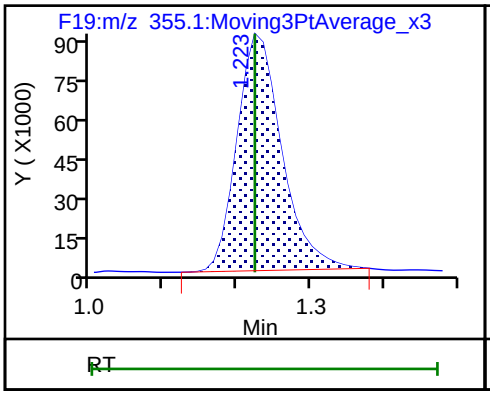
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:10:17 Chrom Revision: 2.3 18-Mar-2022 09:07:22

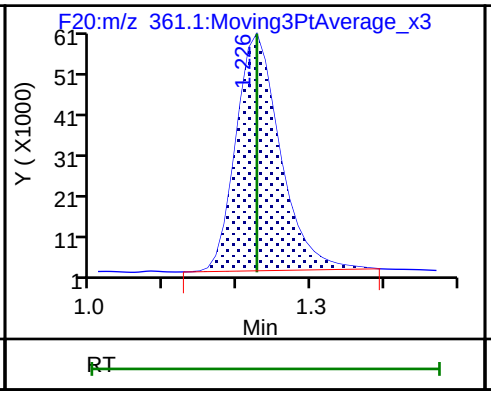
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05067.d
Injection Date: 05-Apr-2022 16:50:48 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-26-H MSD
Client ID: 29SB201(11-12)
Operator ID: acm ALS Bottle#: 9 Worklist Smp#: 64
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

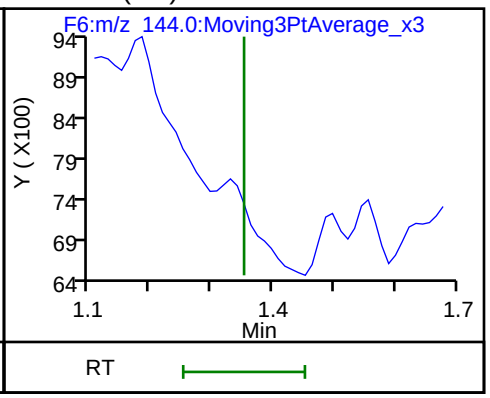
2 HMX



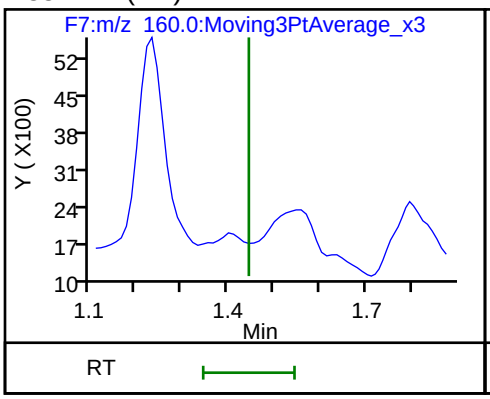
* 1 HMX-13C4



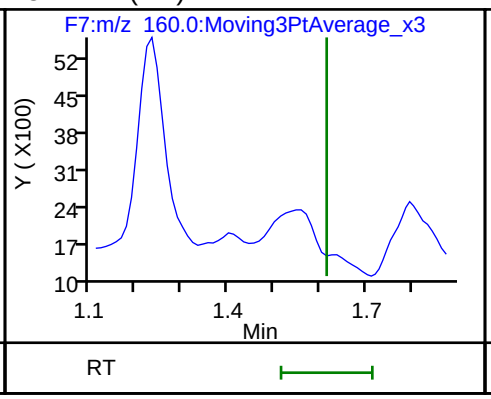
36 TNX (ND)



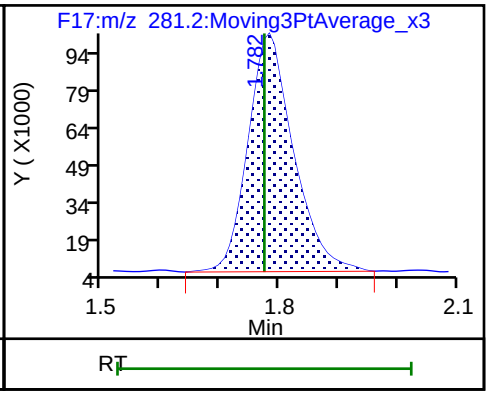
33 DNX (ND)



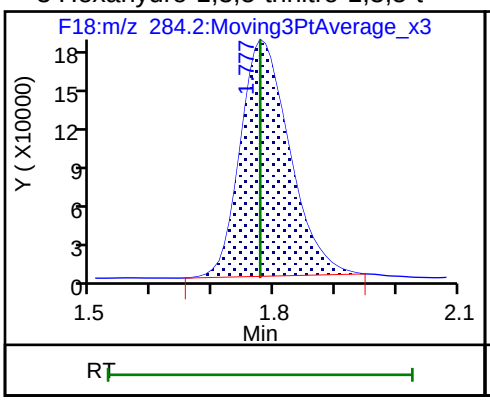
34 MNX (ND)



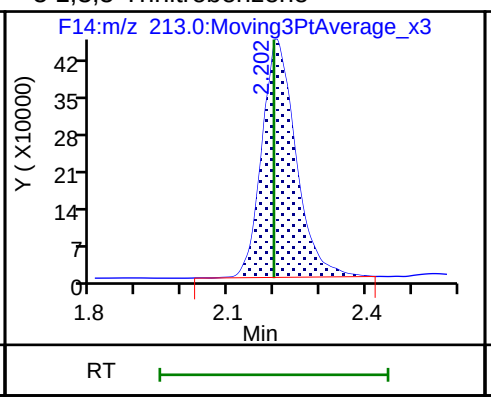
4 RDX



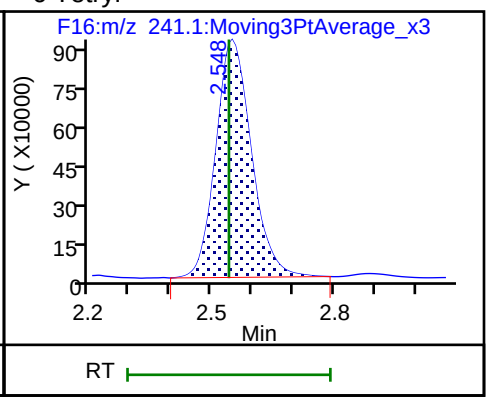
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



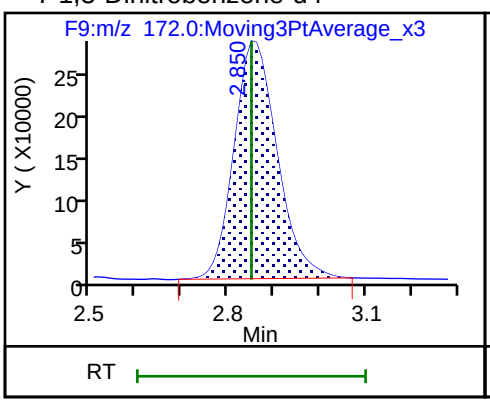
5 1,3,5-Trinitrobenzene



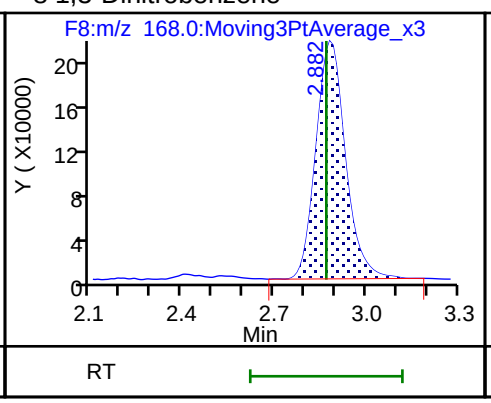
6 Tetryl



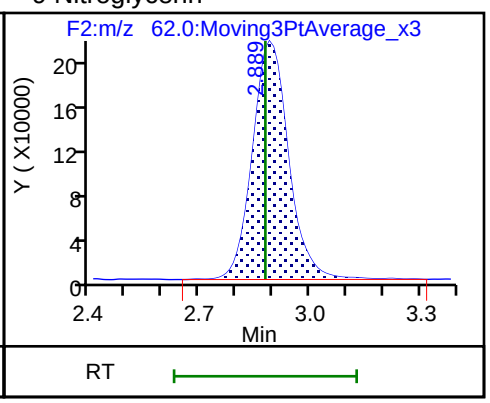
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

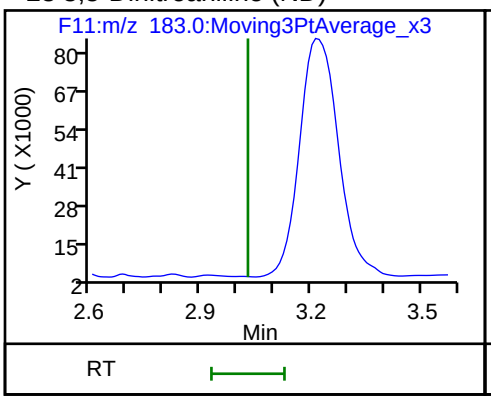


9 Nitroglycerin

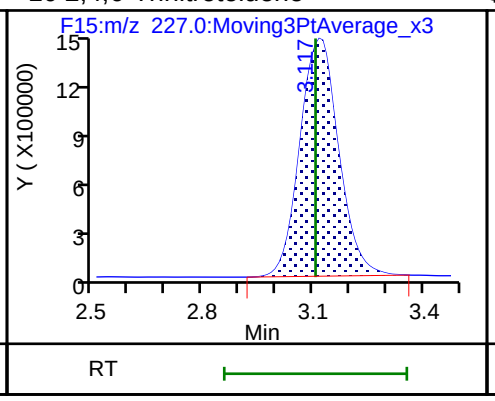


Report Date: 06-Apr-2022 07:10:17 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05067.d

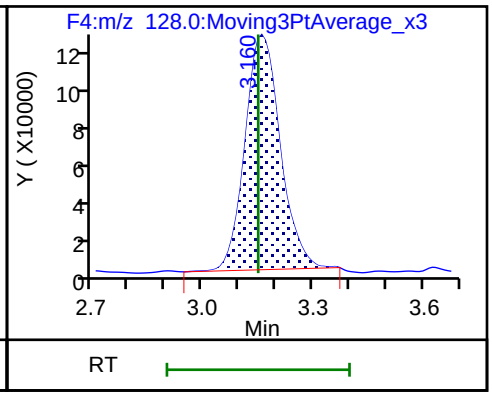
28 3,5-Dinitroaniline (ND)



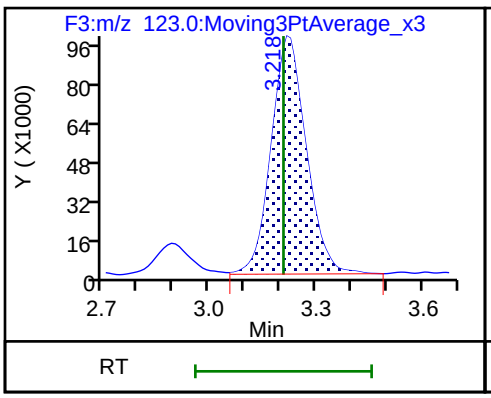
10 2,4,6-Trinitrotoluene



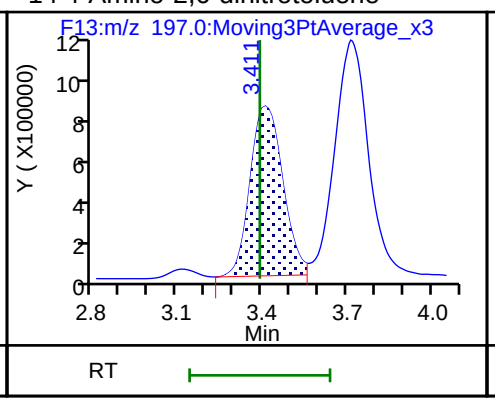
$ 11 Nitrobenzene-d5



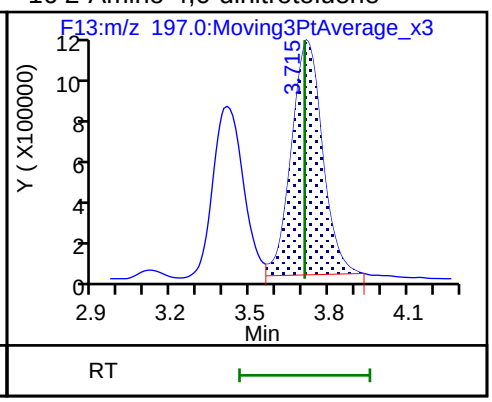
12 Nitrobenzene



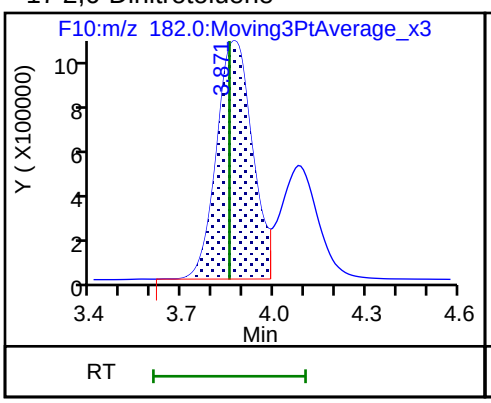
14 4-Amino-2,6-dinitrotoluene



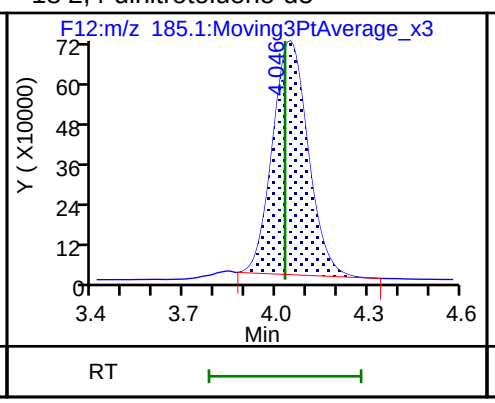
16 2-Amino-4,6-dinitrotoluene



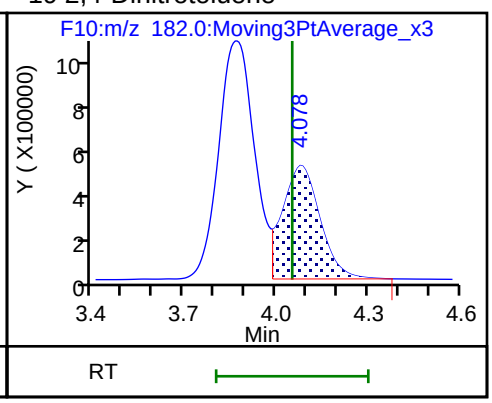
17 2,6-Dinitrotoluene



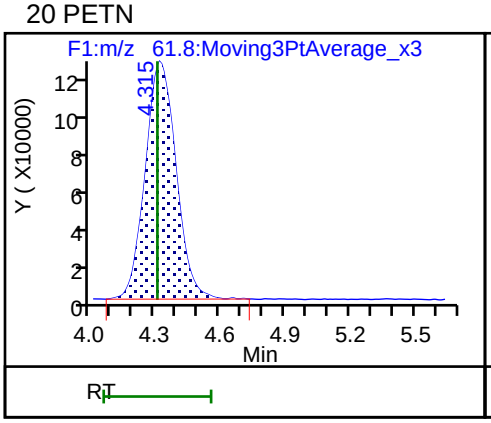
* 18 2,4-dinitrotoluene-d3



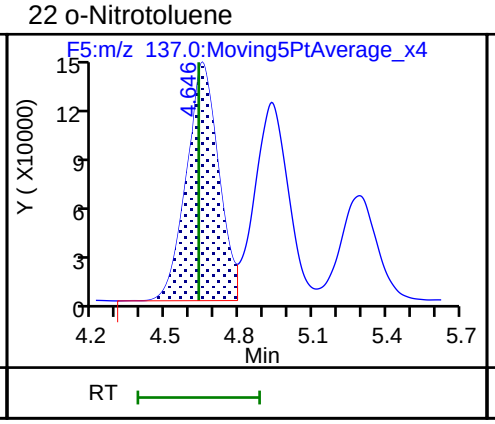
19 2,4-Dinitrotoluene



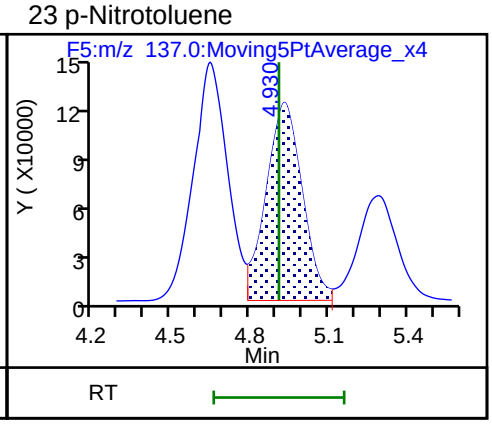
20 PETN



22 o-Nitrotoluene



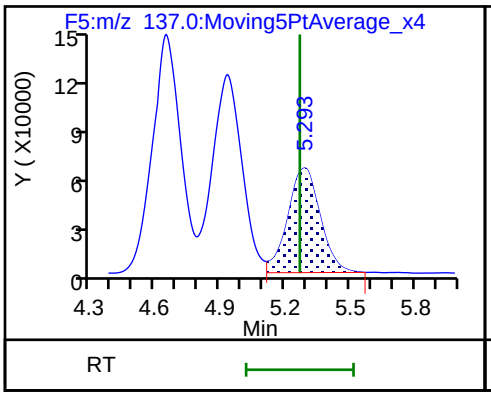
23 p-Nitrotoluene



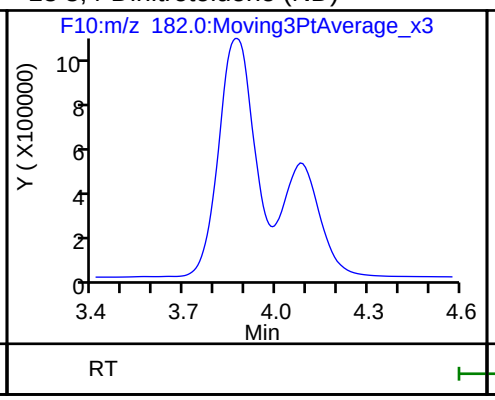
Report Date: 06-Apr-2022 07:10:18 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05067.d

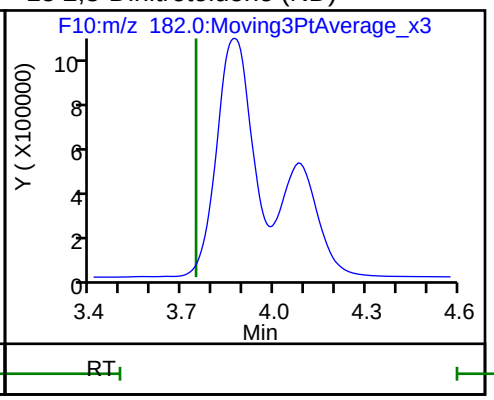
24 m-Nitrotoluene



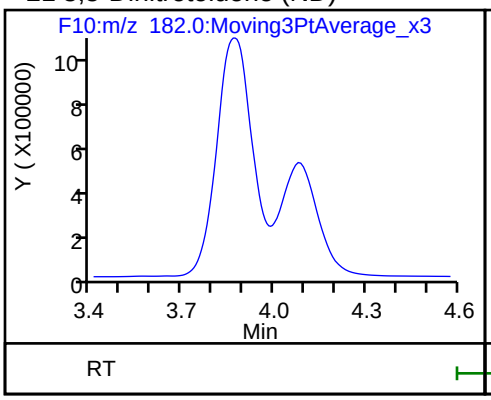
13 3,4-Dinitrotoluene (ND)



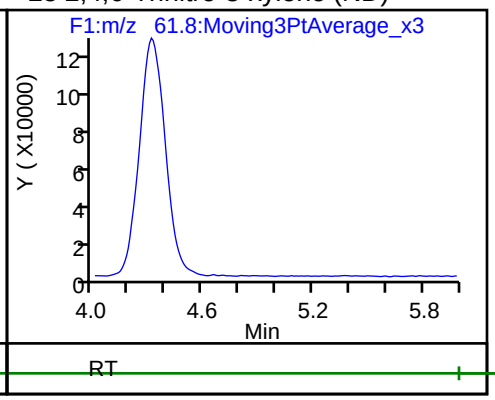
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 06-Apr-2022 07:10:17 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05067.d
Lims ID: 280-160187-A-26-H MSD
Client ID: 29SB201(11-12)
Sample Type: MSD
Inject. Date: 05-Apr-2022 16:50:48 ALS Bottle#: 9 Worklist Smp#: 64
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-26-H MSD
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:10:15 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 06-Apr-2022 06:57:30

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	94.2	93.94

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB197 (3-4) MSD | Lab Sample ID: 280-160187-43 MSD
Matrix: Solid | Lab File ID: ex722D07020.d
Analysis Method: 8321A | Date Collected: 03/23/2022 11:35
Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57
Sample wt/vol: 10.11(g) | Date Analyzed: 04/07/2022 12:31
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571108 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.351		0.099	0.049	0.044
99-65-0	1,3-Dinitrobenzene	0.340		0.099	0.049	0.044
118-96-7	2,4,6-Trinitrotoluene	0.371		0.099	0.049	0.036
121-14-2	2,4-Dinitrotoluene	0.354		0.099	0.049	0.046
606-20-2	2,6-Dinitrotoluene	0.360		0.099	0.049	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.336		0.099	0.049	0.049
19406-51-0	4-Amino-2,6-dinitrotoluene	0.332		0.099	0.049	0.031
2691-41-0	HMX	0.371		0.099	0.049	0.046
99-08-1	m-Nitrotoluene	0.376		0.099	0.049	0.043
98-95-3	Nitrobenzene	0.341		0.11	0.049	0.038
55-63-0	Nitroglycerin	0.370		0.099	0.049	0.029
88-72-2	o-Nitrotoluene	0.360		0.099	0.049	0.042
78-11-5	PETN	0.405		0.099	0.049	0.034
99-99-0	p-Nitrotoluene	0.366		0.099	0.049	0.049
121-82-4	RDX	0.406		0.12	0.049	0.043
479-45-8	Tetryl	0.539	J1	0.099	0.049	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	88		68-140

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07020.d
Lims ID: 280-160187-A-43-H MSD
Client ID: 29SB197 (3-4)
Sample Type: MSD
Inject. Date: 07-Apr-2022 12:31:24 ALS Bottle#: 18 Worklist Smp#: 20
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-43-H MSD
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:46:46 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 08-Apr-2022 07:46:46
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	159418	93.9	89.0	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		107504	125.0	67.3	
4 RDX								
281.2	1.841	1.841	0.0	0.998	222986	102.5	96.0	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								M
284.2	1.844	1.844	0.0		392651	125.0	118	M
5 1,3,5-Trinitrobenzene								
213.0	2.317	2.317	0.0	0.767	1448005	88.7	115	
6 Tetryl								
241.1	2.705	2.712	-0.007	0.896	3096333	136.3	215	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.030	-0.011		1385680	129.4	407	
8 1,3-Dinitrobenzene								
168.0	3.051	3.051	0.0	1.011	996013	86.0	124	
9 Nitroglycerin								
62.0	3.080	3.080	0.0	1.020	962116	93.6	268	
10 2,4,6-Trinitrotoluene								
227.0	3.321	3.321	0.0	0.766	6824607	93.9	166	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.775	592756	88.3	63.4	
12 Nitrobenzene								
123.0	3.421	3.431	-0.010	0.790	500438	86.1	55.9	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.638	3.645	-0.007	0.840	4378407	84.0	30.4	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.976	3.976	0.0	0.918	5733804	85.0	36.4	

Report Date: 08-Apr-2022 07:46:46 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07020.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
17 2,6-Dinitrotoluene								
182.0	4.144	4.150	-0.006	0.957	6308396	91.1	410	
* 18 2,4-dinitrotoluene-d3								
185.1	4.332	4.341	-0.009		4203383	125.0	103	
19 2,4-Dinitrotoluene								
182.0	4.373	4.373	0.0	1.009	3161615	89.6	188	
20 PETN								
61.8	4.726	4.716	0.010	1.091	561277	102.4	112	
22 o-Nitrotoluene								
137.0	4.992	5.002	-0.010	1.152	964673	91.0	359	
23 p-Nitrotoluene								
137.0	5.301	5.311	-0.010	1.224	849575	92.6	307	
24 m-Nitrotoluene								
137.0	5.704	5.704	0.0	1.317	524669	95.0	175	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

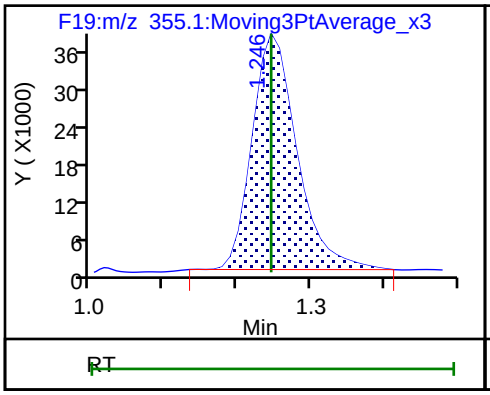
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 08-Apr-2022 07:46:46 Chrom Revision: 2.3 18-Mar-2022 09:07:22

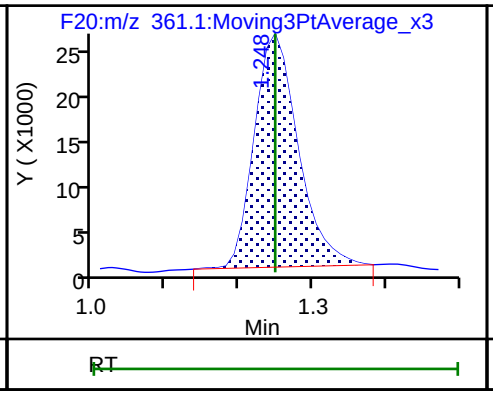
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07020.d
Injection Date: 07-Apr-2022 12:31:24 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-43-H MSD
Client ID: 29SB197 (3-4)
Operator ID: acm ALS Bottle#: 18 Worklist Smp#: 20
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

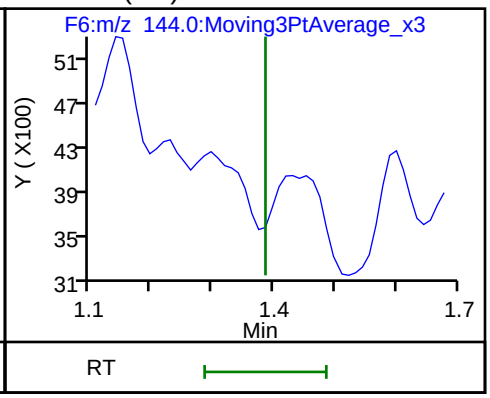
2 HMX



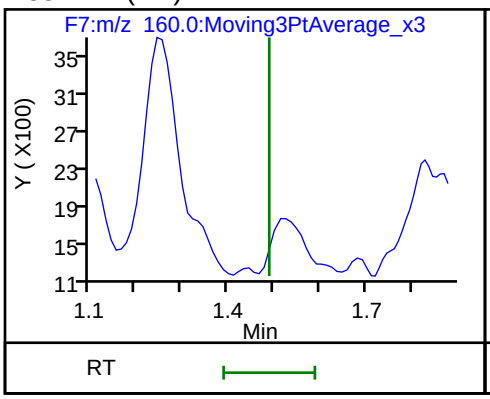
* 1 HMX-13C4



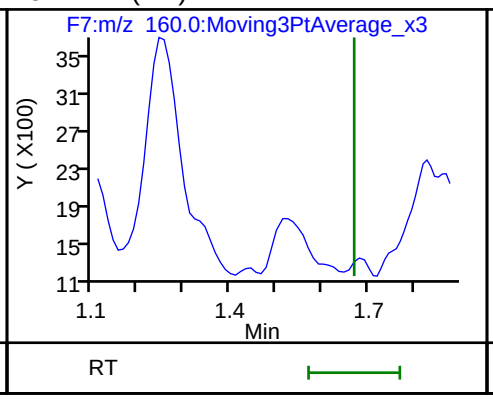
36 TNX (ND)



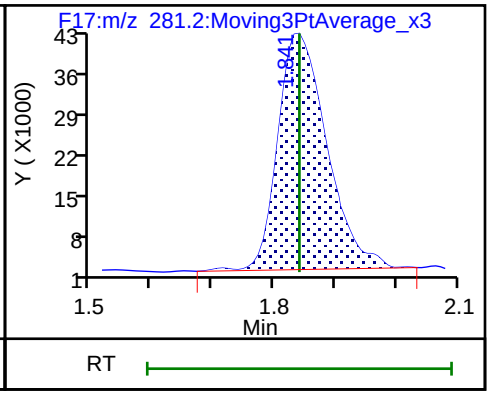
33 DNX (ND)



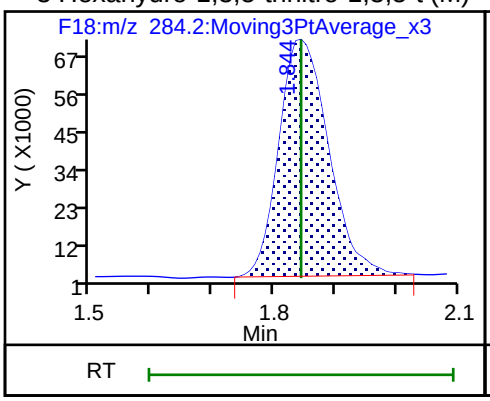
34 MNX (ND)



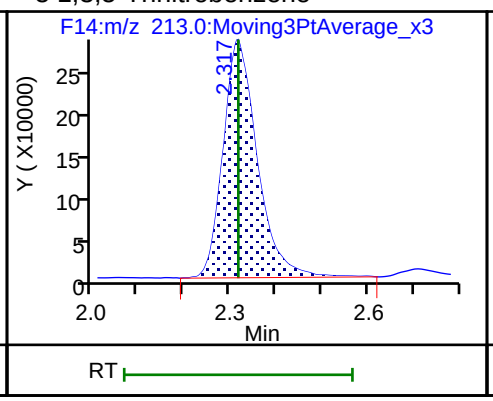
4 RDX



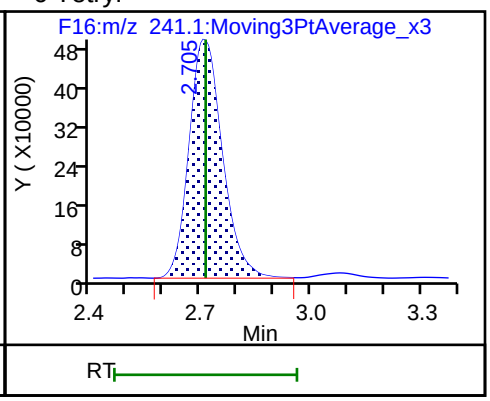
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t (M)



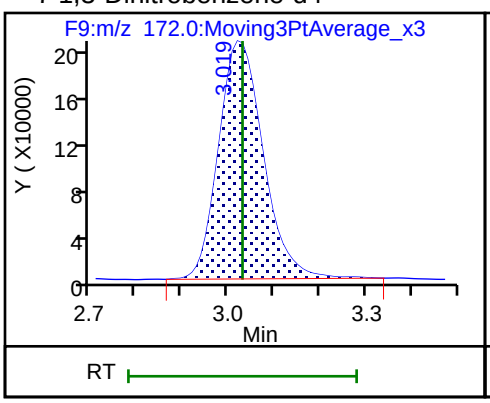
5 1,3,5-Trinitrobenzene



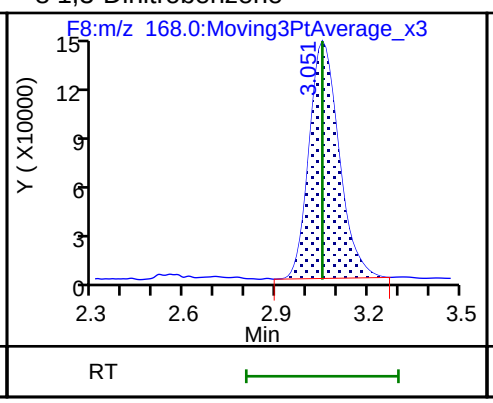
6 Tetryl



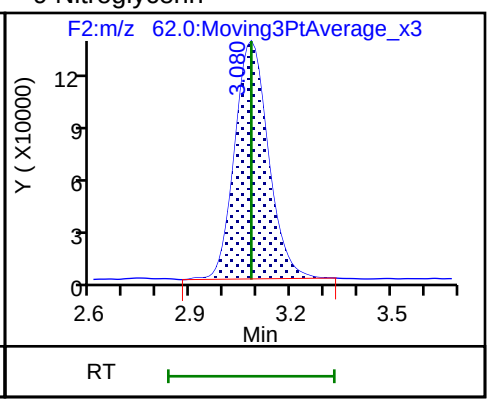
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



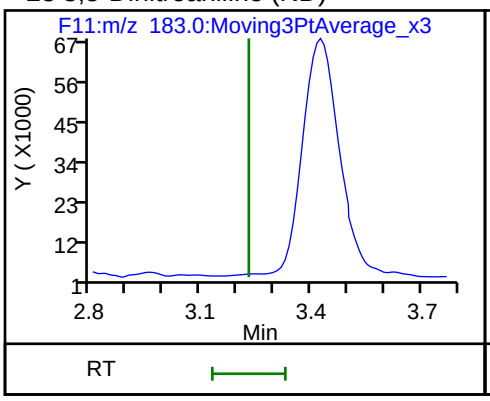
9 Nitroglycerin



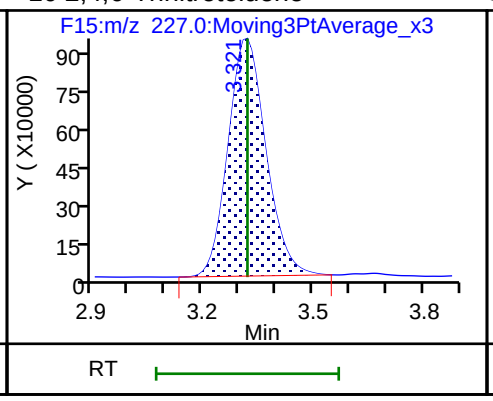
Report Date: 08-Apr-2022 07:46:46 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07020.d

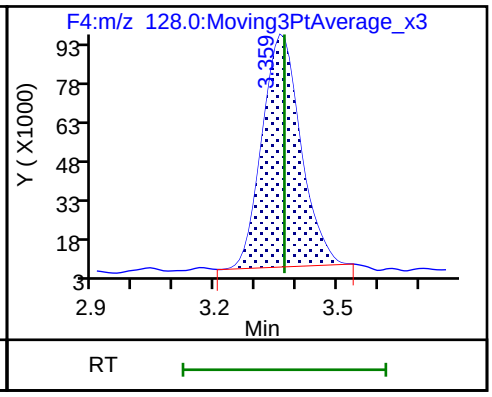
28 3,5-Dinitroaniline (ND)



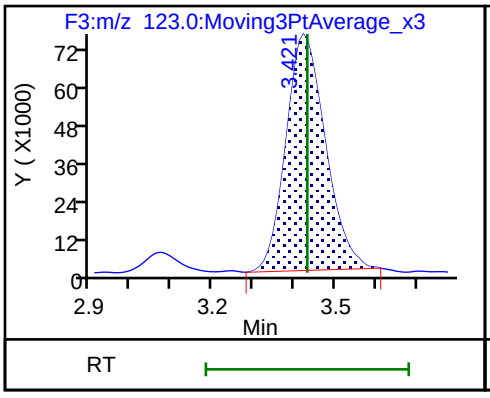
10 2,4,6-Trinitrotoluene



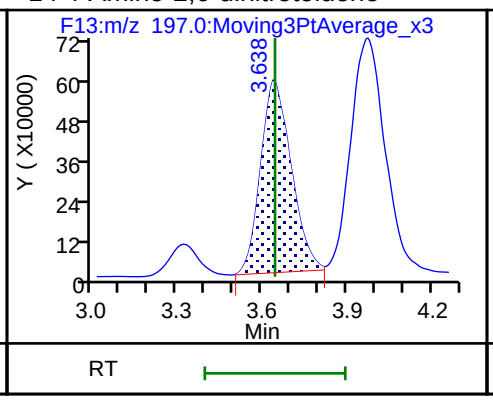
$ 11 Nitrobenzene-d5



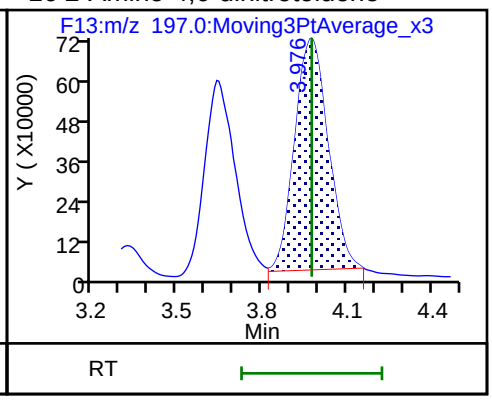
12 Nitrobenzene



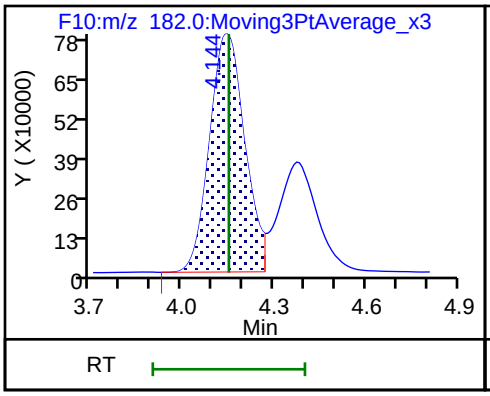
14 4-Amino-2,6-dinitrotoluene



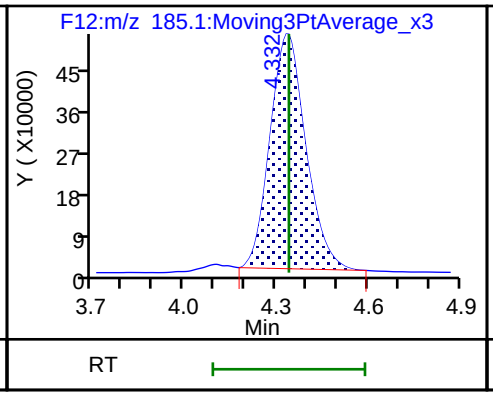
16 2-Amino-4,6-dinitrotoluene



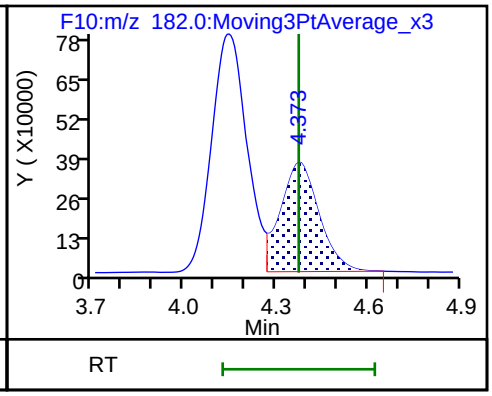
17 2,6-Dinitrotoluene



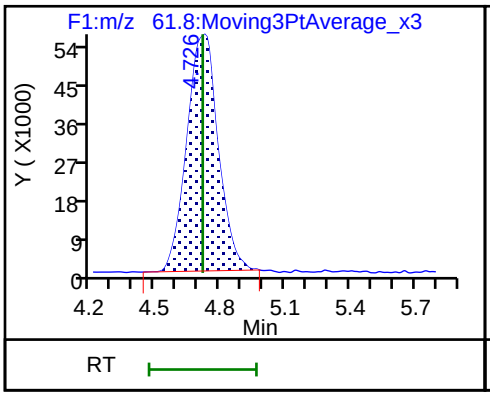
* 18 2,4-dinitrotoluene-d3



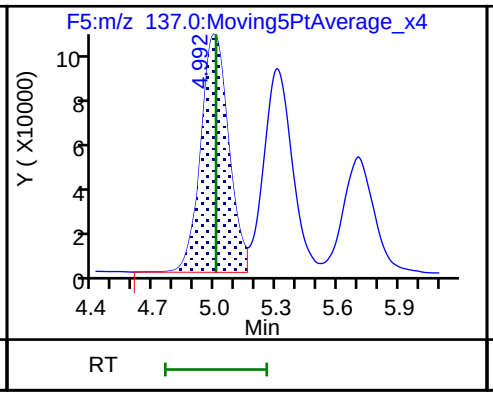
19 2,4-Dinitrotoluene



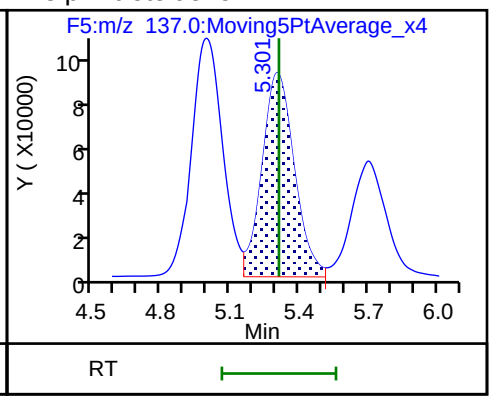
20 PETN



22 o-Nitrotoluene



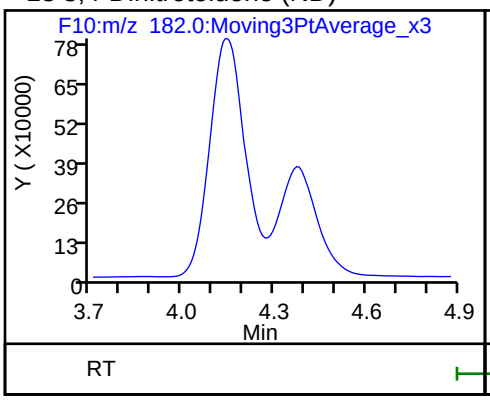
23 p-Nitrotoluene



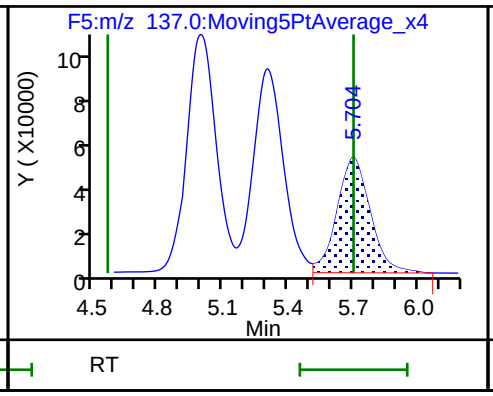
Report Date: 08-Apr-2022 07:46:46 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07020.d

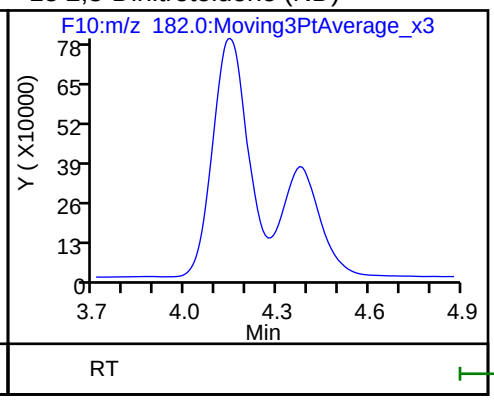
13 3,4-Dinitrotoluene (ND)



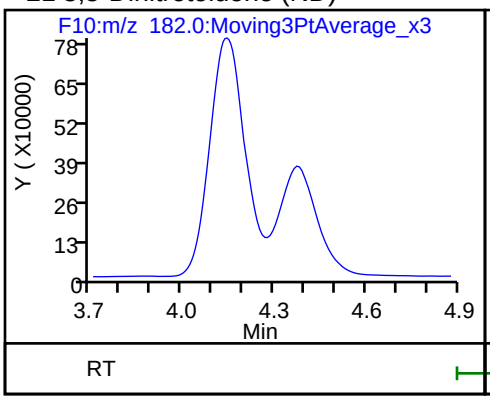
24 m-Nitrotoluene



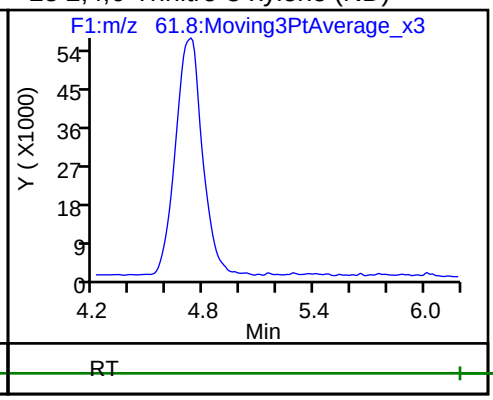
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 08-Apr-2022 07:46:46 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07020.d
Lims ID: 280-160187-A-43-H MSD
Client ID: 29SB197 (3-4)
Sample Type: MSD
Inject. Date: 07-Apr-2022 12:31:24 ALS Bottle#: 18 Worklist Smp#: 20
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-43-H MSD
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:46:46 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 08-Apr-2022 07:46:46

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	88.3	87.99

Report Date: 08-Apr-2022 07:46:46 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07020.d

Injection Date: 07-Apr-2022 12:31:24 Instrument ID: LC_LCMS7

Lims ID: 280-160187-A-43-H MSD

Client ID: 29SB197 (3-4)

Operator ID: acm ALS Bottle#: 18 Worklist Smp#: 20

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

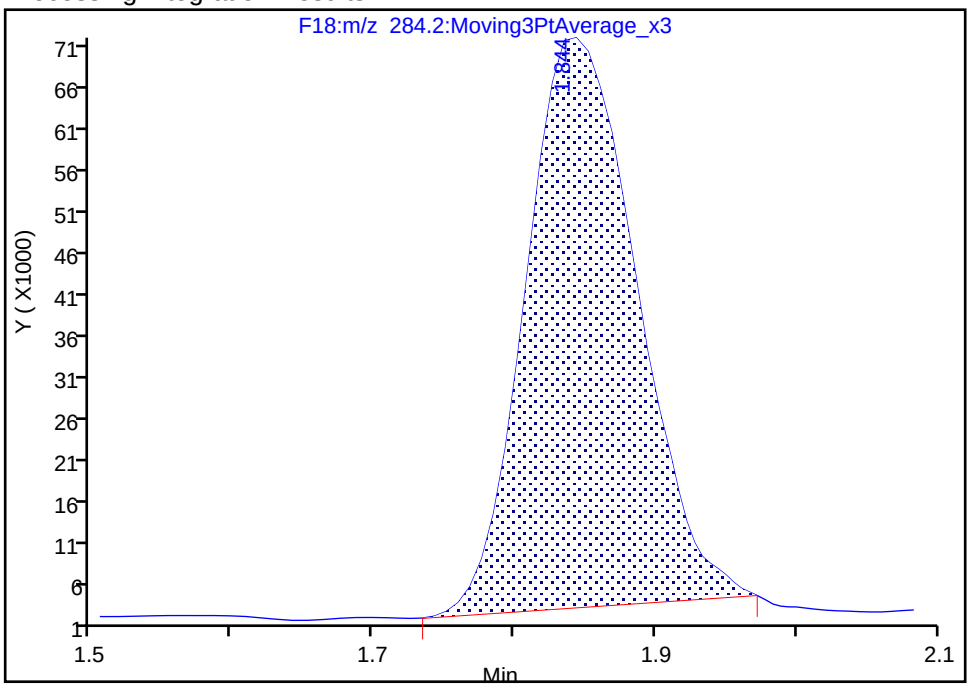
Column: Detector F18:SIR

* 3 Hexahydro-1,3,5-trinitro-1,3,5-t, CAS: STL00205

Signal: 1

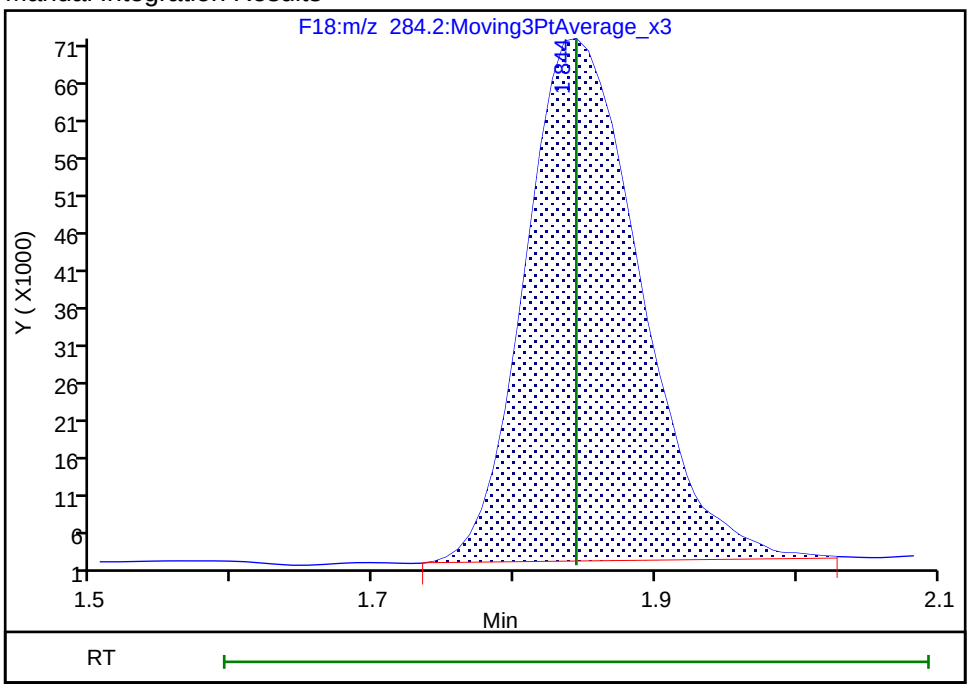
Processing Integration Results

RT: 1.84
Area: 375335
Amount: 125.0000
Amount Units: ug/l



Manual Integration Results

RT: 1.84
Area: 392651
Amount: 125.0000
Amount Units: ug/l



Reviewer: meyera, 08-Apr-2022 07:46:41

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB183 (3-4) DU | Lab Sample ID: 280-160187-2 DU
Matrix: Solid | Lab File ID: ex722D05032.d
Analysis Method: 8321A | Date Collected: 03/22/2022 12:30
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:56
Sample wt/vol: 10.66(g) | Date Analyzed: 04/05/2022 13:06
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 570785 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.047	U M	0.094	0.047	0.042
99-65-0	1,3-Dinitrobenzene	0.047	U	0.094	0.047	0.042
118-96-7	2,4,6-Trinitrotoluene	0.047	U	0.094	0.047	0.035
121-14-2	2,4-Dinitrotoluene	0.047	U	0.094	0.047	0.044
606-20-2	2,6-Dinitrotoluene	0.047	U	0.094	0.047	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.047	U	0.094	0.047	0.047
19406-51-0	4-Amino-2,6-dinitrotoluene	0.047	U	0.094	0.047	0.029
2691-41-0	HMX	0.047	U M	0.094	0.047	0.043
99-08-1	m-Nitrotoluene	0.047	U	0.094	0.047	0.041
98-95-3	Nitrobenzene	0.047	U	0.10	0.047	0.036
55-63-0	Nitroglycerin	0.047	U	0.094	0.047	0.027
88-72-2	o-Nitrotoluene	0.047	U	0.094	0.047	0.040
78-11-5	PETN	0.047	U	0.094	0.047	0.032
99-99-0	p-Nitrotoluene	0.047	U	0.094	0.047	0.046
121-82-4	RDX	0.047	U	0.11	0.047	0.040
479-45-8	Tetryl	0.047	U Q	0.094	0.047	0.036

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	95		68-140

Report Date: 06-Apr-2022 07:09:53 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05032.d
Lims ID: 280-160187-A-2-I DU
Client ID:
Sample Type: DU
Inject. Date: 05-Apr-2022 13:06:49 ALS Bottle#: 25 Worklist Smp#: 29
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-2-I DU
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:09:52 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 13:36:20
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		276526	125.0	153	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		1066215	125.0	238	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1881768	129.4	276	
10 2,4,6-Trinitrotoluene								
227.0	3.137	3.134	0.030	0.777	16499	-0.1205	4.3	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.783	871961	95.0	97.4	
* 18 2,4-dinitrotoluene-d3								
185.1	4.037	4.028	0.009		6079453	125.0	125	

QC Flag Legend

Processing Flags

Reagents:

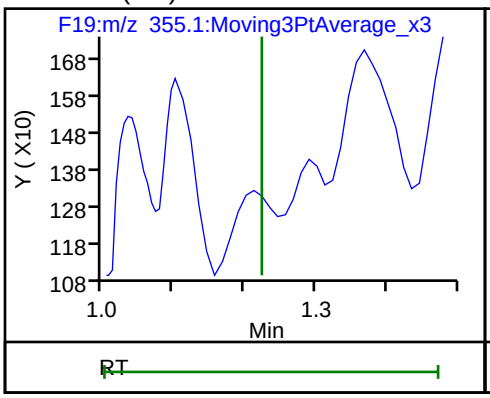
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:09:53 Chrom Revision: 2.3 18-Mar-2022 09:07:22

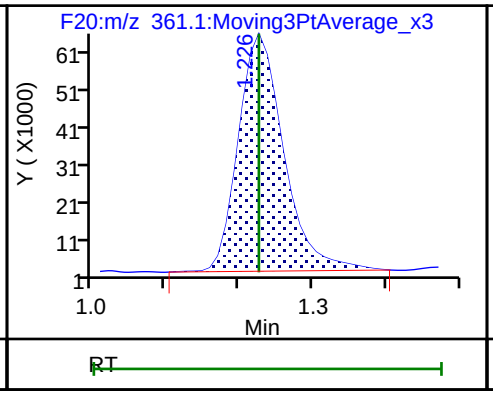
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05032.d
Injection Date: 05-Apr-2022 13:06:49 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-2-I DU
Client ID:
Operator ID: acm ALS Bottle#: 25 Worklist Smp#: 29
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

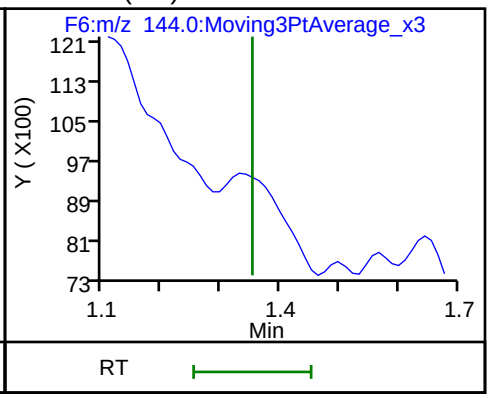
2 HMX (ND)



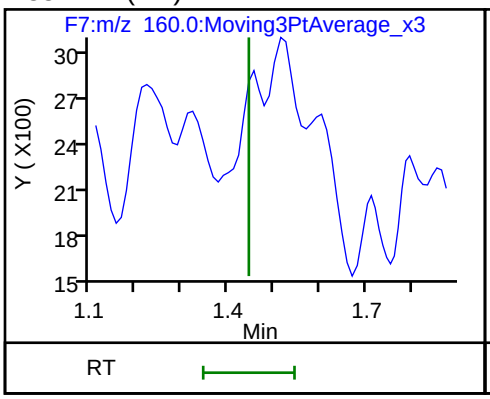
* 1 HMX-13C4



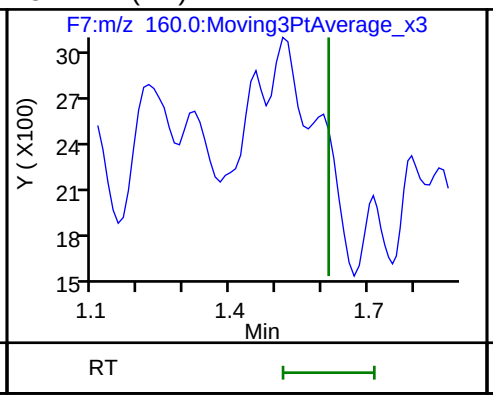
36 TNX (ND)



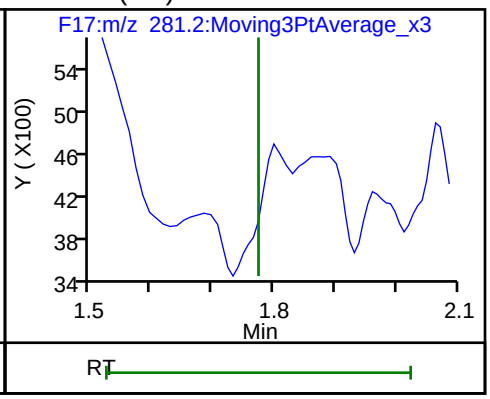
33 DNX (ND)



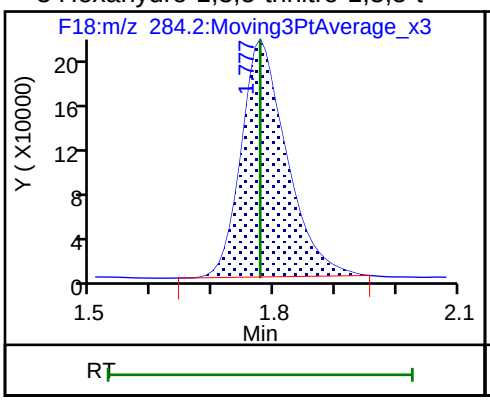
34 MNX (ND)



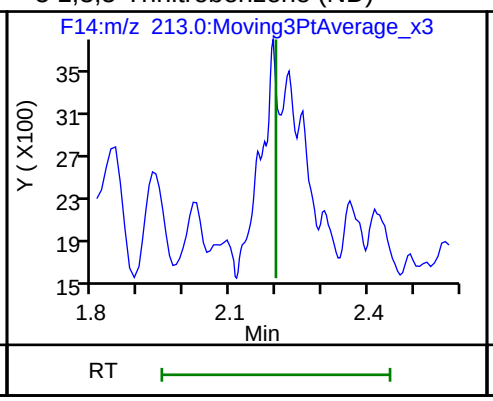
4 RDX (ND)



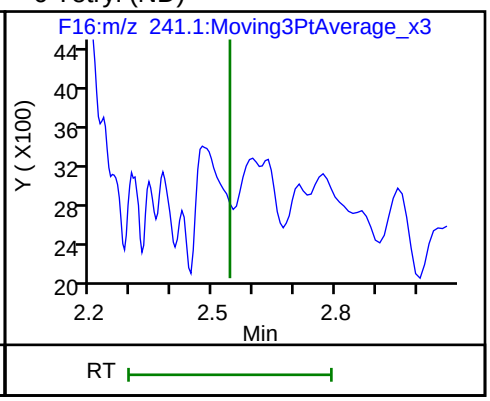
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



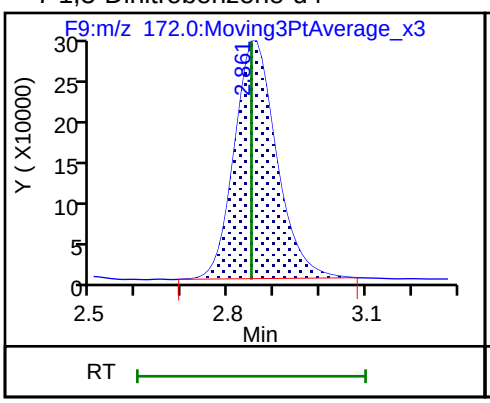
5 1,3,5-Trinitrobenzene (ND)



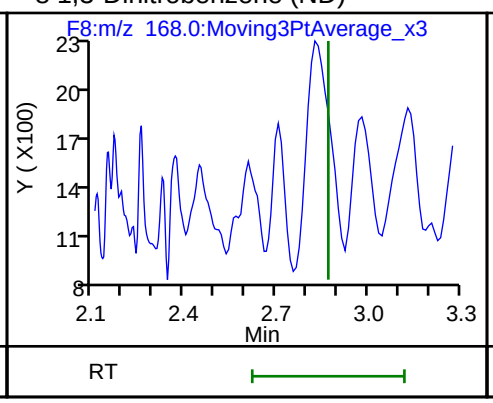
6 Tetryl (ND)



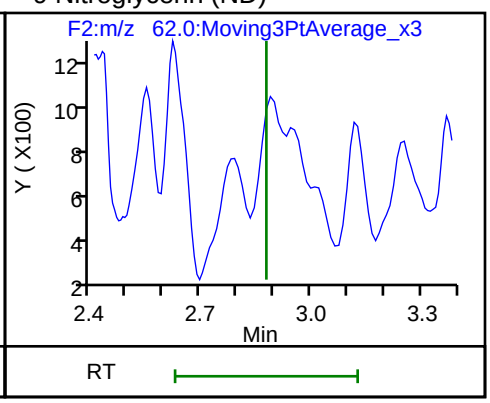
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



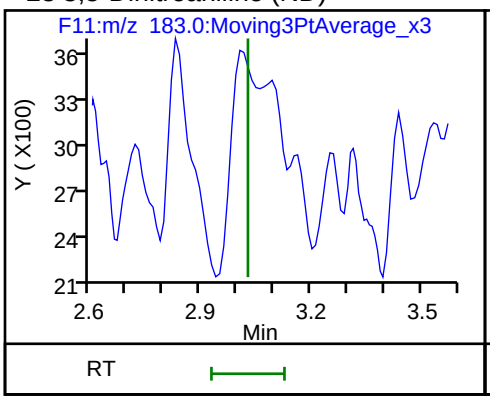
9 Nitroglycerin (ND)



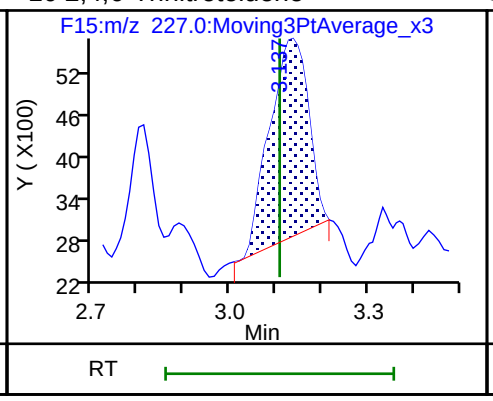
Report Date: 06-Apr-2022 07:09:53 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05032.d

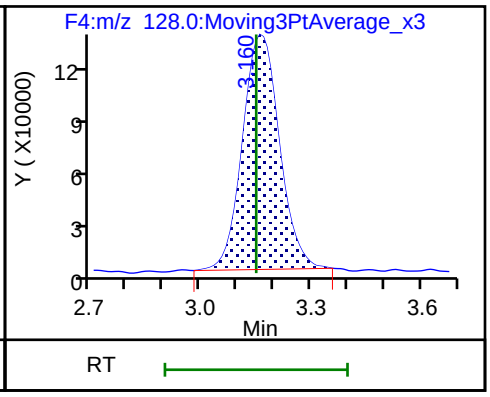
28 3,5-Dinitroaniline (ND)



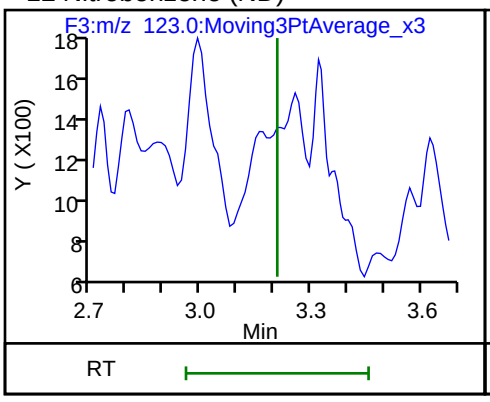
10 2,4,6-Trinitrotoluene



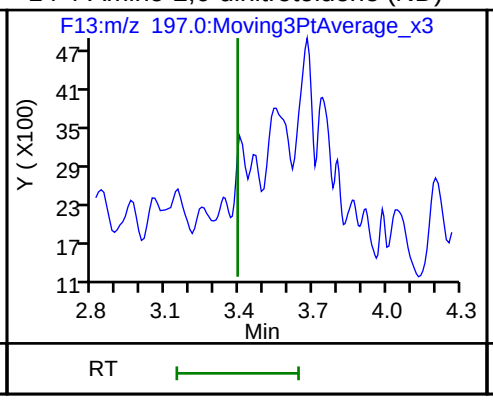
$ 11 Nitrobenzene-d5



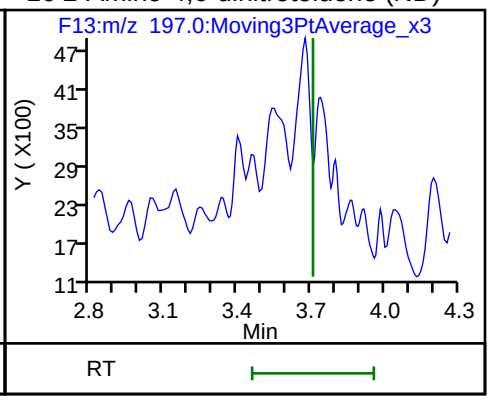
12 Nitrobenzene (ND)



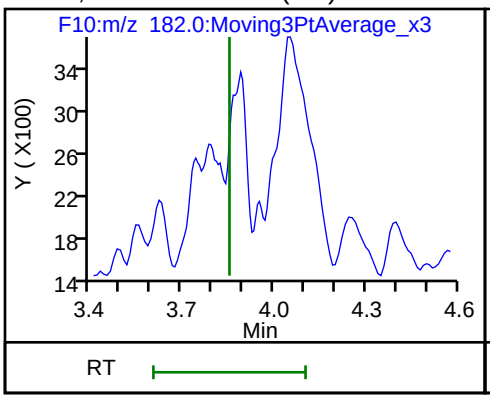
14 4-Amino-2,6-dinitrotoluene (ND)



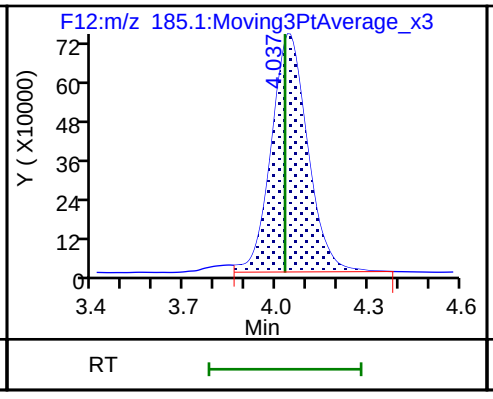
16 2-Amino-4,6-dinitrotoluene (ND)



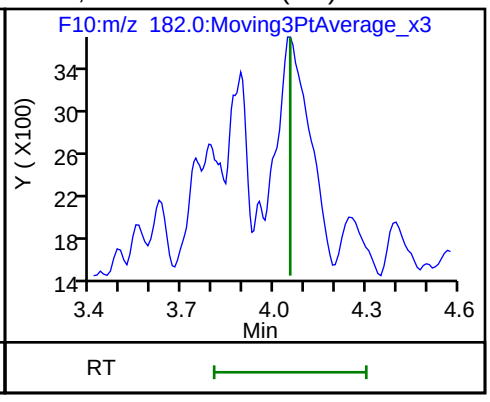
17 2,6-Dinitrotoluene (ND)



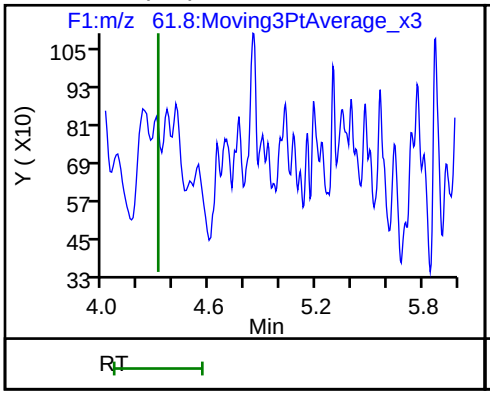
* 18 2,4-dinitrotoluene-d3



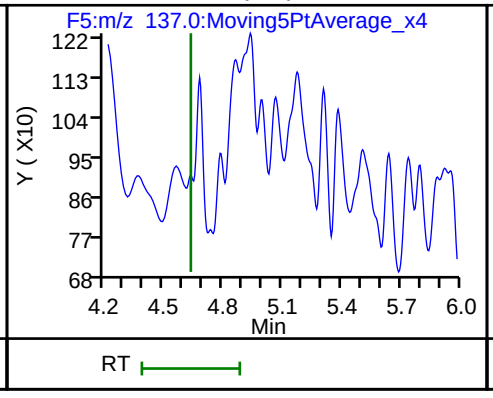
19 2,4-Dinitrotoluene (ND)



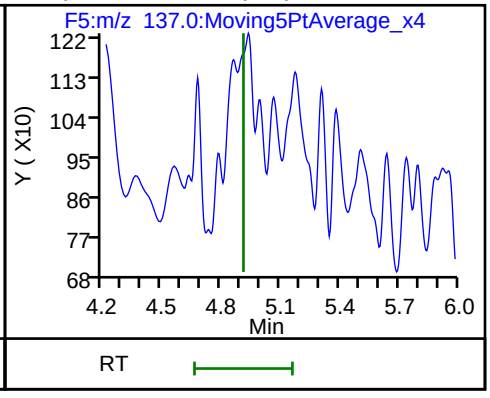
20 PETN (ND)



22 o-Nitrotoluene (ND)



23 p-Nitrotoluene (ND)

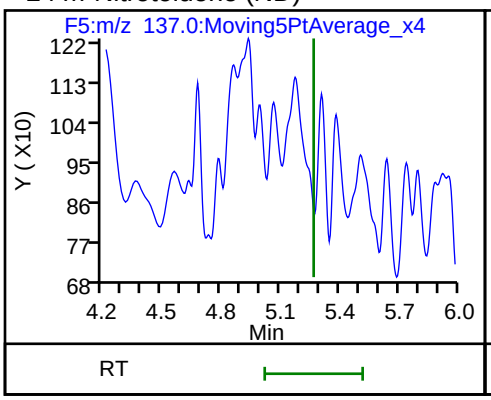


Report Date: 06-Apr-2022 07:09:53

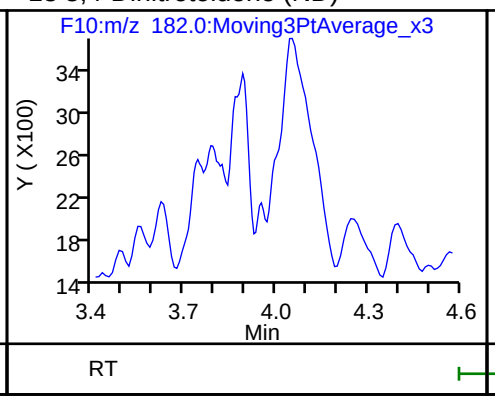
Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05032.d

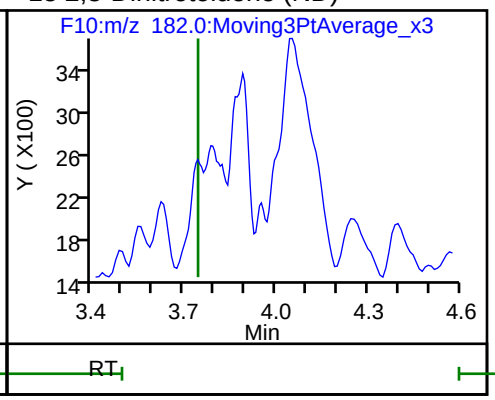
24 m-Nitrotoluene (ND)



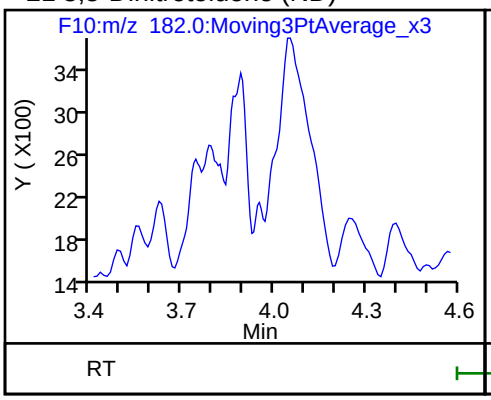
13 3,4-Dinitrotoluene (ND)



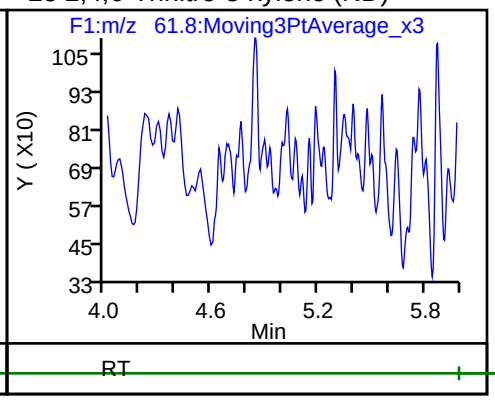
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 06-Apr-2022 07:09:53 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05032.d
Lims ID: 280-160187-A-2-I DU
Client ID:
Sample Type: DU
Inject. Date: 05-Apr-2022 13:06:49 ALS Bottle#: 25 Worklist Smp#: 29
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-2-I DU
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:09:52 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 13:36:20

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	95.0	94.70

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB201(11-12) DU | Lab Sample ID: 280-160187-26 DU
Matrix: Solid | Lab File ID: ex722D05068.d
Analysis Method: 8321A | Date Collected: 03/22/2022 17:20
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:54
Sample wt/vol: 10.34(g) | Date Analyzed: 04/05/2022 16:57
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 570786 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.048	U	0.097	0.048	0.043
99-65-0	1,3-Dinitrobenzene	0.048	U	0.097	0.048	0.043
118-96-7	2,4,6-Trinitrotoluene	0.048	U	0.097	0.048	0.036
121-14-2	2,4-Dinitrotoluene	0.048	U	0.097	0.048	0.045
606-20-2	2,6-Dinitrotoluene	0.048	U Q	0.097	0.048	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.048	U	0.097	0.048	0.048
19406-51-0	4-Amino-2,6-dinitrotoluene	0.048	U Q	0.097	0.048	0.030
2691-41-0	HMX	0.048	U	0.097	0.048	0.045
99-08-1	m-Nitrotoluene	0.048	U	0.097	0.048	0.042
98-95-3	Nitrobenzene	0.048	U	0.11	0.048	0.037
55-63-0	Nitroglycerin	0.048	U	0.097	0.048	0.028
88-72-2	o-Nitrotoluene	0.048	U	0.097	0.048	0.041
78-11-5	PETN	0.048	U	0.097	0.048	0.033
99-99-0	p-Nitrotoluene	0.048	U	0.097	0.048	0.048
121-82-4	RDX	0.048	U	0.12	0.048	0.042
479-45-8	Tetryl	0.048	U Q	0.097	0.048	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	90		68-140

Report Date: 06-Apr-2022 07:10:18 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05068.d
Lims ID: 280-160187-A-26-I DU
Client ID:
Sample Type: DU
Inject. Date: 05-Apr-2022 16:57:12 ALS Bottle#: 10 Worklist Smp#: 65
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-26-I DU
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:10:15 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 06-Apr-2022 06:57:38
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		246528	125.0	138	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		891776	125.0	164	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1842340	129.4	283	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	813990	90.5	105	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		6100182	125.0	116	

QC Flag Legend

Processing Flags

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:10:18

Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05068.d

Injection Date: 05-Apr-2022 16:57:12 Instrument ID: LC_LCMS7

Lims ID: 280-160187-A-26-I DU

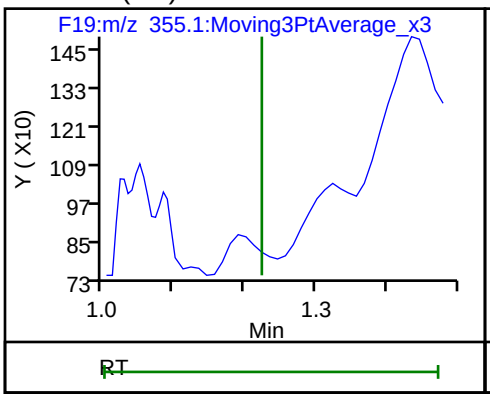
Client ID:

Operator ID: acm ALS Bottle#: 10 Worklist Smp#: 65

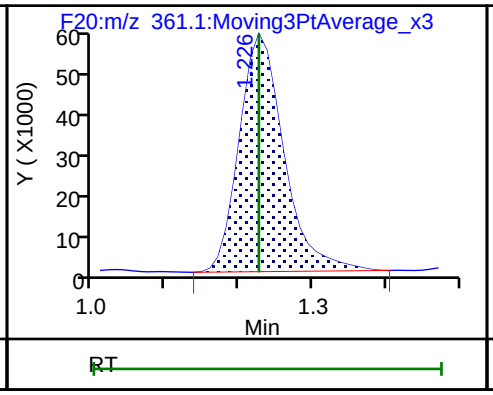
Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

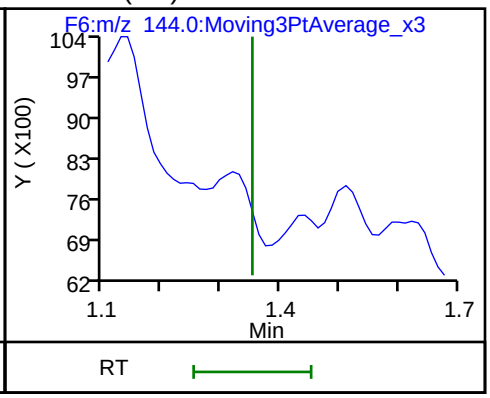
2 HMX (ND)



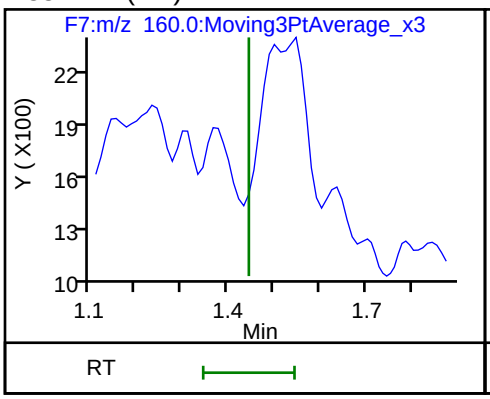
* 1 HMX-13C4



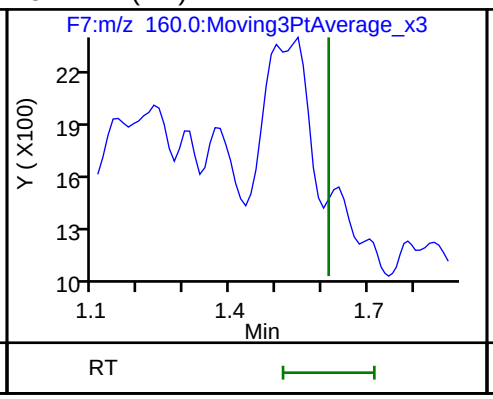
36 TNX (ND)



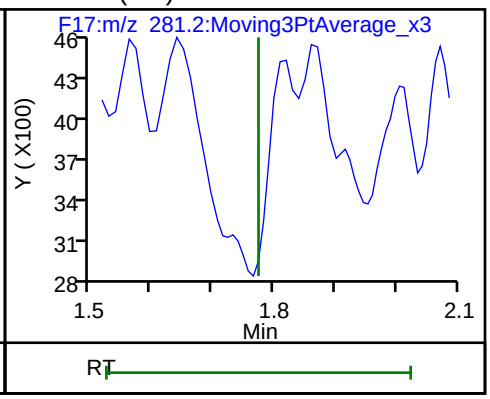
33 DNX (ND)



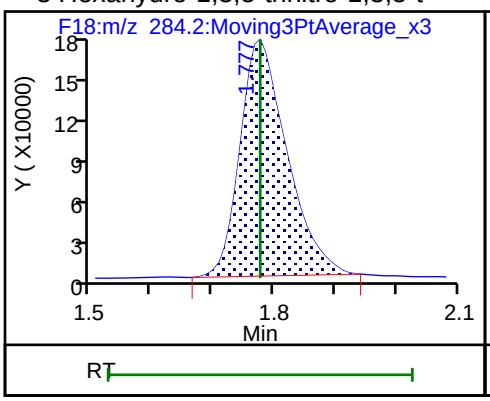
34 MNX (ND)



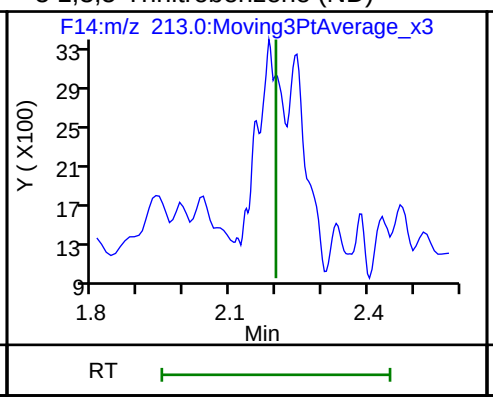
4 RDX (ND)



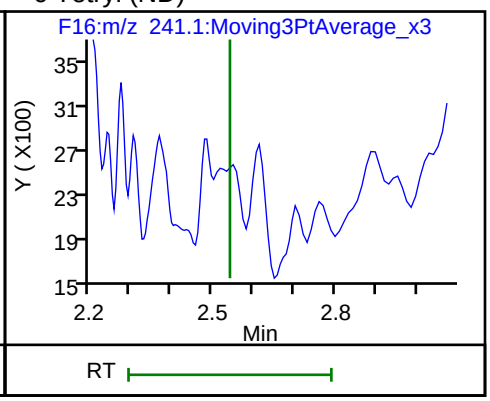
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



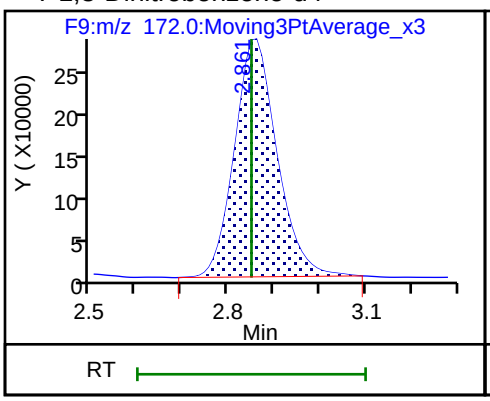
5 1,3,5-Trinitrobenzene (ND)



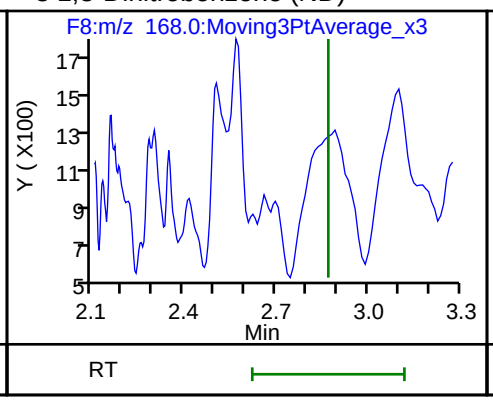
6 Tetryl (ND)



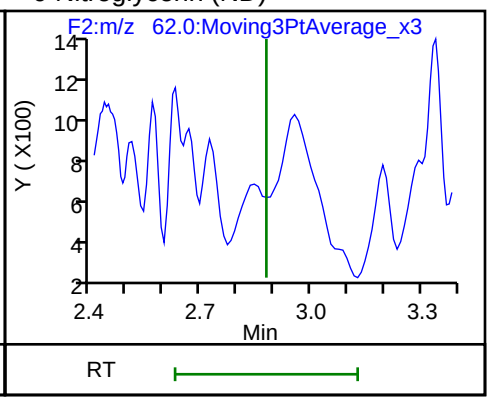
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



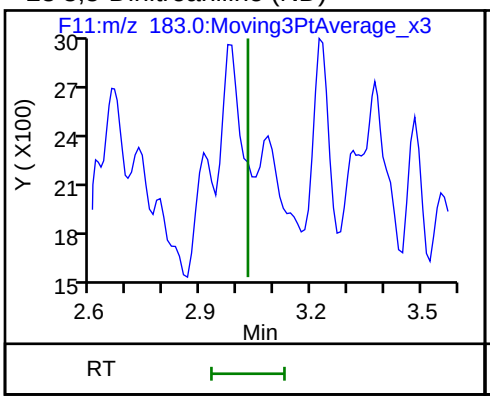
9 Nitroglycerin (ND)



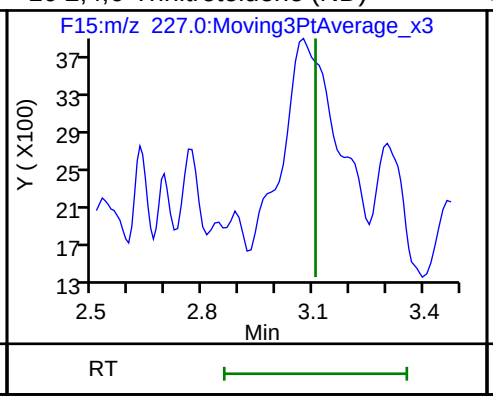
Report Date: 06-Apr-2022 07:10:18 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05068.d

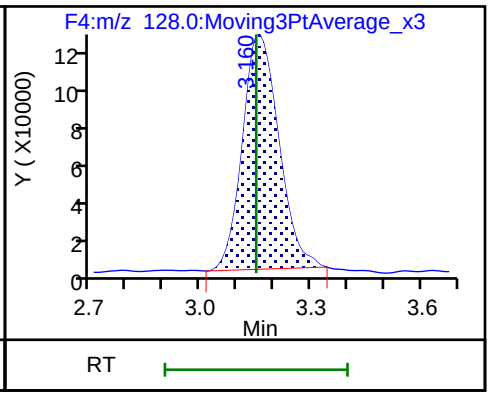
28 3,5-Dinitroaniline (ND)



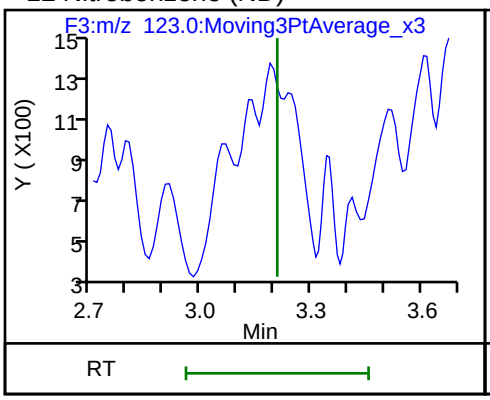
10 2,4,6-Trinitrotoluene (ND)



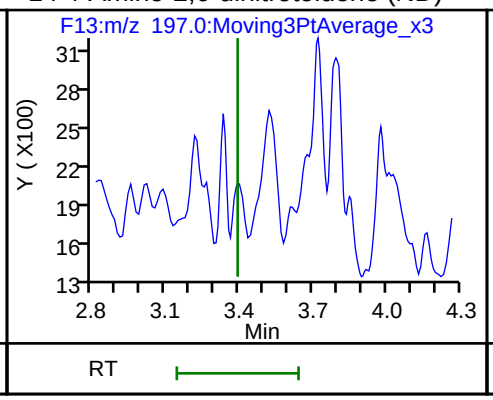
$ 11 Nitrobenzene-d5



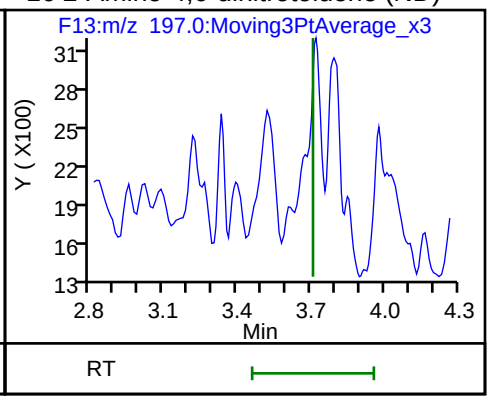
12 Nitrobenzene (ND)



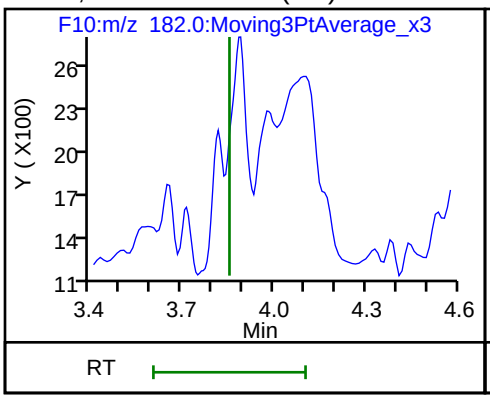
14 4-Amino-2,6-dinitrotoluene (ND)



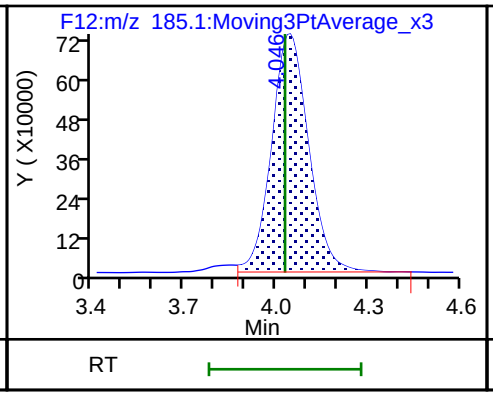
16 2-Amino-4,6-dinitrotoluene (ND)



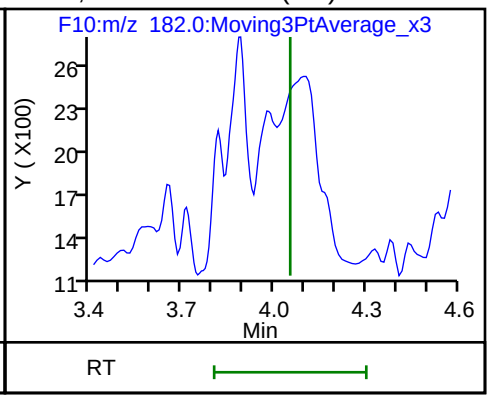
17 2,6-Dinitrotoluene (ND)



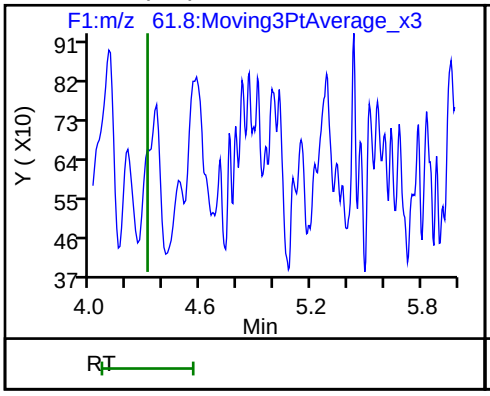
* 18 2,4-dinitrotoluene-d3



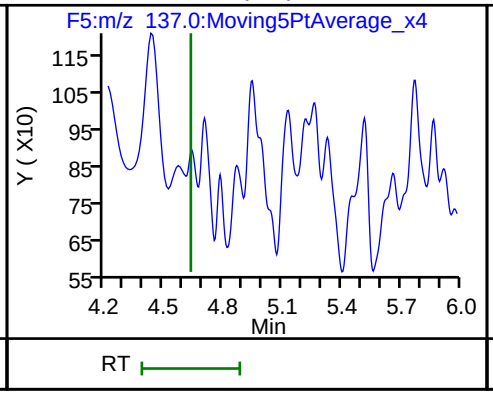
19 2,4-Dinitrotoluene (ND)



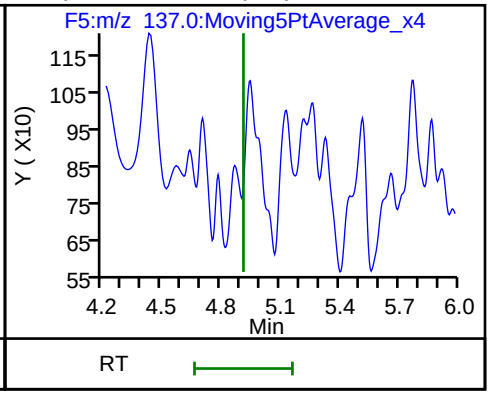
20 PETN (ND)



22 o-Nitrotoluene (ND)



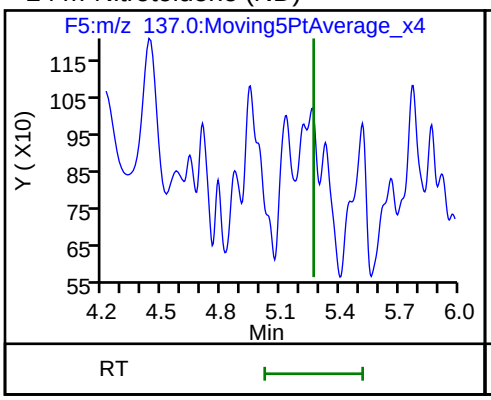
23 p-Nitrotoluene (ND)



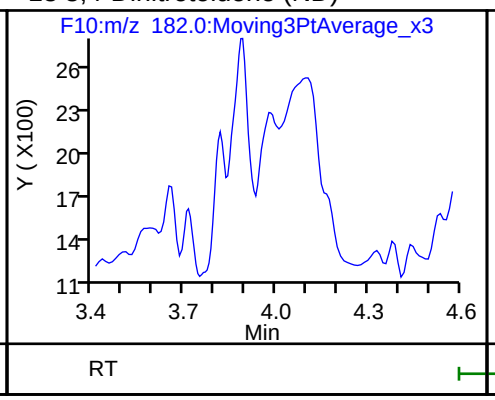
Report Date: 06-Apr-2022 07:10:18 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05068.d

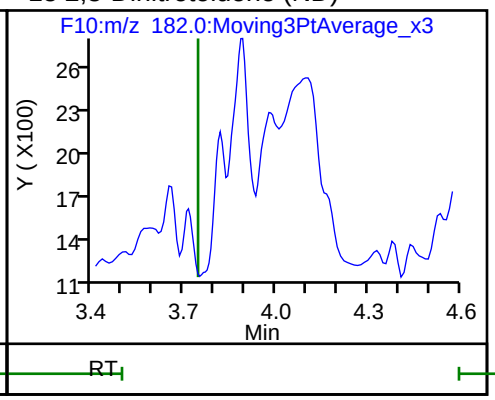
24 m-Nitrotoluene (ND)



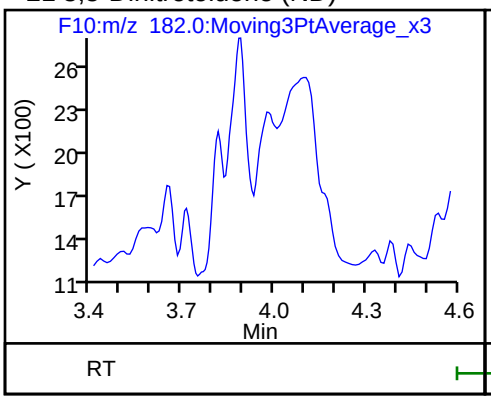
13 3,4-Dinitrotoluene (ND)



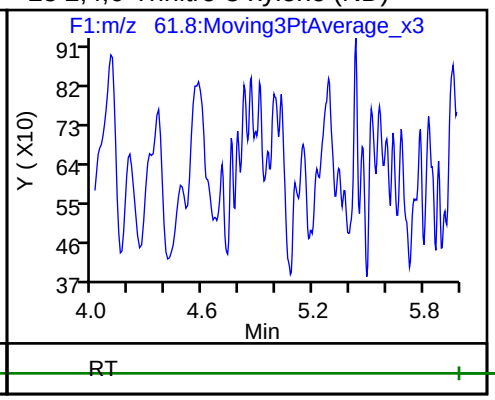
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 06-Apr-2022 07:10:18 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05068.d
Lims ID: 280-160187-A-26-I DU
Client ID:
Sample Type: DU
Inject. Date: 05-Apr-2022 16:57:12 ALS Bottle#: 10 Worklist Smp#: 65
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-26-I DU
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:10:15 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 06-Apr-2022 06:57:38

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	90.5	90.25

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB197 (3-4) DU | Lab Sample ID: 280-160187-43 DU
Matrix: Solid | Lab File ID: ex722D07022.d
Analysis Method: 8321A | Date Collected: 03/23/2022 11:35
Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57
Sample wt/vol: 10.5(g) | Date Analyzed: 04/07/2022 12:44
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571108 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.048	U	0.095	0.048	0.043
99-65-0	1,3-Dinitrobenzene	0.048	U	0.095	0.048	0.043
118-96-7	2,4,6-Trinitrotoluene	0.048	U Q	0.095	0.048	0.035
121-14-2	2,4-Dinitrotoluene	0.048	U	0.095	0.048	0.044
606-20-2	2,6-Dinitrotoluene	0.048	U	0.095	0.048	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.048	U	0.095	0.048	0.047
19406-51-0	4-Amino-2,6-dinitrotoluene	0.048	U	0.095	0.048	0.030
2691-41-0	HMX	0.048	U	0.095	0.048	0.044
99-08-1	m-Nitrotoluene	0.048	U	0.095	0.048	0.041
98-95-3	Nitrobenzene	0.048	U	0.10	0.048	0.036
55-63-0	Nitroglycerin	0.048	U	0.095	0.048	0.028
88-72-2	o-Nitrotoluene	0.048	U	0.095	0.048	0.041
78-11-5	PETN	0.048	U	0.095	0.048	0.032
99-99-0	p-Nitrotoluene	0.048	U	0.095	0.048	0.047
121-82-4	RDX	0.048	U M	0.11	0.048	0.041
479-45-8	Tetryl	0.048	U Q	0.095	0.048	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	98		68-140

Report Date: 08-Apr-2022 07:32:28 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07022.d
Lims ID: 280-160187-A-43-I DU
Client ID:
Sample Type: DU
Inject. Date: 07-Apr-2022 12:44:36 ALS Bottle#: 19 Worklist Smp#: 22
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-43-I DU
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:27 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 13:11:42
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		131030	125.0	82.1	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		390503	125.0	96.7	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.030	-0.011		1379791	129.4	199	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.775	660643	98.6	97.3	
* 18 2,4-dinitrotoluene-d3								
185.1	4.332	4.341	-0.009		4268766	125.0	115	

QC Flag Legend

Processing Flags

Reagents:

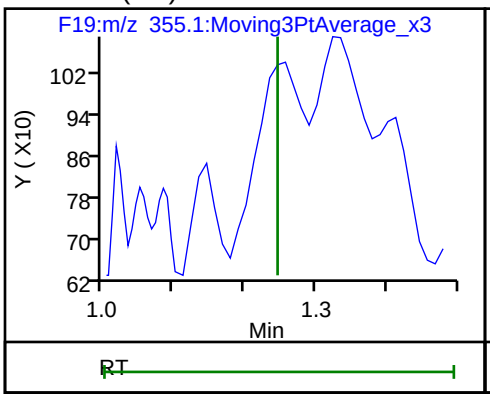
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 08-Apr-2022 07:32:28 Chrom Revision: 2.3 18-Mar-2022 09:07:22

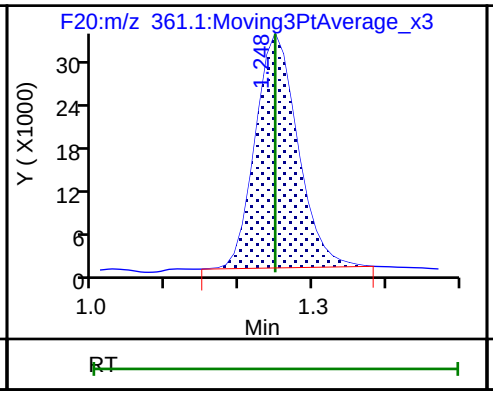
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07022.d
Injection Date: 07-Apr-2022 12:44:36 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-43-I DU
Client ID:
Operator ID: acm ALS Bottle#: 19 Worklist Smp#: 22
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

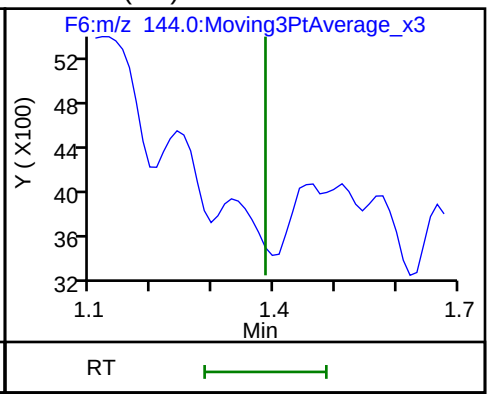
2 HMX (ND)



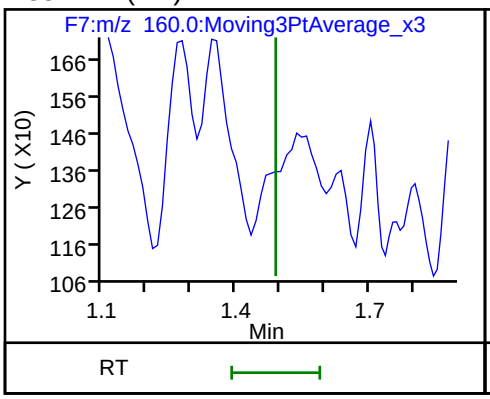
* 1 HMX-13C4



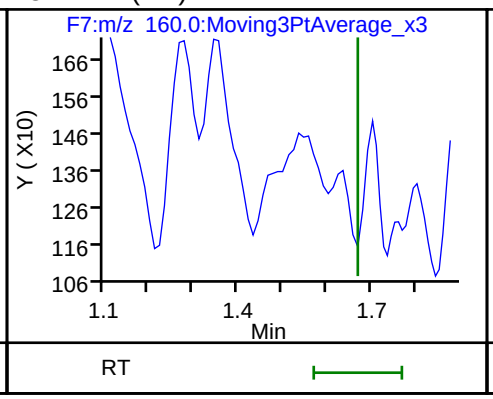
36 TNX (ND)



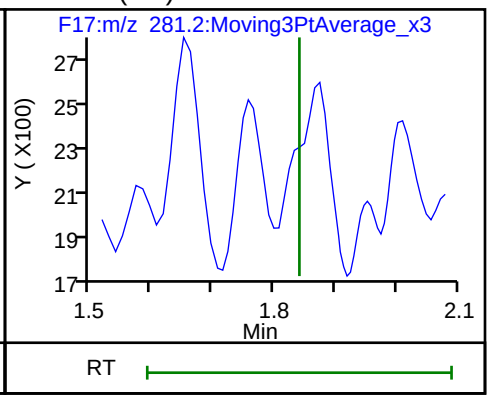
33 DNX (ND)



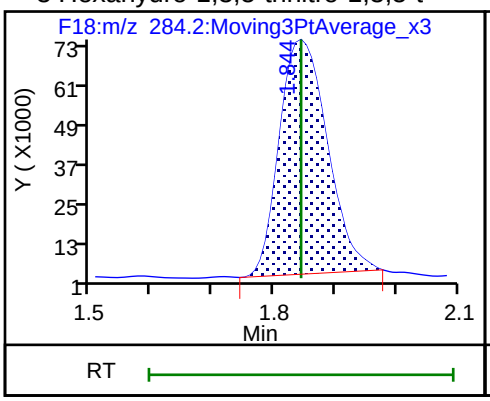
34 MNX (ND)



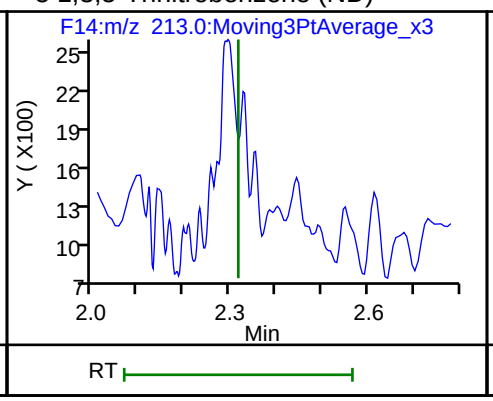
4 RDX (ND)



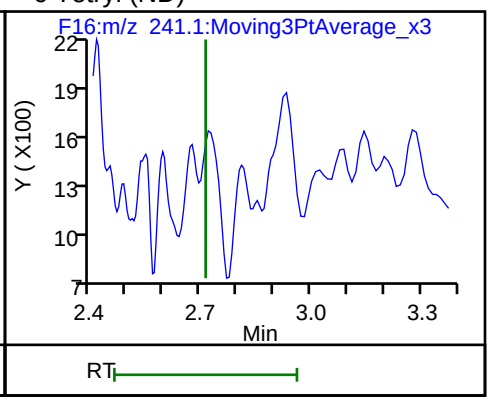
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



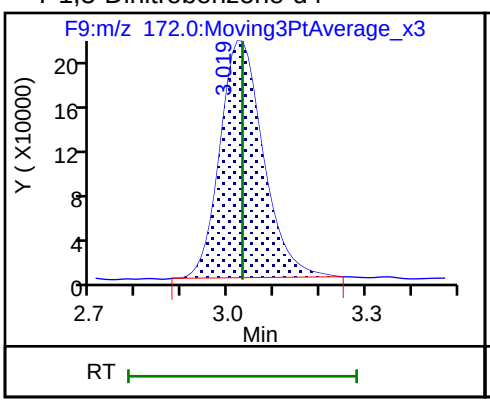
5 1,3,5-Trinitrobenzene (ND)



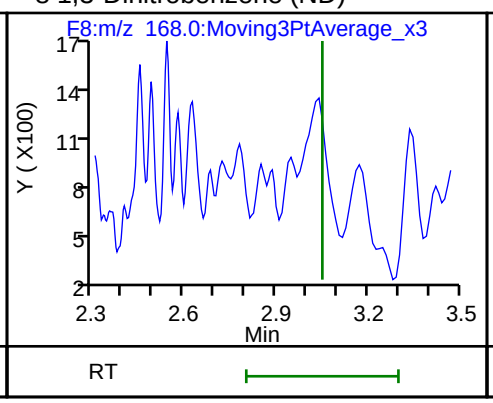
6 Tetryl (ND)



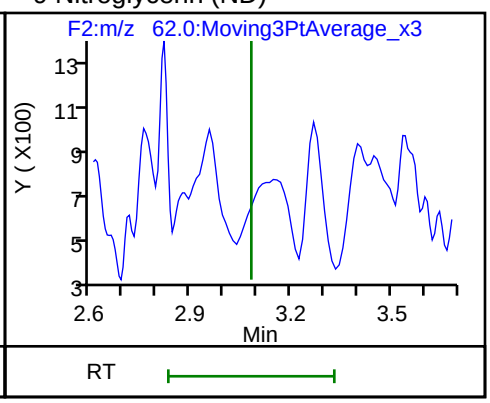
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



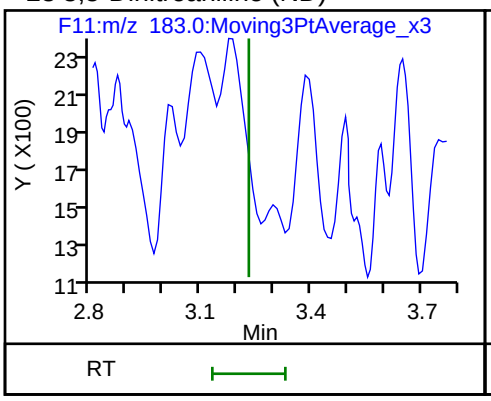
9 Nitroglycerin (ND)



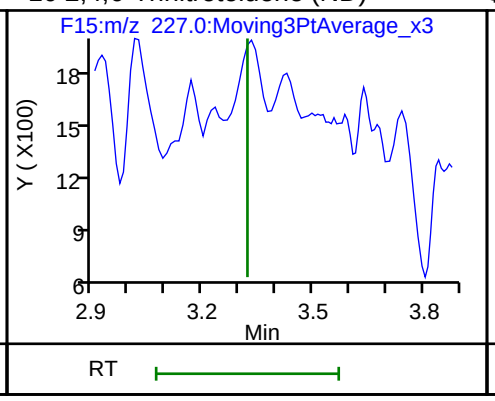
Report Date: 08-Apr-2022 07:32:28 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07022.d

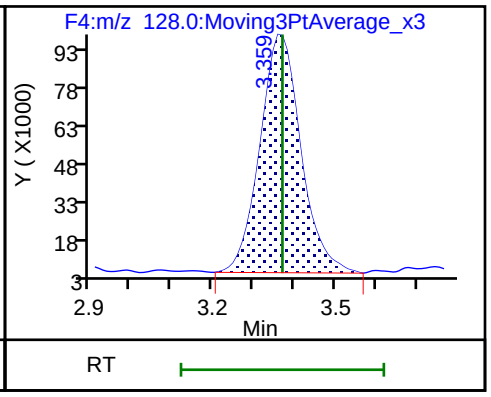
28 3,5-Dinitroaniline (ND)



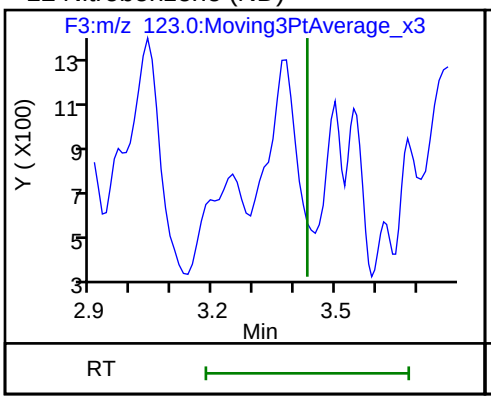
10 2,4,6-Trinitrotoluene (ND)



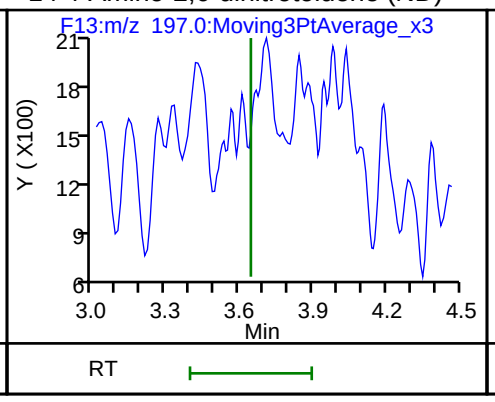
$ 11 Nitrobenzene-d5



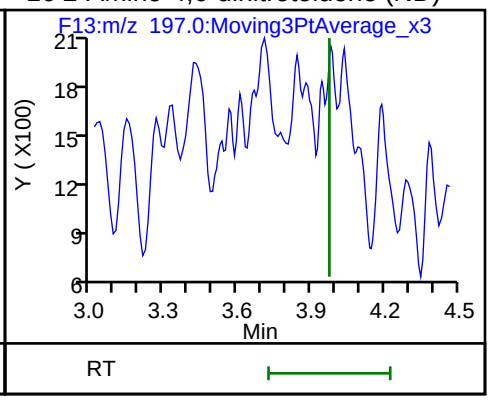
12 Nitrobenzene (ND)



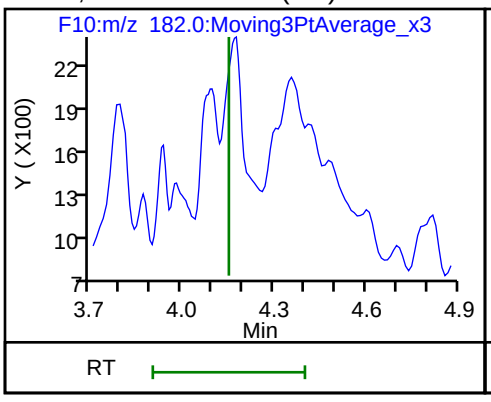
14 4-Amino-2,6-dinitrotoluene (ND)



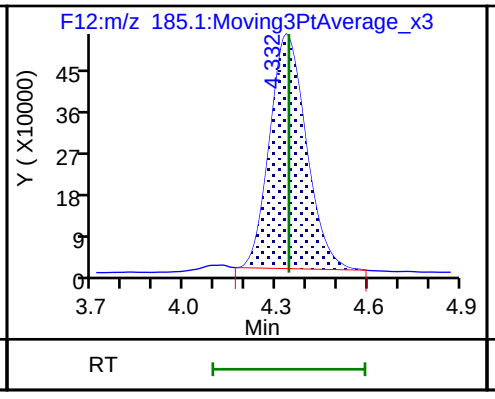
16 2-Amino-4,6-dinitrotoluene (ND)



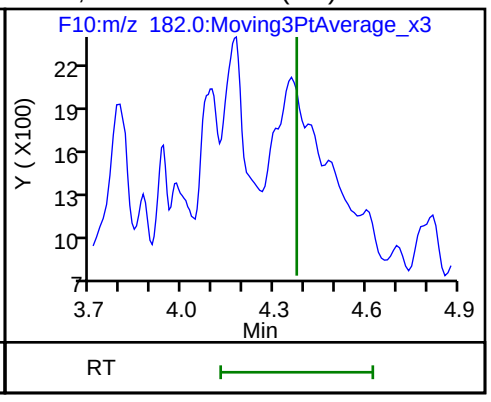
17 2,6-Dinitrotoluene (ND)



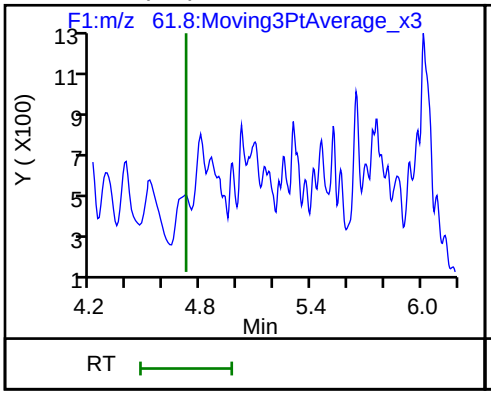
* 18 2,4-dinitrotoluene-d3



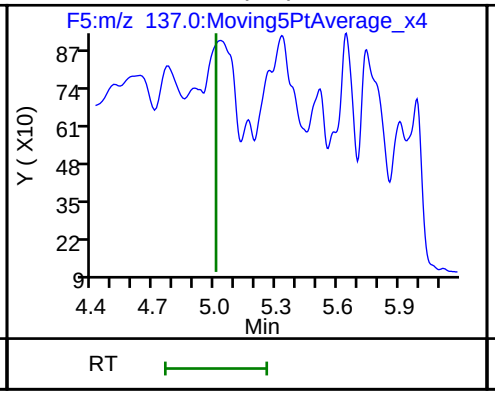
19 2,4-Dinitrotoluene (ND)



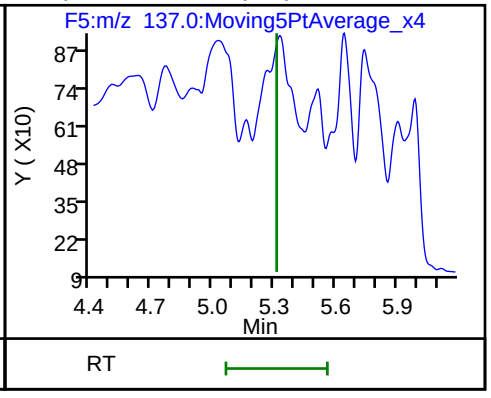
20 PETN (ND)



22 o-Nitrotoluene (ND)



23 p-Nitrotoluene (ND)

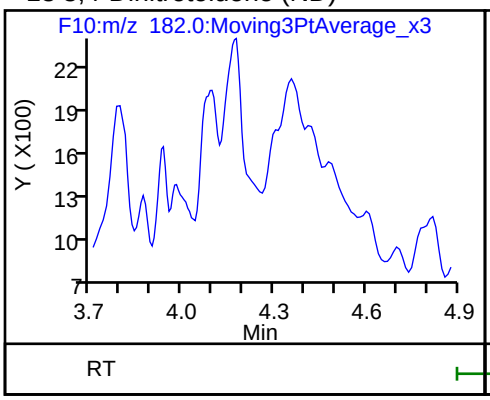


Report Date: 08-Apr-2022 07:32:28

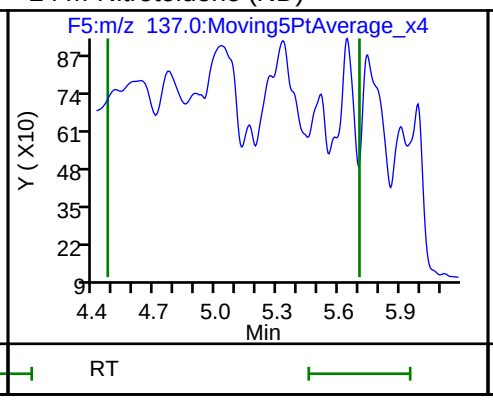
Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07022.d

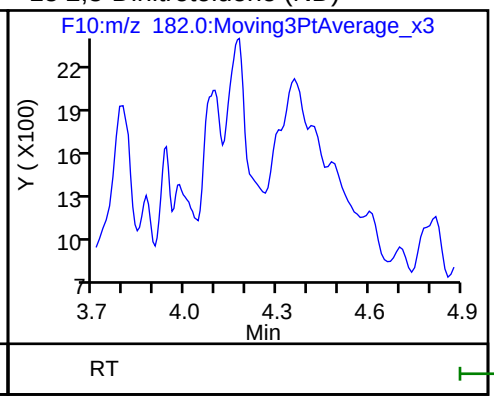
13 3,4-Dinitrotoluene (ND)



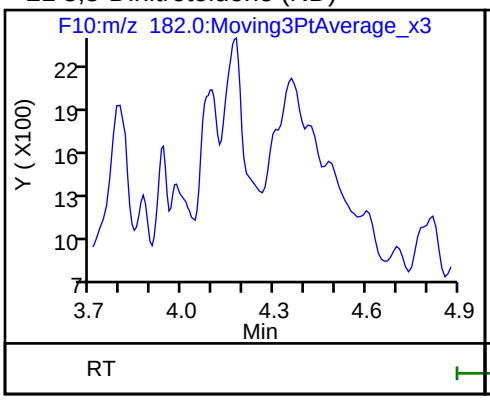
24 m-Nitrotoluene (ND)



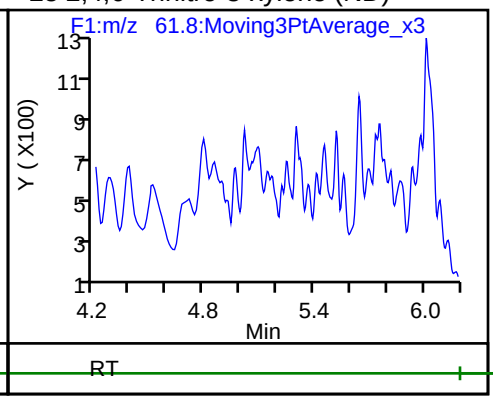
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 08-Apr-2022 07:32:28 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07022.d
Lims ID: 280-160187-A-43-I DU
Client ID:
Sample Type: DU
Inject. Date: 07-Apr-2022 12:44:36 ALS Bottle#: 19 Worklist Smp#: 22
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-43-I DU
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:27 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 13:11:42

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	98.6	98.28

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB183 (3-4) TRL | Lab Sample ID: 280-160187-2 TRL
Matrix: Solid | Lab File ID: ex722D05033.d
Analysis Method: 8321A | Date Collected: 03/22/2022 12:30
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:56
Sample wt/vol: 10.55(g) | Date Analyzed: 04/05/2022 13:13
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 570785 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.047	U	0.095	0.047	0.042
99-65-0	1,3-Dinitrobenzene	0.047	U	0.095	0.047	0.042
118-96-7	2,4,6-Trinitrotoluene	0.047	U	0.095	0.047	0.035
121-14-2	2,4-Dinitrotoluene	0.047	U	0.095	0.047	0.044
606-20-2	2,6-Dinitrotoluene	0.047	U	0.095	0.047	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.047	U	0.095	0.047	0.047
19406-51-0	4-Amino-2,6-dinitrotoluene	0.047	U	0.095	0.047	0.029
2691-41-0	HMX	0.047	U	0.095	0.047	0.044
99-08-1	m-Nitrotoluene	0.047	U	0.095	0.047	0.041
98-95-3	Nitrobenzene	0.047	U	0.10	0.047	0.036
55-63-0	Nitroglycerin	0.047	U	0.095	0.047	0.027
88-72-2	o-Nitrotoluene	0.047	U	0.095	0.047	0.041
78-11-5	PETN	0.047	U	0.095	0.047	0.032
99-99-0	p-Nitrotoluene	0.047	U	0.095	0.047	0.047
121-82-4	RDX	0.047	U	0.11	0.047	0.041
479-45-8	Tetryl	0.047	U Q	0.095	0.047	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	102		68-140

Report Date: 06-Apr-2022 07:09:53 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05033.d
Lims ID: 280-160187-A-2-J TRL
Client ID:
Sample Type: TRL
Inject. Date: 05-Apr-2022 13:13:13 ALS Bottle#: 26 Worklist Smp#: 30
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-2-J TRL
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:09:52 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 14:51:31
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		269268	125.0	131	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		1045023	125.0	241	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.850	2.850	0.0		1887646	129.4	260	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.783	943615	102.6	185	
* 18 2,4-dinitrotoluene-d3								
185.1	4.037	4.028	0.009		6158902	125.0	107	

QC Flag Legend

Processing Flags

Reagents:

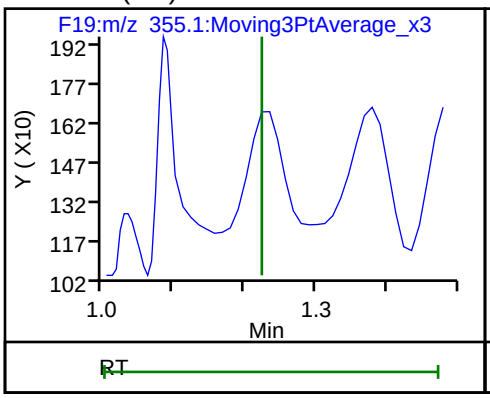
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:09:54 Chrom Revision: 2.3 18-Mar-2022 09:07:22

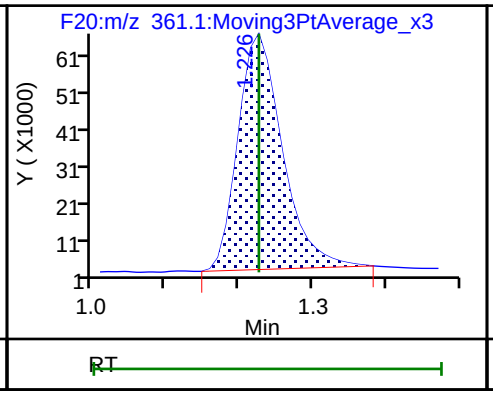
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05033.d
Injection Date: 05-Apr-2022 13:13:13 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-2-J TRL
Client ID:
Operator ID: acm ALS Bottle#: 26 Worklist Smp#: 30
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

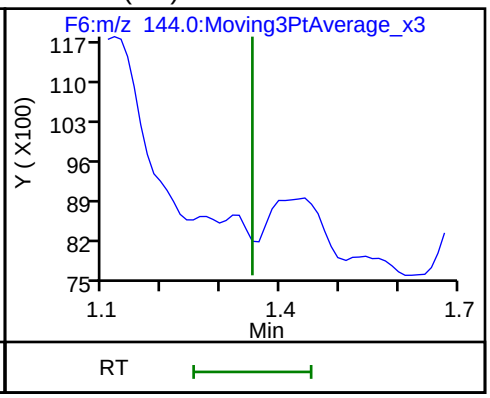
2 HMX (ND)



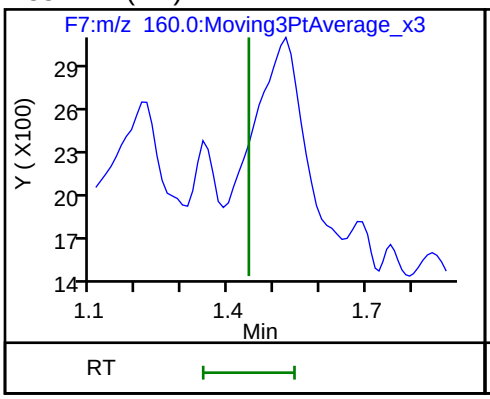
* 1 HMX-13C4



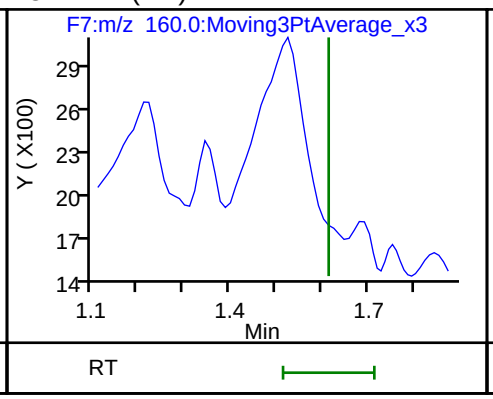
36 TNX (ND)



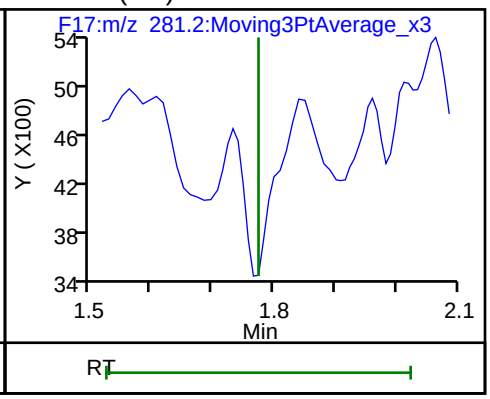
33 DNX (ND)



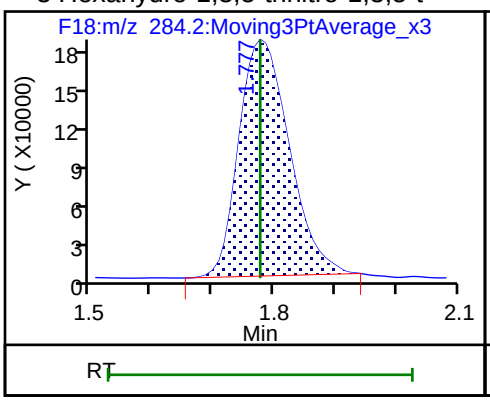
34 MNX (ND)



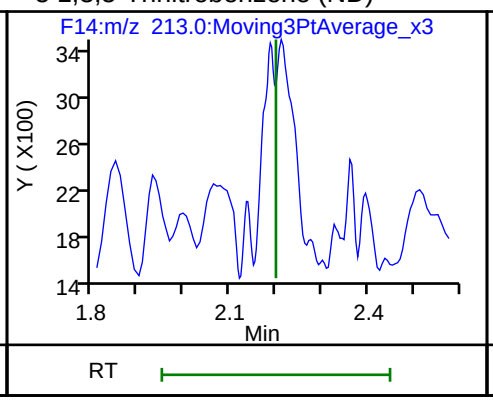
4 RDX (ND)



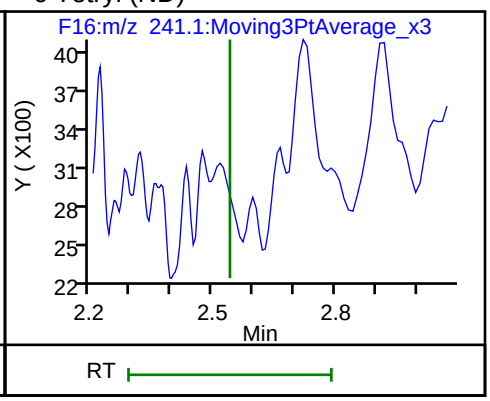
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



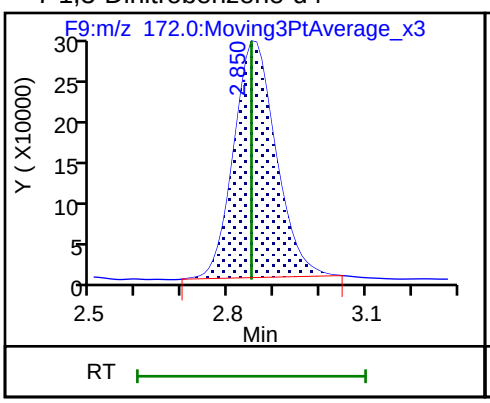
5 1,3,5-Trinitrobenzene (ND)



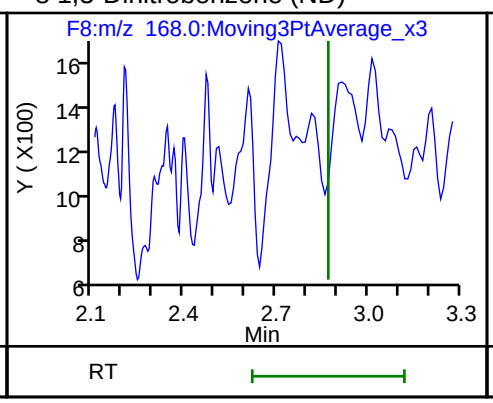
6 Tetryl (ND)



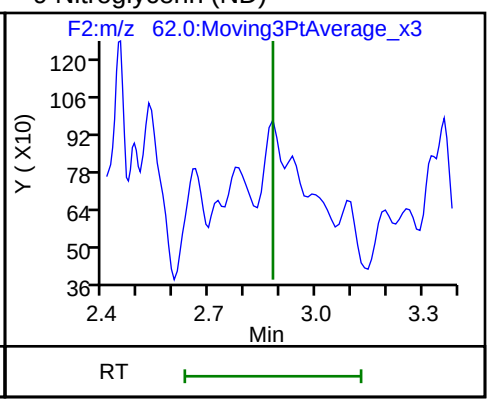
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



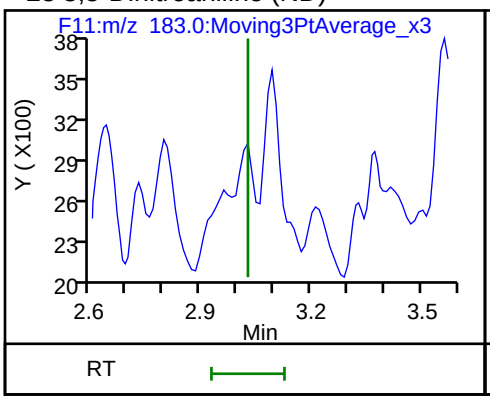
9 Nitroglycerin (ND)



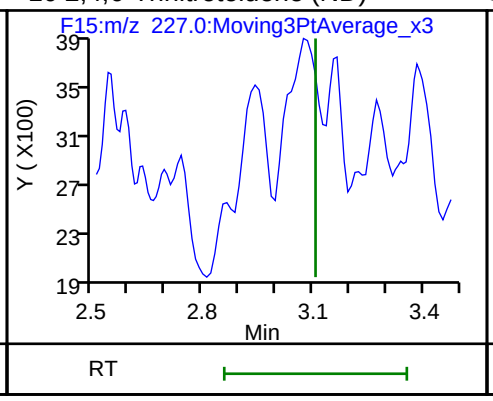
Report Date: 06-Apr-2022 07:09:54 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05033.d

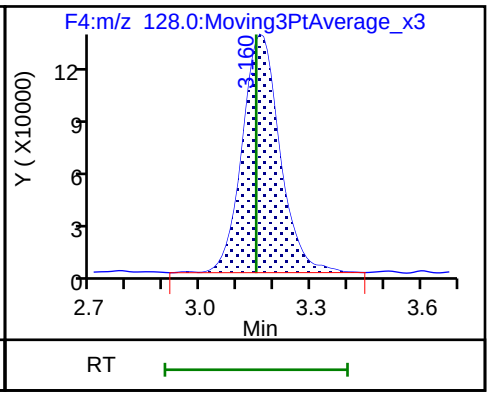
28 3,5-Dinitroaniline (ND)



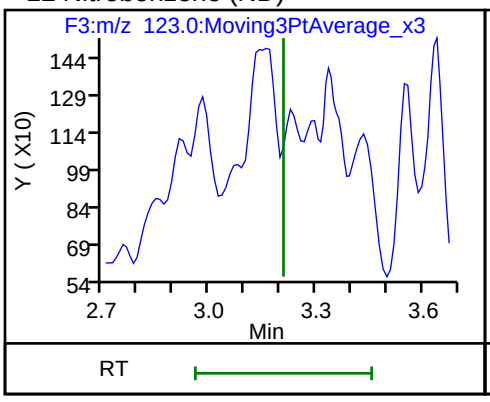
10 2,4,6-Trinitrotoluene (ND)



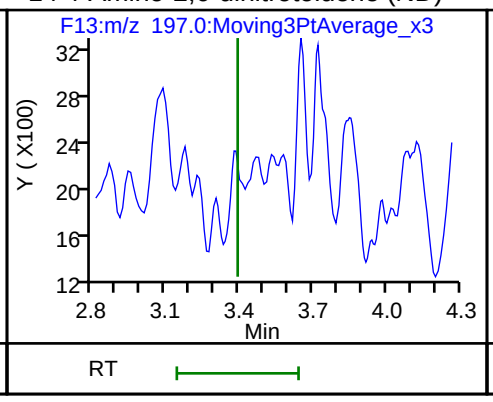
$ 11 Nitrobenzene-d5



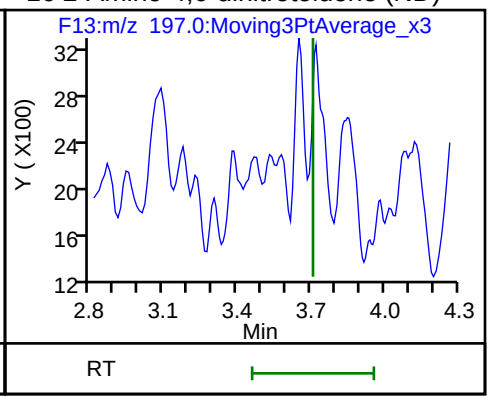
12 Nitrobenzene (ND)



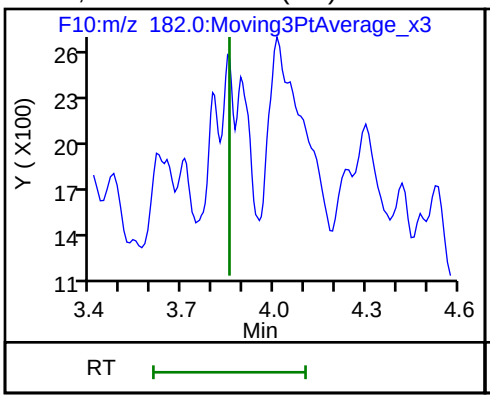
14 4-Amino-2,6-dinitrotoluene (ND)



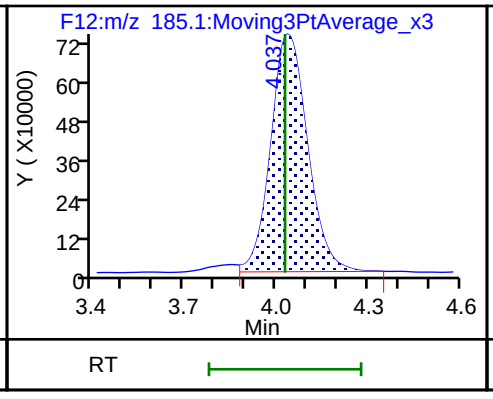
16 2-Amino-4,6-dinitrotoluene (ND)



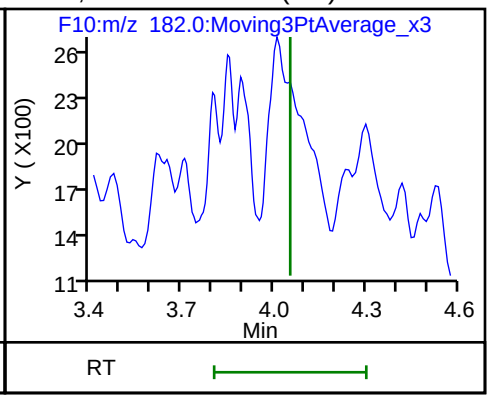
17 2,6-Dinitrotoluene (ND)



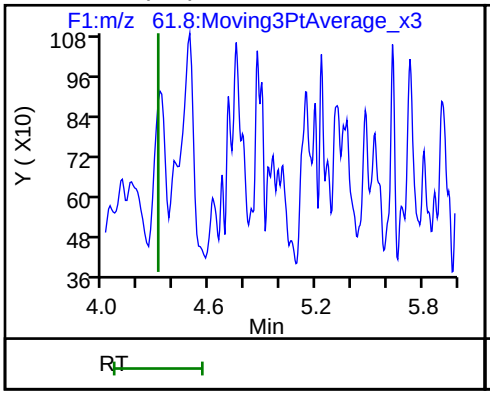
* 18 2,4-dinitrotoluene-d3



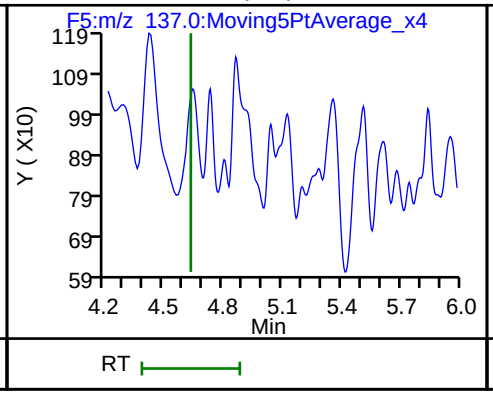
19 2,4-Dinitrotoluene (ND)



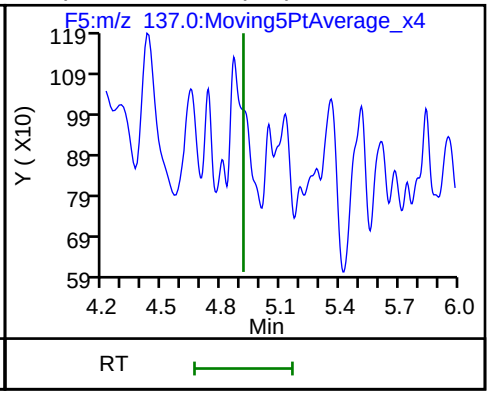
20 PETN (ND)



22 o-Nitrotoluene (ND)



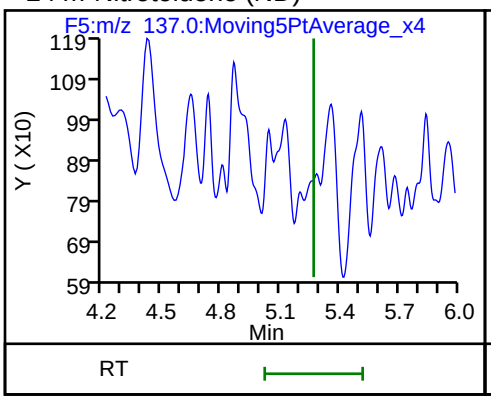
23 p-Nitrotoluene (ND)



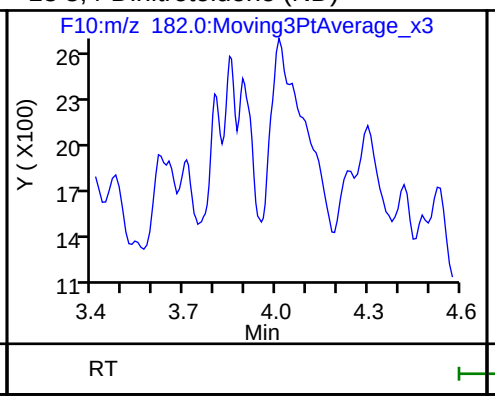
Report Date: 06-Apr-2022 07:09:54 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05033.d

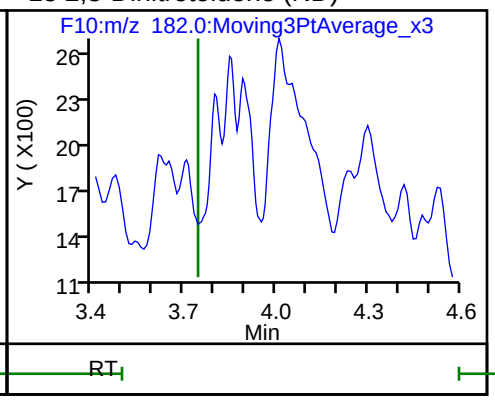
24 m-Nitrotoluene (ND)



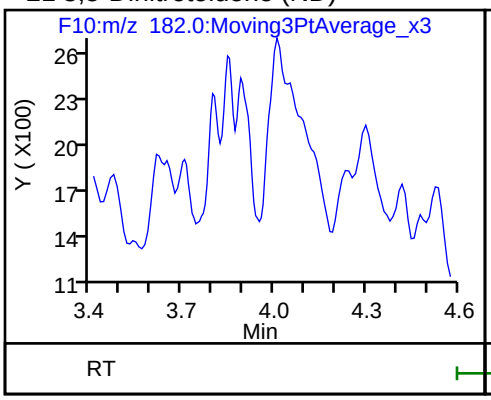
13 3,4-Dinitrotoluene (ND)



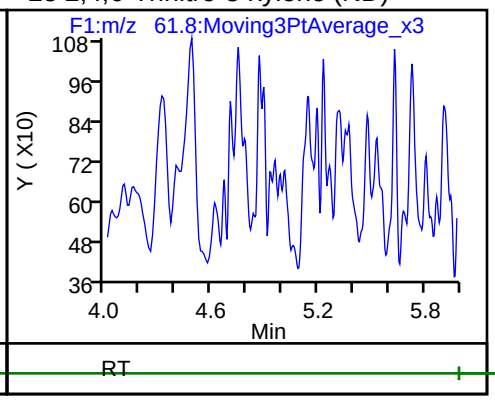
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 06-Apr-2022 07:09:53 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05033.d
Lims ID: 280-160187-A-2-J TRL
Client ID:
Sample Type: TRL
Inject. Date: 05-Apr-2022 13:13:13 ALS Bottle#: 26 Worklist Smp#: 30
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-2-J TRL
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:09:52 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 14:51:31

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	102.6	102.25

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB201(11-12) TRL | Lab Sample ID: 280-160187-26 TRL
Matrix: Solid | Lab File ID: ex722D05069.d
Analysis Method: 8321A | Date Collected: 03/22/2022 17:20
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:54
Sample wt/vol: 10.24(g) | Date Analyzed: 04/05/2022 17:03
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 570786 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.049	U	0.098	0.049	0.044
99-65-0	1,3-Dinitrobenzene	0.049	U	0.098	0.049	0.044
118-96-7	2,4,6-Trinitrotoluene	0.049	U	0.098	0.049	0.036
121-14-2	2,4-Dinitrotoluene	0.049	U	0.098	0.049	0.046
606-20-2	2,6-Dinitrotoluene	0.049	U Q	0.098	0.049	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.049	U	0.098	0.049	0.048
19406-51-0	4-Amino-2,6-dinitrotoluene	0.049	U Q	0.098	0.049	0.030
2691-41-0	HMX	0.049	U M	0.098	0.049	0.045
99-08-1	m-Nitrotoluene	0.049	U	0.098	0.049	0.042
98-95-3	Nitrobenzene	0.049	U	0.11	0.049	0.037
55-63-0	Nitroglycerin	0.049	U	0.098	0.049	0.028
88-72-2	o-Nitrotoluene	0.049	U	0.098	0.049	0.042
78-11-5	PETN	0.049	U	0.098	0.049	0.033
99-99-0	p-Nitrotoluene	0.049	U	0.098	0.049	0.048
121-82-4	RDX	0.049	U	0.12	0.049	0.042
479-45-8	Tetryl	0.049	U Q	0.098	0.049	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	93		68-140

Report Date: 06-Apr-2022 07:10:19 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05069.d
Lims ID: 280-160187-A-26-J TRL
Client ID:
Sample Type: TRL
Inject. Date: 05-Apr-2022 17:03:36 ALS Bottle#: 11 Worklist Smp#: 66
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-26-J TRL
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:10:15 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 06-Apr-2022 06:57:48
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		279550	125.0	152	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		1025866	125.0	307	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1844160	129.4	228	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	836880	93.0	125	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		5676259	125.0	118	

QC Flag Legend
Processing Flags

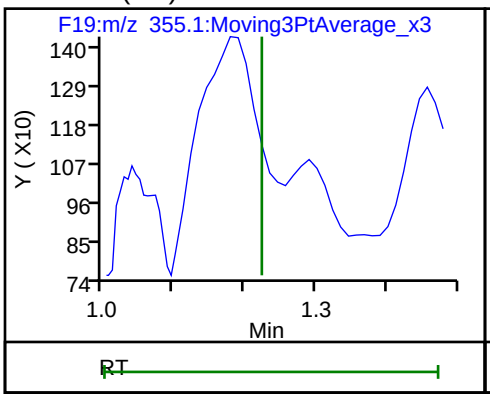
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:10:19 Chrom Revision: 2.3 18-Mar-2022 09:07:22

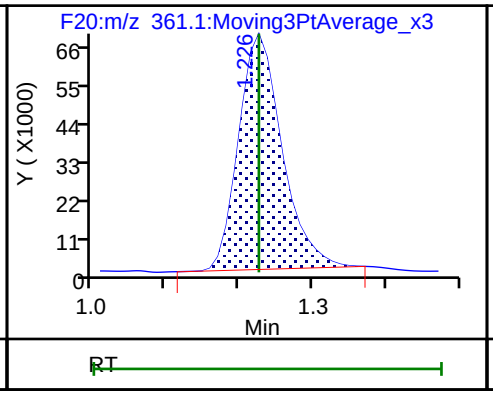
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05069.d
Injection Date: 05-Apr-2022 17:03:36 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-26-J TRL
Client ID:
Operator ID: acm ALS Bottle#: 11 Worklist Smp#: 66
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

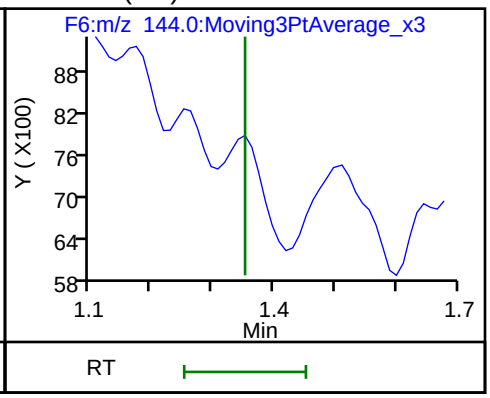
2 HMX (ND)



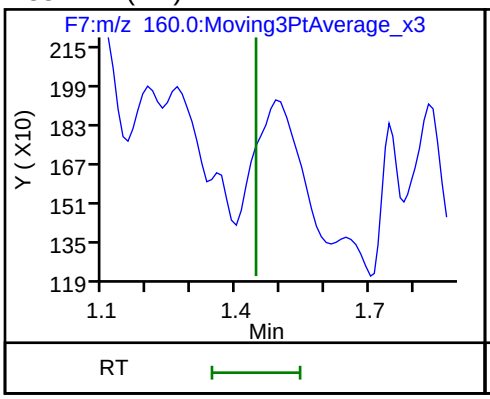
* 1 HMX-13C4



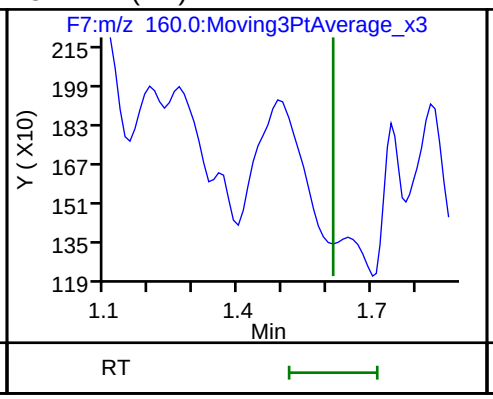
36 TNX (ND)



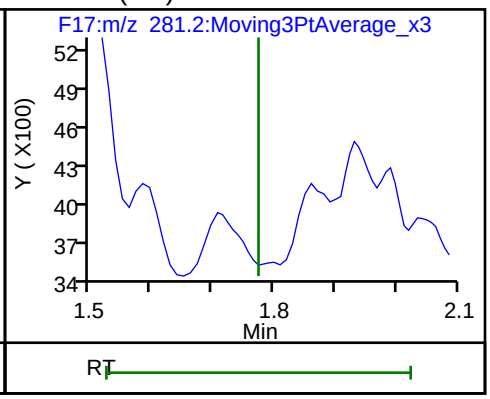
33 DNX (ND)



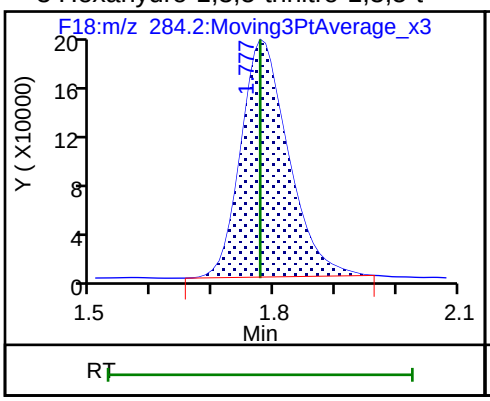
34 MNX (ND)



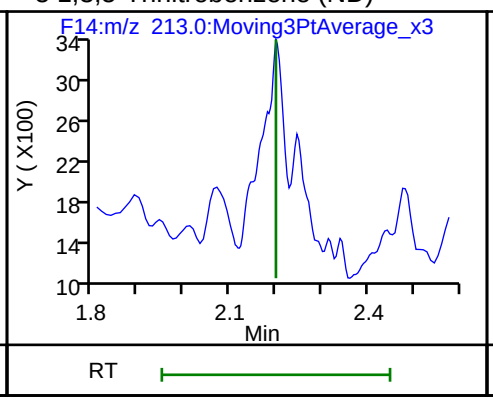
4 RDX (ND)



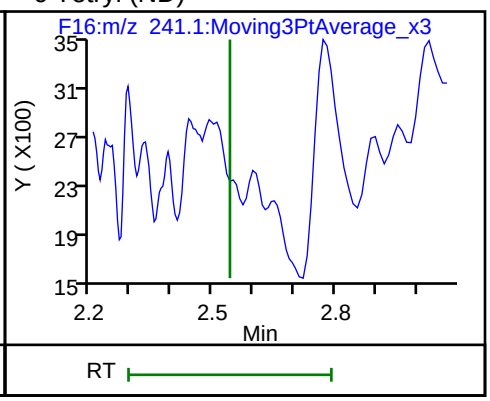
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



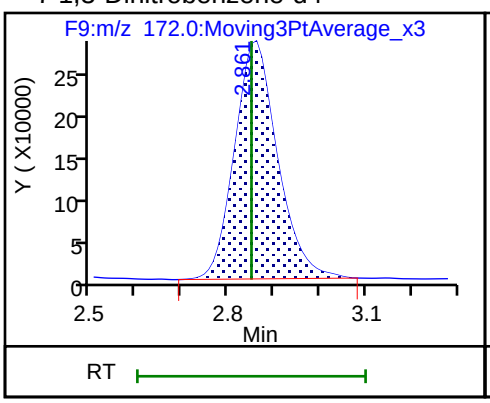
5 1,3,5-Trinitrobenzene (ND)



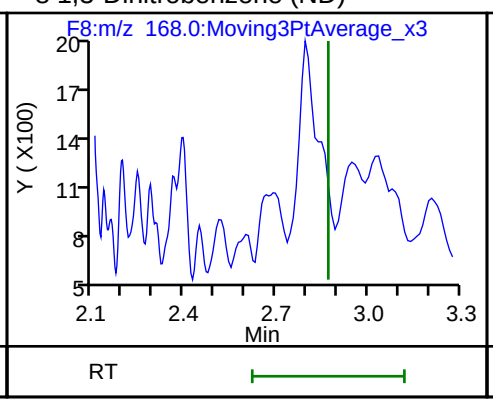
6 Tetryl (ND)



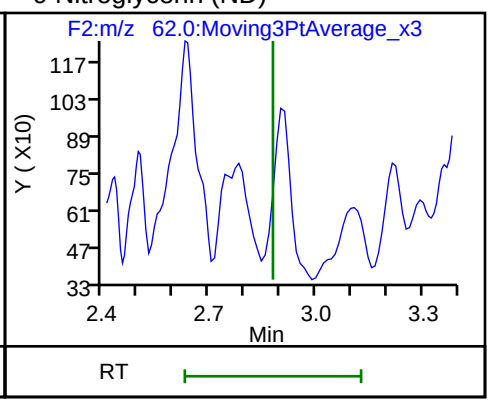
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



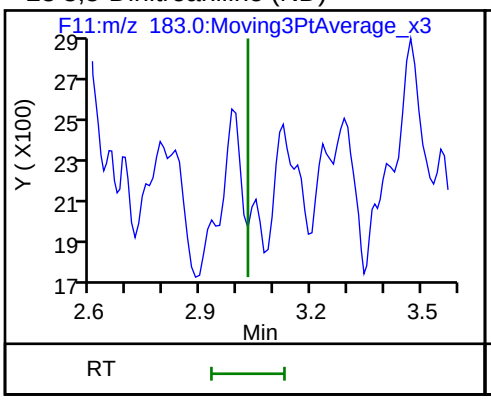
9 Nitroglycerin (ND)



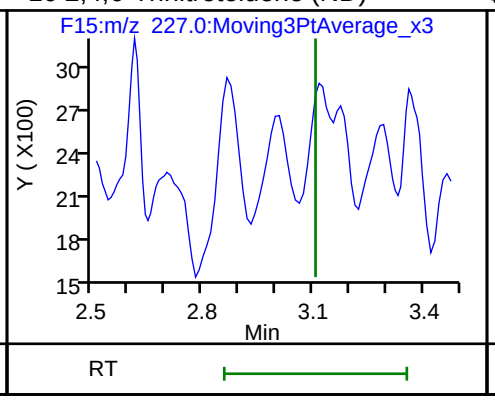
Report Date: 06-Apr-2022 07:10:19 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05069.d

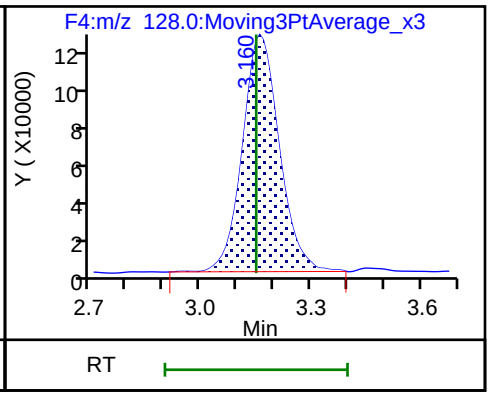
28 3,5-Dinitroaniline (ND)



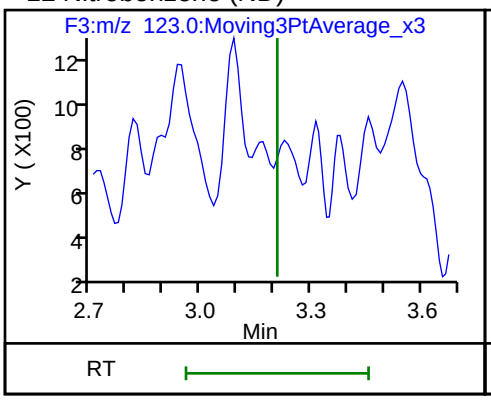
10 2,4,6-Trinitrotoluene (ND)



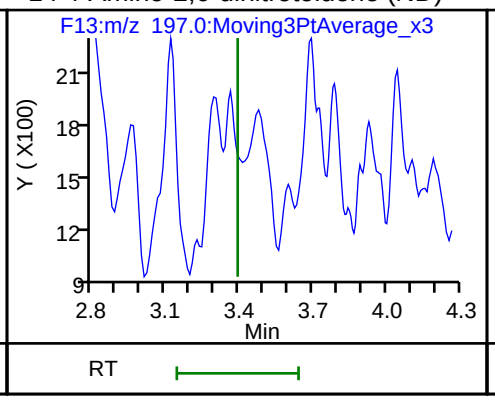
$ 11 Nitrobenzene-d5



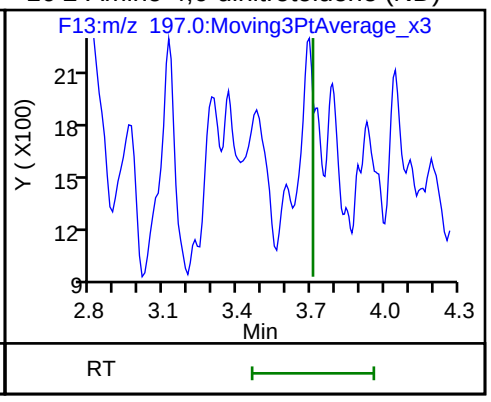
12 Nitrobenzene (ND)



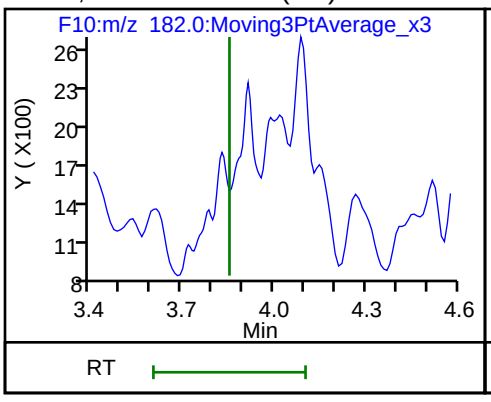
14 4-Amino-2,6-dinitrotoluene (ND)



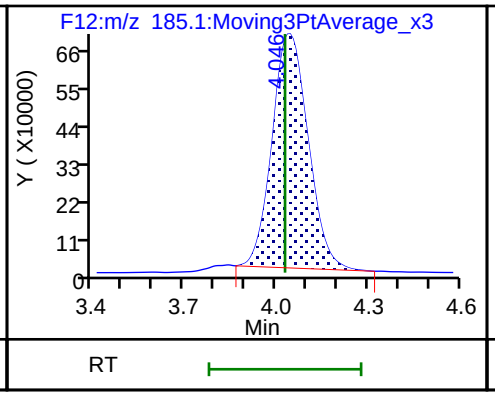
16 2-Amino-4,6-dinitrotoluene (ND)



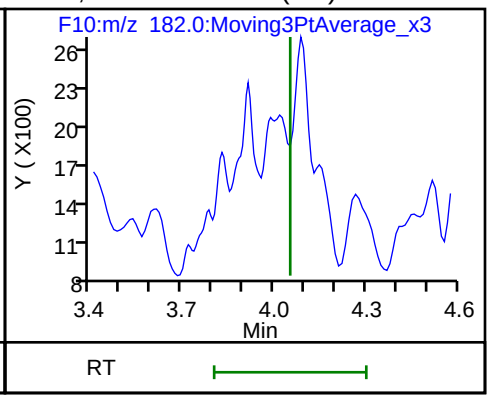
17 2,6-Dinitrotoluene (ND)



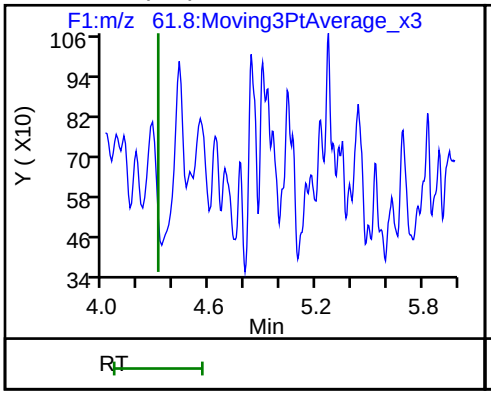
* 18 2,4-dinitrotoluene-d3



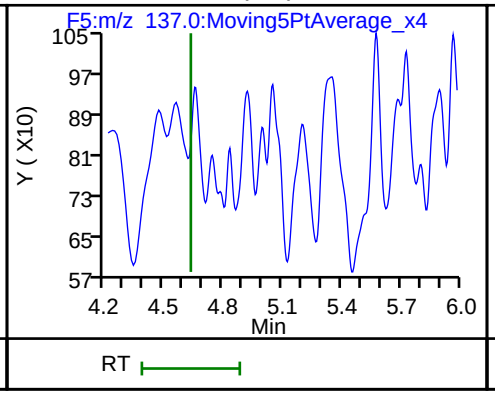
19 2,4-Dinitrotoluene (ND)



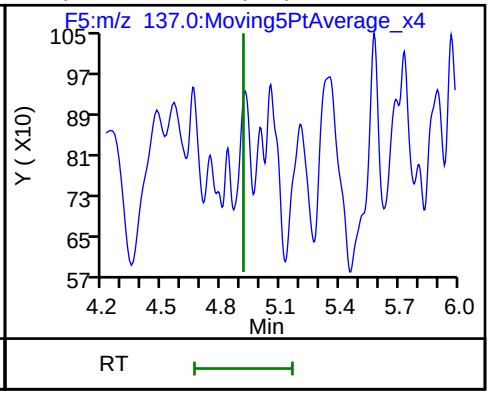
20 PETN (ND)



22 o-Nitrotoluene (ND)



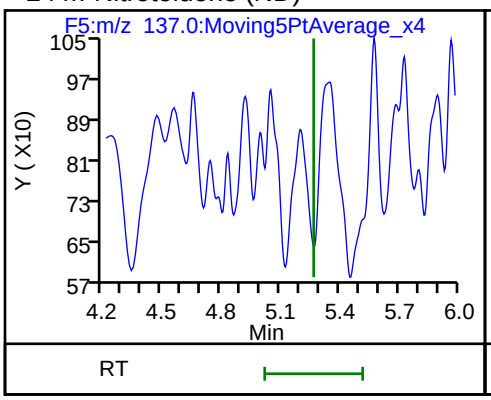
23 p-Nitrotoluene (ND)



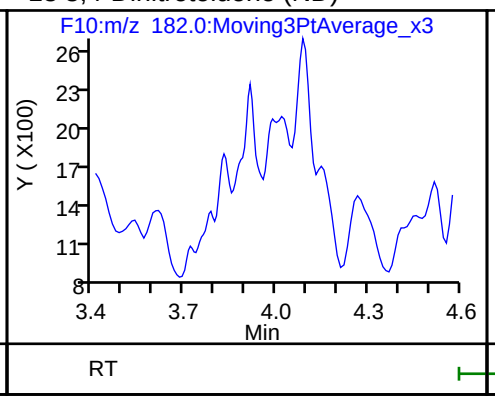
Report Date: 06-Apr-2022 07:10:19 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05069.d

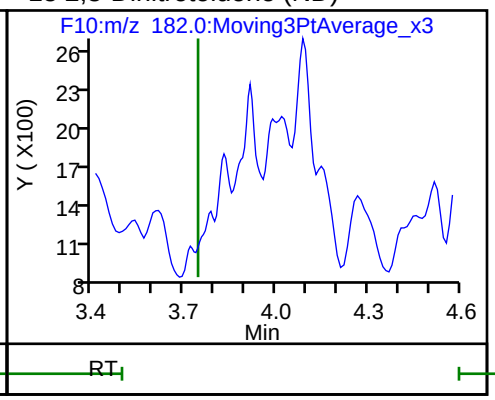
24 m-Nitrotoluene (ND)



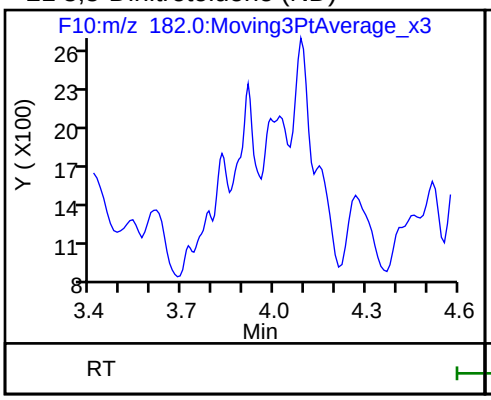
13 3,4-Dinitrotoluene (ND)



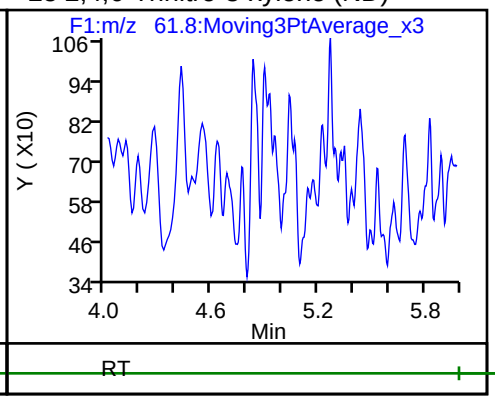
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 06-Apr-2022 07:10:19 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05069.d
Lims ID: 280-160187-A-26-J TRL
Client ID:
Sample Type: TRL
Inject. Date: 05-Apr-2022 17:03:36 ALS Bottle#: 11 Worklist Smp#: 66
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-26-J TRL
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 07:10:15 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 06-Apr-2022 06:57:48

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	93.0	92.73

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB197 (3-4) TRL | Lab Sample ID: 280-160187-43 TRL
Matrix: Solid | Lab File ID: ex722D07023.d
Analysis Method: 8321A | Date Collected: 03/23/2022 11:35
Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57
Sample wt/vol: 10.07(g) | Date Analyzed: 04/07/2022 12:51
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571108 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.050	U	0.099	0.050	0.044
99-65-0	1,3-Dinitrobenzene	0.050	U	0.099	0.050	0.044
118-96-7	2,4,6-Trinitrotoluene	0.050	U	0.099	0.050	0.037
121-14-2	2,4-Dinitrotoluene	0.050	U	0.099	0.050	0.046
606-20-2	2,6-Dinitrotoluene	0.050	U	0.099	0.050	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.050	U	0.099	0.050	0.049
19406-51-0	4-Amino-2,6-dinitrotoluene	0.050	U	0.099	0.050	0.031
2691-41-0	HMX	0.050	U M	0.099	0.050	0.046
99-08-1	m-Nitrotoluene	0.050	U	0.099	0.050	0.043
98-95-3	Nitrobenzene	0.050	U	0.11	0.050	0.038
55-63-0	Nitroglycerin	0.050	U	0.099	0.050	0.029
88-72-2	o-Nitrotoluene	0.050	U	0.099	0.050	0.043
78-11-5	PETN	0.050	U	0.099	0.050	0.034
99-99-0	p-Nitrotoluene	0.050	U	0.099	0.050	0.049
121-82-4	RDX	0.050	U	0.12	0.050	0.043
479-45-8	Tetryl	0.050	U Q	0.099	0.050	0.039

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	92		68-140

Report Date: 08-Apr-2022 07:32:29 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07023.d
Lims ID: 280-160187-A-43-J TRL
Client ID:
Sample Type: TRL
Inject. Date: 07-Apr-2022 12:51:11 ALS Bottle#: 20 Worklist Smp#: 23
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-43-J TRL
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:27 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 13:12:03
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		117307	125.0	107	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								M
284.2	1.844	1.844	0.0		405686	125.0	247	M
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.030	-0.011		1340335	129.4	151	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.774	599064	92.2	64.2	
* 18 2,4-dinitrotoluene-d3								
185.1	4.341	4.341	0.0		4261543	125.0	117	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

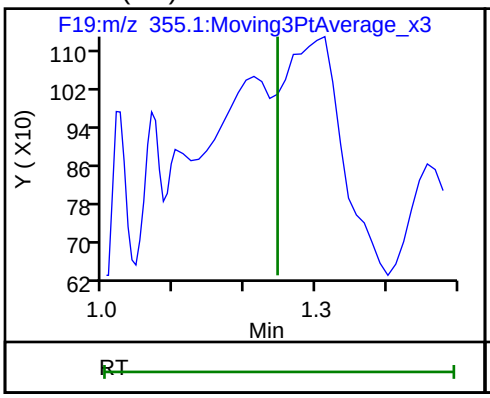
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 08-Apr-2022 07:32:29 Chrom Revision: 2.3 18-Mar-2022 09:07:22

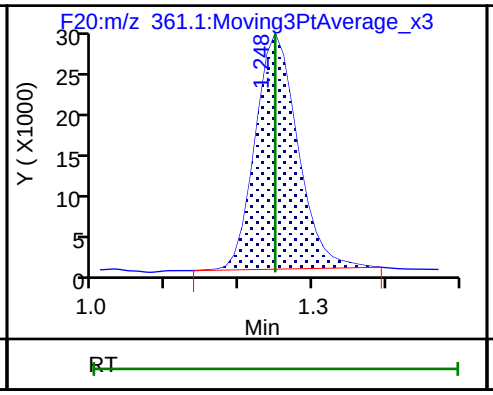
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07023.d
Injection Date: 07-Apr-2022 12:51:11 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-43-J TRL
Client ID:
Operator ID: acm ALS Bottle#: 20 Worklist Smp#: 23
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

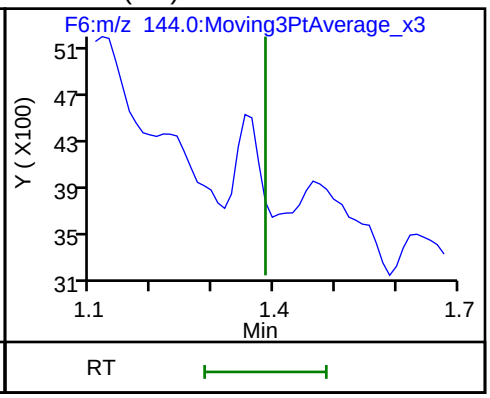
2 HMX (ND)



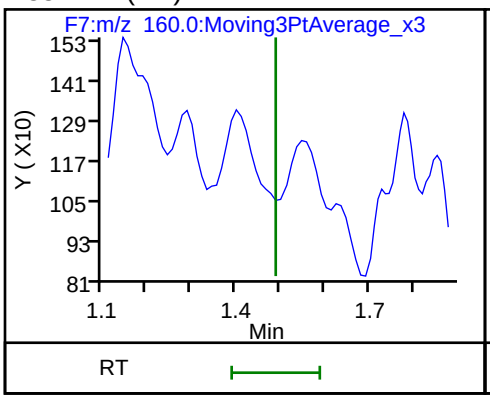
* 1 HMX-13C4



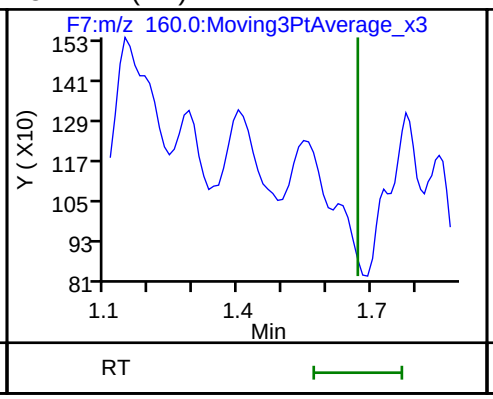
36 TNX (ND)



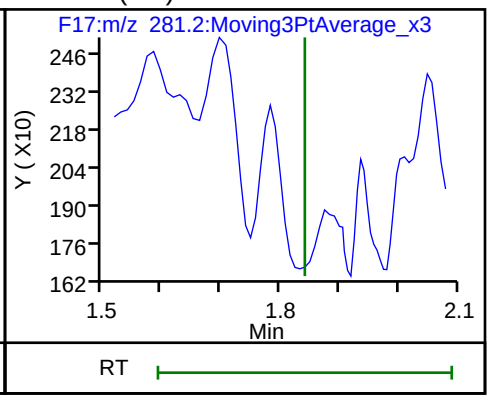
33 DNX (ND)



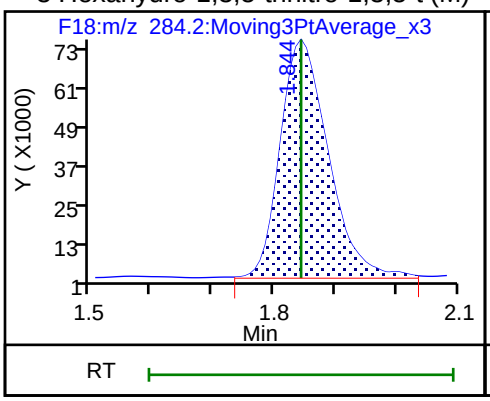
34 MNX (ND)



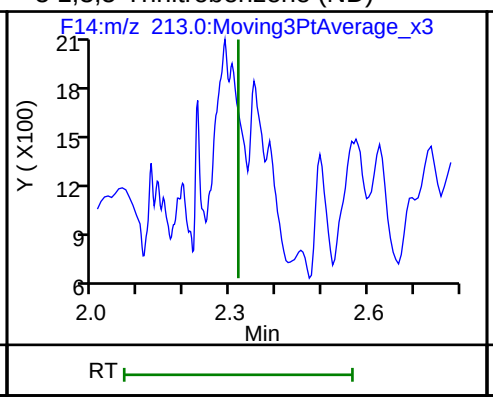
4 RDX (ND)



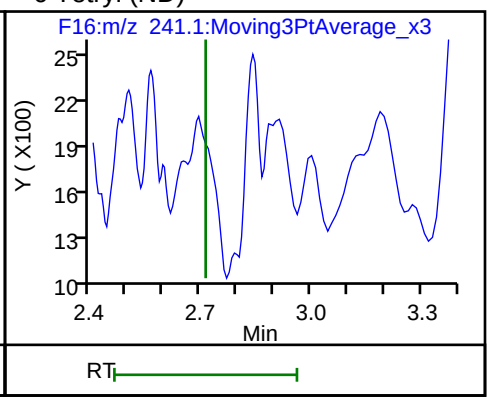
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t (M)



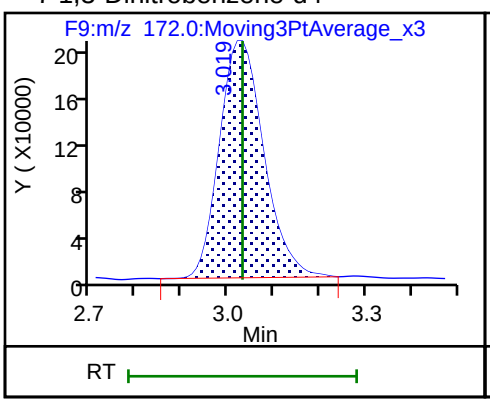
5 1,3,5-Trinitrobenzene (ND)



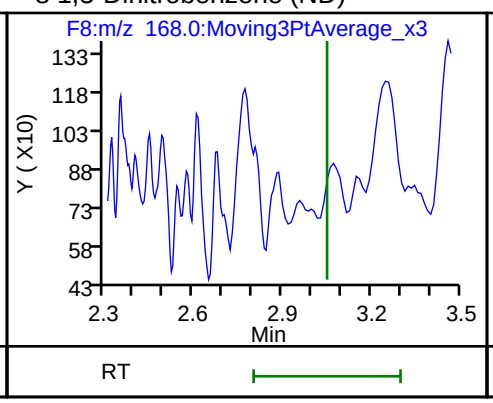
6 Tetryl (ND)



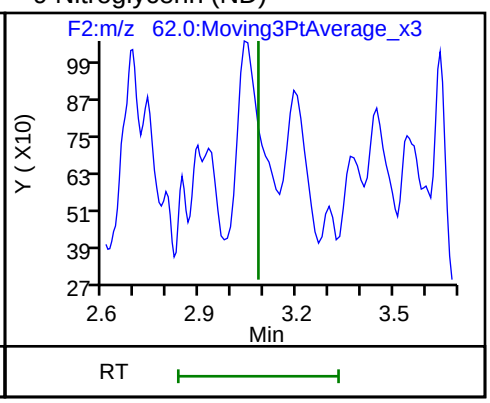
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



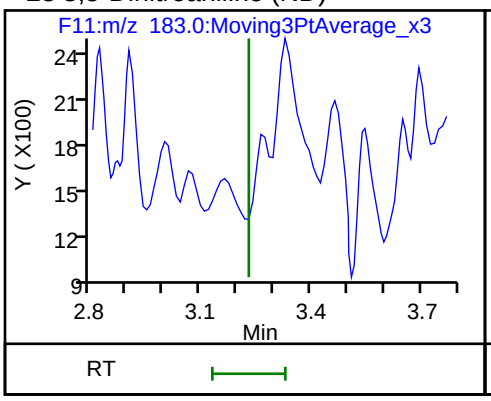
9 Nitroglycerin (ND)



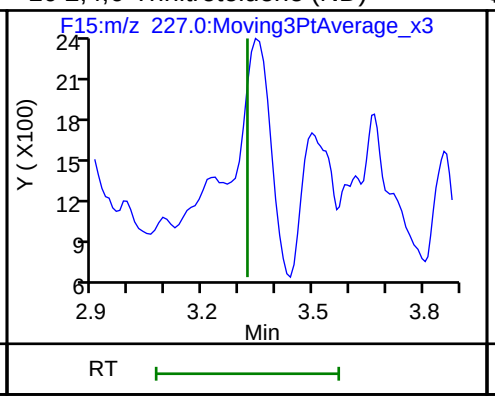
Report Date: 08-Apr-2022 07:32:29 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07023.d

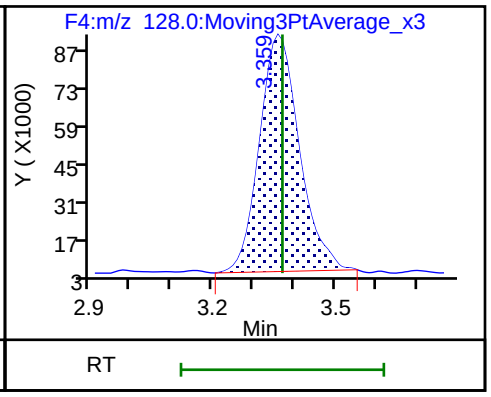
28 3,5-Dinitroaniline (ND)



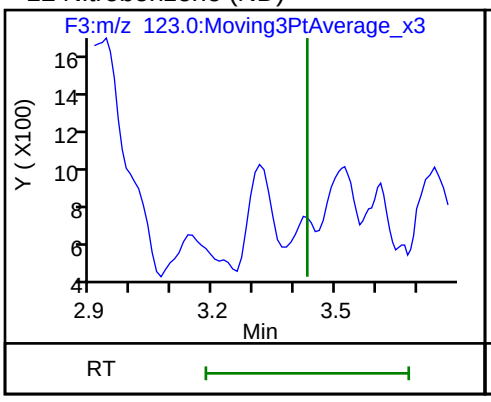
10 2,4,6-Trinitrotoluene (ND)



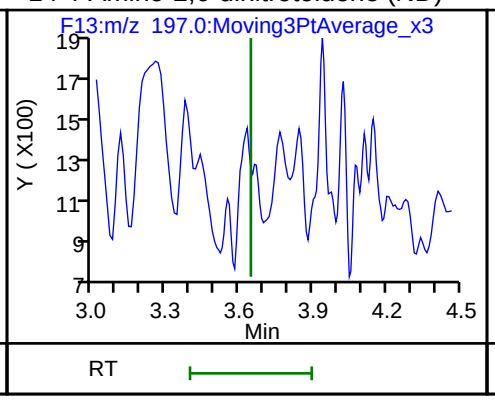
$ 11 Nitrobenzene-d5



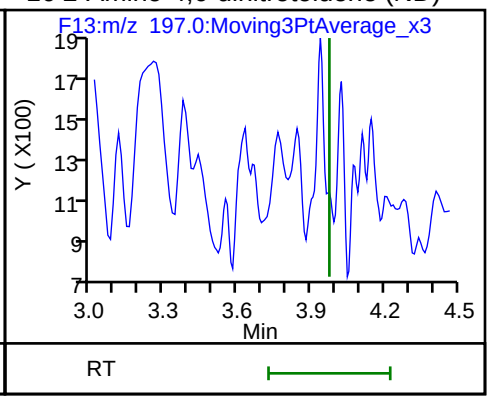
12 Nitrobenzene (ND)



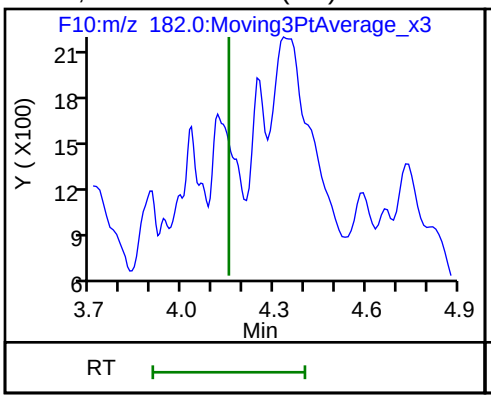
14 4-Amino-2,6-dinitrotoluene (ND)



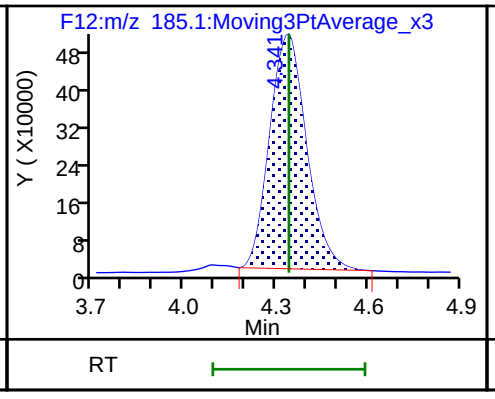
16 2-Amino-4,6-dinitrotoluene (ND)



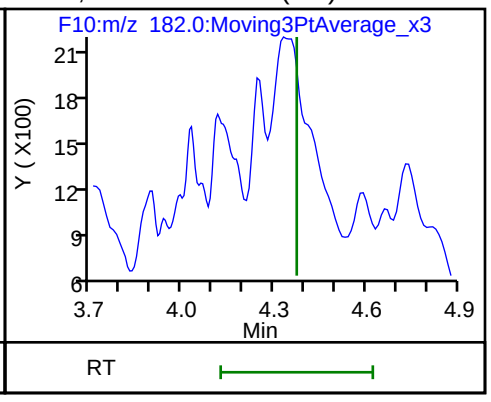
17 2,6-Dinitrotoluene (ND)



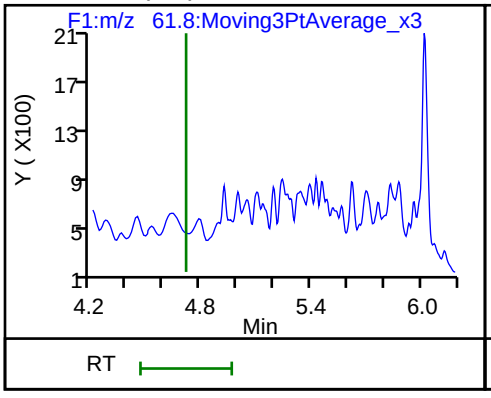
* 18 2,4-dinitrotoluene-d3



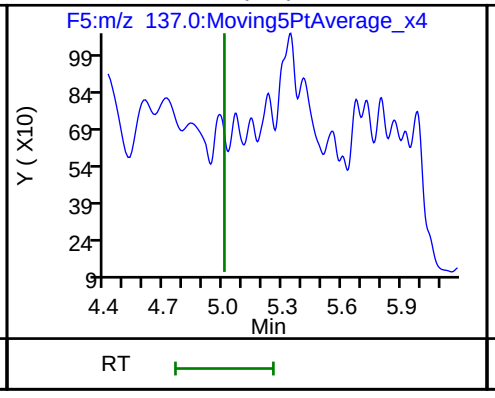
19 2,4-Dinitrotoluene (ND)



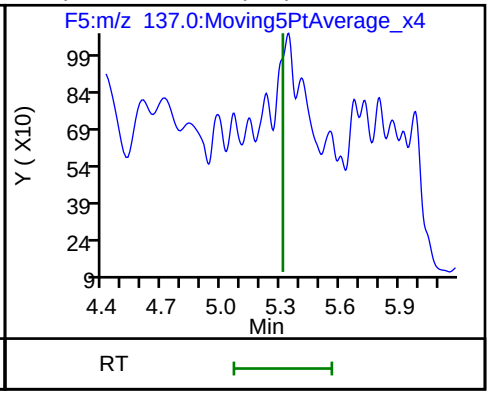
20 PETN (ND)



22 o-Nitrotoluene (ND)



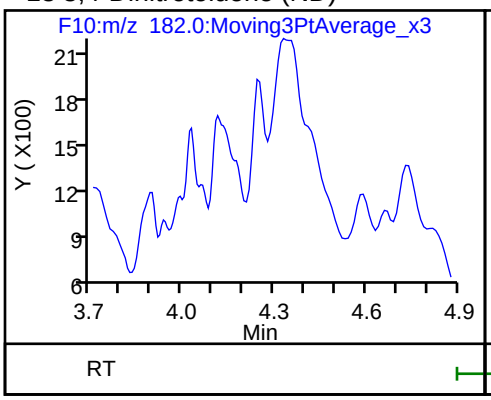
23 p-Nitrotoluene (ND)



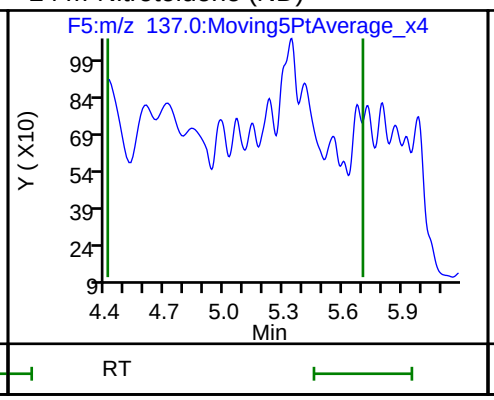
Report Date: 08-Apr-2022 07:32:29 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07023.d

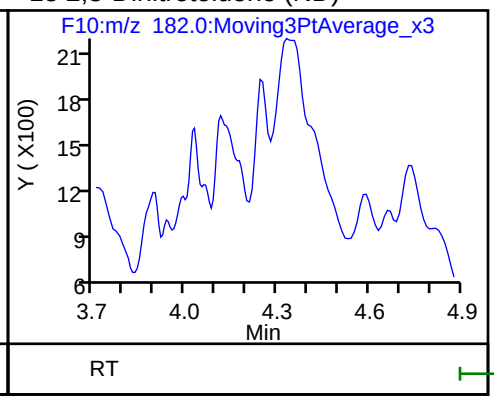
13 3,4-Dinitrotoluene (ND)



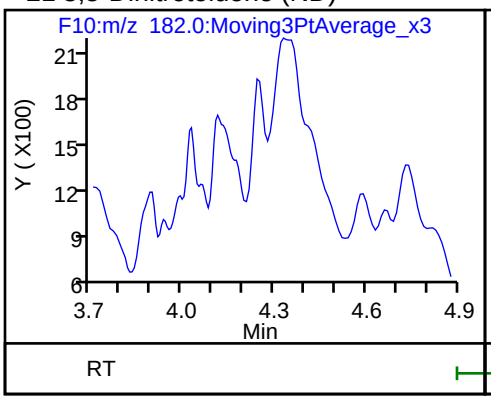
24 m-Nitrotoluene (ND)



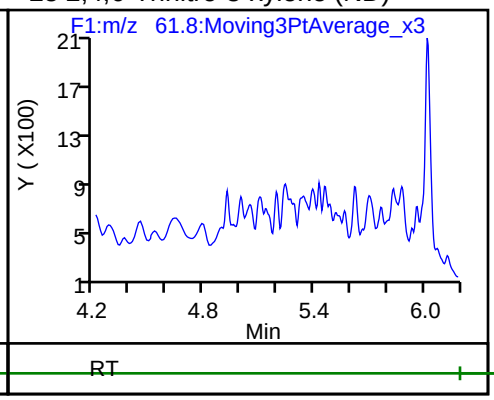
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 08-Apr-2022 07:32:29 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07023.d
Lims ID: 280-160187-A-43-J TRL
Client ID:
Sample Type: TRL
Inject. Date: 07-Apr-2022 12:51:11 ALS Bottle#: 20 Worklist Smp#: 23
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-43-J TRL
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:27 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 13:12:03

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	92.2	91.85

Report Date: 08-Apr-2022 07:32:29 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Manual Integration/User Assign Peak Report

Eurofins Denver

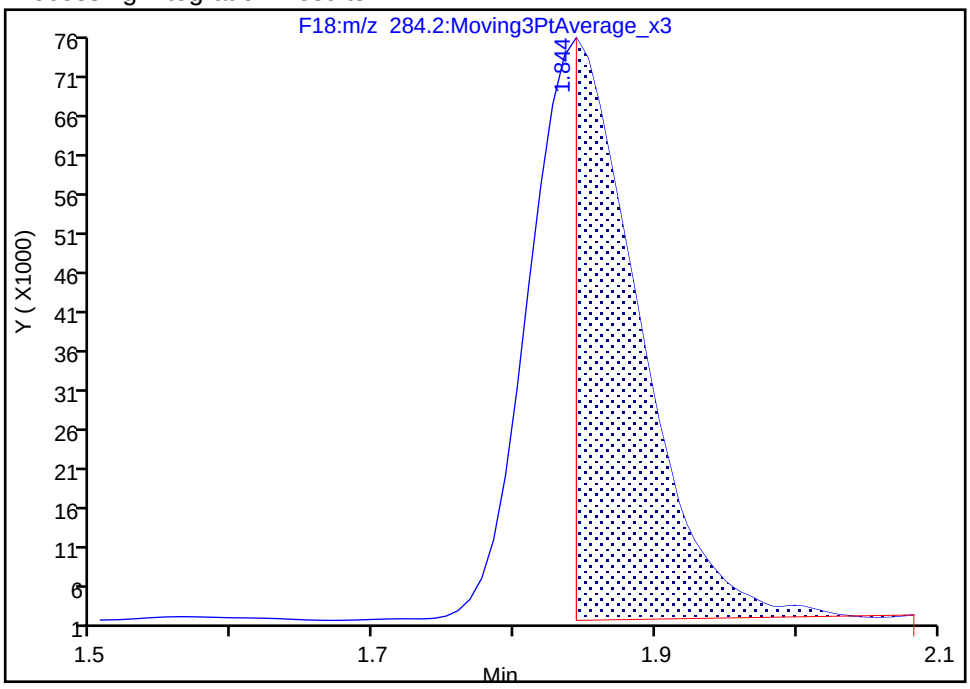
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07023.d
Injection Date: 07-Apr-2022 12:51:11 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-43-J TRL
Client ID:
Operator ID: acm ALS Bottle#: 20 Worklist Smp#: 23
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F18:SIR

* 3 Hexahydro-1,3,5-trinitro-1,3,5-t, CAS: STL00205

Signal: 1

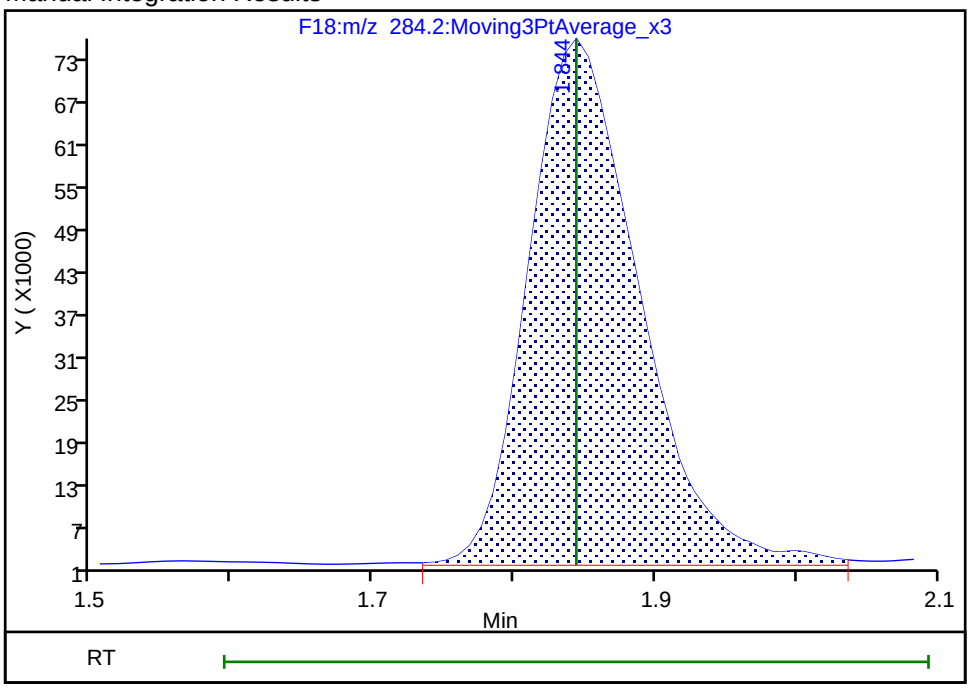
Processing Integration Results

RT: 1.84
Area: 227978
Amount: 125.0000
Amount Units: ug/l



Manual Integration Results

RT: 1.84
Area: 405686
Amount: 125.0000
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 13:11:54
Audit Action: Manually Integrated Audit Reason: Baseline

LCMS ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-160187-1

SDG No.:

Instrument ID: LC_LCMS7 Start Date: 04/05/2022 10:20

Analysis Batch Number: 570784 End Date: 04/05/2022 11:56

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD001 280-570784/3 IC		04/05/2022 10:20	1	ex722D05003.d	Synergi Hydro
STD002 280-570784/4 IC		04/05/2022 10:26	1	ex722D05004.d	Synergi Hydro
STD003 280-570784/5 IC		04/05/2022 10:33	1	ex722D05005.d	Synergi Hydro
STD004 280-570784/6 IC		04/05/2022 10:39	1	ex722D05006.d	Synergi Hydro
STD005 280-570784/7 ICISAV		04/05/2022 10:46	1	ex722D05007.d	Synergi Hydro
STD006 280-570784/8 IC		04/05/2022 10:52	1	ex722D05008.d	Synergi Hydro
STD007 280-570784/9 IC		04/05/2022 10:58	1	ex722D05009.d	Synergi Hydro
ICB 280-570784/10		04/05/2022 11:05	1	ex722D05010.d	Synergi Hydro
ICV 280-570784/11		04/05/2022 11:11	1	ex722D05011.d	Synergi Hydro
MB 280-570053/1-A		04/05/2022 11:18	1	ex722D05012.d	Synergi Hydro
LCS 280-570053/2-A		04/05/2022 11:24	1	ex722D05013.d	Synergi Hydro
LCSD 280-570053/3-A		04/05/2022 11:30	1	ex722D05014.d	Synergi Hydro
280-160187-28	EB-1	04/05/2022 11:37	1	ex722D05015.d	Synergi Hydro
280-160187-47	EB-02	04/05/2022 11:43	1	ex722D05016.d	Synergi Hydro
ZZZZZ		04/05/2022 11:50	1		Synergi Hydro
CCV 280-570784/18		04/05/2022 11:56	1	ex722D05021.d	Synergi Hydro

LCMS ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-160187-1

SDG No.:

Instrument ID: LC_LCMS7 Start Date: 04/05/2022 11:56

Analysis Batch Number: 570785 End Date: 04/05/2022 15:21

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-570785/18		04/05/2022 11:56	1	ex722D05021.d	Synergi Hydro
MB 280-570516/1-A		04/05/2022 12:02	1	ex722D05022.d	Synergi Hydro
LCS 280-570516/2-A		04/05/2022 12:09	1	ex722D05023.d	Synergi Hydro
LCSD 280-570516/3-A		04/05/2022 12:15	1	ex722D05024.d	Synergi Hydro
GB 280-570095/1-B		04/05/2022 12:22	1	ex722D05025.d	Synergi Hydro
LCSSRM 280-570095/2-B		04/05/2022 12:28	1	ex722D05026.d	Synergi Hydro
280-160187-1	29SB183 (1-2)	04/05/2022 12:34	1	ex722D05027.d	Synergi Hydro
280-160187-2	29SB183 (3-4)	04/05/2022 12:41	1	ex722D05028.d	Synergi Hydro
280-160187-2 MS	29SB183 (3-4) MS	04/05/2022 12:47	1	ex722D05029.d	Synergi Hydro
280-160187-2 MSD	29SB183 (3-4) MSD	04/05/2022 12:54	1	ex722D05030.d	Synergi Hydro
CCV 280-570785/28		04/05/2022 13:00	1	ex722D05031.d	Synergi Hydro
280-160187-2 DU	29SB183 (3-4) DU	04/05/2022 13:06	1	ex722D05032.d	Synergi Hydro
280-160187-2 TRL	29SB183 (3-4) TRL	04/05/2022 13:13	1	ex722D05033.d	Synergi Hydro
280-160187-3	DUP-01	04/05/2022 13:19	1	ex722D05034.d	Synergi Hydro
280-160187-4	29SB185 (3-4)	04/05/2022 13:26	1	ex722D05035.d	Synergi Hydro
280-160187-5	29SB185 (7-8)	04/05/2022 13:32	1	ex722D05036.d	Synergi Hydro
280-160187-6	29SB185 (11-12)	04/05/2022 13:38	1	ex722D05037.d	Synergi Hydro
280-160187-7	29SB185 (13.5-14)	04/05/2022 13:45	1	ex722D05038.d	Synergi Hydro
280-160187-8	29SB186 (9-10)	04/05/2022 13:51	1	ex722D05039.d	Synergi Hydro
280-160187-9	29SB186 (11-12)	04/05/2022 13:58	1	ex722D05040.d	Synergi Hydro
280-160187-10	29SB186 (13.5-14)	04/05/2022 14:04	1	ex722D05041.d	Synergi Hydro
CCV 280-570785/39		04/05/2022 14:10	1	ex722D05042.d	Synergi Hydro
280-160187-11	29SB184 (3-4)	04/05/2022 14:17	1	ex722D05043.d	Synergi Hydro
280-160187-12	29SB184 (7-8)	04/05/2022 14:23	1	ex722D05044.d	Synergi Hydro
280-160187-13	29SB184 (11-12)	04/05/2022 14:30	1	ex722D05045.d	Synergi Hydro
280-160187-14	29SB184 (13.5-14)	04/05/2022 14:36	1	ex722D05046.d	Synergi Hydro
280-160187-15	DUP-02	04/05/2022 14:42	1	ex722D05047.d	Synergi Hydro
280-160187-16	29SB199 (3-4)	04/05/2022 14:49	1	ex722D05048.d	Synergi Hydro
280-160187-17	29SB199 (7-8)	04/05/2022 14:55	1	ex722D05049.d	Synergi Hydro
280-160187-18	29SB198 (3-4)	04/05/2022 15:02	1	ex722D05050.d	Synergi Hydro
280-160187-19	29SB198 (7-8)	04/05/2022 15:08	1	ex722D05051.d	Synergi Hydro
280-160187-20	29SB202 (3-4)	04/05/2022 15:14	1	ex722D05052.d	Synergi Hydro
CCV 280-570785/50		04/05/2022 15:21	1	ex722D05053.d	Synergi Hydro

LCMS ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-160187-1

SDG No.:

Instrument ID: LC_LCMS7 Start Date: 04/05/2022 15:21

Analysis Batch Number: 570786 End Date: 04/05/2022 18:45

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-570786/50		04/05/2022 15:21	1	ex722D05053.d	Synergi Hydro
MB 280-570543/1-A		04/05/2022 15:27	1	ex722D05054.d	Synergi Hydro
LCS 280-570543/2-A		04/05/2022 15:34	1	ex722D05055.d	Synergi Hydro
LCSD 280-570543/3-A		04/05/2022 15:40	1	ex722D05056.d	Synergi Hydro
GB 280-570100/1-B		04/05/2022 15:46	1	ex722D05057.d	Synergi Hydro
LCSSRM 280-570100/2-B		04/05/2022 15:53	1	ex722D05058.d	Synergi Hydro
280-160187-21	29SB202 (11-12)	04/05/2022 15:59	1	ex722D05059.d	Synergi Hydro
280-160187-22	29SB202 (15-15.5)	04/05/2022 16:06	1	ex722D05060.d	Synergi Hydro
280-160187-23	29SB200 (15-15.5)	04/05/2022 16:12	1	ex722D05061.d	Synergi Hydro
280-160187-24	DUP-03	04/05/2022 16:18	1	ex722D05062.d	Synergi Hydro
280-160187-25	29SB201(3-4)	04/05/2022 16:25	1	ex722D05063.d	Synergi Hydro
CCV 280-570786/61		04/05/2022 16:31	1	ex722D05064.d	Synergi Hydro
280-160187-26	29SB201(11-12)	04/05/2022 16:38	1	ex722D05065.d	Synergi Hydro
280-160187-26 MS	29SB201(11-12) MS	04/05/2022 16:44	1	ex722D05066.d	Synergi Hydro
280-160187-26 MSD	29SB201(11-12) MSD	04/05/2022 16:50	1	ex722D05067.d	Synergi Hydro
280-160187-26 DU	29SB201(11-12) DU	04/05/2022 16:57	1	ex722D05068.d	Synergi Hydro
280-160187-26 TRL	29SB201(11-12) TRL	04/05/2022 17:03	1	ex722D05069.d	Synergi Hydro
280-160187-27	29SB201(15-15.5)	04/05/2022 17:10	1	ex722D05070.d	Synergi Hydro
280-160187-29	29SB187 (0-2)	04/05/2022 17:16	1	ex722D05071.d	Synergi Hydro
280-160187-30	29SB187 (5-7)	04/05/2022 17:22	1	ex722D05072.d	Synergi Hydro
280-160187-31	29SB187 (10-0.5)	04/05/2022 17:29	1	ex722D05073.d	Synergi Hydro
280-160187-32	29SB189 (0-2)	04/05/2022 17:35	1	ex722D05074.d	Synergi Hydro
CCV 280-570786/72		04/05/2022 17:42	1	ex722D05075.d	Synergi Hydro
280-160187-33	29SB189 (5-7)	04/05/2022 17:48	1	ex722D05076.d	Synergi Hydro
280-160187-34	29SB189 (10-10.5)	04/05/2022 17:54	1	ex722D05077.d	Synergi Hydro
280-160187-35	29SB188 (7-9)	04/05/2022 18:01	1	ex722D05078.d	Synergi Hydro
280-160187-36	29SB188 (10-10.5)	04/05/2022 18:07	1	ex722D05079.d	Synergi Hydro
280-160187-37	29SB195 (7-8)	04/05/2022 18:14	1	ex722D05080.d	Synergi Hydro
280-160187-38	29SB195 (9.5-10)	04/05/2022 18:20	1	ex722D05081.d	Synergi Hydro
280-160187-39	29SB194 (7-8)	04/05/2022 18:26	1	ex722D05082.d	Synergi Hydro
280-160187-40	29SB194 (9.5-10)	04/05/2022 18:33	1	ex722D05083.d	Synergi Hydro
280-160187-41	DUP-04	04/05/2022 18:39	1	ex722D05084.d	Synergi Hydro
CCV 280-570786/82		04/05/2022 18:45	1	ex722D05085.d	Synergi Hydro

LCMS ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-160187-1

SDG No.:

Instrument ID: LC_LCMS7 Start Date: 04/07/2022 10:39

Analysis Batch Number: 571107 End Date: 04/07/2022 11:32

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD001 280-571107/3 IC		04/07/2022 10:39	1	ex722D07003.d	Synergi Hydro
STD002 280-571107/4 IC		04/07/2022 10:45	1	ex722D07004.d	Synergi Hydro
STD003 280-571107/5 IC		04/07/2022 10:52	1	ex722D07005.d	Synergi Hydro
STD004 280-571107/6 IC		04/07/2022 10:59	1	ex722D07006.d	Synergi Hydro
STD005 280-571107/7 ICISAV		04/07/2022 11:05	1	ex722D07007.d	Synergi Hydro
STD006 280-571107/8 IC		04/07/2022 11:12	1	ex722D07008.d	Synergi Hydro
STD007 280-571107/9 IC		04/07/2022 11:18	1	ex722D07009.d	Synergi Hydro
ICB 280-571107/10		04/07/2022 11:25	1	ex722D07010.d	Synergi Hydro
ICV 280-571107/11		04/07/2022 11:32	1	ex722D07011.d	Synergi Hydro

LCMS ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-160187-1

SDG No.:

Instrument ID: LC_LCMS7 Start Date: 04/07/2022 11:38

Analysis Batch Number: 571108 End Date: 04/07/2022 15:24

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
MB 280-570718/1-A		04/07/2022 11:38	1	ex722D07012.d	Synergi Hydro
LCS 280-570718/2-A		04/07/2022 11:45	1	ex722D07013.d	Synergi Hydro
LCSD 280-570718/3-A		04/07/2022 11:51	1	ex722D07014.d	Synergi Hydro
GB 280-570105/1-B		04/07/2022 11:58	1	ex722D07015.d	Synergi Hydro
LCSSRM 280-570105/2-B		04/07/2022 12:05	1	ex722D07016.d	Synergi Hydro
280-160187-42	29SB191 (9.5-10)	04/07/2022 12:11	1	ex722D07017.d	Synergi Hydro
280-160187-43	29SB197 (3-4)	04/07/2022 12:18	1	ex722D07018.d	Synergi Hydro
280-160187-43 MS	29SB197 (3-4) MS	04/07/2022 12:24	1	ex722D07019.d	Synergi Hydro
280-160187-43 MSD	29SB197 (3-4) MSD	04/07/2022 12:31	1	ex722D07020.d	Synergi Hydro
CCV 280-571108/21		04/07/2022 12:38	1	ex722D07021.d	Synergi Hydro
280-160187-43 DU	29SB197 (3-4) DU	04/07/2022 12:44	1	ex722D07022.d	Synergi Hydro
280-160187-43 TRL	29SB197 (3-4) TRL	04/07/2022 12:51	1	ex722D07023.d	Synergi Hydro
280-160187-44	29SB197 (7-7.5)	04/07/2022 12:57	1	ex722D07024.d	Synergi Hydro
280-160187-45	29SB196 (3-4)	04/07/2022 13:04	1	ex722D07025.d	Synergi Hydro
280-160187-46	29SB196 (7-7.5)	04/07/2022 13:10	1	ex722D07026.d	Synergi Hydro
280-160187-48	29SB172 (3-4)	04/07/2022 13:17	1	ex722D07027.d	Synergi Hydro
280-160187-49	29SB172 (6-7)	04/07/2022 13:24	1	ex722D07028.d	Synergi Hydro
280-160187-50	29SB172 (11-12)	04/07/2022 13:30	1	ex722D07029.d	Synergi Hydro
280-160187-51	29SB172 (14.5-15)	04/07/2022 13:37	1	ex722D07030.d	Synergi Hydro
280-160187-52	29SB180 (14.5-15)	04/07/2022 13:43	1	ex722D07031.d	Synergi Hydro
CCV 280-571108/32		04/07/2022 13:50	1	ex722D07032.d	Synergi Hydro
280-160187-53	29SB173 (3-4)	04/07/2022 13:57	1	ex722D07033.d	Synergi Hydro
280-160187-54	29SB173 (6-7)	04/07/2022 14:03	1	ex722D07034.d	Synergi Hydro
280-160187-55	29SB173 (11-12)	04/07/2022 14:10	1	ex722D07035.d	Synergi Hydro
ZZZZZ		04/07/2022 14:16	1		Synergi Hydro
ZZZZZ		04/07/2022 14:23	1		Synergi Hydro
ZZZZZ		04/07/2022 14:30	1		Synergi Hydro
ZZZZZ		04/07/2022 14:36	1		Synergi Hydro
ZZZZZ		04/07/2022 14:43	1		Synergi Hydro
ZZZZZ		04/07/2022 14:49	1		Synergi Hydro
ZZZZZ		04/07/2022 14:56	1		Synergi Hydro
CCV 280-571108/43		04/07/2022 15:03	1	ex722D07043.d	Synergi Hydro
ZZZZZ		04/07/2022 15:09	5		Synergi Hydro
ZZZZZ		04/07/2022 15:17	5		Synergi Hydro
CCV 280-571108/46		04/07/2022 15:24	1		Synergi Hydro

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160187-1

SDG No.:

Batch Number: 570053 Batch Start Date: 03/29/22 13:01 Batch Analyst: Cook, Ashleigh R

Batch Method: 3535 Batch End Date: 03/29/22 16:10

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8321ExplosLCS 00049	8321ExplosSur 00058
MB 280-570053/1		3535, 8321A				1000 mL	5 mL		0.125 mL
LCS 280-570053/2		3535, 8321A				1000 mL	5 mL	0.125 mL	0.125 mL
LCSD 280-570053/3		3535, 8321A				1000 mL	5 mL	0.125 mL	0.125 mL
280-160187-A-28	EB-1	3535, 8321A	T	1381.7 g	502.9 g	878.8 mL	5 mL		0.125 mL
280-160187-A-47	EB-02	3535, 8321A	T	1334.2 g	506.0 g	828.2 mL	5 mL		0.125 mL

Batch Notes	
First Start time	03/29/2022 13:29
First End time	03/29/2022 15:55
SPE Cartridge Type	Strata SDBL
SPE Cartridge Lot ID	S22-000436
Balance ID	24350888
Pipette/Syringe/Dispenser ID	Jiji, Soot, DOD
Solvent Name	N. Elga
Solvent Lot #	N. Elga
Rinse Solvent Name	Acetonitrile
Rinse Solvent Lot	Acetonitrile_0055
Acid Name	0.1% AAinACN
Acid ID	0.1 % AAinACN_00179
Analyst ID - Spike Analyst	ARC
Analyst ID - Spike Witness Analyst	Reviewer: TH
Batch Comment	DV-OP-0019; Mantle: C

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.

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160187-1

SDG No.:

Batch Number: 570095 Batch Start Date: 03/29/22 12:24 Batch Analyst: Bunzli, Eric K

Batch Method: Dry and Grind Batch End Date: 04/01/22 12:33

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
GB 280-570095/1		Dry and Grind, 8330B, 8321A		>10g aliquot					
LCSSRM 280-570095/2		Dry and Grind, 8330B, 8321A		>10g aliquot					
280-160187-A-1	29SB183 (1-2)	Dry and Grind, 8330B, 8321A	T	>10g aliquot					
280-160187-A-2	29SB183 (3-4)	Dry and Grind, 8330B, 8321A	T	>10g aliquot					
280-160187-A-2 MS	29SB183 (3-4)	Dry and Grind, 8330B, 8321A	T	>10g aliquot					
280-160187-A-2 MSD	29SB183 (3-4)	Dry and Grind, 8330B, 8321A	T	>10g aliquot					
280-160187-A-2 DU	29SB183 (3-4)	Dry and Grind, 8330B, 8321A	T	>10g aliquot					
280-160187-A-2 TRL	29SB183 (3-4)	Dry and Grind, 8330B, 8321A	T	>10g aliquot					
280-160187-A-3	DUP-01	Dry and Grind, 8330B, 8321A	T	>10g aliquot					
280-160187-A-4	29SB185 (3-4)	Dry and Grind, 8330B, 8321A	T	>10g aliquot					
280-160187-A-5	29SB185 (7-8)	Dry and Grind, 8330B, 8321A	T	>10g aliquot					
280-160187-A-6	29SB185 (11-12)	Dry and Grind, 8330B, 8321A	T	>10g aliquot					
280-160187-A-7	29SB185 (13.5-14)	Dry and Grind, 8330B, 8321A	T	>10g aliquot					
280-160187-A-8	29SB186 (9-10)	Dry and Grind, 8330B, 8321A	T	>10g aliquot					

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.

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160187-1

SDG No.:

Batch Number: 570095 Batch Start Date: 03/29/22 12:24 Batch Analyst: Bunzli, Eric K

Batch Method: Dry and Grind Batch End Date: 04/01/22 12:33

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
280-160187-A-9	29SB186 (11-12)	Dry and Grind, 8330B, 8321A	T	>10g aliquot					
280-160187-A-10	29SB186 (13.5-14)	Dry and Grind, 8330B, 8321A	T	>10g aliquot					
280-160187-A-11	29SB184 (3-4)	Dry and Grind, 8330B, 8321A	T	>10g aliquot					
280-160187-A-12	29SB184 (7-8)	Dry and Grind, 8330B, 8321A	T	>10g aliquot					
280-160187-A-13	29SB184 (11-12)	Dry and Grind, 8330B, 8321A	T	>10g aliquot					
280-160187-A-14	29SB184 (13.5-14)	Dry and Grind, 8330B, 8321A	T	>10g aliquot					
280-160187-A-15	DUP-02	Dry and Grind, 8330B, 8321A	T	>10g aliquot					
280-160187-A-16	29SB199 (3-4)	Dry and Grind, 8330B, 8321A	T	>10g aliquot					
280-160187-A-17	29SB199 (7-8)	Dry and Grind, 8330B, 8321A	T	>10g aliquot					
280-160187-A-18	29SB198 (3-4)	Dry and Grind, 8330B, 8321A	T	>10g aliquot					
280-160187-A-19	29SB198 (7-8)	Dry and Grind, 8330B, 8321A	T	>10g aliquot					
280-160187-A-20	29SB202 (3-4)	Dry and Grind, 8330B, 8321A	T	>10g aliquot					

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.

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160187-1

SDG No.:

Batch Number: 570095 Batch Start Date: 03/29/22 12:24 Batch Analyst: Bunzli, Eric K

Batch Method: Dry and Grind Batch End Date: 04/01/22 12:33

Batch Notes	
Analyst ID - Label Check	Reviewer: DL
Analyst ID - Drying	EB, DL
SOP Number	DV-OP-0013, P22-001; P22-002
Analyst ID - Ball Mill Prep	puck mill analyst ID: EB
Ball Mill Date and Time On	puck mill date and time: 3-31-2022 (LCSSRM, 280-1601897-1-14) 4-1-2022 (280-160187-15-20)
Date and Time laid out to Dry	3/29/22 17:35
Laid out on Parchment or Foil	foil
Balance ID	multiple
Batch Comment	quarantine; Blank Sand: 210301; LCSSRM: 8330 GrindLCS 00338 (Container ID 6989626)

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.

LogTag

Recorder has been Downloaded 3/30/2022 4:34:07 PM

Note: All Date-Time values are in UTC -07:00 DayLight

Alarm Status

Lower	✓	OK
Upper	✓	OK

Recorder Info

Serial #: 2000144856 Model: TRIX-8 Battery: OK Trip #: 38
Description: Explosives Room (-0.9)

Recorder Configuration

Start type :	Push button start	Temperature alarms	
Start delay :	1 Minute	Lower : 10.9 °C after 3 Consecutive	
Interval :	10 Minutes	or after 3 Accumulative	
Alert indicator :	Enabled lower & upper	Upper : 25.9 °C after 3 Consecutive	
OK indicator :	Enabled	or after 3 Accumulative	

Recorded Data

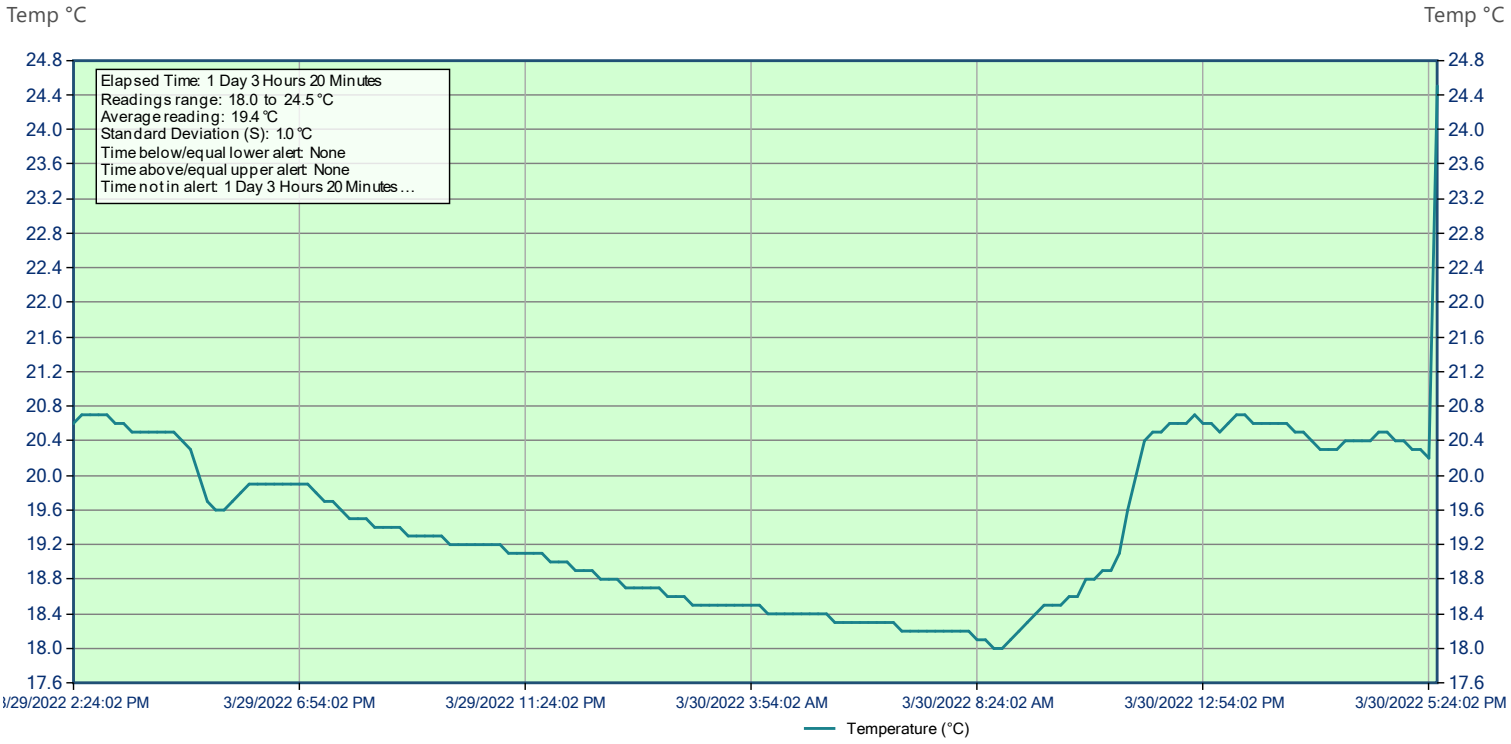
First reading :	3/29/2022 10:24:02 AM	Temperature statistics	
Last reading :	3/30/2022 5:34:02 PM	Lowest :	18.0 °C
Elapsed time :	1 Day 7 Hours 20 Minutes	@	3/30/2022 8:44:02 AM
Total readings :	188	Highest :	24.5 °C
First evaluated :	3/29/2022 2:24:02 PM	@	3/30/2022 5:34:02 PM
Last evaluated :	3/30/2022 5:34:02 PM	Average reading:	19.4 °C
Evaluated Time :	1 Day 3 Hours 20 Minutes	Standard Deviation:	1.0 °C(S)
Evaluated Readings :	164	MKT(ΔH 83.144):	19.5 °C

Lower Alarm

Triggered:	(none)
Time below/equal:	(none)
Occurrences :	0
°C - Minutes below :	0.00

Upper Alarm

Triggered:	(none)
Time above/equal:	(none)
Occurrences :	0
°C - Minutes above :	0.00



Source: Explosives Room (-0.9)TRIX-8- 2000144856 Started 3_29_2022, Finished 3_30_20222D34121435.ltd
Created : 3/30/2022 5:36:30 PM

ISM BATCH: 570095

Use this spreadsheet to document aliquot weights when aliquotting into digestion or extraction vessels. If aliquoting into a temporary vessel, no need to document the exact weight because the sample aliquot will be transferred and weighed at the time of analysis.

Login	Sample	Method --->	gross wt	container tare wt	sample wt (calced)	nonsoil material	combined aliquot				
		target range --->					10-11g				
		Balance ID --->	38602403	38602403	calculated	C33519	C33519				
			(g)	(g)	(g)	(g)	(g)	(g)	(g)	(g)	(g)
280-160187	1	ALIQUOT 1	149.71	10.82	138.89	0.049	10.17				
		ALIQUOT 2			0						
280-160187	2ms,d du,trl	ALIQUOT 1	734.36	380.3	354.06		52.4				
		ALIQUOT 2			0						
280-160187	3	ALIQUOT 1	272.44	127.9	144.54	0.0633	10.21				
		ALIQUOT 2			0						
280-160187	4	ALIQUOT 1	242.63	126.96	115.67		10.38				
		ALIQUOT 2			0						
280-160187	5	ALIQUOT 1	241.52	127.16	114.36		10.45				
		ALIQUOT 2			0						
280-160187	6	ALIQUOT 1	257.16	127.35	129.81		10.51				
		ALIQUOT 2			0						
280-160187	7	ALIQUOT 1	262.03	127.1	134.93		10.17				
		ALIQUOT 2			0						
280-160187	8	ALIQUOT 1	260.5	127.07	133.43		10.62				
		ALIQUOT 2			0						
280-160187	9	ALIQUOT 1	262.39	127.09	135.3		10.28				
		ALIQUOT 2			0						
280-160187	10	ALIQUOT 1	273.86	126.65	147.21		10.68				
		ALIQUOT 2			0						
280-160187	11	ALIQUOT 1	273.59	127.08	146.51		10.1				
		ALIQUOT 2			0						
280-160187	12	ALIQUOT 1	257.84	127.32	130.52		10.1				
		ALIQUOT 2			0						
280-160187	13	ALIQUOT 1	263.18	127.01	136.17		10.67				
		ALIQUOT 2			0						

ISM BATCH: 570095

Use this spreadsheet to document aliquot weights when aliquotting into digestion or extraction vessels. If aliquoting into a temporary vessel, no need to document the exact weight because the sample aliquot will be transferred and weighed at the time of analysis.

Login	Sample	Method --->	gross wt	container tare wt	sample wt (calced)	nonsoil material	combined aliquot				
		target range --->					10-11g				
		Balance ID --->	38602403	38602403	calculated	C33519	C33519				
			(g)	(g)	(g)	(g)	(g)	(g)	(g)	(g)	(g)
280-160187	14	ALIQUOT 1	257.02	127.24	129.78		10.54				
		ALIQUOT 2			0						
280-160187	15	ALIQUOT 1	263.57	126.65	136.92		10.54				
		ALIQUOT 2			0						
280-160187	16	ALIQUOT 1	255.77	127.57	128.2		10.18				
		ALIQUOT 2			0						
280-160187	17	ALIQUOT 1	255.46	127.08	128.38		10.31				
		ALIQUOT 2			0						
280-160187	18	ALIQUOT 1	261.37	126.5	134.87		10.3				
		ALIQUOT 2			0						
280-160187	19	ALIQUOT 1	266.8	127.62	139.18		10.72				
		ALIQUOT 2			0						
280-160187	20	ALIQUOT 1	342.76	132.34	210.42		10.21				
		ALIQUOT 2			0						
GB		ALIQUOT 1			0		10.44				
		ALIQUOT 2			0						
LCSSRM		ALIQUOT 1			0		10.66				
		ALIQUOT 2			0						

ISM BATCH: 570095

Use this spreadsheet to document aliquo
vessel, no need to document the exact

Login	Sample	Method ---> target range ---> Balance ID --->	Comments
280-160187	1	ALIQUOT 1	sample laid out before weighing container. Used pie tin as weigh boat
		ALIQUOT 2	non-soil material consists of a single stick
280-160187	2ms,d du,trl	ALIQUOT 1	55g aliquot; 2 - 10.49g; ms - 10.11g; msd - 10.59g; du - 10.66g; trl - 10.55g
		ALIQUOT 2	
280-160187	3	ALIQUOT 1	Non-soil material consists of a single piece of plastic
		ALIQUOT 2	
280-160187	4	ALIQUOT 1	
		ALIQUOT 2	
280-160187	5	ALIQUOT 1	
		ALIQUOT 2	
280-160187	6	ALIQUOT 1	
		ALIQUOT 2	
280-160187	7	ALIQUOT 1	
		ALIQUOT 2	
280-160187	8	ALIQUOT 1	
		ALIQUOT 2	
280-160187	9	ALIQUOT 1	
		ALIQUOT 2	
280-160187	10	ALIQUOT 1	
		ALIQUOT 2	
280-160187	11	ALIQUOT 1	
		ALIQUOT 2	
280-160187	12	ALIQUOT 1	
		ALIQUOT 2	
280-160187	13	ALIQUOT 1	
		ALIQUOT 2	

ISM BATCH: 570095

Use this spreadsheet to document aliquo
vessel, no need to document the exact

Login	Sample	Method ---> target range ---> Balance ID --->	Comments
280-160187	14	ALIQUOT 1	
		ALIQUOT 2	
280-160187	15	ALIQUOT 1	
		ALIQUOT 2	
280-160187	16	ALIQUOT 1	
		ALIQUOT 2	
280-160187	17	ALIQUOT 1	
		ALIQUOT 2	
280-160187	18	ALIQUOT 1	
		ALIQUOT 2	
280-160187	19	ALIQUOT 1	
		ALIQUOT 2	
280-160187	20	ALIQUOT 1	
		ALIQUOT 2	
GB		ALIQUOT 1	
		ALIQUOT 2	
LCSSRM		ALIQUOT 1	
		ALIQUOT 2	

ISM Batch Number: 570095

DV-F-0070_Rev 2_01-7-2020 Use this spreadsheet to document drying samples to a constant weight.									
balance ID:		38602403	3-30-2022 948	3-30-2022 1717	Dry?		Date/time 3	Dry?	
			EB	DL			analyst initials		
Login	Sample	Tare weight (weight of weighing vessel)	Gross weight (g) (weight of aliquot and weighing vessel)	Gross weight (g) (weight of aliquot and weighing vessel)	Change in weights 1, 2	Proceed with ISM?	Gross weight (g) (weight of aliquot and weighing vessel)	Change in weights 2, 3	Proceed with ISM?
160187	1	2.01	12.56	12.42	1.33%	Yes		119.31%	No
160187	2	2	30.5	29.73	2.70%	Yes		107.21%	No
160187	3	1.98	28.94	28.67	1.00%	Yes		107.42%	No
160187	4	2.02	25.42	25.02	1.71%	Yes		108.78%	No
160187	5	1.94	28.64	28.05	2.21%	Yes		107.43%	No
160187	6	1.91	31.12	30.52	2.05%	Yes		106.68%	No
160187	7	1.92	20.49	20.39	0.54%	Yes		110.40%	No
160187	8	2.01	19.86	19.73	0.73%	Yes		111.34%	No
160187	9	1.95	21.53	21.45	0.41%	Yes		110.00%	No
160187	10	2	16.25	16.17	0.56%	Yes		114.11%	No
160187	11	2.15	22.42	22.33	0.44%	Yes		110.65%	No
160187	12	1.92	20.61	20.49	0.64%	Yes		110.34%	No
160187	13	1.81	28.58	28.44	0.52%	Yes		106.80%	No
160187	14	1.83	16.77	16.65	0.80%	Yes		112.35%	No
160187	15	1.81	21.76	21.5	1.30%	Yes		109.19%	No
160187	16	1.98	23.97	23.84	0.59%	Yes		109.06%	No
160187	17	2.01	23.03	22.91	0.57%	Yes		109.62%	No
160187	18	1.94	23.76	23.57	0.87%	Yes		108.97%	No
160187	19	1.9	18.11	17.99	0.74%	Yes		111.81%	No
160187	20	1.91	29.57	29.43	0.51%	Yes		106.94%	No

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160187-1

SDG No.:

Batch Number: 570100 Batch Start Date: 03/29/22 12:45 Batch Analyst: Bunzli, Eric K

Batch Method: Dry and Grind Batch End Date: 04/01/22 15:51

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
GB 280-570100/1		Dry and Grind, 8330B, 8321A		10g aliquot					
LCSSRM 280-570100/2		Dry and Grind, 8330B, 8321A		10g aliquot					
280-160187-A-21	29SB202 (11-12)	Dry and Grind, 8330B, 8321A	T	10g aliquot					
280-160187-A-22	29SB202 (15-15.5)	Dry and Grind, 8330B, 8321A	T	10g aliquot					
280-160187-A-23	29SB200 (15-15.5)	Dry and Grind, 8330B, 8321A	T	10g aliquot					
280-160187-A-24	DUP-03	Dry and Grind, 8330B, 8321A	T	10g aliquot					
280-160187-A-25	29SB201(3-4)	Dry and Grind, 8330B, 8321A	T	10g aliquot					
280-160187-A-26	29SB201(11-12)	Dry and Grind, 8330B, 8321A	T	10g aliquot					
280-160187-A-26 MS	29SB201(11-12)	Dry and Grind, 8330B, 8321A	T	10g aliquot					
280-160187-A-26 MSD	29SB201(11-12)	Dry and Grind, 8330B, 8321A	T	10g aliquot					
280-160187-A-26 DU	29SB201(11-12)	Dry and Grind, 8330B, 8321A	T	10g aliquot					
280-160187-A-26 TRL	29SB201(11-12)	Dry and Grind, 8330B, 8321A	T	10g aliquot					
280-160187-A-27	29SB201(15-15.5)	Dry and Grind, 8330B, 8321A	T	10g aliquot					
280-160187-A-29	29SB187 (0-2)	Dry and Grind, 8330B, 8321A	T	10g aliquot					

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.

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160187-1

SDG No.:

Batch Number: 570100 Batch Start Date: 03/29/22 12:45 Batch Analyst: Bunzli, Eric K

Batch Method: Dry and Grind Batch End Date: 04/01/22 15:51

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
280-160187-A-30	29SB187 (5-7)	Dry and Grind, 8330B, 8321A	T	10g aliquot					
280-160187-A-31	29SB187 (10-0.5)	Dry and Grind, 8330B, 8321A	T	10g aliquot					
280-160187-A-32	29SB189 (0-2)	Dry and Grind, 8330B, 8321A	T	10g aliquot					
280-160187-A-33	29SB189 (5-7)	Dry and Grind, 8330B, 8321A	T	10g aliquot					
280-160187-A-34	29SB189 (10-10.5)	Dry and Grind, 8330B, 8321A	T	10g aliquot					
280-160187-A-35	29SB188 (7-9)	Dry and Grind, 8330B, 8321A	T	10g aliquot					
280-160187-A-36	29SB188 (10-10.5)	Dry and Grind, 8330B, 8321A	T	10g aliquot					
280-160187-A-37	29SB195 (7-8)	Dry and Grind, 8330B, 8321A	T	10g aliquot					
280-160187-A-38	29SB195 (9.5-10)	Dry and Grind, 8330B, 8321A	T	10g aliquot					
280-160187-A-39	29SB194 (7-8)	Dry and Grind, 8330B, 8321A	T	10g aliquot					
280-160187-A-40	29SB194 (9.5-10)	Dry and Grind, 8330B, 8321A	T	10g aliquot					
280-160187-A-41	DUP-04	Dry and Grind, 8330B, 8321A	T	10g aliquot					

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.

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160187-1

SDG No.:

Batch Number: 570100 Batch Start Date: 03/29/22 12:45 Batch Analyst: Bunzli, Eric K

Batch Method: Dry and Grind Batch End Date: 04/01/22 15:51

Batch Notes	
Analyst ID - Label Check	Reviewer: DL
Analyst ID - Drying	DL
SOP Number	DV-OP-0013, P22-001; P22-002
Analyst ID - Ball Mill Prep	puck mill analyst ID: EB
Ball Mill Date and Time On	puck mill date and time: 4/1/22 15:12
Date and Time laid out to Dry	3/29/22 16:37
Laid out on Parchment or Foil	Foil
Balance ID	C33519, 38602403
Batch Comment	quarantine; Blank Sand: 210301; LCSSRM: 8330 GrindLCS 00338 (Container ID 6989626)

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.

LogTag

Recorder has been Downloaded 3/30/2022 4:34:07 PM

Note: All Date-Time values are in UTC -07:00 DayLight

Alarm Status

Lower	✓	OK
Upper	✓	OK

Recorder Info

Serial #: 2000144856 Model: TRIX-8 Battery: OK Trip #: 38
Description: Explosives Room (-0.9)

Recorder Configuration

Start type :	Push button start	Temperature alarms	
Start delay :	1 Minute	Lower : 10.9 °C after 3 Consecutive	
Interval :	10 Minutes	or after 3 Accumulative	
Alert indicator :	Enabled lower & upper	Upper : 25.9 °C after 3 Consecutive	
OK indicator :	Enabled	or after 3 Accumulative	

Recorded Data

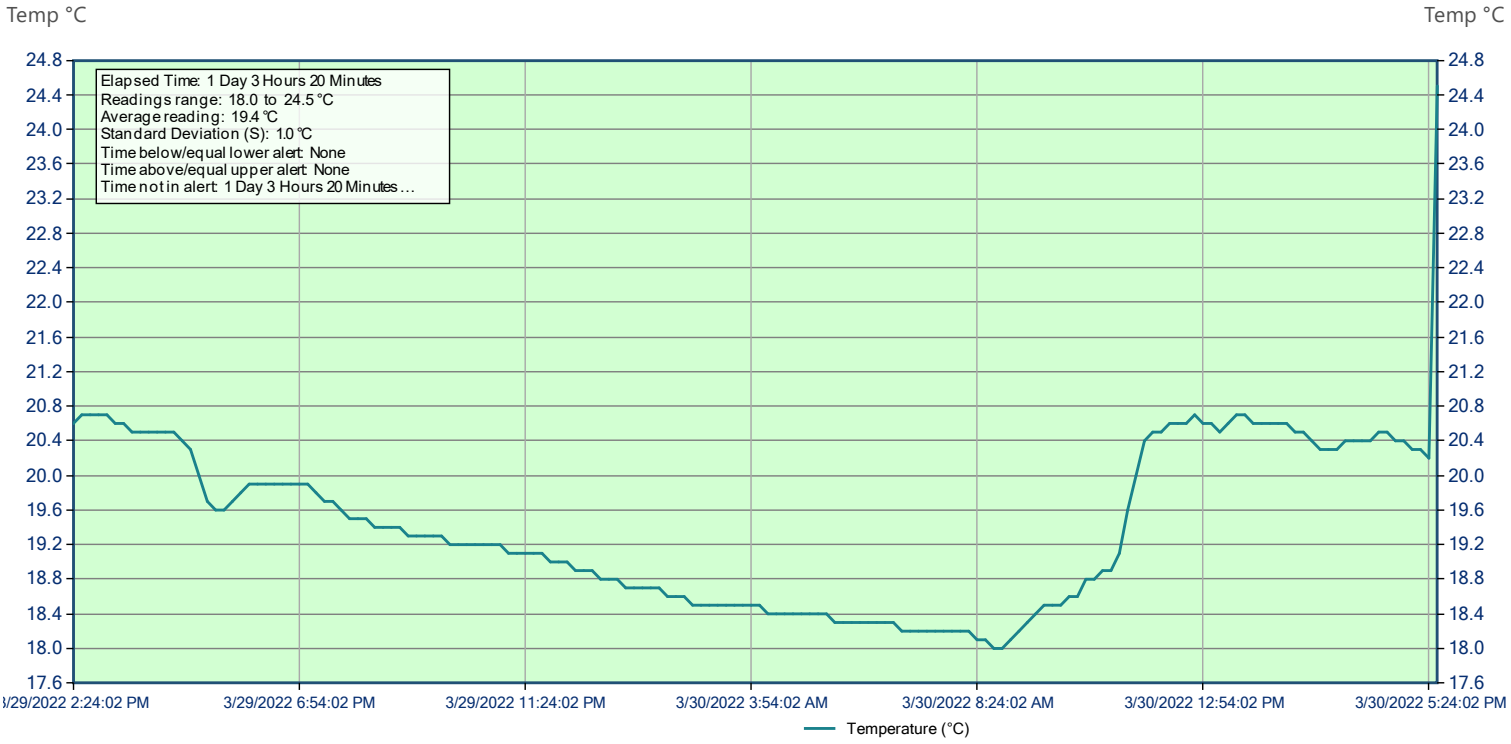
First reading :	3/29/2022 10:24:02 AM	Temperature statistics	
Last reading :	3/30/2022 5:34:02 PM	Lowest :	18.0 °C
Elapsed time :	1 Day 7 Hours 20 Minutes	@	3/30/2022 8:44:02 AM
Total readings :	188	Highest :	24.5 °C
First evaluated :	3/29/2022 2:24:02 PM	@	3/30/2022 5:34:02 PM
Last evaluated :	3/30/2022 5:34:02 PM	Average reading:	19.4 °C
Evaluated Time :	1 Day 3 Hours 20 Minutes	Standard Deviation:	1.0 °C(S)
Evaluated Readings :	164	MKT(ΔH 83.144):	19.5 °C

Lower Alarm

Triggered:	(none)
Time below/equal:	(none)
Occurrences :	0
°C - Minutes below :	0.00

Upper Alarm

Triggered:	(none)
Time above/equal:	(none)
Occurrences :	0
°C - Minutes above :	0.00



Source: Explosives Room (-0.9)TRIX-8- 2000144856 Started 3_29_2022, Finished 3_30_20222D34121435.ltd
Created : 3/30/2022 5:36:30 PM

ISM BATCH: 570100

Use this spreadsheet to document aliquot weights when aliquotting into digestion or extraction vessels. If aliquoting into a temporary vessel, no need to document the exact weight because the sample aliquot will be transferred and weighed at the time of analysis.

Login	Sample	Method ---> target range --->	gross wt	container tare wt	sample wt (calced)	nonsoil material	combined aliquot				
		Balance ID --->	38602403	38602403	calculated	C33519	C33519				
			(g)	(g)	(g)	(g)	(g)	(g)	(g)	(g)	(g)
280-160187	21	ALIQUOT 1	261.06	127.12	133.94		10.6				
		ALIQUOT 2			0						
280-160187	22	ALIQUOT 1	146.97	10.49	136.48		10				
		ALIQUOT 2			0						
280-160187	23	ALIQUOT 1	155.07	10.52	144.55		10.46				
		ALIQUOT 2			0						
280-160187	24	ALIQUOT 1	267.51	127.07	140.44		10.51				
		ALIQUOT 2			0						
280-160187	25	ALIQUOT 1	278.46	128.29	150.17		10.33				
		ALIQUOT 2			0						
280-160187	26ms/du,trl	ALIQUOT 1	809.22	380.54	428.68		51.73				
		ALIQUOT 2			0						
280-160187	27	ALIQUOT 1	170.03	10.51	159.52		10.22				
		ALIQUOT 2			0						
280-160187	29	ALIQUOT 1	290.24	126.75	163.49		10.52				
		ALIQUOT 2			0						
280-160187	30	ALIQUOT 1	284.95	127.01	157.94	4.318	10.44				
		ALIQUOT 2			0						
280-160187	31	ALIQUOT 1	292.38	127.71	164.67		10.05				
		ALIQUOT 2			0						
280-160187	32	ALIQUOT 1	320.62	130.43	190.19		10.53				
		ALIQUOT 2			0						
280-160187	33	ALIQUOT 1	218.79	126.56	92.23		10.12				
		ALIQUOT 2			0						
280-160187	34	ALIQUOT 1	246.28	127.43	118.85		10.66				
		ALIQUOT 2			0						

ISM BATCH: 570100

Use this spreadsheet to document aliquot weights when aliquotting into digestion or extraction vessels. If aliquoting into a temporary vessel, no need to document the exact weight because the sample aliquot will be transferred and weighed at the time of analysis.

Login	Sample	Method --->	gross wt	container tare wt	sample wt (calced)	nonsoil material	combined aliquot				
		target range --->									
		Balance ID --->	38602403	38602403	calculated	C33519	C33519				
			(g)	(g)	(g)	(g)	(g)	(g)	(g)	(g)	(g)
280-160187	35	ALIQUOT 1	262.48	126.16	136.32		10.1				
		ALIQUOT 2			0						
280-160187	36	ALIQUOT 1	283.81	127.21	156.6		10.5				
		ALIQUOT 2			0						
280-160187	37	ALIQUOT 1	257.75	126.2	131.55	0.09	10.38				
		ALIQUOT 2			0						
280-160187	38	ALIQUOT 1	267.66	126.68	140.98		10.55				
		ALIQUOT 2			0						
280-160187	39	ALIQUOT 1	252.47	126.59	125.88		10.18				
		ALIQUOT 2			0						
280-160187	40	ALIQUOT 1	262.4	126.72	135.68		10.71				
		ALIQUOT 2			0						
280-160187	41	ALIQUOT 1	242.84	126.29	116.55		10.57				
		ALIQUOT 2			0						
GB		ALIQUOT 1			0		10.35				
		ALIQUOT 2			0						
LCSSRM		ALIQUOT 1			0		10.75				
		ALIQUOT 2			0						

ISM BATCH: 570100

Use this spreadsheet to document aliquo
vessel, no need to document the exact

Login	Sample	Method ---> target range ---> Balance ID --->	Comments
280-160187	21	ALIQUOT 1	
		ALIQUOT 2	
280-160187	22	ALIQUOT 1	sample laid out before weighing container. Used pie tin as weigh boat
		ALIQUOT 2	
280-160187	23	ALIQUOT 1	sample laid out before weighing container. Used pie tin as weigh boat
		ALIQUOT 2	
280-160187	24	ALIQUOT 1	
		ALIQUOT 2	
280-160187	25	ALIQUOT 1	
		ALIQUOT 2	
280-160187	26ms/d du,trl	ALIQUOT 1	2 - 10.61g; ms - 10.33g; msd - 10.21g; du - 10.34g; trl - 10.24g
		ALIQUOT 2	
280-160187	27	ALIQUOT 1	
		ALIQUOT 2	
280-160187	29	ALIQUOT 1	
		ALIQUOT 2	
280-160187	30	ALIQUOT 1	non-soil material consists of a single rock
		ALIQUOT 2	
280-160187	31	ALIQUOT 1	
		ALIQUOT 2	
280-160187	32	ALIQUOT 1	
		ALIQUOT 2	
280-160187	33	ALIQUOT 1	
		ALIQUOT 2	
280-160187	34	ALIQUOT 1	
		ALIQUOT 2	

ISM BATCH: 570100

Use this spreadsheet to document aliquo
vessel, no need to document the exact

Login	Sample	Method ---> target range ---> Balance ID --->	Comments
280-160187	35	ALIQUOT 1	
		ALIQUOT 2	
280-160187	36	ALIQUOT 1	
		ALIQUOT 2	
280-160187	37	ALIQUOT 1	non-soil material consists of pieces of plastic
		ALIQUOT 2	
280-160187	38	ALIQUOT 1	
		ALIQUOT 2	
280-160187	39	ALIQUOT 1	
		ALIQUOT 2	
280-160187	40	ALIQUOT 1	
		ALIQUOT 2	
280-160187	41	ALIQUOT 1	
		ALIQUOT 2	
GB		ALIQUOT 1	
		ALIQUOT 2	
LCSSRM		ALIQUOT 1	
		ALIQUOT 2	

ISM Batch Number: 570100

DV-F-0070_Rev 2_01-7-2020 Use this spreadsheet to document drying samples to a constant weight.									
balance ID:		38602403	3-30-2022 925	3-30-2022 1722	Dry?		Date/time 3	Dry?	
			EB	DL			analyst initials		
Login	Sample	Tare weight (weight of weighing vessel)	Gross weight (g) (weight of aliquot and weighing vessel)	Gross weight (g) (weight of aliquot and weighing vessel)	Change in weights 1, 2	Proceed with ISM?	Gross weight (g) (weight of aliquot and weighing vessel)	Change in weights 2, 3	Proceed with ISM?
160187	21	2.17	18.73	18.61	0.72%	Yes		113.20%	No
160187	22	2.13	21.12	21.05	0.37%	Yes		111.26%	No
160187	23	2.11	19.43	19.35	0.46%	Yes		112.24%	No
160187	24	2.18	23.77	23.69	0.37%	Yes		110.13%	No
160187	25	2.03	24.23	24.08	0.68%	Yes		109.21%	No
160187	26	2.04	32.95	31.84	3.59%	Yes		106.85%	No
160187	27	2.09	16.14	16.05	0.64%	Yes		114.97%	No
160187	29	2.12	24.03	24	0.14%	Yes		109.69%	No
160187	30	2.05	21.89	21.86	0.15%	Yes		110.35%	No
160187	31	2.08	23.13	23.06	0.33%	Yes		109.91%	No
160187	32	2.04	27.61	27.6	0.04%	Yes		107.98%	No
160187	33	2.04	16.02	15.99	0.21%	Yes		114.62%	No
160187	34	1.88	23.48	23.41	0.32%	Yes		108.73%	No
160187	35	1.94	26.71	26.61	0.40%	Yes		107.86%	No
160187	36	1.96	22.38	22.18	0.98%	Yes		109.69%	No
160187	37	1.91	27.25	27.16	0.36%	Yes		107.56%	No
160187	38	1.87	21.22	21.2	0.10%	Yes		109.67%	No
160187	39	1.97	17.99	17.95	0.25%	Yes		112.33%	No
160187	40	1.91	23.56	23.58	-0.09%	Yes		108.81%	No
160187	41	1.97	23.47	23.35	0.56%	Yes		109.21%	No

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160187-1

SDG No.:

Batch Number: 570105 Batch Start Date: 03/29/22 13:09 Batch Analyst: Bunzli, Eric K

Batch Method: Dry and Grind Batch End Date: 04/04/22 15:51

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
GB 280-570105/1		Dry and Grind, 8330B, 8321A		10g aliquots					
LCSSRM 280-570105/2		Dry and Grind, 8330B, 8321A		10g aliquots					
280-160187-A-42	29SB191 (9.5-10)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160187-A-43	29SB197 (3-4)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160187-A-43 MS	29SB197 (3-4)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160187-A-43 MSD	29SB197 (3-4)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160187-A-43 DU	29SB197 (3-4)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160187-A-43 TRL	29SB197 (3-4)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160187-A-44	29SB197 (7-7.5)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160187-A-45	29SB196 (3-4)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160187-A-46	29SB196 (7-7.5)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160187-A-48	29SB172 (3-4)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160187-A-49	29SB172 (6-7)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160187-A-50	29SB172 (11-12)	Dry and Grind, 8330B, 8321A	T	10g aliquots					

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.

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160187-1

SDG No.:

Batch Number: 570105 Batch Start Date: 03/29/22 13:09 Batch Analyst: Bunzli, Eric K

Batch Method: Dry and Grind Batch End Date: 04/04/22 15:51

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
280-160187-A-51	29SB172 (14.5-15)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160187-A-52	29SB180 (14.5-15)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160187-A-53	29SB173 (3-4)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160187-A-54	29SB173 (6-7)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160187-A-55	29SB173 (11-12)	Dry and Grind, 8330B, 8321A	T	10g aliquots					

Batch Notes	
Analyst ID - Label Check	Reviewer: DL
Analyst ID - Drying	DL
SOP Number	DV-OP-0013, P22-001; P22-002; LCSSRM: 8330 GrindLCS 00338; Blank Sand: 210301, 216016
Analyst ID - Ball Mill Prep	puck mill analyst ID: EB, DL
Ball Mill Date and Time On	puck mill date and time: 4-2-2022 (LCSSRM, 280-160187-42-55, 280-160190-1) 4-4-2022 (280-160190-2-7)
Date and Time laid out to Dry	3-29-22 18-40
Laid out on Parchment or Foil	Foil
Balance ID	C33519, 38602403
Batch Comment	quarantine

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.

LogTag

Recorder has been Downloaded 3/30/2022 4:34:07 PM

Note: All Date-Time values are in UTC -07:00 DayLight

Alarm Status

Lower	✓	OK
Upper	✓	OK

Recorder Info

Serial #: 2000144856 Model: TRIX-8 Battery: OK Trip #: 38
Description: Explosives Room (-0.9)

Recorder Configuration

Start type :	Push button start	Temperature alarms	
Start delay :	1 Minute	Lower : 10.9 °C after 3 Consecutive	
Interval :	10 Minutes	or after 3 Accumulative	
Alert indicator :	Enabled lower & upper	Upper : 25.9 °C after 3 Consecutive	
OK indicator :	Enabled	or after 3 Accumulative	

Recorded Data

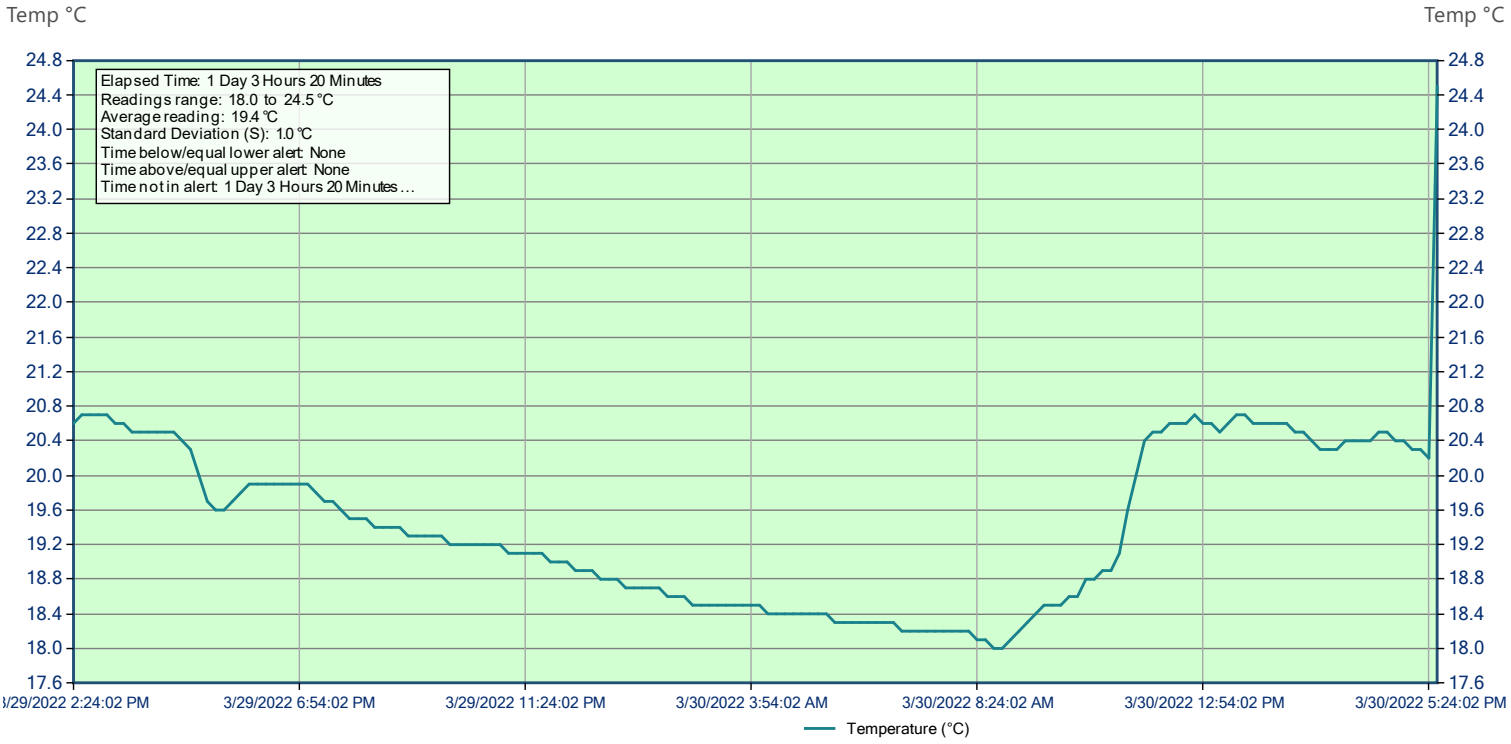
First reading :	3/29/2022 10:24:02 AM	Temperature statistics	
Last reading :	3/30/2022 5:34:02 PM	Lowest :	18.0 °C
Elapsed time :	1 Day 7 Hours 20 Minutes	@	3/30/2022 8:44:02 AM
Total readings :	188	Highest :	24.5 °C
First evaluated :	3/29/2022 2:24:02 PM	@	3/30/2022 5:34:02 PM
Last evaluated :	3/30/2022 5:34:02 PM	Average reading:	19.4 °C
Evaluated Time :	1 Day 3 Hours 20 Minutes	Standard Deviation:	1.0 °C(S)
Evaluated Readings :	164	MKT(ΔH 83.144):	19.5 °C

Lower Alarm

Triggered:	(none)
Time below/equal:	(none)
Occurrences :	0
°C - Minutes below :	0.00

Upper Alarm

Triggered:	(none)
Time above/equal:	(none)
Occurrences :	0
°C - Minutes above :	0.00



Source: Explosives Room (-0.9)TRIX-8- 2000144856 Started 3_29_2022, Finished 3_30_20222D34121435.ltd
Created : 3/30/2022 5:36:30 PM

ISM BATCH: 570105

Use this spreadsheet to document aliquot weights when aliquotting into digestion or extraction vessels. If aliquoting into a temporary vessel, no need to document the exact weight because the sample aliquot will be transferred and weighed at the time of analysis.

Login	Sample	Method --->	gross wt	container tare wt	sample wt (calced)	nonsoil material	combined aliquot				
		target range --->									
		Balance ID --->	38602403	38602403	calculated	C33519	C33519				
			(g)	(g)	(g)	(g)	(g)	(g)	(g)	(g)	(g)
280-160187	42	ALIQUOT 1	278.19	126.44	151.75		10.43				
		ALIQUOT 2			0						
280-160187	43ms/d du,trl	ALIQUOT 1	712.41	379.18	333.23		51.97				
		ALIQUOT 2			0						
280-160187	44	ALIQUOT 1	280.64	126.91	153.73		10.45				
		ALIQUOT 2			0						
280-160187	45	ALIQUOT 1	244.92	127.66	117.26		10.24				
		ALIQUOT 2			0						
280-160187	46	ALIQUOT 1	229.19	125.69	103.5		10.37				
		ALIQUOT 2			0						
280-160187	48	ALIQUOT 1	144.06	10.52	133.54		10.34				
		ALIQUOT 2			0						
280-160187	49	ALIQUOT 1	160.24	10.48	149.76		9.66				
		ALIQUOT 2			0						
280-160187	50	ALIQUOT 1	255.54	126.17	129.37		10.35				
		ALIQUOT 2			0						
280-160187	51	ALIQUOT 1	252.39	127.37	125.02		10.16				
		ALIQUOT 2			0						
280-160187	52	ALIQUOT 1	254.41	127.66	126.75	1.36	10.23				
		ALIQUOT 2			0						
280-160187	53	ALIQUOT 1	257.97	127.44	130.53		10.4				
		ALIQUOT 2			0						
280-160187	54	ALIQUOT 1	261.96	127.74	134.22		10.46				
		ALIQUOT 2			0						
280-160187	55	ALIQUOT 1	261.47	126.67	134.8		10.47				
		ALIQUOT 2			0						

ISM BATCH: 570105

Use this spreadsheet to document aliquot weights when aliquotting into digestion or extraction vessels. If aliquoting into a temporary vessel, no need to document the exact weight because the sample aliquot will be transferred and weighed at the time of analysis.

Login	Sample	Method --->	gross wt	container tare wt	sample wt (calced)	nonsoil material	combined aliquot				
		target range --->									
		Balance ID --->	38602403	38602403	calculated	C33519	C33519				
			(g)	(g)	(g)	(g)	(g)	(g)	(g)	(g)	(g)
280-160187	1	ALIQUOT 1	270.63	127.13	143.5		10.44				
		ALIQUOT 2			0						
280-160190	2	ALIQUOT 1	254.46	126.56	127.9		10.01				
		ALIQUOT 2			0						
280-160190	3	ALIQUOT 1	276.93	126.8	150.13		10.5				
		ALIQUOT 2			0						
280-160190	4	ALIQUOT 1	316.22	128.03	188.19	1.59	10.2				
		ALIQUOT 2			0						
280-160190	5	ALIQUOT 1	277.18	127.46	149.72	8.89	10.54				
		ALIQUOT 2			0						
280-160190	6	ALIQUOT 1	240.33	126.97	113.36		10.72				
		ALIQUOT 2			0						
280-160190	7	ALIQUOT 1	257.66	128.26	129.4		10.13				
		ALIQUOT 2			0						
280-160190		ALIQUOT 1			0						
		ALIQUOT 2			0						
GB		ALIQUOT 1			0		10.29				
		ALIQUOT 2			0						
LCSSRM		ALIQUOT 1					10.49				
		ALIQUOT 2			0						

ISM BATCH: 570105

Use this spreadsheet to document aliquo
vessel, no need to document the exact

Login	Sample	Method ---> target range ---> Balance ID --->	Comments
280-160187	42	ALIQUOT 1	
		ALIQUOT 2	
280-160187	43ms/d du,trl	ALIQUOT 1	43 - 10.53g; 10.76g; 10.11g; 10.5g; 10.07g
		ALIQUOT 2	
280-160187	44	ALIQUOT 1	
		ALIQUOT 2	
280-160187	45	ALIQUOT 1	
		ALIQUOT 2	
280-160187	46	ALIQUOT 1	
		ALIQUOT 2	
280-160187	48	ALIQUOT 1	
		ALIQUOT 2	
280-160187	49	ALIQUOT 1	
		ALIQUOT 2	
280-160187	50	ALIQUOT 1	
		ALIQUOT 2	
280-160187	51	ALIQUOT 1	
		ALIQUOT 2	
280-160187	52	ALIQUOT 1	non-soil material was rocks
		ALIQUOT 2	
280-160187	53	ALIQUOT 1	
		ALIQUOT 2	
280-160187	54	ALIQUOT 1	
		ALIQUOT 2	
280-160187	55	ALIQUOT 1	
		ALIQUOT 2	

ISM BATCH: 570105

Use this spreadsheet to document aliquo
vessel, no need to document the exact

Login	Sample	Method ---> target range ---> Balance ID --->	Comments
280-160187	1	ALIQUOT 1	
		ALIQUOT 2	
280-160190	2	ALIQUOT 1	
		ALIQUOT 2	
280-160190	3	ALIQUOT 1	
		ALIQUOT 2	
280-160190	4	ALIQUOT 1	non-soil material was rocks
		ALIQUOT 2	
280-160190	5	ALIQUOT 1	non-soil material was rocks
		ALIQUOT 2	
280-160190	6	ALIQUOT 1	
		ALIQUOT 2	
280-160190	7	ALIQUOT 1	
		ALIQUOT 2	
280-160190		ALIQUOT 1	
		ALIQUOT 2	
GB		ALIQUOT 1	
		ALIQUOT 2	
LCSSRM		ALIQUOT 1	
		ALIQUOT 2	

ISM Batch Number: 570105

DV-F-0070_Rev 2_01-7-2020 Use this spreadsheet to document drying samples to a constant weight.									
balance ID:		38602403	3-30-2022 1124	3-30-2022 1726	Dry?		Date/time 3	Dry?	
			EB	DL			analyst initials		
Login	Sample	Tare weight (weight of weighing vessel)	Gross weight (g) (weight of aliquot and weighing vessel)	Gross weight (g) (weight of aliquot and weighing vessel)	Change in weights 1, 2	Proceed with ISM?	Gross weight (g) (weight of aliquot and weighing vessel)	Change in weights 2, 3	Proceed with ISM?
160187	42	1.83	19.24	19.18	0.34%	Yes		110.55%	No
160187	43	1.71	30.98	30.92	0.20%	Yes		105.85%	No
160187	44	1.75	18	17.98	0.12%	Yes		110.78%	No
160187	45	1.88	18.68	18.72	-0.24%	Yes		111.16%	No
160187	46	1.88	17.47	17.43	0.26%	Yes		112.09%	No
160187	48	1.87	22.68	22.66	0.10%	Yes		108.99%	No
160187	49	2	24.63	24.63	0.00%	Yes		108.84%	No
160187	50	2.16	18.98	18.94	0.24%	Yes		112.87%	No
160187	51	2.25	18.27	18.17	0.62%	Yes		114.13%	No
160187	52	2.22	19.69	19.58	0.63%	Yes		112.79%	No
160187	53	2.16	22.5	22.56	-0.29%	Yes		110.59%	No
160187	54	2.24	24.75	24.8	-0.22%	Yes		109.93%	No
160187	55	2.27	22.16	22.01	0.75%	Yes		111.50%	No
160187	1	1.89	19.61	19.47	0.79%	Yes		110.75%	No
160190	2	1.89	20.22	20.07	0.82%	Yes		110.40%	No
160190	3	2.13	19.42	19.37	0.29%	Yes		112.35%	No
160190	4	1.45	18.82	18.84	-0.12%	Yes		108.34%	No
160190	5	1.53	24.83	24.83	0.00%	Yes		106.57%	No
160190	6	1.42	14.2	14.2	0.00%	Yes		111.11%	No
160190	7	1.5	16.71	16.65	0.39%	Yes		109.90%	No

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160187-1

SDG No.:

Batch Number: 570516 Batch Start Date: 04/01/22 16:56 Batch Analyst: Holahan, Thomas E

Batch Method: 8330B Batch End Date: 04/04/22 11:52

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8321ExplosLCS 00049	8321ExplosSur 00058	8330 GrindLCS 00338	
MB 280-570516/1		8330B, 8321A		10 g	40 mL		1 mL		
LCS 280-570516/2		8330B, 8321A		10 g	40 mL	1 mL	1 mL		
LCSD 280-570516/3		8330B, 8321A		10 g	40 mL	1 mL	1 mL		
GB 280-570095/1-A		8330B, 8321A		10.44 g	40 mL		1 mL		
LCSSRM 280-570095/2-A		8330B, 8321A		10.66 g	40 mL		1 mL	10.66 g	
280-160187-A-1-A	29SB183 (1-2)	8330B, 8321A	T	10.17 g	40 mL		1 mL		
280-160187-A-2-A	29SB183 (3-4)	8330B, 8321A	T	10.49 g	40 mL		1 mL		
280-160187-A-2-B MS	29SB183 (3-4)	8330B, 8321A	T	10.11 g	40 mL	1 mL	1 mL		
280-160187-A-2-C MSD	29SB183 (3-4)	8330B, 8321A	T	10.59 g	40 mL	1 mL	1 mL		
280-160187-A-2-D DU	29SB183 (3-4)	8330B, 8321A	T	10.66 g	40 mL		1 mL		
280-160187-A-2-E TRL	29SB183 (3-4)	8330B, 8321A	T	10.55 g	40 mL		1 mL		
280-160187-A-3-A	DUP-01	8330B, 8321A	T	10.21 g	40 mL		1 mL		
280-160187-A-4-A	29SB185 (3-4)	8330B, 8321A	T	10.38 g	40 mL		1 mL		
280-160187-A-5-A	29SB185 (7-8)	8330B, 8321A	T	10.45 g	40 mL		1 mL		
280-160187-A-6-A	29SB185 (11-12)	8330B, 8321A	T	10.51 g	40 mL		1 mL		
280-160187-A-7-A	29SB185 (13.5-14)	8330B, 8321A	T	10.17 g	40 mL		1 mL		
280-160187-A-8-A	29SB186 (9-10)	8330B, 8321A	T	10.62 g	40 mL		1 mL		
280-160187-A-9-A	29SB186 (11-12)	8330B, 8321A	T	10.28 g	40 mL		1 mL		
280-160187-A-10-A	29SB186 (13.5-14)	8330B, 8321A	T	10.68 g	40 mL		1 mL		
280-160187-A-11-A	29SB184 (3-4)	8330B, 8321A	T	10.1 g	40 mL		1 mL		
280-160187-A-12-A	29SB184 (7-8)	8330B, 8321A	T	10.1 g	40 mL		1 mL		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160187-1

SDG No.:

Batch Number: 570516 Batch Start Date: 04/01/22 16:56 Batch Analyst: Holahan, Thomas E

Batch Method: 8330B Batch End Date: 04/04/22 11:52

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8321ExplosLCS 00049	8321ExplosSur 00058	8330 GrindLCS 00338	
280-160187-A-13-A	29SB184 (11-12)	8330B, 8321A	T	10.67 g	40 mL		1 mL		
280-160187-A-14-A	29SB184 (13.5-14)	8330B, 8321A	T	10.54 g	40 mL		1 mL		
280-160187-A-15-A	DUP-02	8330B, 8321A	T	10.54 g	40 mL		1 mL		
280-160187-A-16-A	29SB199 (3-4)	8330B, 8321A	T	10.18 g	40 mL		1 mL		
280-160187-A-17-A	29SB199 (7-8)	8330B, 8321A	T	10.31 g	40 mL		1 mL		
280-160187-A-18-A	29SB198 (3-4)	8330B, 8321A	T	10.3 g	40 mL		1 mL		
280-160187-A-19-A	29SB198 (7-8)	8330B, 8321A	T	10.72 g	40 mL		1 mL		
280-160187-A-20-A	29SB202 (3-4)	8330B, 8321A	T	10.21 g	40 mL		1 mL		

Batch Notes	
Solvent Name	0.1%AAinACN
Solvent Lot #	0.1%AAinACN_00180
Prep Solvent Volume Used	20 mL
Analyst ID - Reagent Drop Witness	Reviewer: JZ
Analyst ID - Concentration	TH
Balance ID	C33519
Blank Sand Lot #	210301
Pipette ID for Solvent	Firine
Pipette ID	Tia
Sonication Start Time	17:14
Sonication Stop Time	11:14
Filter Type	0.2 um
Filter ID	R1EB03881
Date Sample was Dried	570095
Date Sample was Ground	570095
SOP Number	DV-OP-0018

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.

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160187-1

SDG No.:

Batch Number: 570516 Batch Start Date: 04/01/22 16:56 Batch Analyst: Holahan, Thomas E

Batch Method: 8330B Batch End Date: 04/04/22 11:52

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.

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160187-1

SDG No.:

Batch Number: 570543 Batch Start Date: 04/01/22 16:54 Batch Analyst: Holahan, Thomas E

Batch Method: 8330B Batch End Date: 04/04/22 12:52

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8321ExplosLCS 00049	8321ExplosSur 00058	8330 GrindLCS 00338	
MB 280-570543/1		8330B, 8321A		10 g	40 mL		1 mL		
LCS 280-570543/2		8330B, 8321A		10 g	40 mL	1 mL	1 mL		
LCSD 280-570543/3		8330B, 8321A		10 g	40 mL	1 mL	1 mL		
GB 280-570100/1-A		8330B, 8321A		10.35 g	40 mL		1 mL		
LCSSRM 280-570100/2-A		8330B, 8321A		10.75 g	40 mL		1 mL	10.75 g	
280-160187-A-21-A	29SB202 (11-12)	8330B, 8321A	T	10.6 g	40 mL		1 mL		
280-160187-A-22-A	29SB202 (15-15.5)	8330B, 8321A	T	10 g	40 mL		1 mL		
280-160187-A-23-A	29SB200 (15-15.5)	8330B, 8321A	T	10.46 g	40 mL		1 mL		
280-160187-A-24-A	DUP-03	8330B, 8321A	T	10.51 g	40 mL		1 mL		
280-160187-A-25-A	29SB201(3-4)	8330B, 8321A	T	10.33 g	40 mL		1 mL		
280-160187-A-26-A	29SB201(11-12)	8330B, 8321A	T	10.61 g	40 mL		1 mL		
280-160187-A-26-B MS	29SB201(11-12)	8330B, 8321A	T	10.33 g	40 mL	1 mL	1 mL		
280-160187-A-26-C MSD	29SB201(11-12)	8330B, 8321A	T	10.21 g	40 mL	1 mL	1 mL		
280-160187-A-26-D DU	29SB201(11-12)	8330B, 8321A	T	10.34 g	40 mL		1 mL		
280-160187-A-26-E TRL	29SB201(11-12)	8330B, 8321A	T	10.24 g	40 mL		1 mL		
280-160187-A-27-A	29SB201(15-15.5)	8330B, 8321A	T	10.22 g	40 mL		1 mL		
280-160187-A-29-A	29SB187 (0-2)	8330B, 8321A	T	10.52 g	40 mL		1 mL		
280-160187-A-30-A	29SB187 (5-7)	8330B, 8321A	T	10.44 g	40 mL		1 mL		
280-160187-A-31-A	29SB187 (10-0.5)	8330B, 8321A	T	10.05 g	40 mL		1 mL		
280-160187-A-32-A	29SB189 (0-2)	8330B, 8321A	T	10.53 g	40 mL		1 mL		
280-160187-A-33-A	29SB189 (5-7)	8330B, 8321A	T	10.12 g	40 mL		1 mL		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160187-1

SDG No.:

Batch Number: 570543 Batch Start Date: 04/01/22 16:54 Batch Analyst: Holahan, Thomas E

Batch Method: 8330B Batch End Date: 04/04/22 12:52

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8321ExplosLCS 00049	8321ExplosSur 00058	8330 GrindLCS 00338	
280-160187-A-34-A	29SB189 (10-10.5)	8330B, 8321A	T	10.66 g	40 mL		1 mL		
280-160187-A-35-A	29SB188 (7-9)	8330B, 8321A	T	10.1 g	40 mL		1 mL		
280-160187-A-36-A	29SB188 (10-10.5)	8330B, 8321A	T	10.5 g	40 mL		1 mL		
280-160187-A-37-A	29SB195 (7-8)	8330B, 8321A	T	10.38 g	40 mL		1 mL		
280-160187-A-38-A	29SB195 (9.5-10)	8330B, 8321A	T	10.55 g	40 mL		1 mL		
280-160187-A-39-A	29SB194 (7-8)	8330B, 8321A	T	10.18 g	40 mL		1 mL		
280-160187-A-40-A	29SB194 (9.5-10)	8330B, 8321A	T	10.71 g	40 mL		1 mL		
280-160187-A-41-A	DUP-04	8330B, 8321A	T	10.57 g	40 mL		1 mL		

Batch Notes	
Solvent Name	0.1%AAinACN
Solvent Lot #	0.1%AAinACN_00180
Prep Solvent Volume Used	20 mL
Analyst ID - Reagent Drop Witness	Reviewer: JZ
Analyst ID - Concentration	TH
Balance ID	C33519
Blank Sand Lot #	210301
Pipette ID for Solvent	Firine
Pipette ID	Tia
Sonication Start Time	17:14
Sonication Stop Time	11:14
Filter Type	0.2 um
Filter ID	R1EB03381
Date Sample was Dried	570100
Date Sample was Ground	570100
SOP Number	DV-OP-0018

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.

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160187-1

SDG No.:

Batch Number: 570543 Batch Start Date: 04/01/22 16:54 Batch Analyst: Holahan, Thomas E

Batch Method: 8330B Batch End Date: 04/04/22 12:52

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.

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160187-1

SDG No.:

Batch Number: 570718 Batch Start Date: 04/04/22 16:57 Batch Analyst: Holahan, Thomas E

Batch Method: 8330B Batch End Date: 04/05/22 13:34

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8321ExplosLCS 00049	8321ExplosSur 00058	8330 GrindLCS 00338	
MB 280-570718/1		8330B, 8321A		10 g	40 mL		1 mL		
LCS 280-570718/2		8330B, 8321A		10 g	40 mL	1 mL	1 mL		
LCSD 280-570718/3		8330B, 8321A		10 g	40 mL	1 mL	1 mL		
GB 280-570105/1-A		8330B, 8321A		10.29 g	40 mL		1 mL		
LCSSRM 280-570105/2-A		8330B, 8321A		10.49 g	40 mL		1 mL	10.49 g	
280-160187-A-42 -A	29SB191 (9.5-10)	8330B, 8321A	T	10.43 g	40 mL		1 mL		
280-160187-A-43 -A	29SB197 (3-4)	8330B, 8321A	T	10.53 g	40 mL		1 mL		
280-160187-A-43 -B MS	29SB197 (3-4)	8330B, 8321A	T	10.76 g	40 mL	1 mL	1 mL		
280-160187-A-43 -C MSD	29SB197 (3-4)	8330B, 8321A	T	10.11 g	40 mL	1 mL	1 mL		
280-160187-A-43 -D DU	29SB197 (3-4)	8330B, 8321A	T	10.5 g	40 mL		1 mL		
280-160187-A-43 -E TRL	29SB197 (3-4)	8330B, 8321A	T	10.07 g	40 mL		1 mL		
280-160187-A-44 -A	29SB197 (7-7.5)	8330B, 8321A	T	10.45 g	40 mL		1 mL		
280-160187-A-45 -A	29SB196 (3-4)	8330B, 8321A	T	10.24 g	40 mL		1 mL		
280-160187-A-46 -A	29SB196 (7-7.5)	8330B, 8321A	T	10.37 g	40 mL		1 mL		
280-160187-A-48 -A	29SB172 (3-4)	8330B, 8321A	T	10.34 g	40 mL		1 mL		
280-160187-A-49 -A	29SB172 (6-7)	8330B, 8321A	T	10.66 g	40 mL		1 mL		
280-160187-A-50 -A	29SB172 (11-12)	8330B, 8321A	T	10.35 g	40 mL		1 mL		
280-160187-A-51 -A	29SB172 (14.5-15)	8330B, 8321A	T	10.16 g	40 mL		1 mL		
280-160187-A-52 -A	29SB180 (14.5-15)	8330B, 8321A	T	10.23 g	40 mL		1 mL		
280-160187-A-53 -A	29SB173 (3-4)	8330B, 8321A	T	10.4 g	40 mL		1 mL		
280-160187-A-54 -A	29SB173 (6-7)	8330B, 8321A	T	10.46 g	40 mL		1 mL		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160187-1

SDG No.:

Batch Number: 570718 Batch Start Date: 04/04/22 16:57 Batch Analyst: Holahan, Thomas E

Batch Method: 8330B Batch End Date: 04/05/22 13:34

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8321ExplosLCS 00049	8321ExplosSur 00058	8330 GrindLCS 00338	
280-160187-A-55-A	29SB173 (11-12)	8330B, 8321A	T	10.47 g	40 mL		1 mL		

Batch Notes	
Solvent Name	0.1%AAinACN
Solvent Lot #	0.1%AAinACN_00181
Prep Solvent Volume Used	20 mL
Analyst ID - Reagent Drop Witness	Reviewer: ARC
Analyst ID - Concentration	TH
Balance ID	C33519
Blank Sand Lot #	210301
Pipette ID for Solvent	Firine
Pipette ID	Tia
Sonication Start Time	17:31
Sonication Stop Time	11:31
Filter Type	0.2 um
Filter ID	R1EB03881
Date Sample was Dried	570105
Date Sample was Ground	570105
SOP Number	DV-OP-0018

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

01130057

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Phone (303) 431-7171

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler:	Lab PM: Rydberg, Donna R	Carrier Tracking No(s):	COC No: 280-118117-33317.1
Client Contact: Lynn Lutz	Phone:	E-Mail: Donna.Rydberg@Eurofinset.com	State of Origin:	Page: Page 1 of 11
Company: HDR Inc	PWSID:			Job #:
Address: 369 Inverness Parkway Suite 325	Due Date Requested:			
City: Englewood	TAT Requested (days):			
State, Zip: CO, 80112	Compliance Project: Δ Yes Δ No			
Phone: 720-633-2380(Tel)	PO #: 1000300001807			
Email: Lynn.Lutz@hdrinc.com	WO #:			
Project Name: Longhorn AAP, TX	Project #: 28022219			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8321A_EXP_DOD5 - Explosives	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
29 SB 183 (1-2)	3/22/22	1220		Solid					
29 SB 183 (3-4)	3/22/22	1230		Solid					MS/MSD
DUP-01	3/22/22	1340		Solid					
29 SB 185 (3-4)	3/22/22	1240		Solid					
29 SB 185 (7-8)	3/22/22	1250		Solid					
29 SB 185 (11-12)	3/22/22	1255		Solid					
29 SB 185 (13.5-14)	3/22/22	1300		Solid					
29 SB 186 (9-10)	3/22/22	1315		Solid					
29 SB 186 (11-12)	3/22/22	1318		Solid					
29SB 186 (13.5-14)	3/22/22	1320		Solid					
29 SB 184 (3-4)	3/22/22	1335		Solid					

280-160187 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	3/24/22 1830		FedEx	3/24/22 1830	
2	FedEX			[signature]	3/25/22 120	ETADEN
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 16, 0.5 IR2 CF+0.1

Ver: 01/16/2019

Page 1030 of 1035

04/19/2022

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Phone (303) 431-7171

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler:	Lab PM: Rydberg, Donna R	Carrier Tracking No(s):	COC No: 280-118117-33317.6
Client Contact: Lynn Lutz	Phone:	E-Mail: Donna.Rydberg@Eurofinset.com	State of Origin:	Page: Page ~~6 of 13~~ 2 of 11
Company: HDR Inc	PWSID:			Job #:
Address: 369 Inverness Parkway Suite 325	Due Date Requested:			
City: Englewood	TAT Requested (days):			
State, Zip: CO, 80112	Compliance Project: Δ Yes Δ No			
Phone: 720-633-2380(Tel)	PO #: 1000300001807			
Email: Lynn.Lutz@hdrinc.com	WO #:			
Project Name: Longhorn AAP, TX	Project #: 28022219			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8321A_EXP_DOD5 - Explosives	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
29SB184 (7-8)	3/22/22	1338		Solid					
29SB184 (11-12)	3/22/22	1340		Solid					
29SB184 (13.5-14)	3/22/22	1343		Solid					
DUP-02	3/22/22	1400		Solid					
29SB199 (3-4)	3/22/22	1430		Solid					
29SB199 (7-8)	3/22/22	1435		Solid					
29SB198 (3-4)	3/22/22	1505		Solid					
29SB198 (7-8)	3/22/22	1510		Solid					
29SB202 (3-4)	3/22/22	1630		Solid					
29SB202 (11-12)	3/22/22	1635		Solid					
29SB202 (~~MS/MSD~~) (15-15.5)	3/22/22	1640		Solid					

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	ACM	3/24/22 1830		FedEx	3/24/22 1830	
2	FedEx					
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Page 1031 of 1035

04/19/2022

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Phone (303) 431-7171

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler:	Lab PM: Rydberg, Donna R	Carrier Tracking No(s):	COC No: 280-118117-33317.3
Client Contact: Lynn Lutz	Phone:	E-Mail: Donna.Rydberg@Eurofinset.com	State of Origin:	Page: Page 3 of 11
Company: HDR Inc	PWSID:			Job #:
Address: 369 Inverness Parkway Suite 325	Due Date Requested:			
City: Englewood	TAT Requested (days):			
State, Zip: CO, 80112	Compliance Project: Δ Yes Δ No			
Phone: 720-633-2380(Tel)	PO #: 1000300001807			
Email: Lynn.Lutz@hdrinc.com	WO #:			
Project Name: Longhorn AAP, TX	Project #: 28022219			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8321A_EXP_DOD5 - Explosives	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
295B 200 (15-15.5)	3/22/22	1655		Solid					
Dup-03	3/22/22	1800		Solid					
295B 201 (3-4)	3/22/22	1718		Solid					
295B 201 (11-12)	3/22/22	1720		Solid					MS/MSD
295B 201 (15-15.5)	3/22/22	1725		Solid					
EB-01	3/22/22	1805		Solid					
295B 187 (0-2)	3/23/22	0815		Solid					
295B 187 (5-7)	3/23/22	0825		Solid					
295B 187 (10-10.5)	3/23/22	0835		Solid					
295B 189 (0-2)	3/23/22	0850		Solid					
295B 189 (5-7)	3/23/22	0855		Solid					

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	3/24/22 1830		[signature]	3/24/22 1830	
2	FedEx	Date/Time:	Company	Received by: [signature]	Date/Time: 3/25/22 1120	Company EHADEN
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Phone (303) 431-7171

Chain of Custody Record

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Client Information	Sampler:	Lab PM: Rydberg, Donna R	Carrier Tracking No(s):	COC No: 280-118117-33317.7
Client Contact: Lynn Lutz	Phone:	E-Mail: Donna.Rydberg@Eurofinset.com	State of Origin:	Page: Page ~~2 of 13~~ 4 of 11
Company: HDR Inc	PWSID:			Job #:

Address: 369 Inverness Parkway Suite 325	Due Date Requested:
City: Englewood	TAT Requested (days):
State, Zip: CO, 80112	Compliance Project: Δ Yes Δ No
Phone: 720-633-2380(Tel)	PO #: 1000300001807
Email: Lynn.Lutz@hdrinc.com	WO #:
Project Name: Longhorn AAP, TX	Project #: 28022219
Site:	SSOW#:

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8321A_EXP_DOD5 - Explosives	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	X	
29SB189 (10-10.5)	3/23/22	0858		Solid					
29SB188 (7-9)	3/23/22	0900		Solid					
29SB188 (10-10.5)	3/23/22	0905		Solid					
29SB195 (7-8)	3/23/22	1010		Solid					
29SB195 (9.5-10)	3/23/22	1015		Solid					
29SB194 (7-8)	3/23/22	1020		Solid					
29SB194 (9.5-10)	3/23/22	1025		Solid					
DUP-04	3/23/22	1200		Solid					
29SB191 (9.5-10)	3/23/22	1040		Solid					
29SB197 (3-4)	3/23/22	1135		Solid					MS/MSD
29SB197 (7-7.5)	3/23/22	1140		Solid					

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	3/24/22 1830		[signature]	3/24/22 1830	
2	FedEx			[signature]	3/25/22 1120	ETADEN
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Phone (303) 431-7171

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler:	Lab PM: Rydberg, Donna R	Carrier Tracking No(s):	COC No: 280-118117-33317.7
Client Contact: Lynn Lutz	Phone:	E-Mail: Donna.Rydberg@Eurofinset.com	State of Origin:	Page: Page ~~7 of 13~~ 5 of 11
Company: HDR Inc	PWSID:	Analysis Requested		Job #:
Address: 369 Inverness Parkway Suite 325	Due Date Requested:			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify); Other:
City: Englewood	TAT Requested (days):			
State, Zip: CO, 80112	Compliance Project: Δ Yes Δ No			
Phone: 720-633-2380(Tel)	PO #: 1000300001807			
Email: Lynn.Lutz@hdrinc.com	WO #:			
Project Name: Longhorn AAP, TX	Project #: 28022219			
Site:	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8321A_EXP_DOD5 - Explosives	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
29SB196 (3-4)	3/23/22	1145		Solid					
29SB196 (7-7.5)	3/23/22	1150		Solid					
EB-02	3/23/22	1355		Solid					
29SB172 (3-4)	3/24/22	0840		Solid					
29SB172 (6-7)	3/24/22	0842		Solid					
29SB172 (11-12)	3/24/22	0845		Solid					
29SB172 (14.5-15)	3/24/22	0848		Solid					
29SB180 (14.5-15)	3/24/22	0855		Solid					
29SB173 (3-4)	3/24/22	0908		Solid					
29SB173 (6-7)	3/24/22	0910		Solid					
29SB173 (11-12)	3/24/22	0912		Solid					

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	3/24/22 1830		[signature]	3/24/22 1830	
Relinquished by: FedEx	Date/Time:	Company	Received by: [signature]	Date/Time: 3/25/22 1120	Company: EHER
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 280-160187-1

Login Number: 160187
List Number: 1
Creator: Rydberg, Donna R

List Source: Eurofins Denver

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing America

ANALYTICAL REPORT

Job Number: 280-160190-1

Job Description: Longhorn AAP, TX (March 2022)

For:
HDR Inc
369 Inverness Parkway
Suite 325
Englewood, CO 80112

Attention: Lynn K. Lutz

Approved for release.
Donna R Rydberg
Senior Project Manager
4/20/2022 11:38 AM

Donna R Rydberg, Senior Project Manager
4955 Yarrow Street, Arvada, CO, 80002
(303)736-0192
Donna.Rydberg@et.eurofinsus.com
04/20/2022

The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the Eurofins TestAmerica Denver Project Manager.

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 TestAmerica Project Manager.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Eurofins Denver
4955 Yarrow Street, Arvada, CO 80002
Tel (303) 736-0100 Fax (303) 431-7171 www.testamericainc.com

Table of Contents

Cover Title Page 1
Data Summaries 4
Definitions 4
Case Narrative 5
Detection Summary 7
Client Sample Results 12
Default Detection Limits 41
Surrogate Summary 42
QC Sample Results 45
QC Association 64
Chronicle 71
Certification Summary 83
Method Summary 84
Sample Summary 85
Manual Integration Summary 87
Reagent Traceability 123
COAs 127
Organic Sample Data 185
LCMS 185
8321A_EXP_DOD5 185
8321A_EXP_DOD5 QC Summary 186
8321A_EXP_DOD5 Sample Data 238
Standards Data 754
8321A_EXP_DOD5 ICAL Data 754
8321A_EXP_DOD5 CCAL Data 1118
Raw QC Data 1264

Table of Contents

8321A_EXP_DOD5 Blank Data 1264
8321A_EXP_DOD5 LCS/LCSD Data 1349
8321A_EXP_DOD5 MS/MSD Data 1437
8321A_EXP_DOD5 Duplicate/Triplicate Data 1502
8321A_EXP_DOD5 Run Logs 1576
8321A_EXP_DOD5 Prep Data 1585
Shipping and Receiving Documents 1623
Client Chain of Custody 1624
Sample Receipt Checklist 1630

Definitions/Glossary

Client: HDR Inc
Project/Site: Longhorn AAP, TX (March 2022)

Job ID: 280-160190-1

Qualifiers

LCMS

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.
D	The reported value is from a dilution.
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
M	Manual integrated compound.
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.

Glossary

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

CASE NARRATIVE

Client: HDR Inc

Project: Longhorn AAP, TX (March 2022)

Report Number: 280-160190-1

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 3/25/2022 at 11:20 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.4º C and 1.4º C.

EXPLOSIVES

Samples 29SB173 (14.5-15) (280-160190-1), 29SB181 (14.5-15) (280-160190-2), 29SB182 (14.5-15) (280-160190-3), 29SB175 (3-4) (280-160190-4), 29SB175 (6-7) (280-160190-5), 29SB175 (11-12) (280-160190-6), 29SB175 (14.5-15) (280-160190-7), DUP-05 (280-160190-8), 29SB167 (3-4) (280-160190-9), 29SB167 (6-7) (280-160190-10), 29SB167 (11-12) (280-160190-11), 29SB167 (14.5-15) (280-160190-12), DUP-06 (280-160190-13), 29SB176 (14.5-15) (280-160190-14), 29SB179 (14.5-15) (280-160190-15), 29SB178 (14.5-15) (280-160190-16), 29SB177 (14.5-15) (280-160190-17), 29SB168 (3-4) (280-160190-18), 29SB168 (6-7) (280-160190-19), 29SB168 (11-12) (280-160190-20), 29SB168 (14.5-15) (280-160190-21), 29SB169 (3-4) (280-160190-22), 29SB169 (6-7) (280-160190-23), 29SB169 (11-12) (280-160190-24), 29SB169 (14.5-15) (280-160190-25), DUP-07 (280-160190-26), 29SB170 (3-4) (280-160190-27), 29SB170 (6-7) (280-160190-28), 29SB170 (11-12) (280-160190-29), 29SB170 (14.5-15) (280-160190-30), 29SB171 (3-4) (280-160190-31), 29SB171 (6-7) (280-160190-32), 29SB171 (11-12) (280-160190-33), 29SB171 (14.5-15) (280-160190-34), DUP-08 (280-160190-35), 29SB174 (3-4) (280-160190-36), 29SB174 (6-7) (280-160190-37), 29SB174 (11-12) (280-160190-38), 29SB174 (14.5-15) (280-160190-39), 29SB190 (3-4) (280-160190-40), 29SB190 (19-20) (280-160190-41), 29SB192 (7-8) (280-160190-42), 29SB192 (11-12) (280-160190-43), 29SB192 (15-16) (280-160190-44), 29SB192 (19-20) (280-160190-45), DUP-09 (280-160190-46), 29SB193 (7-8) (280-160190-47), 29SB193 (11-12) (280-160190-48), 29SB193 (15-16) (280-160190-49), 29SB193 (19-20) (280-160190-50), DUP-10 (280-160190-51), 29SB203 (3-4) (280-160190-52), 29SB203 (7-8) (280-160190-53), 29SB204 (3-4) (280-160190-54) and 29SB204 (7-8) (280-160190-55) were analyzed for explosives in accordance with 8321. The samples were leached on 03/29/2022, prepared on 04/04/2022 and 04/06/2022 and analyzed on 04/07/2022, 04/08/2022, 04/12/2022 and 04/14/2022.

Samples 29SB173 (14.5-15) (280-160190-1)[5X], 29SB181 (14.5-15) (280-160190-2)[5X], 29SB176 (14.5-15) (280-160190-14)[10X], 29SB177 (14.5-15) (280-160190-17)[10X], 29SB168 (3-4) (280-160190-18)[10X], 29SB168 (6-7) (280-160190-19)[10X], 29SB168 (11-12) (280-160190-20)[10X] and 29SB168 (11-12) (280-160190-20)[50X] required dilutions prior to analysis. The reporting limits have been adjusted accordingly.

The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 280-571108 recovered outside control limits (36-120%) for the Tetryl (145%, 149%). This analytes was biased high in the LCS and was not detected in the associated samples 29SB173 (14.5-15) (280-160190-1), 29SB181 (14.5-15) (280-160190-2), 29SB182 (14.5-15) (280-160190-3), 29SB175 (3-4) (280-160190-4), 29SB175 (6-7) (280-160190-5), 29SB175 (11-12) (280-160190-6), 29SB175 (14.5-15) (280-160190-7) and (280-160187-A-43-F) ; therefore, the data have been reported.

The laboratory control sample (LCSSRM) associated with preparation batch 280-570105 and 280-570718 and analytical batch 280-571108 was outside acceptance criteria (69-120%) for 2,4,6-Trinitrotoluene (66%).

The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 280-570112 and 280-571022 and analytical batch 280-571896 recovered outside control limits (36-120%) for Tetryl (135%, 136%). This analytes was biased high in the LCS and was not detected in the associated samples; therefore, the data for 29SB170 (6-7) (280-160190-28), 29SB170 (11-12) (280-160190-29), 29SB170 (14.5-15) (280-160190-30), 29SB171 (3-4) (280-160190-31), 29SB171 (6-7) (280-160190-32), 29SB171 (11-12) (280-160190-33), 29SB171 (14.5-15) (280-160190-34), DUP-08 (280-160190-35), 29SB174 (3-4) (280-160190-36), 29SB174 (6-7) (280-160190-37), 29SB174 (11-12) (280-160190-38), 29SB174 (14.5-15) (280-160190-39), 29SB190 (3-4) (280-160190-40),

29SB190 (19-20) (280-160190-41), 29SB192 (7-8) (280-160190-42), 29SB192 (11-12) (280-160190-43), 29SB192 (15-16) (280-160190-44), 29SB192 (19-20) (280-160190-45), DUP-09 (280-160190-46) and 29SB193 (7-8) (280-160190-47) have been reported.

The analytes 4-Amino-2,6-dinitrotoluene and Tetryl were outside the recovery criteria in the MS and MSD performed on sample 280-160190-28 in batch 280-571896.

The laboratory control sample (160%) and laboratory control sample duplicate (152%) for preparation batch 280-570111 and 280-571024 and analytical batch 280-571224 recovered outside control limits (36-120%) for Tetryl. These analytes were biased high in the LCS/LCSD and were not detected in the associated samples; therefore, the data have been reported.

The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for HMX (26%) in preparation batch 280-570111 and 280-571024 and analytical batch 280-571224 recovered outside control limits (20%). The %R for HMX in the LCS/LCSD is in control.

Tetryl was outside the recovery criteria in the MS and MSD performed on sample 29SB168 (6-7) (280-160190-19) in batch 280-571614. Associated samples were Non-Detect for this analyte.

The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 280-570115 and 280-571025 and analytical batch 280-571897 recovered outside control limits (36-120%) for Tetryl (145%, 139%). These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

The laboratory control sample (LCSSRM 68%) associated with preparation batch 280-570115 and 280-571025 and analytical batch 280-571897 was outside acceptance criteria (69-120%) for 2,4,6-Trinitrotoluene.

The analytes 2-Amino-4,6-dinitrotoluene, 4-Amino-2,6-dinitrotoluene, RDX and Tetryl failed the recovery criteria in the MS and MSD performed on sample 29SB203 (3-4) (280-160190-52) in batch 280-571897.

The analytes 2,4,6-Trinitrotoluene and 2,4-Dinitrotoluene were outside the recovery criteria in the MS and MSD dilutions performed on sample 29SB168 (6-7) (280-160190-19) in batch 280-571614. Associated samples were Non-Detect for this analyte.

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

EXPLOSIVES

Sample EB-03 (280-160190-56) was analyzed for explosives in accordance with SW846 8321A. The samples were prepared on 03/29/2022 and analyzed on 04/05/2022.

The laboratory control sample duplicate (LCSD) for preparation batch 280-570053 and analytical batch 280-570784 recovered outside control limits (35-138%) for Tetryl (145%). This analyte was biased high in the LCSD and were not detected in the associated sample EB-03 (280-160190-56) ; therefore, the data have been reported. The LCS was in control.

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

Detection Summary

Client: HDR Inc
Project/Site: Longhorn AAP, TX (March 2022)

Job ID: 280-160190-1

Client Sample ID: 29SB173 (14.5-15) — Lab Sample ID: 280-160190-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
2,6-Dinitrotoluene	0.58		0.096	0.039	mg/Kg	1		8321A	Total/NA
m-Nitrotoluene	0.11	M	0.096	0.041	mg/Kg	1		8321A	Total/NA
o-Nitrotoluene	0.41	M	0.096	0.041	mg/Kg	1		8321A	Total/NA
2,4-Dinitrotoluene - DL	1.6	D	0.48	0.22	mg/Kg	5		8321A	Total/NA
p-Nitrotoluene - DL	1.6	D	0.48	0.24	mg/Kg	5		8321A	Total/NA

Client Sample ID: 29SB181 (14.5-15) — Lab Sample ID: 280-160190-2

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
2,6-Dinitrotoluene	0.74		0.10	0.040	mg/Kg	1		8321A	Total/NA
m-Nitrotoluene	0.17	M	0.10	0.043	mg/Kg	1		8321A	Total/NA
o-Nitrotoluene	0.73	M	0.10	0.043	mg/Kg	1		8321A	Total/NA
2,4-Dinitrotoluene - DL	1.9	D	0.50	0.23	mg/Kg	5		8321A	Total/NA
p-Nitrotoluene - DL	1.8	D M	0.50	0.25	mg/Kg	5		8321A	Total/NA

Client Sample ID: 29SB182 (14.5-15) — Lab Sample ID: 280-160190-3

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
m-Nitrotoluene	0.074	J M	0.095	0.041	mg/Kg	1		8321A	Total/NA
o-Nitrotoluene	0.51	M	0.095	0.041	mg/Kg	1		8321A	Total/NA
p-Nitrotoluene	0.55	M	0.095	0.047	mg/Kg	1		8321A	Total/NA

Client Sample ID: 29SB175 (3-4) — Lab Sample ID: 280-160190-4

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
2,4-Dinitrotoluene	0.057	J M	0.098	0.046	mg/Kg	1		8321A	Total/NA

Client Sample ID: 29SB175 (6-7) — Lab Sample ID: 280-160190-5

No Detections.

Client Sample ID: 29SB175 (11-12) — Lab Sample ID: 280-160190-6

No Detections.

Client Sample ID: 29SB175 (14.5-15) — Lab Sample ID: 280-160190-7

No Detections.

Client Sample ID: DUP-05 — Lab Sample ID: 280-160190-8

No Detections.

Client Sample ID: 29SB167 (3-4) — Lab Sample ID: 280-160190-9

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
2,4-Dinitrotoluene	0.096	J	0.097	0.045	mg/Kg	1		8321A	Total/NA

Client Sample ID: 29SB167 (6-7) — Lab Sample ID: 280-160190-10

No Detections.

Client Sample ID: 29SB167 (11-12) — Lab Sample ID: 280-160190-11

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB167 (14.5-15) — Lab Sample ID: 280-160190-12

No Detections.

Client Sample ID: DUP-06 — Lab Sample ID: 280-160190-13

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
2,4,6-Trinitrotoluene	0.18		0.099	0.036	mg/Kg	1		8321A	Total/NA
2,4-Dinitrotoluene	0.20	M	0.099	0.046	mg/Kg	1		8321A	Total/NA

Client Sample ID: 29SB176 (14.5-15) — Lab Sample ID: 280-160190-14

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trinitrobenzene	0.048	J	0.098	0.044	mg/Kg	1		8321A	Total/NA
2-Amino-4,6-dinitrotoluene	0.048	J M	0.098	0.048	mg/Kg	1		8321A	Total/NA
m-Nitrotoluene	0.38	M	0.098	0.042	mg/Kg	1		8321A	Total/NA
2,4-Dinitrotoluene - DL	3.2	D	0.98	0.46	mg/Kg	10		8321A	Total/NA
2,6-Dinitrotoluene - DL	1.1	D	0.98	0.39	mg/Kg	10		8321A	Total/NA
o-Nitrotoluene - DL	2.7	D M	0.98	0.42	mg/Kg	10		8321A	Total/NA
p-Nitrotoluene - DL	4.0	D M	0.98	0.48	mg/Kg	10		8321A	Total/NA

Client Sample ID: 29SB179 (14.5-15) — Lab Sample ID: 280-160190-15

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
2,4-Dinitrotoluene	0.27		0.099	0.046	mg/Kg	1		8321A	Total/NA
o-Nitrotoluene	0.078	J M	0.099	0.042	mg/Kg	1		8321A	Total/NA
p-Nitrotoluene	0.12	M	0.099	0.049	mg/Kg	1		8321A	Total/NA

Client Sample ID: 29SB178 (14.5-15) — Lab Sample ID: 280-160190-16

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
2,4-Dinitrotoluene	0.19		0.097	0.045	mg/Kg	1		8321A	Total/NA

Client Sample ID: 29SB177 (14.5-15) — Lab Sample ID: 280-160190-17

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
2,6-Dinitrotoluene	0.51		0.097	0.039	mg/Kg	1		8321A	Total/NA
m-Nitrotoluene	0.11	M	0.097	0.042	mg/Kg	1		8321A	Total/NA
o-Nitrotoluene	0.52	M	0.097	0.042	mg/Kg	1		8321A	Total/NA
p-Nitrotoluene	0.98	M	0.097	0.048	mg/Kg	1		8321A	Total/NA
2,4-Dinitrotoluene - DL	2.2	D	0.97	0.45	mg/Kg	10		8321A	Total/NA

Client Sample ID: 29SB168 (3-4) — Lab Sample ID: 280-160190-18

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trinitrobenzene	0.22		0.097	0.044	mg/Kg	1		8321A	Total/NA
2,6-Dinitrotoluene	0.10		0.097	0.039	mg/Kg	1		8321A	Total/NA
2-Amino-4,6-dinitrotoluene	0.088	J M	0.097	0.048	mg/Kg	1		8321A	Total/NA
4-Amino-2,6-dinitrotoluene	0.078	J M	0.097	0.030	mg/Kg	1		8321A	Total/NA
o-Nitrotoluene	0.055	J M	0.097	0.042	mg/Kg	1		8321A	Total/NA
p-Nitrotoluene	0.11	M	0.097	0.048	mg/Kg	1		8321A	Total/NA
2,4,6-Trinitrotoluene - DL	1.8	D	0.97	0.36	mg/Kg	10		8321A	Total/NA
2,4-Dinitrotoluene - DL	1.0	D	0.97	0.45	mg/Kg	10		8321A	Total/NA

Client Sample ID: 29SB168 (6-7) — Lab Sample ID: 280-160190-19

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trinitrobenzene	0.13		0.093	0.042	mg/Kg	1		8321A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB168 (6-7) (Continued) — Lab Sample ID: 280-160190-19

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
2,6-Dinitrotoluene	0.47		0.093	0.038	mg/Kg	1		8321A	Total/NA
2-Amino-4,6-dinitrotoluene	0.20	M	0.093	0.046	mg/Kg	1		8321A	Total/NA
4-Amino-2,6-dinitrotoluene	0.16	M	0.093	0.029	mg/Kg	1		8321A	Total/NA
m-Nitrotoluene	0.045	J M	0.093	0.040	mg/Kg	1		8321A	Total/NA
o-Nitrotoluene	0.21		0.093	0.040	mg/Kg	1		8321A	Total/NA
p-Nitrotoluene	0.15		0.093	0.046	mg/Kg	1		8321A	Total/NA
2,4,6-Trinitrotoluene - DL	1.4	D J1	0.93	0.34	mg/Kg	10		8321A	Total/NA
2,4-Dinitrotoluene - DL	5.1	D J1	0.93	0.43	mg/Kg	10		8321A	Total/NA

Client Sample ID: 29SB168 (11-12) — Lab Sample ID: 280-160190-20

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trinitrobenzene	0.14		0.095	0.043	mg/Kg	1		8321A	Total/NA
4-Amino-2,6-dinitrotoluene	0.051	J	0.095	0.030	mg/Kg	1		8321A	Total/NA
RDX	0.16		0.11	0.041	mg/Kg	1		8321A	Total/NA
2,4,6-Trinitrotoluene - DL	3.3	D	0.95	0.35	mg/Kg	10		8321A	Total/NA
2,6-Dinitrotoluene - DL	4.8	D	0.95	0.38	mg/Kg	10		8321A	Total/NA
m-Nitrotoluene - DL	4.0	D M	0.95	0.41	mg/Kg	10		8321A	Total/NA
2,4-Dinitrotoluene - DL2	31	D	4.8	2.2	mg/Kg	50		8321A	Total/NA
o-Nitrotoluene - DL2	23	D M	4.8	2.0	mg/Kg	50		8321A	Total/NA
p-Nitrotoluene - DL2	24	D M	4.8	2.4	mg/Kg	50		8321A	Total/NA

Client Sample ID: 29SB168 (14.5-15) — Lab Sample ID: 280-160190-21

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
2,4-Dinitrotoluene	0.19		0.094	0.044	mg/Kg	1		8321A	Total/NA
o-Nitrotoluene	0.069	J	0.094	0.040	mg/Kg	1		8321A	Total/NA
p-Nitrotoluene	0.093	J	0.094	0.047	mg/Kg	1		8321A	Total/NA

Client Sample ID: 29SB169 (3-4) — Lab Sample ID: 280-160190-22

No Detections.

Client Sample ID: 29SB169 (6-7) — Lab Sample ID: 280-160190-23

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
2,4,6-Trinitrotoluene	0.22		0.099	0.037	mg/Kg	1		8321A	Total/NA
2,4-Dinitrotoluene	0.75	M	0.099	0.046	mg/Kg	1		8321A	Total/NA

Client Sample ID: 29SB169 (11-12) — Lab Sample ID: 280-160190-24

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
2,4-Dinitrotoluene	0.14		0.097	0.045	mg/Kg	1		8321A	Total/NA

Client Sample ID: 29SB169 (14.5-15) — Lab Sample ID: 280-160190-25

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
2,4-Dinitrotoluene	0.11		0.093	0.043	mg/Kg	1		8321A	Total/NA

Client Sample ID: DUP-07 — Lab Sample ID: 280-160190-26

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
2,4,6-Trinitrotoluene	0.25		0.092	0.034	mg/Kg	1		8321A	Total/NA
2,4-Dinitrotoluene	0.76	M	0.092	0.043	mg/Kg	1		8321A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB170 (3-4) — Lab Sample ID: 280-160190-27

No Detections.

Client Sample ID: 29SB170 (6-7) — Lab Sample ID: 280-160190-28

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
2,4,6-Trinitrotoluene	0.15		0.095	0.035	mg/Kg	1		8321A	Total/NA
2,4-Dinitrotoluene	0.37	M	0.095	0.044	mg/Kg	1		8321A	Total/NA

Client Sample ID: 29SB170 (11-12) — Lab Sample ID: 280-160190-29

No Detections.

Client Sample ID: 29SB170 (14.5-15) — Lab Sample ID: 280-160190-30

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
2,4-Dinitrotoluene	0.079	J M	0.097	0.045	mg/Kg	1		8321A	Total/NA

Client Sample ID: 29SB171 (3-4) — Lab Sample ID: 280-160190-31

No Detections.

Client Sample ID: 29SB171 (6-7) — Lab Sample ID: 280-160190-32

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
2,4-Dinitrotoluene	0.066	J	0.10	0.046	mg/Kg	1		8321A	Total/NA

Client Sample ID: 29SB171 (11-12) — Lab Sample ID: 280-160190-33

No Detections.

Client Sample ID: 29SB171 (14.5-15) — Lab Sample ID: 280-160190-34

No Detections.

Client Sample ID: DUP-08 — Lab Sample ID: 280-160190-35

No Detections.

Client Sample ID: 29SB174 (3-4) — Lab Sample ID: 280-160190-36

No Detections.

Client Sample ID: 29SB174 (6-7) — Lab Sample ID: 280-160190-37

No Detections.

Client Sample ID: 29SB174 (11-12) — Lab Sample ID: 280-160190-38

No Detections.

Client Sample ID: 29SB174 (14.5-15) — Lab Sample ID: 280-160190-39

No Detections.

Client Sample ID: 29SB190 (3-4) — Lab Sample ID: 280-160190-40

No Detections.

Client Sample ID: 29SB190 (19-20) — Lab Sample ID: 280-160190-41

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB192 (7-8) — Lab Sample ID: 280-160190-42

No Detections.

Client Sample ID: 29SB192 (11-12) — Lab Sample ID: 280-160190-43

No Detections.

Client Sample ID: 29SB192 (15-16) — Lab Sample ID: 280-160190-44

No Detections.

Client Sample ID: 29SB192 (19-20) — Lab Sample ID: 280-160190-45

No Detections.

Client Sample ID: DUP-09 — Lab Sample ID: 280-160190-46

No Detections.

Client Sample ID: 29SB193 (7-8) — Lab Sample ID: 280-160190-47

No Detections.

Client Sample ID: 29SB193 (11-12) — Lab Sample ID: 280-160190-48

No Detections.

Client Sample ID: 29SB193 (15-16) — Lab Sample ID: 280-160190-49

No Detections.

Client Sample ID: 29SB193 (19-20) — Lab Sample ID: 280-160190-50

No Detections.

Client Sample ID: DUP-10 — Lab Sample ID: 280-160190-51

No Detections.

Client Sample ID: 29SB203 (3-4) — Lab Sample ID: 280-160190-52

No Detections.

Client Sample ID: 29SB203 (7-8) — Lab Sample ID: 280-160190-53

No Detections.

Client Sample ID: 29SB204 (3-4) — Lab Sample ID: 280-160190-54

No Detections.

Client Sample ID: 29SB204 (7-8) — Lab Sample ID: 280-160190-55

No Detections.

Client Sample ID: EB-03 — Lab Sample ID: 280-160190-56

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB173 (14.5-15)
Date Collected: 03/24/22 09:14
Date Received: 03/25/22 00:00

Lab Sample ID: 280-160190-1
Matrix: Solid

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.048	U	0.096	0.043	mg/Kg		04/04/22 16:57	04/07/22 14:16	1
1,3-Dinitrobenzene	0.048	U	0.096	0.043	mg/Kg		04/04/22 16:57	04/07/22 14:16	1
2,4,6-Trinitrotoluene	0.048	U Q	0.096	0.035	mg/Kg		04/04/22 16:57	04/07/22 14:16	1
2,6-Dinitrotoluene	**0.58**		0.096	0.039	mg/Kg		04/04/22 16:57	04/07/22 14:16	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.096	0.048	mg/Kg		04/04/22 16:57	04/07/22 14:16	1
4-Amino-2,6-dinitrotoluene	0.048	U	0.096	0.030	mg/Kg		04/04/22 16:57	04/07/22 14:16	1
HMX	0.048	U M	0.096	0.044	mg/Kg		04/04/22 16:57	04/07/22 14:16	1
m-Nitrotoluene	**0.11**	**M**	0.096	0.041	mg/Kg		04/04/22 16:57	04/07/22 14:16	1
Nitrobenzene	0.048	U	0.11	0.036	mg/Kg		04/04/22 16:57	04/07/22 14:16	1
Nitroglycerin	0.048	U	0.096	0.028	mg/Kg		04/04/22 16:57	04/07/22 14:16	1
o-Nitrotoluene	**0.41**	**M**	0.096	0.041	mg/Kg		04/04/22 16:57	04/07/22 14:16	1
PETN	0.048	U	0.096	0.033	mg/Kg		04/04/22 16:57	04/07/22 14:16	1
RDX	0.048	U	0.11	0.041	mg/Kg		04/04/22 16:57	04/07/22 14:16	1
Tetryl	0.048	U Q	0.096	0.037	mg/Kg		04/04/22 16:57	04/07/22 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*95*		*68 - 140*	*04/04/22 16:57*	*04/07/22 14:16*	*1*

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	**1.6**	**D**	0.48	0.22	mg/Kg		04/04/22 16:57	04/07/22 15:09	5
p-Nitrotoluene	**1.6**	**D**	0.48	0.24	mg/Kg		04/04/22 16:57	04/07/22 15:09	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*107*	*D*	*68 - 140*	*04/04/22 16:57*	*04/07/22 15:09*	*5*

Client Sample ID: 29SB181 (14.5-15)
Date Collected: 03/24/22 09:30
Date Received: 03/25/22 00:00

Lab Sample ID: 280-160190-2
Matrix: Solid

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.050	U	0.10	0.045	mg/Kg		04/04/22 16:57	04/07/22 14:23	1
1,3-Dinitrobenzene	0.050	U	0.10	0.045	mg/Kg		04/04/22 16:57	04/07/22 14:23	1
2,4,6-Trinitrotoluene	0.050	U Q	0.10	0.037	mg/Kg		04/04/22 16:57	04/07/22 14:23	1
2,6-Dinitrotoluene	**0.74**		0.10	0.040	mg/Kg		04/04/22 16:57	04/07/22 14:23	1
2-Amino-4,6-dinitrotoluene	0.050	U M	0.10	0.050	mg/Kg		04/04/22 16:57	04/07/22 14:23	1
4-Amino-2,6-dinitrotoluene	0.050	U M	0.10	0.031	mg/Kg		04/04/22 16:57	04/07/22 14:23	1
HMX	0.050	U M	0.10	0.046	mg/Kg		04/04/22 16:57	04/07/22 14:23	1
m-Nitrotoluene	**0.17**	**M**	0.10	0.043	mg/Kg		04/04/22 16:57	04/07/22 14:23	1
Nitrobenzene	0.050	U	0.11	0.038	mg/Kg		04/04/22 16:57	04/07/22 14:23	1
Nitroglycerin	0.050	U	0.10	0.029	mg/Kg		04/04/22 16:57	04/07/22 14:23	1
o-Nitrotoluene	**0.73**	**M**	0.10	0.043	mg/Kg		04/04/22 16:57	04/07/22 14:23	1
PETN	0.050	U	0.10	0.034	mg/Kg		04/04/22 16:57	04/07/22 14:23	1
RDX	0.050	U	0.12	0.043	mg/Kg		04/04/22 16:57	04/07/22 14:23	1
Tetryl	0.050	U Q	0.10	0.039	mg/Kg		04/04/22 16:57	04/07/22 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*89*		*68 - 140*	*04/04/22 16:57*	*04/07/22 14:23*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB181 (14.5-15)
Lab Sample ID: 280-160190-2
Date Collected: 03/24/22 09:30
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	**1.9**	**D**	0.50	0.23	mg/Kg		04/04/22 16:57	04/07/22 15:17	5
p-Nitrotoluene	**1.8**	**D M**	0.50	0.25	mg/Kg		04/04/22 16:57	04/07/22 15:17	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*113*	*D*	*68 - 140*	*04/04/22 16:57*	*04/07/22 15:17*	*5*

Client Sample ID: 29SB182 (14.5-15)
Lab Sample ID: 280-160190-3
Date Collected: 03/24/22 09:40
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.048	U	0.095	0.043	mg/Kg		04/04/22 16:57	04/07/22 14:30	1
1,3-Dinitrobenzene	0.048	U	0.095	0.043	mg/Kg		04/04/22 16:57	04/07/22 14:30	1
2,4,6-Trinitrotoluene	0.048	U Q	0.095	0.035	mg/Kg		04/04/22 16:57	04/07/22 14:30	1
2,4-Dinitrotoluene	0.048	U M	0.095	0.044	mg/Kg		04/04/22 16:57	04/07/22 14:30	1
2,6-Dinitrotoluene	0.048	U M	0.095	0.038	mg/Kg		04/04/22 16:57	04/07/22 14:30	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.095	0.047	mg/Kg		04/04/22 16:57	04/07/22 14:30	1
4-Amino-2,6-dinitrotoluene	0.048	U	0.095	0.030	mg/Kg		04/04/22 16:57	04/07/22 14:30	1
HMX	0.048	U M	0.095	0.044	mg/Kg		04/04/22 16:57	04/07/22 14:30	1
m-Nitrotoluene	**0.074**	**J M**	0.095	0.041	mg/Kg		04/04/22 16:57	04/07/22 14:30	1
Nitrobenzene	0.048	U	0.10	0.036	mg/Kg		04/04/22 16:57	04/07/22 14:30	1
Nitroglycerin	0.048	U	0.095	0.028	mg/Kg		04/04/22 16:57	04/07/22 14:30	1
o-Nitrotoluene	**0.51**	**M**	0.095	0.041	mg/Kg		04/04/22 16:57	04/07/22 14:30	1
PETN	0.048	U	0.095	0.032	mg/Kg		04/04/22 16:57	04/07/22 14:30	1
p-Nitrotoluene	**0.55**	**M**	0.095	0.047	mg/Kg		04/04/22 16:57	04/07/22 14:30	1
RDX	0.048	U	0.11	0.041	mg/Kg		04/04/22 16:57	04/07/22 14:30	1
Tetryl	0.048	U Q	0.095	0.037	mg/Kg		04/04/22 16:57	04/07/22 14:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*97*		*68 - 140*	*04/04/22 16:57*	*04/07/22 14:30*	*1*

Client Sample ID: 29SB175 (3-4)
Lab Sample ID: 280-160190-4
Date Collected: 03/24/22 09:55
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.049	U	0.098	0.044	mg/Kg		04/04/22 16:57	04/07/22 14:36	1
1,3-Dinitrobenzene	0.049	U	0.098	0.044	mg/Kg		04/04/22 16:57	04/07/22 14:36	1
2,4,6-Trinitrotoluene	0.049	U Q	0.098	0.036	mg/Kg		04/04/22 16:57	04/07/22 14:36	1
2,4-Dinitrotoluene	**0.057**	**J M**	0.098	0.046	mg/Kg		04/04/22 16:57	04/07/22 14:36	1
2,6-Dinitrotoluene	0.049	U	0.098	0.040	mg/Kg		04/04/22 16:57	04/07/22 14:36	1
2-Amino-4,6-dinitrotoluene	0.049	U	0.098	0.049	mg/Kg		04/04/22 16:57	04/07/22 14:36	1
4-Amino-2,6-dinitrotoluene	0.049	U	0.098	0.030	mg/Kg		04/04/22 16:57	04/07/22 14:36	1
HMX	0.049	U M	0.098	0.045	mg/Kg		04/04/22 16:57	04/07/22 14:36	1
m-Nitrotoluene	0.049	U	0.098	0.042	mg/Kg		04/04/22 16:57	04/07/22 14:36	1
Nitrobenzene	0.049	U	0.11	0.037	mg/Kg		04/04/22 16:57	04/07/22 14:36	1
Nitroglycerin	0.049	U M	0.098	0.028	mg/Kg		04/04/22 16:57	04/07/22 14:36	1
o-Nitrotoluene	0.049	U M	0.098	0.042	mg/Kg		04/04/22 16:57	04/07/22 14:36	1
PETN	0.049	U	0.098	0.033	mg/Kg		04/04/22 16:57	04/07/22 14:36	1

Client Sample Results

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB175 (3-4)
Lab Sample ID: 280-160190-4
Date Collected: 03/24/22 09:55
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
p-Nitrotoluene	0.049	U M	0.098	0.048	mg/Kg		04/04/22 16:57	04/07/22 14:36	1
RDX	0.049	U	0.12	0.042	mg/Kg		04/04/22 16:57	04/07/22 14:36	1
Tetryl	0.049	U Q	0.098	0.038	mg/Kg		04/04/22 16:57	04/07/22 14:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*88*		*68 - 140*	*04/04/22 16:57*	*04/07/22 14:36*	*1*

Client Sample ID: 29SB175 (6-7)
Lab Sample ID: 280-160190-5
Date Collected: 03/24/22 09:57
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.047	U	0.095	0.043	mg/Kg		04/04/22 16:57	04/07/22 14:43	1
1,3-Dinitrobenzene	0.047	U	0.095	0.042	mg/Kg		04/04/22 16:57	04/07/22 14:43	1
2,4,6-Trinitrotoluene	0.047	U Q	0.095	0.035	mg/Kg		04/04/22 16:57	04/07/22 14:43	1
2,4-Dinitrotoluene	0.047	U M	0.095	0.044	mg/Kg		04/04/22 16:57	04/07/22 14:43	1
2,6-Dinitrotoluene	0.047	U	0.095	0.038	mg/Kg		04/04/22 16:57	04/07/22 14:43	1
2-Amino-4,6-dinitrotoluene	0.047	U	0.095	0.047	mg/Kg		04/04/22 16:57	04/07/22 14:43	1
4-Amino-2,6-dinitrotoluene	0.047	U	0.095	0.030	mg/Kg		04/04/22 16:57	04/07/22 14:43	1
HMX	0.047	U	0.095	0.044	mg/Kg		04/04/22 16:57	04/07/22 14:43	1
m-Nitrotoluene	0.047	U	0.095	0.041	mg/Kg		04/04/22 16:57	04/07/22 14:43	1
Nitrobenzene	0.047	U	0.10	0.036	mg/Kg		04/04/22 16:57	04/07/22 14:43	1
Nitroglycerin	0.047	U	0.095	0.028	mg/Kg		04/04/22 16:57	04/07/22 14:43	1
o-Nitrotoluene	0.047	U	0.095	0.041	mg/Kg		04/04/22 16:57	04/07/22 14:43	1
PETN	0.047	U	0.095	0.032	mg/Kg		04/04/22 16:57	04/07/22 14:43	1
p-Nitrotoluene	0.047	U	0.095	0.047	mg/Kg		04/04/22 16:57	04/07/22 14:43	1
RDX	0.047	U	0.11	0.041	mg/Kg		04/04/22 16:57	04/07/22 14:43	1
Tetryl	0.047	U Q	0.095	0.037	mg/Kg		04/04/22 16:57	04/07/22 14:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*95*		*68 - 140*	*04/04/22 16:57*	*04/07/22 14:43*	*1*

Client Sample ID: 29SB175 (11-12)
Lab Sample ID: 280-160190-6
Date Collected: 03/24/22 09:58
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.047	U	0.093	0.042	mg/Kg		04/04/22 16:57	04/07/22 14:49	1
1,3-Dinitrobenzene	0.047	U	0.093	0.042	mg/Kg		04/04/22 16:57	04/07/22 14:49	1
2,4,6-Trinitrotoluene	0.047	U Q	0.093	0.034	mg/Kg		04/04/22 16:57	04/07/22 14:49	1
2,4-Dinitrotoluene	0.047	U	0.093	0.043	mg/Kg		04/04/22 16:57	04/07/22 14:49	1
2,6-Dinitrotoluene	0.047	U	0.093	0.038	mg/Kg		04/04/22 16:57	04/07/22 14:49	1
2-Amino-4,6-dinitrotoluene	0.047	U	0.093	0.046	mg/Kg		04/04/22 16:57	04/07/22 14:49	1
4-Amino-2,6-dinitrotoluene	0.047	U	0.093	0.029	mg/Kg		04/04/22 16:57	04/07/22 14:49	1
HMX	0.047	U	0.093	0.043	mg/Kg		04/04/22 16:57	04/07/22 14:49	1
m-Nitrotoluene	0.047	U	0.093	0.040	mg/Kg		04/04/22 16:57	04/07/22 14:49	1
Nitrobenzene	0.047	U	0.10	0.035	mg/Kg		04/04/22 16:57	04/07/22 14:49	1
Nitroglycerin	0.047	U	0.093	0.027	mg/Kg		04/04/22 16:57	04/07/22 14:49	1
o-Nitrotoluene	0.047	U	0.093	0.040	mg/Kg		04/04/22 16:57	04/07/22 14:49	1

Client Sample Results

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB175 (11-12)
Lab Sample ID: 280-160190-6
Date Collected: 03/24/22 09:58
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
PETN	0.047	U	0.093	0.032	mg/Kg		04/04/22 16:57	04/07/22 14:49	1
p-Nitrotoluene	0.047	U	0.093	0.046	mg/Kg		04/04/22 16:57	04/07/22 14:49	1
RDX	0.047	U	0.11	0.040	mg/Kg		04/04/22 16:57	04/07/22 14:49	1
Tetryl	0.047	U Q	0.093	0.036	mg/Kg		04/04/22 16:57	04/07/22 14:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*94*		*68 - 140*	*04/04/22 16:57*	*04/07/22 14:49*	*1*

Client Sample ID: 29SB175 (14.5-15)
Lab Sample ID: 280-160190-7
Date Collected: 03/24/22 10:00
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.049	U	0.099	0.044	mg/Kg		04/04/22 16:57	04/07/22 14:56	1
1,3-Dinitrobenzene	0.049	U	0.099	0.044	mg/Kg		04/04/22 16:57	04/07/22 14:56	1
2,4,6-Trinitrotoluene	0.049	U Q	0.099	0.036	mg/Kg		04/04/22 16:57	04/07/22 14:56	1
2,4-Dinitrotoluene	0.049	U	0.099	0.046	mg/Kg		04/04/22 16:57	04/07/22 14:56	1
2,6-Dinitrotoluene	0.049	U	0.099	0.040	mg/Kg		04/04/22 16:57	04/07/22 14:56	1
2-Amino-4,6-dinitrotoluene	0.049	U	0.099	0.049	mg/Kg		04/04/22 16:57	04/07/22 14:56	1
4-Amino-2,6-dinitrotoluene	0.049	U	0.099	0.031	mg/Kg		04/04/22 16:57	04/07/22 14:56	1
HMX	0.049	U	0.099	0.046	mg/Kg		04/04/22 16:57	04/07/22 14:56	1
m-Nitrotoluene	0.049	U	0.099	0.043	mg/Kg		04/04/22 16:57	04/07/22 14:56	1
Nitrobenzene	0.049	U	0.11	0.038	mg/Kg		04/04/22 16:57	04/07/22 14:56	1
Nitroglycerin	0.049	U	0.099	0.029	mg/Kg		04/04/22 16:57	04/07/22 14:56	1
o-Nitrotoluene	0.049	U	0.099	0.042	mg/Kg		04/04/22 16:57	04/07/22 14:56	1
PETN	0.049	U	0.099	0.034	mg/Kg		04/04/22 16:57	04/07/22 14:56	1
p-Nitrotoluene	0.049	U	0.099	0.049	mg/Kg		04/04/22 16:57	04/07/22 14:56	1
RDX	0.049	U	0.12	0.043	mg/Kg		04/04/22 16:57	04/07/22 14:56	1
Tetryl	0.049	U Q	0.099	0.038	mg/Kg		04/04/22 16:57	04/07/22 14:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*98*		*68 - 140*	*04/04/22 16:57*	*04/07/22 14:56*	*1*

Client Sample ID: DUP-05
Lab Sample ID: 280-160190-8
Date Collected: 03/24/22 12:00
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.047	U	0.095	0.042	mg/Kg		04/06/22 18:20	04/08/22 11:20	1
1,3-Dinitrobenzene	0.047	U	0.095	0.042	mg/Kg		04/06/22 18:20	04/08/22 11:20	1
2,4,6-Trinitrotoluene	0.047	U M	0.095	0.035	mg/Kg		04/06/22 18:20	04/08/22 11:20	1
2,4-Dinitrotoluene	0.047	U	0.095	0.044	mg/Kg		04/06/22 18:20	04/08/22 11:20	1
2,6-Dinitrotoluene	0.047	U	0.095	0.038	mg/Kg		04/06/22 18:20	04/08/22 11:20	1
2-Amino-4,6-dinitrotoluene	0.047	U	0.095	0.047	mg/Kg		04/06/22 18:20	04/08/22 11:20	1
4-Amino-2,6-dinitrotoluene	0.047	U	0.095	0.029	mg/Kg		04/06/22 18:20	04/08/22 11:20	1
HMX	0.047	U M Q	0.095	0.044	mg/Kg		04/06/22 18:20	04/08/22 11:20	1
m-Nitrotoluene	0.047	U	0.095	0.041	mg/Kg		04/06/22 18:20	04/08/22 11:20	1
Nitrobenzene	0.047	U	0.10	0.036	mg/Kg		04/06/22 18:20	04/08/22 11:20	1
Nitroglycerin	0.047	U	0.095	0.027	mg/Kg		04/06/22 18:20	04/08/22 11:20	1

Client Sample Results

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: DUP-05
Lab Sample ID: 280-160190-8
Date Collected: 03/24/22 12:00
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
o-Nitrotoluene	0.047	U M	0.095	0.041	mg/Kg		04/06/22 18:20	04/08/22 11:20	1
PETN	0.047	U	0.095	0.032	mg/Kg		04/06/22 18:20	04/08/22 11:20	1
p-Nitrotoluene	0.047	U M	0.095	0.047	mg/Kg		04/06/22 18:20	04/08/22 11:20	1
RDX	0.047	U	0.11	0.041	mg/Kg		04/06/22 18:20	04/08/22 11:20	1
Tetryl	0.047	U Q	0.095	0.037	mg/Kg		04/06/22 18:20	04/08/22 11:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*100*		*68 - 140*	*04/06/22 18:20*	*04/08/22 11:20*	*1*

Client Sample ID: 29SB167 (3-4)
Lab Sample ID: 280-160190-9
Date Collected: 03/24/22 10:30
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.048	U	0.097	0.043	mg/Kg		04/06/22 18:20	04/08/22 11:26	1
1,3-Dinitrobenzene	0.048	U	0.097	0.043	mg/Kg		04/06/22 18:20	04/08/22 11:26	1
2,4,6-Trinitrotoluene	0.048	U	0.097	0.036	mg/Kg		04/06/22 18:20	04/08/22 11:26	1
2,4-Dinitrotoluene	**0.096**	**J**	0.097	0.045	mg/Kg		04/06/22 18:20	04/08/22 11:26	1
2,6-Dinitrotoluene	0.048	U M	0.097	0.039	mg/Kg		04/06/22 18:20	04/08/22 11:26	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.097	0.048	mg/Kg		04/06/22 18:20	04/08/22 11:26	1
4-Amino-2,6-dinitrotoluene	0.048	U	0.097	0.030	mg/Kg		04/06/22 18:20	04/08/22 11:26	1
HMX	0.048	U Q	0.097	0.044	mg/Kg		04/06/22 18:20	04/08/22 11:26	1
m-Nitrotoluene	0.048	U	0.097	0.042	mg/Kg		04/06/22 18:20	04/08/22 11:26	1
Nitrobenzene	0.048	U	0.11	0.037	mg/Kg		04/06/22 18:20	04/08/22 11:26	1
Nitroglycerin	0.048	U	0.097	0.028	mg/Kg		04/06/22 18:20	04/08/22 11:26	1
o-Nitrotoluene	0.048	U	0.097	0.041	mg/Kg		04/06/22 18:20	04/08/22 11:26	1
PETN	0.048	U	0.097	0.033	mg/Kg		04/06/22 18:20	04/08/22 11:26	1
p-Nitrotoluene	0.048	U	0.097	0.048	mg/Kg		04/06/22 18:20	04/08/22 11:26	1
RDX	0.048	U M	0.12	0.042	mg/Kg		04/06/22 18:20	04/08/22 11:26	1
Tetryl	0.048	U Q	0.097	0.037	mg/Kg		04/06/22 18:20	04/08/22 11:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*92*		*68 - 140*	*04/06/22 18:20*	*04/08/22 11:26*	*1*

Client Sample ID: 29SB167 (6-7)
Lab Sample ID: 280-160190-10
Date Collected: 03/24/22 10:32
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.049	U	0.098	0.044	mg/Kg		04/06/22 18:20	04/08/22 11:33	1
1,3-Dinitrobenzene	0.049	U	0.098	0.044	mg/Kg		04/06/22 18:20	04/08/22 11:33	1
2,4,6-Trinitrotoluene	0.049	U	0.098	0.036	mg/Kg		04/06/22 18:20	04/08/22 11:33	1
2,4-Dinitrotoluene	0.049	U	0.098	0.045	mg/Kg		04/06/22 18:20	04/08/22 11:33	1
2,6-Dinitrotoluene	0.049	U	0.098	0.039	mg/Kg		04/06/22 18:20	04/08/22 11:33	1
2-Amino-4,6-dinitrotoluene	0.049	U	0.098	0.048	mg/Kg		04/06/22 18:20	04/08/22 11:33	1
4-Amino-2,6-dinitrotoluene	0.049	U	0.098	0.030	mg/Kg		04/06/22 18:20	04/08/22 11:33	1
HMX	0.049	U M Q	0.098	0.045	mg/Kg		04/06/22 18:20	04/08/22 11:33	1
m-Nitrotoluene	0.049	U	0.098	0.042	mg/Kg		04/06/22 18:20	04/08/22 11:33	1
Nitrobenzene	0.049	U	0.11	0.037	mg/Kg		04/06/22 18:20	04/08/22 11:33	1

Client Sample Results

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB167 (6-7)
Lab Sample ID: 280-160190-10
Date Collected: 03/24/22 10:32
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Nitroglycerin	0.049	U	0.098	0.028	mg/Kg		04/06/22 18:20	04/08/22 11:33	1
o-Nitrotoluene	0.049	U	0.098	0.042	mg/Kg		04/06/22 18:20	04/08/22 11:33	1
PETN	0.049	U	0.098	0.033	mg/Kg		04/06/22 18:20	04/08/22 11:33	1
p-Nitrotoluene	0.049	U	0.098	0.048	mg/Kg		04/06/22 18:20	04/08/22 11:33	1
RDX	0.049	U	0.12	0.042	mg/Kg		04/06/22 18:20	04/08/22 11:33	1
Tetryl	0.049	U Q	0.098	0.038	mg/Kg		04/06/22 18:20	04/08/22 11:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*97*		*68 - 140*	*04/06/22 18:20*	*04/08/22 11:33*	*1*

Client Sample ID: 29SB167 (11-12)
Lab Sample ID: 280-160190-11
Date Collected: 03/24/22 10:33
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.048	U	0.097	0.043	mg/Kg		04/06/22 18:20	04/08/22 11:40	1
1,3-Dinitrobenzene	0.048	U	0.097	0.043	mg/Kg		04/06/22 18:20	04/08/22 11:40	1
2,4,6-Trinitrotoluene	0.048	U	0.097	0.036	mg/Kg		04/06/22 18:20	04/08/22 11:40	1
2,4-Dinitrotoluene	0.048	U	0.097	0.045	mg/Kg		04/06/22 18:20	04/08/22 11:40	1
2,6-Dinitrotoluene	0.048	U	0.097	0.039	mg/Kg		04/06/22 18:20	04/08/22 11:40	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.097	0.048	mg/Kg		04/06/22 18:20	04/08/22 11:40	1
4-Amino-2,6-dinitrotoluene	0.048	U	0.097	0.030	mg/Kg		04/06/22 18:20	04/08/22 11:40	1
HMX	0.048	U M Q	0.097	0.045	mg/Kg		04/06/22 18:20	04/08/22 11:40	1
m-Nitrotoluene	0.048	U	0.097	0.042	mg/Kg		04/06/22 18:20	04/08/22 11:40	1
Nitrobenzene	0.048	U	0.11	0.037	mg/Kg		04/06/22 18:20	04/08/22 11:40	1
Nitroglycerin	0.048	U	0.097	0.028	mg/Kg		04/06/22 18:20	04/08/22 11:40	1
o-Nitrotoluene	0.048	U	0.097	0.041	mg/Kg		04/06/22 18:20	04/08/22 11:40	1
PETN	0.048	U	0.097	0.033	mg/Kg		04/06/22 18:20	04/08/22 11:40	1
p-Nitrotoluene	0.048	U	0.097	0.048	mg/Kg		04/06/22 18:20	04/08/22 11:40	1
RDX	0.048	U	0.12	0.042	mg/Kg		04/06/22 18:20	04/08/22 11:40	1
Tetryl	0.048	U Q	0.097	0.038	mg/Kg		04/06/22 18:20	04/08/22 11:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*96*		*68 - 140*	*04/06/22 18:20*	*04/08/22 11:40*	*1*

Client Sample ID: 29SB167 (14.5-15)
Lab Sample ID: 280-160190-12
Date Collected: 03/24/22 10:34
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.047	U	0.094	0.042	mg/Kg		04/06/22 18:20	04/08/22 11:46	1
1,3-Dinitrobenzene	0.047	U	0.094	0.042	mg/Kg		04/06/22 18:20	04/08/22 11:46	1
2,4,6-Trinitrotoluene	0.047	U M	0.094	0.035	mg/Kg		04/06/22 18:20	04/08/22 11:46	1
2,4-Dinitrotoluene	0.047	U	0.094	0.044	mg/Kg		04/06/22 18:20	04/08/22 11:46	1
2,6-Dinitrotoluene	0.047	U	0.094	0.038	mg/Kg		04/06/22 18:20	04/08/22 11:46	1
2-Amino-4,6-dinitrotoluene	0.047	U	0.094	0.047	mg/Kg		04/06/22 18:20	04/08/22 11:46	1
4-Amino-2,6-dinitrotoluene	0.047	U	0.094	0.029	mg/Kg		04/06/22 18:20	04/08/22 11:46	1
HMX	0.047	U Q	0.094	0.044	mg/Kg		04/06/22 18:20	04/08/22 11:46	1
m-Nitrotoluene	0.047	U	0.094	0.041	mg/Kg		04/06/22 18:20	04/08/22 11:46	1

Client Sample Results

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB167 (14.5-15)
Lab Sample ID: 280-160190-12
Date Collected: 03/24/22 10:34
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrobenzene	0.047	U	0.10	0.036	mg/Kg		04/06/22 18:20	04/08/22 11:46	1
Nitroglycerin	0.047	U	0.094	0.027	mg/Kg		04/06/22 18:20	04/08/22 11:46	1
o-Nitrotoluene	0.047	U	0.094	0.040	mg/Kg		04/06/22 18:20	04/08/22 11:46	1
PETN	0.047	U	0.094	0.032	mg/Kg		04/06/22 18:20	04/08/22 11:46	1
p-Nitrotoluene	0.047	U	0.094	0.047	mg/Kg		04/06/22 18:20	04/08/22 11:46	1
RDX	0.047	U	0.11	0.041	mg/Kg		04/06/22 18:20	04/08/22 11:46	1
Tetryl	0.047	U Q	0.094	0.037	mg/Kg		04/06/22 18:20	04/08/22 11:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*99*		*68 - 140*	*04/06/22 18:20*	*04/08/22 11:46*	*1*

Client Sample ID: DUP-06
Lab Sample ID: 280-160190-13
Date Collected: 03/24/22 12:10
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.049	U	0.099	0.044	mg/Kg		04/06/22 18:20	04/08/22 11:59	1
1,3-Dinitrobenzene	0.049	U	0.099	0.044	mg/Kg		04/06/22 18:20	04/08/22 11:59	1
2,4,6-Trinitrotoluene	**0.18**		0.099	0.036	mg/Kg		04/06/22 18:20	04/08/22 11:59	1
2,4-Dinitrotoluene	**0.20**	**M**	0.099	0.046	mg/Kg		04/06/22 18:20	04/08/22 11:59	1
2,6-Dinitrotoluene	0.049	U M	0.099	0.040	mg/Kg		04/06/22 18:20	04/08/22 11:59	1
2-Amino-4,6-dinitrotoluene	0.049	U	0.099	0.049	mg/Kg		04/06/22 18:20	04/08/22 11:59	1
4-Amino-2,6-dinitrotoluene	0.049	U	0.099	0.031	mg/Kg		04/06/22 18:20	04/08/22 11:59	1
HMX	0.049	U M Q	0.099	0.045	mg/Kg		04/06/22 18:20	04/08/22 11:59	1
m-Nitrotoluene	0.049	U	0.099	0.043	mg/Kg		04/06/22 18:20	04/08/22 11:59	1
Nitrobenzene	0.049	U	0.11	0.037	mg/Kg		04/06/22 18:20	04/08/22 11:59	1
Nitroglycerin	0.049	U	0.099	0.029	mg/Kg		04/06/22 18:20	04/08/22 11:59	1
o-Nitrotoluene	0.049	U	0.099	0.042	mg/Kg		04/06/22 18:20	04/08/22 11:59	1
PETN	0.049	U	0.099	0.033	mg/Kg		04/06/22 18:20	04/08/22 11:59	1
p-Nitrotoluene	0.049	U	0.099	0.049	mg/Kg		04/06/22 18:20	04/08/22 11:59	1
RDX	0.049	U	0.12	0.042	mg/Kg		04/06/22 18:20	04/08/22 11:59	1
Tetryl	0.049	U Q	0.099	0.038	mg/Kg		04/06/22 18:20	04/08/22 11:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*101*		*68 - 140*	*04/06/22 18:20*	*04/08/22 11:59*	*1*

Client Sample ID: 29SB176 (14.5-15)
Lab Sample ID: 280-160190-14
Date Collected: 03/24/22 10:50
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**0.048**	**J**	0.098	0.044	mg/Kg		04/06/22 18:20	04/08/22 12:06	1
1,3-Dinitrobenzene	0.049	U	0.098	0.044	mg/Kg		04/06/22 18:20	04/08/22 12:06	1
2,4,6-Trinitrotoluene	0.049	U M	0.098	0.036	mg/Kg		04/06/22 18:20	04/08/22 12:06	1
2-Amino-4,6-dinitrotoluene	**0.048**	**J M**	0.098	0.048	mg/Kg		04/06/22 18:20	04/08/22 12:06	1
4-Amino-2,6-dinitrotoluene	0.049	U M	0.098	0.030	mg/Kg		04/06/22 18:20	04/08/22 12:06	1
HMX	0.049	U Q	0.098	0.045	mg/Kg		04/06/22 18:20	04/08/22 12:06	1
m-Nitrotoluene	**0.38**	**M**	0.098	0.042	mg/Kg		04/06/22 18:20	04/08/22 12:06	1
Nitrobenzene	0.049	U	0.11	0.037	mg/Kg		04/06/22 18:20	04/08/22 12:06	1

Client Sample Results

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB176 (14.5-15)
Lab Sample ID: 280-160190-14
Date Collected: 03/24/22 10:50
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Nitroglycerin	0.049	U	0.098	0.028	mg/Kg		04/06/22 18:20	04/08/22 12:06	1
PETN	0.049	U	0.098	0.033	mg/Kg		04/06/22 18:20	04/08/22 12:06	1
RDX	0.049	U	0.12	0.042	mg/Kg		04/06/22 18:20	04/08/22 12:06	1
Tetryl	0.049	U Q	0.098	0.038	mg/Kg		04/06/22 18:20	04/08/22 12:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*100*		*68 - 140*	*04/06/22 18:20*	*04/08/22 12:06*	*1*

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	**3.2**	**D**	0.98	0.46	mg/Kg		04/06/22 18:20	04/12/22 21:03	10
2,6-Dinitrotoluene	**1.1**	**D**	0.98	0.39	mg/Kg		04/06/22 18:20	04/12/22 21:03	10
o-Nitrotoluene	**2.7**	**D M**	0.98	0.42	mg/Kg		04/06/22 18:20	04/12/22 21:03	10
p-Nitrotoluene	**4.0**	**D M**	0.98	0.48	mg/Kg		04/06/22 18:20	04/12/22 21:03	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*94*	*D*	*68 - 140*	*04/06/22 18:20*	*04/12/22 21:03*	*10*

Client Sample ID: 29SB179 (14.5-15)
Lab Sample ID: 280-160190-15
Date Collected: 03/24/22 11:05
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.050	U	0.099	0.044	mg/Kg		04/06/22 18:20	04/08/22 12:13	1
1,3-Dinitrobenzene	0.050	U	0.099	0.044	mg/Kg		04/06/22 18:20	04/08/22 12:13	1
2,4,6-Trinitrotoluene	0.050	U	0.099	0.037	mg/Kg		04/06/22 18:20	04/08/22 12:13	1
2,4-Dinitrotoluene	**0.27**		0.099	0.046	mg/Kg		04/06/22 18:20	04/08/22 12:13	1
2,6-Dinitrotoluene	0.050	U	0.099	0.040	mg/Kg		04/06/22 18:20	04/08/22 12:13	1
2-Amino-4,6-dinitrotoluene	0.050	U M	0.099	0.049	mg/Kg		04/06/22 18:20	04/08/22 12:13	1
4-Amino-2,6-dinitrotoluene	0.050	U M	0.099	0.031	mg/Kg		04/06/22 18:20	04/08/22 12:13	1
HMX	0.050	U Q	0.099	0.046	mg/Kg		04/06/22 18:20	04/08/22 12:13	1
m-Nitrotoluene	0.050	U M	0.099	0.043	mg/Kg		04/06/22 18:20	04/08/22 12:13	1
Nitrobenzene	0.050	U	0.11	0.038	mg/Kg		04/06/22 18:20	04/08/22 12:13	1
Nitroglycerin	0.050	U	0.099	0.029	mg/Kg		04/06/22 18:20	04/08/22 12:13	1
o-Nitrotoluene	**0.078**	**J M**	0.099	0.042	mg/Kg		04/06/22 18:20	04/08/22 12:13	1
PETN	0.050	U	0.099	0.034	mg/Kg		04/06/22 18:20	04/08/22 12:13	1
p-Nitrotoluene	**0.12**	**M**	0.099	0.049	mg/Kg		04/06/22 18:20	04/08/22 12:13	1
RDX	0.050	U	0.12	0.043	mg/Kg		04/06/22 18:20	04/08/22 12:13	1
Tetryl	0.050	U M Q	0.099	0.038	mg/Kg		04/06/22 18:20	04/08/22 12:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*102*		*68 - 140*	*04/06/22 18:20*	*04/08/22 12:13*	*1*

Client Sample ID: 29SB178 (14.5-15)
Lab Sample ID: 280-160190-16
Date Collected: 03/24/22 11:40
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.048	U	0.097	0.043	mg/Kg		04/06/22 18:20	04/08/22 12:19	1

Client Sample Results

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB178 (14.5-15)
Lab Sample ID: 280-160190-16
Date Collected: 03/24/22 11:40
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dinitrobenzene	0.048	U	0.097	0.043	mg/Kg		04/06/22 18:20	04/08/22 12:19	1
2,4,6-Trinitrotoluene	0.048	U	0.097	0.036	mg/Kg		04/06/22 18:20	04/08/22 12:19	1
2,4-Dinitrotoluene	**0.19**		0.097	0.045	mg/Kg		04/06/22 18:20	04/08/22 12:19	1
2,6-Dinitrotoluene	0.048	U	0.097	0.039	mg/Kg		04/06/22 18:20	04/08/22 12:19	1
2-Amino-4,6-dinitrotoluene	0.048	U M	0.097	0.048	mg/Kg		04/06/22 18:20	04/08/22 12:19	1
4-Amino-2,6-dinitrotoluene	0.048	U	0.097	0.030	mg/Kg		04/06/22 18:20	04/08/22 12:19	1
HMX	0.048	U M Q	0.097	0.045	mg/Kg		04/06/22 18:20	04/08/22 12:19	1
m-Nitrotoluene	0.048	U M	0.097	0.042	mg/Kg		04/06/22 18:20	04/08/22 12:19	1
Nitrobenzene	0.048	U	0.11	0.037	mg/Kg		04/06/22 18:20	04/08/22 12:19	1
Nitroglycerin	0.048	U M	0.097	0.028	mg/Kg		04/06/22 18:20	04/08/22 12:19	1
o-Nitrotoluene	0.048	U M	0.097	0.041	mg/Kg		04/06/22 18:20	04/08/22 12:19	1
PETN	0.048	U	0.097	0.033	mg/Kg		04/06/22 18:20	04/08/22 12:19	1
p-Nitrotoluene	0.048	U M	0.097	0.048	mg/Kg		04/06/22 18:20	04/08/22 12:19	1
RDX	0.048	U	0.12	0.042	mg/Kg		04/06/22 18:20	04/08/22 12:19	1
Tetryl	0.048	U Q	0.097	0.037	mg/Kg		04/06/22 18:20	04/08/22 12:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*107*		*68 - 140*	*04/06/22 18:20*	*04/08/22 12:19*	*1*

Client Sample ID: 29SB177 (14.5-15)
Lab Sample ID: 280-160190-17
Date Collected: 03/24/22 11:50
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.049	U M	0.097	0.044	mg/Kg		04/06/22 18:20	04/08/22 12:26	1
1,3-Dinitrobenzene	0.049	U	0.097	0.043	mg/Kg		04/06/22 18:20	04/08/22 12:26	1
2,4,6-Trinitrotoluene	0.049	U	0.097	0.036	mg/Kg		04/06/22 18:20	04/08/22 12:26	1
2,6-Dinitrotoluene	**0.51**		0.097	0.039	mg/Kg		04/06/22 18:20	04/08/22 12:26	1
2-Amino-4,6-dinitrotoluene	0.049	U M	0.097	0.048	mg/Kg		04/06/22 18:20	04/08/22 12:26	1
4-Amino-2,6-dinitrotoluene	0.049	U M	0.097	0.030	mg/Kg		04/06/22 18:20	04/08/22 12:26	1
HMX	0.049	U Q	0.097	0.045	mg/Kg		04/06/22 18:20	04/08/22 12:26	1
m-Nitrotoluene	**0.11**	**M**	0.097	0.042	mg/Kg		04/06/22 18:20	04/08/22 12:26	1
Nitrobenzene	0.049	U	0.11	0.037	mg/Kg		04/06/22 18:20	04/08/22 12:26	1
Nitroglycerin	0.049	U	0.097	0.028	mg/Kg		04/06/22 18:20	04/08/22 12:26	1
o-Nitrotoluene	**0.52**	**M**	0.097	0.042	mg/Kg		04/06/22 18:20	04/08/22 12:26	1
PETN	0.049	U	0.097	0.033	mg/Kg		04/06/22 18:20	04/08/22 12:26	1
p-Nitrotoluene	**0.98**	**M**	0.097	0.048	mg/Kg		04/06/22 18:20	04/08/22 12:26	1
RDX	0.049	U	0.12	0.042	mg/Kg		04/06/22 18:20	04/08/22 12:26	1
Tetryl	0.049	U Q	0.097	0.038	mg/Kg		04/06/22 18:20	04/08/22 12:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*95*		*68 - 140*	*04/06/22 18:20*	*04/08/22 12:26*	*1*

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	**2.2**	**D**	0.97	0.45	mg/Kg		04/06/22 18:20	04/12/22 21:14	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*91*	*D*	*68 - 140*	*04/06/22 18:20*	*04/12/22 21:14*	*10*

Client Sample Results

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB168 (3-4)
Lab Sample ID: 280-160190-18
Date Collected: 03/24/22 11:55
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**0.22**		0.097	0.044	mg/Kg		04/06/22 18:20	04/08/22 12:32	1
1,3-Dinitrobenzene	0.049	U	0.097	0.044	mg/Kg		04/06/22 18:20	04/08/22 12:32	1
2,6-Dinitrotoluene	**0.10**		0.097	0.039	mg/Kg		04/06/22 18:20	04/08/22 12:32	1
2-Amino-4,6-dinitrotoluene	**0.088**	**J M**	0.097	0.048	mg/Kg		04/06/22 18:20	04/08/22 12:32	1
4-Amino-2,6-dinitrotoluene	**0.078**	**J M**	0.097	0.030	mg/Kg		04/06/22 18:20	04/08/22 12:32	1
HMX	0.049	U M Q	0.097	0.045	mg/Kg		04/06/22 18:20	04/08/22 12:32	1
m-Nitrotoluene	0.049	U M	0.097	0.042	mg/Kg		04/06/22 18:20	04/08/22 12:32	1
Nitrobenzene	0.049	U	0.11	0.037	mg/Kg		04/06/22 18:20	04/08/22 12:32	1
Nitroglycerin	0.049	U	0.097	0.028	mg/Kg		04/06/22 18:20	04/08/22 12:32	1
o-Nitrotoluene	**0.055**	**J M**	0.097	0.042	mg/Kg		04/06/22 18:20	04/08/22 12:32	1
PETN	0.049	U	0.097	0.033	mg/Kg		04/06/22 18:20	04/08/22 12:32	1
p-Nitrotoluene	**0.11**	**M**	0.097	0.048	mg/Kg		04/06/22 18:20	04/08/22 12:32	1
RDX	0.049	U	0.12	0.042	mg/Kg		04/06/22 18:20	04/08/22 12:32	1
Tetryl	0.049	U Q	0.097	0.038	mg/Kg		04/06/22 18:20	04/08/22 12:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*98*		*68 - 140*	*04/06/22 18:20*	*04/08/22 12:32*	*1*

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,6-Trinitrotoluene	**1.8**	**D**	0.97	0.36	mg/Kg		04/06/22 18:20	04/12/22 21:26	10
2,4-Dinitrotoluene	**1.0**	**D**	0.97	0.45	mg/Kg		04/06/22 18:20	04/12/22 21:26	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*85*	*D*	*68 - 140*	*04/06/22 18:20*	*04/12/22 21:26*	*10*

Client Sample ID: 29SB168 (6-7)
Lab Sample ID: 280-160190-19
Date Collected: 03/24/22 11:58
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**0.13**		0.093	0.042	mg/Kg		04/06/22 18:20	04/08/22 12:39	1
1,3-Dinitrobenzene	0.047	U M	0.093	0.042	mg/Kg		04/06/22 18:20	04/08/22 12:39	1
2,6-Dinitrotoluene	**0.47**		0.093	0.038	mg/Kg		04/06/22 18:20	04/08/22 12:39	1
2-Amino-4,6-dinitrotoluene	**0.20**	**M**	0.093	0.046	mg/Kg		04/06/22 18:20	04/08/22 12:39	1
4-Amino-2,6-dinitrotoluene	**0.16**	**M**	0.093	0.029	mg/Kg		04/06/22 18:20	04/08/22 12:39	1
HMX	0.047	U M Q	0.093	0.043	mg/Kg		04/06/22 18:20	04/08/22 12:39	1
m-Nitrotoluene	**0.045**	**J M**	0.093	0.040	mg/Kg		04/06/22 18:20	04/08/22 12:39	1
Nitrobenzene	0.047	U	0.10	0.035	mg/Kg		04/06/22 18:20	04/08/22 12:39	1
Nitroglycerin	0.047	U M	0.093	0.027	mg/Kg		04/06/22 18:20	04/08/22 12:39	1
o-Nitrotoluene	**0.21**		0.093	0.040	mg/Kg		04/06/22 18:20	04/08/22 12:39	1
PETN	0.047	U	0.093	0.032	mg/Kg		04/06/22 18:20	04/08/22 12:39	1
p-Nitrotoluene	**0.15**		0.093	0.046	mg/Kg		04/06/22 18:20	04/08/22 12:39	1
RDX	0.047	U	0.11	0.040	mg/Kg		04/06/22 18:20	04/08/22 12:39	1
Tetryl	0.047	U Q J1	0.093	0.036	mg/Kg		04/06/22 18:20	04/08/22 12:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*90*		*68 - 140*	*04/06/22 18:20*	*04/08/22 12:39*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB168 (6-7)
Lab Sample ID: 280-160190-19
Date Collected: 03/24/22 11:58
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,6-Trinitrotoluene	**1.4**	**D J1**	0.93	0.34	mg/Kg		04/06/22 18:20	04/12/22 21:37	10
2,4-Dinitrotoluene	**5.1**	**D J1**	0.93	0.43	mg/Kg		04/06/22 18:20	04/12/22 21:37	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*92*	*D*	*68 - 140*	*04/06/22 18:20*	*04/12/22 21:37*	*10*

Client Sample ID: 29SB168 (11-12)
Lab Sample ID: 280-160190-20
Date Collected: 03/24/22 12:02
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**0.14**		0.095	0.043	mg/Kg		04/06/22 18:20	04/08/22 13:19	1
1,3-Dinitrobenzene	0.048	U	0.095	0.043	mg/Kg		04/06/22 18:20	04/08/22 13:19	1
2-Amino-4,6-dinitrotoluene	0.048	U M	0.095	0.047	mg/Kg		04/06/22 18:20	04/08/22 13:19	1
4-Amino-2,6-dinitrotoluene	**0.051**	**J**	0.095	0.030	mg/Kg		04/06/22 18:20	04/08/22 13:19	1
HMX	0.048	U M Q	0.095	0.044	mg/Kg		04/06/22 18:20	04/08/22 13:19	1
Nitrobenzene	0.048	U M	0.10	0.036	mg/Kg		04/06/22 18:20	04/08/22 13:19	1
Nitroglycerin	0.048	U	0.095	0.028	mg/Kg		04/06/22 18:20	04/08/22 13:19	1
PETN	0.048	U	0.095	0.032	mg/Kg		04/06/22 18:20	04/08/22 13:19	1
RDX	**0.16**		0.11	0.041	mg/Kg		04/06/22 18:20	04/08/22 13:19	1
Tetryl	0.048	U Q	0.095	0.037	mg/Kg		04/06/22 18:20	04/08/22 13:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*130*		*68 - 140*	*04/06/22 18:20*	*04/08/22 13:19*	*1*

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,6-Trinitrotoluene	**3.3**	**D**	0.95	0.35	mg/Kg		04/06/22 18:20	04/12/22 22:35	10
2,6-Dinitrotoluene	**4.8**	**D**	0.95	0.38	mg/Kg		04/06/22 18:20	04/12/22 22:35	10
m-Nitrotoluene	**4.0**	**D M**	0.95	0.41	mg/Kg		04/06/22 18:20	04/12/22 22:35	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*96*	*D*	*68 - 140*	*04/06/22 18:20*	*04/12/22 22:35*	*10*

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) - DL2

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	**31**	**D**	4.8	2.2	mg/Kg		04/06/22 18:20	04/12/22 22:47	50
o-Nitrotoluene	**23**	**D M**	4.8	2.0	mg/Kg		04/06/22 18:20	04/12/22 22:47	50
p-Nitrotoluene	**24**	**D M**	4.8	2.4	mg/Kg		04/06/22 18:20	04/12/22 22:47	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*71*	*M D*	*68 - 140*	*04/06/22 18:20*	*04/12/22 22:47*	*50*

Client Sample ID: 29SB168 (14.5-15)
Lab Sample ID: 280-160190-21
Date Collected: 03/24/22 12:04
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.047	U	0.094	0.042	mg/Kg		04/06/22 18:20	04/08/22 13:25	1
1,3-Dinitrobenzene	0.047	U	0.094	0.042	mg/Kg		04/06/22 18:20	04/08/22 13:25	1

Client Sample Results

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB168 (14.5-15)
Lab Sample ID: 280-160190-21
Date Collected: 03/24/22 12:04
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,6-Trinitrotoluene	0.047	U	0.094	0.035	mg/Kg		04/06/22 18:20	04/08/22 13:25	1
2,4-Dinitrotoluene	**0.19**		0.094	0.044	mg/Kg		04/06/22 18:20	04/08/22 13:25	1
2,6-Dinitrotoluene	0.047	U	0.094	0.038	mg/Kg		04/06/22 18:20	04/08/22 13:25	1
2-Amino-4,6-dinitrotoluene	0.047	U	0.094	0.047	mg/Kg		04/06/22 18:20	04/08/22 13:25	1
4-Amino-2,6-dinitrotoluene	0.047	U	0.094	0.029	mg/Kg		04/06/22 18:20	04/08/22 13:25	1
HMX	0.047	U Q	0.094	0.043	mg/Kg		04/06/22 18:20	04/08/22 13:25	1
m-Nitrotoluene	0.047	U	0.094	0.041	mg/Kg		04/06/22 18:20	04/08/22 13:25	1
Nitrobenzene	0.047	U	0.10	0.036	mg/Kg		04/06/22 18:20	04/08/22 13:25	1
Nitroglycerin	0.047	U	0.094	0.027	mg/Kg		04/06/22 18:20	04/08/22 13:25	1
o-Nitrotoluene	**0.069**	**J**	0.094	0.040	mg/Kg		04/06/22 18:20	04/08/22 13:25	1
PETN	0.047	U	0.094	0.032	mg/Kg		04/06/22 18:20	04/08/22 13:25	1
p-Nitrotoluene	**0.093**	**J**	0.094	0.047	mg/Kg		04/06/22 18:20	04/08/22 13:25	1
RDX	0.047	U	0.11	0.041	mg/Kg		04/06/22 18:20	04/08/22 13:25	1
Tetryl	0.047	U Q	0.094	0.037	mg/Kg		04/06/22 18:20	04/08/22 13:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*98*		*68 - 140*	*04/06/22 18:20*	*04/08/22 13:25*	*1*

Client Sample ID: 29SB169 (3-4)
Lab Sample ID: 280-160190-22
Date Collected: 03/24/22 12:11
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.048	U	0.096	0.043	mg/Kg		04/06/22 18:20	04/08/22 13:32	1
1,3-Dinitrobenzene	0.048	U	0.096	0.043	mg/Kg		04/06/22 18:20	04/08/22 13:32	1
2,4,6-Trinitrotoluene	0.048	U	0.096	0.035	mg/Kg		04/06/22 18:20	04/08/22 13:32	1
2,4-Dinitrotoluene	0.048	U	0.096	0.045	mg/Kg		04/06/22 18:20	04/08/22 13:32	1
2,6-Dinitrotoluene	0.048	U	0.096	0.039	mg/Kg		04/06/22 18:20	04/08/22 13:32	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.096	0.048	mg/Kg		04/06/22 18:20	04/08/22 13:32	1
4-Amino-2,6-dinitrotoluene	0.048	U	0.096	0.030	mg/Kg		04/06/22 18:20	04/08/22 13:32	1
HMX	0.048	U Q	0.096	0.044	mg/Kg		04/06/22 18:20	04/08/22 13:32	1
m-Nitrotoluene	0.048	U	0.096	0.041	mg/Kg		04/06/22 18:20	04/08/22 13:32	1
Nitrobenzene	0.048	U	0.11	0.036	mg/Kg		04/06/22 18:20	04/08/22 13:32	1
Nitroglycerin	0.048	U	0.096	0.028	mg/Kg		04/06/22 18:20	04/08/22 13:32	1
o-Nitrotoluene	0.048	U	0.096	0.041	mg/Kg		04/06/22 18:20	04/08/22 13:32	1
PETN	0.048	U	0.096	0.033	mg/Kg		04/06/22 18:20	04/08/22 13:32	1
p-Nitrotoluene	0.048	U	0.096	0.047	mg/Kg		04/06/22 18:20	04/08/22 13:32	1
RDX	0.048	U	0.12	0.041	mg/Kg		04/06/22 18:20	04/08/22 13:32	1
Tetryl	0.048	U Q	0.096	0.037	mg/Kg		04/06/22 18:20	04/08/22 13:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*106*		*68 - 140*	*04/06/22 18:20*	*04/08/22 13:32*	*1*

Client Sample ID: 29SB169 (6-7)
Lab Sample ID: 280-160190-23
Date Collected: 03/24/22 12:13
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.050	U	0.099	0.044	mg/Kg		04/06/22 18:20	04/08/22 13:38	1

Client Sample Results

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB169 (6-7)
Lab Sample ID: 280-160190-23
Date Collected: 03/24/22 12:13
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dinitrobenzene	0.050	U	0.099	0.044	mg/Kg		04/06/22 18:20	04/08/22 13:38	1
2,4,6-Trinitrotoluene	**0.22**		0.099	0.037	mg/Kg		04/06/22 18:20	04/08/22 13:38	1
2,4-Dinitrotoluene	**0.75**	**M**	0.099	0.046	mg/Kg		04/06/22 18:20	04/08/22 13:38	1
2,6-Dinitrotoluene	0.050	U M	0.099	0.040	mg/Kg		04/06/22 18:20	04/08/22 13:38	1
2-Amino-4,6-dinitrotoluene	0.050	U M	0.099	0.049	mg/Kg		04/06/22 18:20	04/08/22 13:38	1
4-Amino-2,6-dinitrotoluene	0.050	U M	0.099	0.031	mg/Kg		04/06/22 18:20	04/08/22 13:38	1
HMX	0.050	U Q	0.099	0.046	mg/Kg		04/06/22 18:20	04/08/22 13:38	1
m-Nitrotoluene	0.050	U	0.099	0.043	mg/Kg		04/06/22 18:20	04/08/22 13:38	1
Nitrobenzene	0.050	U	0.11	0.038	mg/Kg		04/06/22 18:20	04/08/22 13:38	1
Nitroglycerin	0.050	U	0.099	0.029	mg/Kg		04/06/22 18:20	04/08/22 13:38	1
o-Nitrotoluene	0.050	U	0.099	0.043	mg/Kg		04/06/22 18:20	04/08/22 13:38	1
PETN	0.050	U	0.099	0.034	mg/Kg		04/06/22 18:20	04/08/22 13:38	1
p-Nitrotoluene	0.050	U	0.099	0.049	mg/Kg		04/06/22 18:20	04/08/22 13:38	1
RDX	0.050	U	0.12	0.043	mg/Kg		04/06/22 18:20	04/08/22 13:38	1
Tetryl	0.050	U Q	0.099	0.039	mg/Kg		04/06/22 18:20	04/08/22 13:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*94*		*68 - 140*	*04/06/22 18:20*	*04/08/22 13:38*	*1*

Client Sample ID: 29SB169 (11-12)
Lab Sample ID: 280-160190-24
Date Collected: 03/24/22 12:15
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.048	U	0.097	0.043	mg/Kg		04/06/22 18:20	04/08/22 13:45	1
1,3-Dinitrobenzene	0.048	U	0.097	0.043	mg/Kg		04/06/22 18:20	04/08/22 13:45	1
2,4,6-Trinitrotoluene	0.048	U	0.097	0.036	mg/Kg		04/06/22 18:20	04/08/22 13:45	1
2,4-Dinitrotoluene	**0.14**		0.097	0.045	mg/Kg		04/06/22 18:20	04/08/22 13:45	1
2,6-Dinitrotoluene	0.048	U	0.097	0.039	mg/Kg		04/06/22 18:20	04/08/22 13:45	1
2-Amino-4,6-dinitrotoluene	0.048	U M	0.097	0.048	mg/Kg		04/06/22 18:20	04/08/22 13:45	1
4-Amino-2,6-dinitrotoluene	0.048	U M	0.097	0.030	mg/Kg		04/06/22 18:20	04/08/22 13:45	1
HMX	0.048	U Q	0.097	0.045	mg/Kg		04/06/22 18:20	04/08/22 13:45	1
m-Nitrotoluene	0.048	U	0.097	0.042	mg/Kg		04/06/22 18:20	04/08/22 13:45	1
Nitrobenzene	0.048	U M	0.11	0.037	mg/Kg		04/06/22 18:20	04/08/22 13:45	1
Nitroglycerin	0.048	U	0.097	0.028	mg/Kg		04/06/22 18:20	04/08/22 13:45	1
o-Nitrotoluene	0.048	U M	0.097	0.041	mg/Kg		04/06/22 18:20	04/08/22 13:45	1
PETN	0.048	U	0.097	0.033	mg/Kg		04/06/22 18:20	04/08/22 13:45	1
p-Nitrotoluene	0.048	U M	0.097	0.048	mg/Kg		04/06/22 18:20	04/08/22 13:45	1
RDX	0.048	U	0.12	0.042	mg/Kg		04/06/22 18:20	04/08/22 13:45	1
Tetryl	0.048	U Q	0.097	0.038	mg/Kg		04/06/22 18:20	04/08/22 13:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*102*		*68 - 140*	*04/06/22 18:20*	*04/08/22 13:45*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB169 (14.5-15)
Lab Sample ID: 280-160190-25
Date Collected: 03/24/22 12:17
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.047	U	0.093	0.042	mg/Kg		04/06/22 18:20	04/08/22 13:52	1
1,3-Dinitrobenzene	0.047	U	0.093	0.042	mg/Kg		04/06/22 18:20	04/08/22 13:52	1
2,4,6-Trinitrotoluene	0.047	U	0.093	0.034	mg/Kg		04/06/22 18:20	04/08/22 13:52	1
2,4-Dinitrotoluene	**0.11**		0.093	0.043	mg/Kg		04/06/22 18:20	04/08/22 13:52	1
2,6-Dinitrotoluene	0.047	U	0.093	0.038	mg/Kg		04/06/22 18:20	04/08/22 13:52	1
2-Amino-4,6-dinitrotoluene	0.047	U M	0.093	0.046	mg/Kg		04/06/22 18:20	04/08/22 13:52	1
4-Amino-2,6-dinitrotoluene	0.047	U	0.093	0.029	mg/Kg		04/06/22 18:20	04/08/22 13:52	1
HMX	0.047	U Q	0.093	0.043	mg/Kg		04/06/22 18:20	04/08/22 13:52	1
m-Nitrotoluene	0.047	U	0.093	0.040	mg/Kg		04/06/22 18:20	04/08/22 13:52	1
Nitrobenzene	0.047	U	0.10	0.035	mg/Kg		04/06/22 18:20	04/08/22 13:52	1
Nitroglycerin	0.047	U	0.093	0.027	mg/Kg		04/06/22 18:20	04/08/22 13:52	1
o-Nitrotoluene	0.047	U	0.093	0.040	mg/Kg		04/06/22 18:20	04/08/22 13:52	1
PETN	0.047	U	0.093	0.032	mg/Kg		04/06/22 18:20	04/08/22 13:52	1
p-Nitrotoluene	0.047	U	0.093	0.046	mg/Kg		04/06/22 18:20	04/08/22 13:52	1
RDX	0.047	U	0.11	0.040	mg/Kg		04/06/22 18:20	04/08/22 13:52	1
Tetryl	0.047	U Q	0.093	0.036	mg/Kg		04/06/22 18:20	04/08/22 13:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*94*		*68 - 140*	*04/06/22 18:20*	*04/08/22 13:52*	*1*

Client Sample ID: DUP-07
Lab Sample ID: 280-160190-26
Date Collected: 03/24/22 13:00
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.046	U	0.092	0.041	mg/Kg		04/06/22 18:20	04/08/22 13:58	1
1,3-Dinitrobenzene	0.046	U	0.092	0.041	mg/Kg		04/06/22 18:20	04/08/22 13:58	1
2,4,6-Trinitrotoluene	**0.25**		0.092	0.034	mg/Kg		04/06/22 18:20	04/08/22 13:58	1
2,4-Dinitrotoluene	**0.76**	**M**	0.092	0.043	mg/Kg		04/06/22 18:20	04/08/22 13:58	1
2,6-Dinitrotoluene	0.046	U M	0.092	0.037	mg/Kg		04/06/22 18:20	04/08/22 13:58	1
2-Amino-4,6-dinitrotoluene	0.046	U M	0.092	0.046	mg/Kg		04/06/22 18:20	04/08/22 13:58	1
4-Amino-2,6-dinitrotoluene	0.046	U M	0.092	0.029	mg/Kg		04/06/22 18:20	04/08/22 13:58	1
HMX	0.046	U M Q	0.092	0.043	mg/Kg		04/06/22 18:20	04/08/22 13:58	1
m-Nitrotoluene	0.046	U	0.092	0.040	mg/Kg		04/06/22 18:20	04/08/22 13:58	1
Nitrobenzene	0.046	U	0.10	0.035	mg/Kg		04/06/22 18:20	04/08/22 13:58	1
Nitroglycerin	0.046	U	0.092	0.027	mg/Kg		04/06/22 18:20	04/08/22 13:58	1
o-Nitrotoluene	0.046	U	0.092	0.039	mg/Kg		04/06/22 18:20	04/08/22 13:58	1
PETN	0.046	U	0.092	0.031	mg/Kg		04/06/22 18:20	04/08/22 13:58	1
p-Nitrotoluene	0.046	U	0.092	0.046	mg/Kg		04/06/22 18:20	04/08/22 13:58	1
RDX	0.046	U	0.11	0.040	mg/Kg		04/06/22 18:20	04/08/22 13:58	1
Tetryl	0.046	U Q	0.092	0.036	mg/Kg		04/06/22 18:20	04/08/22 13:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*98*		*68 - 140*	*04/06/22 18:20*	*04/08/22 13:58*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB170 (3-4)
Lab Sample ID: 280-160190-27
Date Collected: 03/24/22 12:30
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.049	U	0.097	0.044	mg/Kg		04/06/22 18:20	04/08/22 14:05	1
1,3-Dinitrobenzene	0.049	U	0.097	0.044	mg/Kg		04/06/22 18:20	04/08/22 14:05	1
2,4,6-Trinitrotoluene	0.049	U	0.097	0.036	mg/Kg		04/06/22 18:20	04/08/22 14:05	1
2,4-Dinitrotoluene	0.049	U M	0.097	0.045	mg/Kg		04/06/22 18:20	04/08/22 14:05	1
2,6-Dinitrotoluene	0.049	U	0.097	0.039	mg/Kg		04/06/22 18:20	04/08/22 14:05	1
2-Amino-4,6-dinitrotoluene	0.049	U	0.097	0.048	mg/Kg		04/06/22 18:20	04/08/22 14:05	1
4-Amino-2,6-dinitrotoluene	0.049	U	0.097	0.030	mg/Kg		04/06/22 18:20	04/08/22 14:05	1
HMX	0.049	U Q	0.097	0.045	mg/Kg		04/06/22 18:20	04/08/22 14:05	1
m-Nitrotoluene	0.049	U	0.097	0.042	mg/Kg		04/06/22 18:20	04/08/22 14:05	1
Nitrobenzene	0.049	U	0.11	0.037	mg/Kg		04/06/22 18:20	04/08/22 14:05	1
Nitroglycerin	0.049	U	0.097	0.028	mg/Kg		04/06/22 18:20	04/08/22 14:05	1
o-Nitrotoluene	0.049	U	0.097	0.042	mg/Kg		04/06/22 18:20	04/08/22 14:05	1
PETN	0.049	U	0.097	0.033	mg/Kg		04/06/22 18:20	04/08/22 14:05	1
p-Nitrotoluene	0.049	U	0.097	0.048	mg/Kg		04/06/22 18:20	04/08/22 14:05	1
RDX	0.049	U M	0.12	0.042	mg/Kg		04/06/22 18:20	04/08/22 14:05	1
Tetryl	0.049	U Q	0.097	0.038	mg/Kg		04/06/22 18:20	04/08/22 14:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*102*		*68 - 140*	*04/06/22 18:20*	*04/08/22 14:05*	*1*

Client Sample ID: 29SB170 (6-7)
Lab Sample ID: 280-160190-28
Date Collected: 03/24/22 12:35
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.047	U M	0.095	0.043	mg/Kg		04/06/22 18:23	04/14/22 14:00	1
1,3-Dinitrobenzene	0.047	U	0.095	0.042	mg/Kg		04/06/22 18:23	04/14/22 14:00	1
2,4,6-Trinitrotoluene	**0.15**		0.095	0.035	mg/Kg		04/06/22 18:23	04/14/22 14:00	1
2,4-Dinitrotoluene	**0.37**	**M**	0.095	0.044	mg/Kg		04/06/22 18:23	04/14/22 14:00	1
2,6-Dinitrotoluene	0.047	U M	0.095	0.038	mg/Kg		04/06/22 18:23	04/14/22 14:00	1
2-Amino-4,6-dinitrotoluene	0.047	U M	0.095	0.047	mg/Kg		04/06/22 18:23	04/14/22 14:00	1
4-Amino-2,6-dinitrotoluene	0.047	U J1	0.095	0.030	mg/Kg		04/06/22 18:23	04/14/22 14:00	1
HMX	0.047	U M	0.095	0.044	mg/Kg		04/06/22 18:23	04/14/22 14:00	1
m-Nitrotoluene	0.047	U	0.095	0.041	mg/Kg		04/06/22 18:23	04/14/22 14:00	1
Nitrobenzene	0.047	U	0.10	0.036	mg/Kg		04/06/22 18:23	04/14/22 14:00	1
Nitroglycerin	0.047	U	0.095	0.028	mg/Kg		04/06/22 18:23	04/14/22 14:00	1
o-Nitrotoluene	0.047	U	0.095	0.041	mg/Kg		04/06/22 18:23	04/14/22 14:00	1
PETN	0.047	U	0.095	0.032	mg/Kg		04/06/22 18:23	04/14/22 14:00	1
p-Nitrotoluene	0.047	U	0.095	0.047	mg/Kg		04/06/22 18:23	04/14/22 14:00	1
RDX	0.047	U	0.11	0.041	mg/Kg		04/06/22 18:23	04/14/22 14:00	1
Tetryl	0.047	U Q J1	0.095	0.037	mg/Kg		04/06/22 18:23	04/14/22 14:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*100*		*68 - 140*	*04/06/22 18:23*	*04/14/22 14:00*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB170 (11-12)
Lab Sample ID: 280-160190-29
Date Collected: 03/24/22 12:37
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.049	U	0.098	0.044	mg/Kg		04/06/22 18:23	04/14/22 14:19	1
1,3-Dinitrobenzene	0.049	U	0.098	0.044	mg/Kg		04/06/22 18:23	04/14/22 14:19	1
2,4,6-Trinitrotoluene	0.049	U	0.098	0.036	mg/Kg		04/06/22 18:23	04/14/22 14:19	1
2,4-Dinitrotoluene	0.049	U	0.098	0.046	mg/Kg		04/06/22 18:23	04/14/22 14:19	1
2,6-Dinitrotoluene	0.049	U	0.098	0.040	mg/Kg		04/06/22 18:23	04/14/22 14:19	1
2-Amino-4,6-dinitrotoluene	0.049	U	0.098	0.049	mg/Kg		04/06/22 18:23	04/14/22 14:19	1
4-Amino-2,6-dinitrotoluene	0.049	U	0.098	0.030	mg/Kg		04/06/22 18:23	04/14/22 14:19	1
HMX	0.049	U	0.098	0.045	mg/Kg		04/06/22 18:23	04/14/22 14:19	1
m-Nitrotoluene	0.049	U	0.098	0.042	mg/Kg		04/06/22 18:23	04/14/22 14:19	1
Nitrobenzene	0.049	U	0.11	0.037	mg/Kg		04/06/22 18:23	04/14/22 14:19	1
Nitroglycerin	0.049	U	0.098	0.028	mg/Kg		04/06/22 18:23	04/14/22 14:19	1
o-Nitrotoluene	0.049	U M	0.098	0.042	mg/Kg		04/06/22 18:23	04/14/22 14:19	1
PETN	0.049	U	0.098	0.033	mg/Kg		04/06/22 18:23	04/14/22 14:19	1
p-Nitrotoluene	0.049	U M	0.098	0.048	mg/Kg		04/06/22 18:23	04/14/22 14:19	1
RDX	0.049	U	0.12	0.042	mg/Kg		04/06/22 18:23	04/14/22 14:19	1
Tetryl	0.049	U Q	0.098	0.038	mg/Kg		04/06/22 18:23	04/14/22 14:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*90*		*68 - 140*	*04/06/22 18:23*	*04/14/22 14:19*	*1*

Client Sample ID: 29SB170 (14.5-15)
Lab Sample ID: 280-160190-30
Date Collected: 03/24/22 12:40
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.048	U M	0.097	0.043	mg/Kg		04/06/22 18:23	04/14/22 14:46	1
1,3-Dinitrobenzene	0.048	U	0.097	0.043	mg/Kg		04/06/22 18:23	04/14/22 14:46	1
2,4,6-Trinitrotoluene	0.048	U	0.097	0.036	mg/Kg		04/06/22 18:23	04/14/22 14:46	1
2,4-Dinitrotoluene	**0.079**	**J M**	0.097	0.045	mg/Kg		04/06/22 18:23	04/14/22 14:46	1
2,6-Dinitrotoluene	0.048	U M	0.097	0.039	mg/Kg		04/06/22 18:23	04/14/22 14:46	1
2-Amino-4,6-dinitrotoluene	0.048	U M	0.097	0.048	mg/Kg		04/06/22 18:23	04/14/22 14:46	1
4-Amino-2,6-dinitrotoluene	0.048	U	0.097	0.030	mg/Kg		04/06/22 18:23	04/14/22 14:46	1
HMX	0.048	U	0.097	0.045	mg/Kg		04/06/22 18:23	04/14/22 14:46	1
m-Nitrotoluene	0.048	U	0.097	0.042	mg/Kg		04/06/22 18:23	04/14/22 14:46	1
Nitrobenzene	0.048	U	0.11	0.037	mg/Kg		04/06/22 18:23	04/14/22 14:46	1
Nitroglycerin	0.048	U M	0.097	0.028	mg/Kg		04/06/22 18:23	04/14/22 14:46	1
o-Nitrotoluene	0.048	U M	0.097	0.041	mg/Kg		04/06/22 18:23	04/14/22 14:46	1
PETN	0.048	U	0.097	0.033	mg/Kg		04/06/22 18:23	04/14/22 14:46	1
p-Nitrotoluene	0.048	U M	0.097	0.048	mg/Kg		04/06/22 18:23	04/14/22 14:46	1
RDX	0.048	U	0.12	0.042	mg/Kg		04/06/22 18:23	04/14/22 14:46	1
Tetryl	0.048	U Q	0.097	0.038	mg/Kg		04/06/22 18:23	04/14/22 14:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*95*		*68 - 140*	*04/06/22 18:23*	*04/14/22 14:46*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB171 (3-4)
Lab Sample ID: 280-160190-31
Date Collected: 03/24/22 12:48
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.049	U	0.097	0.043	mg/Kg		04/06/22 18:23	04/14/22 14:52	1
1,3-Dinitrobenzene	0.049	U	0.097	0.043	mg/Kg		04/06/22 18:23	04/14/22 14:52	1
2,4,6-Trinitrotoluene	0.049	U	0.097	0.036	mg/Kg		04/06/22 18:23	04/14/22 14:52	1
2,4-Dinitrotoluene	0.049	U	0.097	0.045	mg/Kg		04/06/22 18:23	04/14/22 14:52	1
2,6-Dinitrotoluene	0.049	U	0.097	0.039	mg/Kg		04/06/22 18:23	04/14/22 14:52	1
2-Amino-4,6-dinitrotoluene	0.049	U	0.097	0.048	mg/Kg		04/06/22 18:23	04/14/22 14:52	1
4-Amino-2,6-dinitrotoluene	0.049	U	0.097	0.030	mg/Kg		04/06/22 18:23	04/14/22 14:52	1
HMX	0.049	U M	0.097	0.045	mg/Kg		04/06/22 18:23	04/14/22 14:52	1
m-Nitrotoluene	0.049	U	0.097	0.042	mg/Kg		04/06/22 18:23	04/14/22 14:52	1
Nitrobenzene	0.049	U	0.11	0.037	mg/Kg		04/06/22 18:23	04/14/22 14:52	1
Nitroglycerin	0.049	U	0.097	0.028	mg/Kg		04/06/22 18:23	04/14/22 14:52	1
o-Nitrotoluene	0.049	U	0.097	0.042	mg/Kg		04/06/22 18:23	04/14/22 14:52	1
PETN	0.049	U	0.097	0.033	mg/Kg		04/06/22 18:23	04/14/22 14:52	1
p-Nitrotoluene	0.049	U	0.097	0.048	mg/Kg		04/06/22 18:23	04/14/22 14:52	1
RDX	0.049	U	0.12	0.042	mg/Kg		04/06/22 18:23	04/14/22 14:52	1
Tetryl	0.049	U Q	0.097	0.038	mg/Kg		04/06/22 18:23	04/14/22 14:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*94*		*68 - 140*	*04/06/22 18:23*	*04/14/22 14:52*	*1*

Client Sample ID: 29SB171 (6-7)
Lab Sample ID: 280-160190-32
Date Collected: 03/24/22 12:50
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.050	U	0.10	0.045	mg/Kg		04/06/22 18:23	04/14/22 14:59	1
1,3-Dinitrobenzene	0.050	U	0.10	0.044	mg/Kg		04/06/22 18:23	04/14/22 14:59	1
2,4,6-Trinitrotoluene	0.050	U	0.10	0.037	mg/Kg		04/06/22 18:23	04/14/22 14:59	1
2,4-Dinitrotoluene	**0.066**	**J**	0.10	0.046	mg/Kg		04/06/22 18:23	04/14/22 14:59	1
2,6-Dinitrotoluene	0.050	U	0.10	0.040	mg/Kg		04/06/22 18:23	04/14/22 14:59	1
2-Amino-4,6-dinitrotoluene	0.050	U	0.10	0.049	mg/Kg		04/06/22 18:23	04/14/22 14:59	1
4-Amino-2,6-dinitrotoluene	0.050	U	0.10	0.031	mg/Kg		04/06/22 18:23	04/14/22 14:59	1
HMX	0.050	U M	0.10	0.046	mg/Kg		04/06/22 18:23	04/14/22 14:59	1
m-Nitrotoluene	0.050	U	0.10	0.043	mg/Kg		04/06/22 18:23	04/14/22 14:59	1
Nitrobenzene	0.050	U	0.11	0.038	mg/Kg		04/06/22 18:23	04/14/22 14:59	1
Nitroglycerin	0.050	U	0.10	0.029	mg/Kg		04/06/22 18:23	04/14/22 14:59	1
o-Nitrotoluene	0.050	U M	0.10	0.043	mg/Kg		04/06/22 18:23	04/14/22 14:59	1
PETN	0.050	U	0.10	0.034	mg/Kg		04/06/22 18:23	04/14/22 14:59	1
p-Nitrotoluene	0.050	U M	0.10	0.049	mg/Kg		04/06/22 18:23	04/14/22 14:59	1
RDX	0.050	U	0.12	0.043	mg/Kg		04/06/22 18:23	04/14/22 14:59	1
Tetryl	0.050	U Q	0.10	0.039	mg/Kg		04/06/22 18:23	04/14/22 14:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*89*		*68 - 140*	*04/06/22 18:23*	*04/14/22 14:59*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB171 (11-12)
Lab Sample ID: 280-160190-33
Date Collected: 03/24/22 12:52
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.049	U	0.099	0.044	mg/Kg		04/06/22 18:23	04/14/22 15:06	1
1,3-Dinitrobenzene	0.049	U	0.099	0.044	mg/Kg		04/06/22 18:23	04/14/22 15:06	1
2,4,6-Trinitrotoluene	0.049	U M	0.099	0.036	mg/Kg		04/06/22 18:23	04/14/22 15:06	1
2,4-Dinitrotoluene	0.049	U	0.099	0.046	mg/Kg		04/06/22 18:23	04/14/22 15:06	1
2,6-Dinitrotoluene	0.049	U M	0.099	0.040	mg/Kg		04/06/22 18:23	04/14/22 15:06	1
2-Amino-4,6-dinitrotoluene	0.049	U	0.099	0.049	mg/Kg		04/06/22 18:23	04/14/22 15:06	1
4-Amino-2,6-dinitrotoluene	0.049	U	0.099	0.031	mg/Kg		04/06/22 18:23	04/14/22 15:06	1
HMX	0.049	U M	0.099	0.046	mg/Kg		04/06/22 18:23	04/14/22 15:06	1
m-Nitrotoluene	0.049	U	0.099	0.043	mg/Kg		04/06/22 18:23	04/14/22 15:06	1
Nitrobenzene	0.049	U	0.11	0.038	mg/Kg		04/06/22 18:23	04/14/22 15:06	1
Nitroglycerin	0.049	U	0.099	0.029	mg/Kg		04/06/22 18:23	04/14/22 15:06	1
o-Nitrotoluene	0.049	U	0.099	0.042	mg/Kg		04/06/22 18:23	04/14/22 15:06	1
PETN	0.049	U	0.099	0.034	mg/Kg		04/06/22 18:23	04/14/22 15:06	1
p-Nitrotoluene	0.049	U	0.099	0.049	mg/Kg		04/06/22 18:23	04/14/22 15:06	1
RDX	0.049	U	0.12	0.043	mg/Kg		04/06/22 18:23	04/14/22 15:06	1
Tetryl	0.049	U Q	0.099	0.038	mg/Kg		04/06/22 18:23	04/14/22 15:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*112*		*68 - 140*	*04/06/22 18:23*	*04/14/22 15:06*	*1*

Client Sample ID: 29SB171 (14.5-15)
Lab Sample ID: 280-160190-34
Date Collected: 03/24/22 12:54
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.048	U	0.095	0.043	mg/Kg		04/06/22 18:23	04/14/22 15:12	1
1,3-Dinitrobenzene	0.048	U	0.095	0.043	mg/Kg		04/06/22 18:23	04/14/22 15:12	1
2,4,6-Trinitrotoluene	0.048	U	0.095	0.035	mg/Kg		04/06/22 18:23	04/14/22 15:12	1
2,4-Dinitrotoluene	0.048	U	0.095	0.044	mg/Kg		04/06/22 18:23	04/14/22 15:12	1
2,6-Dinitrotoluene	0.048	U	0.095	0.038	mg/Kg		04/06/22 18:23	04/14/22 15:12	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.095	0.047	mg/Kg		04/06/22 18:23	04/14/22 15:12	1
4-Amino-2,6-dinitrotoluene	0.048	U	0.095	0.030	mg/Kg		04/06/22 18:23	04/14/22 15:12	1
HMX	0.048	U	0.095	0.044	mg/Kg		04/06/22 18:23	04/14/22 15:12	1
m-Nitrotoluene	0.048	U	0.095	0.041	mg/Kg		04/06/22 18:23	04/14/22 15:12	1
Nitrobenzene	0.048	U	0.10	0.036	mg/Kg		04/06/22 18:23	04/14/22 15:12	1
Nitroglycerin	0.048	U	0.095	0.028	mg/Kg		04/06/22 18:23	04/14/22 15:12	1
o-Nitrotoluene	0.048	U	0.095	0.041	mg/Kg		04/06/22 18:23	04/14/22 15:12	1
PETN	0.048	U	0.095	0.032	mg/Kg		04/06/22 18:23	04/14/22 15:12	1
p-Nitrotoluene	0.048	U	0.095	0.047	mg/Kg		04/06/22 18:23	04/14/22 15:12	1
RDX	0.048	U	0.11	0.041	mg/Kg		04/06/22 18:23	04/14/22 15:12	1
Tetryl	0.048	U Q	0.095	0.037	mg/Kg		04/06/22 18:23	04/14/22 15:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*104*		*68 - 140*	*04/06/22 18:23*	*04/14/22 15:12*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: DUP-08
Lab Sample ID: 280-160190-35
Date Collected: 03/24/22 14:00
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.048	U	0.096	0.043	mg/Kg		04/06/22 18:23	04/14/22 15:19	1
1,3-Dinitrobenzene	0.048	U	0.096	0.043	mg/Kg		04/06/22 18:23	04/14/22 15:19	1
2,4,6-Trinitrotoluene	0.048	U	0.096	0.035	mg/Kg		04/06/22 18:23	04/14/22 15:19	1
2,4-Dinitrotoluene	0.048	U	0.096	0.045	mg/Kg		04/06/22 18:23	04/14/22 15:19	1
2,6-Dinitrotoluene	0.048	U	0.096	0.039	mg/Kg		04/06/22 18:23	04/14/22 15:19	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.096	0.047	mg/Kg		04/06/22 18:23	04/14/22 15:19	1
4-Amino-2,6-dinitrotoluene	0.048	U	0.096	0.030	mg/Kg		04/06/22 18:23	04/14/22 15:19	1
HMX	0.048	U	0.096	0.044	mg/Kg		04/06/22 18:23	04/14/22 15:19	1
m-Nitrotoluene	0.048	U	0.096	0.041	mg/Kg		04/06/22 18:23	04/14/22 15:19	1
Nitrobenzene	0.048	U M	0.11	0.036	mg/Kg		04/06/22 18:23	04/14/22 15:19	1
Nitroglycerin	0.048	U	0.096	0.028	mg/Kg		04/06/22 18:23	04/14/22 15:19	1
o-Nitrotoluene	0.048	U	0.096	0.041	mg/Kg		04/06/22 18:23	04/14/22 15:19	1
PETN	0.048	U	0.096	0.033	mg/Kg		04/06/22 18:23	04/14/22 15:19	1
p-Nitrotoluene	0.048	U	0.096	0.047	mg/Kg		04/06/22 18:23	04/14/22 15:19	1
RDX	0.048	U	0.11	0.041	mg/Kg		04/06/22 18:23	04/14/22 15:19	1
Tetryl	0.048	U Q	0.096	0.037	mg/Kg		04/06/22 18:23	04/14/22 15:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*97*		*68 - 140*	*04/06/22 18:23*	*04/14/22 15:19*	*1*

Client Sample ID: 29SB174 (3-4)
Lab Sample ID: 280-160190-36
Date Collected: 03/24/22 13:10
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.047	U	0.093	0.042	mg/Kg		04/06/22 18:23	04/14/22 15:25	1
1,3-Dinitrobenzene	0.047	U	0.093	0.042	mg/Kg		04/06/22 18:23	04/14/22 15:25	1
2,4,6-Trinitrotoluene	0.047	U	0.093	0.034	mg/Kg		04/06/22 18:23	04/14/22 15:25	1
2,4-Dinitrotoluene	0.047	U	0.093	0.044	mg/Kg		04/06/22 18:23	04/14/22 15:25	1
2,6-Dinitrotoluene	0.047	U	0.093	0.038	mg/Kg		04/06/22 18:23	04/14/22 15:25	1
2-Amino-4,6-dinitrotoluene	0.047	U M	0.093	0.046	mg/Kg		04/06/22 18:23	04/14/22 15:25	1
4-Amino-2,6-dinitrotoluene	0.047	U M	0.093	0.029	mg/Kg		04/06/22 18:23	04/14/22 15:25	1
HMX	0.047	U M	0.093	0.043	mg/Kg		04/06/22 18:23	04/14/22 15:25	1
m-Nitrotoluene	0.047	U	0.093	0.040	mg/Kg		04/06/22 18:23	04/14/22 15:25	1
Nitrobenzene	0.047	U	0.10	0.036	mg/Kg		04/06/22 18:23	04/14/22 15:25	1
Nitroglycerin	0.047	U	0.093	0.027	mg/Kg		04/06/22 18:23	04/14/22 15:25	1
o-Nitrotoluene	0.047	U	0.093	0.040	mg/Kg		04/06/22 18:23	04/14/22 15:25	1
PETN	0.047	U	0.093	0.032	mg/Kg		04/06/22 18:23	04/14/22 15:25	1
p-Nitrotoluene	0.047	U	0.093	0.046	mg/Kg		04/06/22 18:23	04/14/22 15:25	1
RDX	0.047	U	0.11	0.040	mg/Kg		04/06/22 18:23	04/14/22 15:25	1
Tetryl	0.047	U Q	0.093	0.036	mg/Kg		04/06/22 18:23	04/14/22 15:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*100*		*68 - 140*	*04/06/22 18:23*	*04/14/22 15:25*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB174 (6-7)
Lab Sample ID: 280-160190-37
Date Collected: 03/24/22 13:11
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.048	U	0.096	0.043	mg/Kg		04/06/22 18:23	04/14/22 15:32	1
1,3-Dinitrobenzene	0.048	U	0.096	0.043	mg/Kg		04/06/22 18:23	04/14/22 15:32	1
2,4,6-Trinitrotoluene	0.048	U	0.096	0.035	mg/Kg		04/06/22 18:23	04/14/22 15:32	1
2,4-Dinitrotoluene	0.048	U	0.096	0.045	mg/Kg		04/06/22 18:23	04/14/22 15:32	1
2,6-Dinitrotoluene	0.048	U	0.096	0.039	mg/Kg		04/06/22 18:23	04/14/22 15:32	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.096	0.048	mg/Kg		04/06/22 18:23	04/14/22 15:32	1
4-Amino-2,6-dinitrotoluene	0.048	U	0.096	0.030	mg/Kg		04/06/22 18:23	04/14/22 15:32	1
HMX	0.048	U	0.096	0.044	mg/Kg		04/06/22 18:23	04/14/22 15:32	1
m-Nitrotoluene	0.048	U	0.096	0.042	mg/Kg		04/06/22 18:23	04/14/22 15:32	1
Nitrobenzene	0.048	U	0.11	0.037	mg/Kg		04/06/22 18:23	04/14/22 15:32	1
Nitroglycerin	0.048	U	0.096	0.028	mg/Kg		04/06/22 18:23	04/14/22 15:32	1
o-Nitrotoluene	0.048	U	0.096	0.041	mg/Kg		04/06/22 18:23	04/14/22 15:32	1
PETN	0.048	U	0.096	0.033	mg/Kg		04/06/22 18:23	04/14/22 15:32	1
p-Nitrotoluene	0.048	U	0.096	0.048	mg/Kg		04/06/22 18:23	04/14/22 15:32	1
RDX	0.048	U	0.12	0.042	mg/Kg		04/06/22 18:23	04/14/22 15:32	1
Tetryl	0.048	U Q	0.096	0.037	mg/Kg		04/06/22 18:23	04/14/22 15:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*97*		*68 - 140*	*04/06/22 18:23*	*04/14/22 15:32*	*1*

Client Sample ID: 29SB174 (11-12)
Lab Sample ID: 280-160190-38
Date Collected: 03/24/22 13:12
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.049	U	0.098	0.044	mg/Kg		04/06/22 18:23	04/14/22 15:45	1
1,3-Dinitrobenzene	0.049	U	0.098	0.044	mg/Kg		04/06/22 18:23	04/14/22 15:45	1
2,4,6-Trinitrotoluene	0.049	U	0.098	0.036	mg/Kg		04/06/22 18:23	04/14/22 15:45	1
2,4-Dinitrotoluene	0.049	U	0.098	0.046	mg/Kg		04/06/22 18:23	04/14/22 15:45	1
2,6-Dinitrotoluene	0.049	U	0.098	0.039	mg/Kg		04/06/22 18:23	04/14/22 15:45	1
2-Amino-4,6-dinitrotoluene	0.049	U	0.098	0.048	mg/Kg		04/06/22 18:23	04/14/22 15:45	1
4-Amino-2,6-dinitrotoluene	0.049	U	0.098	0.030	mg/Kg		04/06/22 18:23	04/14/22 15:45	1
HMX	0.049	U M	0.098	0.045	mg/Kg		04/06/22 18:23	04/14/22 15:45	1
m-Nitrotoluene	0.049	U	0.098	0.042	mg/Kg		04/06/22 18:23	04/14/22 15:45	1
Nitrobenzene	0.049	U	0.11	0.037	mg/Kg		04/06/22 18:23	04/14/22 15:45	1
Nitroglycerin	0.049	U	0.098	0.028	mg/Kg		04/06/22 18:23	04/14/22 15:45	1
o-Nitrotoluene	0.049	U	0.098	0.042	mg/Kg		04/06/22 18:23	04/14/22 15:45	1
PETN	0.049	U	0.098	0.033	mg/Kg		04/06/22 18:23	04/14/22 15:45	1
p-Nitrotoluene	0.049	U	0.098	0.048	mg/Kg		04/06/22 18:23	04/14/22 15:45	1
RDX	0.049	U	0.12	0.042	mg/Kg		04/06/22 18:23	04/14/22 15:45	1
Tetryl	0.049	U Q	0.098	0.038	mg/Kg		04/06/22 18:23	04/14/22 15:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*93*		*68 - 140*	*04/06/22 18:23*	*04/14/22 15:45*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB174 (14.5-15)
Lab Sample ID: 280-160190-39
Date Collected: 03/24/22 13:15
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.049	U	0.098	0.044	mg/Kg		04/06/22 18:23	04/14/22 15:52	1
1,3-Dinitrobenzene	0.049	U	0.098	0.044	mg/Kg		04/06/22 18:23	04/14/22 15:52	1
2,4,6-Trinitrotoluene	0.049	U	0.098	0.036	mg/Kg		04/06/22 18:23	04/14/22 15:52	1
2,4-Dinitrotoluene	0.049	U	0.098	0.046	mg/Kg		04/06/22 18:23	04/14/22 15:52	1
2,6-Dinitrotoluene	0.049	U	0.098	0.039	mg/Kg		04/06/22 18:23	04/14/22 15:52	1
2-Amino-4,6-dinitrotoluene	0.049	U	0.098	0.049	mg/Kg		04/06/22 18:23	04/14/22 15:52	1
4-Amino-2,6-dinitrotoluene	0.049	U	0.098	0.030	mg/Kg		04/06/22 18:23	04/14/22 15:52	1
HMX	0.049	U M	0.098	0.045	mg/Kg		04/06/22 18:23	04/14/22 15:52	1
m-Nitrotoluene	0.049	U	0.098	0.042	mg/Kg		04/06/22 18:23	04/14/22 15:52	1
Nitrobenzene	0.049	U	0.11	0.037	mg/Kg		04/06/22 18:23	04/14/22 15:52	1
Nitroglycerin	0.049	U	0.098	0.028	mg/Kg		04/06/22 18:23	04/14/22 15:52	1
o-Nitrotoluene	0.049	U	0.098	0.042	mg/Kg		04/06/22 18:23	04/14/22 15:52	1
PETN	0.049	U	0.098	0.033	mg/Kg		04/06/22 18:23	04/14/22 15:52	1
p-Nitrotoluene	0.049	U	0.098	0.048	mg/Kg		04/06/22 18:23	04/14/22 15:52	1
RDX	0.049	U	0.12	0.042	mg/Kg		04/06/22 18:23	04/14/22 15:52	1
Tetryl	0.049	U Q	0.098	0.038	mg/Kg		04/06/22 18:23	04/14/22 15:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*103*		*68 - 140*	*04/06/22 18:23*	*04/14/22 15:52*	*1*

Client Sample ID: 29SB190 (3-4)
Lab Sample ID: 280-160190-40
Date Collected: 03/24/22 13:55
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.049	U	0.099	0.044	mg/Kg		04/06/22 18:23	04/14/22 15:58	1
1,3-Dinitrobenzene	0.049	U	0.099	0.044	mg/Kg		04/06/22 18:23	04/14/22 15:58	1
2,4,6-Trinitrotoluene	0.049	U M	0.099	0.036	mg/Kg		04/06/22 18:23	04/14/22 15:58	1
2,4-Dinitrotoluene	0.049	U	0.099	0.046	mg/Kg		04/06/22 18:23	04/14/22 15:58	1
2,6-Dinitrotoluene	0.049	U	0.099	0.040	mg/Kg		04/06/22 18:23	04/14/22 15:58	1
2-Amino-4,6-dinitrotoluene	0.049	U	0.099	0.049	mg/Kg		04/06/22 18:23	04/14/22 15:58	1
4-Amino-2,6-dinitrotoluene	0.049	U	0.099	0.031	mg/Kg		04/06/22 18:23	04/14/22 15:58	1
HMX	0.049	U	0.099	0.046	mg/Kg		04/06/22 18:23	04/14/22 15:58	1
m-Nitrotoluene	0.049	U	0.099	0.043	mg/Kg		04/06/22 18:23	04/14/22 15:58	1
Nitrobenzene	0.049	U M	0.11	0.038	mg/Kg		04/06/22 18:23	04/14/22 15:58	1
Nitroglycerin	0.049	U	0.099	0.029	mg/Kg		04/06/22 18:23	04/14/22 15:58	1
o-Nitrotoluene	0.049	U	0.099	0.042	mg/Kg		04/06/22 18:23	04/14/22 15:58	1
PETN	0.049	U	0.099	0.034	mg/Kg		04/06/22 18:23	04/14/22 15:58	1
p-Nitrotoluene	0.049	U	0.099	0.049	mg/Kg		04/06/22 18:23	04/14/22 15:58	1
RDX	0.049	U	0.12	0.043	mg/Kg		04/06/22 18:23	04/14/22 15:58	1
Tetryl	0.049	U Q	0.099	0.038	mg/Kg		04/06/22 18:23	04/14/22 15:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*102*		*68 - 140*	*04/06/22 18:23*	*04/14/22 15:58*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB190 (19-20)
Lab Sample ID: 280-160190-41
Date Collected: 03/24/22 14:05
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.048	U	0.097	0.043	mg/Kg		04/06/22 18:23	04/14/22 16:05	1
1,3-Dinitrobenzene	0.048	U	0.097	0.043	mg/Kg		04/06/22 18:23	04/14/22 16:05	1
2,4,6-Trinitrotoluene	0.048	U	0.097	0.036	mg/Kg		04/06/22 18:23	04/14/22 16:05	1
2,4-Dinitrotoluene	0.048	U M	0.097	0.045	mg/Kg		04/06/22 18:23	04/14/22 16:05	1
2,6-Dinitrotoluene	0.048	U	0.097	0.039	mg/Kg		04/06/22 18:23	04/14/22 16:05	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.097	0.048	mg/Kg		04/06/22 18:23	04/14/22 16:05	1
4-Amino-2,6-dinitrotoluene	0.048	U M	0.097	0.030	mg/Kg		04/06/22 18:23	04/14/22 16:05	1
HMX	0.048	U M	0.097	0.045	mg/Kg		04/06/22 18:23	04/14/22 16:05	1
m-Nitrotoluene	0.048	U	0.097	0.042	mg/Kg		04/06/22 18:23	04/14/22 16:05	1
Nitrobenzene	0.048	U	0.11	0.037	mg/Kg		04/06/22 18:23	04/14/22 16:05	1
Nitroglycerin	0.048	U	0.097	0.028	mg/Kg		04/06/22 18:23	04/14/22 16:05	1
o-Nitrotoluene	0.048	U	0.097	0.041	mg/Kg		04/06/22 18:23	04/14/22 16:05	1
PETN	0.048	U	0.097	0.033	mg/Kg		04/06/22 18:23	04/14/22 16:05	1
p-Nitrotoluene	0.048	U	0.097	0.048	mg/Kg		04/06/22 18:23	04/14/22 16:05	1
RDX	0.048	U	0.12	0.042	mg/Kg		04/06/22 18:23	04/14/22 16:05	1
Tetryl	0.048	U Q	0.097	0.038	mg/Kg		04/06/22 18:23	04/14/22 16:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*100*		*68 - 140*	*04/06/22 18:23*	*04/14/22 16:05*	*1*

Client Sample ID: 29SB192 (7-8)
Lab Sample ID: 280-160190-42
Date Collected: 03/24/22 14:15
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.048	U	0.097	0.043	mg/Kg		04/06/22 18:23	04/14/22 16:12	1
1,3-Dinitrobenzene	0.048	U	0.097	0.043	mg/Kg		04/06/22 18:23	04/14/22 16:12	1
2,4,6-Trinitrotoluene	0.048	U	0.097	0.036	mg/Kg		04/06/22 18:23	04/14/22 16:12	1
2,4-Dinitrotoluene	0.048	U	0.097	0.045	mg/Kg		04/06/22 18:23	04/14/22 16:12	1
2,6-Dinitrotoluene	0.048	U	0.097	0.039	mg/Kg		04/06/22 18:23	04/14/22 16:12	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.097	0.048	mg/Kg		04/06/22 18:23	04/14/22 16:12	1
4-Amino-2,6-dinitrotoluene	0.048	U	0.097	0.030	mg/Kg		04/06/22 18:23	04/14/22 16:12	1
HMX	0.048	U	0.097	0.044	mg/Kg		04/06/22 18:23	04/14/22 16:12	1
m-Nitrotoluene	0.048	U	0.097	0.042	mg/Kg		04/06/22 18:23	04/14/22 16:12	1
Nitrobenzene	0.048	U	0.11	0.037	mg/Kg		04/06/22 18:23	04/14/22 16:12	1
Nitroglycerin	0.048	U	0.097	0.028	mg/Kg		04/06/22 18:23	04/14/22 16:12	1
o-Nitrotoluene	0.048	U	0.097	0.041	mg/Kg		04/06/22 18:23	04/14/22 16:12	1
PETN	0.048	U	0.097	0.033	mg/Kg		04/06/22 18:23	04/14/22 16:12	1
p-Nitrotoluene	0.048	U	0.097	0.048	mg/Kg		04/06/22 18:23	04/14/22 16:12	1
RDX	0.048	U	0.12	0.042	mg/Kg		04/06/22 18:23	04/14/22 16:12	1
Tetryl	0.048	U Q	0.097	0.037	mg/Kg		04/06/22 18:23	04/14/22 16:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*97*		*68 - 140*	*04/06/22 18:23*	*04/14/22 16:12*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB192 (11-12)
Lab Sample ID: 280-160190-43
Date Collected: 03/24/22 14:20
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.050	U	0.099	0.044	mg/Kg		04/06/22 18:23	04/14/22 16:18	1
1,3-Dinitrobenzene	0.050	U	0.099	0.044	mg/Kg		04/06/22 18:23	04/14/22 16:18	1
2,4,6-Trinitrotoluene	0.050	U	0.099	0.036	mg/Kg		04/06/22 18:23	04/14/22 16:18	1
2,4-Dinitrotoluene	0.050	U	0.099	0.046	mg/Kg		04/06/22 18:23	04/14/22 16:18	1
2,6-Dinitrotoluene	0.050	U	0.099	0.040	mg/Kg		04/06/22 18:23	04/14/22 16:18	1
2-Amino-4,6-dinitrotoluene	0.050	U M	0.099	0.049	mg/Kg		04/06/22 18:23	04/14/22 16:18	1
4-Amino-2,6-dinitrotoluene	0.050	U	0.099	0.031	mg/Kg		04/06/22 18:23	04/14/22 16:18	1
HMX	0.050	U M	0.099	0.046	mg/Kg		04/06/22 18:23	04/14/22 16:18	1
m-Nitrotoluene	0.050	U	0.099	0.043	mg/Kg		04/06/22 18:23	04/14/22 16:18	1
Nitrobenzene	0.050	U	0.11	0.038	mg/Kg		04/06/22 18:23	04/14/22 16:18	1
Nitroglycerin	0.050	U	0.099	0.029	mg/Kg		04/06/22 18:23	04/14/22 16:18	1
o-Nitrotoluene	0.050	U	0.099	0.042	mg/Kg		04/06/22 18:23	04/14/22 16:18	1
PETN	0.050	U	0.099	0.034	mg/Kg		04/06/22 18:23	04/14/22 16:18	1
p-Nitrotoluene	0.050	U	0.099	0.049	mg/Kg		04/06/22 18:23	04/14/22 16:18	1
RDX	0.050	U	0.12	0.043	mg/Kg		04/06/22 18:23	04/14/22 16:18	1
Tetryl	0.050	U Q	0.099	0.038	mg/Kg		04/06/22 18:23	04/14/22 16:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*100*		*68 - 140*	*04/06/22 18:23*	*04/14/22 16:18*	*1*

Client Sample ID: 29SB192 (15-16)
Lab Sample ID: 280-160190-44
Date Collected: 03/24/22 14:25
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.047	U M	0.094	0.042	mg/Kg		04/06/22 18:23	04/14/22 16:25	1
1,3-Dinitrobenzene	0.047	U	0.094	0.042	mg/Kg		04/06/22 18:23	04/14/22 16:25	1
2,4,6-Trinitrotoluene	0.047	U	0.094	0.035	mg/Kg		04/06/22 18:23	04/14/22 16:25	1
2,4-Dinitrotoluene	0.047	U	0.094	0.044	mg/Kg		04/06/22 18:23	04/14/22 16:25	1
2,6-Dinitrotoluene	0.047	U	0.094	0.038	mg/Kg		04/06/22 18:23	04/14/22 16:25	1
2-Amino-4,6-dinitrotoluene	0.047	U	0.094	0.047	mg/Kg		04/06/22 18:23	04/14/22 16:25	1
4-Amino-2,6-dinitrotoluene	0.047	U	0.094	0.029	mg/Kg		04/06/22 18:23	04/14/22 16:25	1
HMX	0.047	U	0.094	0.043	mg/Kg		04/06/22 18:23	04/14/22 16:25	1
m-Nitrotoluene	0.047	U	0.094	0.041	mg/Kg		04/06/22 18:23	04/14/22 16:25	1
Nitrobenzene	0.047	U	0.10	0.036	mg/Kg		04/06/22 18:23	04/14/22 16:25	1
Nitroglycerin	0.047	U	0.094	0.027	mg/Kg		04/06/22 18:23	04/14/22 16:25	1
o-Nitrotoluene	0.047	U	0.094	0.040	mg/Kg		04/06/22 18:23	04/14/22 16:25	1
PETN	0.047	U	0.094	0.032	mg/Kg		04/06/22 18:23	04/14/22 16:25	1
p-Nitrotoluene	0.047	U	0.094	0.046	mg/Kg		04/06/22 18:23	04/14/22 16:25	1
RDX	0.047	U	0.11	0.040	mg/Kg		04/06/22 18:23	04/14/22 16:25	1
Tetryl	0.047	U Q	0.094	0.036	mg/Kg		04/06/22 18:23	04/14/22 16:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*86*		*68 - 140*	*04/06/22 18:23*	*04/14/22 16:25*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB192 (19-20)
Lab Sample ID: 280-160190-45
Date Collected: 03/24/22 14:27
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.049	U	0.098	0.044	mg/Kg		04/06/22 18:23	04/14/22 16:31	1
1,3-Dinitrobenzene	0.049	U	0.098	0.044	mg/Kg		04/06/22 18:23	04/14/22 16:31	1
2,4,6-Trinitrotoluene	0.049	U	0.098	0.036	mg/Kg		04/06/22 18:23	04/14/22 16:31	1
2,4-Dinitrotoluene	0.049	U	0.098	0.046	mg/Kg		04/06/22 18:23	04/14/22 16:31	1
2,6-Dinitrotoluene	0.049	U	0.098	0.039	mg/Kg		04/06/22 18:23	04/14/22 16:31	1
2-Amino-4,6-dinitrotoluene	0.049	U	0.098	0.049	mg/Kg		04/06/22 18:23	04/14/22 16:31	1
4-Amino-2,6-dinitrotoluene	0.049	U	0.098	0.030	mg/Kg		04/06/22 18:23	04/14/22 16:31	1
HMX	0.049	U M	0.098	0.045	mg/Kg		04/06/22 18:23	04/14/22 16:31	1
m-Nitrotoluene	0.049	U	0.098	0.042	mg/Kg		04/06/22 18:23	04/14/22 16:31	1
Nitrobenzene	0.049	U M	0.11	0.037	mg/Kg		04/06/22 18:23	04/14/22 16:31	1
Nitroglycerin	0.049	U	0.098	0.028	mg/Kg		04/06/22 18:23	04/14/22 16:31	1
o-Nitrotoluene	0.049	U	0.098	0.042	mg/Kg		04/06/22 18:23	04/14/22 16:31	1
PETN	0.049	U	0.098	0.033	mg/Kg		04/06/22 18:23	04/14/22 16:31	1
p-Nitrotoluene	0.049	U	0.098	0.048	mg/Kg		04/06/22 18:23	04/14/22 16:31	1
RDX	0.049	U	0.12	0.042	mg/Kg		04/06/22 18:23	04/14/22 16:31	1
Tetryl	0.049	U Q	0.098	0.038	mg/Kg		04/06/22 18:23	04/14/22 16:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*93*		*68 - 140*	*04/06/22 18:23*	*04/14/22 16:31*	*1*

Client Sample ID: DUP-09
Lab Sample ID: 280-160190-46
Date Collected: 03/24/22 15:00
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.048	U M	0.095	0.043	mg/Kg		04/06/22 18:23	04/14/22 16:38	1
1,3-Dinitrobenzene	0.048	U	0.095	0.042	mg/Kg		04/06/22 18:23	04/14/22 16:38	1
2,4,6-Trinitrotoluene	0.048	U	0.095	0.035	mg/Kg		04/06/22 18:23	04/14/22 16:38	1
2,4-Dinitrotoluene	0.048	U	0.095	0.044	mg/Kg		04/06/22 18:23	04/14/22 16:38	1
2,6-Dinitrotoluene	0.048	U	0.095	0.038	mg/Kg		04/06/22 18:23	04/14/22 16:38	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.095	0.047	mg/Kg		04/06/22 18:23	04/14/22 16:38	1
4-Amino-2,6-dinitrotoluene	0.048	U	0.095	0.030	mg/Kg		04/06/22 18:23	04/14/22 16:38	1
HMX	0.048	U	0.095	0.044	mg/Kg		04/06/22 18:23	04/14/22 16:38	1
m-Nitrotoluene	0.048	U	0.095	0.041	mg/Kg		04/06/22 18:23	04/14/22 16:38	1
Nitrobenzene	0.048	U	0.10	0.036	mg/Kg		04/06/22 18:23	04/14/22 16:38	1
Nitroglycerin	0.048	U	0.095	0.028	mg/Kg		04/06/22 18:23	04/14/22 16:38	1
o-Nitrotoluene	0.048	U	0.095	0.041	mg/Kg		04/06/22 18:23	04/14/22 16:38	1
PETN	0.048	U	0.095	0.032	mg/Kg		04/06/22 18:23	04/14/22 16:38	1
p-Nitrotoluene	0.048	U	0.095	0.047	mg/Kg		04/06/22 18:23	04/14/22 16:38	1
RDX	0.048	U	0.11	0.041	mg/Kg		04/06/22 18:23	04/14/22 16:38	1
Tetryl	0.048	U Q	0.095	0.037	mg/Kg		04/06/22 18:23	04/14/22 16:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*100*		*68 - 140*	*04/06/22 18:23*	*04/14/22 16:38*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB193 (7-8)
Lab Sample ID: 280-160190-47
Date Collected: 03/24/22 14:40
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.047	U	0.093	0.042	mg/Kg		04/06/22 18:23	04/14/22 16:45	1
1,3-Dinitrobenzene	0.047	U	0.093	0.042	mg/Kg		04/06/22 18:23	04/14/22 16:45	1
2,4,6-Trinitrotoluene	0.047	U	0.093	0.034	mg/Kg		04/06/22 18:23	04/14/22 16:45	1
2,4-Dinitrotoluene	0.047	U	0.093	0.043	mg/Kg		04/06/22 18:23	04/14/22 16:45	1
2,6-Dinitrotoluene	0.047	U	0.093	0.037	mg/Kg		04/06/22 18:23	04/14/22 16:45	1
2-Amino-4,6-dinitrotoluene	0.047	U	0.093	0.046	mg/Kg		04/06/22 18:23	04/14/22 16:45	1
4-Amino-2,6-dinitrotoluene	0.047	U	0.093	0.029	mg/Kg		04/06/22 18:23	04/14/22 16:45	1
HMX	0.047	U	0.093	0.043	mg/Kg		04/06/22 18:23	04/14/22 16:45	1
m-Nitrotoluene	0.047	U	0.093	0.040	mg/Kg		04/06/22 18:23	04/14/22 16:45	1
Nitrobenzene	0.047	U	0.10	0.035	mg/Kg		04/06/22 18:23	04/14/22 16:45	1
Nitroglycerin	0.047	U	0.093	0.027	mg/Kg		04/06/22 18:23	04/14/22 16:45	1
o-Nitrotoluene	0.047	U	0.093	0.040	mg/Kg		04/06/22 18:23	04/14/22 16:45	1
PETN	0.047	U	0.093	0.032	mg/Kg		04/06/22 18:23	04/14/22 16:45	1
p-Nitrotoluene	0.047	U	0.093	0.046	mg/Kg		04/06/22 18:23	04/14/22 16:45	1
RDX	0.047	U	0.11	0.040	mg/Kg		04/06/22 18:23	04/14/22 16:45	1
Tetryl	0.047	U Q	0.093	0.036	mg/Kg		04/06/22 18:23	04/14/22 16:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*96*		*68 - 140*	*04/06/22 18:23*	*04/14/22 16:45*	*1*

Client Sample ID: 29SB193 (11-12)
Lab Sample ID: 280-160190-48
Date Collected: 03/24/22 14:42
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.049	U	0.098	0.044	mg/Kg		04/06/22 18:17	04/14/22 17:31	1
1,3-Dinitrobenzene	0.049	U	0.098	0.044	mg/Kg		04/06/22 18:17	04/14/22 17:31	1
2,4,6-Trinitrotoluene	0.049	U Q	0.098	0.036	mg/Kg		04/06/22 18:17	04/14/22 17:31	1
2,4-Dinitrotoluene	0.049	U	0.098	0.046	mg/Kg		04/06/22 18:17	04/14/22 17:31	1
2,6-Dinitrotoluene	0.049	U	0.098	0.040	mg/Kg		04/06/22 18:17	04/14/22 17:31	1
2-Amino-4,6-dinitrotoluene	0.049	U	0.098	0.049	mg/Kg		04/06/22 18:17	04/14/22 17:31	1
4-Amino-2,6-dinitrotoluene	0.049	U	0.098	0.031	mg/Kg		04/06/22 18:17	04/14/22 17:31	1
HMX	0.049	U	0.098	0.045	mg/Kg		04/06/22 18:17	04/14/22 17:31	1
m-Nitrotoluene	0.049	U	0.098	0.042	mg/Kg		04/06/22 18:17	04/14/22 17:31	1
Nitrobenzene	0.049	U	0.11	0.037	mg/Kg		04/06/22 18:17	04/14/22 17:31	1
Nitroglycerin	0.049	U M	0.098	0.028	mg/Kg		04/06/22 18:17	04/14/22 17:31	1
o-Nitrotoluene	0.049	U	0.098	0.042	mg/Kg		04/06/22 18:17	04/14/22 17:31	1
PETN	0.049	U	0.098	0.033	mg/Kg		04/06/22 18:17	04/14/22 17:31	1
p-Nitrotoluene	0.049	U	0.098	0.048	mg/Kg		04/06/22 18:17	04/14/22 17:31	1
RDX	0.049	U	0.12	0.042	mg/Kg		04/06/22 18:17	04/14/22 17:31	1
Tetryl	0.049	U Q	0.098	0.038	mg/Kg		04/06/22 18:17	04/14/22 17:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*91*		*68 - 140*	*04/06/22 18:17*	*04/14/22 17:31*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB193 (15-16)
Lab Sample ID: 280-160190-49
Date Collected: 03/24/22 14:45
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.050	U	0.099	0.044	mg/Kg		04/06/22 18:17	04/14/22 17:37	1
1,3-Dinitrobenzene	0.050	U	0.099	0.044	mg/Kg		04/06/22 18:17	04/14/22 17:37	1
2,4,6-Trinitrotoluene	0.050	U Q	0.099	0.037	mg/Kg		04/06/22 18:17	04/14/22 17:37	1
2,4-Dinitrotoluene	0.050	U	0.099	0.046	mg/Kg		04/06/22 18:17	04/14/22 17:37	1
2,6-Dinitrotoluene	0.050	U	0.099	0.040	mg/Kg		04/06/22 18:17	04/14/22 17:37	1
2-Amino-4,6-dinitrotoluene	0.050	U M	0.099	0.049	mg/Kg		04/06/22 18:17	04/14/22 17:37	1
4-Amino-2,6-dinitrotoluene	0.050	U M	0.099	0.031	mg/Kg		04/06/22 18:17	04/14/22 17:37	1
HMX	0.050	U	0.099	0.046	mg/Kg		04/06/22 18:17	04/14/22 17:37	1
m-Nitrotoluene	0.050	U	0.099	0.043	mg/Kg		04/06/22 18:17	04/14/22 17:37	1
Nitrobenzene	0.050	U	0.11	0.038	mg/Kg		04/06/22 18:17	04/14/22 17:37	1
Nitroglycerin	0.050	U	0.099	0.029	mg/Kg		04/06/22 18:17	04/14/22 17:37	1
o-Nitrotoluene	0.050	U	0.099	0.042	mg/Kg		04/06/22 18:17	04/14/22 17:37	1
PETN	0.050	U	0.099	0.034	mg/Kg		04/06/22 18:17	04/14/22 17:37	1
p-Nitrotoluene	0.050	U	0.099	0.049	mg/Kg		04/06/22 18:17	04/14/22 17:37	1
RDX	0.050	U	0.12	0.043	mg/Kg		04/06/22 18:17	04/14/22 17:37	1
Tetryl	0.050	U Q	0.099	0.038	mg/Kg		04/06/22 18:17	04/14/22 17:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*96*		*68 - 140*	*04/06/22 18:17*	*04/14/22 17:37*	*1*

Client Sample ID: 29SB193 (19-20)
Lab Sample ID: 280-160190-50
Date Collected: 03/24/22 14:50
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.048	U	0.095	0.043	mg/Kg		04/06/22 18:17	04/14/22 17:44	1
1,3-Dinitrobenzene	0.048	U	0.095	0.043	mg/Kg		04/06/22 18:17	04/14/22 17:44	1
2,4,6-Trinitrotoluene	0.048	U Q	0.095	0.035	mg/Kg		04/06/22 18:17	04/14/22 17:44	1
2,4-Dinitrotoluene	0.048	U	0.095	0.044	mg/Kg		04/06/22 18:17	04/14/22 17:44	1
2,6-Dinitrotoluene	0.048	U	0.095	0.038	mg/Kg		04/06/22 18:17	04/14/22 17:44	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.095	0.047	mg/Kg		04/06/22 18:17	04/14/22 17:44	1
4-Amino-2,6-dinitrotoluene	0.048	U	0.095	0.030	mg/Kg		04/06/22 18:17	04/14/22 17:44	1
HMX	0.048	U	0.095	0.044	mg/Kg		04/06/22 18:17	04/14/22 17:44	1
m-Nitrotoluene	0.048	U	0.095	0.041	mg/Kg		04/06/22 18:17	04/14/22 17:44	1
Nitrobenzene	0.048	U M	0.10	0.036	mg/Kg		04/06/22 18:17	04/14/22 17:44	1
Nitroglycerin	0.048	U	0.095	0.028	mg/Kg		04/06/22 18:17	04/14/22 17:44	1
o-Nitrotoluene	0.048	U	0.095	0.041	mg/Kg		04/06/22 18:17	04/14/22 17:44	1
PETN	0.048	U	0.095	0.032	mg/Kg		04/06/22 18:17	04/14/22 17:44	1
p-Nitrotoluene	0.048	U	0.095	0.047	mg/Kg		04/06/22 18:17	04/14/22 17:44	1
RDX	0.048	U	0.11	0.041	mg/Kg		04/06/22 18:17	04/14/22 17:44	1
Tetryl	0.048	U Q	0.095	0.037	mg/Kg		04/06/22 18:17	04/14/22 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*98*		*68 - 140*	*04/06/22 18:17*	*04/14/22 17:44*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: DUP-10
Lab Sample ID: 280-160190-51
Date Collected: 03/24/22 15:30
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.049	U	0.099	0.044	mg/Kg		04/06/22 18:17	04/14/22 17:50	1
1,3-Dinitrobenzene	0.049	U	0.099	0.044	mg/Kg		04/06/22 18:17	04/14/22 17:50	1
2,4,6-Trinitrotoluene	0.049	U Q	0.099	0.036	mg/Kg		04/06/22 18:17	04/14/22 17:50	1
2,4-Dinitrotoluene	0.049	U	0.099	0.046	mg/Kg		04/06/22 18:17	04/14/22 17:50	1
2,6-Dinitrotoluene	0.049	U	0.099	0.040	mg/Kg		04/06/22 18:17	04/14/22 17:50	1
2-Amino-4,6-dinitrotoluene	0.049	U	0.099	0.049	mg/Kg		04/06/22 18:17	04/14/22 17:50	1
4-Amino-2,6-dinitrotoluene	0.049	U	0.099	0.031	mg/Kg		04/06/22 18:17	04/14/22 17:50	1
HMX	0.049	U	0.099	0.045	mg/Kg		04/06/22 18:17	04/14/22 17:50	1
m-Nitrotoluene	0.049	U	0.099	0.043	mg/Kg		04/06/22 18:17	04/14/22 17:50	1
Nitrobenzene	0.049	U	0.11	0.037	mg/Kg		04/06/22 18:17	04/14/22 17:50	1
Nitroglycerin	0.049	U	0.099	0.029	mg/Kg		04/06/22 18:17	04/14/22 17:50	1
o-Nitrotoluene	0.049	U	0.099	0.042	mg/Kg		04/06/22 18:17	04/14/22 17:50	1
PETN	0.049	U	0.099	0.033	mg/Kg		04/06/22 18:17	04/14/22 17:50	1
p-Nitrotoluene	0.049	U	0.099	0.049	mg/Kg		04/06/22 18:17	04/14/22 17:50	1
RDX	0.049	U	0.12	0.042	mg/Kg		04/06/22 18:17	04/14/22 17:50	1
Tetryl	0.049	U Q	0.099	0.038	mg/Kg		04/06/22 18:17	04/14/22 17:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*103*		*68 - 140*	*04/06/22 18:17*	*04/14/22 17:50*	*1*

Client Sample ID: 29SB203 (3-4)
Lab Sample ID: 280-160190-52
Date Collected: 03/24/22 15:15
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.047	U	0.095	0.042	mg/Kg		04/06/22 18:17	04/14/22 18:04	1
1,3-Dinitrobenzene	0.047	U	0.095	0.042	mg/Kg		04/06/22 18:17	04/14/22 18:04	1
2,4,6-Trinitrotoluene	0.047	U Q	0.095	0.035	mg/Kg		04/06/22 18:17	04/14/22 18:04	1
2,4-Dinitrotoluene	0.047	U	0.095	0.044	mg/Kg		04/06/22 18:17	04/14/22 18:04	1
2,6-Dinitrotoluene	0.047	U	0.095	0.038	mg/Kg		04/06/22 18:17	04/14/22 18:04	1
2-Amino-4,6-dinitrotoluene	0.047	U J1	0.095	0.047	mg/Kg		04/06/22 18:17	04/14/22 18:04	1
4-Amino-2,6-dinitrotoluene	0.047	U J1	0.095	0.029	mg/Kg		04/06/22 18:17	04/14/22 18:04	1
HMX	0.047	U	0.095	0.044	mg/Kg		04/06/22 18:17	04/14/22 18:04	1
m-Nitrotoluene	0.047	U	0.095	0.041	mg/Kg		04/06/22 18:17	04/14/22 18:04	1
Nitrobenzene	0.047	U	0.10	0.036	mg/Kg		04/06/22 18:17	04/14/22 18:04	1
Nitroglycerin	0.047	U	0.095	0.027	mg/Kg		04/06/22 18:17	04/14/22 18:04	1
o-Nitrotoluene	0.047	U	0.095	0.040	mg/Kg		04/06/22 18:17	04/14/22 18:04	1
PETN	0.047	U	0.095	0.032	mg/Kg		04/06/22 18:17	04/14/22 18:04	1
p-Nitrotoluene	0.047	U	0.095	0.047	mg/Kg		04/06/22 18:17	04/14/22 18:04	1
RDX	0.047	U	0.11	0.041	mg/Kg		04/06/22 18:17	04/14/22 18:04	1
Tetryl	0.047	U Q J1	0.095	0.037	mg/Kg		04/06/22 18:17	04/14/22 18:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*102*		*68 - 140*	*04/06/22 18:17*	*04/14/22 18:04*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB203 (7-8)
Lab Sample ID: 280-160190-53
Date Collected: 03/24/22 15:17
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.049	U	0.098	0.044	mg/Kg		04/06/22 18:17	04/14/22 18:37	1
1,3-Dinitrobenzene	0.049	U	0.098	0.044	mg/Kg		04/06/22 18:17	04/14/22 18:37	1
2,4,6-Trinitrotoluene	0.049	U Q	0.098	0.036	mg/Kg		04/06/22 18:17	04/14/22 18:37	1
2,4-Dinitrotoluene	0.049	U	0.098	0.045	mg/Kg		04/06/22 18:17	04/14/22 18:37	1
2,6-Dinitrotoluene	0.049	U	0.098	0.039	mg/Kg		04/06/22 18:17	04/14/22 18:37	1
2-Amino-4,6-dinitrotoluene	0.049	U M	0.098	0.048	mg/Kg		04/06/22 18:17	04/14/22 18:37	1
4-Amino-2,6-dinitrotoluene	0.049	U	0.098	0.030	mg/Kg		04/06/22 18:17	04/14/22 18:37	1
HMX	0.049	U	0.098	0.045	mg/Kg		04/06/22 18:17	04/14/22 18:37	1
m-Nitrotoluene	0.049	U	0.098	0.042	mg/Kg		04/06/22 18:17	04/14/22 18:37	1
Nitrobenzene	0.049	U	0.11	0.037	mg/Kg		04/06/22 18:17	04/14/22 18:37	1
Nitroglycerin	0.049	U	0.098	0.028	mg/Kg		04/06/22 18:17	04/14/22 18:37	1
o-Nitrotoluene	0.049	U	0.098	0.042	mg/Kg		04/06/22 18:17	04/14/22 18:37	1
PETN	0.049	U	0.098	0.033	mg/Kg		04/06/22 18:17	04/14/22 18:37	1
p-Nitrotoluene	0.049	U	0.098	0.048	mg/Kg		04/06/22 18:17	04/14/22 18:37	1
RDX	0.049	U	0.12	0.042	mg/Kg		04/06/22 18:17	04/14/22 18:37	1
Tetryl	0.049	U Q	0.098	0.038	mg/Kg		04/06/22 18:17	04/14/22 18:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*112*		*68 - 140*	*04/06/22 18:17*	*04/14/22 18:37*	*1*

Client Sample ID: 29SB204 (3-4)
Lab Sample ID: 280-160190-54
Date Collected: 03/24/22 15:25
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.048	U	0.095	0.043	mg/Kg		04/06/22 18:17	04/14/22 18:43	1
1,3-Dinitrobenzene	0.048	U	0.095	0.042	mg/Kg		04/06/22 18:17	04/14/22 18:43	1
2,4,6-Trinitrotoluene	0.048	U Q	0.095	0.035	mg/Kg		04/06/22 18:17	04/14/22 18:43	1
2,4-Dinitrotoluene	0.048	U	0.095	0.044	mg/Kg		04/06/22 18:17	04/14/22 18:43	1
2,6-Dinitrotoluene	0.048	U M	0.095	0.038	mg/Kg		04/06/22 18:17	04/14/22 18:43	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.095	0.047	mg/Kg		04/06/22 18:17	04/14/22 18:43	1
4-Amino-2,6-dinitrotoluene	0.048	U	0.095	0.030	mg/Kg		04/06/22 18:17	04/14/22 18:43	1
HMX	0.048	U M	0.095	0.044	mg/Kg		04/06/22 18:17	04/14/22 18:43	1
m-Nitrotoluene	0.048	U	0.095	0.041	mg/Kg		04/06/22 18:17	04/14/22 18:43	1
Nitrobenzene	0.048	U	0.10	0.036	mg/Kg		04/06/22 18:17	04/14/22 18:43	1
Nitroglycerin	0.048	U	0.095	0.028	mg/Kg		04/06/22 18:17	04/14/22 18:43	1
o-Nitrotoluene	0.048	U	0.095	0.041	mg/Kg		04/06/22 18:17	04/14/22 18:43	1
PETN	0.048	U	0.095	0.032	mg/Kg		04/06/22 18:17	04/14/22 18:43	1
p-Nitrotoluene	0.048	U	0.095	0.047	mg/Kg		04/06/22 18:17	04/14/22 18:43	1
RDX	0.048	U	0.11	0.041	mg/Kg		04/06/22 18:17	04/14/22 18:43	1
Tetryl	0.048	U Q	0.095	0.037	mg/Kg		04/06/22 18:17	04/14/22 18:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*104*		*68 - 140*	*04/06/22 18:17*	*04/14/22 18:43*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB204 (7-8)
Lab Sample ID: 280-160190-55
Date Collected: 03/24/22 15:26
Matrix: Solid
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.048	U	0.097	0.043	mg/Kg		04/06/22 18:17	04/14/22 18:50	1
1,3-Dinitrobenzene	0.048	U M	0.097	0.043	mg/Kg		04/06/22 18:17	04/14/22 18:50	1
2,4,6-Trinitrotoluene	0.048	U Q	0.097	0.036	mg/Kg		04/06/22 18:17	04/14/22 18:50	1
2,4-Dinitrotoluene	0.048	U	0.097	0.045	mg/Kg		04/06/22 18:17	04/14/22 18:50	1
2,6-Dinitrotoluene	0.048	U M	0.097	0.039	mg/Kg		04/06/22 18:17	04/14/22 18:50	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.097	0.048	mg/Kg		04/06/22 18:17	04/14/22 18:50	1
4-Amino-2,6-dinitrotoluene	0.048	U	0.097	0.030	mg/Kg		04/06/22 18:17	04/14/22 18:50	1
HMX	0.048	U M	0.097	0.045	mg/Kg		04/06/22 18:17	04/14/22 18:50	1
m-Nitrotoluene	0.048	U	0.097	0.042	mg/Kg		04/06/22 18:17	04/14/22 18:50	1
Nitrobenzene	0.048	U	0.11	0.037	mg/Kg		04/06/22 18:17	04/14/22 18:50	1
Nitroglycerin	0.048	U	0.097	0.028	mg/Kg		04/06/22 18:17	04/14/22 18:50	1
o-Nitrotoluene	0.048	U	0.097	0.041	mg/Kg		04/06/22 18:17	04/14/22 18:50	1
PETN	0.048	U	0.097	0.033	mg/Kg		04/06/22 18:17	04/14/22 18:50	1
p-Nitrotoluene	0.048	U	0.097	0.048	mg/Kg		04/06/22 18:17	04/14/22 18:50	1
RDX	0.048	U M	0.12	0.042	mg/Kg		04/06/22 18:17	04/14/22 18:50	1
Tetryl	0.048	U M Q	0.097	0.038	mg/Kg		04/06/22 18:17	04/14/22 18:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*88*		*68 - 140*	*04/06/22 18:17*	*04/14/22 18:50*	*1*

Client Sample ID: EB-03
Lab Sample ID: 280-160190-56
Date Collected: 03/24/22 16:00
Matrix: Water
Date Received: 03/25/22 00:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.065	U	0.11	0.025	ug/L		03/29/22 13:01	04/05/22 11:50	1
1,3-Dinitrobenzene	0.065	U	0.11	0.024	ug/L		03/29/22 13:01	04/05/22 11:50	1
2,4,6-Trinitrotoluene	0.065	U	0.11	0.032	ug/L		03/29/22 13:01	04/05/22 11:50	1
2,4-Dinitrotoluene	0.065	U	0.11	0.029	ug/L		03/29/22 13:01	04/05/22 11:50	1
2,6-Dinitrotoluene	0.065	U	0.11	0.027	ug/L		03/29/22 13:01	04/05/22 11:50	1
2-Amino-4,6-dinitrotoluene	0.065	U	0.11	0.032	ug/L		03/29/22 13:01	04/05/22 11:50	1
4-Amino-2,6-dinitrotoluene	0.065	U	0.11	0.042	ug/L		03/29/22 13:01	04/05/22 11:50	1
HMX	0.065	U M	0.11	0.036	ug/L		03/29/22 13:01	04/05/22 11:50	1
m-Nitrotoluene	0.065	U	0.11	0.030	ug/L		03/29/22 13:01	04/05/22 11:50	1
Nitrobenzene	0.065	U M	0.16	0.030	ug/L		03/29/22 13:01	04/05/22 11:50	1
Nitroglycerin	0.065	U	0.16	0.031	ug/L		03/29/22 13:01	04/05/22 11:50	1
o-Nitrotoluene	0.065	U	0.11	0.034	ug/L		03/29/22 13:01	04/05/22 11:50	1
PETN	0.065	U	0.11	0.038	ug/L		03/29/22 13:01	04/05/22 11:50	1
p-Nitrotoluene	0.065	U	0.11	0.031	ug/L		03/29/22 13:01	04/05/22 11:50	1
RDX	0.065	U	0.11	0.029	ug/L		03/29/22 13:01	04/05/22 11:50	1
Tetryl	0.065	U Q	0.11	0.030	ug/L		03/29/22 13:01	04/05/22 11:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*89*		*48 - 130*	*03/29/22 13:01*	*04/05/22 11:50*	*1*

Default Detection Limits

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Prep: 3535

Analyte	LOQ	DL	Units
1,3,5-Trinitrobenzene	0.10	0.023	ug/L
1,3-Dinitrobenzene	0.10	0.022	ug/L
2,4,6-Trinitrotoluene	0.10	0.030	ug/L
2,4-Dinitrotoluene	0.10	0.027	ug/L
2,6-Dinitrotoluene	0.10	0.025	ug/L
2-Amino-4,6-dinitrotoluene	0.10	0.030	ug/L
4-Amino-2,6-dinitrotoluene	0.10	0.039	ug/L
HMX	0.10	0.033	ug/L
m-Nitrotoluene	0.10	0.028	ug/L
Nitrobenzene	0.15	0.028	ug/L
Nitroglycerin	0.15	0.029	ug/L
o-Nitrotoluene	0.10	0.032	ug/L
PETN	0.10	0.035	ug/L
p-Nitrotoluene	0.10	0.029	ug/L
RDX	0.10	0.027	ug/L
Tetryl	0.10	0.028	ug/L

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Prep: 8330B

Leach: Dry and Grind

Analyte	LOQ	DL	Units
1,3,5-Trinitrobenzene	0.10	0.045	mg/Kg
1,3-Dinitrobenzene	0.10	0.045	mg/Kg
2,4,6-Trinitrotoluene	0.10	0.037	mg/Kg
2,4-Dinitrotoluene	0.10	0.047	mg/Kg
2,6-Dinitrotoluene	0.10	0.040	mg/Kg
2-Amino-4,6-dinitrotoluene	0.10	0.050	mg/Kg
4-Amino-2,6-dinitrotoluene	0.10	0.031	mg/Kg
HMX	0.10	0.046	mg/Kg
m-Nitrotoluene	0.10	0.043	mg/Kg
Nitrobenzene	0.11	0.038	mg/Kg
Nitroglycerin	0.10	0.029	mg/Kg
o-Nitrotoluene	0.10	0.043	mg/Kg
PETN	0.10	0.034	mg/Kg
p-Nitrotoluene	0.10	0.049	mg/Kg
RDX	0.12	0.043	mg/Kg
Tetryl	0.10	0.039	mg/Kg

Surrogate Summary

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	NBZ (68-140)							
280-160190-1	29SB173 (14.5-15)	95							
280-160190-1 - DL	29SB173 (14.5-15)	107 D							
280-160190-2	29SB181 (14.5-15)	89							
280-160190-2 - DL	29SB181 (14.5-15)	113 D							
280-160190-3	29SB182 (14.5-15)	97							
280-160190-4	29SB175 (3-4)	88							
280-160190-5	29SB175 (6-7)	95							
280-160190-6	29SB175 (11-12)	94							
280-160190-7	29SB175 (14.5-15)	98							
280-160190-8	DUP-05	100							
280-160190-9	29SB167 (3-4)	92							
280-160190-10	29SB167 (6-7)	97							
280-160190-11	29SB167 (11-12)	96							
280-160190-12	29SB167 (14.5-15)	99							
280-160190-13	DUP-06	101							
280-160190-14	29SB176 (14.5-15)	100							
280-160190-14 - DL	29SB176 (14.5-15)	94 D							
280-160190-15	29SB179 (14.5-15)	102							
280-160190-16	29SB178 (14.5-15)	107							
280-160190-17	29SB177 (14.5-15)	95							
280-160190-17 - DL	29SB177 (14.5-15)	91 D							
280-160190-18	29SB168 (3-4)	98							
280-160190-18 - DL	29SB168 (3-4)	85 D							
280-160190-19	29SB168 (6-7)	90							
280-160190-19 - DL	29SB168 (6-7)	92 D							
280-160190-19 DU	29SB168 (6-7)	100							
280-160190-19 DU - DL	29SB168 (6-7)	89 D							
280-160190-19 MS	29SB168 (6-7)	99							
280-160190-19 MS - DL	29SB168 (6-7)	92 D							
280-160190-19 MSD	29SB168 (6-7)	106							
280-160190-19 MSD - DL	29SB168 (6-7)	92 D							
280-160190-19 TRL	29SB168 (6-7)	89							
280-160190-19 TRL - DL	29SB168 (6-7)	91 D							
280-160190-20	29SB168 (11-12)	130							
280-160190-20 - DL	29SB168 (11-12)	96 D							
280-160190-20 - DL2	29SB168 (11-12)	71 M D							
280-160190-21	29SB168 (14.5-15)	98							
280-160190-22	29SB169 (3-4)	106							
280-160190-23	29SB169 (6-7)	94							
280-160190-24	29SB169 (11-12)	102							
280-160190-25	29SB169 (14.5-15)	94							
280-160190-26	DUP-07	98							
280-160190-27	29SB170 (3-4)	102							
280-160190-28	29SB170 (6-7)	100							
280-160190-29	29SB170 (11-12)	90							
280-160190-30	29SB170 (14.5-15)	95							
280-160190-31	29SB171 (3-4)	94							
280-160190-32	29SB171 (6-7)	89							
280-160190-33	29SB171 (11-12)	112							

Surrogate Summary

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

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

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	NBZ (68-140)
280-160190-34	29SB171 (14.5-15)	104
280-160190-35	DUP-08	97
280-160190-36	29SB174 (3-4)	100
280-160190-37	29SB174 (6-7)	97
280-160190-38	29SB174 (11-12)	93
280-160190-39	29SB174 (14.5-15)	103
280-160190-40	29SB190 (3-4)	102
280-160190-41	29SB190 (19-20)	100
280-160190-42	29SB192 (7-8)	97
280-160190-43	29SB192 (11-12)	100
280-160190-44	29SB192 (15-16)	86
280-160190-45	29SB192 (19-20)	93
280-160190-46	DUP-09	100
280-160190-47	29SB193 (7-8)	96
280-160190-48	29SB193 (11-12)	91
280-160190-49	29SB193 (15-16)	96
280-160190-50	29SB193 (19-20)	98
280-160190-51	DUP-10	103
280-160190-52	29SB203 (3-4)	102
280-160190-52MS	29SB203 (3-4)	95
280-160190-52MSD	29SB203 (3-4)	97
280-160190-53	29SB203 (7-8)	112
280-160190-54	29SB204 (3-4)	104
280-160190-55	29SB204 (7-8)	88
280-160190-A-28-E MS	280-160190-A-28-E MS	98
280-160190-A-28-F MSD	280-160190-A-28-F MSD	93
280-160190-A-29-E DU	280-160190-A-29-E DU	95
280-160190-A-29-F TRL	280-160190-A-29-F TRL	90
280-160190-A-52-I DU	280-160190-A-52-I DU	107
280-160190-A-52-J TRL	280-160190-A-52-J TRL	94
GB 280-570105/1-B	Method Blank	95
GB 280-570111/1-B	Method Blank	101
GB 280-570112/1-B	Method Blank	94
GB 280-570115/1-B	Method Blank	102
LCS 280-570718/2-A	Lab Control Sample	98
LCS 280-571022/2-A	Lab Control Sample	98
LCS 280-571024/2-A	Lab Control Sample	115
LCS 280-571025/2-A	Lab Control Sample	103
LCSD 280-570718/3-A	Lab Control Sample Dup	101
LCSD 280-571022/3-A	Lab Control Sample Dup	93
LCSD 280-571024/3-A	Lab Control Sample Dup	111
LCSD 280-571025/3-A	Lab Control Sample Dup	94
LCSSRM 280-570105/2-B	Lab Control Sample	91
LCSSRM 280-570111/2-B	Lab Control Sample	103
LCSSRM 280-570112/2-B	Lab Control Sample	99
LCSSRM 280-570115/2-B	Lab Control Sample	102
MB 280-570718/1-A	Method Blank	98
MB 280-571022/1-A	Method Blank	90
MB 280-571024/1-A	Method Blank	92
MB 280-571025/1-A	Method Blank	94

Surrogate Summary

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Surrogate Legend
NBZ = Nitrobenzene-d5

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)							
		NBZ							
Lab Sample ID	Client Sample ID	(48-130)							
280-160190-56	EB-03	89							
LCS 280-570053/2-A	Lab Control Sample	90							
LCSD 280-570053/3-A	Lab Control Sample Dup	91							
MB 280-570053/1-A	Method Blank	89							

Surrogate Legend
NBZ = Nitrobenzene-d5

QC Sample Results

Client: HDR Inc
Project/Site: Longhorn AAP, TX (March 2022)

Job ID: 280-160190-1

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Lab Sample ID: MB 280-570053/1-A
Matrix: Water
Analysis Batch: 570784

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 570053

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.060	U	0.10	0.023	ug/L		03/29/22 13:01	04/05/22 11:18	1
1,3-Dinitrobenzene	0.060	U	0.10	0.022	ug/L		03/29/22 13:01	04/05/22 11:18	1
2,4,6-Trinitrotoluene	0.060	U	0.10	0.030	ug/L		03/29/22 13:01	04/05/22 11:18	1
2,4-Dinitrotoluene	0.060	U	0.10	0.027	ug/L		03/29/22 13:01	04/05/22 11:18	1
2,6-Dinitrotoluene	0.060	U	0.10	0.025	ug/L		03/29/22 13:01	04/05/22 11:18	1
2-Amino-4,6-dinitrotoluene	0.060	U	0.10	0.030	ug/L		03/29/22 13:01	04/05/22 11:18	1
4-Amino-2,6-dinitrotoluene	0.060	U	0.10	0.039	ug/L		03/29/22 13:01	04/05/22 11:18	1
HMX	0.060	U M	0.10	0.033	ug/L		03/29/22 13:01	04/05/22 11:18	1
m-Nitrotoluene	0.060	U	0.10	0.028	ug/L		03/29/22 13:01	04/05/22 11:18	1
Nitrobenzene	0.060	U	0.15	0.028	ug/L		03/29/22 13:01	04/05/22 11:18	1
Nitroglycerin	0.060	U	0.15	0.029	ug/L		03/29/22 13:01	04/05/22 11:18	1
o-Nitrotoluene	0.060	U	0.10	0.032	ug/L		03/29/22 13:01	04/05/22 11:18	1
PETN	0.060	U	0.10	0.035	ug/L		03/29/22 13:01	04/05/22 11:18	1
p-Nitrotoluene	0.060	U	0.10	0.029	ug/L		03/29/22 13:01	04/05/22 11:18	1
RDX	0.060	U	0.10	0.027	ug/L		03/29/22 13:01	04/05/22 11:18	1
Tetryl	0.060	U	0.10	0.028	ug/L		03/29/22 13:01	04/05/22 11:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*89*		*48 - 130*	*03/29/22 13:01*	*04/05/22 11:18*	*1*

Lab Sample ID: LCS 280-570053/2-A
Matrix: Water
Analysis Batch: 570784

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 570053

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,3,5-Trinitrobenzene			0.500	0.434		ug/L		87	66 - 111		
1,3-Dinitrobenzene			0.500	0.446		ug/L		89	78 - 118		
2,4,6-Trinitrotoluene			0.500	0.470		ug/L		94	68 - 129		
2,4-Dinitrotoluene			0.500	0.431		ug/L		86	76 - 117		
2,6-Dinitrotoluene			0.500	0.463		ug/L		93	80 - 108		
2-Amino-4,6-dinitrotoluene			0.500	0.468		ug/L		94	69 - 127		
4-Amino-2,6-dinitrotoluene			0.500	0.455		ug/L		91	68 - 126		
HMX			0.500	0.420		ug/L		84	62 - 112		
m-Nitrotoluene			0.500	0.423		ug/L		85	54 - 112		
Nitrobenzene			0.500	0.414		ug/L		83	61 - 108		
Nitroglycerin			0.500	0.498		ug/L		100	37 - 147		
o-Nitrotoluene			0.500	0.425		ug/L		85	52 - 112		
PETN			0.500	0.505		ug/L		101	62 - 128		
p-Nitrotoluene			0.500	0.435		ug/L		87	54 - 117		
RDX			0.500	0.483		ug/L		97	73 - 126		
Tetryl			0.500	0.680		ug/L		136	35 - 138		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*90*		*48 - 130*

QC Sample Results

Client: HDR Inc
Project/Site: Longhorn AAP, TX (March 2022)

Job ID: 280-160190-1

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Lab Sample ID: LCSD 280-570053/3-A
Matrix: Water
Analysis Batch: 570784

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 570053

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene			0.500	0.477		ug/L		95	66 - 111	9	20
1,3-Dinitrobenzene			0.500	0.501		ug/L		100	78 - 118	11	20
2,4,6-Trinitrotoluene			0.500	0.522		ug/L		104	68 - 129	10	20
2,4-Dinitrotoluene			0.500	0.456		ug/L		91	76 - 117	6	20
2,6-Dinitrotoluene			0.500	0.490		ug/L		98	80 - 108	6	20
2-Amino-4,6-dinitrotoluene			0.500	0.492		ug/L		98	69 - 127	5	20
4-Amino-2,6-dinitrotoluene			0.500	0.493		ug/L		99	68 - 126	8	20
HMX			0.500	0.452		ug/L		90	62 - 112	7	20
m-Nitrotoluene			0.500	0.431		ug/L		86	54 - 112	2	20
Nitrobenzene			0.500	0.435		ug/L		87	61 - 108	5	20
Nitroglycerin			0.500	0.556		ug/L		111	37 - 147	11	20
o-Nitrotoluene			0.500	0.441		ug/L		88	52 - 112	4	20
PETN			0.500	0.556		ug/L		111	62 - 128	10	20
p-Nitrotoluene			0.500	0.434		ug/L		87	54 - 117	0	20
RDX			0.500	0.515		ug/L		103	73 - 126	6	20
Tetryl			0.500	0.724	Q	ug/L		145	35 - 138	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5	*91*		*48 - 130*

Lab Sample ID: GB 280-570105/1-B
Matrix: Solid
Analysis Batch: 571108

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 570718

Analyte	GB Result	GB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.049	U	0.097	0.044	mg/Kg		04/04/22 16:57	04/07/22 11:58	1
1,3-Dinitrobenzene	0.049	U	0.097	0.043	mg/Kg		04/04/22 16:57	04/07/22 11:58	1
2,4,6-Trinitrotoluene	0.049	U	0.097	0.036	mg/Kg		04/04/22 16:57	04/07/22 11:58	1
2,4-Dinitrotoluene	0.049	U	0.097	0.045	mg/Kg		04/04/22 16:57	04/07/22 11:58	1
2,6-Dinitrotoluene	0.049	U M	0.097	0.039	mg/Kg		04/04/22 16:57	04/07/22 11:58	1
2-Amino-4,6-dinitrotoluene	0.049	U	0.097	0.048	mg/Kg		04/04/22 16:57	04/07/22 11:58	1
4-Amino-2,6-dinitrotoluene	0.049	U	0.097	0.030	mg/Kg		04/04/22 16:57	04/07/22 11:58	1
HMX	0.049	U M	0.097	0.045	mg/Kg		04/04/22 16:57	04/07/22 11:58	1
m-Nitrotoluene	0.049	U	0.097	0.042	mg/Kg		04/04/22 16:57	04/07/22 11:58	1
Nitrobenzene	0.049	U	0.11	0.037	mg/Kg		04/04/22 16:57	04/07/22 11:58	1
Nitroglycerin	0.049	U	0.097	0.028	mg/Kg		04/04/22 16:57	04/07/22 11:58	1
o-Nitrotoluene	0.049	U	0.097	0.042	mg/Kg		04/04/22 16:57	04/07/22 11:58	1
PETN	0.049	U	0.097	0.033	mg/Kg		04/04/22 16:57	04/07/22 11:58	1
p-Nitrotoluene	0.049	U	0.097	0.048	mg/Kg		04/04/22 16:57	04/07/22 11:58	1
RDX	0.049	U	0.12	0.042	mg/Kg		04/04/22 16:57	04/07/22 11:58	1
Tetryl	0.049	U	0.097	0.038	mg/Kg		04/04/22 16:57	04/07/22 11:58	1

Surrogate	*GB %Recovery*	*GB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*95*		*68 - 140*	*04/04/22 16:57*	*04/07/22 11:58*	*1*

QC Sample Results

Client: HDR Inc
Project/Site: Longhorn AAP, TX (March 2022)

Job ID: 280-160190-1

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Lab Sample ID: MB 280-570718/1-A
Matrix: Solid
Analysis Batch: 571108

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 570718

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.050	U	0.10	0.045	mg/Kg		04/04/22 16:57	04/07/22 11:38	1
1,3-Dinitrobenzene	0.050	U	0.10	0.045	mg/Kg		04/04/22 16:57	04/07/22 11:38	1
2,4,6-Trinitrotoluene	0.050	U	0.10	0.037	mg/Kg		04/04/22 16:57	04/07/22 11:38	1
2,4-Dinitrotoluene	0.050	U	0.10	0.047	mg/Kg		04/04/22 16:57	04/07/22 11:38	1
2,6-Dinitrotoluene	0.050	U	0.10	0.040	mg/Kg		04/04/22 16:57	04/07/22 11:38	1
2-Amino-4,6-dinitrotoluene	0.050	U	0.10	0.050	mg/Kg		04/04/22 16:57	04/07/22 11:38	1
4-Amino-2,6-dinitrotoluene	0.050	U	0.10	0.031	mg/Kg		04/04/22 16:57	04/07/22 11:38	1
HMX	0.050	U M	0.10	0.046	mg/Kg		04/04/22 16:57	04/07/22 11:38	1
m-Nitrotoluene	0.050	U	0.10	0.043	mg/Kg		04/04/22 16:57	04/07/22 11:38	1
Nitrobenzene	0.050	U M	0.11	0.038	mg/Kg		04/04/22 16:57	04/07/22 11:38	1
Nitroglycerin	0.050	U	0.10	0.029	mg/Kg		04/04/22 16:57	04/07/22 11:38	1
o-Nitrotoluene	0.050	U	0.10	0.043	mg/Kg		04/04/22 16:57	04/07/22 11:38	1
PETN	0.050	U	0.10	0.034	mg/Kg		04/04/22 16:57	04/07/22 11:38	1
p-Nitrotoluene	0.050	U	0.10	0.049	mg/Kg		04/04/22 16:57	04/07/22 11:38	1
RDX	0.050	U	0.12	0.043	mg/Kg		04/04/22 16:57	04/07/22 11:38	1
Tetryl	0.050	U M	0.10	0.039	mg/Kg		04/04/22 16:57	04/07/22 11:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*98*		*68 - 140*	*04/04/22 16:57*	*04/07/22 11:38*	*1*

Lab Sample ID: LCS 280-570718/2-A
Matrix: Solid
Analysis Batch: 571108

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 570718

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,3,5-Trinitrobenzene			0.400	0.384		mg/Kg		96	69 - 115		
1,3-Dinitrobenzene			0.400	0.384		mg/Kg		96	83 - 122		
2,4,6-Trinitrotoluene			0.400	0.415		mg/Kg		104	65 - 133		
2,4-Dinitrotoluene			0.400	0.388		mg/Kg		97	82 - 119		
2,6-Dinitrotoluene			0.400	0.403		mg/Kg		101	86 - 113		
2-Amino-4,6-dinitrotoluene			0.400	0.412		mg/Kg		103	75 - 130		
4-Amino-2,6-dinitrotoluene			0.400	0.399		mg/Kg		100	77 - 125		
HMX			0.400	0.397		mg/Kg		99	65 - 114		
m-Nitrotoluene			0.400	0.380		mg/Kg		95	68 - 125		
Nitrobenzene			0.400	0.385		mg/Kg		96	75 - 120		
Nitroglycerin			0.400	0.431		mg/Kg		108	27 - 146		
o-Nitrotoluene			0.400	0.406		mg/Kg		102	72 - 125		
PETN			0.400	0.442		mg/Kg		110	62 - 143		
p-Nitrotoluene			0.400	0.407		mg/Kg		102	72 - 127		
RDX			0.400	0.401		mg/Kg		100	77 - 123		
Tetryl			0.400	0.578	Q	mg/Kg		145	36 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*98*		*68 - 140*

QC Sample Results

Client: HDR Inc
Project/Site: Longhorn AAP, TX (March 2022)

Job ID: 280-160190-1

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Lab Sample ID: LCSD 280-570718/3-A
Matrix: Solid
Analysis Batch: 571108

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 570718

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene			0.400	0.398		mg/Kg		100	69 - 115	4	20
1,3-Dinitrobenzene			0.400	0.391		mg/Kg		98	83 - 122	2	20
2,4,6-Trinitrotoluene			0.400	0.421		mg/Kg		105	65 - 133	1	20
2,4-Dinitrotoluene			0.400	0.393		mg/Kg		98	82 - 119	1	20
2,6-Dinitrotoluene			0.400	0.411		mg/Kg		103	86 - 113	2	20
2-Amino-4,6-dinitrotoluene			0.400	0.405		mg/Kg		101	75 - 130	2	20
4-Amino-2,6-dinitrotoluene			0.400	0.404		mg/Kg		101	77 - 125	1	20
HMX			0.400	0.400		mg/Kg		100	65 - 114	1	20
m-Nitrotoluene			0.400	0.395		mg/Kg		99	68 - 125	4	20
Nitrobenzene			0.400	0.390		mg/Kg		98	75 - 120	1	20
Nitroglycerin			0.400	0.404		mg/Kg		101	27 - 146	7	20
o-Nitrotoluene			0.400	0.403		mg/Kg		101	72 - 125	1	20
PETN			0.400	0.451		mg/Kg		113	62 - 143	2	20
p-Nitrotoluene			0.400	0.414		mg/Kg		103	72 - 127	2	20
RDX			0.400	0.438		mg/Kg		110	77 - 123	9	20
Tetryl			0.400	0.595	Q	mg/Kg		149	36 - 120	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5	*101*		*68 - 140*

Lab Sample ID: LCSSRM 280-570105/2-B
Matrix: Solid
Analysis Batch: 571108

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 570718

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
1,3,5-Trinitrobenzene			0.600	0.523		mg/Kg		87	58 - 116
1,3-Dinitrobenzene			0.600	0.555		mg/Kg		93	69 - 116
2,4,6-Trinitrotoluene			0.600	0.395	Q	mg/Kg		66	69 - 120
2,4-Dinitrotoluene			0.600	0.534		mg/Kg		89	69 - 137
2,6-Dinitrotoluene			0.600	0.559		mg/Kg		93	60 - 121
2-Amino-4,6-dinitrotoluene			0.600	0.517		mg/Kg		86	56 - 108
4-Amino-2,6-dinitrotoluene			0.600	0.475		mg/Kg		79	46 - 98
HMX			0.600	0.521		mg/Kg		87	59 - 131
m-Nitrotoluene			0.600	0.578		mg/Kg		96	69 - 124
Nitrobenzene			0.600	0.511		mg/Kg		85	58 - 119
Nitroglycerin			0.600	0.527		mg/Kg		88	60 - 115
o-Nitrotoluene			0.600	0.571		mg/Kg		95	67 - 117
PETN			0.600	0.544		mg/Kg		91	60 - 115
p-Nitrotoluene			0.600	0.555		mg/Kg		93	51 - 143
RDX			0.600	0.508		mg/Kg		85	62 - 123
Tetryl			0.600	0.349		mg/Kg		58	36 - 120

Surrogate	*LCSSRM %Recovery*	*LCSSRM Qualifier*	*Limits*
Nitrobenzene-d5	*91*		*68 - 140*

QC Sample Results

Client: HDR Inc
Project/Site: Longhorn AAP, TX (March 2022)

Job ID: 280-160190-1

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Lab Sample ID: GB 280-570112/1-B
Matrix: Solid
Analysis Batch: 571896

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 571022

Analyte	GB Result	GB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.046	U	0.092	0.041	mg/Kg		04/06/22 18:23	04/14/22 13:46	1
1,3-Dinitrobenzene	0.046	U	0.092	0.041	mg/Kg		04/06/22 18:23	04/14/22 13:46	1
2,4,6-Trinitrotoluene	0.046	U	0.092	0.034	mg/Kg		04/06/22 18:23	04/14/22 13:46	1
2,4-Dinitrotoluene	0.046	U	0.092	0.043	mg/Kg		04/06/22 18:23	04/14/22 13:46	1
2,6-Dinitrotoluene	0.046	U	0.092	0.037	mg/Kg		04/06/22 18:23	04/14/22 13:46	1
2-Amino-4,6-dinitrotoluene	0.046	U	0.092	0.046	mg/Kg		04/06/22 18:23	04/14/22 13:46	1
4-Amino-2,6-dinitrotoluene	0.046	U	0.092	0.029	mg/Kg		04/06/22 18:23	04/14/22 13:46	1
HMX	0.046	U M	0.092	0.043	mg/Kg		04/06/22 18:23	04/14/22 13:46	1
m-Nitrotoluene	0.046	U	0.092	0.040	mg/Kg		04/06/22 18:23	04/14/22 13:46	1
Nitrobenzene	0.046	U	0.10	0.035	mg/Kg		04/06/22 18:23	04/14/22 13:46	1
Nitroglycerin	0.046	U	0.092	0.027	mg/Kg		04/06/22 18:23	04/14/22 13:46	1
o-Nitrotoluene	0.046	U	0.092	0.040	mg/Kg		04/06/22 18:23	04/14/22 13:46	1
PETN	0.046	U	0.092	0.031	mg/Kg		04/06/22 18:23	04/14/22 13:46	1
p-Nitrotoluene	0.046	U	0.092	0.046	mg/Kg		04/06/22 18:23	04/14/22 13:46	1
RDX	0.046	U	0.11	0.040	mg/Kg		04/06/22 18:23	04/14/22 13:46	1
Tetryl	0.046	U	0.092	0.036	mg/Kg		04/06/22 18:23	04/14/22 13:46	1

Surrogate	*GB %Recovery*	*GB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*94*		*68 - 140*	*04/06/22 18:23*	*04/14/22 13:46*	*1*

Lab Sample ID: MB 280-571022/1-A
Matrix: Solid
Analysis Batch: 571896

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 571022

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.050	U	0.10	0.045	mg/Kg		04/06/22 18:23	04/14/22 13:27	1
1,3-Dinitrobenzene	0.050	U	0.10	0.045	mg/Kg		04/06/22 18:23	04/14/22 13:27	1
2,4,6-Trinitrotoluene	0.050	U M	0.10	0.037	mg/Kg		04/06/22 18:23	04/14/22 13:27	1
2,4-Dinitrotoluene	0.050	U	0.10	0.047	mg/Kg		04/06/22 18:23	04/14/22 13:27	1
2,6-Dinitrotoluene	0.050	U	0.10	0.040	mg/Kg		04/06/22 18:23	04/14/22 13:27	1
2-Amino-4,6-dinitrotoluene	0.050	U	0.10	0.050	mg/Kg		04/06/22 18:23	04/14/22 13:27	1
4-Amino-2,6-dinitrotoluene	0.050	U	0.10	0.031	mg/Kg		04/06/22 18:23	04/14/22 13:27	1
HMX	0.050	U M	0.10	0.046	mg/Kg		04/06/22 18:23	04/14/22 13:27	1
m-Nitrotoluene	0.050	U	0.10	0.043	mg/Kg		04/06/22 18:23	04/14/22 13:27	1
Nitrobenzene	0.050	U	0.11	0.038	mg/Kg		04/06/22 18:23	04/14/22 13:27	1
Nitroglycerin	0.050	U	0.10	0.029	mg/Kg		04/06/22 18:23	04/14/22 13:27	1
o-Nitrotoluene	0.050	U	0.10	0.043	mg/Kg		04/06/22 18:23	04/14/22 13:27	1
PETN	0.050	U	0.10	0.034	mg/Kg		04/06/22 18:23	04/14/22 13:27	1
p-Nitrotoluene	0.050	U	0.10	0.049	mg/Kg		04/06/22 18:23	04/14/22 13:27	1
RDX	0.050	U	0.12	0.043	mg/Kg		04/06/22 18:23	04/14/22 13:27	1
Tetryl	0.050	U	0.10	0.039	mg/Kg		04/06/22 18:23	04/14/22 13:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*90*		*68 - 140*	*04/06/22 18:23*	*04/14/22 13:27*	*1*

QC Sample Results

Client: HDR Inc
Project/Site: Longhorn AAP, TX (March 2022)

Job ID: 280-160190-1

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Lab Sample ID: LCS 280-571022/2-A
Matrix: Solid
Analysis Batch: 571896

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 571022

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,3,5-Trinitrobenzene			0.400	0.348		mg/Kg		87	69 - 115		
1,3-Dinitrobenzene			0.400	0.344		mg/Kg		86	83 - 122		
2,4,6-Trinitrotoluene			0.400	0.377		mg/Kg		94	65 - 133		
2,4-Dinitrotoluene			0.400	0.337		mg/Kg		84	82 - 119		
2,6-Dinitrotoluene			0.400	0.351		mg/Kg		88	86 - 113		
2-Amino-4,6-dinitrotoluene			0.400	0.339		mg/Kg		85	75 - 130		
4-Amino-2,6-dinitrotoluene			0.400	0.336		mg/Kg		84	77 - 125		
HMX			0.400	0.312		mg/Kg		78	65 - 114		
m-Nitrotoluene			0.400	0.354		mg/Kg		88	68 - 125		
Nitrobenzene			0.400	0.362		mg/Kg		90	75 - 120		
Nitroglycerin			0.400	0.359		mg/Kg		90	27 - 146		
o-Nitrotoluene			0.400	0.360		mg/Kg		90	72 - 125		
PETN			0.400	0.378		mg/Kg		95	62 - 143		
p-Nitrotoluene			0.400	0.361		mg/Kg		90	72 - 127		
RDX			0.400	0.315		mg/Kg		79	77 - 123		
Tetryl			0.400	0.540	Q	mg/Kg		135	36 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*98*		*68 - 140*

Lab Sample ID: LCSD 280-571022/3-A
Matrix: Solid
Analysis Batch: 571896

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 571022

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene			0.400	0.346		mg/Kg		87	69 - 115	0	20
1,3-Dinitrobenzene			0.400	0.346		mg/Kg		87	83 - 122	1	20
2,4,6-Trinitrotoluene			0.400	0.379		mg/Kg		95	65 - 133	1	20
2,4-Dinitrotoluene			0.400	0.342		mg/Kg		86	82 - 119	2	20
2,6-Dinitrotoluene			0.400	0.355		mg/Kg		89	86 - 113	1	20
2-Amino-4,6-dinitrotoluene			0.400	0.336		mg/Kg		84	75 - 130	1	20
4-Amino-2,6-dinitrotoluene			0.400	0.339		mg/Kg		85	77 - 125	1	20
HMX			0.400	0.330		mg/Kg		83	65 - 114	6	20
m-Nitrotoluene			0.400	0.375		mg/Kg		94	68 - 125	6	20
Nitrobenzene			0.400	0.376		mg/Kg		94	75 - 120	4	20
Nitroglycerin			0.400	0.393		mg/Kg		98	27 - 146	9	20
o-Nitrotoluene			0.400	0.372		mg/Kg		93	72 - 125	3	20
PETN			0.400	0.379		mg/Kg		95	62 - 143	0	20
p-Nitrotoluene			0.400	0.372		mg/Kg		93	72 - 127	3	20
RDX			0.400	0.324	M	mg/Kg		81	77 - 123	3	20
Tetryl			0.400	0.545	Q	mg/Kg		136	36 - 120	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5	*93*		*68 - 140*

QC Sample Results

Client: HDR Inc
Project/Site: Longhorn AAP, TX (March 2022)

Job ID: 280-160190-1

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Lab Sample ID: LCSSRM 280-570112/2-B
Matrix: Solid
Analysis Batch: 571896

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 571022

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
1,3,5-Trinitrobenzene	0.600	0.505		mg/Kg		84	58 - 116
1,3-Dinitrobenzene	0.600	0.557		mg/Kg		93	69 - 116
2,4,6-Trinitrotoluene	0.600	0.412		mg/Kg		69	69 - 120
2,4-Dinitrotoluene	0.600	0.524		mg/Kg		87	69 - 137
2,6-Dinitrotoluene	0.600	0.572		mg/Kg		95	60 - 121
2-Amino-4,6-dinitrotoluene	0.600	0.493		mg/Kg		82	56 - 108
4-Amino-2,6-dinitrotoluene	0.600	0.470		mg/Kg		78	46 - 98
HMX	0.600	0.518		mg/Kg		86	59 - 131
m-Nitrotoluene	0.600	0.576		mg/Kg		96	69 - 124
Nitrobenzene	0.600	0.593		mg/Kg		99	58 - 119
Nitroglycerin	0.600	0.547		mg/Kg		91	60 - 115
o-Nitrotoluene	0.600	0.581		mg/Kg		97	67 - 117
PETN	0.600	0.520		mg/Kg		87	60 - 115
p-Nitrotoluene	0.600	0.562		mg/Kg		94	51 - 143
RDX	0.600	0.459		mg/Kg		76	62 - 123
Tetryl	0.600	0.418		mg/Kg		70	36 - 120

Surrogate	*LCSSRM %Recovery*	*LCSSRM Qualifier*	*Limits*
Nitrobenzene-d5	*99*		*68 - 140*

Lab Sample ID: 280-160190-A-28-E MS
Matrix: Solid
Analysis Batch: 571896

Client Sample ID: 280-160190-A-28-E MS
Prep Type: Total/NA
Prep Batch: 571022

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,3,5-Trinitrobenzene	0.047	U M	0.386	0.341		mg/Kg		88	69 - 115
1,3-Dinitrobenzene	0.047	U	0.386	0.357		mg/Kg		92	83 - 122
2,4,6-Trinitrotoluene	0.15		0.386	0.514		mg/Kg		96	65 - 133
2,4-Dinitrotoluene	0.37	M	0.386	0.714		mg/Kg		88	82 - 119
2,6-Dinitrotoluene	0.047	U M	0.386	0.360		mg/Kg		93	86 - 113
2-Amino-4,6-dinitrotoluene	0.047	U M	0.386	0.322		mg/Kg		83	75 - 130
4-Amino-2,6-dinitrotoluene	0.047	U J1	0.386	0.284	J1	mg/Kg		74	77 - 125
HMX	0.047	U M	0.386	0.315		mg/Kg		82	65 - 114
m-Nitrotoluene	0.047	U	0.386	0.362		mg/Kg		94	68 - 125
Nitrobenzene	0.047	U	0.386	0.358		mg/Kg		93	75 - 120
Nitroglycerin	0.047	U	0.386	0.385		mg/Kg		100	27 - 146
o-Nitrotoluene	0.047	U	0.386	0.362		mg/Kg		94	72 - 125
PETN	0.047	U	0.386	0.377		mg/Kg		98	62 - 143
p-Nitrotoluene	0.047	U	0.386	0.382		mg/Kg		99	72 - 127
RDX	0.047	U	0.386	0.300		mg/Kg		78	77 - 123
Tetryl	0.047	U Q J1	0.386	0.552	J1	mg/Kg		143	36 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5	*98*		*68 - 140*

QC Sample Results

Client: HDR Inc
Project/Site: Longhorn AAP, TX (March 2022)

Job ID: 280-160190-1

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Lab Sample ID: 280-160190-A-28-F MSD
Matrix: Solid
Analysis Batch: 571896

Client Sample ID: 280-160190-A-28-F MSD
Prep Type: Total/NA
Prep Batch: 571022

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene	0.047	U M	0.393	0.339		mg/Kg		86	69 - 115	1	20
1,3-Dinitrobenzene	0.047	U	0.393	0.363		mg/Kg		92	83 - 122	2	20
2,4,6-Trinitrotoluene	0.15		0.393	0.521		mg/Kg		95	65 - 133	1	20
2,4-Dinitrotoluene	0.37	M	0.393	0.717		mg/Kg		88	82 - 119	0	20
2,6-Dinitrotoluene	0.047	U M	0.393	0.365		mg/Kg		93	86 - 113	2	20
2-Amino-4,6-dinitrotoluene	0.047	U M	0.393	0.319		mg/Kg		81	75 - 130	1	20
4-Amino-2,6-dinitrotoluene	0.047	U J1	0.393	0.288	J1	mg/Kg		73	77 - 125	1	20
HMX	0.047	U M	0.393	0.300		mg/Kg		76	65 - 114	5	20
m-Nitrotoluene	0.047	U	0.393	0.364		mg/Kg		92	68 - 125	0	20
Nitrobenzene	0.047	U	0.393	0.368		mg/Kg		94	75 - 120	3	20
Nitroglycerin	0.047	U	0.393	0.367		mg/Kg		93	27 - 146	5	20
o-Nitrotoluene	0.047	U	0.393	0.373		mg/Kg		95	72 - 125	3	20
PETN	0.047	U	0.393	0.376		mg/Kg		96	62 - 143	0	20
p-Nitrotoluene	0.047	U	0.393	0.380		mg/Kg		97	72 - 127	1	20
RDX	0.047	U	0.393	0.317		mg/Kg		81	77 - 123	6	20
Tetryl	0.047	U Q J1	0.393	0.541	J1	mg/Kg		137	36 - 120	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5	*93*		*68 - 140*

Lab Sample ID: 280-160190-A-29-E DU
Matrix: Solid
Analysis Batch: 571896

Client Sample ID: 280-160190-A-29-E DU
Prep Type: Total/NA
Prep Batch: 571022

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
1,3,5-Trinitrobenzene	0.049	U		0.048	U	mg/Kg				NC	20
1,3-Dinitrobenzene	0.049	U		0.048	U	mg/Kg				NC	20
2,4,6-Trinitrotoluene	0.049	U		0.048	U	mg/Kg				NC	20
2,4-Dinitrotoluene	0.049	U		0.048	U	mg/Kg				NC	20
2,6-Dinitrotoluene	0.049	U		0.048	U	mg/Kg				NC	20
2-Amino-4,6-dinitrotoluene	0.049	U		0.048	U	mg/Kg				NC	20
4-Amino-2,6-dinitrotoluene	0.049	U		0.048	U	mg/Kg				NC	20
HMX	0.049	U		0.048	U M	mg/Kg				NC	20
m-Nitrotoluene	0.049	U		0.048	U	mg/Kg				NC	20
Nitrobenzene	0.049	U		0.048	U	mg/Kg				NC	20
Nitroglycerin	0.049	U		0.048	U	mg/Kg				NC	20
o-Nitrotoluene	0.049	U M		0.048	U M	mg/Kg				NC	20
PETN	0.049	U		0.048	U	mg/Kg				NC	20
p-Nitrotoluene	0.049	U M		0.048	U M	mg/Kg				NC	20
RDX	0.049	U		0.048	U	mg/Kg				NC	20
Tetryl	0.049	U Q		0.048	U Q	mg/Kg				NC	20

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
Nitrobenzene-d5	*95*		*68 - 140*

QC Sample Results

Client: HDR Inc
Project/Site: Longhorn AAP, TX (March 2022)

Job ID: 280-160190-1

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Lab Sample ID: 280-160190-A-29-F TRL
Matrix: Solid
Analysis Batch: 571896

Client Sample ID: 280-160190-A-29-F TRL
Prep Type: Total/NA
Prep Batch: 571022

Analyte	Sample Result	Sample Qualifier		TRL Result	TRL Qualifier	Unit	D			RSD	RSD Limit
1,3,5-Trinitrobenzene	0.049	U		0.049	U	mg/Kg				NC	20
1,3-Dinitrobenzene	0.049	U		0.049	U	mg/Kg				NC	20
2,4,6-Trinitrotoluene	0.049	U Q		0.049	U	mg/Kg				NC	20
2,4-Dinitrotoluene	0.049	U Q		0.049	U M	mg/Kg				NC	20
2,6-Dinitrotoluene	0.049	U		0.049	U	mg/Kg				NC	20
2-Amino-4,6-dinitrotoluene	0.049	U		0.049	U	mg/Kg				NC	20
4-Amino-2,6-dinitrotoluene	0.049	U		0.049	U	mg/Kg				NC	20
HMX	0.049	U		0.049	U M	mg/Kg				NC	20
m-Nitrotoluene	0.049	U		0.049	U	mg/Kg				NC	20
Nitrobenzene	0.049	U		0.049	U	mg/Kg				NC	20
Nitroglycerin	0.049	U		0.049	U	mg/Kg				NC	20
o-Nitrotoluene	0.049	U		0.049	U M	mg/Kg				NC	20
PETN	0.049	U		0.049	U	mg/Kg				NC	20
p-Nitrotoluene	0.049	U		0.049	U M	mg/Kg				NC	20
RDX	0.049	U Q		0.049	U	mg/Kg				NC	20
Tetryl	0.049	U Q		0.049	U Q	mg/Kg				NC	20

Surrogate	*TRL %Recovery*	*TRL Qualifier*	*Limits*
Nitrobenzene-d5	*90*		*68 - 140*

Lab Sample ID: GB 280-570111/1-B
Matrix: Solid
Analysis Batch: 571224

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 571024

Analyte	GB Result	GB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.048	U	0.096	0.043	mg/Kg		04/06/22 18:20	04/08/22 11:07	1
1,3-Dinitrobenzene	0.048	U	0.096	0.043	mg/Kg		04/06/22 18:20	04/08/22 11:07	1
2,4,6-Trinitrotoluene	0.048	U	0.096	0.035	mg/Kg		04/06/22 18:20	04/08/22 11:07	1
2,4-Dinitrotoluene	0.048	U	0.096	0.045	mg/Kg		04/06/22 18:20	04/08/22 11:07	1
2,6-Dinitrotoluene	0.048	U	0.096	0.039	mg/Kg		04/06/22 18:20	04/08/22 11:07	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.096	0.048	mg/Kg		04/06/22 18:20	04/08/22 11:07	1
4-Amino-2,6-dinitrotoluene	0.048	U	0.096	0.030	mg/Kg		04/06/22 18:20	04/08/22 11:07	1
HMX	0.048	U	0.096	0.044	mg/Kg		04/06/22 18:20	04/08/22 11:07	1
m-Nitrotoluene	0.048	U	0.096	0.042	mg/Kg		04/06/22 18:20	04/08/22 11:07	1
Nitrobenzene	0.048	U	0.11	0.037	mg/Kg		04/06/22 18:20	04/08/22 11:07	1
Nitroglycerin	0.048	U	0.096	0.028	mg/Kg		04/06/22 18:20	04/08/22 11:07	1
o-Nitrotoluene	0.048	U	0.096	0.041	mg/Kg		04/06/22 18:20	04/08/22 11:07	1
PETN	0.048	U	0.096	0.033	mg/Kg		04/06/22 18:20	04/08/22 11:07	1
p-Nitrotoluene	0.048	U	0.096	0.048	mg/Kg		04/06/22 18:20	04/08/22 11:07	1
RDX	0.048	U	0.12	0.041	mg/Kg		04/06/22 18:20	04/08/22 11:07	1
Tetryl	0.048	U	0.096	0.037	mg/Kg		04/06/22 18:20	04/08/22 11:07	1

Surrogate	*GB %Recovery*	*GB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*101*		*68 - 140*	*04/06/22 18:20*	*04/08/22 11:07*	*1*

QC Sample Results

Client: HDR Inc
Project/Site: Longhorn AAP, TX (March 2022)

Job ID: 280-160190-1

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Lab Sample ID: MB 280-571024/1-A
Matrix: Solid
Analysis Batch: 571224

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 571024

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.050	U	0.10	0.045	mg/Kg		04/06/22 18:20	04/08/22 10:47	1
1,3-Dinitrobenzene	0.050	U	0.10	0.045	mg/Kg		04/06/22 18:20	04/08/22 10:47	1
2,4,6-Trinitrotoluene	0.050	U	0.10	0.037	mg/Kg		04/06/22 18:20	04/08/22 10:47	1
2,4-Dinitrotoluene	0.050	U	0.10	0.047	mg/Kg		04/06/22 18:20	04/08/22 10:47	1
2,6-Dinitrotoluene	0.050	U	0.10	0.040	mg/Kg		04/06/22 18:20	04/08/22 10:47	1
2-Amino-4,6-dinitrotoluene	0.050	U	0.10	0.050	mg/Kg		04/06/22 18:20	04/08/22 10:47	1
4-Amino-2,6-dinitrotoluene	0.050	U	0.10	0.031	mg/Kg		04/06/22 18:20	04/08/22 10:47	1
HMX	0.050	U M	0.10	0.046	mg/Kg		04/06/22 18:20	04/08/22 10:47	1
m-Nitrotoluene	0.050	U	0.10	0.043	mg/Kg		04/06/22 18:20	04/08/22 10:47	1
Nitrobenzene	0.050	U	0.11	0.038	mg/Kg		04/06/22 18:20	04/08/22 10:47	1
Nitroglycerin	0.050	U	0.10	0.029	mg/Kg		04/06/22 18:20	04/08/22 10:47	1
o-Nitrotoluene	0.050	U	0.10	0.043	mg/Kg		04/06/22 18:20	04/08/22 10:47	1
PETN	0.050	U	0.10	0.034	mg/Kg		04/06/22 18:20	04/08/22 10:47	1
p-Nitrotoluene	0.050	U	0.10	0.049	mg/Kg		04/06/22 18:20	04/08/22 10:47	1
RDX	0.050	U	0.12	0.043	mg/Kg		04/06/22 18:20	04/08/22 10:47	1
Tetryl	0.050	U	0.10	0.039	mg/Kg		04/06/22 18:20	04/08/22 10:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*92*		*68 - 140*	*04/06/22 18:20*	*04/08/22 10:47*	*1*

Lab Sample ID: LCS 280-571024/2-A
Matrix: Solid
Analysis Batch: 571224

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 571024

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,3,5-Trinitrobenzene			0.400	0.420		mg/Kg		105	69 - 115		
1,3-Dinitrobenzene			0.400	0.394		mg/Kg		98	83 - 122		
2,4,6-Trinitrotoluene			0.400	0.431		mg/Kg		108	65 - 133		
2,4-Dinitrotoluene			0.400	0.380		mg/Kg		95	82 - 119		
2,6-Dinitrotoluene			0.400	0.410		mg/Kg		103	86 - 113		
2-Amino-4,6-dinitrotoluene			0.400	0.384		mg/Kg		96	75 - 130		
4-Amino-2,6-dinitrotoluene			0.400	0.393		mg/Kg		98	77 - 125		
HMX			0.400	0.347		mg/Kg		87	65 - 114		
m-Nitrotoluene			0.400	0.392		mg/Kg		98	68 - 125		
Nitrobenzene			0.400	0.429		mg/Kg		107	75 - 120		
Nitroglycerin			0.400	0.455		mg/Kg		114	27 - 146		
o-Nitrotoluene			0.400	0.412		mg/Kg		103	72 - 125		
PETN			0.400	0.404		mg/Kg		101	62 - 143		
p-Nitrotoluene			0.400	0.402		mg/Kg		100	72 - 127		
RDX			0.400	0.380		mg/Kg		95	77 - 123		
Tetryl			0.400	0.640	Q	mg/Kg		160	36 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*115*		*68 - 140*

QC Sample Results

Client: HDR Inc
Project/Site: Longhorn AAP, TX (March 2022)

Job ID: 280-160190-1

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Lab Sample ID: LCSD 280-571024/3-A
Matrix: Solid
Analysis Batch: 571224

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 571024

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene			0.400	0.412		mg/Kg		103	69 - 115	2	20
1,3-Dinitrobenzene			0.400	0.396		mg/Kg		99	83 - 122	0	20
2,4,6-Trinitrotoluene			0.400	0.432		mg/Kg		108	65 - 133	0	20
2,4-Dinitrotoluene			0.400	0.389		mg/Kg		97	82 - 119	2	20
2,6-Dinitrotoluene			0.400	0.399		mg/Kg		100	86 - 113	3	20
2-Amino-4,6-dinitrotoluene			0.400	0.403	M	mg/Kg		101	75 - 130	5	20
4-Amino-2,6-dinitrotoluene			0.400	0.399	M	mg/Kg		100	77 - 125	1	20
HMX			0.400	0.450	Q	mg/Kg		112	65 - 114	26	20
m-Nitrotoluene			0.400	0.390		mg/Kg		97	68 - 125	1	20
Nitrobenzene			0.400	0.418		mg/Kg		104	75 - 120	3	20
Nitroglycerin			0.400	0.443		mg/Kg		111	27 - 146	3	20
o-Nitrotoluene			0.400	0.397		mg/Kg		99	72 - 125	4	20
PETN			0.400	0.418		mg/Kg		105	62 - 143	3	20
p-Nitrotoluene			0.400	0.404		mg/Kg		101	72 - 127	0	20
RDX			0.400	0.445		mg/Kg		111	77 - 123	16	20
Tetryl			0.400	0.608	Q	mg/Kg		152	36 - 120	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5	*111*		*68 - 140*

Lab Sample ID: LCSSRM 280-570111/2-B
Matrix: Solid
Analysis Batch: 571224

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 571024

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
1,3,5-Trinitrobenzene			0.600	0.556		mg/Kg		93	58 - 116
1,3-Dinitrobenzene			0.600	0.573		mg/Kg		96	69 - 116
2,4,6-Trinitrotoluene			0.600	0.420		mg/Kg		70	69 - 120
2,4-Dinitrotoluene			0.600	0.563		mg/Kg		94	69 - 137
2,6-Dinitrotoluene			0.600	0.589		mg/Kg		98	60 - 121
2-Amino-4,6-dinitrotoluene			0.600	0.524		mg/Kg		87	56 - 108
4-Amino-2,6-dinitrotoluene			0.600	0.489		mg/Kg		82	46 - 98
HMX			0.600	0.501		mg/Kg		84	59 - 131
m-Nitrotoluene			0.600	0.570		mg/Kg		95	69 - 124
Nitrobenzene			0.600	0.583		mg/Kg		97	58 - 119
Nitroglycerin			0.600	0.596		mg/Kg		99	60 - 115
o-Nitrotoluene			0.600	0.586		mg/Kg		98	67 - 117
PETN			0.600	0.549		mg/Kg		91	60 - 115
p-Nitrotoluene			0.600	0.571		mg/Kg		95	51 - 143
RDX			0.600	0.520		mg/Kg		87	62 - 123
Tetryl			0.600	0.443		mg/Kg		74	36 - 120

Surrogate	*LCSSRM %Recovery*	*LCSSRM Qualifier*	*Limits*
Nitrobenzene-d5	*103*		*68 - 140*

QC Sample Results

Client: HDR Inc
Project/Site: Longhorn AAP, TX (March 2022)

Job ID: 280-160190-1

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Lab Sample ID: 280-160190-19 MS
Matrix: Solid
Analysis Batch: 571224

Client Sample ID: 29SB168 (6-7)
Prep Type: Total/NA
Prep Batch: 571024

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,3,5-Trinitrobenzene	0.13		0.378	0.471		mg/Kg		90	69 - 115
1,3-Dinitrobenzene	0.047	U M	0.378	0.370		mg/Kg		98	83 - 122
2,6-Dinitrotoluene	0.47		0.378	0.814		mg/Kg		92	86 - 113
2-Amino-4,6-dinitrotoluene	0.20	M	0.378	0.559	M	mg/Kg		96	75 - 130
4-Amino-2,6-dinitrotoluene	0.16	M	0.378	0.487	M	mg/Kg		85	77 - 125
HMX	0.047	U M Q	0.378	0.332		mg/Kg		88	65 - 114
m-Nitrotoluene	0.045	J M	0.378	0.417	M	mg/Kg		98	68 - 125
Nitrobenzene	0.047	U	0.378	0.370		mg/Kg		98	75 - 120
Nitroglycerin	0.047	U M	0.378	0.393		mg/Kg		104	27 - 146
o-Nitrotoluene	0.21		0.378	0.562	M	mg/Kg		93	72 - 125
PETN	0.047	U	0.378	0.395		mg/Kg		104	62 - 143
p-Nitrotoluene	0.15		0.378	0.498	M	mg/Kg		93	72 - 127
RDX	0.047	U	0.378	0.391		mg/Kg		103	77 - 123
Tetryl	0.047	U Q J1	0.378	0.535	J1	mg/Kg		142	36 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5	*99*		*68 - 140*

Lab Sample ID: 280-160190-19 MSD
Matrix: Solid
Analysis Batch: 571224

Client Sample ID: 29SB168 (6-7)
Prep Type: Total/NA
Prep Batch: 571024

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene	0.13		0.387	0.502		mg/Kg		96	69 - 115	7	20
1,3-Dinitrobenzene	0.047	U M	0.387	0.436		mg/Kg		113	83 - 122	16	20
2,6-Dinitrotoluene	0.47		0.387	0.818		mg/Kg		91	86 - 113	0	20
2-Amino-4,6-dinitrotoluene	0.20	M	0.387	0.563	M	mg/Kg		95	75 - 130	1	20
4-Amino-2,6-dinitrotoluene	0.16	M	0.387	0.501	M	mg/Kg		87	77 - 125	3	20
HMX	0.047	U M Q	0.387	0.323		mg/Kg		83	65 - 114	3	20
m-Nitrotoluene	0.045	J M	0.387	0.405		mg/Kg		93	68 - 125	3	20
Nitrobenzene	0.047	U	0.387	0.382		mg/Kg		99	75 - 120	3	20
Nitroglycerin	0.047	U M	0.387	0.429		mg/Kg		111	27 - 146	9	20
o-Nitrotoluene	0.21		0.387	0.547		mg/Kg		87	72 - 125	3	20
PETN	0.047	U	0.387	0.396		mg/Kg		102	62 - 143	0	20
p-Nitrotoluene	0.15		0.387	0.509		mg/Kg		93	72 - 127	2	20
RDX	0.047	U	0.387	0.334		mg/Kg		86	77 - 123	16	20
Tetryl	0.047	U Q J1	0.387	0.560	J1	mg/Kg		145	36 - 120	5	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5	*106*		*68 - 140*

Lab Sample ID: 280-160190-19 DU
Matrix: Solid
Analysis Batch: 571224

Client Sample ID: 29SB168 (6-7)
Prep Type: Total/NA
Prep Batch: 571024

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
1,3,5-Trinitrobenzene	0.13		0.119		mg/Kg		8	20
1,3-Dinitrobenzene	0.047	U M	0.047	U M	mg/Kg		NC	20

QC Sample Results

Client: HDR Inc
Project/Site: Longhorn AAP, TX (March 2022)

Job ID: 280-160190-1

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Lab Sample ID: 280-160190-19 DU
Matrix: Solid
Analysis Batch: 571224

Client Sample ID: 29SB168 (6-7)
Prep Type: Total/NA
Prep Batch: 571024

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
2,6-Dinitrotoluene	0.47			0.447		mg/Kg				4	20
2-Amino-4,6-dinitrotoluene	0.20	M		0.175	M	mg/Kg				11	20
4-Amino-2,6-dinitrotoluene	0.16	M		0.158	M	mg/Kg				4	20
HMX	0.047	U M Q		0.047	U M Q	mg/Kg				NC	20
m-Nitrotoluene	0.045	J M		0.0450	J M	mg/Kg				0.9	20
Nitrobenzene	0.047	U		0.047	U	mg/Kg				NC	20
Nitroglycerin	0.047	U M		0.047	U	mg/Kg				NC	20
o-Nitrotoluene	0.21			0.195	M	mg/Kg				7	20
PETN	0.047	U		0.047	U	mg/Kg				NC	20
p-Nitrotoluene	0.15			0.142	M	mg/Kg				5	20
RDX	0.047	U		0.047	U	mg/Kg				NC	20
Tetryl	0.047	U Q J1		0.047	U Q	mg/Kg				NC	20

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
Nitrobenzene-d5	*100*		*68 - 140*

Lab Sample ID: 280-160190-19 TRL
Matrix: Solid
Analysis Batch: 571224

Client Sample ID: 29SB168 (6-7)
Prep Type: Total/NA
Prep Batch: 571024

Analyte	Sample Result	Sample Qualifier		TRL Result	TRL Qualifier	Unit	D			RSD	RSD Limit
1,3,5-Trinitrobenzene	0.13			0.120		mg/Kg				4	20
1,3-Dinitrobenzene	0.047	U M		0.048	U M	mg/Kg				NC	20
2,6-Dinitrotoluene	0.47			0.442		mg/Kg				3	20
2-Amino-4,6-dinitrotoluene	0.20	M		0.177	M	mg/Kg				7	20
4-Amino-2,6-dinitrotoluene	0.16	M		0.150	M	mg/Kg				5	20
HMX	0.047	U M Q		0.048	U M Q	mg/Kg				NC	20
m-Nitrotoluene	0.045	J M		0.0471	J M	mg/Kg				2	20
Nitrobenzene	0.047	U		0.048	U	mg/Kg				NC	20
Nitroglycerin	0.047	U M		0.048	U	mg/Kg				NC	20
o-Nitrotoluene	0.21			0.206	M	mg/Kg				4	20
PETN	0.047	U		0.048	U	mg/Kg				NC	20
p-Nitrotoluene	0.15			0.149	M	mg/Kg				3	20
RDX	0.047	U		0.048	U	mg/Kg				NC	20
Tetryl	0.047	U Q J1		0.048	U Q	mg/Kg				NC	20

Surrogate	*TRL %Recovery*	*TRL Qualifier*	*Limits*
Nitrobenzene-d5	*89*		*68 - 140*

Lab Sample ID: GB 280-570115/1-B
Matrix: Solid
Analysis Batch: 571897

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 571025

Analyte	GB Result	GB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.047	U	0.094	0.042	mg/Kg		04/06/22 18:17	04/14/22 17:18	1
1,3-Dinitrobenzene	0.047	U	0.094	0.042	mg/Kg		04/06/22 18:17	04/14/22 17:18	1
2,4,6-Trinitrotoluene	0.047	U	0.094	0.035	mg/Kg		04/06/22 18:17	04/14/22 17:18	1
2,4-Dinitrotoluene	0.047	U	0.094	0.044	mg/Kg		04/06/22 18:17	04/14/22 17:18	1

QC Sample Results

Client: HDR Inc
Project/Site: Longhorn AAP, TX (March 2022)

Job ID: 280-160190-1

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Lab Sample ID: GB 280-570115/1-B
Matrix: Solid
Analysis Batch: 571897

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 571025

Analyte	GB Result	GB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	0.047	U	0.094	0.038	mg/Kg		04/06/22 18:17	04/14/22 17:18	1
2-Amino-4,6-dinitrotoluene	0.047	U	0.094	0.047	mg/Kg		04/06/22 18:17	04/14/22 17:18	1
4-Amino-2,6-dinitrotoluene	0.047	U	0.094	0.029	mg/Kg		04/06/22 18:17	04/14/22 17:18	1
HMX	0.047	U M	0.094	0.043	mg/Kg		04/06/22 18:17	04/14/22 17:18	1
m-Nitrotoluene	0.047	U	0.094	0.041	mg/Kg		04/06/22 18:17	04/14/22 17:18	1
Nitrobenzene	0.047	U	0.10	0.036	mg/Kg		04/06/22 18:17	04/14/22 17:18	1
Nitroglycerin	0.047	U	0.094	0.027	mg/Kg		04/06/22 18:17	04/14/22 17:18	1
o-Nitrotoluene	0.047	U	0.094	0.040	mg/Kg		04/06/22 18:17	04/14/22 17:18	1
PETN	0.047	U	0.094	0.032	mg/Kg		04/06/22 18:17	04/14/22 17:18	1
p-Nitrotoluene	0.047	U	0.094	0.047	mg/Kg		04/06/22 18:17	04/14/22 17:18	1
RDX	0.047	U	0.11	0.041	mg/Kg		04/06/22 18:17	04/14/22 17:18	1
Tetryl	0.047	U	0.094	0.037	mg/Kg		04/06/22 18:17	04/14/22 17:18	1

Surrogate	*GB %Recovery*	*GB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*102*		*68 - 140*	*04/06/22 18:17*	*04/14/22 17:18*	*1*

Lab Sample ID: MB 280-571025/1-A
Matrix: Solid
Analysis Batch: 571897

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 571025

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.050	U	0.10	0.045	mg/Kg		04/06/22 18:17	04/14/22 16:58	1
1,3-Dinitrobenzene	0.050	U	0.10	0.045	mg/Kg		04/06/22 18:17	04/14/22 16:58	1
2,4,6-Trinitrotoluene	0.050	U	0.10	0.037	mg/Kg		04/06/22 18:17	04/14/22 16:58	1
2,4-Dinitrotoluene	0.050	U	0.10	0.047	mg/Kg		04/06/22 18:17	04/14/22 16:58	1
2,6-Dinitrotoluene	0.050	U	0.10	0.040	mg/Kg		04/06/22 18:17	04/14/22 16:58	1
2-Amino-4,6-dinitrotoluene	0.050	U	0.10	0.050	mg/Kg		04/06/22 18:17	04/14/22 16:58	1
4-Amino-2,6-dinitrotoluene	0.050	U	0.10	0.031	mg/Kg		04/06/22 18:17	04/14/22 16:58	1
HMX	0.050	U M	0.10	0.046	mg/Kg		04/06/22 18:17	04/14/22 16:58	1
m-Nitrotoluene	0.050	U	0.10	0.043	mg/Kg		04/06/22 18:17	04/14/22 16:58	1
Nitrobenzene	0.050	U	0.11	0.038	mg/Kg		04/06/22 18:17	04/14/22 16:58	1
Nitroglycerin	0.050	U	0.10	0.029	mg/Kg		04/06/22 18:17	04/14/22 16:58	1
o-Nitrotoluene	0.050	U	0.10	0.043	mg/Kg		04/06/22 18:17	04/14/22 16:58	1
PETN	0.050	U	0.10	0.034	mg/Kg		04/06/22 18:17	04/14/22 16:58	1
p-Nitrotoluene	0.050	U	0.10	0.049	mg/Kg		04/06/22 18:17	04/14/22 16:58	1
RDX	0.050	U	0.12	0.043	mg/Kg		04/06/22 18:17	04/14/22 16:58	1
Tetryl	0.050	U M	0.10	0.039	mg/Kg		04/06/22 18:17	04/14/22 16:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*94*		*68 - 140*	*04/06/22 18:17*	*04/14/22 16:58*	*1*

Lab Sample ID: LCS 280-571025/2-A
Matrix: Solid
Analysis Batch: 571897

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 571025

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,3,5-Trinitrobenzene			0.400	0.353		mg/Kg		88	69 - 115		
1,3-Dinitrobenzene			0.400	0.367		mg/Kg		92	83 - 122		

QC Sample Results

Client: HDR Inc
Project/Site: Longhorn AAP, TX (March 2022)

Job ID: 280-160190-1

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Lab Sample ID: LCS 280-571025/2-A
Matrix: Solid
Analysis Batch: 571897

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 571025

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
2,4,6-Trinitrotoluene			0.400	0.395		mg/Kg		99	65 - 133		
2,4-Dinitrotoluene			0.400	0.350		mg/Kg		88	82 - 119		
2,6-Dinitrotoluene			0.400	0.373		mg/Kg		93	86 - 113		
2-Amino-4,6-dinitrotoluene			0.400	0.334		mg/Kg		83	75 - 130		
4-Amino-2,6-dinitrotoluene			0.400	0.345		mg/Kg		86	77 - 125		
HMX			0.400	0.350		mg/Kg		88	65 - 114		
m-Nitrotoluene			0.400	0.398		mg/Kg		100	68 - 125		
Nitrobenzene			0.400	0.413		mg/Kg		103	75 - 120		
Nitroglycerin			0.400	0.409		mg/Kg		102	27 - 146		
o-Nitrotoluene			0.400	0.385		mg/Kg		96	72 - 125		
PETN			0.400	0.435		mg/Kg		109	62 - 143		
p-Nitrotoluene			0.400	0.387		mg/Kg		97	72 - 127		
RDX			0.400	0.360		mg/Kg		90	77 - 123		
Tetryl			0.400	0.579	Q	mg/Kg		145	36 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*103*		*68 - 140*

Lab Sample ID: LCSD 280-571025/3-A
Matrix: Solid
Analysis Batch: 571897

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 571025

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene			0.400	0.352		mg/Kg		88	69 - 115	0	20
1,3-Dinitrobenzene			0.400	0.363		mg/Kg		91	83 - 122	1	20
2,4,6-Trinitrotoluene			0.400	0.379		mg/Kg		95	65 - 133	4	20
2,4-Dinitrotoluene			0.400	0.354		mg/Kg		89	82 - 119	1	20
2,6-Dinitrotoluene			0.400	0.371		mg/Kg		93	86 - 113	0	20
2-Amino-4,6-dinitrotoluene			0.400	0.353		mg/Kg		88	75 - 130	6	20
4-Amino-2,6-dinitrotoluene			0.400	0.352		mg/Kg		88	77 - 125	2	20
HMX			0.400	0.348		mg/Kg		87	65 - 114	1	20
m-Nitrotoluene			0.400	0.385		mg/Kg		96	68 - 125	3	20
Nitrobenzene			0.400	0.402		mg/Kg		100	75 - 120	3	20
Nitroglycerin			0.400	0.379		mg/Kg		95	27 - 146	8	20
o-Nitrotoluene			0.400	0.390		mg/Kg		97	72 - 125	1	20
PETN			0.400	0.410		mg/Kg		103	62 - 143	6	20
p-Nitrotoluene			0.400	0.377		mg/Kg		94	72 - 127	3	20
RDX			0.400	0.368		mg/Kg		92	77 - 123	2	20
Tetryl			0.400	0.557	Q	mg/Kg		139	36 - 120	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5	*94*		*68 - 140*

QC Sample Results

Client: HDR Inc
Project/Site: Longhorn AAP, TX (March 2022)

Job ID: 280-160190-1

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Lab Sample ID: LCSSRM 280-570115/2-B
Matrix: Solid
Analysis Batch: 571897

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 571025

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
1,3,5-Trinitrobenzene	0.600	0.510		mg/Kg		85	58 - 116
1,3-Dinitrobenzene	0.600	0.538		mg/Kg		90	69 - 116
2,4,6-Trinitrotoluene	0.600	0.409	Q	mg/Kg		68	69 - 120
2,4-Dinitrotoluene	0.600	0.526		mg/Kg		88	69 - 137
2,6-Dinitrotoluene	0.600	0.569		mg/Kg		95	60 - 121
2-Amino-4,6-dinitrotoluene	0.600	0.484		mg/Kg		81	56 - 108
4-Amino-2,6-dinitrotoluene	0.600	0.465		mg/Kg		77	46 - 98
HMX	0.600	0.562		mg/Kg		94	59 - 131
m-Nitrotoluene	0.600	0.595		mg/Kg		99	69 - 124
Nitrobenzene	0.600	0.597		mg/Kg		100	58 - 119
Nitroglycerin	0.600	0.574		mg/Kg		96	60 - 115
o-Nitrotoluene	0.600	0.612		mg/Kg		102	67 - 117
PETN	0.600	0.577		mg/Kg		96	60 - 115
p-Nitrotoluene	0.600	0.616		mg/Kg		103	51 - 143
RDX	0.600	0.469		mg/Kg		78	62 - 123
Tetryl	0.600	0.433		mg/Kg		72	36 - 120

Surrogate	*LCSSRM %Recovery*	*LCSSRM Qualifier*	*Limits*
Nitrobenzene-d5	*102*		*68 - 140*

Lab Sample ID: 280-160190-52MS
Matrix: Solid
Analysis Batch: 571897

Client Sample ID: 29SB203 (3-4)
Prep Type: Total/NA
Prep Batch: 571025

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,3,5-Trinitrobenzene	0.047	U	0.395	0.330		mg/Kg		84	69 - 115
1,3-Dinitrobenzene	0.047	U	0.395	0.349		mg/Kg		88	83 - 122
2,4,6-Trinitrotoluene	0.047	U Q	0.395	0.368		mg/Kg		93	65 - 133
2,4-Dinitrotoluene	0.047	U	0.395	0.340		mg/Kg		86	82 - 119
2,6-Dinitrotoluene	0.047	U	0.395	0.382		mg/Kg		97	86 - 113
2-Amino-4,6-dinitrotoluene	0.047	U J1	0.395	0.262	J1	mg/Kg		66	75 - 130
4-Amino-2,6-dinitrotoluene	0.047	U J1	0.395	0.132	J1	mg/Kg		33	77 - 125
HMX	0.047	U	0.395	0.305		mg/Kg		77	65 - 114
m-Nitrotoluene	0.047	U	0.395	0.411		mg/Kg		104	68 - 125
Nitrobenzene	0.047	U	0.395	0.362		mg/Kg		92	75 - 120
Nitroglycerin	0.047	U	0.395	0.370		mg/Kg		94	27 - 146
o-Nitrotoluene	0.047	U	0.395	0.361		mg/Kg		91	72 - 125
PETN	0.047	U	0.395	0.416		mg/Kg		105	62 - 143
p-Nitrotoluene	0.047	U	0.395	0.361		mg/Kg		91	72 - 127
RDX	0.047	U	0.395	0.323	M	mg/Kg		82	77 - 123
Tetryl	0.047	U Q J1	0.395	0.531	J1	mg/Kg		134	36 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5	*95*		*68 - 140*

QC Sample Results

Client: HDR Inc
Project/Site: Longhorn AAP, TX (March 2022)

Job ID: 280-160190-1

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Lab Sample ID: 280-160190-52MSD
Matrix: Solid
Analysis Batch: 571897

Client Sample ID: 29SB203 (3-4)
Prep Type: Total/NA
Prep Batch: 571025

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene	0.047	U	0.385	0.344		mg/Kg		89	69 - 115	4	20
1,3-Dinitrobenzene	0.047	U	0.385	0.340		mg/Kg		88	83 - 122	3	20
2,4,6-Trinitrotoluene	0.047	U Q	0.385	0.349		mg/Kg		91	65 - 133	5	20
2,4-Dinitrotoluene	0.047	U	0.385	0.334		mg/Kg		87	82 - 119	2	20
2,6-Dinitrotoluene	0.047	U	0.385	0.361		mg/Kg		94	86 - 113	5	20
2-Amino-4,6-dinitrotoluene	0.047	U J1	0.385	0.252	J1	mg/Kg		66	75 - 130	4	20
4-Amino-2,6-dinitrotoluene	0.047	U J1	0.385	0.118	J1	mg/Kg		31	77 - 125	11	20
HMX	0.047	U	0.385	0.342		mg/Kg		89	65 - 114	11	20
m-Nitrotoluene	0.047	U	0.385	0.343		mg/Kg		89	68 - 125	18	20
Nitrobenzene	0.047	U	0.385	0.357		mg/Kg		93	75 - 120	1	20
Nitroglycerin	0.047	U	0.385	0.404		mg/Kg		105	27 - 146	9	20
o-Nitrotoluene	0.047	U	0.385	0.352		mg/Kg		91	72 - 125	3	20
PETN	0.047	U	0.385	0.386		mg/Kg		100	62 - 143	8	20
p-Nitrotoluene	0.047	U	0.385	0.353		mg/Kg		92	72 - 127	2	20
RDX	0.047	U	0.385	0.297	M	mg/Kg		77	77 - 123	8	20
Tetryl	0.047	U Q J1	0.385	0.557	J1	mg/Kg		145	36 - 120	5	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5	*97*		*68 - 140*

Lab Sample ID: 280-160190-A-52-I DU
Matrix: Solid
Analysis Batch: 571897

Client Sample ID: 280-160190-A-52-I DU
Prep Type: Total/NA
Prep Batch: 571025

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
1,3,5-Trinitrobenzene	0.047	U		0.049	U	mg/Kg				NC	20
1,3-Dinitrobenzene	0.047	U		0.049	U	mg/Kg				NC	20
2,4,6-Trinitrotoluene	0.047	U Q		0.049	U M Q	mg/Kg				NC	20
2,4-Dinitrotoluene	0.047	U		0.049	U	mg/Kg				NC	20
2,6-Dinitrotoluene	0.047	U		0.049	U	mg/Kg				NC	20
2-Amino-4,6-dinitrotoluene	0.047	U J1		0.049	U	mg/Kg				NC	20
4-Amino-2,6-dinitrotoluene	0.047	U J1		0.049	U	mg/Kg				NC	20
HMX	0.047	U		0.049	U	mg/Kg				NC	20
m-Nitrotoluene	0.047	U		0.049	U	mg/Kg				NC	20
Nitrobenzene	0.047	U		0.049	U	mg/Kg				NC	20
Nitroglycerin	0.047	U		0.049	U	mg/Kg				NC	20
o-Nitrotoluene	0.047	U		0.049	U	mg/Kg				NC	20
PETN	0.047	U		0.049	U	mg/Kg				NC	20
p-Nitrotoluene	0.047	U		0.049	U	mg/Kg				NC	20
RDX	0.047	U		0.049	U	mg/Kg				NC	20
Tetryl	0.047	U Q J1		0.049	U Q	mg/Kg				NC	20

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
Nitrobenzene-d5	*107*		*68 - 140*

QC Sample Results

Client: HDR Inc
Project/Site: Longhorn AAP, TX (March 2022)

Job ID: 280-160190-1

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Lab Sample ID: 280-160190-A-52-J TRL
Matrix: Solid
Analysis Batch: 571897

Client Sample ID: 280-160190-A-52-J TRL
Prep Type: Total/NA
Prep Batch: 571025

Analyte	Sample Result	Sample Qualifier		TRL Result	TRL Qualifier	Unit	D			RSD	RSD Limit
1,3,5-Trinitrobenzene	0.047	U		0.048	U	mg/Kg				NC	20
1,3-Dinitrobenzene	0.047	U		0.048	U	mg/Kg				NC	20
2,4,6-Trinitrotoluene	0.047	U Q		0.048	U M	mg/Kg				NC	20
2,4-Dinitrotoluene	0.047	U Q		0.048	U	mg/Kg				NC	20
2,6-Dinitrotoluene	0.047	U Q		0.048	U	mg/Kg				NC	20
2-Amino-4,6-dinitrotoluene	0.047	U J1		0.048	U	mg/Kg				NC	20
4-Amino-2,6-dinitrotoluene	0.047	U J1		0.048	U	mg/Kg				NC	20
HMX	0.047	U		0.048	U M	mg/Kg				NC	20
m-Nitrotoluene	0.047	U		0.048	U	mg/Kg				NC	20
Nitrobenzene	0.047	U		0.048	U	mg/Kg				NC	20
Nitroglycerin	0.047	U M		0.048	U	mg/Kg				NC	20
o-Nitrotoluene	0.047	U		0.048	U	mg/Kg				NC	20
PETN	0.047	U		0.048	U	mg/Kg				NC	20
p-Nitrotoluene	0.047	U		0.048	U	mg/Kg				NC	20
RDX	0.047	U Q		0.048	U	mg/Kg				NC	20
Tetryl	0.047	U J1 Q		0.048	U Q	mg/Kg				NC	20

Surrogate	*TRL %Recovery*	*TRL Qualifier*	*Limits*
Nitrobenzene-d5	*94*		*68 - 140*

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) - DL

Lab Sample ID: 280-160190-19 MS
Matrix: Solid
Analysis Batch: 571614

Client Sample ID: 29SB168 (6-7)
Prep Type: Total/NA
Prep Batch: 571024

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
2,4,6-Trinitrotoluene - DL	1.4	D J1	0.378	1.57	D J1	mg/Kg		56	65 - 133		
2,4-Dinitrotoluene - DL	5.1	D J1	0.378	5.10	D 4	mg/Kg		0.2	82 - 119		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5 - DL	*92*	*D*	*68 - 140*

Lab Sample ID: 280-160190-19 MSD
Matrix: Solid
Analysis Batch: 571614

Client Sample ID: 29SB168 (6-7)
Prep Type: Total/NA
Prep Batch: 571024

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4,6-Trinitrotoluene - DL	1.4	D J1	0.387	1.62	D	mg/Kg		68	65 - 133	3	20
2,4-Dinitrotoluene - DL	5.1	D J1	0.387	5.47	D 4	mg/Kg		96	82 - 119	7	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5 - DL	*92*	*D*	*68 - 140*

QC Sample Results

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) - DL (Continued)

Lab Sample ID: 280-160190-19 DU
Matrix: Solid
Analysis Batch: 571614

Client Sample ID: 29SB168 (6-7)
Prep Type: Total/NA
Prep Batch: 571024

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
2,4,6-Trinitrotoluene - DL	1.4	D J1		1.23	D	mg/Kg				10	20
2,4-Dinitrotoluene - DL	5.1	D J1		5.01	D	mg/Kg				2	20

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
Nitrobenzene-d5 - DL	*89*	*D*	*68 - 140*

Lab Sample ID: 280-160190-19 TRL
Matrix: Solid
Analysis Batch: 571614

Client Sample ID: 29SB168 (6-7)
Prep Type: Total/NA
Prep Batch: 571024

Analyte	Sample Result	Sample Qualifier		TRL Result	TRL Qualifier	Unit	D			RSD	RSD Limit
2,4,6-Trinitrotoluene - DL	1.4	D J1		1.32	D	mg/Kg				5	20
2,4-Dinitrotoluene - DL	5.1	D J1		4.75	D	mg/Kg				4	20

Surrogate	*TRL %Recovery*	*TRL Qualifier*	*Limits*
Nitrobenzene-d5 - DL	*91*	*D*	*68 - 140*

QC Association Summary

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

LCMS

Prep Batch: 570053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-160190-56	EB-03	Total/NA	Water	3535	
MB 280-570053/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-570053/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 280-570053/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Leach Batch: 570105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-160190-1 - DL	29SB173 (14.5-15)	Total/NA	Solid	Dry and Grind	
280-160190-1	29SB173 (14.5-15)	Total/NA	Solid	Dry and Grind	
280-160190-2	29SB181 (14.5-15)	Total/NA	Solid	Dry and Grind	
280-160190-2 - DL	29SB181 (14.5-15)	Total/NA	Solid	Dry and Grind	
280-160190-3	29SB182 (14.5-15)	Total/NA	Solid	Dry and Grind	
280-160190-4	29SB175 (3-4)	Total/NA	Solid	Dry and Grind	
280-160190-5	29SB175 (6-7)	Total/NA	Solid	Dry and Grind	
280-160190-6	29SB175 (11-12)	Total/NA	Solid	Dry and Grind	
280-160190-7	29SB175 (14.5-15)	Total/NA	Solid	Dry and Grind	
GB 280-570105/1-B	Method Blank	Total/NA	Solid	Dry and Grind	
LCSSRM 280-570105/2-B	Lab Control Sample	Total/NA	Solid	Dry and Grind	

Leach Batch: 570111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-160190-8	DUP-05	Total/NA	Solid	Dry and Grind	
280-160190-9	29SB167 (3-4)	Total/NA	Solid	Dry and Grind	
280-160190-10	29SB167 (6-7)	Total/NA	Solid	Dry and Grind	
280-160190-11	29SB167 (11-12)	Total/NA	Solid	Dry and Grind	
280-160190-12	29SB167 (14.5-15)	Total/NA	Solid	Dry and Grind	
280-160190-13	DUP-06	Total/NA	Solid	Dry and Grind	
280-160190-14 - DL	29SB176 (14.5-15)	Total/NA	Solid	Dry and Grind	
280-160190-14	29SB176 (14.5-15)	Total/NA	Solid	Dry and Grind	
280-160190-15	29SB179 (14.5-15)	Total/NA	Solid	Dry and Grind	
280-160190-16	29SB178 (14.5-15)	Total/NA	Solid	Dry and Grind	
280-160190-17 - DL	29SB177 (14.5-15)	Total/NA	Solid	Dry and Grind	
280-160190-17	29SB177 (14.5-15)	Total/NA	Solid	Dry and Grind	
280-160190-18 - DL	29SB168 (3-4)	Total/NA	Solid	Dry and Grind	
280-160190-18	29SB168 (3-4)	Total/NA	Solid	Dry and Grind	
280-160190-19 - DL	29SB168 (6-7)	Total/NA	Solid	Dry and Grind	
280-160190-19	29SB168 (6-7)	Total/NA	Solid	Dry and Grind	
280-160190-20 - DL	29SB168 (11-12)	Total/NA	Solid	Dry and Grind	
280-160190-20 - DL2	29SB168 (11-12)	Total/NA	Solid	Dry and Grind	
280-160190-20	29SB168 (11-12)	Total/NA	Solid	Dry and Grind	
280-160190-21	29SB168 (14.5-15)	Total/NA	Solid	Dry and Grind	
280-160190-22	29SB169 (3-4)	Total/NA	Solid	Dry and Grind	
280-160190-23	29SB169 (6-7)	Total/NA	Solid	Dry and Grind	
280-160190-24	29SB169 (11-12)	Total/NA	Solid	Dry and Grind	
280-160190-25	29SB169 (14.5-15)	Total/NA	Solid	Dry and Grind	
280-160190-26	DUP-07	Total/NA	Solid	Dry and Grind	
280-160190-27	29SB170 (3-4)	Total/NA	Solid	Dry and Grind	
GB 280-570111/1-B	Method Blank	Total/NA	Solid	Dry and Grind	
LCSSRM 280-570111/2-B	Lab Control Sample	Total/NA	Solid	Dry and Grind	
280-160190-19 MS - DL	29SB168 (6-7)	Total/NA	Solid	Dry and Grind	
280-160190-19 MS	29SB168 (6-7)	Total/NA	Solid	Dry and Grind	

QC Association Summary

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

LCMS (Continued)

Leach Batch: 570111 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-160190-19 MSD - DL	29SB168 (6-7)	Total/NA	Solid	Dry and Grind	
280-160190-19 MSD	29SB168 (6-7)	Total/NA	Solid	Dry and Grind	
280-160190-19 DU - DL	29SB168 (6-7)	Total/NA	Solid	Dry and Grind	
280-160190-19 DU	29SB168 (6-7)	Total/NA	Solid	Dry and Grind	
280-160190-19 TRL - DL	29SB168 (6-7)	Total/NA	Solid	Dry and Grind	
280-160190-19 TRL	29SB168 (6-7)	Total/NA	Solid	Dry and Grind	

Leach Batch: 570112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-160190-28	29SB170 (6-7)	Total/NA	Solid	Dry and Grind	
280-160190-29	29SB170 (11-12)	Total/NA	Solid	Dry and Grind	
280-160190-30	29SB170 (14.5-15)	Total/NA	Solid	Dry and Grind	
280-160190-31	29SB171 (3-4)	Total/NA	Solid	Dry and Grind	
280-160190-32	29SB171 (6-7)	Total/NA	Solid	Dry and Grind	
280-160190-33	29SB171 (11-12)	Total/NA	Solid	Dry and Grind	
280-160190-34	29SB171 (14.5-15)	Total/NA	Solid	Dry and Grind	
280-160190-35	DUP-08	Total/NA	Solid	Dry and Grind	
280-160190-36	29SB174 (3-4)	Total/NA	Solid	Dry and Grind	
280-160190-37	29SB174 (6-7)	Total/NA	Solid	Dry and Grind	
280-160190-38	29SB174 (11-12)	Total/NA	Solid	Dry and Grind	
280-160190-39	29SB174 (14.5-15)	Total/NA	Solid	Dry and Grind	
280-160190-40	29SB190 (3-4)	Total/NA	Solid	Dry and Grind	
280-160190-41	29SB190 (19-20)	Total/NA	Solid	Dry and Grind	
280-160190-42	29SB192 (7-8)	Total/NA	Solid	Dry and Grind	
280-160190-43	29SB192 (11-12)	Total/NA	Solid	Dry and Grind	
280-160190-44	29SB192 (15-16)	Total/NA	Solid	Dry and Grind	
280-160190-45	29SB192 (19-20)	Total/NA	Solid	Dry and Grind	
280-160190-46	DUP-09	Total/NA	Solid	Dry and Grind	
280-160190-47	29SB193 (7-8)	Total/NA	Solid	Dry and Grind	
GB 280-570112/1-B	Method Blank	Total/NA	Solid	Dry and Grind	
LCSSRM 280-570112/2-B	Lab Control Sample	Total/NA	Solid	Dry and Grind	
280-160190-A-28-E MS	280-160190-A-28-E MS	Total/NA	Solid	Dry and Grind	
280-160190-A-28-F MSD	280-160190-A-28-F MSD	Total/NA	Solid	Dry and Grind	
280-160190-A-29-E DU	280-160190-A-29-E DU	Total/NA	Solid	Dry and Grind	
280-160190-A-29-F TRL	280-160190-A-29-F TRL	Total/NA	Solid	Dry and Grind	

Leach Batch: 570115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-160190-48	29SB193 (11-12)	Total/NA	Solid	Dry and Grind	
280-160190-49	29SB193 (15-16)	Total/NA	Solid	Dry and Grind	
280-160190-50	29SB193 (19-20)	Total/NA	Solid	Dry and Grind	
280-160190-51	DUP-10	Total/NA	Solid	Dry and Grind	
280-160190-52	29SB203 (3-4)	Total/NA	Solid	Dry and Grind	
280-160190-53	29SB203 (7-8)	Total/NA	Solid	Dry and Grind	
280-160190-54	29SB204 (3-4)	Total/NA	Solid	Dry and Grind	
280-160190-55	29SB204 (7-8)	Total/NA	Solid	Dry and Grind	
GB 280-570115/1-B	Method Blank	Total/NA	Solid	Dry and Grind	
LCSSRM 280-570115/2-B	Lab Control Sample	Total/NA	Solid	Dry and Grind	
280-160190-52MS	29SB203 (3-4)	Total/NA	Solid	Dry and Grind	
280-160190-52MSD	29SB203 (3-4)	Total/NA	Solid	Dry and Grind	
280-160190-A-52-I DU	280-160190-A-52-I DU	Total/NA	Solid	Dry and Grind	

QC Association Summary

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

LCMS (Continued)

Leach Batch: 570115 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-160190-A-52-J TRL	280-160190-A-52-J TRL	Total/NA	Solid	Dry and Grind	

Prep Batch: 570718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-160190-1	29SB173 (14.5-15)	Total/NA	Solid	8330B	570105
280-160190-1 - DL	29SB173 (14.5-15)	Total/NA	Solid	8330B	570105
280-160190-2	29SB181 (14.5-15)	Total/NA	Solid	8330B	570105
280-160190-2 - DL	29SB181 (14.5-15)	Total/NA	Solid	8330B	570105
280-160190-3	29SB182 (14.5-15)	Total/NA	Solid	8330B	570105
280-160190-4	29SB175 (3-4)	Total/NA	Solid	8330B	570105
280-160190-5	29SB175 (6-7)	Total/NA	Solid	8330B	570105
280-160190-6	29SB175 (11-12)	Total/NA	Solid	8330B	570105
280-160190-7	29SB175 (14.5-15)	Total/NA	Solid	8330B	570105
GB 280-570105/1-B	Method Blank	Total/NA	Solid	8330B	570105
MB 280-570718/1-A	Method Blank	Total/NA	Solid	8330B	
LCS 280-570718/2-A	Lab Control Sample	Total/NA	Solid	8330B	
LCSD 280-570718/3-A	Lab Control Sample Dup	Total/NA	Solid	8330B	
LCSSRM 280-570105/2-B	Lab Control Sample	Total/NA	Solid	8330B	570105

Analysis Batch: 570784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-160190-56	EB-03	Total/NA	Water	8321A	570053
MB 280-570053/1-A	Method Blank	Total/NA	Water	8321A	570053
LCS 280-570053/2-A	Lab Control Sample	Total/NA	Water	8321A	570053
LCSD 280-570053/3-A	Lab Control Sample Dup	Total/NA	Water	8321A	570053

Prep Batch: 571022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-160190-28	29SB170 (6-7)	Total/NA	Solid	8330B	570112
280-160190-29	29SB170 (11-12)	Total/NA	Solid	8330B	570112
280-160190-30	29SB170 (14.5-15)	Total/NA	Solid	8330B	570112
280-160190-31	29SB171 (3-4)	Total/NA	Solid	8330B	570112
280-160190-32	29SB171 (6-7)	Total/NA	Solid	8330B	570112
280-160190-33	29SB171 (11-12)	Total/NA	Solid	8330B	570112
280-160190-34	29SB171 (14.5-15)	Total/NA	Solid	8330B	570112
280-160190-35	DUP-08	Total/NA	Solid	8330B	570112
280-160190-36	29SB174 (3-4)	Total/NA	Solid	8330B	570112
280-160190-37	29SB174 (6-7)	Total/NA	Solid	8330B	570112
280-160190-38	29SB174 (11-12)	Total/NA	Solid	8330B	570112
280-160190-39	29SB174 (14.5-15)	Total/NA	Solid	8330B	570112
280-160190-40	29SB190 (3-4)	Total/NA	Solid	8330B	570112
280-160190-41	29SB190 (19-20)	Total/NA	Solid	8330B	570112
280-160190-42	29SB192 (7-8)	Total/NA	Solid	8330B	570112
280-160190-43	29SB192 (11-12)	Total/NA	Solid	8330B	570112
280-160190-44	29SB192 (15-16)	Total/NA	Solid	8330B	570112
280-160190-45	29SB192 (19-20)	Total/NA	Solid	8330B	570112
280-160190-46	DUP-09	Total/NA	Solid	8330B	570112
280-160190-47	29SB193 (7-8)	Total/NA	Solid	8330B	570112
GB 280-570112/1-B	Method Blank	Total/NA	Solid	8330B	570112
MB 280-571022/1-A	Method Blank	Total/NA	Solid	8330B	
LCS 280-571022/2-A	Lab Control Sample	Total/NA	Solid	8330B	

QC Association Summary

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

LCMS (Continued)

Prep Batch: 571022 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 280-571022/3-A	Lab Control Sample Dup	Total/NA	Solid	8330B	
LCSSRM 280-570112/2-B	Lab Control Sample	Total/NA	Solid	8330B	570112
280-160190-A-28-E MS	280-160190-A-28-E MS	Total/NA	Solid	8330B	570112
280-160190-A-28-F MSD	280-160190-A-28-F MSD	Total/NA	Solid	8330B	570112
280-160190-A-29-E DU	280-160190-A-29-E DU	Total/NA	Solid	8330B	570112
280-160190-A-29-F TRL	280-160190-A-29-F TRL	Total/NA	Solid	8330B	570112

Prep Batch: 571024

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-160190-8	DUP-05	Total/NA	Solid	8330B	570111
280-160190-9	29SB167 (3-4)	Total/NA	Solid	8330B	570111
280-160190-10	29SB167 (6-7)	Total/NA	Solid	8330B	570111
280-160190-11	29SB167 (11-12)	Total/NA	Solid	8330B	570111
280-160190-12	29SB167 (14.5-15)	Total/NA	Solid	8330B	570111
280-160190-13	DUP-06	Total/NA	Solid	8330B	570111
280-160190-14 - DL	29SB176 (14.5-15)	Total/NA	Solid	8330B	570111
280-160190-14	29SB176 (14.5-15)	Total/NA	Solid	8330B	570111
280-160190-15	29SB179 (14.5-15)	Total/NA	Solid	8330B	570111
280-160190-16	29SB178 (14.5-15)	Total/NA	Solid	8330B	570111
280-160190-17 - DL	29SB177 (14.5-15)	Total/NA	Solid	8330B	570111
280-160190-17	29SB177 (14.5-15)	Total/NA	Solid	8330B	570111
280-160190-18 - DL	29SB168 (3-4)	Total/NA	Solid	8330B	570111
280-160190-18	29SB168 (3-4)	Total/NA	Solid	8330B	570111
280-160190-19 - DL	29SB168 (6-7)	Total/NA	Solid	8330B	570111
280-160190-19	29SB168 (6-7)	Total/NA	Solid	8330B	570111
280-160190-20 - DL2	29SB168 (11-12)	Total/NA	Solid	8330B	570111
280-160190-20 - DL	29SB168 (11-12)	Total/NA	Solid	8330B	570111
280-160190-20	29SB168 (11-12)	Total/NA	Solid	8330B	570111
280-160190-21	29SB168 (14.5-15)	Total/NA	Solid	8330B	570111
280-160190-22	29SB169 (3-4)	Total/NA	Solid	8330B	570111
280-160190-23	29SB169 (6-7)	Total/NA	Solid	8330B	570111
280-160190-24	29SB169 (11-12)	Total/NA	Solid	8330B	570111
280-160190-25	29SB169 (14.5-15)	Total/NA	Solid	8330B	570111
280-160190-26	DUP-07	Total/NA	Solid	8330B	570111
280-160190-27	29SB170 (3-4)	Total/NA	Solid	8330B	570111
GB 280-570111/1-B	Method Blank	Total/NA	Solid	8330B	570111
MB 280-571024/1-A	Method Blank	Total/NA	Solid	8330B	
LCS 280-571024/2-A	Lab Control Sample	Total/NA	Solid	8330B	
LCSD 280-571024/3-A	Lab Control Sample Dup	Total/NA	Solid	8330B	
LCSSRM 280-570111/2-B	Lab Control Sample	Total/NA	Solid	8330B	570111
280-160190-19 MS - DL	29SB168 (6-7)	Total/NA	Solid	8330B	570111
280-160190-19 MS	29SB168 (6-7)	Total/NA	Solid	8330B	570111
280-160190-19 MSD - DL	29SB168 (6-7)	Total/NA	Solid	8330B	570111
280-160190-19 MSD	29SB168 (6-7)	Total/NA	Solid	8330B	570111
280-160190-19 DU - DL	29SB168 (6-7)	Total/NA	Solid	8330B	570111
280-160190-19 DU	29SB168 (6-7)	Total/NA	Solid	8330B	570111
280-160190-19 TRL - DL	29SB168 (6-7)	Total/NA	Solid	8330B	570111
280-160190-19 TRL	29SB168 (6-7)	Total/NA	Solid	8330B	570111

QC Association Summary

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

LCMS

Prep Batch: 571025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-160190-48	29SB193 (11-12)	Total/NA	Solid	8330B	570115
280-160190-49	29SB193 (15-16)	Total/NA	Solid	8330B	570115
280-160190-50	29SB193 (19-20)	Total/NA	Solid	8330B	570115
280-160190-51	DUP-10	Total/NA	Solid	8330B	570115
280-160190-52	29SB203 (3-4)	Total/NA	Solid	8330B	570115
280-160190-53	29SB203 (7-8)	Total/NA	Solid	8330B	570115
280-160190-54	29SB204 (3-4)	Total/NA	Solid	8330B	570115
280-160190-55	29SB204 (7-8)	Total/NA	Solid	8330B	570115
GB 280-570115/1-B	Method Blank	Total/NA	Solid	8330B	570115
MB 280-571025/1-A	Method Blank	Total/NA	Solid	8330B	
LCS 280-571025/2-A	Lab Control Sample	Total/NA	Solid	8330B	
LCSD 280-571025/3-A	Lab Control Sample Dup	Total/NA	Solid	8330B	
LCSSRM 280-570115/2-B	Lab Control Sample	Total/NA	Solid	8330B	570115
280-160190-52MS	29SB203 (3-4)	Total/NA	Solid	8330B	570115
280-160190-52MSD	29SB203 (3-4)	Total/NA	Solid	8330B	570115
280-160190-A-52-I DU	280-160190-A-52-I DU	Total/NA	Solid	8330B	570115
280-160190-A-52-J TRL	280-160190-A-52-J TRL	Total/NA	Solid	8330B	570115

Analysis Batch: 571108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-160190-1	29SB173 (14.5-15)	Total/NA	Solid	8321A	570718
280-160190-1 - DL	29SB173 (14.5-15)	Total/NA	Solid	8321A	570718
280-160190-2	29SB181 (14.5-15)	Total/NA	Solid	8321A	570718
280-160190-2 - DL	29SB181 (14.5-15)	Total/NA	Solid	8321A	570718
280-160190-3	29SB182 (14.5-15)	Total/NA	Solid	8321A	570718
280-160190-4	29SB175 (3-4)	Total/NA	Solid	8321A	570718
280-160190-5	29SB175 (6-7)	Total/NA	Solid	8321A	570718
280-160190-6	29SB175 (11-12)	Total/NA	Solid	8321A	570718
280-160190-7	29SB175 (14.5-15)	Total/NA	Solid	8321A	570718
GB 280-570105/1-B	Method Blank	Total/NA	Solid	8321A	570718
MB 280-570718/1-A	Method Blank	Total/NA	Solid	8321A	570718
LCS 280-570718/2-A	Lab Control Sample	Total/NA	Solid	8321A	570718
LCSD 280-570718/3-A	Lab Control Sample Dup	Total/NA	Solid	8321A	570718
LCSSRM 280-570105/2-B	Lab Control Sample	Total/NA	Solid	8321A	570718

Analysis Batch: 571224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-160190-8	DUP-05	Total/NA	Solid	8321A	571024
280-160190-9	29SB167 (3-4)	Total/NA	Solid	8321A	571024
280-160190-10	29SB167 (6-7)	Total/NA	Solid	8321A	571024
280-160190-11	29SB167 (11-12)	Total/NA	Solid	8321A	571024
280-160190-12	29SB167 (14.5-15)	Total/NA	Solid	8321A	571024
280-160190-13	DUP-06	Total/NA	Solid	8321A	571024
280-160190-14	29SB176 (14.5-15)	Total/NA	Solid	8321A	571024
280-160190-15	29SB179 (14.5-15)	Total/NA	Solid	8321A	571024
280-160190-16	29SB178 (14.5-15)	Total/NA	Solid	8321A	571024
280-160190-17	29SB177 (14.5-15)	Total/NA	Solid	8321A	571024
280-160190-18	29SB168 (3-4)	Total/NA	Solid	8321A	571024
280-160190-19	29SB168 (6-7)	Total/NA	Solid	8321A	571024
280-160190-20	29SB168 (11-12)	Total/NA	Solid	8321A	571024
280-160190-21	29SB168 (14.5-15)	Total/NA	Solid	8321A	571024

QC Association Summary

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

LCMS (Continued)

Analysis Batch: 571224 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-160190-22	29SB169 (3-4)	Total/NA	Solid	8321A	571024
280-160190-23	29SB169 (6-7)	Total/NA	Solid	8321A	571024
280-160190-24	29SB169 (11-12)	Total/NA	Solid	8321A	571024
280-160190-25	29SB169 (14.5-15)	Total/NA	Solid	8321A	571024
280-160190-26	DUP-07	Total/NA	Solid	8321A	571024
280-160190-27	29SB170 (3-4)	Total/NA	Solid	8321A	571024
GB 280-570111/1-B	Method Blank	Total/NA	Solid	8321A	571024
MB 280-571024/1-A	Method Blank	Total/NA	Solid	8321A	571024
LCS 280-571024/2-A	Lab Control Sample	Total/NA	Solid	8321A	571024
LCSD 280-571024/3-A	Lab Control Sample Dup	Total/NA	Solid	8321A	571024
LCSSRM 280-570111/2-B	Lab Control Sample	Total/NA	Solid	8321A	571024
280-160190-19 MS	29SB168 (6-7)	Total/NA	Solid	8321A	571024
280-160190-19 MSD	29SB168 (6-7)	Total/NA	Solid	8321A	571024
280-160190-19 DU	29SB168 (6-7)	Total/NA	Solid	8321A	571024
280-160190-19 TRL	29SB168 (6-7)	Total/NA	Solid	8321A	571024

Analysis Batch: 571614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-160190-14 - DL	29SB176 (14.5-15)	Total/NA	Solid	8321A	571024
280-160190-17 - DL	29SB177 (14.5-15)	Total/NA	Solid	8321A	571024
280-160190-18 - DL	29SB168 (3-4)	Total/NA	Solid	8321A	571024
280-160190-19 - DL	29SB168 (6-7)	Total/NA	Solid	8321A	571024
280-160190-20 - DL	29SB168 (11-12)	Total/NA	Solid	8321A	571024
280-160190-20 - DL2	29SB168 (11-12)	Total/NA	Solid	8321A	571024
280-160190-19 MS - DL	29SB168 (6-7)	Total/NA	Solid	8321A	571024
280-160190-19 MSD - DL	29SB168 (6-7)	Total/NA	Solid	8321A	571024
280-160190-19 DU - DL	29SB168 (6-7)	Total/NA	Solid	8321A	571024
280-160190-19 TRL - DL	29SB168 (6-7)	Total/NA	Solid	8321A	571024

Analysis Batch: 571896

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-160190-28	29SB170 (6-7)	Total/NA	Solid	8321A	571022
280-160190-29	29SB170 (11-12)	Total/NA	Solid	8321A	571022
280-160190-30	29SB170 (14.5-15)	Total/NA	Solid	8321A	571022
280-160190-31	29SB171 (3-4)	Total/NA	Solid	8321A	571022
280-160190-32	29SB171 (6-7)	Total/NA	Solid	8321A	571022
280-160190-33	29SB171 (11-12)	Total/NA	Solid	8321A	571022
280-160190-34	29SB171 (14.5-15)	Total/NA	Solid	8321A	571022
280-160190-35	DUP-08	Total/NA	Solid	8321A	571022
280-160190-36	29SB174 (3-4)	Total/NA	Solid	8321A	571022
280-160190-37	29SB174 (6-7)	Total/NA	Solid	8321A	571022
280-160190-38	29SB174 (11-12)	Total/NA	Solid	8321A	571022
280-160190-39	29SB174 (14.5-15)	Total/NA	Solid	8321A	571022
280-160190-40	29SB190 (3-4)	Total/NA	Solid	8321A	571022
280-160190-41	29SB190 (19-20)	Total/NA	Solid	8321A	571022
280-160190-42	29SB192 (7-8)	Total/NA	Solid	8321A	571022
280-160190-43	29SB192 (11-12)	Total/NA	Solid	8321A	571022
280-160190-44	29SB192 (15-16)	Total/NA	Solid	8321A	571022
280-160190-45	29SB192 (19-20)	Total/NA	Solid	8321A	571022
280-160190-46	DUP-09	Total/NA	Solid	8321A	571022
280-160190-47	29SB193 (7-8)	Total/NA	Solid	8321A	571022

QC Association Summary

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

LCMS (Continued)

Analysis Batch: 571896 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
GB 280-570112/1-B	Method Blank	Total/NA	Solid	8321A	571022
MB 280-571022/1-A	Method Blank	Total/NA	Solid	8321A	571022
LCS 280-571022/2-A	Lab Control Sample	Total/NA	Solid	8321A	571022
LCSD 280-571022/3-A	Lab Control Sample Dup	Total/NA	Solid	8321A	571022
LCSSRM 280-570112/2-B	Lab Control Sample	Total/NA	Solid	8321A	571022
280-160190-A-28-E MS	280-160190-A-28-E MS	Total/NA	Solid	8321A	571022
280-160190-A-28-F MSD	280-160190-A-28-F MSD	Total/NA	Solid	8321A	571022
280-160190-A-29-E DU	280-160190-A-29-E DU	Total/NA	Solid	8321A	571022
280-160190-A-29-F TRL	280-160190-A-29-F TRL	Total/NA	Solid	8321A	571022

Analysis Batch: 571897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-160190-48	29SB193 (11-12)	Total/NA	Solid	8321A	571025
280-160190-49	29SB193 (15-16)	Total/NA	Solid	8321A	571025
280-160190-50	29SB193 (19-20)	Total/NA	Solid	8321A	571025
280-160190-51	DUP-10	Total/NA	Solid	8321A	571025
280-160190-52	29SB203 (3-4)	Total/NA	Solid	8321A	571025
280-160190-53	29SB203 (7-8)	Total/NA	Solid	8321A	571025
280-160190-54	29SB204 (3-4)	Total/NA	Solid	8321A	571025
280-160190-55	29SB204 (7-8)	Total/NA	Solid	8321A	571025
GB 280-570115/1-B	Method Blank	Total/NA	Solid	8321A	571025
MB 280-571025/1-A	Method Blank	Total/NA	Solid	8321A	571025
LCS 280-571025/2-A	Lab Control Sample	Total/NA	Solid	8321A	571025
LCSD 280-571025/3-A	Lab Control Sample Dup	Total/NA	Solid	8321A	571025
LCSSRM 280-570115/2-B	Lab Control Sample	Total/NA	Solid	8321A	571025
280-160190-52MS	29SB203 (3-4)	Total/NA	Solid	8321A	571025
280-160190-52MSD	29SB203 (3-4)	Total/NA	Solid	8321A	571025
280-160190-A-52-I DU	280-160190-A-52-I DU	Total/NA	Solid	8321A	571025
280-160190-A-52-J TRL	280-160190-A-52-J TRL	Total/NA	Solid	8321A	571025

Lab Chronicle

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB173 (14.5-15)
Lab Sample ID: 280-160190-1
Date Collected: 03/24/22 09:14
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570105	03/29/22 13:09	EKB	TAL DEN
Total/NA	Prep	8330B			10.44 g	40 mL	570718	04/04/22 16:57	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571108	04/07/22 14:16	AGCM	TAL DEN
Total/NA	Leach	Dry and Grind	DL		1.0 g	1.0 g	570105	03/29/22 13:09	EKB	TAL DEN
Total/NA	Prep	8330B	DL		10.44 g	40 mL	570718	04/04/22 16:57	TEH	TAL DEN
Total/NA	Analysis	8321A	DL	5			571108	04/07/22 15:09	AGCM	TAL DEN

Client Sample ID: 29SB181 (14.5-15)
Lab Sample ID: 280-160190-2
Date Collected: 03/24/22 09:30
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570105	03/29/22 13:09	EKB	TAL DEN
Total/NA	Prep	8330B			10.01 g	40 mL	570718	04/04/22 16:57	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571108	04/07/22 14:23	AGCM	TAL DEN
Total/NA	Leach	Dry and Grind	DL		1.0 g	1.0 g	570105	03/29/22 13:09	EKB	TAL DEN
Total/NA	Prep	8330B	DL		10.01 g	40 mL	570718	04/04/22 16:57	TEH	TAL DEN
Total/NA	Analysis	8321A	DL	5			571108	04/07/22 15:17	AGCM	TAL DEN

Client Sample ID: 29SB182 (14.5-15)
Lab Sample ID: 280-160190-3
Date Collected: 03/24/22 09:40
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570105	03/29/22 13:09	EKB	TAL DEN
Total/NA	Prep	8330B			10.5 g	40 mL	570718	04/04/22 16:57	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571108	04/07/22 14:30	AGCM	TAL DEN

Client Sample ID: 29SB175 (3-4)
Lab Sample ID: 280-160190-4
Date Collected: 03/24/22 09:55
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570105	03/29/22 13:09	EKB	TAL DEN
Total/NA	Prep	8330B			10.2 g	40 mL	570718	04/04/22 16:57	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571108	04/07/22 14:36	AGCM	TAL DEN

Client Sample ID: 29SB175 (6-7)
Lab Sample ID: 280-160190-5
Date Collected: 03/24/22 09:57
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570105	03/29/22 13:09	EKB	TAL DEN
Total/NA	Prep	8330B			10.54 g	40 mL	570718	04/04/22 16:57	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571108	04/07/22 14:43	AGCM	TAL DEN

Lab Chronicle

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB175 (11-12)
Lab Sample ID: 280-160190-6
Date Collected: 03/24/22 09:58
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570105	03/29/22 13:09	EKB	TAL DEN
Total/NA	Prep	8330B			10.72 g	40 mL	570718	04/04/22 16:57	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571108	04/07/22 14:49	AGCM	TAL DEN

Client Sample ID: 29SB175 (14.5-15)
Lab Sample ID: 280-160190-7
Date Collected: 03/24/22 10:00
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570105	03/29/22 13:09	EKB	TAL DEN
Total/NA	Prep	8330B			10.13 g	40 mL	570718	04/04/22 16:57	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571108	04/07/22 14:56	AGCM	TAL DEN

Client Sample ID: DUP-05
Lab Sample ID: 280-160190-8
Date Collected: 03/24/22 12:00
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570111	03/29/22 13:29	EKB	TAL DEN
Total/NA	Prep	8330B			10.55 g	40 mL	571024	04/06/22 18:20	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571224	04/08/22 11:20	AGCM	TAL DEN

Client Sample ID: 29SB167 (3-4)
Lab Sample ID: 280-160190-9
Date Collected: 03/24/22 10:30
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570111	03/29/22 13:29	EKB	TAL DEN
Total/NA	Prep	8330B			10.36 g	40 mL	571024	04/06/22 18:20	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571224	04/08/22 11:26	AGCM	TAL DEN

Client Sample ID: 29SB167 (6-7)
Lab Sample ID: 280-160190-10
Date Collected: 03/24/22 10:32
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570111	03/29/22 13:29	EKB	TAL DEN
Total/NA	Prep	8330B			10.25 g	40 mL	571024	04/06/22 18:20	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571224	04/08/22 11:33	AGCM	TAL DEN

Lab Chronicle

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB167 (11-12)
Lab Sample ID: 280-160190-11
Date Collected: 03/24/22 10:33
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570111	03/29/22 13:29	EKB	TAL DEN
Total/NA	Prep	8330B			10.33 g	40 mL	571024	04/06/22 18:20	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571224	04/08/22 11:40	AGCM	TAL DEN

Client Sample ID: 29SB167 (14.5-15)
Lab Sample ID: 280-160190-12
Date Collected: 03/24/22 10:34
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570111	03/29/22 13:29	EKB	TAL DEN
Total/NA	Prep	8330B			10.59 g	40 mL	571024	04/06/22 18:20	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571224	04/08/22 11:46	AGCM	TAL DEN

Client Sample ID: DUP-06
Lab Sample ID: 280-160190-13
Date Collected: 03/24/22 12:10
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570111	03/29/22 13:29	EKB	TAL DEN
Total/NA	Prep	8330B			10.15 g	40 mL	571024	04/06/22 18:20	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571224	04/08/22 11:59	AGCM	TAL DEN

Client Sample ID: 29SB176 (14.5-15)
Lab Sample ID: 280-160190-14
Date Collected: 03/24/22 10:50
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind	DL		1.0 g	1.0 g	570111	03/29/22 13:29	EKB	TAL DEN
Total/NA	Prep	8330B	DL		10.23 g	40 mL	571024	04/06/22 18:20	TEH	TAL DEN
Total/NA	Analysis	8321A	DL	10			571614	04/12/22 21:03	AGCM	TAL DEN
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570111	03/29/22 13:29	EKB	TAL DEN
Total/NA	Prep	8330B			10.23 g	40 mL	571024	04/06/22 18:20	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571224	04/08/22 12:06	AGCM	TAL DEN

Client Sample ID: 29SB179 (14.5-15)
Lab Sample ID: 280-160190-15
Date Collected: 03/24/22 11:05
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570111	03/29/22 13:29	EKB	TAL DEN
Total/NA	Prep	8330B			10.08 g	40 mL	571024	04/06/22 18:20	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571224	04/08/22 12:13	AGCM	TAL DEN

Lab Chronicle

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB178 (14.5-15)
Lab Sample ID: 280-160190-16
Date Collected: 03/24/22 11:40
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570111	03/29/22 13:29	EKB	TAL DEN
Total/NA	Prep	8330B			10.35 g	40 mL	571024	04/06/22 18:20	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571224	04/08/22 12:19	AGCM	TAL DEN

Client Sample ID: 29SB177 (14.5-15)
Lab Sample ID: 280-160190-17
Date Collected: 03/24/22 11:50
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind	DL		1.0 g	1.0 g	570111	03/29/22 13:29	EKB	TAL DEN
Total/NA	Prep	8330B	DL		10.29 g	40 mL	571024	04/06/22 18:20	TEH	TAL DEN
Total/NA	Analysis	8321A	DL	10			571614	04/12/22 21:14	AGCM	TAL DEN
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570111	03/29/22 13:29	EKB	TAL DEN
Total/NA	Prep	8330B			10.29 g	40 mL	571024	04/06/22 18:20	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571224	04/08/22 12:26	AGCM	TAL DEN

Client Sample ID: 29SB168 (3-4)
Lab Sample ID: 280-160190-18
Date Collected: 03/24/22 11:55
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind	DL		1.0 g	1.0 g	570111	03/29/22 13:29	EKB	TAL DEN
Total/NA	Prep	8330B	DL		10.27 g	40 mL	571024	04/06/22 18:20	TEH	TAL DEN
Total/NA	Analysis	8321A	DL	10			571614	04/12/22 21:26	AGCM	TAL DEN
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570111	03/29/22 13:29	EKB	TAL DEN
Total/NA	Prep	8330B			10.27 g	40 mL	571024	04/06/22 18:20	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571224	04/08/22 12:32	AGCM	TAL DEN

Client Sample ID: 29SB168 (6-7)
Lab Sample ID: 280-160190-19
Date Collected: 03/24/22 11:58
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind	DL		1.0 g	1.0 g	570111	03/29/22 13:29	EKB	TAL DEN
Total/NA	Prep	8330B	DL		10.73 g	40 mL	571024	04/06/22 18:20	TEH	TAL DEN
Total/NA	Analysis	8321A	DL	10			571614	04/12/22 21:37	AGCM	TAL DEN
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570111	03/29/22 13:29	EKB	TAL DEN
Total/NA	Prep	8330B			10.73 g	40 mL	571024	04/06/22 18:20	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571224	04/08/22 12:39	AGCM	TAL DEN

Lab Chronicle

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB168 (11-12)
Lab Sample ID: 280-160190-20
Date Collected: 03/24/22 12:02
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind	DL		1.0 g	1.0 g	570111	03/29/22 13:29	EKB	TAL DEN
Total/NA	Prep	8330B	DL		10.49 g	40 mL	571024	04/06/22 18:20	TEH	TAL DEN
Total/NA	Analysis	8321A	DL	10			571614	04/12/22 22:35	AGCM	TAL DEN
Total/NA	Leach	Dry and Grind	DL2		1.0 g	1.0 g	570111	03/29/22 13:29	EKB	TAL DEN
Total/NA	Prep	8330B	DL2		10.49 g	40 mL	571024	04/06/22 18:20	TEH	TAL DEN
Total/NA	Analysis	8321A	DL2	50			571614	04/12/22 22:47	AGCM	TAL DEN
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570111	03/29/22 13:29	EKB	TAL DEN
Total/NA	Prep	8330B			10.49 g	40 mL	571024	04/06/22 18:20	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571224	04/08/22 13:19	AGCM	TAL DEN

Client Sample ID: 29SB168 (14.5-15)
Lab Sample ID: 280-160190-21
Date Collected: 03/24/22 12:04
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570111	03/29/22 13:29	EKB	TAL DEN
Total/NA	Prep	8330B			10.62 g	40 mL	571024	04/06/22 18:20	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571224	04/08/22 13:25	AGCM	TAL DEN

Client Sample ID: 29SB169 (3-4)
Lab Sample ID: 280-160190-22
Date Collected: 03/24/22 12:11
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570111	03/29/22 13:29	EKB	TAL DEN
Total/NA	Prep	8330B			10.42 g	40 mL	571024	04/06/22 18:20	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571224	04/08/22 13:32	AGCM	TAL DEN

Client Sample ID: 29SB169 (6-7)
Lab Sample ID: 280-160190-23
Date Collected: 03/24/22 12:13
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570111	03/29/22 13:29	EKB	TAL DEN
Total/NA	Prep	8330B			10.07 g	40 mL	571024	04/06/22 18:20	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571224	04/08/22 13:38	AGCM	TAL DEN

Client Sample ID: 29SB169 (11-12)
Lab Sample ID: 280-160190-24
Date Collected: 03/24/22 12:15
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570111	03/29/22 13:29	EKB	TAL DEN
Total/NA	Prep	8330B			10.33 g	40 mL	571024	04/06/22 18:20	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571224	04/08/22 13:45	AGCM	TAL DEN

Lab Chronicle

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB169 (14.5-15)
Lab Sample ID: 280-160190-25
Date Collected: 03/24/22 12:17
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570111	03/29/22 13:29	EKB	TAL DEN
Total/NA	Prep	8330B			10.72 g	40 mL	571024	04/06/22 18:20	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571224	04/08/22 13:52	AGCM	TAL DEN

Client Sample ID: DUP-07
Lab Sample ID: 280-160190-26
Date Collected: 03/24/22 13:00
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570111	03/29/22 13:29	EKB	TAL DEN
Total/NA	Prep	8330B			10.84 g	40 mL	571024	04/06/22 18:20	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571224	04/08/22 13:58	AGCM	TAL DEN

Client Sample ID: 29SB170 (3-4)
Lab Sample ID: 280-160190-27
Date Collected: 03/24/22 12:30
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570111	03/29/22 13:29	EKB	TAL DEN
Total/NA	Prep	8330B			10.26 g	40 mL	571024	04/06/22 18:20	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571224	04/08/22 14:05	AGCM	TAL DEN

Client Sample ID: 29SB170 (6-7)
Lab Sample ID: 280-160190-28
Date Collected: 03/24/22 12:35
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570112	03/29/22 13:38	EKB	TAL DEN
Total/NA	Prep	8330B			10.54 g	40 mL	571022	04/06/22 18:23	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571896	04/14/22 14:00	AGCM	TAL DEN

Client Sample ID: 29SB170 (11-12)
Lab Sample ID: 280-160190-29
Date Collected: 03/24/22 12:37
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570112	03/29/22 13:38	EKB	TAL DEN
Total/NA	Prep	8330B			10.2 g	40 mL	571022	04/06/22 18:23	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571896	04/14/22 14:19	AGCM	TAL DEN

Lab Chronicle

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB170 (14.5-15)
Lab Sample ID: 280-160190-30
Date Collected: 03/24/22 12:40
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570112	03/29/22 13:38	EKB	TAL DEN
Total/NA	Prep	8330B			10.33 g	40 mL	571022	04/06/22 18:23	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571896	04/14/22 14:46	AGCM	TAL DEN

Client Sample ID: 29SB171 (3-4)
Lab Sample ID: 280-160190-31
Date Collected: 03/24/22 12:48
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570112	03/29/22 13:38	EKB	TAL DEN
Total/NA	Prep	8330B			10.3 g	40 mL	571022	04/06/22 18:23	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571896	04/14/22 14:52	AGCM	TAL DEN

Client Sample ID: 29SB171 (6-7)
Lab Sample ID: 280-160190-32
Date Collected: 03/24/22 12:50
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570112	03/29/22 13:38	EKB	TAL DEN
Total/NA	Prep	8330B			10.05 g	40 mL	571022	04/06/22 18:23	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571896	04/14/22 14:59	AGCM	TAL DEN

Client Sample ID: 29SB171 (11-12)
Lab Sample ID: 280-160190-33
Date Collected: 03/24/22 12:52
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570112	03/29/22 13:38	EKB	TAL DEN
Total/NA	Prep	8330B			10.13 g	40 mL	571022	04/06/22 18:23	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571896	04/14/22 15:06	AGCM	TAL DEN

Client Sample ID: 29SB171 (14.5-15)
Lab Sample ID: 280-160190-34
Date Collected: 03/24/22 12:54
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570112	03/29/22 13:38	EKB	TAL DEN
Total/NA	Prep	8330B			10.5 g	40 mL	571022	04/06/22 18:23	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571896	04/14/22 15:12	AGCM	TAL DEN

Lab Chronicle

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: DUP-08
Lab Sample ID: 280-160190-35
Date Collected: 03/24/22 14:00
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570112	03/29/22 13:38	EKB	TAL DEN
Total/NA	Prep	8330B			10.45 g	40 mL	571022	04/06/22 18:23	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571896	04/14/22 15:19	AGCM	TAL DEN

Client Sample ID: 29SB174 (3-4)
Lab Sample ID: 280-160190-36
Date Collected: 03/24/22 13:10
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570112	03/29/22 13:38	EKB	TAL DEN
Total/NA	Prep	8330B			10.7 g	40 mL	571022	04/06/22 18:23	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571896	04/14/22 15:25	AGCM	TAL DEN

Client Sample ID: 29SB174 (6-7)
Lab Sample ID: 280-160190-37
Date Collected: 03/24/22 13:11
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570112	03/29/22 13:38	EKB	TAL DEN
Total/NA	Prep	8330B			10.37 g	40 mL	571022	04/06/22 18:23	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571896	04/14/22 15:32	AGCM	TAL DEN

Client Sample ID: 29SB174 (11-12)
Lab Sample ID: 280-160190-38
Date Collected: 03/24/22 13:12
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570112	03/29/22 13:38	EKB	TAL DEN
Total/NA	Prep	8330B			10.23 g	40 mL	571022	04/06/22 18:23	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571896	04/14/22 15:45	AGCM	TAL DEN

Client Sample ID: 29SB174 (14.5-15)
Lab Sample ID: 280-160190-39
Date Collected: 03/24/22 13:15
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570112	03/29/22 13:38	EKB	TAL DEN
Total/NA	Prep	8330B			10.21 g	40 mL	571022	04/06/22 18:23	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571896	04/14/22 15:52	AGCM	TAL DEN

Lab Chronicle

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB190 (3-4)
Lab Sample ID: 280-160190-40
Date Collected: 03/24/22 13:55
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570112	03/29/22 13:38	EKB	TAL DEN
Total/NA	Prep	8330B			10.11 g	40 mL	571022	04/06/22 18:23	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571896	04/14/22 15:58	AGCM	TAL DEN

Client Sample ID: 29SB190 (19-20)
Lab Sample ID: 280-160190-41
Date Collected: 03/24/22 14:05
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570112	03/29/22 13:38	EKB	TAL DEN
Total/NA	Prep	8330B			10.34 g	40 mL	571022	04/06/22 18:23	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571896	04/14/22 16:05	AGCM	TAL DEN

Client Sample ID: 29SB192 (7-8)
Lab Sample ID: 280-160190-42
Date Collected: 03/24/22 14:15
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570112	03/29/22 13:38	EKB	TAL DEN
Total/NA	Prep	8330B			10.36 g	40 mL	571022	04/06/22 18:23	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571896	04/14/22 16:12	AGCM	TAL DEN

Client Sample ID: 29SB192 (11-12)
Lab Sample ID: 280-160190-43
Date Collected: 03/24/22 14:20
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570112	03/29/22 13:38	EKB	TAL DEN
Total/NA	Prep	8330B			10.09 g	40 mL	571022	04/06/22 18:23	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571896	04/14/22 16:18	AGCM	TAL DEN

Client Sample ID: 29SB192 (15-16)
Lab Sample ID: 280-160190-44
Date Collected: 03/24/22 14:25
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570112	03/29/22 13:38	EKB	TAL DEN
Total/NA	Prep	8330B			10.66 g	40 mL	571022	04/06/22 18:23	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571896	04/14/22 16:25	AGCM	TAL DEN

Lab Chronicle

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB192 (19-20)
Lab Sample ID: 280-160190-45
Date Collected: 03/24/22 14:27
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570112	03/29/22 13:38	EKB	TAL DEN
Total/NA	Prep	8330B			10.21 g	40 mL	571022	04/06/22 18:23	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571896	04/14/22 16:31	AGCM	TAL DEN

Client Sample ID: DUP-09
Lab Sample ID: 280-160190-46
Date Collected: 03/24/22 15:00
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570112	03/29/22 13:38	EKB	TAL DEN
Total/NA	Prep	8330B			10.52 g	40 mL	571022	04/06/22 18:23	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571896	04/14/22 16:38	AGCM	TAL DEN

Client Sample ID: 29SB193 (7-8)
Lab Sample ID: 280-160190-47
Date Collected: 03/24/22 14:40
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570112	03/29/22 13:38	EKB	TAL DEN
Total/NA	Prep	8330B			10.75 g	40 mL	571022	04/06/22 18:23	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571896	04/14/22 16:45	AGCM	TAL DEN

Client Sample ID: 29SB193 (11-12)
Lab Sample ID: 280-160190-48
Date Collected: 03/24/22 14:42
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570115	03/29/22 13:49	EKB	TAL DEN
Total/NA	Prep	8330B			10.19 g	40 mL	571025	04/06/22 18:17	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571897	04/14/22 17:31	AGCM	TAL DEN

Client Sample ID: 29SB193 (15-16)
Lab Sample ID: 280-160190-49
Date Collected: 03/24/22 14:45
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570115	03/29/22 13:49	EKB	TAL DEN
Total/NA	Prep	8330B			10.08 g	40 mL	571025	04/06/22 18:17	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571897	04/14/22 17:37	AGCM	TAL DEN

Lab Chronicle

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB193 (19-20)
Lab Sample ID: 280-160190-50
Date Collected: 03/24/22 14:50
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570115	03/29/22 13:49	EKB	TAL DEN
Total/NA	Prep	8330B			10.49 g	40 mL	571025	04/06/22 18:17	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571897	04/14/22 17:44	AGCM	TAL DEN

Client Sample ID: DUP-10
Lab Sample ID: 280-160190-51
Date Collected: 03/24/22 15:30
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570115	03/29/22 13:49	EKB	TAL DEN
Total/NA	Prep	8330B			10.15 g	40 mL	571025	04/06/22 18:17	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571897	04/14/22 17:50	AGCM	TAL DEN

Client Sample ID: 29SB203 (3-4)
Lab Sample ID: 280-160190-52
Date Collected: 03/24/22 15:15
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570115	03/29/22 13:49	EKB	TAL DEN
Total/NA	Prep	8330B			10.57 g	40 mL	571025	04/06/22 18:17	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571897	04/14/22 18:04	AGCM	TAL DEN

Client Sample ID: 29SB203 (7-8)
Lab Sample ID: 280-160190-53
Date Collected: 03/24/22 15:17
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570115	03/29/22 13:49	EKB	TAL DEN
Total/NA	Prep	8330B			10.25 g	40 mL	571025	04/06/22 18:17	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571897	04/14/22 18:37	AGCM	TAL DEN

Client Sample ID: 29SB204 (3-4)
Lab Sample ID: 280-160190-54
Date Collected: 03/24/22 15:25
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570115	03/29/22 13:49	EKB	TAL DEN
Total/NA	Prep	8330B			10.52 g	40 mL	571025	04/06/22 18:17	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571897	04/14/22 18:43	AGCM	TAL DEN

Lab Chronicle

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB204 (7-8)
Lab Sample ID: 280-160190-55
Date Collected: 03/24/22 15:26
Matrix: Solid
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	Dry and Grind			1.0 g	1.0 g	570115	03/29/22 13:49	EKB	TAL DEN
Total/NA	Prep	8330B			10.34 g	40 mL	571025	04/06/22 18:17	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571897	04/14/22 18:50	AGCM	TAL DEN

Client Sample ID: EB-03
Lab Sample ID: 280-160190-56
Date Collected: 03/24/22 16:00
Matrix: Water
Date Received: 03/25/22 00:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			928.3 mL	5 mL	570053	03/29/22 13:01	ARC	TAL DEN
Total/NA	Analysis	8321A		1			570784	04/05/22 11:50	AGCM	TAL DEN

Laboratory References:

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

Accreditation/Certification Summary

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Laboratory: Eurofins Denver

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

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

Method Summary

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Method	Method Description	Protocol	Laboratory
8321A	Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)	SW846	TAL DEN
3535	Solid-Phase Extraction (SPE)	SW846	TAL DEN
8330B	Sonication Extraction (Explosives)	SW846	TAL DEN
Dry and Grind	Preparation, Dry and Grind	None	TAL DEN

Protocol References:

None = None

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

Laboratory References:

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

Sample Summary

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-160190-1	29SB173 (14.5-15)	Solid	03/24/22 09:14	03/25/22 00:00
280-160190-2	29SB181 (14.5-15)	Solid	03/24/22 09:30	03/25/22 00:00
280-160190-3	29SB182 (14.5-15)	Solid	03/24/22 09:40	03/25/22 00:00
280-160190-4	29SB175 (3-4)	Solid	03/24/22 09:55	03/25/22 00:00
280-160190-5	29SB175 (6-7)	Solid	03/24/22 09:57	03/25/22 00:00
280-160190-6	29SB175 (11-12)	Solid	03/24/22 09:58	03/25/22 00:00
280-160190-7	29SB175 (14.5-15)	Solid	03/24/22 10:00	03/25/22 00:00
280-160190-8	DUP-05	Solid	03/24/22 12:00	03/25/22 00:00
280-160190-9	29SB167 (3-4)	Solid	03/24/22 10:30	03/25/22 00:00
280-160190-10	29SB167 (6-7)	Solid	03/24/22 10:32	03/25/22 00:00
280-160190-11	29SB167 (11-12)	Solid	03/24/22 10:33	03/25/22 00:00
280-160190-12	29SB167 (14.5-15)	Solid	03/24/22 10:34	03/25/22 00:00
280-160190-13	DUP-06	Solid	03/24/22 12:10	03/25/22 00:00
280-160190-14	29SB176 (14.5-15)	Solid	03/24/22 10:50	03/25/22 00:00
280-160190-15	29SB179 (14.5-15)	Solid	03/24/22 11:05	03/25/22 00:00
280-160190-16	29SB178 (14.5-15)	Solid	03/24/22 11:40	03/25/22 00:00
280-160190-17	29SB177 (14.5-15)	Solid	03/24/22 11:50	03/25/22 00:00
280-160190-18	29SB168 (3-4)	Solid	03/24/22 11:55	03/25/22 00:00
280-160190-19	29SB168 (6-7)	Solid	03/24/22 11:58	03/25/22 00:00
280-160190-20	29SB168 (11-12)	Solid	03/24/22 12:02	03/25/22 00:00
280-160190-21	29SB168 (14.5-15)	Solid	03/24/22 12:04	03/25/22 00:00
280-160190-22	29SB169 (3-4)	Solid	03/24/22 12:11	03/25/22 00:00
280-160190-23	29SB169 (6-7)	Solid	03/24/22 12:13	03/25/22 00:00
280-160190-24	29SB169 (11-12)	Solid	03/24/22 12:15	03/25/22 00:00
280-160190-25	29SB169 (14.5-15)	Solid	03/24/22 12:17	03/25/22 00:00
280-160190-26	DUP-07	Solid	03/24/22 13:00	03/25/22 00:00
280-160190-27	29SB170 (3-4)	Solid	03/24/22 12:30	03/25/22 00:00
280-160190-28	29SB170 (6-7)	Solid	03/24/22 12:35	03/25/22 00:00
280-160190-29	29SB170 (11-12)	Solid	03/24/22 12:37	03/25/22 00:00
280-160190-30	29SB170 (14.5-15)	Solid	03/24/22 12:40	03/25/22 00:00
280-160190-31	29SB171 (3-4)	Solid	03/24/22 12:48	03/25/22 00:00
280-160190-32	29SB171 (6-7)	Solid	03/24/22 12:50	03/25/22 00:00
280-160190-33	29SB171 (11-12)	Solid	03/24/22 12:52	03/25/22 00:00
280-160190-34	29SB171 (14.5-15)	Solid	03/24/22 12:54	03/25/22 00:00
280-160190-35	DUP-08	Solid	03/24/22 14:00	03/25/22 00:00
280-160190-36	29SB174 (3-4)	Solid	03/24/22 13:10	03/25/22 00:00
280-160190-37	29SB174 (6-7)	Solid	03/24/22 13:11	03/25/22 00:00
280-160190-38	29SB174 (11-12)	Solid	03/24/22 13:12	03/25/22 00:00
280-160190-39	29SB174 (14.5-15)	Solid	03/24/22 13:15	03/25/22 00:00
280-160190-40	29SB190 (3-4)	Solid	03/24/22 13:55	03/25/22 00:00
280-160190-41	29SB190 (19-20)	Solid	03/24/22 14:05	03/25/22 00:00
280-160190-42	29SB192 (7-8)	Solid	03/24/22 14:15	03/25/22 00:00
280-160190-43	29SB192 (11-12)	Solid	03/24/22 14:20	03/25/22 00:00
280-160190-44	29SB192 (15-16)	Solid	03/24/22 14:25	03/25/22 00:00
280-160190-45	29SB192 (19-20)	Solid	03/24/22 14:27	03/25/22 00:00
280-160190-46	DUP-09	Solid	03/24/22 15:00	03/25/22 00:00
280-160190-47	29SB193 (7-8)	Solid	03/24/22 14:40	03/25/22 00:00
280-160190-48	29SB193 (11-12)	Solid	03/24/22 14:42	03/25/22 00:00
280-160190-49	29SB193 (15-16)	Solid	03/24/22 14:45	03/25/22 00:00
280-160190-50	29SB193 (19-20)	Solid	03/24/22 14:50	03/25/22 00:00
280-160190-51	DUP-10	Solid	03/24/22 15:30	03/25/22 00:00
280-160190-52	29SB203 (3-4)	Solid	03/24/22 15:15	03/25/22 00:00
280-160190-53	29SB203 (7-8)	Solid	03/24/22 15:17	03/25/22 00:00
280-160190-54	29SB204 (3-4)	Solid	03/24/22 15:25	03/25/22 00:00

Sample Summary

Client: HDR Inc
Job ID: 280-160190-1
Project/Site: Longhorn AAP, TX (March 2022)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-160190-55	29SB204 (7-8)	Solid	03/24/22 15:26	03/25/22 00:00
280-160190-56	EB-03	Water	03/24/22 16:00	03/25/22 00:00

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS4 Analysis Batch Number: 571614

Lab Sample ID: STD005 280-571614/4 IC Client Sample ID:

Date Analyzed: 04/12/22 09:22 Lab File ID: ex422D12003.d GC Column: IonPac ID: 2(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	1.99	Baseline	meyera	04/13/22 13:23
TNX	2.15	Baseline	meyera	04/13/22 13:23
RDX	2.77	Baseline	meyera	04/13/22 13:23

Lab Sample ID: STD010 280-571614/5 IC Client Sample ID:

Date Analyzed: 04/12/22 09:34 Lab File ID: ex422D12004.d GC Column: IonPac ID: 2(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	2.80	Baseline	meyera	04/13/22 13:22

Lab Sample ID: STD025 280-571614/6 IC Client Sample ID:

Date Analyzed: 04/12/22 09:45 Lab File ID: ex422D12005.d GC Column: IonPac ID: 2(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	2.77	Baseline	meyera	04/13/22 13:22

Lab Sample ID: STD100 280-571614/8 ICI Client Sample ID:

Date Analyzed: 04/12/22 10:08 Lab File ID: ex422D12007.d GC Column: IonPac ID: 2(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	2.77	Baseline	meyera	04/13/22 13:21

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS4 Analysis Batch Number: 571614

Lab Sample ID: STD200 280-571614/9 IC Client Sample ID:

Date Analyzed: 04/12/22 10:20 Lab File ID: ex422D12008.d GC Column: IonPac ID: 2(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-Dinitrotoluene	6.09	Baseline	meyera	04/13/22 14:25
2,4-Dinitrotoluene	6.37	Baseline	meyera	04/13/22 14:25

Lab Sample ID: ICB 280-571614/11 Client Sample ID:

Date Analyzed: 04/12/22 10:43 Lab File ID: ex422D12010.d GC Column: IonPac ID: 2(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
m-Nitrotoluene		Invalid Compound ID	meyera	04/13/22 13:25
Nitroglycerin		Invalid Compound ID	meyera	04/13/22 13:25

Lab Sample ID: 280-160190-14 DL Client Sample ID: 29SB176 (14.5-15) DL

Date Analyzed: 04/12/22 21:03 Lab File ID: ex422D12063.d GC Column: IonPac ID: 2(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
o-Nitrotoluene	7.36	Baseline	meyera	04/13/22 13:45
p-Nitrotoluene	7.85	Baseline	meyera	04/13/22 13:45

Lab Sample ID: 280-160190-20 DL Client Sample ID: 29SB168 (11-12) DL

Date Analyzed: 04/12/22 22:35 Lab File ID: ex422D12071.d GC Column: IonPac ID: 2(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
m-Nitrotoluene	8.42	Baseline	meyera	04/13/22 13:53

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS4 Analysis Batch Number: 571614

Lab Sample ID: 280-160190-20 DL2 Client Sample ID: 29SB168 (11-12) DL2

Date Analyzed: 04/12/22 22:47 Lab File ID: ex422D12072.d GC Column: IonPac ID: 2(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrobenzene-d5	4.92	Baseline	meyera	04/14/22 10:33
o-Nitrotoluene	7.39	Baseline	meyera	04/13/22 13:53
p-Nitrotoluene	7.81	Baseline	meyera	04/13/22 13:53

Lab Sample ID: CCV 280-571614/74 Client Sample ID:

Date Analyzed: 04/12/22 22:58 Lab File ID: ex422D12073.d GC Column: IonPac ID: 2(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3,5-Trinitrobenzene	3.46	Baseline	meyera	04/13/22 13:54

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 570784

Lab Sample ID: STD001 280-570784/3 IC Client Sample ID:

Date Analyzed: 04/05/22 10:20 Lab File ID: ex722D05003.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	1.22	Baseline	meyera	04/05/22 11:37
RDX	1.77	Baseline	meyera	04/05/22 11:37
Nitrobenzene-d5	3.16	Baseline	meyera	04/05/22 11:38

Lab Sample ID: STD002 280-570784/4 IC Client Sample ID:

Date Analyzed: 04/05/22 10:26 Lab File ID: ex722D05004.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrobenzene-d5	3.13	Baseline	meyera	04/05/22 11:41

Lab Sample ID: STD003 280-570784/5 IC Client Sample ID:

Date Analyzed: 04/05/22 10:33 Lab File ID: ex722D05005.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrobenzene-d5	3.15	Baseline	meyera	04/05/22 11:42
4-Amino-2,6-dinitrotoluene	3.39	Baseline	meyera	04/05/22 11:43
2-Amino-4,6-dinitrotoluene	3.70	Baseline	meyera	04/05/22 11:43
o-Nitrotoluene	4.63	Baseline	meyera	04/05/22 11:42
p-Nitrotoluene	4.90	Baseline	meyera	04/05/22 11:42
m-Nitrotoluene	5.26	Baseline	meyera	04/05/22 11:42

Lab Sample ID: ICB 280-570784/10 Client Sample ID:

Date Analyzed: 04/05/22 11:05 Lab File ID: ex722D05010.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/05/22 11:44
Tetryl		Invalid Compound ID	meyera	04/05/22 11:44

8321A

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 570784

Lab Sample ID: MB 280-570053/1-A Client Sample ID:

Date Analyzed: 04/05/22 11:18 Lab File ID: ex722D05012.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/05/22 12:46

Lab Sample ID: 280-160190-56 Client Sample ID: EB-03

Date Analyzed: 04/05/22 11:50 Lab File ID: ex722D05017.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/05/22 12:48
Nitrobenzene		Invalid Compound ID	meyera	04/05/22 12:47

Lab Sample ID: CCV 280-570784/18 Client Sample ID:

Date Analyzed: 04/05/22 11:56 Lab File ID: ex722D05021.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3,5-Dinitroaniline	3.04	Baseline	meyera	04/05/22 12:48

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571107

Lab Sample ID: STD001 280-571107/3 IC Client Sample ID:

Date Analyzed: 04/07/22 10:39 Lab File ID: ex722D07003.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	1.25	Assign Peak	meyera	04/07/22 12:31
RDX	1.84	Assign Peak	meyera	04/07/22 12:31
Nitrobenzene-d5	3.34	Assign Peak	meyera	04/07/22 12:31
PETN	4.70	Assign Peak	meyera	04/07/22 12:32
o-Nitrotoluene	4.99	Baseline	meyera	04/07/22 12:32
p-Nitrotoluene	5.30	Baseline	meyera	04/07/22 12:32
m-Nitrotoluene	5.71	Baseline	meyera	04/07/22 12:32

Lab Sample ID: STD002 280-571107/4 IC Client Sample ID:

Date Analyzed: 04/07/22 10:45 Lab File ID: ex722D07004.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	1.26	Baseline	meyera	04/07/22 12:31
RDX	1.85	Baseline	meyera	04/07/22 12:31

Lab Sample ID: STD003 280-571107/5 IC Client Sample ID:

Date Analyzed: 04/07/22 10:52 Lab File ID: ex722D07005.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX 13C3	1.84	Baseline	meyera	04/07/22 12:30
1,3-Dinitrobenzene	3.05	Baseline	meyera	04/07/22 12:30

Lab Sample ID: STD005 280-571107/7 ICI Client Sample ID:

Date Analyzed: 04/07/22 11:05 Lab File ID: ex722D07007.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX 13C3	1.84	Baseline	meyera	04/07/22 12:28

8321A

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571107

Lab Sample ID: STD006 280-571107/8 IC Client Sample ID:

Date Analyzed: 04/07/22 11:12 Lab File ID: ex722D07008.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
DNX	1.49	Baseline	meyera	04/07/22 12:33
MNX	1.67	Baseline	meyera	04/07/22 12:33

Lab Sample ID: ICB 280-571107/10 Client Sample ID:

Date Analyzed: 04/07/22 11:25 Lab File ID: ex722D07010.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/07/22 12:33

Lab Sample ID: ICV 280-571107/11 Client Sample ID:

Date Analyzed: 04/07/22 11:32 Lab File ID: ex722D07011.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3,5-Dinitroaniline	3.23	Baseline	meyera	04/07/22 12:34

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571108

Lab Sample ID: MB 280-570718/1-A Client Sample ID:

Date Analyzed: 04/07/22 11:38 Lab File ID: ex722D07012.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/07/22 12:34
Nitrobenzene		Invalid Compound ID	meyera	04/07/22 12:34
Tetryl		Invalid Compound ID	meyera	04/07/22 12:34

Lab Sample ID: GB 280-570105/1-B Client Sample ID:

Date Analyzed: 04/07/22 11:58 Lab File ID: ex722D07015.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-Dinitrotoluene		Invalid Compound ID	meyera	04/07/22 12:35
HMX		Invalid Compound ID	meyera	04/07/22 12:35

Lab Sample ID: CCV 280-571108/21 Client Sample ID:

Date Analyzed: 04/07/22 12:38 Lab File ID: ex722D07021.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3,5-Dinitroaniline	3.23	Baseline	meyera	04/07/22 13:10

Lab Sample ID: CCV 280-571108/32 Client Sample ID:

Date Analyzed: 04/07/22 13:50 Lab File ID: ex722D07032.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	1.84	Baseline	meyera	04/07/22 14:40
3,5-Dinitroaniline	3.23	Baseline	meyera	04/07/22 14:40

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571108

Lab Sample ID: 280-160190-1 Client Sample ID: 29SB173 (14.5-15)

Date Analyzed: 04/07/22 14:16 Lab File ID: ex722D07036.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
o-Nitrotoluene	4.99	Baseline	meyera	04/07/22 14:42
m-Nitrotoluene	5.70	Baseline	meyera	04/07/22 14:42
HMX		Invalid Compound ID	meyera	04/07/22 14:42

Lab Sample ID: 280-160190-2 Client Sample ID:

Date Analyzed: 04/07/22 14:23 Lab File ID: ex722D07037.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Hexahydro-1,3,5-trinitro-1,3,5-triazine 13C3	1.84	Baseline	meyera	04/07/22 14:44
4-Amino-2,6-dinitrotoluene	3.66	Baseline	meyera	04/07/22 14:44
2-Amino-4,6-dinitrotoluene	3.99	Baseline	meyera	04/07/22 14:44
o-Nitrotoluene	4.99	Baseline	meyera	04/07/22 14:44
m-Nitrotoluene	5.70	Baseline	meyera	04/07/22 14:44
HMX		Invalid Compound ID	meyera	04/07/22 14:44

Lab Sample ID: 280-160190-3 Client Sample ID: 29SB182 (14.5-15)

Date Analyzed: 04/07/22 14:30 Lab File ID: ex722D07038.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-Dinitrotoluene	4.14	Baseline	meyera	04/07/22 14:48
2,4-Dinitrotoluene	4.37	Baseline	meyera	04/07/22 14:48
o-Nitrotoluene	4.99	Baseline	meyera	04/07/22 14:48
p-Nitrotoluene	5.30	Baseline	meyera	04/07/22 14:48
m-Nitrotoluene	5.70	Baseline	meyera	04/07/22 14:48
HMX		Invalid Compound ID	meyera	04/07/22 14:48

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571108

Lab Sample ID: 280-160190-4 Client Sample ID: 29SB175 (3-4)

Date Analyzed: 04/07/22 14:36 Lab File ID: ex722D07039.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-Dinitrotoluene	4.16	Assign Peak	meyera	04/07/22 14:49
2,4-Dinitrotoluene	4.38	Assign Peak	meyera	04/07/22 14:49
o-Nitrotoluene	5.00	Assign Peak	meyera	04/07/22 14:48
p-Nitrotoluene	5.29	Assign Peak	meyera	04/07/22 14:48
HMX		Invalid Compound ID	meyera	04/07/22 14:49
Nitroglycerin		Invalid Compound ID	meyera	04/07/22 14:49

Lab Sample ID: 280-160190-5 Client Sample ID: 29SB175 (6-7)

Date Analyzed: 04/07/22 14:43 Lab File ID: ex722D07040.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4-Dinitrotoluene	4.38	Assign Peak	meyera	04/07/22 14:58

Lab Sample ID: CCV 280-571108/43 Client Sample ID:

Date Analyzed: 04/07/22 15:03 Lab File ID: ex722D07043.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3,5-Dinitroaniline	3.23	Baseline	meyera	04/08/22 07:19

Lab Sample ID: 280-160190-2 DL Client Sample ID: 29SB181 (14.5-15) DL

Date Analyzed: 04/07/22 15:17 Lab File ID: ex722D07045.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
p-Nitrotoluene	5.31	Baseline	meyera	04/08/22 07:21

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571108

Lab Sample ID: CCV 280-571108/46 Client Sample ID:

Date Analyzed: 04/07/22 15:24 Lab File ID: ex722D07046.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3,5-Dinitroaniline	3.23	Baseline	meyera	04/08/22 07:21

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571224

Lab Sample ID: STD001 280-571224/3 IC Client Sample ID:

Date Analyzed: 04/08/22 09:48 Lab File ID: ex722D08003.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	1.83	Baseline	meyera	04/11/22 08:38
Nitrobenzene-d5	3.33	Baseline	meyera	04/11/22 08:37
PETN	4.70	Baseline	meyera	04/11/22 08:37

Lab Sample ID: STD002 280-571224/4 IC Client Sample ID:

Date Analyzed: 04/08/22 09:54 Lab File ID: ex722D08004.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
DNX	1.49	Baseline	meyera	04/11/22 08:39
MNX	1.67	Baseline	meyera	04/11/22 08:39
RDX	1.83	Baseline	meyera	04/11/22 08:37
PETN	4.70	Baseline	meyera	04/11/22 08:37

Lab Sample ID: STD004 280-571224/6 IC Client Sample ID:

Date Analyzed: 04/08/22 10:07 Lab File ID: ex722D08006.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
DNX	1.49	Baseline	meyera	04/11/22 08:38
MNX	1.67	Baseline	meyera	04/11/22 08:38

Lab Sample ID: STD006 280-571224/8 IC Client Sample ID:

Date Analyzed: 04/08/22 10:21 Lab File ID: ex722D08008.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
DNX	1.49	Baseline	meyera	04/11/22 08:39
MNX	1.67	Baseline	meyera	04/11/22 08:39

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571224

Lab Sample ID: STD007 280-571224/9 IC Client Sample ID:

Date Analyzed: 04/08/22 10:27 Lab File ID: ex722D08009.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
DNX	1.48	Baseline	meyera	04/11/22 08:36
MNX	1.67	Baseline	meyera	04/11/22 08:36

Lab Sample ID: ICB 280-571224/10 Client Sample ID:

Date Analyzed: 04/08/22 10:34 Lab File ID: ex722D08010.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/11/22 08:40

Lab Sample ID: MB 280-571024/1-A Client Sample ID:

Date Analyzed: 04/08/22 10:47 Lab File ID: ex722D08012.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/11/22 08:40

Lab Sample ID: LCSD 280-571024/3-A Client Sample ID:

Date Analyzed: 04/08/22 11:00 Lab File ID: ex722D08014.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Amino-2,6-dinitrotoluene	3.64	Baseline	meyera	04/11/22 11:39
2-Amino-4,6-dinitrotoluene	3.98	Baseline	meyera	04/11/22 11:39

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571224

Lab Sample ID: 280-160190-8 Client Sample ID: DUP-05

Date Analyzed: 04/08/22 11:20 Lab File ID: ex722D08017.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
o-Nitrotoluene	4.98	Baseline	meyera	04/11/22 11:40
p-Nitrotoluene	5.32	Assign Peak	meyera	04/11/22 11:40
2,4,6-Trinitrotoluene		Invalid Compound ID	meyera	04/11/22 11:41
HMX		Invalid Compound ID	meyera	04/11/22 11:41

Lab Sample ID: 280-160190-9 Client Sample ID: 29SB167 (3-4)

Date Analyzed: 04/08/22 11:26 Lab File ID: ex722D08018.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-Dinitrotoluene		Invalid Compound ID	meyera	04/11/22 11:41
RDX		Invalid Compound ID	meyera	04/11/22 11:41

Lab Sample ID: 280-160190-10 Client Sample ID:

Date Analyzed: 04/08/22 11:33 Lab File ID: ex722D08019.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX-13C4	1.25	Baseline	meyera	04/11/22 08:41
HMX		Invalid Compound ID	meyera	04/11/22 08:41

Lab Sample ID: 280-160190-11 Client Sample ID: 29SB167 (11-12)

Date Analyzed: 04/08/22 11:40 Lab File ID: ex722D08020.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/11/22 11:41

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571224

Lab Sample ID: 280-160190-12 Client Sample ID: 29SB167 (14.5-15)

Date Analyzed: 04/08/22 11:46 Lab File ID: ex722D08021.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4,6-Trinitrotoluene		Invalid Compound ID	meyera	04/11/22 11:42

Lab Sample ID: CCV 280-571224/22 Client Sample ID:

Date Analyzed: 04/08/22 11:53 Lab File ID: ex722D08022.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3,5-Dinitroaniline	3.22	Baseline	meyera	04/11/22 11:42

Lab Sample ID: 280-160190-13 Client Sample ID: DUP-06

Date Analyzed: 04/08/22 11:59 Lab File ID: ex722D08023.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-Dinitrotoluene	4.14	Baseline	meyera	04/11/22 11:42
2,4-Dinitrotoluene	4.37	Baseline	meyera	04/11/22 11:42
HMX		Invalid Compound ID	meyera	04/11/22 11:43

Lab Sample ID: 280-160190-14 Client Sample ID: 29SB176 (14.5-15)

Date Analyzed: 04/08/22 12:06 Lab File ID: ex722D08024.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4,6-Trinitrotoluene	3.31	Baseline	meyera	04/11/22 11:43
4-Amino-2,6-dinitrotoluene	3.65	Baseline	meyera	04/11/22 11:43
2-Amino-4,6-dinitrotoluene	3.97	Baseline	meyera	04/11/22 11:43
m-Nitrotoluene	5.69	Baseline	meyera	04/11/22 11:43

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571224

Lab Sample ID: 280-160190-15 Client Sample ID: 29SB179 (14.5-15)

Date Analyzed: 04/08/22 12:13 Lab File ID: ex722D08025.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Amino-2,6-dinitrotoluene	3.64	Baseline	meyera	04/11/22 11:44
2-Amino-4,6-dinitrotoluene	3.98	Baseline	meyera	04/11/22 11:44
o-Nitrotoluene	4.98	Baseline	meyera	04/11/22 11:44
p-Nitrotoluene	5.30	Baseline	meyera	04/11/22 11:44
m-Nitrotoluene	5.71	Baseline	meyera	04/11/22 11:44
Tetryl		Invalid Compound ID	meyera	04/11/22 11:45

Lab Sample ID: 280-160190-16 Client Sample ID: 29SB178 (14.5-15)

Date Analyzed: 04/08/22 12:19 Lab File ID: ex722D08026.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	3.97	Baseline	meyera	04/11/22 11:45
o-Nitrotoluene	4.97	Baseline	meyera	04/11/22 11:45
p-Nitrotoluene	5.29	Baseline	meyera	04/11/22 11:45
m-Nitrotoluene	5.67	Baseline	meyera	04/11/22 11:45
HMX		Invalid Compound ID	meyera	04/11/22 11:45
Nitroglycerin		Invalid Compound ID	meyera	04/11/22 11:45

Lab Sample ID: 280-160190-17 Client Sample ID: 29SB177 (14.5-15)

Date Analyzed: 04/08/22 12:26 Lab File ID: ex722D08027.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3,5-Trinitrobenzene	2.33	Baseline	meyera	04/11/22 11:46
4-Amino-2,6-dinitrotoluene	3.65	Baseline	meyera	04/11/22 11:46
2-Amino-4,6-dinitrotoluene	3.96	Baseline	meyera	04/11/22 11:46
o-Nitrotoluene	4.98	Baseline	meyera	04/11/22 11:45
p-Nitrotoluene	5.30	Baseline	meyera	04/11/22 11:45
m-Nitrotoluene	5.67	Baseline	meyera	04/11/22 11:45

8321A

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571224

Lab Sample ID: 280-160190-18 Client Sample ID: 29SB168 (3-4)

Date Analyzed: 04/08/22 12:32 Lab File ID: ex722D08028.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Amino-2,6-dinitrotoluene	3.65	Assign Peak	meyera	04/11/22 11:47
2-Amino-4,6-dinitrotoluene	3.96	Assign Peak	meyera	04/11/22 11:47
o-Nitrotoluene	4.98	Baseline	meyera	04/11/22 11:47
p-Nitrotoluene	5.30	Baseline	meyera	04/11/22 11:47
m-Nitrotoluene	5.66	Baseline	meyera	04/11/22 11:47
HMX		Invalid Compound ID	meyera	04/11/22 11:46

Lab Sample ID: 280-160190-19 Client Sample ID: 29SB168 (6-7)

Date Analyzed: 04/08/22 12:39 Lab File ID: ex722D08029.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Dinitrobenzene	3.03	Baseline	meyera	04/11/22 11:48
4-Amino-2,6-dinitrotoluene	3.64	Baseline	meyera	04/11/22 11:49
2-Amino-4,6-dinitrotoluene	3.97	Baseline	meyera	04/11/22 11:49
m-Nitrotoluene	5.68	Baseline	meyera	04/11/22 11:49
HMX		Invalid Compound ID	meyera	04/11/22 11:48
Nitroglycerin		Invalid Compound ID	meyera	04/11/22 11:48

Lab Sample ID: 280-160190-19 MS Client Sample ID: 29SB168 (6-7) MS

Date Analyzed: 04/08/22 12:46 Lab File ID: ex722D08030.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Amino-2,6-dinitrotoluene	3.65	Baseline	meyera	04/11/22 11:50
2-Amino-4,6-dinitrotoluene	3.98	Baseline	meyera	04/11/22 11:50
o-Nitrotoluene	4.98	Baseline	meyera	04/11/22 11:49
p-Nitrotoluene	5.29	Baseline	meyera	04/11/22 11:49
m-Nitrotoluene	5.69	Baseline	meyera	04/11/22 11:49

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571224

Lab Sample ID: 280-160190-19 MSD Client Sample ID: 29SB168 (6-7) MSD

Date Analyzed: 04/08/22 12:52 Lab File ID: ex722D08031.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Amino-2,6-dinitrotoluene	3.65	Baseline	meyera	04/11/22 11:50
2-Amino-4,6-dinitrotoluene	3.96	Baseline	meyera	04/11/22 11:50

Lab Sample ID: CCV 280-571224/32 Client Sample ID:

Date Analyzed: 04/08/22 12:59 Lab File ID: ex722D08032.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	1.84	Baseline	meyera	04/11/22 08:42

Lab Sample ID: 280-160190-19 DU Client Sample ID: 29SB168 (6-7) DU

Date Analyzed: 04/08/22 13:05 Lab File ID: ex722D08033.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Dinitrobenzene	3.04	Assign Peak	meyera	04/11/22 11:50
4-Amino-2,6-dinitrotoluene	3.65	Baseline	meyera	04/11/22 11:51
2-Amino-4,6-dinitrotoluene	3.96	Baseline	meyera	04/11/22 11:51
o-Nitrotoluene	4.98	Baseline	meyera	04/11/22 11:51
p-Nitrotoluene	5.29	Baseline	meyera	04/11/22 11:51
m-Nitrotoluene	5.67	Baseline	meyera	04/11/22 11:51
HMX		Invalid Compound ID	meyera	04/11/22 11:50

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571224

Lab Sample ID: 280-160190-19 TRL Client Sample ID: 29SB168 (6-7) TRL

Date Analyzed: 04/08/22 13:12 Lab File ID: ex722D08034.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Dinitrobenzene	3.05	Baseline	meyera	04/11/22 11:52
4-Amino-2,6-dinitrotoluene	3.65	Baseline	meyera	04/11/22 11:52
2-Amino-4,6-dinitrotoluene	3.98	Baseline	meyera	04/11/22 11:52
o-Nitrotoluene	4.99	Baseline	meyera	04/11/22 11:51
p-Nitrotoluene	5.30	Baseline	meyera	04/11/22 11:51
m-Nitrotoluene	5.70	Assign Peak	meyera	04/11/22 11:51
HMX		Invalid Compound ID	meyera	04/11/22 11:52

Lab Sample ID: 280-160190-20 Client Sample ID: 29SB168 (11-12)

Date Analyzed: 04/08/22 13:19 Lab File ID: ex722D08035.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	3.98	Assign Peak	meyera	04/11/22 11:52
HMX		Invalid Compound ID	meyera	04/11/22 11:52
Nitrobenzene		Invalid Compound ID	meyera	04/11/22 11:52

Lab Sample ID: 280-160190-23 Client Sample ID: 29SB169 (6-7)

Date Analyzed: 04/08/22 13:38 Lab File ID: ex722D08038.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Amino-2,6-dinitrotoluene	3.63	Assign Peak	meyera	04/11/22 11:54
2-Amino-4,6-dinitrotoluene	3.96	Assign Peak	meyera	04/11/22 11:54
2,6-Dinitrotoluene	4.12	Baseline	meyera	04/11/22 11:54
2,4-Dinitrotoluene	4.37	Baseline	meyera	04/11/22 11:54

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571224

Lab Sample ID: 280-160190-24 Client Sample ID: 29SB169 (11-12)

Date Analyzed: 04/08/22 13:45 Lab File ID: ex722D08039.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Amino-2,6-dinitrotoluene	3.65	Assign Peak	meyera	04/11/22 11:55
2-Amino-4,6-dinitrotoluene	3.98	Assign Peak	meyera	04/11/22 11:55
o-Nitrotoluene	4.97	Baseline	meyera	04/11/22 11:55
p-Nitrotoluene	5.31	Baseline	meyera	04/11/22 11:55
Nitrobenzene		Invalid Compound ID	meyera	04/11/22 11:55

Lab Sample ID: 280-160190-25 Client Sample ID: 29SB169 (14.5-15)

Date Analyzed: 04/08/22 13:52 Lab File ID: ex722D08040.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	3.96	Assign Peak	meyera	04/11/22 11:55

Lab Sample ID: 280-160190-26 Client Sample ID: DUP-07

Date Analyzed: 04/08/22 13:58 Lab File ID: ex722D08041.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Amino-2,6-dinitrotoluene	3.64	Assign Peak	meyera	04/11/22 11:56
2-Amino-4,6-dinitrotoluene	3.96	Assign Peak	meyera	04/11/22 11:56
2,6-Dinitrotoluene	4.13	Assign Peak	meyera	04/11/22 11:56
2,4-Dinitrotoluene	4.37	Assign Peak	meyera	04/11/22 11:56
HMX		Invalid Compound ID	meyera	04/11/22 11:56

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571224

Lab Sample ID: 280-160190-27 Client Sample ID: 29SB170 (3-4)

Date Analyzed: 04/08/22 14:05 Lab File ID: ex722D08042.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-Dinitrotoluene	4.14	Baseline	meyera	04/11/22 11:56
2,4-Dinitrotoluene	4.36	Baseline	meyera	04/11/22 11:56
RDX		Invalid Compound ID	meyera	04/11/22 11:57

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571895

Lab Sample ID: STD001 280-571895/3 IC Client Sample ID:

Date Analyzed: 04/14/22 12:27 Lab File ID: ex722D14003.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	1.82	Baseline	meyera	04/14/22 14:22
Tetryl	2.63	Baseline	meyera	04/14/22 14:23
1,3-Dinitrobenzene	2.99	Baseline	meyera	04/14/22 14:23
Nitroglycerin	3.00	Baseline	meyera	04/14/22 14:23
Nitrobenzene-d5	3.28	Baseline	meyera	04/14/22 14:23
Nitrobenzene	3.34	Baseline	meyera	04/14/22 14:23
PETN	4.59	Baseline	meyera	04/14/22 14:23
o-Nitrotoluene	4.87	Baseline	meyera	04/14/22 14:23
p-Nitrotoluene	5.16	Baseline	meyera	04/14/22 14:23
m-Nitrotoluene	5.56	Baseline	meyera	04/14/22 14:23

Lab Sample ID: STD002 280-571895/4 IC Client Sample ID:

Date Analyzed: 04/14/22 12:34 Lab File ID: ex722D14004.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3,5-Trinitrobenzene	2.30	Split Peak	meyera	04/14/22 14:22
Nitrobenzene-d5	3.32	Baseline	meyera	04/14/22 14:25
4-Amino-2,6-dinitrotoluene	3.59	Split Peak	meyera	04/14/22 14:21
2-Amino-4,6-dinitrotoluene	3.92	Split Peak	meyera	04/14/22 14:21
PETN	4.64	Split Peak	meyera	04/14/22 14:21

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571895

Lab Sample ID: STD003 280-571895/5 IC Client Sample ID:

Date Analyzed: 04/14/22 12:41 Lab File ID: ex722D14005.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrobenzene-d5	3.32	Baseline	meyera	04/14/22 14:25
o-Nitrotoluene	4.93	Baseline	meyera	04/14/22 14:21
p-Nitrotoluene	5.22	Baseline	meyera	04/14/22 14:21
m-Nitrotoluene	5.61	Baseline	meyera	04/14/22 14:21

Lab Sample ID: STD004 280-571895/6 IC Client Sample ID:

Date Analyzed: 04/14/22 12:47 Lab File ID: ex722D14006.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrobenzene	3.38	Baseline	meyera	04/14/22 14:21
4-Amino-2,6-dinitrotoluene	3.61	Assign Peak	meyera	04/14/22 14:20
2-Amino-4,6-dinitrotoluene	3.93	Assign Peak	meyera	04/14/22 14:20

Lab Sample ID: STD006 280-571895/8 IC Client Sample ID:

Date Analyzed: 04/14/22 13:00 Lab File ID: ex722D14008.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Amino-2,6-dinitrotoluene	3.60	Assign Peak	meyera	04/14/22 14:20
2-Amino-4,6-dinitrotoluene	3.92	Assign Peak	meyera	04/14/22 14:20

Lab Sample ID: ICB 280-571895/10 Client Sample ID:

Date Analyzed: 04/14/22 13:13 Lab File ID: ex722D14010.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Dinitrobenzene		Invalid Compound ID	meyera	04/14/22 14:26

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571895

Lab Sample ID: ICV 280-571895/11 Client Sample ID:

Date Analyzed: 04/14/22 13:20 Lab File ID: ex722D14011.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3,5-Dinitroaniline	3.20	Baseline	meyera	04/14/22 14:27

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571896

Lab Sample ID: MB 280-571022/1-A Client Sample ID:

Date Analyzed: 04/14/22 13:27 Lab File ID: ex722D14012.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4,6-Trinitrotoluene		Invalid Compound ID	meyera	04/14/22 14:27
HMX		Invalid Compound ID	meyera	04/14/22 14:27

Lab Sample ID: LCSD 280-571022/3-A Client Sample ID:

Date Analyzed: 04/14/22 13:40 Lab File ID: ex722D14014.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	1.82	Baseline	meyera	04/15/22 07:56

Lab Sample ID: GB 280-570112/1-B Client Sample ID:

Date Analyzed: 04/14/22 13:46 Lab File ID: ex722D14015.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/14/22 14:28

Lab Sample ID: 280-160190-28 Client Sample ID: 29SB170 (6-7)

Date Analyzed: 04/14/22 14:00 Lab File ID: ex722D14017.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3,5-Trinitrobenzene	2.29	Baseline	meyera	04/14/22 14:28
2-Amino-4,6-dinitrotoluene	3.93	Baseline	meyera	04/14/22 14:28
2,6-Dinitrotoluene	4.08	Baseline	meyera	04/14/22 14:28
2,4-Dinitrotoluene	4.33	Baseline	meyera	04/14/22 14:28
HMX		Invalid Compound ID	meyera	04/14/22 14:29

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571896

Lab Sample ID: 280-160190-29 Client Sample ID: 29SB170 (11-12)

Date Analyzed: 04/14/22 14:19 Lab File ID: ex722D14020.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4,6-Trinitrotoluene	3.27	Baseline	meyera	04/15/22 07:26
2-Amino-4,6-dinitrotoluene	3.61	Baseline	meyera	04/15/22 07:27
o-Nitrotoluene	4.97	Baseline	meyera	04/15/22 07:26
p-Nitrotoluene	5.24	Baseline	meyera	04/15/22 07:26

Lab Sample ID: CCV 280-571896/21 Client Sample ID:

Date Analyzed: 04/14/22 14:26 Lab File ID: ex722D14021.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3,5-Dinitroaniline	3.21	Baseline	meyera	04/15/22 07:40

Lab Sample ID: 280-160190-A-29-E DU Client Sample ID:

Date Analyzed: 04/14/22 14:33 Lab File ID: ex722D14022.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Amino-2,6-dinitrotoluene	3.63	Baseline	meyera	04/15/22 07:28
2-Amino-4,6-dinitrotoluene	3.94	Baseline	meyera	04/15/22 07:28
o-Nitrotoluene	4.96	Baseline	meyera	04/15/22 07:27
p-Nitrotoluene	5.24	Baseline	meyera	04/15/22 07:27
HMX		Invalid Compound ID	meyera	04/15/22 07:27

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571896

Lab Sample ID: 280-160190-A-29-F TRL Client Sample ID:

Date Analyzed: 04/14/22 14:39 Lab File ID: ex722D14023.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-Dinitrotoluene	4.09	Baseline	meyera	04/15/22 07:28
2,4-Dinitrotoluene	4.31	Baseline	meyera	04/15/22 07:28
o-Nitrotoluene	4.91	Baseline	meyera	04/15/22 07:28
p-Nitrotoluene	5.22	Baseline	meyera	04/15/22 07:29
HMX		Invalid Compound ID	meyera	04/15/22 07:28

Lab Sample ID: 280-160190-30 Client Sample ID: 29SB170 (14.5-15)

Date Analyzed: 04/14/22 14:46 Lab File ID: ex722D14024.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3,5-Trinitrobenzene	2.32	Baseline	meyera	04/15/22 07:30
2,4,6-Trinitrotoluene	3.26	Baseline	meyera	04/15/22 07:29
4-Amino-2,6-dinitrotoluene	3.60	Baseline	meyera	04/15/22 07:29
2-Amino-4,6-dinitrotoluene	3.95	Baseline	meyera	04/15/22 07:29
2,6-Dinitrotoluene	4.11	Baseline	meyera	04/15/22 07:29
2,4-Dinitrotoluene	4.32	Baseline	meyera	04/15/22 07:29
o-Nitrotoluene	4.92	Baseline	meyera	04/15/22 07:29
p-Nitrotoluene	5.22	Baseline	meyera	04/15/22 07:29
Nitroglycerin		Invalid Compound ID	meyera	04/15/22 07:29

Lab Sample ID: 280-160190-31 Client Sample ID: 29SB171 (3-4)

Date Analyzed: 04/14/22 14:52 Lab File ID: ex722D14025.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/15/22 07:30

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571896

Lab Sample ID: 280-160190-32 Client Sample ID: 29SB171 (6-7)

Date Analyzed: 04/14/22 14:59 Lab File ID: ex722D14026.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Amino-2,6-dinitrotoluene	3.64	Baseline	meyera	04/15/22 07:30
2-Amino-4,6-dinitrotoluene	3.89	Baseline	meyera	04/15/22 07:31
o-Nitrotoluene	4.93	Baseline	meyera	04/15/22 07:30
p-Nitrotoluene	5.24	Baseline	meyera	04/15/22 07:30
HMX		Invalid Compound ID	meyera	04/15/22 07:31

Lab Sample ID: 280-160190-33 Client Sample ID: 29SB171 (11-12)

Date Analyzed: 04/14/22 15:06 Lab File ID: ex722D14027.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4-Dinitrotoluene	4.32	Baseline	meyera	04/15/22 07:31
2,4,6-Trinitrotoluene		Invalid Compound ID	meyera	04/15/22 07:31
2,6-Dinitrotoluene		Invalid Compound ID	meyera	04/15/22 07:31
HMX		Invalid Compound ID	meyera	04/15/22 07:31

Lab Sample ID: 280-160190-35 Client Sample ID: DUP-08

Date Analyzed: 04/14/22 15:19 Lab File ID: ex722D14029.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrobenzene		Invalid Compound ID	meyera	04/15/22 07:31

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571896

Lab Sample ID: 280-160190-36 Client Sample ID: 29SB174 (3-4)

Date Analyzed: 04/14/22 15:25 Lab File ID: ex722D14030.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	meyera	04/15/22 07:32
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	meyera	04/15/22 07:32
HMX		Invalid Compound ID	meyera	04/15/22 07:32

Lab Sample ID: 280-160190-38 Client Sample ID: 29SB174 (11-12)

Date Analyzed: 04/14/22 15:45 Lab File ID: ex722D14033.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-Dinitrotoluene	4.12	Baseline	meyera	04/15/22 07:32
2,4-Dinitrotoluene	4.29	Baseline	meyera	04/15/22 07:32
HMX		Invalid Compound ID	meyera	04/15/22 07:32

Lab Sample ID: 280-160190-39 Client Sample ID: 29SB174 (14.5-15)

Date Analyzed: 04/14/22 15:52 Lab File ID: ex722D14034.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/15/22 07:33

Lab Sample ID: 280-160190-40 Client Sample ID: 29SB190 (3-4)

Date Analyzed: 04/14/22 15:58 Lab File ID: ex722D14035.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4,6-Trinitrotoluene		Invalid Compound ID	meyera	04/15/22 07:33
Nitrobenzene		Invalid Compound ID	meyera	04/15/22 07:33

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571896

Lab Sample ID: 280-160190-41 Client Sample ID: 29SB190 (19-20)

Date Analyzed: 04/14/22 16:05 Lab File ID: ex722D14036.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-Dinitrotoluene	4.09	Baseline	meyera	04/15/22 07:33
2,4-Dinitrotoluene	4.31	Baseline	meyera	04/15/22 07:33
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	meyera	04/15/22 07:33
HMX		Invalid Compound ID	meyera	04/15/22 07:33

Lab Sample ID: 280-160190-43 Client Sample ID: 29SB192 (11-12)

Date Analyzed: 04/14/22 16:18 Lab File ID: ex722D14038.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	meyera	04/15/22 07:34
HMX		Invalid Compound ID	meyera	04/15/22 07:34

Lab Sample ID: 280-160190-44 Client Sample ID: 29SB192 (15-16)

Date Analyzed: 04/14/22 16:25 Lab File ID: ex722D14039.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3,5-Trinitrobenzene		Invalid Compound ID	meyera	04/15/22 07:34

Lab Sample ID: 280-160190-45 Client Sample ID: 29SB192 (19-20)

Date Analyzed: 04/14/22 16:31 Lab File ID: ex722D14040.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/15/22 07:34
Nitrobenzene		Invalid Compound ID	meyera	04/15/22 07:34

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571896

Lab Sample ID: 280-160190-46 Client Sample ID: DUP-09

Date Analyzed: 04/14/22 16:38 Lab File ID: ex722D14041.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3,5-Trinitrobenzene		Invalid Compound ID	meyera	04/15/22 07:34

Lab Sample ID: CCV 280-571896/43 Client Sample ID:

Date Analyzed: 04/14/22 16:51 Lab File ID: ex722D14043.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-Dinitrotoluene	4.08	Assign Peak	meyera	04/15/22 07:35
2,4-Dinitrotoluene	4.31	Assign Peak	meyera	04/15/22 07:35

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571897

Lab Sample ID: CCV 280-571897/43 Client Sample ID:

Date Analyzed: 04/14/22 16:51 Lab File ID: ex722D14043.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-Dinitrotoluene	4.08	Assign Peak	meyera	04/15/22 07:35
2,4-Dinitrotoluene	4.31	Assign Peak	meyera	04/15/22 07:35

Lab Sample ID: MB 280-571025/1-A Client Sample ID:

Date Analyzed: 04/14/22 16:58 Lab File ID: ex722D14044.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/15/22 07:35
Tetryl		Invalid Compound ID	meyera	04/15/22 07:35

Lab Sample ID: GB 280-570115/1-B Client Sample ID:

Date Analyzed: 04/14/22 17:18 Lab File ID: ex722D14047.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/15/22 07:36

Lab Sample ID: 280-160190-48 Client Sample ID: 29SB193 (11-12)

Date Analyzed: 04/14/22 17:31 Lab File ID: ex722D14049.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin		Invalid Compound ID	meyera	04/15/22 07:36

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571897

Lab Sample ID: 280-160190-49 Client Sample ID: 29SB193 (15-16)

Date Analyzed: 04/14/22 17:37 Lab File ID: ex722D14050.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	meyera	04/15/22 07:36
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	meyera	04/15/22 07:36

Lab Sample ID: 280-160190-50 Client Sample ID: 29SB193 (19-20)

Date Analyzed: 04/14/22 17:44 Lab File ID: ex722D14051.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrobenzene		Invalid Compound ID	meyera	04/15/22 07:36

Lab Sample ID: 280-160190-51 Client Sample ID:

Date Analyzed: 04/14/22 17:50 Lab File ID: ex722D14052.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX-13C4	1.25	Baseline	meyera	04/15/22 07:37

Lab Sample ID: CCV 280-571897/53 Client Sample ID:

Date Analyzed: 04/14/22 17:57 Lab File ID: ex722D14053.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3,5-Dinitroaniline	3.21	Baseline	meyera	04/15/22 07:37

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571897

Lab Sample ID: 280-160190-52 Client Sample ID: 29SB203 (3-4)

Date Analyzed: 04/14/22 18:04 Lab File ID: ex722D14054.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4,6-Trinitrotoluene	3.27	Baseline	meyera	04/15/22 07:38
2,6-Dinitrotoluene	4.06	Baseline	meyera	04/15/22 07:37
2,4-Dinitrotoluene	4.26	Baseline	meyera	04/15/22 07:37

Lab Sample ID: 280-160190-52MS Client Sample ID: 29SB203 (3-4) MS

Date Analyzed: 04/14/22 18:10 Lab File ID: ex722D14055.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	1.83	Baseline	meyera	04/15/22 08:19

Lab Sample ID: 280-160190-52MSD Client Sample ID: 29SB203 (3-4) MSD

Date Analyzed: 04/14/22 18:17 Lab File ID: ex722D14056.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	1.82	Baseline	meyera	04/15/22 08:18

Lab Sample ID: 280-160190-A-52-I DU Client Sample ID:

Date Analyzed: 04/14/22 18:24 Lab File ID: ex722D14057.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4,6-Trinitrotoluene		Invalid Compound ID	meyera	04/15/22 07:38

8321A

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571897

Lab Sample ID: 280-160190-A-52-J TRL Client Sample ID:

Date Analyzed: 04/14/22 18:30 Lab File ID: ex722D14058.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4,6-Trinitrotoluene		Invalid Compound ID	meyera	04/15/22 07:38
HMX		Invalid Compound ID	meyera	04/15/22 07:38

Lab Sample ID: 280-160190-53 Client Sample ID: 29SB203 (7-8)

Date Analyzed: 04/14/22 18:37 Lab File ID: ex722D14059.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	meyera	04/15/22 07:39

Lab Sample ID: 280-160190-54 Client Sample ID: 29SB204 (3-4)

Date Analyzed: 04/14/22 18:43 Lab File ID: ex722D14060.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-Dinitrotoluene		Invalid Compound ID	meyera	04/15/22 07:39
HMX		Invalid Compound ID	meyera	04/15/22 07:39

Lab Sample ID: 280-160190-55 Client Sample ID: 29SB204 (7-8)

Date Analyzed: 04/14/22 18:50 Lab File ID: ex722D14061.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4,6-Trinitrotoluene	3.27	Baseline	meyera	04/15/22 07:39
2,4-Dinitrotoluene	4.29	Baseline	meyera	04/15/22 07:39
1,3-Dinitrobenzene		Invalid Compound ID	meyera	04/15/22 07:39
2,6-Dinitrotoluene		Invalid Compound ID	meyera	04/15/22 07:39
HMX		Invalid Compound ID	meyera	04/15/22 07:39
RDX		Invalid Compound ID	meyera	04/15/22 07:39
Tetryl		Invalid Compound ID	meyera	04/15/22 07:39

8321A

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571897

Lab Sample ID: CCV 280-571897/62 Client Sample ID:

Date Analyzed: 04/14/22 18:56 Lab File ID: ex722D14062.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3,5-Dinitroaniline	3.20	Baseline	meyera	04/15/22 07:40

8321A

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
8321EXcalprim_00029	10/05/22	04/05/22	acn, Lot 103152	10 mL	8321NG_00013	1 mL	Nitroglycerin	10.06 ug/mL
					8321PETN_00017	1 mL	PETN	9.96 ug/mL
					8330 Stock_TS_00020	0.1 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
							4-Amino-2,6-dinitrotoluene	10.01 ug/mL
							HMX	10 ug/mL
							m-Nitrotoluene	10.01 ug/mL
							Nitrobenzene	10.04 ug/mL
							o-Nitrotoluene	10 ug/mL
							p-Nitrotoluene	10.02 ug/mL
							RDX	10 ug/mL
							Tetryl	10.02 ug/mL
					MNX,TNX,DNX_00055	1 mL	DNX	10.01 ug/mL
							MNX	11.67 ug/mL
							TNX	10.01 ug/mL
.8321NG_00013	11/30/22	Accustandard, Lot 219091211-01			(Purchased Reagent)		Nitroglycerin	100.6 ug/mL
.8321PETN_00017	02/08/23	Accustandard, Lot B8020122-4D			(Purchased Reagent)		PETN	99.6 ug/mL
.8330 Stock_TS_00020	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
							4-Amino-2,6-dinitrotoluene	1001 ug/mL
							HMX	1000 ug/mL
							m-Nitrotoluene	1001 ug/mL
							Nitrobenzene	1004 ug/mL
							o-Nitrotoluene	1000 ug/mL
							p-Nitrotoluene	1002 ug/mL
							RDX	1000 ug/mL
							Tetryl	1002 ug/mL
.MNX,TNX,DNX_00055	04/30/22	Agilent, Lot 0006594482			(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.1 ug/mL
8321expICV_00019	04/21/22	04/21/21	Acetonitrile, Lot 63600	10 mL	8330_NG1000_00003	0.1 mL	Nitroglycerin	10 ug/mL
					8330_PETN1000_00003	0.1 mL	PETN	10 ug/mL
					8330LCSMix1_00122	0.1 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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					8330LCSmix2_00022	0.1 mL	2,6-Dinitrotoluene	10 ug/mL
							2-Amino-4,6-dinitrotoluene	10 ug/mL
							4-Amino-2,6-dinitrotoluene	10 ug/mL
							m-Nitrotoluene	10 ug/mL
							o-Nitrotoluene	10 ug/mL
							p-Nitrotoluene	10 ug/mL
							Tetryl	10 ug/mL
.8330_NG1000_00003	10/31/25		Restek, Lot A0165199		(Purchased Reagent)		Nitroglycerin	1000 ug/mL
.8330_PETN1000_00003	01/31/26		Restek, Lot A0168441		(Purchased Reagent)		PETN	1000 ug/mL
.8330LCSMix1_00122	08/31/25		Restek, Lot A0163590		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
.8330LCSmix2_00022	06/30/25		Restek, Lot A0161545		(Purchased Reagent)		2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							m-Nitrotoluene	1000 ug/mL
							o-Nitrotoluene	1000 ug/mL
							p-Nitrotoluene	1000 ug/mL
							Tetryl	1000 ug/mL
8321ExplosLCS_00049	09/07/22	03/07/22	Acetonitrile, Lot Acetonitrile_00055	100 mL	8330_NG_Stk_00098	80 uL	Nitroglycerin	4 ug/mL
					8330_PETN_Stk_00115	80 uL	PETN	4 ug/mL
					8330LCSMix1_00127	400 uL	1,3,5-Trinitrobenzene	4 ug/mL
							1,3-Dinitrobenzene	4 ug/mL
							2,4,6-Trinitrotoluene	4 ug/mL
							2,4-Dinitrotoluene	4 ug/mL
							HMX	4 ug/mL
							Nitrobenzene	4 ug/mL
							RDX	4 ug/mL
					8330LCSmix2_00019	400 uL	2,6-Dinitrotoluene	4 ug/mL
							2-Amino-4,6-dinitrotoluene	4 ug/mL
							4-Amino-2,6-dinitrotoluene	4 ug/mL
							m-Nitrotoluene	4 ug/mL
							o-Nitrotoluene	4 ug/mL
							p-Nitrotoluene	4 ug/mL
							Tetryl	4 ug/mL
.8330_NG_Stk_00098	03/01/23		Restek, Lot A0161480		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00115	03/07/23		Restek, Lot A0172687		(Purchased Reagent)		PETN	5000 ug/mL
.8330LCSMix1_00127	03/07/23		Restek, Lot A0171502		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							RDX	1000 ug/mL
.8330LCSmix2_00019	03/07/23	Restek, Lot A0157533			(Purchased Reagent)		2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							m-Nitrotoluene	1000 ug/mL
							o-Nitrotoluene	1000 ug/mL
							p-Nitrotoluene	1000 ug/mL
							Tetryl	1000 ug/mL
8321ExplosSur_00058	04/28/22	01/12/22	Acetonitrile, Lot Acetonitrile 00059	200 mL	8321NB-D5-1_00018	67 uL	Nitrobenzene-d5	4.01297 ug/mL
.8321NB-D5-1_00018	04/28/22	11/05/21	ACN, Lot 11238	10 mL	8321NB-D5_00009	0.121 mL	Nitrobenzene-d5	11979 ug/mL
..8321NB-D5_00009	01/22/24	Cambridge Isotope, Lot PR-20474/06199NB1			(Purchased Reagent)		Nitrobenzene-d5	99 %
8321ExplosSur_00059	04/28/22	04/05/22	Acetonitrile, Lot Acetonitrile 00063	200 mL	8321NB-D5-1_00019	67 uL	Nitrobenzene-d5	4.01297 ug/mL
.8321NB-D5-1_00019	01/22/24	04/05/22	ACN, Lot 11238	10 mL	8321NB-D5_00009	0.121 mL	Nitrobenzene-d5	11979 ug/mL
..8321NB-D5_00009	01/22/24	Cambridge Isotope, Lot PR-20474/06199NB1			(Purchased Reagent)		Nitrobenzene-d5	99 %
8321NB-D5-cal_00021	04/28/22	11/05/21	ACN, Lot 111238	40 mL	8321NB-D5-2_00017	4 mL	Nitrobenzene-d5	10.0025 ug/mL
.8321NB-D5-2_00017	04/28/22	11/05/21	ACN, Lot 111238	10 mL	8321NB-D5-1_00018	0.0835 mL	Nitrobenzene-d5	100.025 ug/mL
..8321NB-D5-1_00018	04/28/22	11/05/21	ACN, Lot 11238	10 mL	8321NB-D5_00009	0.121 mL	Nitrobenzene-d5	11979 ug/mL
...8321NB-D5_00009	01/22/24	Cambridge Isotope, Lot PR-20474/06199NB1			(Purchased Reagent)		Nitrobenzene-d5	99 %
8330 GrindLCS_00338	12/02/22	Phenova, Lot D20210740			(Purchased Reagent)		1,3,5-Trinitrobenzene	600 ug/Kg
							1,3-Dinitrobenzene	600 ug/Kg
							2,4,6-Trinitrotoluene	600 ug/Kg
							2,4-Dinitrotoluene	600 ug/Kg
							2,6-Dinitrotoluene	600 ug/Kg
							2-Amino-4,6-dinitrotoluene	600 ug/Kg
							3,5-Dinitroaniline	600 ug/Kg
							4-Amino-2,6-dinitrotoluene	600 ug/Kg
							HMX	600 ug/Kg
							m-Nitrotoluene	600 ug/Kg
							Nitrobenzene	600 ug/Kg
							Nitroglycerin	600 ug/Kg
							o-Nitrotoluene	600 ug/Kg
							p-Nitrotoluene	600 ug/Kg
							PETN	600 ug/Kg
							RDX	600 ug/Kg
							Tetryl	600 ug/Kg
8330 GrindLCS_00339	04/07/22	Phenova, Lot D20210740			(Purchased Reagent)		1,3,5-Trinitrobenzene	600 ug/Kg
							1,3-Dinitrobenzene	600 ug/Kg
							2,4,6-Trinitrotoluene	600 ug/Kg
							2,4-Dinitrotoluene	600 ug/Kg
							2,6-Dinitrotoluene	600 ug/Kg
							2-Amino-4,6-dinitrotoluene	600 ug/Kg
							3,5-Dinitroaniline	600 ug/Kg
							4-Amino-2,6-dinitrotoluene	600 ug/Kg

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							HMX	600 ug/Kg
							m-Nitrotoluene	600 ug/Kg
							Nitrobenzene	600 ug/Kg
							Nitroglycerin	600 ug/Kg
							o-Nitrotoluene	600 ug/Kg
							p-Nitrotoluene	600 ug/Kg
							PETN	600 ug/Kg
							RDX	600 ug/Kg
							Tetryl	600 ug/Kg
EXPWORKINGIS_00089	10/05/22	04/05/22	Acetonitrile, Lot 130057	20 mL	83212,4DNTIS_00012	125 uL	2,4-dinitrotoluene-d3	6.25 ug/mL
					8321HMX13C4IS_00016	125 uL	HMX-13C4	6.25 ug/mL
					8321RDX13C3IS_00014	125 uL	Hexahydro-1,3,5-trinitro-1,3,5-triazine 13C3	6.25 ug/mL
					EXPDNBD4IS_00014	20 uL	1,3-Dinitrobenzene-d4	6.468 ug/mL
.83212,4DNTIS_00012	10/27/24	Cambridge Isotope, Lot SDEJ-005			(Purchased Reagent)		2,4-dinitrotoluene-d3	1000 mg/L
.8321HMX13C4IS_00016	03/27/23	Cambridge Isotope, Lot SCGF-021			(Purchased Reagent)		HMX-13C4	1000 mg/L
.8321RDX13C3IS_00014	03/30/22	Cambridge Isotope, Lot SDBK-002			(Purchased Reagent)		Hexahydro-1,3,5-trinitro-1,3,5-triazine 13C3	1000 mg/L
.EXPDNBD4IS_00014	05/15/24	07/20/20	Acetonitrile, Lot 66640	10 mL	832113DNBD4IS_00004	0.066 g	1,3-Dinitrobenzene-d4	6468 ug/mL
..832113DNBD4IS_00004	05/15/24	Cambridge Isotope, Lot P-7759			(Purchased Reagent)		1,3-Dinitrobenzene-d4	98 %

Reagent

832113DNBD4IS_00004

Cambridge Isotope Laboratories, Inc.

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800.322.1174 (N. America) 978.749.8000 (International)
www.isotope.com

CERTIFICATE OF ANALYSIS

Product Name: 1,3-DINITROBENZENE
(Isotopic Label & Enrichment Specification) (D4, 98%)

Lot Number: P-7759

Catalog Number: DLM-3024-0

Product Information

Chemical Purity Specification:	≥ 98%
Labeled CAS Number:	54247-05-1
Unlabeled CAS Number:	99-65-0
MW of fully enriched product:	172.13
Chemical Formula:	O2NC6D4NO2
Storage:	Store at room temperature away from light and moisture.

Certification

Cambridge Isotope Laboratories, Inc. guarantees that this material meets or exceeds the specifications stated. Absolute identity as well as chemical and isotopic purities are assured by the use of unambiguous synthetic routes and multiple chemical analyses whenever possible. Results are representative of QC testing at time of release from Quality Control unless otherwise stated.

The retest date for this chemical has been designated based on CIL's experience in working with chemical standards for over 30 years, and includes review of actual analytical results and relevant literature references. The retest date is valid only for unopened vials or ampoules that have been stored as recommended.

Approved by: Jeffrey O Neill
Jeffrey O'Neill, Quality Assurance

Quality Control Tests and Results

1H NMR for Chemical Purity	Pass
GC/FID for Chemical Purity	100%
GC/MS for Chemical Purity	100%
GC/MS for Isotopic Enrichment	99.7%
Melting Point Range Determination	82-84°C

Retest/Review Date: 11/09/19

Reagent

83212,4DNTIS_00012

Cambridge Isotope Laboratories, Inc.

Certificate of Analysis

Product Name: 2,4-DINITROTOLUENE
(Isotopic Label & Enrichment Specification) (RING-D3, 98%) 1 MG/ML IN ACETONITRILE-D3

Lot Number: SDEJ-005

Catalog Number: DLM-2207-S-0

Product Information

Chemical Purity Specification:	≥ 98%
Labeled CAS Number:	93951-68-9
Unlabeled CAS Number:	121-14-2
MW*:	185.15
Chemical Formula:	C7H3D3N2O4
Storage:	Store at room temperature away from light and moisture.
Stability:	See storage and expiration date.

Certification

Cambridge Isotope Laboratories, Inc. guarantees that this material meets or exceeds the specifications stated. Absolute identity as well as chemical and isotopic purities are assured by the use of unambiguous synthetic routes and multiple chemical analyses whenever possible. Results are representative of QC testing at time of release from Quality Control unless otherwise stated.

Volumetric measurements were made with Class A glassware. Gravimetry is traceable to the NIST through calibrated balances and certified, calibrated, standard weights. The calibrations are traceable to the NIST under Test No. 822/270236-04. The calibrations also meet specifications outlined in ISO 9001, ISO/IEC 17025, ANSI/NSCL Z540-1-1994, NCR Document 10CFR50 Appendix B, and applicable subdocuments.

This COA references the bulk catalog number before packaging. The COA also applies to the CIL finished good catalog number . Some possible packaging sizes and their corresponding suffix are -1.2, -1, -0.5, -10, or -0.1.

* *For isotopically labeled compounds, MW listed is for the fully enriched product.*

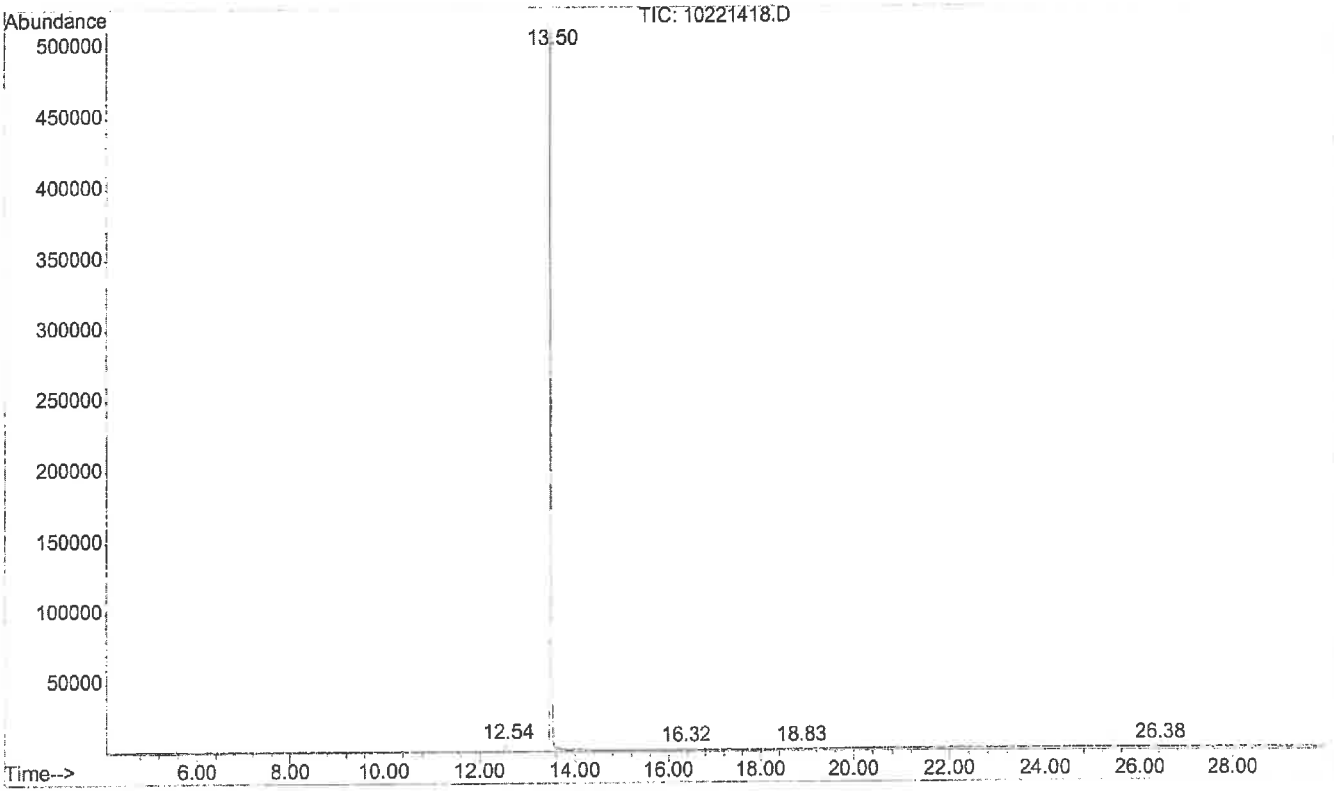
Approved by: T. J. Eckersley

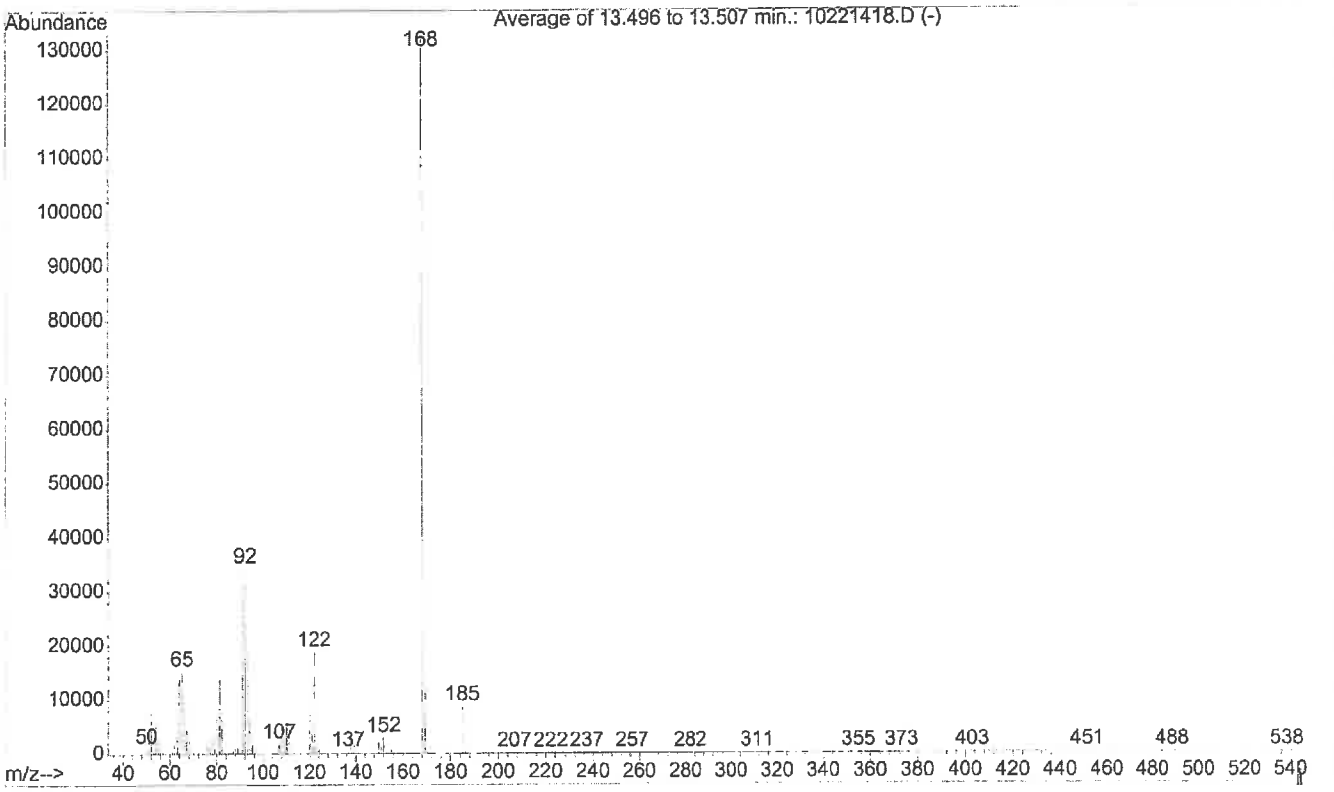
Timothy J. Eckersley, Ph.D., Quality Assurance

Quality Control Tests and Results

QC Release Date	10/27/2014
Expiration Date	10/27/2024
Concentration Based on Gravimetry	1.0 mg/mL
Chemical Purity of Neat Material(s)	99.7%
HPLC for Concentration	0.97 ± 0.02 mg/mL (k=2)

File : C:\HPCHEM\1\DATA\A102214\10221418.D
Operator :
Acquired : 23 Oct 2014 3:48 am using AcqMethod DAVE2
Instrument : GC/MS 597
Sample Name: 2,4-DNT D3 DLM-2207-0 SDEJ-005
Misc Info : TS QDP-QC-TM-161
Vial Number: 14





Reagent

8321HMX13C4IS_00016

Cambridge Isotope Laboratories, Inc.

Certificate of Analysis

Product Name: (Isotopic Label & Enrichment Specification)	HMX (13C4, 99%; RING-15N4, 98%) 1 MG/ML IN CH3CN
Lot Number:	SCGF-021
Catalog Number:	CNLM-7963-S-0

Product Information

Chemical Purity Specification:	≥ 98%
MW*: * *For isotopically labeled compounds, MW listed is for the fully enriched product.*	304.10
Labeled CAS Number:	NA
Unlabeled CAS Number:	2691-41-0
Chemical Formula:	*C4H8N4*N4O8
Storage:	Store refrigerated (-5°C to 5°C). Protect from light.
Stability:	See storage and expiration date.

Certification

Cambridge Isotope Laboratories, Inc. guarantees that this material meets or exceeds the specifications stated. Absolute identity as well as chemical and isotopic purities are assured by the use of unambiguous synthetic routes and multiple chemical analyses whenever possible. Results are representative of QC testing at time of release from Quality Control unless otherwise stated. CIL Certificates of Analysis are occasionally updated with new data following recertification. We recommend checking the website for the latest version.

Volumetric measurements were made with Class A glassware. Gravimetry is traceable to the NIST through calibrated balances and certified, calibrated, standard weights. The calibrations are traceable to the NIST under Test No. 822/270236-04. The calibrations also meet specifications outlined in ISO 9001, ISO/IEC 17025, ANSI/NSCL Z540-1-1994, NCR Document 10CFR50 Appendix B, and applicable subdocuments.

This COA references the bulk catalog number before packaging. The COA also applies to the CIL finished good catalog number . Some possible packaging sizes and their corresponding suffix are -1.2, -1, -0.5, -10, or -0.1.

Approved by: Jeffrey O Neill

Jeffrey O'Neill, Quality Review

Quality Control Tests and Results

QC Release Date	9/11/2006
Recertification Date	3/27/2018
Expiration Date	3/27/2023
Concentration Based on Gravimetry	1.0 mg/mL
HPLC for Concentration	1.02 ± 0.05 mg/mL (k=2)

(continued on next page)

Cambridge Isotope Laboratories, Inc.

Certificate of Analysis

Product Name: HMX
(Isotopic Label & Enrichment Specification) (13C4, 99%; RING-15N4, 98%) 1 MG/ML IN CH3CN

Lot Number: SCGF-021

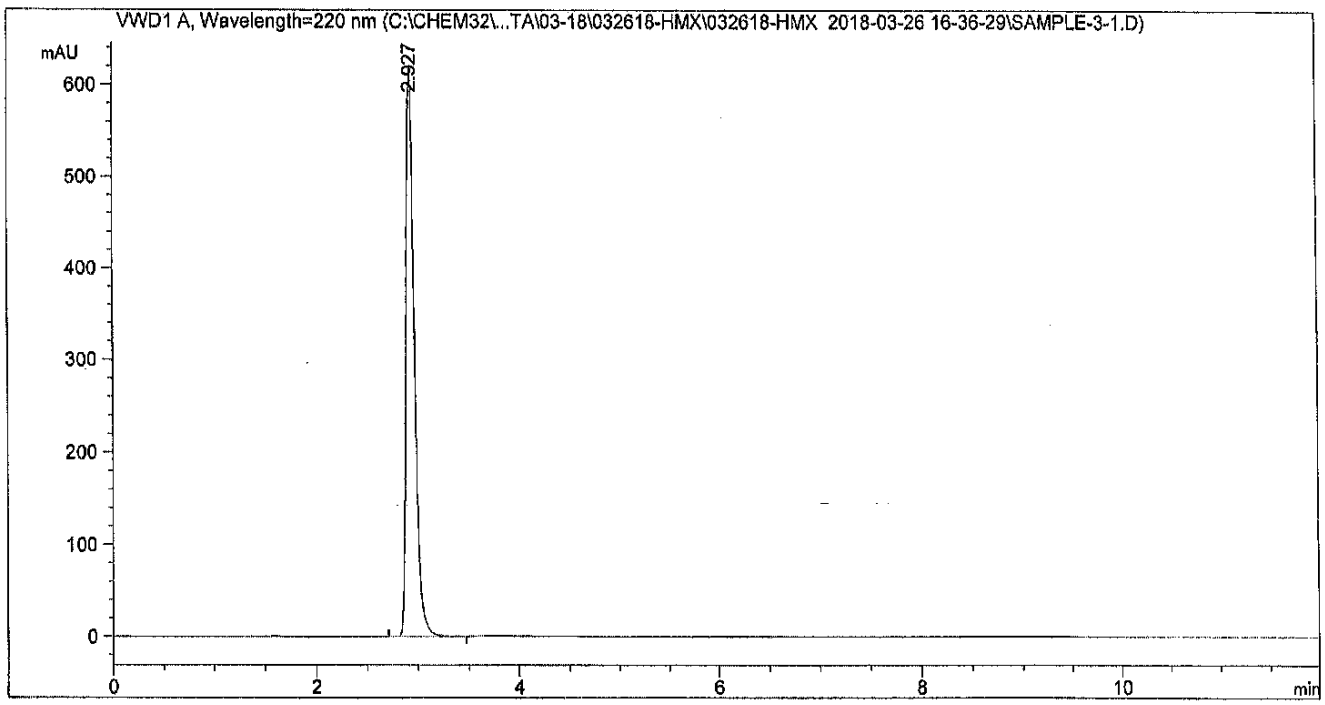
Catalog Number: CNLM-7963-S-0

Quality Control Tests and Results (continued)

HPLC for Chemical Purity	99.3%

Data File C:\CHEM32\1\DATA\03-18\032618-HMX\032618-HMX 2018-03-26 16-36-29\SAMPLE-3-1.D
Sample Name: Sample-3

Acq. Operator : YX Seq. Line : 6
Acq. Instrument : Instrument 1 Location : Vial 4
Injection Date : 3/26/2018 6:39:57 PM Inj : 1
Inj Volume : 2.0 µl
Different Inj Volume from Sequence ! Actual Inj Volume : 1.0 µl
Acq. Method : C:\CHEM32\1\DATA\03-18\032618-HMX\032618-HMX 2018-03-26 16-36-29\PUMPC@230.M
Last changed : 3/26/2018 4:33:27 PM by YX
Analysis Method : C:\CHEM32\1\DATA\03-18\032618-HMX\032618-HMX 2018-03-26 16-36-29\PUMPC@230.M (Sequence Method)
Last changed : 3/27/2018 9:39:05 AM by YX
(modified after loading)
Sample Info : HMX 13C4 15N4 CNLM-7963-S-0 SCGF-021



Area Percent Report

Sorted By : Signal
Multiplier: : 1.0000
Dilution: : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=220 nm

Peak #	RetTime [min]	Type	Width [min]	Area mAU *s	Height [mAU]	Area %
1	2.927	BB	0.0905	3540.35278	614.70868	100.0000
Totals :				3540.35278	614.70868	

Reagent

8321NB-D5_00009

Cambridge Isotope Laboratories, Inc. Certificate of Analysis

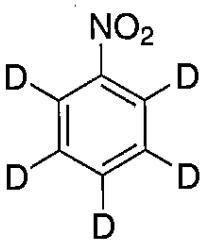
Product Name: NITROBENZENE-D5
(Isotopic Label & Enrichment Specification) (D, 99%)

Lot Number: PR-25462

Catalog Number: DLM-294-0

Product Information

Chemical Purity Specification:	≥ 98%
MW*: ** For isotopically labeled compounds, MW listed is for the fully enriched product.*	128.14
Labeled CAS Number:	4165-60-0
Unlabeled CAS Number:	98-95-3
Chemical Formula:	C6D5NO2
Storage:	Store at room temperature away from light and moisture.
Stability:	Stable if stored under recommended conditions.



Certification

Cambridge Isotope Laboratories, Inc. guarantees that this material meets or exceeds the specifications stated. Absolute identity as well as chemical and isotopic purities are assured by the use of unambiguous synthetic routes and multiple chemical analyses whenever possible. Results are representative of QC testing at time of release from Quality Control unless otherwise stated. This COA references the bulk catalog number before packaging. The COA also applies to the CIL finished good catalog number which contains a different suffix such as -0.XX, -XXX, -10xX, -PK, etc. depending on the packaged size.

Approved by: Jeffrey O Neill
Jeffrey O'Neill, Quality Review

Quality Control Tests and Results

1H NMR for Chemical Purity	Pass
GC/MS for Chemical Purity	100%
GC/MS for Isotopic Enrichment	99.6%

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Reagent

8321NG_00013

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

Tel (203)786-5290
Fax (203)786-5287
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CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-1
Description: Nitroglycerin
Lot: 219091211-01
Solvent: Ethanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Oct 30, 2020
Expiration: Nov 30, 2022
Sample Size: 1 mL
Components: 1
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ANAB ACCREDITED TESTING LABORATORY AT-1339

ilac-MRA

Component	CAS #	Purity % (HPLC)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
Nitroglycerin	55-63-0	99.4	100.6	100.0

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

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

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

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

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

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

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

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

For use in routine laboratory analysis.

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

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

Reagent

8321PETN_00017

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-2
Description: PETN
Lot: B8020122-4D-01
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Jan 8, 2021
Expiration: Feb 8, 2023
Sample Size: 1 mL
Components: 1
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

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

Component	CAS #	Purity % (HPLC)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
PETN	78-11-5	99.3	100.3	99.6

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

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

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

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

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

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

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

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

Certified By: Larry Decker, Organic QC Manager

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. 7/20

Reagent

8321RDX13C3IS_00014

Cambridge Isotope Laboratories, Inc.

Certificate of Analysis

Product Name: RDX
(Isotopic Label & Enrichment Specification) (13C3, 99%) 1MG/ML IN ACETONITRILE

Lot Number: SDBK-002

Catalog Number: CLM-3846-S-0

Product Information

Chemical Purity Specification:	≥ 98%
Labeled CAS Number:	NA
Unlabeled CAS Number:	121-82-4
MW of fully enriched product:	225.09
Chemical Formula:	*C3H6N6O6
Storage:	Store refrigerated (-5°C to 5°C). Protect from light.
Stability:	See storage and expiration date.

Certification

Cambridge Isotope Laboratories, Inc. guarantees that this material meets or exceeds the specifications stated. Absolute identity as well as chemical and isotopic purities are assured by the use of unambiguous synthetic routes and multiple chemical analyses whenever possible. Results are representative of QC testing at time of release from Quality Control unless otherwise stated.

Volumetric measurements were made with Class A glassware. Gravimetry is traceable to the NIST through calibrated balances and certified, calibrated, standard weights. The calibrations are traceable to the NIST under Test No. 822/270236-04. The calibrations also meet specifications outlined in ISO 9001, ISO/IEC 17025, ANSI/NSCL Z540-1-1994, NCR Document 10CFR50 Appendix B, and applicable subdocuments.

This COA references the bulk catalog number before packaging. The COA also applies to the CIL finished good catalog number . Some possible packaging sizes and their corresponding suffix are -1.2, -1, -0.5, -10, or -0.1.

Approved by: T. J. Eckersley

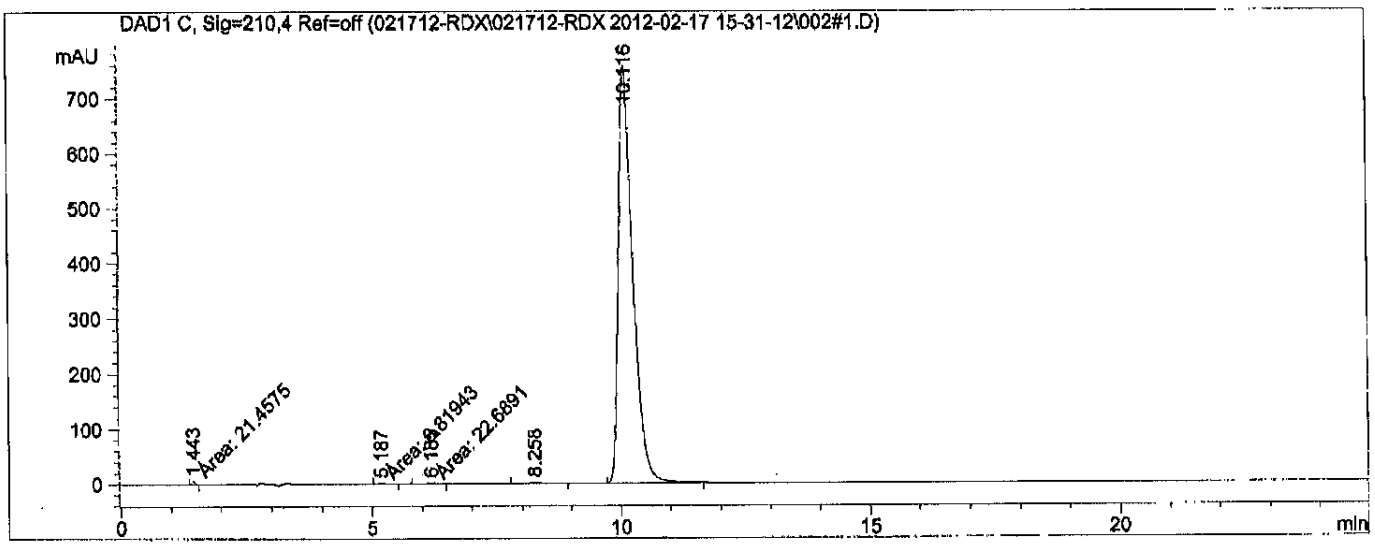
Timothy J. Eckersley, Ph.D., Quality Assurance

Quality Control Tests and Results

QC Release Date	3/30/2012
Expiration Date	3/30/2022
Concentration Based on Gravimetry	1.00 mg/mL
Chemical Purity of Neat Material(s)	>98%
HPLC for Concentration	1.03 ± 0.01 mg/mL (k=2)

Data File C:\CHEM32\1\DATA\021712-RDX\021712-RDX 2012-02-17 15-31-12\002#1.D
Sample Name: RDX 002

Acq. Operator	: robinw	Seq. Line	: 4
Acq. Instrument	: Instrument 1	Location	: Vial 43
Injection Date	: 2/17/2012 4:51:04 PM	Inj	: 1
		Inj Volume	: 5.0 µl
Acq. Method	: C:\CHEM32\1\DATA\021712-RDX\021712-RDX 2012-02-17 15-31-12\PUMPC@210.M		
Last changed	: 2/17/2012 3:31:04 PM by robinw		
Analysis Method	: C:\CHEM32\1\DATA\021712-RDX\REINT.M		
Last changed	: 2/21/2012 8:53:24 AM by robinw (modified after loading)		
Sample Info	: RDX CLM-3846-S SDBK-002		



Area Percent Report

Sorted By : Signal
Multiplier: : 1.0000
Dilution: : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 C, Sig=210,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	1.443	MM	0.0657	21.45754	5.44001	0.1377
2	5.187	MM	0.1804	8.81943	8.14715e-1	0.0566
3	6.185	MM	0.2499	22.68910	1.51336	0.1456
4	8.258	BB	0.2890	38.12000	2.30445	0.2446
5	10.116	BB	0.3354	1.54916e4	755.07300	99.4155
Totals :				1.55827e4	765.14553	

Reagent

8330 GrindLCS_00338

info@phenova.com · www.phenova.com · 1-866-942-2978

Custom Explosives In Soil by 8330B — Lot #D20210740

TNI Analyte Code	Analyte	Certified Value (µg/kg)
9306	4-Amino-2,6-dinitrotoluene	605
9303	2-Amino-4,6-dinitrotoluene	598
6160	1,3-Dinitrobenzene	601
6185	2,4-Dinitrotoluene	598
6190	2,6-Dinitrotoluene	598
6150	3,5-Dinitroaniline	602
9522	HMX (Octahydro-1,3,5,7-TNTC)	600
6885	1,3,5-Trinitrobenzene	601
5015	Nitrobenzene	600
9507	2-Nitrotoluene	602
9510	3-Nitrotoluene	599
9513	4-Nitrotoluene	601
9432	RDX (Hexahydro-1,3,5-TN-Triazine)	600
6485	Nitroglycerin (Trinitroglycerin)	600
9558	Pentaerythritol tetranitrate (PETN)	600
6415	Tetryl	600
9651	2,4,6-Trinitrotoluene	600

Certified Values = "100% true concentration" of each analyte as determined from gravimetric and volumetric measurements made during standard manufacture.

Matrix = 30/60 Sieved Soil

Date of Manufacture: 12/02/2021

Store at 4°C.

Expiration Date: 12/02/2022

Preparation Instructions: This Phenova Custom Explosives in Soil by 8330B is a ready to use standard that requires preparation/extraction prior to analysis. The standard is pre-dried so percent moisture is 0%. Homogenize thoroughly prior to taking an aliquot. Total sample size in each container is 500g. Use your normal laboratory procedures for 8330B to prepare and analyze the sample.

Technical Assistance: If you require any technical assistance with this standard, please do not

Prepared by: AMB

Reviewed by: LS

Date: 12/21

Date: 12/21

Reagent

8330 GrindLCS_00339

info@phenova.com · www.phenova.com · 1-866-942-2978

Custom Explosives In Soil by 8330B — Lot #D20210740

TNI Analyte Code	Analyte	Certified Value (µg/kg)
9306	4-Amino-2,6-dinitrotoluene	605
9303	2-Amino-4,6-dinitrotoluene	598
6160	1,3-Dinitrobenzene	601
6185	2,4-Dinitrotoluene	598
6190	2,6-Dinitrotoluene	598
6150	3,5-Dinitroaniline	602
9522	HMX (Octahydro-1,3,5,7-TNTC)	600
6885	1,3,5-Trinitrobenzene	601
5015	Nitrobenzene	600
9507	2-Nitrotoluene	602
9510	3-Nitrotoluene	599
9513	4-Nitrotoluene	601
9432	RDX (Hexahydro-1,3,5-TN-Triazine)	600
6485	Nitroglycerin (Trinitroglycerin)	600
9558	Pentaerythritol tetranitrate (PETN)	600
6415	Tetryl	600
9651	2,4,6-Trinitrotoluene	600

Certified Values = "100% true concentration" of each analyte as determined from gravimetric and volumetric measurements made during standard manufacture.

Matrix = 30/60 Sieved Soil

Date of Manufacture: 12/02/2021

Store at 4°C.

Expiration Date: 12/02/2022

Preparation Instructions: This Phenova Custom Explosives in Soil by 8330B is a ready to use standard that requires preparation/extraction prior to analysis. The standard is pre-dried so percent moisture is 0%. Homogenize thoroughly prior to taking an aliquot. Total sample size in each container is 500g. Use your normal laboratory procedures for 8330B to prepare and analyze the sample.

Technical Assistance: If you require any technical assistance with this standard, please do not

Prepared by: AMB

Reviewed by: LS

Date: 12/21

Date: 12/21

Reagent

8330 Stock_TS_00020

Agilent

Certificate of Analysis
ISO Guide 34

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 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 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_00098

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CERTIFIED REFERENCE MATERIAL

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

Certificate of Composition

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. : 568871 **Lot No.:** A0161840

Description : Custom Nitroglycerin Standard

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

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

Expiration Date : June 30, 2023 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Nitroglycerin	5,032.0 µg/mL	+/- 46.7949 µg/mL	Gravimetric
	CAS # 55-63-0 (Lot 200507JLM)		+/- 278.0096 µg/mL	Unstressed
	Purity 99%		+/- 323.4663 µg/mL	Stressed

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330_NG1000_00003

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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

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31498 **Lot No.:** A0165199

Description : Nitroglycerin Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Nitroglycerin		1,002.0 µg/mL	+/- 5.9516	µg/mL	Gravimetric
	CAS # 55-63-0	(Lot 200507JLM)		+/- 54.8926	µg/mL	Unstressed
	Purity 99%			+/- 64.0101	µg/mL	Stressed

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

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

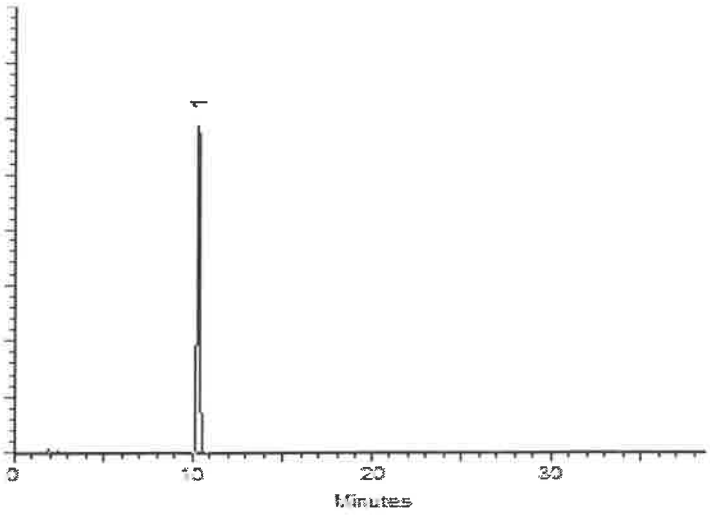
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Brandon Reish - Mix Technician

Date Mixed: 11-Oct-2020 **Balance:** B345965662

Peng-Yun Lo - QC Analyst

Date Passed: 16-Oct-2020

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330_PETN_Stk_00115

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Composition

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568872 **Lot No.:** A0172687

Description : Custom PETN Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	PETN		5,032.0 µg/mL	+/- 46.7949	µg/mL	Gravimetric
	CAS # 78-11-5	(Lot 051108JLM)		+/- 278.0096	µg/mL	Unstressed
	Purity 99%			+/- 323.4663	µg/mL	Stressed

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

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

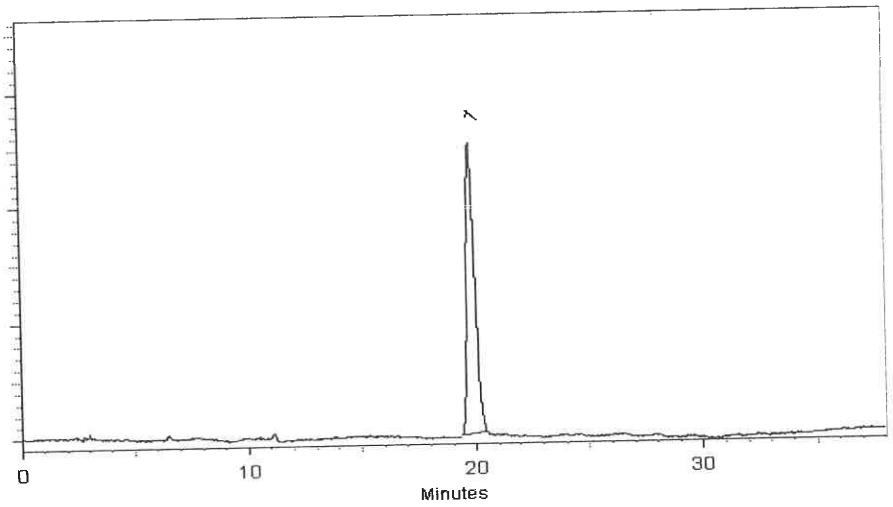
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Katelyn McGinni - Operations Tech I

Date Mixed: 24-May-2021 **Balance:** 1128353505

Marlina Cowan - Operations Tech I

Date Passed: 27-May-2021

REVIEWED
By Jennifer Polimo at 2:38 pm, May 27, 2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330_PETN1000_00003

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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. : 31600 **Lot No.:** A0168441

Description : PETN Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

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

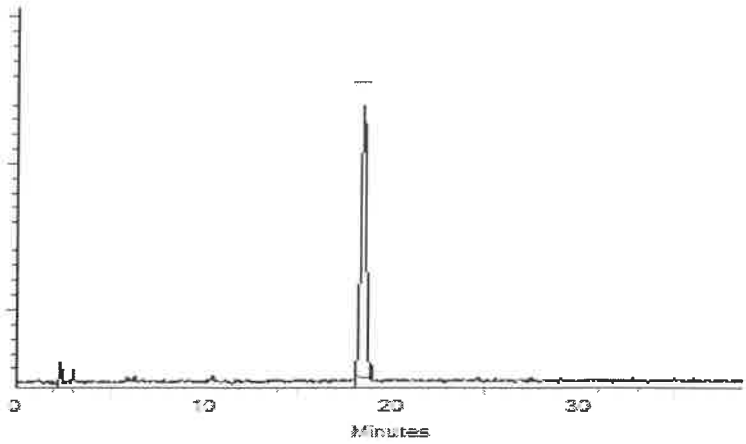
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Cathleen Soltis - Mix Technician

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

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 26-Jan-2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330LCSMix1_00122

4 vials Rec. 10/6/20
8330 Cali mix 1

01130231

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31450 **Lot No.:** A0163590

Description : 8330 Calibration Mix #1

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	HMX		1,002.5 µg/mL	+/- 5.9548	µg/mL	Gravimetric
	CAS # 2691-41-0	(Lot 191003JLM)		+/- 54.9222	µg/mL	Unstressed
	Purity 98%			+/- 64.0446	µg/mL	Stressed
2	RDX		1,005.0 µg/mL	+/- 5.9694	µg/mL	Gravimetric
	CAS # 121-82-4	(Lot 080228JLM)		+/- 55.0569	µg/mL	Unstressed
	Purity 99%			+/- 64.2018	µg/mL	Stressed
3	1,3,5-Trinitrobenzene		1,005.0 µg/mL	+/- 5.9694	µg/mL	Gravimetric
	CAS # 99-35-4	(Lot A6TDK)		+/- 55.0569	µg/mL	Unstressed
	Purity 99%			+/- 64.2018	µg/mL	Stressed
4	1,3-Dinitrobenzene		1,007.0 µg/mL	+/- 5.9813	µg/mL	Gravimetric
	CAS # 99-65-0	(Lot BCBN4329V)		+/- 55.1665	µg/mL	Unstressed
	Purity 99%			+/- 64.3295	µg/mL	Stressed
5	Nitrobenzene		1,000.0 µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS # 98-95-3	(Lot SHBJ3622)		+/- 54.7830	µg/mL	Unstressed
	Purity 99%			+/- 63.8824	µg/mL	Stressed
6	2,4,6-Trinitrotoluene		1,006.0 µg/mL	+/- 5.9753	µg/mL	Gravimetric
	CAS # 118-96-7	(Lot 5737200)		+/- 55.1117	µg/mL	Unstressed
	Purity 99%			+/- 64.2657	µg/mL	Stressed
7	2,4-Dinitrotoluene		1,009.0 µg/mL	+/- 5.9932	µg/mL	Gravimetric
	CAS # 121-14-2	(Lot MKAA0690V)		+/- 55.2761	µg/mL	Unstressed
	Purity 99%			+/- 64.4573	µg/mL	Stressed

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

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

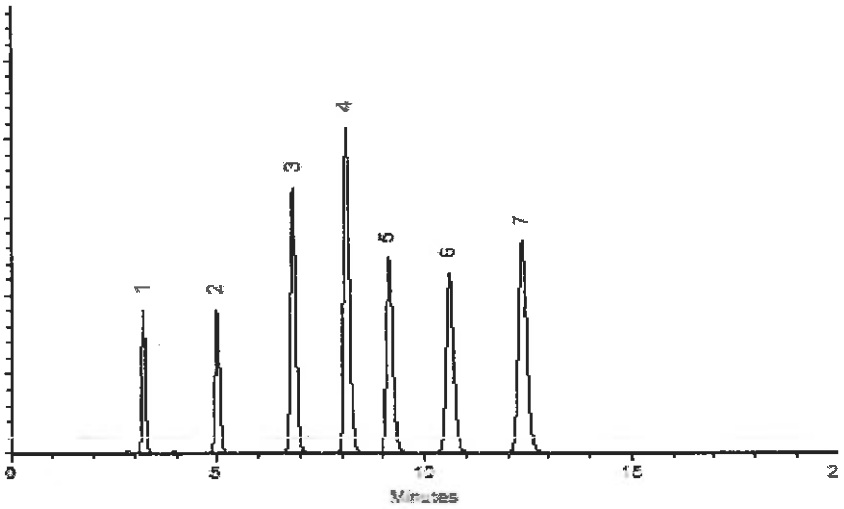
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Dalton Stover - Operations Technician I

Date Mixed: 17-Aug-2020 **Balance:** 1128353505

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 19-Aug-2020

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

Reagent

8330LCSMix1_00127

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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. : 31450 **Lot No.:** A0171502

Description : 8330 Calibration Mix #1

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	HMX **CAS #** 2691-41-0 **Purity** 99%	(Lot 210324JLM)	1,002.0 µg/mL	+/- 5.9516 +/- 54.8926 +/- 64.0101	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	RDX **CAS #** 121-82-4 **Purity** 99%	(Lot 080220JLM)	1,003.0 µg/mL	+/- 5.9575 +/- 54.9474 +/- 64.0740	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	1,3,5-Trinitrobenzene **CAS #** 99-35-4 **Purity** 99%	(Lot A6TDK)	1,004.0 µg/mL	+/- 5.9635 +/- 55.0021 +/- 64.1379	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1,3-Dinitrobenzene **CAS #** 99-65-0 **Purity** 99%	(Lot 1-DXX-24-1)	1,000.0 µg/mL	+/- 5.9397 +/- 54.7830 +/- 63.8824	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Nitrobenzene **CAS #** 98-95-3 **Purity** 99%	(Lot MKCK4267)	1,010.0 µg/mL	+/- 5.9991 +/- 55.3308 +/- 64.5212	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	2,4,6-Trinitrotoluene **CAS #** 118-96-7 **Purity** 99%	(Lot D10587700)	1,000.0 µg/mL	+/- 5.9397 +/- 54.7830 +/- 63.8824	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	2,4-Dinitrotoluene **CAS #** 121-14-2 **Purity** 99%	(Lot MKAA0690)	1,004.0 µg/mL	+/- 5.9635 +/- 55.0021 +/- 64.1379	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)

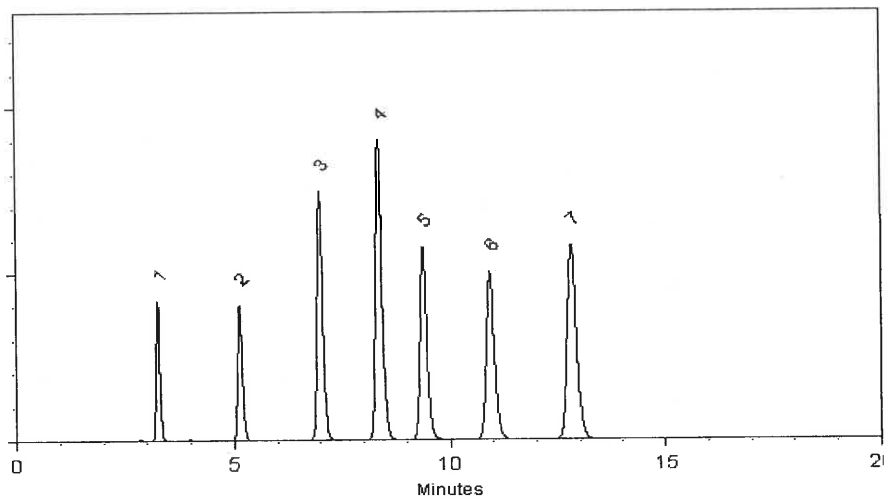
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Lane Kibe - Mix Technician

Date Mixed: 20-Apr-2021 **Balance:** 1127510105

Alexis Shelow - Operations Tech I

Date Passed: 23-Apr-2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330LCSmix2_00019

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

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. : 31451 **Lot No.:** A0161545

Description : 8330 Calibration Mix #2

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

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

Expiration Date : June 30, 2025 **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 (Lot 091120JLM) **Purity** 99%	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 (Lot ER070908-01) **Purity** 99%	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 (Lot 29550-55) **Purity** 99%	1,000.0 µg/mL	+/- 5.9397 µg/mL +/- 54.7830 µg/mL +/- 63.8824 µg/mL	Gravimetric Unstressed Stressed
4	2,6-Dinitrotoluene **CAS #** 606-20-2 (Lot 1437483V) **Purity** 99%	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 (Lot BCBZ7826) **Purity** 99%	1,000.0 µg/mL	+/- 5.9397 µg/mL +/- 54.7830 µg/mL +/- 63.8824 µg/mL	Gravimetric Unstressed Stressed
6	4-Nitrotoluene **CAS #** 99-99-0 (Lot FAU01) **Purity** 99%	1,000.0 µg/mL	+/- 5.9397 µg/mL +/- 54.7830 µg/mL +/- 63.8824 µg/mL	Gravimetric Unstressed Stressed
7	3-Nitrotoluene **CAS #** 99-08-1 (Lot FBO01) **Purity** 99%	1,000.0 µg/mL	+/- 5.9397 µg/mL +/- 54.7830 µg/mL +/- 63.8824 µg/mL	Gravimetric Unstressed Stressed

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

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

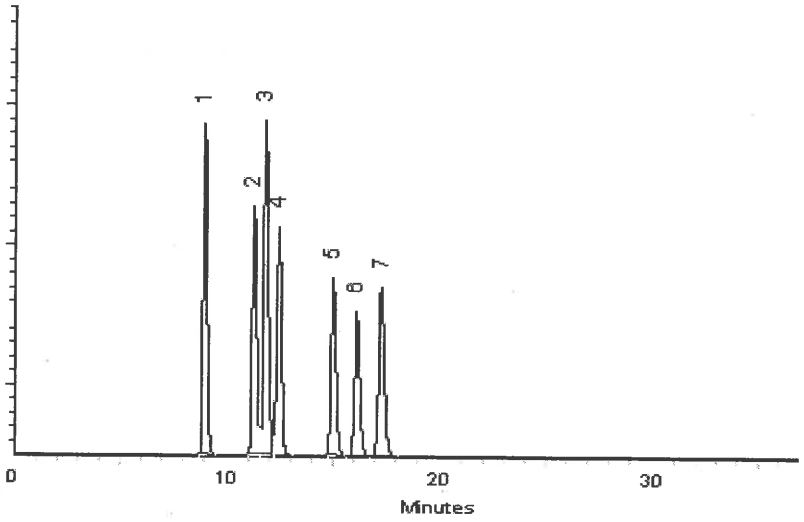
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Clara Windle - Operations Technician I

Date Mixed: 08-Jun-2020 **Balance:** B442140311

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 10-Jun-2020

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

Reagent

8330LCSmix2_00022

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
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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. : 31451 **Lot No.:** A0161545

Description : 8330 Calibration Mix #2

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

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

Expiration Date : June 30, 2025 **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 (Lot 091120JLM) **Purity** 99%	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 (Lot ER070908-01) **Purity** 99%	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 (Lot 29550-55) **Purity** 99%	1,000.0 µg/mL	+/- 5.9397 µg/mL +/- 54.7830 µg/mL +/- 63.8824 µg/mL	Gravimetric Unstressed Stressed
4	2,6-Dinitrotoluene **CAS #** 606-20-2 (Lot 1437483V) **Purity** 99%	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 (Lot BCBZ7826) **Purity** 99%	1,000.0 µg/mL	+/- 5.9397 µg/mL +/- 54.7830 µg/mL +/- 63.8824 µg/mL	Gravimetric Unstressed Stressed
6	4-Nitrotoluene **CAS #** 99-99-0 (Lot FAU01) **Purity** 99%	1,000.0 µg/mL	+/- 5.9397 µg/mL +/- 54.7830 µg/mL +/- 63.8824 µg/mL	Gravimetric Unstressed Stressed
7	3-Nitrotoluene **CAS #** 99-08-1 (Lot FBO01) **Purity** 99%	1,000.0 µg/mL	+/- 5.9397 µg/mL +/- 54.7830 µg/mL +/- 63.8824 µg/mL	Gravimetric Unstressed Stressed

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

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

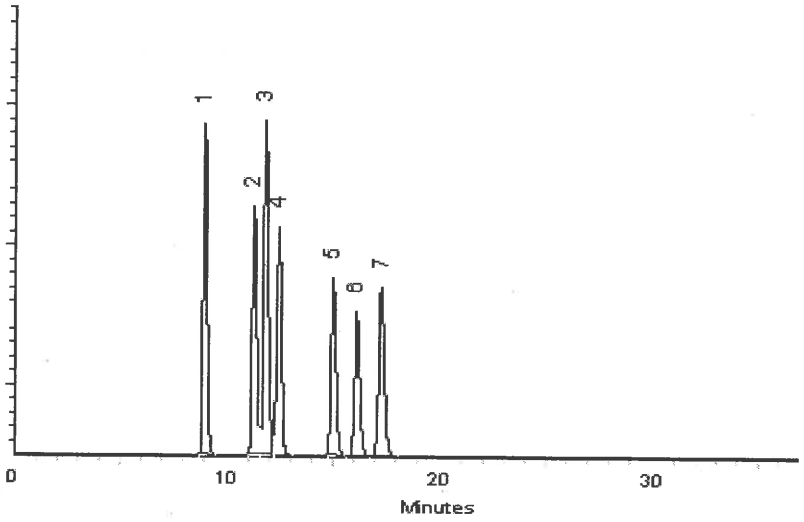
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Clara Windle - Operations Technician I

Date Mixed: 08-Jun-2020 **Balance:** B442140311

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 10-Jun-2020

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

Reagent

MNX,TNX,DNX_00055

Agilent

Certificate of Analysis

Product Name: Custom Standard

Product Number: CUS-23984 **Lot Issue Date:** 10-Mar-2021

Lot Number: 0006594482 **Expiration Date:** 30-Apr-2022

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	99.7 ± 0.5 µg/mL
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.1 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	116.7 ± 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.

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

RM was produced in accordance with the LRQA registered ISO 9001:2015 Quality Management System. Cert # 10303760

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:** 0006594482

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.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER
ISO 17034 Cert
No. AR-1936

RM was produced in accordance with the LRQA registered ISO 9001:2015 Quality Management System. Cert # 10303760
Page: 2 of 2
www.agilent.com/quality/
CSD-QA-015.1

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

8321A_EXP_DOD5

Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

FORM II
LCMS SURROGATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): Synergi Hyd ID:

Client Sample ID	Lab Sample ID	NBZ	#
29SB173 (14.5-15)	280-160190-1	95	
29SB173 (14.5-15) DL	280-160190-1 DL	107	D
29SB181 (14.5-15)	280-160190-2	89	
29SB181 (14.5-15) DL	280-160190-2 DL	113	D
29SB182 (14.5-15)	280-160190-3	97	
29SB175 (3-4)	280-160190-4	88	
29SB175 (6-7)	280-160190-5	95	
29SB175 (11-12)	280-160190-6	94	
29SB175 (14.5-15)	280-160190-7	98	
DUP-05	280-160190-8	100	
29SB167 (3-4)	280-160190-9	92	
29SB167 (6-7)	280-160190-10	97	
29SB167 (11-12)	280-160190-11	96	
29SB167 (14.5-15)	280-160190-12	99	
DUP-06	280-160190-13	101	
29SB176 (14.5-15)	280-160190-14	100	
29SB176 (14.5-15) DL	280-160190-14 DL	94	D
29SB179 (14.5-15)	280-160190-15	102	
29SB178 (14.5-15)	280-160190-16	107	
29SB177 (14.5-15)	280-160190-17	95	
29SB177 (14.5-15) DL	280-160190-17 DL	91	D
29SB168 (3-4)	280-160190-18	98	
29SB168 (3-4) DL	280-160190-18 DL	85	D
29SB168 (6-7)	280-160190-19	90	
29SB168 (6-7) DL	280-160190-19 DL	92	D
29SB168 (11-12)	280-160190-20	130	
29SB168 (11-12) DL	280-160190-20 DL	96	D
29SB168 (11-12) DL2	280-160190-20 DL2	71 M	D
29SB168 (14.5-15)	280-160190-21	98	
29SB169 (3-4)	280-160190-22	106	
29SB169 (6-7)	280-160190-23	94	
29SB169 (11-12)	280-160190-24	102	

	QC LIMITS
NBZ = Nitrobenzene-d5	68-140

Column to be used to flag recovery values

FORM II 8321A

FORM II
LCMS SURROGATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): Synergi Hyd ID:

Client Sample ID	Lab Sample ID	NBZ #
29SB169 (14.5-15)	280-160190-25	94
DUP-07	280-160190-26	98
29SB170 (3-4)	280-160190-27	102
29SB170 (6-7)	280-160190-28	100
29SB170 (11-12)	280-160190-29	90
29SB170 (14.5-15)	280-160190-30	95
29SB171 (3-4)	280-160190-31	94
29SB171 (6-7)	280-160190-32	89
29SB171 (11-12)	280-160190-33	112
29SB171 (14.5-15)	280-160190-34	104
DUP-08	280-160190-35	97
29SB174 (3-4)	280-160190-36	100
29SB174 (6-7)	280-160190-37	97
29SB174 (11-12)	280-160190-38	93
29SB174 (14.5-15)	280-160190-39	103
29SB190 (3-4)	280-160190-40	102
29SB190 (19-20)	280-160190-41	100
29SB192 (7-8)	280-160190-42	97
29SB192 (11-12)	280-160190-43	100
29SB192 (15-16)	280-160190-44	86
29SB192 (19-20)	280-160190-45	93
DUP-09	280-160190-46	100
29SB193 (7-8)	280-160190-47	96
29SB193 (11-12)	280-160190-48	91
29SB193 (15-16)	280-160190-49	96
29SB193 (19-20)	280-160190-50	98
DUP-10	280-160190-51	103
29SB203 (3-4)	280-160190-52	102
29SB203 (7-8)	280-160190-53	112
29SB204 (3-4)	280-160190-54	104
29SB204 (7-8)	280-160190-55	88
	MB 280-570718/1-A	98
	MB 280-571022/1-A	90

	QC LIMITS
NBZ = Nitrobenzene-d5	68-140

Column to be used to flag recovery values

FORM II 8321A

FORM II
LCMS SURROGATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): Synergi Hyd ID:

Client Sample ID	Lab Sample ID	NBZ	#
	MB 280-571024/1-A	92	
	MB 280-571025/1-A	94	
	GB 280-570105/1-B	95	
	GB 280-570112/1-B	94	
	GB 280-570111/1-B	101	
	GB 280-570115/1-B	102	
	LCS 280-570718/2-A	98	
	LCS 280-571022/2-A	98	
	LCS 280-571024/2-A	115	
	LCS 280-571025/2-A	103	
	LCSD 280-570718/3-A	101	
	LCSD 280-571022/3-A	93	
	LCSD 280-571024/3-A	111	
	LCSD 280-571025/3-A	94	
	LCSSRM 280-570105/2-B	91	
	LCSSRM 280-570112/2-B	99	
	LCSSRM 280-570111/2-B	103	
	LCSSRM 280-570115/2-B	102	
29SB168 (6-7) MS	280-160190-19 MS	99	
29SB168 (6-7) MS DL	280-160190-19 MS DL	92	D
	280-160190-A-28-E MS	98	
29SB203 (3-4) MS	280-160190-52MS	95	
29SB168 (6-7) MSD	280-160190-19 MSD	106	
29SB168 (6-7) MSD DL	280-160190-19 MSD DL	92	D
	280-160190-A-28-F MSD	93	

	QC LIMITS
NBZ = Nitrobenzene-d5	68-140

Column to be used to flag recovery values

FORM II 8321A

FORM II
LCMS SURROGATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): Synergi Hyd ID:

Client Sample ID	Lab Sample ID	NBZ	#
29SB203 (3-4) MSD	280-160190-52MSD	97	
29SB168 (6-7) DU	280-160190-19 DU	100	
29SB168 (6-7) DU DL	280-160190-19 DU DL	89	D
	280-160190-A-29-E DU	95	
	280-160190-A-52-I DU	107	
29SB168 (6-7) TRL	280-160190-19 TRL	89	
29SB168 (6-7) TRL DL	280-160190-19 TRL DL	91	D
	280-160190-A-29-F TRL	90	
	280-160190-A-52-J TRL	94	

	QC LIMITS
NBZ = Nitrobenzene-d5	68-140

Column to be used to flag recovery values

FORM II 8321A

FORM II
LCMS SURROGATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Synergi Hyd ID:

Client Sample ID	Lab Sample ID	NBZ #
EB-03	280-160190-56	89
	MB 280-570053/1-A	89
	LCS 280-570053/2-A	90
	LCSD 280-570053/3-A	91

	QC LIMITS
NBZ = Nitrobenzene-d5	48-130

Column to be used to flag recovery values

FORM II 8321A

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Matrix: Water Level: Low Lab File ID: ex722D05013.d

Lab ID: LCS 280-570053/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	0.500	0.434	87	66-111	
1,3-Dinitrobenzene	0.500	0.446	89	78-118	
2,4,6-Trinitrotoluene	0.500	0.470	94	68-129	
2,4-Dinitrotoluene	0.500	0.431	86	76-117	
2,6-Dinitrotoluene	0.500	0.463	93	80-108	
2-Amino-4,6-dinitrotoluene	0.500	0.468	94	69-127	
4-Amino-2,6-dinitrotoluene	0.500	0.455	91	68-126	
HMX	0.500	0.420	84	62-112	
m-Nitrotoluene	0.500	0.423	85	54-112	
Nitrobenzene	0.500	0.414	83	61-108	
Nitroglycerin	0.500	0.498	100	37-147	
o-Nitrotoluene	0.500	0.425	85	52-112	
PETN	0.500	0.505	101	62-128	
p-Nitrotoluene	0.500	0.435	87	54-117	
RDX	0.500	0.483	97	73-126	
Tetryl	0.500	0.680	136	35-138	

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D07013.d

Lab ID: LCS 280-570718/2-A Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	0.400	0.384	96	69-115	
1,3-Dinitrobenzene	0.400	0.384	96	83-122	
2,4,6-Trinitrotoluene	0.400	0.415	104	65-133	
2,4-Dinitrotoluene	0.400	0.388	97	82-119	
2,6-Dinitrotoluene	0.400	0.403	101	86-113	
2-Amino-4,6-dinitrotoluene	0.400	0.412	103	75-130	
4-Amino-2,6-dinitrotoluene	0.400	0.399	100	77-125	
HMX	0.400	0.397	99	65-114	
m-Nitrotoluene	0.400	0.380	95	68-125	
Nitrobenzene	0.400	0.385	96	75-120	
Nitroglycerin	0.400	0.431	108	27-146	
o-Nitrotoluene	0.400	0.406	102	72-125	
PETN	0.400	0.442	110	62-143	
p-Nitrotoluene	0.400	0.407	102	72-127	
RDX	0.400	0.401	100	77-123	
Tetryl	0.400	0.578	145	36-120	Q

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D14013.d

Lab ID: LCS 280-571022/2-A Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	0.400	0.348	87	69-115	
1,3-Dinitrobenzene	0.400	0.344	86	83-122	
2,4,6-Trinitrotoluene	0.400	0.377	94	65-133	
2,4-Dinitrotoluene	0.400	0.337	84	82-119	
2,6-Dinitrotoluene	0.400	0.351	88	86-113	
2-Amino-4,6-dinitrotoluene	0.400	0.339	85	75-130	
4-Amino-2,6-dinitrotoluene	0.400	0.336	84	77-125	
HMX	0.400	0.312	78	65-114	
m-Nitrotoluene	0.400	0.354	88	68-125	
Nitrobenzene	0.400	0.362	90	75-120	
Nitroglycerin	0.400	0.359	90	27-146	
o-Nitrotoluene	0.400	0.360	90	72-125	
PETN	0.400	0.378	95	62-143	
p-Nitrotoluene	0.400	0.361	90	72-127	
RDX	0.400	0.315	79	77-123	
Tetryl	0.400	0.540	135	36-120	Q

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D08013.d

Lab ID: LCS 280-571024/2-A Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	0.400	0.420	105	69-115	
1,3-Dinitrobenzene	0.400	0.394	98	83-122	
2,4,6-Trinitrotoluene	0.400	0.431	108	65-133	
2,4-Dinitrotoluene	0.400	0.380	95	82-119	
2,6-Dinitrotoluene	0.400	0.410	103	86-113	
2-Amino-4,6-dinitrotoluene	0.400	0.384	96	75-130	
4-Amino-2,6-dinitrotoluene	0.400	0.393	98	77-125	
HMX	0.400	0.347	87	65-114	
m-Nitrotoluene	0.400	0.392	98	68-125	
Nitrobenzene	0.400	0.429	107	75-120	
Nitroglycerin	0.400	0.455	114	27-146	
o-Nitrotoluene	0.400	0.412	103	72-125	
PETN	0.400	0.404	101	62-143	
p-Nitrotoluene	0.400	0.402	100	72-127	
RDX	0.400	0.380	95	77-123	
Tetryl	0.400	0.640	160	36-120	Q

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D14045.d

Lab ID: LCS 280-571025/2-A Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	0.400	0.353	88	69-115	
1,3-Dinitrobenzene	0.400	0.367	92	83-122	
2,4,6-Trinitrotoluene	0.400	0.395	99	65-133	
2,4-Dinitrotoluene	0.400	0.350	88	82-119	
2,6-Dinitrotoluene	0.400	0.373	93	86-113	
2-Amino-4,6-dinitrotoluene	0.400	0.334	83	75-130	
4-Amino-2,6-dinitrotoluene	0.400	0.345	86	77-125	
HMX	0.400	0.350	88	65-114	
m-Nitrotoluene	0.400	0.398	100	68-125	
Nitrobenzene	0.400	0.413	103	75-120	
Nitroglycerin	0.400	0.409	102	27-146	
o-Nitrotoluene	0.400	0.385	96	72-125	
PETN	0.400	0.435	109	62-143	
p-Nitrotoluene	0.400	0.387	97	72-127	
RDX	0.400	0.360	90	77-123	
Tetryl	0.400	0.579	145	36-120	Q

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM III
LCMS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Matrix: Water Level: Low Lab File ID: ex722D05014.d

Lab ID: LCSD 280-570053/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,3,5-Trinitrobenzene	0.500	0.477	95	9	20	66-111	
1,3-Dinitrobenzene	0.500	0.501	100	11	20	78-118	
2,4,6-Trinitrotoluene	0.500	0.522	104	10	20	68-129	
2,4-Dinitrotoluene	0.500	0.456	91	6	20	76-117	
2,6-Dinitrotoluene	0.500	0.490	98	6	20	80-108	
2-Amino-4,6-dinitrotoluene	0.500	0.492	98	5	20	69-127	
4-Amino-2,6-dinitrotoluene	0.500	0.493	99	8	20	68-126	
HMX	0.500	0.452	90	7	20	62-112	
m-Nitrotoluene	0.500	0.431	86	2	20	54-112	
Nitrobenzene	0.500	0.435	87	5	20	61-108	
Nitroglycerin	0.500	0.556	111	11	20	37-147	
o-Nitrotoluene	0.500	0.441	88	4	20	52-112	
PETN	0.500	0.556	111	10	20	62-128	
p-Nitrotoluene	0.500	0.434	87	0	20	54-117	
RDX	0.500	0.515	103	6	20	73-126	
Tetryl	0.500	0.724	145	6	20	35-138	Q

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM III
LCMS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D07014.d

Lab ID: LCSD 280-570718/3-A Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,3,5-Trinitrobenzene	0.400	0.398	100	4	20	69-115	
1,3-Dinitrobenzene	0.400	0.391	98	2	20	83-122	
2,4,6-Trinitrotoluene	0.400	0.421	105	1	20	65-133	
2,4-Dinitrotoluene	0.400	0.393	98	1	20	82-119	
2,6-Dinitrotoluene	0.400	0.411	103	2	20	86-113	
2-Amino-4,6-dinitrotoluene	0.400	0.405	101	2	20	75-130	
4-Amino-2,6-dinitrotoluene	0.400	0.404	101	1	20	77-125	
HMX	0.400	0.400	100	1	20	65-114	
m-Nitrotoluene	0.400	0.395	99	4	20	68-125	
Nitrobenzene	0.400	0.390	98	1	20	75-120	
Nitroglycerin	0.400	0.404	101	7	20	27-146	
o-Nitrotoluene	0.400	0.403	101	1	20	72-125	
PETN	0.400	0.451	113	2	20	62-143	
p-Nitrotoluene	0.400	0.414	103	2	20	72-127	
RDX	0.400	0.438	110	9	20	77-123	
Tetryl	0.400	0.595	149	3	20	36-120	Q

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM III
LCMS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D14014.d

Lab ID: LCSD 280-571022/3-A Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,3,5-Trinitrobenzene	0.400	0.346	87	0	20	69-115	
1,3-Dinitrobenzene	0.400	0.346	87	1	20	83-122	
2,4,6-Trinitrotoluene	0.400	0.379	95	1	20	65-133	
2,4-Dinitrotoluene	0.400	0.342	86	2	20	82-119	
2,6-Dinitrotoluene	0.400	0.355	89	1	20	86-113	
2-Amino-4,6-dinitrotoluene	0.400	0.336	84	1	20	75-130	
4-Amino-2,6-dinitrotoluene	0.400	0.339	85	1	20	77-125	
HMX	0.400	0.330	83	6	20	65-114	
m-Nitrotoluene	0.400	0.375	94	6	20	68-125	
Nitrobenzene	0.400	0.376	94	4	20	75-120	
Nitroglycerin	0.400	0.393	98	9	20	27-146	
o-Nitrotoluene	0.400	0.372	93	3	20	72-125	
PETN	0.400	0.379	95	0	20	62-143	
p-Nitrotoluene	0.400	0.372	93	3	20	72-127	
RDX	0.400	0.324	81	3	20	77-123	M
Tetryl	0.400	0.545	136	1	20	36-120	Q

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM III
LCMS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D08014.d

Lab ID: LCSD 280-571024/3-A Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,3,5-Trinitrobenzene	0.400	0.412	103	2	20	69-115	
1,3-Dinitrobenzene	0.400	0.396	99	0	20	83-122	
2,4,6-Trinitrotoluene	0.400	0.432	108	0	20	65-133	
2,4-Dinitrotoluene	0.400	0.389	97	2	20	82-119	
2,6-Dinitrotoluene	0.400	0.399	100	3	20	86-113	
2-Amino-4,6-dinitrotoluene	0.400	0.403	101	5	20	75-130	M
4-Amino-2,6-dinitrotoluene	0.400	0.399	100	1	20	77-125	M
HMX	0.400	0.450	112	26	20	65-114	Q
m-Nitrotoluene	0.400	0.390	97	1	20	68-125	
Nitrobenzene	0.400	0.418	104	3	20	75-120	
Nitroglycerin	0.400	0.443	111	3	20	27-146	
o-Nitrotoluene	0.400	0.397	99	4	20	72-125	
PETN	0.400	0.418	105	3	20	62-143	
p-Nitrotoluene	0.400	0.404	101	0	20	72-127	
RDX	0.400	0.445	111	16	20	77-123	
Tetryl	0.400	0.608	152	5	20	36-120	Q

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM III
LCMS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D14046.d

Lab ID: LCSD 280-571025/3-A Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,3,5-Trinitrobenzene	0.400	0.352	88	0	20	69-115	
1,3-Dinitrobenzene	0.400	0.363	91	1	20	83-122	
2,4,6-Trinitrotoluene	0.400	0.379	95	4	20	65-133	
2,4-Dinitrotoluene	0.400	0.354	89	1	20	82-119	
2,6-Dinitrotoluene	0.400	0.371	93	0	20	86-113	
2-Amino-4,6-dinitrotoluene	0.400	0.353	88	6	20	75-130	
4-Amino-2,6-dinitrotoluene	0.400	0.352	88	2	20	77-125	
HMX	0.400	0.348	87	1	20	65-114	
m-Nitrotoluene	0.400	0.385	96	3	20	68-125	
Nitrobenzene	0.400	0.402	100	3	20	75-120	
Nitroglycerin	0.400	0.379	95	8	20	27-146	
o-Nitrotoluene	0.400	0.390	97	1	20	72-125	
PETN	0.400	0.410	103	6	20	62-143	
p-Nitrotoluene	0.400	0.377	94	3	20	72-127	
RDX	0.400	0.368	92	2	20	77-123	
Tetryl	0.400	0.557	139	4	20	36-120	Q

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM III
LCMS LCS-CERTIFIED REFERENCE MATERIAL RECOVERY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D07016.d

Lab ID: LCSSRM 280-570105/2-B Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSSRM CONCENTRATION (mg/Kg)	LCSSRM % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	0.600	0.523	87	58-116	
1,3-Dinitrobenzene	0.600	0.555	93	69-116	
2,4,6-Trinitrotoluene	0.600	0.395	66	69-120	Q
2,4-Dinitrotoluene	0.600	0.534	89	69-137	
2,6-Dinitrotoluene	0.600	0.559	93	60-121	
2-Amino-4,6-dinitrotoluene	0.600	0.517	86	56-108	
4-Amino-2,6-dinitrotoluene	0.600	0.475	79	46-98	
HMX	0.600	0.521	87	59-131	
m-Nitrotoluene	0.600	0.578	96	69-124	
Nitrobenzene	0.600	0.511	85	58-119	
Nitroglycerin	0.600	0.527	88	60-115	
o-Nitrotoluene	0.600	0.571	95	67-117	
PETN	0.600	0.544	91	60-115	
p-Nitrotoluene	0.600	0.555	93	51-143	
RDX	0.600	0.508	85	62-123	
Tetryl	0.600	0.349	58	36-120	

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM III
LCMS LCS-CERTIFIED REFERENCE MATERIAL RECOVERY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D14016.d

Lab ID: LCSSRM 280-570112/2-B Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSSRM CONCENTRATION (mg/Kg)	LCSSRM % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	0.600	0.505	84	58-116	
1,3-Dinitrobenzene	0.600	0.557	93	69-116	
2,4,6-Trinitrotoluene	0.600	0.412	69	69-120	
2,4-Dinitrotoluene	0.600	0.524	87	69-137	
2,6-Dinitrotoluene	0.600	0.572	95	60-121	
2-Amino-4,6-dinitrotoluene	0.600	0.493	82	56-108	
4-Amino-2,6-dinitrotoluene	0.600	0.470	78	46-98	
HMX	0.600	0.518	86	59-131	
m-Nitrotoluene	0.600	0.576	96	69-124	
Nitrobenzene	0.600	0.593	99	58-119	
Nitroglycerin	0.600	0.547	91	60-115	
o-Nitrotoluene	0.600	0.581	97	67-117	
PETN	0.600	0.520	87	60-115	
p-Nitrotoluene	0.600	0.562	94	51-143	
RDX	0.600	0.459	76	62-123	
Tetryl	0.600	0.418	70	36-120	

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM III
LCMS LCS-CERTIFIED REFERENCE MATERIAL RECOVERY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D08016.d

Lab ID: LCSSRM 280-570111/2-B Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSSRM CONCENTRATION (mg/Kg)	LCSSRM % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	0.600	0.556	93	58-116	
1,3-Dinitrobenzene	0.600	0.573	96	69-116	
2,4,6-Trinitrotoluene	0.600	0.420	70	69-120	
2,4-Dinitrotoluene	0.600	0.563	94	69-137	
2,6-Dinitrotoluene	0.600	0.589	98	60-121	
2-Amino-4,6-dinitrotoluene	0.600	0.524	87	56-108	
4-Amino-2,6-dinitrotoluene	0.600	0.489	82	46-98	
HMX	0.600	0.501	84	59-131	
m-Nitrotoluene	0.600	0.570	95	69-124	
Nitrobenzene	0.600	0.583	97	58-119	
Nitroglycerin	0.600	0.596	99	60-115	
o-Nitrotoluene	0.600	0.586	98	67-117	
PETN	0.600	0.549	91	60-115	
p-Nitrotoluene	0.600	0.571	95	51-143	
RDX	0.600	0.520	87	62-123	
Tetryl	0.600	0.443	74	36-120	

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM III
LCMS LCS-CERTIFIED REFERENCE MATERIAL RECOVERY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D14048.d

Lab ID: LCSSRM 280-570115/2-B Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSSRM CONCENTRATION (mg/Kg)	LCSSRM % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	0.600	0.510	85	58-116	
1,3-Dinitrobenzene	0.600	0.538	90	69-116	
2,4,6-Trinitrotoluene	0.600	0.409	68	69-120	Q
2,4-Dinitrotoluene	0.600	0.526	88	69-137	
2,6-Dinitrotoluene	0.600	0.569	95	60-121	
2-Amino-4,6-dinitrotoluene	0.600	0.484	81	56-108	
4-Amino-2,6-dinitrotoluene	0.600	0.465	77	46-98	
HMX	0.600	0.562	94	59-131	
m-Nitrotoluene	0.600	0.595	99	69-124	
Nitrobenzene	0.600	0.597	100	58-119	
Nitroglycerin	0.600	0.574	96	60-115	
o-Nitrotoluene	0.600	0.612	102	67-117	
PETN	0.600	0.577	96	60-115	
p-Nitrotoluene	0.600	0.616	103	51-143	
RDX	0.600	0.469	78	62-123	
Tetryl	0.600	0.433	72	36-120	

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM III
LCMS MATRIX SPIKE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D08030.d

Lab ID: 280-160190-19 MS Client ID: 29SB168 (6-7) MS

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONCENTRATION (mg/Kg)	MS CONCENTRATION (mg/Kg)	MS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	0.378	0.13	0.471	90	69-115	
1,3-Dinitrobenzene	0.378	0.047 U	0.370	98	83-122	
2,6-Dinitrotoluene	0.378	0.47	0.814	92	86-113	
2-Amino-4,6-dinitrotoluene	0.378	0.20	0.559	96	75-130	M
4-Amino-2,6-dinitrotoluene	0.378	0.16	0.487	85	77-125	M
HMX	0.378	0.047 U	0.332	88	65-114	
m-Nitrotoluene	0.378	0.045 J	0.417	98	68-125	M
Nitrobenzene	0.378	0.047 U	0.370	98	75-120	
Nitroglycerin	0.378	0.047 U	0.393	104	27-146	
o-Nitrotoluene	0.378	0.21	0.562	93	72-125	M
PETN	0.378	0.047 U	0.395	104	62-143	
p-Nitrotoluene	0.378	0.15	0.498	93	72-127	M
RDX	0.378	0.047 U	0.391	103	77-123	
Tetryl	0.378	0.047 U	0.535	142	36-120	J1

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM III
LCMS MATRIX SPIKE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex422D12067.d

Lab ID: 280-160190-19 MS DL Client ID: 29SB168 (6-7) MS DL

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONCENTRATION (mg/Kg)	MS CONCENTRATION (mg/Kg)	MS % REC	QC LIMITS REC	#
2,4,6-Trinitrotoluene	0.378	1.4	1.57	56	65-133	D J1
2,4-Dinitrotoluene	0.378	5.1	5.10	0.2	82-119	D 4

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM III
LCMS MATRIX SPIKE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D14018.d

Lab ID: 280-160190-A-28-E MS Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONCENTRATION (mg/Kg)	MS CONCENTRATION (mg/Kg)	MS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	0.386	0.047 U	0.341	88	69-115	
1,3-Dinitrobenzene	0.386	0.047 U	0.357	92	83-122	
2,4,6-Trinitrotoluene	0.386	0.15	0.514	96	65-133	
2,4-Dinitrotoluene	0.386	0.37	0.714	88	82-119	
2,6-Dinitrotoluene	0.386	0.047 U	0.360	93	86-113	
2-Amino-4,6-dinitrotoluene	0.386	0.047 U	0.322	83	75-130	
4-Amino-2,6-dinitrotoluene	0.386	0.047 U	0.284	74	77-125	J1
HMX	0.386	0.047 U	0.315	82	65-114	
m-Nitrotoluene	0.386	0.047 U	0.362	94	68-125	
Nitrobenzene	0.386	0.047 U	0.358	93	75-120	
Nitroglycerin	0.386	0.047 U	0.385	100	27-146	
o-Nitrotoluene	0.386	0.047 U	0.362	94	72-125	
PETN	0.386	0.047 U	0.377	98	62-143	
p-Nitrotoluene	0.386	0.047 U	0.382	99	72-127	
RDX	0.386	0.047 U	0.300	78	77-123	
Tetryl	0.386	0.047 U	0.552	143	36-120	J1

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM III
LCMS MATRIX SPIKE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D14055.d

Lab ID: 280-160190-52MS Client ID: 29SB203 (3-4) MS

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONCENTRATION (mg/Kg)	MS CONCENTRATION (mg/Kg)	MS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	0.395	0.047 U	0.330	84	69-115	
1,3-Dinitrobenzene	0.395	0.047 U	0.349	88	83-122	
2,4,6-Trinitrotoluene	0.395	0.047 U	0.368	93	65-133	
2,4-Dinitrotoluene	0.395	0.047 U	0.340	86	82-119	
2,6-Dinitrotoluene	0.395	0.047 U	0.382	97	86-113	
2-Amino-4,6-dinitrotoluene	0.395	0.047 U	0.262	66	75-130	J1
4-Amino-2,6-dinitrotoluene	0.395	0.047 U	0.132	33	77-125	J1
HMX	0.395	0.047 U	0.305	77	65-114	
m-Nitrotoluene	0.395	0.047 U	0.411	104	68-125	
Nitrobenzene	0.395	0.047 U	0.362	92	75-120	
Nitroglycerin	0.395	0.047 U	0.370	94	27-146	
o-Nitrotoluene	0.395	0.047 U	0.361	91	72-125	
PETN	0.395	0.047 U	0.416	105	62-143	
p-Nitrotoluene	0.395	0.047 U	0.361	91	72-127	
RDX	0.395	0.047 U	0.323	82	77-123	M
Tetryl	0.395	0.047 U	0.531	134	36-120	J1

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM III
LCMS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D08031.d

Lab ID: 280-160190-19 MSD Client ID: 29SB168 (6-7) MSD

COMPOUND	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,3,5-Trinitrobenzene	0.387	0.502	96	7	20	69-115	
1,3-Dinitrobenzene	0.387	0.436	113	16	20	83-122	
2,6-Dinitrotoluene	0.387	0.818	91	0	20	86-113	
2-Amino-4,6-dinitrotoluene	0.387	0.563	95	1	20	75-130	M
4-Amino-2,6-dinitrotoluene	0.387	0.501	87	3	20	77-125	M
HMX	0.387	0.323	83	3	20	65-114	
m-Nitrotoluene	0.387	0.405	93	3	20	68-125	
Nitrobenzene	0.387	0.382	99	3	20	75-120	
Nitroglycerin	0.387	0.429	111	9	20	27-146	
o-Nitrotoluene	0.387	0.547	87	3	20	72-125	
PETN	0.387	0.396	102	0	20	62-143	
p-Nitrotoluene	0.387	0.509	93	2	20	72-127	
RDX	0.387	0.334	86	16	20	77-123	
Tetryl	0.387	0.560	145	5	20	36-120	J1

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM III
LCMS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex422D12068.d

Lab ID: 280-160190-19 MSD DL Client ID: 29SB168 (6-7) MSD DL

COMPOUND	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2,4,6-Trinitrotoluene	0.387	1.62	68	3	20	65-133	D
2,4-Dinitrotoluene	0.387	5.47	96	7	20	82-119	D 4

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM III
LCMS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D14019.d

Lab ID: 280-160190-A-28-F MSD Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,3,5-Trinitrobenzene	0.393	0.339	86	1	20	69-115	
1,3-Dinitrobenzene	0.393	0.363	92	2	20	83-122	
2,4,6-Trinitrotoluene	0.393	0.521	95	1	20	65-133	
2,4-Dinitrotoluene	0.393	0.717	88	0	20	82-119	
2,6-Dinitrotoluene	0.393	0.365	93	2	20	86-113	
2-Amino-4,6-dinitrotoluene	0.393	0.319	81	1	20	75-130	
4-Amino-2,6-dinitrotoluene	0.393	0.288	73	1	20	77-125	J1
HMX	0.393	0.300	76	5	20	65-114	
m-Nitrotoluene	0.393	0.364	92	0	20	68-125	
Nitrobenzene	0.393	0.368	94	3	20	75-120	
Nitroglycerin	0.393	0.367	93	5	20	27-146	
o-Nitrotoluene	0.393	0.373	95	3	20	72-125	
PETN	0.393	0.376	96	0	20	62-143	
p-Nitrotoluene	0.393	0.380	97	1	20	72-127	
RDX	0.393	0.317	81	6	20	77-123	
Tetryl	0.393	0.541	137	2	20	36-120	J1

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM III
LCMS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D14056.d

Lab ID: 280-160190-52MSD Client ID: 29SB203 (3-4) MSD

COMPOUND	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,3,5-Trinitrobenzene	0.385	0.344	89	4	20	69-115	
1,3-Dinitrobenzene	0.385	0.340	88	3	20	83-122	
2,4,6-Trinitrotoluene	0.385	0.349	91	5	20	65-133	
2,4-Dinitrotoluene	0.385	0.334	87	2	20	82-119	
2,6-Dinitrotoluene	0.385	0.361	94	5	20	86-113	
2-Amino-4,6-dinitrotoluene	0.385	0.252	66	4	20	75-130	J1
4-Amino-2,6-dinitrotoluene	0.385	0.118	31	11	20	77-125	J1
HMX	0.385	0.342	89	11	20	65-114	
m-Nitrotoluene	0.385	0.343	89	18	20	68-125	
Nitrobenzene	0.385	0.357	93	1	20	75-120	
Nitroglycerin	0.385	0.404	105	9	20	27-146	
o-Nitrotoluene	0.385	0.352	91	3	20	72-125	
PETN	0.385	0.386	100	8	20	62-143	
p-Nitrotoluene	0.385	0.353	92	2	20	72-127	
RDX	0.385	0.297	77	8	20	77-123	M
Tetryl	0.385	0.557	145	5	20	36-120	J1

Column to be used to flag recovery and RPD values

FORM III 8321A

LCMS TRIPLICATE SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D08034.d

Lab ID: 280-160190-19 TRL Client ID: 29SB168 (6-7) TRL

COMPOUND	SAMPLE CONC. (mg/Kg)	DUPLICATE CONC. (mg/Kg)	TRIPLICATE CONC. (mg/Kg)	%RSD	%RSD LIMIT	#
1,3,5-Trinitrobenzene	0.13	0.119	0.120	4	20	
1,3-Dinitrobenzene	0.047 U	0.047 U	0.048 U	NC	20	
2,6-Dinitrotoluene	0.47	0.447	0.442	3	20	
2-Amino-4,6-dinitrotoluene	0.20	0.175	0.177	7	20	
4-Amino-2,6-dinitrotoluene	0.16	0.158	0.150	5	20	
HMX	0.047 U	0.047 U	0.048 U	NC	20	
m-Nitrotoluene	0.045 J	0.0450 J	0.0471 J	2	20	
Nitrobenzene	0.047 U	0.047 U	0.048 U	NC	20	
Nitroglycerin	0.047 U	0.047 U	0.048 U	NC	20	
o-Nitrotoluene	0.21	0.195	0.206	4	20	
PETN	0.047 U	0.047 U	0.048 U	NC	20	
p-Nitrotoluene	0.15	0.142	0.149	3	20	
RDX	0.047 U	0.047 U	0.048 U	NC	20	
Tetryl	0.047 U	0.047 U	0.048 U	NC	20	

Column to be used to flag %RSD values

8321A

LCMS TRIPLICATE SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex422D12070.d

Lab ID: 280-160190-19 TRL DL Client ID: 29SB168 (6-7) TRL DL

COMPOUND	SAMPLE CONC. (mg/Kg)	DUPLICATE CONC. (mg/Kg)	TRIPLICATE CONC. (mg/Kg)	%RSD	%RSD LIMIT	#
2,4,6-Trinitrotoluene	1.4	1.23	1.32	5	20	
2,4-Dinitrotoluene	5.1	5.01	4.75	4	20	

Column to be used to flag %RSD values

8321A

LCMS TRIPLICATE SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D14023.d

Lab ID: 280-160190-A-29-F TRL Client ID:

COMPOUND	SAMPLE CONC. (mg/Kg)	DUPLICATE CONC. (mg/Kg)	TRIPLICATE CONC. (mg/Kg)	%RSD	%RSD LIMIT	#
1,3,5-Trinitrobenzene	0.049 U	0.048 U	0.049 U	NC	20	
1,3-Dinitrobenzene	0.049 U	0.048 U	0.049 U	NC	20	
2,4,6-Trinitrotoluene	0.049 U	0.048 U	0.049 U	NC	20	
2,4-Dinitrotoluene	0.049 U	0.048 U	0.049 U	NC	20	
2,6-Dinitrotoluene	0.049 U	0.048 U	0.049 U	NC	20	
2-Amino-4,6-dinitrotoluene	0.049 U	0.048 U	0.049 U	NC	20	
4-Amino-2,6-dinitrotoluene	0.049 U	0.048 U	0.049 U	NC	20	
HMX	0.049 U	0.048 U	0.049 U	NC	20	
m-Nitrotoluene	0.049 U	0.048 U	0.049 U	NC	20	
Nitrobenzene	0.049 U	0.048 U	0.049 U	NC	20	
Nitroglycerin	0.049 U	0.048 U	0.049 U	NC	20	
o-Nitrotoluene	0.049 U	0.048 U	0.049 U	NC	20	
PETN	0.049 U	0.048 U	0.049 U	NC	20	
p-Nitrotoluene	0.049 U	0.048 U	0.049 U	NC	20	
RDX	0.049 U	0.048 U	0.049 U	NC	20	
Tetryl	0.049 U	0.048 U	0.049 U	NC	20	

Column to be used to flag %RSD values

8321A

LCMS TRIPLICATE SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D14058.d

Lab ID: 280-160190-A-52-J TRL Client ID:

COMPOUND	SAMPLE CONC. (mg/Kg)	DUPLICATE CONC. (mg/Kg)	TRIPLICATE CONC. (mg/Kg)	%RSD	%RSD LIMIT	#
1,3,5-Trinitrobenzene	0.047 U	0.049 U	0.048 U	NC	20	
1,3-Dinitrobenzene	0.047 U	0.049 U	0.048 U	NC	20	
2,4,6-Trinitrotoluene	0.047 U	0.049 U	0.048 U	NC	20	
2,4-Dinitrotoluene	0.047 U	0.049 U	0.048 U	NC	20	
2,6-Dinitrotoluene	0.047 U	0.049 U	0.048 U	NC	20	
2-Amino-4,6-dinitrotoluene	0.047 U	0.049 U	0.048 U	NC	20	
4-Amino-2,6-dinitrotoluene	0.047 U	0.049 U	0.048 U	NC	20	
HMX	0.047 U	0.049 U	0.048 U	NC	20	
m-Nitrotoluene	0.047 U	0.049 U	0.048 U	NC	20	
Nitrobenzene	0.047 U	0.049 U	0.048 U	NC	20	
Nitroglycerin	0.047 U	0.049 U	0.048 U	NC	20	
o-Nitrotoluene	0.047 U	0.049 U	0.048 U	NC	20	
PETN	0.047 U	0.049 U	0.048 U	NC	20	
p-Nitrotoluene	0.047 U	0.049 U	0.048 U	NC	20	
RDX	0.047 U	0.049 U	0.048 U	NC	20	
Tetryl	0.047 U	0.049 U	0.048 U	NC	20	

Column to be used to flag %RSD values

8321A

FORM IV
LCMS METHOD BLANK SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Lab File ID: ex722D05012.d Lab Sample ID: MB 280-570053/1-A

Matrix: Water Date Extracted: 03/29/2022 13:01

Instrument ID: LC_LCMS7 Date Analyzed: 04/05/2022 11:18

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-570053/2-A	ex722D05013.d	04/05/2022 11:24
	LCSD 280-570053/3-A	ex722D05014.d	04/05/2022 11:30
EB-03	280-160190-56	ex722D05017.d	04/05/2022 11:50

FORM IV
LCMS METHOD BLANK SUMMARY

Lab Name: Eurofins Denver | Job No.: 280-160190-1

SDG No.:

Lab File ID: ex722D07012.d | Lab Sample ID: MB 280-570718/1-A

Matrix: Solid | Date Extracted: 04/04/2022 16:57

Instrument ID: LC_LCMS7 | Date Analyzed: 04/07/2022 11:38

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-570718/2-A	ex722D07013.d	04/07/2022 11:45
	LCSD 280-570718/3-A	ex722D07014.d	04/07/2022 11:51
	GB 280-570105/1-B	ex722D07015.d	04/07/2022 11:58
	LCSSRM 280-570105/2-B	ex722D07016.d	04/07/2022 12:05
29SB173 (14.5-15)	280-160190-1	ex722D07036.d	04/07/2022 14:16
29SB181 (14.5-15)	280-160190-2	ex722D07037.d	04/07/2022 14:23
29SB182 (14.5-15)	280-160190-3	ex722D07038.d	04/07/2022 14:30
29SB175 (3-4)	280-160190-4	ex722D07039.d	04/07/2022 14:36
29SB175 (6-7)	280-160190-5	ex722D07040.d	04/07/2022 14:43
29SB175 (11-12)	280-160190-6	ex722D07041.d	04/07/2022 14:49
29SB175 (14.5-15)	280-160190-7	ex722D07042.d	04/07/2022 14:56
29SB173 (14.5-15) DL	280-160190-1 DL	ex722D07044.d	04/07/2022 15:09
29SB181 (14.5-15) DL	280-160190-2 DL	ex722D07045.d	04/07/2022 15:17

FORM IV
LCMS METHOD BLANK SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Lab File ID: ex722D14044.d Lab Sample ID: MB 280-571025/1-A

Matrix: Solid Date Extracted: 04/06/2022 18:17

Instrument ID: LC_LCMS7 Date Analyzed: 04/14/2022 16:58

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-571025/2-A	ex722D14045.d	04/14/2022 17:04
	LCSD 280-571025/3-A	ex722D14046.d	04/14/2022 17:11
	GB 280-570115/1-B	ex722D14047.d	04/14/2022 17:18
	LCSSRM 280-570115/2-B	ex722D14048.d	04/14/2022 17:24
29SB193 (11-12)	280-160190-48	ex722D14049.d	04/14/2022 17:31
29SB193 (15-16)	280-160190-49	ex722D14050.d	04/14/2022 17:37
29SB193 (19-20)	280-160190-50	ex722D14051.d	04/14/2022 17:44
DUP-10	280-160190-51	ex722D14052.d	04/14/2022 17:50
29SB203 (3-4)	280-160190-52	ex722D14054.d	04/14/2022 18:04
29SB203 (3-4) MS	280-160190-52MS	ex722D14055.d	04/14/2022 18:10
29SB203 (3-4) MSD	280-160190-52MSD	ex722D14056.d	04/14/2022 18:17
	280-160190-A-52-I DU	ex722D14057.d	04/14/2022 18:24
	280-160190-A-52-J TRL	ex722D14058.d	04/14/2022 18:30
29SB203 (7-8)	280-160190-53	ex722D14059.d	04/14/2022 18:37
29SB204 (3-4)	280-160190-54	ex722D14060.d	04/14/2022 18:43
29SB204 (7-8)	280-160190-55	ex722D14061.d	04/14/2022 18:50

FORM IV
LCMS METHOD BLANK SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Lab File ID: ex722D08012.d Lab Sample ID: MB 280-571024/1-A

Matrix: Solid Date Extracted: 04/06/2022 18:20

Instrument ID: LC_LCMS7 Date Analyzed: 04/08/2022 10:47

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-571024/2-A	ex722D08013.d	04/08/2022 10:54
	LCSD 280-571024/3-A	ex722D08014.d	04/08/2022 11:00
	GB 280-570111/1-B	ex722D08015.d	04/08/2022 11:07
	LCSSRM 280-570111/2-B	ex722D08016.d	04/08/2022 11:13
DUP-05	280-160190-8	ex722D08017.d	04/08/2022 11:20
29SB167 (3-4)	280-160190-9	ex722D08018.d	04/08/2022 11:26
29SB167 (6-7)	280-160190-10	ex722D08019.d	04/08/2022 11:33
29SB167 (11-12)	280-160190-11	ex722D08020.d	04/08/2022 11:40
29SB167 (14.5-15)	280-160190-12	ex722D08021.d	04/08/2022 11:46
DUP-06	280-160190-13	ex722D08023.d	04/08/2022 11:59
29SB176 (14.5-15)	280-160190-14	ex722D08024.d	04/08/2022 12:06
29SB179 (14.5-15)	280-160190-15	ex722D08025.d	04/08/2022 12:13
29SB178 (14.5-15)	280-160190-16	ex722D08026.d	04/08/2022 12:19
29SB177 (14.5-15)	280-160190-17	ex722D08027.d	04/08/2022 12:26
29SB168 (3-4)	280-160190-18	ex722D08028.d	04/08/2022 12:32
29SB168 (6-7)	280-160190-19	ex722D08029.d	04/08/2022 12:39
29SB168 (6-7) MS	280-160190-19 MS	ex722D08030.d	04/08/2022 12:46
29SB168 (6-7) MSD	280-160190-19 MSD	ex722D08031.d	04/08/2022 12:52
29SB168 (6-7) DU	280-160190-19 DU	ex722D08033.d	04/08/2022 13:05
29SB168 (6-7) TRL	280-160190-19 TRL	ex722D08034.d	04/08/2022 13:12
29SB168 (11-12)	280-160190-20	ex722D08035.d	04/08/2022 13:19
29SB168 (14.5-15)	280-160190-21	ex722D08036.d	04/08/2022 13:25

FORM IV
LCMS METHOD BLANK SUMMARY

Lab Name: Eurofins Denver | Job No.: 280-160190-1

SDG No.:

Lab File ID: ex722D08012.d | Lab Sample ID: MB 280-571024/1-A

Matrix: Solid | Date Extracted: 04/06/2022 18:20

Instrument ID: LC_LCMS7 | Date Analyzed: 04/08/2022 10:47

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
29SB169 (3-4)	280-160190-22	ex722D08037.d	04/08/2022 13:32
29SB169 (6-7)	280-160190-23	ex722D08038.d	04/08/2022 13:38
29SB169 (11-12)	280-160190-24	ex722D08039.d	04/08/2022 13:45
29SB169 (14.5-15)	280-160190-25	ex722D08040.d	04/08/2022 13:52
DUP-07	280-160190-26	ex722D08041.d	04/08/2022 13:58
29SB170 (3-4)	280-160190-27	ex722D08042.d	04/08/2022 14:05
29SB176 (14.5-15) DL	280-160190-14 DL	ex422D12063.d	04/12/2022 21:03
29SB177 (14.5-15) DL	280-160190-17 DL	ex422D12064.d	04/12/2022 21:14
29SB168 (3-4) DL	280-160190-18 DL	ex422D12065.d	04/12/2022 21:26
29SB168 (6-7) DL	280-160190-19 DL	ex422D12066.d	04/12/2022 21:37
29SB168 (6-7) MS DL	280-160190-19 MS DL	ex422D12067.d	04/12/2022 21:49
29SB168 (6-7) MSD DL	280-160190-19 MSD DL	ex422D12068.d	04/12/2022 22:01
29SB168 (6-7) DU DL	280-160190-19 DU DL	ex422D12069.d	04/12/2022 22:12
29SB168 (6-7) TRL DL	280-160190-19 TRL DL	ex422D12070.d	04/12/2022 22:24
29SB168 (11-12) DL	280-160190-20 DL	ex422D12071.d	04/12/2022 22:35
29SB168 (11-12) DL2	280-160190-20 DL2	ex422D12072.d	04/12/2022 22:47

FORM IV
LCMS METHOD BLANK SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Lab File ID: ex722D14012.d Lab Sample ID: MB 280-571022/1-A

Matrix: Solid Date Extracted: 04/06/2022 18:23

Instrument ID: LC_LCMS7 Date Analyzed: 04/14/2022 13:27

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-571022/2-A	ex722D14013.d	04/14/2022 13:33
	LCSD 280-571022/3-A	ex722D14014.d	04/14/2022 13:40
	GB 280-570112/1-B	ex722D14015.d	04/14/2022 13:46
	LCSSRM 280-570112/2-B	ex722D14016.d	04/14/2022 13:53
29SB170 (6-7)	280-160190-28	ex722D14017.d	04/14/2022 14:00
	280-160190-A-28-E MS	ex722D14018.d	04/14/2022 14:06
	280-160190-A-28-F MSD	ex722D14019.d	04/14/2022 14:13
29SB170 (11-12)	280-160190-29	ex722D14020.d	04/14/2022 14:19
	280-160190-A-29-E DU	ex722D14022.d	04/14/2022 14:33
	280-160190-A-29-F TRL	ex722D14023.d	04/14/2022 14:39
29SB170 (14.5-15)	280-160190-30	ex722D14024.d	04/14/2022 14:46
29SB171 (3-4)	280-160190-31	ex722D14025.d	04/14/2022 14:52
29SB171 (6-7)	280-160190-32	ex722D14026.d	04/14/2022 14:59
29SB171 (11-12)	280-160190-33	ex722D14027.d	04/14/2022 15:06
29SB171 (14.5-15)	280-160190-34	ex722D14028.d	04/14/2022 15:12
DUP-08	280-160190-35	ex722D14029.d	04/14/2022 15:19
29SB174 (3-4)	280-160190-36	ex722D14030.d	04/14/2022 15:25
29SB174 (6-7)	280-160190-37	ex722D14031.d	04/14/2022 15:32
29SB174 (11-12)	280-160190-38	ex722D14033.d	04/14/2022 15:45
29SB174 (14.5-15)	280-160190-39	ex722D14034.d	04/14/2022 15:52
29SB190 (3-4)	280-160190-40	ex722D14035.d	04/14/2022 15:58
29SB190 (19-20)	280-160190-41	ex722D14036.d	04/14/2022 16:05

FORM IV
LCMS METHOD BLANK SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Lab File ID: ex722D14012.d Lab Sample ID: MB 280-571022/1-A

Matrix: Solid Date Extracted: 04/06/2022 18:23

Instrument ID: LC_LCMS7 Date Analyzed: 04/14/2022 13:27

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
29SB192 (7-8)	280-160190-42	ex722D14037.d	04/14/2022 16:12
29SB192 (11-12)	280-160190-43	ex722D14038.d	04/14/2022 16:18
29SB192 (15-16)	280-160190-44	ex722D14039.d	04/14/2022 16:25
29SB192 (19-20)	280-160190-45	ex722D14040.d	04/14/2022 16:31
DUP-09	280-160190-46	ex722D14041.d	04/14/2022 16:38
29SB193 (7-8)	280-160190-47	ex722D14042.d	04/14/2022 16:45

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS4 Calibration Start Date: 04/12/2022 09:22

GC Column: IonPac ID: 2(mm) Calibration End Date: 04/12/2022 10:31

Calibration ID: 64076

		HXC4		HHTT		DNB4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		138911	1.96	359251	2.78	1068702	4.45
UPPER LIMIT		277822	2.46	718502	3.28	2137404	4.95
LOWER LIMIT		69456	1.46	179626	2.28	534351	3.95
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICB 280-571614/11		145190	1.97	333299	2.80	1031329	4.46
ICV 280-571614/12		121377	1.96	344535	2.80	1128218	4.46
CCV 280-571614/63		139400	1.97	351280	2.77	1106141	4.46
280-160190-14 DL	29SB176 (14.5-15) DL	202843	1.96	415780	2.77	1156944	4.46
280-160190-17 DL	29SB177 (14.5-15) DL	185094	1.96	372328	2.75	1003812	4.40
280-160190-18 DL	29SB168 (3-4) DL	203334	1.97	390541	2.75	1016176	4.41
280-160190-19 DL	29SB168 (6-7) DL	180597	1.97	378911	2.77	1088963	4.40
280-160190-19 MS DL	29SB168 (6-7) MS DL	197016	1.96	333389	2.77	1204761	4.40
280-160190-19 MSD DL	29SB168 (6-7) MSD DL	202795	1.96	437254	2.77	1023442	4.40
280-160190-19 DU DL	29SB168 (6-7) DU DL	211092	1.97	435513	2.77	1221640	4.40
280-160190-19 TRL DL	29SB168 (6-7) TRL DL	180839	1.97	365005	2.75	1099281	4.46
280-160190-20 DL	29SB168 (11-12) DL	193462	1.97	408868	2.77	1122455	4.46
280-160190-20 DL2	29SB168 (11-12) DL2	212670	1.96	431267	2.77	1172553	4.46
CCV 280-571614/74		141941	1.97	309242	2.77	1243158	4.46

HXC4 = HMX-13C4
HHTT = Hexahydro-1,3,5-trinitro-1,3,5-triazine 13C3
DNB4 = 1,3-Dinitrobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8321A

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS4 Calibration Start Date: 04/12/2022 09:22

GC Column: IonPac ID: 2(mm) Calibration End Date: 04/12/2022 10:31

Calibration ID: 64076

		DNT3					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		2888155	6.32				
UPPER LIMIT		5776310	6.82				
LOWER LIMIT		1444078	5.82				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICB 280-571614/11		3212584	6.33				
ICV 280-571614/12		3034212	6.34				
CCV 280-571614/63		2981485	6.33				
280-160190-14 DL	29SB176 (14.5-15) DL	3247685	6.31				
280-160190-17 DL	29SB177 (14.5-15) DL	2661878	6.31				
280-160190-18 DL	29SB168 (3-4) DL	2828976	6.30				
280-160190-19 DL	29SB168 (6-7) DL	3071258	6.30				
280-160190-19 MS DL	29SB168 (6-7) MS DL	3231172	6.31				
280-160190-19 MSD DL	29SB168 (6-7) MSD DL	2777592	6.31				
280-160190-19 DU DL	29SB168 (6-7) DU DL	3385207	6.30				
280-160190-19 TRL DL	29SB168 (6-7) TRL DL	2977424	6.30				
280-160190-20 DL	29SB168 (11-12) DL	3199065	6.31				
280-160190-20 DL2	29SB168 (11-12) DL2	3085174	6.31				
CCV 280-571614/74		2690510	6.30				

DNT3 = 2,4-dinitrotoluene-d3

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8321A

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Calibration Start Date: 04/05/2022 10:20

GC Column: Synergi Hydro ID: Calibration End Date: 04/05/2022 10:58

Calibration ID: 63687

		HXC4		HHTT		DNB4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		214127	1.22	799241	1.78	1821180	2.85
UPPER LIMIT		428254	1.72	1598482	2.28	3642360	3.35
LOWER LIMIT		107064	0.72	399621	1.28	910590	2.35
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICB 280-570784/10		244466	1.23	848727	1.78	1739742	2.85
ICV 280-570784/11		221453	1.23	818238	1.78	1794479	2.85
MB 280-570053/1-A		243274	1.23	858885	1.79	1840007	2.86
LCS 280-570053/2-A		225882	1.23	825906	1.79	1805318	2.86
LCSD 280-570053/3-A		234377	1.23	836989	1.79	1743098	2.87
280-160190-56	EB-03	269178	1.23	878431	1.79	1765132	2.87
CCV 280-570784/18		225789	1.23	864556	1.79	1744336	2.86

HXC4 = HMX-13C4
HHTT = Hexahydro-1,3,5-trinitro-1,3,5-triazine 13C3
DNB4 = 1,3-Dinitrobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8321A

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Calibration Start Date: 04/05/2022 10:20

GC Column: Synergi Hydro ID: Calibration End Date: 04/05/2022 10:58

Calibration ID: 63687

		DNT3					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		5833688	4.02				
UPPER LIMIT		11667376	4.52				
LOWER LIMIT		2916844	3.52				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICB 280-570784/10		5452943	4.04				
ICV 280-570784/11		5819137	4.03				
MB 280-570053/1-A		5602028	4.05				
LCS 280-570053/2-A		5555557	4.05				
LCSD 280-570053/3-A		5463650	4.05				
280-160190-56	EB-03	5509266	4.05				
CCV 280-570784/18		5453702	4.05				

DNT3 = 2,4-dinitrotoluene-d3

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8321A

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Calibration Start Date: 04/07/2022 10:39

GC Column: Synergi Hydro ID: Calibration End Date: 04/07/2022 11:18

Calibration ID: 63793

		HXC4		HHTT		DNB4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		102792	1.25	382993	1.84	1294091	3.03
UPPER LIMIT		205584	1.75	765986	2.34	2588182	3.53
LOWER LIMIT		51396	0.75	191497	1.34	647046	2.53
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICB 280-571107/10		110048	1.25	376855	1.84	1387389	3.03
ICV 280-571107/11		108491	1.25	372231	1.84	1353932	3.02
MB 280-570718/1-A		132705	1.25	371603	1.84	1290098	3.03
LCS 280-570718/2-A		105009	1.25	406169	1.84	1382250	3.03
LCSD 280-570718/3-A		107169	1.25	412142	1.84	1380244	3.03
GB 280-570105/1-B		107593	1.25	386530	1.84	1335869	3.02
LCSSRM 280-570105/2-B		107476	1.25	414553	1.84	1366388	3.03
CCV 280-571108/21		116352	1.25	379799	1.84	1363291	3.03
CCV 280-571108/32		110145	1.25	378008	1.84	1337884	3.02
280-160190-1	29SB173 (14.5-15)	119923	1.25	414735	1.84	1391503	3.02
280-160190-2	29SB181 (14.5-15)	113982	1.25	401849	1.84	1411741	3.02
280-160190-3	29SB182 (14.5-15)	133618	1.25	436518	1.84	1402130	3.02
280-160190-4	29SB175 (3-4)	132859	1.25	408515	1.84	1455235	3.03
280-160190-5	29SB175 (6-7)	126099	1.25	416514	1.84	1405003	3.03
280-160190-6	29SB175 (11-12)	132999	1.25	380304	1.84	1430168	3.03
280-160190-7	29SB175 (14.5-15)	129691	1.25	383231	1.85	1373036	3.02
CCV 280-571108/43		101680	1.25	359456	1.84	1311201	3.03
280-160190-1 DL	29SB173 (14.5-15) DL	124516	1.25	364163	1.84	1329255	3.02
280-160190-2 DL	29SB181 (14.5-15) DL	124984	1.25	378175	1.84	1316770	3.02
CCV 280-571108/46		101088	1.25	414590	1.84	1328454	3.02

HXC4 = HMX-13C4
HHTT = Hexahydro-1,3,5-trinitro-1,3,5-triazine 13C3
DNB4 = 1,3-Dinitrobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8321A

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Calibration Start Date: 04/07/2022 10:39

GC Column: Synergi Hydro ID: Calibration End Date: 04/07/2022 11:18

Calibration ID: 63793

		DNT3					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		4060737	4.34				
UPPER LIMIT		8121474	4.84				
LOWER LIMIT		2030369	3.84				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICB 280-571107/10		4099845	4.34				
ICV 280-571107/11		4059996	4.33				
MB 280-570718/1-A		4070990	4.34				
LCS 280-570718/2-A		4195665	4.33				
LCSD 280-570718/3-A		4148312	4.34				
GB 280-570105/1-B		4222723	4.33				
LCSSRM 280-570105/2-B		4175240	4.33				
CCV 280-571108/21		4212185	4.34				
CCV 280-571108/32		4093045	4.33				
280-160190-1	29SB173 (14.5-15)	4238481	4.33				
280-160190-2	29SB181 (14.5-15)	4144177	4.34				
280-160190-3	29SB182 (14.5-15)	4444846	4.33				
280-160190-4	29SB175 (3-4)	4439121	4.33				
280-160190-5	29SB175 (6-7)	4387445	4.34				
280-160190-6	29SB175 (11-12)	4311600	4.33				
280-160190-7	29SB175 (14.5-15)	4277057	4.34				
CCV 280-571108/43		3997245	4.34				
280-160190-1 DL	29SB173 (14.5-15) DL	3965544	4.34				
280-160190-2 DL	29SB181 (14.5-15) DL	4124316	4.33				
CCV 280-571108/46		4137136	4.33				

DNT3 = 2,4-dinitrotoluene-d3

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8321A

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Calibration Start Date: 04/08/2022 09:48

GC Column: Synergi Hydro ID: Calibration End Date: 04/08/2022 10:27

Calibration ID: 63915

		HXC4		HHTT		DNB4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		105117	1.25	381026	1.84	1269487	3.01
UPPER LIMIT		210234	1.75	762052	2.34	2538974	3.51
LOWER LIMIT		52559	0.75	190513	1.34	634744	2.51
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICB 280-571224/10		111193	1.25	369477	1.84	1298609	3.02
ICV 280-571224/11		92669	1.25	373133	1.84	1305265	3.02
MB 280-571024/1-A		127610	1.25	376097	1.84	1318274	3.02
LCS 280-571024/2-A		116083	1.25	423834	1.84	1251696	3.01
LCSD 280-571024/3-A		102053	1.25	361568	1.84	1273600	3.02
GB 280-570111/1-B		166874	1.25	609310	1.84	2005023	3.01
LCSSRM 280-570111/2-B		107447	1.25	405815	1.84	1250972	3.02
280-160190-8	DUP-05	124270	1.25	384711	1.85	1270569	3.02
280-160190-9	29SB167 (3-4)	129445	1.25	421558	1.84	1330483	3.02
280-160190-10	29SB167 (6-7)	204966	1.25	708523	1.84	1283035	3.01
280-160190-11	29SB167 (11-12)	122017	1.25	383174	1.84	1275020	3.02
280-160190-12	29SB167 (14.5-15)	131165	1.25	386163	1.84	1310839	3.01
CCV 280-571224/22		97260	1.25	365315	1.84	1260014	3.02
280-160190-13	DUP-06	109601	1.25	372998	1.84	1237631	3.02
280-160190-14	29SB176 (14.5-15)	115591	1.25	350001	1.84	1253170	3.02
280-160190-15	29SB179 (14.5-15)	109946	1.25	350102	1.84	1246772	3.02
280-160190-16	29SB178 (14.5-15)	115772	1.25	352892	1.84	1193014	3.02
280-160190-17	29SB177 (14.5-15)	114617	1.25	380766	1.84	1307671	3.02
280-160190-18	29SB168 (3-4)	113285	1.25	317549	1.84	1274252	3.02
280-160190-19	29SB168 (6-7)	101614	1.25	330405	1.84	1239880	3.02
280-160190-19 MS	29SB168 (6-7) MS	95311	1.25	317173	1.84	1298512	3.02
280-160190-19 MSD	29SB168 (6-7) MSD	101933	1.25	360735	1.84	1230435	3.01
CCV 280-571224/32		104392	1.25	370531	1.84	1229641	3.02
280-160190-19 DU	29SB168 (6-7) DU	114470	1.25	347994	1.84	1321257	3.02
280-160190-19 TRL	29SB168 (6-7) TRL	114269	1.25	354127	1.84	1309215	3.02
280-160190-20	29SB168 (11-12)	121927	1.25	354234	1.84	1399574	3.01
280-160190-21	29SB168 (14.5-15)	116907	1.25	354416	1.84	1288153	3.01
280-160190-22	29SB169 (3-4)	106503	1.25	385595	1.84	1626347	3.02
280-160190-23	29SB169 (6-7)	130325	1.25	406633	1.84	1388153	3.02

HXC4 = HMX-13C4
HHTT = Hexahydro-1,3,5-trinitro-1,3,5-triazine 13C3
DNB4 = 1,3-Dinitrobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8321A

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Calibration Start Date: 04/08/2022 09:48

GC Column: Synergi Hydro ID: Calibration End Date: 04/08/2022 10:27

Calibration ID: 63915

		HXC4		HHTT		DNB4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		105117	1.25	381026	1.84	1269487	3.01
UPPER LIMIT		210234	1.75	762052	2.34	2538974	3.51
LOWER LIMIT		52559	0.75	190513	1.34	634744	2.51
LAB SAMPLE ID	CLIENT SAMPLE ID						
280-160190-24	29SB169 (11-12)	116315	1.25	364597	1.84	1351355	3.02
280-160190-25	29SB169 (14.5-15)	113517	1.25	365973	1.84	1236747	3.02
280-160190-26	DUP-07	124228	1.25	391886	1.84	1347402	3.01
280-160190-27	29SB170 (3-4)	115710	1.25	390613	1.84	1291248	3.02
CCV 280-571224/43		98354	1.25	351302	1.84	1260749	3.02

HXC4 = HMX-13C4
HHTT = Hexahydro-1,3,5-trinitro-1,3,5-triazine 13C3
DNB4 = 1,3-Dinitrobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8321A

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Calibration Start Date: 04/08/2022 09:48

GC Column: Synergi Hydro ID: Calibration End Date: 04/08/2022 10:27

Calibration ID: 63915

		DNT3					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		3880112	4.32				
UPPER LIMIT		7760224	4.82				
LOWER LIMIT		1940056	3.82				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICB 280-571224/10		3904089	4.32				
ICV 280-571224/11		3936260	4.32				
MB 280-571024/1-A		4108224	4.32				
LCS 280-571024/2-A		4000946	4.32				
LCSD 280-571024/3-A		4057101	4.32				
GB 280-570111/1-B		5810759	4.32				
LCSSRM 280-570111/2-B		3772064	4.32				
280-160190-8	DUP-05	3973341	4.32				
280-160190-9	29SB167 (3-4)	4131130	4.32				
280-160190-10	29SB167 (6-7)	3944193	4.32				
280-160190-11	29SB167 (11-12)	3931102	4.32				
280-160190-12	29SB167 (14.5-15)	4023855	4.32				
CCV 280-571224/22		3948823	4.32				
280-160190-13	DUP-06	3775607	4.32				
280-160190-14	29SB176 (14.5-15)	3801198	4.32				
280-160190-15	29SB179 (14.5-15)	3943592	4.32				
280-160190-16	29SB178 (14.5-15)	3863359	4.32				
280-160190-17	29SB177 (14.5-15)	4006124	4.32				
280-160190-18	29SB168 (3-4)	3863119	4.32				
280-160190-19	29SB168 (6-7)	3903095	4.32				
280-160190-19 MS	29SB168 (6-7) MS	4137957	4.32				
280-160190-19 MSD	29SB168 (6-7) MSD	4042999	4.32				
CCV 280-571224/32		3952295	4.32				
280-160190-19 DU	29SB168 (6-7) DU	4141364	4.32				
280-160190-19 TRL	29SB168 (6-7) TRL	3978395	4.32				
280-160190-20	29SB168 (11-12)	3945812	4.32				
280-160190-21	29SB168 (14.5-15)	4133277	4.32				
280-160190-22	29SB169 (3-4)	5020023	4.32				
280-160190-23	29SB169 (6-7)	4212556	4.32				

DNT3 = 2,4-dinitrotoluene-d3

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8321A

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Calibration Start Date: 04/08/2022 09:48

GC Column: Synergi Hydro ID: Calibration End Date: 04/08/2022 10:27

Calibration ID: 63915

		DNT3					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		3880112	4.32				
UPPER LIMIT		7760224	4.82				
LOWER LIMIT		1940056	3.82				
LAB SAMPLE ID	CLIENT SAMPLE ID						
280-160190-24	29SB169 (11-12)	4134396	4.32				
280-160190-25	29SB169 (14.5-15)	3884638	4.32				
280-160190-26	DUP-07	4162871	4.32				
280-160190-27	29SB170 (3-4)	4036021	4.32				
CCV 280-571224/43		3931494	4.32				

DNT3 = 2,4-dinitrotoluene-d3

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8321A

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Calibration Start Date: 04/14/2022 12:27

GC Column: Synergi Hydro ID: Calibration End Date: 04/14/2022 13:07

Calibration ID: 64206

		HXC4		HHTT		DNB4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		123575	1.25	587930	1.83	1291754	2.98
UPPER LIMIT		247150	1.75	1175860	2.33	2583508	3.48
LOWER LIMIT		61788	0.75	293965	1.33	645877	2.48
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICB 280-571895/10		151106	1.25	437870	1.84	1292680	2.99
ICV 280-571895/11		124479	1.25	606372	1.84	1212816	2.99
MB 280-571022/1-A		138539	1.25	483150	1.84	1230552	2.99
LCS 280-571022/2-A		143864	1.25	607172	1.84	1209866	2.99
LCSD 280-571022/3-A		136058	1.25	619006	1.83	1176938	2.99
GB 280-570112/1-B		149323	1.25	489615	1.84	1217465	2.99
LCSSRM 280-570112/2-B		128069	1.25	678119	1.84	1210125	2.99
280-160190-28	29SB170 (6-7)	145866	1.25	474507	1.84	1165031	2.99
280-160190-A-28-E MS		137573	1.25	580747	1.84	1168181	2.99
280-160190-A-28-F MSD		130694	1.25	569856	1.84	1223981	2.99
280-160190-29	29SB170 (11-12)	155221	1.25	512166	1.84	1230460	2.99
CCV 280-571896/21		125708	1.25	529775	1.84	1109197	2.99
280-160190-A-29-E DU		169604	1.25	510946	1.84	1192437	2.99
280-160190-A-29-F TRL		146570	1.25	474149	1.84	1145199	2.99
280-160190-30	29SB170 (14.5-15)	152052	1.25	490444	1.84	1188819	2.99
280-160190-31	29SB171 (3-4)	149339	1.25	437848	1.84	1134634	2.99
280-160190-32	29SB171 (6-7)	145706	1.25	468420	1.84	1193606	2.99
280-160190-33	29SB171 (11-12)	136662	1.25	485885	1.84	1121624	2.99
280-160190-34	29SB171 (14.5-15)	144434	1.25	474436	1.84	1082374	2.99
280-160190-35	DUP-08	155806	1.25	509663	1.84	1207458	2.99
280-160190-36	29SB174 (3-4)	156053	1.25	524572	1.84	1194617	2.99
280-160190-37	29SB174 (6-7)	154168	1.25	473695	1.84	1185597	2.99
CCV 280-571896/32		132472	1.25	650341	1.84	1173893	2.99
280-160190-38	29SB174 (11-12)	163926	1.25	518441	1.84	1194186	2.99
280-160190-39	29SB174 (14.5-15)	155188	1.25	477914	1.84	1124198	2.99
280-160190-40	29SB190 (3-4)	152045	1.25	458861	1.83	1090957	2.99
280-160190-41	29SB190 (19-20)	154051	1.25	494746	1.84	1119166	2.99
280-160190-42	29SB192 (7-8)	163864	1.25	538232	1.84	1167178	2.99

HXC4 = HMX-13C4
HHTT = Hexahydro-1,3,5-trinitro-1,3,5-triazine 13C3
DNB4 = 1,3-Dinitrobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8321A

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Calibration Start Date: 04/14/2022 12:27

GC Column: Synergi Hydro ID: Calibration End Date: 04/14/2022 13:07

Calibration ID: 64206

		HXC4		HHTT		DNB4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		123575	1.25	587930	1.83	1291754	2.98
UPPER LIMIT		247150	1.75	1175860	2.33	2583508	3.48
LOWER LIMIT		61788	0.75	293965	1.33	645877	2.48
LAB SAMPLE ID	CLIENT SAMPLE ID						
280-160190-43	29SB192 (11-12)	150530	1.25	507131	1.84	1119685	2.98
280-160190-44	29SB192 (15-16)	162803	1.25	518339	1.84	1185766	2.99
280-160190-45	29SB192 (19-20)	177140	1.25	481238	1.84	1181809	2.99
280-160190-46	DUP-09	156301	1.25	470084	1.84	1137365	2.99
280-160190-47	29SB193 (7-8)	157054	1.24	441261	1.84	1147439	2.99
CCV 280-571896/43		130901	1.25	527171	1.84	988450	2.99
CCV 280-571897/43		130901	1.25	527171	1.84	988450	2.99
MB 280-571025/1-A		156078	1.25	468901	1.84	1140028	2.99
LCS 280-571025/2-A		134443	1.25	627068	1.84	1059596	2.99
LCSD 280-571025/3-A		135850	1.25	539971	1.84	1051413	2.99
GB 280-570115/1-B		159225	1.25	486396	1.84	1132437	2.99
LCSSRM 280-570115/2-B		120673	1.25	651460	1.83	1076378	2.98
280-160190-48	29SB193 (11-12)	145440	1.25	488722	1.84	1118349	2.99
280-160190-49	29SB193 (15-16)	155917	1.25	536445	1.84	1147180	2.99
280-160190-50	29SB193 (19-20)	134090	1.25	522236	1.83	1191541	2.99
280-160190-51	DUP-10	136322	1.25	520255	1.84	1099646	2.99
CCV 280-571897/53		110780	1.25	632466	1.84	1249730	2.99
280-160190-52	29SB203 (3-4)	153997	1.25	532483	1.83	1119636	2.99
280-160190-52MS	29SB203 (3-4) MS	142487	1.25	594187	1.84	1122803	2.98
280-160190-52MSD	29SB203 (3-4) MSD	130200	1.25	635935	1.84	1110839	2.98
280-160190-A-52-I DU		155833	1.24	504306	1.84	1056986	2.98
280-160190-A-52-J TRL		155269	1.25	507449	1.84	1165075	2.99
280-160190-53	29SB203 (7-8)	164634	1.25	522977	1.84	1103246	2.98
280-160190-54	29SB204 (3-4)	153035	1.25	537989	1.83	1081375	2.98
280-160190-55	29SB204 (7-8)	147160	1.24	499251	1.84	1179879	2.98
CCV 280-571897/62		128465	1.24	570877	1.84	1076448	2.99

HXC4 = HMX-13C4
HHTT = Hexahydro-1,3,5-trinitro-1,3,5-triazine 13C3
DNB4 = 1,3-Dinitrobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8321A

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Calibration Start Date: 04/14/2022 12:27

GC Column: Synergi Hydro ID: Calibration End Date: 04/14/2022 13:07

Calibration ID: 64206

		DNT3					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		4021835	4.26				
UPPER LIMIT		8043670	4.76				
LOWER LIMIT		2010918	3.76				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICB 280-571895/10		3873791	4.28				
ICV 280-571895/11		3865364	4.28				
MB 280-571022/1-A		3810608	4.28				
LCS 280-571022/2-A		3698942	4.28				
LCSD 280-571022/3-A		3635103	4.28				
GB 280-570112/1-B		3799172	4.28				
LCSSRM 280-570112/2-B		3672552	4.28				
280-160190-28	29SB170 (6-7)	3667613	4.28				
280-160190-A-28-E MS		3651112	4.28				
280-160190-A-28-F MSD		3717836	4.28				
280-160190-29	29SB170 (11-12)	3698989	4.28				
CCV 280-571896/21		3413933	4.28				
280-160190-A-29-E DU		3812883	4.28				
280-160190-A-29-F TRL		3604624	4.28				
280-160190-30	29SB170 (14.5-15)	3661556	4.28				
280-160190-31	29SB171 (3-4)	3476906	4.28				
280-160190-32	29SB171 (6-7)	3683598	4.28				
280-160190-33	29SB171 (11-12)	3558187	4.28				
280-160190-34	29SB171 (14.5-15)	3546765	4.28				
280-160190-35	DUP-08	3698178	4.28				
280-160190-36	29SB174 (3-4)	3584542	4.28				
280-160190-37	29SB174 (6-7)	3566335	4.28				
CCV 280-571896/32		3710541	4.28				
280-160190-38	29SB174 (11-12)	3601265	4.28				
280-160190-39	29SB174 (14.5-15)	3516187	4.28				
280-160190-40	29SB190 (3-4)	3351334	4.28				
280-160190-41	29SB190 (19-20)	3558049	4.28				
280-160190-42	29SB192 (7-8)	3604807	4.28				

DNT3 = 2,4-dinitrotoluene-d3

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8321A

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Calibration Start Date: 04/14/2022 12:27

GC Column: Synergi Hydro ID: Calibration End Date: 04/14/2022 13:07

Calibration ID: 64206

		DNT3					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		4021835	4.26				
UPPER LIMIT		8043670	4.76				
LOWER LIMIT		2010918	3.76				
LAB SAMPLE ID	CLIENT SAMPLE ID						
280-160190-43	29SB192 (11-12)	3531300	4.28				
280-160190-44	29SB192 (15-16)	3685603	4.28				
280-160190-45	29SB192 (19-20)	3576343	4.28				
280-160190-46	DUP-09	3531153	4.28				
280-160190-47	29SB193 (7-8)	3548479	4.28				
CCV 280-571896/43		3186598	4.28				
CCV 280-571897/43		3186598	4.28				
MB 280-571025/1-A		3401201	4.28				
LCS 280-571025/2-A		3205573	4.28				
LCSD 280-571025/3-A		3226884	4.28				
GB 280-570115/1-B		3471356	4.28				
LCSSRM 280-570115/2-B		3256301	4.28				
280-160190-48	29SB193 (11-12)	3458590	4.27				
280-160190-49	29SB193 (15-16)	3578782	4.27				
280-160190-50	29SB193 (19-20)	3724454	4.27				
280-160190-51	DUP-10	3474956	4.27				
CCV 280-571897/53		3733601	4.28				
280-160190-52	29SB203 (3-4)	3515800	4.27				
280-160190-52MS	29SB203 (3-4) MS	3332163	4.28				
280-160190-52MSD	29SB203 (3-4) MSD	3478833	4.27				
280-160190-A-52-I DU		3314569	4.27				
280-160190-A-52-J TRL		3504522	4.27				
280-160190-53	29SB203 (7-8)	3531141	4.27				
280-160190-54	29SB204 (3-4)	3339415	4.27				
280-160190-55	29SB204 (7-8)	3507641	4.27				
CCV 280-571897/62		3347535	4.27				

DNT3 = 2,4-dinitrotoluene-d3

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8321A

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB173 (14.5-15) | Lab Sample ID: 280-160190-1
Matrix: Solid | Lab File ID: ex722D07036.d
Analysis Method: 8321A | Date Collected: 03/24/2022 09:14
Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57
Sample wt/vol: 10.44(g) | Date Analyzed: 04/07/2022 14:16
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571108 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.048	U	0.096	0.048	0.043
99-65-0	1,3-Dinitrobenzene	0.048	U	0.096	0.048	0.043
118-96-7	2,4,6-Trinitrotoluene	0.048	U Q	0.096	0.048	0.035
606-20-2	2,6-Dinitrotoluene	0.58		0.096	0.048	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.048	U	0.096	0.048	0.048
19406-51-0	4-Amino-2,6-dinitrotoluene	0.048	U	0.096	0.048	0.030
2691-41-0	HMX	0.048	U M	0.096	0.048	0.044
99-08-1	m-Nitrotoluene	0.11	M	0.096	0.048	0.041
98-95-3	Nitrobenzene	0.048	U	0.11	0.048	0.036
55-63-0	Nitroglycerin	0.048	U	0.096	0.048	0.028
88-72-2	o-Nitrotoluene	0.41	M	0.096	0.048	0.041
78-11-5	PETN	0.048	U	0.096	0.048	0.033
121-82-4	RDX	0.048	U	0.11	0.048	0.041
479-45-8	Tetryl	0.048	U Q	0.096	0.048	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	95		68-140

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07036.d
Lims ID: 280-160190-A-1-B
Client ID: 29SB173 (14.5-15)
Sample Type: Client
Inject. Date: 07-Apr-2022 14:16:59 ALS Bottle#: 32 Worklist Smp#: 36
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-1-B
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:34 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 14:42:35
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		119923	125.0	161	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		414735	125.0	126	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.030	-0.011		1391503	129.4	344	
28 3,5-Dinitroaniline								
183.0	3.230	3.230	0.0	1.070	89616	1.45	17.7	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.775	646959	95.8	113	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.652	3.645	0.007	0.843	189622	3.16	16.8	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.982	3.976	0.006	0.919	555805	7.81	46.1	
17 2,6-Dinitrotoluene								
182.0	4.144	4.150	-0.006	0.957	10475081	150.3	150	
* 18 2,4-dinitrotoluene-d3								
185.1	4.332	4.341	-0.009		4238481	125.0	116	
19 2,4-Dinitrotoluene								E
182.0	4.382	4.373	0.009	1.011	13673999	386.3	178	E
22 o-Nitrotoluene								M
137.0	4.992	5.002	-0.010	1.152	1144973	107.2	197	M
23 p-Nitrotoluene								EM
137.0	5.311	5.311	0.0	1.226	3797569	412.3	606	EM
24 m-Nitrotoluene								M
137.0	5.704	5.704	0.0	1.317	167722	29.9	23.4	M

Report Date: 08-Apr-2022 07:32:37 Chrom Revision: 2.3 18-Mar-2022 09:07:22

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

Reagents:

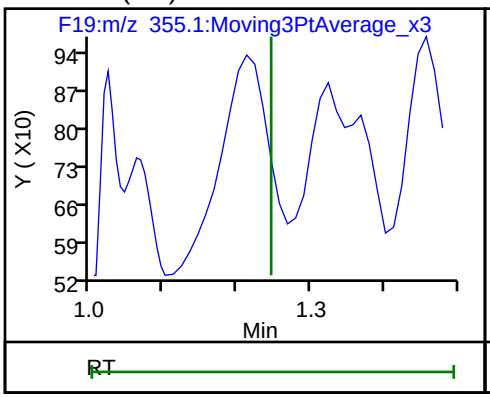
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 08-Apr-2022 07:32:37 Chrom Revision: 2.3 18-Mar-2022 09:07:22

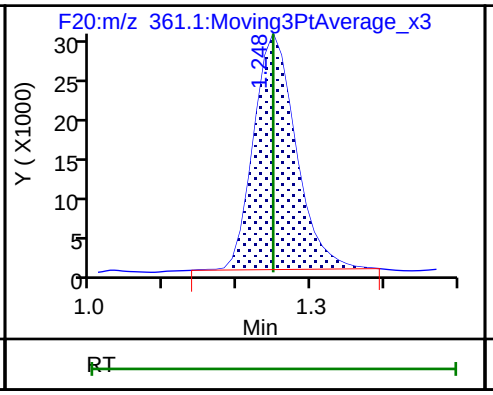
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07036.d
Injection Date: 07-Apr-2022 14:16:59 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-1-B Lab Sample ID: 280-160190-1
Client ID: 29SB173 (14.5-15)
Operator ID: acm ALS Bottle#: 32 Worklist Smp#: 36
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

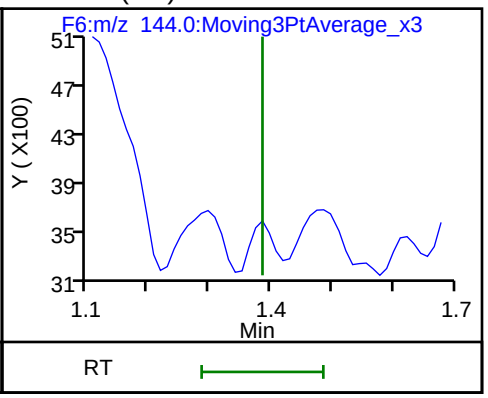
2 HMX (ND)



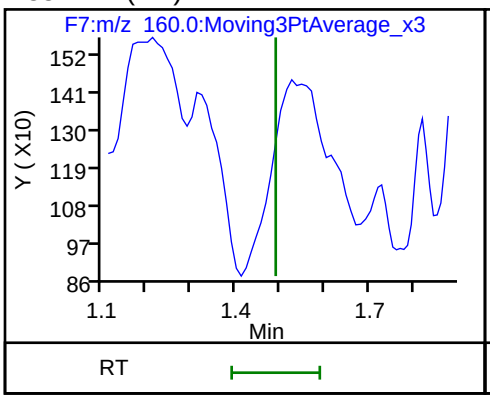
* 1 HMX-13C4



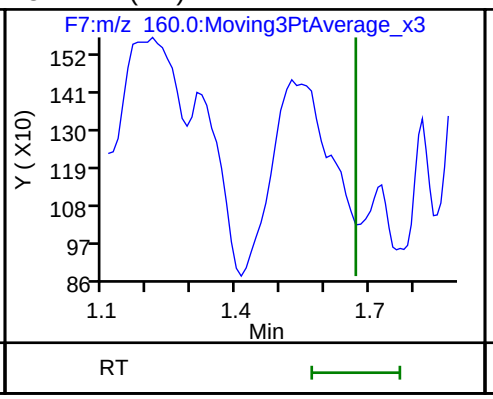
36 TNX (ND)



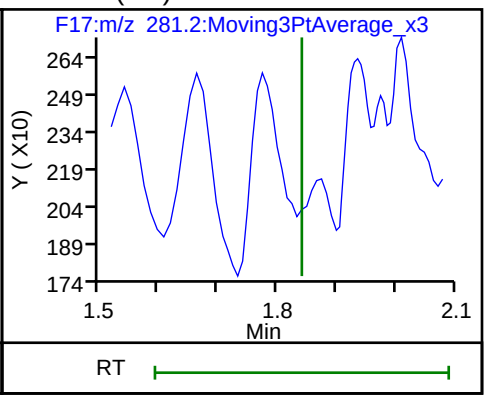
33 DNX (ND)



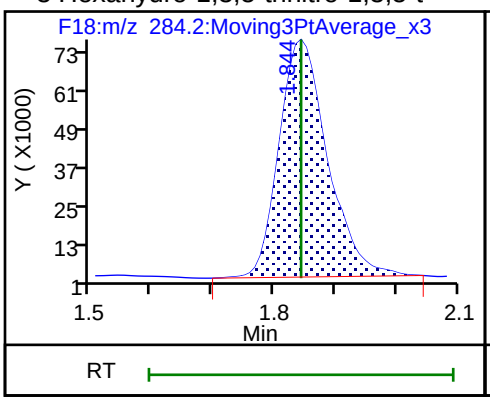
34 MNX (ND)



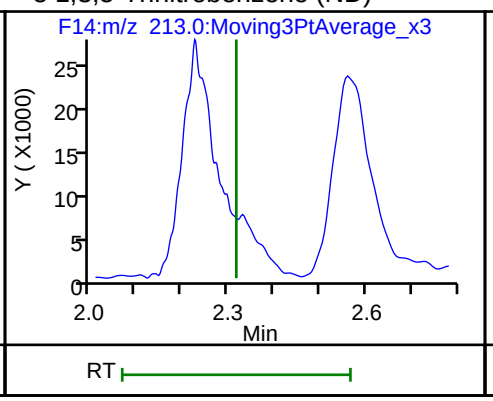
4 RDX (ND)



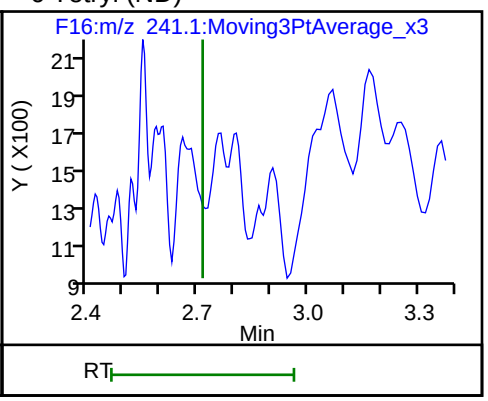
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



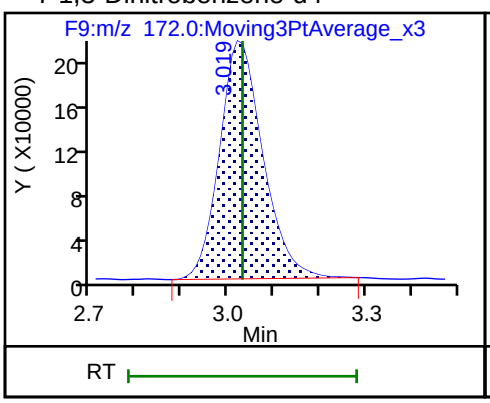
5 1,3,5-Trinitrobenzene (ND)



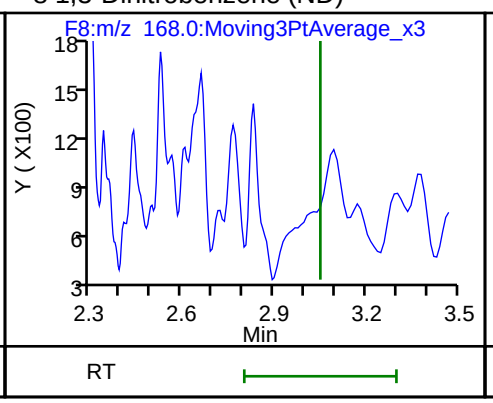
6 Tetryl (ND)



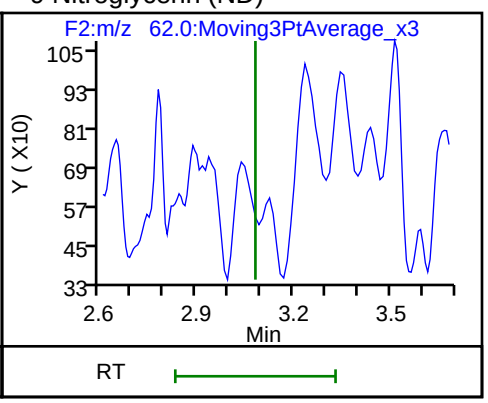
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



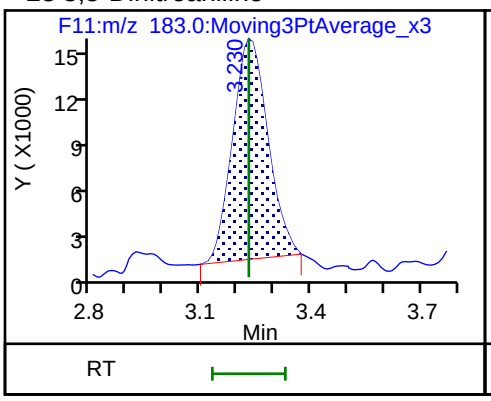
9 Nitroglycerin (ND)



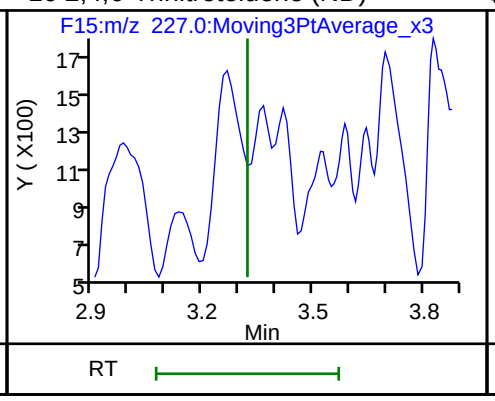
Report Date: 08-Apr-2022 07:32:37 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07036.d

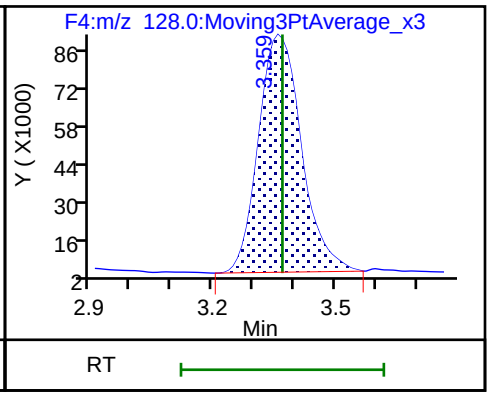
28 3,5-Dinitroaniline



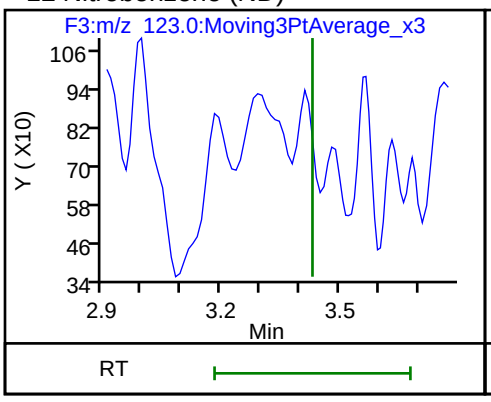
10 2,4,6-Trinitrotoluene (ND)



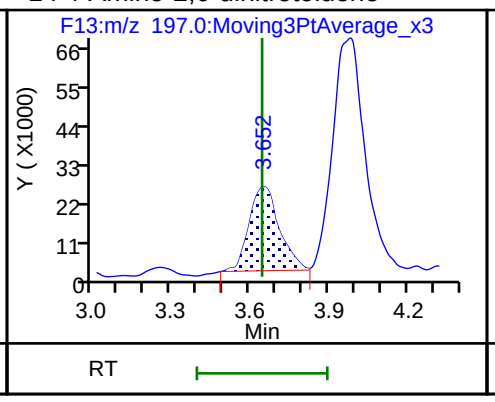
$ 11 Nitrobenzene-d5



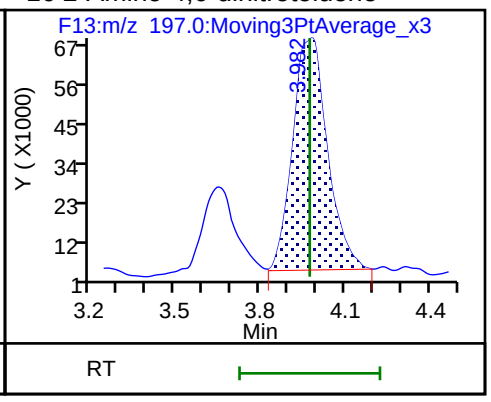
12 Nitrobenzene (ND)



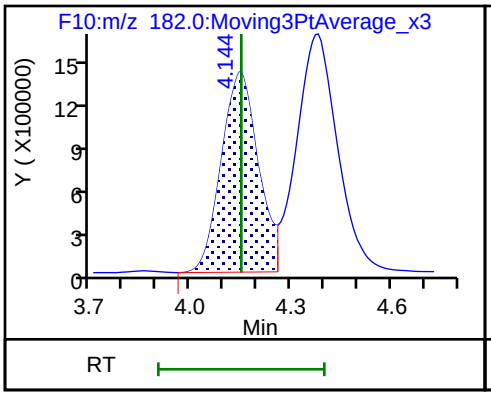
14 4-Amino-2,6-dinitrotoluene



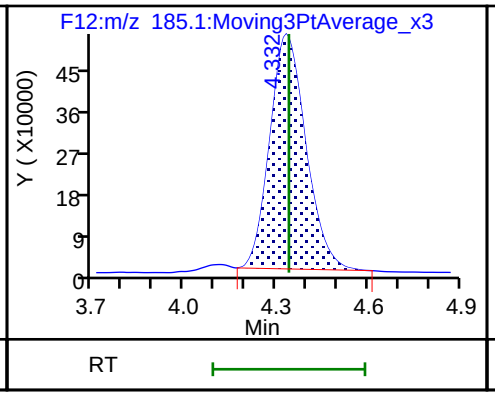
16 2-Amino-4,6-dinitrotoluene



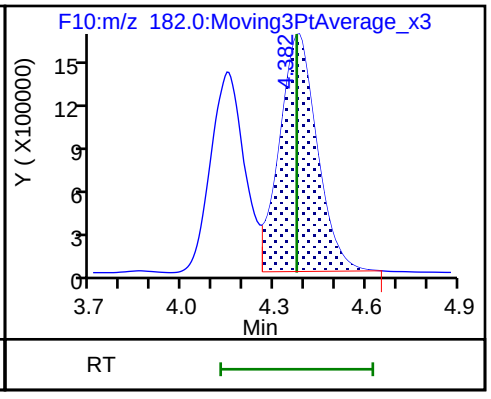
17 2,6-Dinitrotoluene



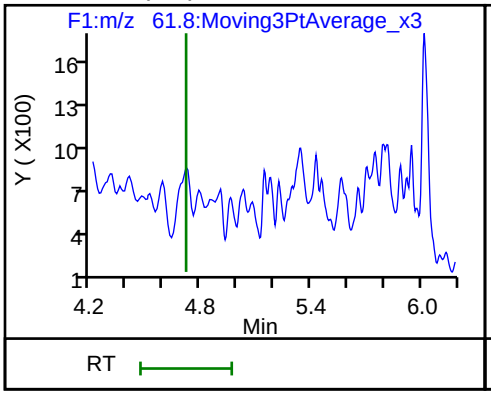
* 18 2,4-dinitrotoluene-d3



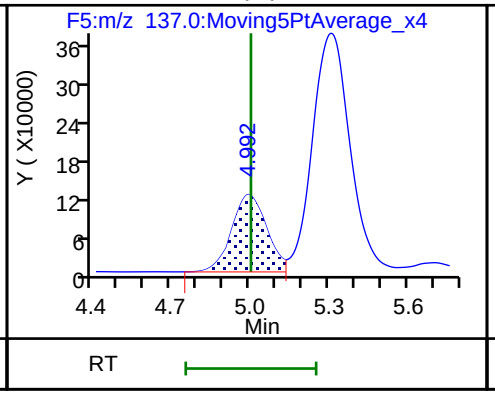
19 2,4-Dinitrotoluene



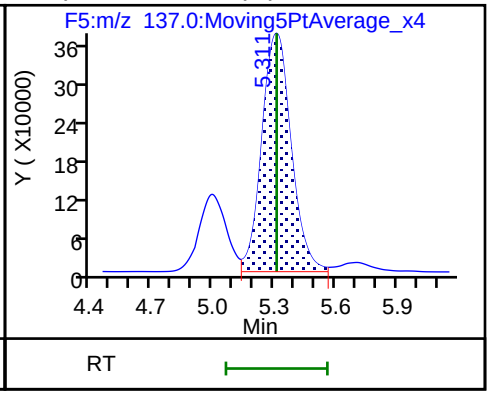
20 PETN (ND)



22 o-Nitrotoluene (M)



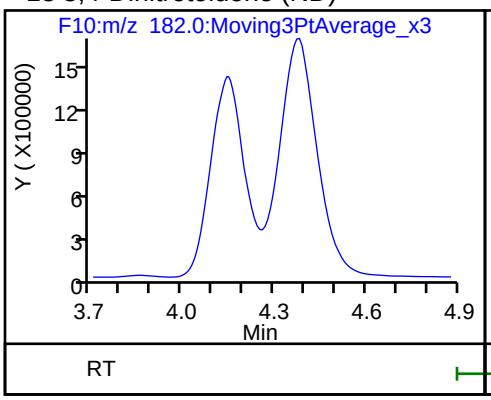
23 p-Nitrotoluene (M)



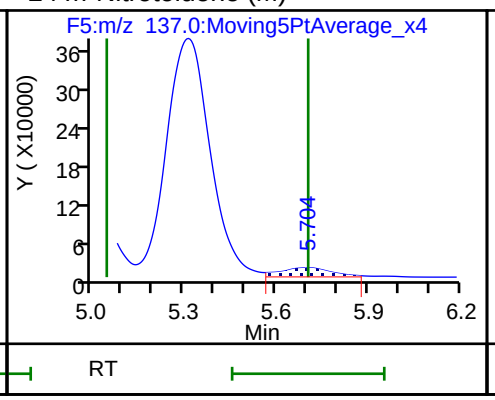
Report Date: 08-Apr-2022 07:32:37 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07036.d

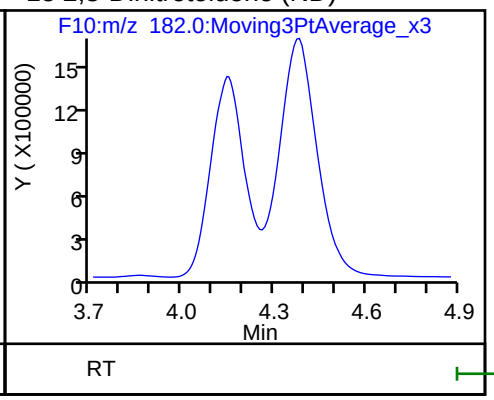
13 3,4-Dinitrotoluene (ND)



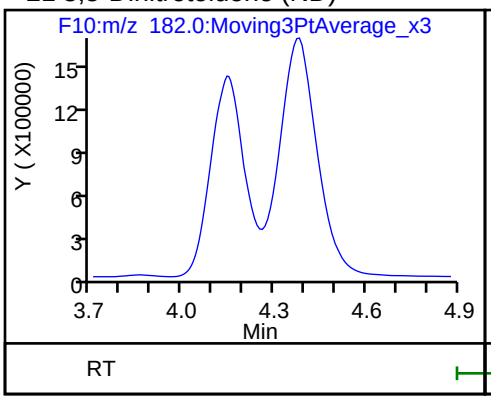
24 m-Nitrotoluene (M)



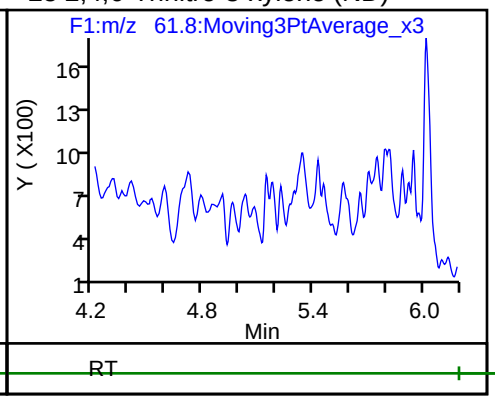
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 08-Apr-2022 07:32:37 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07036.d
Lims ID: 280-160190-A-1-B
Client ID: 29SB173 (14.5-15)
Sample Type: Client
Inject. Date: 07-Apr-2022 14:16:59 ALS Bottle#: 32 Worklist Smp#: 36
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-1-B
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:34 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 14:42:35

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	95.8	95.48

Report Date: 08-Apr-2022 07:32:37

Chrom Revision: 2.3 18-Mar-2022 09:07:22
Manual Integration/User Assign Peak Report

Eurofins Denver

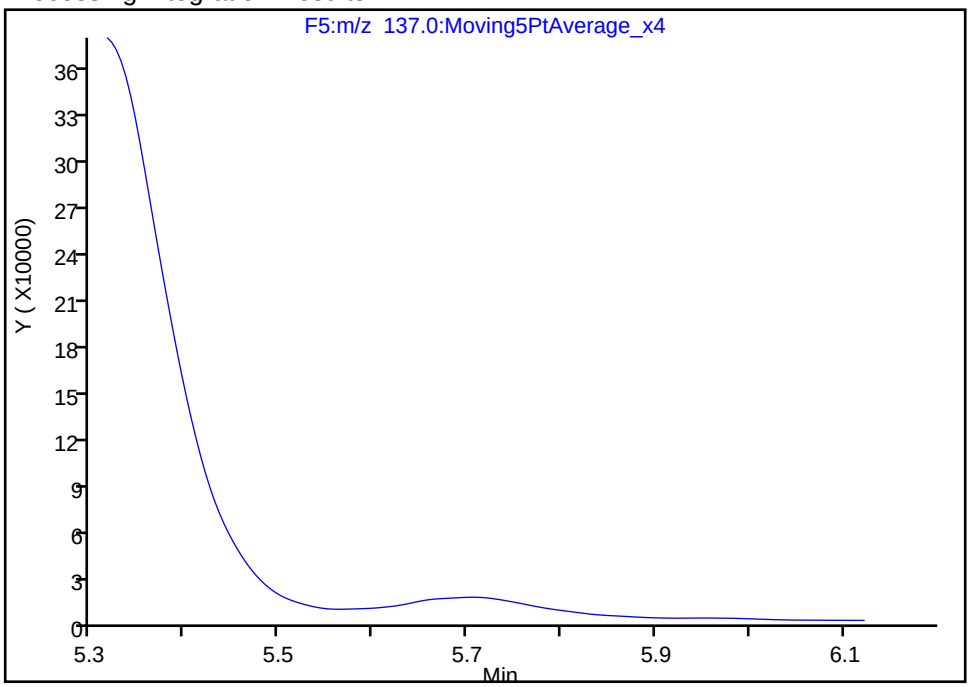
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07036.d				
Injection Date:	07-Apr-2022 14:16:59	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-1-B	Lab Sample ID:	280-160190-1		
Client ID:	29SB173 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	32	Worklist Smp#:	36
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F5:SIR		

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

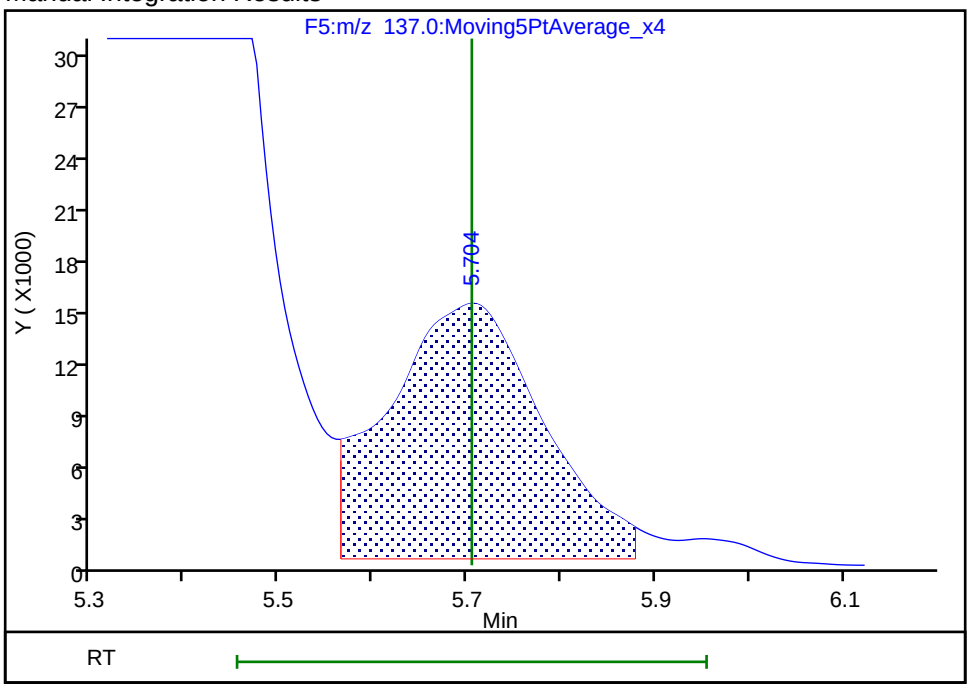
Not Detected
Expected RT: 5.70

Processing Integration Results



Manual Integration Results

RT: 5.70
Area: 167722
Amount: 29.853842
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 14:42:00
Audit Action: Manually Integrated
Audit Reason: Baseline

Report Date: 08-Apr-2022 07:32:37 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

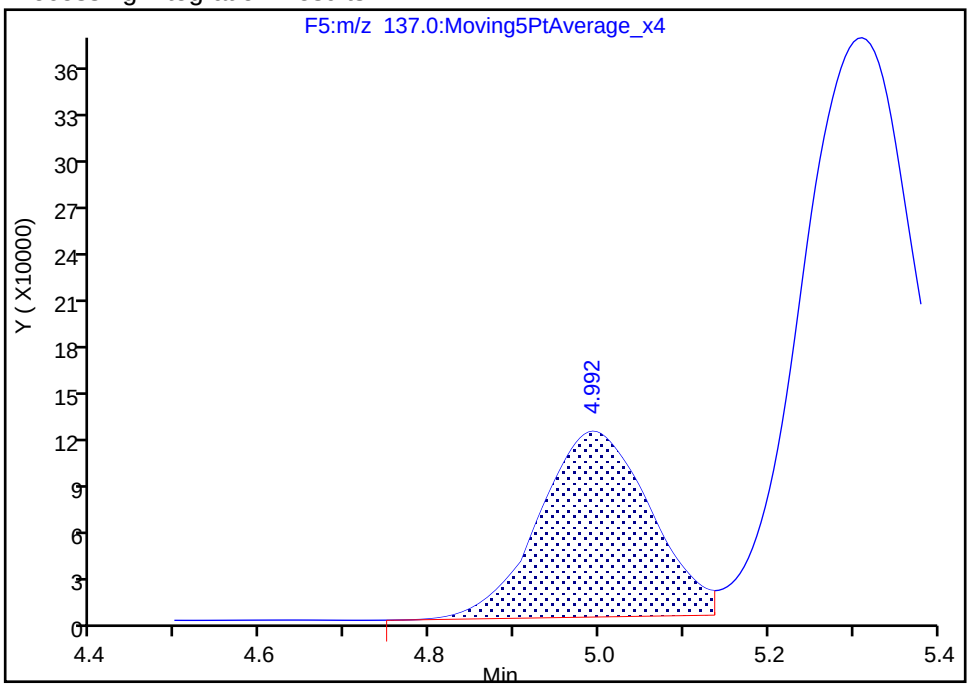
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07036.d				
Injection Date:	07-Apr-2022 14:16:59	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-1-B	Lab Sample ID:	280-160190-1		
Client ID:	29SB173 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	32	Worklist Smp#:	36
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F5:SIR		

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

Signal: 1

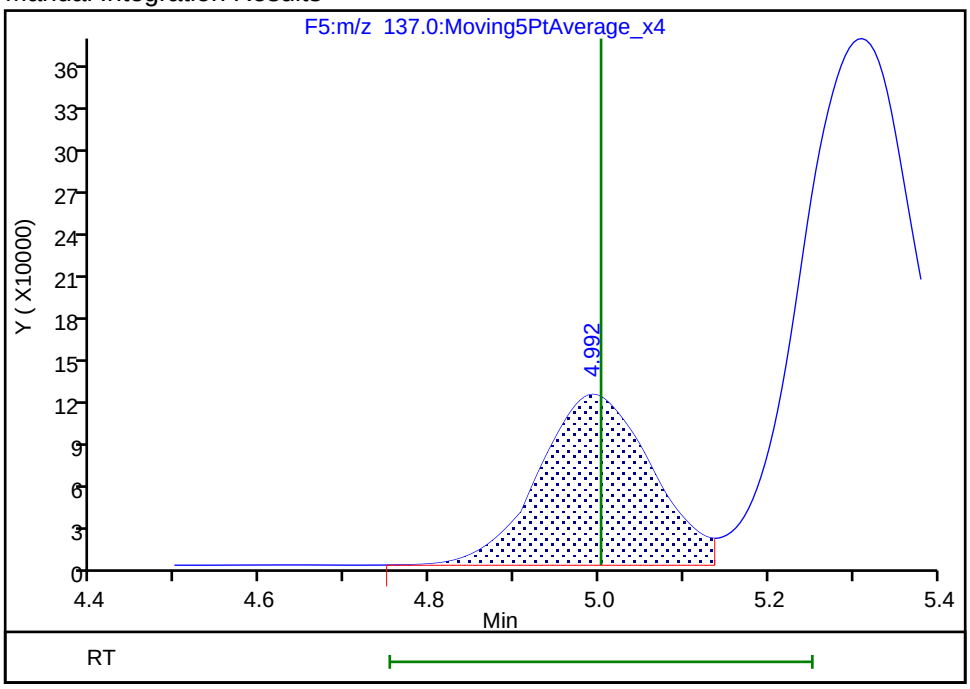
Processing Integration Results

RT: 4.99
Area: 1104374
Amount: 103.3485
Amount Units: ug/l



Manual Integration Results

RT: 4.99
Area: 1144973
Amount: 107.1608
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 14:42:00

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB173 (14.5-15) DL | Lab Sample ID: 280-160190-1 DL
Matrix: Solid | Lab File ID: ex722D07044.d
Analysis Method: 8321A | Date Collected: 03/24/2022 09:14
Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57
Sample wt/vol: 10.44(g) | Date Analyzed: 04/07/2022 15:09
Con. Extract Vol.: 40(mL) | Dilution Factor: 5
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571108 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
121-14-2	2,4-Dinitrotoluene	1.6	D	0.48	0.24	0.22
99-99-0	p-Nitrotoluene	1.6	D	0.48	0.24	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	107	D	68-140

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07044.d
Lims ID: 280-160190-A-1-B
Client ID: 29SB173 (14.5-15)
Sample Type: Client
Inject. Date: 07-Apr-2022 15:09:49 ALS Bottle#: 39 Worklist Smp#: 44
Injection Vol: 10.0 ul Dil. Factor: 5.0000
Sample Info: 280-160190-A-1-B 5x
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:42 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 08-Apr-2022 07:20:08
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		124516	125.0	118	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		364163	125.0	96.8	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.030	-0.011		1329255	129.4	360	
28 3,5-Dinitroaniline								
183.0	3.230	3.230	0.0	1.070	18700	0.0556	7.3	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.774	130166	21.5	17.6	
14 4-Amino-2,6-dinitrotoluene								M
197.0	3.652	3.645	0.007	0.841	53161	0.6163	7.5	M
16 2-Amino-4,6-dinitrotoluene								M
197.0	3.988	3.976	0.012	0.919	112610	1.38	16.0	M
17 2,6-Dinitrotoluene								
182.0	4.144	4.150	-0.006	0.955	2038886	30.9	172	
* 18 2,4-dinitrotoluene-d3								
185.1	4.341	4.341	0.0		3965544	125.0	110	
19 2,4-Dinitrotoluene								
182.0	4.373	4.373	0.0	1.007	2696727	80.9	214	
22 o-Nitrotoluene								
137.0	4.992	5.002	-0.010	1.150	225239	22.3	65.6	
23 p-Nitrotoluene								
137.0	5.311	5.311	0.0	1.223	731198	84.4	194	
24 m-Nitrotoluene								M
137.0	5.694	5.704	-0.010	1.312	27489	4.93	7.3	M

Report Date: 08-Apr-2022 07:32:43 Chrom Revision: 2.3 18-Mar-2022 09:07:22

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

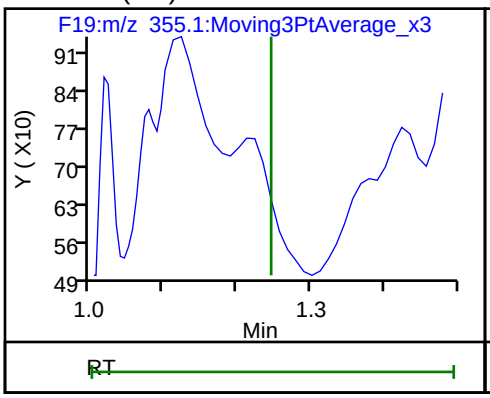
Report Date: 08-Apr-2022 07:32:43 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

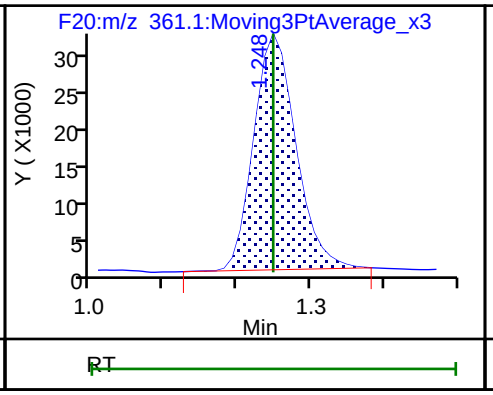
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07044.d

Injection Date:	07-Apr-2022 15:09:49	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-1-B	Lab Sample ID:	280-160190-1		
Client ID:	29SB173 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	39	Worklist Smp#:	44
Injection Vol:	10.0 ul	Dil. Factor:	5.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		

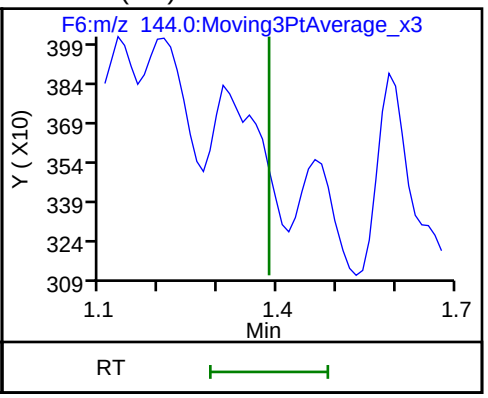
2 HMX (ND)



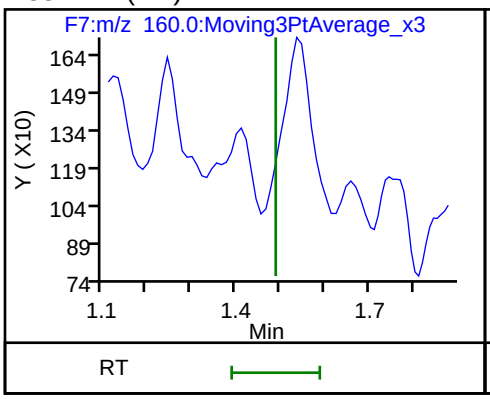
* 1 HMX-13C4



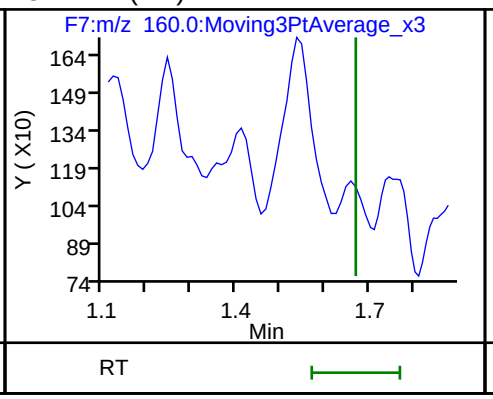
36 TNX (ND)



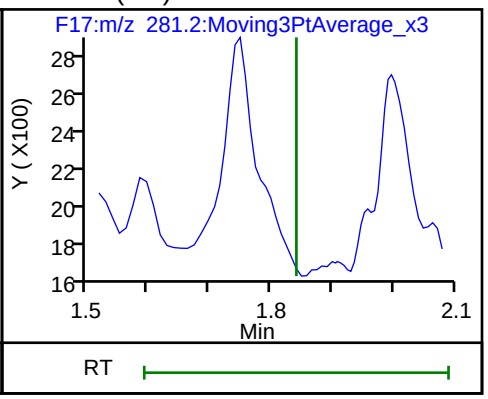
33 DNX (ND)



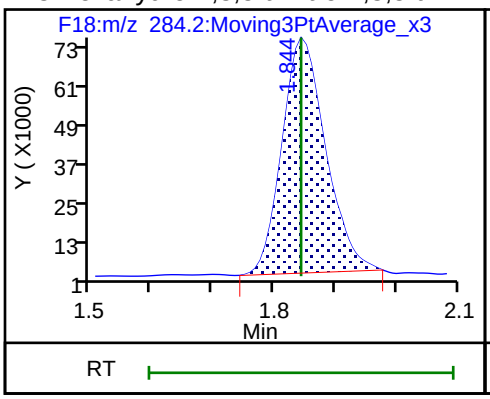
34 MNX (ND)



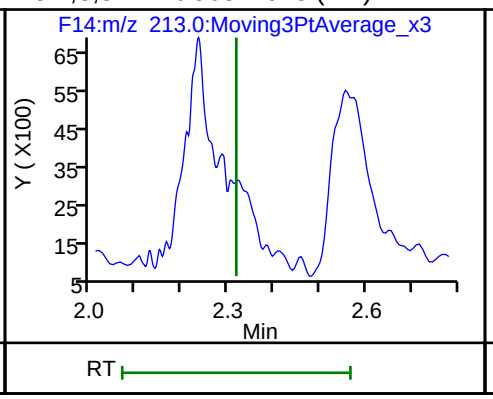
4 RDX (ND)



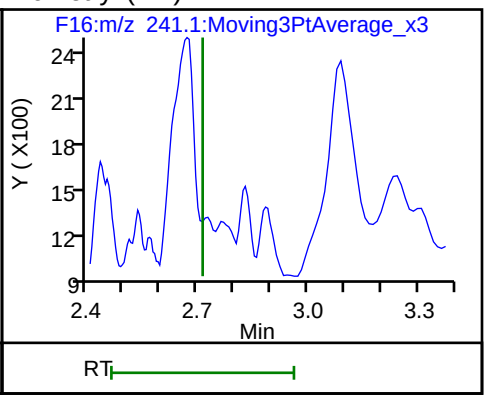
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



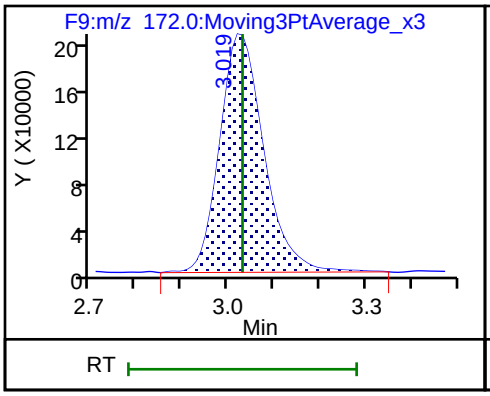
5 1,3,5-Trinitrobenzene (ND)



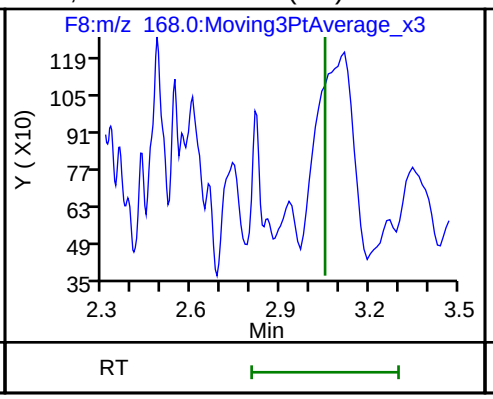
6 Tetryl (ND)



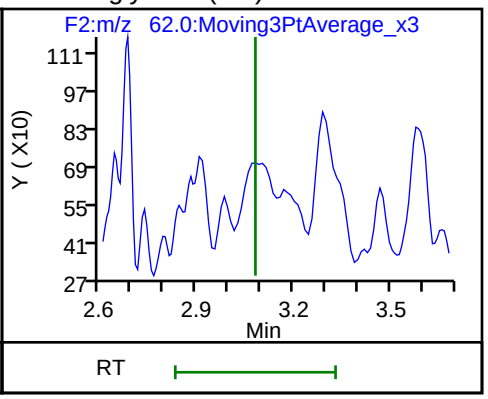
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



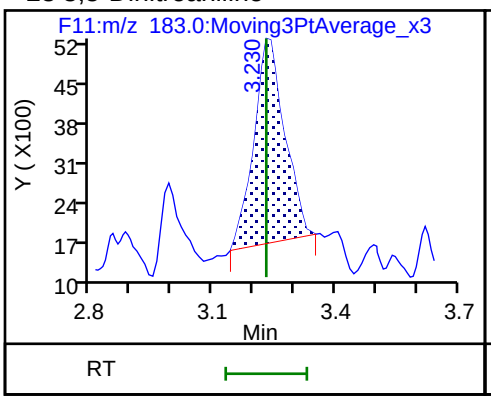
9 Nitroglycerin (ND)



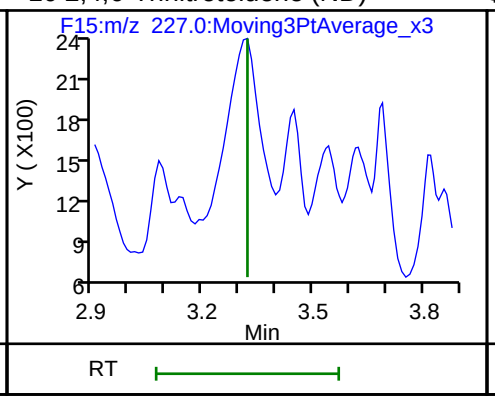
Report Date: 08-Apr-2022 07:32:43 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07044.d

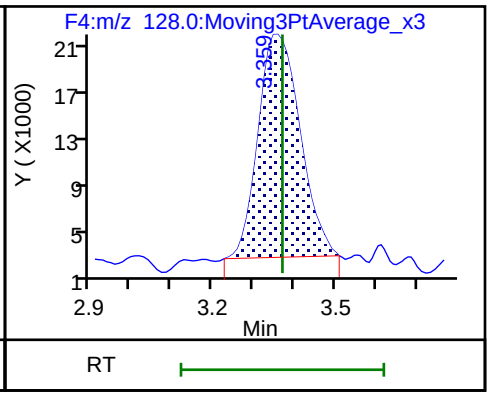
28 3,5-Dinitroaniline



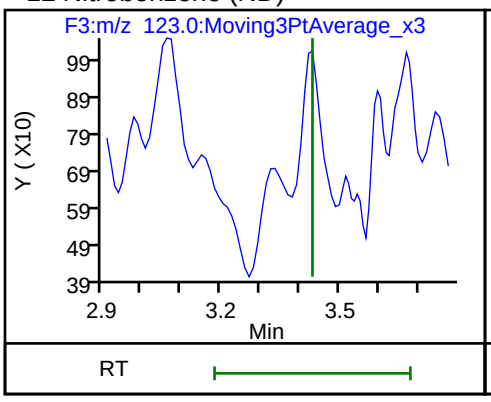
10 2,4,6-Trinitrotoluene (ND)



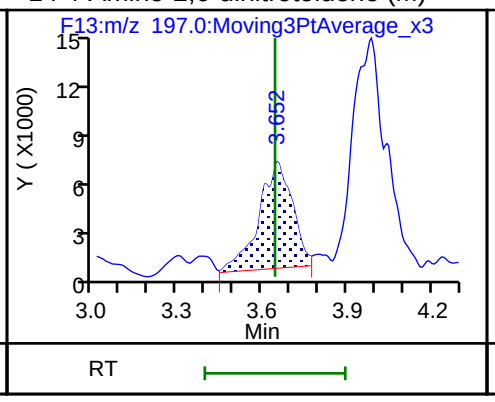
$ 11 Nitrobenzene-d5



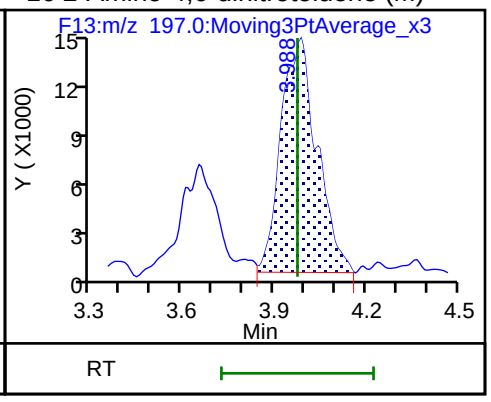
12 Nitrobenzene (ND)



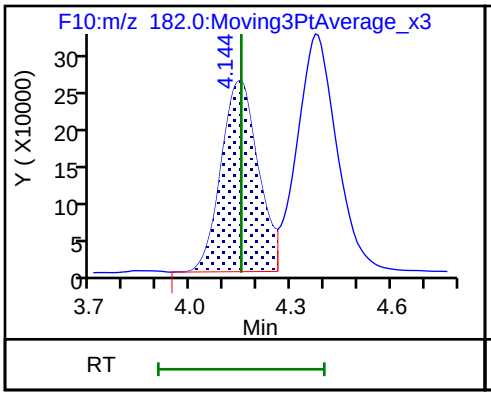
14 4-Amino-2,6-dinitrotoluene (M)



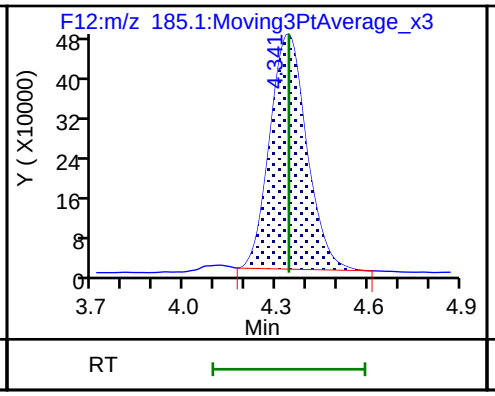
16 2-Amino-4,6-dinitrotoluene (M)



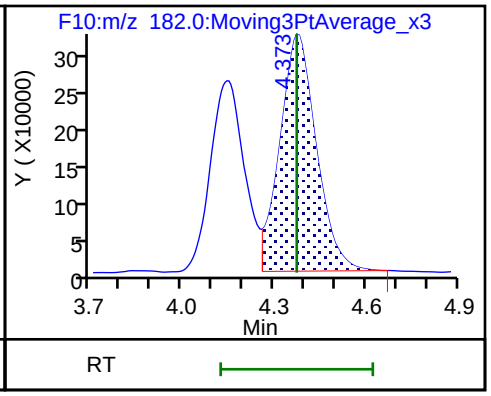
17 2,6-Dinitrotoluene



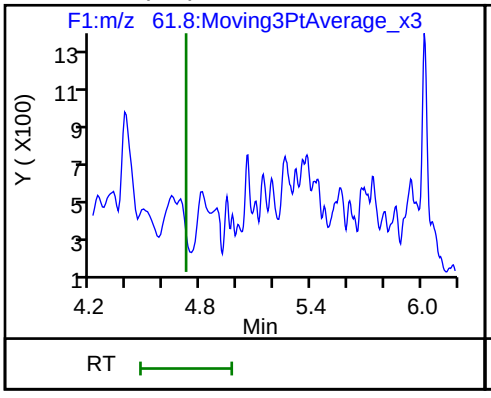
* 18 2,4-dinitrotoluene-d3



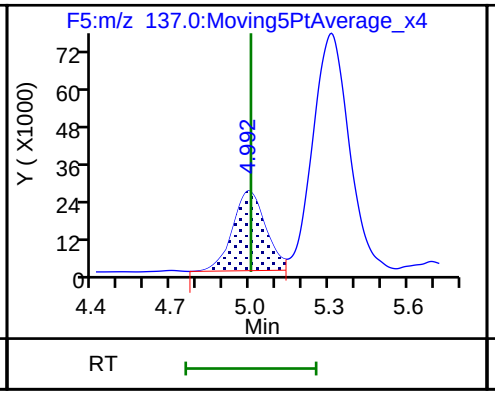
19 2,4-Dinitrotoluene



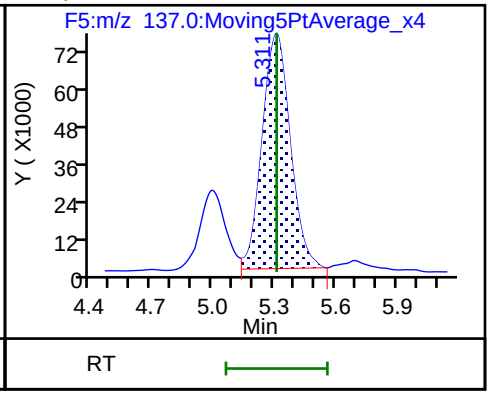
20 PETN (ND)



22 o-Nitrotoluene



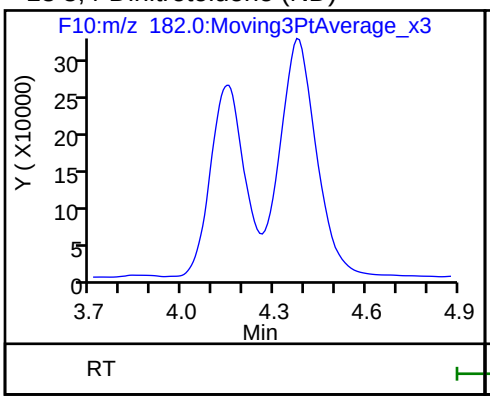
23 p-Nitrotoluene



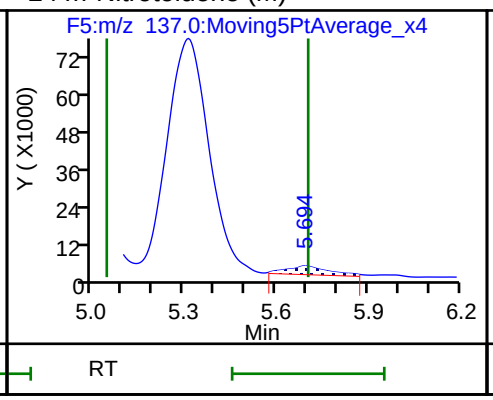
Report Date: 08-Apr-2022 07:32:43 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07044.d

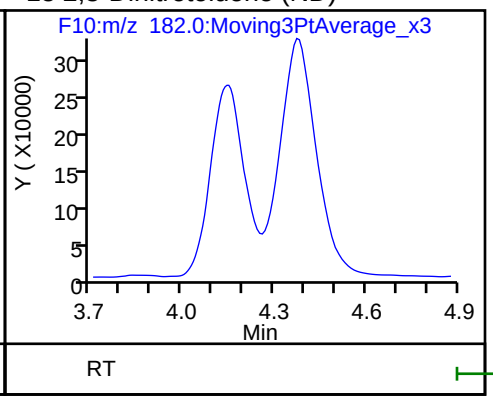
13 3,4-Dinitrotoluene (ND)



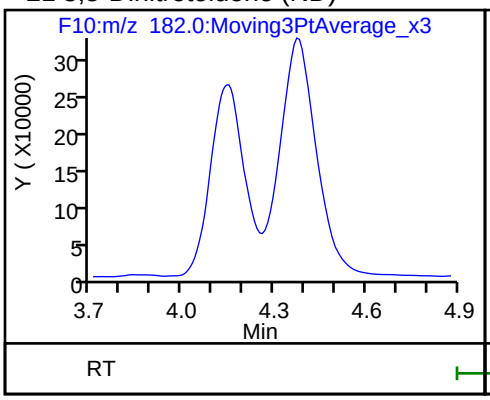
24 m-Nitrotoluene (M)



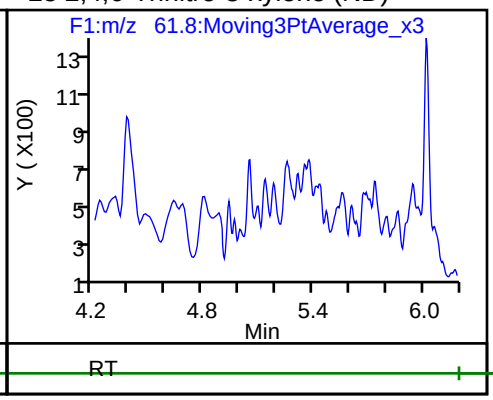
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 08-Apr-2022 07:32:43 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07044.d
Lims ID: 280-160190-A-1-B
Client ID: 29SB173 (14.5-15)
Sample Type: Client
Inject. Date: 07-Apr-2022 15:09:49 ALS Bottle#: 39 Worklist Smp#: 44
Injection Vol: 10.0 ul Dil. Factor: 5.0000
Sample Info: 280-160190-A-1-B 5x
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:42 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 08-Apr-2022 07:20:08

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	21.5	107.30

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB181 (14.5-15) | Lab Sample ID: 280-160190-2
Matrix: Solid | Lab File ID: ex722D07037.d
Analysis Method: 8321A | Date Collected: 03/24/2022 09:30
Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57
Sample wt/vol: 10.01(g) | Date Analyzed: 04/07/2022 14:23
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571108 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.050	U	0.10	0.050	0.045
99-65-0	1,3-Dinitrobenzene	0.050	U	0.10	0.050	0.045
118-96-7	2,4,6-Trinitrotoluene	0.050	U Q	0.10	0.050	0.037
606-20-2	2,6-Dinitrotoluene	0.74		0.10	0.050	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.050	U M	0.10	0.050	0.050
19406-51-0	4-Amino-2,6-dinitrotoluene	0.050	U M	0.10	0.050	0.031
2691-41-0	HMX	0.050	U M	0.10	0.050	0.046
99-08-1	m-Nitrotoluene	0.17	M	0.10	0.050	0.043
98-95-3	Nitrobenzene	0.050	U	0.11	0.050	0.038
55-63-0	Nitroglycerin	0.050	U	0.10	0.050	0.029
88-72-2	o-Nitrotoluene	0.73	M	0.10	0.050	0.043
78-11-5	PETN	0.050	U	0.10	0.050	0.034
121-82-4	RDX	0.050	U	0.12	0.050	0.043
479-45-8	Tetryl	0.050	U Q	0.10	0.050	0.039

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	89		68-140

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07037.d
Lims ID: 280-160190-A-2-B
Client ID: 29SB181 (14.5-15)
Sample Type: Client
Inject. Date: 07-Apr-2022 14:23:34 ALS Bottle#: 33 Worklist Smp#: 37
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-2-B
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:34 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 14:44:51
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		113982	125.0	169	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								M
284.2	1.844	1.844	0.0		401849	125.0	225	M
5 1,3,5-Trinitrobenzene								
213.0	2.323	2.317	0.006	0.770	143721	8.44	2.2	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.030	-0.011		1411741	129.4	436	
28 3,5-Dinitroaniline								
183.0	3.241	3.230	0.011	1.073	81732	1.33	13.7	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.774	610072	89.2	90.4	
14 4-Amino-2,6-dinitrotoluene								M
197.0	3.660	3.645	0.015	0.843	153411	2.53	8.8	M
16 2-Amino-4,6-dinitrotoluene								M
197.0	3.988	3.976	0.012	0.919	546592	7.86	30.3	M
17 2,6-Dinitrotoluene								
182.0	4.144	4.150	-0.006	0.955	12694687	186.4	102	
* 18 2,4-dinitrotoluene-d3								
185.1	4.341	4.341	0.0		4144177	125.0	106	
19 2,4-Dinitrotoluene								E
182.0	4.373	4.373	0.0	1.007	16472531	476.1	120	E
22 o-Nitrotoluene								M
137.0	4.992	5.002	-0.010	1.150	1908921	183.0	373	M
23 p-Nitrotoluene								EM
137.0	5.306	5.311	-0.005	1.222	4096799	455.0	777	EM
24 m-Nitrotoluene								M
137.0	5.699	5.704	-0.005	1.313	233673	42.7	40.6	M

Report Date: 08-Apr-2022 07:32:38 Chrom Revision: 2.3 18-Mar-2022 09:07:22

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

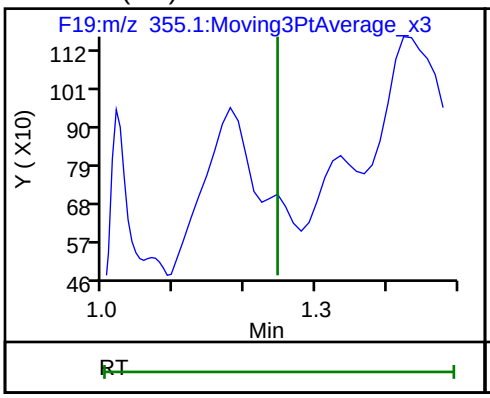
Report Date: 08-Apr-2022 07:32:38 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

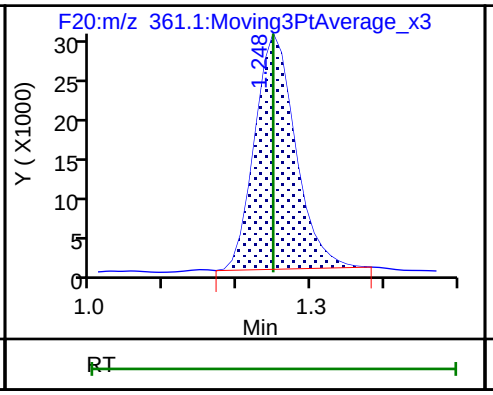
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07037.d

Injection Date:	07-Apr-2022 14:23:34	Instrument ID:	LC_LCMS7
Lims ID:	280-160190-A-2-B	Lab Sample ID:	280-160190-2
Client ID:	29SB181 (14.5-15)		
Operator ID:	acm	ALS Bottle#:	33 Worklist Smp#: 37
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl

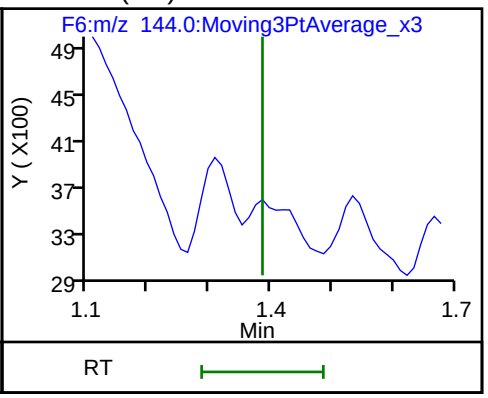
2 HMX (ND)



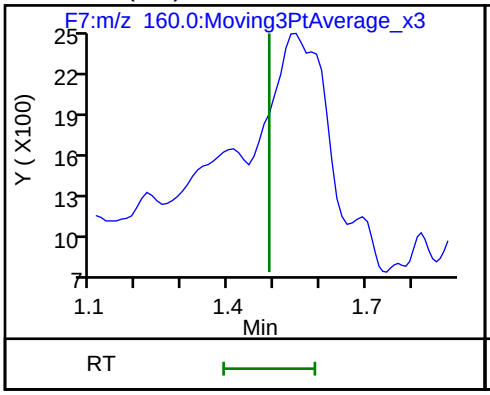
* 1 HMX-13C4



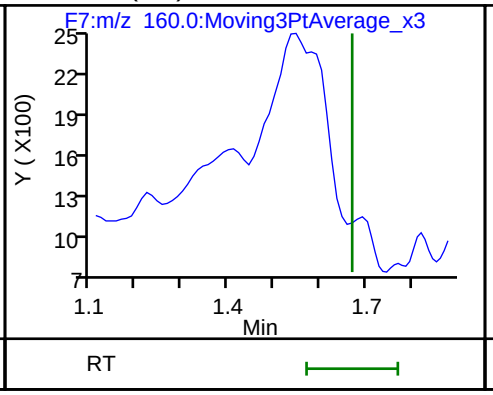
36 TNX (ND)



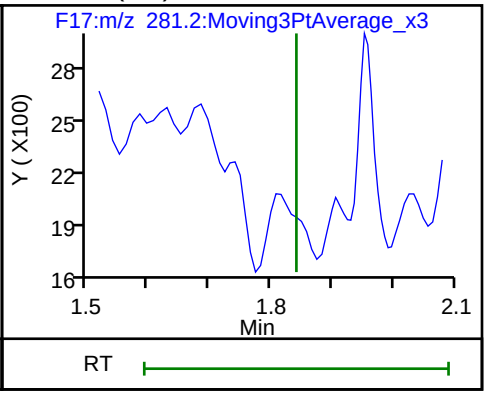
33 DNX (ND)



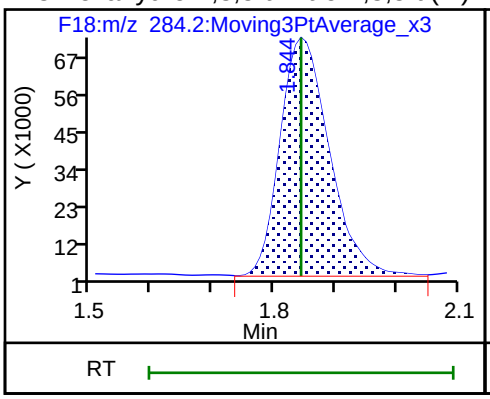
34 MNX (ND)



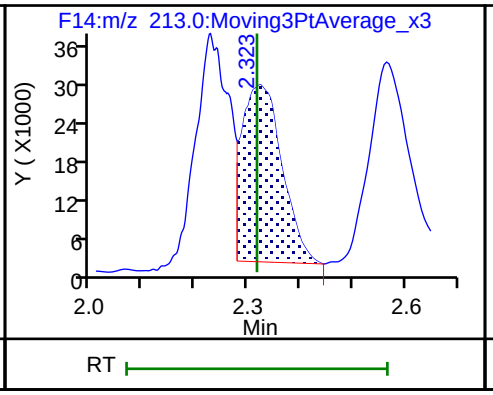
4 RDX (ND)



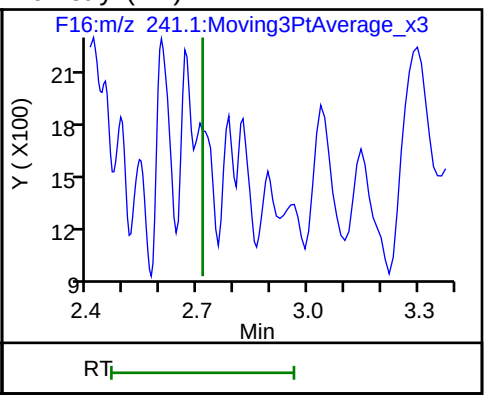
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t (M)



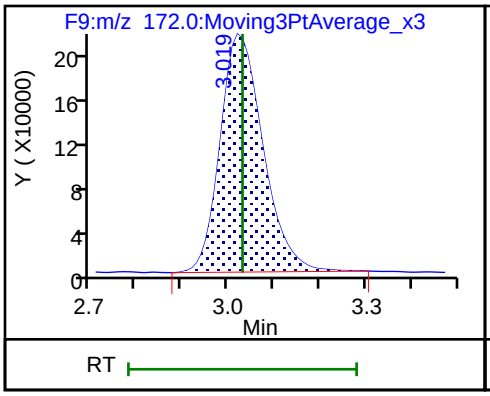
5 1,3,5-Trinitrobenzene



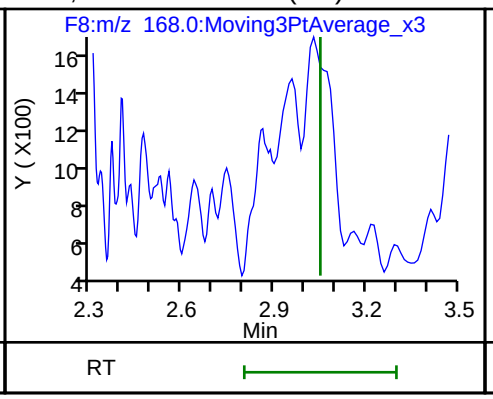
6 Tetryl (ND)



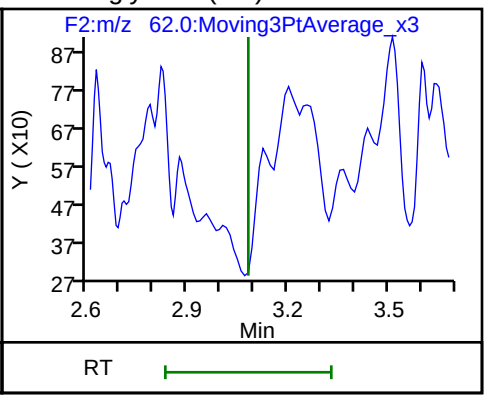
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

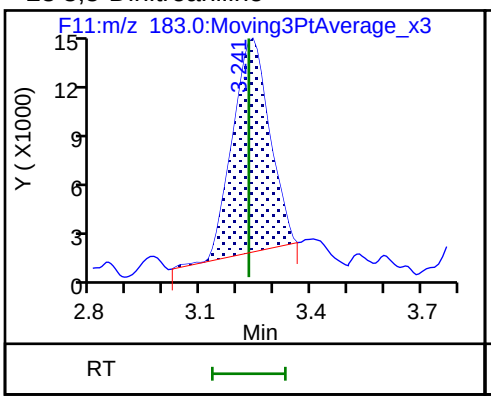


9 Nitroglycerin (ND)

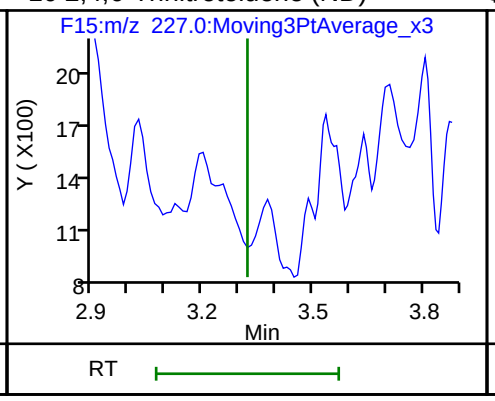


Report Date: 08-Apr-2022 07:32:38 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07037.d

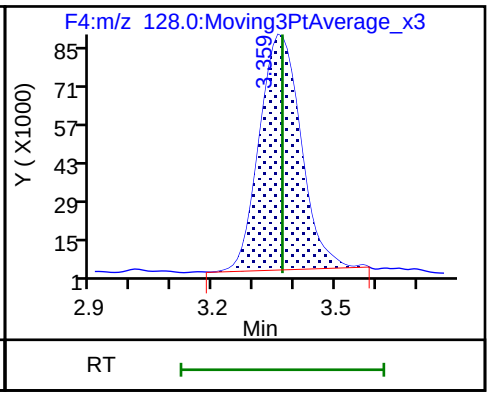
28 3,5-Dinitroaniline



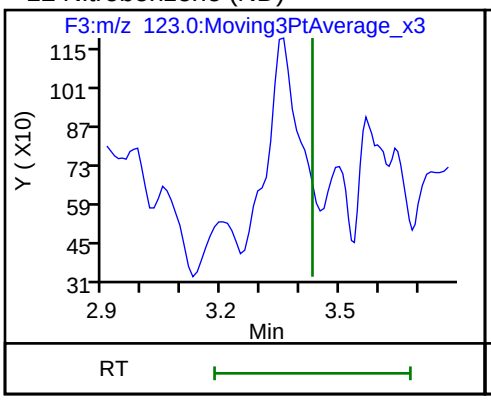
10 2,4,6-Trinitrotoluene (ND)



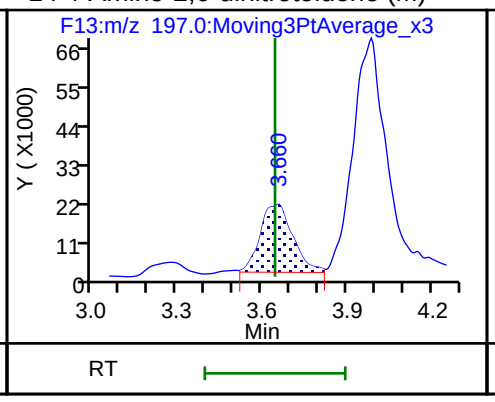
$ 11 Nitrobenzene-d5



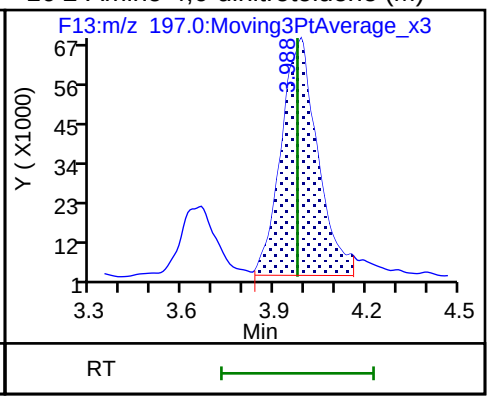
12 Nitrobenzene (ND)



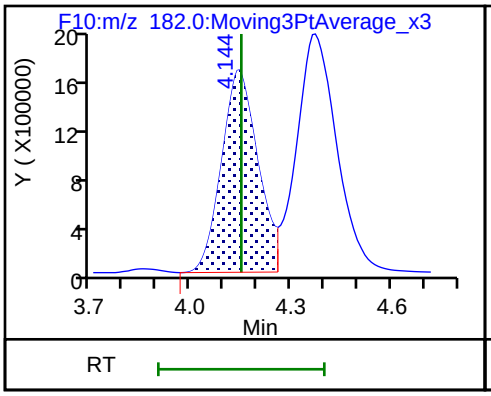
14 4-Amino-2,6-dinitrotoluene (M)



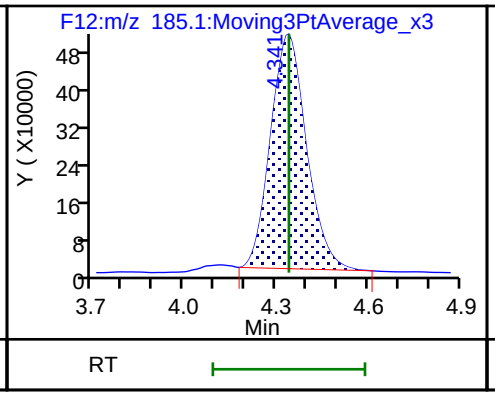
16 2-Amino-4,6-dinitrotoluene (M)



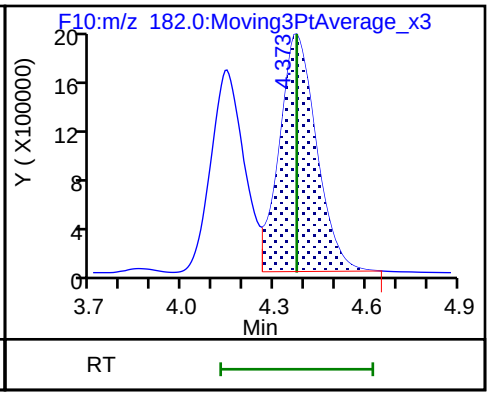
17 2,6-Dinitrotoluene



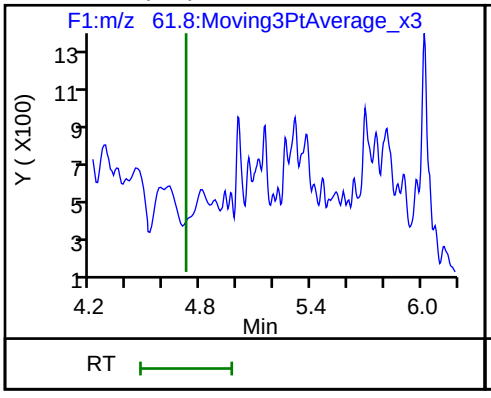
* 18 2,4-dinitrotoluene-d3



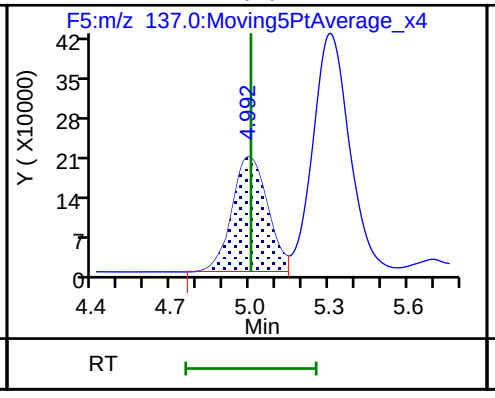
19 2,4-Dinitrotoluene



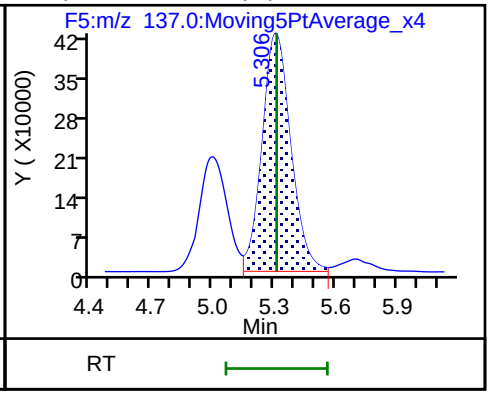
20 PETN (ND)



22 o-Nitrotoluene (M)



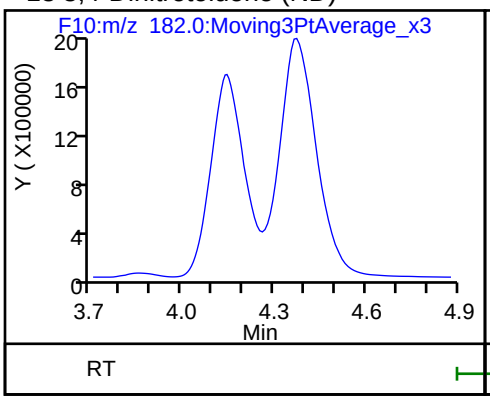
23 p-Nitrotoluene (M)



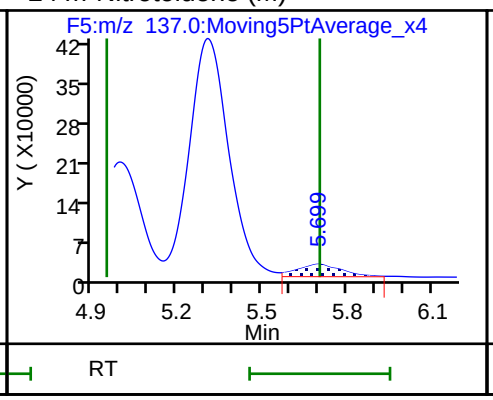
Report Date: 08-Apr-2022 07:32:38 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07037.d

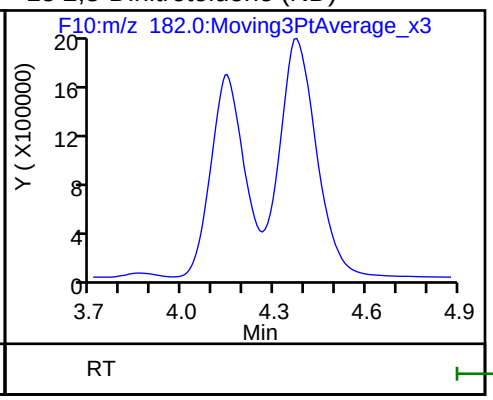
13 3,4-Dinitrotoluene (ND)



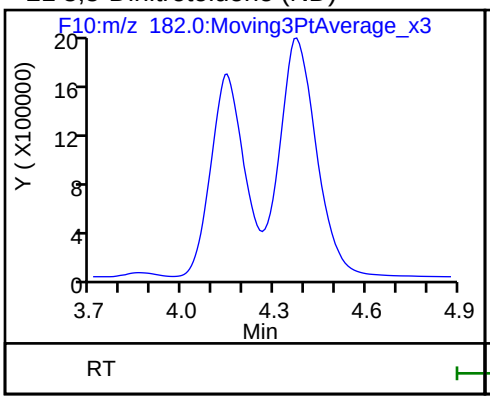
24 m-Nitrotoluene (M)



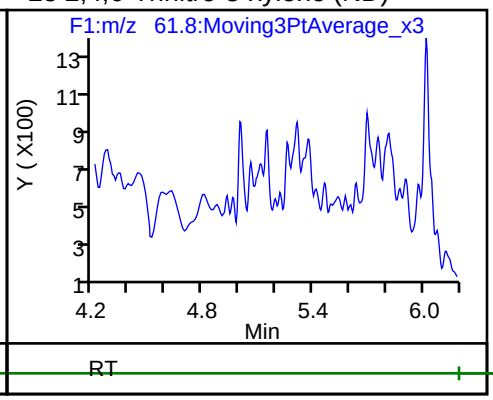
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 08-Apr-2022 07:32:38 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07037.d
Lims ID: 280-160190-A-2-B
Client ID: 29SB181 (14.5-15)
Sample Type: Client
Inject. Date: 07-Apr-2022 14:23:34 ALS Bottle#: 33 Worklist Smp#: 37
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-2-B
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:34 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 14:44:51

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	89.2	88.87

Report Date: 08-Apr-2022 07:32:38 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07037.d

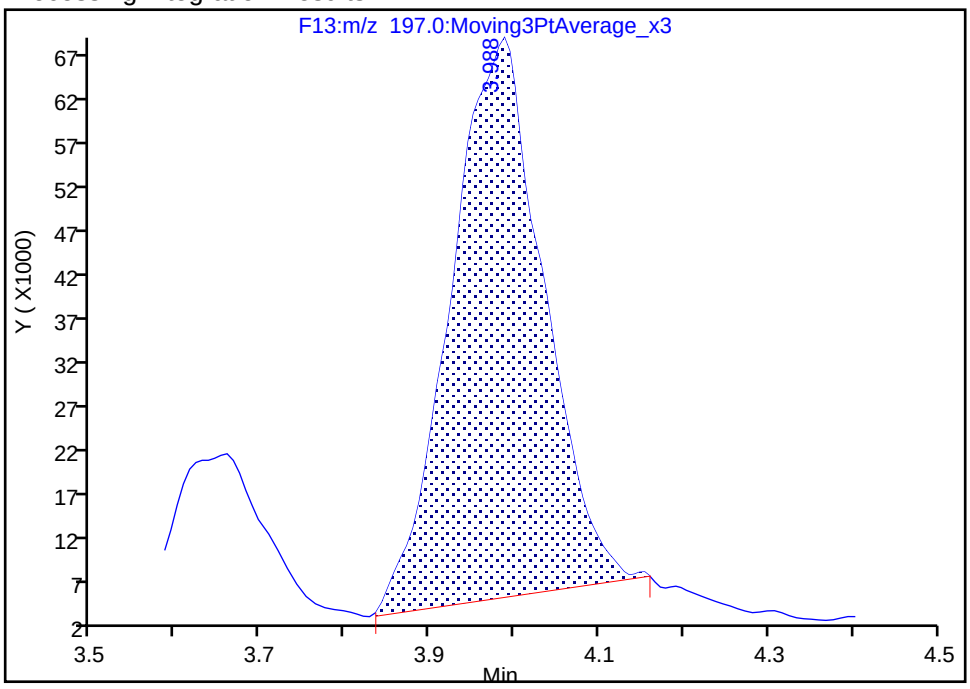
Injection Date:	07-Apr-2022 14:23:34	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-2-B	Lab Sample ID:	280-160190-2		
Client ID:	29SB181 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	33	Worklist Smp#:	37
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

16 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

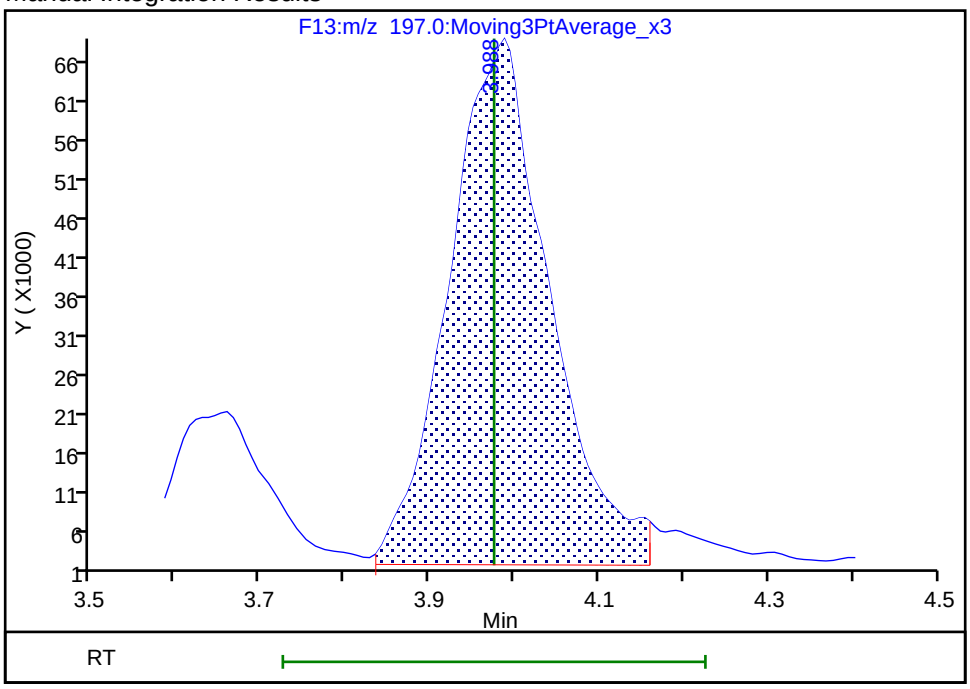
Processing Integration Results

RT: 3.99
Area: 483954
Amount: 6.908802
Amount Units: ug/l



Manual Integration Results

RT: 3.99
Area: 546592
Amount: 7.855018
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 14:44:21

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 08-Apr-2022 07:32:38 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

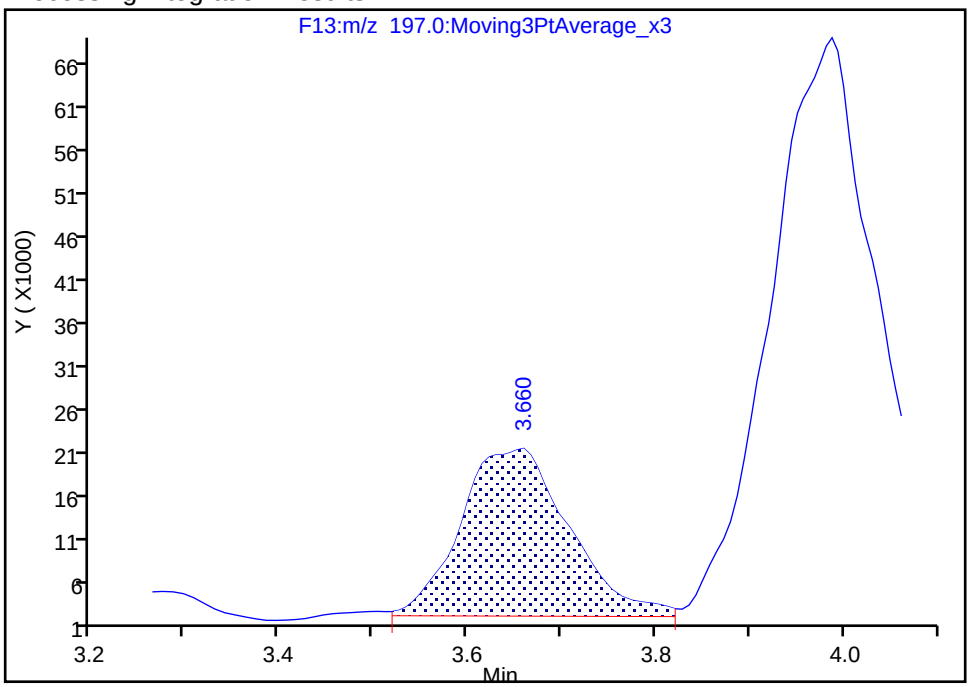
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07037.d				
Injection Date:	07-Apr-2022 14:23:34	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-2-B	Lab Sample ID:	280-160190-2		
Client ID:	29SB181 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	33	Worklist Smp#:	37
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

14 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

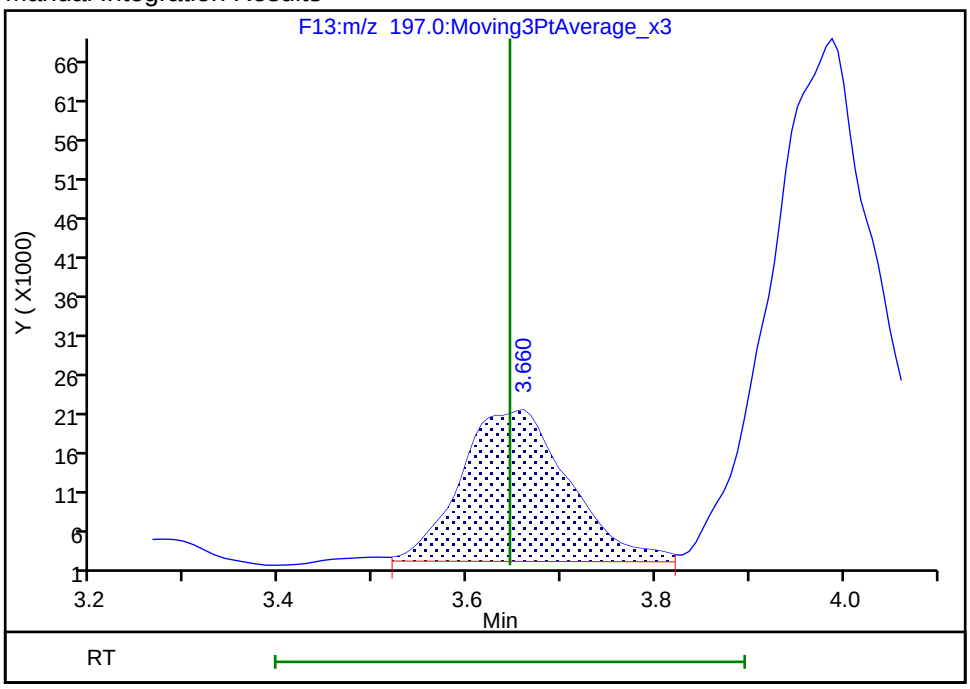
Processing Integration Results

RT: 3.66
Area: 141011
Amount: 2.287933
Amount Units: ug/l



Manual Integration Results

RT: 3.66
Area: 153411
Amount: 2.530494
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 14:44:21

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 08-Apr-2022 07:32:38 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

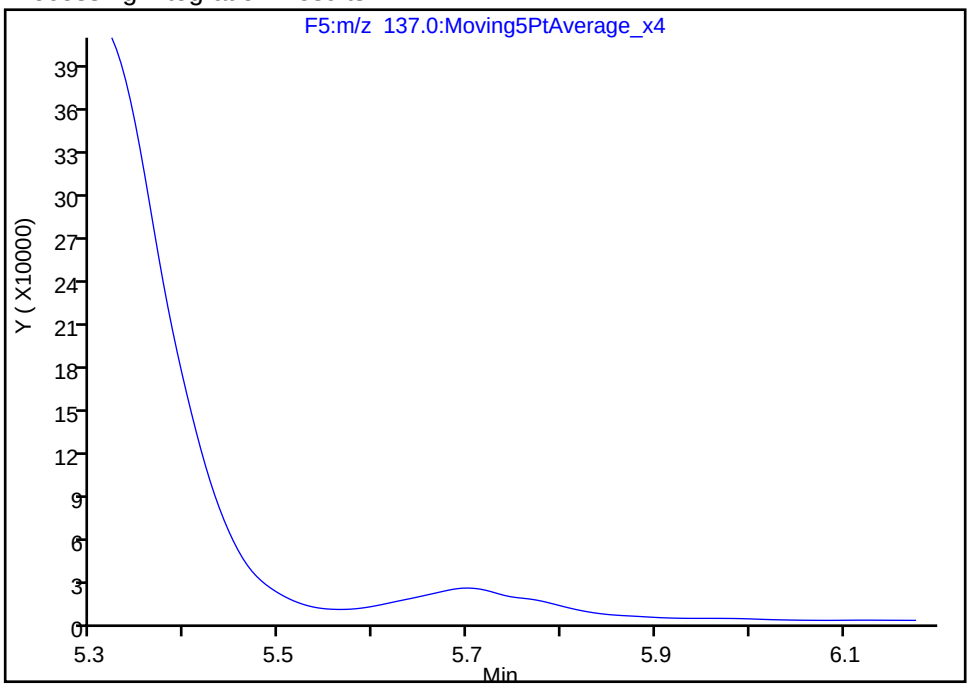
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07037.d				
Injection Date:	07-Apr-2022 14:23:34	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-2-B	Lab Sample ID:	280-160190-2		
Client ID:	29SB181 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	33	Worklist Smp#:	37
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F5:SIR		

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

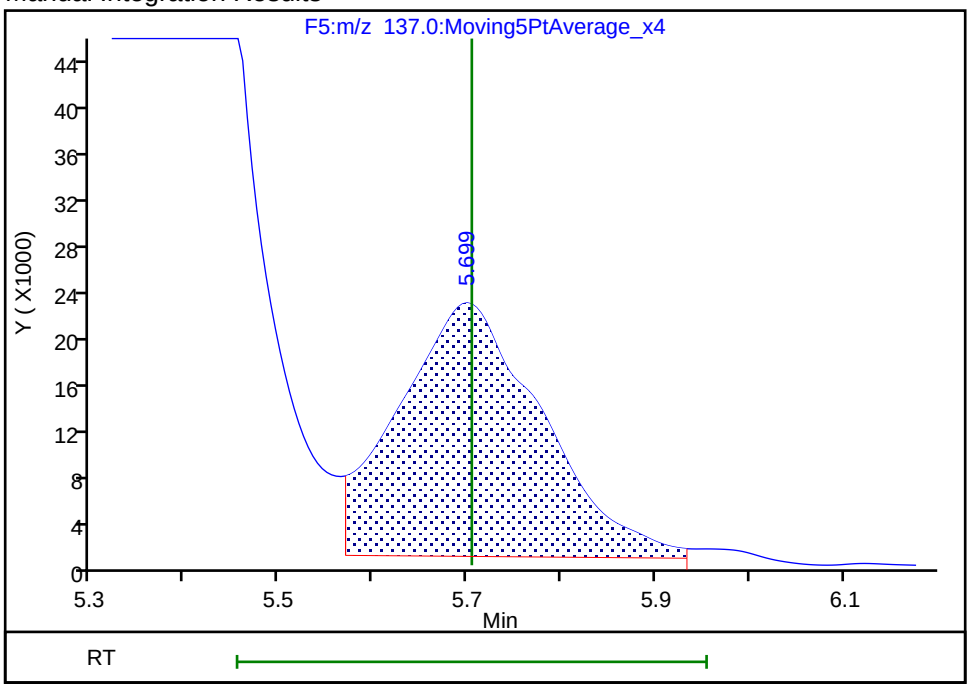
Not Detected
Expected RT: 5.70

Processing Integration Results



Manual Integration Results

RT: 5.70
Area: 233673
Amount: 42.694675
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 14:44:10
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 08-Apr-2022 07:32:38 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

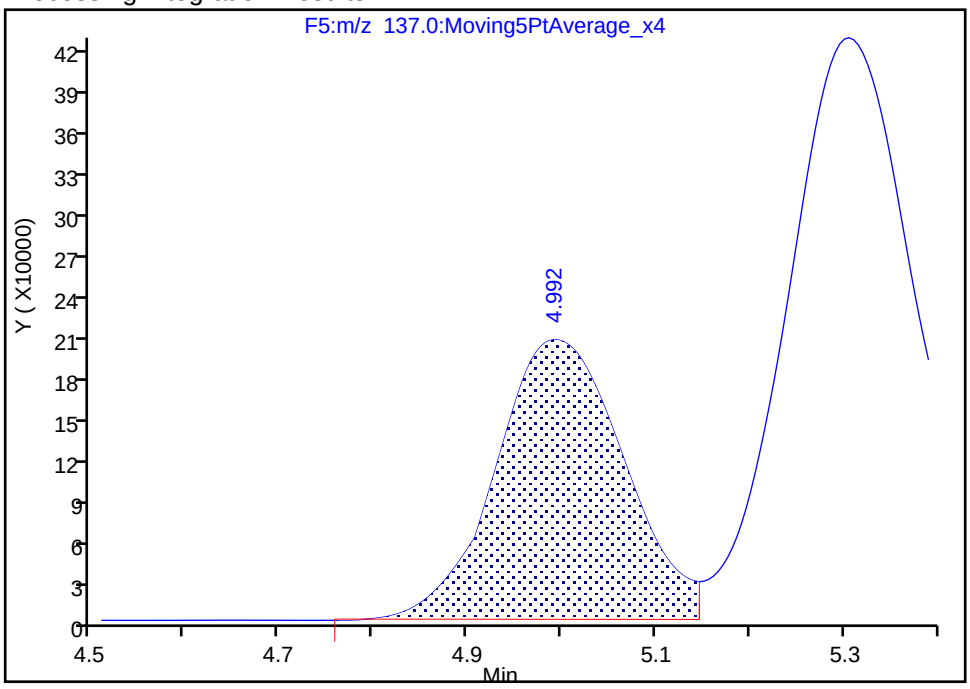
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07037.d		
Injection Date:	07-Apr-2022 14:23:34	Instrument ID:	LC_LCMS7
Lims ID:	280-160190-A-2-B	Lab Sample ID:	280-160190-2
Client ID:	29SB181 (14.5-15)		
Operator ID:	acm	ALS Bottle#:	33 Worklist Smp#: 37
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F5:SIR

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

Signal: 1

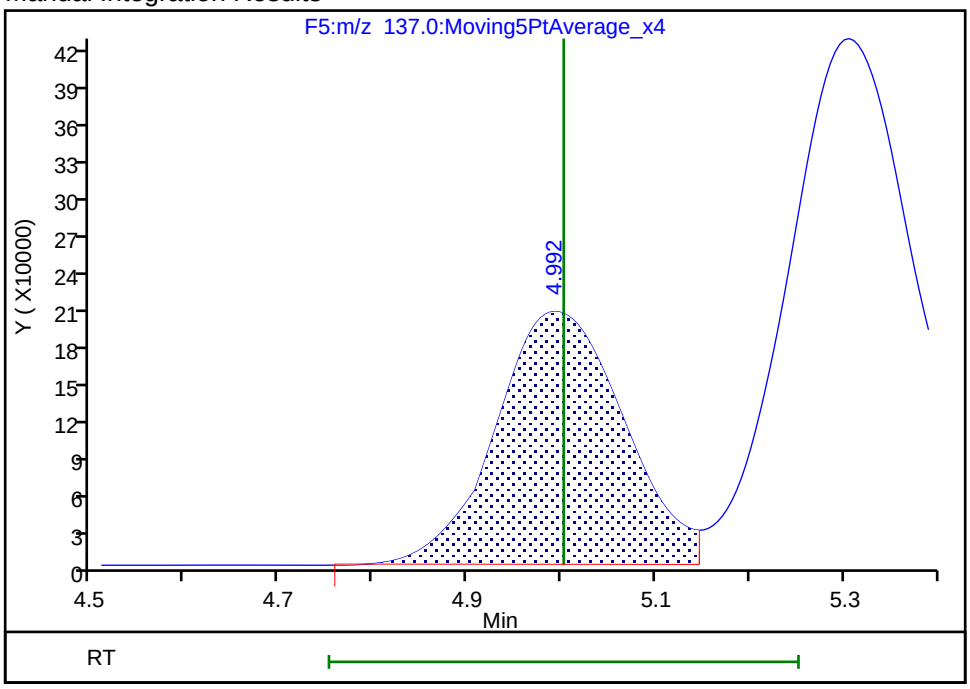
Processing Integration Results

RT: 4.99
Area: 1885825
Amount: 180.7568
Amount Units: ug/l



Manual Integration Results

RT: 4.99
Area: 1908921
Amount: 182.9748
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 14:44:10

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 08-Apr-2022 07:32:38 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07037.d

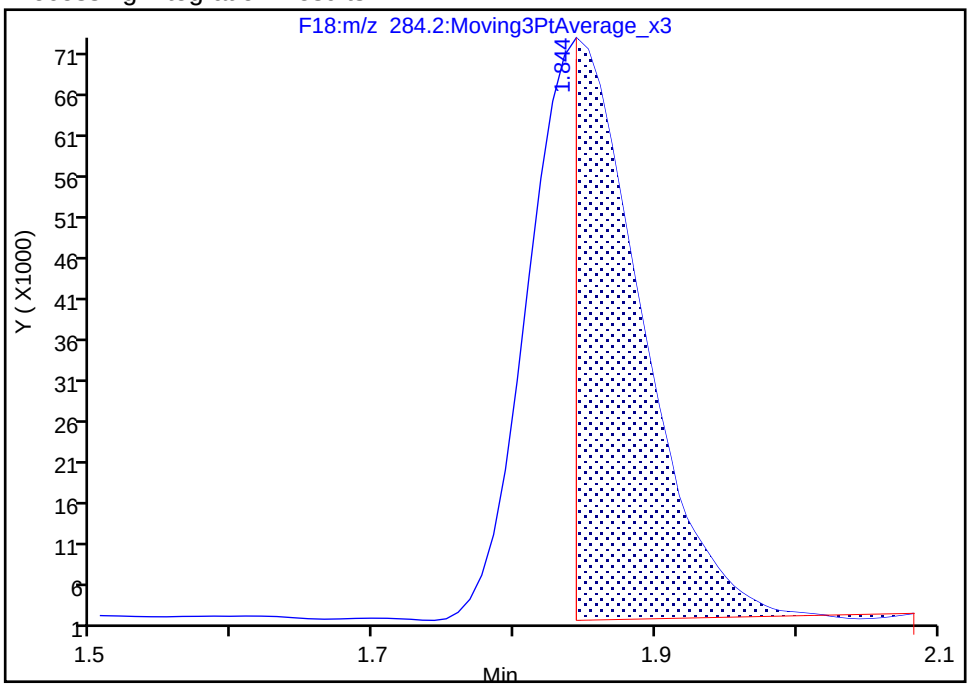
Injection Date:	07-Apr-2022 14:23:34	Instrument ID:	LC_LCMS7
Lims ID:	280-160190-A-2-B	Lab Sample ID:	280-160190-2
Client ID:	29SB181 (14.5-15)		
Operator ID:	acm	ALS Bottle#:	33 Worklist Smp#: 37
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F18:SIR

* 3 Hexahydro-1,3,5-trinitro-1,3,5-t, CAS: STL00205

Signal: 1

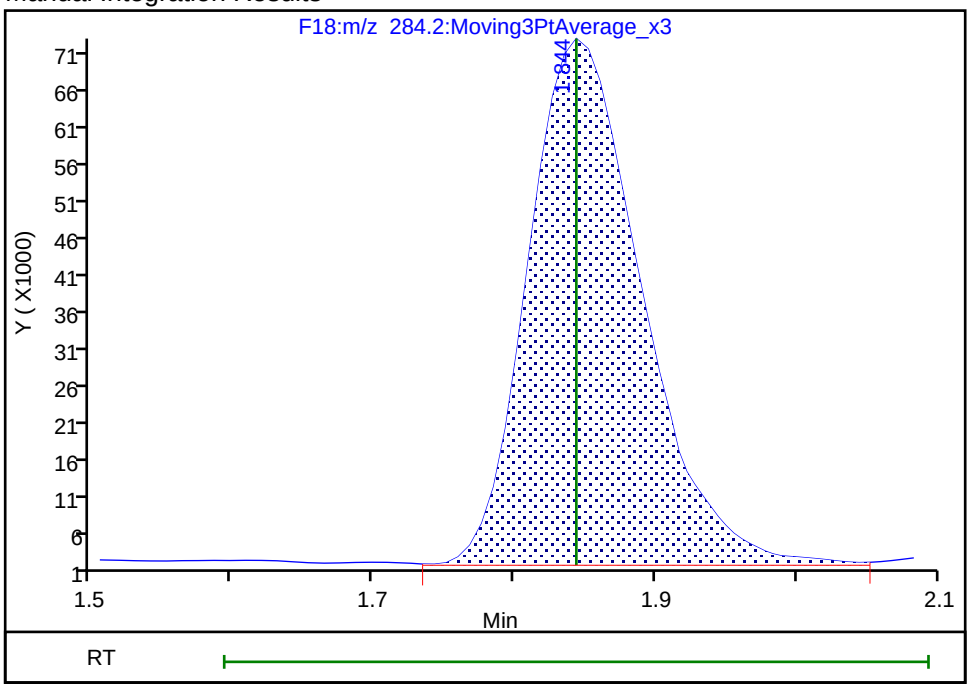
Processing Integration Results

RT: 1.84
Area: 226254
Amount: 125.0000
Amount Units: ug/l



Manual Integration Results

RT: 1.84
Area: 401849
Amount: 125.0000
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 14:44:32

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1

SDG No.:

Client Sample ID: 29SB181 (14.5-15) DL | Lab Sample ID: 280-160190-2 DL

Matrix: Solid | Lab File ID: ex722D07045.d

Analysis Method: 8321A | Date Collected: 03/24/2022 09:30

Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57

Sample wt/vol: 10.01(g) | Date Analyzed: 04/07/2022 15:17

Con. Extract Vol.: 40(mL) | Dilution Factor: 5

Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:

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

Analysis Batch No.: 571108 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
121-14-2	2,4-Dinitrotoluene	1.9	D	0.50	0.25	0.23
99-99-0	p-Nitrotoluene	1.8	D M	0.50	0.25	0.25

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	113	D	68-140

Report Date: 08-Apr-2022 07:32:44 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07045.d
Lims ID: 280-160190-A-2-B
Client ID: 29SB181 (14.5-15)
Sample Type: Client
Inject. Date: 07-Apr-2022 15:17:57 ALS Bottle#: 40 Worklist Smp#: 45
Injection Vol: 10.0 ul Dil. Factor: 5.0000
Sample Info: 280-160190-A-2-B 5x
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:42 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 08-Apr-2022 07:21:37
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		124984	125.0	173	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		378175	125.0	113	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.030	-0.011		1316770	129.4	337	
28 3,5-Dinitroaniline								
183.0	3.241	3.230	0.011	1.073	16887	0.002909	6.1	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.775	136305	22.7	25.5	
14 4-Amino-2,6-dinitrotoluene								M
197.0	3.645	3.645	0.0	0.841	34923	0.2160	5.7	M
16 2-Amino-4,6-dinitrotoluene								M
197.0	3.994	3.976	0.018	0.922	114837	1.34	18.4	M
17 2,6-Dinitrotoluene								
182.0	4.150	4.150	0.0	0.958	2617984	38.3	112	
* 18 2,4-dinitrotoluene-d3								
185.1	4.332	4.341	-0.009		4124316	125.0	106	
19 2,4-Dinitrotoluene								
182.0	4.382	4.373	0.009	1.011	3323726	96.0	129	
22 o-Nitrotoluene								M
137.0	4.997	5.002	-0.005	1.153	387627	37.1	87.5	M
23 p-Nitrotoluene								M
137.0	5.306	5.311	-0.005	1.225	826396	91.8	174	M
24 m-Nitrotoluene								M
137.0	5.680	5.704	-0.024	1.311	40438	7.12	7.8	M

Report Date: 08-Apr-2022 07:32:44 Chrom Revision: 2.3 18-Mar-2022 09:07:22

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

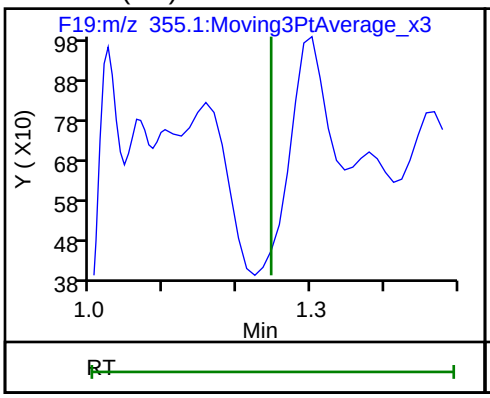
Report Date: 08-Apr-2022 07:32:44 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

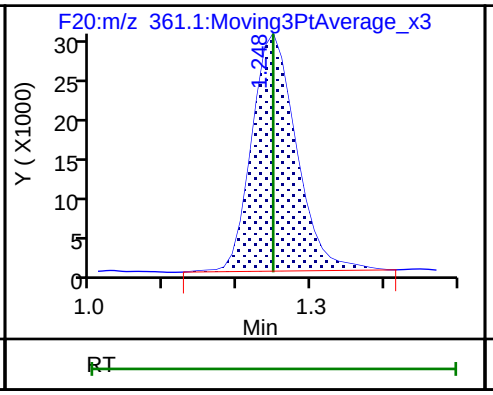
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07045.d

Injection Date:	07-Apr-2022 15:17:57	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-2-B	Lab Sample ID:	280-160190-2		
Client ID:	29SB181 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	40	Worklist Smp#:	45
Injection Vol:	10.0 ul	Dil. Factor:	5.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		

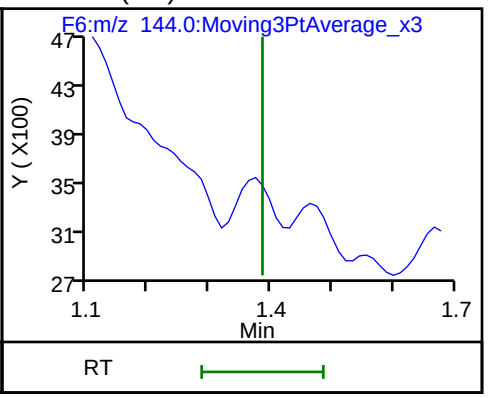
2 HMX (ND)



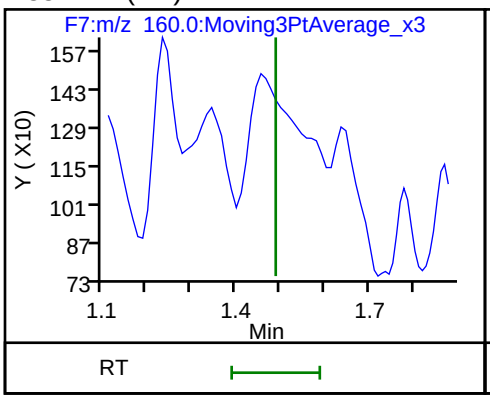
* 1 HMX-13C4



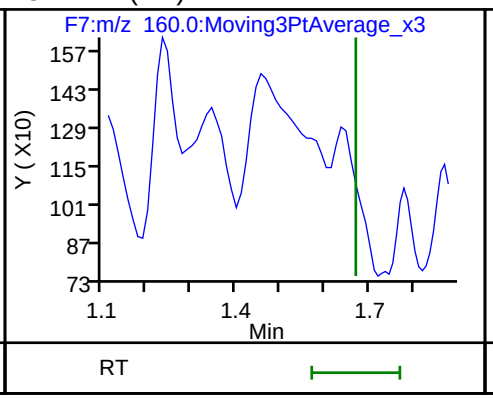
36 TNX (ND)



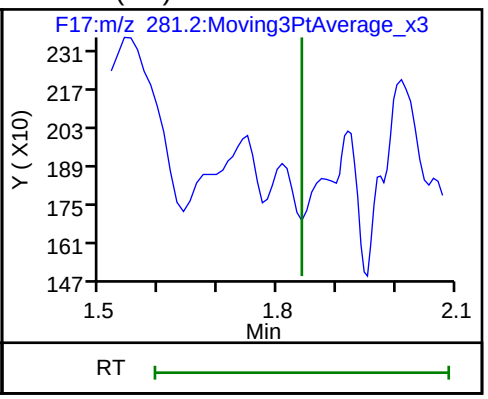
33 DNX (ND)



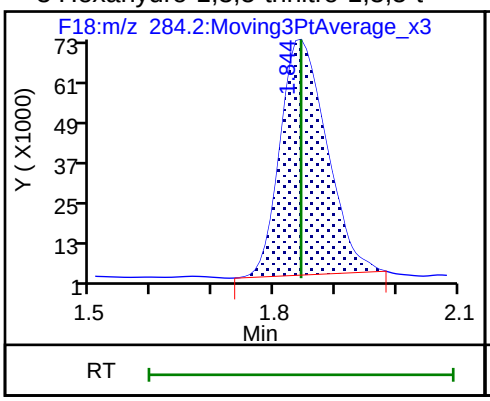
34 MNX (ND)



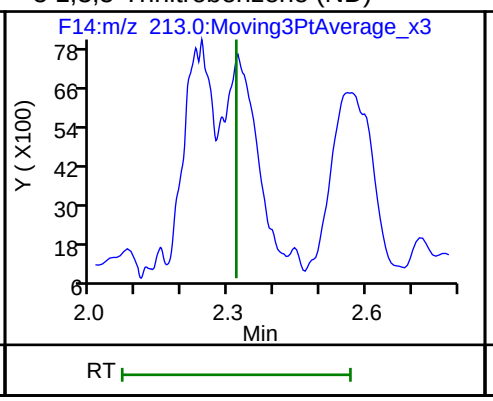
4 RDX (ND)



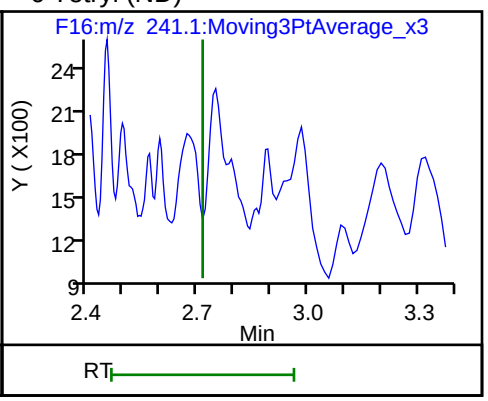
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



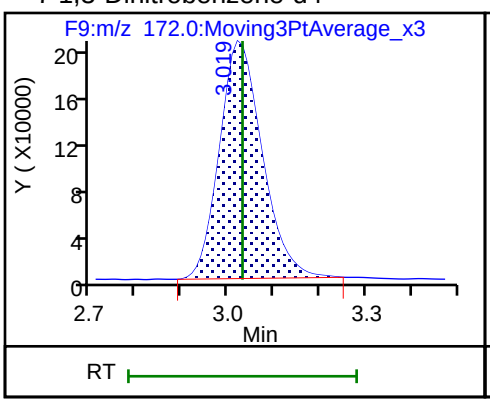
5 1,3,5-Trinitrobenzene (ND)



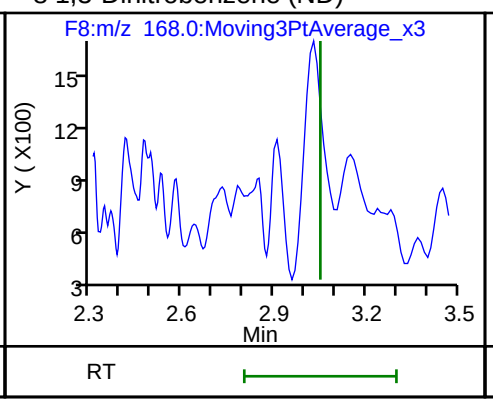
6 Tetryl (ND)



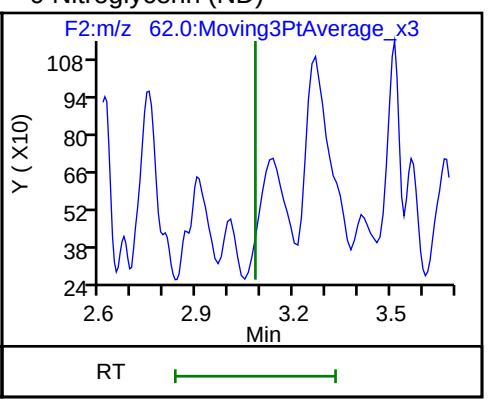
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



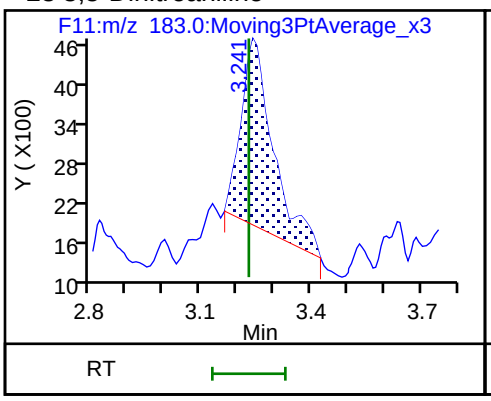
9 Nitroglycerin (ND)



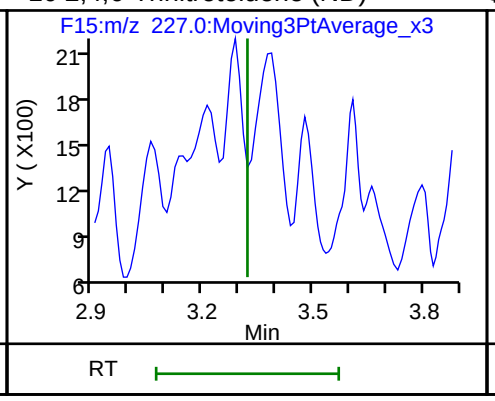
Report Date: 08-Apr-2022 07:32:44 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07045.d

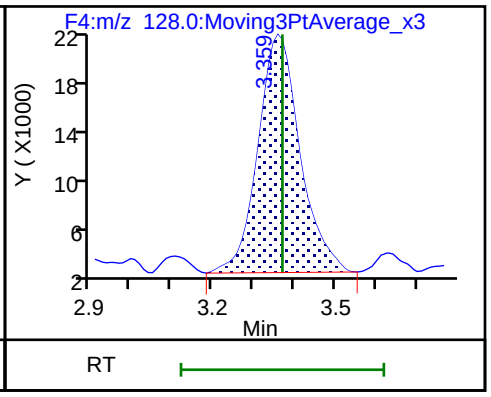
28 3,5-Dinitroaniline



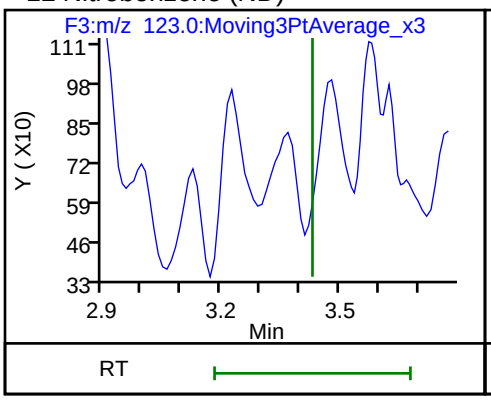
10 2,4,6-Trinitrotoluene (ND)



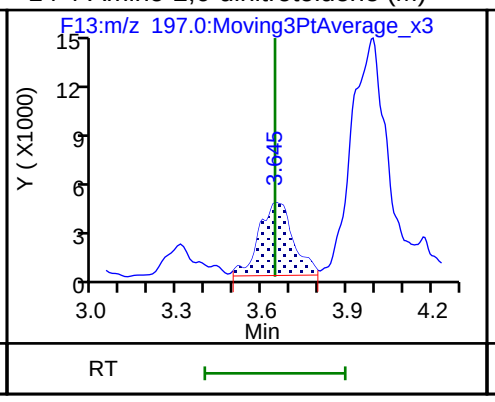
$ 11 Nitrobenzene-d5



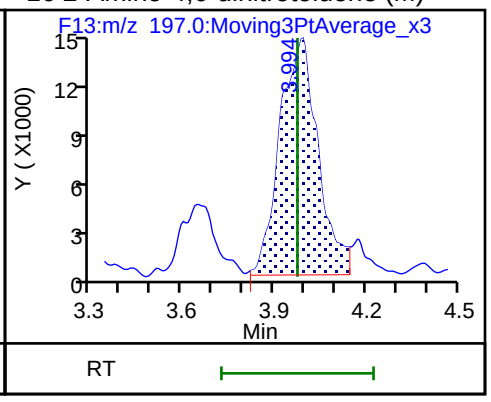
12 Nitrobenzene (ND)



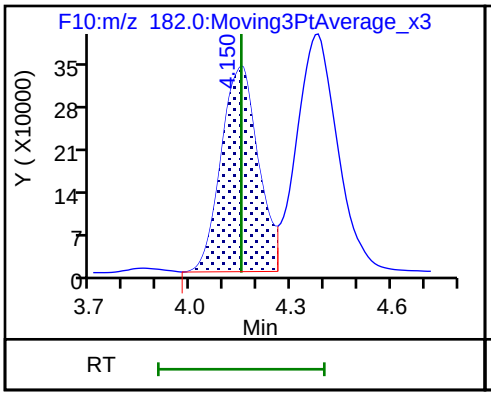
14 4-Amino-2,6-dinitrotoluene (M)



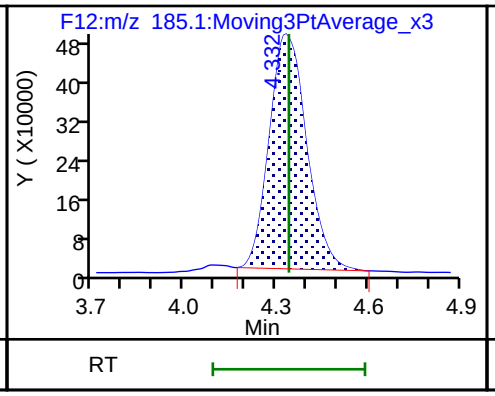
16 2-Amino-4,6-dinitrotoluene (M)



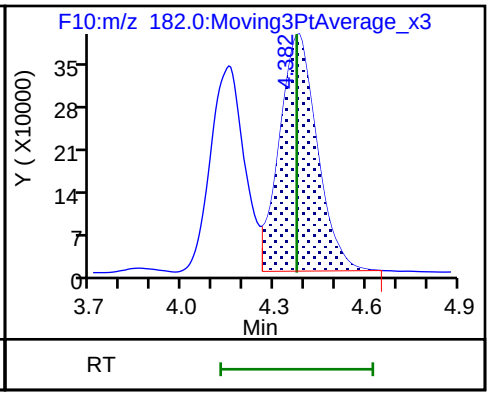
17 2,6-Dinitrotoluene



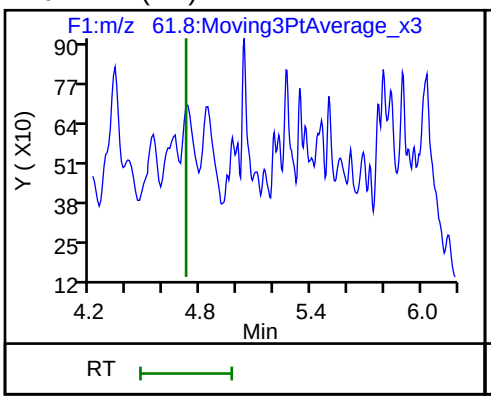
* 18 2,4-dinitrotoluene-d3



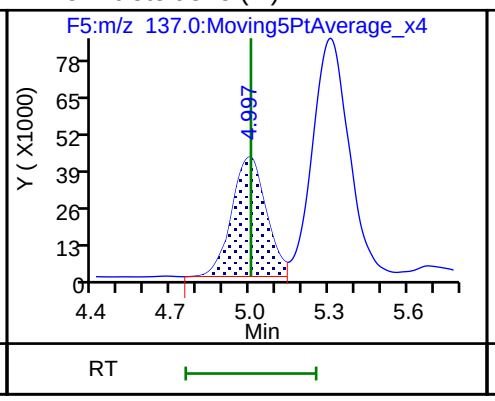
19 2,4-Dinitrotoluene



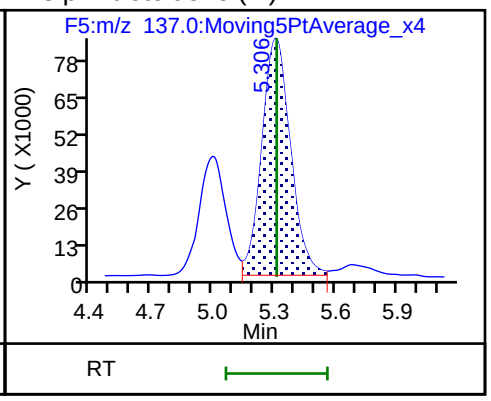
20 PETN (ND)



22 o-Nitrotoluene (M)



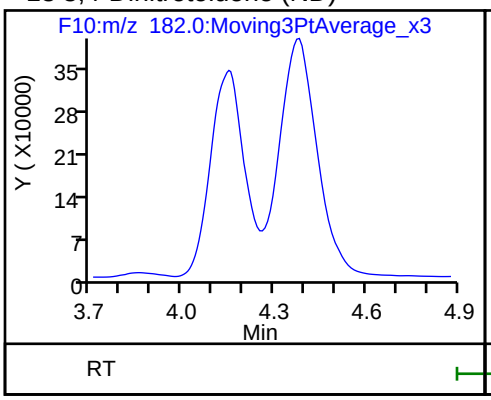
23 p-Nitrotoluene (M)



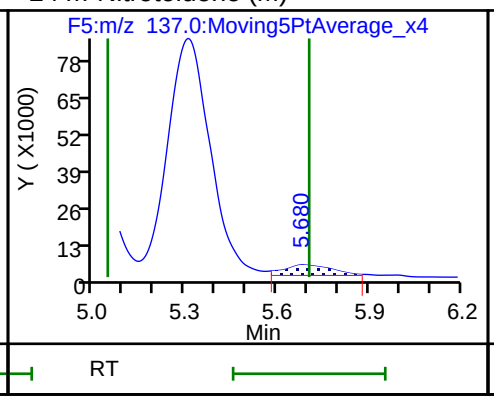
Report Date: 08-Apr-2022 07:32:44 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07045.d

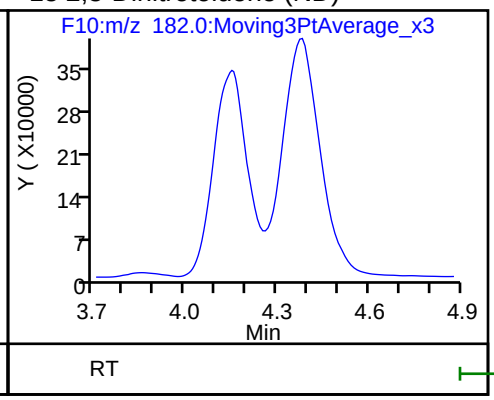
13 3,4-Dinitrotoluene (ND)



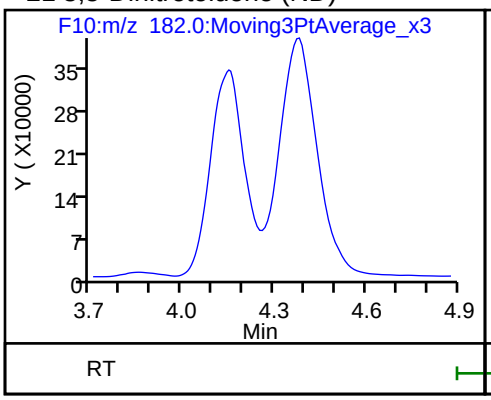
24 m-Nitrotoluene (M)



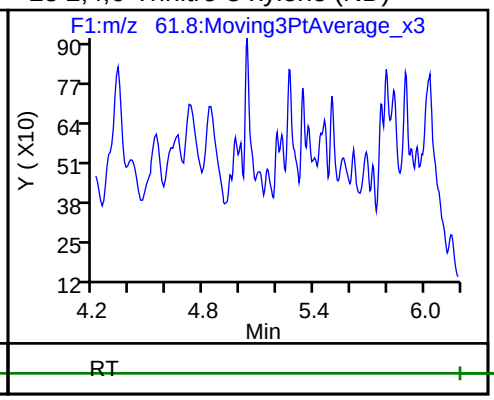
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 08-Apr-2022 07:32:44 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07045.d
Lims ID: 280-160190-A-2-B
Client ID: 29SB181 (14.5-15)
Sample Type: Client
Inject. Date: 07-Apr-2022 15:17:57 ALS Bottle#: 40 Worklist Smp#: 45
Injection Vol: 10.0 ul Dil. Factor: 5.0000
Sample Info: 280-160190-A-2-B 5x
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:42 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 08-Apr-2022 07:21:37

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	22.7	112.94

Report Date: 08-Apr-2022 07:32:44 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

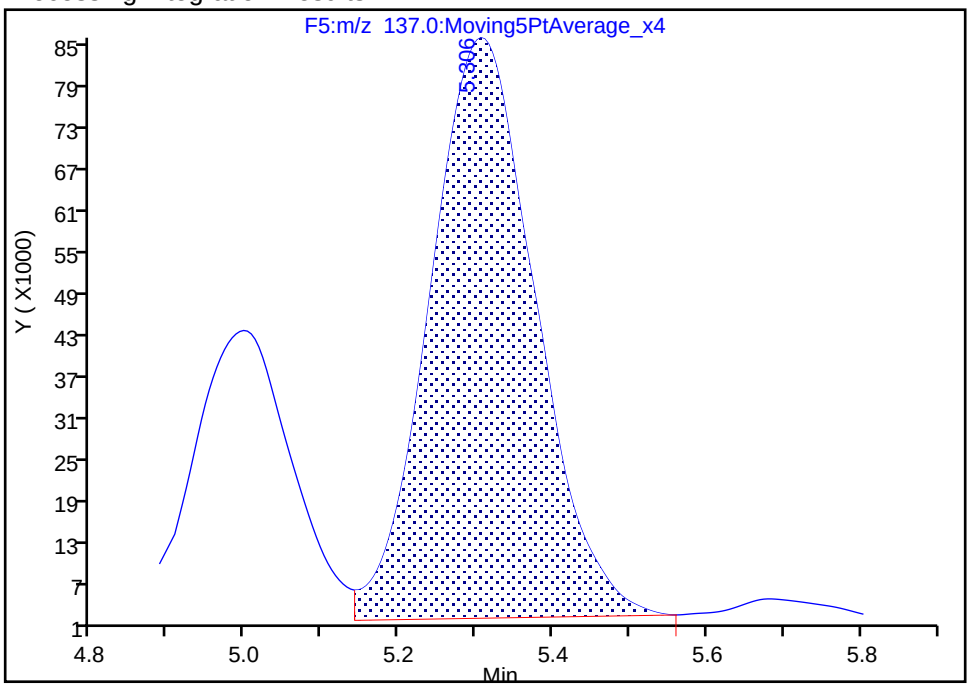
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07045.d				
Injection Date:	07-Apr-2022 15:17:57	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-2-B	Lab Sample ID:	280-160190-2		
Client ID:	29SB181 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	40	Worklist Smp#:	45
Injection Vol:	10.0 ul	Dil. Factor:	5.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F5:SIR		

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

Signal: 1

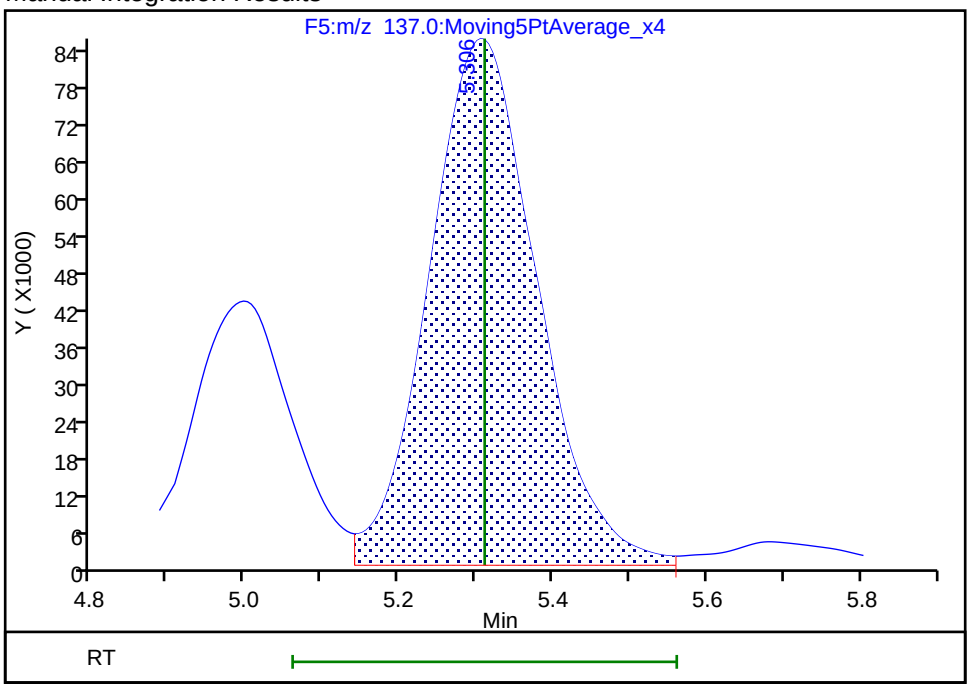
Processing Integration Results

RT: 5.31
Area: 799579
Amount: 88.801650
Amount Units: ug/l



Manual Integration Results

RT: 5.31
Area: 826396
Amount: 91.797923
Amount Units: ug/l



Reviewer: meyera, 08-Apr-2022 07:21:10

Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB182 (14.5-15) | Lab Sample ID: 280-160190-3
Matrix: Solid | Lab File ID: ex722D07038.d
Analysis Method: 8321A | Date Collected: 03/24/2022 09:40
Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57
Sample wt/vol: 10.5(g) | Date Analyzed: 04/07/2022 14:30
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571108 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.048	U	0.095	0.048	0.043
99-65-0	1,3-Dinitrobenzene	0.048	U	0.095	0.048	0.043
118-96-7	2,4,6-Trinitrotoluene	0.048	U Q	0.095	0.048	0.035
121-14-2	2,4-Dinitrotoluene	0.048	U M	0.095	0.048	0.044
606-20-2	2,6-Dinitrotoluene	0.048	U M	0.095	0.048	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.048	U	0.095	0.048	0.047
19406-51-0	4-Amino-2,6-dinitrotoluene	0.048	U	0.095	0.048	0.030
2691-41-0	HMX	0.048	U M	0.095	0.048	0.044
99-08-1	m-Nitrotoluene	0.074	J M	0.095	0.048	0.041
98-95-3	Nitrobenzene	0.048	U	0.10	0.048	0.036
55-63-0	Nitroglycerin	0.048	U	0.095	0.048	0.028
88-72-2	o-Nitrotoluene	0.51	M	0.095	0.048	0.041
78-11-5	PETN	0.048	U	0.095	0.048	0.032
99-99-0	p-Nitrotoluene	0.55	M	0.095	0.048	0.047
121-82-4	RDX	0.048	U	0.11	0.048	0.041
479-45-8	Tetryl	0.048	U Q	0.095	0.048	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	97		68-140

Report Date: 08-Apr-2022 07:32:39 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07038.d
Lims ID: 280-160190-A-3-B
Client ID: 29SB182 (14.5-15)
Sample Type: Client
Inject. Date: 07-Apr-2022 14:30:11 ALS Bottle#: 34 Worklist Smp#: 38
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-3-B
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:34 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 14:48:43
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		133618	125.0	221	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		436518	125.0	169	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.030	-0.011		1402130	129.4	647	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.775	660320	97.0	71.3	
17 2,6-Dinitrotoluene								M
182.0	4.144	4.150	-0.006	0.957	466651	5.94	122	M
* 18 2,4-dinitrotoluene-d3								
185.1	4.332	4.341	-0.009		4444846	125.0	107	
19 2,4-Dinitrotoluene								M
182.0	4.373	4.373	0.0	1.009	41513	0.5038	12.1	M
22 o-Nitrotoluene								M
137.0	4.987	5.002	-0.015	1.151	1511247	135.0	371	M
23 p-Nitrotoluene								M
137.0	5.301	5.311	-0.010	1.224	1385304	143.1	322	M
24 m-Nitrotoluene								M
137.0	5.699	5.704	-0.005	1.316	114947	19.4	22.0	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Report Date: 08-Apr-2022 07:32:39 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

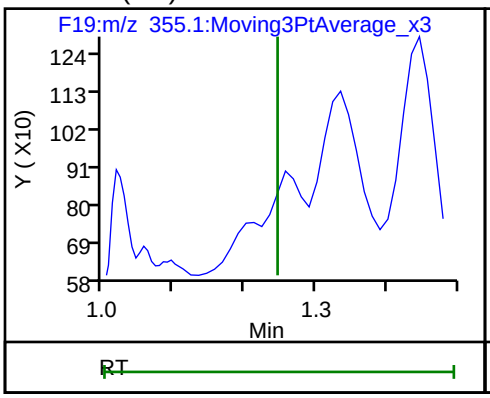
Report Date: 08-Apr-2022 07:32:39 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

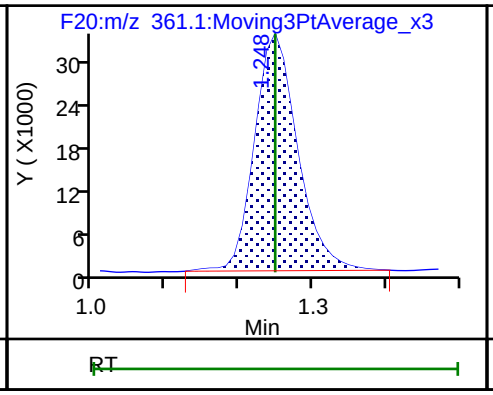
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07038.d

Injection Date:	07-Apr-2022 14:30:11	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-3-B	Lab Sample ID:	280-160190-3		
Client ID:	29SB182 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	34	Worklist Smp#:	38
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		

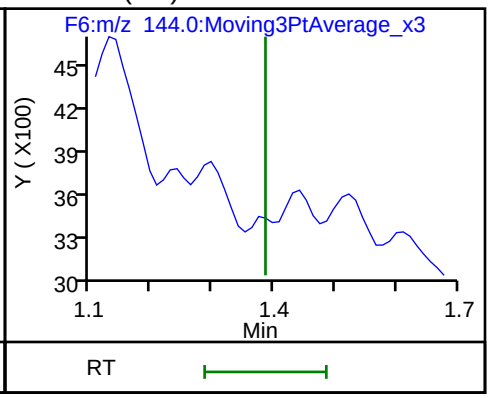
2 HMX (ND)



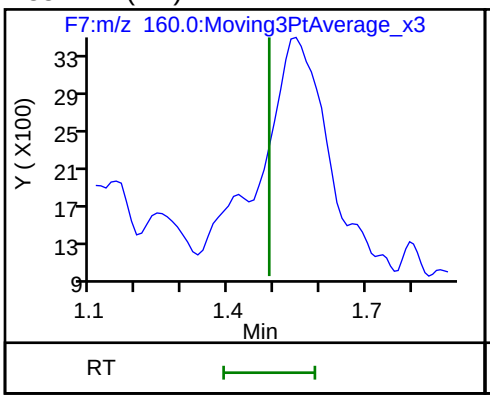
* 1 HMX-13C4



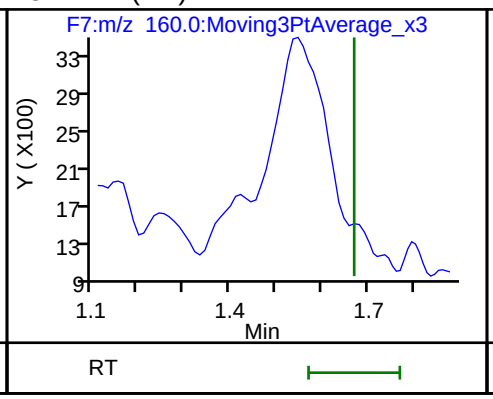
36 TNX (ND)



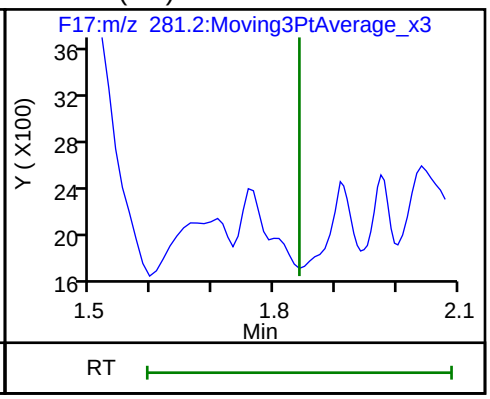
33 DNX (ND)



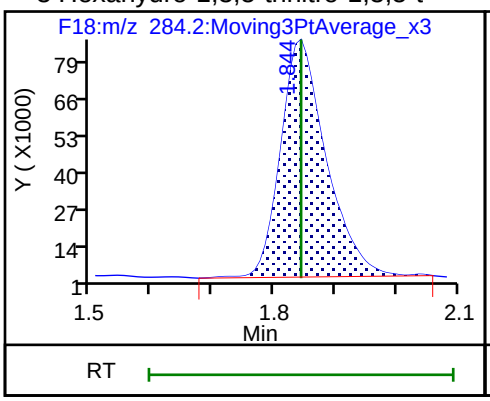
34 MNX (ND)



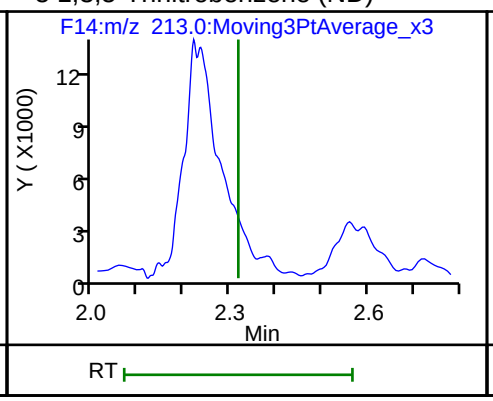
4 RDX (ND)



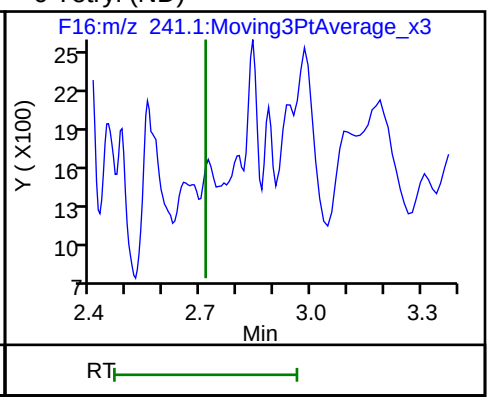
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



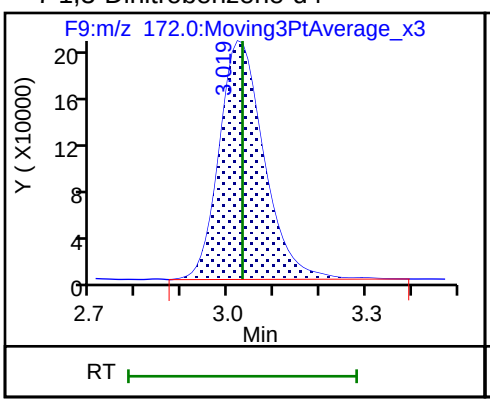
5 1,3,5-Trinitrobenzene (ND)



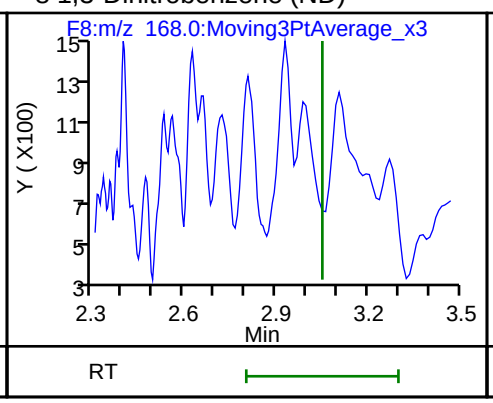
6 Tetryl (ND)



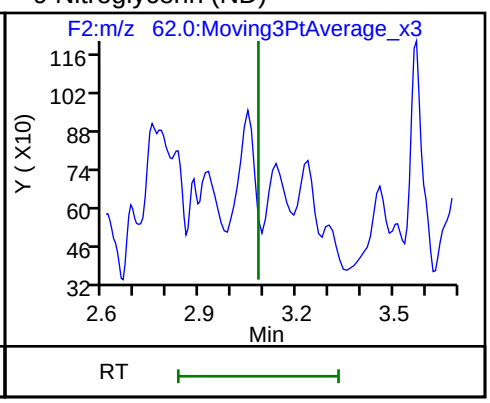
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

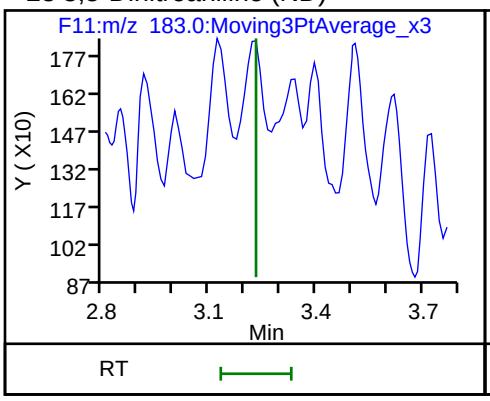


9 Nitroglycerin (ND)

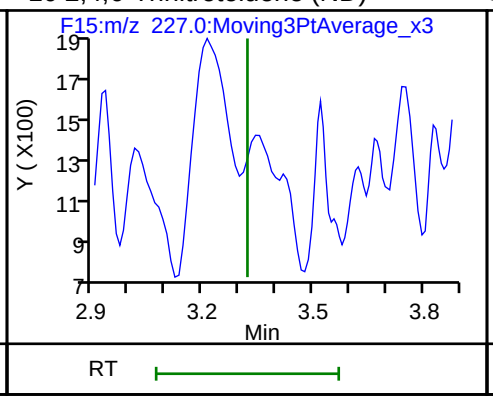


Report Date: 08-Apr-2022 07:32:39 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07038.d

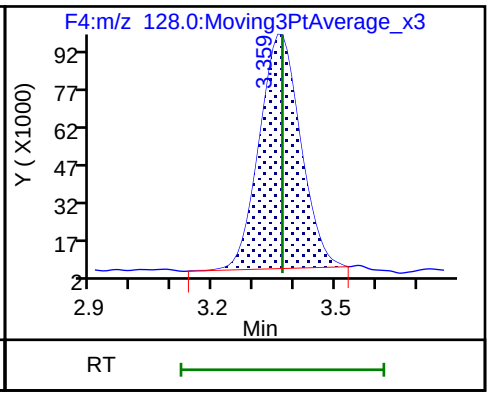
28 3,5-Dinitroaniline (ND)



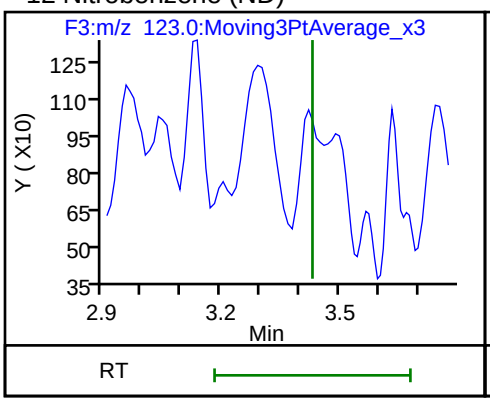
10 2,4,6-Trinitrotoluene (ND)



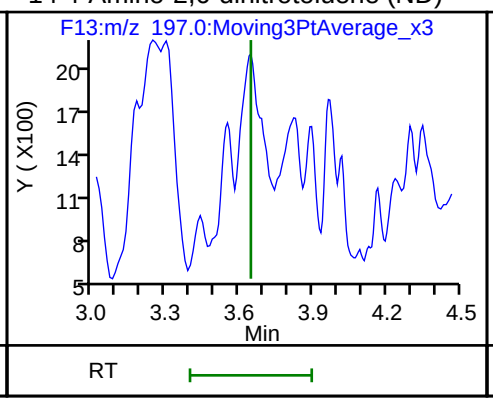
$ 11 Nitrobenzene-d5



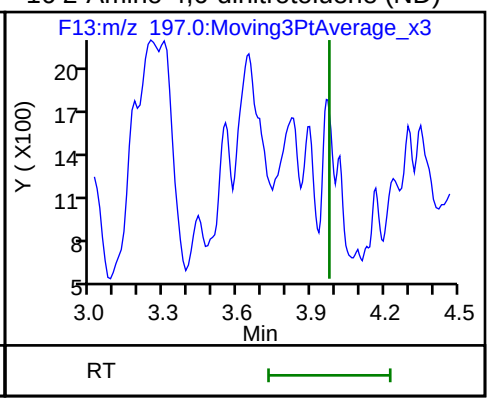
12 Nitrobenzene (ND)



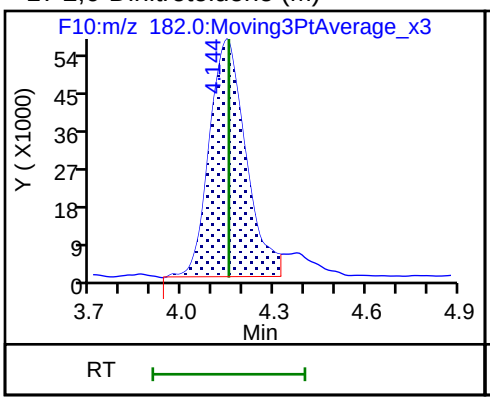
14 4-Amino-2,6-dinitrotoluene (ND)



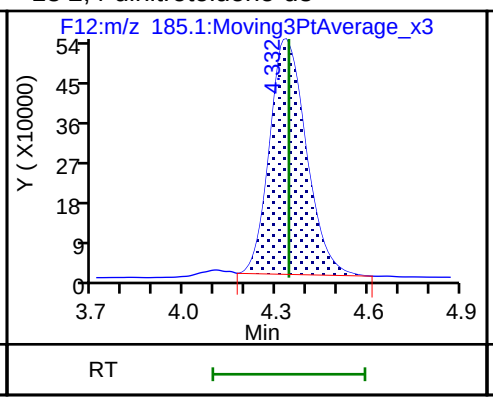
16 2-Amino-4,6-dinitrotoluene (ND)



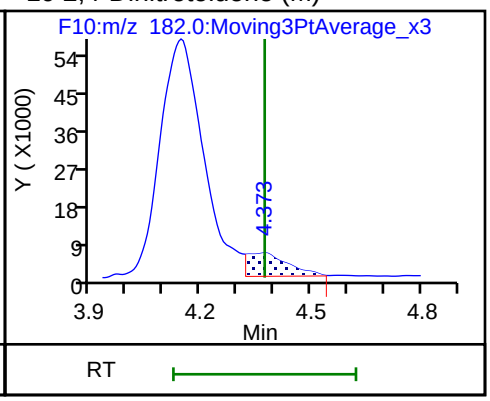
17 2,6-Dinitrotoluene (M)



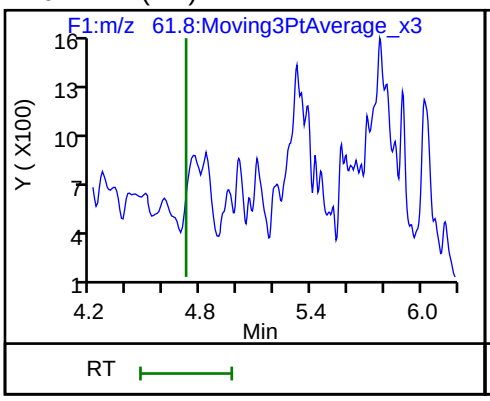
* 18 2,4-dinitrotoluene-d3



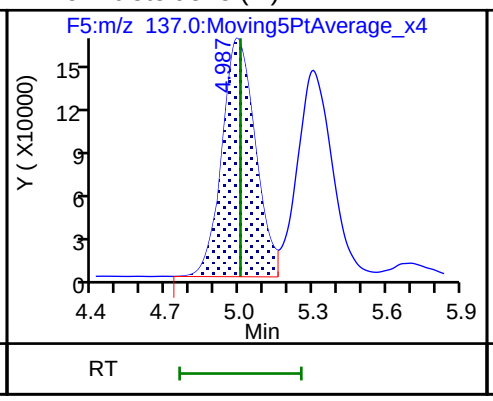
19 2,4-Dinitrotoluene (M)



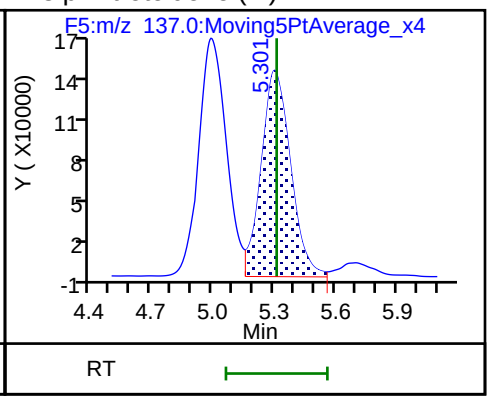
20 PETN (ND)



22 o-Nitrotoluene (M)



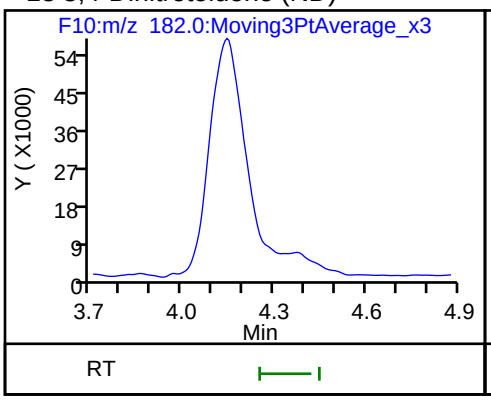
23 p-Nitrotoluene (M)



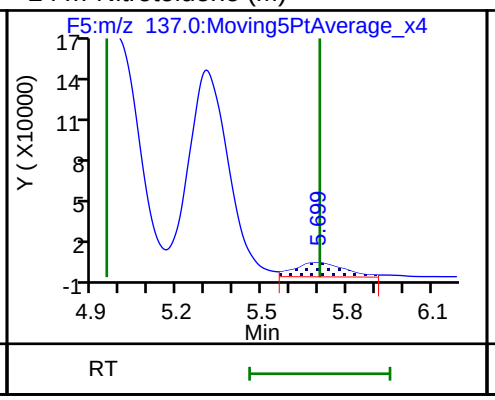
Report Date: 08-Apr-2022 07:32:39 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07038.d

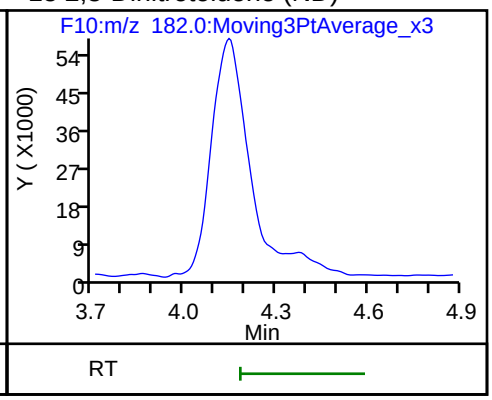
13 3,4-Dinitrotoluene (ND)



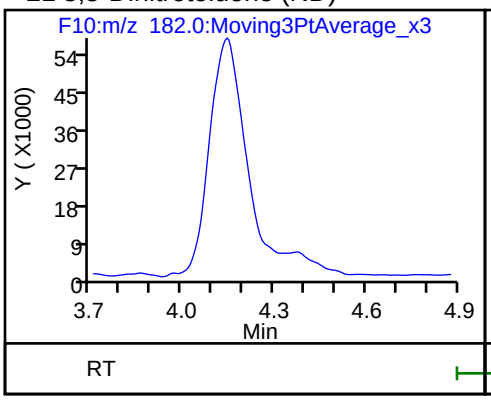
24 m-Nitrotoluene (M)



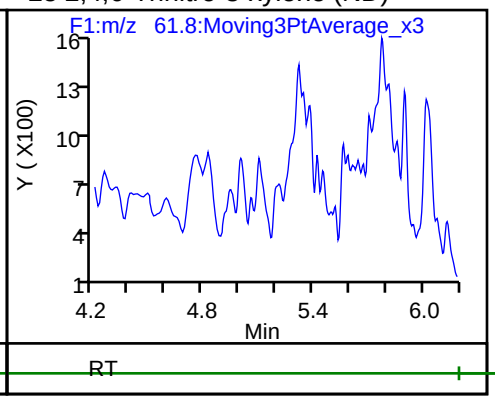
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07038.d
Lims ID: 280-160190-A-3-B
Client ID: 29SB182 (14.5-15)
Sample Type: Client
Inject. Date: 07-Apr-2022 14:30:11 ALS Bottle#: 34 Worklist Smp#: 38
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-3-B
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:34 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 14:48:43

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	97.0	96.69

Report Date: 08-Apr-2022 07:32:39 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

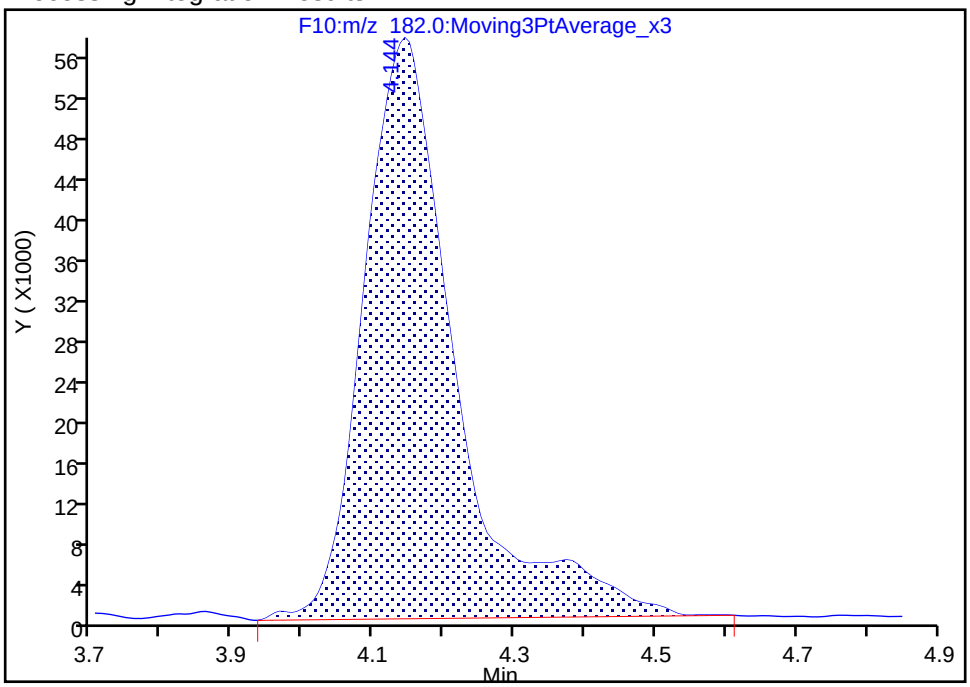
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07038.d				
Injection Date:	07-Apr-2022 14:30:11	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-3-B	Lab Sample ID:	280-160190-3		
Client ID:	29SB182 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	34	Worklist Smp#:	38
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F10:SIR		

19 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

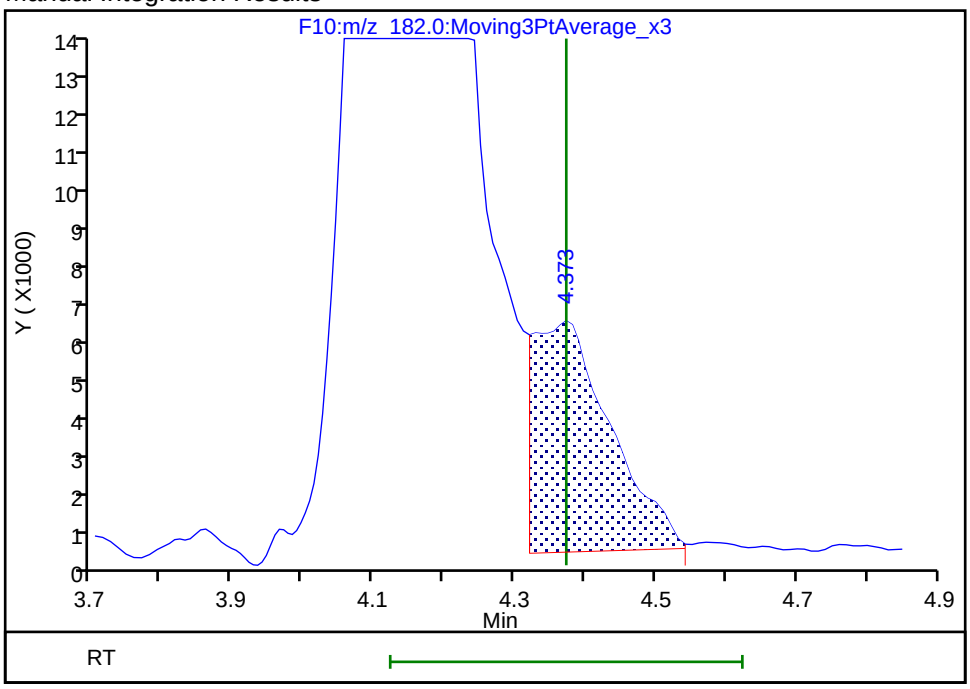
Processing Integration Results

RT: 4.14
Area: 510270
Amount: 13.152281
Amount Units: ug/l



Manual Integration Results

RT: 4.37
Area: 41513
Amount: 0.503790
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 14:48:21

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 08-Apr-2022 07:32:39 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

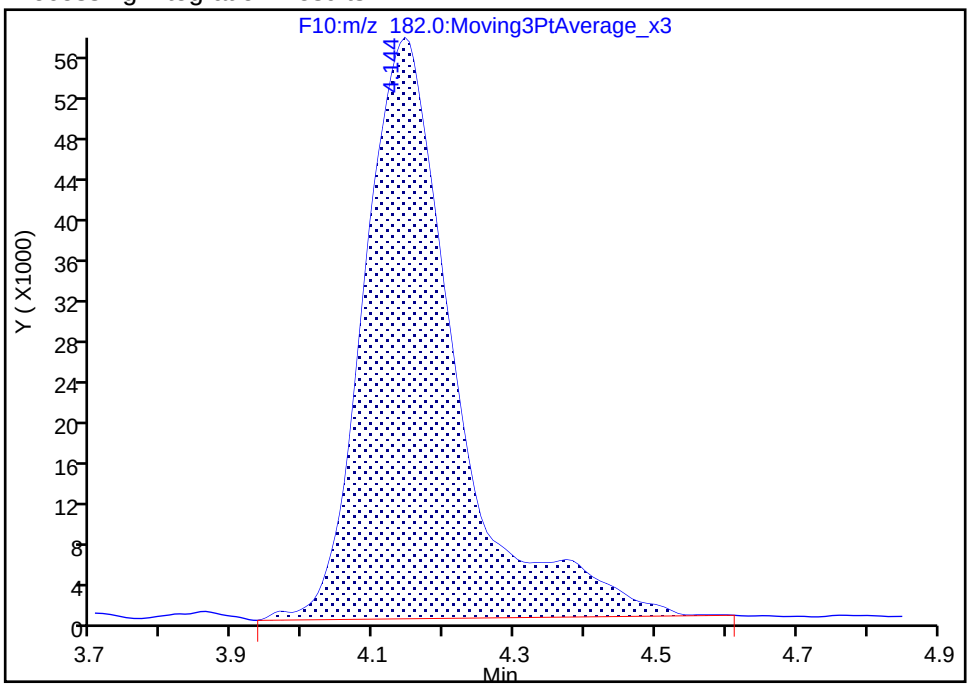
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07038.d				
Injection Date:	07-Apr-2022 14:30:11	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-3-B	Lab Sample ID:	280-160190-3		
Client ID:	29SB182 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	34	Worklist Smp#:	38
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F10:SIR		

17 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

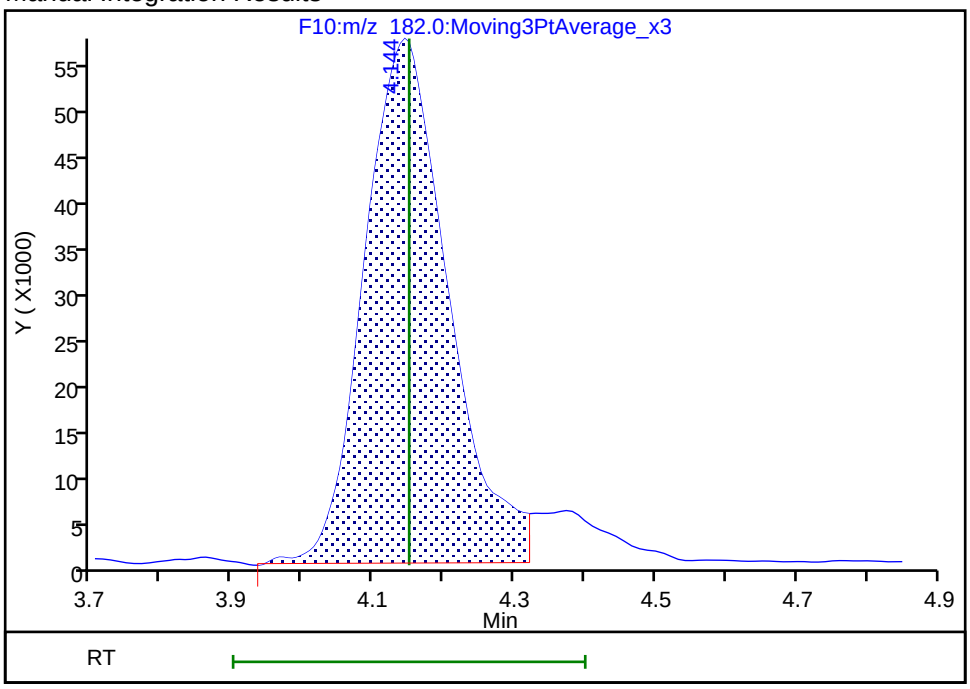
Processing Integration Results

RT: 4.14
Area: 510270
Amount: 6.542197
Amount Units: ug/l



Manual Integration Results

RT: 4.14
Area: 466651
Amount: 5.943705
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 14:48:16

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 08-Apr-2022 07:32:39 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

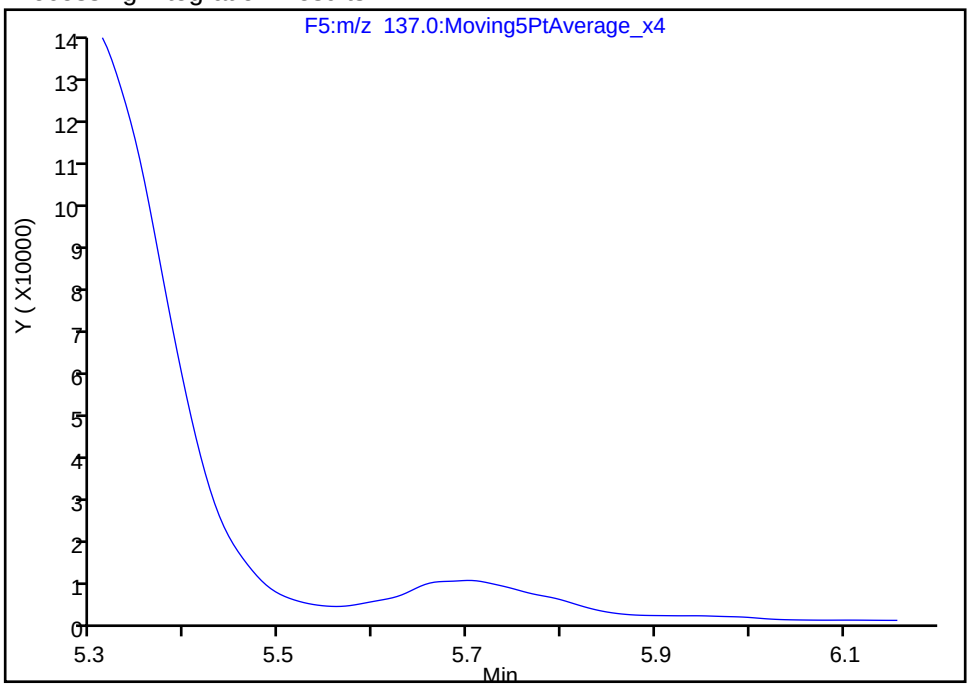
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07038.d				
Injection Date:	07-Apr-2022 14:30:11	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-3-B	Lab Sample ID:	280-160190-3		
Client ID:	29SB182 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	34	Worklist Smp#:	38
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F5:SIR		

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

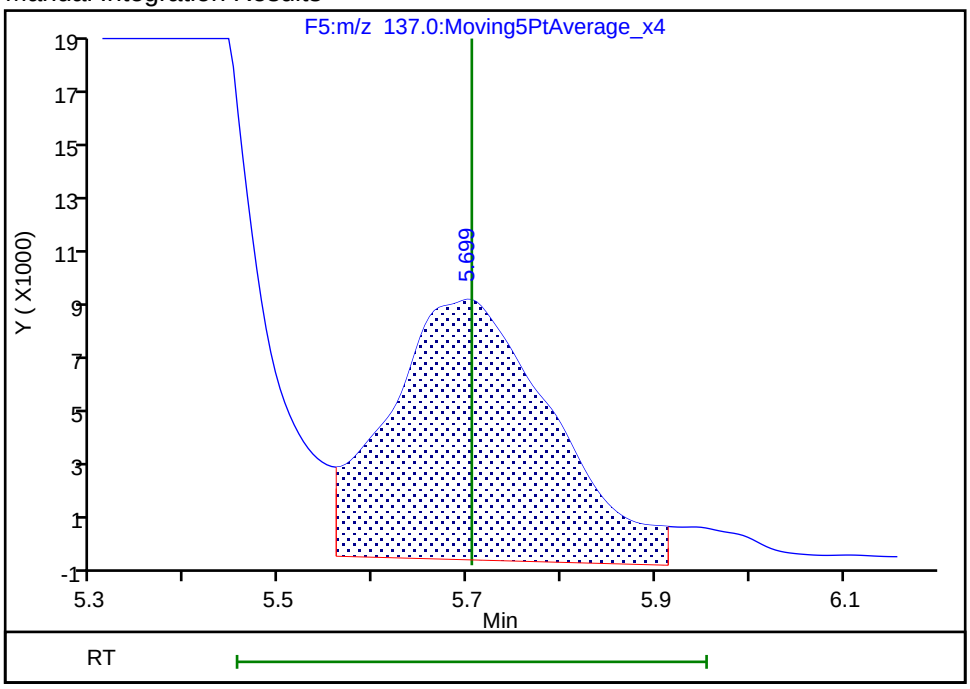
Not Detected
Expected RT: 5.70

Processing Integration Results



Manual Integration Results

RT: 5.70
Area: 114947
Amount: 19.383519
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 14:48:39
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 08-Apr-2022 07:32:39 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07038.d

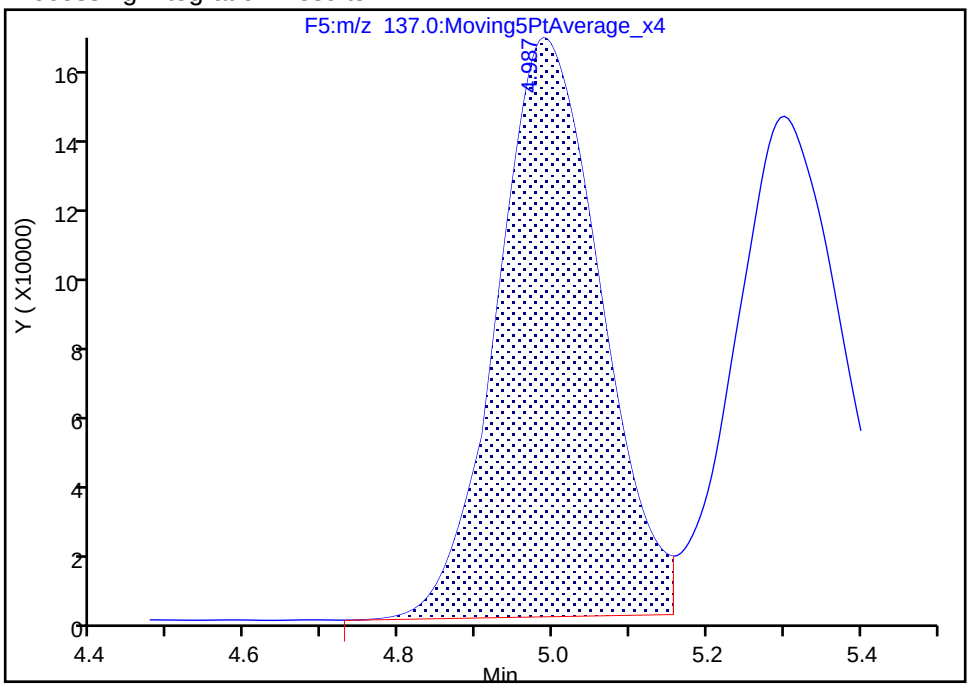
Injection Date:	07-Apr-2022 14:30:11	Instrument ID:	LC_LCMS7
Lims ID:	280-160190-A-3-B	Lab Sample ID:	280-160190-3
Client ID:	29SB182 (14.5-15)		
Operator ID:	acm	ALS Bottle#:	34 Worklist Smp#: 38
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F5:SIR

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

Signal: 1

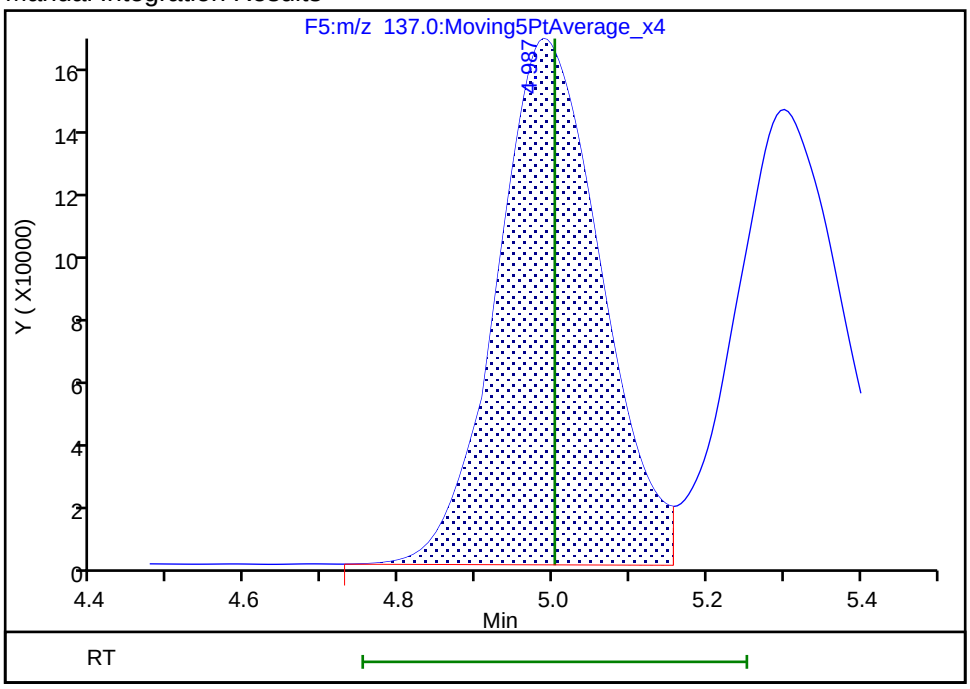
Processing Integration Results

RT: 4.99
Area: 1487826
Amount: 132.8685
Amount Units: ug/l



Manual Integration Results

RT: 4.99
Area: 1511247
Amount: 134.9656
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 14:48:30

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 08-Apr-2022 07:32:39 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

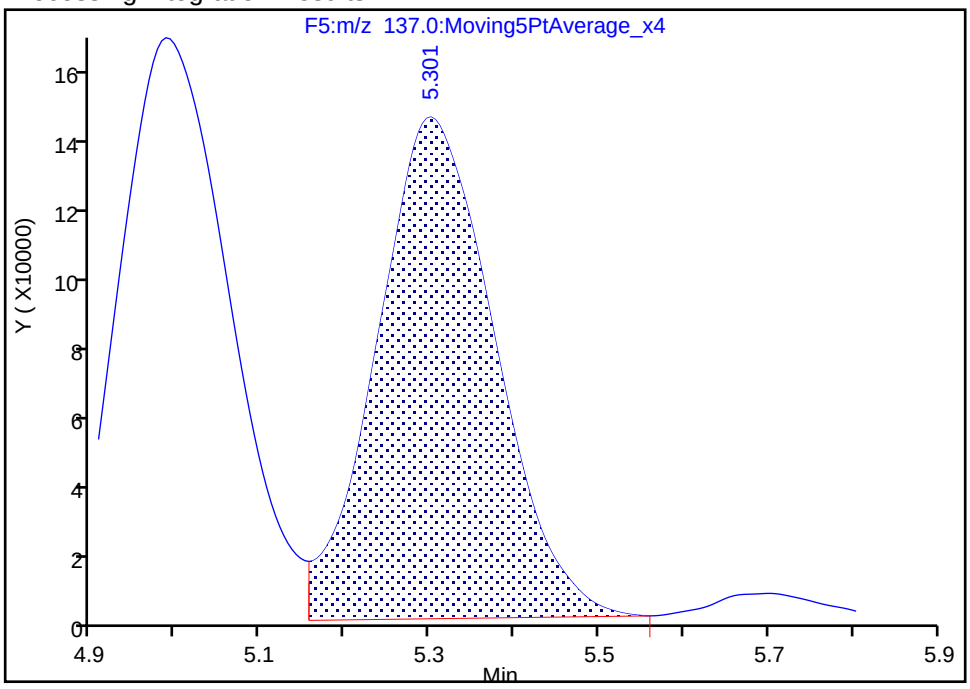
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07038.d				
Injection Date:	07-Apr-2022 14:30:11	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-3-B	Lab Sample ID:	280-160190-3		
Client ID:	29SB182 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	34	Worklist Smp#:	38
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F5:SIR		

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

Signal: 1

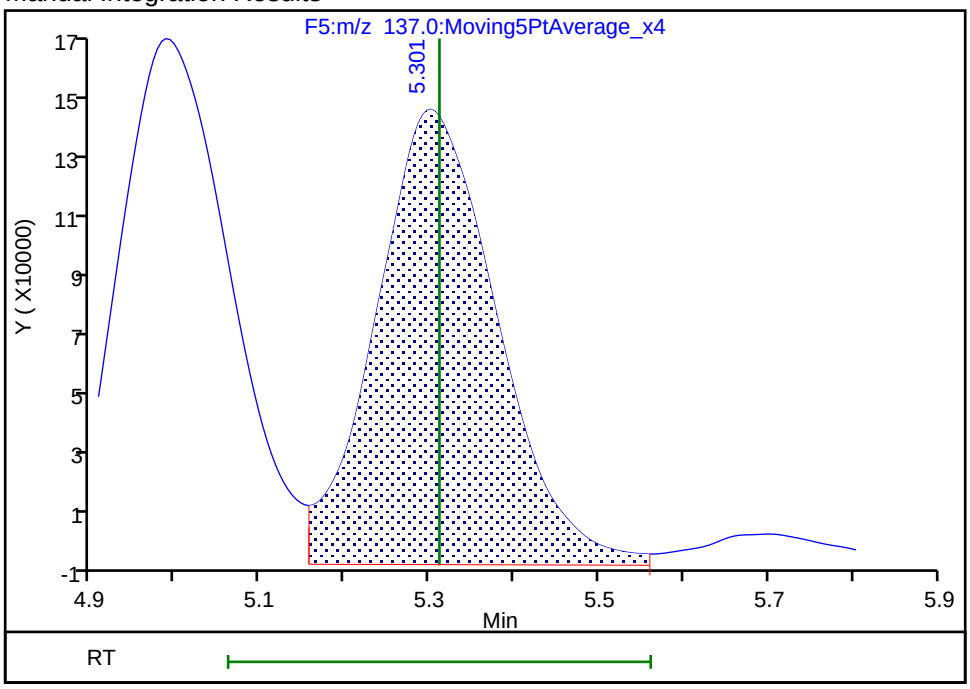
Processing Integration Results

RT: 5.30
Area: 1321557
Amount: 136.4744
Amount Units: ug/l



Manual Integration Results

RT: 5.30
Area: 1385304
Amount: 143.0833
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 14:48:30

Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB175 (3-4) | Lab Sample ID: 280-160190-4
Matrix: Solid | Lab File ID: ex722D07039.d
Analysis Method: 8321A | Date Collected: 03/24/2022 09:55
Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57
Sample wt/vol: 10.2(g) | Date Analyzed: 04/07/2022 14:36
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571108 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.049	U	0.098	0.049	0.044
99-65-0	1,3-Dinitrobenzene	0.049	U	0.098	0.049	0.044
118-96-7	2,4,6-Trinitrotoluene	0.049	U Q	0.098	0.049	0.036
121-14-2	2,4-Dinitrotoluene	0.057	J M	0.098	0.049	0.046
606-20-2	2,6-Dinitrotoluene	0.049	U	0.098	0.049	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.049	U	0.098	0.049	0.049
19406-51-0	4-Amino-2,6-dinitrotoluene	0.049	U	0.098	0.049	0.030
2691-41-0	HMX	0.049	U M	0.098	0.049	0.045
99-08-1	m-Nitrotoluene	0.049	U	0.098	0.049	0.042
98-95-3	Nitrobenzene	0.049	U	0.11	0.049	0.037
55-63-0	Nitroglycerin	0.049	U M	0.098	0.049	0.028
88-72-2	o-Nitrotoluene	0.049	U M	0.098	0.049	0.042
78-11-5	PETN	0.049	U	0.098	0.049	0.033
99-99-0	p-Nitrotoluene	0.049	U M	0.098	0.049	0.048
121-82-4	RDX	0.049	U	0.12	0.049	0.042
479-45-8	Tetryl	0.049	U Q	0.098	0.049	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	88		68-140

Report Date: 08-Apr-2022 07:32:40 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07039.d
Lims ID: 280-160190-A-4-B
Client ID: 29SB175 (3-4)
Sample Type: Client
Inject. Date: 07-Apr-2022 14:36:47 ALS Bottle#: 35 Worklist Smp#: 39
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-4-B
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:34 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 14:49:33
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		132859	125.0	148	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		408515	125.0	110	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.030	3.030	0.0		1455235	129.4	243	
10 2,4,6-Trinitrotoluene								
227.0	3.321	3.321	0.0	0.766	27475	0.0550	9.5	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.775	621151	88.1	61.1	
17 2,6-Dinitrotoluene								M
182.0	4.156	4.150	0.006	0.959	27942	-0.0753	12.5	M
* 18 2,4-dinitrotoluene-d3								
185.1	4.332	4.341	-0.009		4439121	125.0	113	
19 2,4-Dinitrotoluene								M
182.0	4.382	4.373	0.009	1.011	562239	14.6	159	M
22 o-Nitrotoluene								M
137.0	5.002	5.002	0.0	1.155	12168	0.7381	3.0	M
23 p-Nitrotoluene								M
137.0	5.286	5.311	-0.025	1.220	16541	1.18	4.4	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Report Date: 08-Apr-2022 07:32:40 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 08-Apr-2022 07:32:40 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07039.d

Injection Date: 07-Apr-2022 14:36:47 Instrument ID: LC_LCMS7

Lims ID: 280-160190-A-4-B Lab Sample ID: 280-160190-4

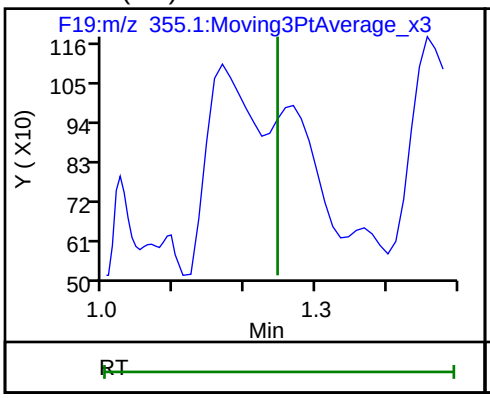
Client ID: 29SB175 (3-4)

Operator ID: acm ALS Bottle#: 35 Worklist Smp#: 39

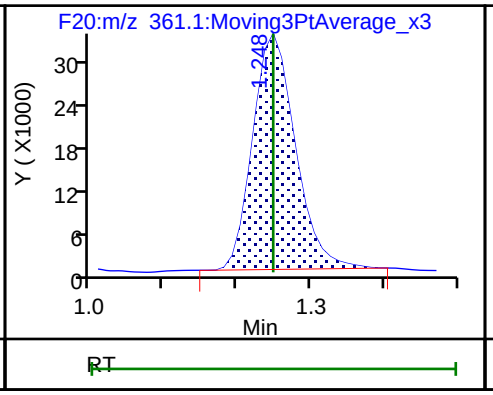
Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

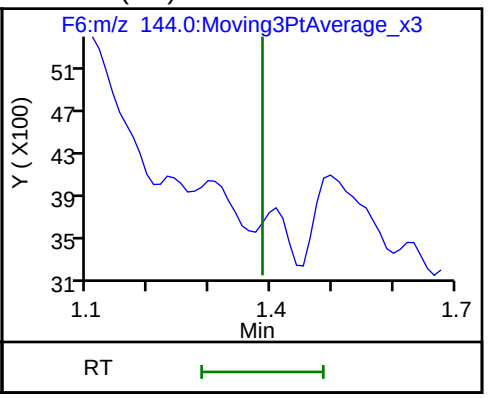
2 HMX (ND)



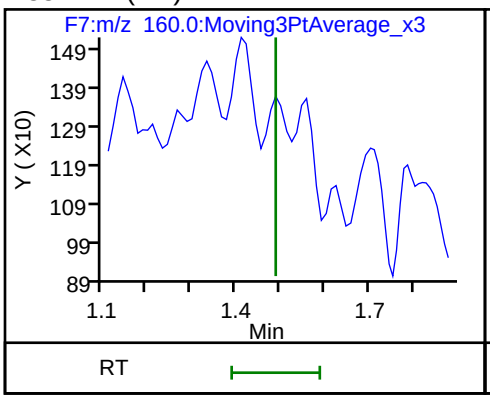
* 1 HMX-13C4



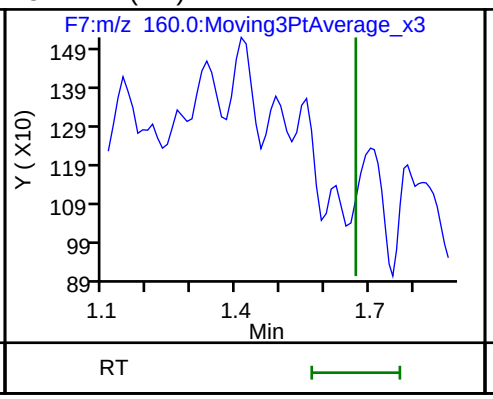
36 TNX (ND)



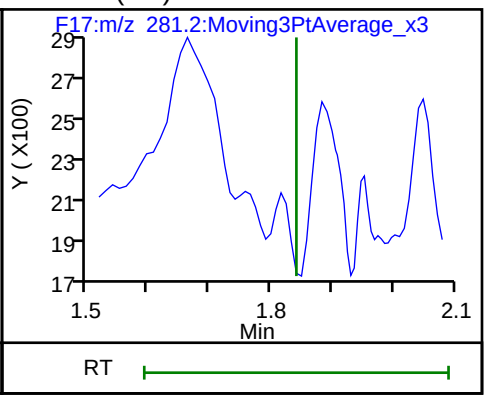
33 DNX (ND)



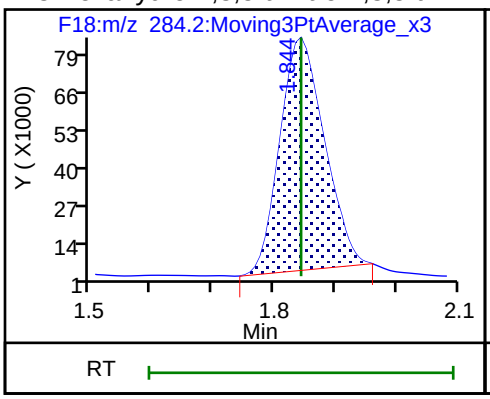
34 MNX (ND)



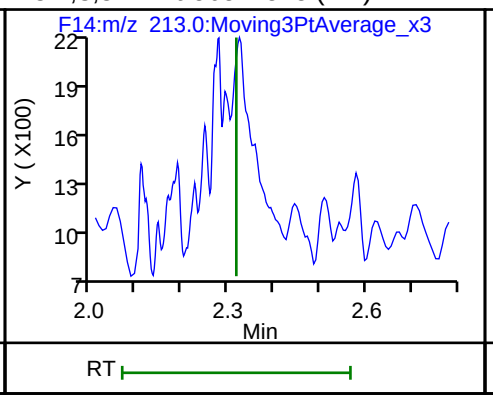
4 RDX (ND)



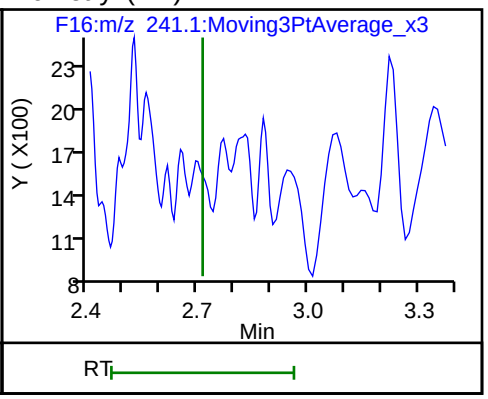
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



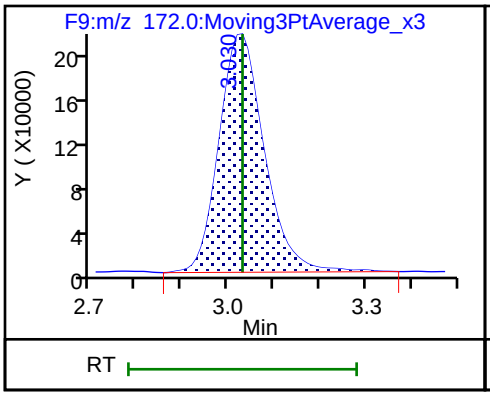
5 1,3,5-Trinitrobenzene (ND)



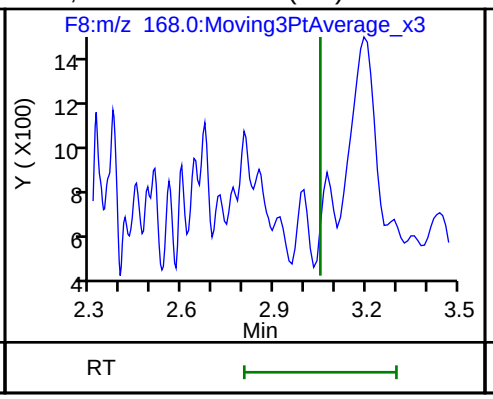
6 Tetryl (ND)



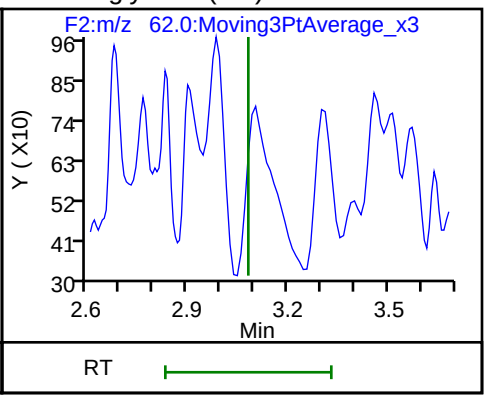
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

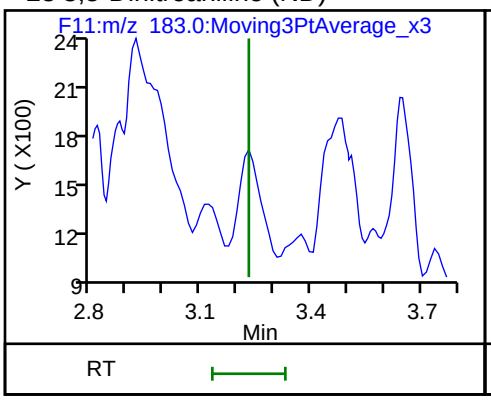


9 Nitroglycerin (ND)

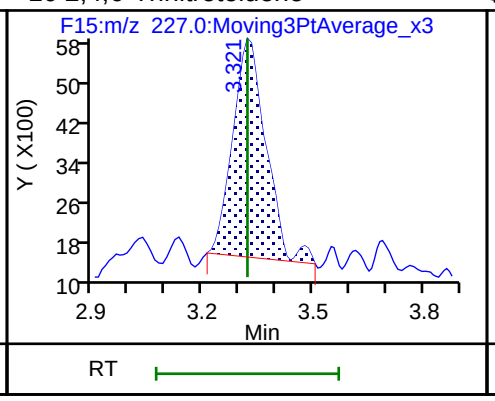


Report Date: 08-Apr-2022 07:32:40 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07039.d

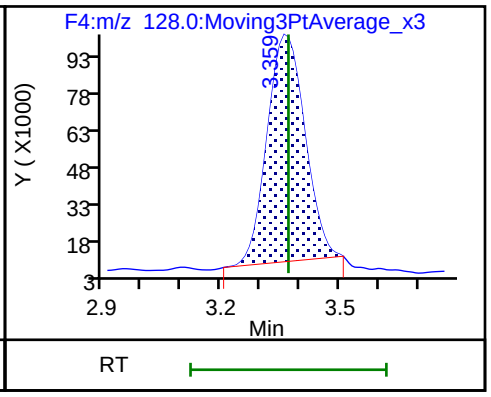
28 3,5-Dinitroaniline (ND)



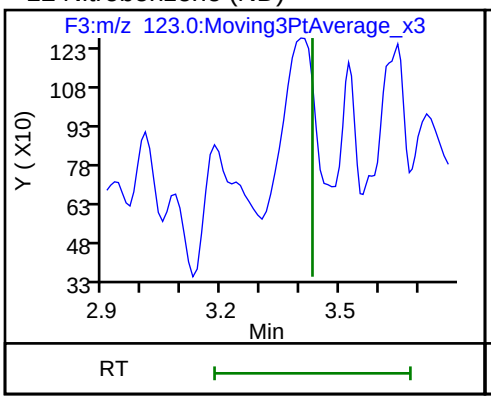
10 2,4,6-Trinitrotoluene



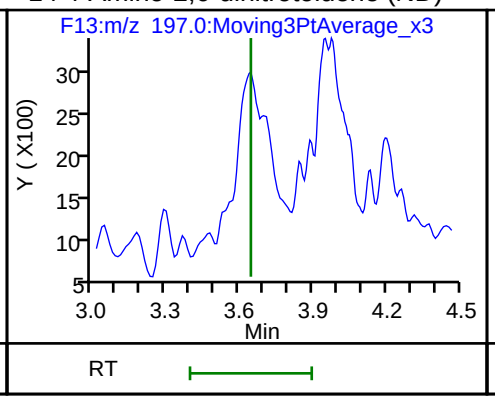
$ 11 Nitrobenzene-d5



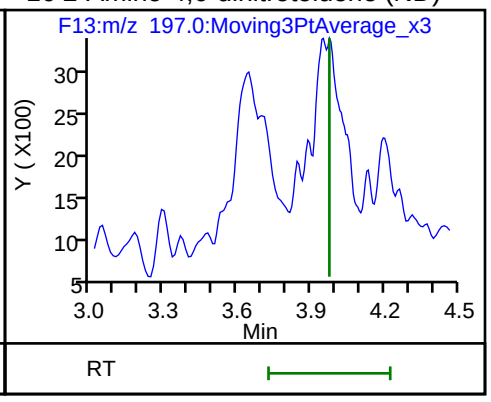
12 Nitrobenzene (ND)



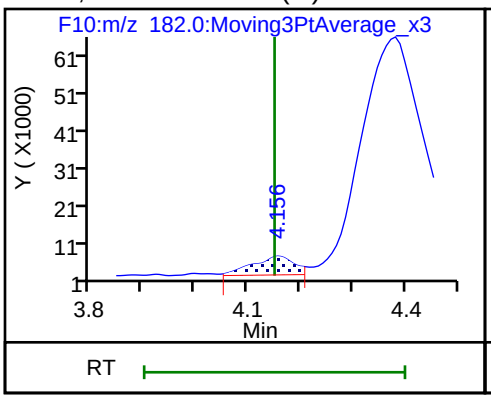
14 4-Amino-2,6-dinitrotoluene (ND)



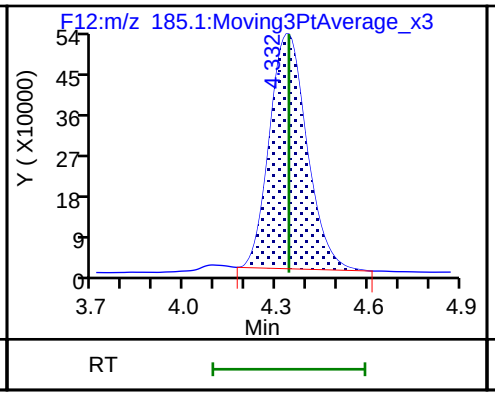
16 2-Amino-4,6-dinitrotoluene (ND)



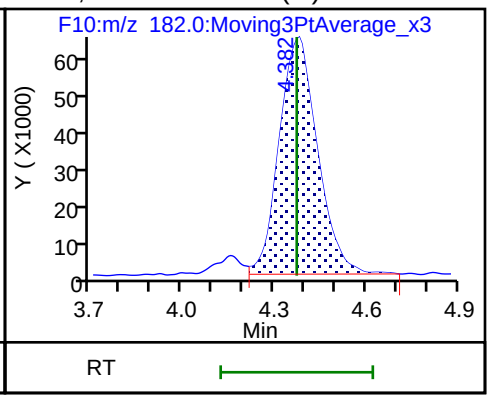
17 2,6-Dinitrotoluene (M)



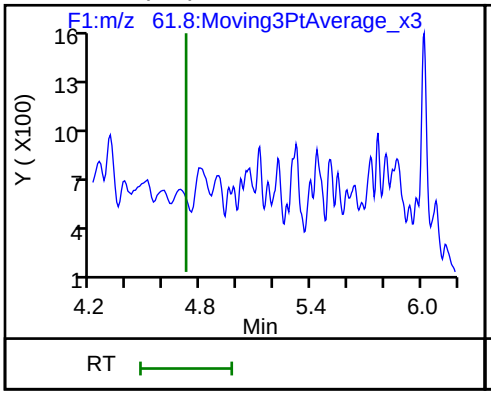
* 18 2,4-dinitrotoluene-d3



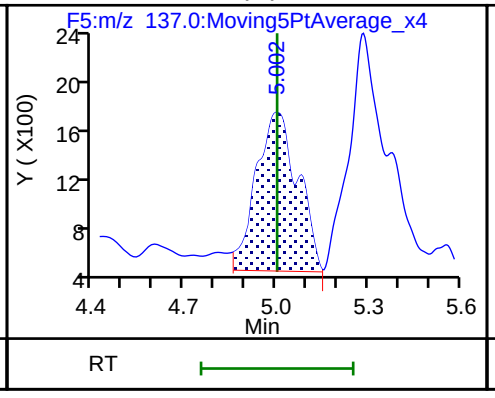
19 2,4-Dinitrotoluene (M)



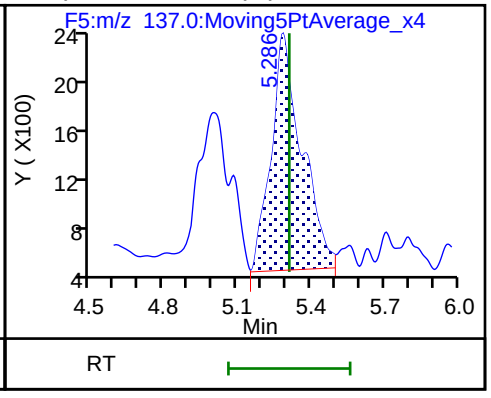
20 PETN (ND)



22 o-Nitrotoluene (M)



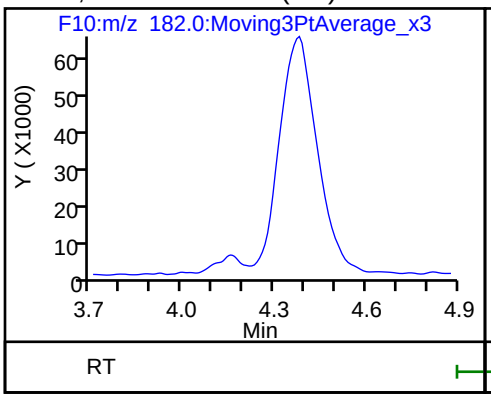
23 p-Nitrotoluene (M)



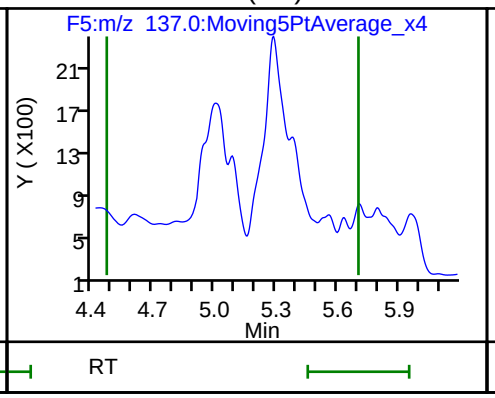
Report Date: 08-Apr-2022 07:32:40 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07039.d

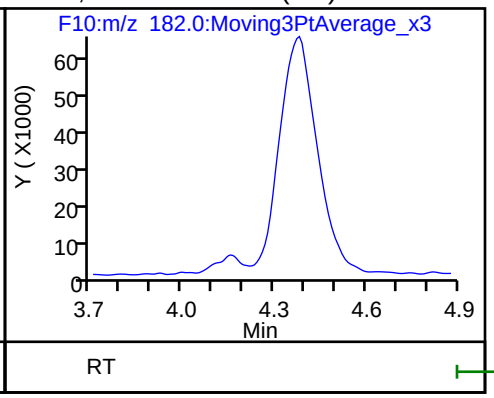
13 3,4-Dinitrotoluene (ND)



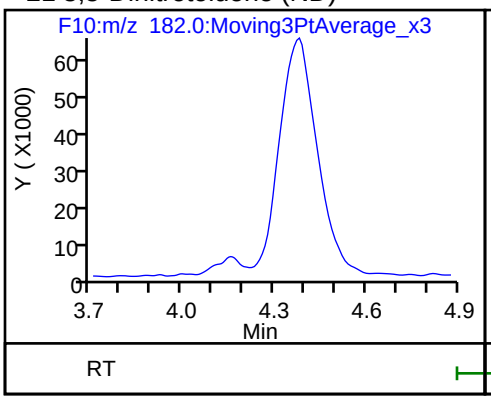
24 m-Nitrotoluene (ND)



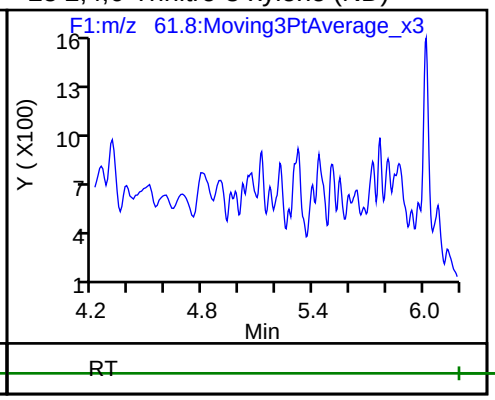
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 08-Apr-2022 07:32:40 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07039.d
Lims ID: 280-160190-A-4-B
Client ID: 29SB175 (3-4)
Sample Type: Client
Inject. Date: 07-Apr-2022 14:36:47 ALS Bottle#: 35 Worklist Smp#: 39
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-4-B
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:34 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 14:49:33

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	88.1	87.80

Report Date: 08-Apr-2022 07:32:40 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

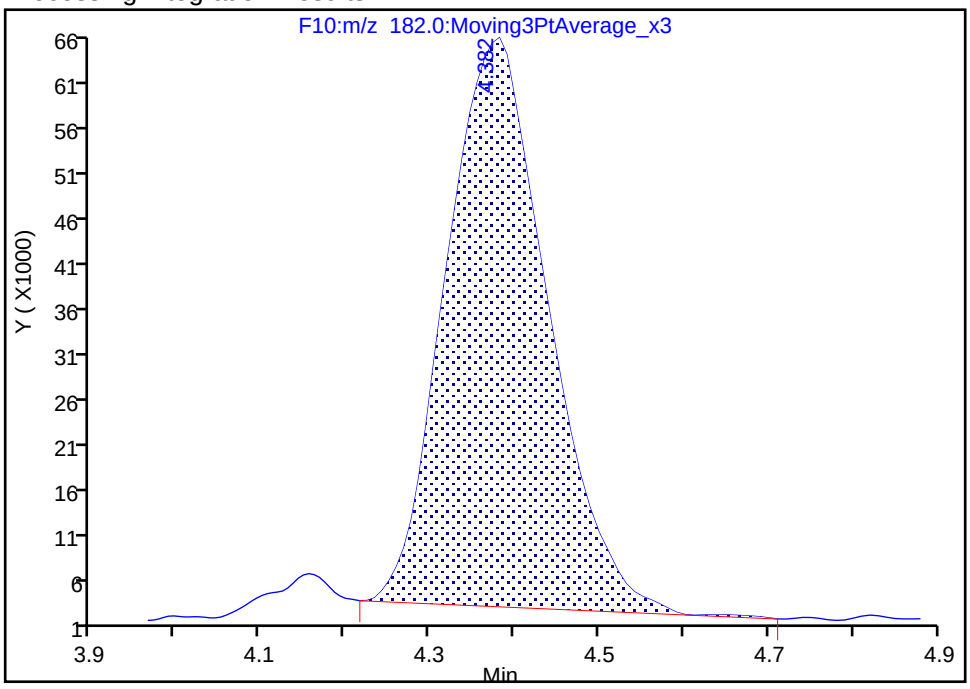
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07039.d				
Injection Date:	07-Apr-2022 14:36:47	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-4-B	Lab Sample ID:	280-160190-4		
Client ID:	29SB175 (3-4)				
Operator ID:	acm	ALS Bottle#:	35	Worklist Smp#:	39
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F10:SIR		

19 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

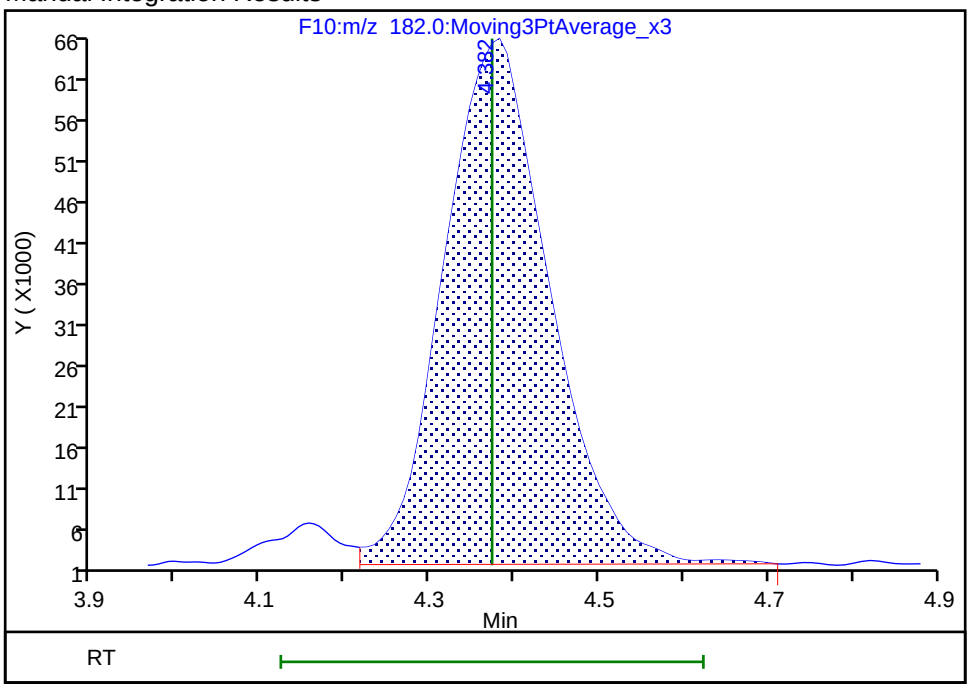
Processing Integration Results

RT: 4.38
Area: 531435
Amount: 13.741870
Amount Units: ug/l



Manual Integration Results

RT: 4.38
Area: 562239
Amount: 14.574128
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 14:49:05

Audit Action: Manually Integrated Audit Reason: Assign Peak

Report Date: 08-Apr-2022 07:32:40 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

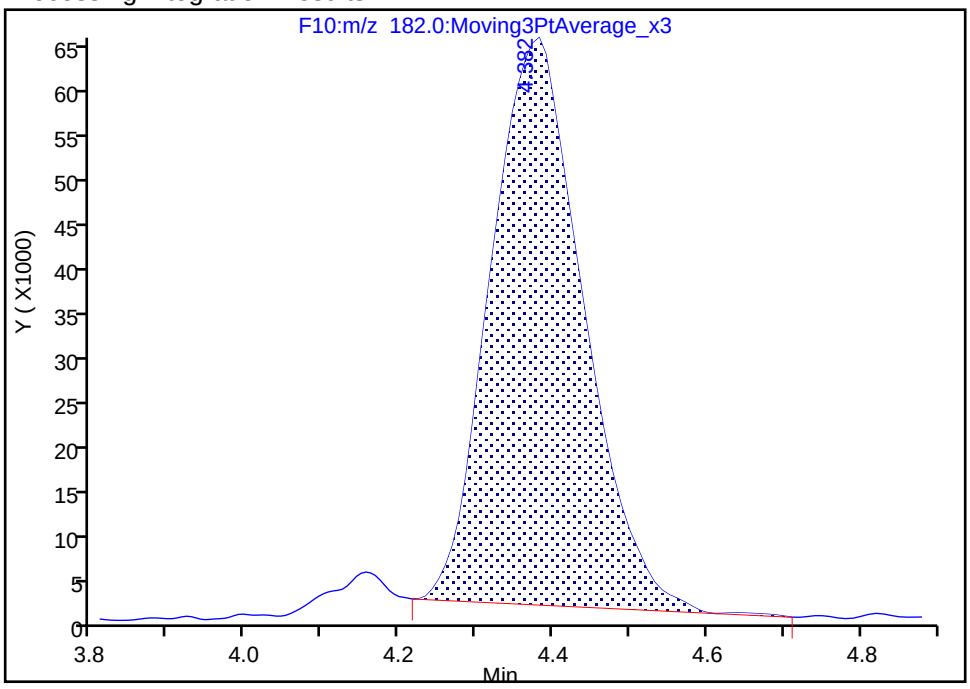
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07039.d				
Injection Date:	07-Apr-2022 14:36:47	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-4-B	Lab Sample ID:	280-160190-4		
Client ID:	29SB175 (3-4)				
Operator ID:	acm	ALS Bottle#:	35	Worklist Smp#:	39
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F10:SIR		

17 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

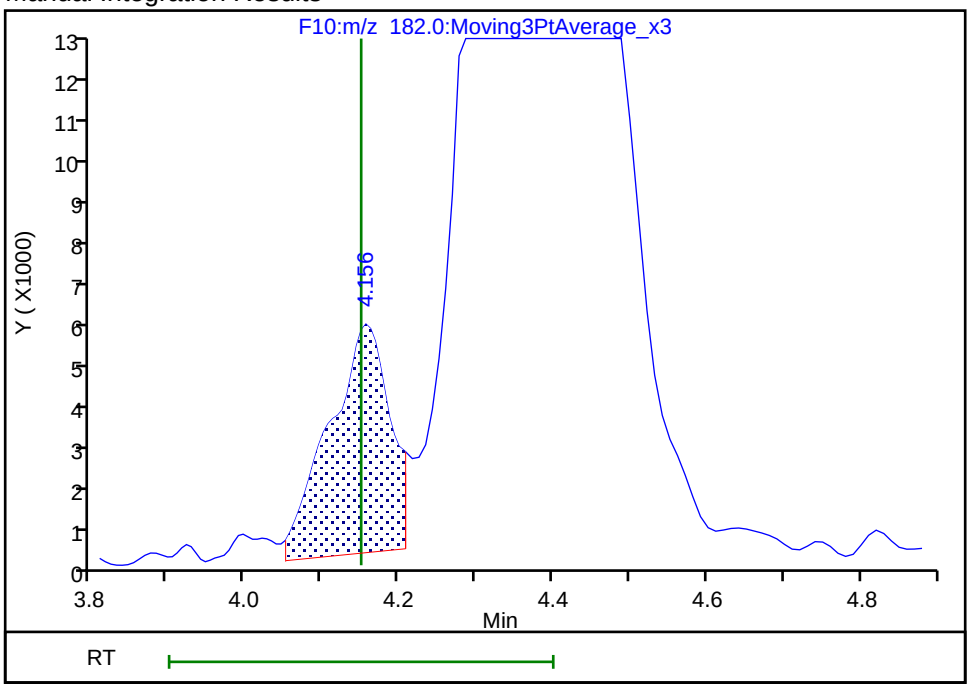
Processing Integration Results

RT: 4.38
Area: 531435
Amount: 6.842004
Amount Units: ug/l



Manual Integration Results

RT: 4.16
Area: 27942
Amount: -0.075282
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 14:49:16

Audit Action: Manually Integrated Audit Reason: Assign Peak

Report Date: 08-Apr-2022 07:32:40 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

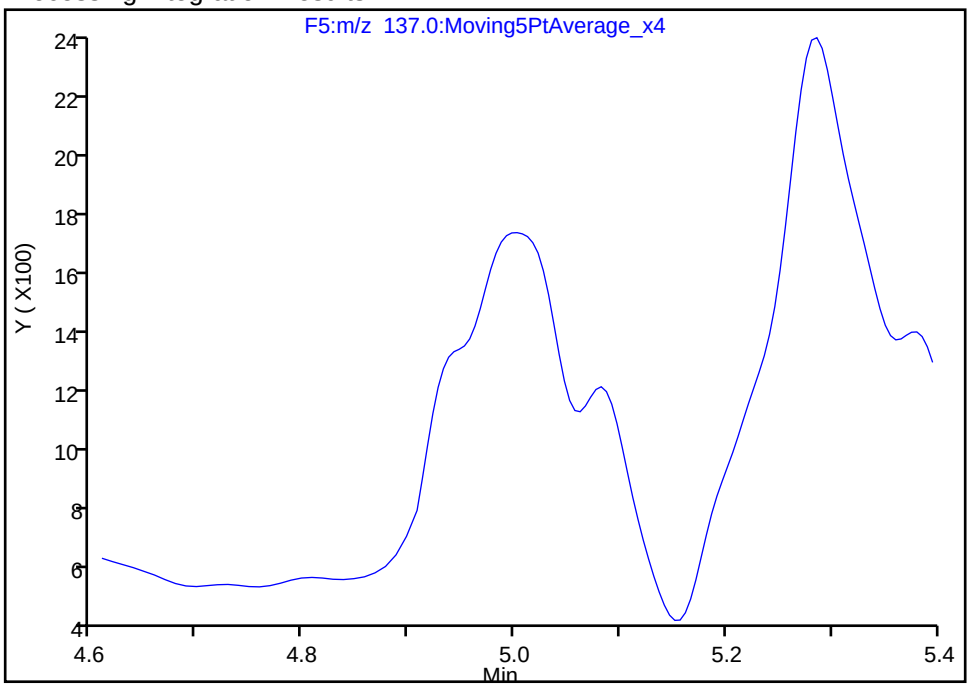
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07039.d				
Injection Date:	07-Apr-2022 14:36:47	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-4-B	Lab Sample ID:	280-160190-4		
Client ID:	29SB175 (3-4)				
Operator ID:	acm	ALS Bottle#:	35	Worklist Smp#:	39
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F5:SIR		

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

Signal: 1

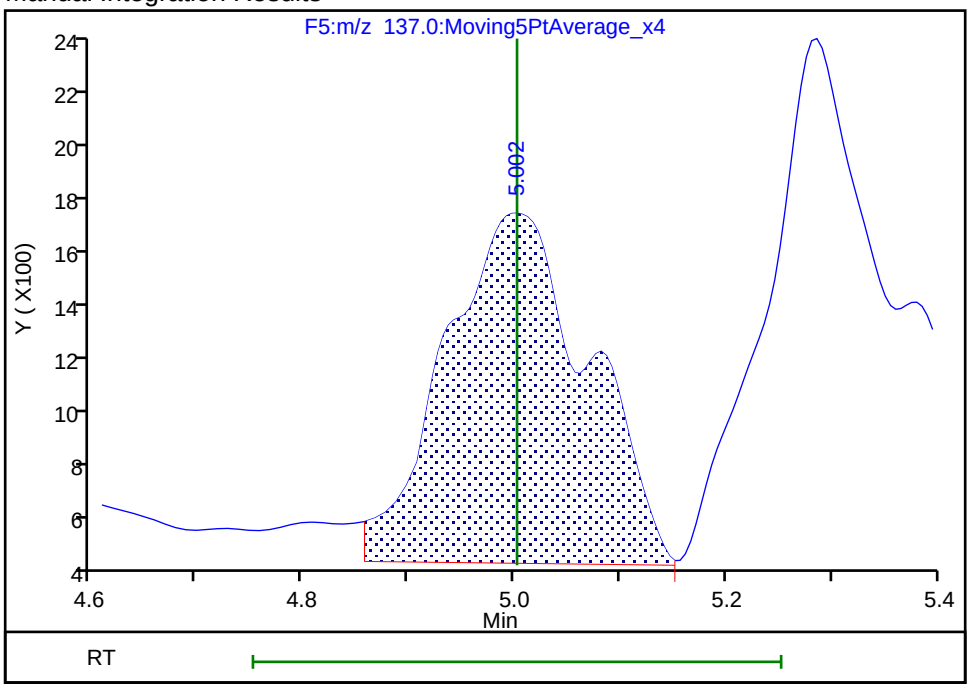
Not Detected
Expected RT: 5.00

Processing Integration Results



Manual Integration Results

RT: 5.00
Area: 12168
Amount: 0.738110
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 14:48:58
Audit Action: Manually Integrated Audit Reason: Assign Peak

Report Date: 08-Apr-2022 07:32:40 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

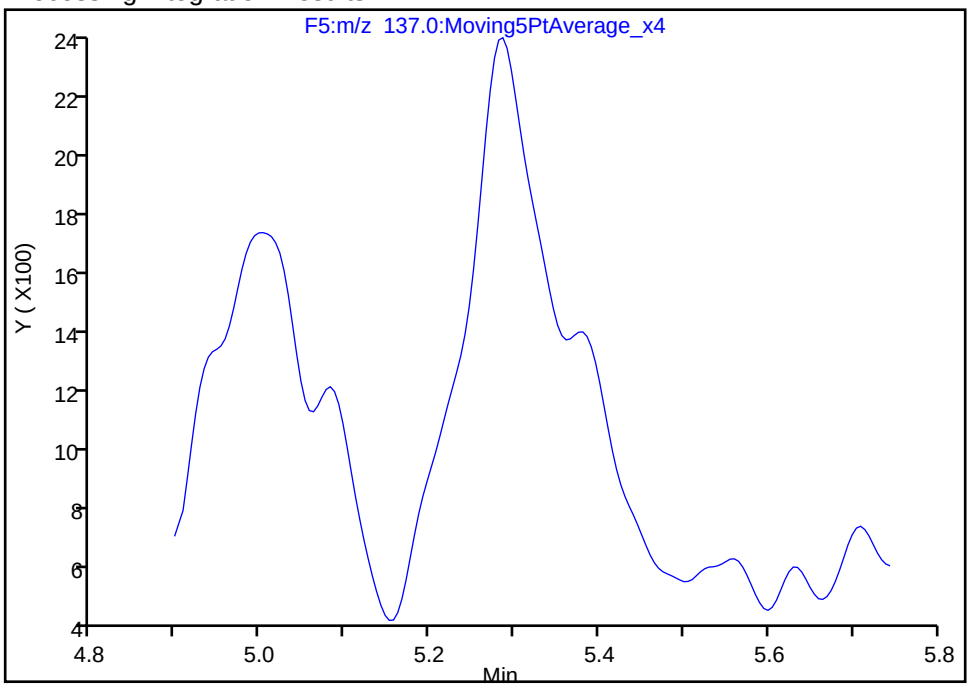
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07039.d				
Injection Date:	07-Apr-2022 14:36:47	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-4-B	Lab Sample ID:	280-160190-4		
Client ID:	29SB175 (3-4)				
Operator ID:	acm	ALS Bottle#:	35	Worklist Smp#:	39
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F5:SIR		

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

Signal: 1

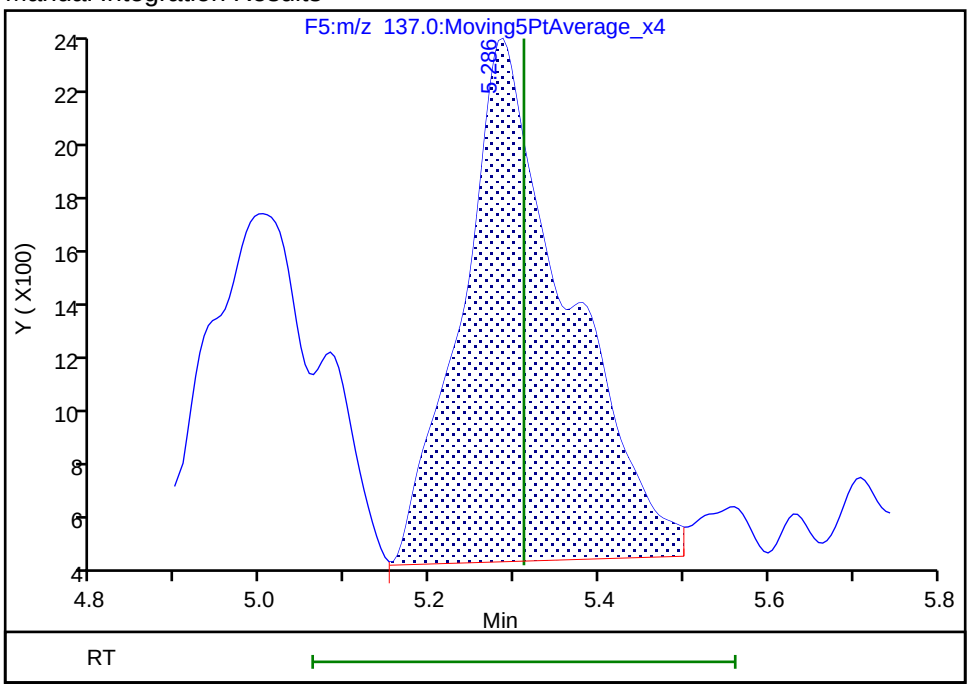
Not Detected
Expected RT: 5.31

Processing Integration Results



Manual Integration Results

RT: 5.29
Area: 16541
Amount: 1.181487
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 14:48:54
Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB175 (6-7) | Lab Sample ID: 280-160190-5
Matrix: Solid | Lab File ID: ex722D07040.d
Analysis Method: 8321A | Date Collected: 03/24/2022 09:57
Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57
Sample wt/vol: 10.54(g) | Date Analyzed: 04/07/2022 14:43
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571108 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.047	U	0.095	0.047	0.043
99-65-0	1,3-Dinitrobenzene	0.047	U	0.095	0.047	0.042
118-96-7	2,4,6-Trinitrotoluene	0.047	U Q	0.095	0.047	0.035
121-14-2	2,4-Dinitrotoluene	0.047	U M	0.095	0.047	0.044
606-20-2	2,6-Dinitrotoluene	0.047	U	0.095	0.047	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.047	U	0.095	0.047	0.047
19406-51-0	4-Amino-2,6-dinitrotoluene	0.047	U	0.095	0.047	0.030
2691-41-0	HMX	0.047	U	0.095	0.047	0.044
99-08-1	m-Nitrotoluene	0.047	U	0.095	0.047	0.041
98-95-3	Nitrobenzene	0.047	U	0.10	0.047	0.036
55-63-0	Nitroglycerin	0.047	U	0.095	0.047	0.028
88-72-2	o-Nitrotoluene	0.047	U	0.095	0.047	0.041
78-11-5	PETN	0.047	U	0.095	0.047	0.032
99-99-0	p-Nitrotoluene	0.047	U	0.095	0.047	0.047
121-82-4	RDX	0.047	U	0.11	0.047	0.041
479-45-8	Tetryl	0.047	U Q	0.095	0.047	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	95		68-140

Report Date: 08-Apr-2022 07:32:40 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07040.d
Lims ID: 280-160190-A-5-B
Client ID: 29SB175 (6-7)
Sample Type: Client
Inject. Date: 07-Apr-2022 14:43:23 ALS Bottle#: 36 Worklist Smp#: 40
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-5-B
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:34 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 14:58:30
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		126099	125.0	132	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		416514	125.0	265	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.030	3.030	0.0		1405003	129.4	325	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.774	652612	95.7	113	
* 18 2,4-dinitrotoluene-d3								
185.1	4.341	4.341	0.0		4387445	125.0	112	
19 2,4-Dinitrotoluene								M
182.0	4.382	4.373	0.009	1.009	27144	0.1257	5.2	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

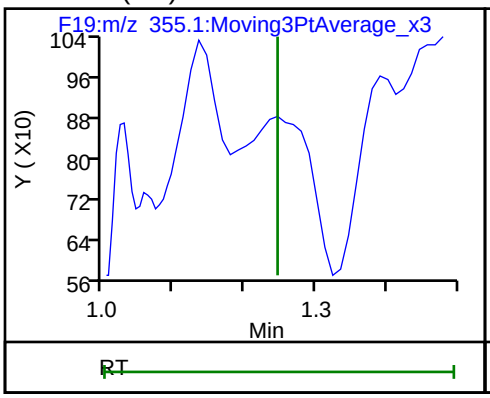
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 08-Apr-2022 07:32:40 Chrom Revision: 2.3 18-Mar-2022 09:07:22

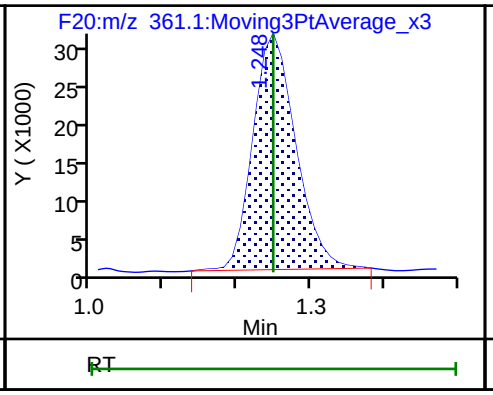
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07040.d
Injection Date: 07-Apr-2022 14:43:23 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-5-B Lab Sample ID: 280-160190-5
Client ID: 29SB175 (6-7)
Operator ID: acm ALS Bottle#: 36 Worklist Smp#: 40
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

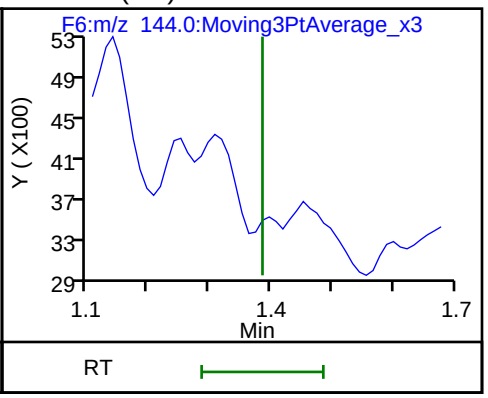
2 HMX (ND)



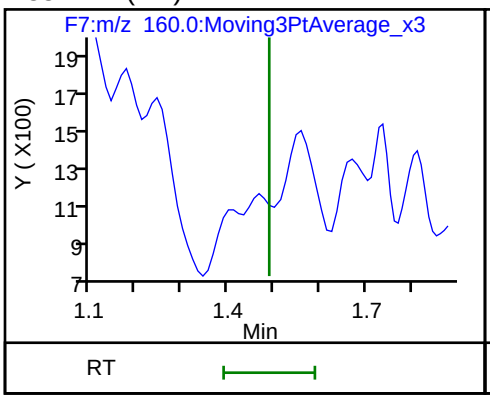
* 1 HMX-13C4



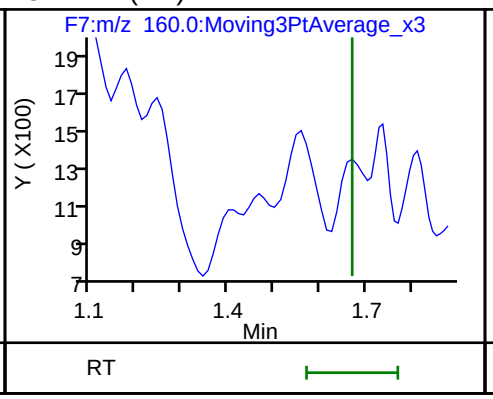
36 TNX (ND)



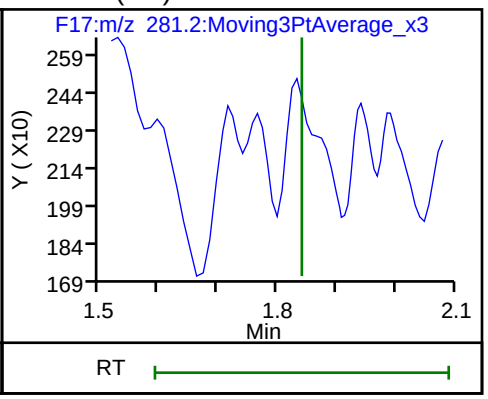
33 DNX (ND)



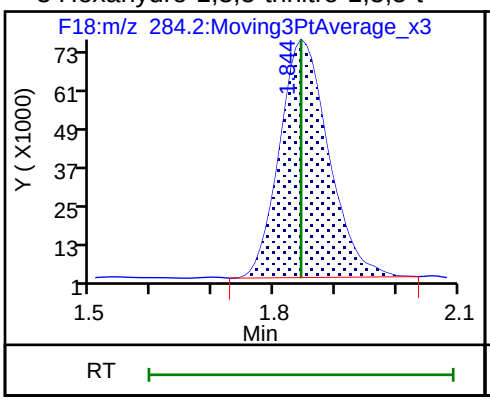
34 MNX (ND)



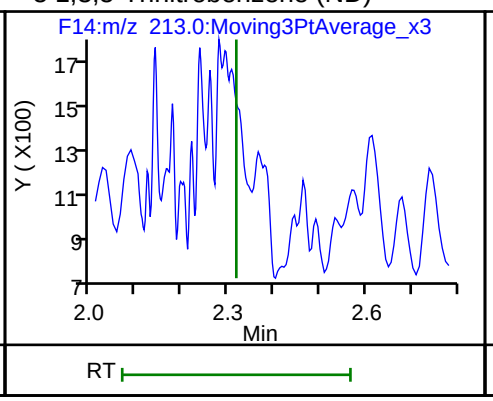
4 RDX (ND)



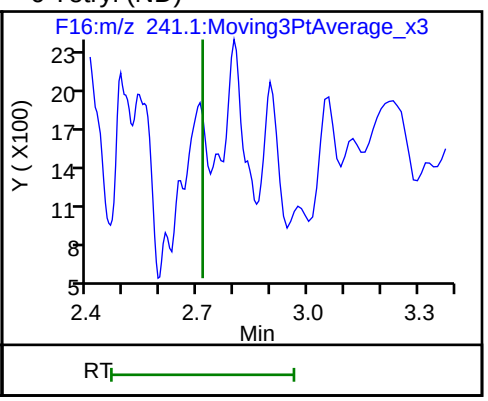
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



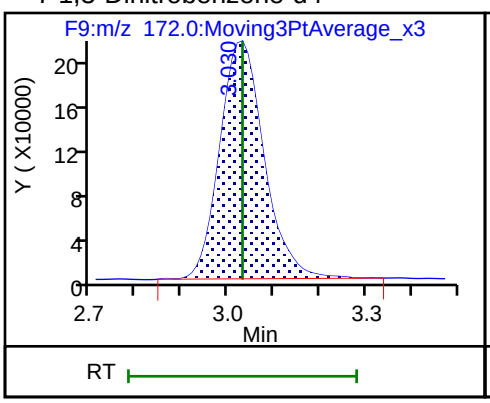
5 1,3,5-Trinitrobenzene (ND)



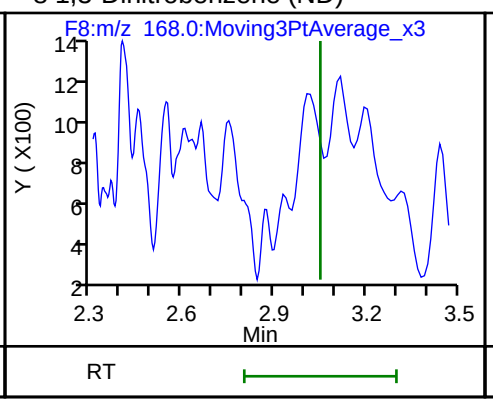
6 Tetryl (ND)



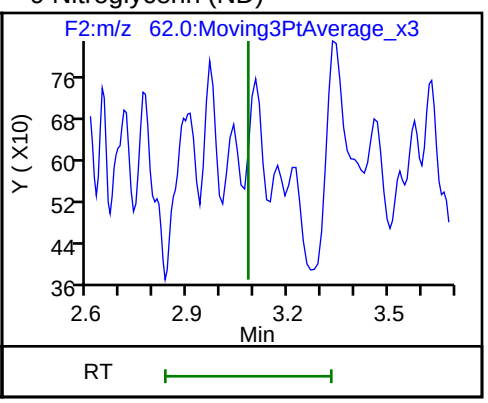
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

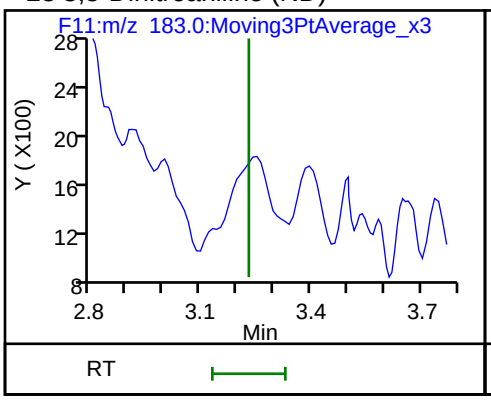


9 Nitroglycerin (ND)

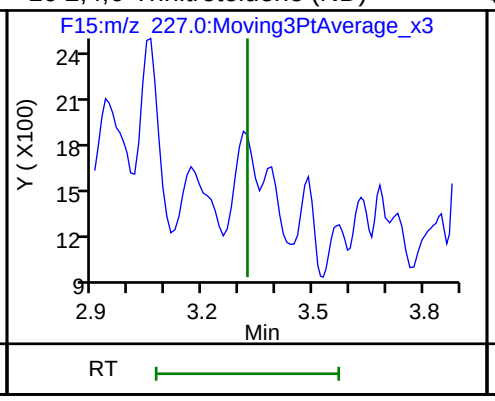


Report Date: 08-Apr-2022 07:32:40 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07040.d

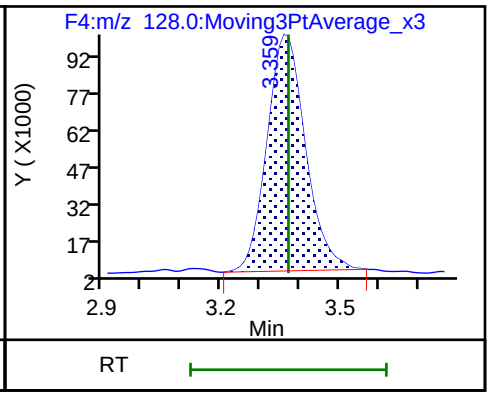
28 3,5-Dinitroaniline (ND)



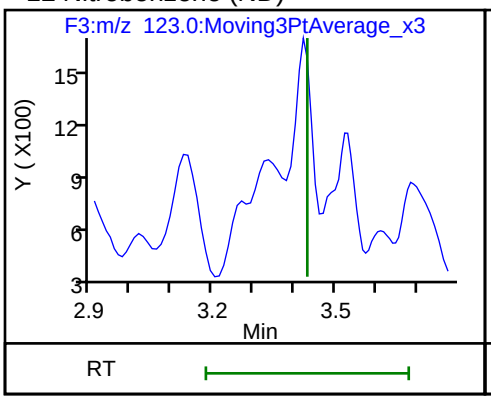
10 2,4,6-Trinitrotoluene (ND)



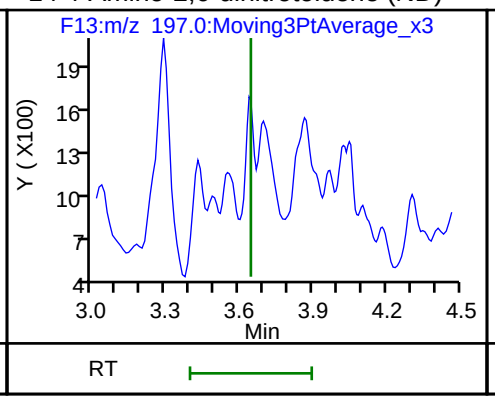
$ 11 Nitrobenzene-d5



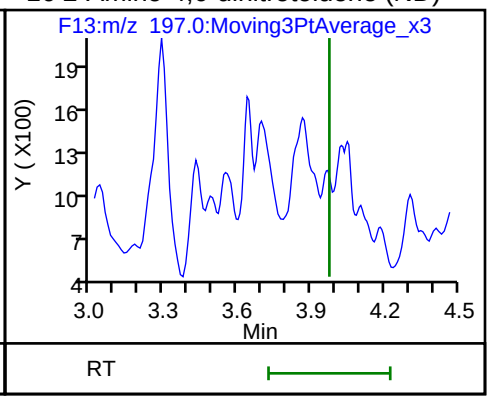
12 Nitrobenzene (ND)



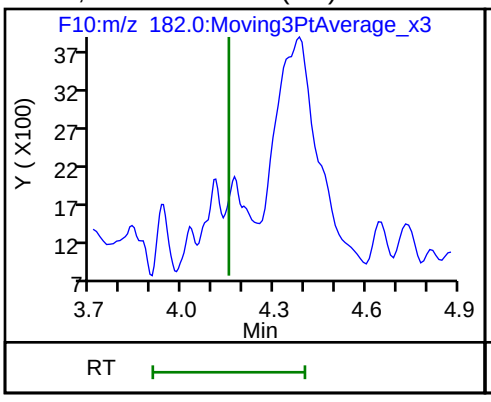
14 4-Amino-2,6-dinitrotoluene (ND)



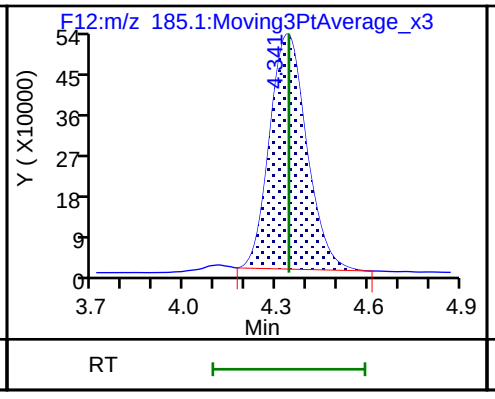
16 2-Amino-4,6-dinitrotoluene (ND)



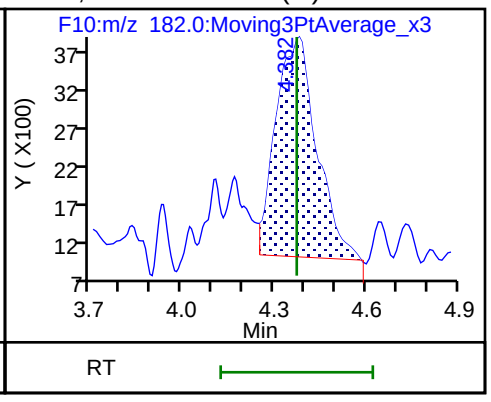
17 2,6-Dinitrotoluene (ND)



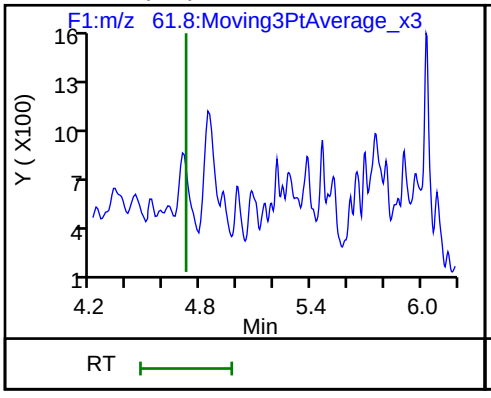
* 18 2,4-dinitrotoluene-d3



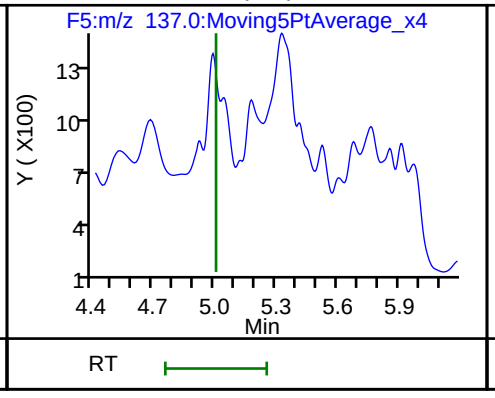
19 2,4-Dinitrotoluene (M)



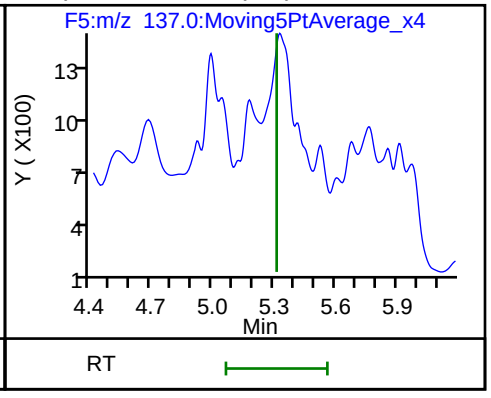
20 PETN (ND)



22 o-Nitrotoluene (ND)



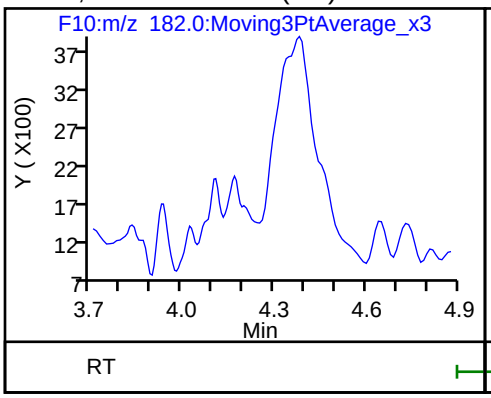
23 p-Nitrotoluene (ND)



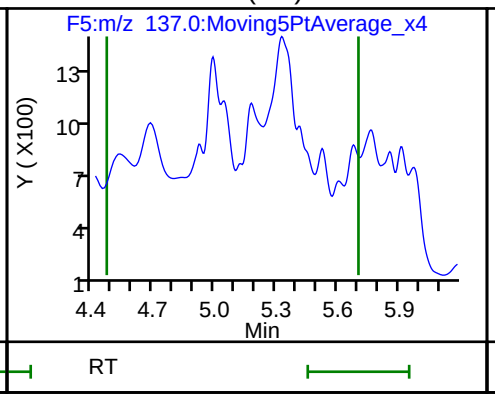
Report Date: 08-Apr-2022 07:32:40 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07040.d

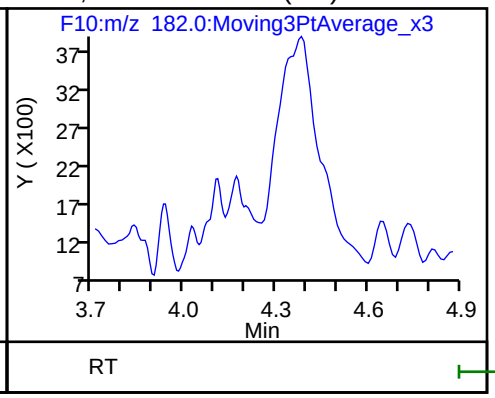
13 3,4-Dinitrotoluene (ND)



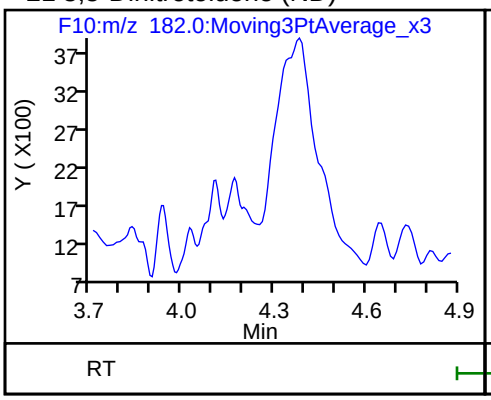
24 m-Nitrotoluene (ND)



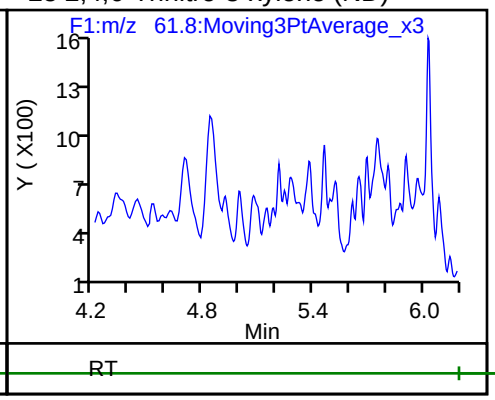
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 08-Apr-2022 07:32:40 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07040.d
Lims ID: 280-160190-A-5-B
Client ID: 29SB175 (6-7)
Sample Type: Client
Inject. Date: 07-Apr-2022 14:43:23 ALS Bottle#: 36 Worklist Smp#: 40
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-5-B
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:34 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 14:58:30

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	95.7	95.39

Report Date: 08-Apr-2022 07:32:40 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

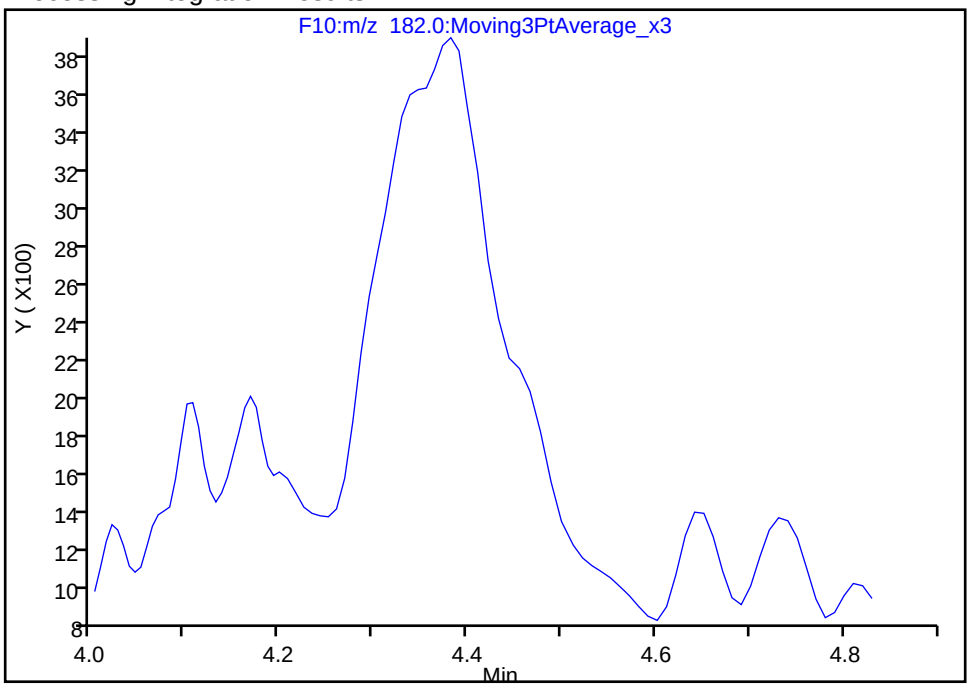
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07040.d				
Injection Date:	07-Apr-2022 14:43:23	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-5-B	Lab Sample ID:	280-160190-5		
Client ID:	29SB175 (6-7)				
Operator ID:	acm	ALS Bottle#:	36	Worklist Smp#:	40
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F10:SIR		

19 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

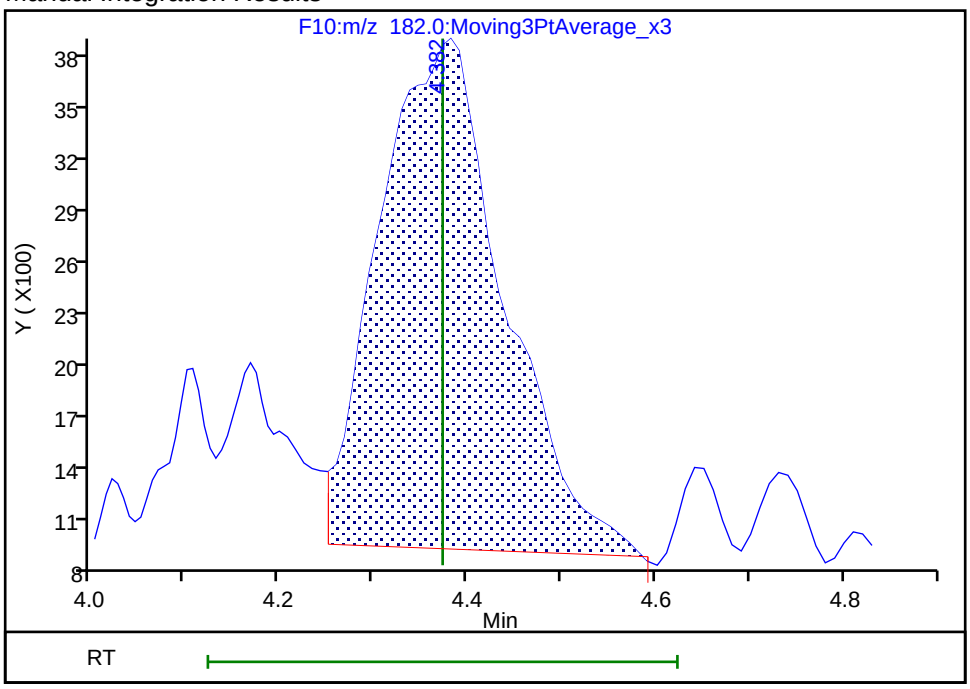
Not Detected
Expected RT: 4.37

Processing Integration Results



Manual Integration Results

RT: 4.38
Area: 27144
Amount: 0.125653
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 14:58:26
Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB175 (11-12) | Lab Sample ID: 280-160190-6
Matrix: Solid | Lab File ID: ex722D07041.d
Analysis Method: 8321A | Date Collected: 03/24/2022 09:58
Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57
Sample wt/vol: 10.72(g) | Date Analyzed: 04/07/2022 14:49
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571108 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.047	U	0.093	0.047	0.042
99-65-0	1,3-Dinitrobenzene	0.047	U	0.093	0.047	0.042
118-96-7	2,4,6-Trinitrotoluene	0.047	U Q	0.093	0.047	0.034
121-14-2	2,4-Dinitrotoluene	0.047	U	0.093	0.047	0.043
606-20-2	2,6-Dinitrotoluene	0.047	U	0.093	0.047	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.047	U	0.093	0.047	0.046
19406-51-0	4-Amino-2,6-dinitrotoluene	0.047	U	0.093	0.047	0.029
2691-41-0	HMX	0.047	U	0.093	0.047	0.043
99-08-1	m-Nitrotoluene	0.047	U	0.093	0.047	0.040
98-95-3	Nitrobenzene	0.047	U	0.10	0.047	0.035
55-63-0	Nitroglycerin	0.047	U	0.093	0.047	0.027
88-72-2	o-Nitrotoluene	0.047	U	0.093	0.047	0.040
78-11-5	PETN	0.047	U	0.093	0.047	0.032
99-99-0	p-Nitrotoluene	0.047	U	0.093	0.047	0.046
121-82-4	RDX	0.047	U	0.11	0.047	0.040
479-45-8	Tetryl	0.047	U Q	0.093	0.047	0.036

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	94		68-140

Report Date: 08-Apr-2022 07:32:41 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07041.d
Lims ID: 280-160190-A-6-B
Client ID: 29SB175 (11-12)
Sample Type: Client
Inject. Date: 07-Apr-2022 14:49:59 ALS Bottle#: 37 Worklist Smp#: 41
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-6-B
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:34 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 15:02:01
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		132999	125.0	153	
33 DNX								
160.0	1.547	1.489	0.058	0.839	9692	-0.4441	5.3	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		380304	125.0	122	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.030	3.030	0.0		1430168	129.4	390	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.775	654918	94.4	113	
* 18 2,4-dinitrotoluene-d3								
185.1	4.332	4.341	-0.009		4311600	125.0	128	
22 o-Nitrotoluene								
137.0	5.002	5.002	0.0	1.155	37849	3.14	8.7	
23 p-Nitrotoluene								
137.0	5.311	5.311	0.0	1.226	40037	3.74	9.4	

QC Flag Legend

Processing Flags

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

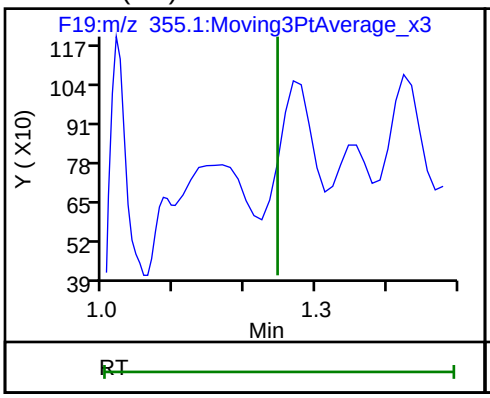
Report Date: 08-Apr-2022 07:32:41 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

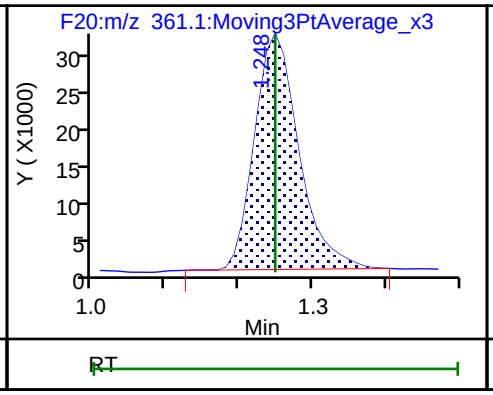
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07041.d

Injection Date:	07-Apr-2022 14:49:59	Instrument ID:	LC_LCMS7
Lims ID:	280-160190-A-6-B	Lab Sample ID:	280-160190-6
Client ID:	29SB175 (11-12)		
Operator ID:	acm	ALS Bottle#:	37 Worklist Smp#: 41
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl

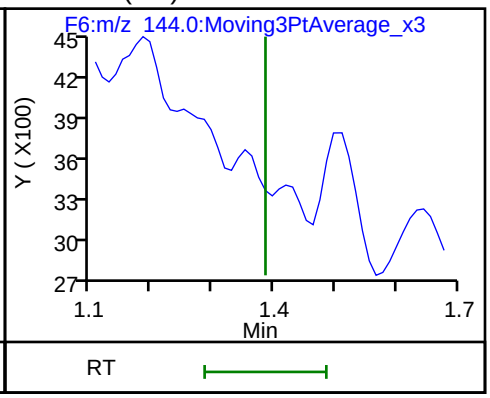
2 HMX (ND)



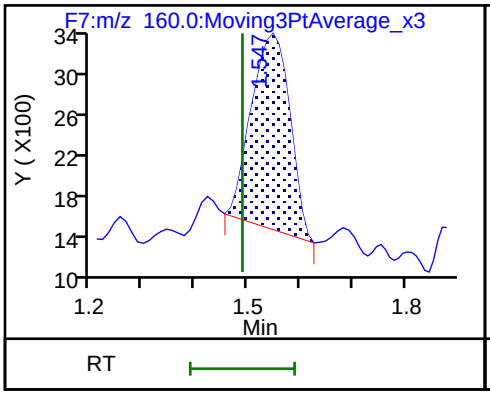
* 1 HMX-13C4



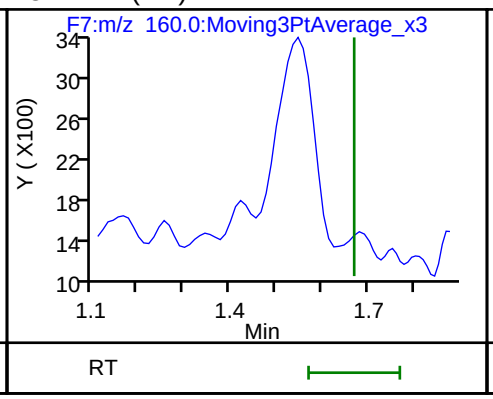
36 TNX (ND)



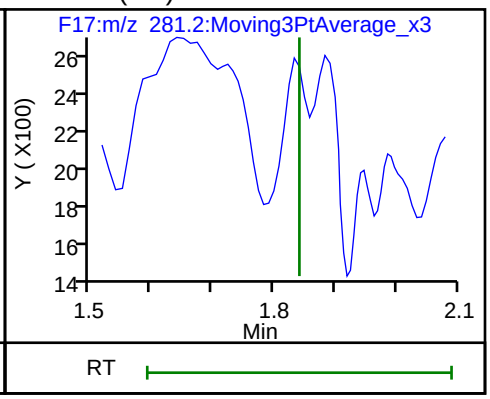
33 DNX



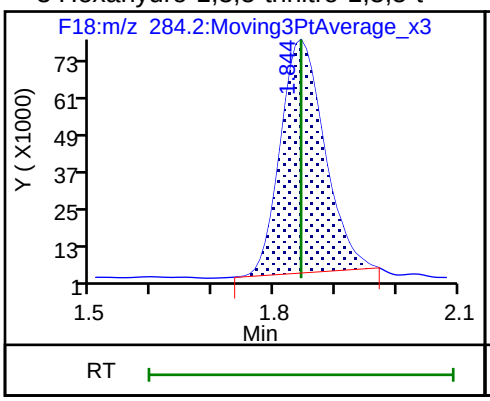
34 MNX (ND)



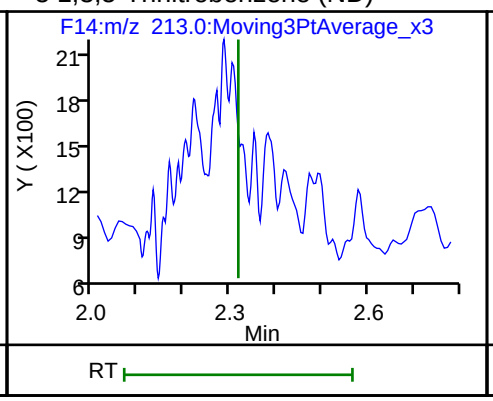
4 RDX (ND)



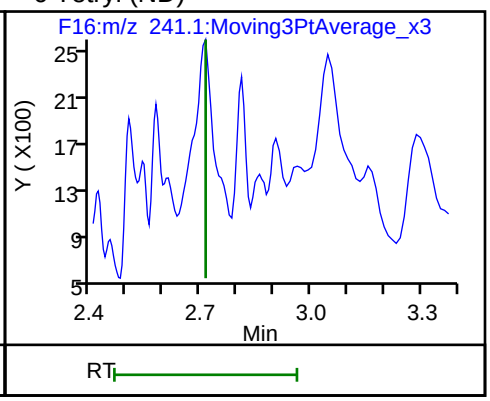
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



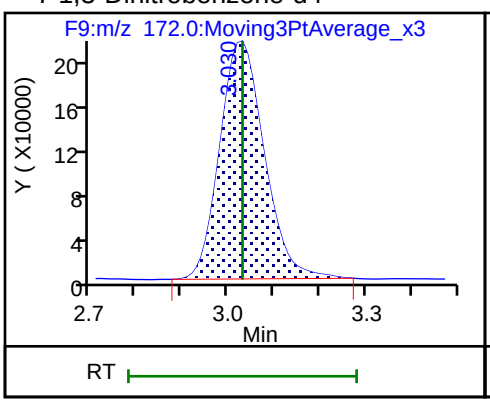
5 1,3,5-Trinitrobenzene (ND)



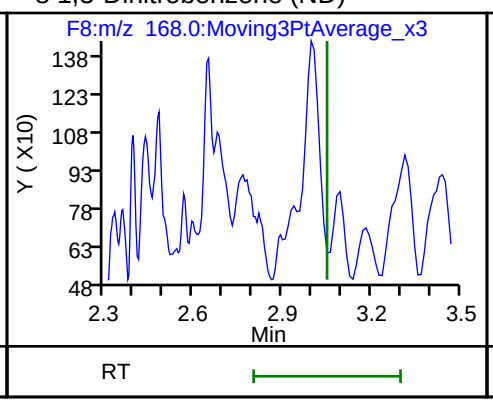
6 Tetryl (ND)



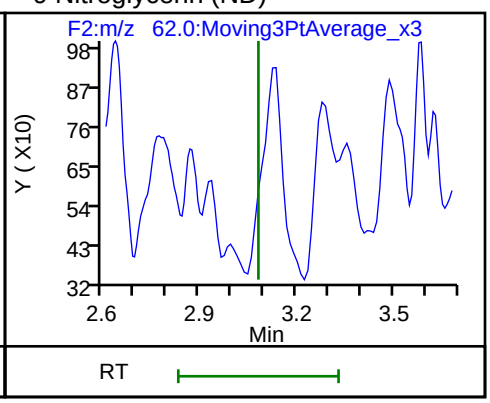
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

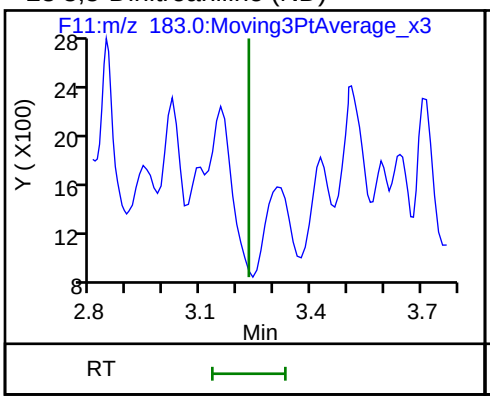


9 Nitroglycerin (ND)

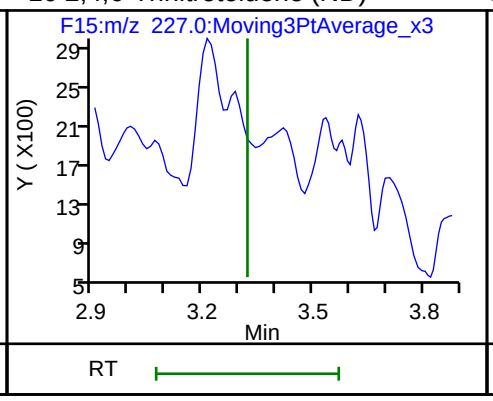


Report Date: 08-Apr-2022 07:32:41 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07041.d

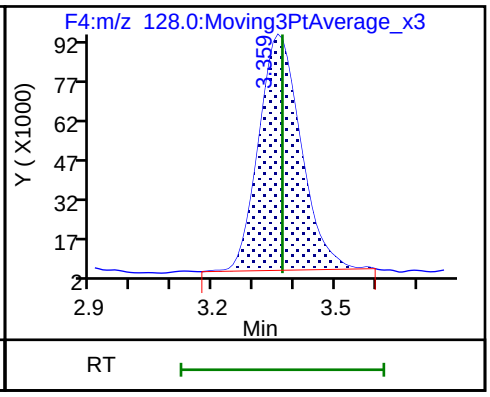
28 3,5-Dinitroaniline (ND)



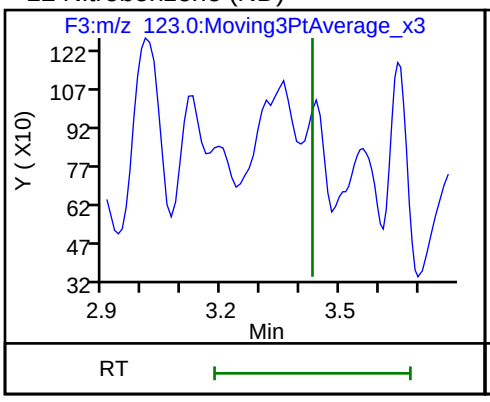
10 2,4,6-Trinitrotoluene (ND)



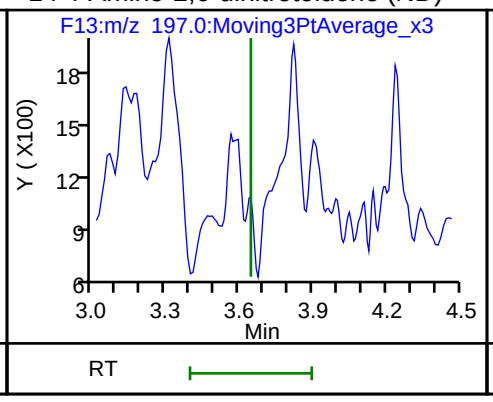
$ 11 Nitrobenzene-d5



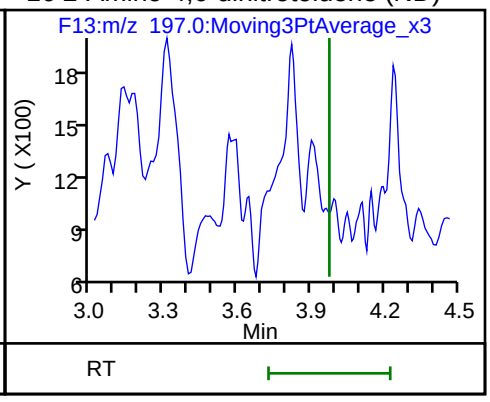
12 Nitrobenzene (ND)



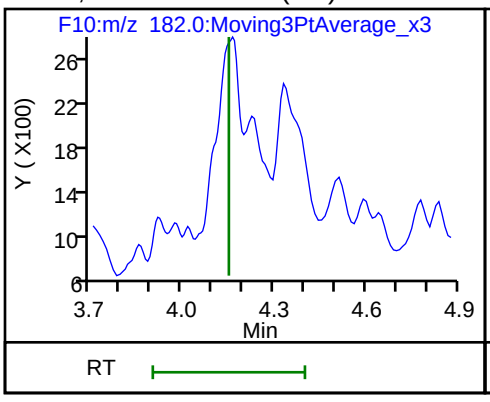
14 4-Amino-2,6-dinitrotoluene (ND)



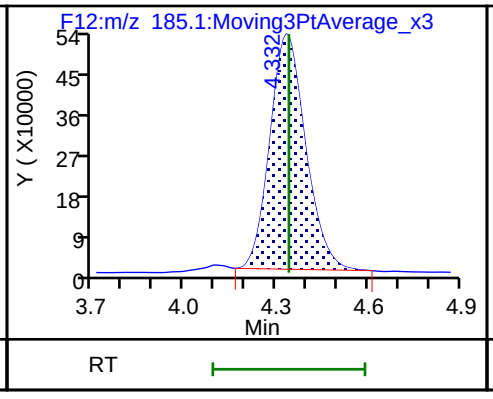
16 2-Amino-4,6-dinitrotoluene (ND)



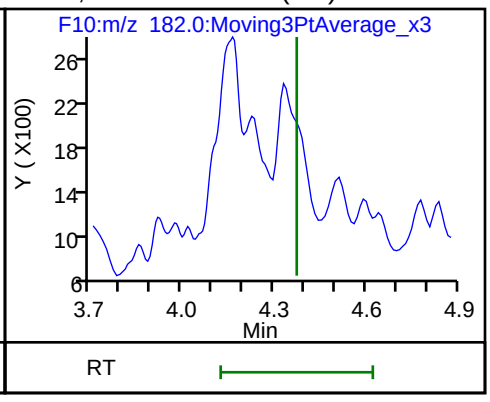
17 2,6-Dinitrotoluene (ND)



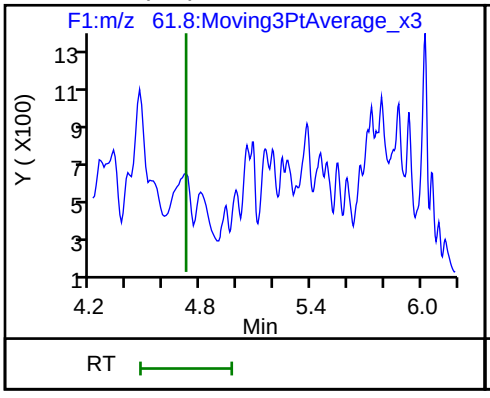
* 18 2,4-dinitrotoluene-d3



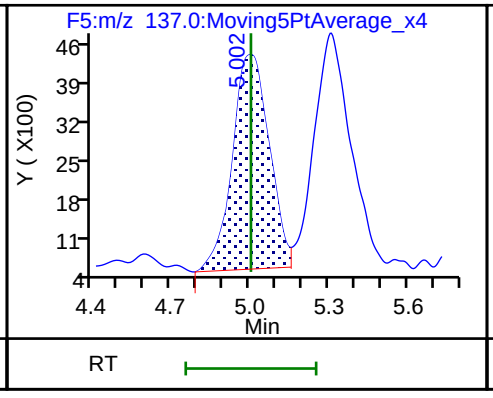
19 2,4-Dinitrotoluene (ND)



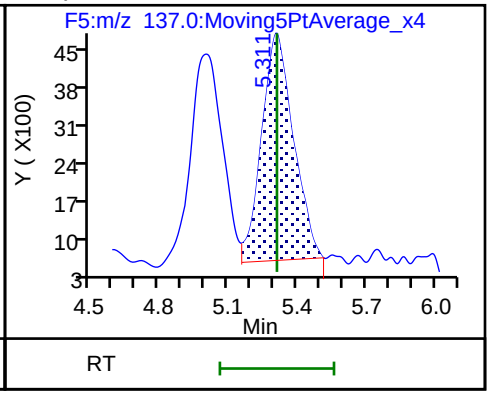
20 PETN (ND)



22 o-Nitrotoluene



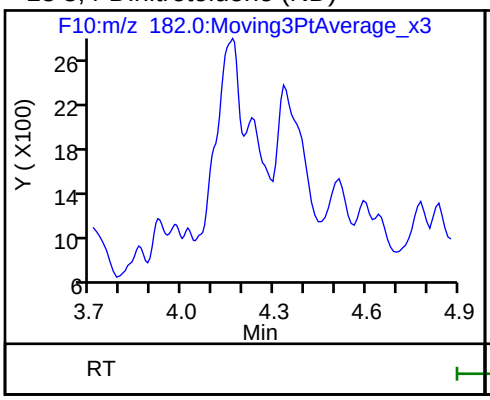
23 p-Nitrotoluene



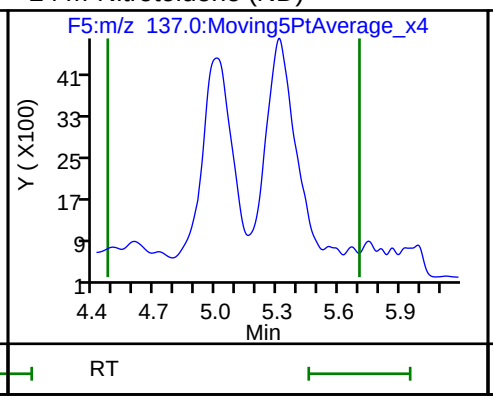
Report Date: 08-Apr-2022 07:32:41 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07041.d

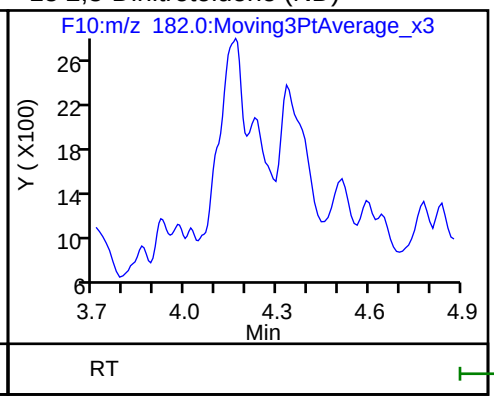
13 3,4-Dinitrotoluene (ND)



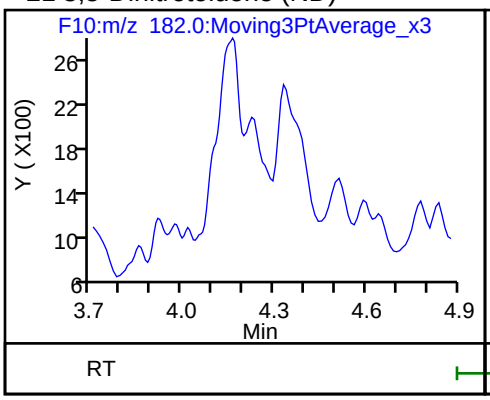
24 m-Nitrotoluene (ND)



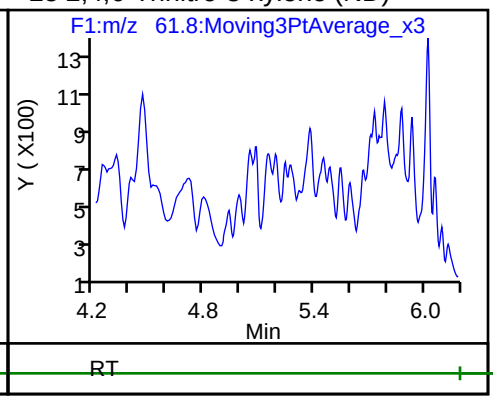
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 08-Apr-2022 07:32:41 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07041.d
Lims ID: 280-160190-A-6-B
Client ID: 29SB175 (11-12)
Sample Type: Client
Inject. Date: 07-Apr-2022 14:49:59 ALS Bottle#: 37 Worklist Smp#: 41
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-6-B
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:34 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 15:02:01

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	94.4	94.07

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB175 (14.5-15) | Lab Sample ID: 280-160190-7
Matrix: Solid | Lab File ID: ex722D07042.d
Analysis Method: 8321A | Date Collected: 03/24/2022 10:00
Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57
Sample wt/vol: 10.13(g) | Date Analyzed: 04/07/2022 14:56
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571108 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.049	U	0.099	0.049	0.044
99-65-0	1,3-Dinitrobenzene	0.049	U	0.099	0.049	0.044
118-96-7	2,4,6-Trinitrotoluene	0.049	U Q	0.099	0.049	0.036
121-14-2	2,4-Dinitrotoluene	0.049	U	0.099	0.049	0.046
606-20-2	2,6-Dinitrotoluene	0.049	U	0.099	0.049	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.049	U	0.099	0.049	0.049
19406-51-0	4-Amino-2,6-dinitrotoluene	0.049	U	0.099	0.049	0.031
2691-41-0	HMX	0.049	U	0.099	0.049	0.046
99-08-1	m-Nitrotoluene	0.049	U	0.099	0.049	0.043
98-95-3	Nitrobenzene	0.049	U	0.11	0.049	0.038
55-63-0	Nitroglycerin	0.049	U	0.099	0.049	0.029
88-72-2	o-Nitrotoluene	0.049	U	0.099	0.049	0.042
78-11-5	PETN	0.049	U	0.099	0.049	0.034
99-99-0	p-Nitrotoluene	0.049	U	0.099	0.049	0.049
121-82-4	RDX	0.049	U	0.12	0.049	0.043
479-45-8	Tetryl	0.049	U Q	0.099	0.049	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	98		68-140

Report Date: 08-Apr-2022 07:32:42 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07042.d
Lims ID: 280-160190-A-7-B
Client ID: 29SB175 (14.5-15)
Sample Type: Client
Inject. Date: 07-Apr-2022 14:56:35 ALS Bottle#: 38 Worklist Smp#: 42
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-7-B
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:34 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 08-Apr-2022 07:19:42
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		129691	125.0	186	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.852	1.844	0.008		383231	125.0	227	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.030	-0.011		1373036	129.4	374	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.774	656852	98.5	78.2	
12 Nitrobenzene								
123.0	3.391	3.431	-0.040	0.781	2306	-0.7357	2.1	
* 18 2,4-dinitrotoluene-d3								
185.1	4.341	4.341	0.0		4277057	125.0	113	

QC Flag Legend
Processing Flags

Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

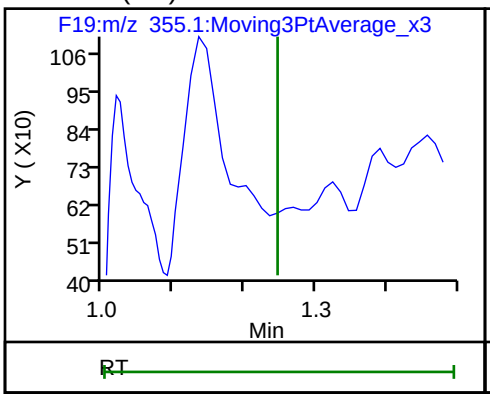
Report Date: 08-Apr-2022 07:32:42 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

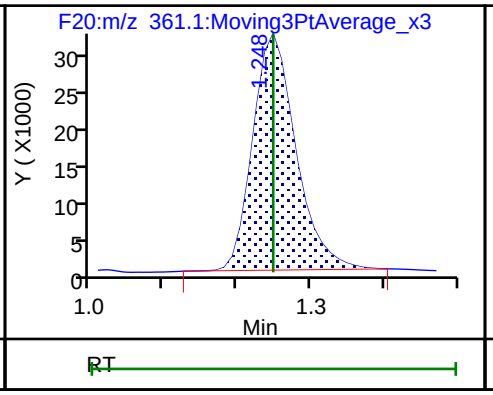
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07042.d

Injection Date:	07-Apr-2022 14:56:35	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-7-B	Lab Sample ID:	280-160190-7		
Client ID:	29SB175 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	38	Worklist Smp#:	42
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		

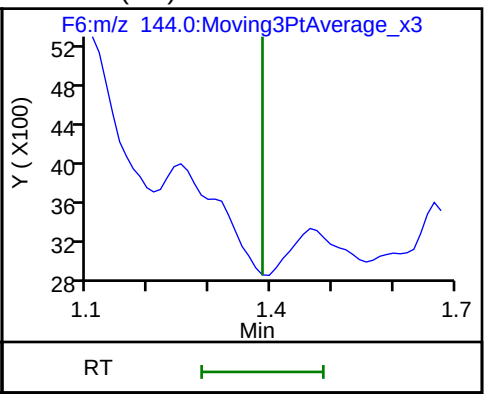
2 HMX (ND)



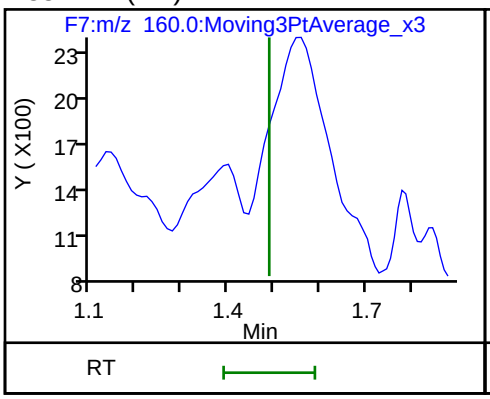
* 1 HMX-13C4



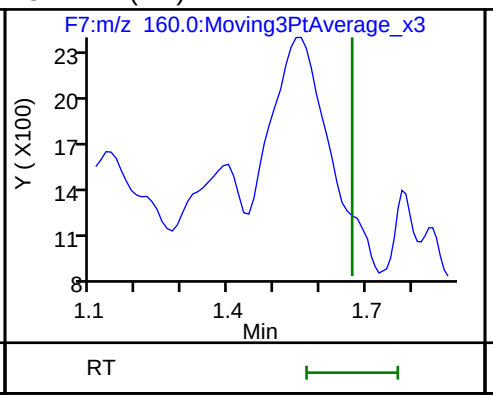
36 TNX (ND)



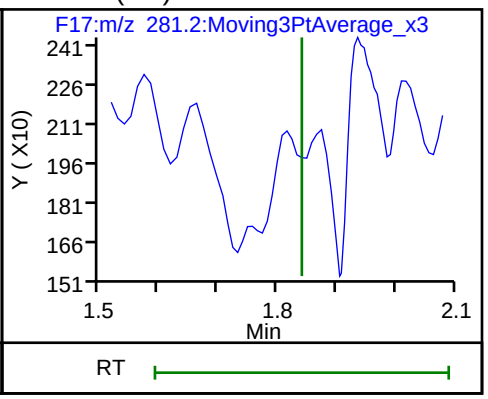
33 DNX (ND)



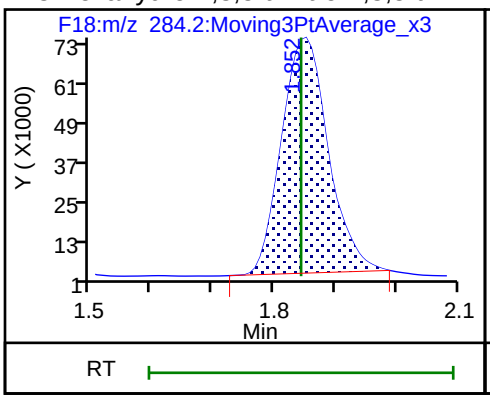
34 MNX (ND)



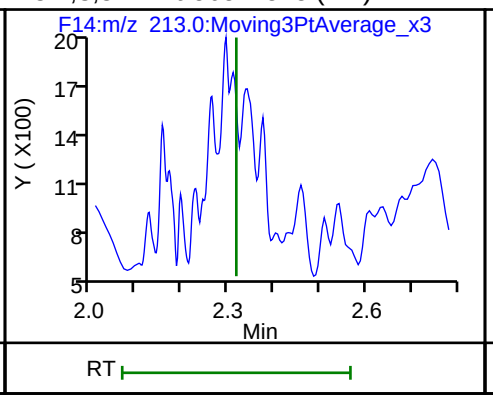
4 RDX (ND)



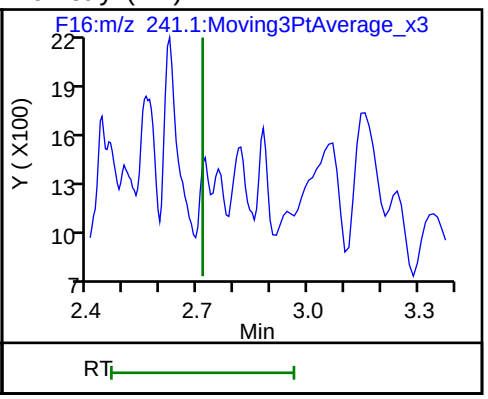
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



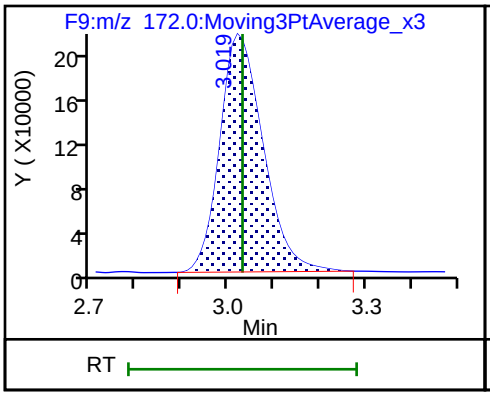
5 1,3,5-Trinitrobenzene (ND)



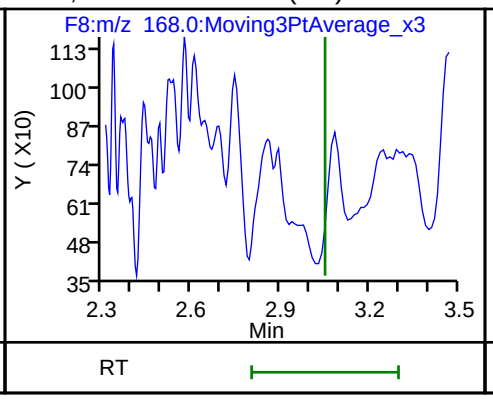
6 Tetryl (ND)



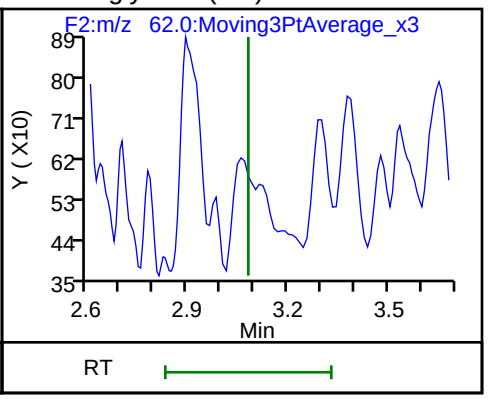
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

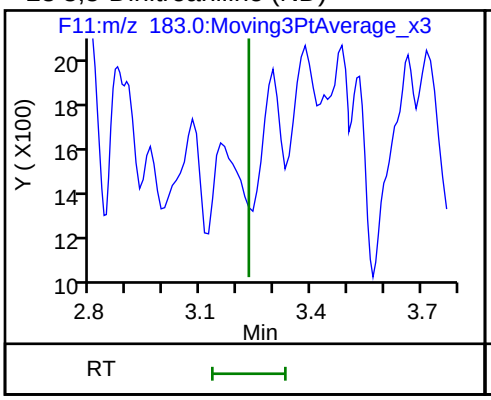


9 Nitroglycerin (ND)

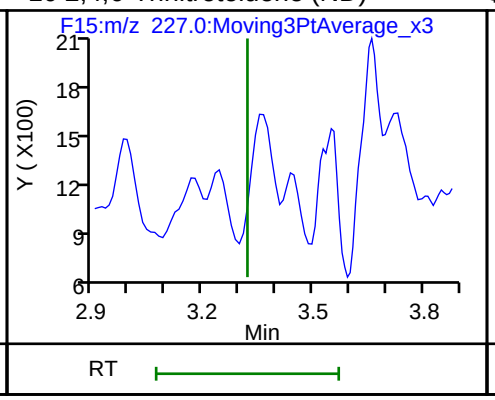


Report Date: 08-Apr-2022 07:32:42 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07042.d

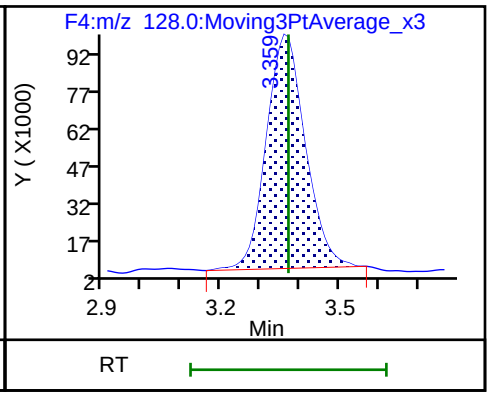
28 3,5-Dinitroaniline (ND)



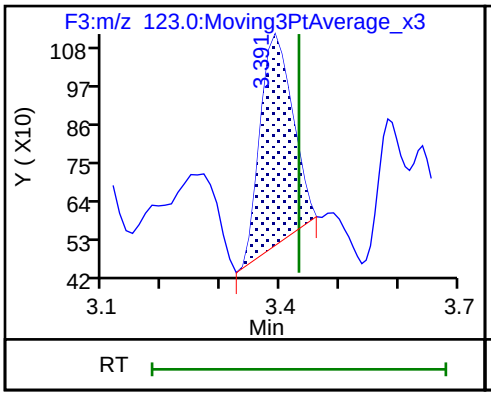
10 2,4,6-Trinitrotoluene (ND)



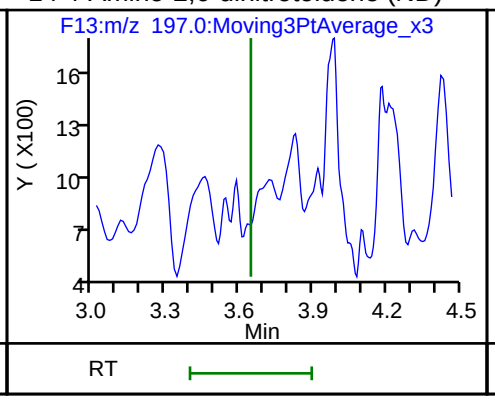
$ 11 Nitrobenzene-d5



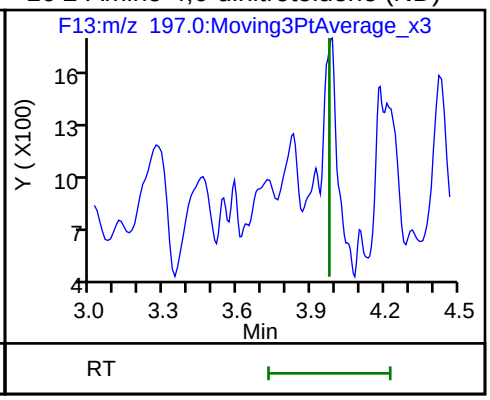
12 Nitrobenzene



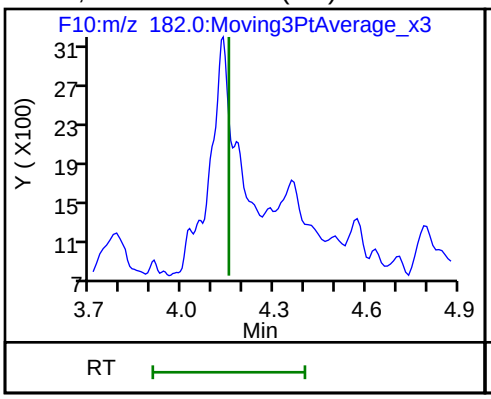
14 4-Amino-2,6-dinitrotoluene (ND)



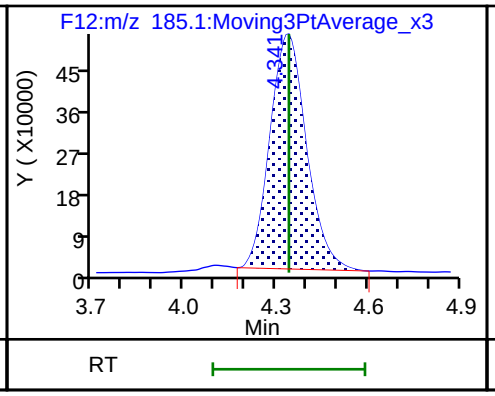
16 2-Amino-4,6-dinitrotoluene (ND)



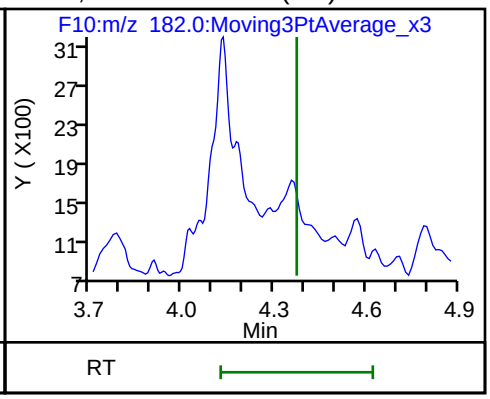
17 2,6-Dinitrotoluene (ND)



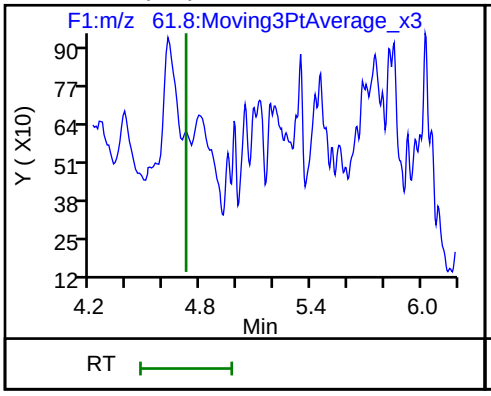
* 18 2,4-dinitrotoluene-d3



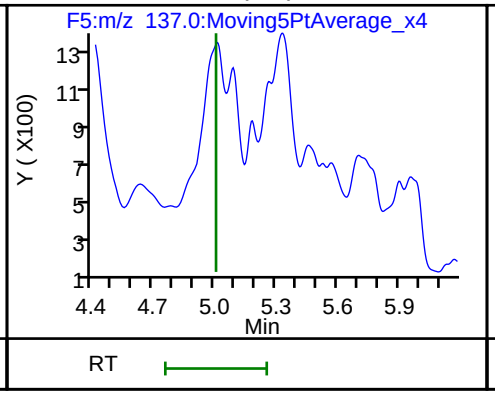
19 2,4-Dinitrotoluene (ND)



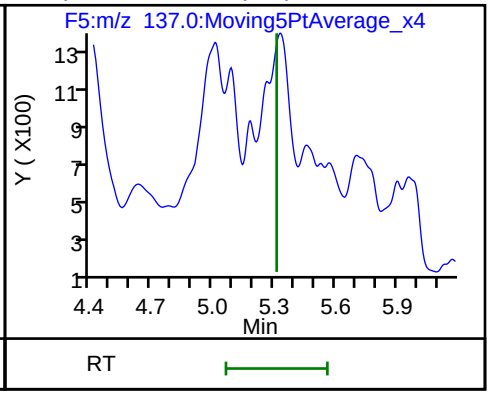
20 PETN (ND)



22 o-Nitrotoluene (ND)



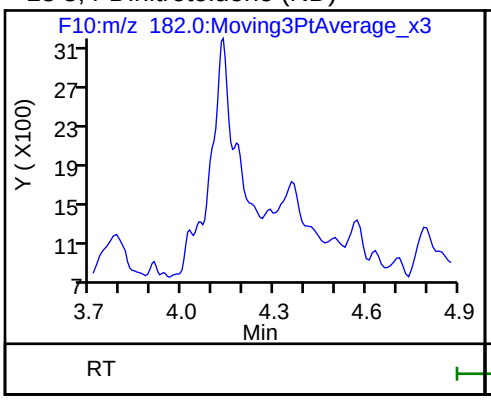
23 p-Nitrotoluene (ND)



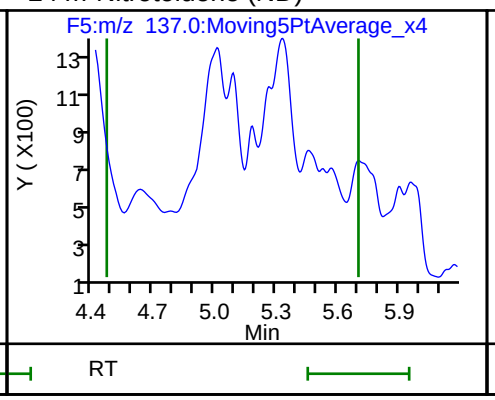
Report Date: 08-Apr-2022 07:32:42 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07042.d

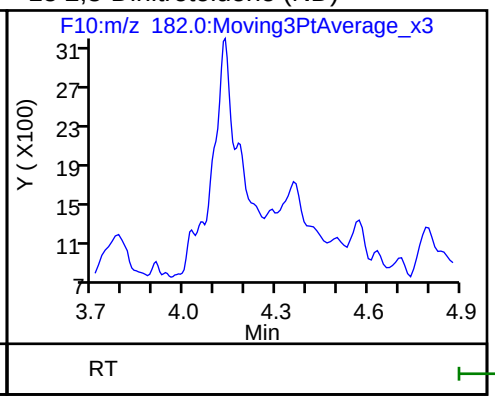
13 3,4-Dinitrotoluene (ND)



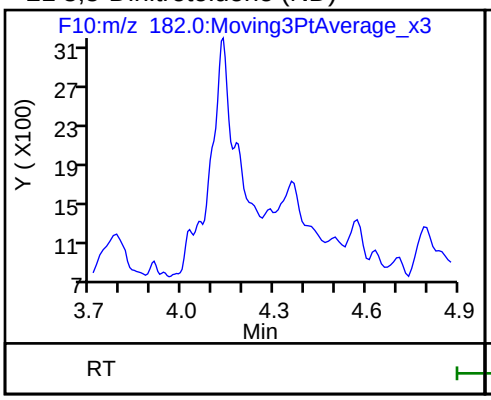
24 m-Nitrotoluene (ND)



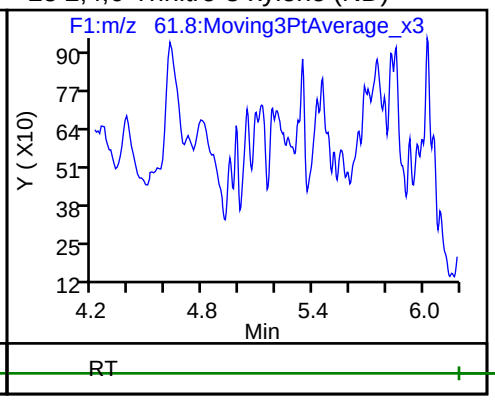
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 08-Apr-2022 07:32:42 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07042.d
Lims ID: 280-160190-A-7-B
Client ID: 29SB175 (14.5-15)
Sample Type: Client
Inject. Date: 07-Apr-2022 14:56:35 ALS Bottle#: 38 Worklist Smp#: 42
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-7-B
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:34 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 08-Apr-2022 07:19:42

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	98.5	98.19

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1

SDG No.:

Client Sample ID: DUP-05 | Lab Sample ID: 280-160190-8

Matrix: Solid | Lab File ID: ex722D08017.d

Analysis Method: 8321A | Date Collected: 03/24/2022 12:00

Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20

Sample wt/vol: 10.55(g) | Date Analyzed: 04/08/2022 11:20

Con. Extract Vol.: 40(mL) | Dilution Factor: 1

Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:

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

Analysis Batch No.: 571224 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.047	U	0.095	0.047	0.042
99-65-0	1,3-Dinitrobenzene	0.047	U	0.095	0.047	0.042
118-96-7	2,4,6-Trinitrotoluene	0.047	U M	0.095	0.047	0.035
121-14-2	2,4-Dinitrotoluene	0.047	U	0.095	0.047	0.044
606-20-2	2,6-Dinitrotoluene	0.047	U	0.095	0.047	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.047	U	0.095	0.047	0.047
19406-51-0	4-Amino-2,6-dinitrotoluene	0.047	U	0.095	0.047	0.029
2691-41-0	HMX	0.047	U M Q	0.095	0.047	0.044
99-08-1	m-Nitrotoluene	0.047	U	0.095	0.047	0.041
98-95-3	Nitrobenzene	0.047	U	0.10	0.047	0.036
55-63-0	Nitroglycerin	0.047	U	0.095	0.047	0.027
88-72-2	o-Nitrotoluene	0.047	U M	0.095	0.047	0.041
78-11-5	PETN	0.047	U	0.095	0.047	0.032
99-99-0	p-Nitrotoluene	0.047	U M	0.095	0.047	0.047
121-82-4	RDX	0.047	U	0.11	0.047	0.041
479-45-8	Tetryl	0.047	U Q	0.095	0.047	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	100		68-140

Report Date: 14-Apr-2022 10:06:49 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08017.d
Lims ID: 280-160190-A-8-B
Client ID: DUP-05
Sample Type: Client
Inject. Date: 08-Apr-2022 11:20:23 ALS Bottle#: 15 Worklist Smp#: 17
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-8-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:44 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:41:16
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		124270	125.0	174	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.852	1.844	0.008		384711	125.0	237	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.008	0.011		1270569	129.4	219	
$ 11 Nitrobenzene-d5								
128.0	3.348	3.354	0.0	0.774	602025	100.2	96.2	
* 18 2,4-dinitrotoluene-d3								
185.1	4.324	4.315	0.009		3973341	125.0	106	
22 o-Nitrotoluene								M
137.0	4.977	4.987	0.0	1.151	44841	4.16	12.2	M
23 p-Nitrotoluene								M
137.0	5.316	5.297	0.030	1.230	37523	3.71	8.4	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 14-Apr-2022 10:06:49 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08017.d

Injection Date: 08-Apr-2022 11:20:23 Instrument ID: LC_LCMS7

Lims ID: 280-160190-A-8-B Lab Sample ID: 280-160190-8

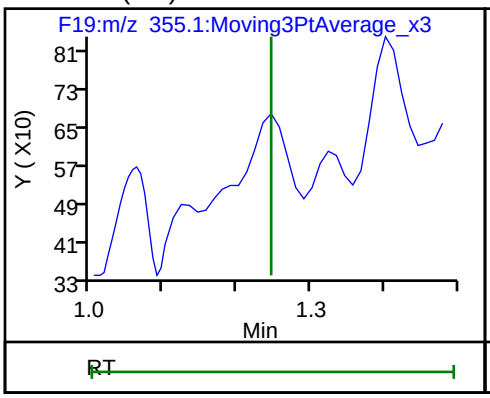
Client ID: DUP-05

Operator ID: acm ALS Bottle#: 15 Worklist Smp#: 17

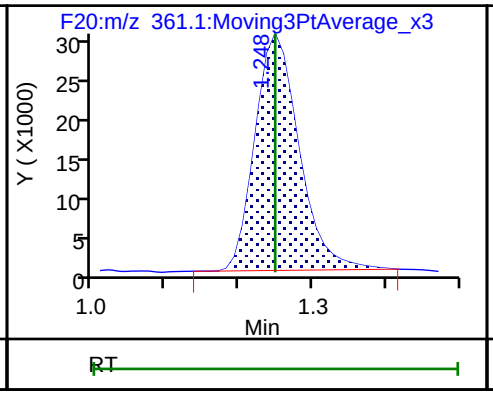
Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

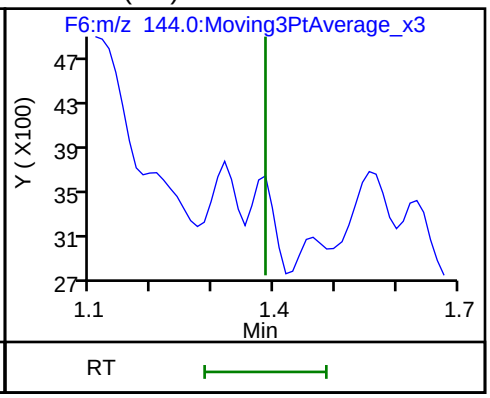
2 HMX (ND)



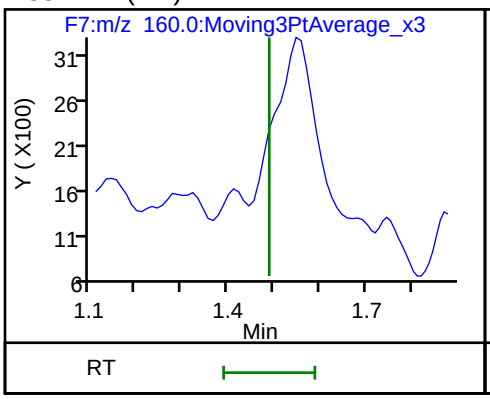
* 1 HMX-13C4



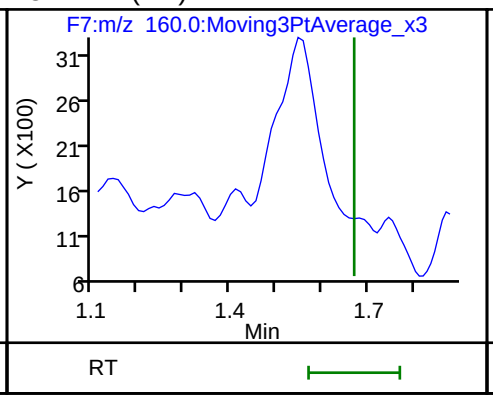
36 TNX (ND)



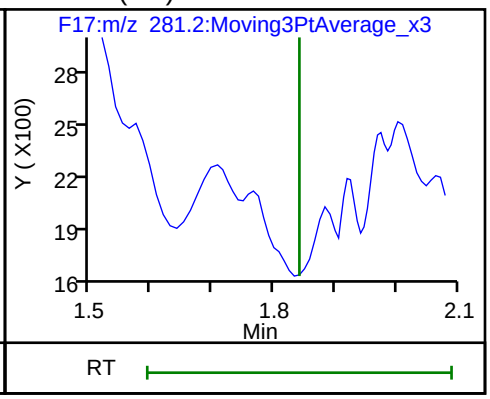
33 DNX (ND)



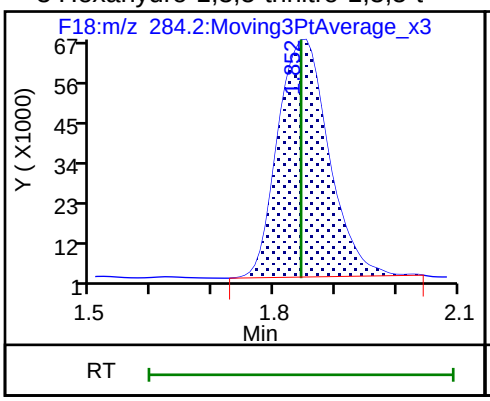
34 MNX (ND)



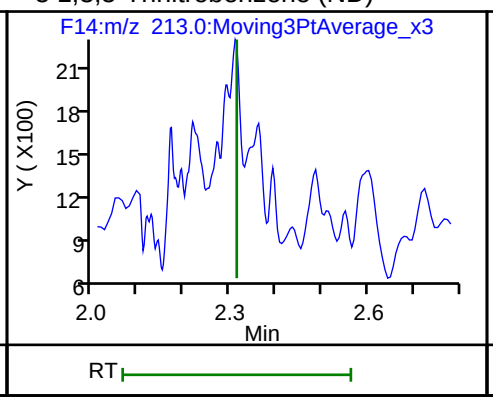
4 RDX (ND)



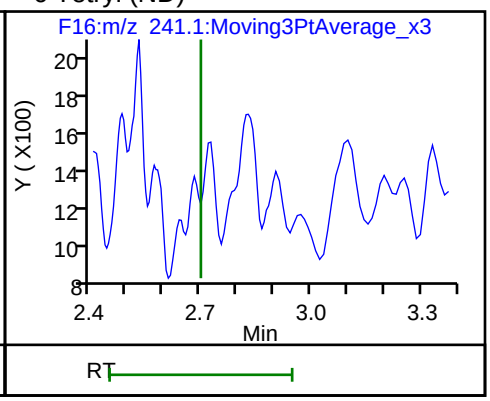
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



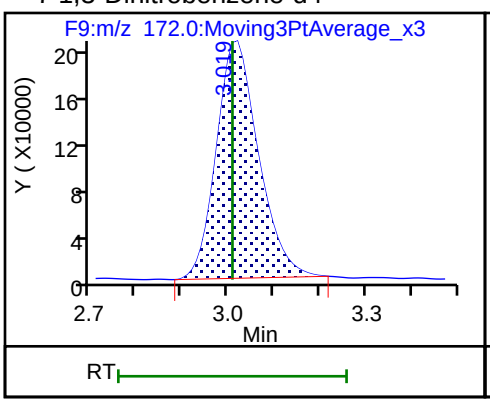
5 1,3,5-Trinitrobenzene (ND)



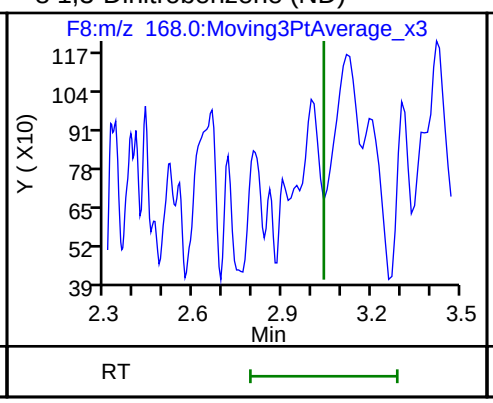
6 Tetryl (ND)



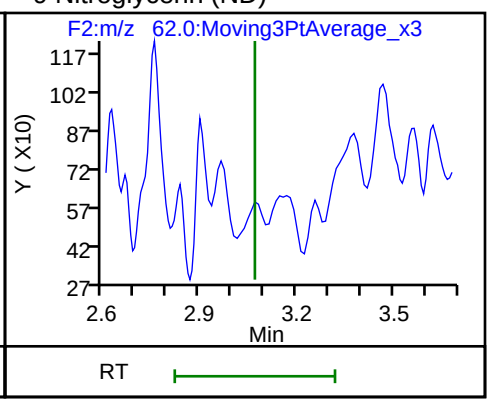
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

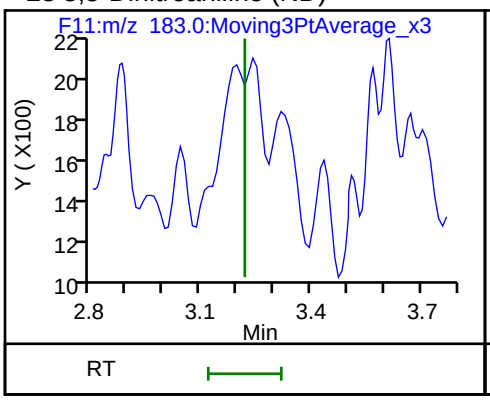


9 Nitroglycerin (ND)

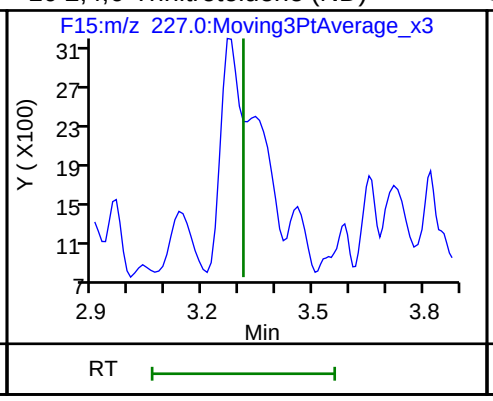


Report Date: 14-Apr-2022 10:06:49 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08017.d

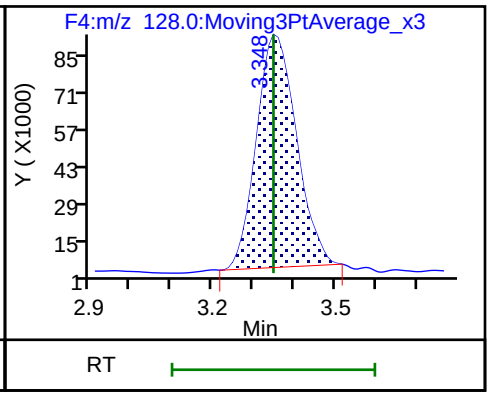
28 3,5-Dinitroaniline (ND)



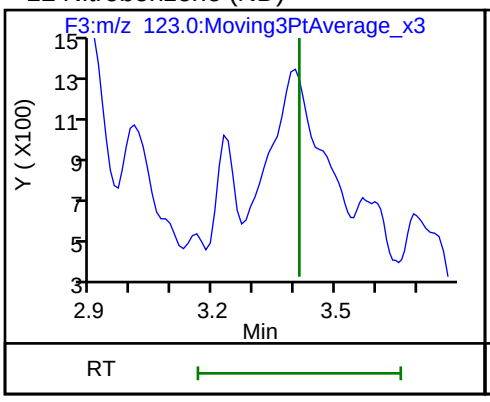
10 2,4,6-Trinitrotoluene (ND)



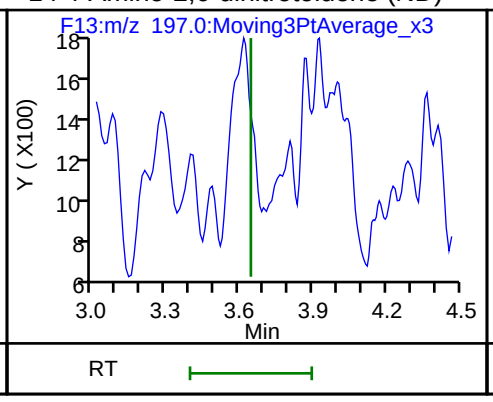
$ 11 Nitrobenzene-d5



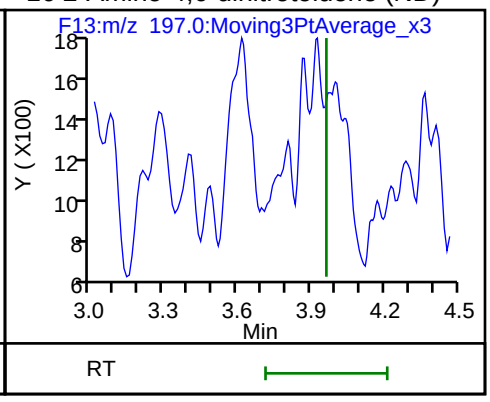
12 Nitrobenzene (ND)



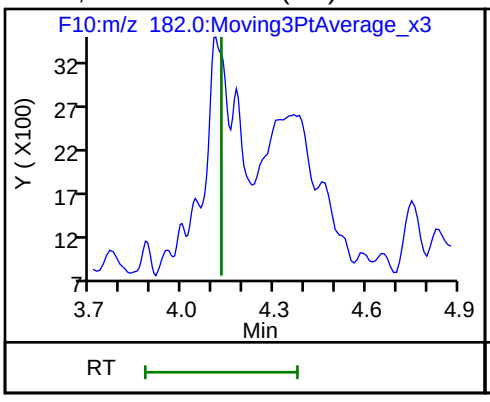
14 4-Amino-2,6-dinitrotoluene (ND)



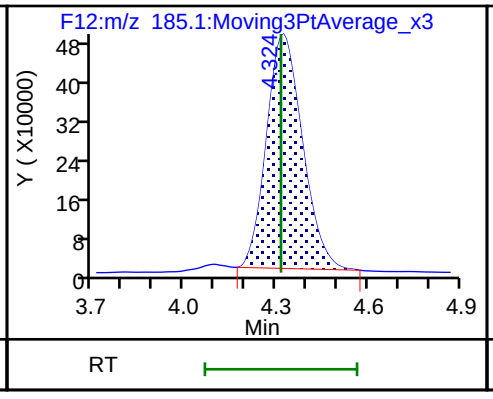
16 2-Amino-4,6-dinitrotoluene (ND)



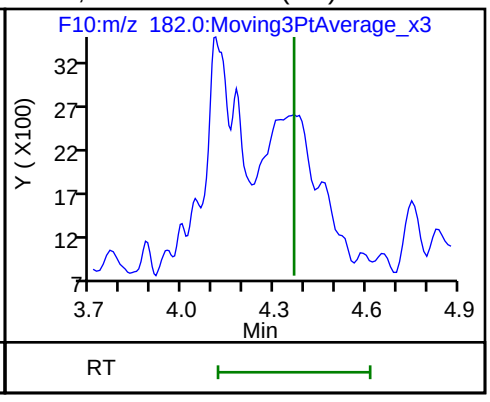
17 2,6-Dinitrotoluene (ND)



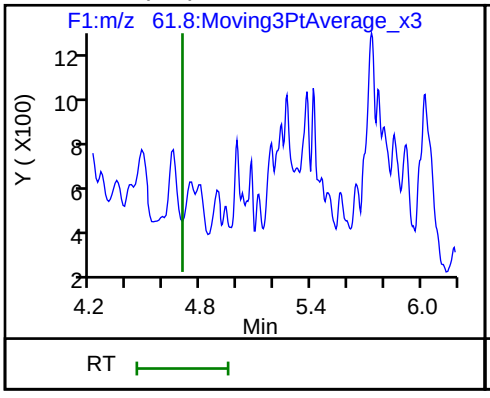
* 18 2,4-dinitrotoluene-d3



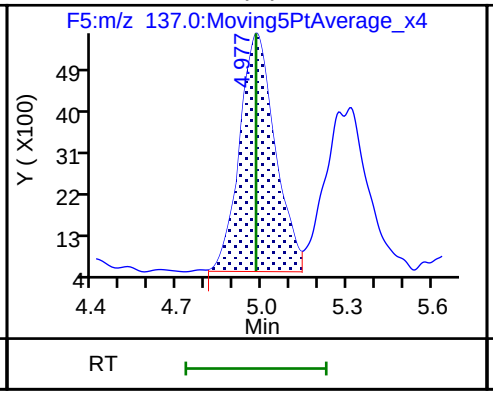
19 2,4-Dinitrotoluene (ND)



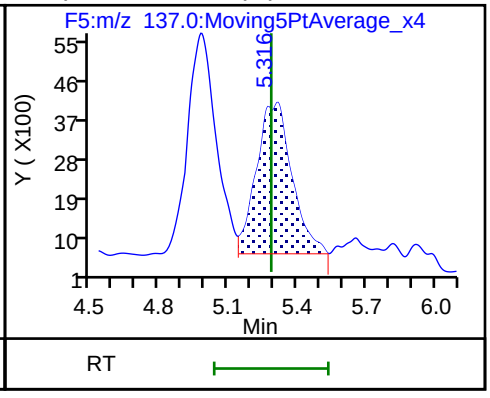
20 PETN (ND)



22 o-Nitrotoluene (M)



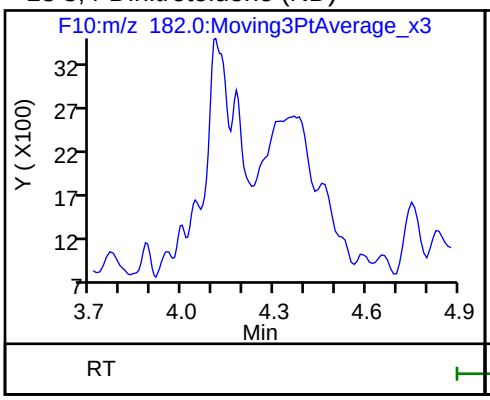
23 p-Nitrotoluene (M)



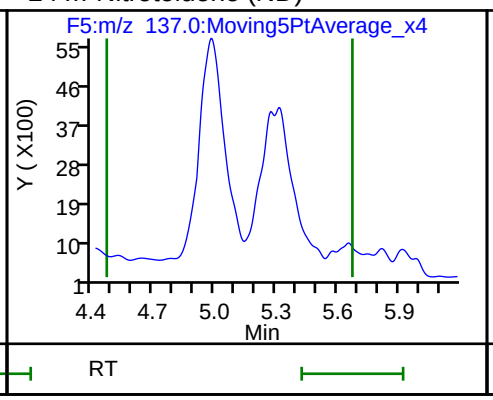
Report Date: 14-Apr-2022 10:06:49 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08017.d

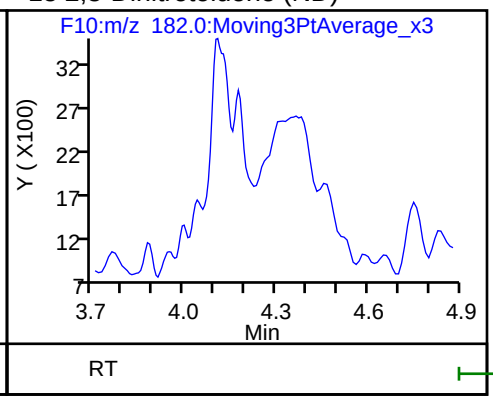
13 3,4-Dinitrotoluene (ND)



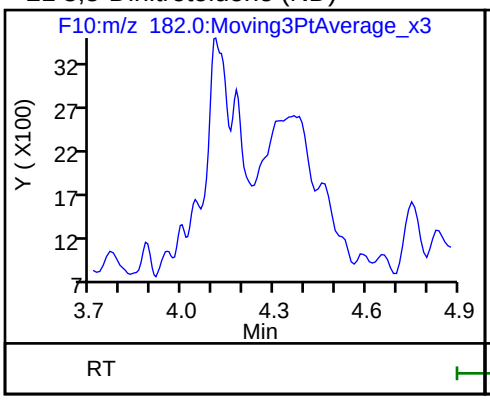
24 m-Nitrotoluene (ND)



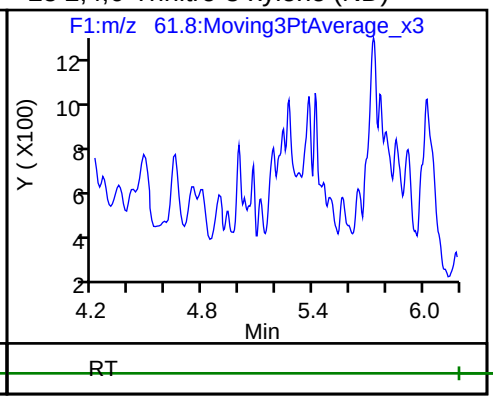
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 14-Apr-2022 10:06:49 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08017.d
Lims ID: 280-160190-A-8-B
Client ID: DUP-05
Sample Type: Client
Inject. Date: 08-Apr-2022 11:20:23 ALS Bottle#: 15 Worklist Smp#: 17
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-8-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:44 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:41:16

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	100.2	99.85

Report Date: 14-Apr-2022 10:06:49 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

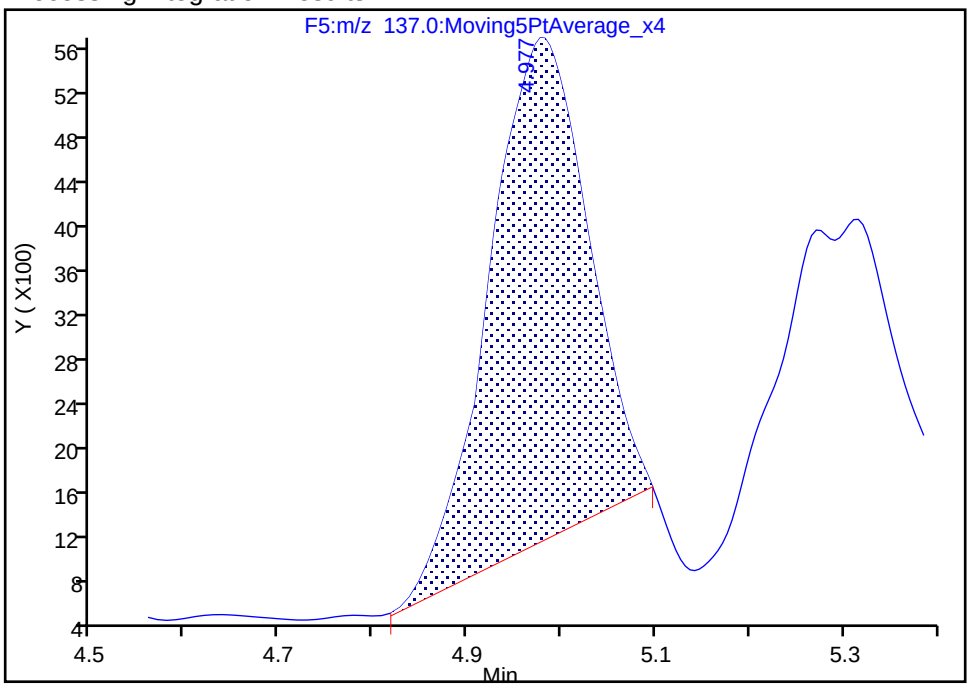
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08017.d				
Injection Date:	08-Apr-2022 11:20:23	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-8-B	Lab Sample ID:	280-160190-8		
Client ID:	DUP-05				
Operator ID:	acm	ALS Bottle#:	15	Worklist Smp#:	17
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F5:SIR		

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

Signal: 1

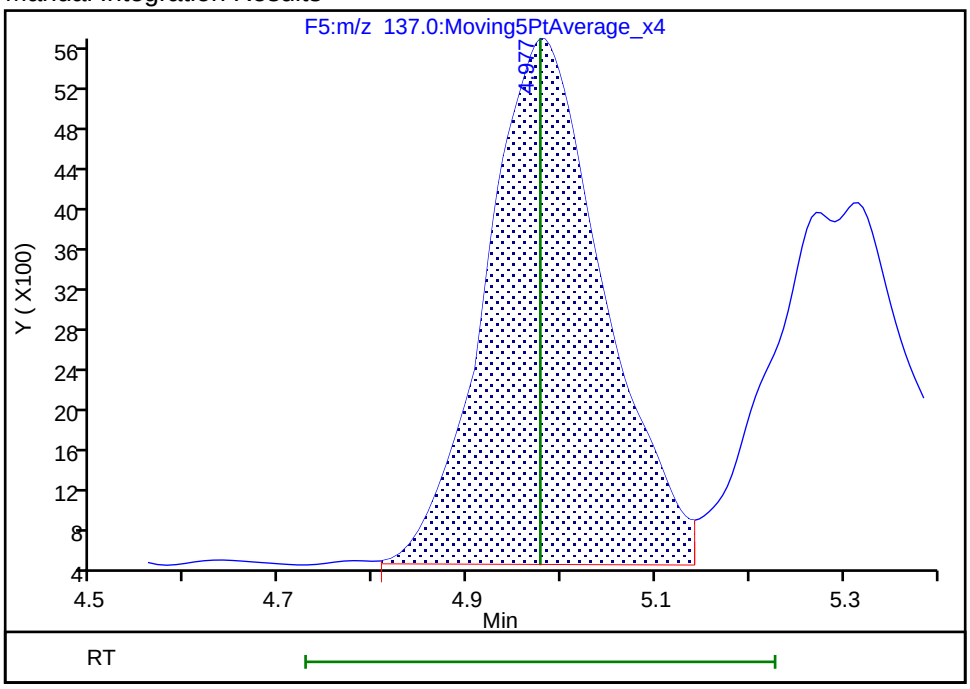
Processing Integration Results

RT: 4.98
Area: 32832
Amount: 2.978191
Amount Units: ug/l



Manual Integration Results

RT: 4.98
Area: 44841
Amount: 4.162113
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:40:59

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:06:49 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08017.d				
Injection Date:	08-Apr-2022 11:20:23	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-8-B	Lab Sample ID:	280-160190-8		
Client ID:	DUP-05				
Operator ID:	acm	ALS Bottle#:	15	Worklist Smp#:	17
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F5:SIR		

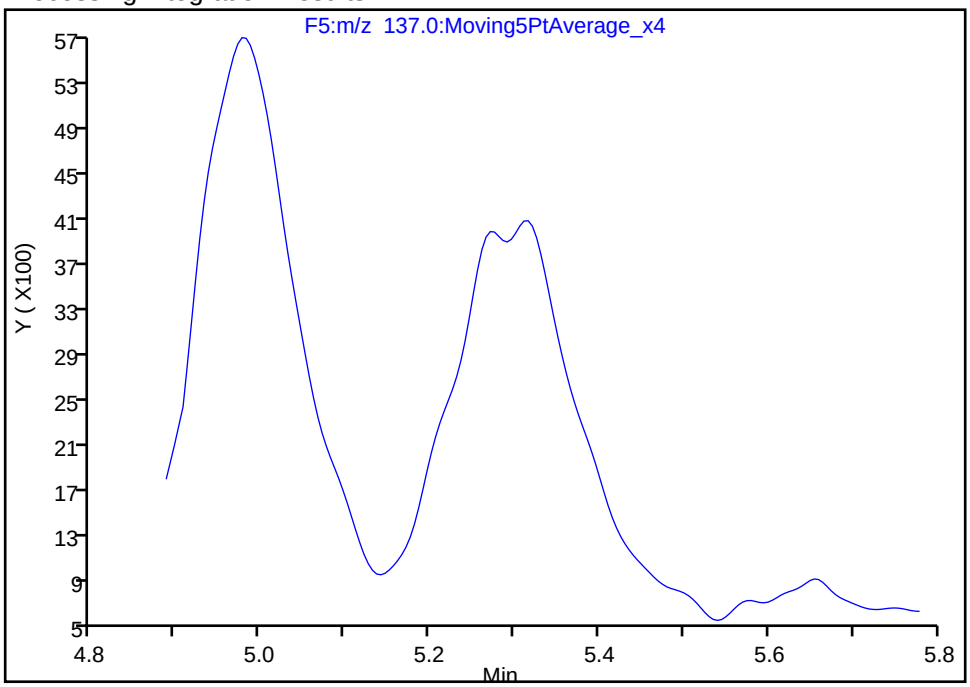
23 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

Processing Integration Results

Not Detected

Expected RT: 5.29



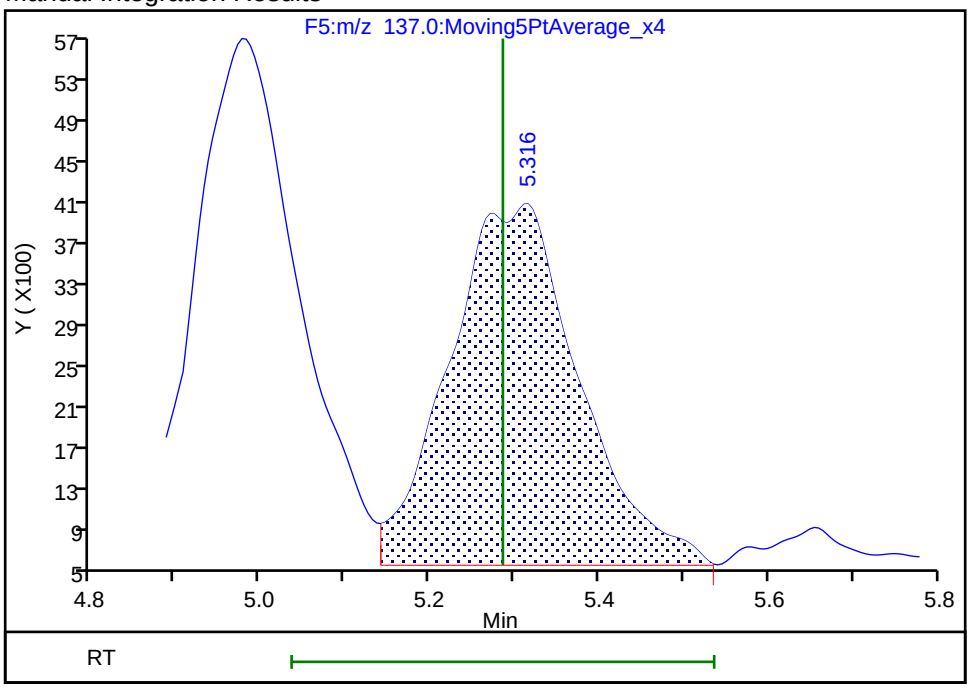
Manual Integration Results

RT: 5.32

Area: 37523

Amount: 3.707979

Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:40:53

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB167 (3-4) | Lab Sample ID: 280-160190-9
Matrix: Solid | Lab File ID: ex722D08018.d
Analysis Method: 8321A | Date Collected: 03/24/2022 10:30
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20
Sample wt/vol: 10.36(g) | Date Analyzed: 04/08/2022 11:26
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571224 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.048	U	0.097	0.048	0.043
99-65-0	1,3-Dinitrobenzene	0.048	U	0.097	0.048	0.043
118-96-7	2,4,6-Trinitrotoluene	0.048	U	0.097	0.048	0.036
121-14-2	2,4-Dinitrotoluene	0.096	J	0.097	0.048	0.045
606-20-2	2,6-Dinitrotoluene	0.048	U M	0.097	0.048	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.048	U	0.097	0.048	0.048
19406-51-0	4-Amino-2,6-dinitrotoluene	0.048	U	0.097	0.048	0.030
2691-41-0	HMX	0.048	U Q	0.097	0.048	0.044
99-08-1	m-Nitrotoluene	0.048	U	0.097	0.048	0.042
98-95-3	Nitrobenzene	0.048	U	0.11	0.048	0.037
55-63-0	Nitroglycerin	0.048	U	0.097	0.048	0.028
88-72-2	o-Nitrotoluene	0.048	U	0.097	0.048	0.041
78-11-5	PETN	0.048	U	0.097	0.048	0.033
99-99-0	p-Nitrotoluene	0.048	U	0.097	0.048	0.048
121-82-4	RDX	0.048	U M	0.12	0.048	0.042
479-45-8	Tetryl	0.048	U Q	0.097	0.048	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	92		68-140

Report Date: 14-Apr-2022 10:06:50 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08018.d
Lims ID: 280-160190-A-9-B
Client ID: 29SB167 (3-4)
Sample Type: Client
Inject. Date: 08-Apr-2022 11:26:59 ALS Bottle#: 16 Worklist Smp#: 18
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-9-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:44 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:41:33
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		129445	125.0	163	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		421558	125.0	190	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.008	0.011		1330483	129.4	258	
10 2,4,6-Trinitrotoluene								
227.0	3.310	3.316	0.0	0.765	252418	3.75	94.2	
$ 11 Nitrobenzene-d5								
128.0	3.348	3.354	0.0	0.774	582149	92.5	98.2	
* 18 2,4-dinitrotoluene-d3								
185.1	4.324	4.315	0.009		4131130	125.0	111	
19 2,4-Dinitrotoluene								
182.0	4.365	4.373	0.0	1.009	878075	24.9	85.0	

QC Flag Legend

Processing Flags

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 14-Apr-2022 10:06:50 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08018.d

Injection Date: 08-Apr-2022 11:26:59 Instrument ID: LC_LCMS7

Lims ID: 280-160190-A-9-B Lab Sample ID: 280-160190-9

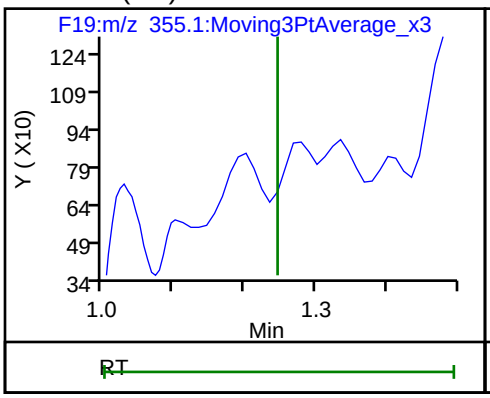
Client ID: 29SB167 (3-4)

Operator ID: acm ALS Bottle#: 16 Worklist Smp#: 18

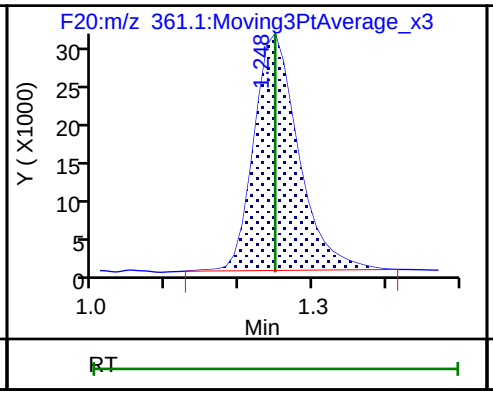
Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

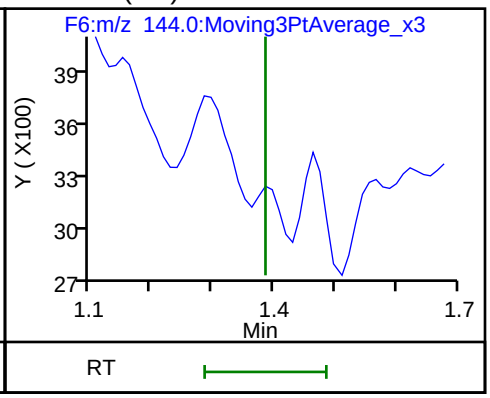
2 HMX (ND)



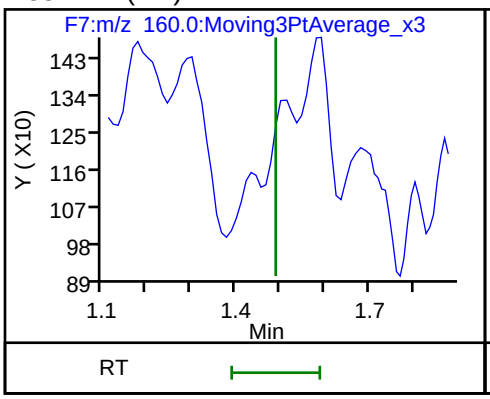
* 1 HMX-13C4



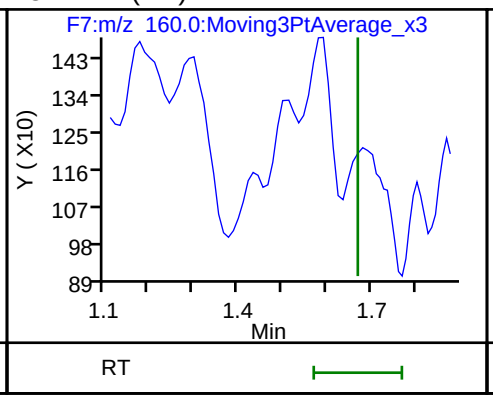
36 TNX (ND)



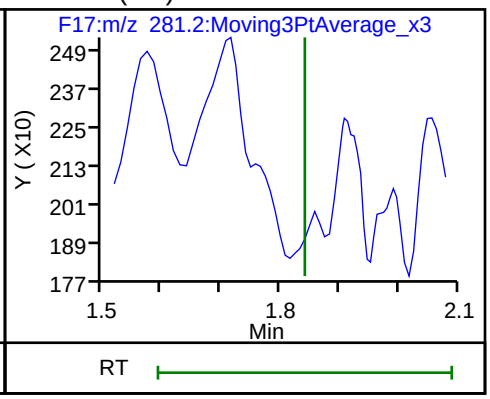
33 DNX (ND)



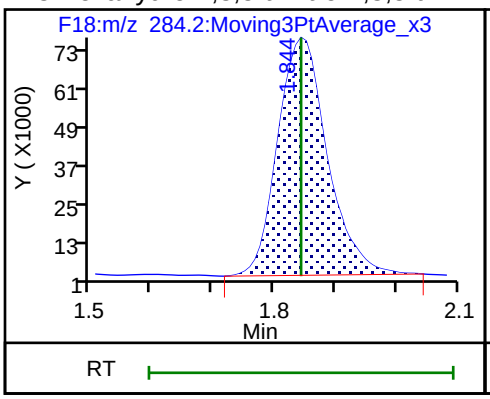
34 MNX (ND)



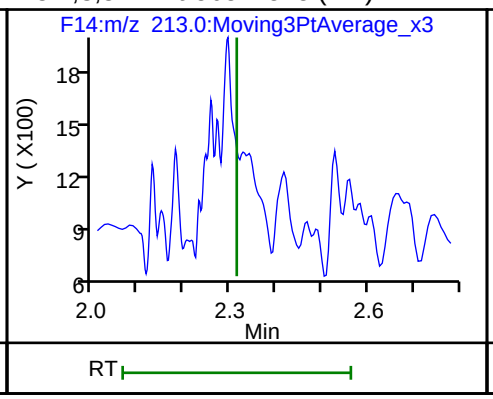
4 RDX (ND)



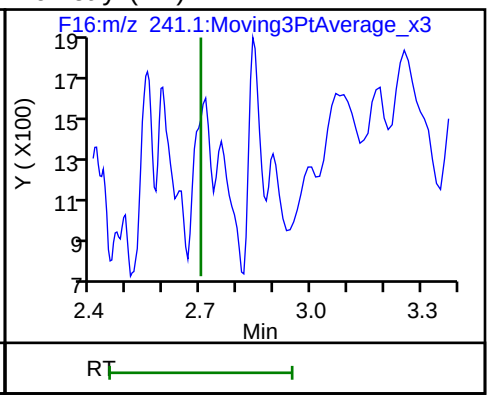
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



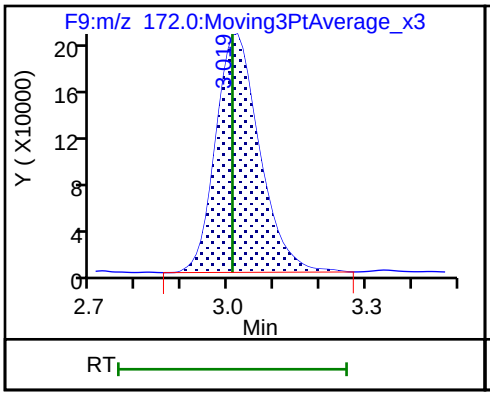
5 1,3,5-Trinitrobenzene (ND)



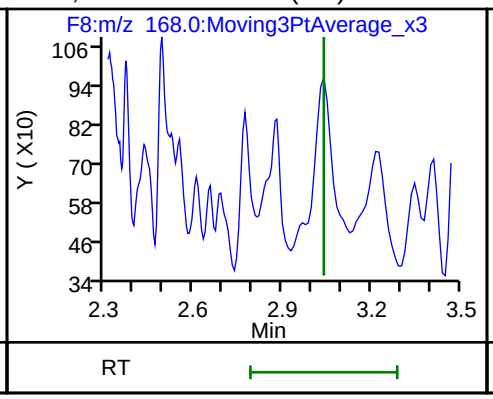
6 Tetryl (ND)



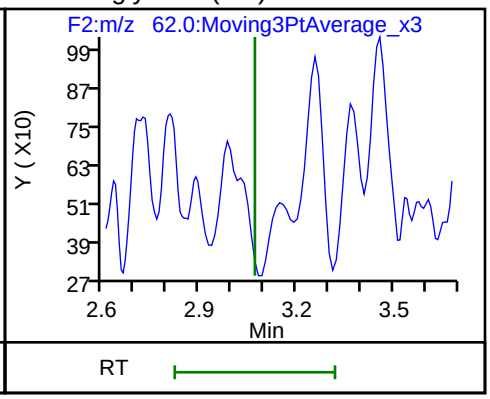
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

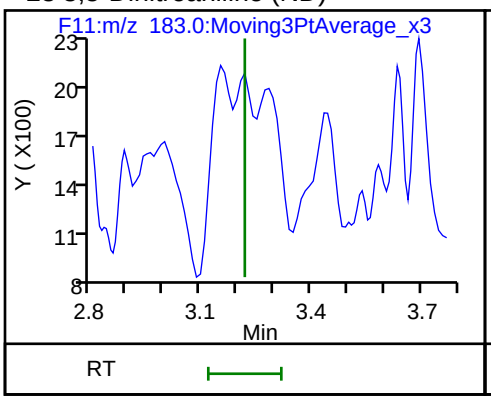


9 Nitroglycerin (ND)

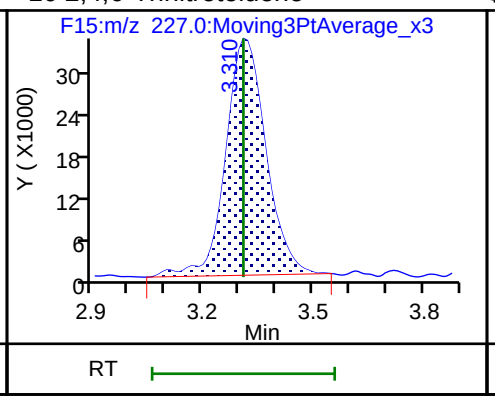


Report Date: 14-Apr-2022 10:06:50 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08018.d

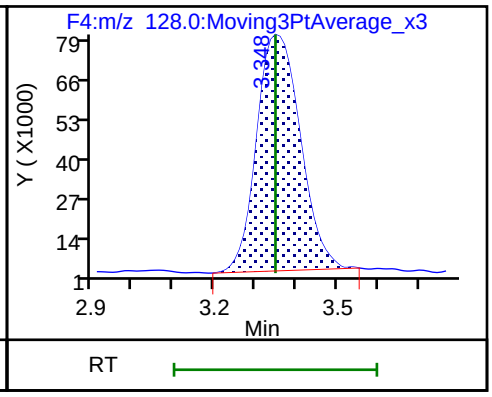
28 3,5-Dinitroaniline (ND)



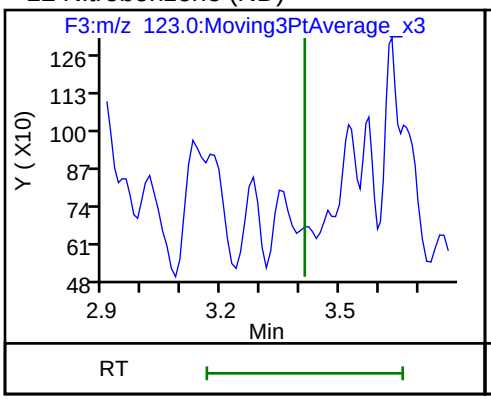
10 2,4,6-Trinitrotoluene



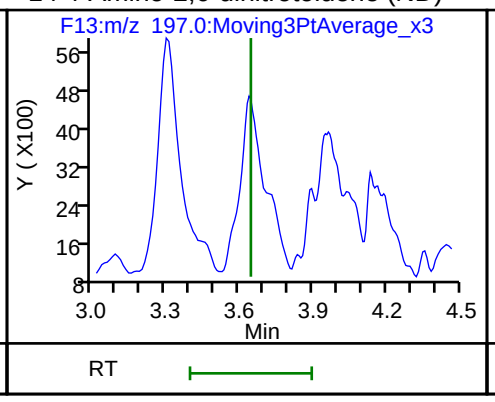
$ 11 Nitrobenzene-d5



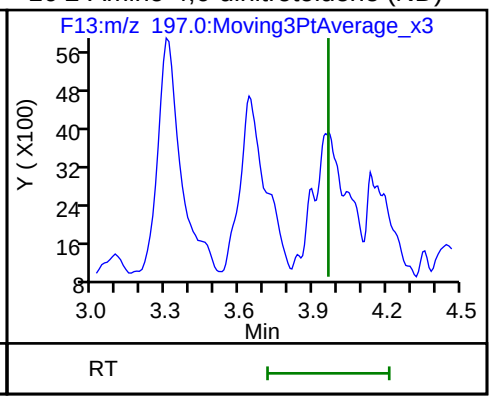
12 Nitrobenzene (ND)



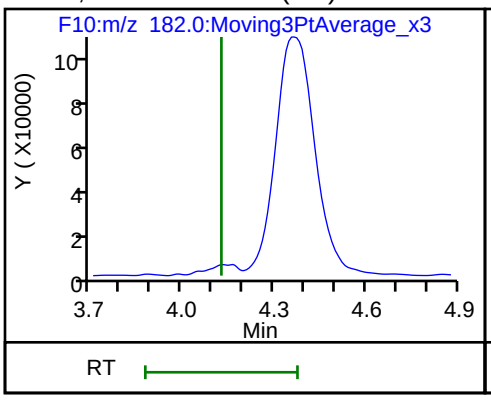
14 4-Amino-2,6-dinitrotoluene (ND)



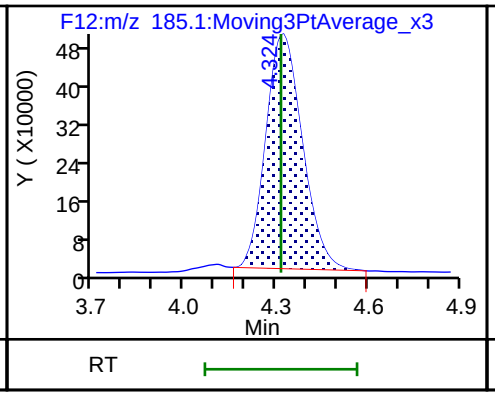
16 2-Amino-4,6-dinitrotoluene (ND)



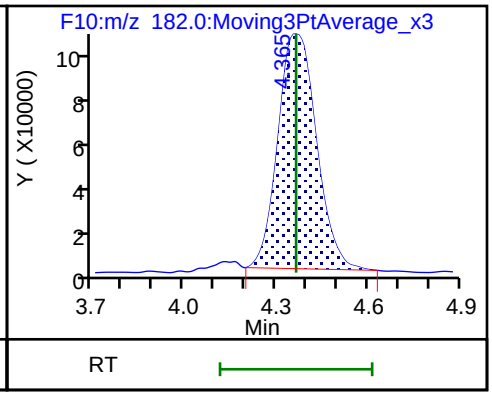
17 2,6-Dinitrotoluene (ND)



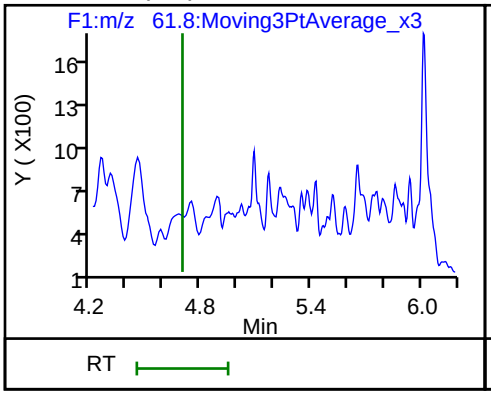
* 18 2,4-dinitrotoluene-d3



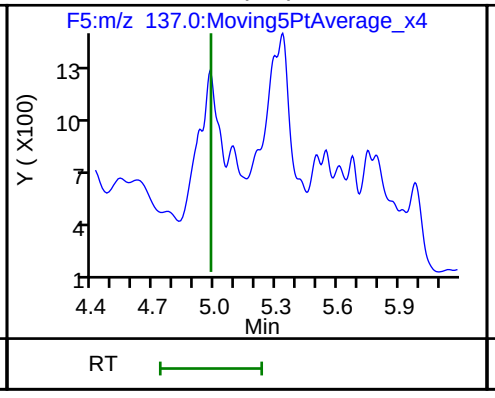
19 2,4-Dinitrotoluene



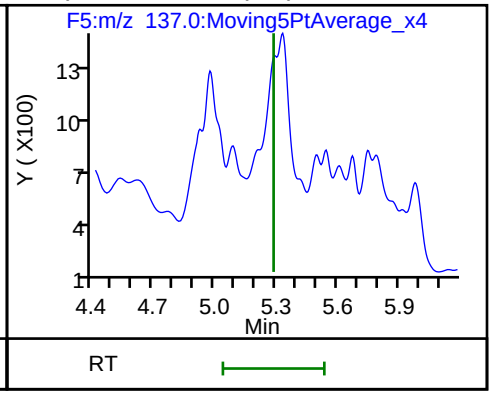
20 PETN (ND)



22 o-Nitrotoluene (ND)



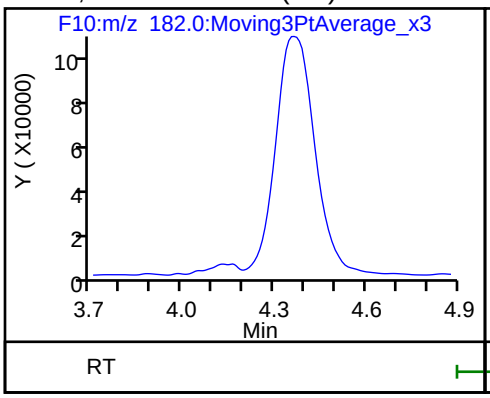
23 p-Nitrotoluene (ND)



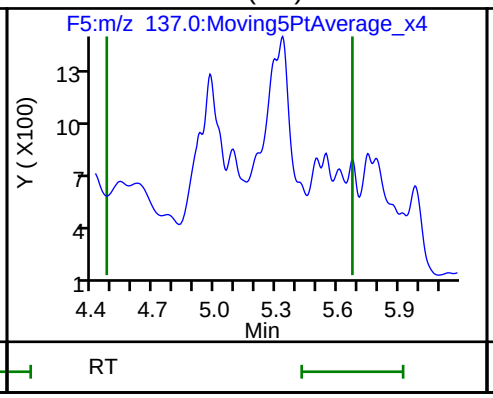
Report Date: 14-Apr-2022 10:06:50 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08018.d

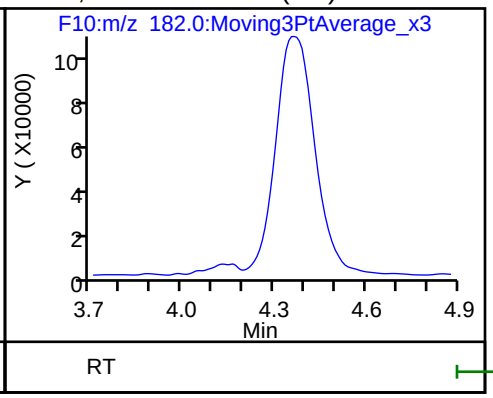
13 3,4-Dinitrotoluene (ND)



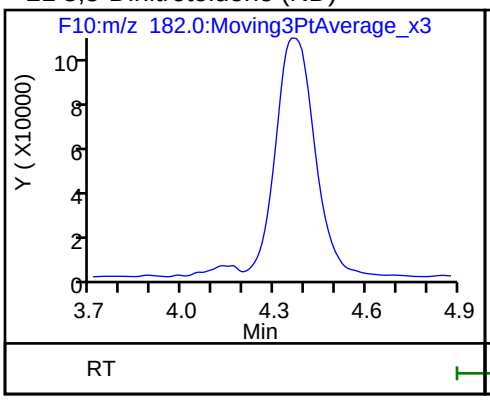
24 m-Nitrotoluene (ND)



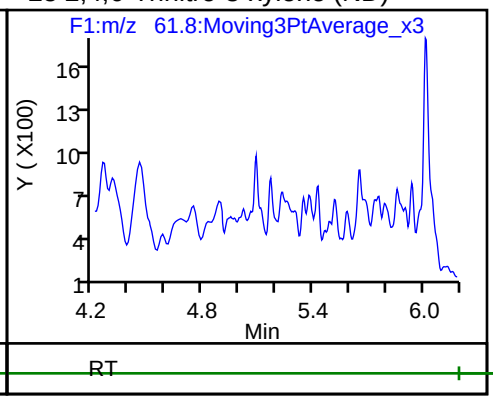
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 14-Apr-2022 10:06:50 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08018.d
Lims ID: 280-160190-A-9-B
Client ID: 29SB167 (3-4)
Sample Type: Client
Inject. Date: 08-Apr-2022 11:26:59 ALS Bottle#: 16 Worklist Smp#: 18
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-9-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:44 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:41:33

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	92.5	92.16

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB167 (6-7) | Lab Sample ID: 280-160190-10
Matrix: Solid | Lab File ID: ex722D08019.d
Analysis Method: 8321A | Date Collected: 03/24/2022 10:32
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20
Sample wt/vol: 10.25(g) | Date Analyzed: 04/08/2022 11:33
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571224 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.049	U	0.098	0.049	0.044
99-65-0	1,3-Dinitrobenzene	0.049	U	0.098	0.049	0.044
118-96-7	2,4,6-Trinitrotoluene	0.049	U	0.098	0.049	0.036
121-14-2	2,4-Dinitrotoluene	0.049	U	0.098	0.049	0.045
606-20-2	2,6-Dinitrotoluene	0.049	U	0.098	0.049	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.049	U	0.098	0.049	0.048
19406-51-0	4-Amino-2,6-dinitrotoluene	0.049	U	0.098	0.049	0.030
2691-41-0	HMX	0.049	U M Q	0.098	0.049	0.045
99-08-1	m-Nitrotoluene	0.049	U	0.098	0.049	0.042
98-95-3	Nitrobenzene	0.049	U	0.11	0.049	0.037
55-63-0	Nitroglycerin	0.049	U	0.098	0.049	0.028
88-72-2	o-Nitrotoluene	0.049	U	0.098	0.049	0.042
78-11-5	PETN	0.049	U	0.098	0.049	0.033
99-99-0	p-Nitrotoluene	0.049	U	0.098	0.049	0.048
121-82-4	RDX	0.049	U	0.12	0.049	0.042
479-45-8	Tetryl	0.049	U Q	0.098	0.049	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	97		68-140

Report Date: 14-Apr-2022 10:06:50 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08019.d
Lims ID: 280-160190-A-10-B
Client ID: 29SB167 (6-7)
Sample Type: Client
Inject. Date: 08-Apr-2022 11:33:34 ALS Bottle#: 17 Worklist Smp#: 19
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-10-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:44 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 08:41:21
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								M
361.1	1.248	1.248	0.0		204966	125.0	174	M
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		708523	125.0	189	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.008	3.008	0.0		1283035	129.4	362	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.354	0.011	0.778	590406	97.3	89.9	
* 18 2,4-dinitrotoluene-d3								
185.1	4.315	4.315	0.0		3944193	125.0	114	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

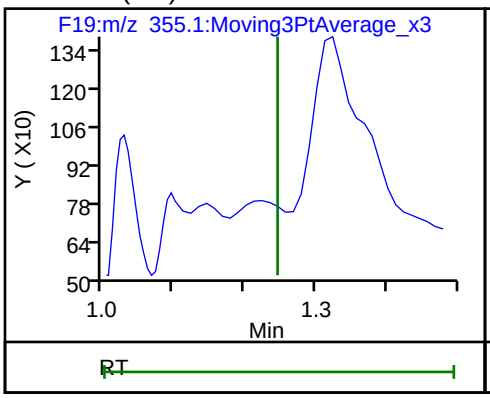
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 14-Apr-2022 10:06:50 Chrom Revision: 2.3 12-Apr-2022 20:29:44

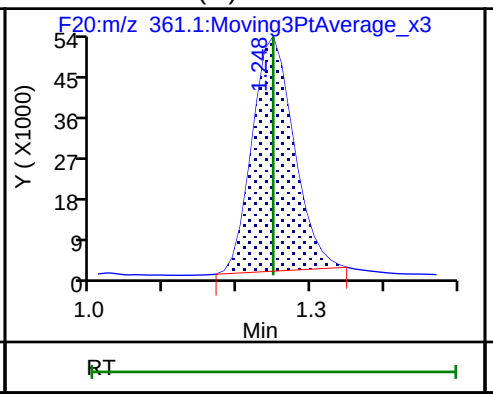
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08019.d
Injection Date: 08-Apr-2022 11:33:34 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-10-B Lab Sample ID: 280-160190-10
Client ID: 29SB167 (6-7)
Operator ID: acm ALS Bottle#: 17 Worklist Smp#: 19
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

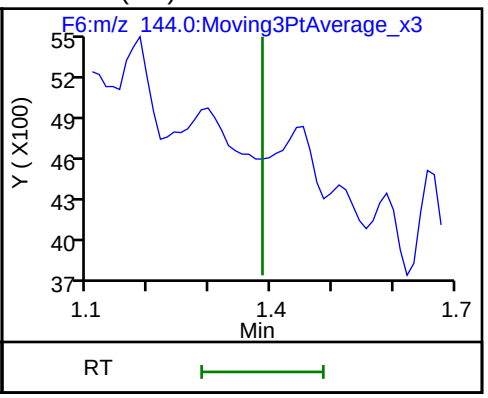
2 HMX (ND)



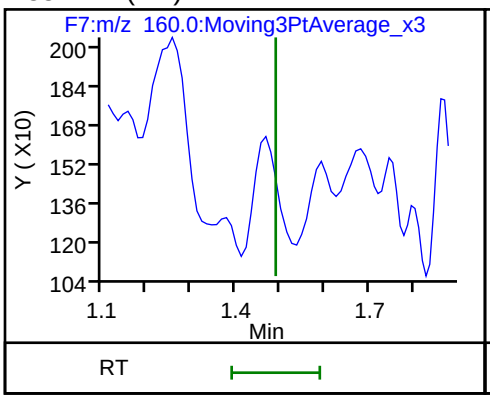
* 1 HMX-13C4 (M)



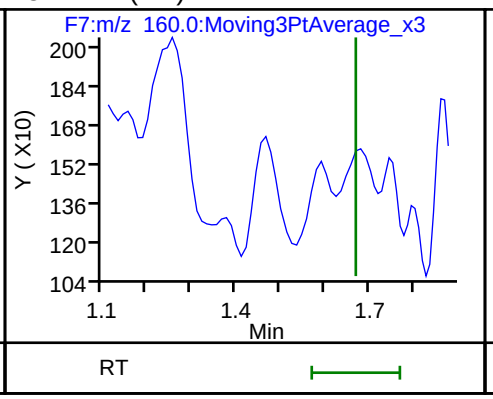
36 TNX (ND)



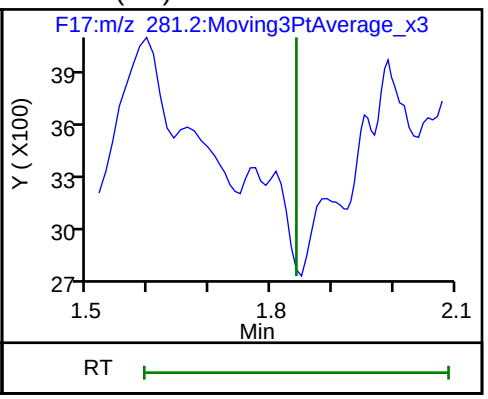
33 DNX (ND)



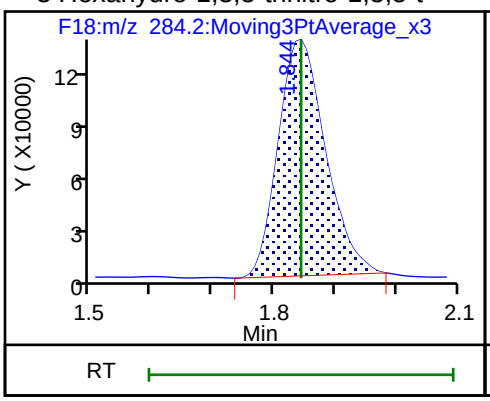
34 MNX (ND)



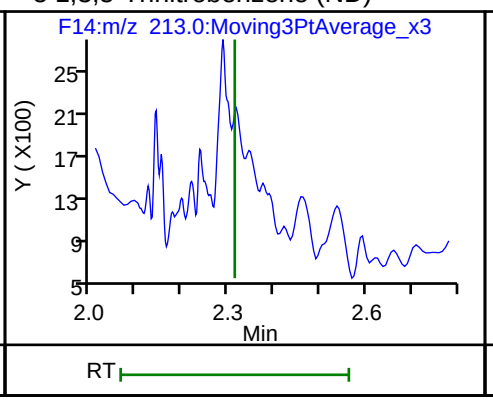
4 RDX (ND)



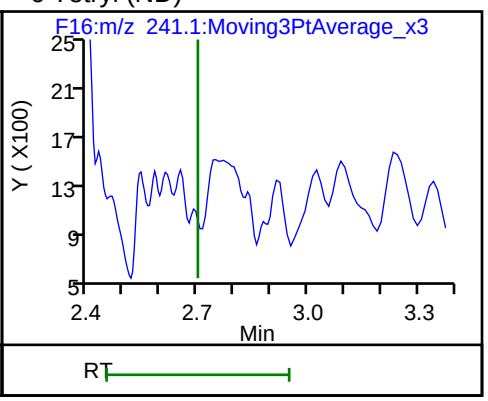
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



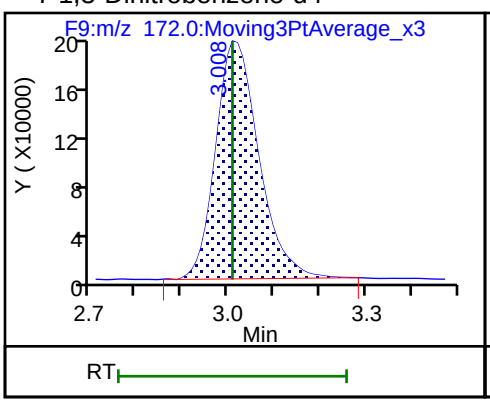
5 1,3,5-Trinitrobenzene (ND)



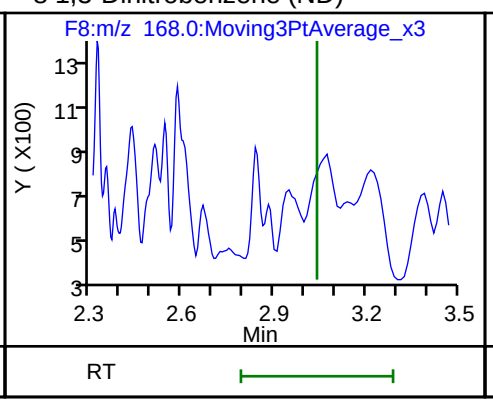
6 Tetryl (ND)



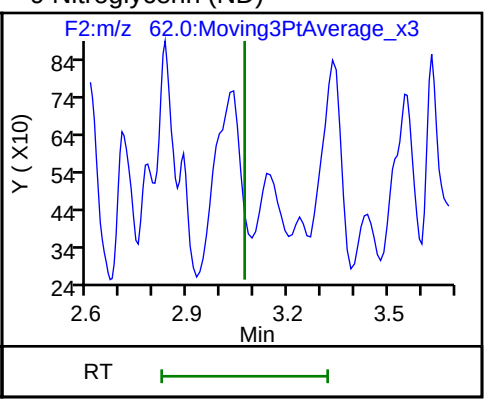
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

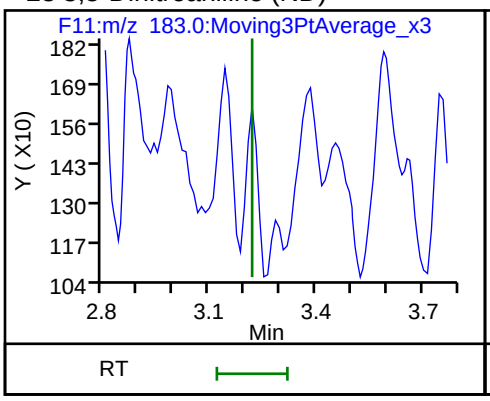


9 Nitroglycerin (ND)

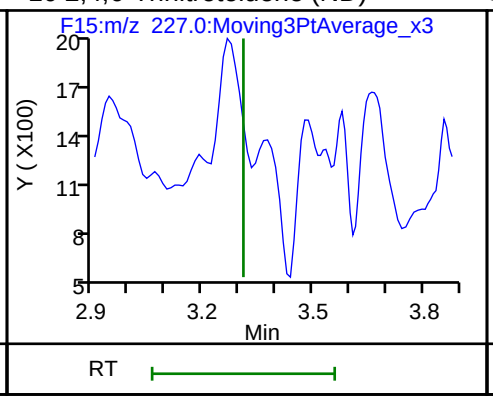


Report Date: 14-Apr-2022 10:06:50 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08019.d

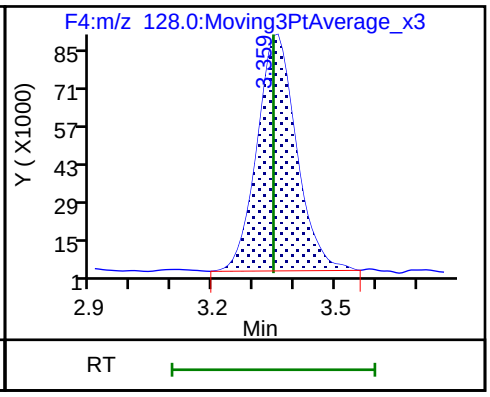
28 3,5-Dinitroaniline (ND)



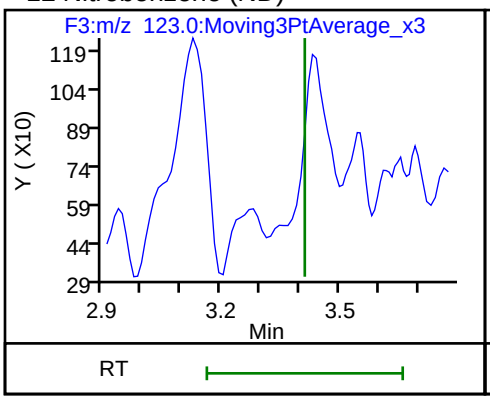
10 2,4,6-Trinitrotoluene (ND)



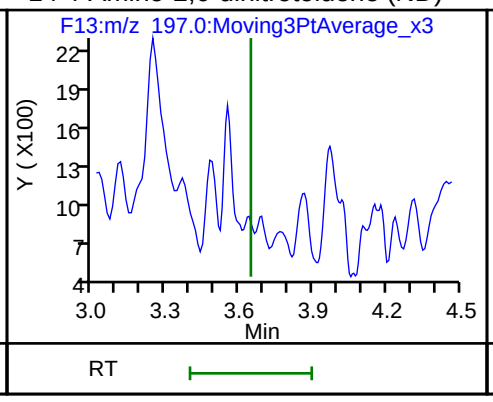
$ 11 Nitrobenzene-d5



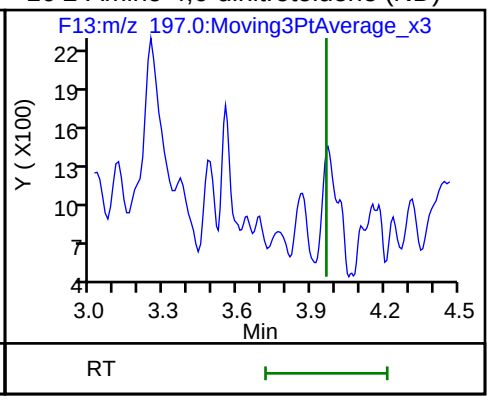
12 Nitrobenzene (ND)



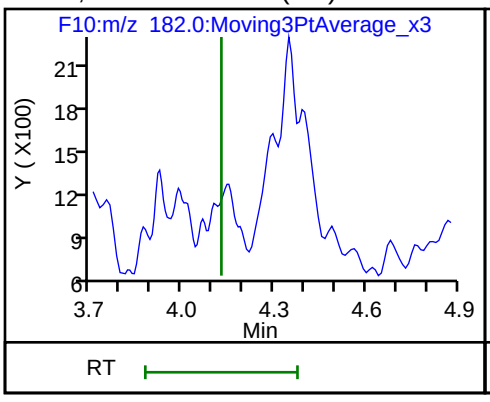
14 4-Amino-2,6-dinitrotoluene (ND)



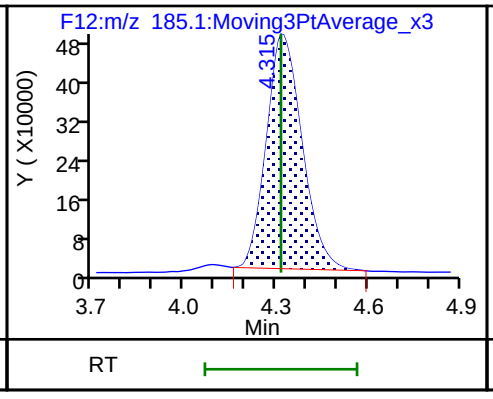
16 2-Amino-4,6-dinitrotoluene (ND)



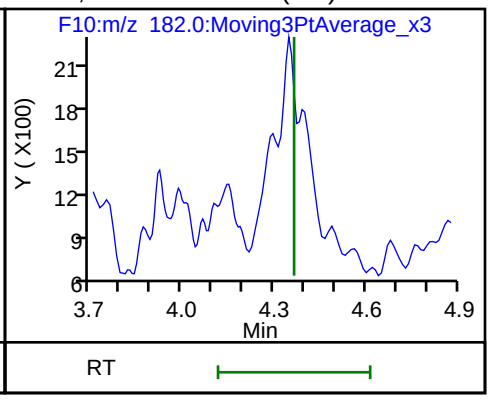
17 2,6-Dinitrotoluene (ND)



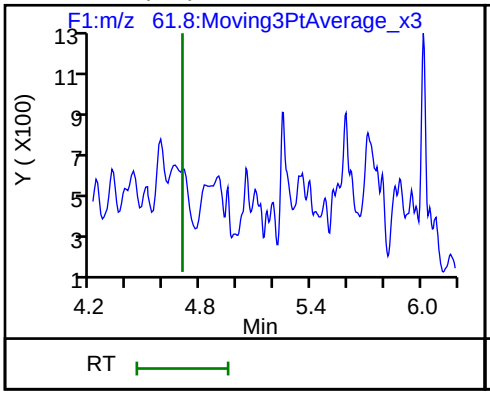
* 18 2,4-dinitrotoluene-d3



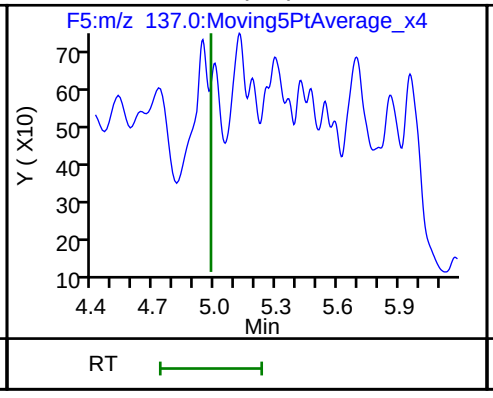
19 2,4-Dinitrotoluene (ND)



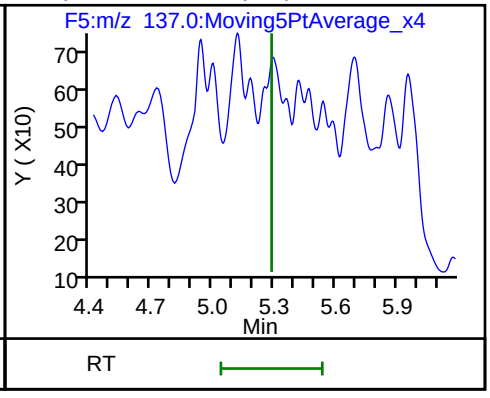
20 PETN (ND)



22 o-Nitrotoluene (ND)

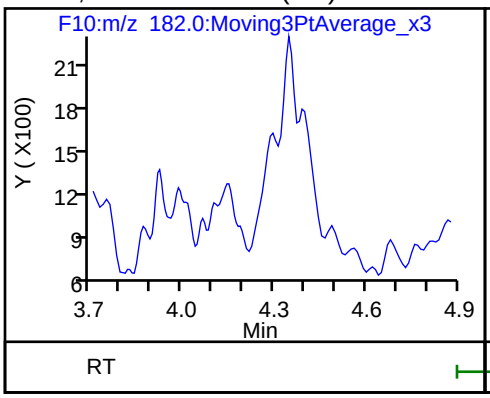


23 p-Nitrotoluene (ND)

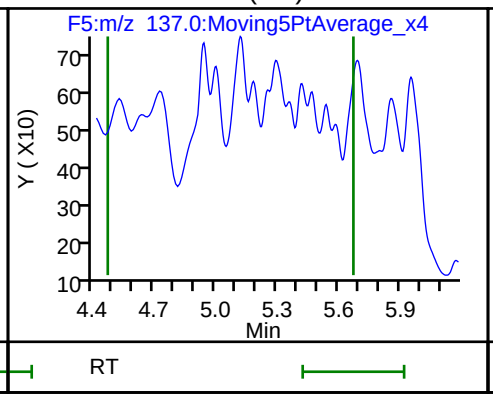


Report Date: 14-Apr-2022 10:06:50 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08019.d

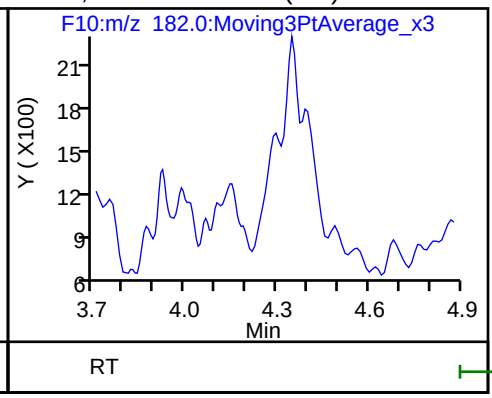
13 3,4-Dinitrotoluene (ND)



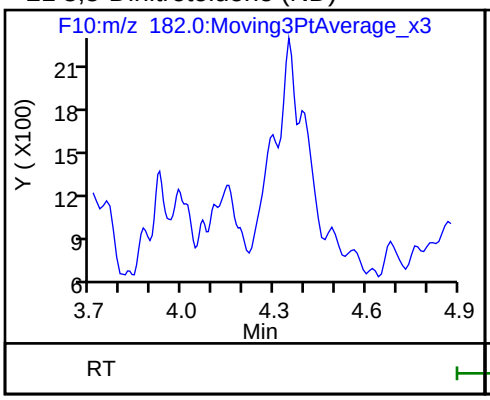
24 m-Nitrotoluene (ND)



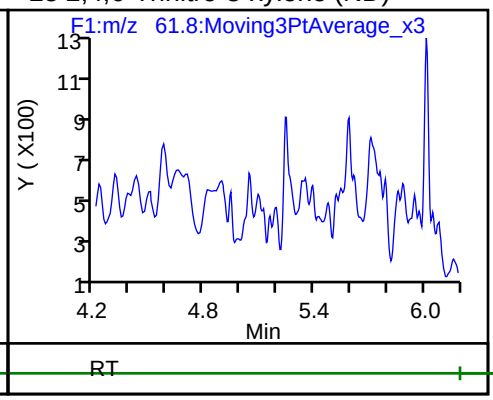
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 14-Apr-2022 10:06:50 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08019.d
Lims ID: 280-160190-A-10-B
Client ID: 29SB167 (6-7)
Sample Type: Client
Inject. Date: 08-Apr-2022 11:33:34 ALS Bottle#: 17 Worklist Smp#: 19
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-10-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:44 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 08:41:21

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	97.3	96.96

Report Date: 14-Apr-2022 10:06:51 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08019.d

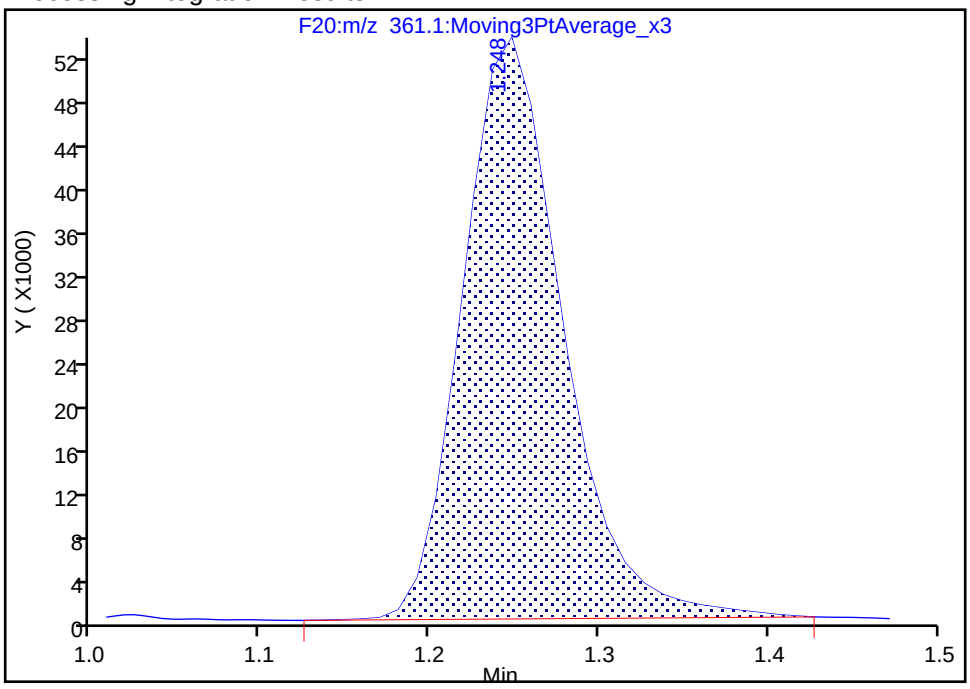
Injection Date:	08-Apr-2022 11:33:34	Instrument ID:	LC_LCMS7
Lims ID:	280-160190-A-10-B	Lab Sample ID:	280-160190-10
Client ID:	29SB167 (6-7)		
Operator ID:	acm	ALS Bottle#:	17 Worklist Smp#: 19
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F20:SIR

* 1 HMX-13C4, CAS: STL00986

Signal: 1

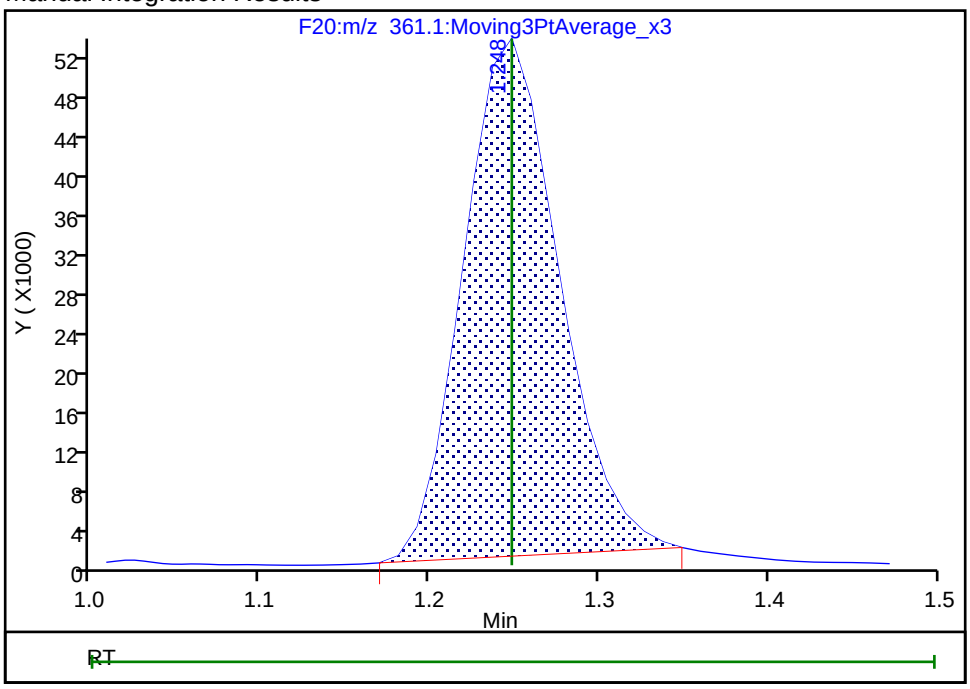
Processing Integration Results

RT: 1.25
Area: 217322
Amount: 125.0000
Amount Units: ug/l



Manual Integration Results

RT: 1.25
Area: 204966
Amount: 125.0000
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 08:41:11

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB167 (11-12) | Lab Sample ID: 280-160190-11
Matrix: Solid | Lab File ID: ex722D08020.d
Analysis Method: 8321A | Date Collected: 03/24/2022 10:33
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20
Sample wt/vol: 10.33(g) | Date Analyzed: 04/08/2022 11:40
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571224 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.048	U	0.097	0.048	0.043
99-65-0	1,3-Dinitrobenzene	0.048	U	0.097	0.048	0.043
118-96-7	2,4,6-Trinitrotoluene	0.048	U	0.097	0.048	0.036
121-14-2	2,4-Dinitrotoluene	0.048	U	0.097	0.048	0.045
606-20-2	2,6-Dinitrotoluene	0.048	U	0.097	0.048	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.048	U	0.097	0.048	0.048
19406-51-0	4-Amino-2,6-dinitrotoluene	0.048	U	0.097	0.048	0.030
2691-41-0	HMX	0.048	U M Q	0.097	0.048	0.045
99-08-1	m-Nitrotoluene	0.048	U	0.097	0.048	0.042
98-95-3	Nitrobenzene	0.048	U	0.11	0.048	0.037
55-63-0	Nitroglycerin	0.048	U	0.097	0.048	0.028
88-72-2	o-Nitrotoluene	0.048	U	0.097	0.048	0.041
78-11-5	PETN	0.048	U	0.097	0.048	0.033
99-99-0	p-Nitrotoluene	0.048	U	0.097	0.048	0.048
121-82-4	RDX	0.048	U	0.12	0.048	0.042
479-45-8	Tetryl	0.048	U Q	0.097	0.048	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	96		68-140

Report Date: 14-Apr-2022 10:06:51 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08020.d
Lims ID: 280-160190-A-11-B
Client ID: 29SB167 (11-12)
Sample Type: Client
Inject. Date: 08-Apr-2022 11:40:10 ALS Bottle#: 18 Worklist Smp#: 20
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-11-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:44 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:41:56
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		122017	125.0	119	
33 DNX								
160.0	1.559	1.489	0.070	0.845	9863	-0.7284	8.1	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		383174	125.0	392	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.008	0.011		1275020	129.4	330	
$ 11 Nitrobenzene-d5								
128.0	3.348	3.354	0.0	0.774	583535	96.7	68.3	
* 18 2,4-dinitrotoluene-d3								
185.1	4.324	4.315	0.009		3931102	125.0	105	

QC Flag Legend

Processing Flags

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

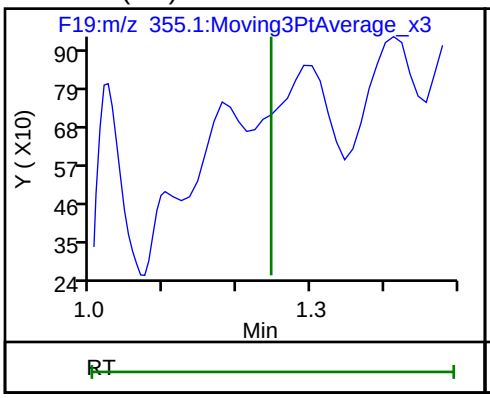
Report Date: 14-Apr-2022 10:06:51 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

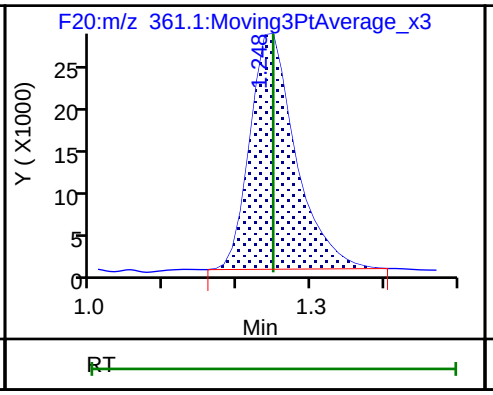
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08020.d

Injection Date:	08-Apr-2022 11:40:10	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-11-B	Lab Sample ID:	280-160190-11		
Client ID:	29SB167 (11-12)				
Operator ID:	acm	ALS Bottle#:	18	Worklist Smp#:	20
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		

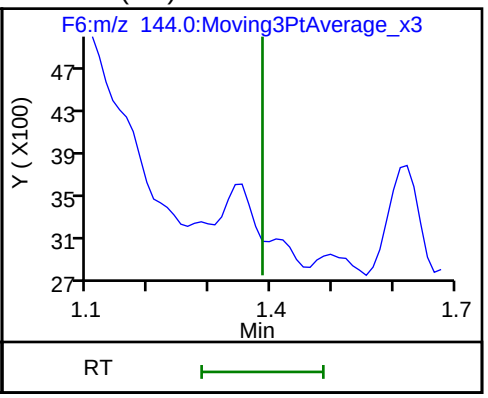
2 HMX (ND)



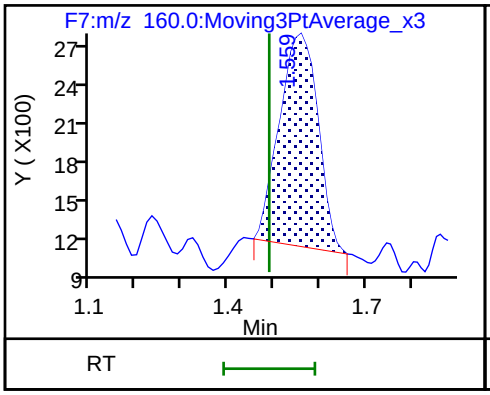
* 1 HMX-13C4



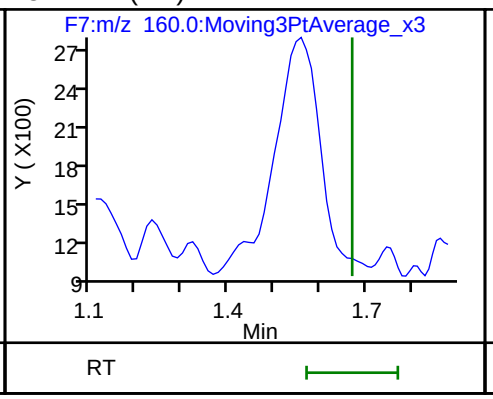
36 TNX (ND)



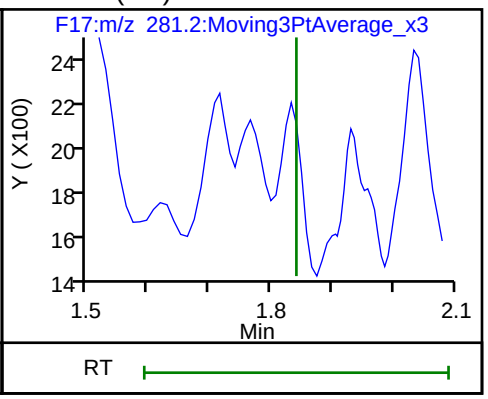
33 DNX



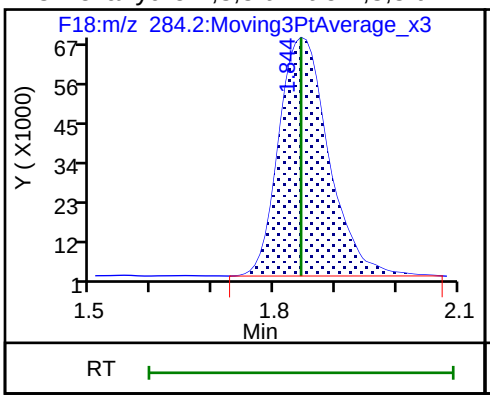
34 MNX (ND)



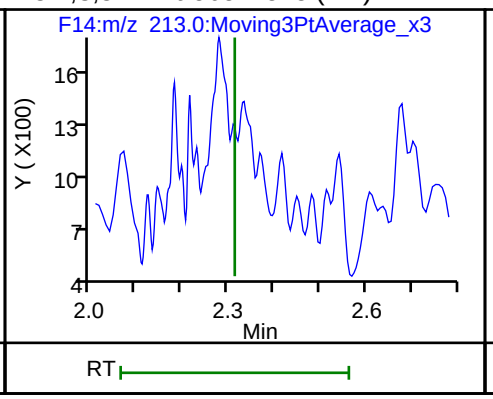
4 RDX (ND)



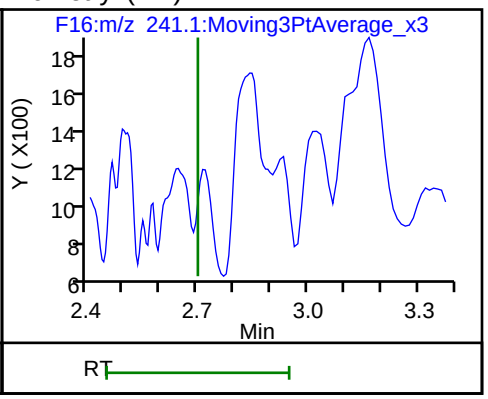
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



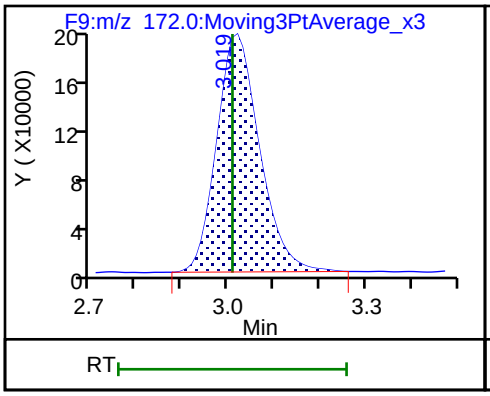
5 1,3,5-Trinitrobenzene (ND)



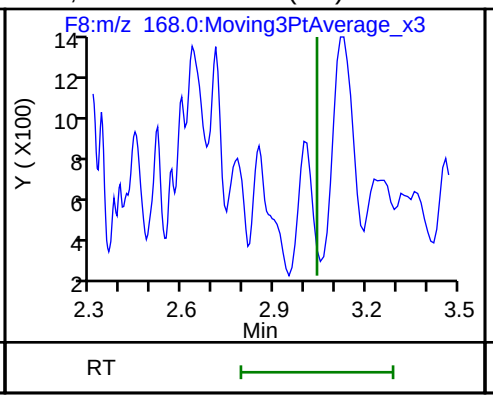
6 Tetryl (ND)



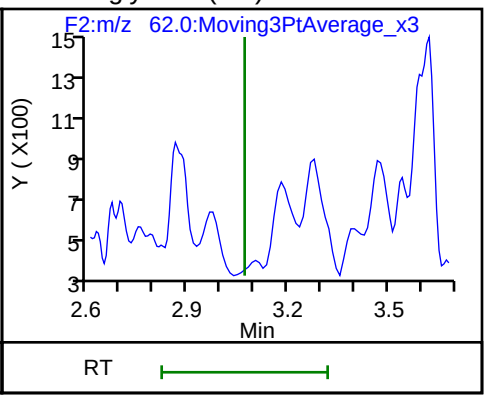
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

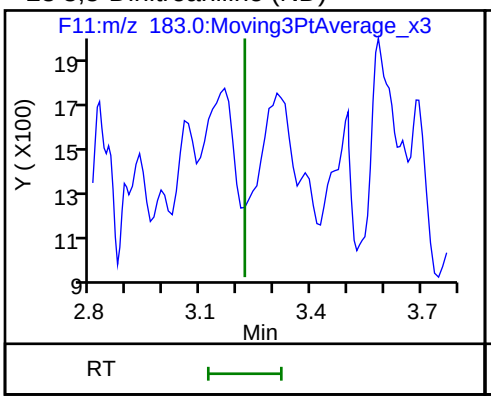


9 Nitroglycerin (ND)

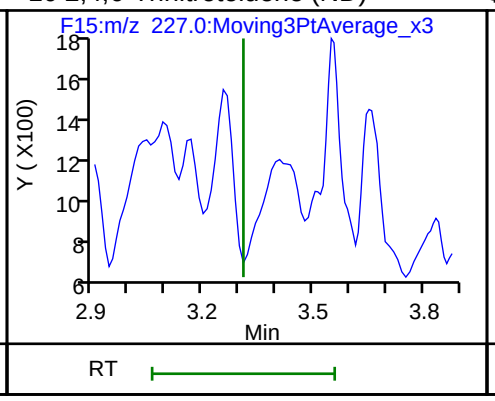


Report Date: 14-Apr-2022 10:06:51 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08020.d

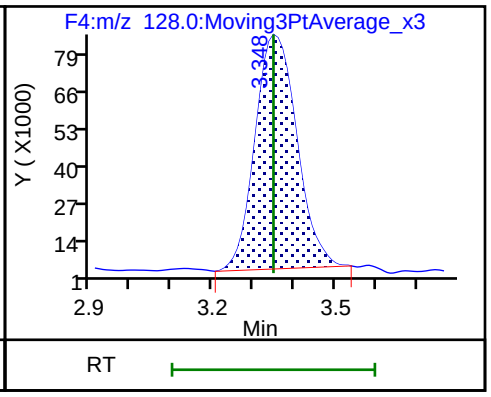
28 3,5-Dinitroaniline (ND)



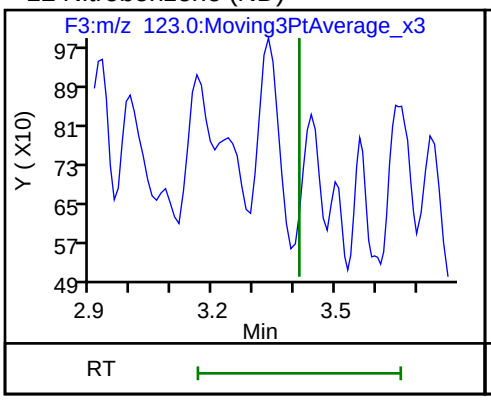
10 2,4,6-Trinitrotoluene (ND)



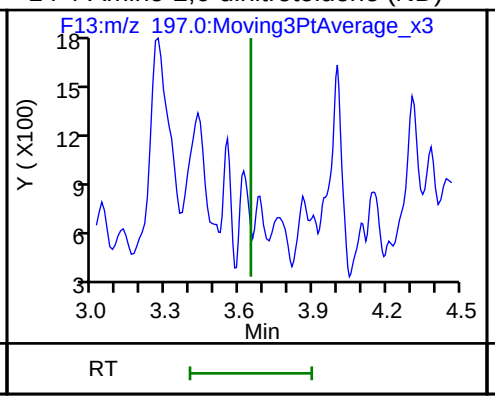
$ 11 Nitrobenzene-d5



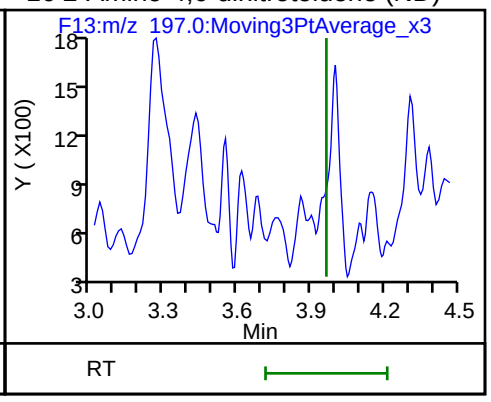
12 Nitrobenzene (ND)



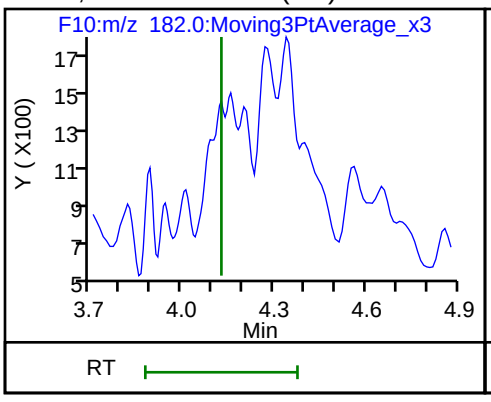
14 4-Amino-2,6-dinitrotoluene (ND)



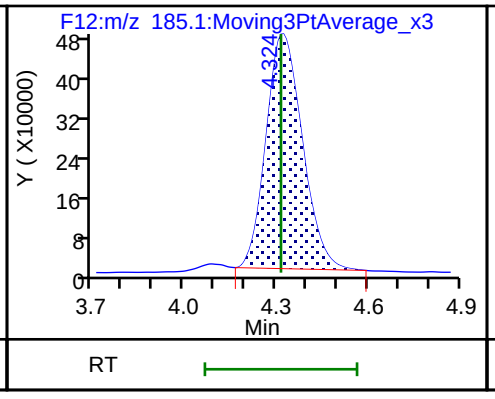
16 2-Amino-4,6-dinitrotoluene (ND)



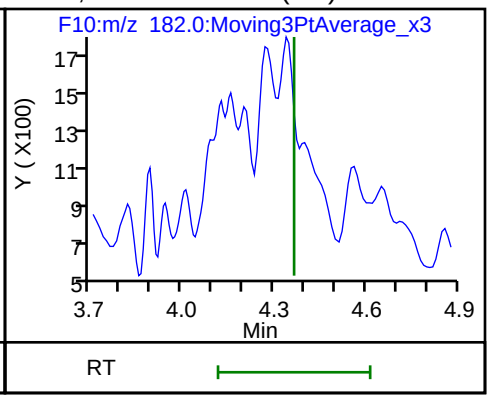
17 2,6-Dinitrotoluene (ND)



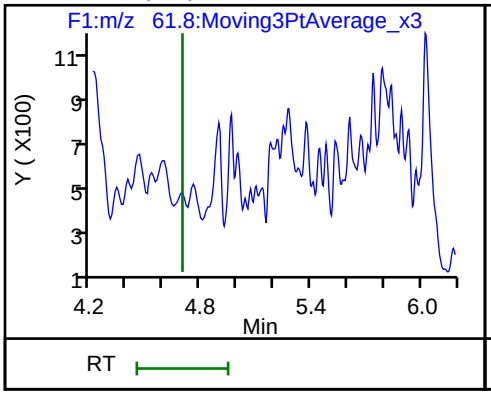
* 18 2,4-dinitrotoluene-d3



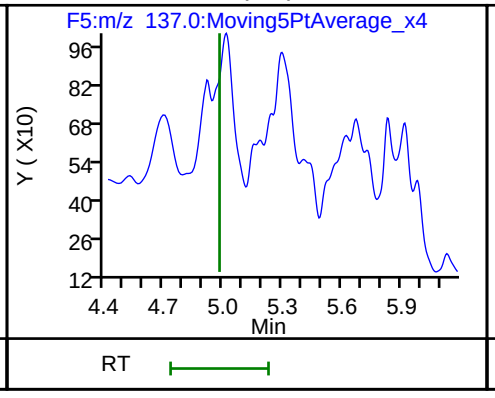
19 2,4-Dinitrotoluene (ND)



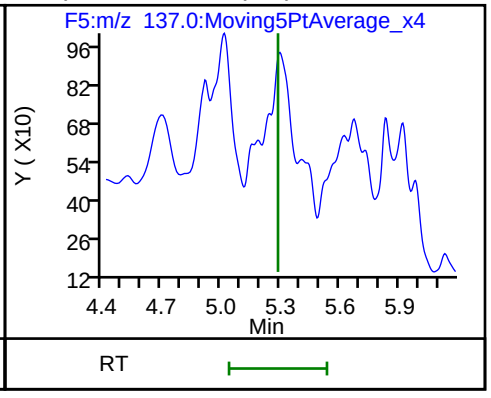
20 PETN (ND)



22 o-Nitrotoluene (ND)



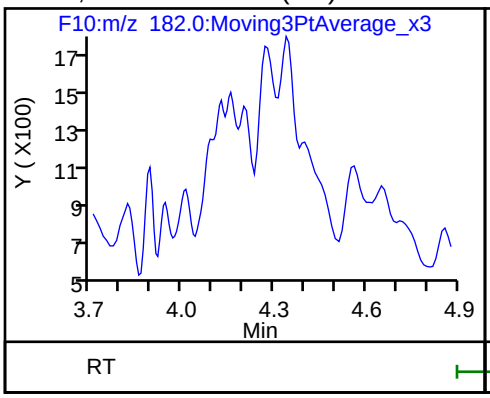
23 p-Nitrotoluene (ND)



Report Date: 14-Apr-2022 10:06:51 Chrom Revision: 2.3 12-Apr-2022 20:29:44

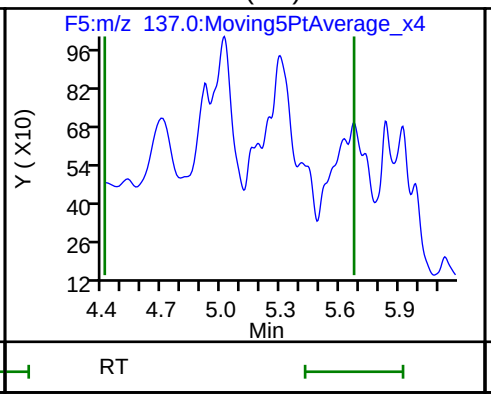
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08020.d

13 3,4-Dinitrotoluene (ND)



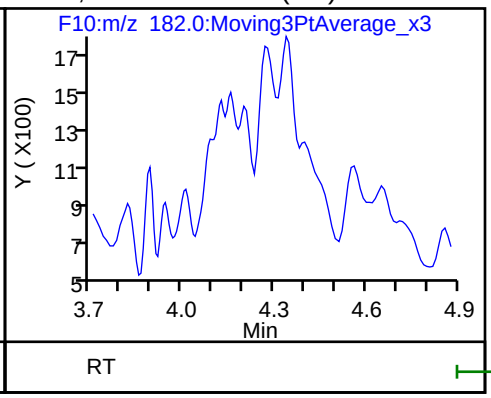
RT

24 m-Nitrotoluene (ND)



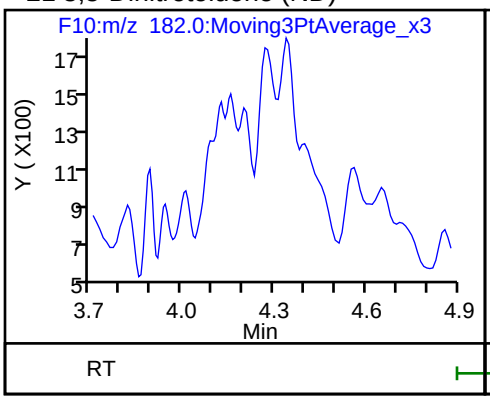
RT

15 2,3-Dinitrotoluene (ND)



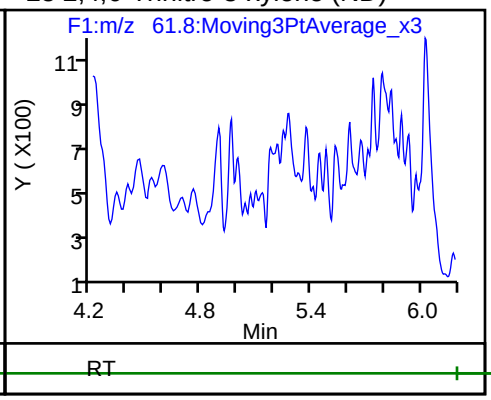
RT

21 3,5-Dinitrotoluene (ND)



RT

25 2,4,6-Trinitro-3-xylene (ND)



RT

Report Date: 14-Apr-2022 10:06:51 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08020.d
Lims ID: 280-160190-A-11-B
Client ID: 29SB167 (11-12)
Sample Type: Client
Inject. Date: 08-Apr-2022 11:40:10 ALS Bottle#: 18 Worklist Smp#: 20
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-11-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:44 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:41:56

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	96.7	96.43

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB167 (14.5-15) | Lab Sample ID: 280-160190-12
Matrix: Solid | Lab File ID: ex722D08021.d
Analysis Method: 8321A | Date Collected: 03/24/2022 10:34
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20
Sample wt/vol: 10.59(g) | Date Analyzed: 04/08/2022 11:46
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571224 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.047	U	0.094	0.047	0.042
99-65-0	1,3-Dinitrobenzene	0.047	U	0.094	0.047	0.042
118-96-7	2,4,6-Trinitrotoluene	0.047	U M	0.094	0.047	0.035
121-14-2	2,4-Dinitrotoluene	0.047	U	0.094	0.047	0.044
606-20-2	2,6-Dinitrotoluene	0.047	U	0.094	0.047	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.047	U	0.094	0.047	0.047
19406-51-0	4-Amino-2,6-dinitrotoluene	0.047	U	0.094	0.047	0.029
2691-41-0	HMX	0.047	U Q	0.094	0.047	0.044
99-08-1	m-Nitrotoluene	0.047	U	0.094	0.047	0.041
98-95-3	Nitrobenzene	0.047	U	0.10	0.047	0.036
55-63-0	Nitroglycerin	0.047	U	0.094	0.047	0.027
88-72-2	o-Nitrotoluene	0.047	U	0.094	0.047	0.040
78-11-5	PETN	0.047	U	0.094	0.047	0.032
99-99-0	p-Nitrotoluene	0.047	U	0.094	0.047	0.047
121-82-4	RDX	0.047	U	0.11	0.047	0.041
479-45-8	Tetryl	0.047	U Q	0.094	0.047	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	99		68-140

Report Date: 14-Apr-2022 10:06:52 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08021.d
Lims ID: 280-160190-A-12-B
Client ID: 29SB167 (14.5-15)
Sample Type: Client
Inject. Date: 08-Apr-2022 11:46:46 ALS Bottle#: 19 Worklist Smp#: 21
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-12-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:44 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:42:08
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		131165	125.0	339	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		386163	125.0	328	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.008	3.008	0.0		1310839	129.4	249	
$ 11 Nitrobenzene-d5								
128.0	3.348	3.354	0.0	0.774	618261	99.7	172	
* 18 2,4-dinitrotoluene-d3								
185.1	4.324	4.315	0.009		4023855	125.0	118	

QC Flag Legend
Processing Flags

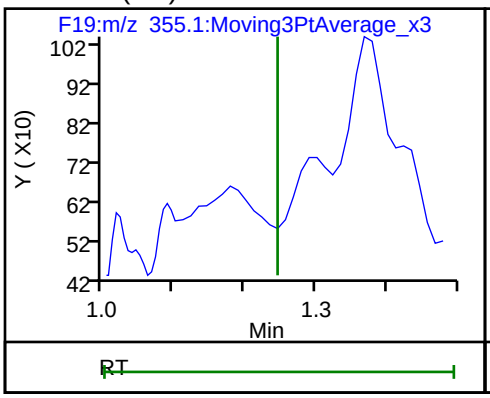
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 14-Apr-2022 10:06:52 Chrom Revision: 2.3 12-Apr-2022 20:29:44

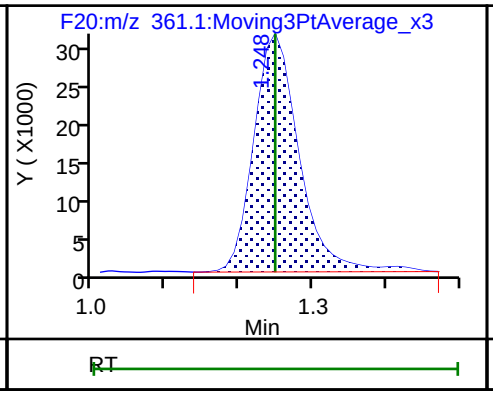
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08021.d
Injection Date: 08-Apr-2022 11:46:46 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-12-B Lab Sample ID: 280-160190-12
Client ID: 29SB167 (14.5-15)
Operator ID: acm ALS Bottle#: 19 Worklist Smp#: 21
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

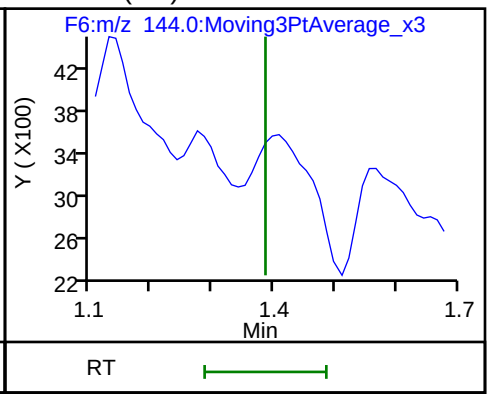
2 HMX (ND)



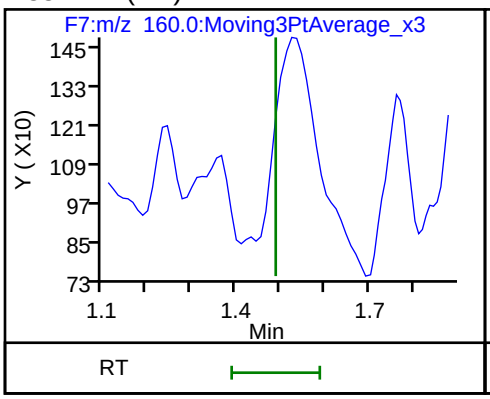
* 1 HMX-13C4



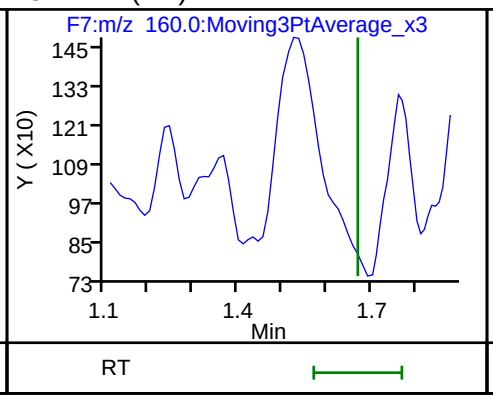
36 TNX (ND)



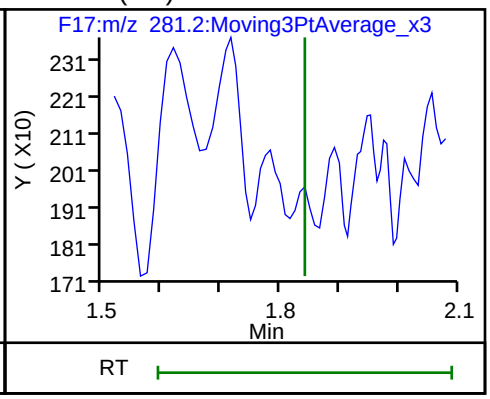
33 DNX (ND)



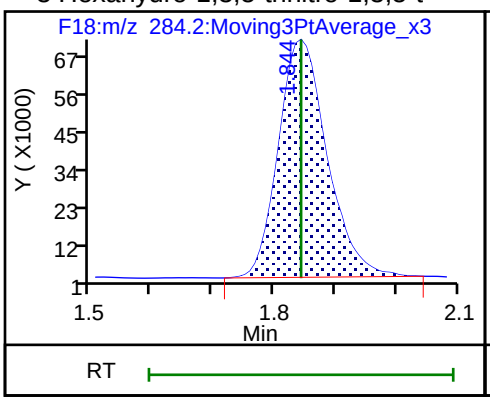
34 MNX (ND)



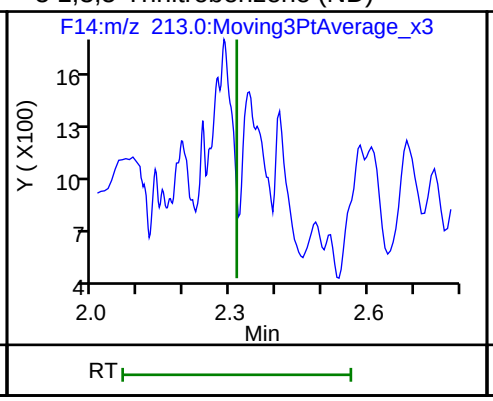
4 RDX (ND)



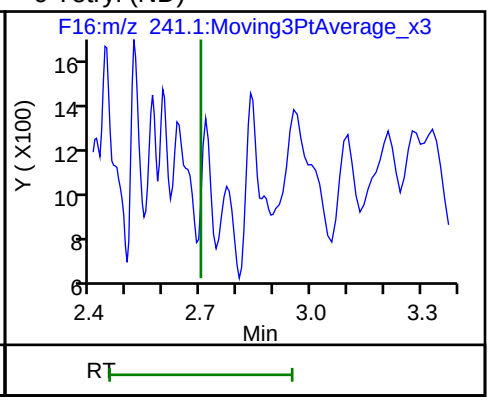
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



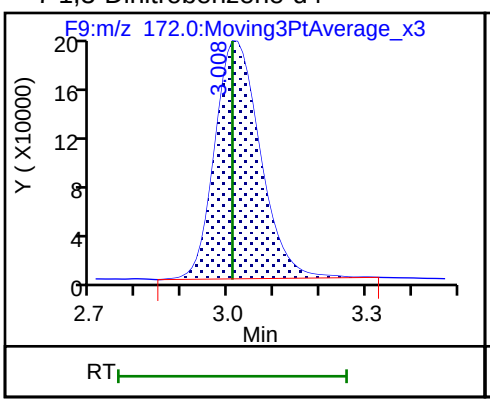
5 1,3,5-Trinitrobenzene (ND)



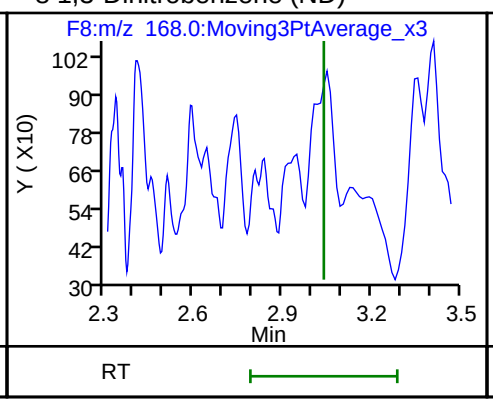
6 Tetryl (ND)



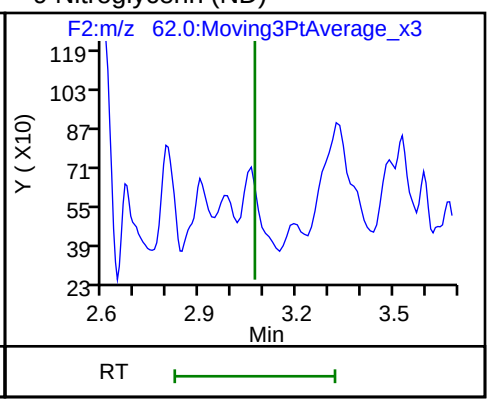
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

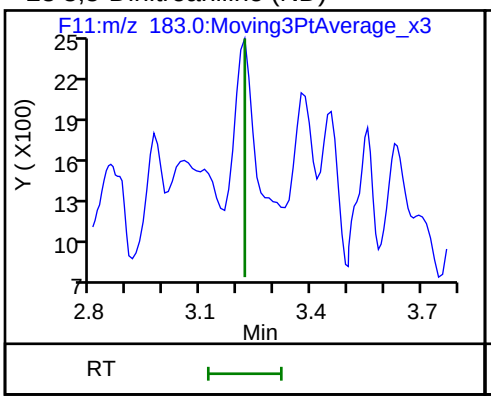


9 Nitroglycerin (ND)

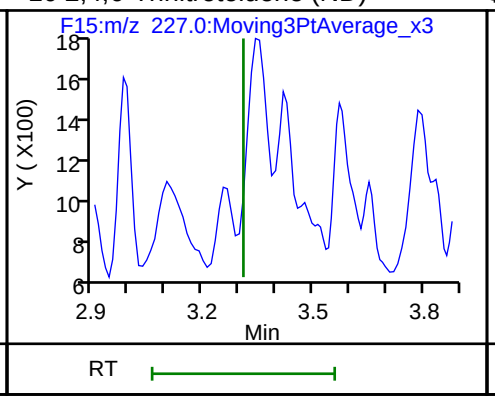


Report Date: 14-Apr-2022 10:06:52 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08021.d

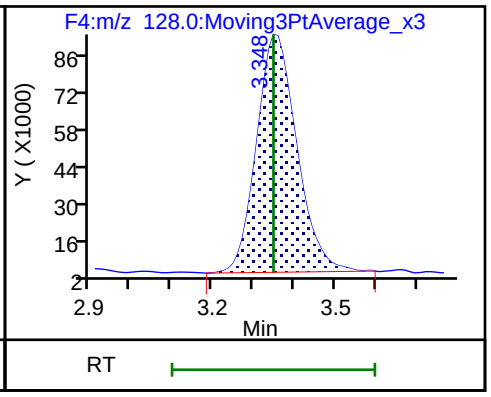
28 3,5-Dinitroaniline (ND)



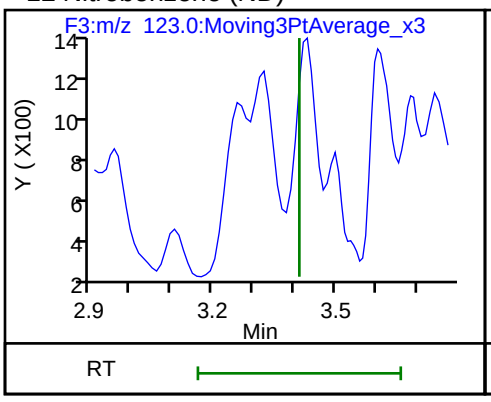
10 2,4,6-Trinitrotoluene (ND)



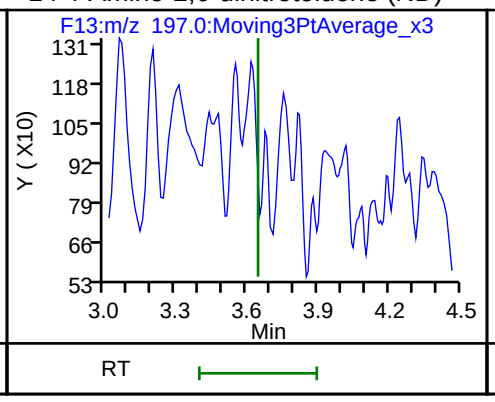
$ 11 Nitrobenzene-d5



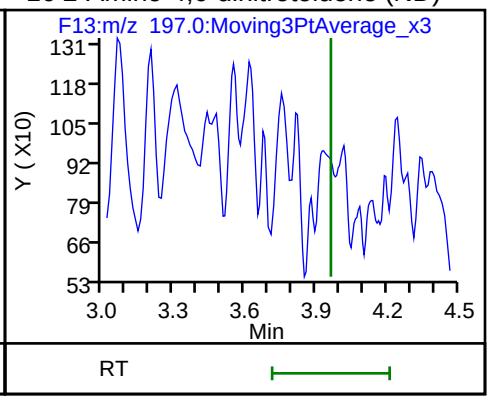
12 Nitrobenzene (ND)



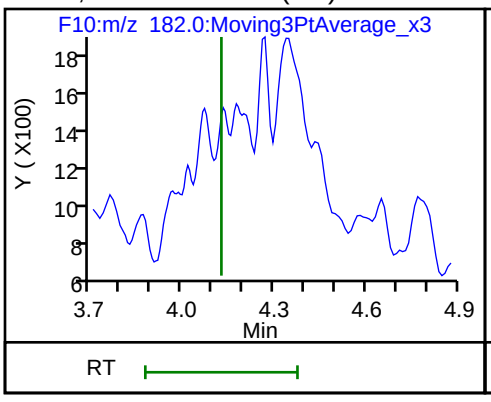
14 4-Amino-2,6-dinitrotoluene (ND)



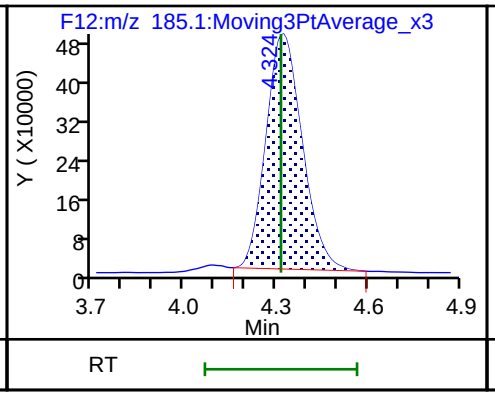
16 2-Amino-4,6-dinitrotoluene (ND)



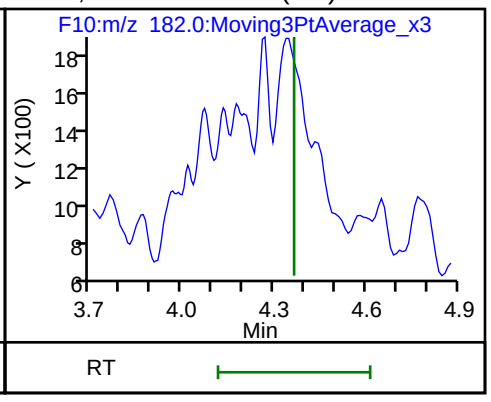
17 2,6-Dinitrotoluene (ND)



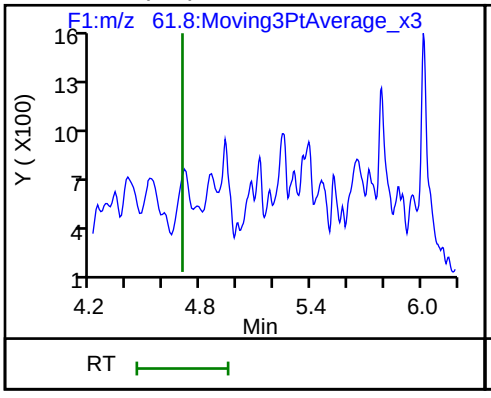
* 18 2,4-dinitrotoluene-d3



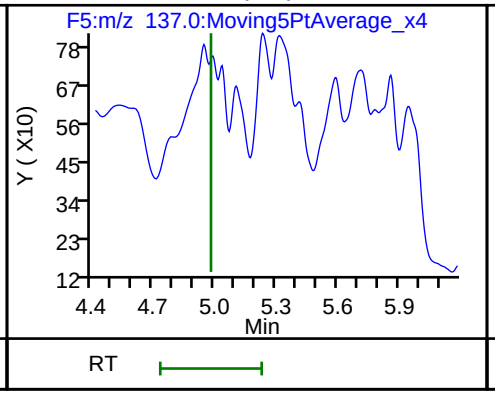
19 2,4-Dinitrotoluene (ND)



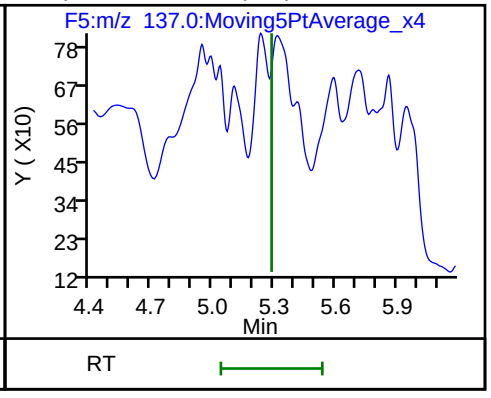
20 PETN (ND)



22 o-Nitrotoluene (ND)

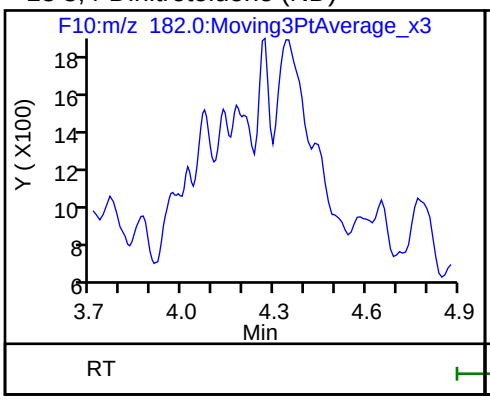


23 p-Nitrotoluene (ND)

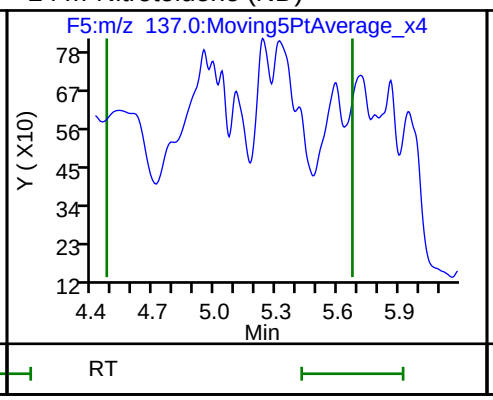


Report Date: 14-Apr-2022 10:06:52 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08021.d

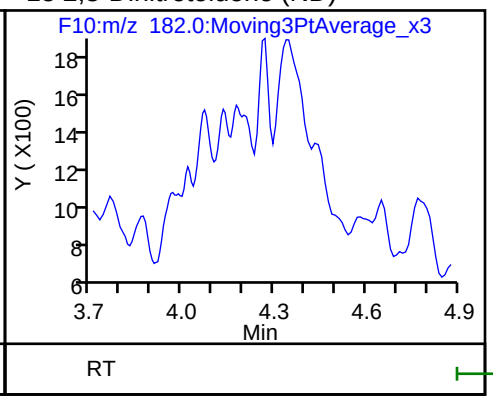
13 3,4-Dinitrotoluene (ND)



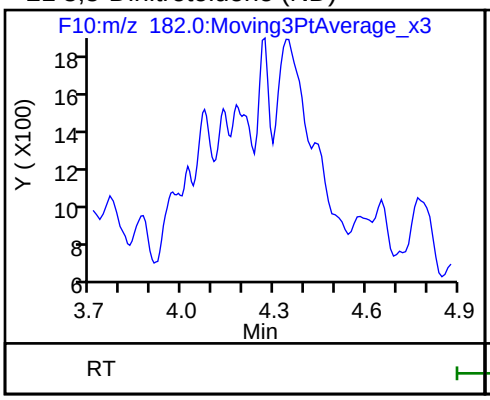
24 m-Nitrotoluene (ND)



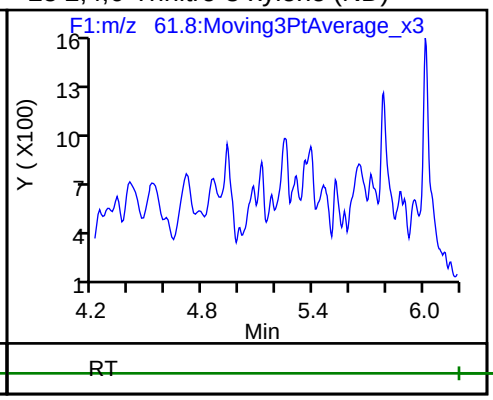
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 14-Apr-2022 10:06:52 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08021.d
Lims ID: 280-160190-A-12-B
Client ID: 29SB167 (14.5-15)
Sample Type: Client
Inject. Date: 08-Apr-2022 11:46:46 ALS Bottle#: 19 Worklist Smp#: 21
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-12-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:44 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:42:08

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	99.7	99.39

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: DUP-06 | Lab Sample ID: 280-160190-13
Matrix: Solid | Lab File ID: ex722D08023.d
Analysis Method: 8321A | Date Collected: 03/24/2022 12:10
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20
Sample wt/vol: 10.15(g) | Date Analyzed: 04/08/2022 11:59
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571224 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.049	U	0.099	0.049	0.044
99-65-0	1,3-Dinitrobenzene	0.049	U	0.099	0.049	0.044
118-96-7	2,4,6-Trinitrotoluene	0.18		0.099	0.049	0.036
121-14-2	2,4-Dinitrotoluene	0.20	M	0.099	0.049	0.046
606-20-2	2,6-Dinitrotoluene	0.049	U M	0.099	0.049	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.049	U	0.099	0.049	0.049
19406-51-0	4-Amino-2,6-dinitrotoluene	0.049	U	0.099	0.049	0.031
2691-41-0	HMX	0.049	U M Q	0.099	0.049	0.045
99-08-1	m-Nitrotoluene	0.049	U	0.099	0.049	0.043
98-95-3	Nitrobenzene	0.049	U	0.11	0.049	0.037
55-63-0	Nitroglycerin	0.049	U	0.099	0.049	0.029
88-72-2	o-Nitrotoluene	0.049	U	0.099	0.049	0.042
78-11-5	PETN	0.049	U	0.099	0.049	0.033
99-99-0	p-Nitrotoluene	0.049	U	0.099	0.049	0.049
121-82-4	RDX	0.049	U	0.12	0.049	0.042
479-45-8	Tetryl	0.049	U Q	0.099	0.049	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	101		68-140

Report Date: 14-Apr-2022 10:06:53 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08023.d
Lims ID: 280-160190-A-13-B
Client ID: DUP-06
Sample Type: Client
Inject. Date: 08-Apr-2022 11:59:58 ALS Bottle#: 20 Worklist Smp#: 23
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-13-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:52 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:43:05
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		109601	125.0	78.6	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		372998	125.0	335	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.008	0.011		1237631	129.4	412	
10 2,4,6-Trinitrotoluene								
227.0	3.310	3.316	0.0	0.765	2975574	46.7	526	
$ 11 Nitrobenzene-d5								
128.0	3.348	3.354	0.0	0.774	592968	101.3	93.9	
17 2,6-Dinitrotoluene								M
182.0	4.144	4.138	0.018	0.958	98474	0.9807	8.5	M
* 18 2,4-dinitrotoluene-d3								
185.1	4.324	4.315	0.009		3775607	125.0	112	
19 2,4-Dinitrotoluene								M
182.0	4.373	4.373	0.008	1.011	1649318	51.5	131	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

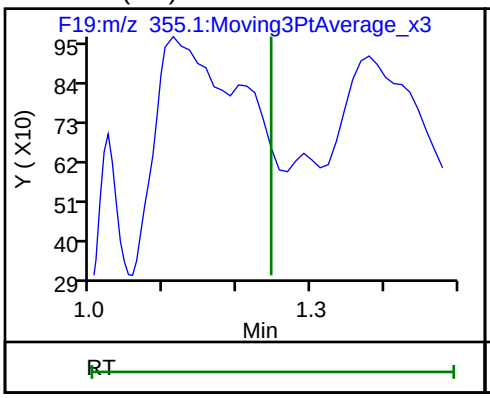
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 14-Apr-2022 10:06:53 Chrom Revision: 2.3 12-Apr-2022 20:29:44

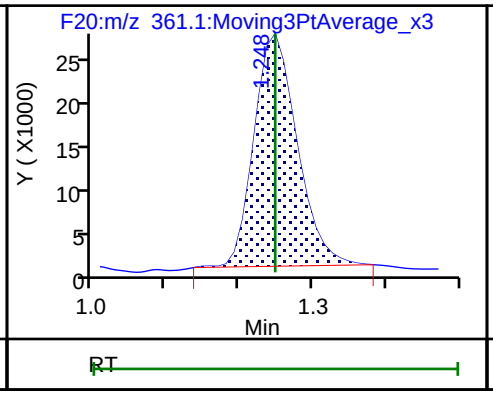
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08023.d
Injection Date: 08-Apr-2022 11:59:58 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-13-B Lab Sample ID: 280-160190-13
Client ID: DUP-06
Operator ID: acm ALS Bottle#: 20 Worklist Smp#: 23
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

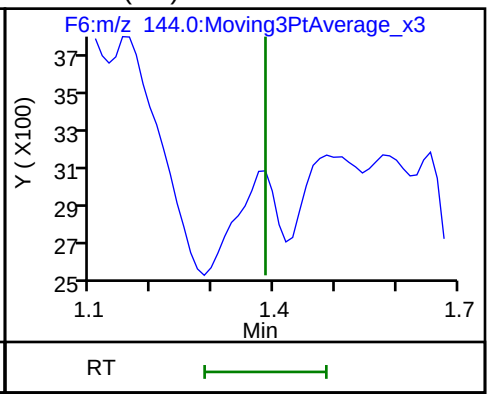
2 HMX (ND)



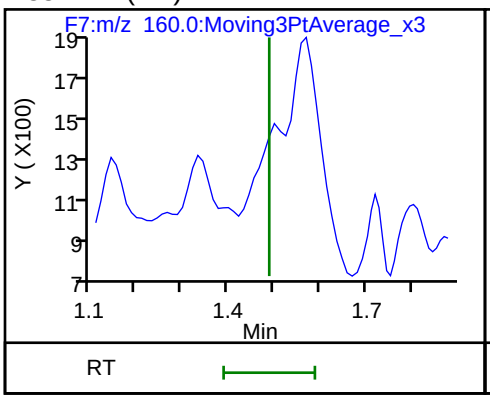
* 1 HMX-13C4



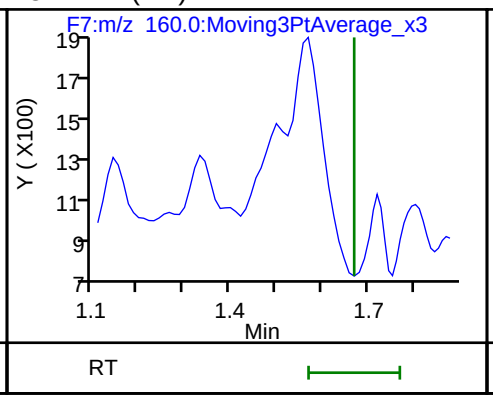
36 TNX (ND)



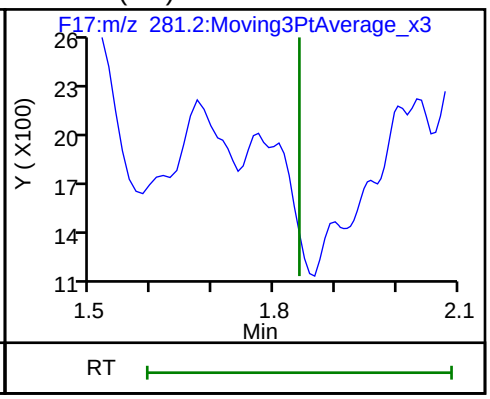
33 DNX (ND)



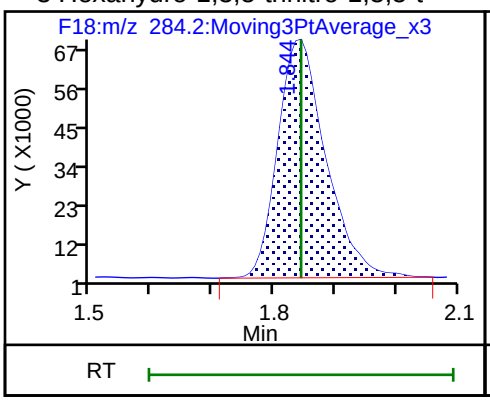
34 MNX (ND)



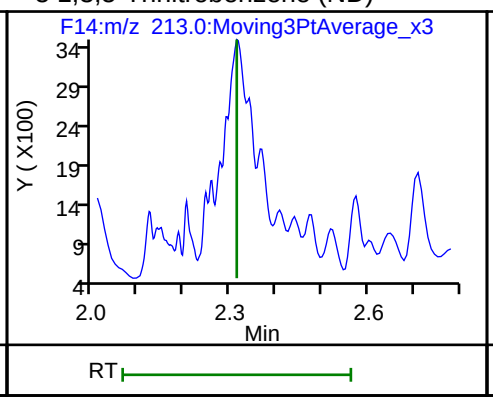
4 RDX (ND)



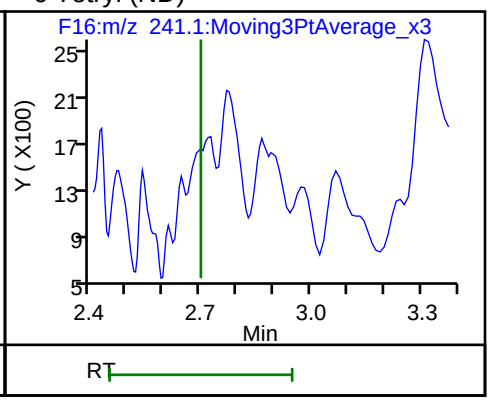
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



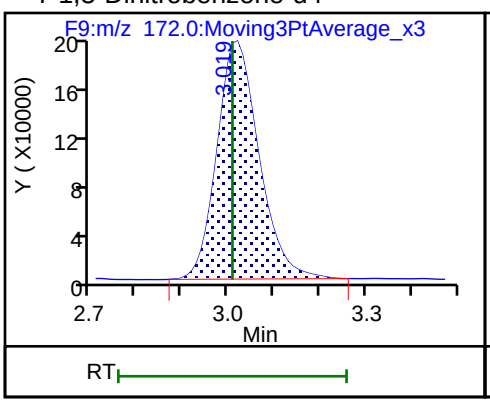
5 1,3,5-Trinitrobenzene (ND)



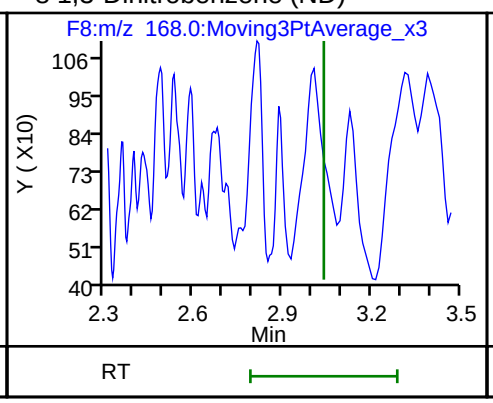
6 Tetryl (ND)



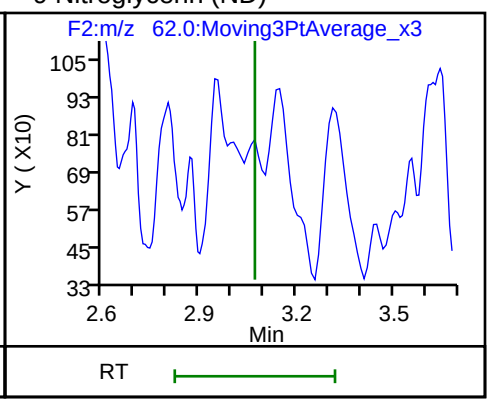
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

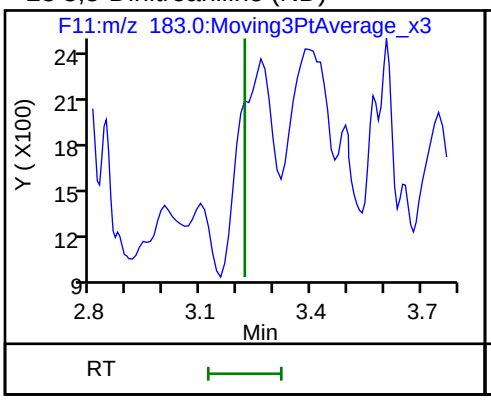


9 Nitroglycerin (ND)

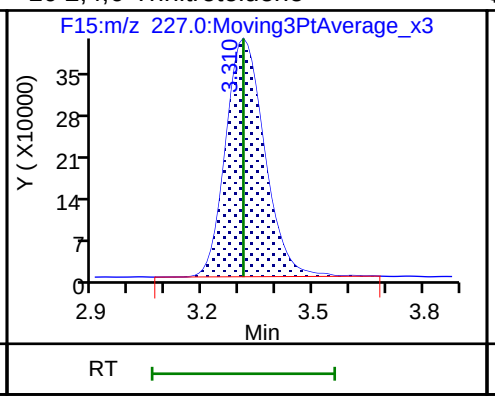


Report Date: 14-Apr-2022 10:06:53 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08023.d

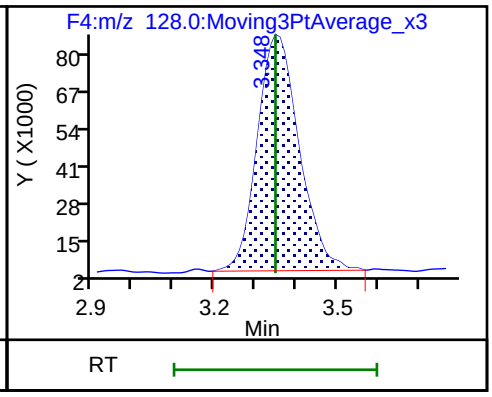
28 3,5-Dinitroaniline (ND)



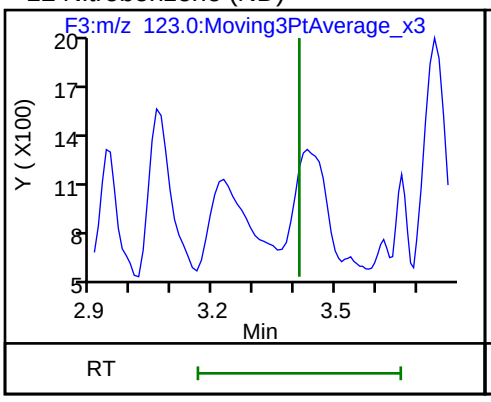
10 2,4,6-Trinitrotoluene



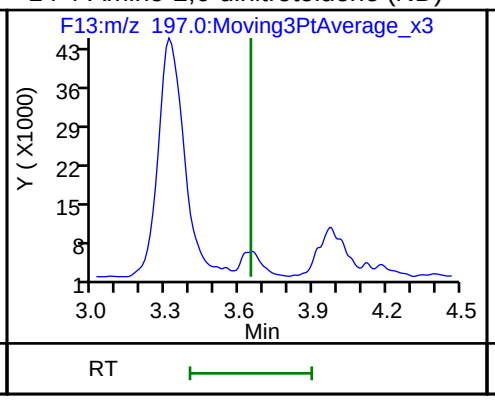
$ 11 Nitrobenzene-d5



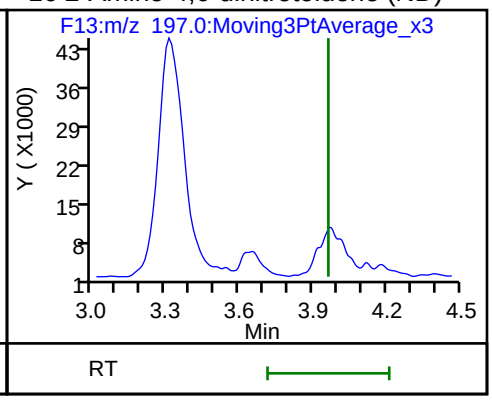
12 Nitrobenzene (ND)



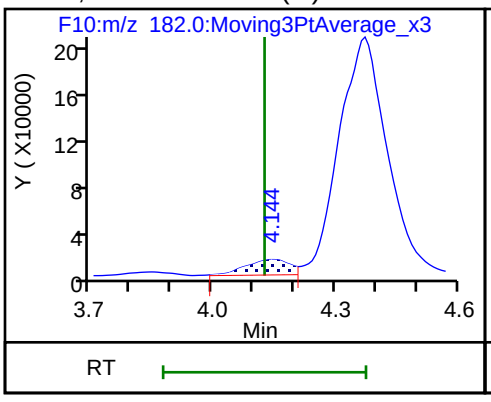
14 4-Amino-2,6-dinitrotoluene (ND)



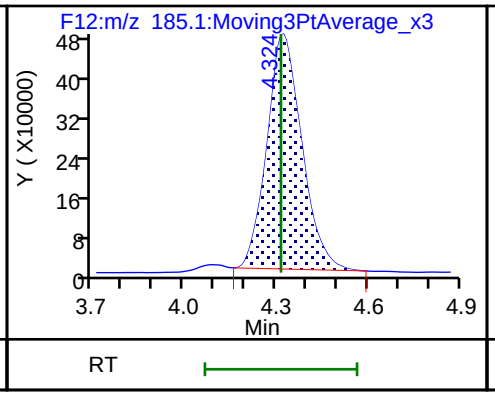
16 2-Amino-4,6-dinitrotoluene (ND)



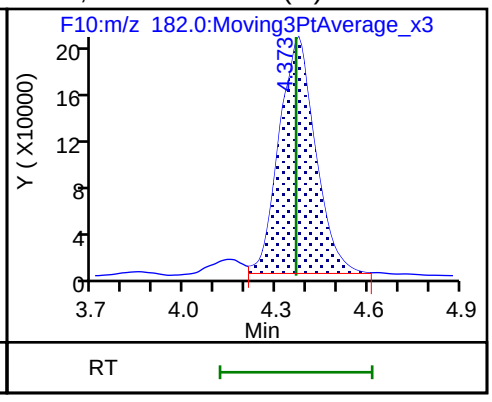
17 2,6-Dinitrotoluene (M)



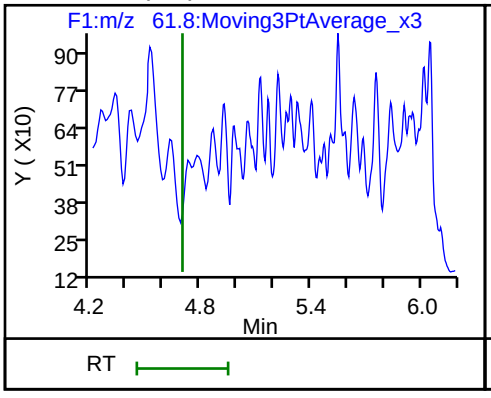
* 18 2,4-dinitrotoluene-d3



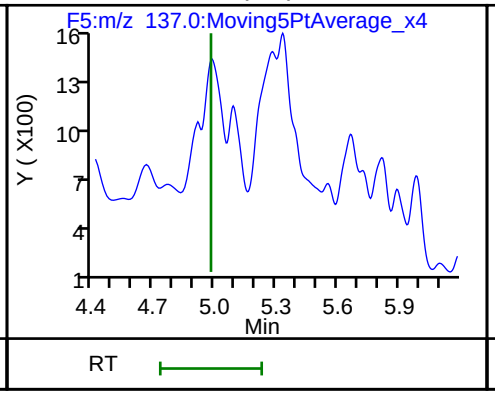
19 2,4-Dinitrotoluene (M)



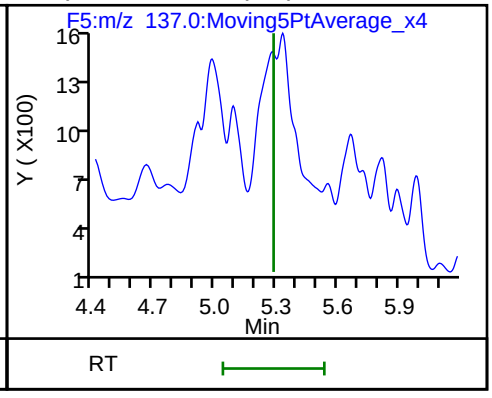
20 PETN (ND)



22 o-Nitrotoluene (ND)



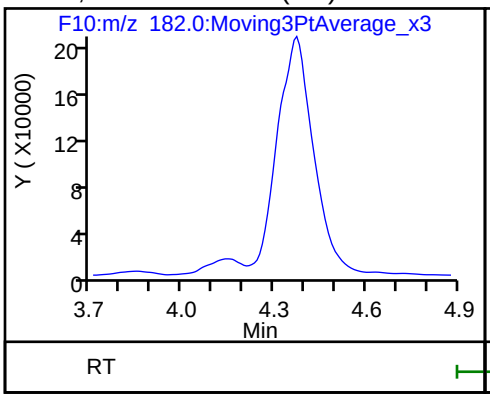
23 p-Nitrotoluene (ND)



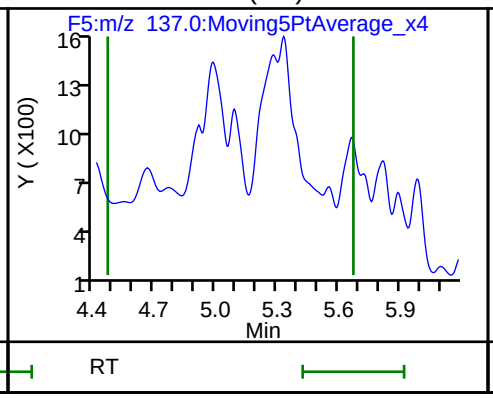
Report Date: 14-Apr-2022 10:06:53 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08023.d

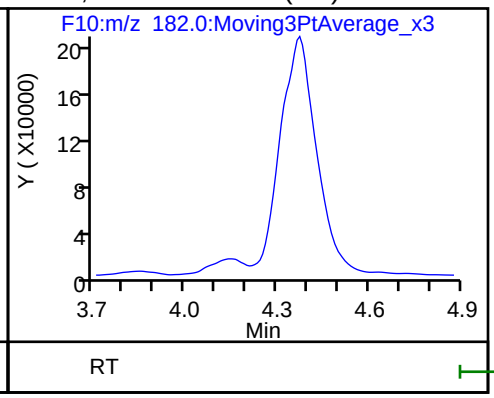
13 3,4-Dinitrotoluene (ND)



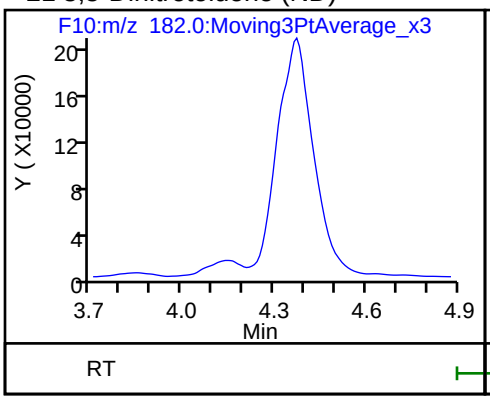
24 m-Nitrotoluene (ND)



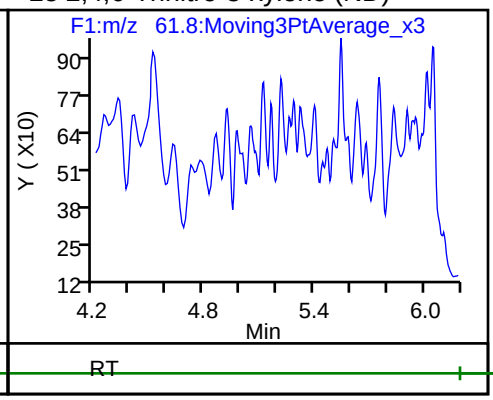
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 14-Apr-2022 10:06:53 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08023.d
Lims ID: 280-160190-A-13-B
Client ID: DUP-06
Sample Type: Client
Inject. Date: 08-Apr-2022 11:59:58 ALS Bottle#: 20 Worklist Smp#: 23
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-13-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:52 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:43:05

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	101.3	100.97

Report Date: 14-Apr-2022 10:06:54 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

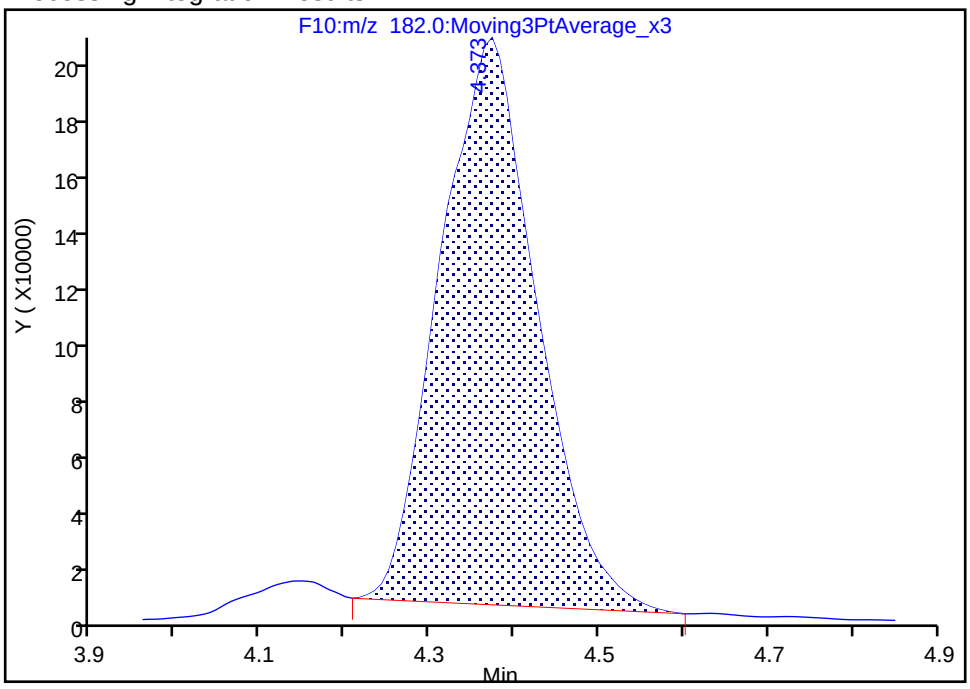
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08023.d				
Injection Date:	08-Apr-2022 11:59:58	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-13-B	Lab Sample ID:	280-160190-13		
Client ID:	DUP-06				
Operator ID:	acm	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F10:SIR		

19 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

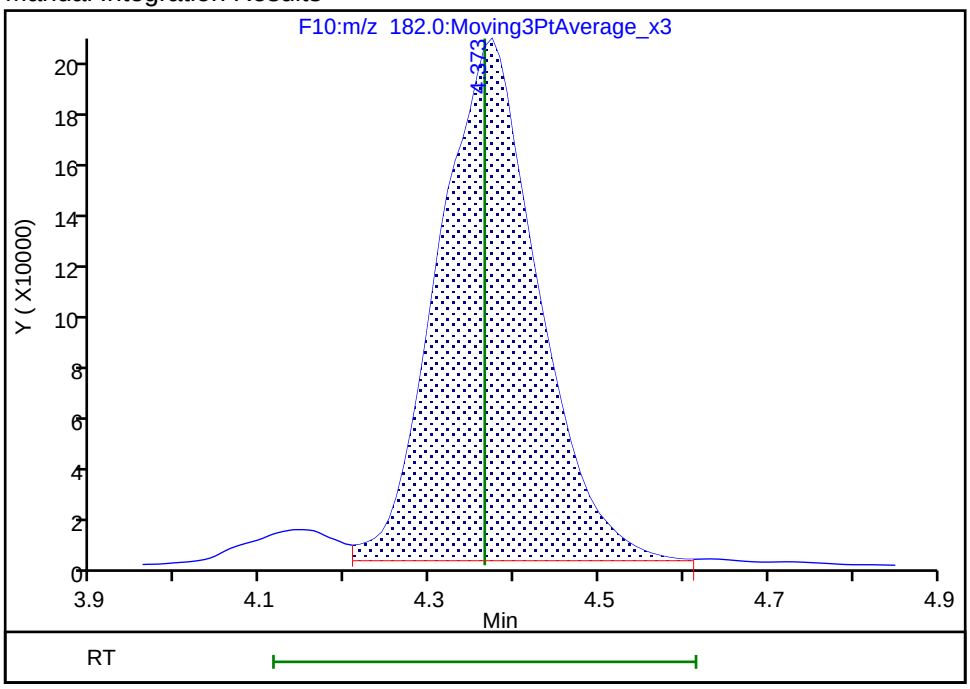
Processing Integration Results

RT: 4.37
Area: 1572625
Amount: 49.055766
Amount Units: ug/l



Manual Integration Results

RT: 4.37
Area: 1649318
Amount: 51.463624
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:42:48

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:06:53 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08023.d

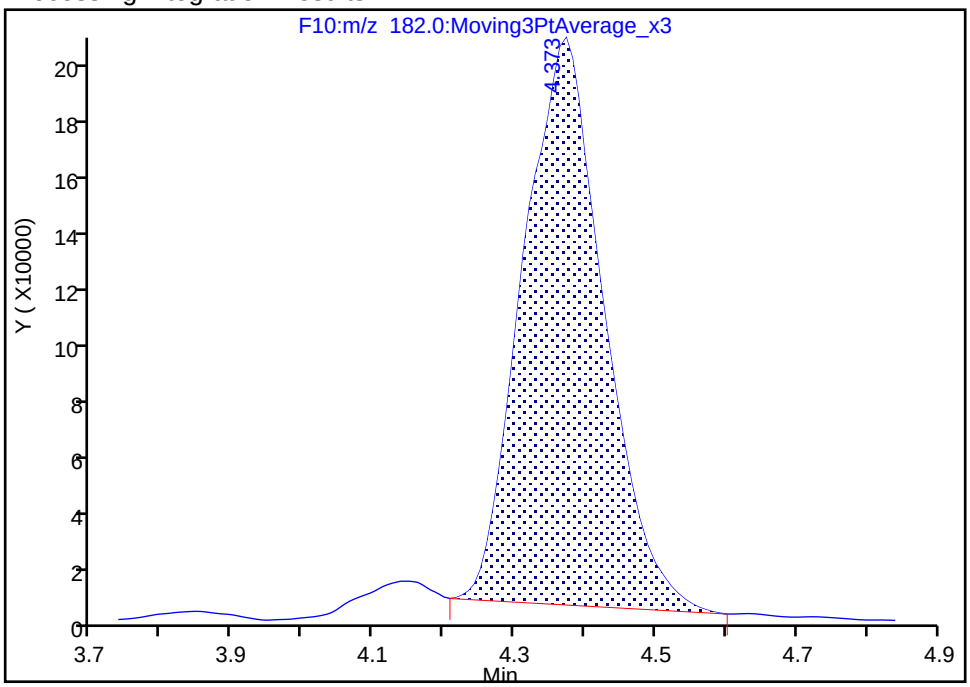
Injection Date:	08-Apr-2022 11:59:58	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-13-B	Lab Sample ID:	280-160190-13		
Client ID:	DUP-06				
Operator ID:	acm	ALS Bottle#:	20	Worklist Smp#:	23
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F10:SIR		

17 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

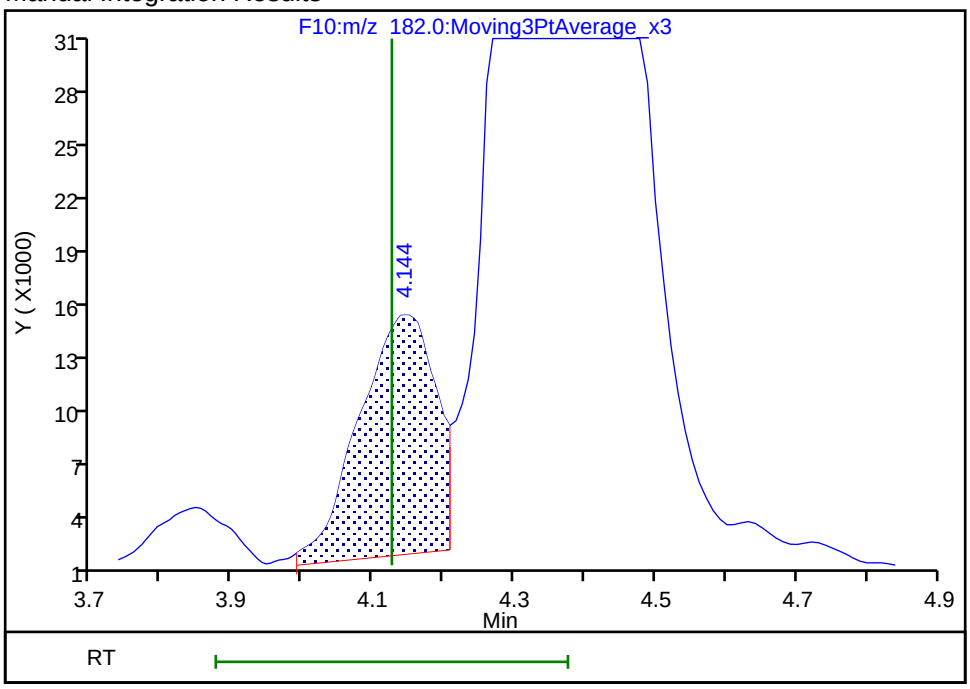
Processing Integration Results

RT: 4.37
Area: 1572625
Amount: 24.694103
Amount Units: ug/l



Manual Integration Results

RT: 4.14
Area: 98474
Amount: 0.980701
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:42:54

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB176 (14.5-15) | Lab Sample ID: 280-160190-14
Matrix: Solid | Lab File ID: ex722D08024.d
Analysis Method: 8321A | Date Collected: 03/24/2022 10:50
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20
Sample wt/vol: 10.23(g) | Date Analyzed: 04/08/2022 12:06
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571224 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.048	J	0.098	0.049	0.044
99-65-0	1,3-Dinitrobenzene	0.049	U	0.098	0.049	0.044
118-96-7	2,4,6-Trinitrotoluene	0.049	U M	0.098	0.049	0.036
35572-78-2	2-Amino-4,6-dinitrotoluene	0.048	J M	0.098	0.049	0.048
19406-51-0	4-Amino-2,6-dinitrotoluene	0.049	U M	0.098	0.049	0.030
2691-41-0	HMX	0.049	U Q	0.098	0.049	0.045
99-08-1	m-Nitrotoluene	0.38	M	0.098	0.049	0.042
98-95-3	Nitrobenzene	0.049	U	0.11	0.049	0.037
55-63-0	Nitroglycerin	0.049	U	0.098	0.049	0.028
78-11-5	PETN	0.049	U	0.098	0.049	0.033
121-82-4	RDX	0.049	U	0.12	0.049	0.042
479-45-8	Tetryl	0.049	U Q	0.098	0.049	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	100		68-140

Report Date: 14-Apr-2022 10:06:54 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08024.d
Lims ID: 280-160190-A-14-B
Client ID: 29SB176 (14.5-15)
Sample Type: Client
Inject. Date: 08-Apr-2022 12:06:34 ALS Bottle#: 21 Worklist Smp#: 24
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-14-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:52 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:44:26
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		115591	125.0	97.9	
33 DNX								
160.0	1.536	1.489	0.047	0.837	7730	-0.7603	6.6	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		350001	125.0	70.5	
5 1,3,5-Trinitrobenzene								
213.0	2.323	2.322	0.010	0.770	189911	12.2	2.6	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.008	0.011		1253170	129.4	316	
28 3,5-Dinitroaniline								
183.0	3.241	3.231	0.022	1.073	209559	4.88	31.6	
10 2,4,6-Trinitrotoluene								M
227.0	3.310	3.316	0.0	0.767	29610	0.5297	6.0	M
$ 11 Nitrobenzene-d5								
128.0	3.348	3.354	0.0	0.776	594841	100.4	24.5	
14 4-Amino-2,6-dinitrotoluene								M
197.0	3.652	3.652	0.007	0.846	299355	5.83	8.0	M
16 2-Amino-4,6-dinitrotoluene								M
197.0	3.970	3.971	0.007	0.920	762017	12.3	20.0	M
17 2,6-Dinitrotoluene								E
182.0	4.132	4.138	0.006	0.958	18990123	302.8	101	E
* 18 2,4-dinitrotoluene-d3								
185.1	4.315	4.315	0.0		3801198	125.0	119	
19 2,4-Dinitrotoluene								E
182.0	4.365	4.373	0.0	1.012	25550968	796.5	124	E
22 o-Nitrotoluene								EM
137.0	4.982	4.987	0.005	1.155	6065644	624.8	912	EM

Report Date: 14-Apr-2022 10:06:54 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08024.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
23 p-Nitrotoluene								EM
137.0	5.286	5.297	0.0	1.225	7780502	923.9	1113	EM
24 m-Nitrotoluene								M
137.0	5.685	5.686	0.010	1.317	491654	97.8	64.6	M

QC Flag Legend

Processing Flags
E - Exceeded Maximum Amount
Review Flags
M - Manually Integrated

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

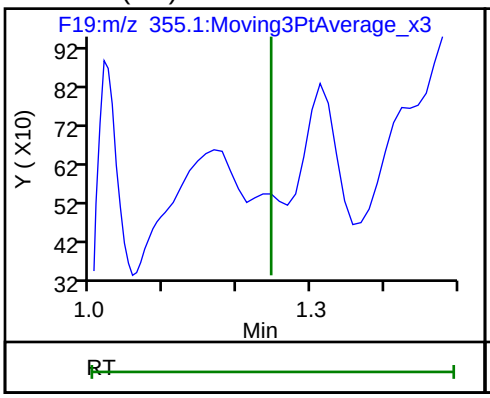
Report Date: 14-Apr-2022 10:06:54 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

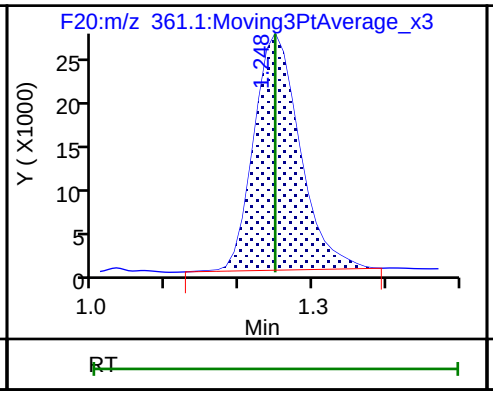
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08024.d

Injection Date:	08-Apr-2022 12:06:34	Instrument ID:	LC_LCMS7
Lims ID:	280-160190-A-14-B	Lab Sample ID:	280-160190-14
Client ID:	29SB176 (14.5-15)		
Operator ID:	acm	ALS Bottle#:	21 Worklist Smp#: 24
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl

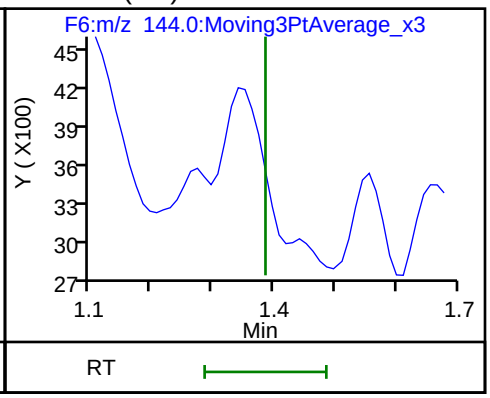
2 HMX (ND)



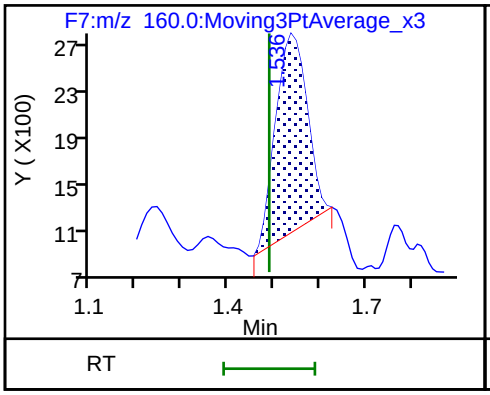
* 1 HMX-13C4



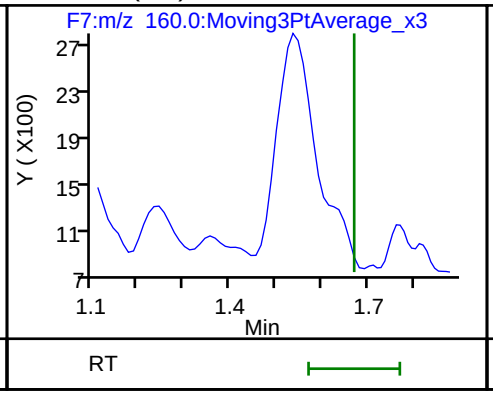
36 TNX (ND)



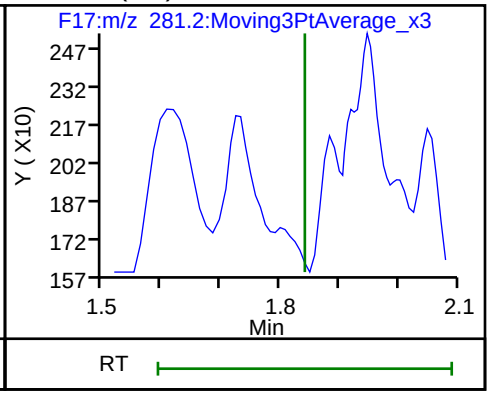
33 DNX



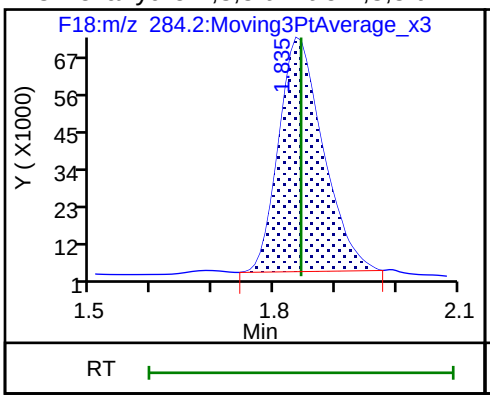
34 MNX (ND)



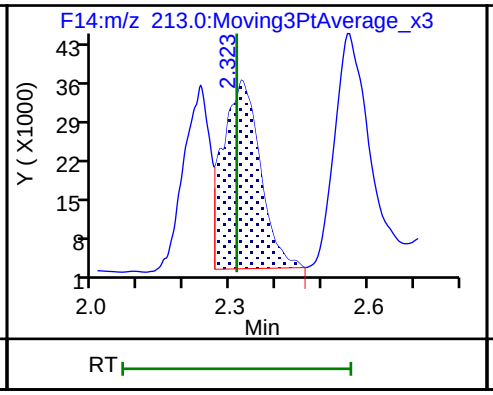
4 RDX (ND)



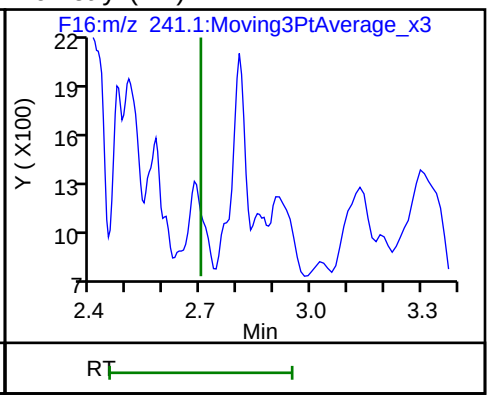
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



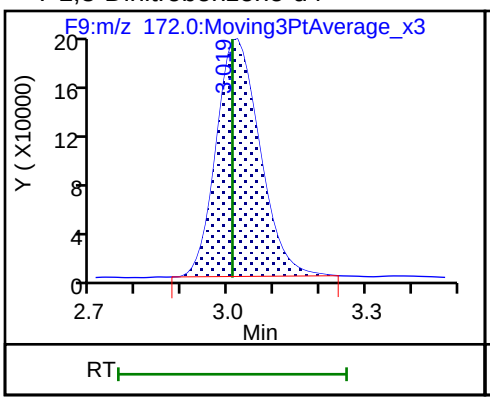
5 1,3,5-Trinitrobenzene



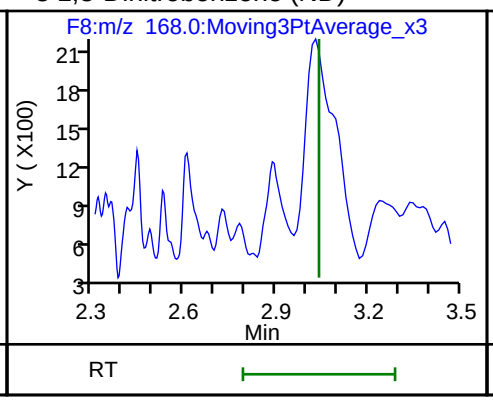
6 Tetryl (ND)



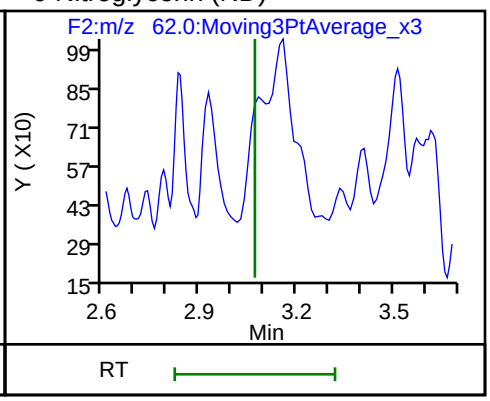
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

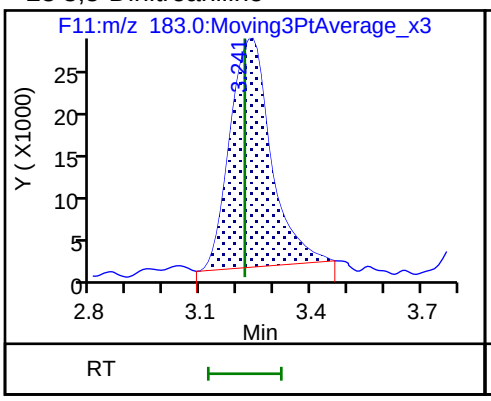


9 Nitroglycerin (ND)

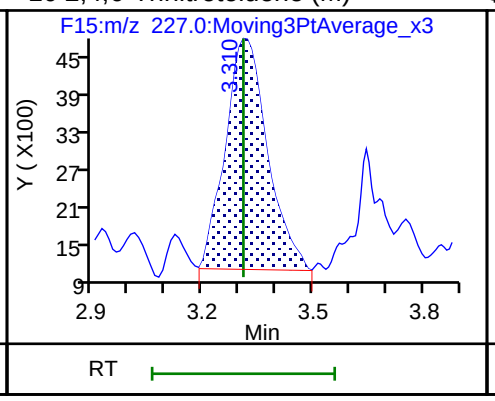


Report Date: 14-Apr-2022 10:06:54 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08024.d

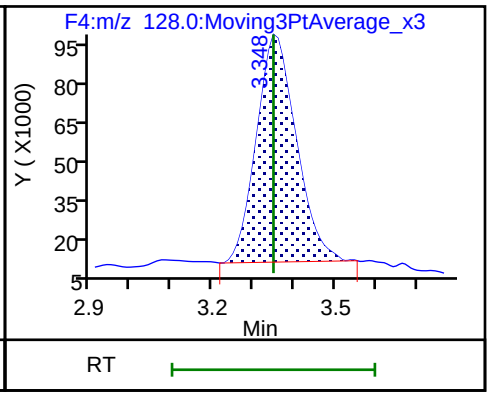
28 3,5-Dinitroaniline



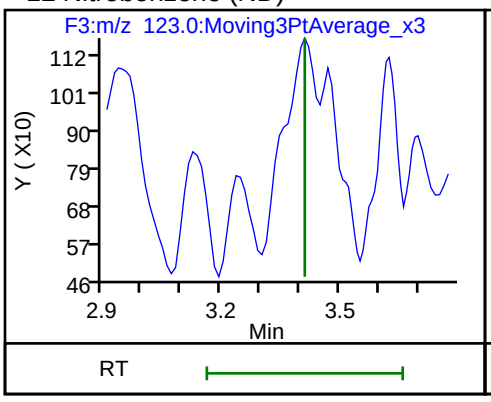
10 2,4,6-Trinitrotoluene (M)



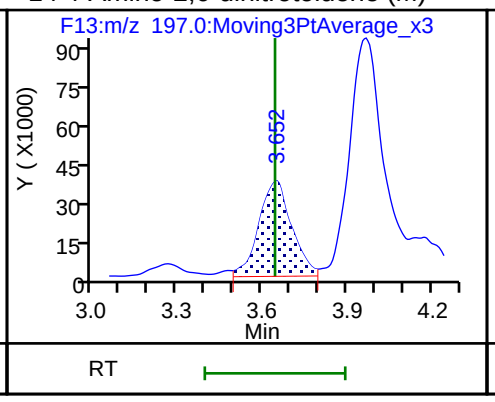
$ 11 Nitrobenzene-d5



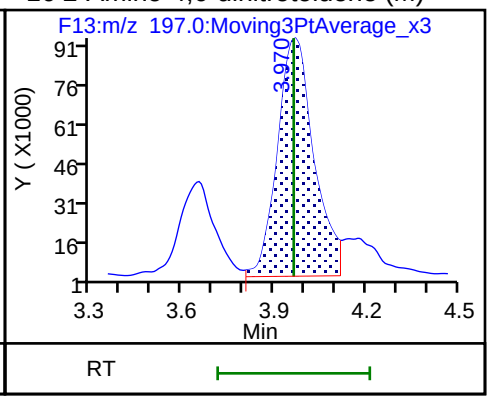
12 Nitrobenzene (ND)



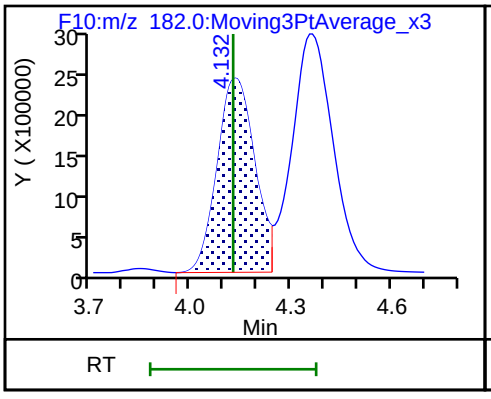
14 4-Amino-2,6-dinitrotoluene (M)



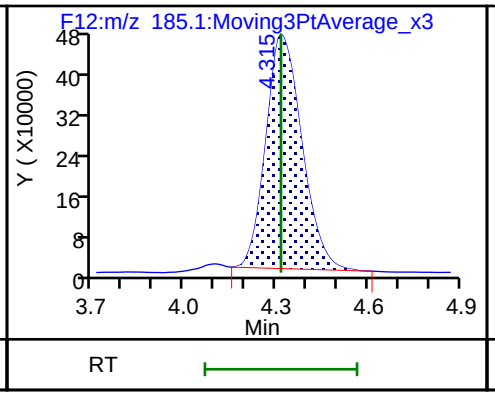
16 2-Amino-4,6-dinitrotoluene (M)



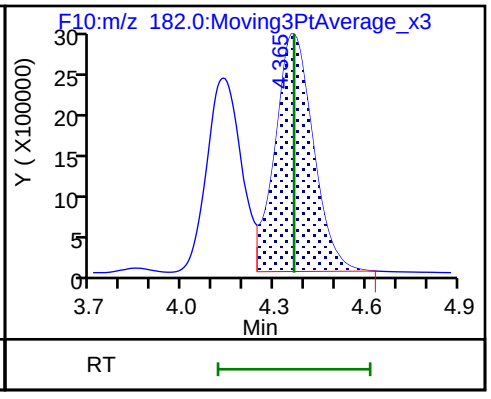
17 2,6-Dinitrotoluene



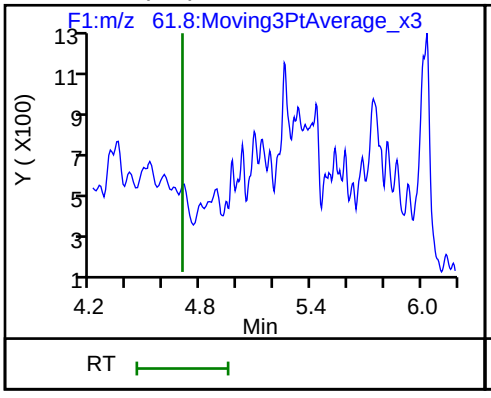
* 18 2,4-dinitrotoluene-d3



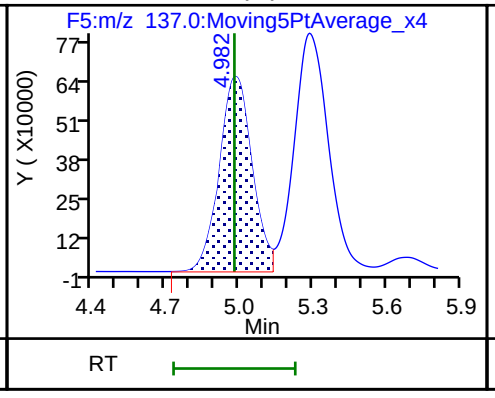
19 2,4-Dinitrotoluene



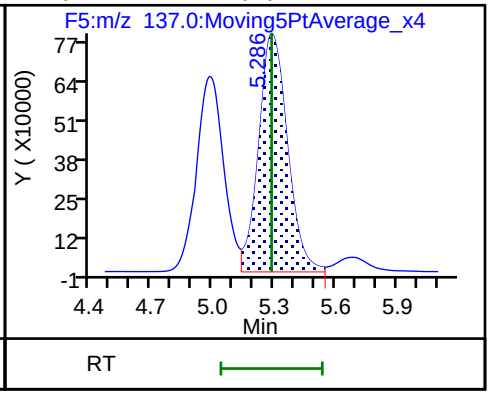
20 PETN (ND)



22 o-Nitrotoluene (M)

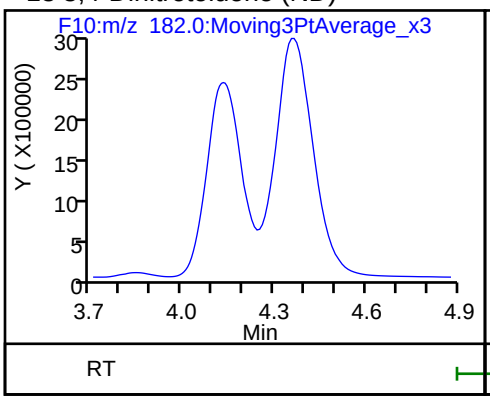


23 p-Nitrotoluene (M)

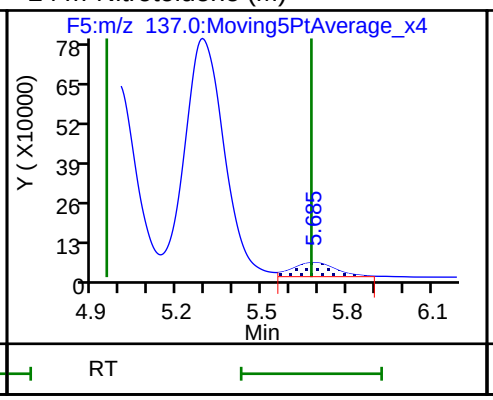


Report Date: 14-Apr-2022 10:06:54 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08024.d

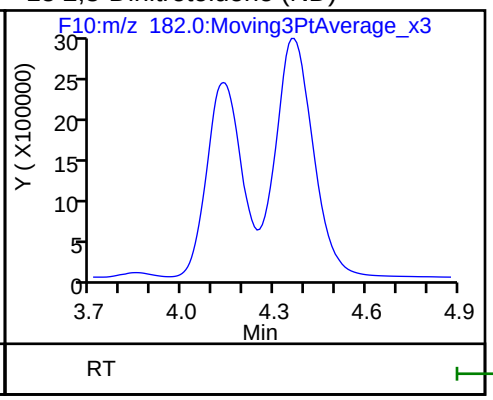
13 3,4-Dinitrotoluene (ND)



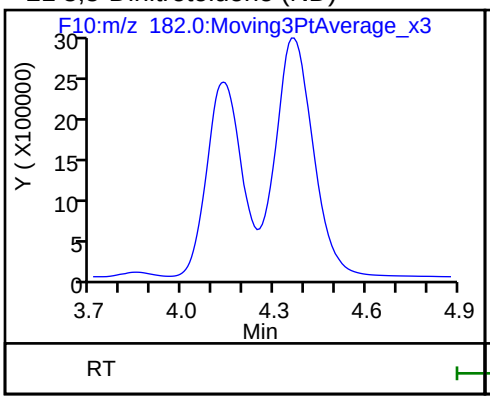
24 m-Nitrotoluene (M)



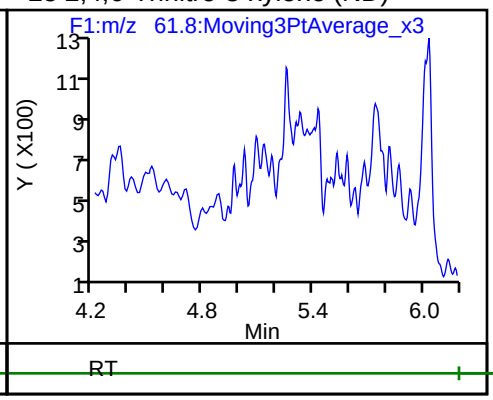
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 14-Apr-2022 10:06:54 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08024.d
Lims ID: 280-160190-A-14-B
Client ID: 29SB176 (14.5-15)
Sample Type: Client
Inject. Date: 08-Apr-2022 12:06:34 ALS Bottle#: 21 Worklist Smp#: 24
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-14-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:52 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:44:26

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	100.4	100.03

Report Date: 14-Apr-2022 10:06:54 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08024.d

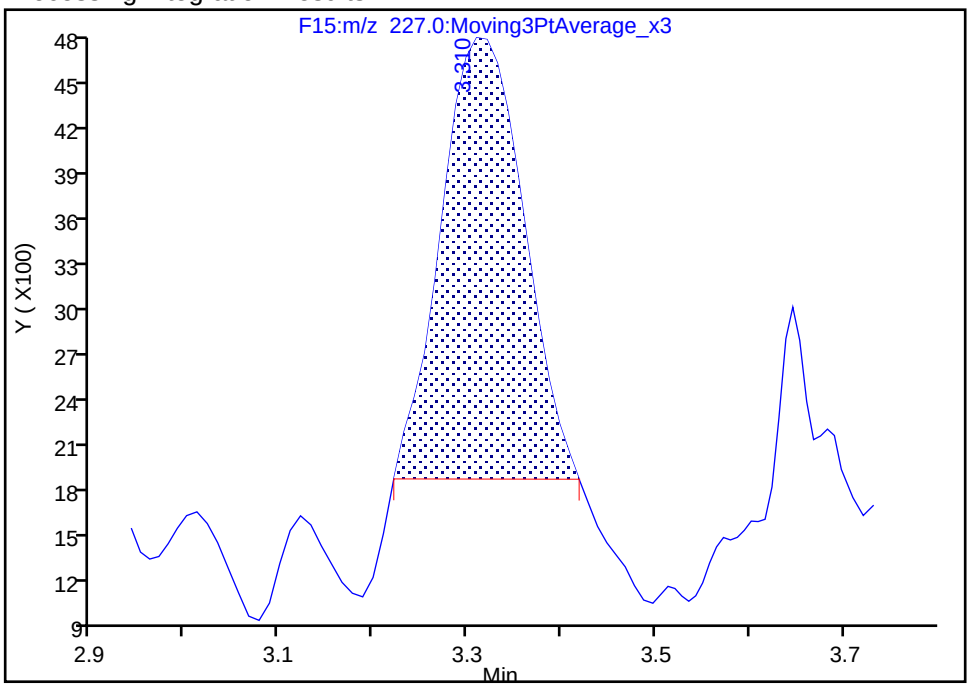
Injection Date:	08-Apr-2022 12:06:34	Instrument ID:	LC_LCMS7
Lims ID:	280-160190-A-14-B	Lab Sample ID:	280-160190-14
Client ID:	29SB176 (14.5-15)		
Operator ID:	acm	ALS Bottle#:	21 Worklist Smp#: 24
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F15:SIR

10 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

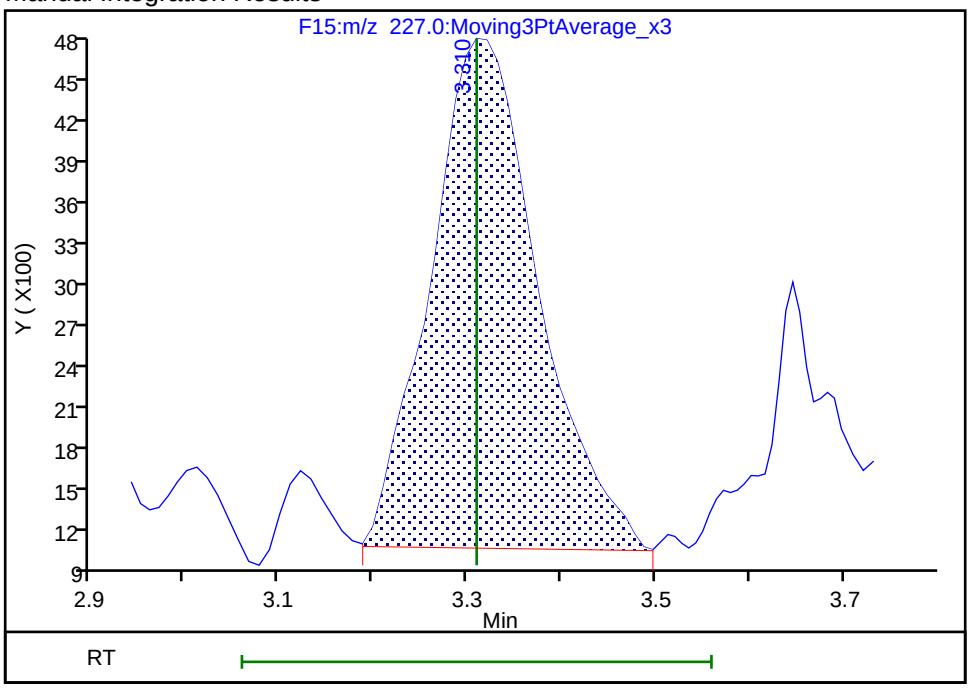
Processing Integration Results

RT: 3.31
Area: 17807
Amount: 0.346948
Amount Units: ug/l



Manual Integration Results

RT: 3.31
Area: 29610
Amount: 0.529717
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:43:19

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:06:54 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

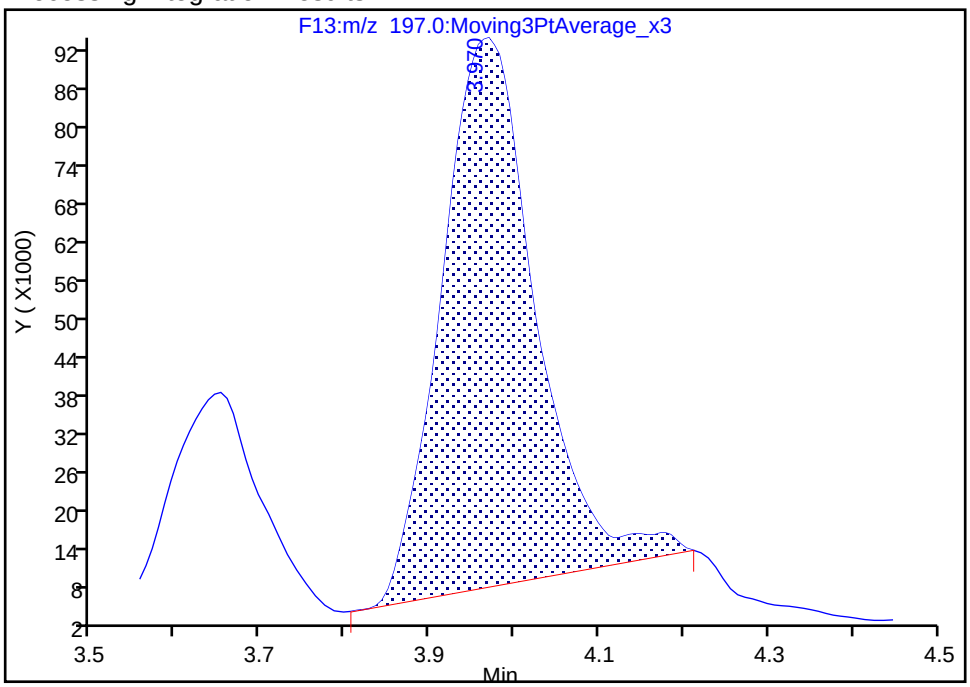
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08024.d				
Injection Date:	08-Apr-2022 12:06:34	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-14-B	Lab Sample ID:	280-160190-14		
Client ID:	29SB176 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

16 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

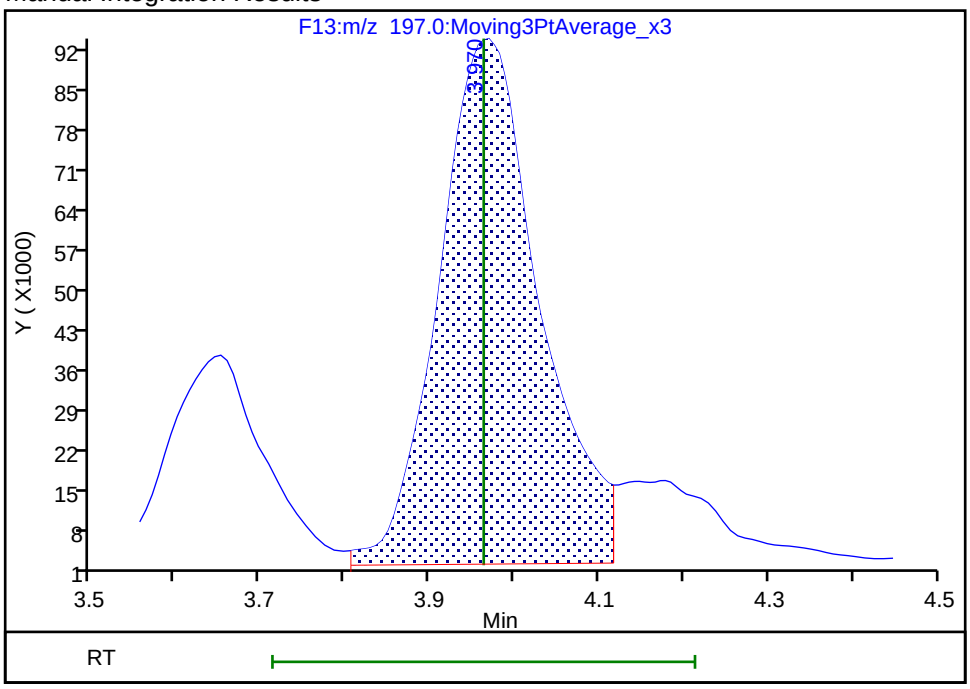
Processing Integration Results

RT: 3.97
Area: 668573
Amount: 10.726898
Amount Units: ug/l



Manual Integration Results

RT: 3.97
Area: 762017
Amount: 12.294439
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:43:36

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:06:54 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

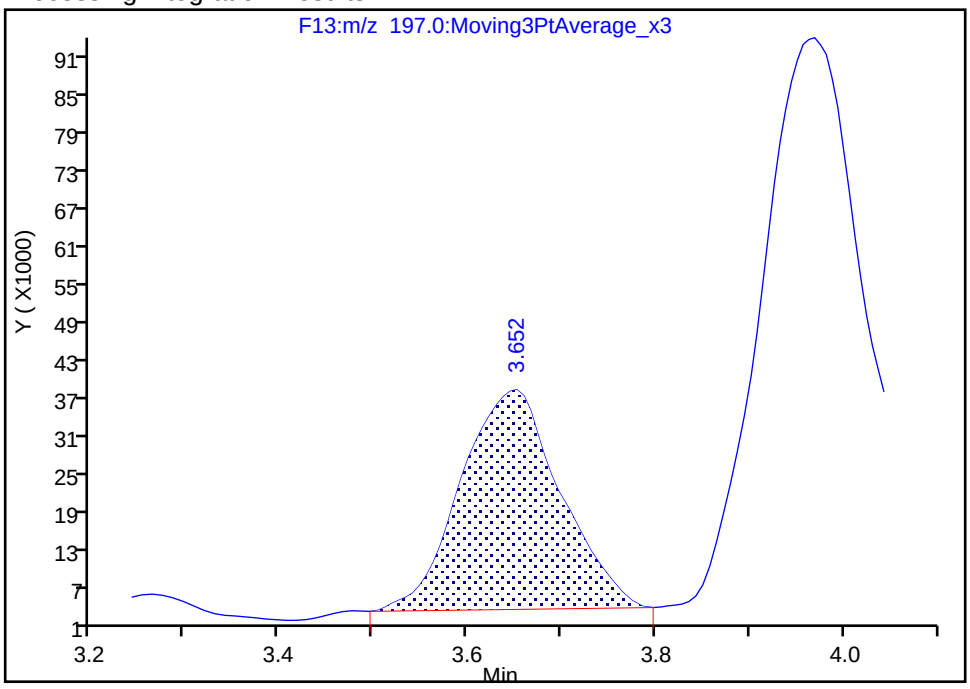
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08024.d				
Injection Date:	08-Apr-2022 12:06:34	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-14-B	Lab Sample ID:	280-160190-14		
Client ID:	29SB176 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

14 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

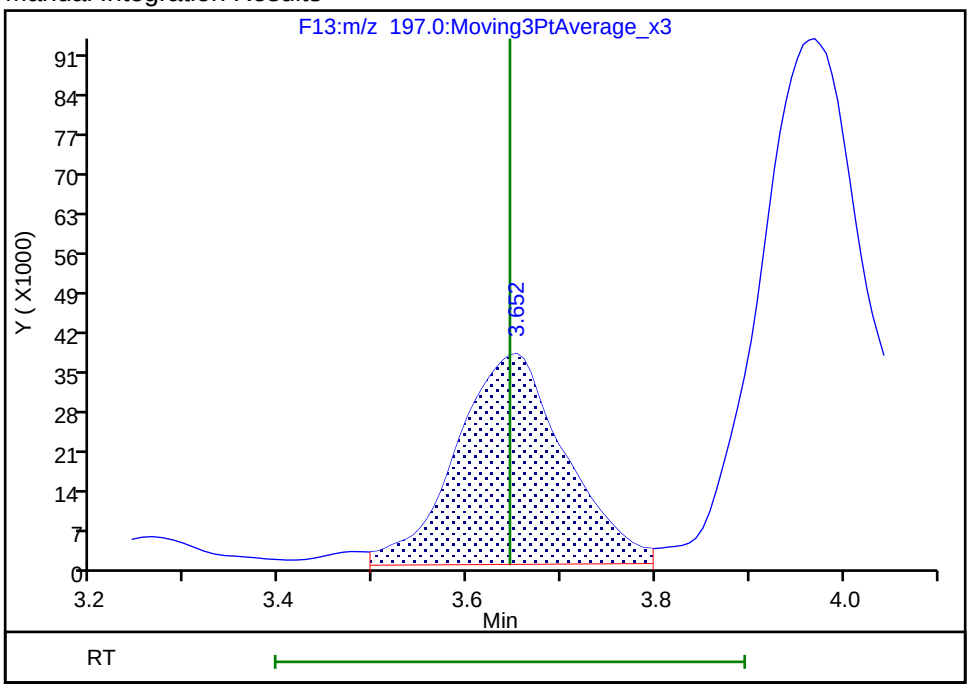
Processing Integration Results

RT: 3.65
Area: 254563
Amount: 4.868883
Amount Units: ug/l



Manual Integration Results

RT: 3.65
Area: 299355
Amount: 5.831400
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:43:28

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:06:54 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

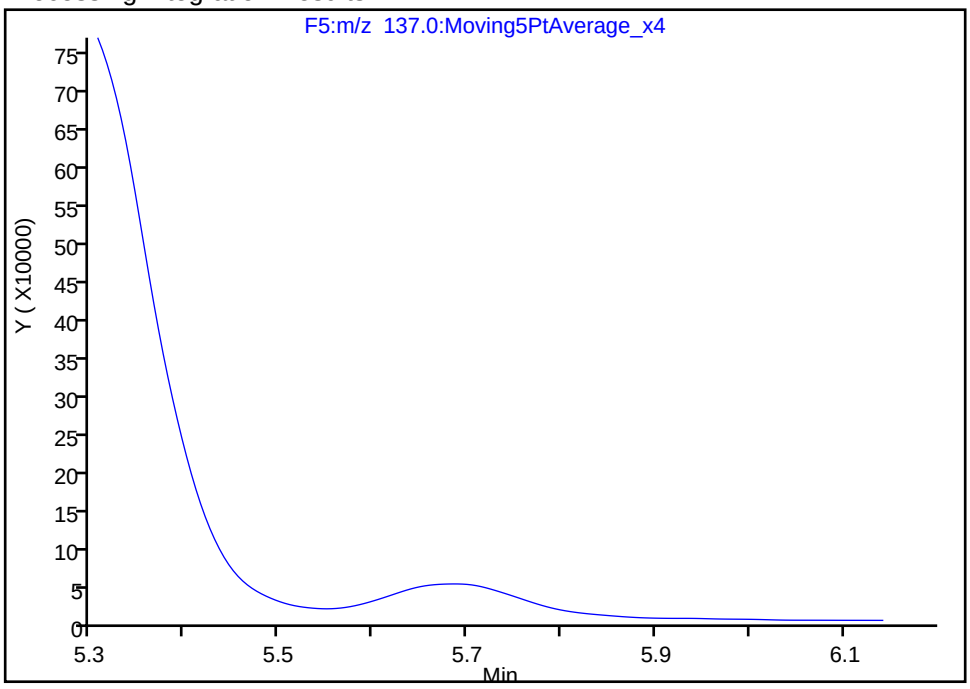
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08024.d				
Injection Date:	08-Apr-2022 12:06:34	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-14-B	Lab Sample ID:	280-160190-14		
Client ID:	29SB176 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F5:SIR		

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

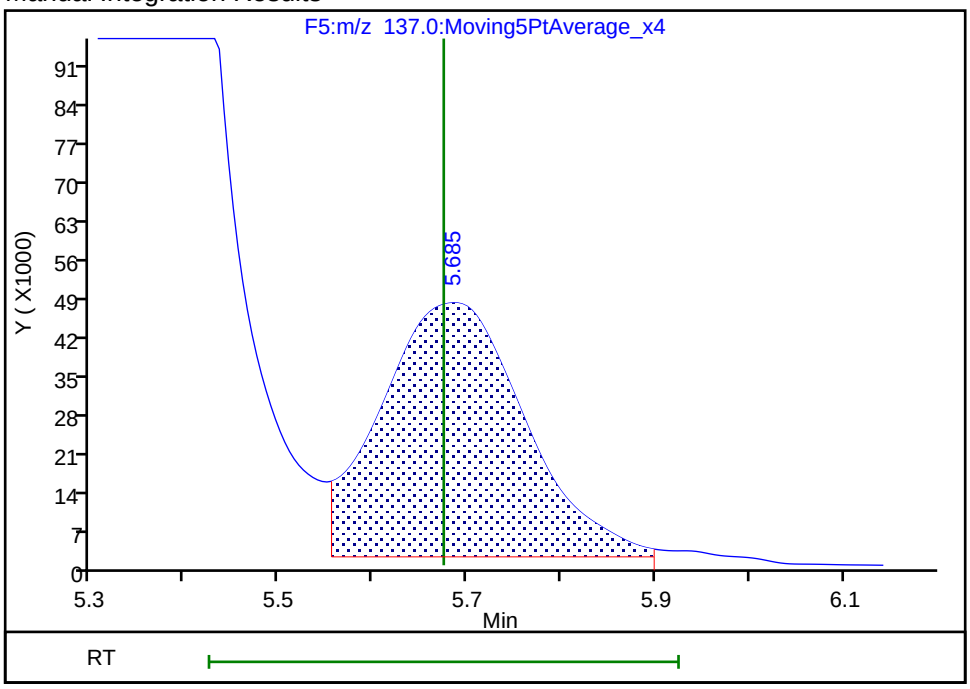
Not Detected
Expected RT: 5.67

Processing Integration Results



Manual Integration Results

RT: 5.68
Area: 491654
Amount: 97.757862
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:43:54
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1

SDG No.:

Client Sample ID: 29SB176 (14.5-15) DL | Lab Sample ID: 280-160190-14 DL

Matrix: Solid | Lab File ID: ex422D12063.d

Analysis Method: 8321A | Date Collected: 03/24/2022 10:50

Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20

Sample wt/vol: 10.23(g) | Date Analyzed: 04/12/2022 21:03

Con. Extract Vol.: 40(mL) | Dilution Factor: 10

Injection Volume: 40(uL) | GC Column: IonPac ID: 2(mm)

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

Analysis Batch No.: 571614 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
121-14-2	2,4-Dinitrotoluene	3.2	D	0.98	0.49	0.46
606-20-2	2,6-Dinitrotoluene	1.1	D	0.98	0.49	0.39
88-72-2	o-Nitrotoluene	2.7	D M	0.98	0.49	0.42
99-99-0	p-Nitrotoluene	4.0	D M	0.98	0.49	0.48

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	94	D	68-140

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12063.d
Lims ID: 280-160190-A-14-B
Client ID: 29SB176 (14.5-15)
Sample Type: Client
Inject. Date: 12-Apr-2022 21:03:06 ALS Bottle#: 56 Worklist Smp#: 64
Injection Vol: 40.0 ul Dil. Factor: 10.0000
Sample Info: 280-160190-A-14-B 10x
Misc. Info.: 04/08/2022 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\8321expDuPont.m
Limit Group: LC - 8321A Expl
Last Update: 13-Apr-2022 13:58:36 Calib Date: 12-Apr-2022 10:31:58
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d

Column 1 : Det: F1:SIR
Process Host: CTX1683

First Level Reviewer: meyera Date: 13-Apr-2022 13:45:38
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
360.9	1.964	1.964	0.0		202843	125.0	132	
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.1	2.772	2.798	-0.026		415780	125.0	528	
* 12 1,3-Dinitrobenzene-d4								
172.1	4.461	4.461	0.0		1156944	129.4	72.9	
15 2,4,6-Trinitrotoluene								
227.1	4.882	4.841	0.041	0.774	4219	-0.2775	6.9	
$ 16 Nitrobenzene-d5								
128.1	4.922	4.962	-0.040	1.103	82864	9.44	12.8	
19 4-Amino-2,6-dinitrotoluene								
197.2	5.417	5.417	0.0	0.859	17424	-0.2658	5.6	
22 2-Amino-4,6-dinitrotoluene								
197.2	5.861	5.861	0.0	0.929	55085	0.9461	12.1	
23 2,6-Dinitrotoluene								
182.1	6.063	6.094	-0.031	0.961	1446172	28.1	257	
* 24 2,4-dinitrotoluene-d3								
185.1	6.307	6.336	-0.029		3247685	125.0	606	
25 2,4-Dinitrotoluene								
182.1	6.367	6.367	0.0	1.010	2358664	80.6	326	
28 o-Nitrotoluene								M
137.1	7.359	7.389	-0.030	1.167	804102	69.2	217	M
29 p-Nitrotoluene								M
137.1	7.845	7.875	-0.030	1.244	1006503	103.0	270	M
30 m-Nitrotoluene								M
137.1	8.422	8.391	0.031	1.335	89610	12.9	20.5	M

Report Date: 13-Apr-2022 13:58:37 Chrom Revision: 2.3 18-Mar-2022 09:07:22

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 13-Apr-2022 13:58:37 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12063.d

Injection Date: 12-Apr-2022 21:03:06 Instrument ID: LC_LCMS4

Lims ID: 280-160190-A-14-B Lab Sample ID: 280-160190-14

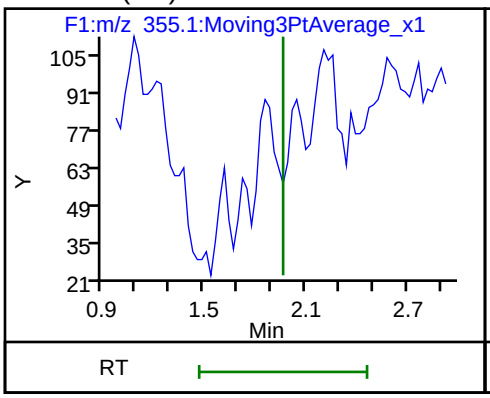
Client ID: 29SB176 (14.5-15)

Operator ID: acm ALS Bottle#: 56 Worklist Smp#: 64

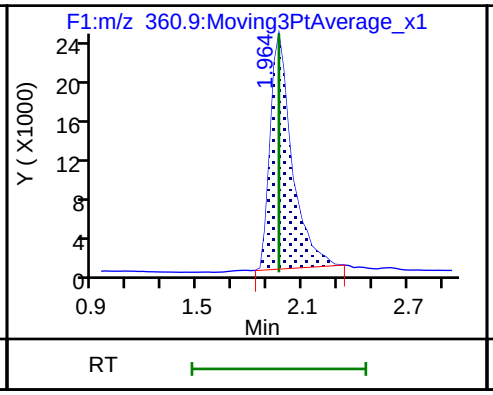
Injection Vol: 40.0 ul Dil. Factor: 10.0000

Method: 8321expDuPont Limit Group: LC - 8321A Expl

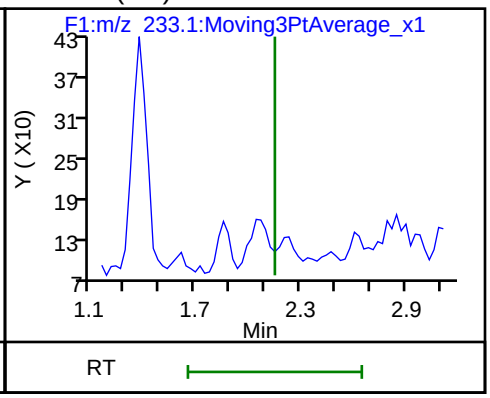
2 HMX (ND)



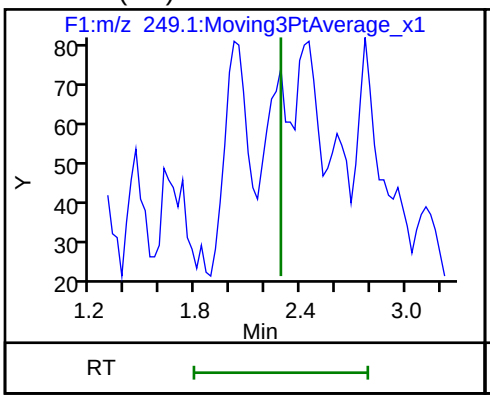
* 1 HMX-13C4



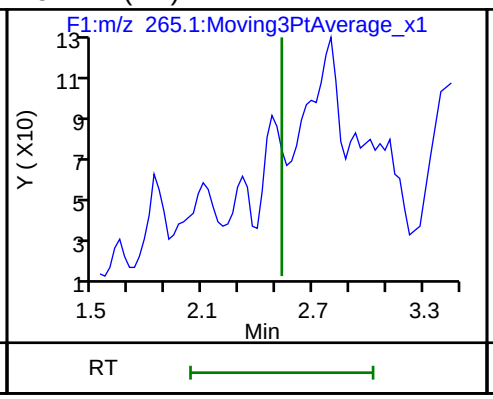
3 TNX (ND)



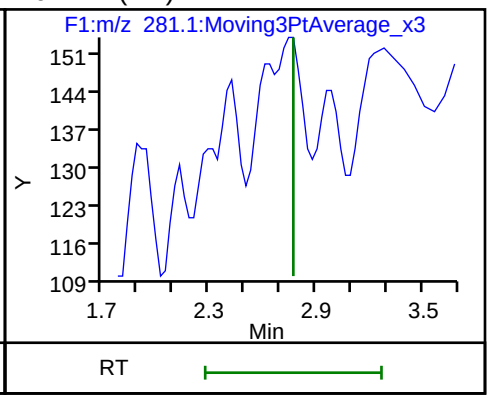
4 DNX (ND)



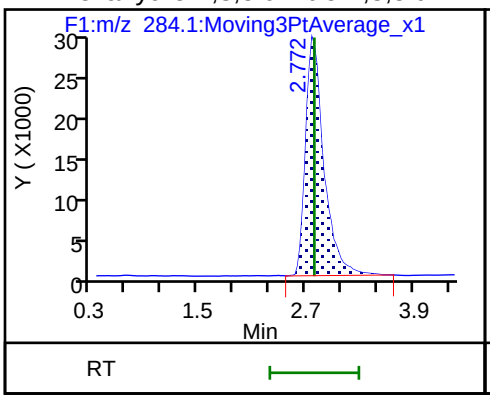
5 MNX (ND)



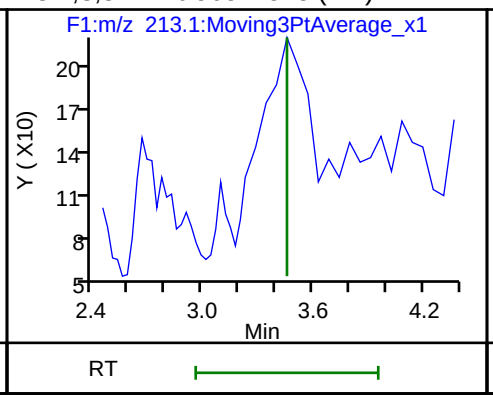
6 RDX (ND)



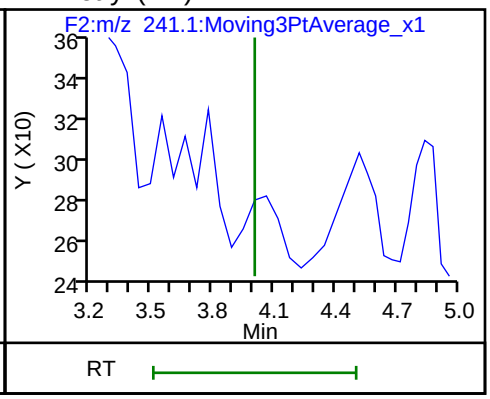
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t



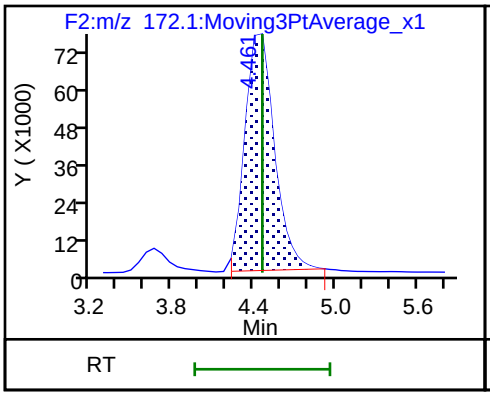
8 1,3,5-Trinitrobenzene (ND)



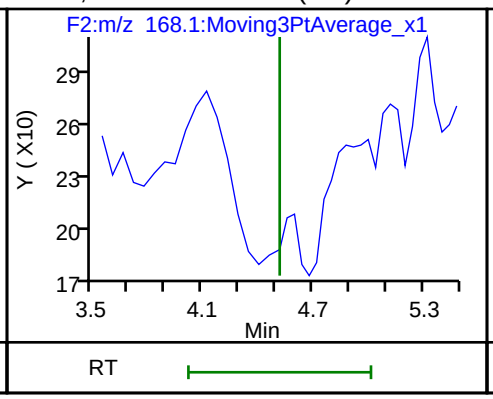
11 Tetryl (ND)



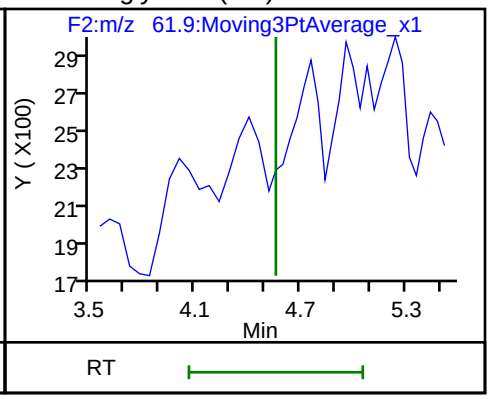
* 12 1,3-Dinitrobenzene-d4



13 1,3-Dinitrobenzene (ND)



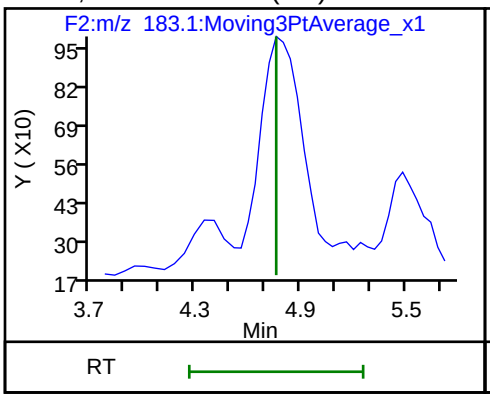
14 Nitroglycerin (ND)



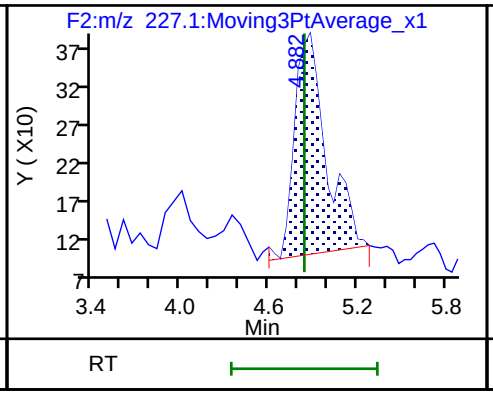
Report Date: 13-Apr-2022 13:58:37 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12063.d

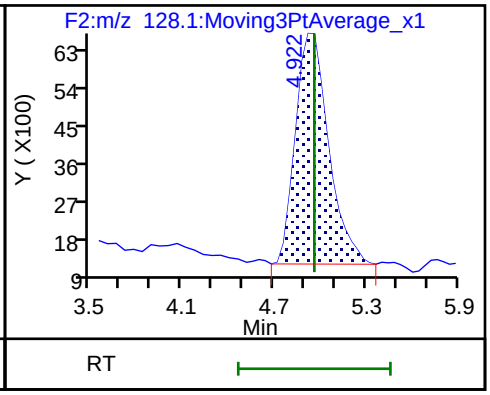
33 3,5-Dinitroaniline (ND)



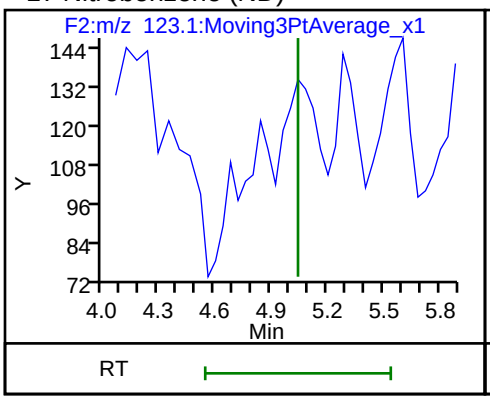
15 2,4,6-Trinitrotoluene



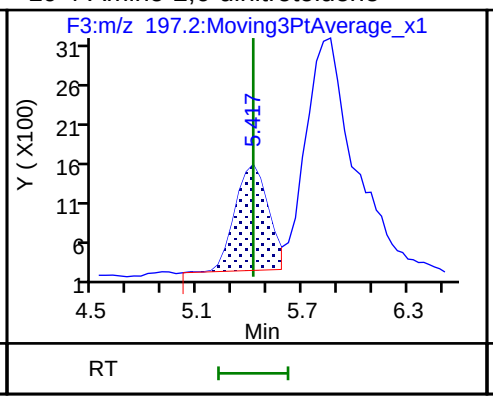
$ 16 Nitrobenzene-d5



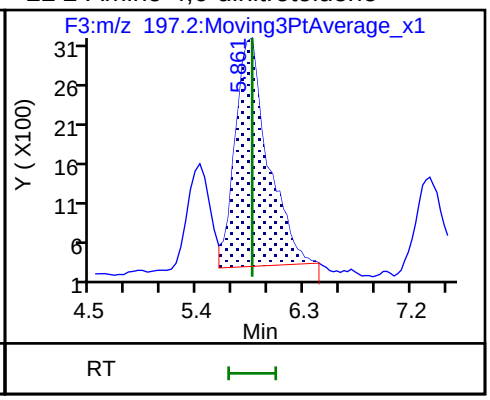
17 Nitrobenzene (ND)



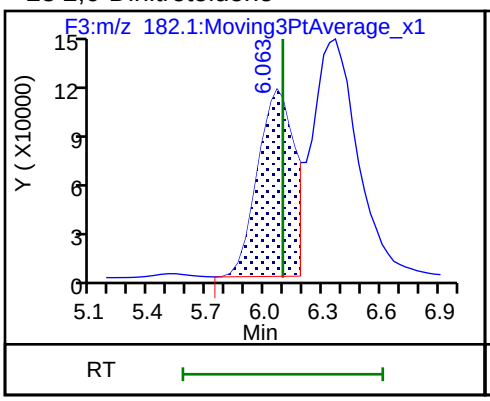
19 4-Amino-2,6-dinitrotoluene



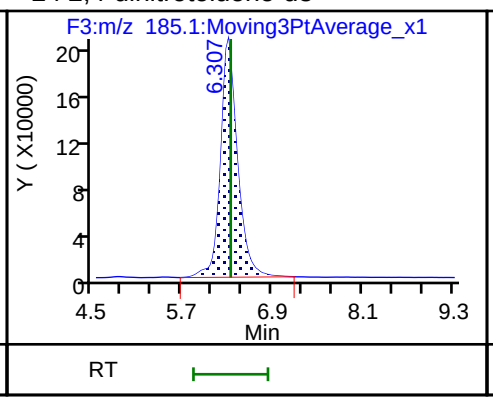
22 2-Amino-4,6-dinitrotoluene



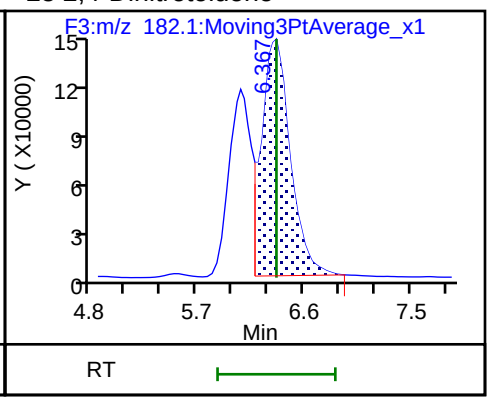
23 2,6-Dinitrotoluene



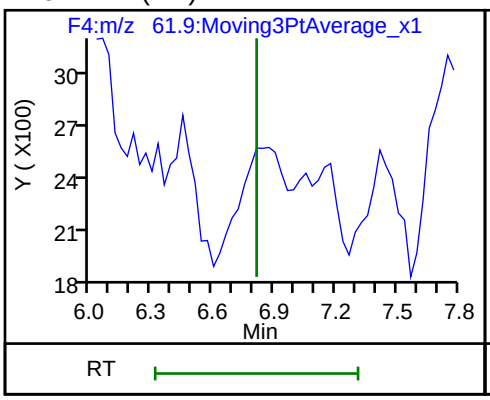
* 24 2,4-dinitrotoluene-d3



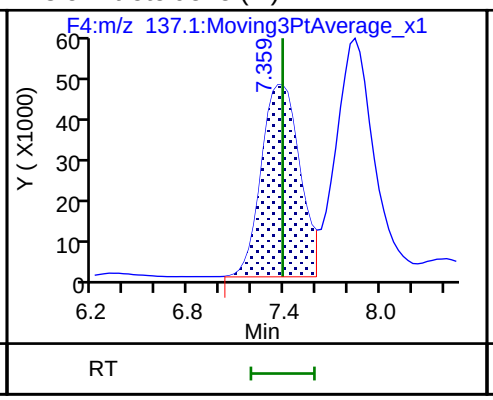
25 2,4-Dinitrotoluene



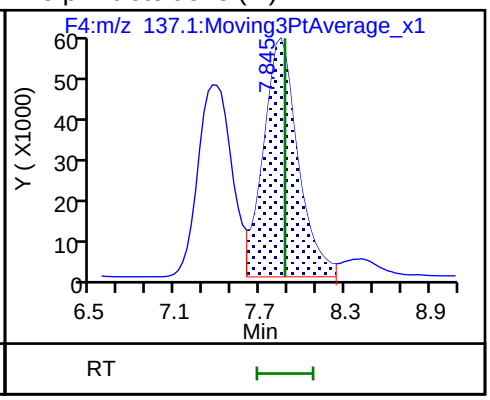
26 PETN (ND)



28 o-Nitrotoluene (M)

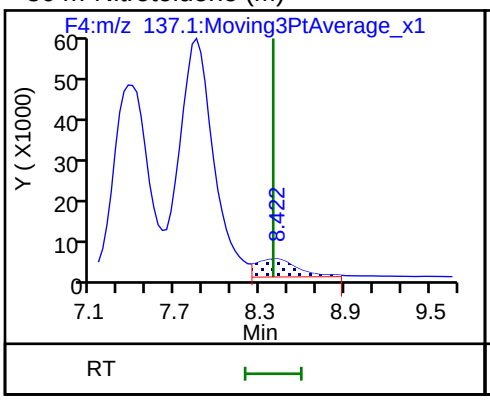


29 p-Nitrotoluene (M)

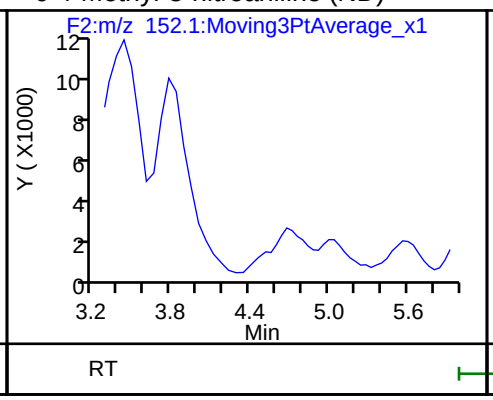


Report Date: 13-Apr-2022 13:58:37 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12063.d

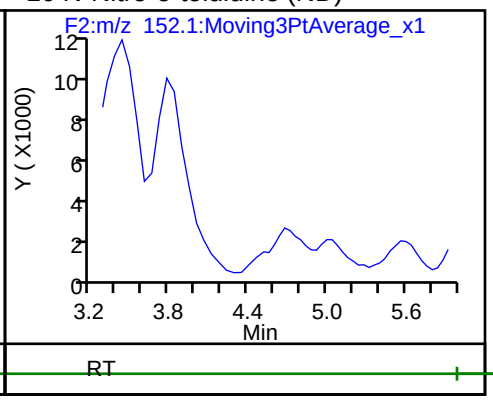
30 m-Nitrotoluene (M)



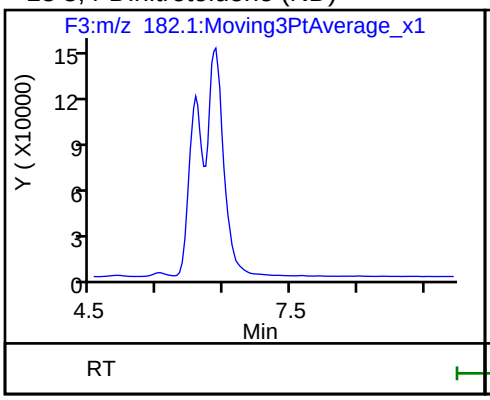
9 4-Methyl-3-nitroaniline (ND)



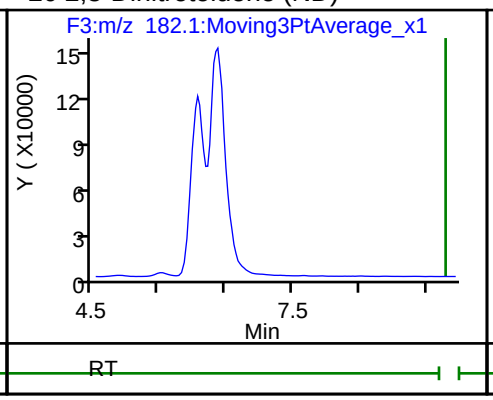
10 N-Nitro-o-toluidine (ND)



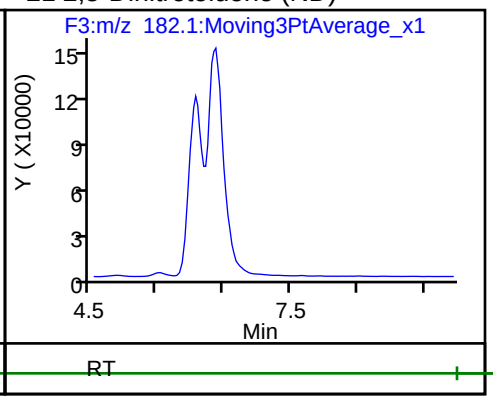
18 3,4-Dinitrotoluene (ND)



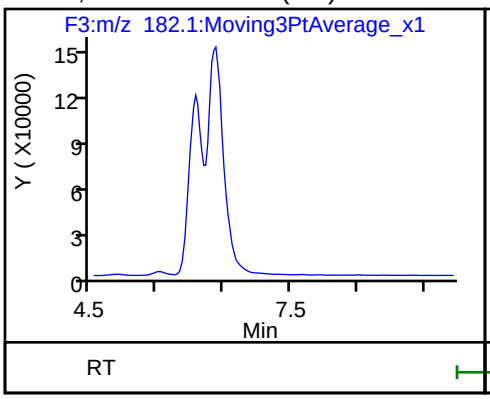
20 2,3-Dinitrotoluene (ND)



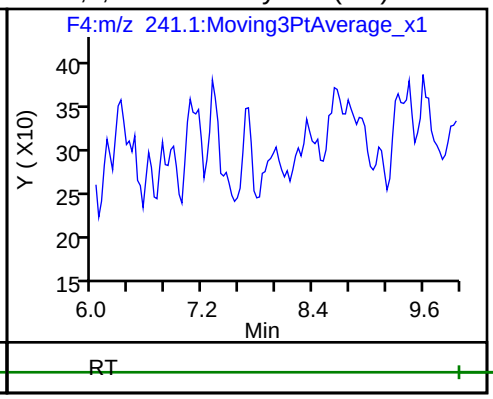
21 2,5-Dinitrotoluene (ND)



27 3,5-Dinitrotoluene (ND)



31 2,4,6-Trinitro-3-xylene (ND)



Report Date: 13-Apr-2022 13:58:37 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12063.d
Lims ID: 280-160190-A-14-B
Client ID: 29SB176 (14.5-15)
Sample Type: Client
Inject. Date: 12-Apr-2022 21:03:06 ALS Bottle#: 56 Worklist Smp#: 64
Injection Vol: 40.0 ul Dil. Factor: 10.0000
Sample Info: 280-160190-A-14-B 10x
Misc. Info.: 04/08/2022 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\8321expDuPont.m
Limit Group: LC - 8321A Expl
Last Update: 13-Apr-2022 13:58:36 Calib Date: 12-Apr-2022 10:31:58
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d

Column 1 : Det: F1:SIR
Process Host: CTX1683

First Level Reviewer: meyera Date: 13-Apr-2022 13:45:38

Compound	Amount Added	Amount Recovered	% Rec.
$ 16 Nitrobenzene-d5	100.3	9.44	9.41

Report Date: 13-Apr-2022 13:58:37 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12063.d

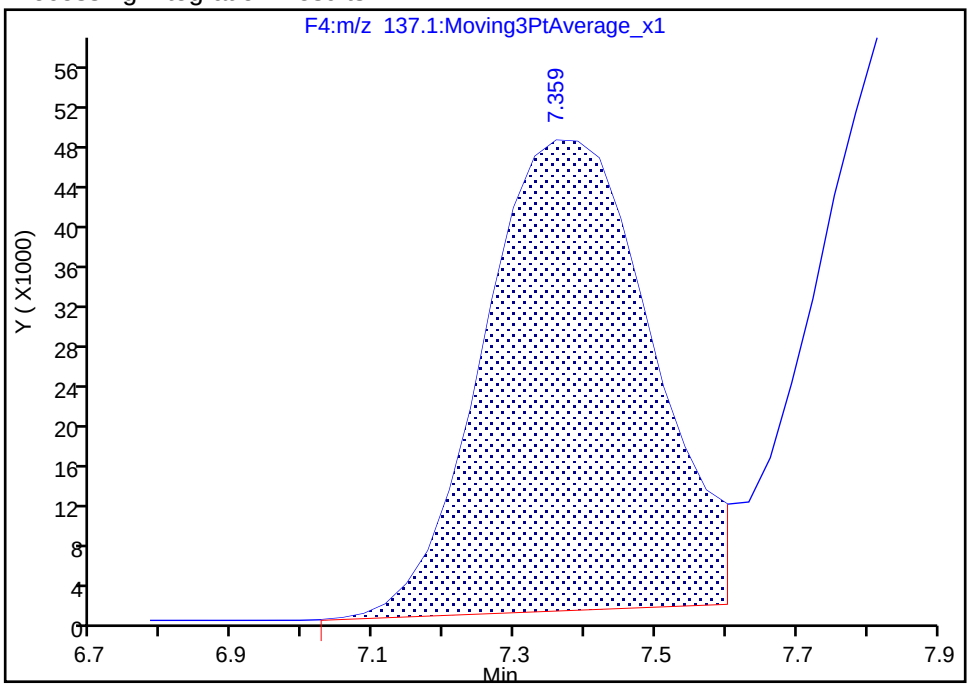
Injection Date:	12-Apr-2022 21:03:06	Instrument ID:	LC_LCMS4
Lims ID:	280-160190-A-14-B	Lab Sample ID:	280-160190-14
Client ID:	29SB176 (14.5-15)		
Operator ID:	acm	ALS Bottle#:	56 Worklist Smp#: 64
Injection Vol:	40.0 ul	Dil. Factor:	10.0000
Method:	8321expDuPont	Limit Group:	LC - 8321A Expl
Column:		Detector	F4:SIR

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

Signal: 1

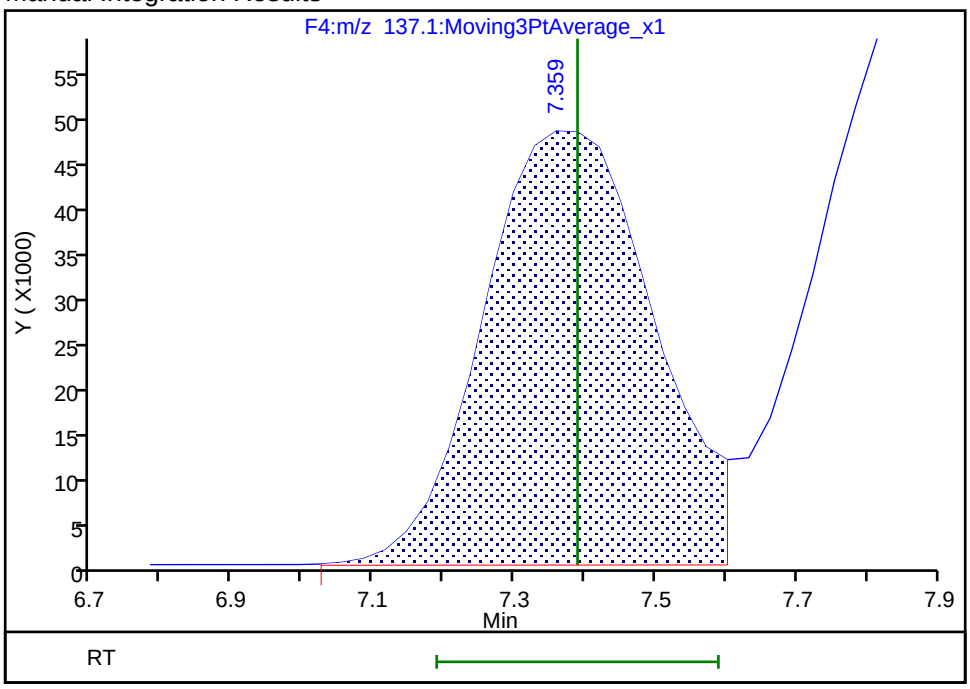
Processing Integration Results

RT: 7.36
Area: 774420
Amount: 66.586390
Amount Units: ug/l



Manual Integration Results

RT: 7.36
Area: 804102
Amount: 69.162133
Amount Units: ug/l



Reviewer: meyera, 13-Apr-2022 13:45:28

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 13-Apr-2022 13:58:38 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

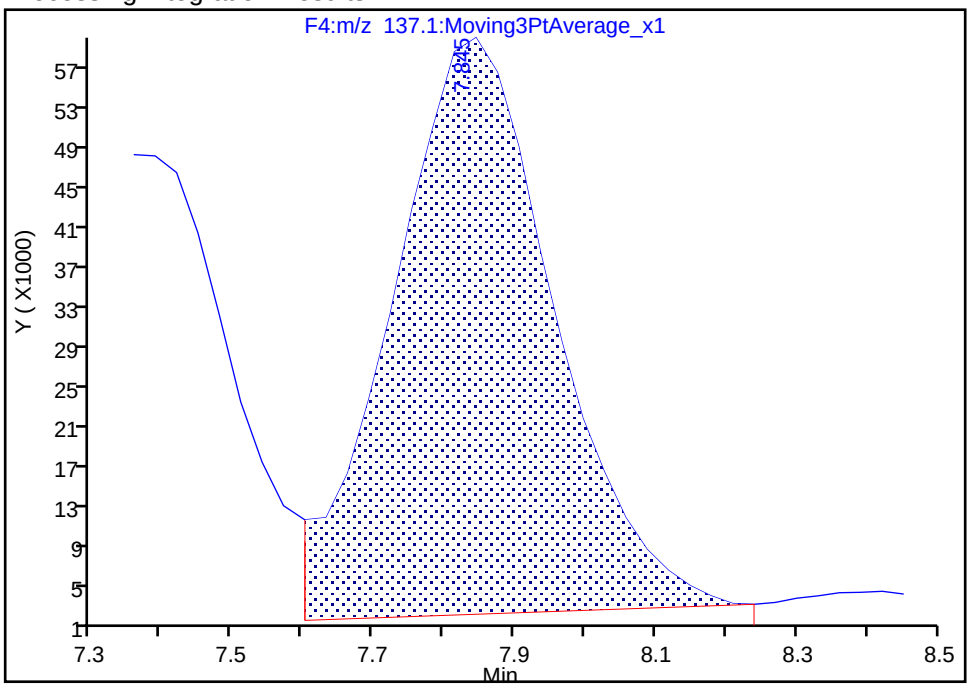
Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12063.d				
Injection Date:	12-Apr-2022 21:03:06	Instrument ID:	LC_LCMS4		
Lims ID:	280-160190-A-14-B	Lab Sample ID:	280-160190-14		
Client ID:	29SB176 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	56	Worklist Smp#:	64
Injection Vol:	40.0 ul	Dil. Factor:	10.0000		
Method:	8321expDuPont	Limit Group:	LC - 8321A Expl		
Column:		Detector	F4:SIR		

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

Signal: 1

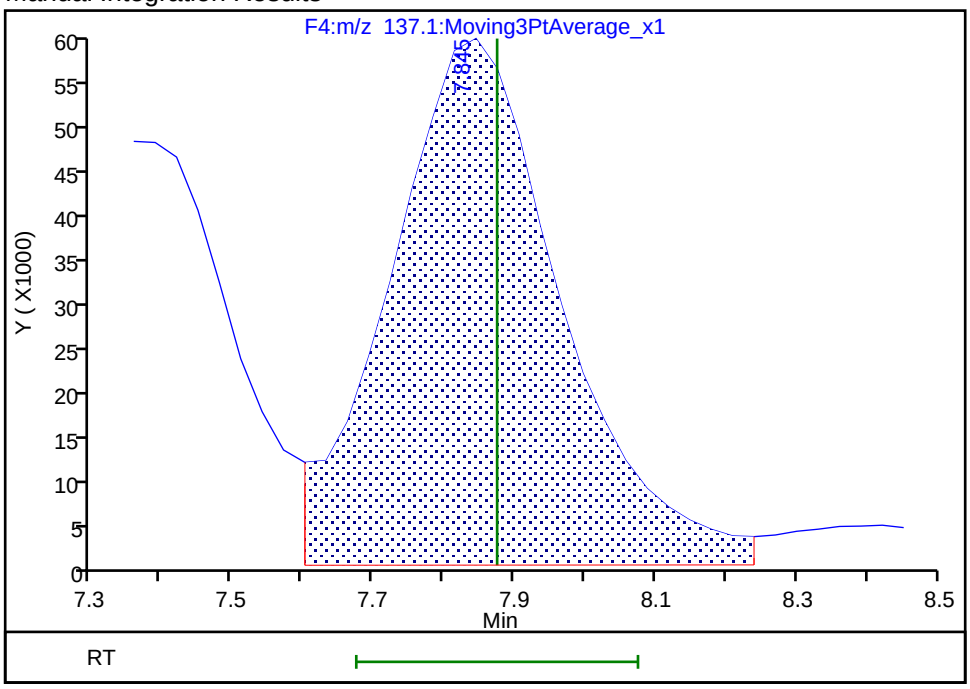
Processing Integration Results

RT: 7.85
Area: 914025
Amount: 93.452299
Amount Units: ug/l



Manual Integration Results

RT: 7.85
Area: 1006503
Amount: 102.9849
Amount Units: ug/l



Reviewer: meyera, 13-Apr-2022 13:45:28

Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB179 (14.5-15) | Lab Sample ID: 280-160190-15
Matrix: Solid | Lab File ID: ex722D08025.d
Analysis Method: 8321A | Date Collected: 03/24/2022 11:05
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20
Sample wt/vol: 10.08(g) | Date Analyzed: 04/08/2022 12:13
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571224 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.050	U	0.099	0.050	0.044
99-65-0	1,3-Dinitrobenzene	0.050	U	0.099	0.050	0.044
118-96-7	2,4,6-Trinitrotoluene	0.050	U	0.099	0.050	0.037
121-14-2	2,4-Dinitrotoluene	0.27		0.099	0.050	0.046
606-20-2	2,6-Dinitrotoluene	0.050	U	0.099	0.050	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.050	U M	0.099	0.050	0.049
19406-51-0	4-Amino-2,6-dinitrotoluene	0.050	U M	0.099	0.050	0.031
2691-41-0	HMX	0.050	U Q	0.099	0.050	0.046
99-08-1	m-Nitrotoluene	0.050	U M	0.099	0.050	0.043
98-95-3	Nitrobenzene	0.050	U	0.11	0.050	0.038
55-63-0	Nitroglycerin	0.050	U	0.099	0.050	0.029
88-72-2	o-Nitrotoluene	0.078	J M	0.099	0.050	0.042
78-11-5	PETN	0.050	U	0.099	0.050	0.034
99-99-0	p-Nitrotoluene	0.12	M	0.099	0.050	0.049
121-82-4	RDX	0.050	U	0.12	0.050	0.043
479-45-8	Tetryl	0.050	U M Q	0.099	0.050	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	102		68-140

Report Date: 14-Apr-2022 10:06:55 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08025.d
Lims ID: 280-160190-A-15-B
Client ID: 29SB179 (14.5-15)
Sample Type: Client
Inject. Date: 08-Apr-2022 12:13:10 ALS Bottle#: 22 Worklist Smp#: 25
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-15-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:52 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:45:06
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		109946	125.0	162	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		350102	125.0	115	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.008	0.011		1246772	129.4	297	
10 2,4,6-Trinitrotoluene								
227.0	3.332	3.316	0.022	0.771	20926	0.3969	5.2	
$ 11 Nitrobenzene-d5								
128.0	3.348	3.354	0.0	0.774	604546	102.5	39.0	
14 4-Amino-2,6-dinitrotoluene								M
197.0	3.638	3.652	-0.007	0.841	35841	0.1410	3.0	M
16 2-Amino-4,6-dinitrotoluene								M
197.0	3.982	3.971	0.019	0.921	208219	2.88	14.5	M
17 2,6-Dinitrotoluene								
182.0	4.144	4.138	0.018	0.958	424582	5.94	67.4	
* 18 2,4-dinitrotoluene-d3								
185.1	4.324	4.315	0.009		3943592	125.0	111	
19 2,4-Dinitrotoluene								
182.0	4.365	4.373	0.0	1.009	2244485	67.1	303	
22 o-Nitrotoluene								M
137.0	4.982	4.987	0.005	1.152	199410	19.5	60.6	M
23 p-Nitrotoluene								M
137.0	5.296	5.297	0.010	1.225	278365	31.3	74.4	M
24 m-Nitrotoluene								M
137.0	5.714	5.686	0.039	1.322	29346	5.85	6.7	M

Report Date: 14-Apr-2022 10:06:55 Chrom Revision: 2.3 12-Apr-2022 20:29:44

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

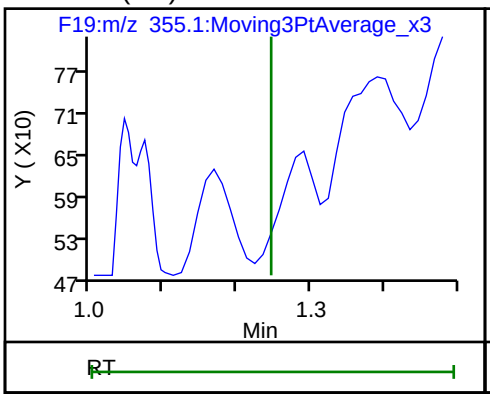
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 14-Apr-2022 10:06:55 Chrom Revision: 2.3 12-Apr-2022 20:29:44

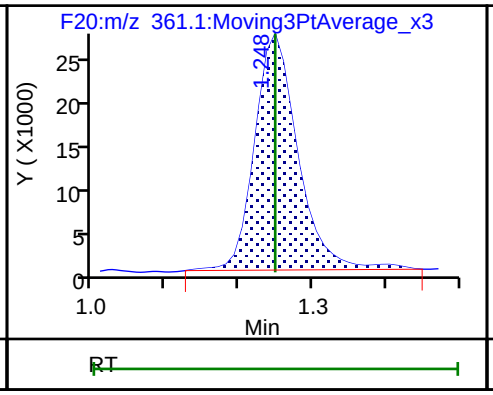
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08025.d
Injection Date: 08-Apr-2022 12:13:10 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-15-B Lab Sample ID: 280-160190-15
Client ID: 29SB179 (14.5-15)
Operator ID: acm ALS Bottle#: 22 Worklist Smp#: 25
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

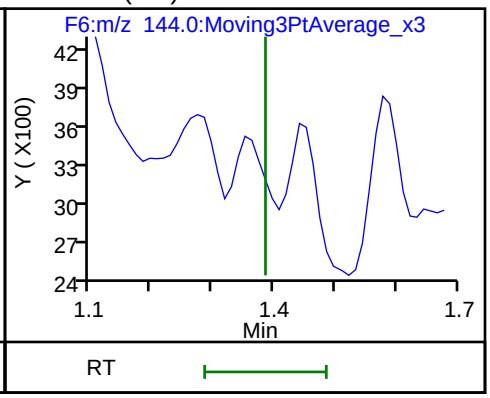
2 HMX (ND)



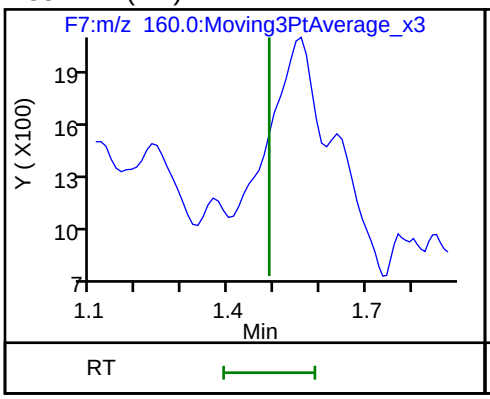
* 1 HMX-13C4



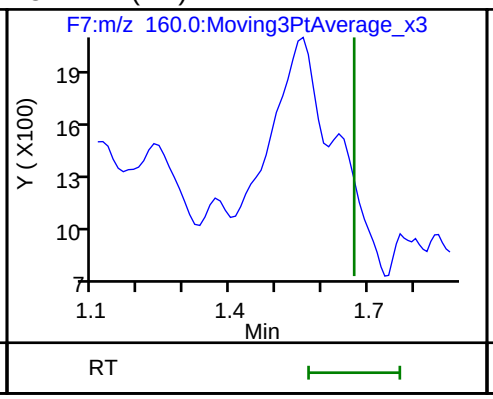
36 TNX (ND)



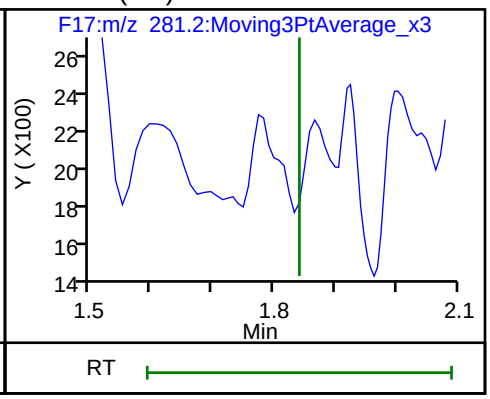
33 DNX (ND)



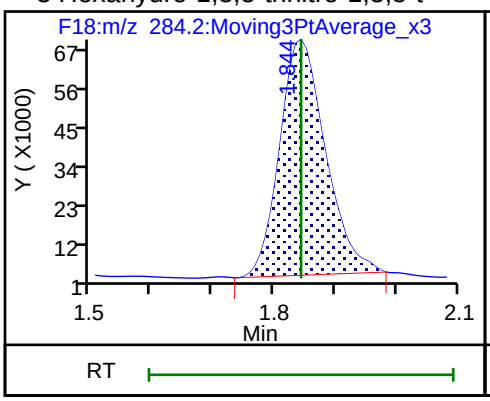
34 MNX (ND)



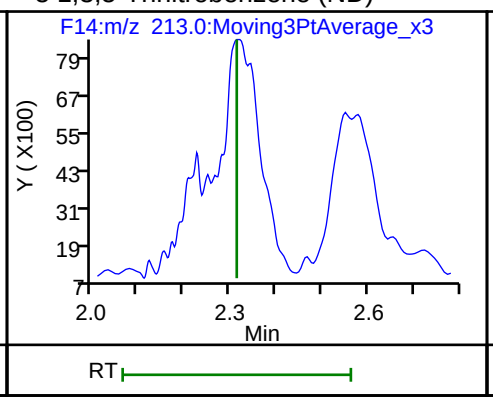
4 RDX (ND)



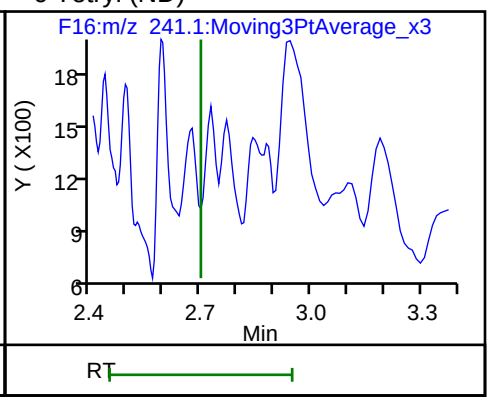
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



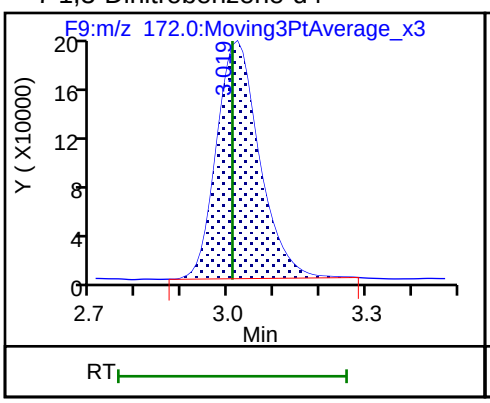
5 1,3,5-Trinitrobenzene (ND)



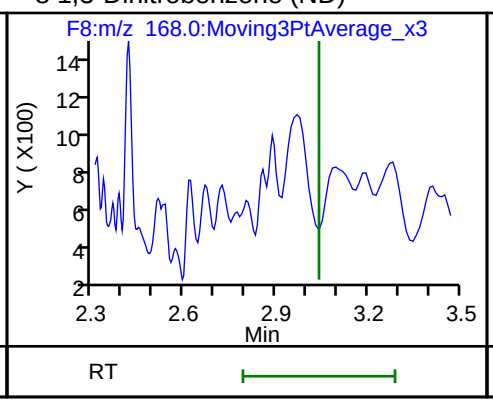
6 Tetryl (ND)



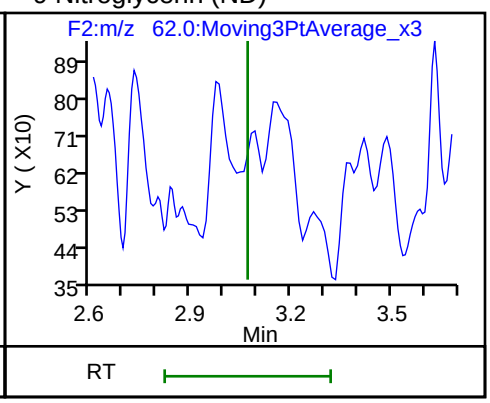
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



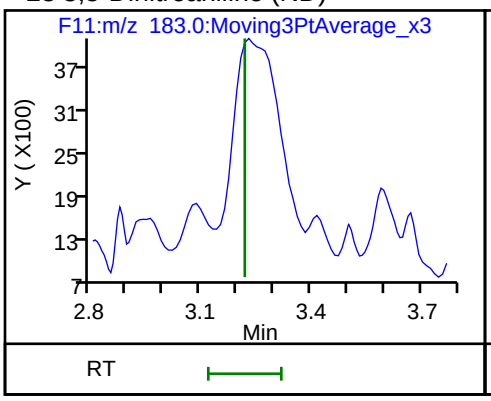
9 Nitroglycerin (ND)



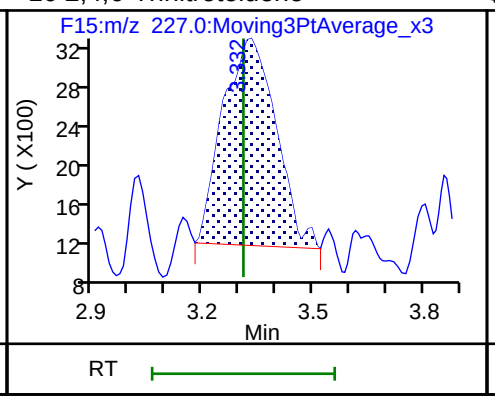
Report Date: 14-Apr-2022 10:06:55 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08025.d

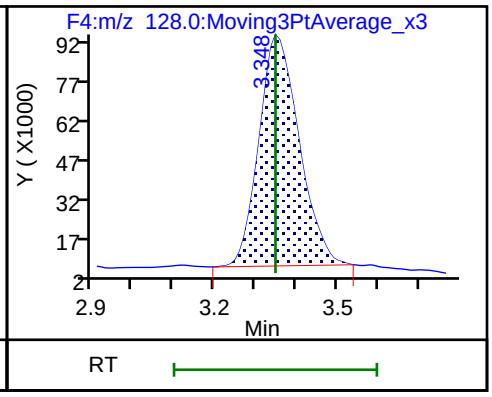
28 3,5-Dinitroaniline (ND)



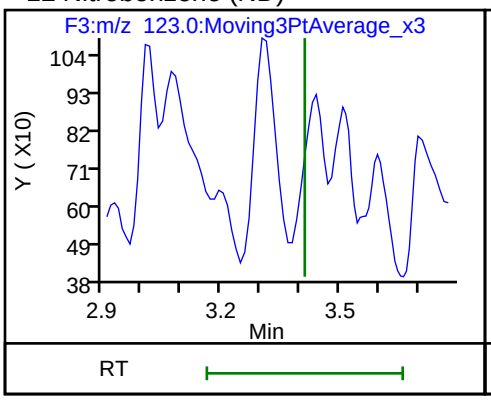
10 2,4,6-Trinitrotoluene



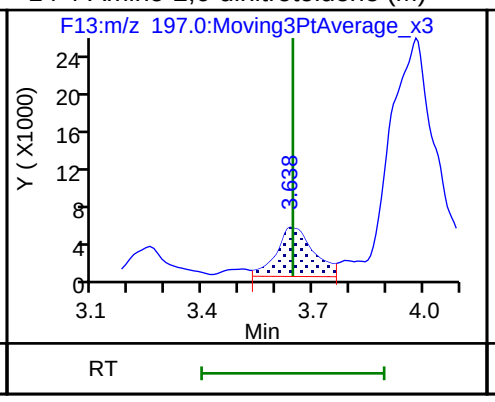
$ 11 Nitrobenzene-d5



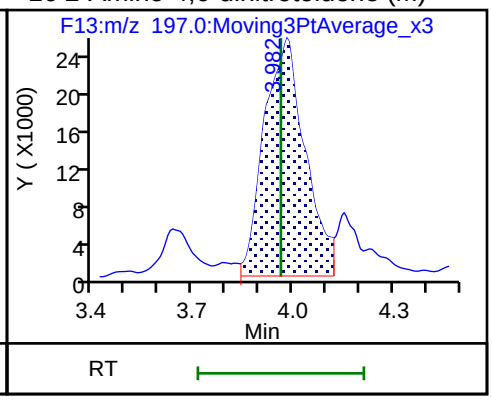
12 Nitrobenzene (ND)



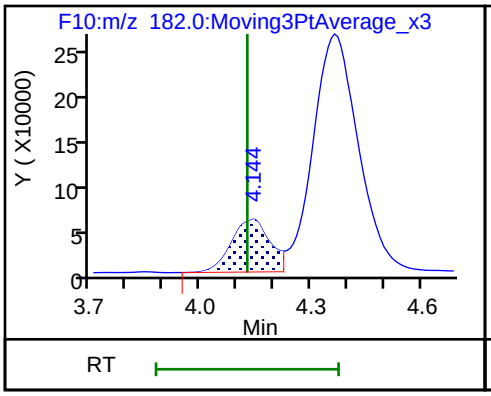
14 4-Amino-2,6-dinitrotoluene (M)



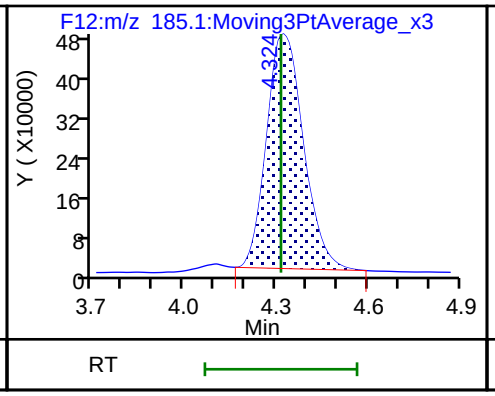
16 2-Amino-4,6-dinitrotoluene (M)



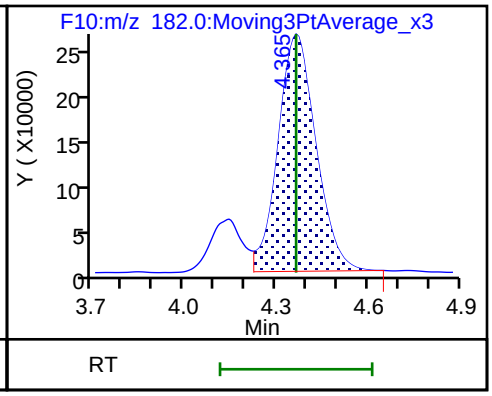
17 2,6-Dinitrotoluene



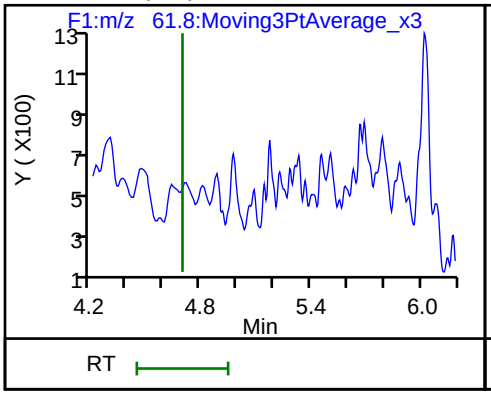
* 18 2,4-dinitrotoluene-d3



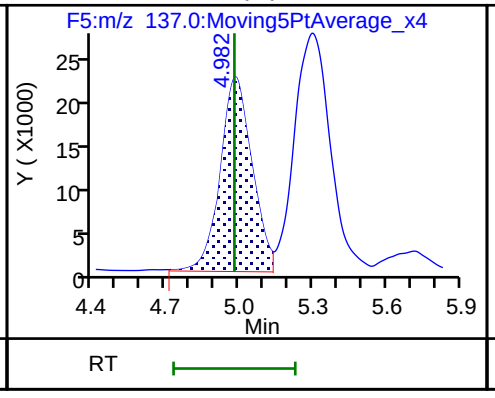
19 2,4-Dinitrotoluene



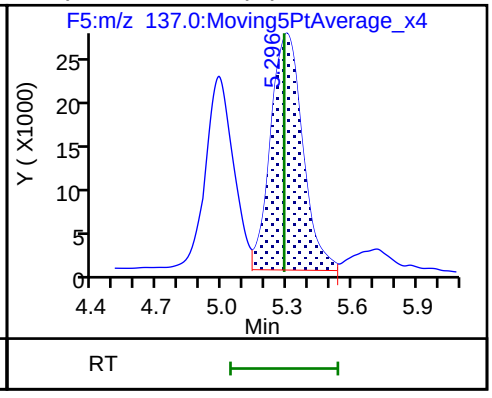
20 PETN (ND)



22 o-Nitrotoluene (M)

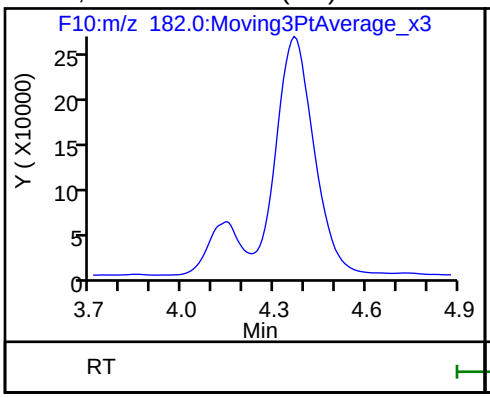


23 p-Nitrotoluene (M)

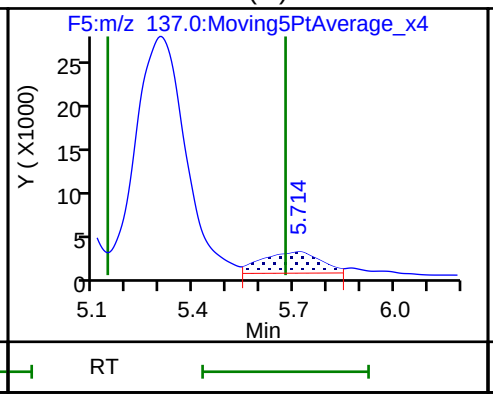


Report Date: 14-Apr-2022 10:06:55 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08025.d

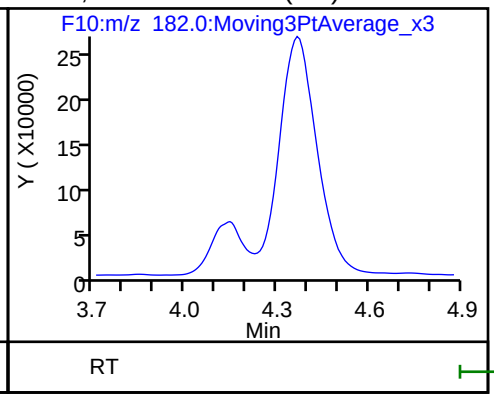
13 3,4-Dinitrotoluene (ND)



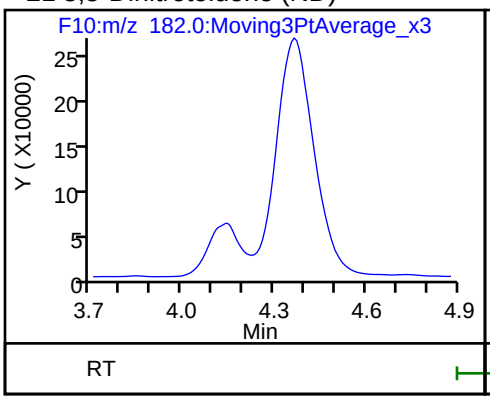
24 m-Nitrotoluene (M)



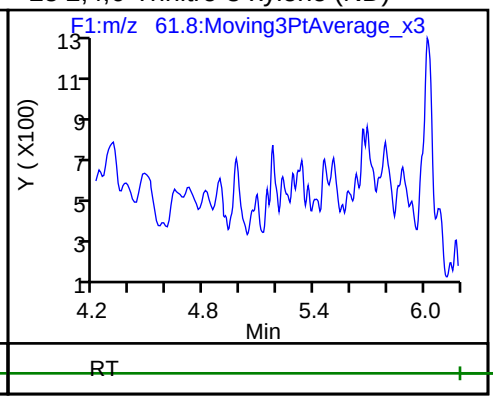
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 14-Apr-2022 10:06:55 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08025.d
Lims ID: 280-160190-A-15-B
Client ID: 29SB179 (14.5-15)
Sample Type: Client
Inject. Date: 08-Apr-2022 12:13:10 ALS Bottle#: 22 Worklist Smp#: 25
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-15-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:52 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:45:06

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	102.5	102.20

Report Date: 14-Apr-2022 10:06:55 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

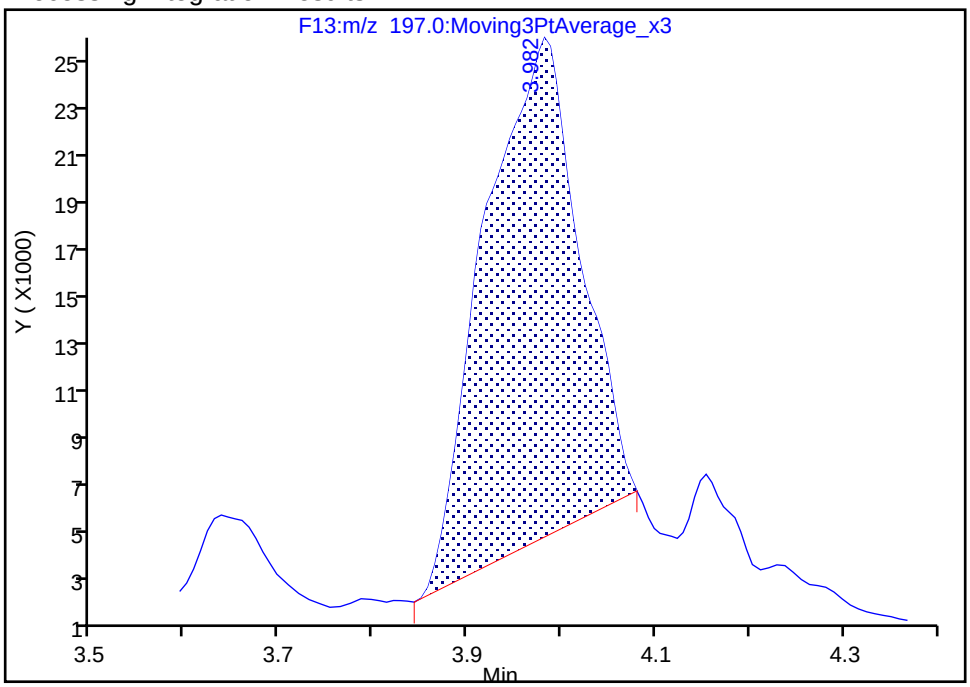
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08025.d				
Injection Date:	08-Apr-2022 12:13:10	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-15-B	Lab Sample ID:	280-160190-15		
Client ID:	29SB179 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

16 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

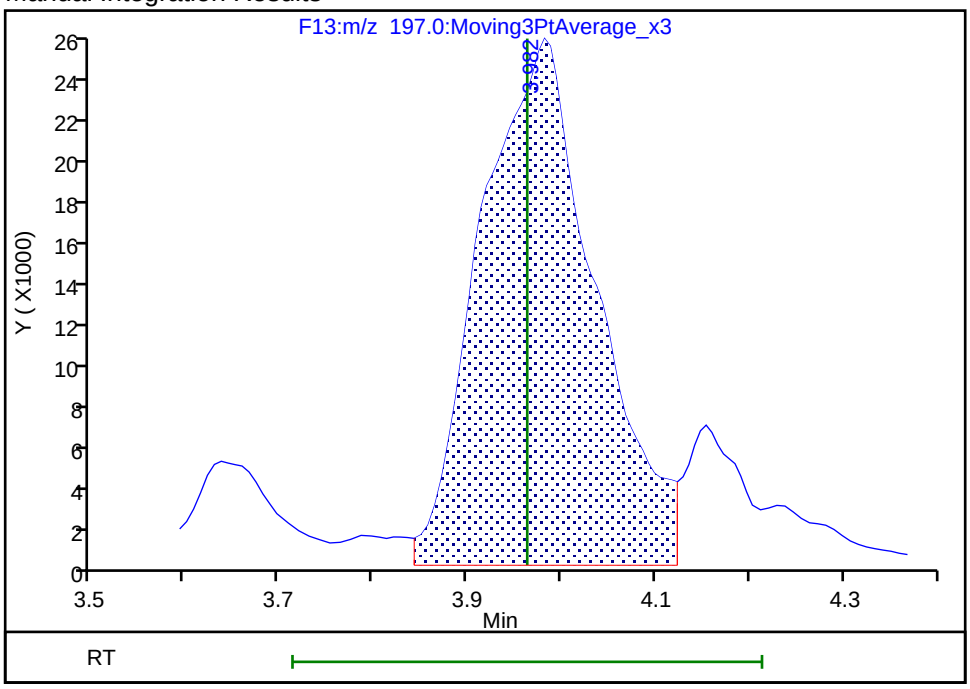
Processing Integration Results

RT: 3.98
Area: 146365
Amount: 1.878105
Amount Units: ug/l



Manual Integration Results

RT: 3.98
Area: 208219
Amount: 2.878252
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:44:52

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:06:55 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

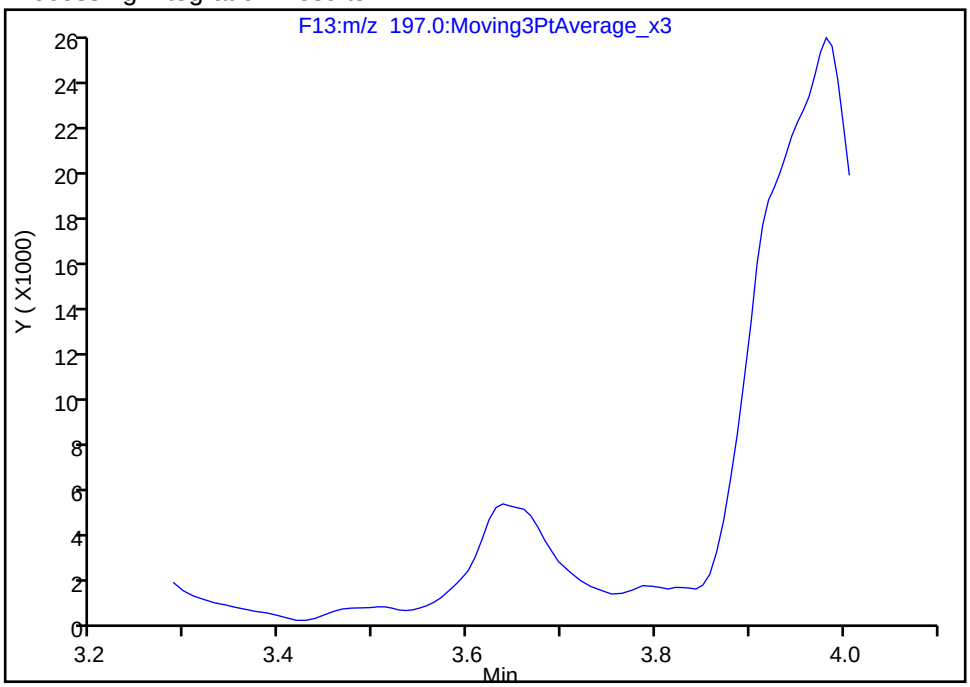
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08025.d				
Injection Date:	08-Apr-2022 12:13:10	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-15-B	Lab Sample ID:	280-160190-15		
Client ID:	29SB179 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

14 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

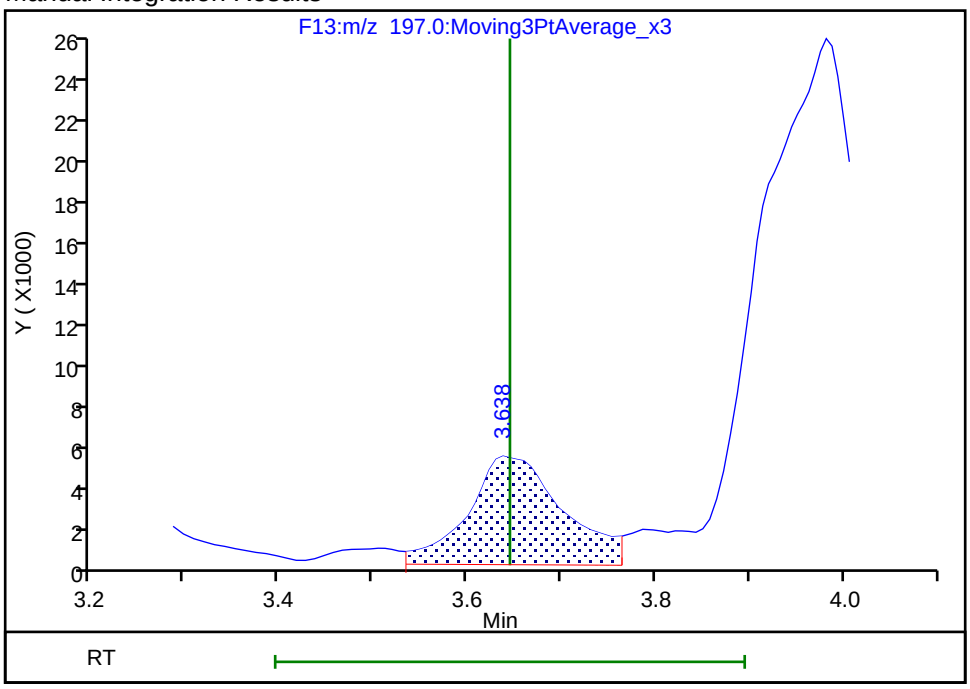
Not Detected
Expected RT: 3.65

Processing Integration Results



Manual Integration Results

RT: 3.64
Area: 35841
Amount: 0.141043
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:44:56
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:06:55 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

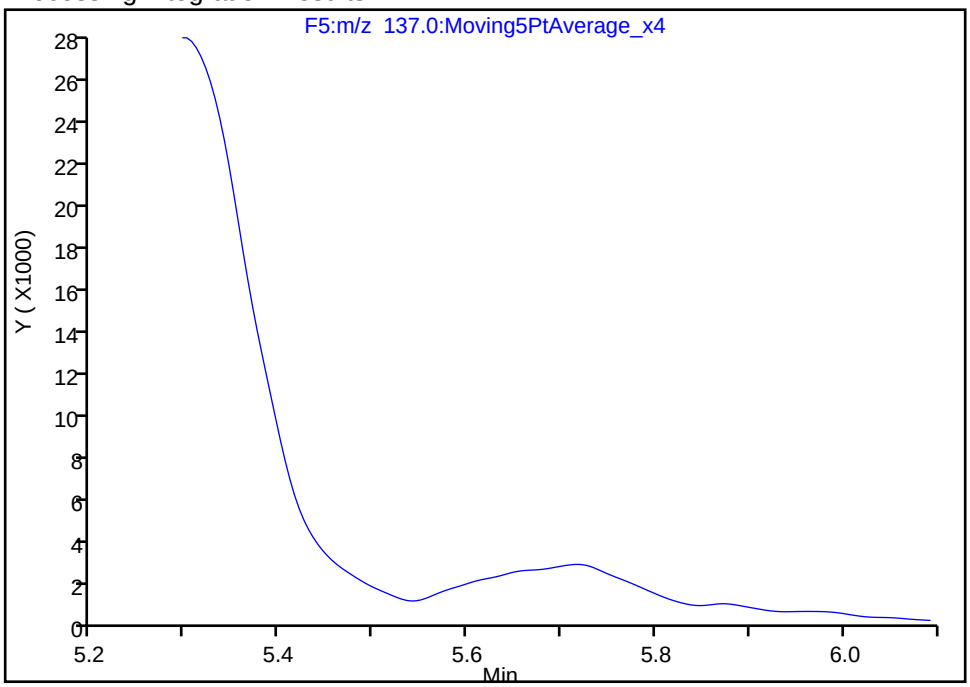
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08025.d				
Injection Date:	08-Apr-2022 12:13:10	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-15-B	Lab Sample ID:	280-160190-15		
Client ID:	29SB179 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F5:SIR		

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

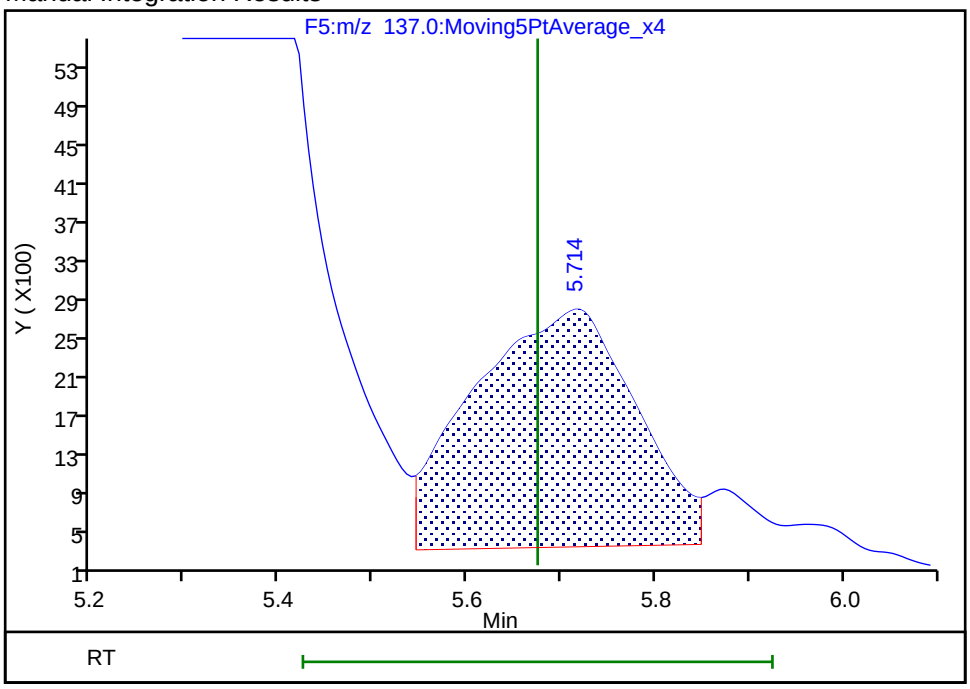
Not Detected
Expected RT: 5.67

Processing Integration Results



Manual Integration Results

RT: 5.71
Area: 29346
Amount: 5.853706
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:44:42
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:06:55 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08025.d

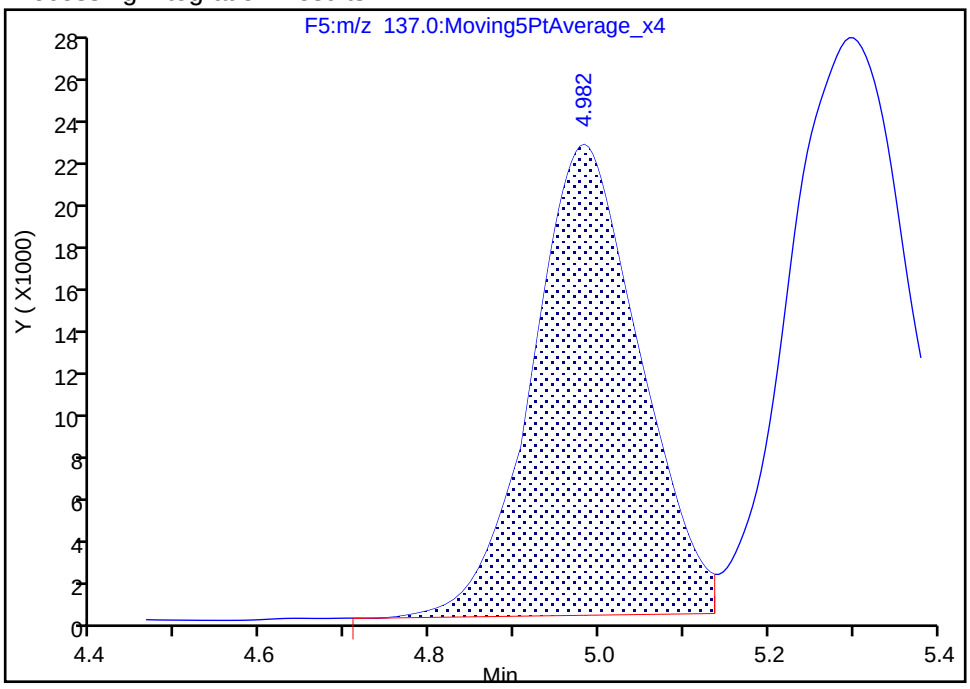
Injection Date:	08-Apr-2022 12:13:10	Instrument ID:	LC_LCMS7
Lims ID:	280-160190-A-15-B	Lab Sample ID:	280-160190-15
Client ID:	29SB179 (14.5-15)		
Operator ID:	acm	ALS Bottle#:	22 Worklist Smp#: 25
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F5:SIR

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

Signal: 1

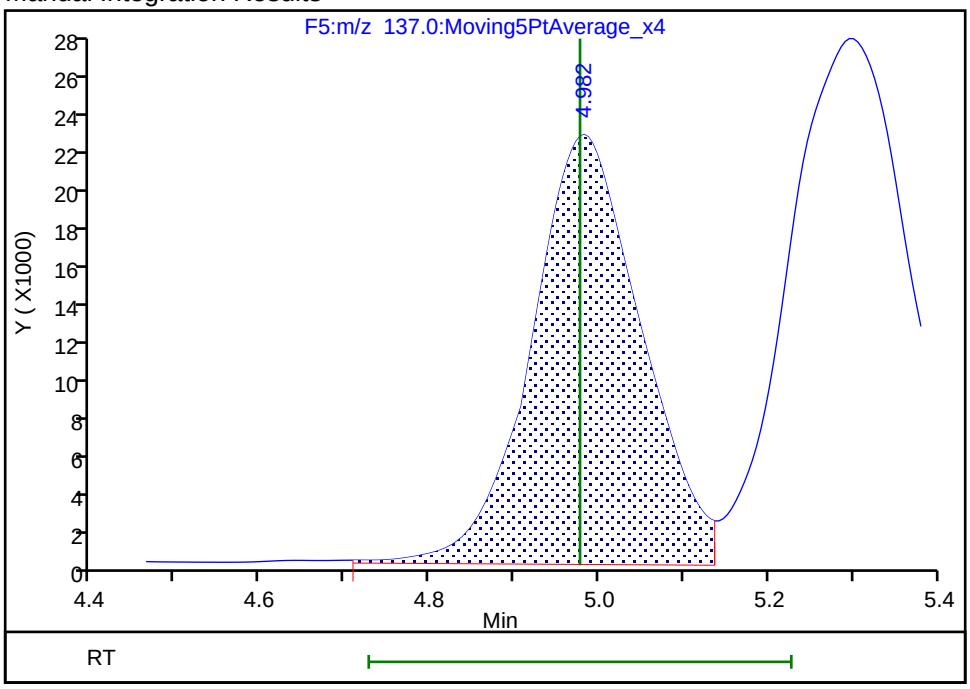
Processing Integration Results

RT: 4.98
Area: 191706
Amount: 18.783542
Amount Units: ug/l



Manual Integration Results

RT: 4.98
Area: 199410
Amount: 19.548779
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:44:36

Audit Action: Assigned New Baseline Audit Reason: Baseline

Report Date: 14-Apr-2022 10:06:55 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

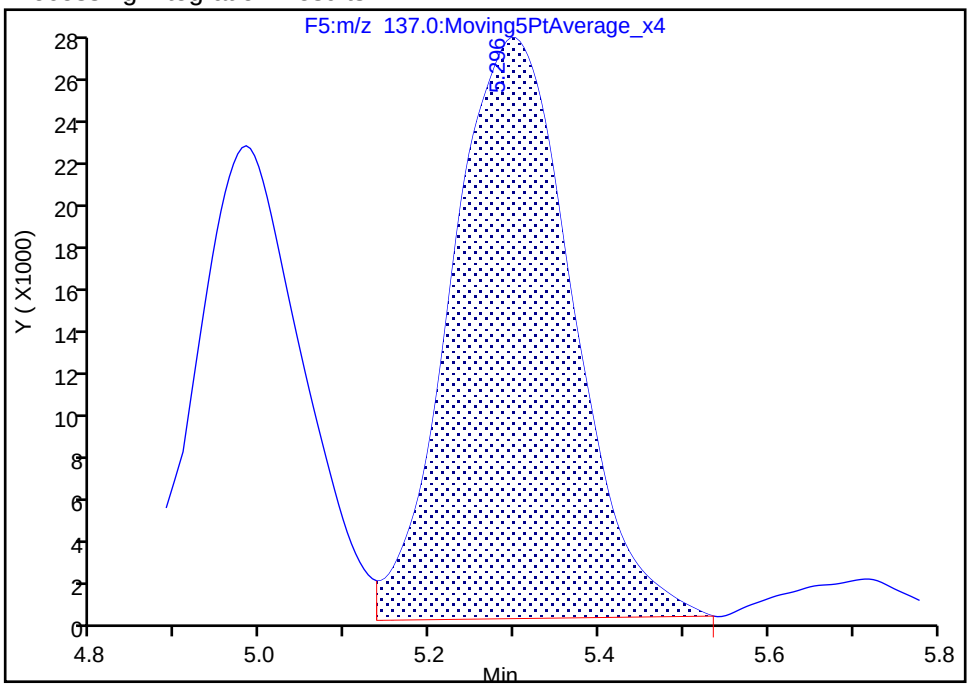
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08025.d				
Injection Date:	08-Apr-2022 12:13:10	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-15-B	Lab Sample ID:	280-160190-15		
Client ID:	29SB179 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F5:SIR		

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

Signal: 1

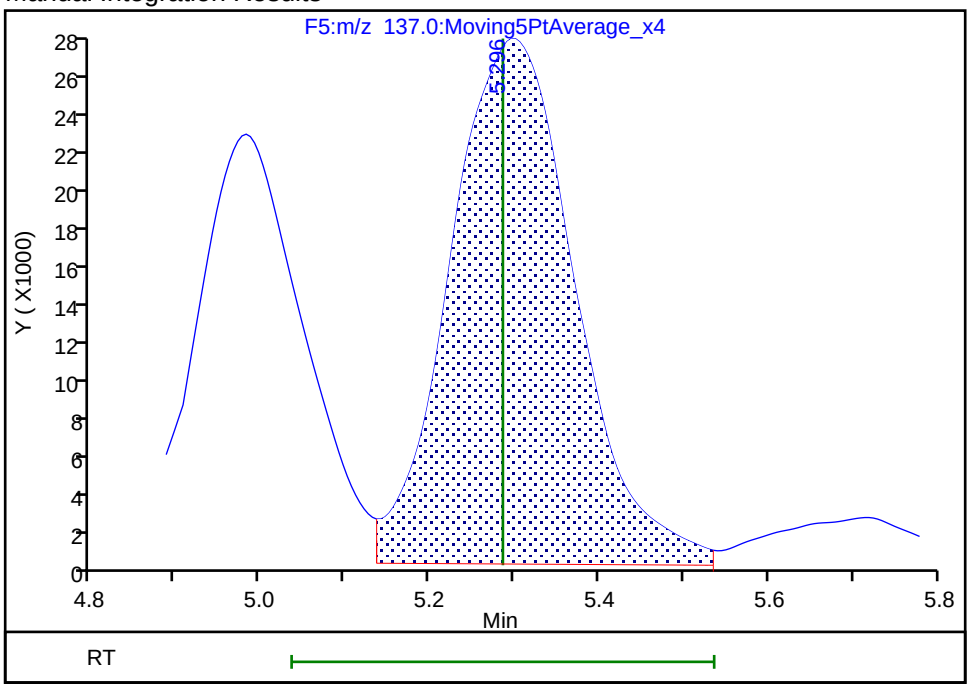
Processing Integration Results

RT: 5.30
Area: 263558
Amount: 29.626864
Amount Units: ug/l



Manual Integration Results

RT: 5.30
Area: 278365
Amount: 31.322639
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:44:36

Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB178 (14.5-15) | Lab Sample ID: 280-160190-16
Matrix: Solid | Lab File ID: ex722D08026.d
Analysis Method: 8321A | Date Collected: 03/24/2022 11:40
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20
Sample wt/vol: 10.35(g) | Date Analyzed: 04/08/2022 12:19
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571224 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.048	U	0.097	0.048	0.043
99-65-0	1,3-Dinitrobenzene	0.048	U	0.097	0.048	0.043
118-96-7	2,4,6-Trinitrotoluene	0.048	U	0.097	0.048	0.036
121-14-2	2,4-Dinitrotoluene	0.19		0.097	0.048	0.045
606-20-2	2,6-Dinitrotoluene	0.048	U	0.097	0.048	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.048	U M	0.097	0.048	0.048
19406-51-0	4-Amino-2,6-dinitrotoluene	0.048	U	0.097	0.048	0.030
2691-41-0	HMX	0.048	U M Q	0.097	0.048	0.045
99-08-1	m-Nitrotoluene	0.048	U M	0.097	0.048	0.042
98-95-3	Nitrobenzene	0.048	U	0.11	0.048	0.037
55-63-0	Nitroglycerin	0.048	U M	0.097	0.048	0.028
88-72-2	o-Nitrotoluene	0.048	U M	0.097	0.048	0.041
78-11-5	PETN	0.048	U	0.097	0.048	0.033
99-99-0	p-Nitrotoluene	0.048	U M	0.097	0.048	0.048
121-82-4	RDX	0.048	U	0.12	0.048	0.042
479-45-8	Tetryl	0.048	U Q	0.097	0.048	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	107		68-140

Report Date: 14-Apr-2022 10:06:56 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08026.d
Lims ID: 280-160190-A-16-B
Client ID: 29SB178 (14.5-15)
Sample Type: Client
Inject. Date: 08-Apr-2022 12:19:46 ALS Bottle#: 23 Worklist Smp#: 26
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-16-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:52 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:45:42
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		115772	125.0	103	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		352892	125.0	128	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.008	0.011		1193014	129.4	411	
28 3,5-Dinitroaniline								
183.0	3.241	3.231	0.022	1.073	32596	0.2044	9.9	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.354	0.011	0.777	604179	107.1	38.9	
16 2-Amino-4,6-dinitrotoluene								M
197.0	3.970	3.971	0.007	0.918	383736	5.85	18.9	M
17 2,6-Dinitrotoluene								
182.0	4.138	4.138	0.012	0.957	260186	3.49	34.1	
* 18 2,4-dinitrotoluene-d3								
185.1	4.324	4.315	0.009		3863359	125.0	119	
19 2,4-Dinitrotoluene								
182.0	4.365	4.373	0.0	1.009	1632318	49.8	186	
22 o-Nitrotoluene								M
137.0	4.967	4.987	-0.010	1.149	82792	8.14	25.7	M
23 p-Nitrotoluene								M
137.0	5.291	5.297	0.005	1.224	94767	10.5	25.6	M
24 m-Nitrotoluene								M
137.0	5.670	5.686	-0.005	1.311	11086	2.41	2.9	M

Report Date: 14-Apr-2022 10:06:56 Chrom Revision: 2.3 12-Apr-2022 20:29:44

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

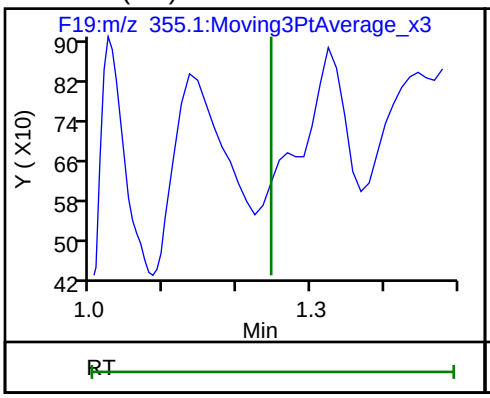
Report Date: 14-Apr-2022 10:06:56 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

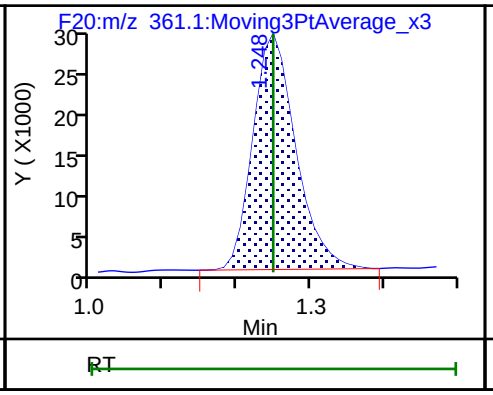
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08026.d

Injection Date:	08-Apr-2022 12:19:46	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-16-B	Lab Sample ID:	280-160190-16		
Client ID:	29SB178 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		

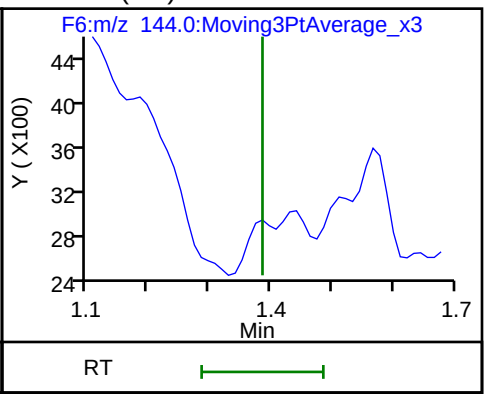
2 HMX (ND)



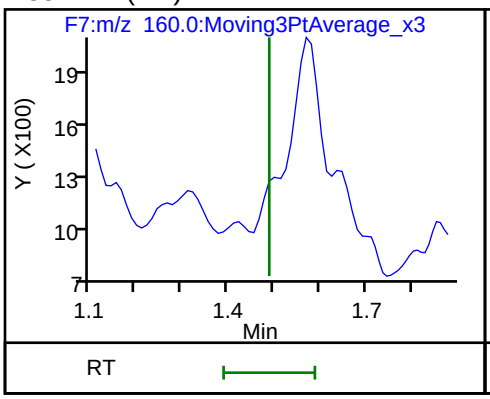
* 1 HMX-13C4



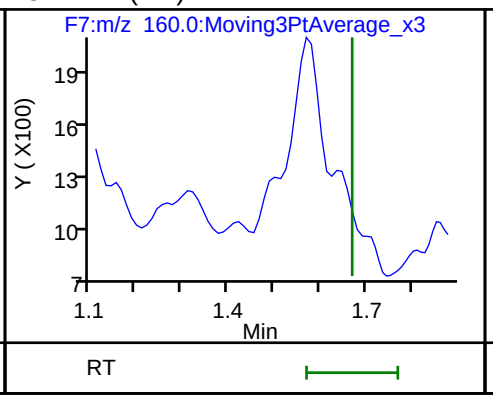
36 TNX (ND)



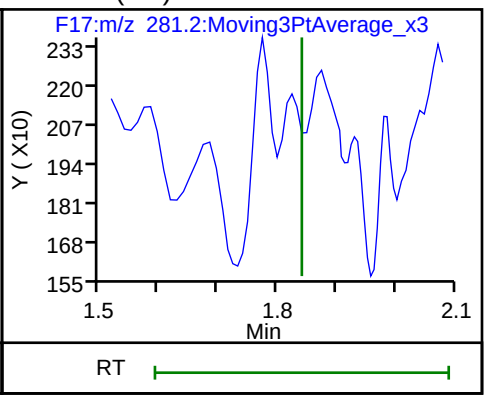
33 DNX (ND)



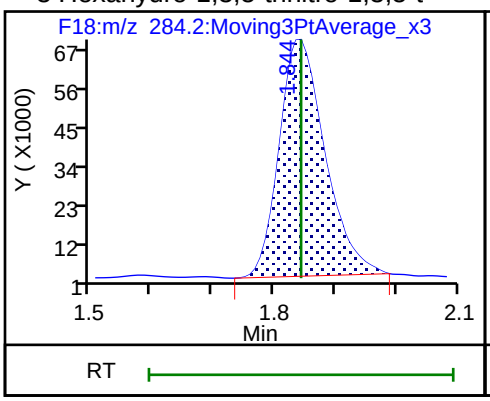
34 MNX (ND)



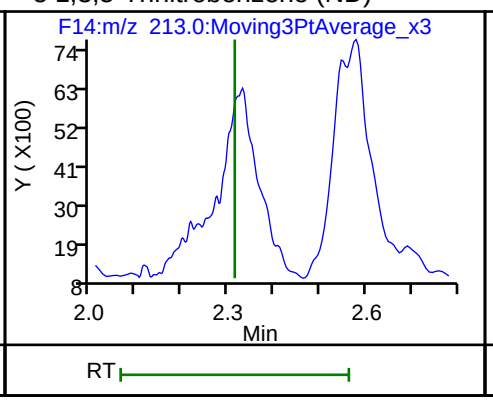
4 RDX (ND)



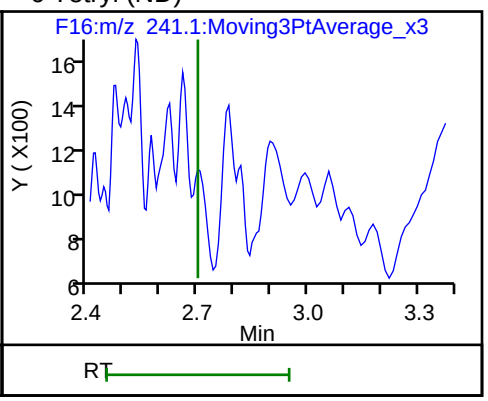
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



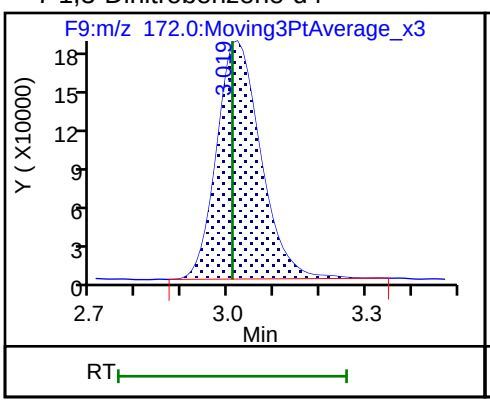
5 1,3,5-Trinitrobenzene (ND)



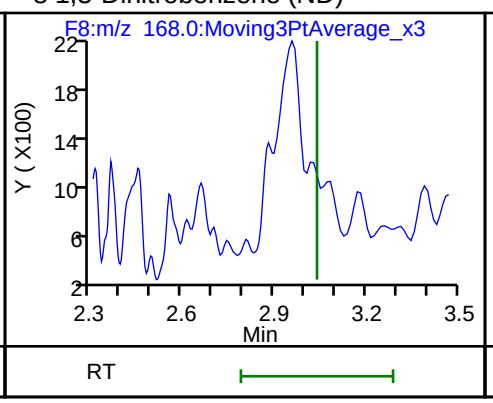
6 Tetryl (ND)



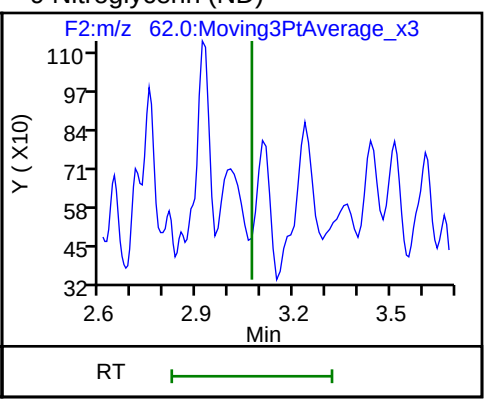
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

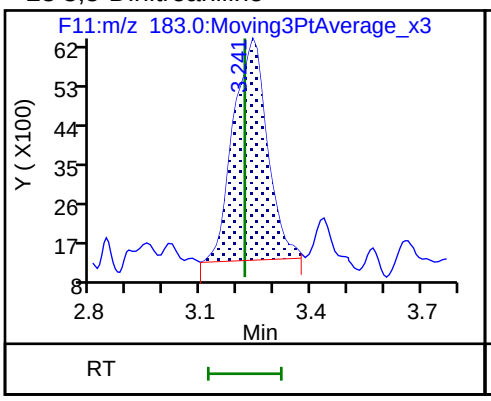


9 Nitroglycerin (ND)

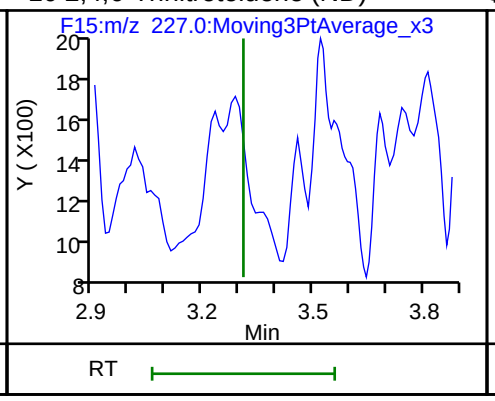


Report Date: 14-Apr-2022 10:06:56 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08026.d

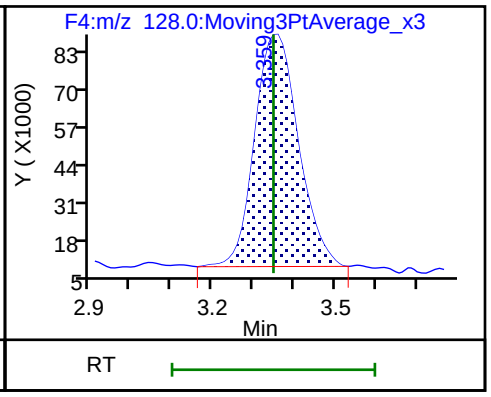
28 3,5-Dinitroaniline



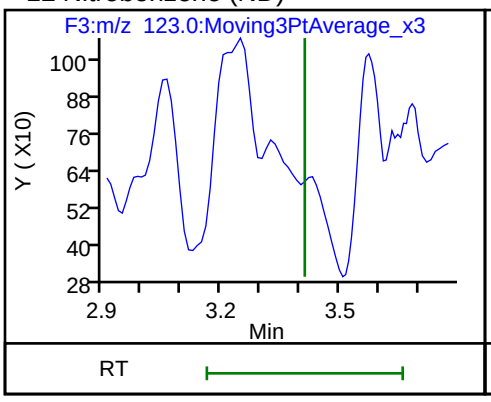
10 2,4,6-Trinitrotoluene (ND)



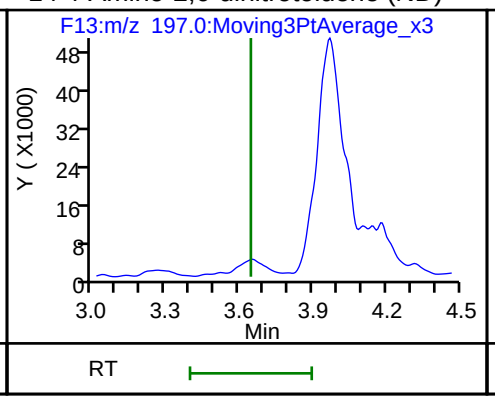
$ 11 Nitrobenzene-d5



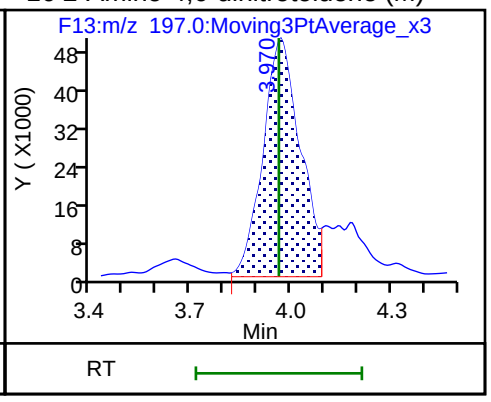
12 Nitrobenzene (ND)



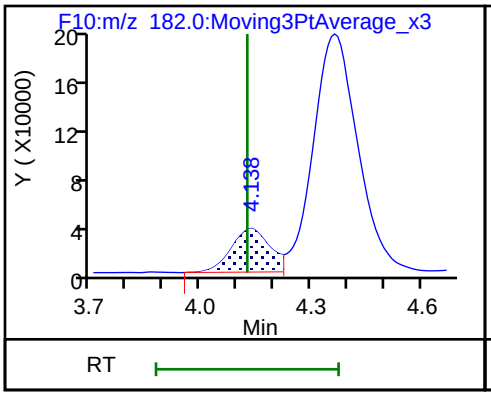
14 4-Amino-2,6-dinitrotoluene (ND)



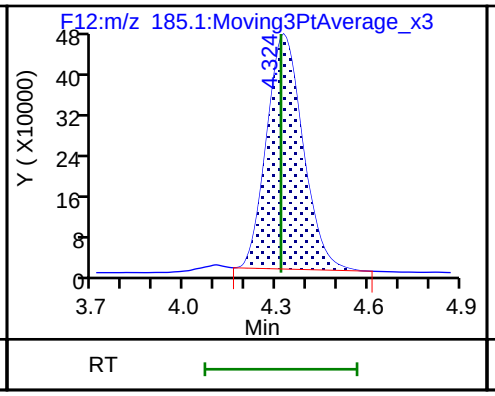
16 2-Amino-4,6-dinitrotoluene (M)



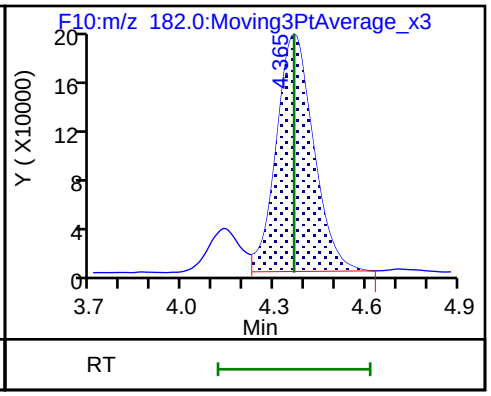
17 2,6-Dinitrotoluene



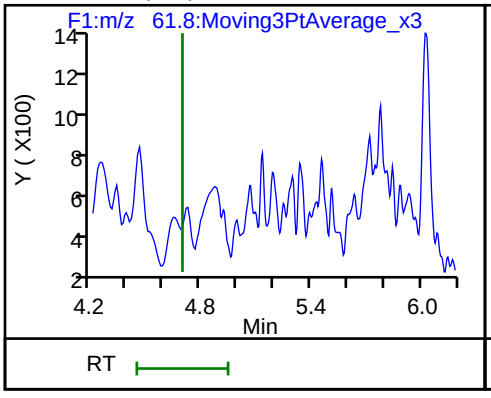
* 18 2,4-dinitrotoluene-d3



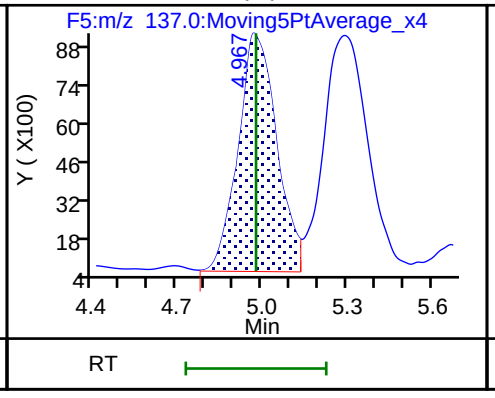
19 2,4-Dinitrotoluene



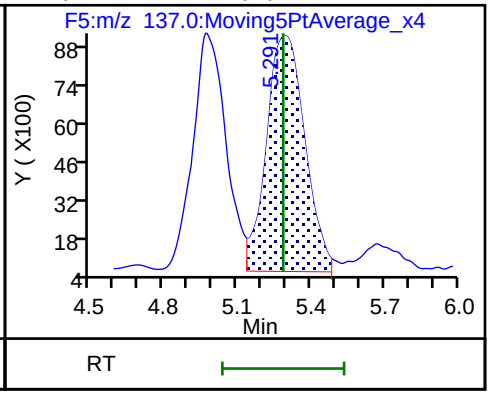
20 PETN (ND)



22 o-Nitrotoluene (M)



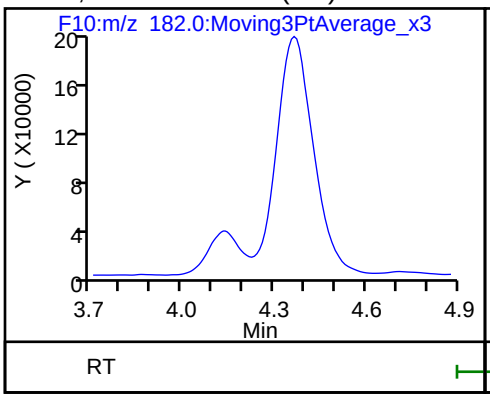
23 p-Nitrotoluene (M)



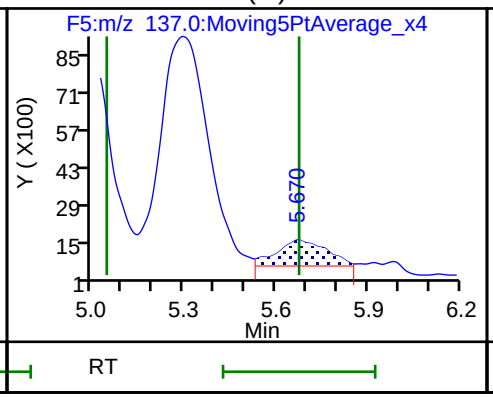
Report Date: 14-Apr-2022 10:06:56 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08026.d

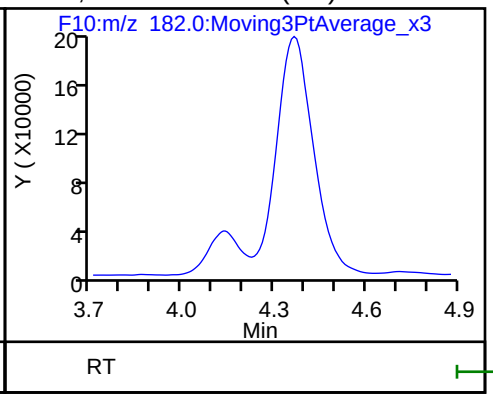
13 3,4-Dinitrotoluene (ND)



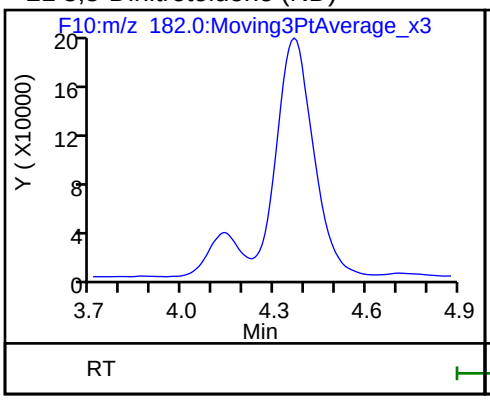
24 m-Nitrotoluene (M)



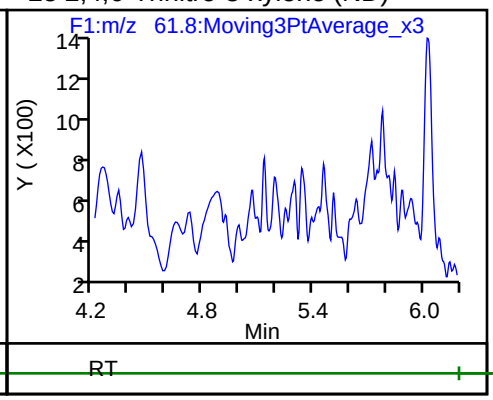
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 14-Apr-2022 10:06:56 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08026.d
Lims ID: 280-160190-A-16-B
Client ID: 29SB178 (14.5-15)
Sample Type: Client
Inject. Date: 08-Apr-2022 12:19:46 ALS Bottle#: 23 Worklist Smp#: 26
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-16-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:52 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:45:42

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	107.1	106.76

Report Date: 14-Apr-2022 10:06:56 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08026.d

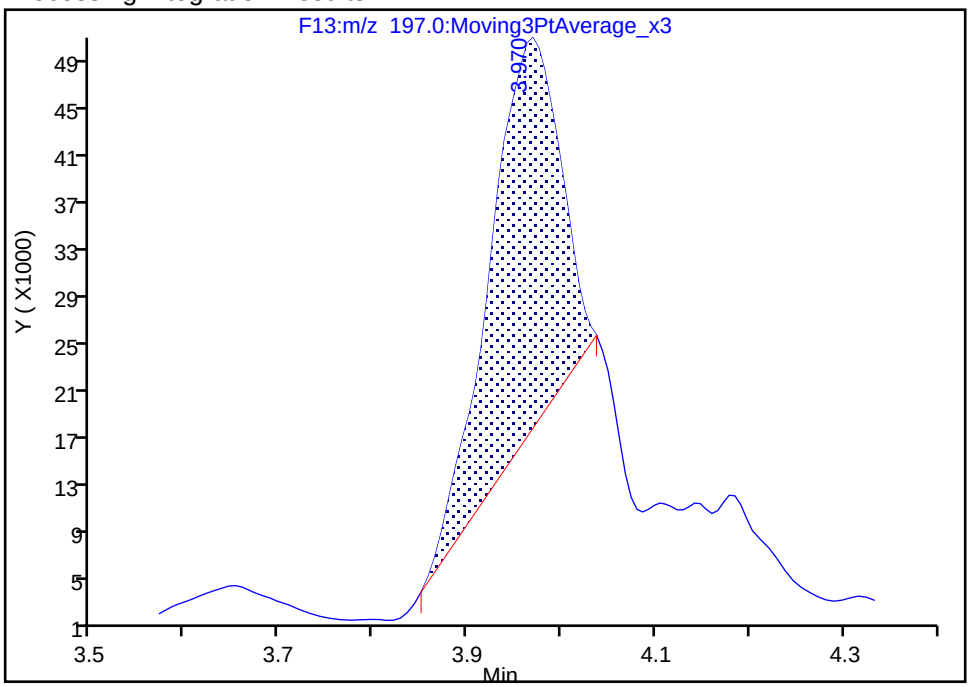
Injection Date:	08-Apr-2022 12:19:46	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-16-B	Lab Sample ID:	280-160190-16		
Client ID:	29SB178 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

16 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

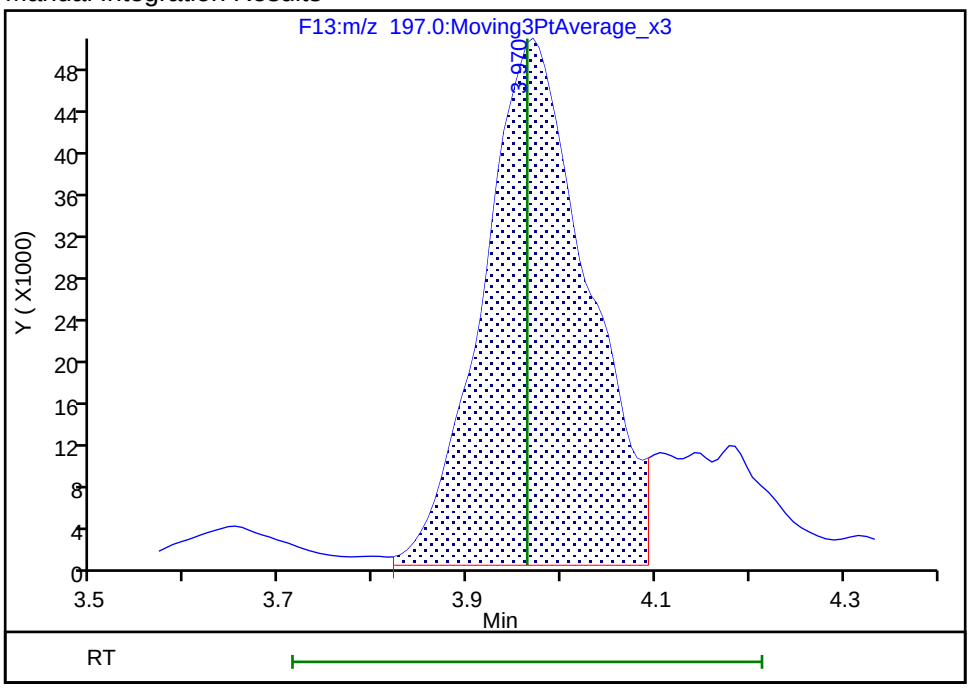
Processing Integration Results

RT: 3.97
Area: 172906
Amount: 2.365321
Amount Units: ug/l



Manual Integration Results

RT: 3.97
Area: 383736
Amount: 5.845129
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:45:24

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:06:56 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

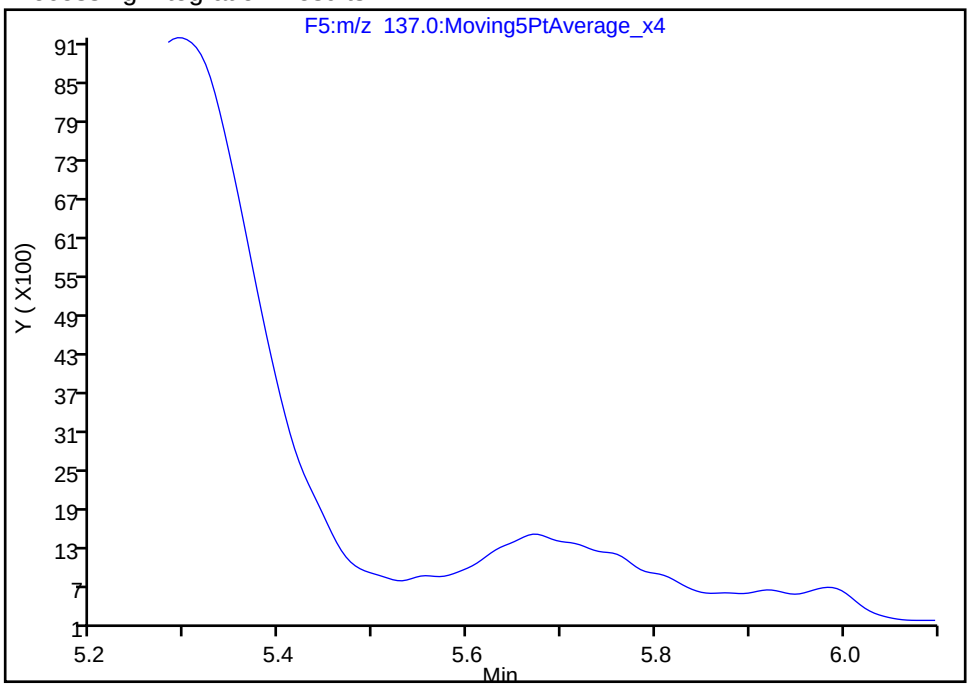
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08026.d				
Injection Date:	08-Apr-2022 12:19:46	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-16-B	Lab Sample ID:	280-160190-16		
Client ID:	29SB178 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F5:SIR		

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

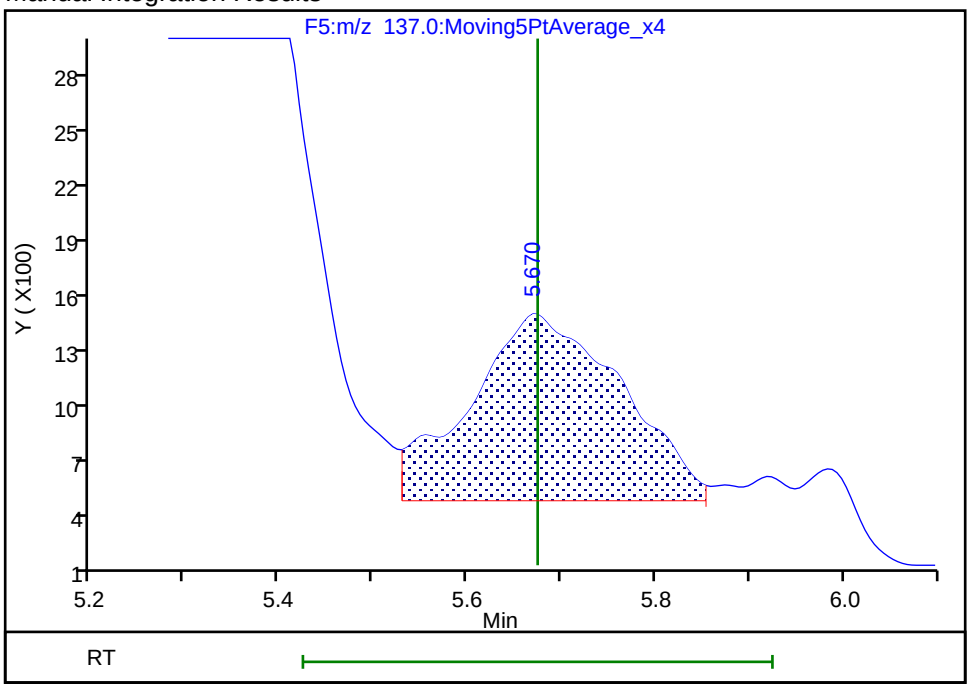
Not Detected
Expected RT: 5.67

Processing Integration Results



Manual Integration Results

RT: 5.67
Area: 11086
Amount: 2.406810
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:45:40
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:06:56 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08026.d

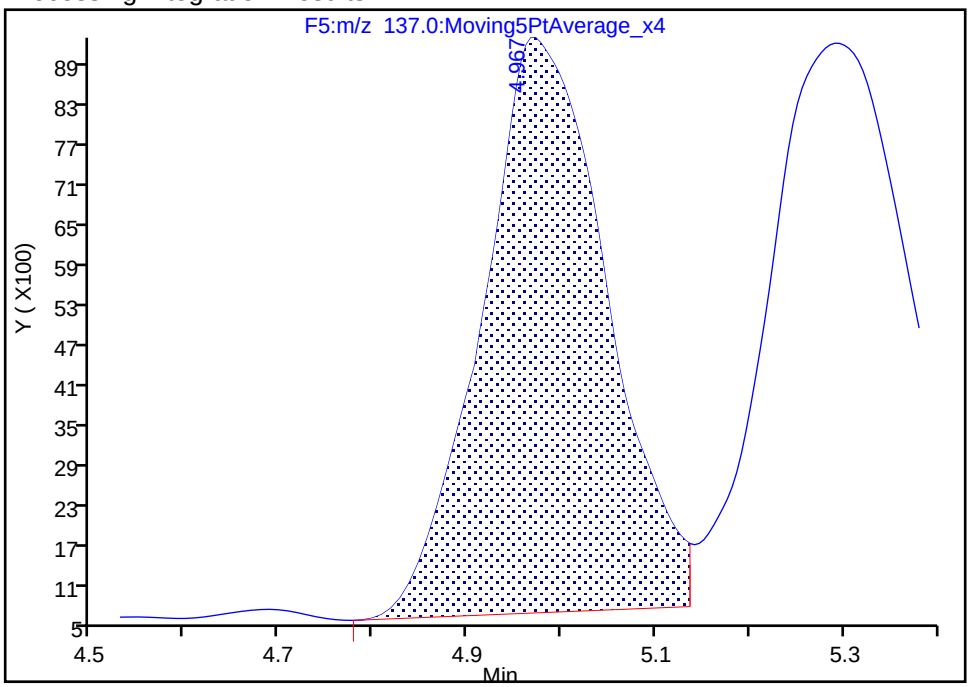
Injection Date:	08-Apr-2022 12:19:46	Instrument ID:	LC_LCMS7
Lims ID:	280-160190-A-16-B	Lab Sample ID:	280-160190-16
Client ID:	29SB178 (14.5-15)		
Operator ID:	acm	ALS Bottle#:	23 Worklist Smp#: 26
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F5:SIR

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

Signal: 1

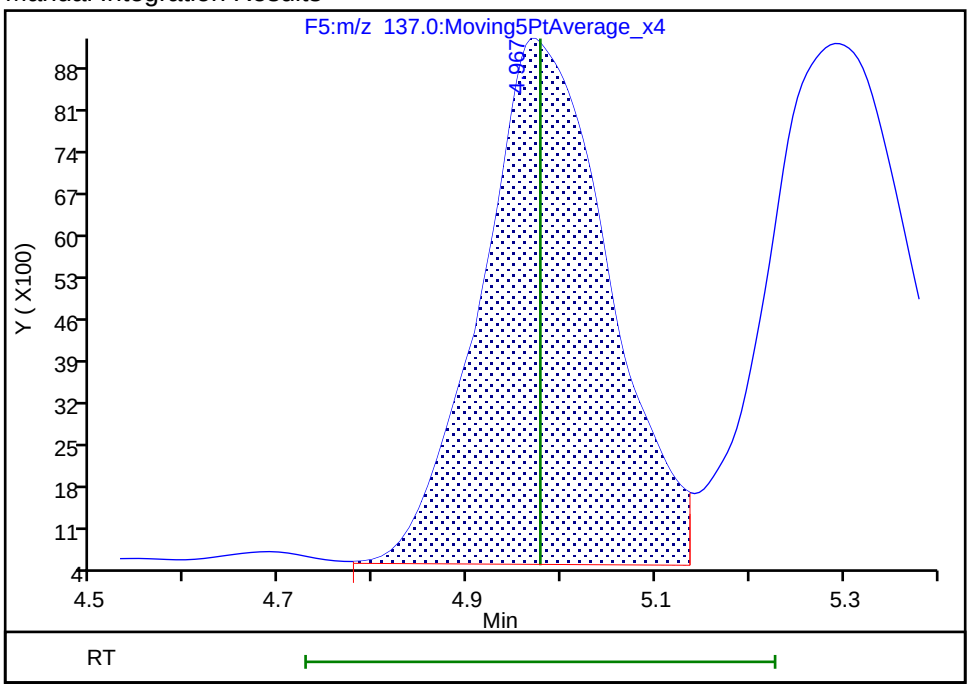
Processing Integration Results

RT: 4.97
Area: 79588
Amount: 7.811054
Amount Units: ug/l



Manual Integration Results

RT: 4.97
Area: 82792
Amount: 8.135916
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:45:35

Audit Action: Assigned New Baseline Audit Reason: Baseline

Report Date: 14-Apr-2022 10:06:56 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

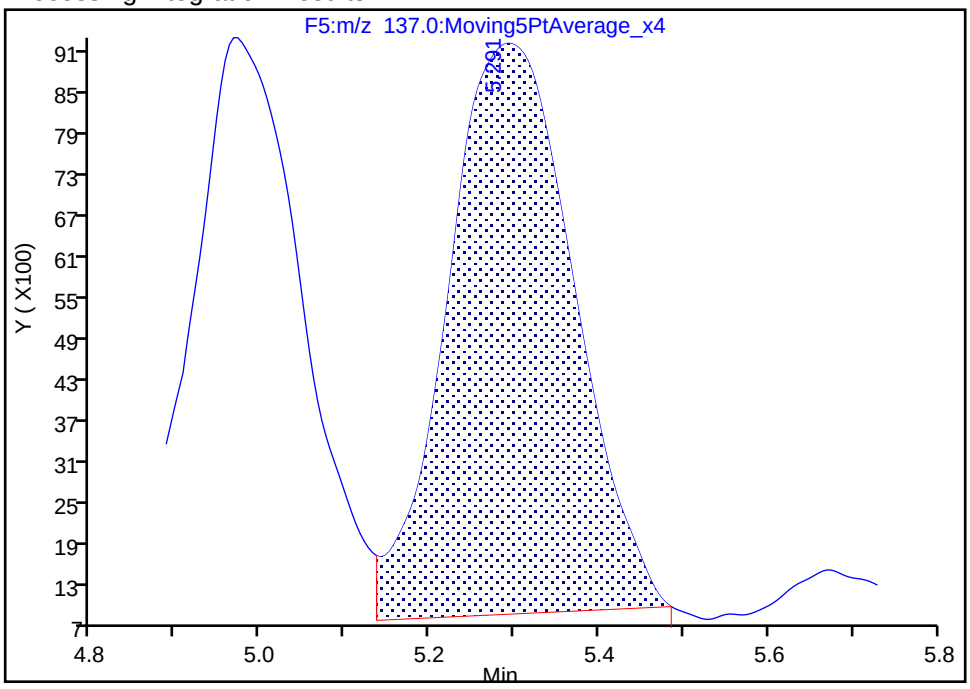
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08026.d				
Injection Date:	08-Apr-2022 12:19:46	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-16-B	Lab Sample ID:	280-160190-16		
Client ID:	29SB178 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F5:SIR		

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

Signal: 1

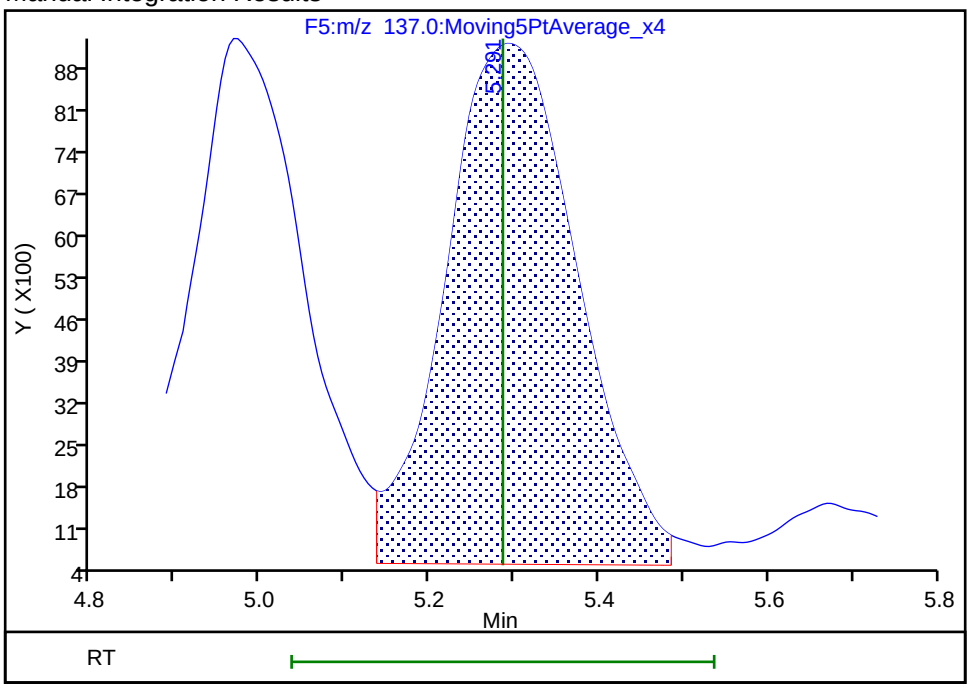
Processing Integration Results

RT: 5.29
Area: 86736
Amount: 9.582579
Amount Units: ug/l



Manual Integration Results

RT: 5.29
Area: 94767
Amount: 10.521432
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:45:35

Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB177 (14.5-15) | Lab Sample ID: 280-160190-17
Matrix: Solid | Lab File ID: ex722D08027.d
Analysis Method: 8321A | Date Collected: 03/24/2022 11:50
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20
Sample wt/vol: 10.29(g) | Date Analyzed: 04/08/2022 12:26
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571224 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.049	U M	0.097	0.049	0.044
99-65-0	1,3-Dinitrobenzene	0.049	U	0.097	0.049	0.043
118-96-7	2,4,6-Trinitrotoluene	0.049	U	0.097	0.049	0.036
606-20-2	2,6-Dinitrotoluene	0.51		0.097	0.049	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.049	U M	0.097	0.049	0.048
19406-51-0	4-Amino-2,6-dinitrotoluene	0.049	U M	0.097	0.049	0.030
2691-41-0	HMX	0.049	U Q	0.097	0.049	0.045
99-08-1	m-Nitrotoluene	0.11	M	0.097	0.049	0.042
98-95-3	Nitrobenzene	0.049	U	0.11	0.049	0.037
55-63-0	Nitroglycerin	0.049	U	0.097	0.049	0.028
88-72-2	o-Nitrotoluene	0.52	M	0.097	0.049	0.042
78-11-5	PETN	0.049	U	0.097	0.049	0.033
99-99-0	p-Nitrotoluene	0.98	M	0.097	0.049	0.048
121-82-4	RDX	0.049	U	0.12	0.049	0.042
479-45-8	Tetryl	0.049	U Q	0.097	0.049	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	95		68-140

Report Date: 14-Apr-2022 10:06:57 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08027.d
Lims ID: 280-160190-A-17-B
Client ID: 29SB177 (14.5-15)
Sample Type: Client
Inject. Date: 08-Apr-2022 12:26:22 ALS Bottle#: 24 Worklist Smp#: 27
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-17-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:52 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:46:31
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		114617	125.0	127	
33 DNX								
160.0	1.489	1.489	0.0	0.807	652	-0.8758	1.2	
34 MNX								
160.0	1.581	1.670	-0.089	0.857	1267	-0.9640	1.3	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		380766	125.0	113	
5 1,3,5-Trinitrobenzene								M
213.0	2.327	2.322	0.014	0.771	95914	5.70	4.3	M
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.008	0.011		1307671	129.4	323	
28 3,5-Dinitroaniline								M
183.0	3.219	3.231	0.0	1.066	84168	1.46	9.0	M
10 2,4,6-Trinitrotoluene								
227.0	3.310	3.316	0.0	0.765	56005	0.9023	19.1	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.354	0.011	0.777	592449	95.8	142	
14 4-Amino-2,6-dinitrotoluene								M
197.0	3.645	3.652	0.0	0.843	79041	1.01	1.6	M
16 2-Amino-4,6-dinitrotoluene								M
197.0	3.963	3.971	0.0	0.917	769607	11.8	16.3	M
17 2,6-Dinitrotoluene								
182.0	4.138	4.138	0.012	0.957	8645978	130.5	56.3	
* 18 2,4-dinitrotoluene-d3								
185.1	4.324	4.315	0.009		4006124	125.0	114	
19 2,4-Dinitrotoluene								E
182.0	4.365	4.373	0.0	1.009	20415691	603.8	118	E

Report Date: 14-Apr-2022 10:06:57 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08027.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
22 o-Nitrotoluene								M
137.0	4.982	4.987	0.005	1.152	1372617	134.0	289	M
23 p-Nitrotoluene								M
137.0	5.296	5.297	0.010	1.225	2239359	251.9	422	M
24 m-Nitrotoluene								M
137.0	5.670	5.686	-0.005	1.311	144292	27.4	24.0	M

QC Flag Legend

Processing Flags
E - Exceeded Maximum Amount
Review Flags
M - Manually Integrated

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

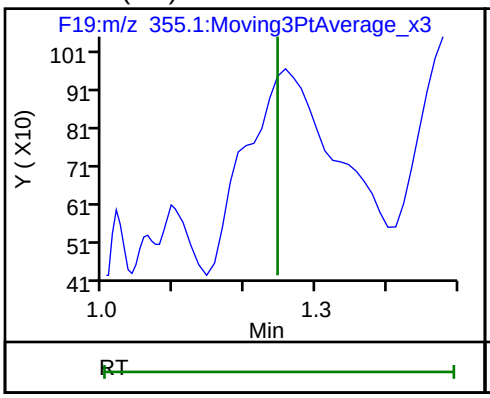
Report Date: 14-Apr-2022 10:06:57 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

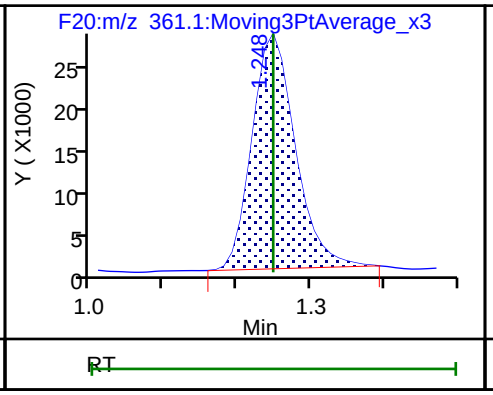
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08027.d

Injection Date:	08-Apr-2022 12:26:22	Instrument ID:	LC_LCMS7
Lims ID:	280-160190-A-17-B	Lab Sample ID:	280-160190-17
Client ID:	29SB177 (14.5-15)		
Operator ID:	acm	ALS Bottle#:	24 Worklist Smp#: 27
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl

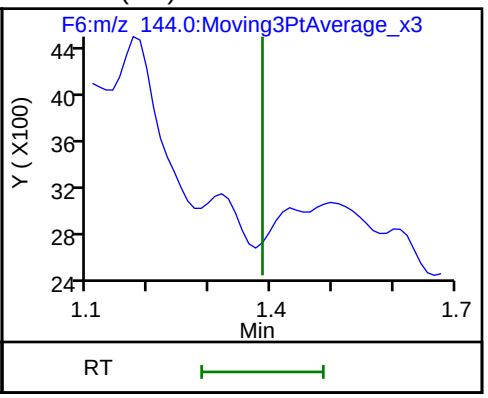
2 HMX (ND)



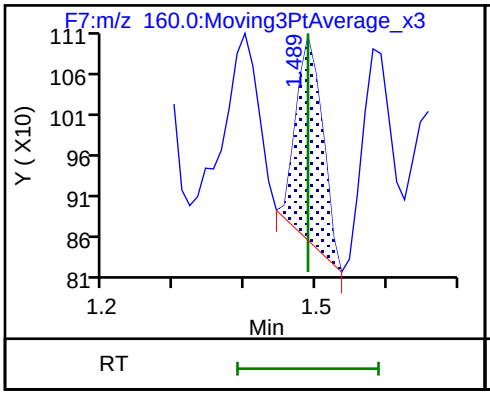
* 1 HMX-13C4



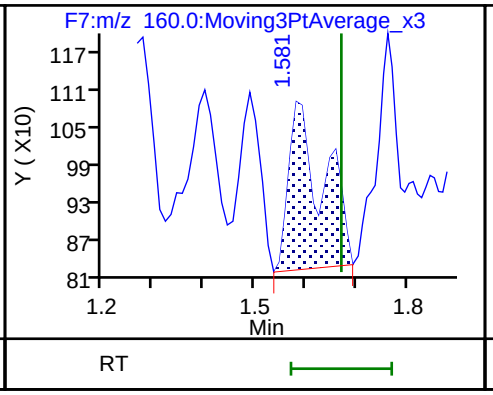
36 TNX (ND)



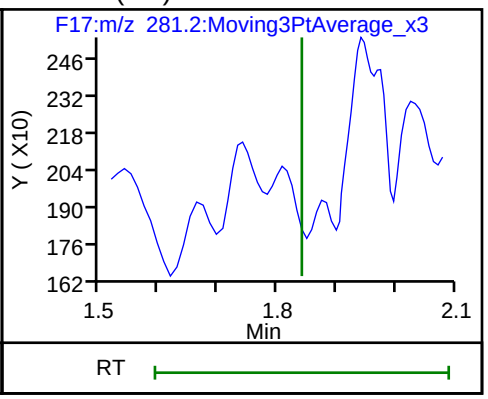
33 DNX



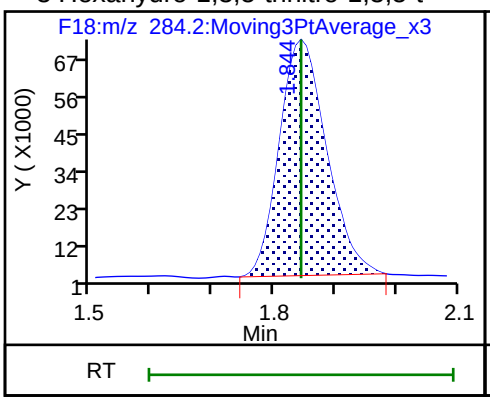
34 MNX



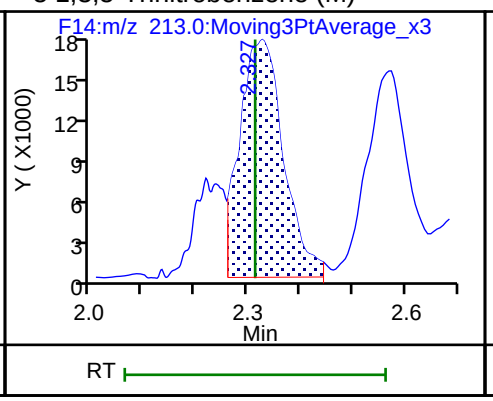
4 RDX (ND)



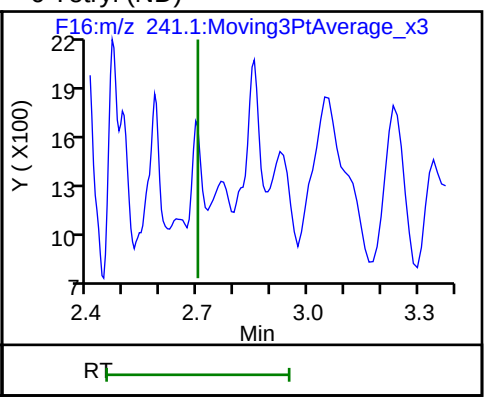
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



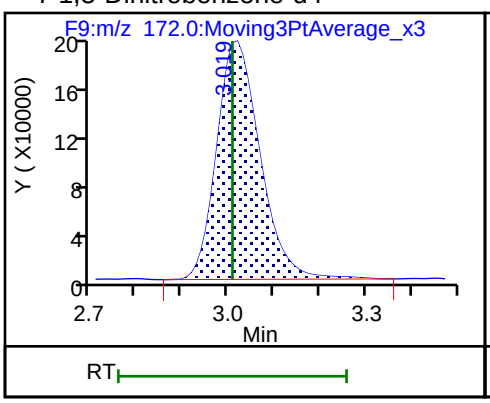
5 1,3,5-Trinitrobenzene (M)



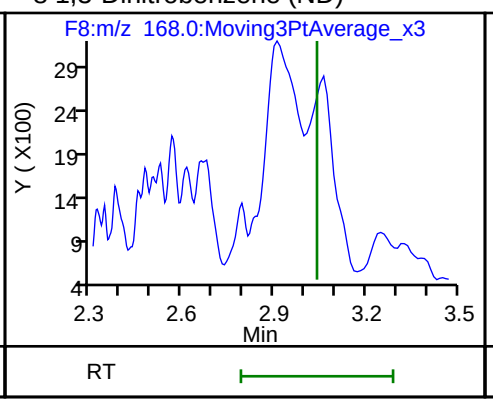
6 Tetryl (ND)



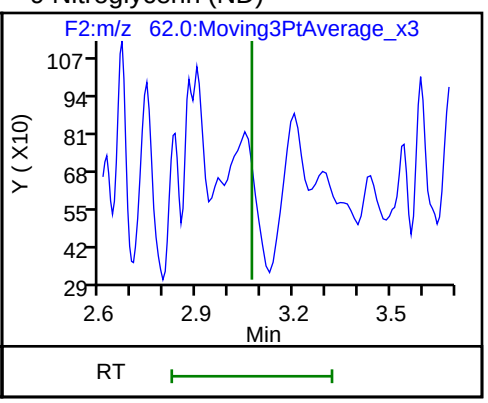
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

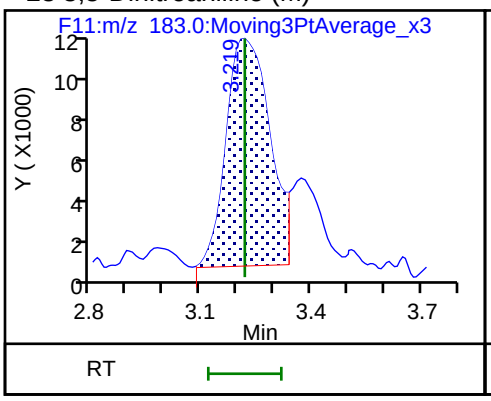


9 Nitroglycerin (ND)

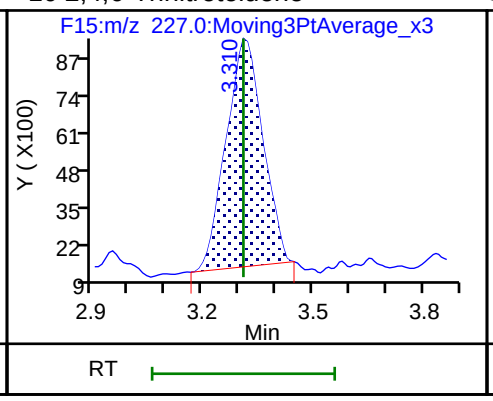


Report Date: 14-Apr-2022 10:06:57 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08027.d

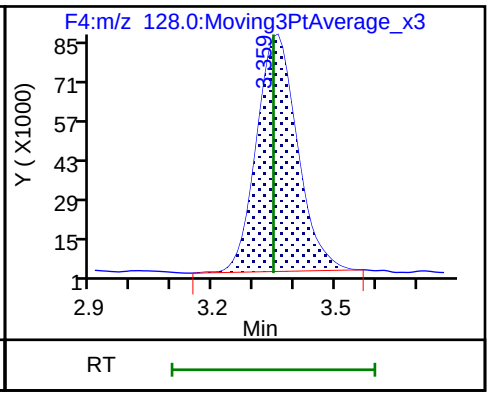
28 3,5-Dinitroaniline (M)



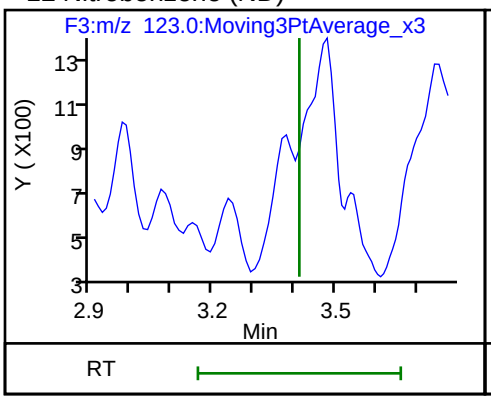
10 2,4,6-Trinitrotoluene



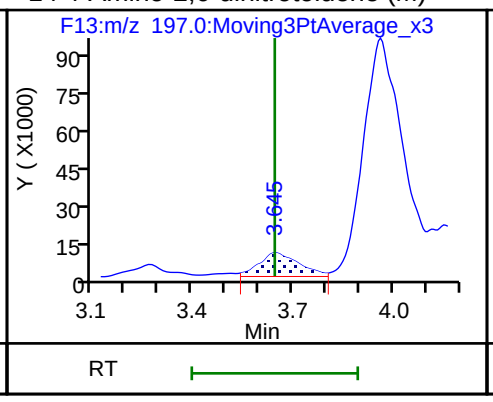
$ 11 Nitrobenzene-d5



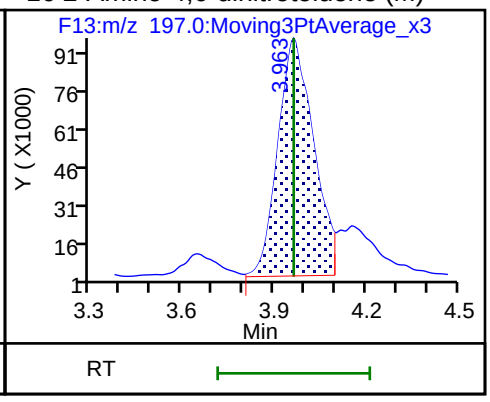
12 Nitrobenzene (ND)



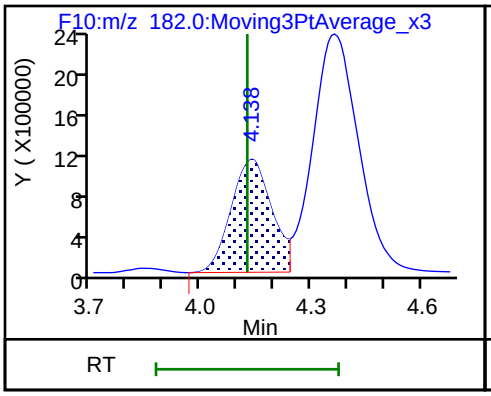
14 4-Amino-2,6-dinitrotoluene (M)



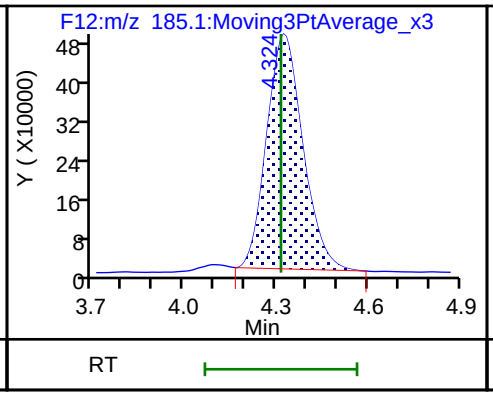
16 2-Amino-4,6-dinitrotoluene (M)



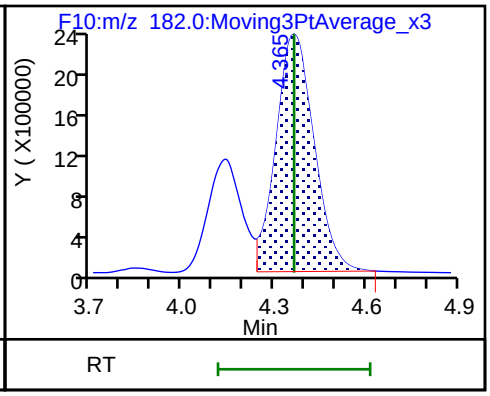
17 2,6-Dinitrotoluene



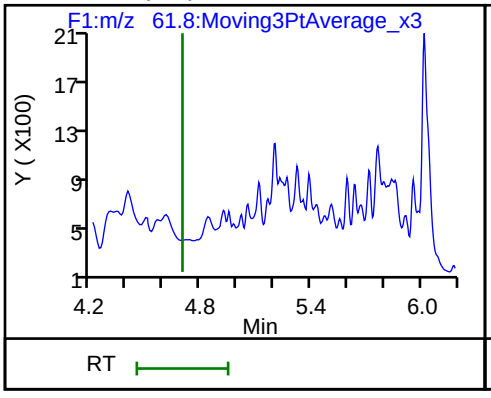
* 18 2,4-dinitrotoluene-d3



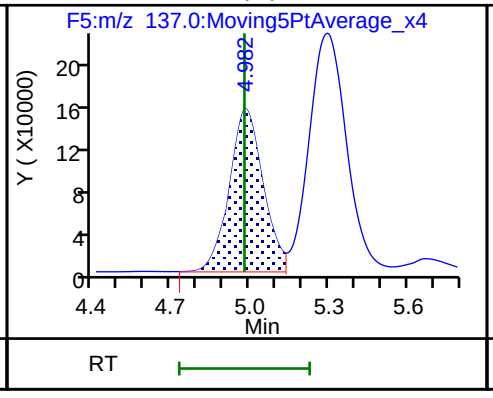
19 2,4-Dinitrotoluene



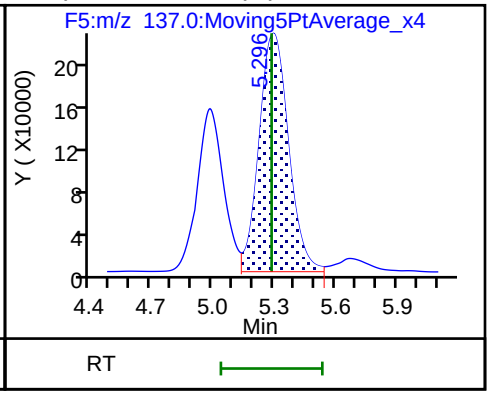
20 PETN (ND)



22 o-Nitrotoluene (M)



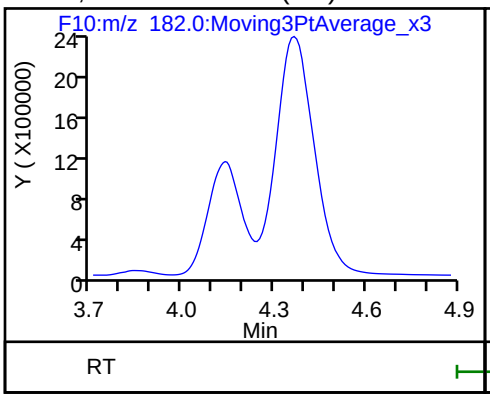
23 p-Nitrotoluene (M)



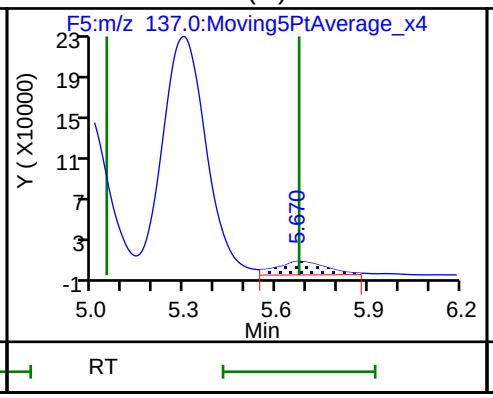
Report Date: 14-Apr-2022 10:06:57 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08027.d

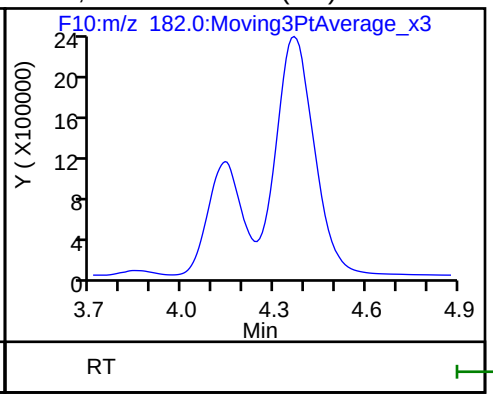
13 3,4-Dinitrotoluene (ND)



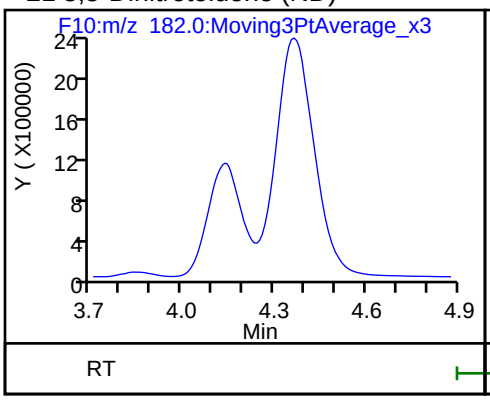
24 m-Nitrotoluene (M)



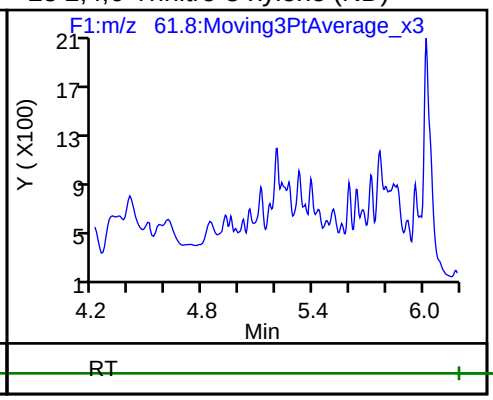
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 14-Apr-2022 10:06:57 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08027.d
Lims ID: 280-160190-A-17-B
Client ID: 29SB177 (14.5-15)
Sample Type: Client
Inject. Date: 08-Apr-2022 12:26:22 ALS Bottle#: 24 Worklist Smp#: 27
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-17-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:52 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:46:31

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	95.8	95.45

Report Date: 14-Apr-2022 10:06:57 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

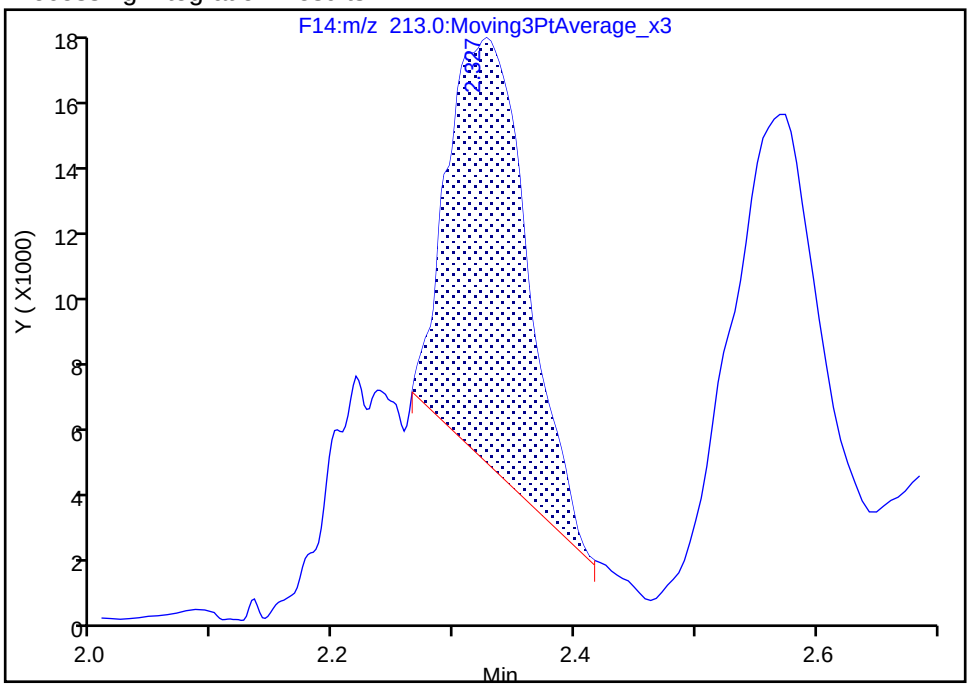
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08027.d				
Injection Date:	08-Apr-2022 12:26:22	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-17-B	Lab Sample ID:	280-160190-17		
Client ID:	29SB177 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F14:SIR		

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

Signal: 1

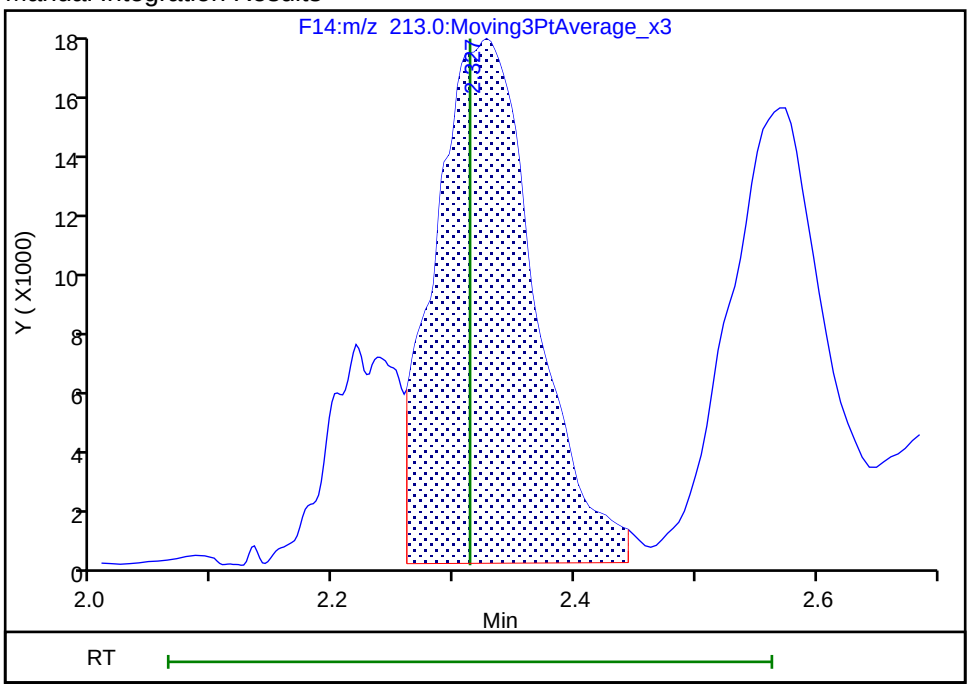
Processing Integration Results

RT: 2.33
Area: 55797
Amount: 3.141446
Amount Units: ug/l



Manual Integration Results

RT: 2.33
Area: 95914
Amount: 5.699720
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:46:26

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:06:57 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

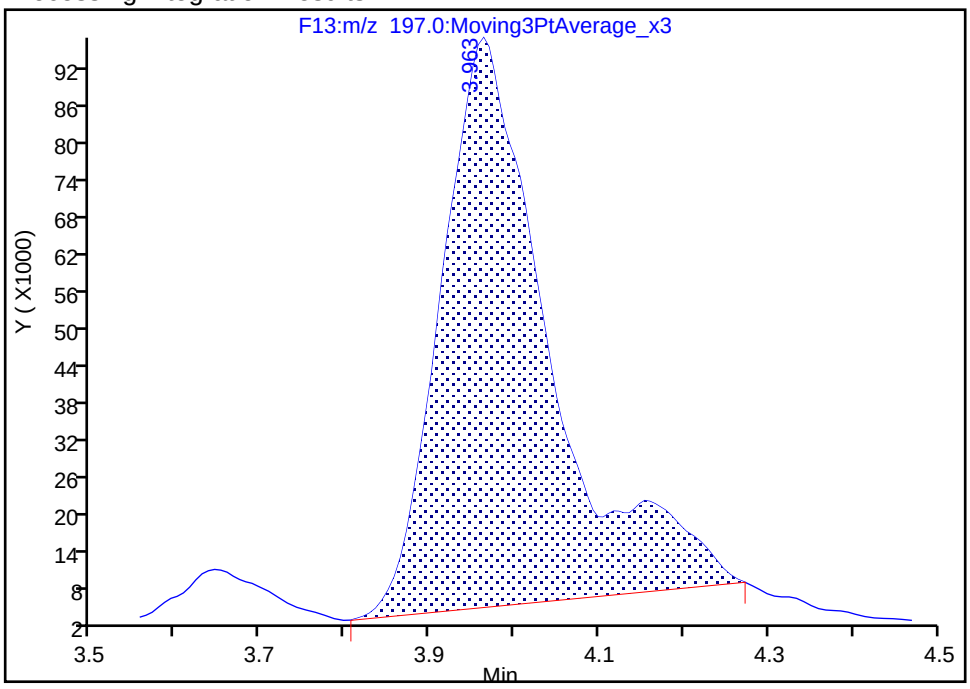
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08027.d				
Injection Date:	08-Apr-2022 12:26:22	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-17-B	Lab Sample ID:	280-160190-17		
Client ID:	29SB177 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

16 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

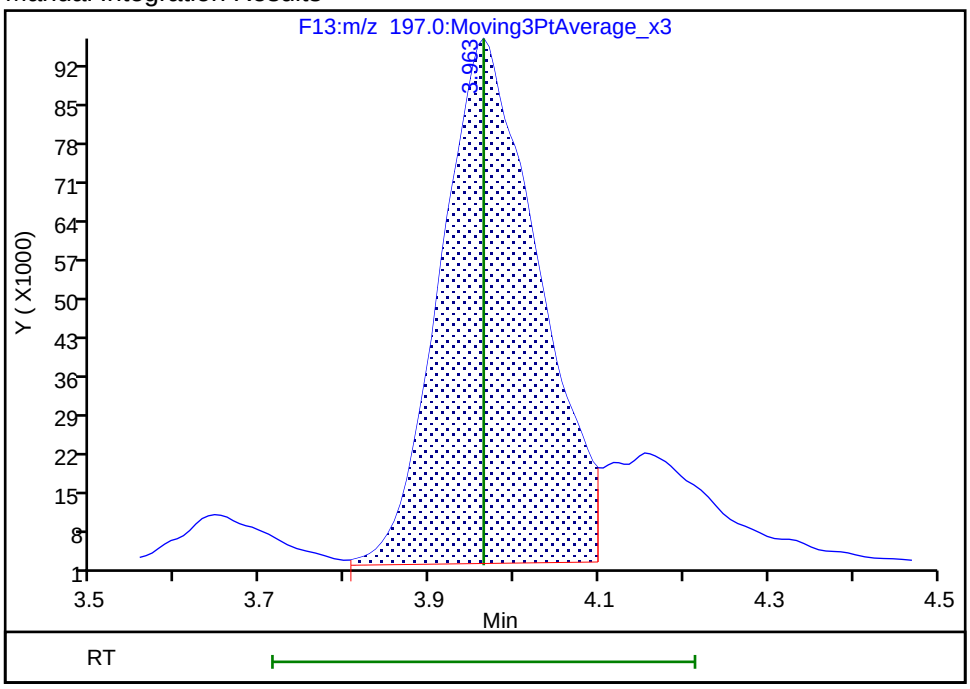
Processing Integration Results

RT: 3.96
Area: 824839
Amount: 12.640492
Amount Units: ug/l



Manual Integration Results

RT: 3.96
Area: 769607
Amount: 11.761359
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:46:08

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:06:57 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

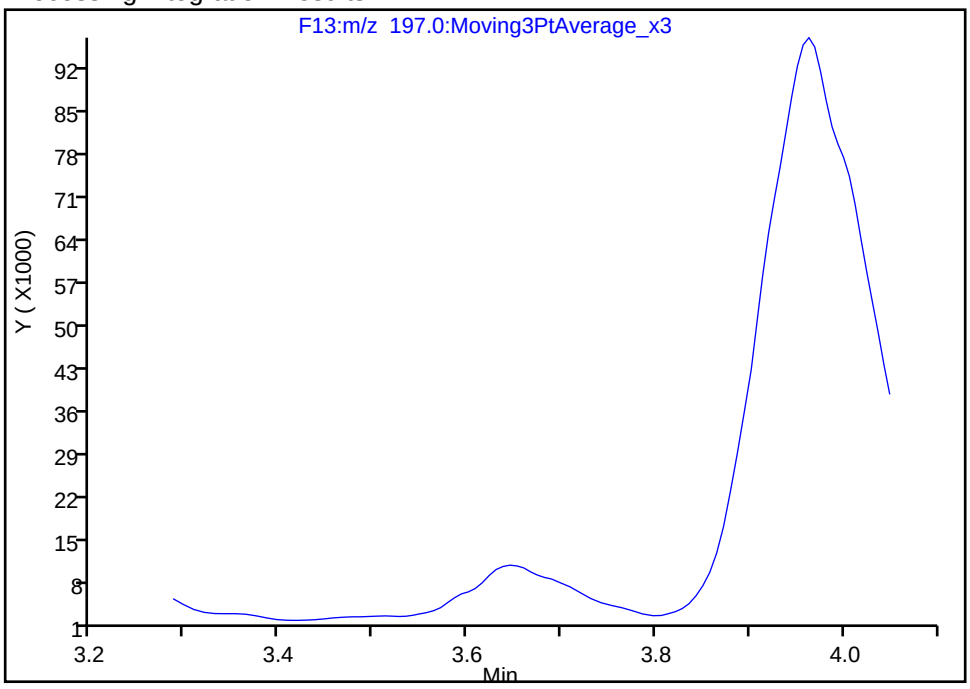
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08027.d				
Injection Date:	08-Apr-2022 12:26:22	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-17-B	Lab Sample ID:	280-160190-17		
Client ID:	29SB177 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

14 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

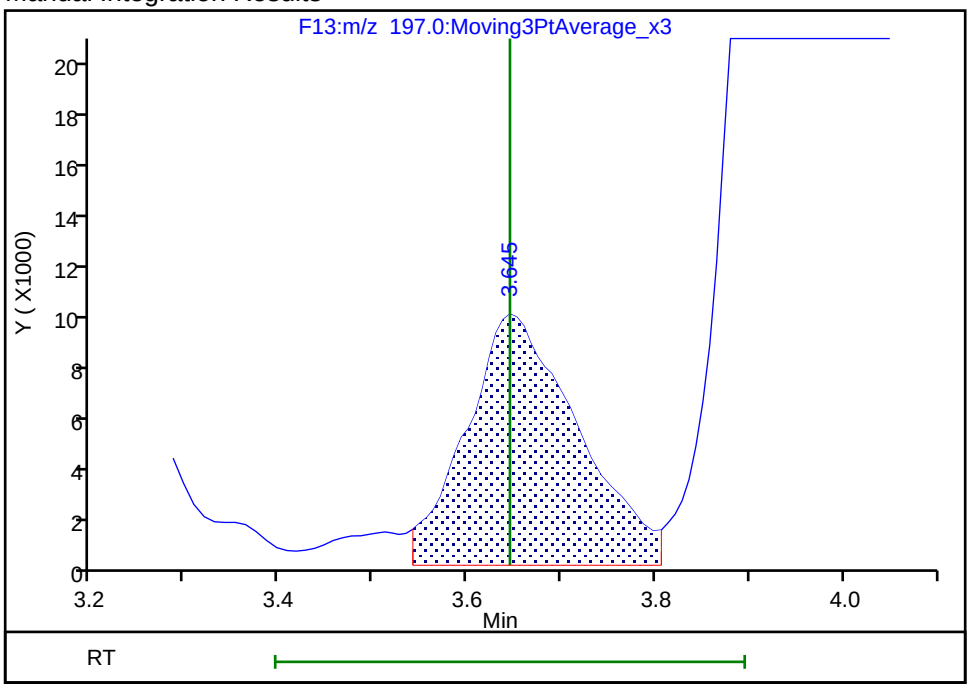
Not Detected
Expected RT: 3.65

Processing Integration Results



Manual Integration Results

RT: 3.65
Area: 79041
Amount: 1.010277
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:46:12
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:06:57 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

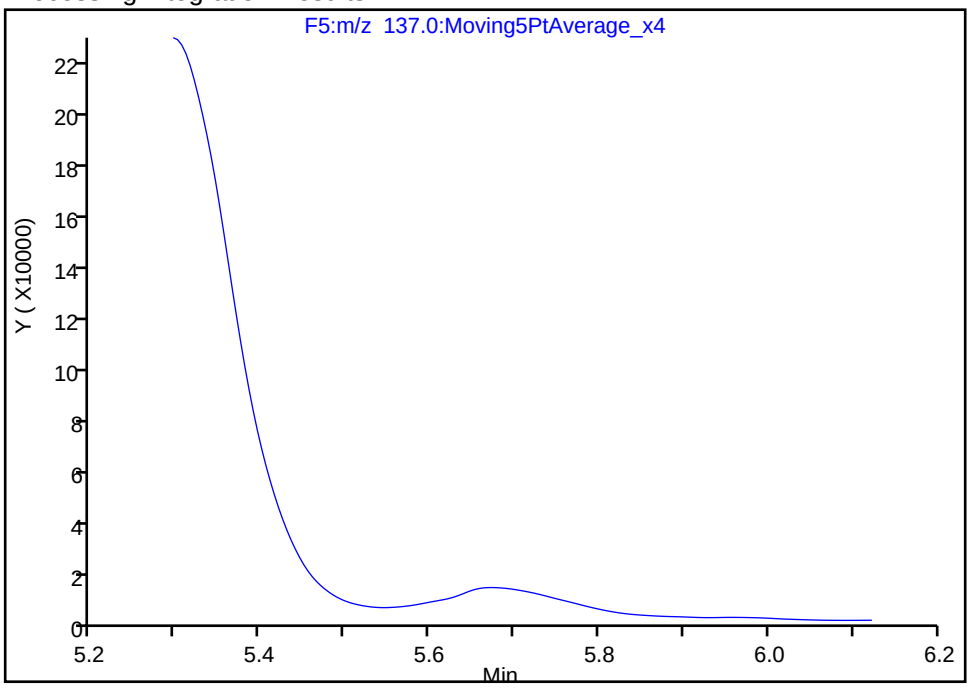
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08027.d				
Injection Date:	08-Apr-2022 12:26:22	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-17-B	Lab Sample ID:	280-160190-17		
Client ID:	29SB177 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F5:SIR		

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

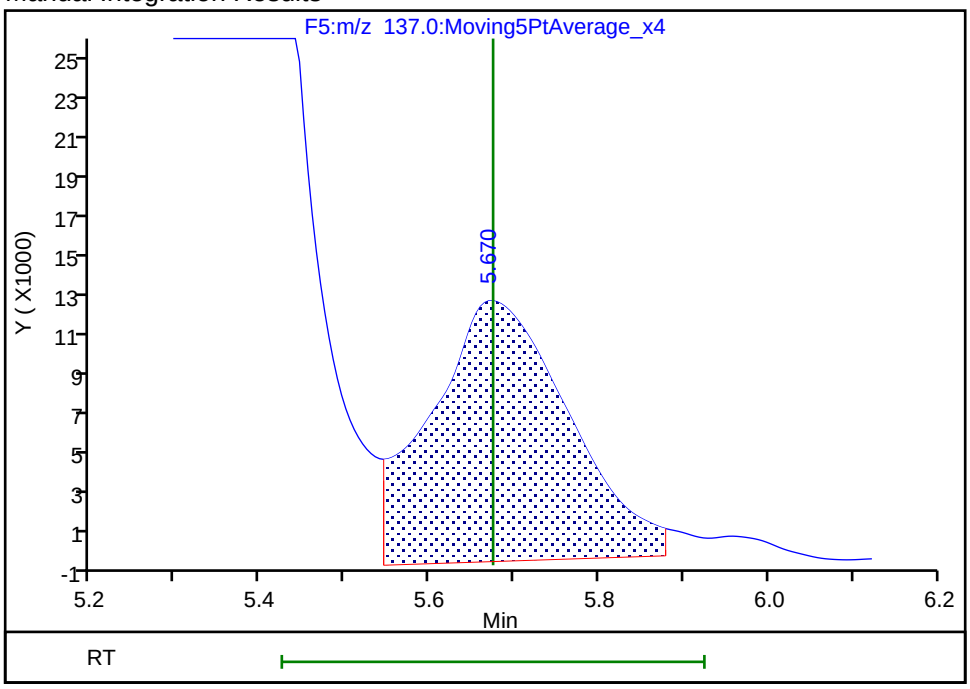
Not Detected
Expected RT: 5.67

Processing Integration Results



Manual Integration Results

RT: 5.67
Area: 144292
Amount: 27.398272
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:45:58
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:06:57 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08027.d

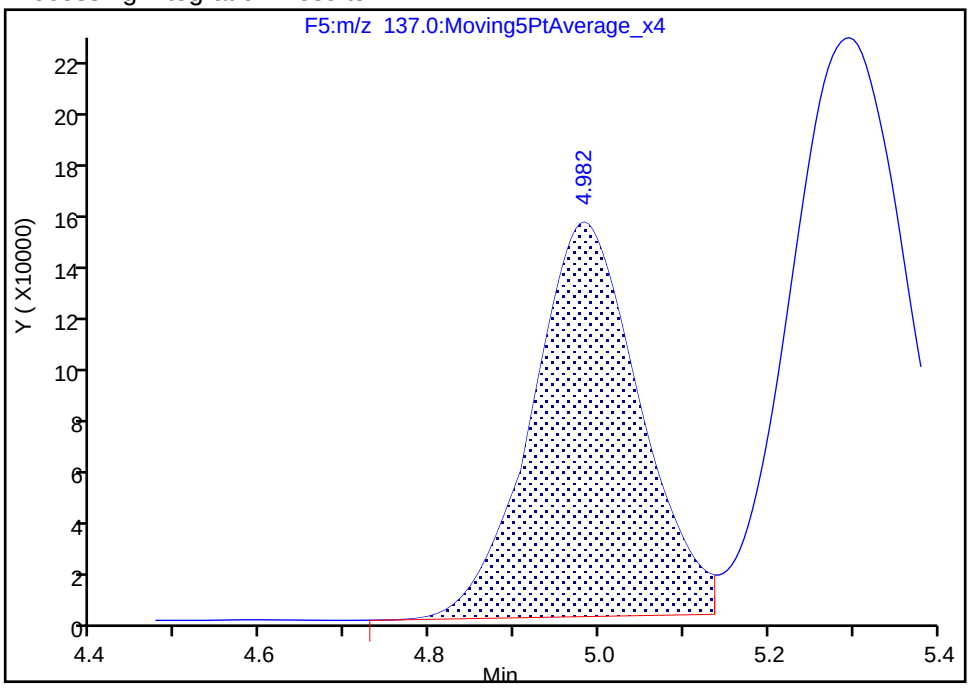
Injection Date:	08-Apr-2022 12:26:22	Instrument ID:	LC_LCMS7
Lims ID:	280-160190-A-17-B	Lab Sample ID:	280-160190-17
Client ID:	29SB177 (14.5-15)		
Operator ID:	acm	ALS Bottle#:	24 Worklist Smp#: 27
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F5:SIR

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

Signal: 1

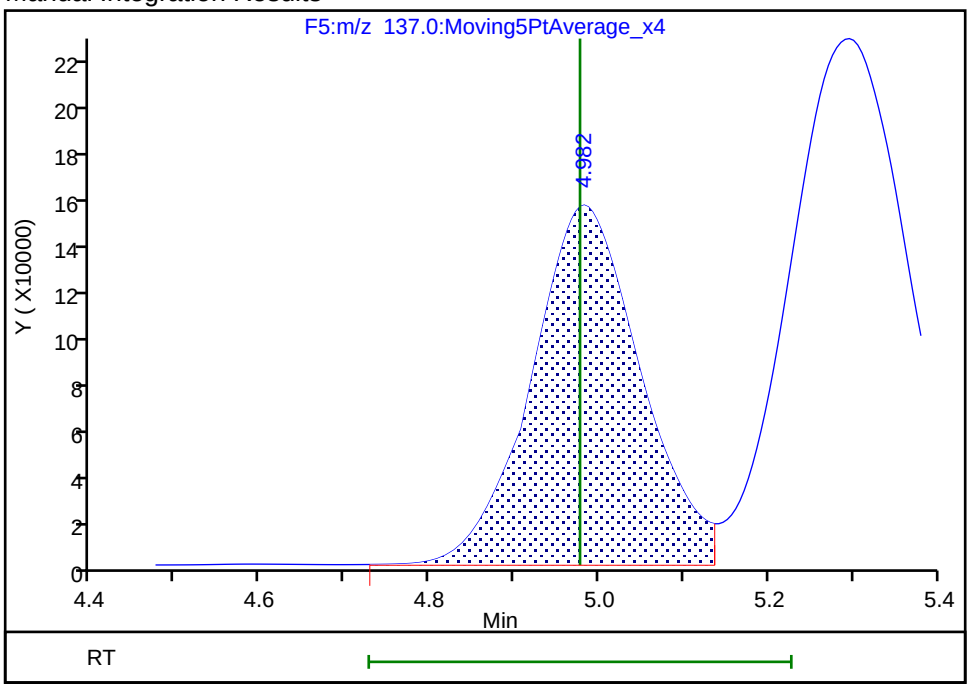
Processing Integration Results

RT: 4.98
Area: 1338006
Amount: 130.5709
Amount Units: ug/l



Manual Integration Results

RT: 4.98
Area: 1372617
Amount: 133.9551
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:45:52

Audit Action: Assigned New Baseline Audit Reason: Baseline

Report Date: 14-Apr-2022 10:06:57 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

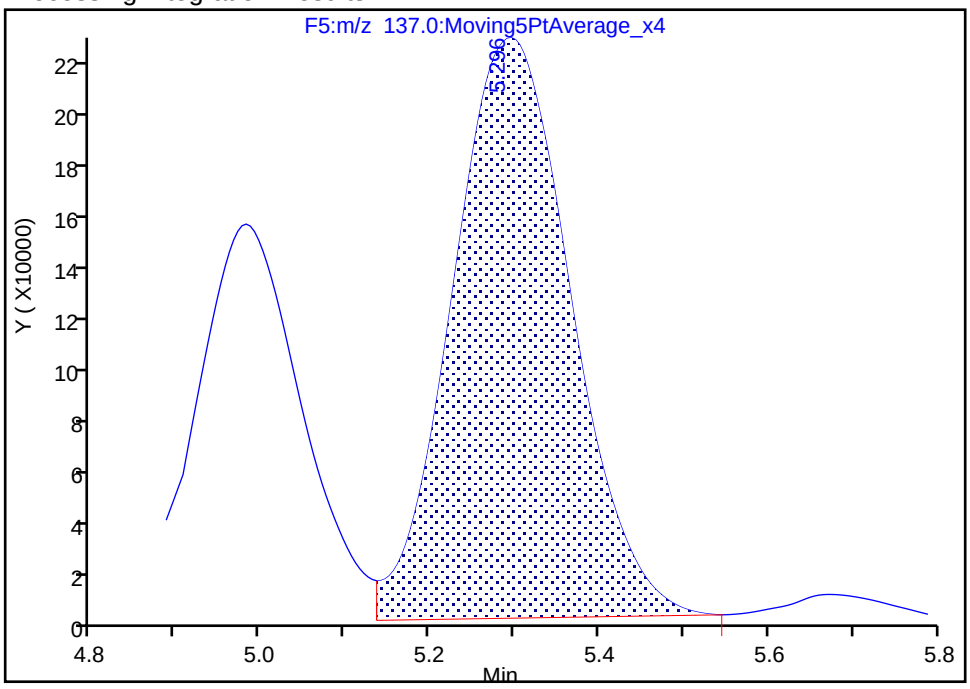
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08027.d				
Injection Date:	08-Apr-2022 12:26:22	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-17-B	Lab Sample ID:	280-160190-17		
Client ID:	29SB177 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F5:SIR		

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

Signal: 1

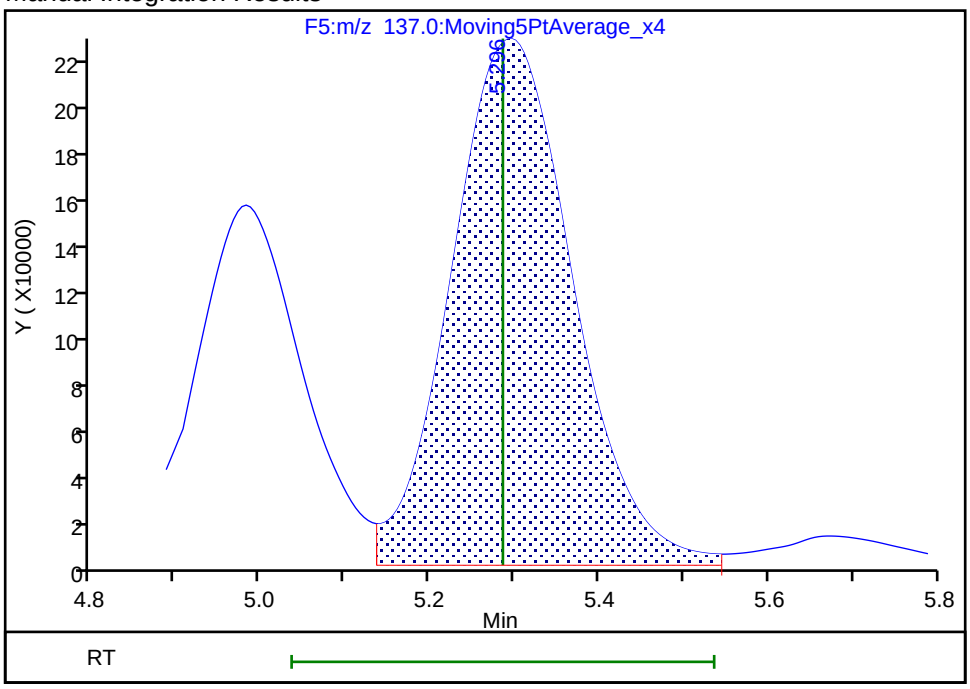
Processing Integration Results

RT: 5.30
Area: 2150326
Amount: 241.8654
Amount Units: ug/l



Manual Integration Results

RT: 5.30
Area: 2239359
Amount: 251.9028
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:45:52

Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1

SDG No.:

Client Sample ID: 29SB177 (14.5-15) DL | Lab Sample ID: 280-160190-17 DL

Matrix: Solid | Lab File ID: ex422D12064.d

Analysis Method: 8321A | Date Collected: 03/24/2022 11:50

Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20

Sample wt/vol: 10.29(g) | Date Analyzed: 04/12/2022 21:14

Con. Extract Vol.: 40(mL) | Dilution Factor: 10

Injection Volume: 40(uL) | GC Column: IonPac ID: 2(mm)

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

Analysis Batch No.: 571614 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
121-14-2	2,4-Dinitrotoluene	2.2	D	0.97	0.49	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	91	D	68-140

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12064.d
Lims ID: 280-160190-A-17-B
Client ID: 29SB177 (14.5-15)
Sample Type: Client
Inject. Date: 12-Apr-2022 21:14:53 ALS Bottle#: 57 Worklist Smp#: 65
Injection Vol: 40.0 ul Dil. Factor: 10.0000
Sample Info: 280-160190-A-17-B 10x
Misc. Info.: 04/08/2022 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\8321expDuPont.m
Limit Group: LC - 8321A Expl
Last Update: 13-Apr-2022 13:58:36 Calib Date: 12-Apr-2022 10:31:58
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d

Column 1 : Det: F1:SIR
Process Host: CTX1683

First Level Reviewer: meyera Date: 13-Apr-2022 13:46:09
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
360.9	1.964	1.964	0.0		185094	125.0	119	
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.1	2.745	2.798	-0.053		372328	125.0	270	
8 1,3,5-Trinitrobenzene								
213.1	3.458	3.458	0.0	0.785	2545	0.9669	1.7	
* 12 1,3-Dinitrobenzene-d4								
172.1	4.404	4.461	-0.057		1003812	129.4	74.4	
15 2,4,6-Trinitrotoluene								
227.1	4.841	4.841	0.0	0.768	2966	-0.3027	7.1	
$ 16 Nitrobenzene-d5								
128.1	4.962	4.962	0.0	1.127	69840	9.13	48.9	
22 2-Amino-4,6-dinitrotoluene								
197.2	5.780	5.861	-0.081	0.917	37876	0.6943	11.5	
23 2,6-Dinitrotoluene								
182.1	6.063	6.094	-0.031	0.961	490640	11.4	131	
* 24 2,4-dinitrotoluene-d3								
185.1	6.306	6.336	-0.030		2661878	125.0	507	
25 2,4-Dinitrotoluene								
182.1	6.367	6.367	0.0	1.010	1350722	56.4	289	
28 o-Nitrotoluene								M
137.1	7.389	7.389	0.0	1.172	146853	14.1	64.4	M
29 p-Nitrotoluene								M
137.1	7.814	7.875	-0.061	1.239	235500	27.2	98.4	M
30 m-Nitrotoluene								M
137.1	8.391	8.391	0.0	1.331	24028	3.53	7.3	M

Report Date: 13-Apr-2022 13:58:39 Chrom Revision: 2.3 18-Mar-2022 09:07:22

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

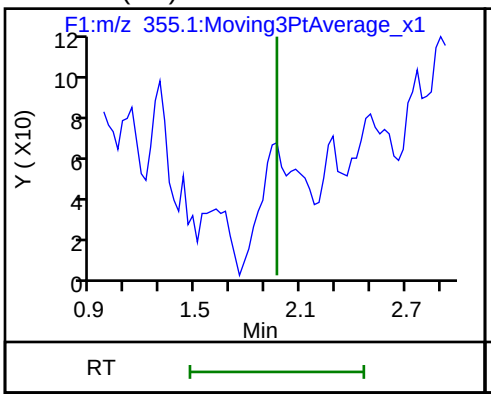
Report Date: 13-Apr-2022 13:58:39 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

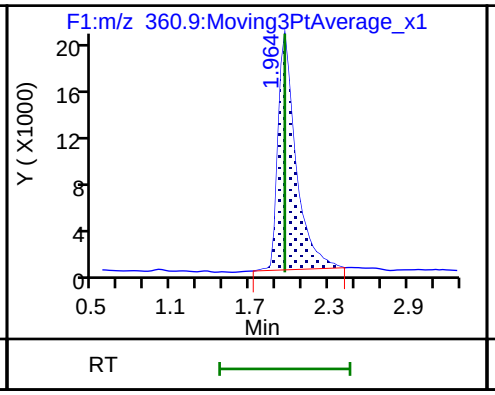
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12064.d

Injection Date:	12-Apr-2022 21:14:53	Instrument ID:	LC_LCMS4
Lims ID:	280-160190-A-17-B	Lab Sample ID:	280-160190-17
Client ID:	29SB177 (14.5-15)		
Operator ID:	acm	ALS Bottle#:	57 Worklist Smp#: 65
Injection Vol:	40.0 ul	Dil. Factor:	10.0000
Method:	8321expDuPont	Limit Group:	LC - 8321A Expl

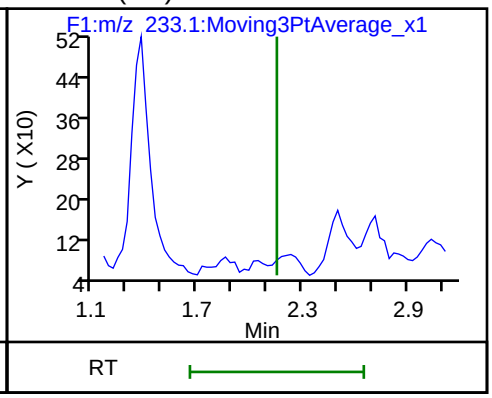
2 HMX (ND)



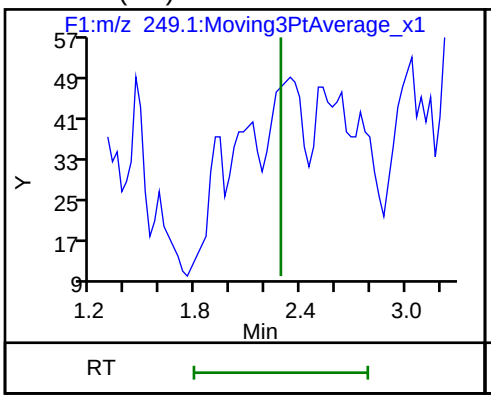
* 1 HMX-13C4



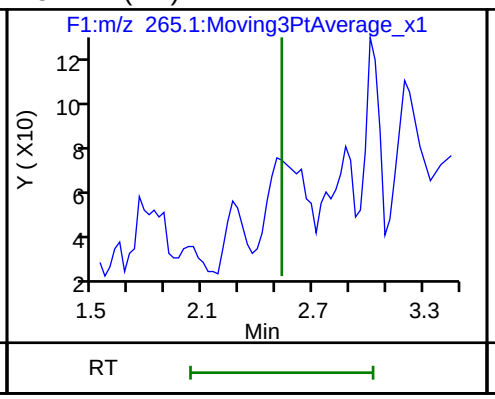
3 TNX (ND)



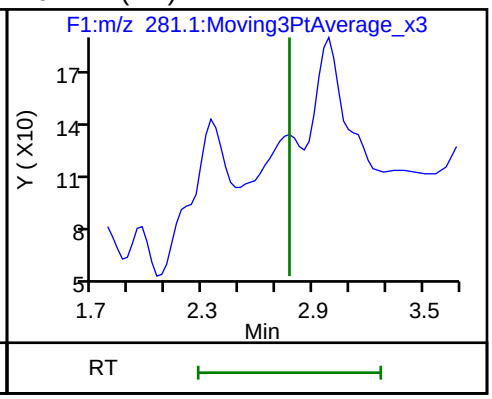
4 DNX (ND)



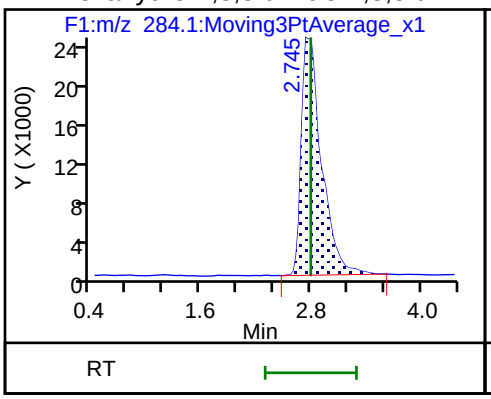
5 MNX (ND)



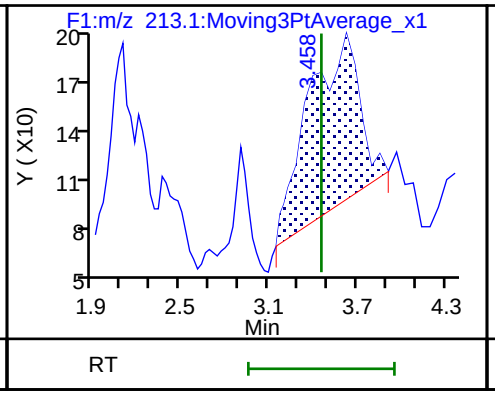
6 RDX (ND)



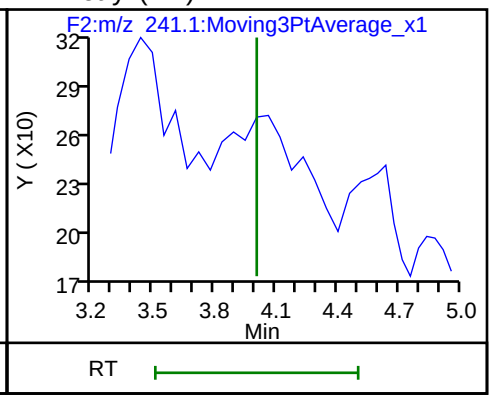
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t



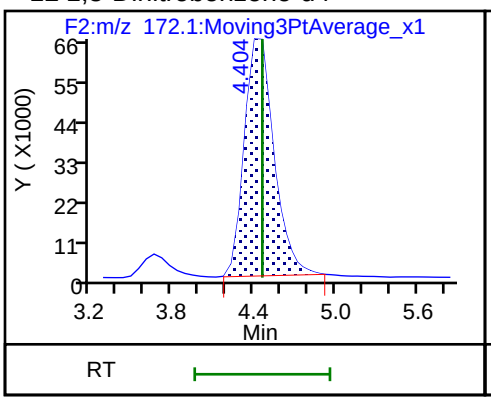
8 1,3,5-Trinitrobenzene



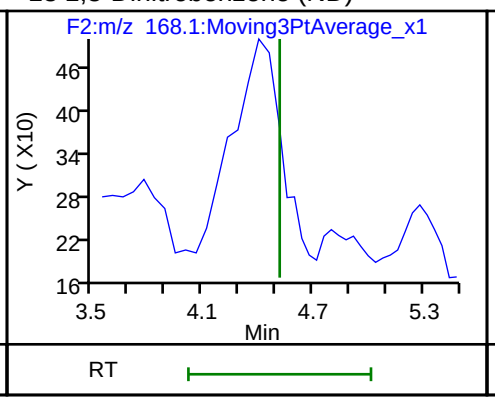
11 Tetryl (ND)



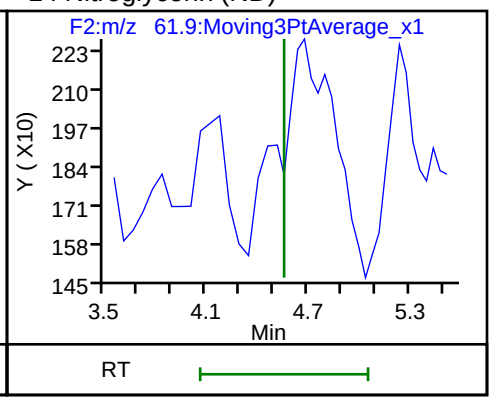
* 12 1,3-Dinitrobenzene-d4



13 1,3-Dinitrobenzene (ND)

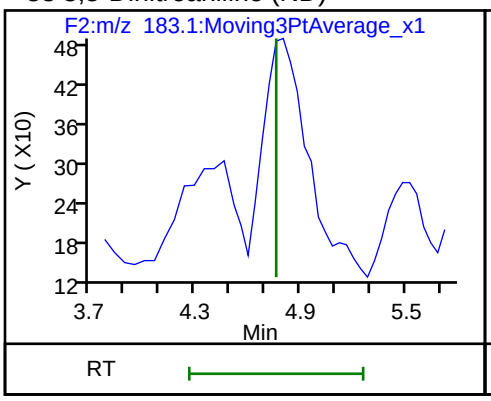


14 Nitroglycerin (ND)

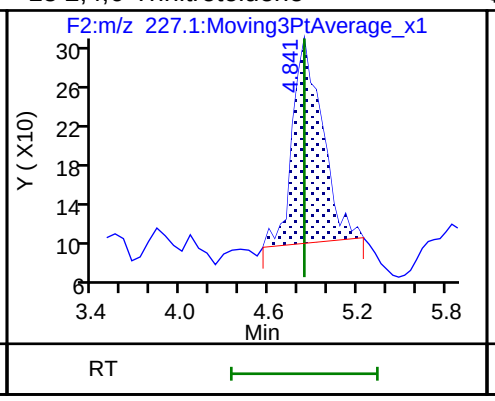


Report Date: 13-Apr-2022 13:58:39 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12064.d

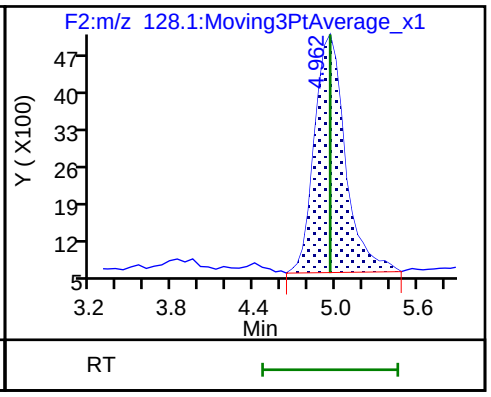
33 3,5-Dinitroaniline (ND)



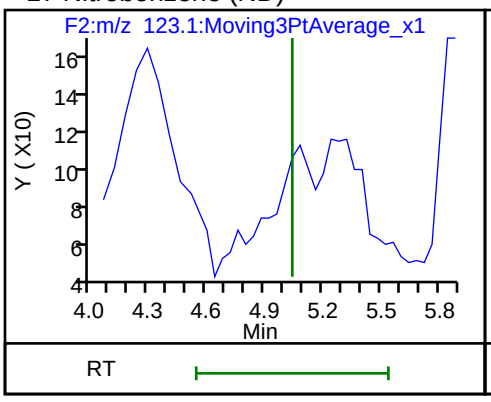
15 2,4,6-Trinitrotoluene



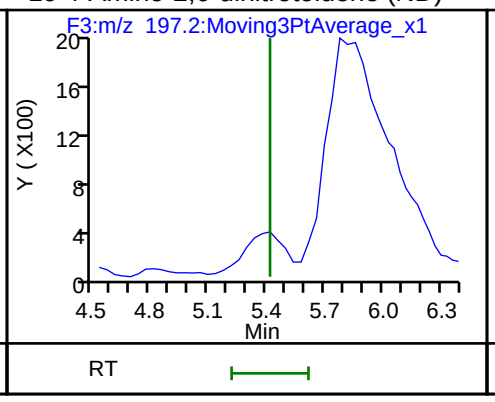
$ 16 Nitrobenzene-d5



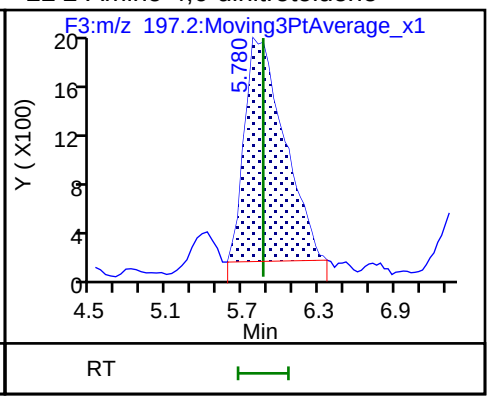
17 Nitrobenzene (ND)



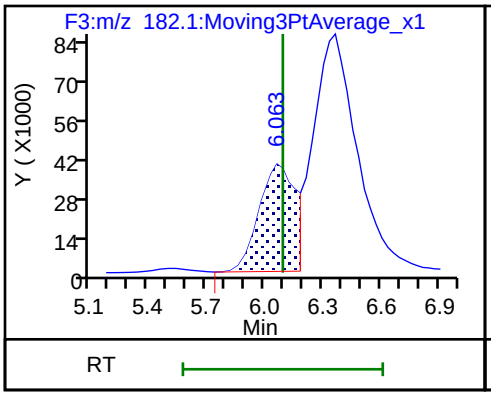
19 4-Amino-2,6-dinitrotoluene (ND)



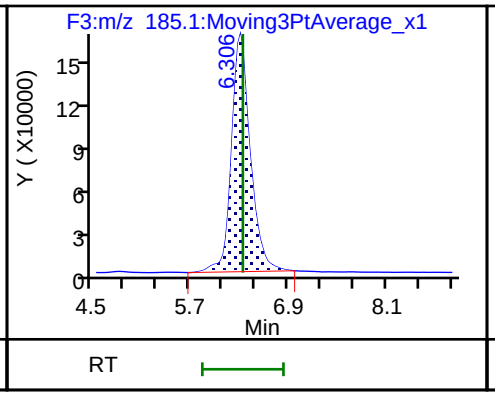
22 2-Amino-4,6-dinitrotoluene



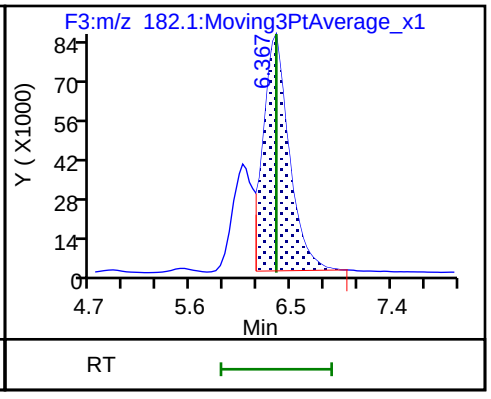
23 2,6-Dinitrotoluene



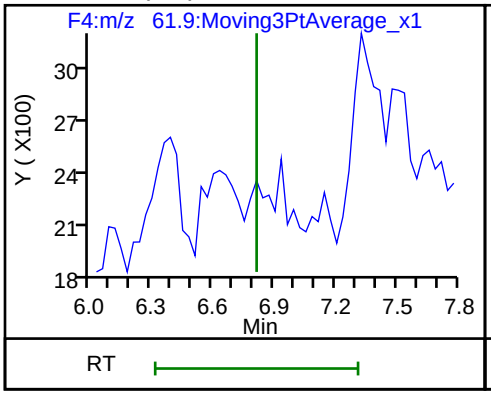
* 24 2,4-dinitrotoluene-d3



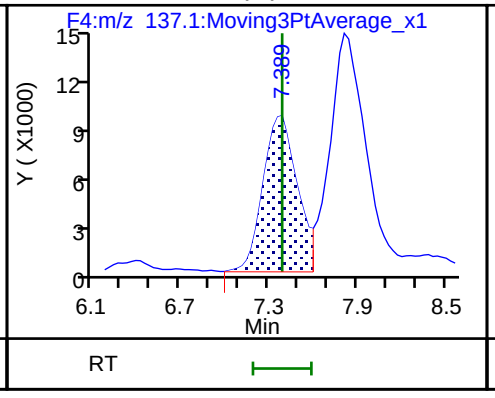
25 2,4-Dinitrotoluene



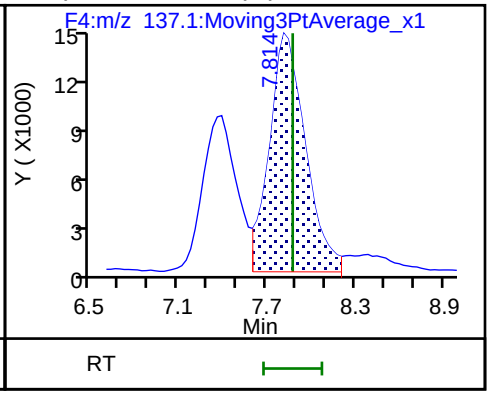
26 PETN (ND)



28 o-Nitrotoluene (M)

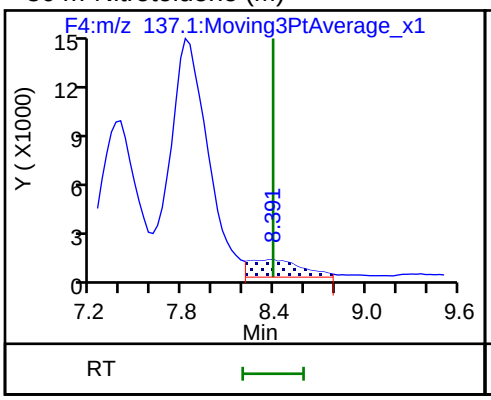


29 p-Nitrotoluene (M)

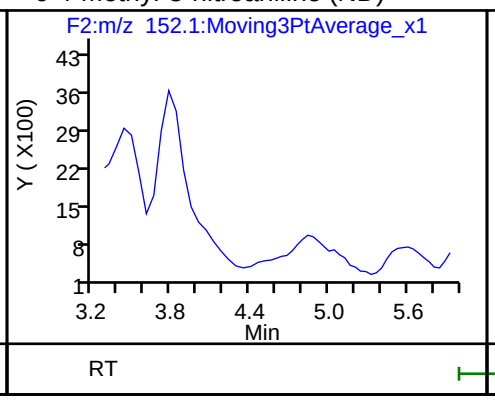


Report Date: 13-Apr-2022 13:58:39 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12064.d

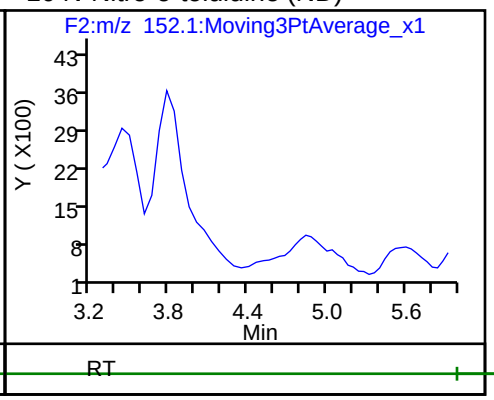
30 m-Nitrotoluene (M)



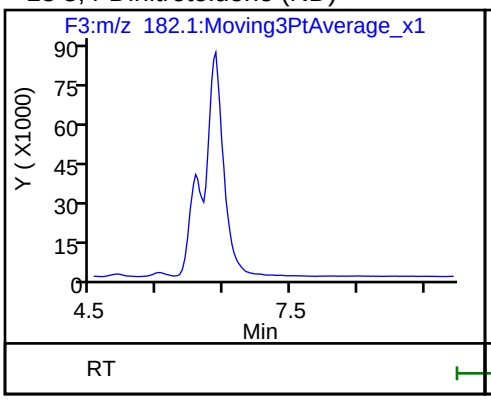
9 4-Methyl-3-nitroaniline (ND)



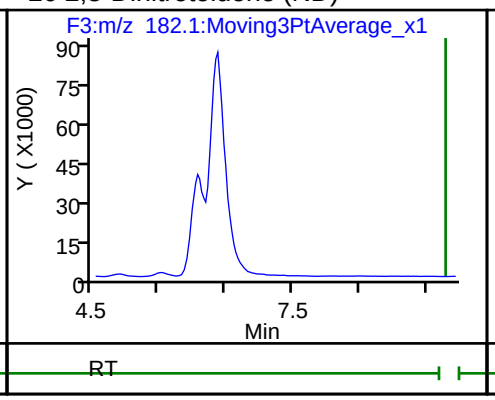
10 N-Nitro-o-toluidine (ND)



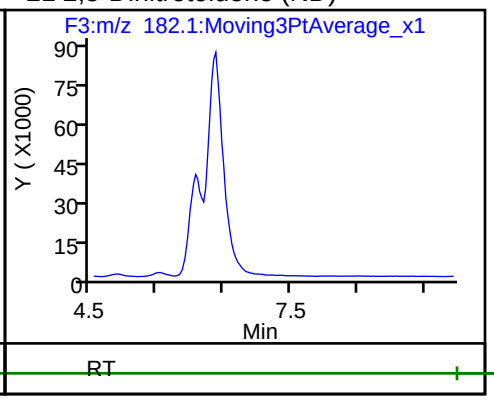
18 3,4-Dinitrotoluene (ND)



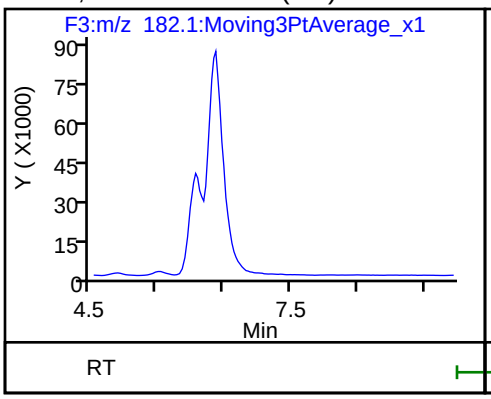
20 2,3-Dinitrotoluene (ND)



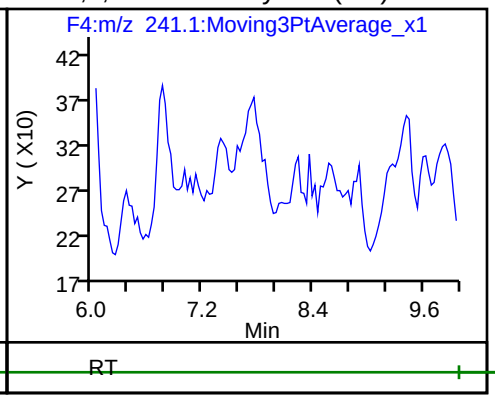
21 2,5-Dinitrotoluene (ND)



27 3,5-Dinitrotoluene (ND)



31 2,4,6-Trinitro-3-xylene (ND)



Report Date: 13-Apr-2022 13:58:39 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12064.d
Lims ID: 280-160190-A-17-B
Client ID: 29SB177 (14.5-15)
Sample Type: Client
Inject. Date: 12-Apr-2022 21:14:53 ALS Bottle#: 57 Worklist Smp#: 65
Injection Vol: 40.0 ul Dil. Factor: 10.0000
Sample Info: 280-160190-A-17-B 10x
Misc. Info.: 04/08/2022 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\8321expDuPont.m
Limit Group: LC - 8321A Expl
Last Update: 13-Apr-2022 13:58:36 Calib Date: 12-Apr-2022 10:31:58
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d

Column 1 : Det: F1:SIR
Process Host: CTX1683

First Level Reviewer: meyera Date: 13-Apr-2022 13:46:09

Compound	Amount Added	Amount Recovered	% Rec.
$ 16 Nitrobenzene-d5	100.3	9.13	9.10

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB168 (3-4) | Lab Sample ID: 280-160190-18
Matrix: Solid | Lab File ID: ex722D08028.d
Analysis Method: 8321A | Date Collected: 03/24/2022 11:55
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20
Sample wt/vol: 10.27(g) | Date Analyzed: 04/08/2022 12:32
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571224 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.22		0.097	0.049	0.044
99-65-0	1,3-Dinitrobenzene	0.049	U	0.097	0.049	0.044
606-20-2	2,6-Dinitrotoluene	0.10		0.097	0.049	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.088	J M	0.097	0.049	0.048
19406-51-0	4-Amino-2,6-dinitrotoluene	0.078	J M	0.097	0.049	0.030
2691-41-0	HMX	0.049	U M Q	0.097	0.049	0.045
99-08-1	m-Nitrotoluene	0.049	U M	0.097	0.049	0.042
98-95-3	Nitrobenzene	0.049	U	0.11	0.049	0.037
55-63-0	Nitroglycerin	0.049	U	0.097	0.049	0.028
88-72-2	o-Nitrotoluene	0.055	J M	0.097	0.049	0.042
78-11-5	PETN	0.049	U	0.097	0.049	0.033
99-99-0	p-Nitrotoluene	0.11	M	0.097	0.049	0.048
121-82-4	RDX	0.049	U	0.12	0.049	0.042
479-45-8	Tetryl	0.049	U Q	0.097	0.049	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	98		68-140

Report Date: 14-Apr-2022 10:06:58 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08028.d
Lims ID: 280-160190-A-18-B
Client ID: 29SB168 (3-4)
Sample Type: Client
Inject. Date: 08-Apr-2022 12:32:58 ALS Bottle#: 25 Worklist Smp#: 28
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-18-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:52 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:47:39
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		113285	125.0	109	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		317549	125.0	70.2	
5 1,3,5-Trinitrobenzene								
213.0	2.317	2.322	0.004	0.767	870976	56.6	106	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.008	0.011		1274252	129.4	560	
28 3,5-Dinitroaniline								
183.0	3.241	3.231	0.022	1.073	251200	5.87	55.0	
10 2,4,6-Trinitrotoluene								E
227.0	3.310	3.316	0.0	0.765	32328672	492.4	520	E
$ 11 Nitrobenzene-d5								
128.0	3.348	3.354	0.0	0.774	592680	98.3	103	
14 4-Amino-2,6-dinitrotoluene								M
197.0	3.652	3.652	0.007	0.845	976227	20.0	1.8	M
16 2-Amino-4,6-dinitrotoluene								M
197.0	3.957	3.971	-0.006	0.915	1395668	22.5	2.4	M
17 2,6-Dinitrotoluene								
182.0	4.138	4.138	0.012	0.957	1713163	26.3	18.0	
* 18 2,4-dinitrotoluene-d3								
185.1	4.324	4.315	0.009		3863119	125.0	113	
19 2,4-Dinitrotoluene								E
182.0	4.365	4.373	0.0	1.009	10093416	309.4	94.9	E
22 o-Nitrotoluene								M
137.0	4.982	4.987	0.005	1.152	141729	14.1	34.9	M
23 p-Nitrotoluene								M
137.0	5.301	5.297	0.015	1.226	249289	28.6	59.9	M

Report Date: 14-Apr-2022 10:06:58 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08028.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
24 m-Nitrotoluene								M
137.0	5.655	5.686	-0.020	1.308	16767	3.52	4.2	M

QC Flag Legend

Processing Flags
E - Exceeded Maximum Amount
Review Flags
M - Manually Integrated

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

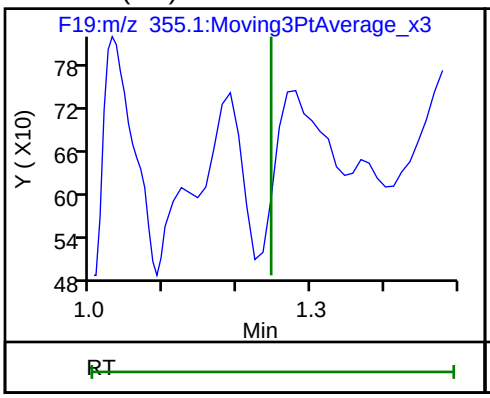
Report Date: 14-Apr-2022 10:06:58 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

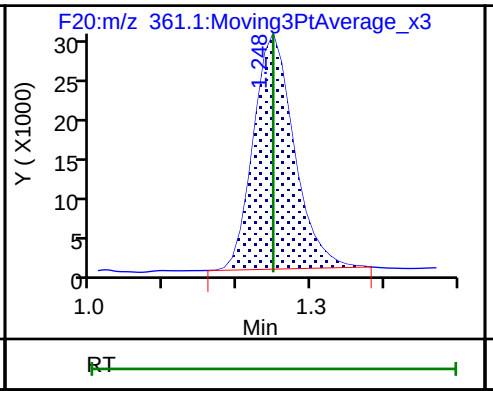
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08028.d

Injection Date:	08-Apr-2022 12:32:58	Instrument ID:	LC_LCMS7
Lims ID:	280-160190-A-18-B	Lab Sample ID:	280-160190-18
Client ID:	29SB168 (3-4)		
Operator ID:	acm	ALS Bottle#:	25 Worklist Smp#: 28
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl

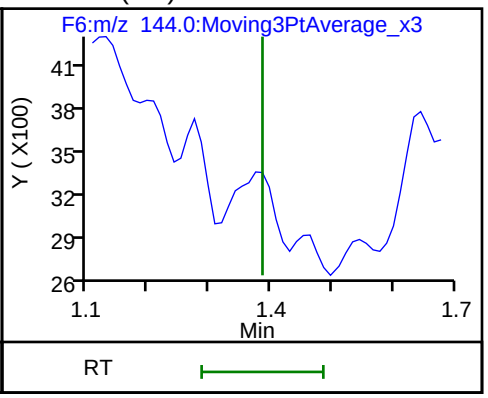
2 HMX (ND)



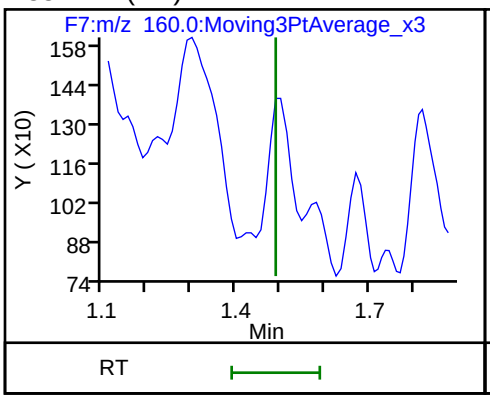
* 1 HMX-13C4



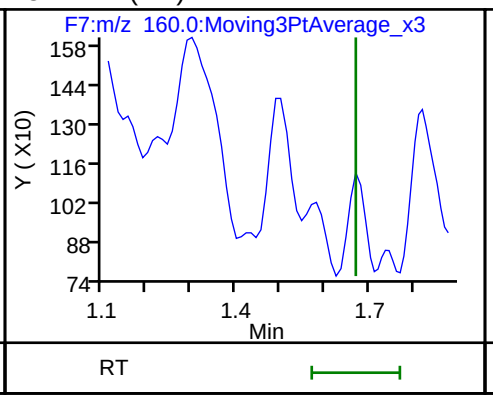
36 TNX (ND)



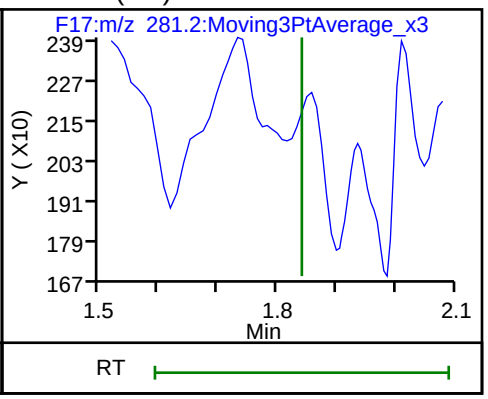
33 DNX (ND)



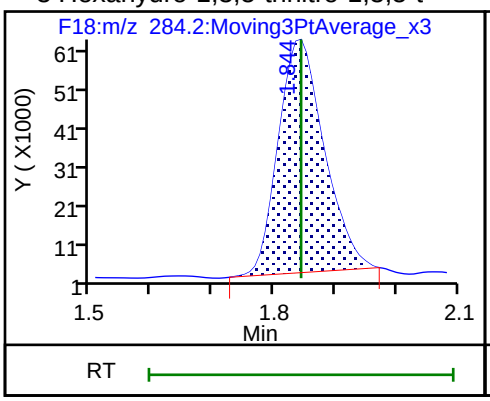
34 MNX (ND)



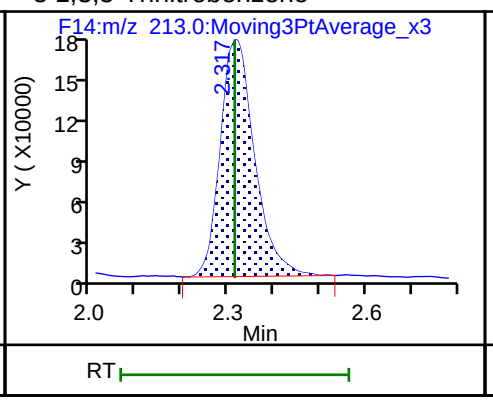
4 RDX (ND)



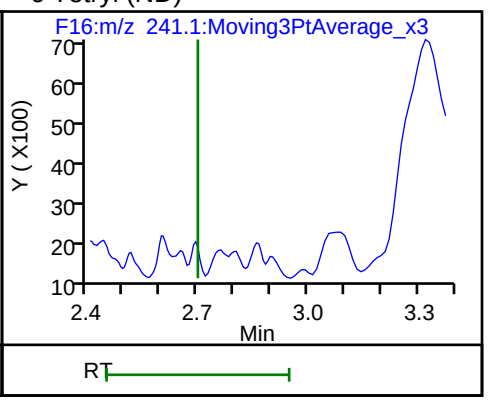
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



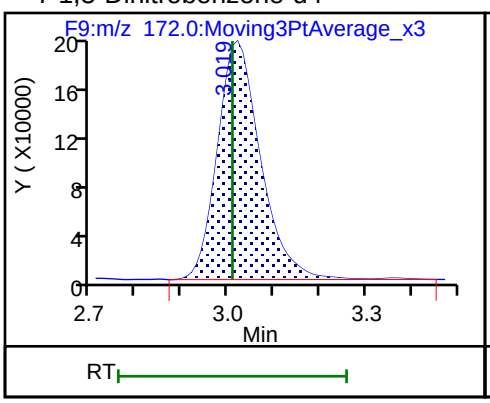
5 1,3,5-Trinitrobenzene



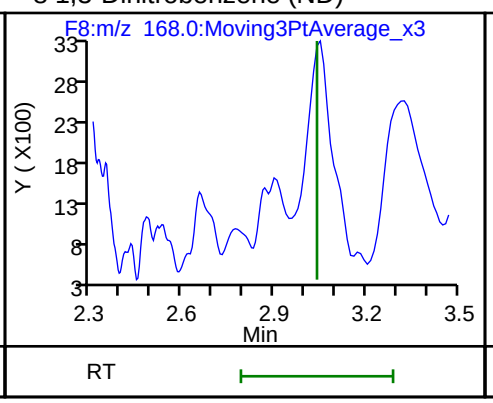
6 Tetryl (ND)



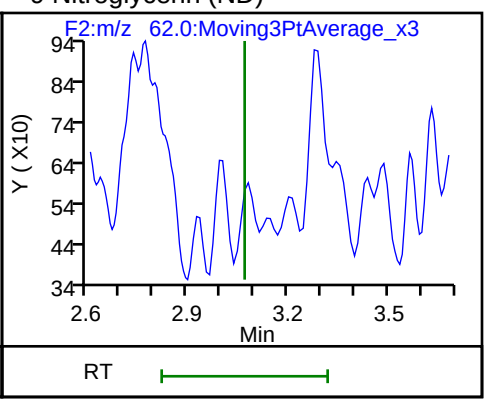
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

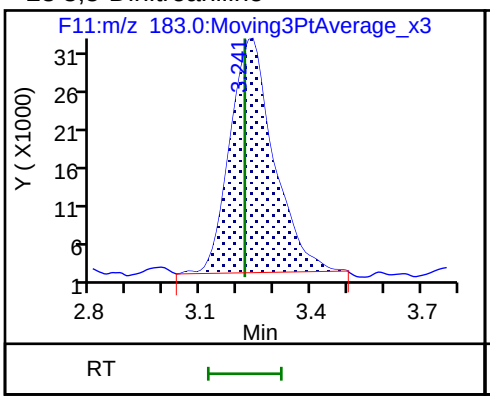


9 Nitroglycerin (ND)

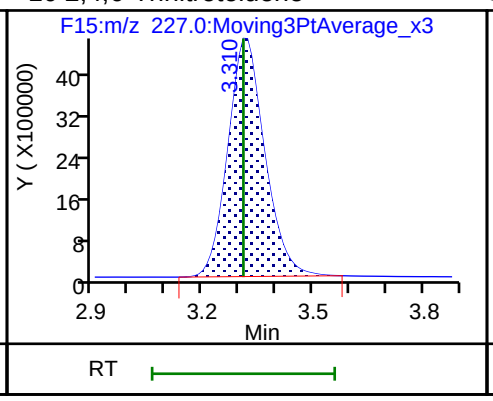


Report Date: 14-Apr-2022 10:06:58 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08028.d

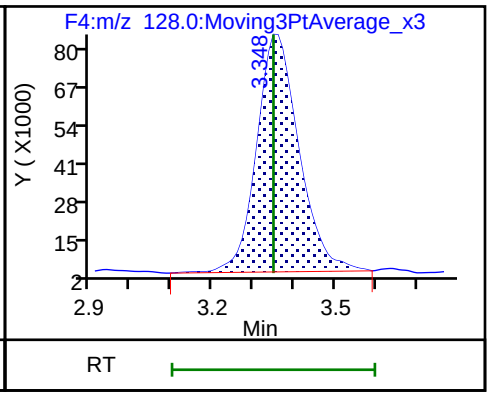
28 3,5-Dinitroaniline



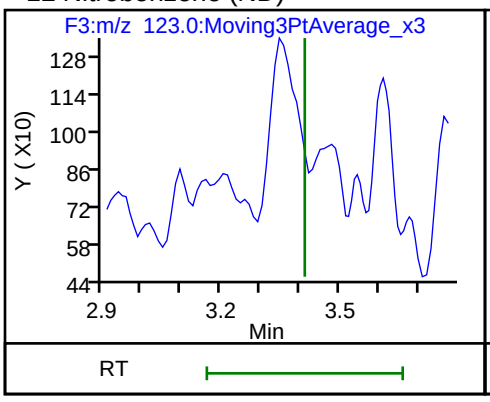
10 2,4,6-Trinitrotoluene



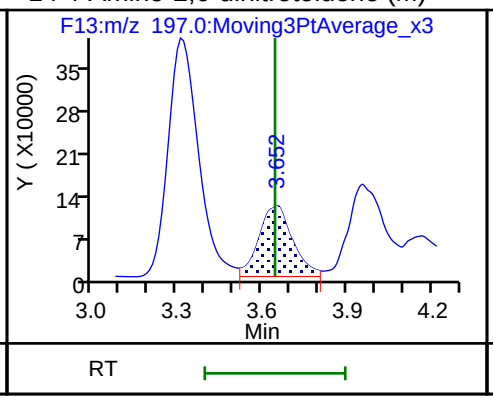
$ 11 Nitrobenzene-d5



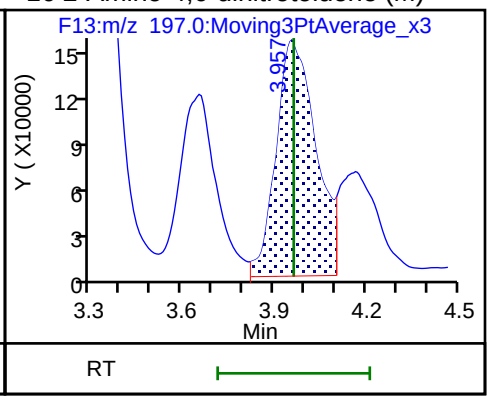
12 Nitrobenzene (ND)



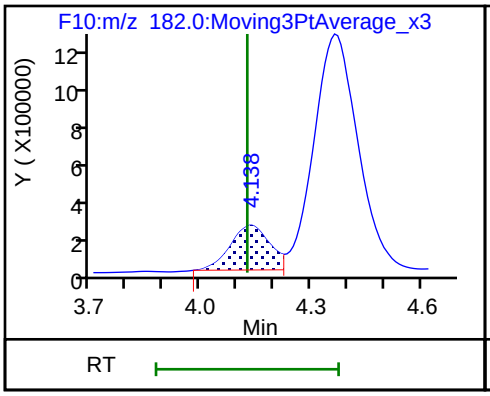
14 4-Amino-2,6-dinitrotoluene (M)



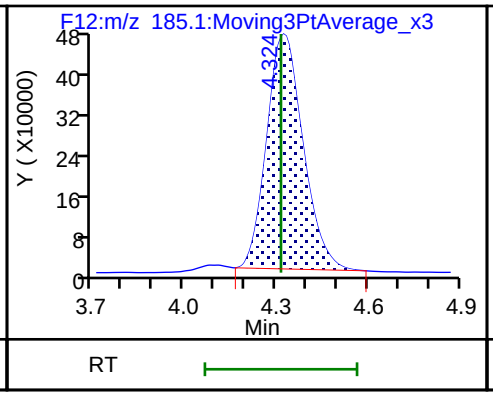
16 2-Amino-4,6-dinitrotoluene (M)



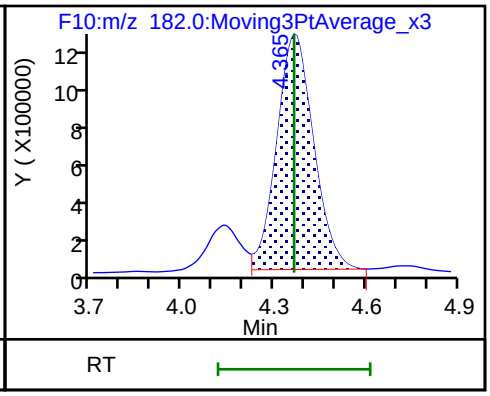
17 2,6-Dinitrotoluene



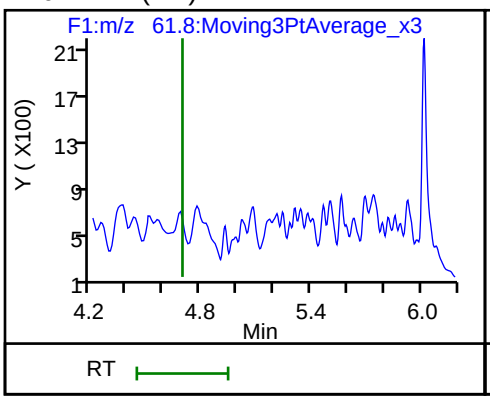
* 18 2,4-dinitrotoluene-d3



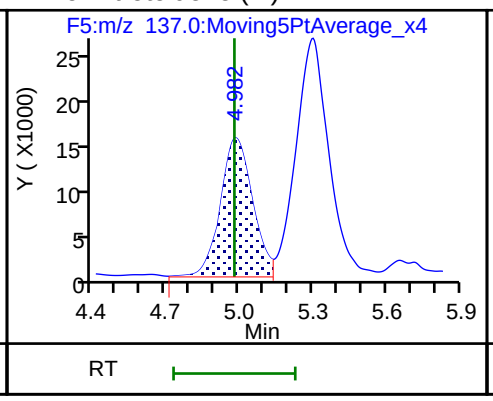
19 2,4-Dinitrotoluene



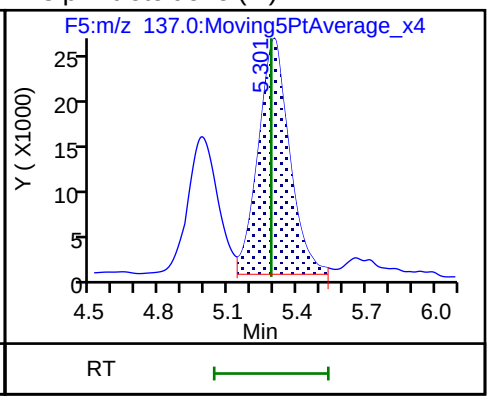
20 PETN (ND)



22 o-Nitrotoluene (M)

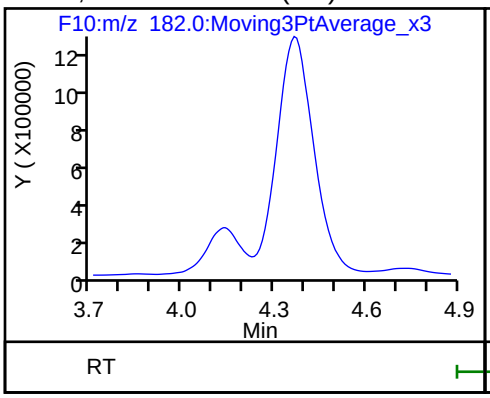


23 p-Nitrotoluene (M)

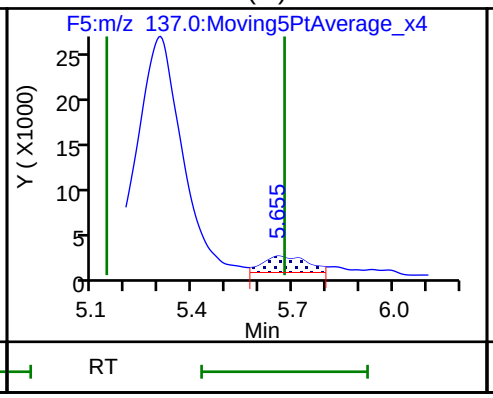


Report Date: 14-Apr-2022 10:06:58 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08028.d

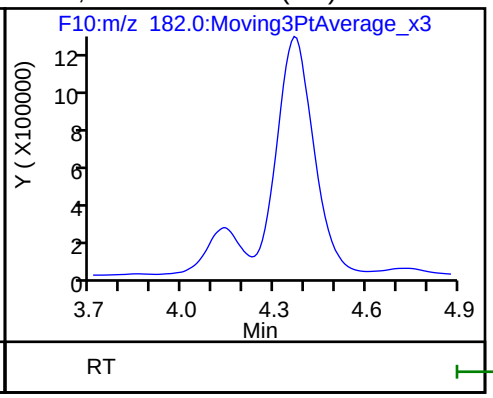
13 3,4-Dinitrotoluene (ND)



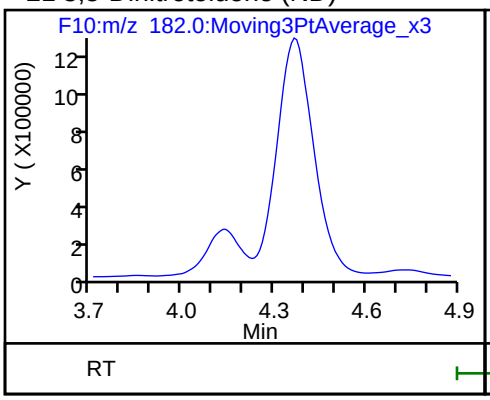
24 m-Nitrotoluene (M)



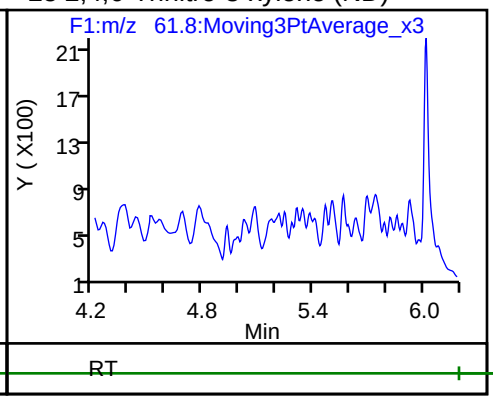
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 14-Apr-2022 10:06:58 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08028.d
Lims ID: 280-160190-A-18-B
Client ID: 29SB168 (3-4)
Sample Type: Client
Inject. Date: 08-Apr-2022 12:32:58 ALS Bottle#: 25 Worklist Smp#: 28
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-18-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:52 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:47:39

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	98.3	98.01

Report Date: 14-Apr-2022 10:06:58 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

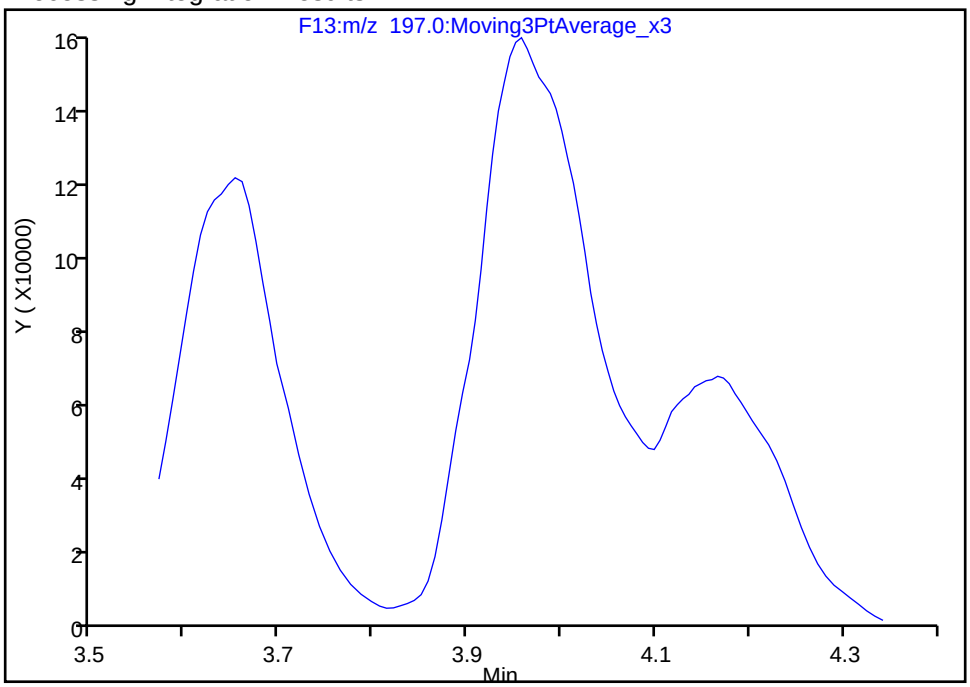
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08028.d				
Injection Date:	08-Apr-2022 12:32:58	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-18-B	Lab Sample ID:	280-160190-18		
Client ID:	29SB168 (3-4)				
Operator ID:	acm	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

16 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

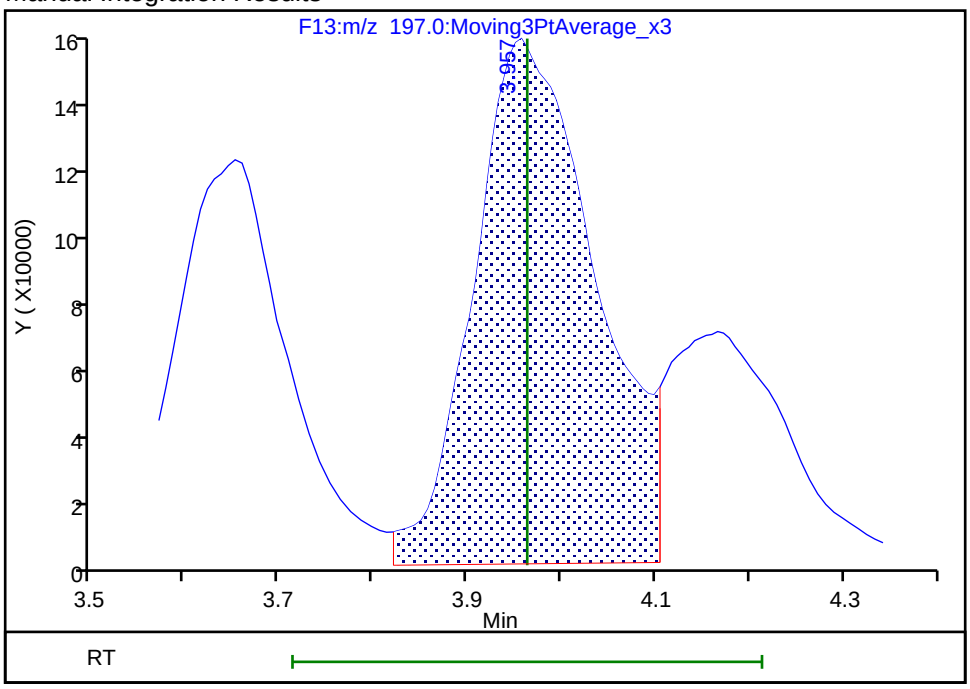
Not Detected
Expected RT: 3.96

Processing Integration Results



Manual Integration Results

RT: 3.96
Area: 1395668
Amount: 22.548779
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:47:08
Audit Action: Manually Integrated Audit Reason: Assign Peak

Report Date: 14-Apr-2022 10:06:58 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

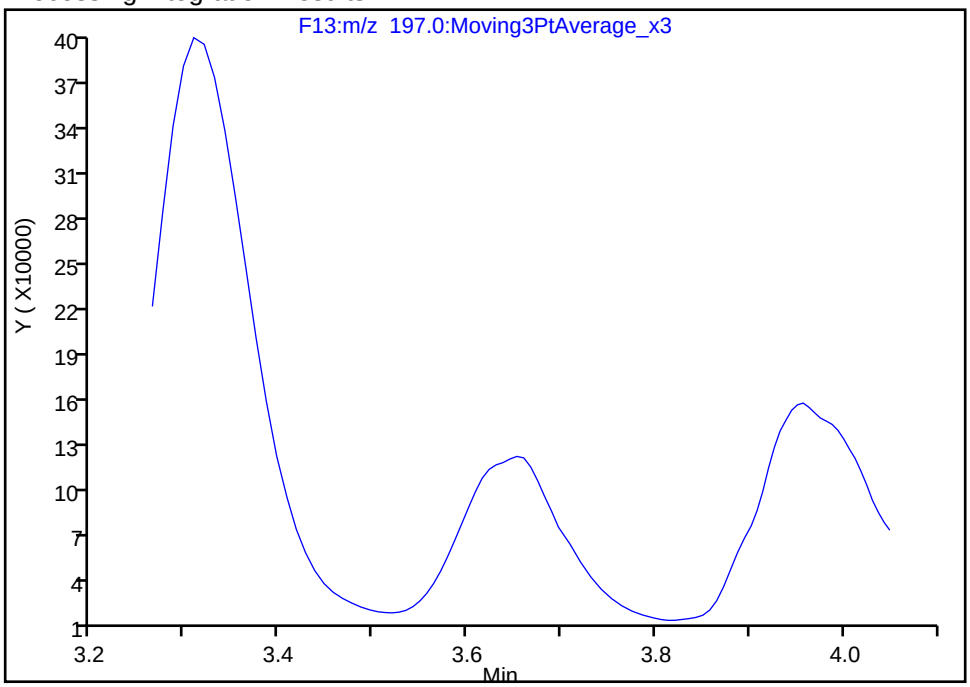
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08028.d				
Injection Date:	08-Apr-2022 12:32:58	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-18-B	Lab Sample ID:	280-160190-18		
Client ID:	29SB168 (3-4)				
Operator ID:	acm	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

14 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

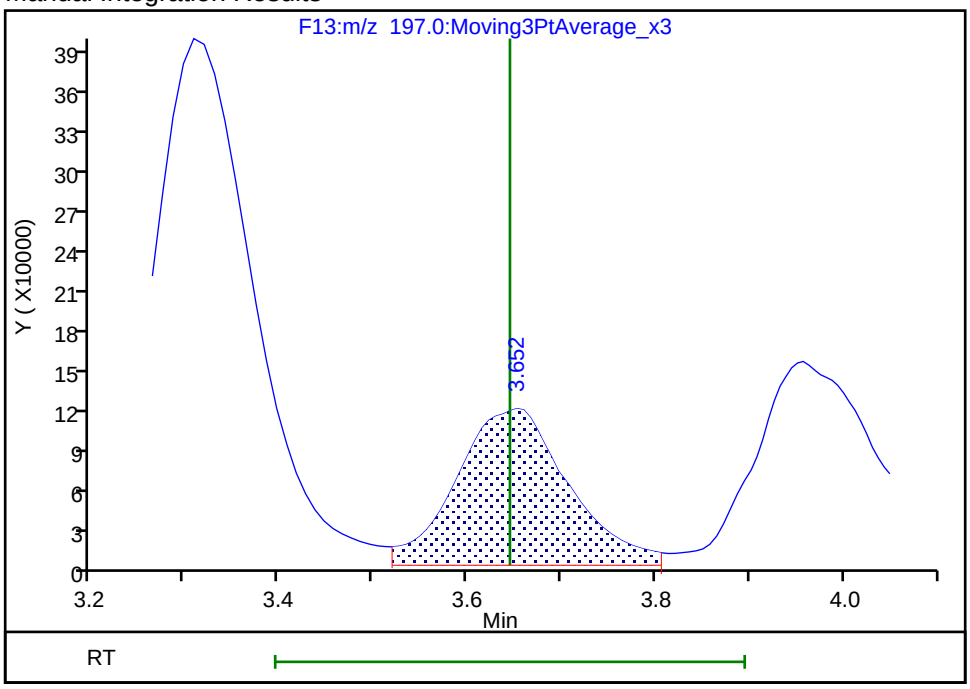
Not Detected
Expected RT: 3.65

Processing Integration Results



Manual Integration Results

RT: 3.65
Area: 976227
Amount: 20.040186
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:47:04
Audit Action: Manually Integrated Audit Reason: Assign Peak

Report Date: 14-Apr-2022 10:06:58 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

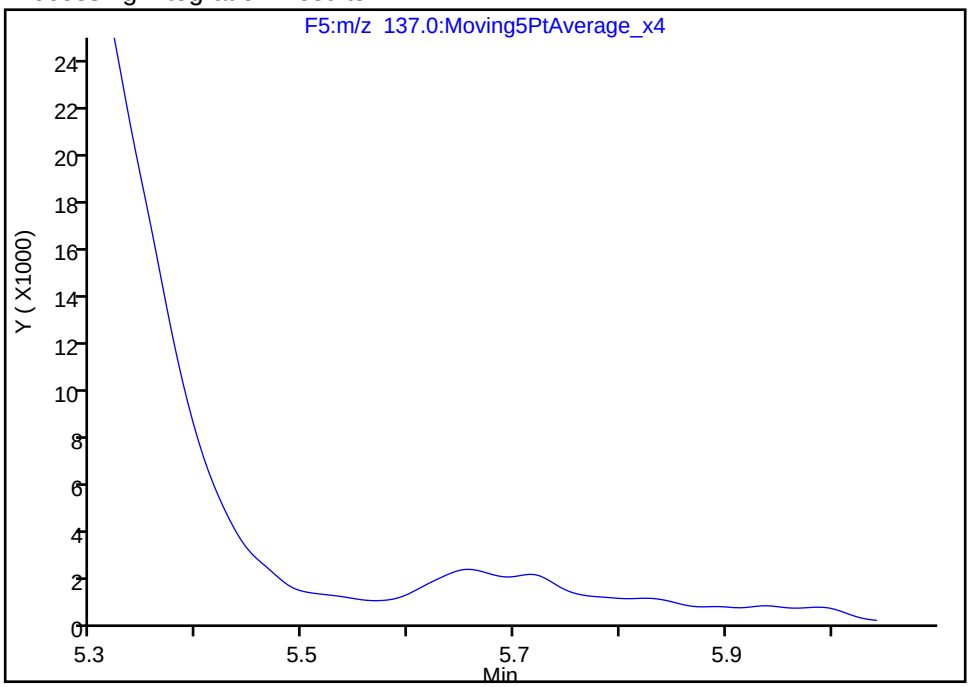
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08028.d				
Injection Date:	08-Apr-2022 12:32:58	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-18-B	Lab Sample ID:	280-160190-18		
Client ID:	29SB168 (3-4)				
Operator ID:	acm	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F5:SIR		

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

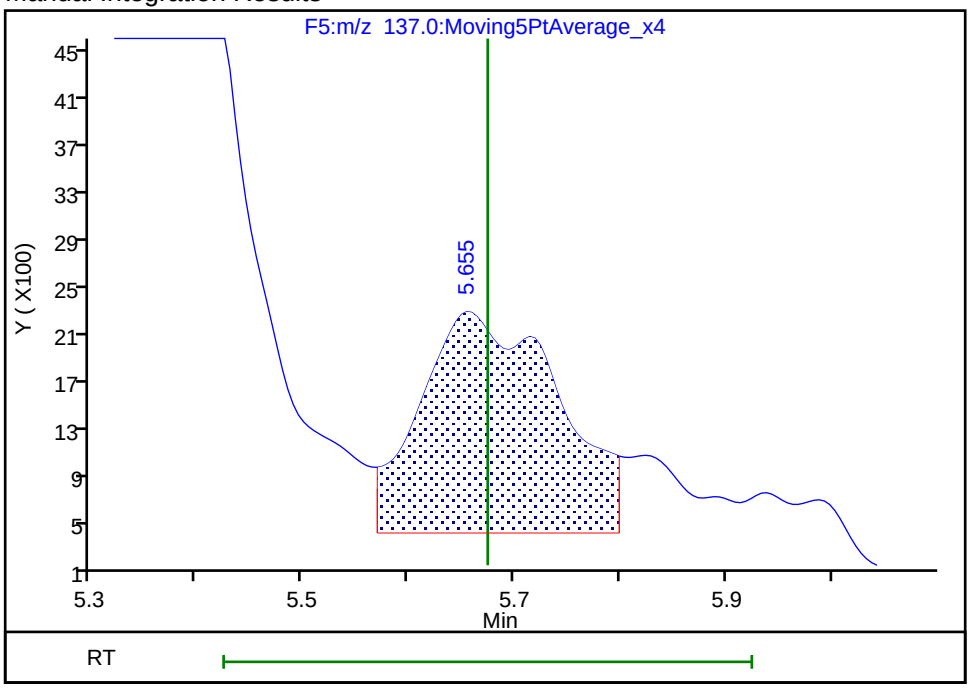
Not Detected
Expected RT: 5.67

Processing Integration Results



Manual Integration Results

RT: 5.65
Area: 16767
Amount: 3.515652
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:47:28
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:06:58 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

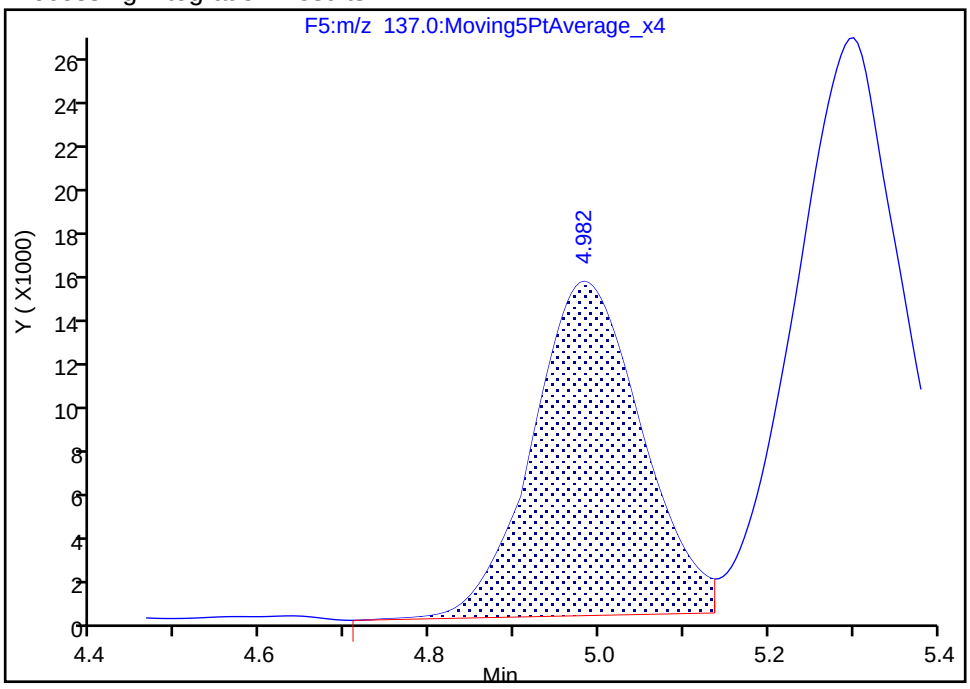
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08028.d				
Injection Date:	08-Apr-2022 12:32:58	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-18-B	Lab Sample ID:	280-160190-18		
Client ID:	29SB168 (3-4)				
Operator ID:	acm	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F5:SIR		

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

Signal: 1

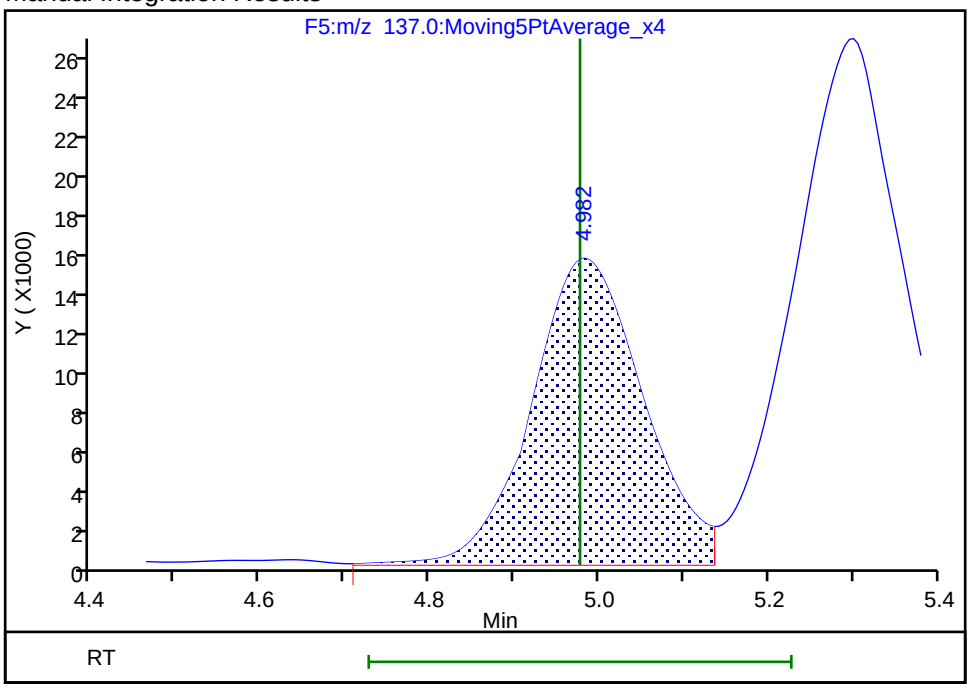
Processing Integration Results

RT: 4.98
Area: 135541
Amount: 13.485134
Amount Units: ug/l



Manual Integration Results

RT: 4.98
Area: 141729
Amount: 14.112592
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:47:22

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:06:58 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

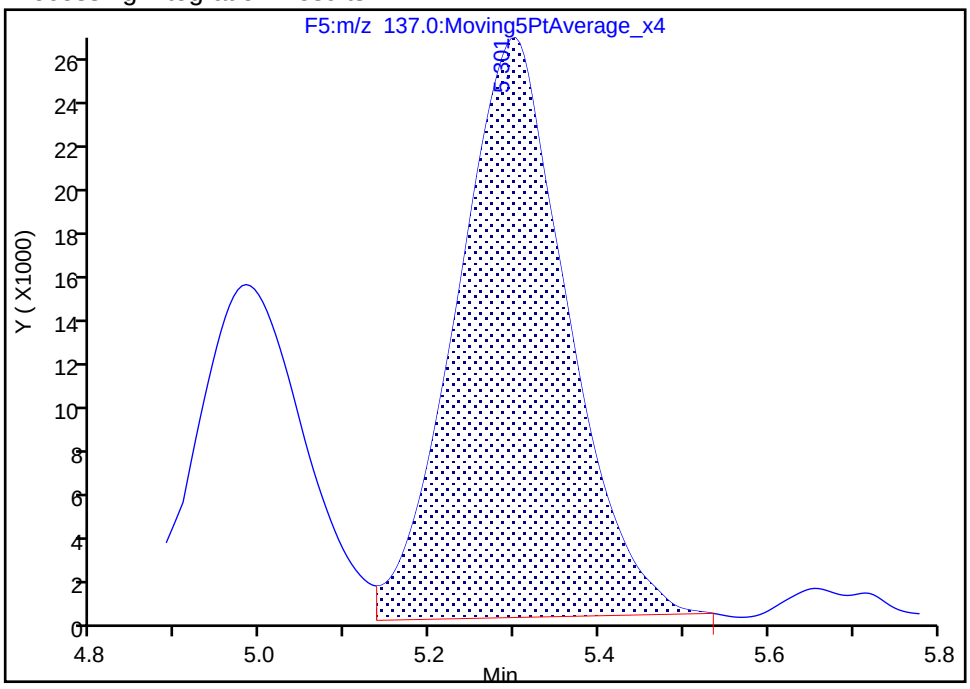
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08028.d				
Injection Date:	08-Apr-2022 12:32:58	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-18-B	Lab Sample ID:	280-160190-18		
Client ID:	29SB168 (3-4)				
Operator ID:	acm	ALS Bottle#:	25	Worklist Smp#:	28
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F5:SIR		

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

Signal: 1

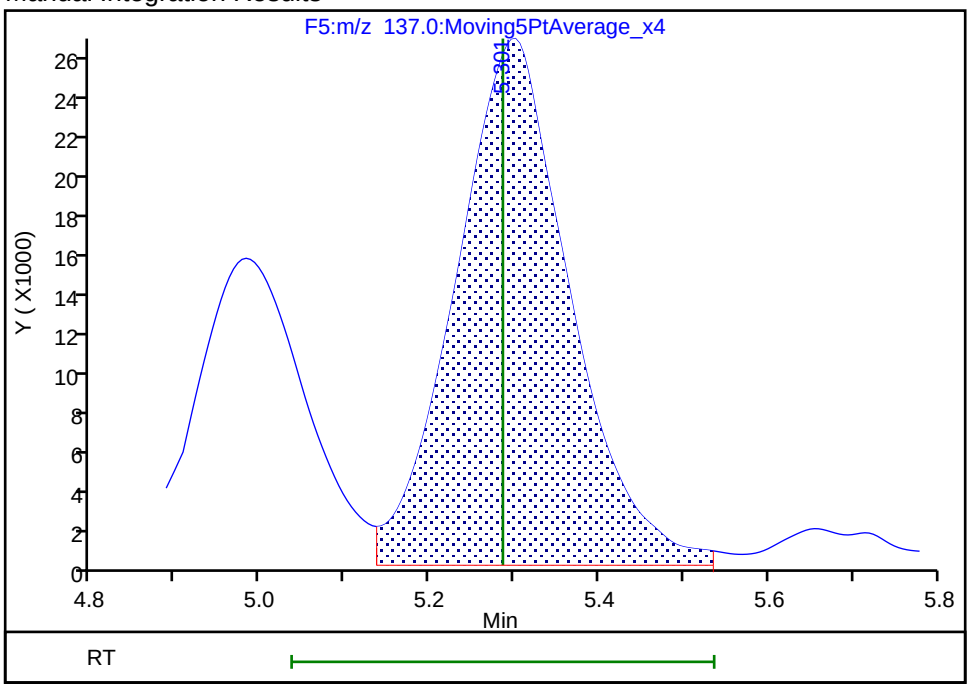
Processing Integration Results

RT: 5.30
Area: 235772
Amount: 27.007144
Amount Units: ug/l



Manual Integration Results

RT: 5.30
Area: 249289
Amount: 28.587429
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:47:22

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1

SDG No.:

Client Sample ID: 29SB168 (3-4) DL | Lab Sample ID: 280-160190-18 DL

Matrix: Solid | Lab File ID: ex422D12065.d

Analysis Method: 8321A | Date Collected: 03/24/2022 11:55

Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20

Sample wt/vol: 10.27(g) | Date Analyzed: 04/12/2022 21:26

Con. Extract Vol.: 40(mL) | Dilution Factor: 10

Injection Volume: 40(uL) | GC Column: IonPac ID: 2(mm)

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

Analysis Batch No.: 571614 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
118-96-7	2,4,6-Trinitrotoluene	1.8	D	0.97	0.49	0.36
121-14-2	2,4-Dinitrotoluene	1.0	D	0.97	0.49	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	85	D	68-140

Report Date: 13-Apr-2022 13:58:40 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12065.d
Lims ID: 280-160190-A-18-B
Client ID: 29SB168 (3-4)
Sample Type: Client
Inject. Date: 12-Apr-2022 21:26:25 ALS Bottle#: 58 Worklist Smp#: 66
Injection Vol: 40.0 ul Dil. Factor: 10.0000
Sample Info: 280-160190-A-18-B 10x
Misc. Info.: 04/08/2022 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\8321expDuPont.m
Limit Group: LC - 8321A Expl
Last Update: 13-Apr-2022 13:58:36 Calib Date: 12-Apr-2022 10:31:58
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d

Column 1 : Det: F1:SIR
Process Host: CTX1683

First Level Reviewer: meyera Date: 13-Apr-2022 13:46:30
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
360.9	1.965	1.964	0.001		203334	125.0	107	
5 MNX								
265.1	2.853	2.529	0.324	1.039	4209	-3.85	8.8	
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.1	2.745	2.798	-0.053		390541	125.0	367	
8 1,3,5-Trinitrobenzene								
213.1	3.459	3.458	0.001	0.785	41992	5.65	52.8	
11 Tetryl								
241.1	4.004	4.003	0.001	0.909	3323	0.4456	2.3	
* 12 1,3-Dinitrobenzene-d4								
172.1	4.405	4.461	-0.056		1016176	129.4	78.6	
33 3,5-Dinitroaniline								
183.1	4.761	4.760	0.001	1.081	13777	1.53	3.4	
15 2,4,6-Trinitrotoluene								
227.1	4.842	4.841	0.001	0.768	1318028	46.8	604	
$ 16 Nitrobenzene-d5								
128.1	4.923	4.962	-0.039	1.118	66509	8.51	25.1	
19 4-Amino-2,6-dinitrotoluene								
197.2	5.378	5.417	-0.039	0.853	45540	0.9042	9.2	
22 2-Amino-4,6-dinitrotoluene								
197.2	5.822	5.861	-0.039	0.924	83466	2.10	9.6	
23 2,6-Dinitrotoluene								
182.1	6.061	6.094	-0.033	0.961	95398	1.83	41.9	
* 24 2,4-dinitrotoluene-d3								
185.1	6.304	6.336	-0.032		2828976	125.0	645	
25 2,4-Dinitrotoluene								
182.1	6.365	6.367	-0.002	1.010	651146	25.8	212	

Report Date: 13-Apr-2022 13:58:40 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12065.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
28 o-Nitrotoluene 137.1	7.387	7.389	-0.002	1.172	15100	0.8757	7.3	
29 p-Nitrotoluene 137.1	7.843	7.875	-0.032	1.244	21807	1.79	10.7	

QC Flag Legend

Processing Flags

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

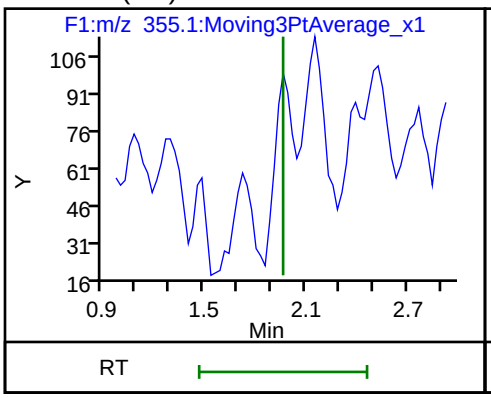
Report Date: 13-Apr-2022 13:58:40 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

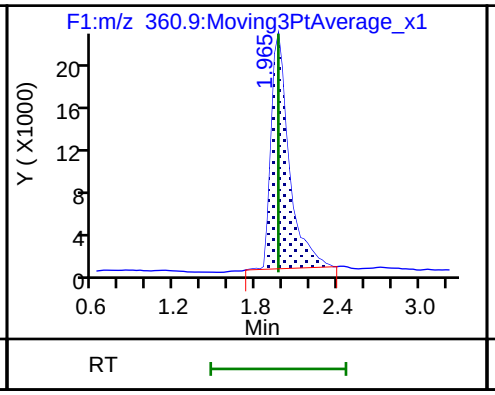
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12065.d

Injection Date:	12-Apr-2022 21:26:25	Instrument ID:	LC_LCMS4
Lims ID:	280-160190-A-18-B	Lab Sample ID:	280-160190-18
Client ID:	29SB168 (3-4)		
Operator ID:	acm	ALS Bottle#:	58 Worklist Smp#: 66
Injection Vol:	40.0 ul	Dil. Factor:	10.0000
Method:	8321expDuPont	Limit Group:	LC - 8321A Expl

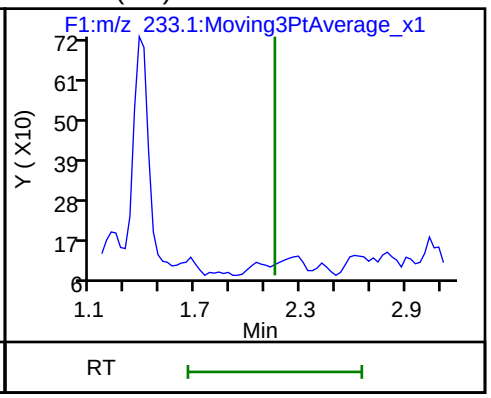
2 HMX (ND)



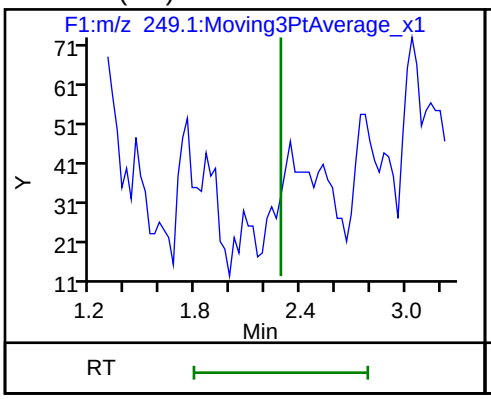
* 1 HMX-13C4



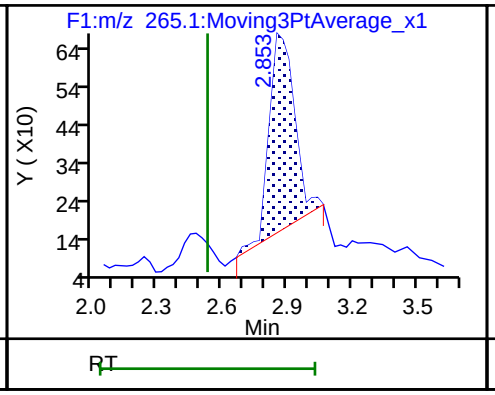
3 TNX (ND)



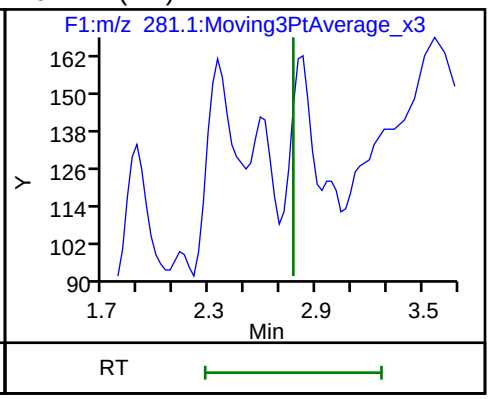
4 DNX (ND)



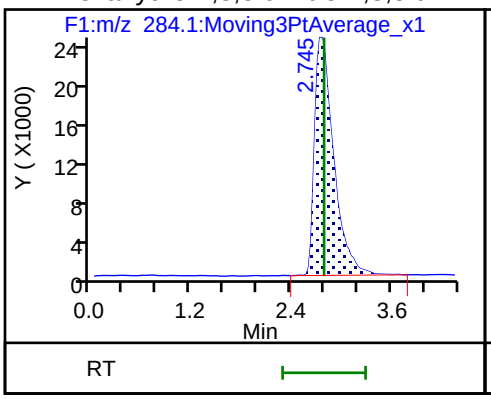
5 MNX



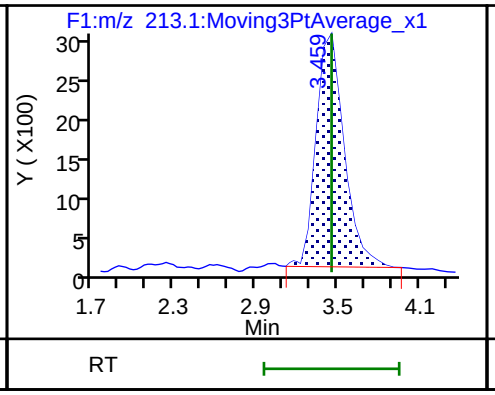
6 RDX (ND)



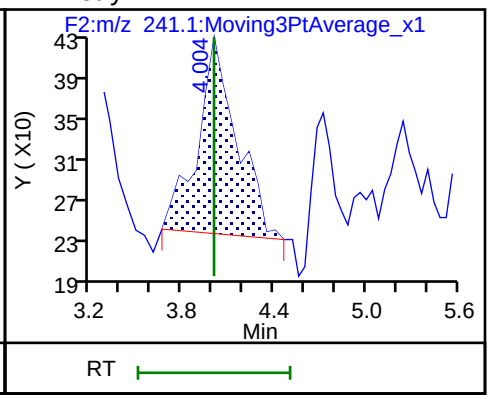
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t



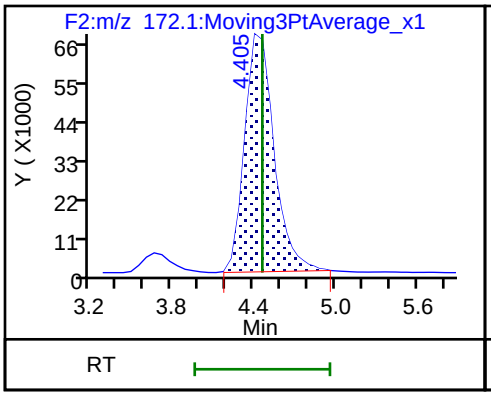
8 1,3,5-Trinitrobenzene



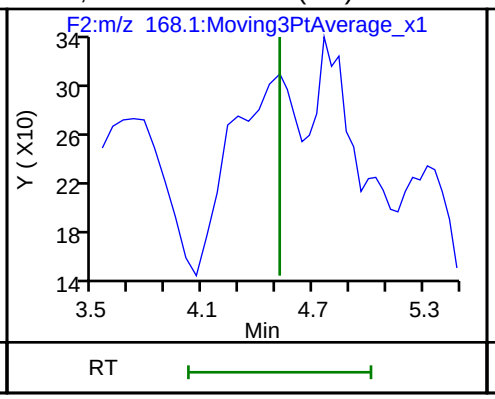
11 Tetryl



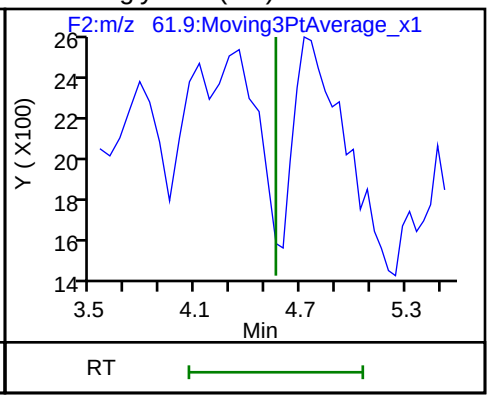
* 12 1,3-Dinitrobenzene-d4



13 1,3-Dinitrobenzene (ND)



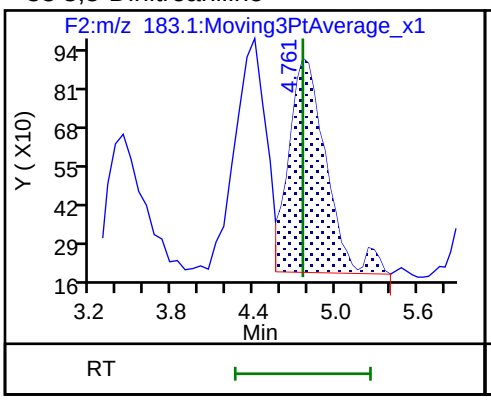
14 Nitroglycerin (ND)



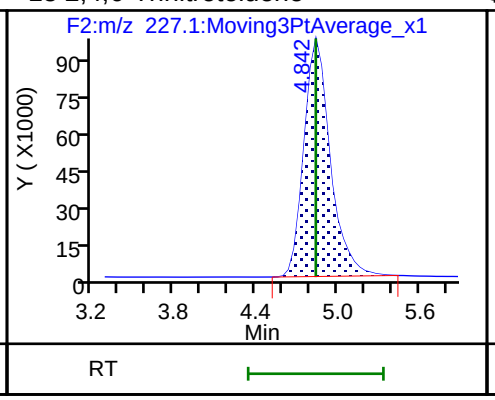
Report Date: 13-Apr-2022 13:58:40 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12065.d

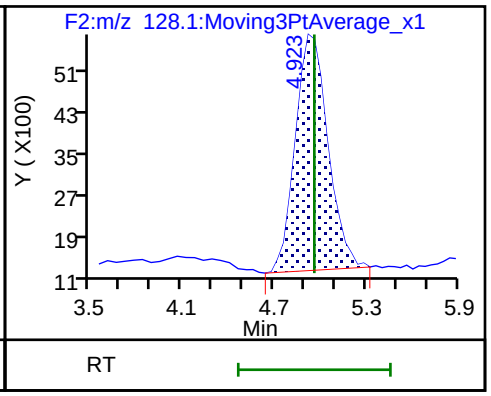
33 3,5-Dinitroaniline



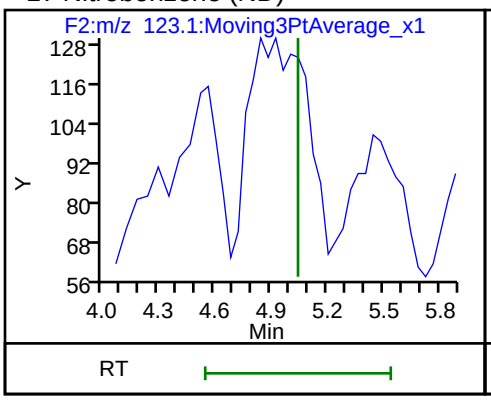
15 2,4,6-Trinitrotoluene



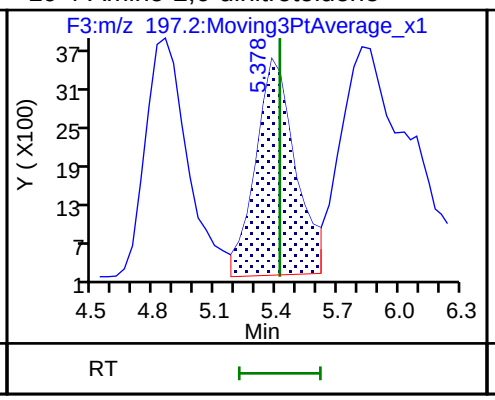
$ 16 Nitrobenzene-d5



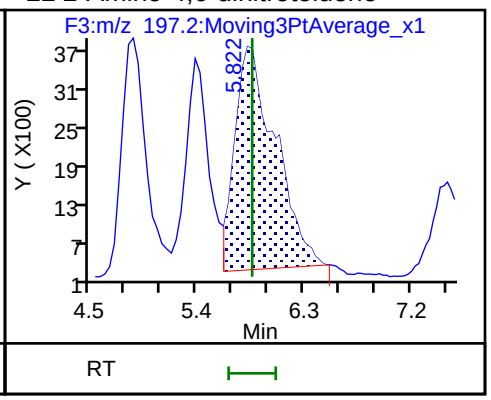
17 Nitrobenzene (ND)



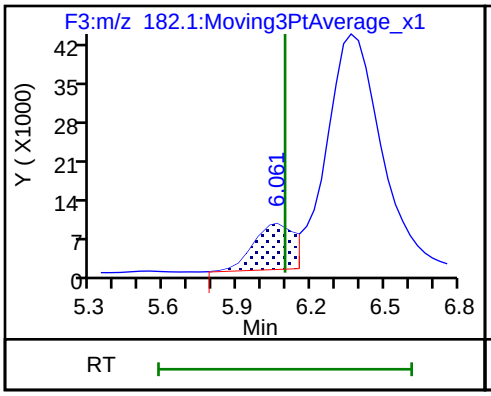
19 4-Amino-2,6-dinitrotoluene



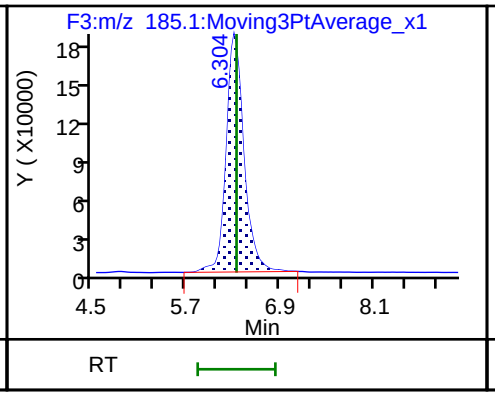
22 2-Amino-4,6-dinitrotoluene



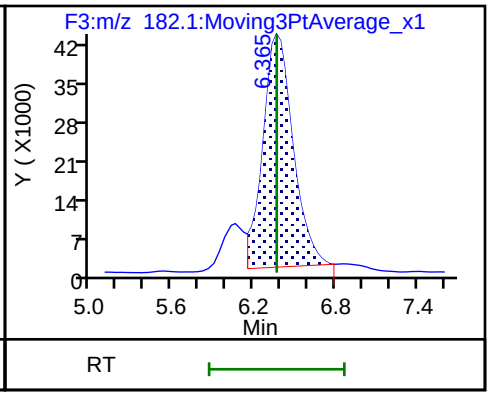
23 2,6-Dinitrotoluene



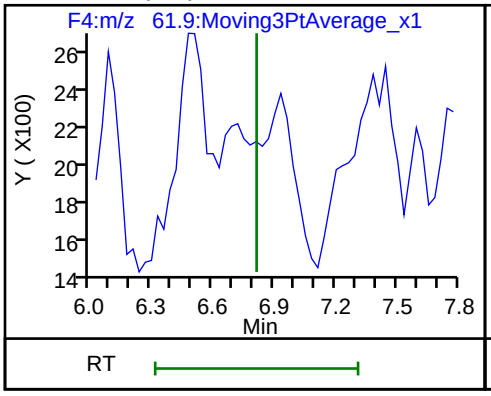
* 24 2,4-dinitrotoluene-d3



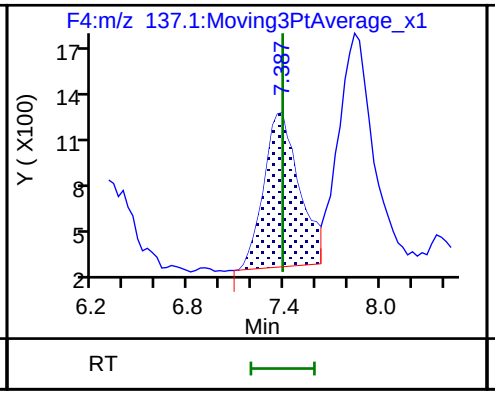
25 2,4-Dinitrotoluene



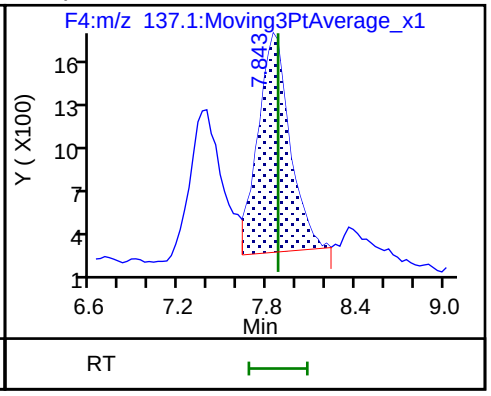
26 PETN (ND)



28 o-Nitrotoluene

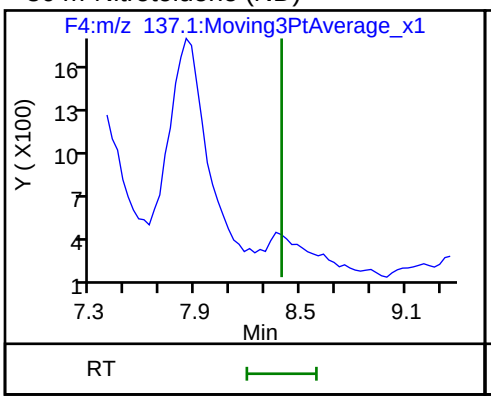


29 p-Nitrotoluene

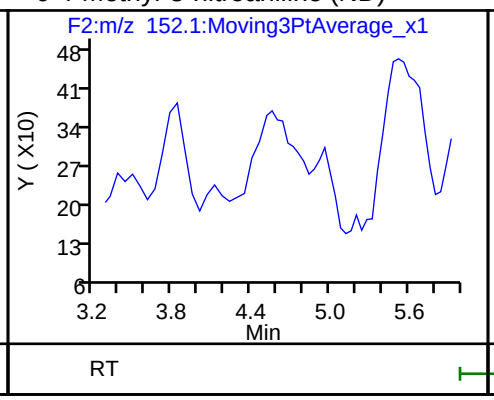


Report Date: 13-Apr-2022 13:58:40 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12065.d

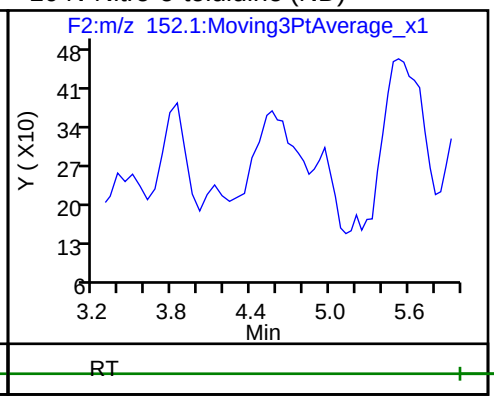
30 m-Nitrotoluene (ND)



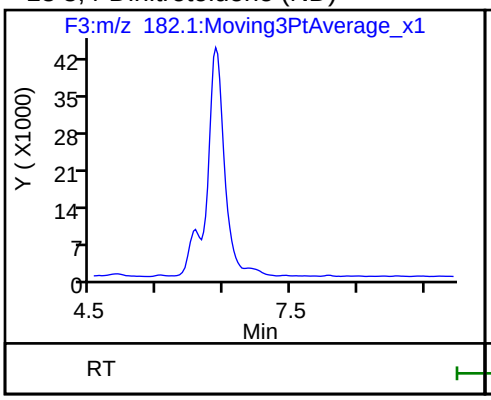
9 4-Methyl-3-nitroaniline (ND)



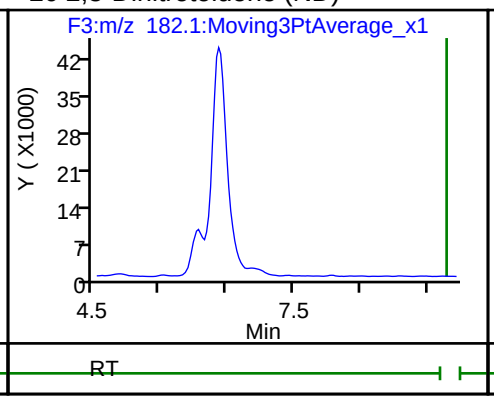
10 N-Nitro-o-toluidine (ND)



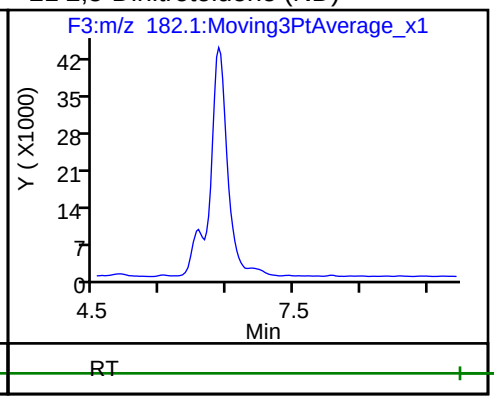
18 3,4-Dinitrotoluene (ND)



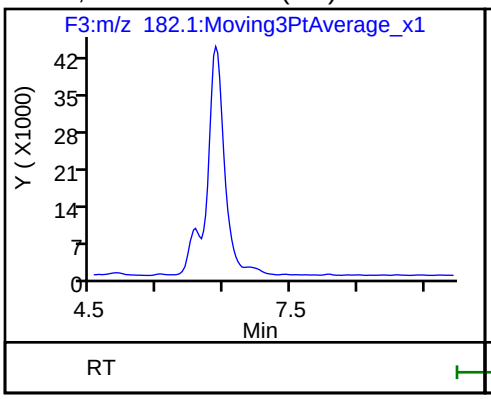
20 2,3-Dinitrotoluene (ND)



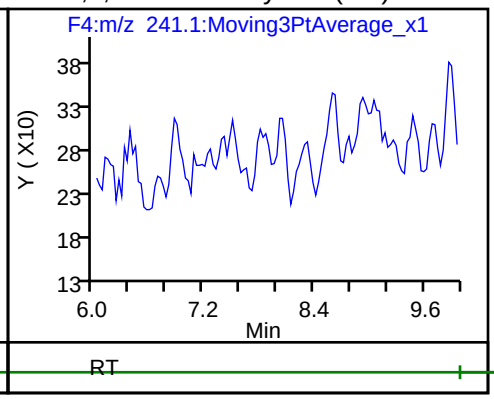
21 2,5-Dinitrotoluene (ND)



27 3,5-Dinitrotoluene (ND)



31 2,4,6-Trinitro-3-xylene (ND)



Report Date: 13-Apr-2022 13:58:40 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12065.d
Lims ID: 280-160190-A-18-B
Client ID: 29SB168 (3-4)
Sample Type: Client
Inject. Date: 12-Apr-2022 21:26:25 ALS Bottle#: 58 Worklist Smp#: 66
Injection Vol: 40.0 ul Dil. Factor: 10.0000
Sample Info: 280-160190-A-18-B 10x
Misc. Info.: 04/08/2022 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\8321expDuPont.m
Limit Group: LC - 8321A Expl
Last Update: 13-Apr-2022 13:58:36 Calib Date: 12-Apr-2022 10:31:58
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d

Column 1 : Det: F1:SIR
Process Host: CTX1683

First Level Reviewer: meyera Date: 13-Apr-2022 13:46:30

Compound	Amount Added	Amount Recovered	% Rec.
$ 16 Nitrobenzene-d5	100.3	8.51	8.49

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB168 (6-7) | Lab Sample ID: 280-160190-19
Matrix: Solid | Lab File ID: ex722D08029.d
Analysis Method: 8321A | Date Collected: 03/24/2022 11:58
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20
Sample wt/vol: 10.73(g) | Date Analyzed: 04/08/2022 12:39
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571224 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.13		0.093	0.047	0.042
99-65-0	1,3-Dinitrobenzene	0.047	U M	0.093	0.047	0.042
606-20-2	2,6-Dinitrotoluene	0.47		0.093	0.047	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.20	M	0.093	0.047	0.046
19406-51-0	4-Amino-2,6-dinitrotoluene	0.16	M	0.093	0.047	0.029
2691-41-0	HMX	0.047	U M Q	0.093	0.047	0.043
99-08-1	m-Nitrotoluene	0.045	J M	0.093	0.047	0.040
98-95-3	Nitrobenzene	0.047	U	0.10	0.047	0.035
55-63-0	Nitroglycerin	0.047	U M	0.093	0.047	0.027
88-72-2	o-Nitrotoluene	0.21		0.093	0.047	0.040
78-11-5	PETN	0.047	U	0.093	0.047	0.032
99-99-0	p-Nitrotoluene	0.15		0.093	0.047	0.046
121-82-4	RDX	0.047	U	0.11	0.047	0.040
479-45-8	Tetryl	0.047	U Q J1	0.093	0.047	0.036

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	90		68-140

Report Date: 14-Apr-2022 10:06:59 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08029.d
Lims ID: 280-160190-A-19-F
Client ID: 29SB168 (6-7)
Sample Type: Client
Inject. Date: 08-Apr-2022 12:39:34 ALS Bottle#: 26 Worklist Smp#: 29
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-19-F
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:52 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:49:23
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		101614	125.0	43.3	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		330405	125.0	38.0	
5 1,3,5-Trinitrobenzene								
213.0	2.310	2.322	-0.003	0.765	520188	34.6	38.1	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.008	0.011		1239880	129.4	265	
8 1,3-Dinitrobenzene								M
168.0	3.029	3.051	-0.011	1.003	71014	6.43	5.5	M
28 3,5-Dinitroaniline								
183.0	3.230	3.231	0.011	1.070	311775	7.35	48.5	
10 2,4,6-Trinitrotoluene								E
227.0	3.310	3.316	0.0	0.765	24205179	378.9	406	E
$ 11 Nitrobenzene-d5								
128.0	3.348	3.354	0.0	0.774	532420	90.7	44.7	
14 4-Amino-2,6-dinitrotoluene								M
197.0	3.638	3.652	-0.007	0.841	2140568	44.2	5.0	M
16 2-Amino-4,6-dinitrotoluene								M
197.0	3.970	3.971	0.007	0.918	3260529	52.8	7.5	M
17 2,6-Dinitrotoluene								
182.0	4.132	4.138	0.006	0.956	8093880	125.3	23.3	
* 18 2,4-dinitrotoluene-d3								
185.1	4.324	4.315	0.009		3903095	125.0	118	
19 2,4-Dinitrotoluene								E
182.0	4.365	4.373	0.0	1.009	47094695	1430.0	117	E
22 o-Nitrotoluene								
137.0	4.987	4.987	0.010	1.154	563560	56.3	187	

Report Date: 14-Apr-2022 10:06:59 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08029.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
23 p-Nitrotoluene								
137.0	5.286	5.297	0.0	1.223	349190	39.8	110	
24 m-Nitrotoluene								M
137.0	5.680	5.686	0.005	1.314	61804	12.2	18.1	M

QC Flag Legend

Processing Flags
E - Exceeded Maximum Amount
Review Flags
M - Manually Integrated

Reagents:

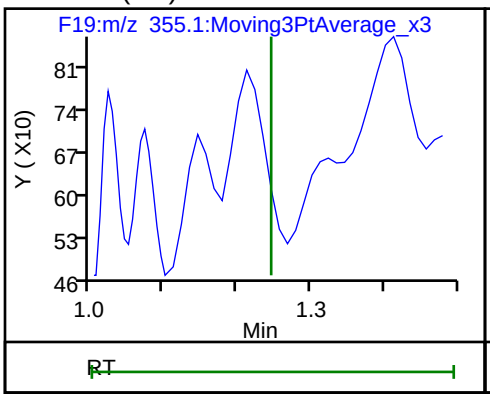
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 14-Apr-2022 10:06:59 Chrom Revision: 2.3 12-Apr-2022 20:29:44

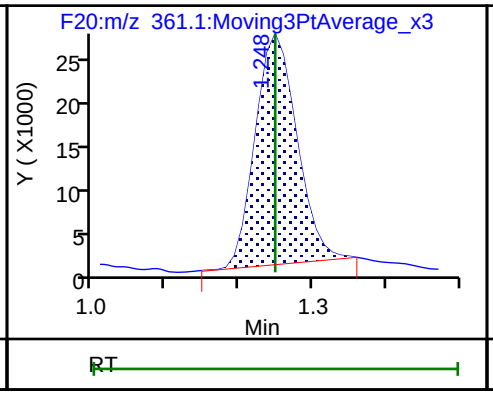
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08029.d
Injection Date: 08-Apr-2022 12:39:34 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-19-F Lab Sample ID: 280-160190-19
Client ID: 29SB168 (6-7)
Operator ID: acm ALS Bottle#: 26 Worklist Smp#: 29
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

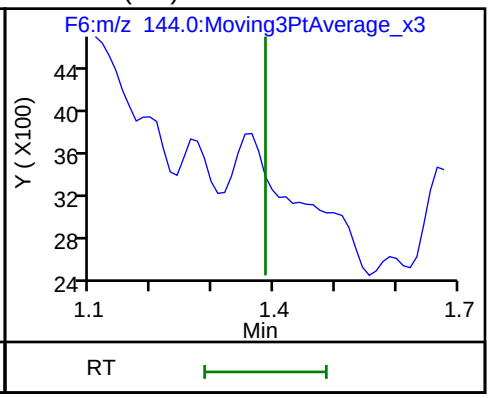
2 HMX (ND)



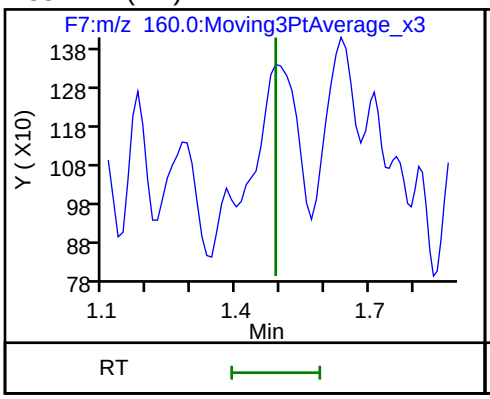
* 1 HMX-13C4



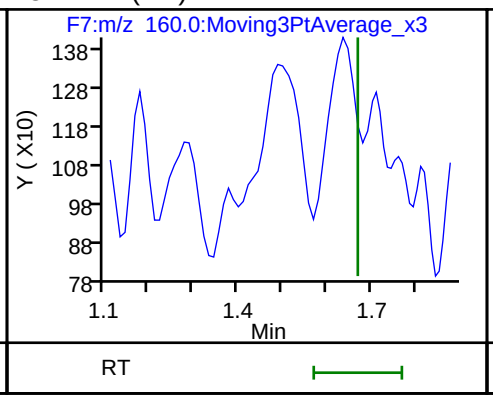
36 TNX (ND)



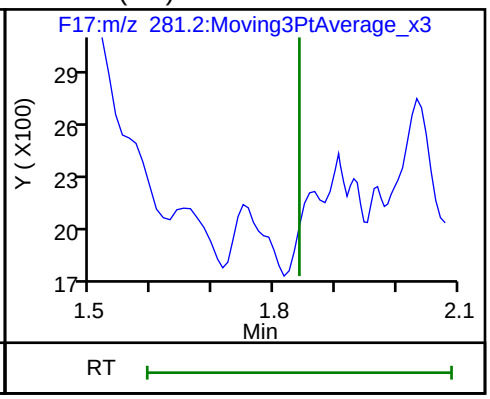
33 DNX (ND)



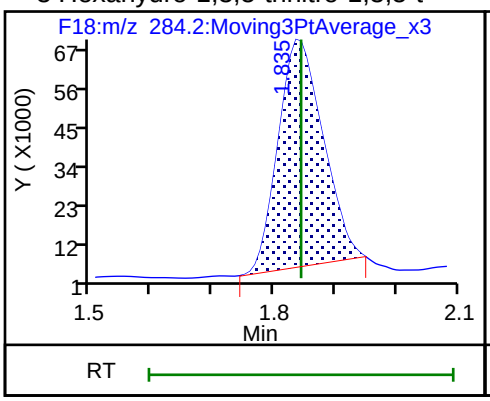
34 MNX (ND)



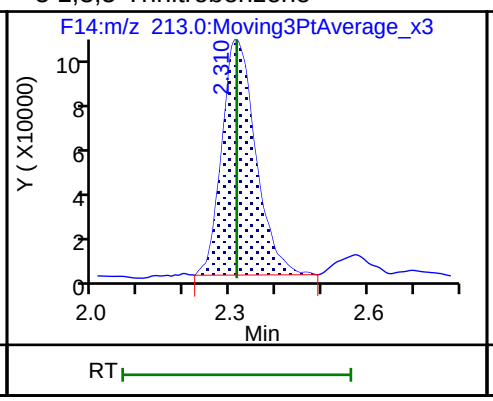
4 RDX (ND)



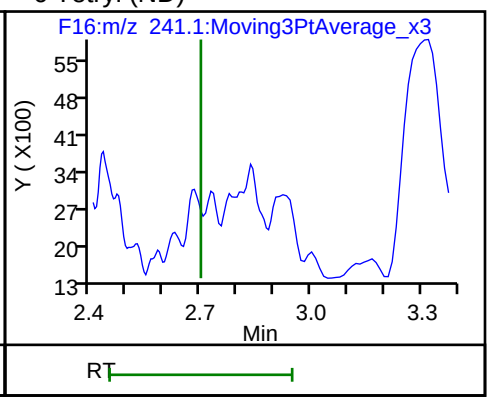
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



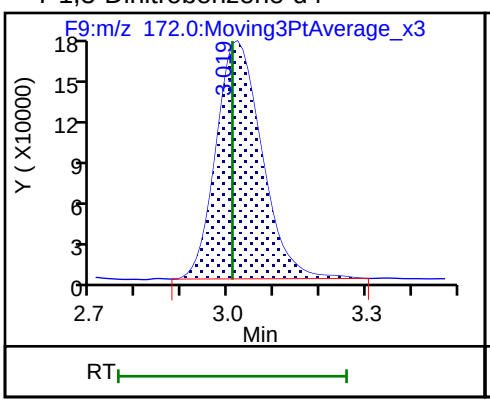
5 1,3,5-Trinitrobenzene



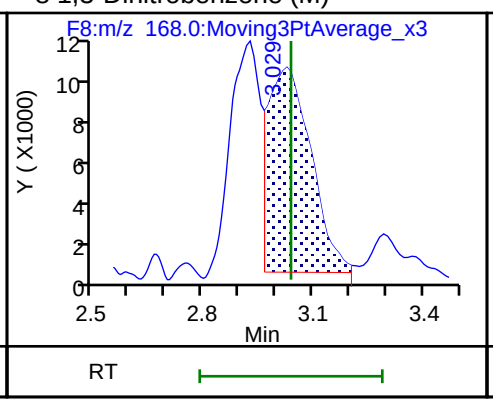
6 Tetryl (ND)



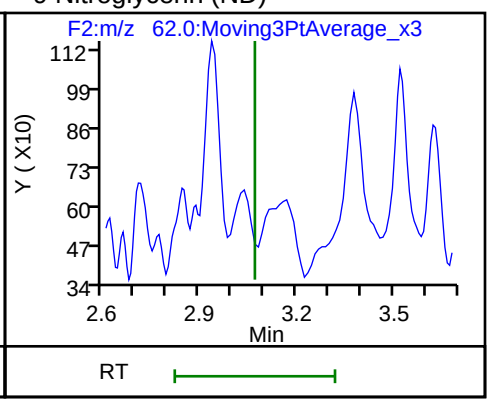
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (M)

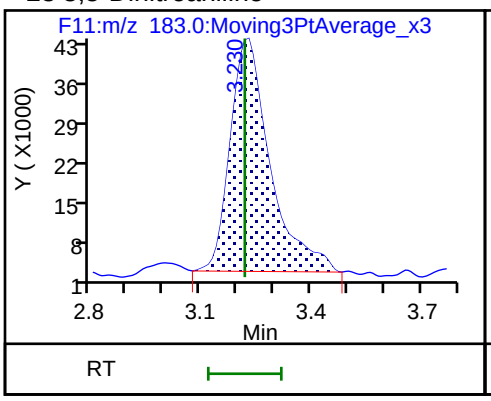


9 Nitroglycerin (ND)

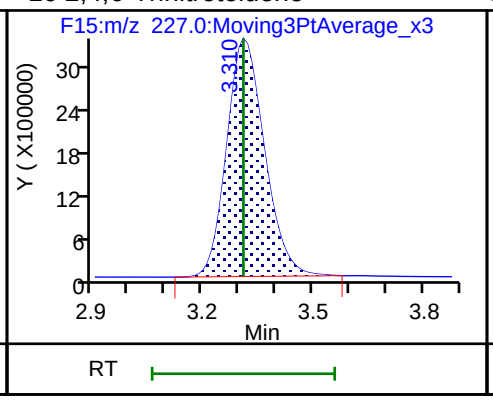


Report Date: 14-Apr-2022 10:06:59 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08029.d

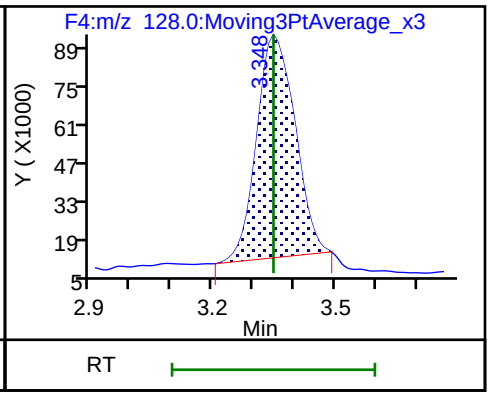
28 3,5-Dinitroaniline



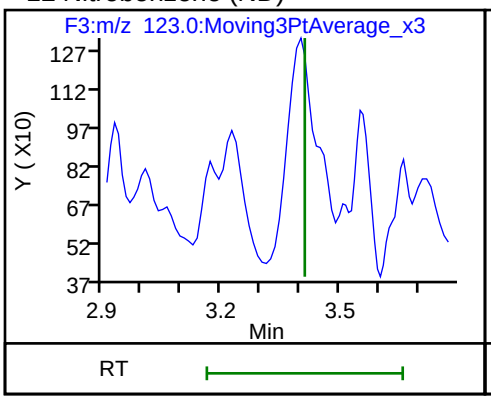
10 2,4,6-Trinitrotoluene



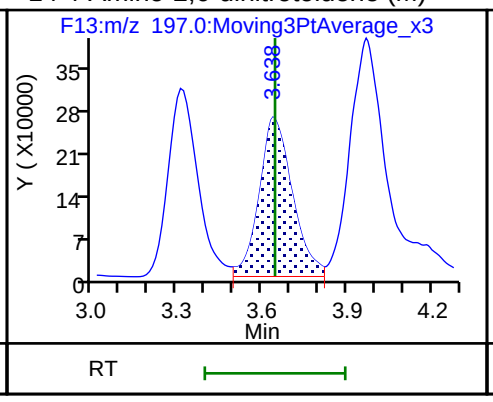
$ 11 Nitrobenzene-d5



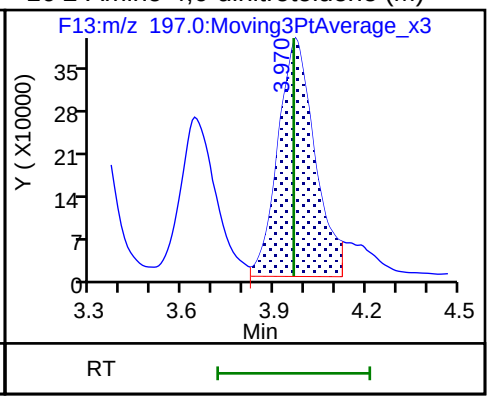
12 Nitrobenzene (ND)



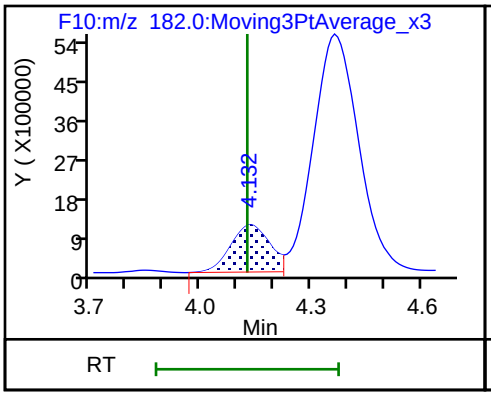
14 4-Amino-2,6-dinitrotoluene (M)



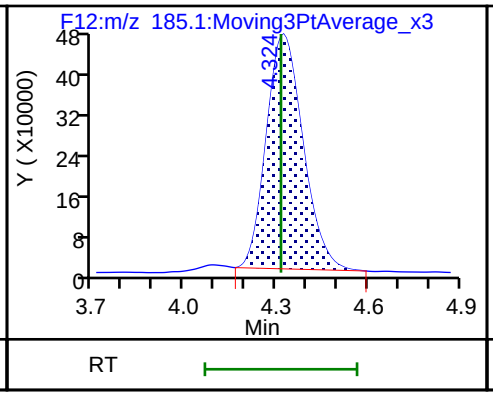
16 2-Amino-4,6-dinitrotoluene (M)



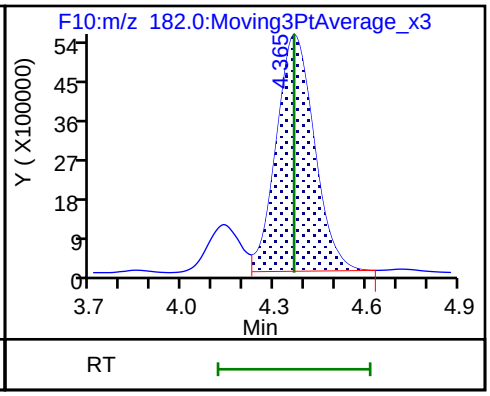
17 2,6-Dinitrotoluene



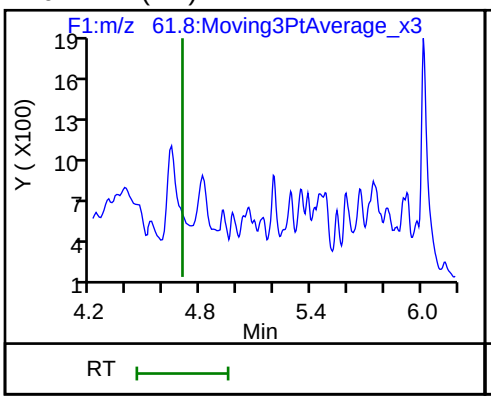
* 18 2,4-dinitrotoluene-d3



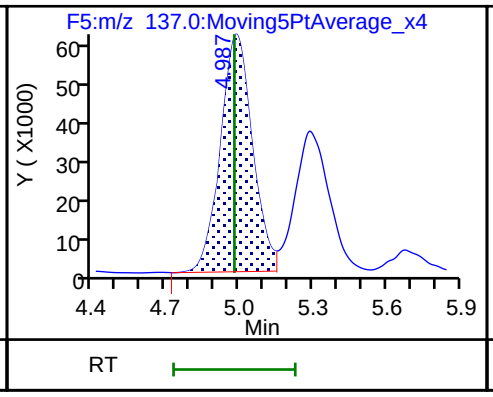
19 2,4-Dinitrotoluene



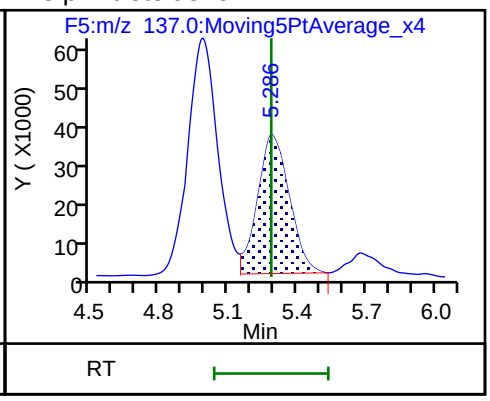
20 PETN (ND)



22 o-Nitrotoluene



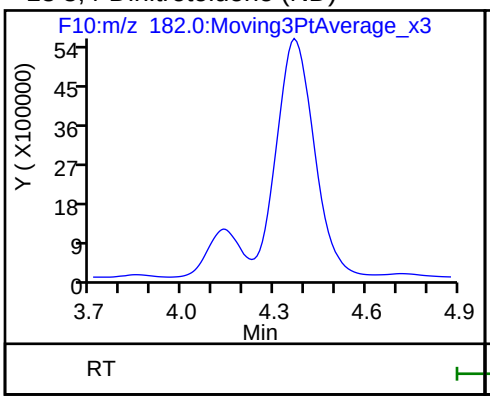
23 p-Nitrotoluene



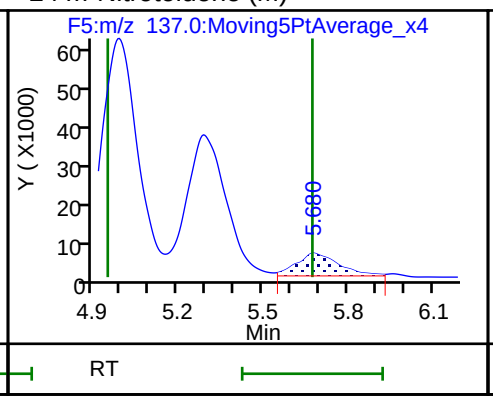
Report Date: 14-Apr-2022 10:06:59 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08029.d

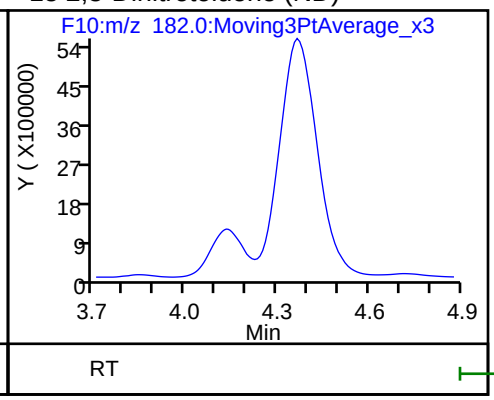
13 3,4-Dinitrotoluene (ND)



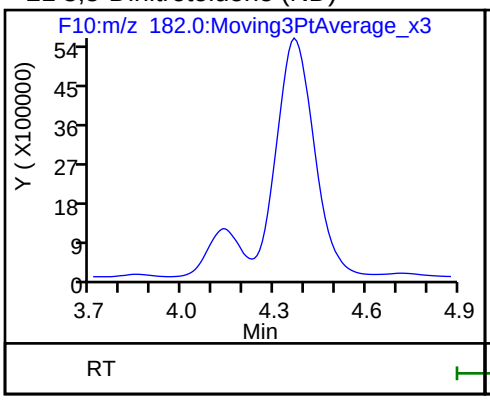
24 m-Nitrotoluene (M)



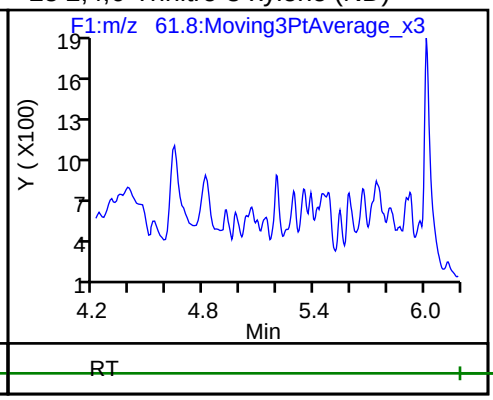
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 14-Apr-2022 10:06:59 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08029.d
Lims ID: 280-160190-A-19-F
Client ID: 29SB168 (6-7)
Sample Type: Client
Inject. Date: 08-Apr-2022 12:39:34 ALS Bottle#: 26 Worklist Smp#: 29
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-19-F
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:52 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:49:23

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	90.7	90.44

Report Date: 14-Apr-2022 10:06:59 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08029.d

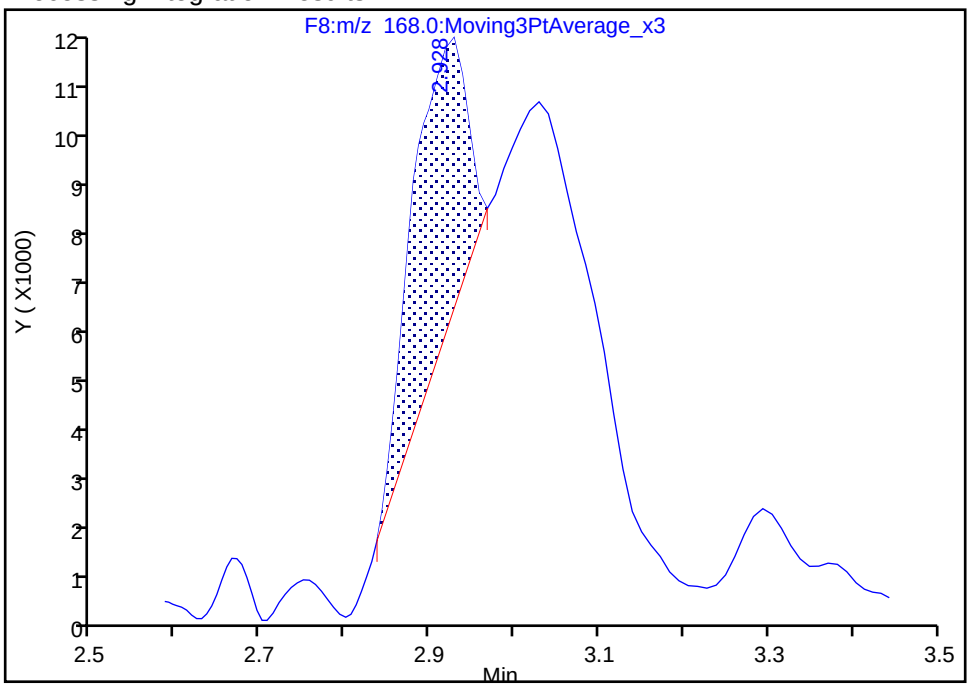
Injection Date:	08-Apr-2022 12:39:34	Instrument ID:	LC_LCMS7
Lims ID:	280-160190-A-19-F	Lab Sample ID:	280-160190-19
Client ID:	29SB168 (6-7)		
Operator ID:	acm	ALS Bottle#:	26 Worklist Smp#: 29
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F8:SIR

8 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

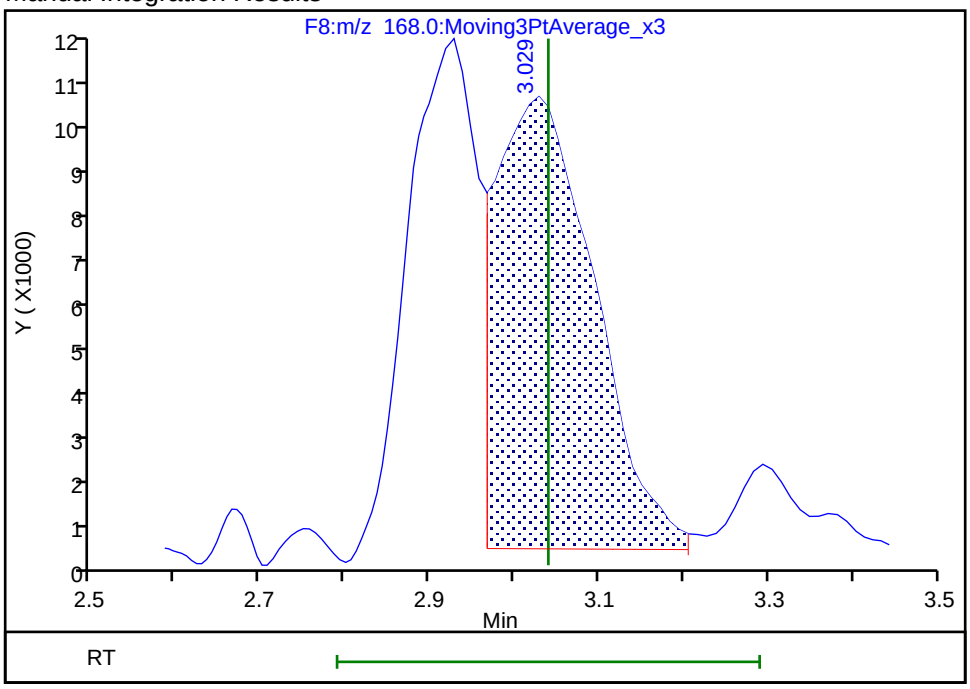
Processing Integration Results

RT: 2.93
Area: 24201
Amount: 1.902294
Amount Units: ug/l



Manual Integration Results

RT: 3.03
Area: 71014
Amount: 6.429257
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:48:50

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:06:59 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

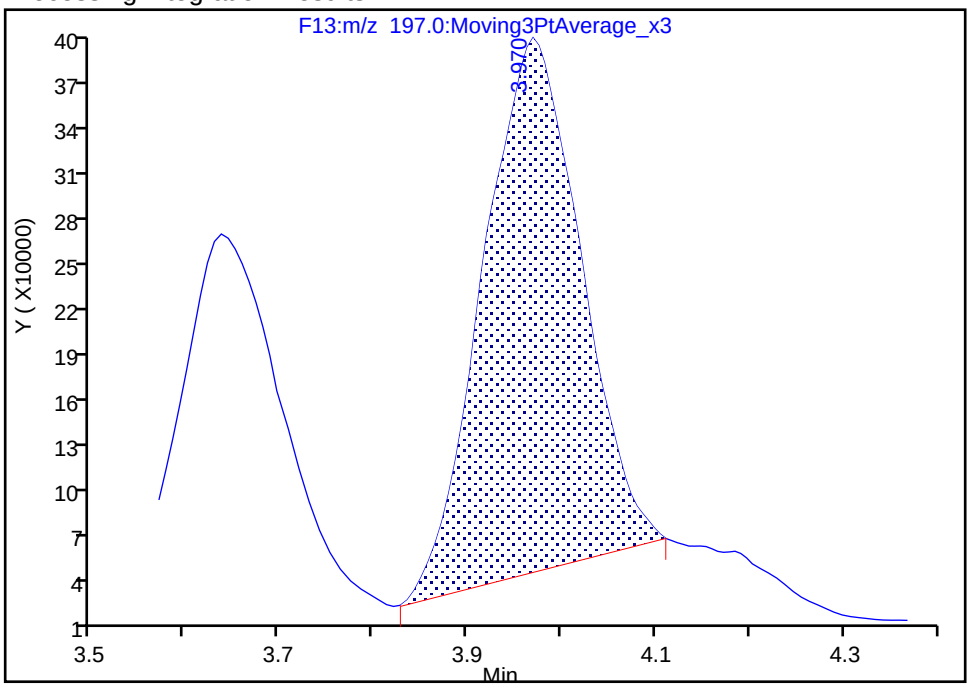
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08029.d				
Injection Date:	08-Apr-2022 12:39:34	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-19-F	Lab Sample ID:	280-160190-19		
Client ID:	29SB168 (6-7)				
Operator ID:	acm	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

16 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

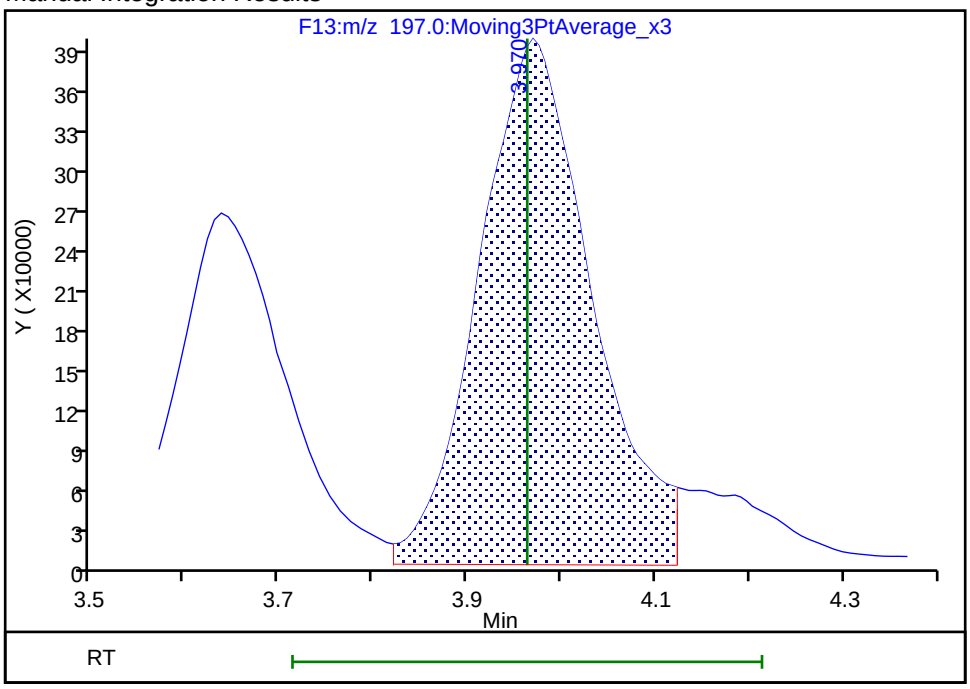
Processing Integration Results

RT: 3.97
Area: 2568766
Amount: 41.478016
Amount Units: ug/l



Manual Integration Results

RT: 3.97
Area: 3260529
Amount: 52.779516
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:49:08

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:06:59 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

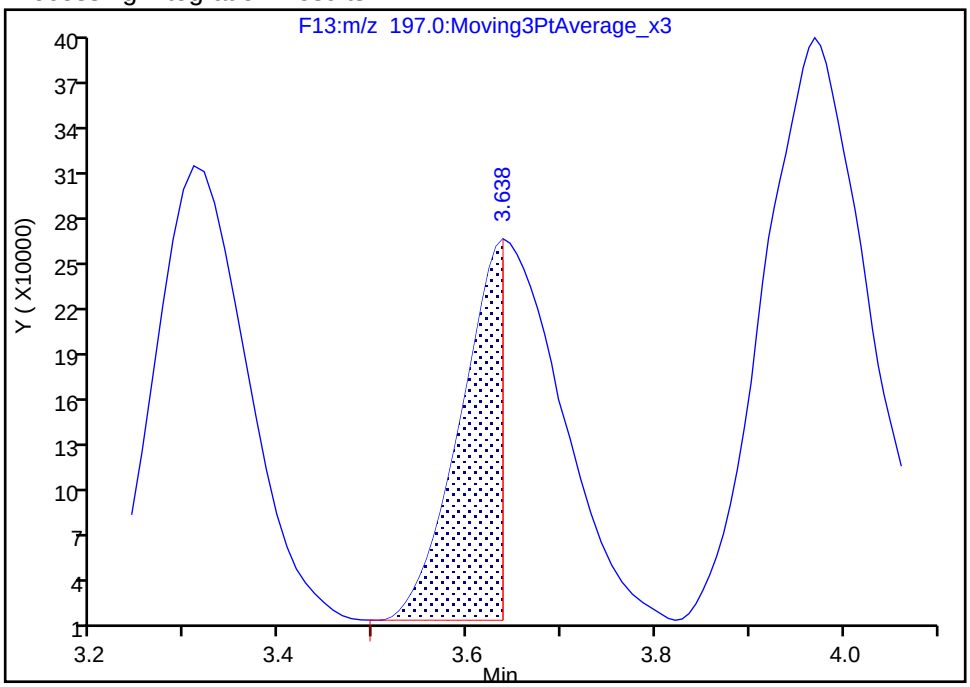
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08029.d				
Injection Date:	08-Apr-2022 12:39:34	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-19-F	Lab Sample ID:	280-160190-19		
Client ID:	29SB168 (6-7)				
Operator ID:	acm	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

14 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

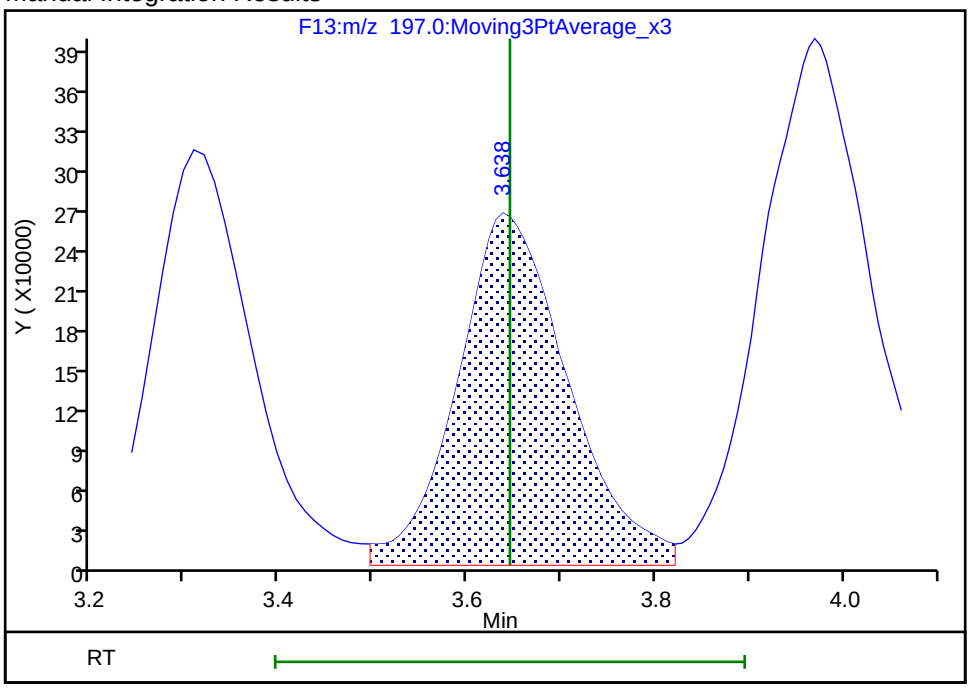
Processing Integration Results

RT: 3.64
Area: 753111
Amount: 15.159489
Amount Units: ug/l



Manual Integration Results

RT: 3.64
Area: 2140568
Amount: 44.195642
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:49:01

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:06:59 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08029.d

Injection Date:	08-Apr-2022 12:39:34	Instrument ID:	LC_LCMS7
Lims ID:	280-160190-A-19-F	Lab Sample ID:	280-160190-19
Client ID:	29SB168 (6-7)		
Operator ID:	acm	ALS Bottle#:	26 Worklist Smp#: 29
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F5:SIR

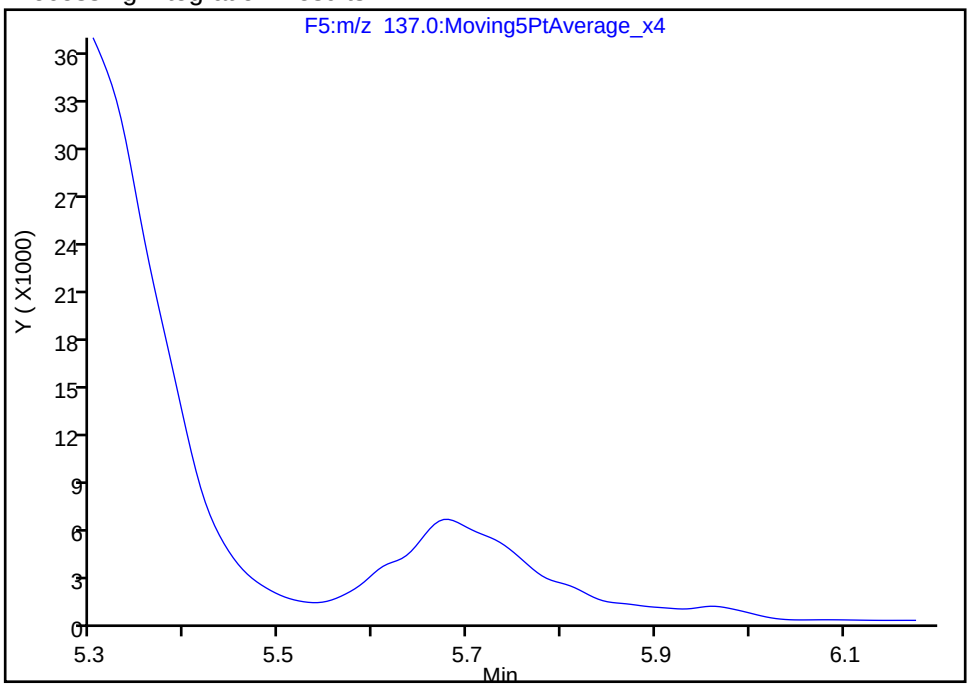
24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

Not Detected

Expected RT: 5.67

Processing Integration Results



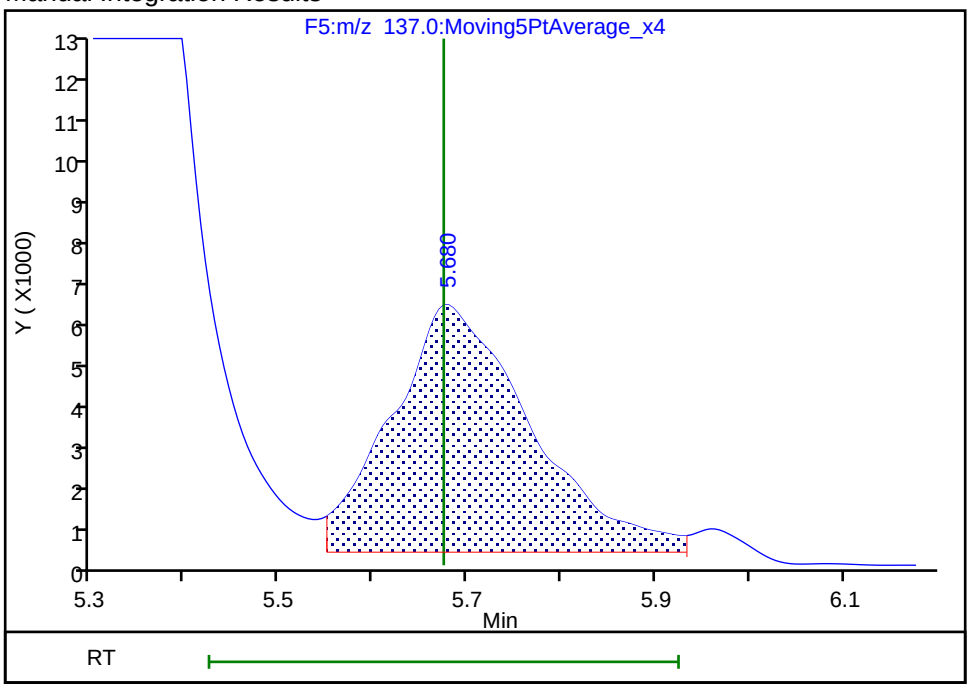
Manual Integration Results

RT: 5.68

Area: 61804

Amount: 12.181557

Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:49:17

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1

SDG No.:

Client Sample ID: 29SB168 (6-7) DL | Lab Sample ID: 280-160190-19 DL

Matrix: Solid | Lab File ID: ex422D12066.d

Analysis Method: 8321A | Date Collected: 03/24/2022 11:58

Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20

Sample wt/vol: 10.73(g) | Date Analyzed: 04/12/2022 21:37

Con. Extract Vol.: 40(mL) | Dilution Factor: 10

Injection Volume: 40(uL) | GC Column: IonPac ID: 2(mm)

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

Analysis Batch No.: 571614 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
118-96-7	2,4,6-Trinitrotoluene	1.4	D J1	0.93	0.47	0.34
121-14-2	2,4-Dinitrotoluene	5.1	D J1	0.93	0.47	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	92	D	68-140

Report Date: 13-Apr-2022 13:58:41 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12066.d
Lims ID: 280-160190-A-19-F
Client ID: 29SB168 (6-7)
Sample Type: Client
Inject. Date: 12-Apr-2022 21:37:57 ALS Bottle#: 59 Worklist Smp#: 67
Injection Vol: 40.0 ul Dil. Factor: 10.0000
Sample Info: 280-160190-A-19-F 10x
Misc. Info.: 04/08/2022 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\8321expDuPont.m
Limit Group: LC - 8321A Expl
Last Update: 13-Apr-2022 13:58:36 Calib Date: 12-Apr-2022 10:31:58
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d

Column 1 : Det: F1:SIR
Process Host: CTX1683

First Level Reviewer: meyera Date: 13-Apr-2022 13:47:17
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
360.9	1.965	1.964	0.001		180597	125.0	120	
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.1	2.772	2.798	-0.026		378911	125.0	290	
8 1,3,5-Trinitrobenzene								
213.1	3.401	3.458	-0.057	0.772	27337	3.69	19.8	
* 12 1,3-Dinitrobenzene-d4								
172.1	4.404	4.461	-0.057		1088963	129.4	77.6	
13 1,3-Dinitrobenzene								
168.1	4.233	4.518	-0.285	0.961	8780	0.9588	3.6	
33 3,5-Dinitroaniline								
183.1	4.761	4.760	0.001	1.081	12925	1.47	3.5	
15 2,4,6-Trinitrotoluene								
227.1	4.842	4.841	0.001	0.768	1103003	36.5	1107	
$ 16 Nitrobenzene-d5								
128.1	4.923	4.962	-0.039	1.118	76212	9.19	12.8	
19 4-Amino-2,6-dinitrotoluene								M
197.2	5.378	5.417	-0.039	0.853	112157	3.13	12.9	M
22 2-Amino-4,6-dinitrotoluene								M
197.2	5.822	5.861	-0.039	0.924	191972	5.14	17.0	M
23 2,6-Dinitrotoluene								
182.1	6.061	6.094	-0.033	0.961	413485	8.27	65.9	
* 24 2,4-dinitrotoluene-d3								
185.1	6.304	6.336	-0.032		3071258	125.0	806	
25 2,4-Dinitrotoluene								
182.1	6.365	6.367	-0.002	1.010	3793663	136.9	406	
28 o-Nitrotoluene								M
137.1	7.357	7.389	-0.032	1.167	65130	5.39	18.9	M

Report Date: 13-Apr-2022 13:58:41 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12066.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
29 p-Nitrotoluene								M
137.1	7.843	7.875	-0.032	1.244	40681	3.69	9.8	M
30 m-Nitrotoluene								M
137.1	8.389	8.391	-0.002	1.331	10780	1.09	2.5	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

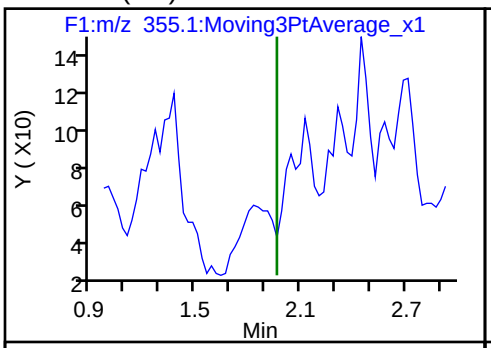
Report Date: 13-Apr-2022 13:58:41 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12066.d

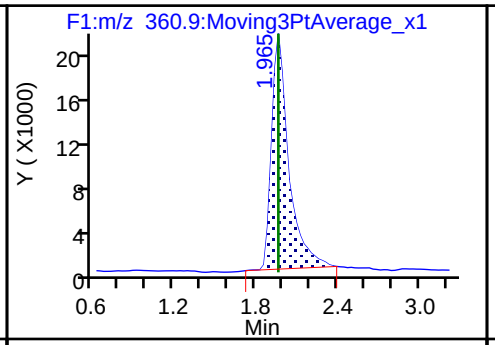
Injection Date:	12-Apr-2022 21:37:57	Instrument ID:	LC_LCMS4
Lims ID:	280-160190-A-19-F	Lab Sample ID:	280-160190-19
Client ID:	29SB168 (6-7)		
Operator ID:	acm	ALS Bottle#:	59 Worklist Smp#: 67
Injection Vol:	40.0 ul	Dil. Factor:	10.0000
Method:	8321expDuPont	Limit Group:	LC - 8321A Expl

2 HMX (ND)



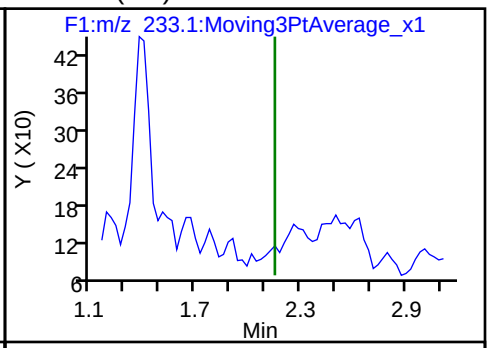
RT

* 1 HMX-13C4



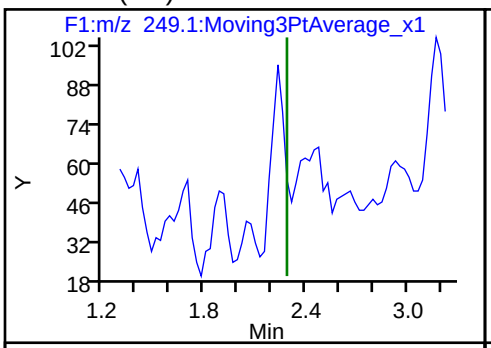
RT

3 TNX (ND)



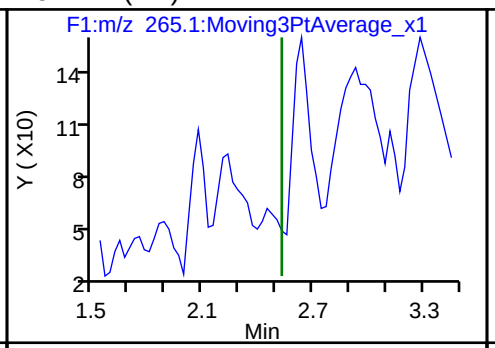
RT

4 DNX (ND)



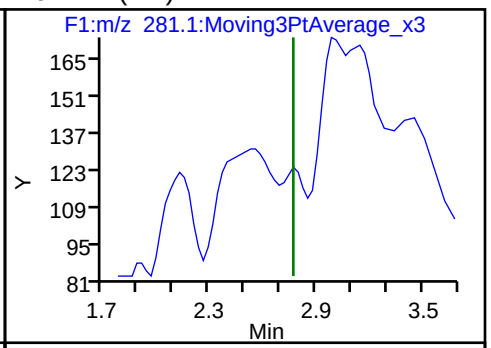
RT

5 MNX (ND)



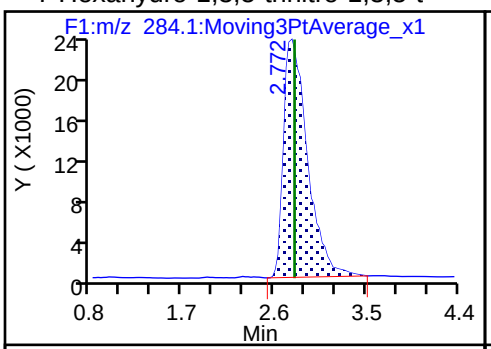
RT

6 RDX (ND)



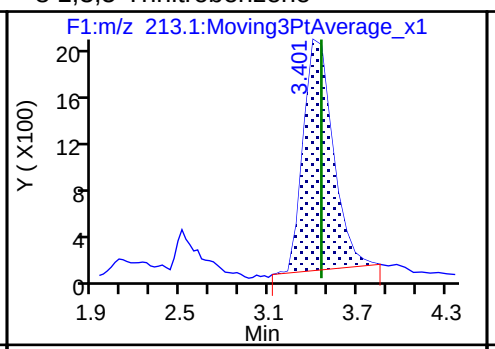
RT

* 7 Hexahydro-1,3,5-trinitro-1,3,5-t



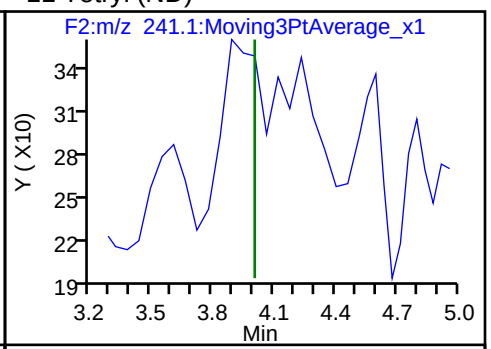
RT

8 1,3,5-Trinitrobenzene



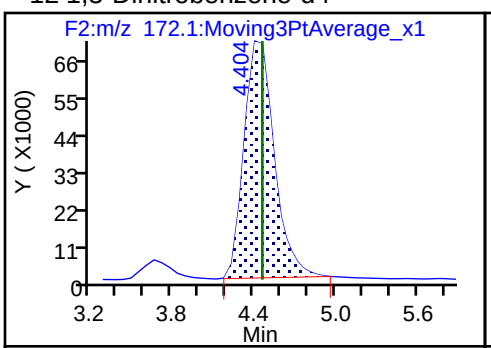
RT

11 Tetryl (ND)



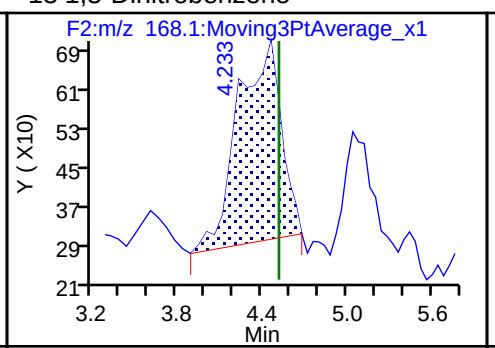
RT

* 12 1,3-Dinitrobenzene-d4



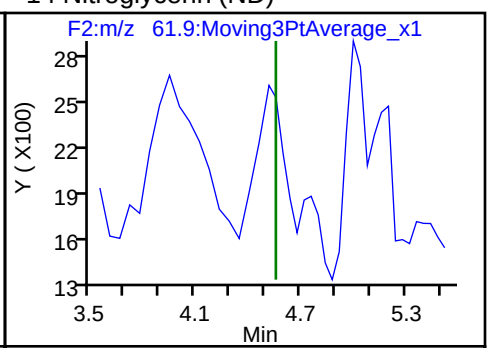
RT

13 1,3-Dinitrobenzene



RT

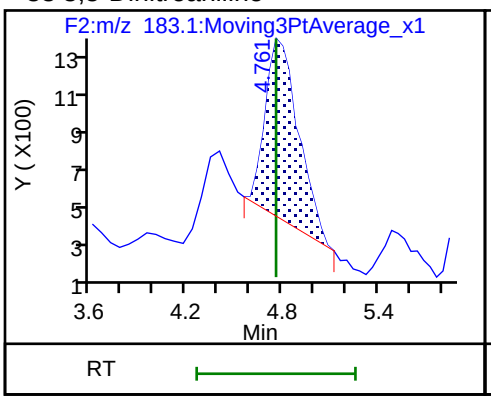
14 Nitroglycerin (ND)



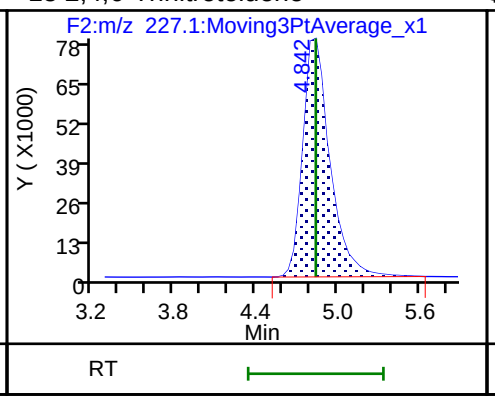
RT

Report Date: 13-Apr-2022 13:58:41 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12066.d

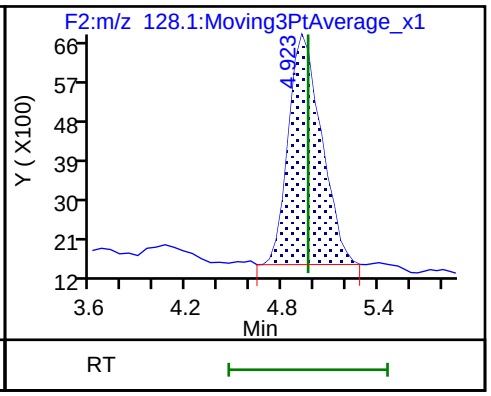
33 3,5-Dinitroaniline



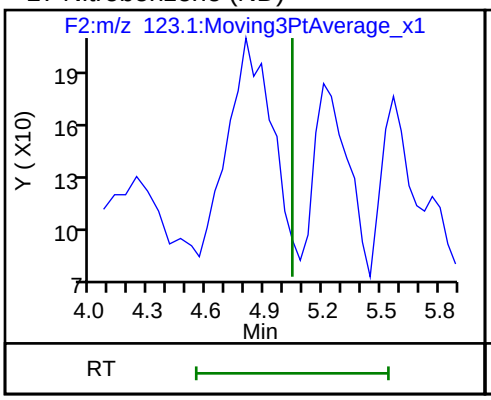
15 2,4,6-Trinitrotoluene



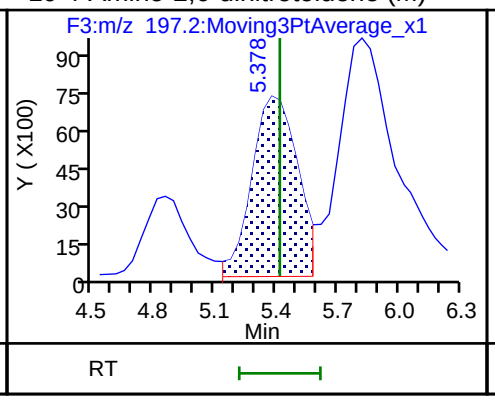
$ 16 Nitrobenzene-d5



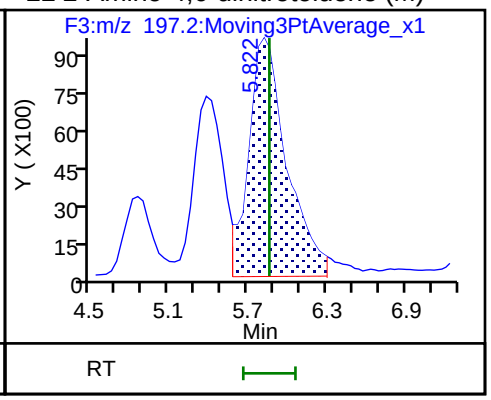
17 Nitrobenzene (ND)



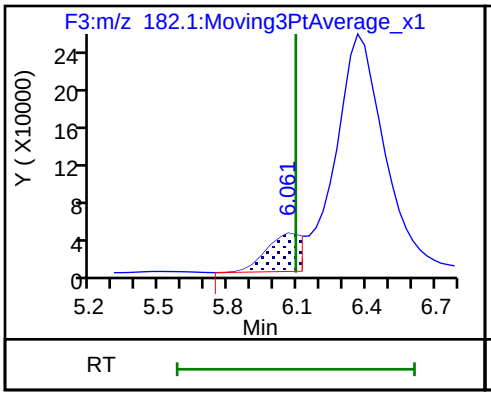
19 4-Amino-2,6-dinitrotoluene (M)



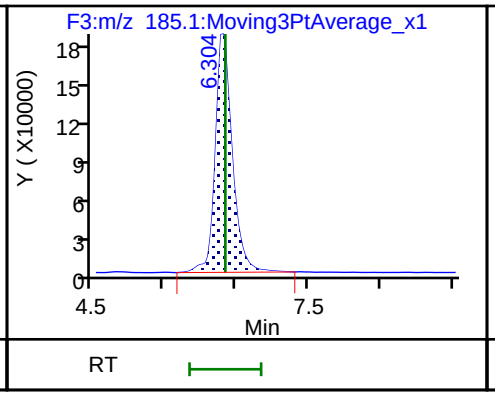
22 2-Amino-4,6-dinitrotoluene (M)



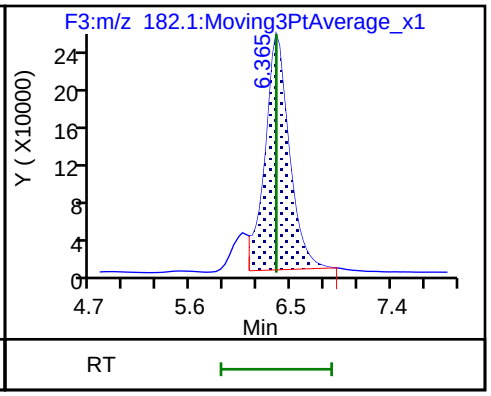
23 2,6-Dinitrotoluene



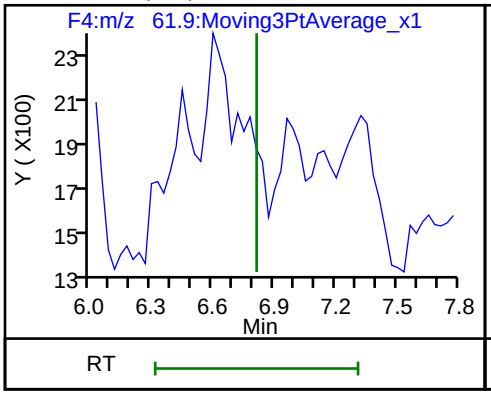
* 24 2,4-dinitrotoluene-d3



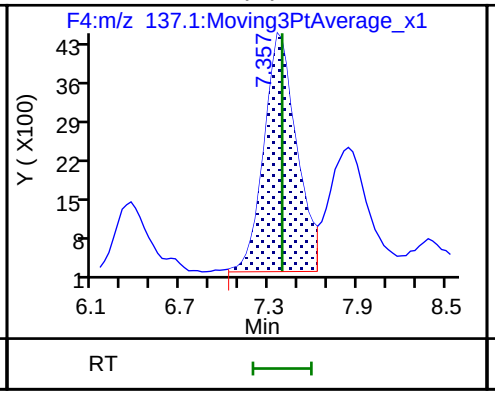
25 2,4-Dinitrotoluene



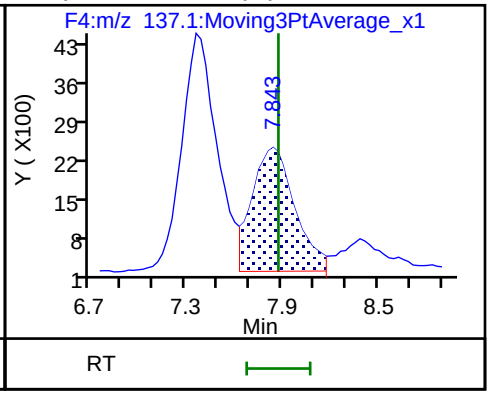
26 PETN (ND)



28 o-Nitrotoluene (M)

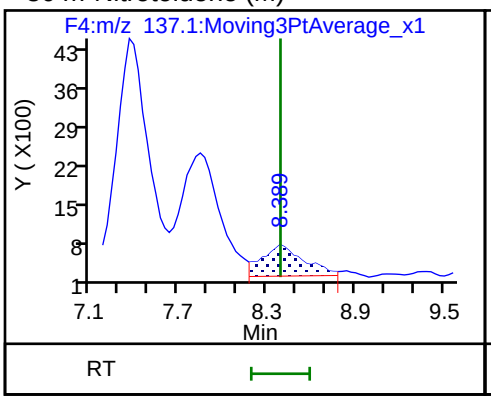


29 p-Nitrotoluene (M)

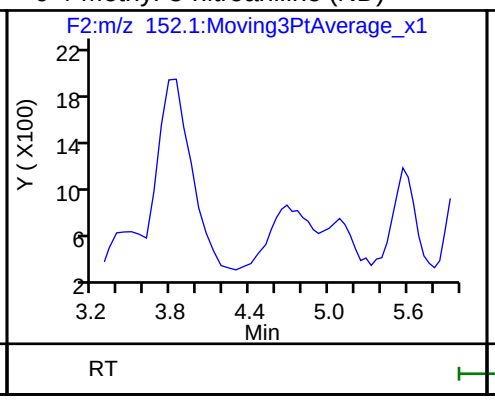


Report Date: 13-Apr-2022 13:58:42 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12066.d

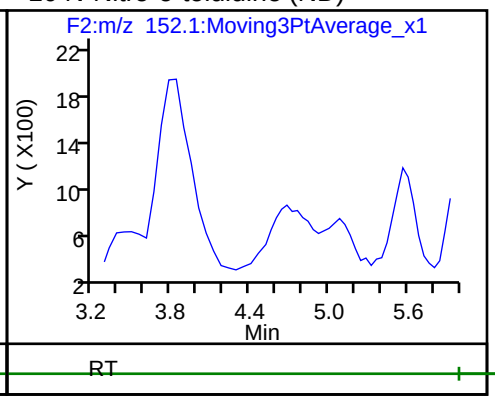
30 m-Nitrotoluene (M)



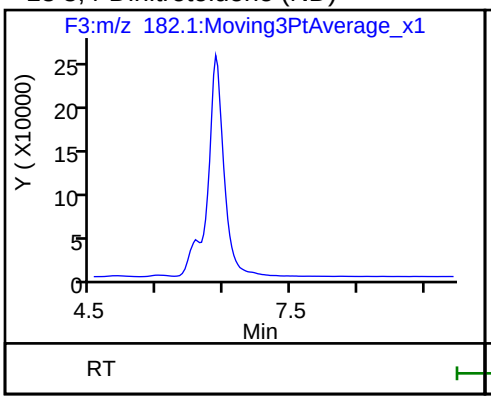
9 4-Methyl-3-nitroaniline (ND)



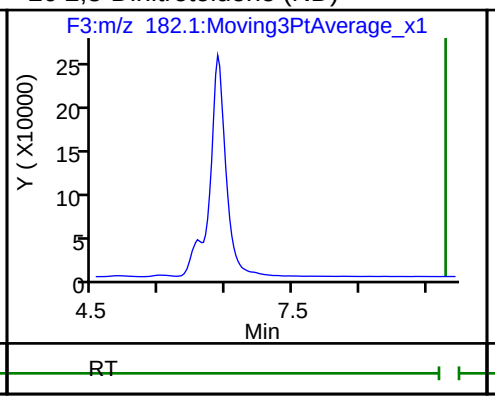
10 N-Nitro-o-toluidine (ND)



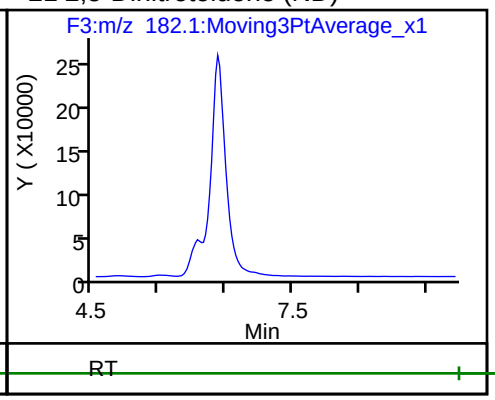
18 3,4-Dinitrotoluene (ND)



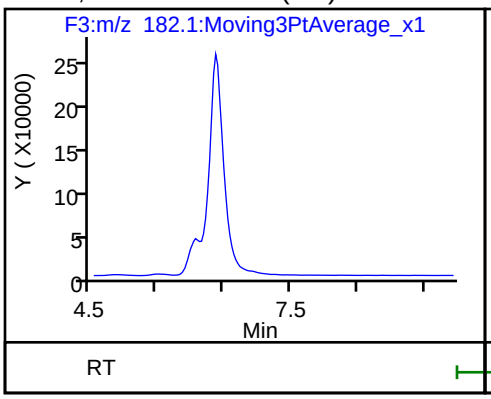
20 2,3-Dinitrotoluene (ND)



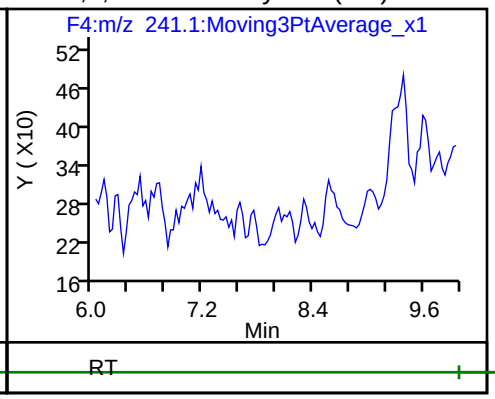
21 2,5-Dinitrotoluene (ND)



27 3,5-Dinitrotoluene (ND)



31 2,4,6-Trinitro-3-xylene (ND)



Report Date: 13-Apr-2022 13:58:41 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12066.d
Lims ID: 280-160190-A-19-F
Client ID: 29SB168 (6-7)
Sample Type: Client
Inject. Date: 12-Apr-2022 21:37:57 ALS Bottle#: 59 Worklist Smp#: 67
Injection Vol: 40.0 ul Dil. Factor: 10.0000
Sample Info: 280-160190-A-19-F 10x
Misc. Info.: 04/08/2022 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\8321expDuPont.m
Limit Group: LC - 8321A Expl
Last Update: 13-Apr-2022 13:58:36 Calib Date: 12-Apr-2022 10:31:58
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d

Column 1 : Det: F1:SIR
Process Host: CTX1683

First Level Reviewer: meyera Date: 13-Apr-2022 13:47:17

Compound	Amount Added	Amount Recovered	% Rec.
$ 16 Nitrobenzene-d5	100.3	9.19	9.16

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB168 (11-12) | Lab Sample ID: 280-160190-20
Matrix: Solid | Lab File ID: ex722D08035.d
Analysis Method: 8321A | Date Collected: 03/24/2022 12:02
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20
Sample wt/vol: 10.49(g) | Date Analyzed: 04/08/2022 13:19
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571224 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.14		0.095	0.048	0.043
99-65-0	1,3-Dinitrobenzene	0.048	U	0.095	0.048	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	0.048	U M	0.095	0.048	0.047
19406-51-0	4-Amino-2,6-dinitrotoluene	0.051	J	0.095	0.048	0.030
2691-41-0	HMX	0.048	U M Q	0.095	0.048	0.044
98-95-3	Nitrobenzene	0.048	U M	0.10	0.048	0.036
55-63-0	Nitroglycerin	0.048	U	0.095	0.048	0.028
78-11-5	PETN	0.048	U	0.095	0.048	0.032
121-82-4	RDX	0.16		0.11	0.048	0.041
479-45-8	Tetryl	0.048	U Q	0.095	0.048	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	130		68-140

Report Date: 14-Apr-2022 10:09:37 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08035.d
Lims ID: 280-160190-A-20-B
Client ID: 29SB168 (11-12)
Sample Type: Client
Inject. Date: 08-Apr-2022 13:19:10 ALS Bottle#: 31 Worklist Smp#: 35
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-20-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:07:02 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:53:26
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		121927	125.0	38.0	
4 RDX								
281.2	1.931	1.833	0.090	1.047	93270	42.8	44.2	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		354234	125.0	111	
5 1,3,5-Trinitrobenzene								
213.0	2.313	2.322	0.0	0.769	636140	37.5	20.4	
6 Tetryl								
241.1	2.733	2.708	0.034	0.909	5683	0.8282	1.1	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.008	3.008	0.0		1399574	129.4	199	
8 1,3-Dinitrobenzene								
168.0	3.040	3.051	0.0	1.011	63312	4.99	4.5	
28 3,5-Dinitroaniline								
183.0	3.219	3.231	0.0	1.070	95966	1.79	0.8	
10 2,4,6-Trinitrotoluene								E
227.0	3.321	3.316	0.011	0.770	77640220	1076.6	608	E
$ 11 Nitrobenzene-d5								
128.0	3.359	3.354	0.011	0.778	863619	130.6	125	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.652	3.652	0.007	0.846	672162	13.3	0.8	
16 2-Amino-4,6-dinitrotoluene								M
197.0	3.976	3.971	0.013	0.921	566860	8.67	0.6	M
17 2,6-Dinitrotoluene								E
182.0	4.138	4.138	0.012	0.959	102982577	1584.5	34.3	E
* 18 2,4-dinitrotoluene-d3								
185.1	4.315	4.315	0.0		3945812	125.0	71.0	

Report Date: 14-Apr-2022 10:09:37 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08035.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
19 2,4-Dinitrotoluene								E
182.0	4.365	4.373	0.0	1.012	257096912	7723.3	76.6	E
22 o-Nitrotoluene								EM
137.0	4.982	4.987	0.005	1.155	63919885	6345.3	835	EM
23 p-Nitrotoluene								EM
137.0	5.296	5.297	0.010	1.227	61927211	7087.7	765	EM
24 m-Nitrotoluene								EM
137.0	5.685	5.686	0.010	1.317	5024745	960.3	59.1	EM

QC Flag Legend

Processing Flags
E - Exceeded Maximum Amount
Review Flags
M - Manually Integrated

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

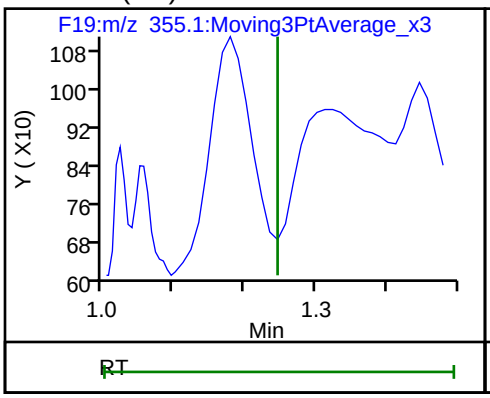
Report Date: 14-Apr-2022 10:09:37 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

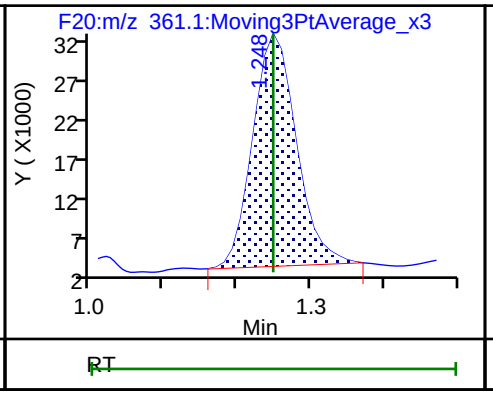
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08035.d

Injection Date:	08-Apr-2022 13:19:10	Instrument ID:	LC_LCMS7
Lims ID:	280-160190-A-20-B	Lab Sample ID:	280-160190-20
Client ID:	29SB168 (11-12)		
Operator ID:	acm	ALS Bottle#:	31 Worklist Smp#: 35
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl

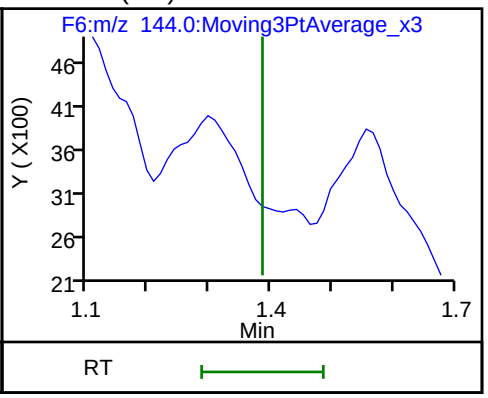
2 HMX (ND)



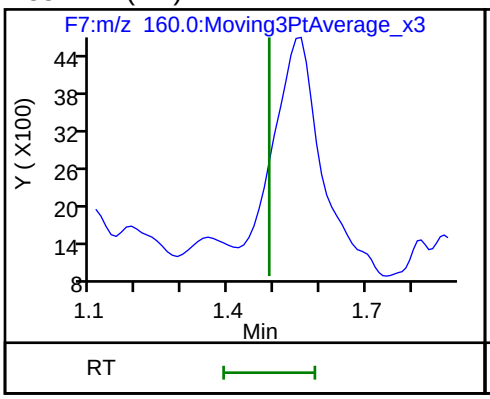
* 1 HMX-13C4



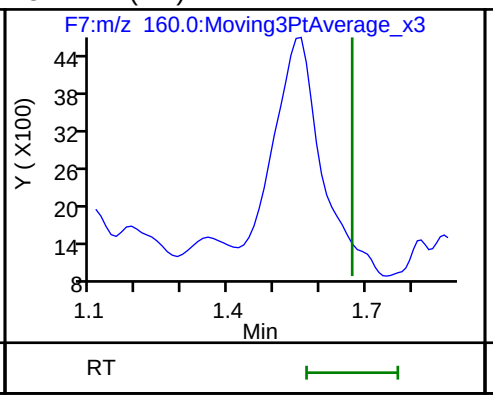
36 TNX (ND)



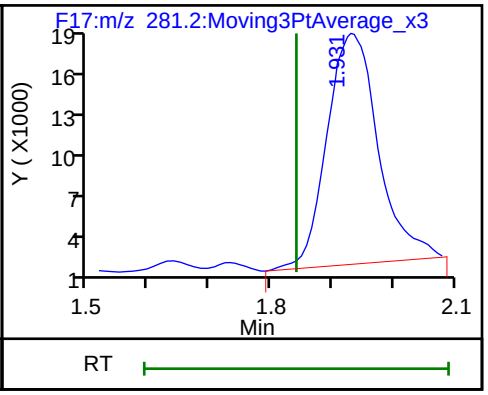
33 DNX (ND)



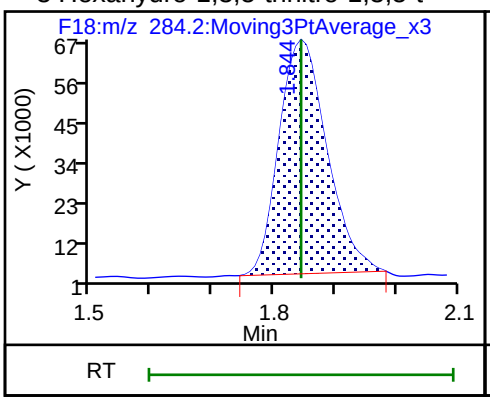
34 MNX (ND)



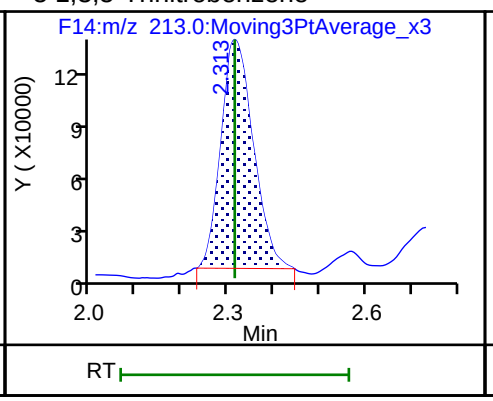
4 RDX



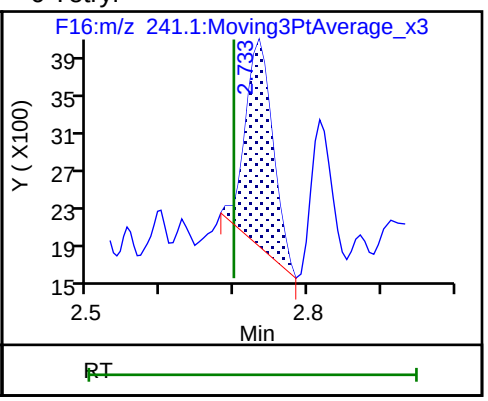
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



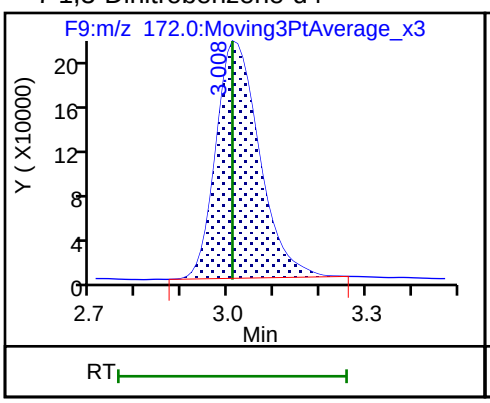
5 1,3,5-Trinitrobenzene



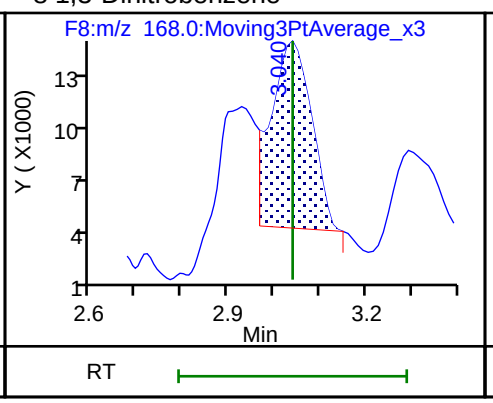
6 Tetryl



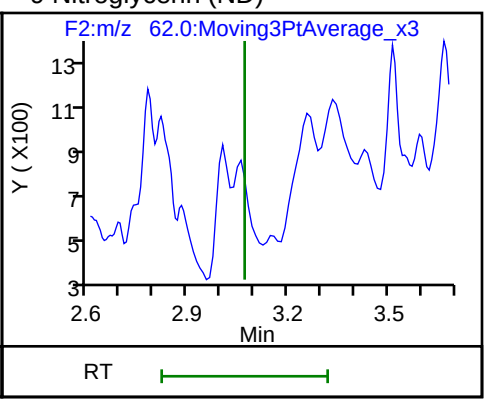
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

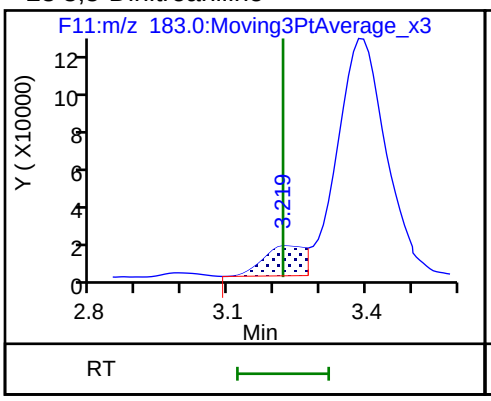


9 Nitroglycerin (ND)

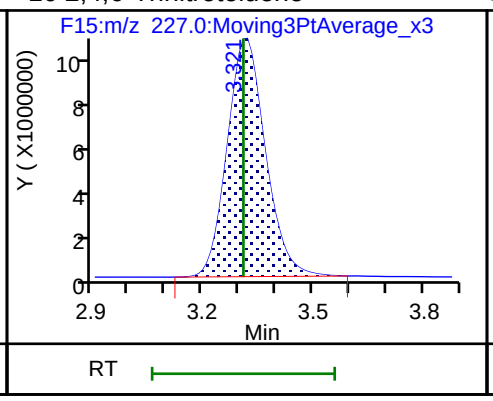


Report Date: 14-Apr-2022 10:09:37 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08035.d

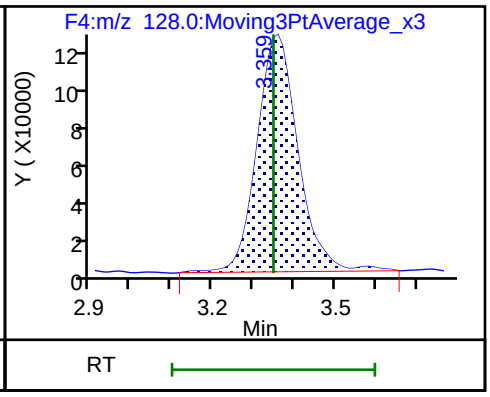
28 3,5-Dinitroaniline



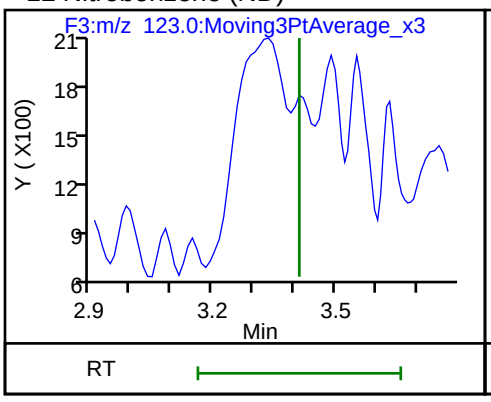
10 2,4,6-Trinitrotoluene



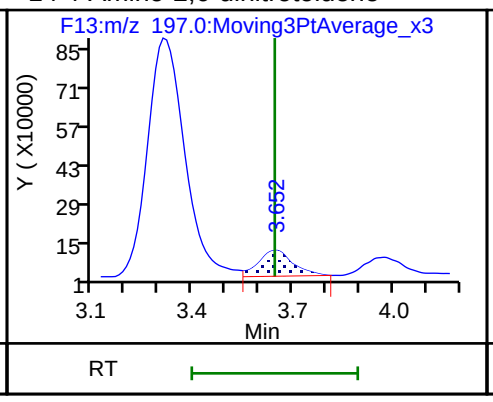
$ 11 Nitrobenzene-d5



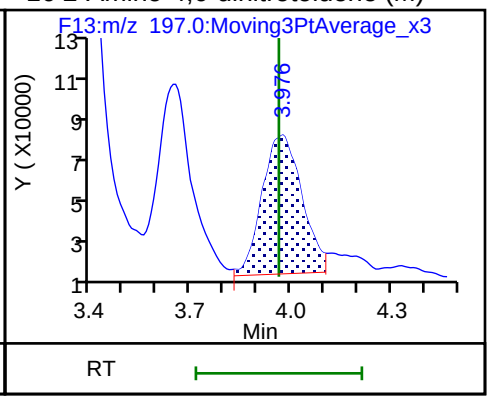
12 Nitrobenzene (ND)



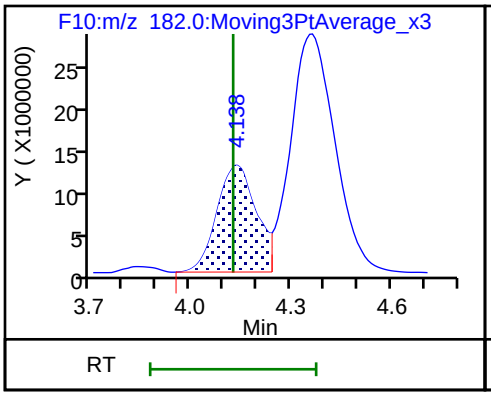
14 4-Amino-2,6-dinitrotoluene



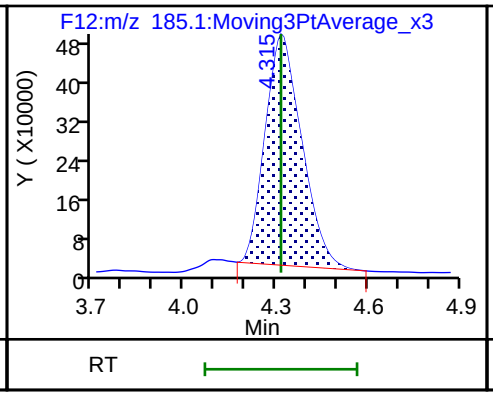
16 2-Amino-4,6-dinitrotoluene (M)



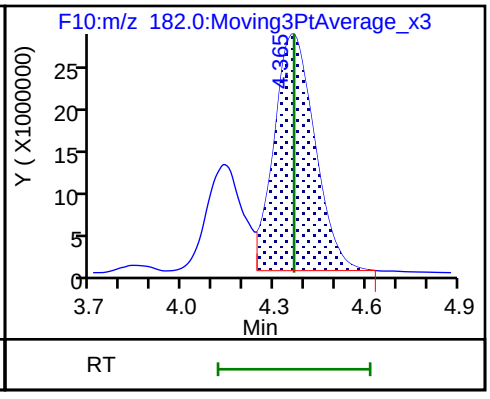
17 2,6-Dinitrotoluene



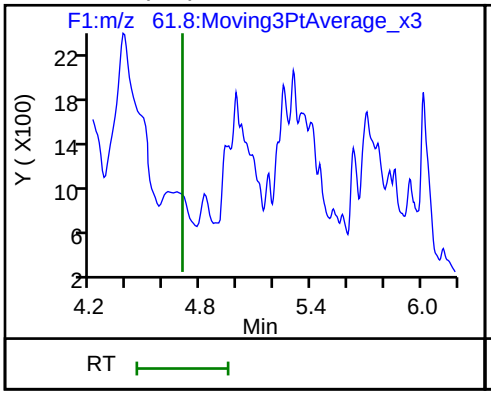
* 18 2,4-dinitrotoluene-d3



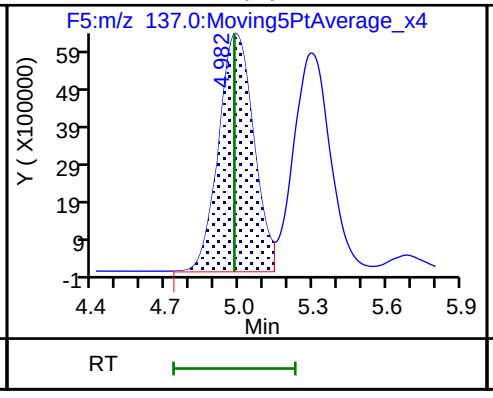
19 2,4-Dinitrotoluene



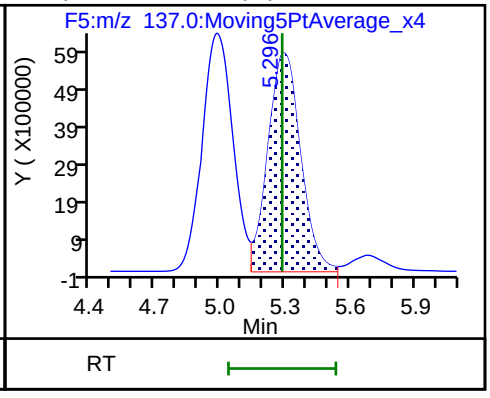
20 PETN (ND)



22 o-Nitrotoluene (M)



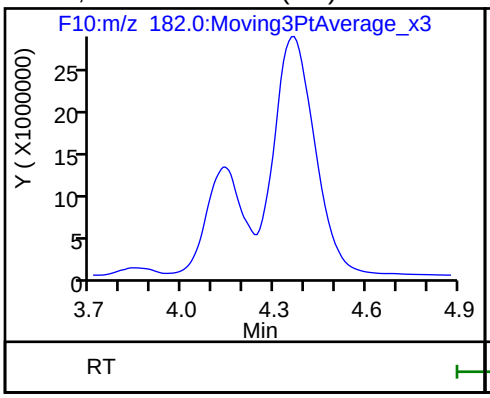
23 p-Nitrotoluene (M)



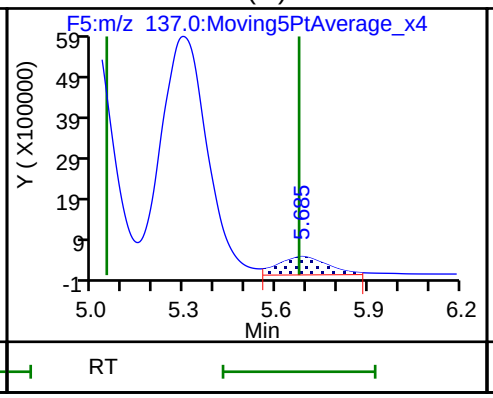
Report Date: 14-Apr-2022 10:09:37 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08035.d

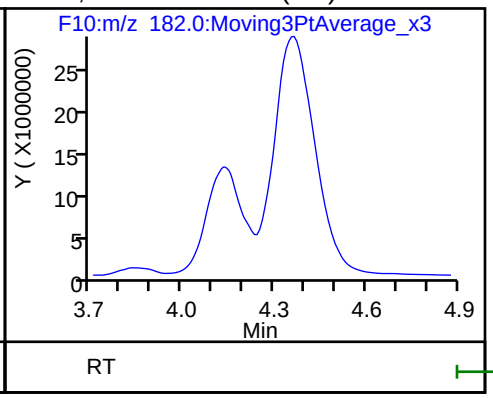
13 3,4-Dinitrotoluene (ND)



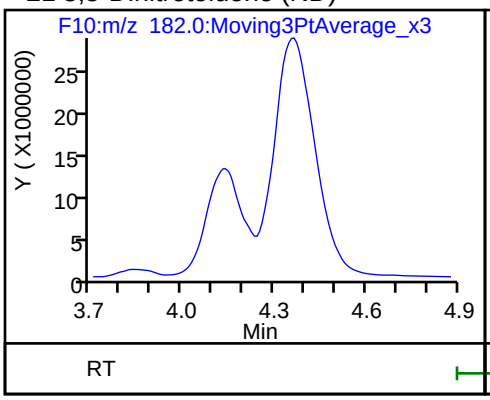
24 m-Nitrotoluene (M)



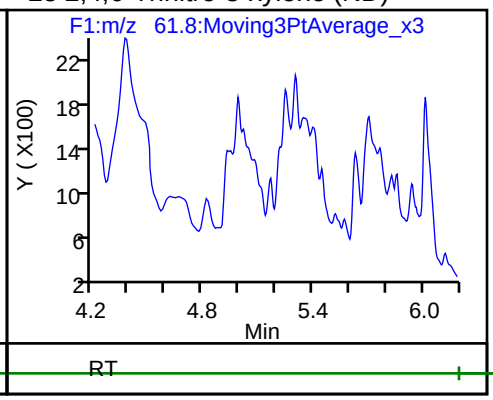
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 14-Apr-2022 10:09:37 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08035.d
Lims ID: 280-160190-A-20-B
Client ID: 29SB168 (11-12)
Sample Type: Client
Inject. Date: 08-Apr-2022 13:19:10 ALS Bottle#: 31 Worklist Smp#: 35
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-20-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:07:02 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:53:26

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	130.6	130.22

Report Date: 14-Apr-2022 10:09:37 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

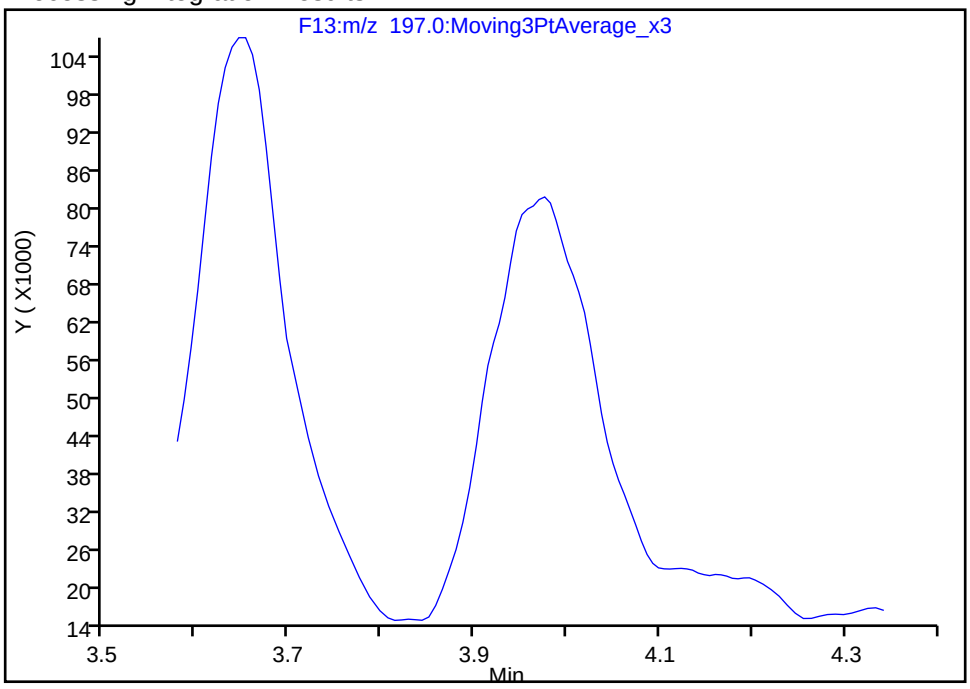
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08035.d				
Injection Date:	08-Apr-2022 13:19:10	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-20-B	Lab Sample ID:	280-160190-20		
Client ID:	29SB168 (11-12)				
Operator ID:	acm	ALS Bottle#:	31	Worklist Smp#:	35
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

16 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

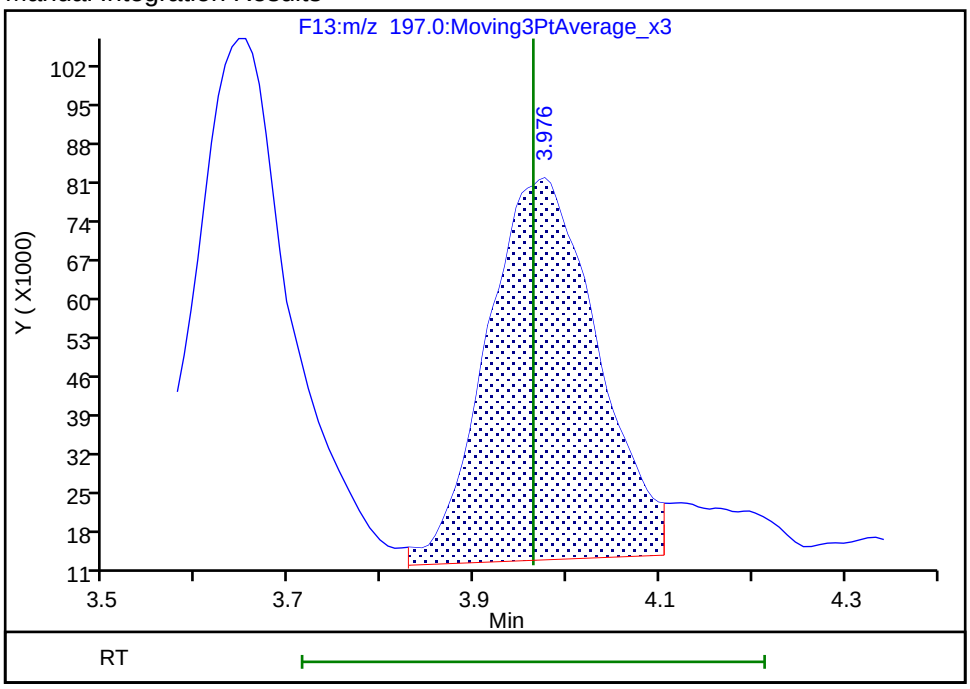
Not Detected
Expected RT: 3.96

Processing Integration Results



Manual Integration Results

RT: 3.98
Area: 566860
Amount: 8.672132
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:52:49
Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1

SDG No.:

Client Sample ID: 29SB168 (11-12) DL | Lab Sample ID: 280-160190-20 DL

Matrix: Solid | Lab File ID: ex422D12071.d

Analysis Method: 8321A | Date Collected: 03/24/2022 12:02

Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20

Sample wt/vol: 10.49(g) | Date Analyzed: 04/12/2022 22:35

Con. Extract Vol.: 40(mL) | Dilution Factor: 10

Injection Volume: 40(uL) | GC Column: IonPac ID: 2(mm)

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

Analysis Batch No.: 571614 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
118-96-7	2,4,6-Trinitrotoluene	3.3	D	0.95	0.48	0.35
606-20-2	2,6-Dinitrotoluene	4.8	D	0.95	0.48	0.38
99-08-1	m-Nitrotoluene	4.0	D M	0.95	0.48	0.41

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	96	D	68-140

Report Date: 13-Apr-2022 13:58:51 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12071.d
Lims ID: 280-160190-A-20-B
Client ID: 29SB168 (11-12)
Sample Type: Client
Inject. Date: 12-Apr-2022 22:35:34 ALS Bottle#: 64 Worklist Smp#: 72
Injection Vol: 40.0 ul Dil. Factor: 10.0000
Sample Info: 280-160190-A-20-B 10x
Misc. Info.: 04/08/2022 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\8321expDuPont.m
Limit Group: LC - 8321A Expl
Last Update: 13-Apr-2022 13:58:36 Calib Date: 12-Apr-2022 10:31:58
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d

Column 1 : Det: F1:SIR
Process Host: CTX1683

First Level Reviewer: meyera Date: 13-Apr-2022 13:53:37
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
360.9	1.965	1.964	0.001		193462	125.0	98.4	
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.1	2.772	2.798	-0.026		408868	125.0	531	
8 1,3,5-Trinitrobenzene								
213.1	3.458	3.458	0.0	0.775	39517	4.91	37.3	
* 12 1,3-Dinitrobenzene-d4								
172.1	4.461	4.461	0.0		1122455	129.4	76.8	
15 2,4,6-Trinitrotoluene								
227.1	4.841	4.841	0.0	0.768	2667676	86.1	1020	
$ 16 Nitrobenzene-d5								
128.1	4.922	4.962	-0.040	1.103	81720	9.62	44.2	
17 Nitrobenzene								
123.1	4.882	5.043	-0.161	1.094	4537	-0.3410	4.0	
19 4-Amino-2,6-dinitrotoluene								M
197.2	5.417	5.417	0.0	0.859	34217	0.3153	1.0	M
22 2-Amino-4,6-dinitrotoluene								M
197.2	5.821	5.861	-0.040	0.923	27947	0.1881	1.0	M
23 2,6-Dinitrotoluene								
182.1	6.064	6.094	-0.030	0.961	6263994	124.6	110	
* 24 2,4-dinitrotoluene-d3								
185.1	6.307	6.336	-0.029		3199065	125.0	673	
25 2,4-Dinitrotoluene								E
182.1	6.398	6.367	0.031	1.014	23888814	825.9	269	E
28 o-Nitrotoluene								EM
137.1	7.390	7.389	0.001	1.172	7319259	654.1	357	EM
29 p-Nitrotoluene								EM
137.1	7.845	7.875	-0.030	1.244	7218064	766.1	342	EM

Report Date: 13-Apr-2022 13:58:51 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12071.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
30 m-Nitrotoluene								M
137.1	8.422	8.391	0.031	1.335	673851	104.0	29.1	M

QC Flag Legend

Processing Flags
E - Exceeded Maximum Amount
Review Flags
M - Manually Integrated

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

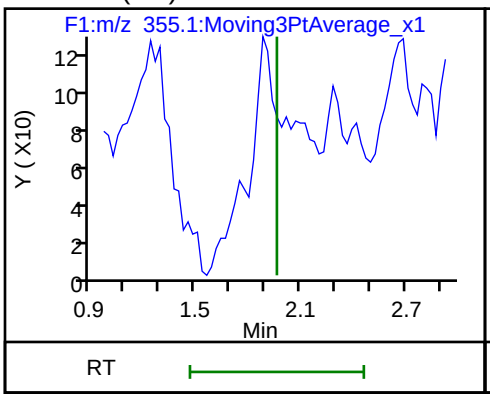
Report Date: 13-Apr-2022 13:58:51 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

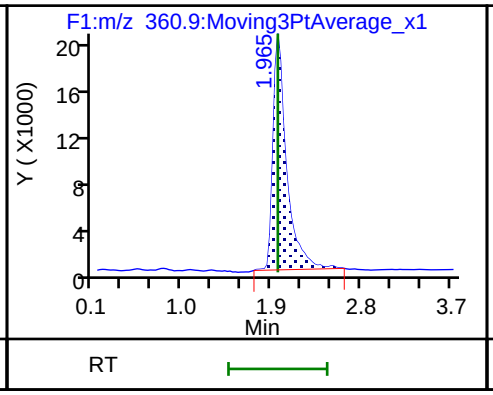
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12071.d

Injection Date:	12-Apr-2022 22:35:34	Instrument ID:	LC_LCMS4
Lims ID:	280-160190-A-20-B	Lab Sample ID:	280-160190-20
Client ID:	29SB168 (11-12)		
Operator ID:	acm	ALS Bottle#:	64 Worklist Smp#: 72
Injection Vol:	40.0 ul	Dil. Factor:	10.0000
Method:	8321expDuPont	Limit Group:	LC - 8321A Expl

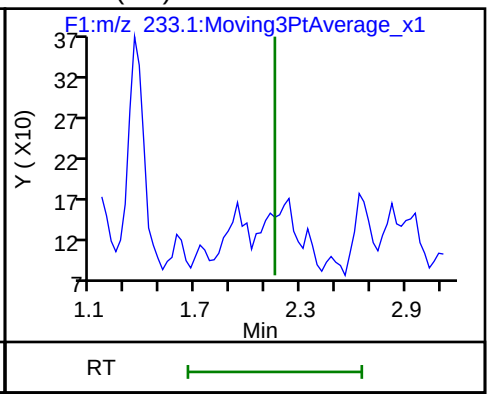
2 HMX (ND)



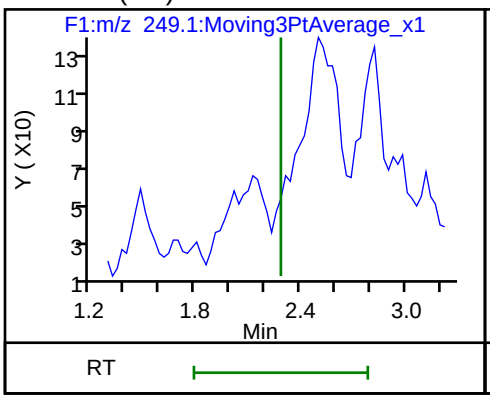
* 1 HMX-13C4



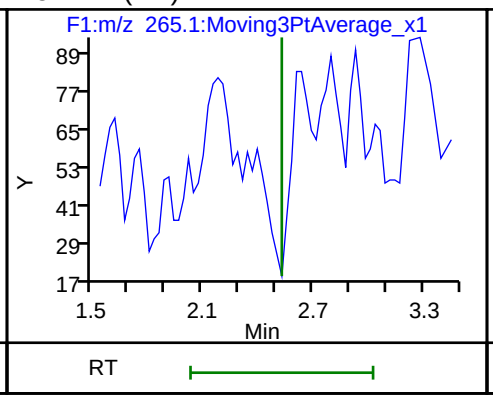
3 TNX (ND)



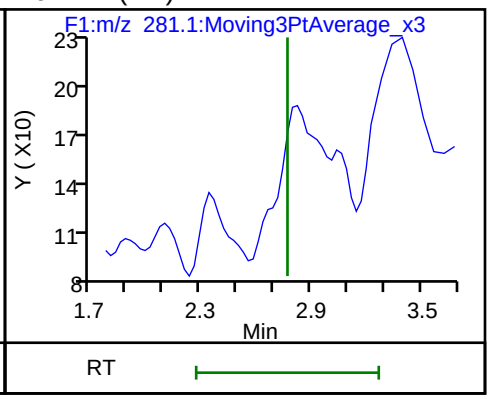
4 DNX (ND)



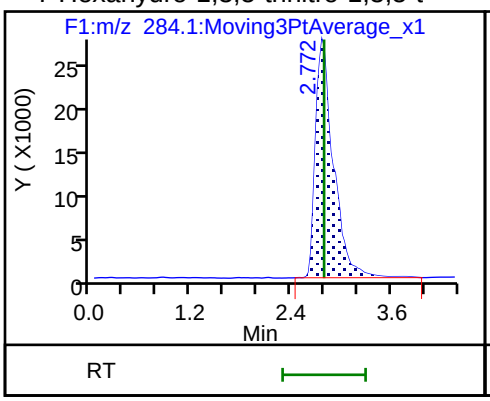
5 MNX (ND)



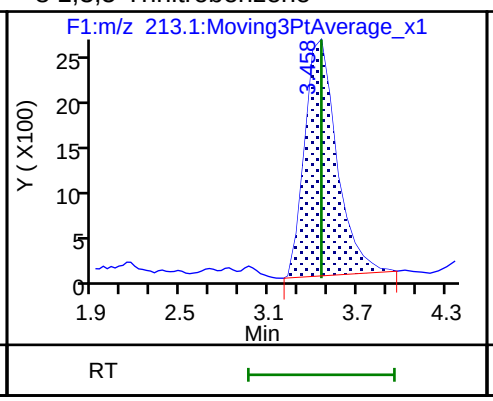
6 RDX (ND)



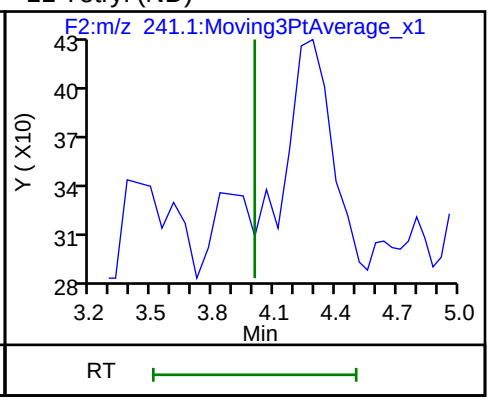
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t



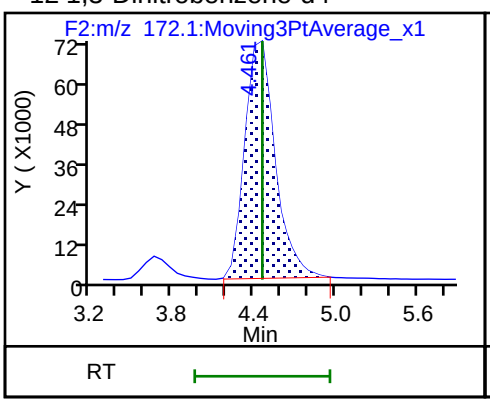
8 1,3,5-Trinitrobenzene



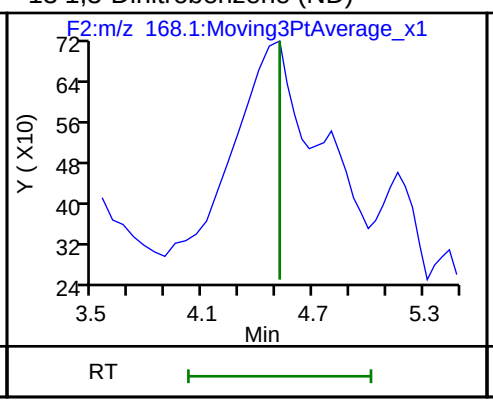
11 Tetryl (ND)



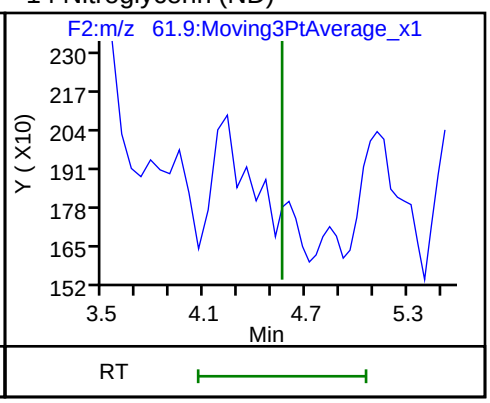
* 12 1,3-Dinitrobenzene-d4



13 1,3-Dinitrobenzene (ND)

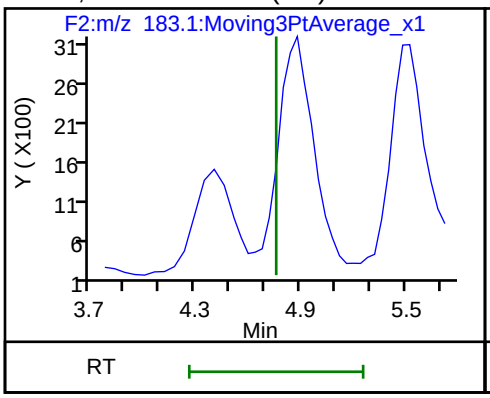


14 Nitroglycerin (ND)

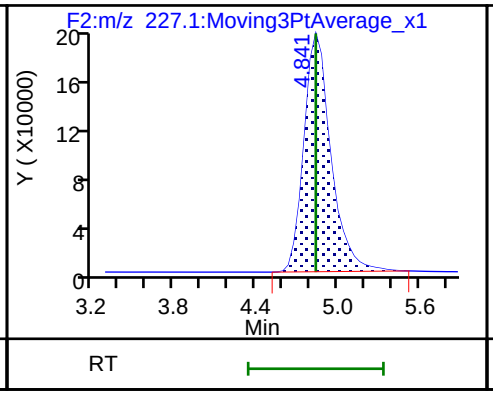


Report Date: 13-Apr-2022 13:58:51 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12071.d

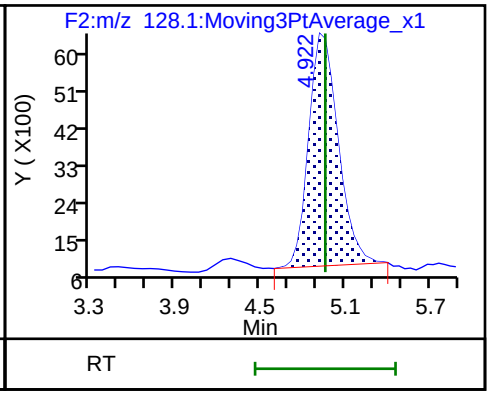
33 3,5-Dinitroaniline (ND)



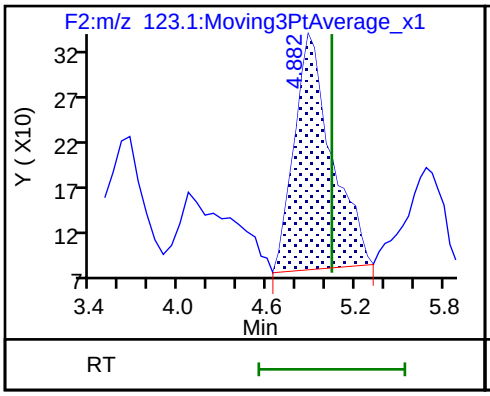
15 2,4,6-Trinitrotoluene



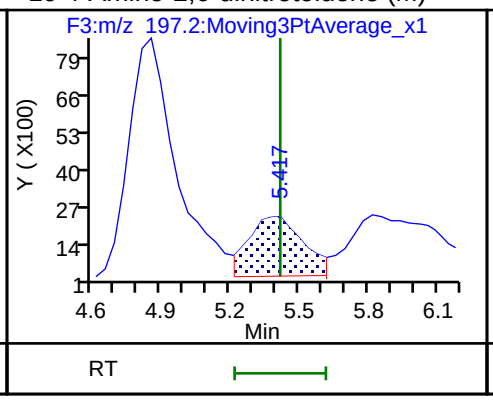
$ 16 Nitrobenzene-d5



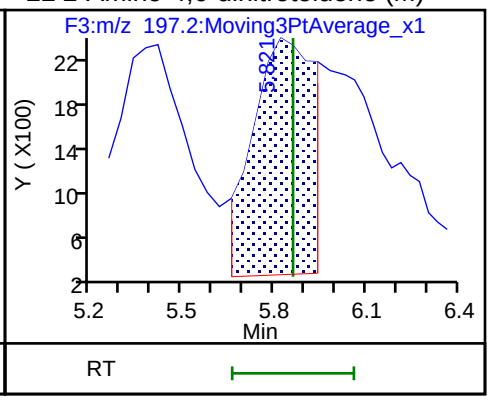
17 Nitrobenzene



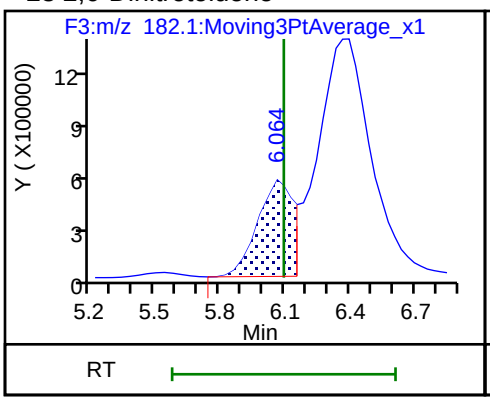
19 4-Amino-2,6-dinitrotoluene (M)



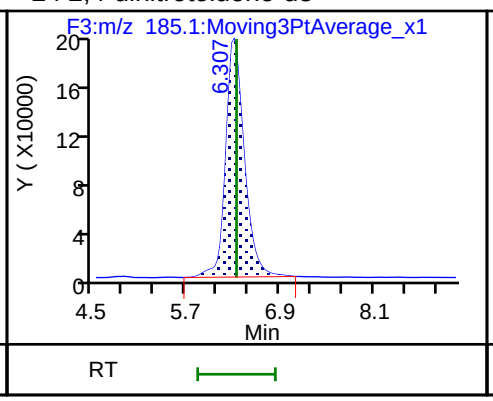
22 2-Amino-4,6-dinitrotoluene (M)



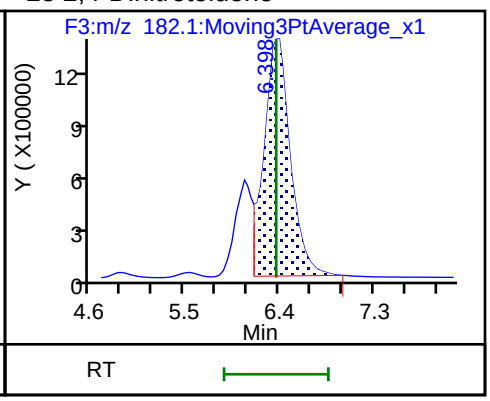
23 2,6-Dinitrotoluene



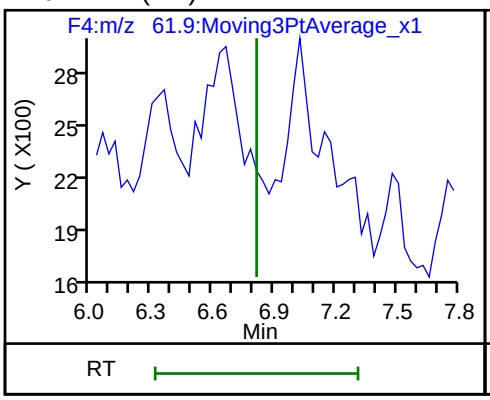
* 24 2,4-dinitrotoluene-d3



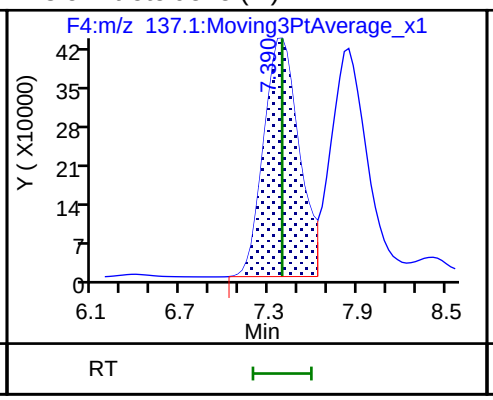
25 2,4-Dinitrotoluene



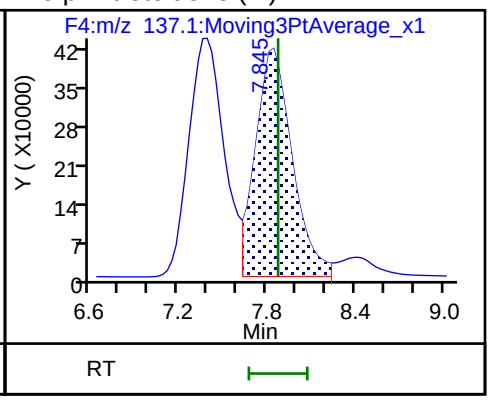
26 PETN (ND)



28 o-Nitrotoluene (M)

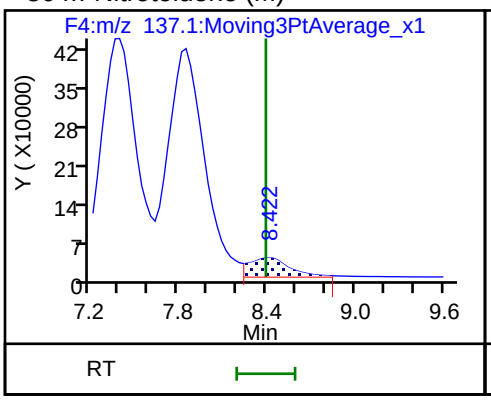


29 p-Nitrotoluene (M)

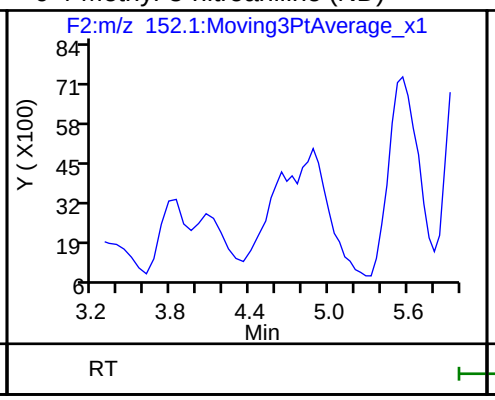


Report Date: 13-Apr-2022 13:58:51 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12071.d

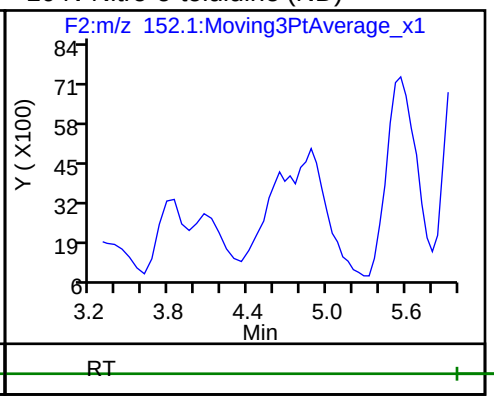
30 m-Nitrotoluene (M)



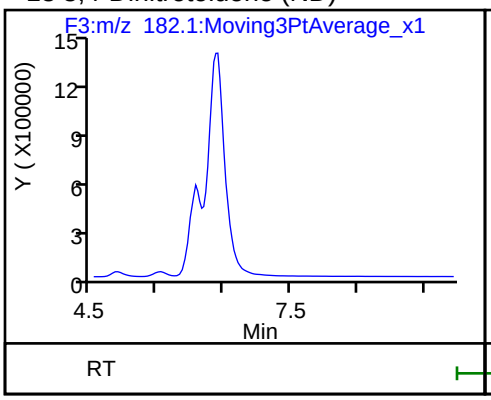
9 4-Methyl-3-nitroaniline (ND)



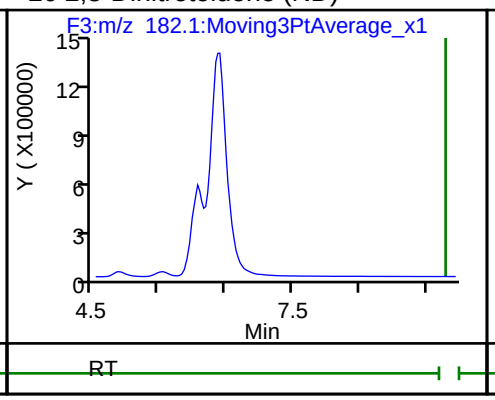
10 N-Nitro-o-toluidine (ND)



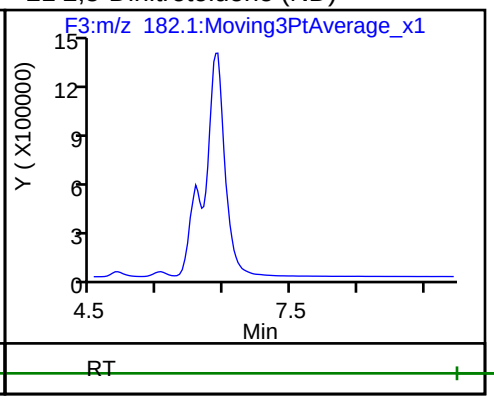
18 3,4-Dinitrotoluene (ND)



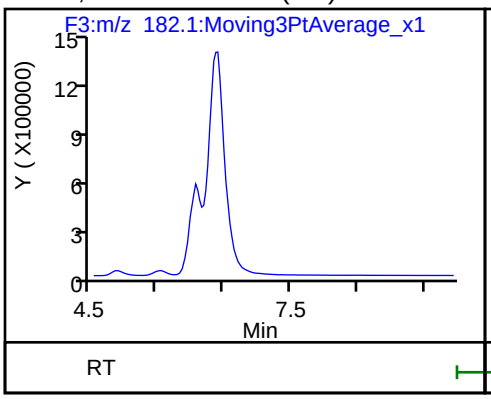
20 2,3-Dinitrotoluene (ND)



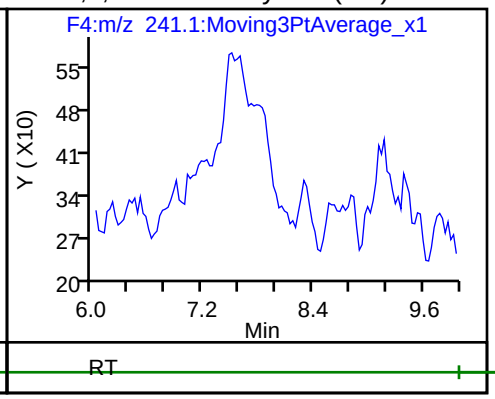
21 2,5-Dinitrotoluene (ND)



27 3,5-Dinitrotoluene (ND)



31 2,4,6-Trinitro-3-xylene (ND)



Report Date: 13-Apr-2022 13:58:51 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12071.d
Lims ID: 280-160190-A-20-B
Client ID: 29SB168 (11-12)
Sample Type: Client
Inject. Date: 12-Apr-2022 22:35:34 ALS Bottle#: 64 Worklist Smp#: 72
Injection Vol: 40.0 ul Dil. Factor: 10.0000
Sample Info: 280-160190-A-20-B 10x
Misc. Info.: 04/08/2022 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\8321expDuPont.m
Limit Group: LC - 8321A Expl
Last Update: 13-Apr-2022 13:58:36 Calib Date: 12-Apr-2022 10:31:58
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d

Column 1 : Det: F1:SIR
Process Host: CTX1683

First Level Reviewer: meyera Date: 13-Apr-2022 13:53:37

Compound	Amount Added	Amount Recovered	% Rec.
$ 16 Nitrobenzene-d5	100.3	9.62	9.58

Report Date: 13-Apr-2022 13:58:52 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12071.d

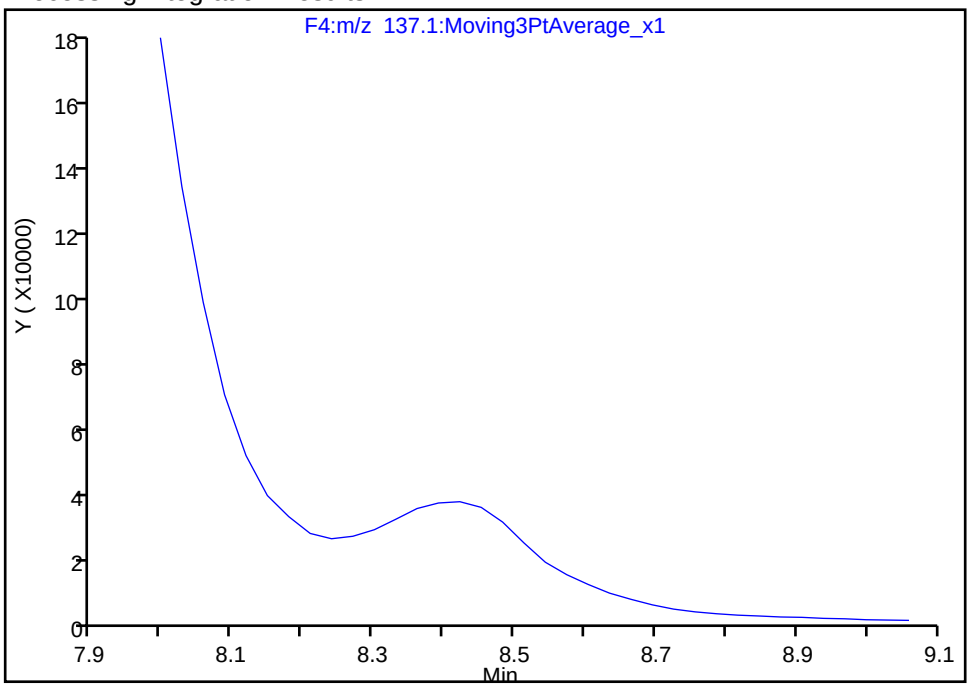
Injection Date:	12-Apr-2022 22:35:34	Instrument ID:	LC_LCMS4		
Lims ID:	280-160190-A-20-B	Lab Sample ID:	280-160190-20		
Client ID:	29SB168 (11-12)				
Operator ID:	acm	ALS Bottle#:	64	Worklist Smp#:	72
Injection Vol:	40.0 ul	Dil. Factor:	10.0000		
Method:	8321expDuPont	Limit Group:	LC - 8321A Expl		
Column:		Detector	F4:SIR		

30 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

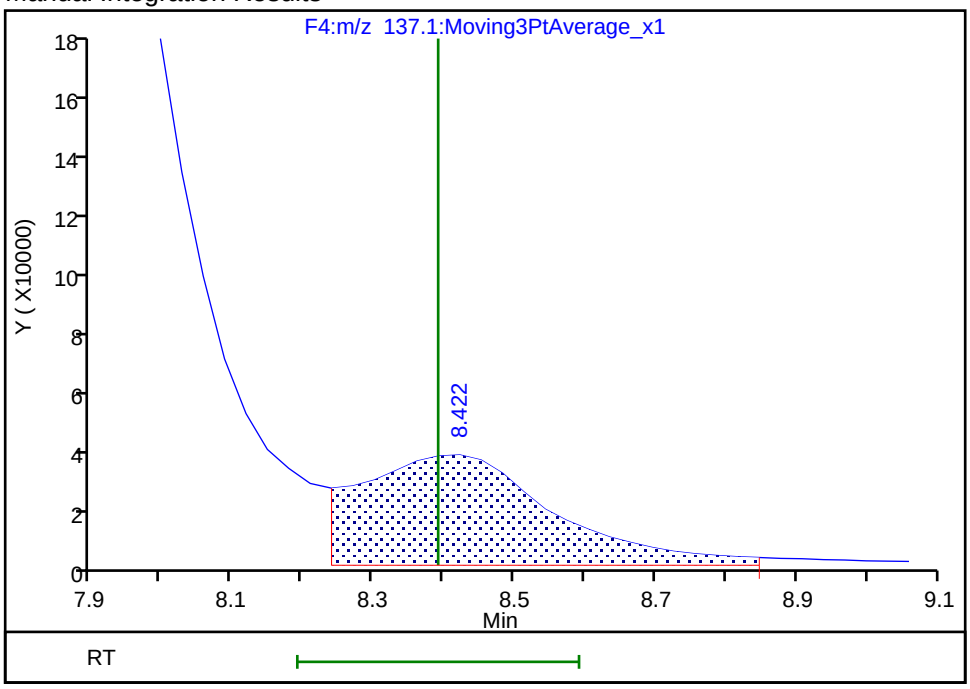
Not Detected
Expected RT: 8.39

Processing Integration Results



Manual Integration Results

RT: 8.42
Area: 673851
Amount: 103.9824
Amount Units: ug/l



Reviewer: meyera, 13-Apr-2022 13:53:34

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1

SDG No.:

Client Sample ID: 29SB168 (11-12) DL2 | Lab Sample ID: 280-160190-20 DL2

Matrix: Solid | Lab File ID: ex422D12072.d

Analysis Method: 8321A | Date Collected: 03/24/2022 12:02

Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20

Sample wt/vol: 10.49(g) | Date Analyzed: 04/12/2022 22:47

Con. Extract Vol.: 40(mL) | Dilution Factor: 50

Injection Volume: 40(uL) | GC Column: IonPac ID: 2(mm)

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

Analysis Batch No.: 571614 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
121-14-2	2,4-Dinitrotoluene	31	D	4.8	2.4	2.2
88-72-2	o-Nitrotoluene	23	D M	4.8	2.4	2.0
99-99-0	p-Nitrotoluene	24	D M	4.8	2.4	2.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	71	M D	68-140

Report Date: 14-Apr-2022 10:33:46 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12072.d
Lims ID: 280-160190-A-20-B
Client ID: 29SB168 (11-12)
Sample Type: Client
Inject. Date: 12-Apr-2022 22:47:06 ALS Bottle#: 65 Worklist Smp#: 73
Injection Vol: 40.0 ul Dil. Factor: 50.0000
Sample Info: 280-160190-A-20-B 50x
Misc. Info.: 04/08/2022 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\8321expDuPont.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:33:46 Calib Date: 12-Apr-2022 10:31:58
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 14-Apr-2022 10:33:46
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
360.9	1.964	1.964	0.0		212670	125.0	101	
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.1	2.772	2.798	-0.026		431267	125.0	510	
8 1,3,5-Trinitrobenzene								
213.1	3.458	3.458	0.0	0.775	6934	1.37	6.3	
* 12 1,3-Dinitrobenzene-d4								
172.1	4.461	4.461	0.0		1172553	129.4	76.7	
15 2,4,6-Trinitrotoluene								
227.1	4.841	4.841	0.0	0.768	552365	16.7	439	
$ 16 Nitrobenzene-d5								M
128.1	4.922	4.922	-0.040	1.103	21269	1.42	11.2	M
19 4-Amino-2,6-dinitrotoluene								M
197.2	5.376	5.417	-0.041	0.853	6123	-0.6343	1.1	M
22 2-Amino-4,6-dinitrotoluene								M
197.2	5.861	5.861	0.0	0.929	8789	-0.3545	1.1	M
23 2,6-Dinitrotoluene								
182.1	6.063	6.094	-0.031	0.961	1361345	28.0	108	
* 24 2,4-dinitrotoluene-d3								
185.1	6.306	6.336	-0.030		3085174	125.0	904	
25 2,4-Dinitrotoluene								
182.1	6.336	6.367	-0.031	1.005	4445782	163.6	269	
28 o-Nitrotoluene								M
137.1	7.389	7.389	0.0	1.172	1394640	118.2	253	M
29 p-Nitrotoluene								M
137.1	7.814	7.875	-0.061	1.239	1269204	127.7	219	M
30 m-Nitrotoluene								M
137.1	8.422	8.391	0.031	1.335	119254	17.6	19.5	M

Report Date: 14-Apr-2022 10:33:46 Chrom Revision: 2.3 12-Apr-2022 20:29:44

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 14-Apr-2022 10:33:46 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12072.d

Injection Date: 12-Apr-2022 22:47:06 Instrument ID: LC_LCMS4

Lims ID: 280-160190-A-20-B Lab Sample ID: 280-160190-20

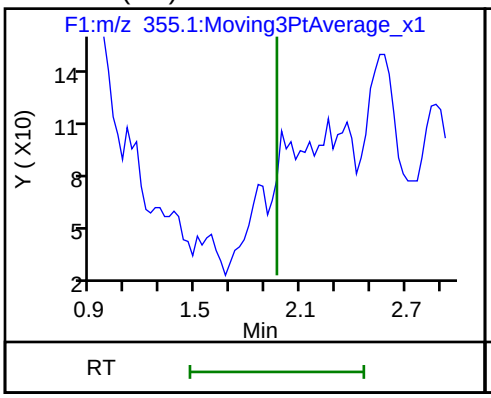
Client ID: 29SB168 (11-12)

Operator ID: acm ALS Bottle#: 65 Worklist Smp#: 73

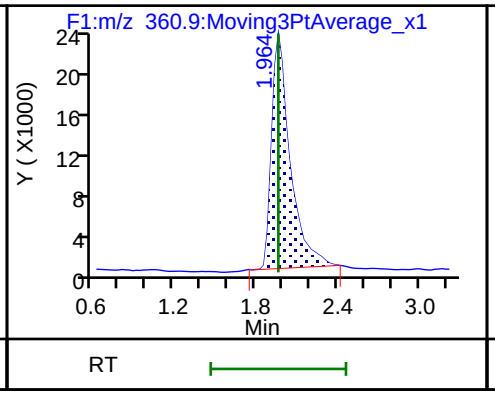
Injection Vol: 40.0 ul Dil. Factor: 50.0000

Method: 8321expDuPont Limit Group: LC - 8321A Expl

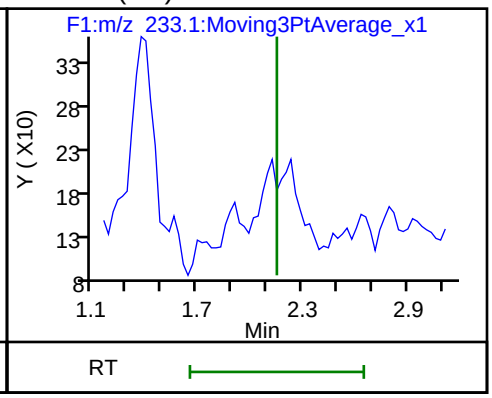
2 HMX (ND)



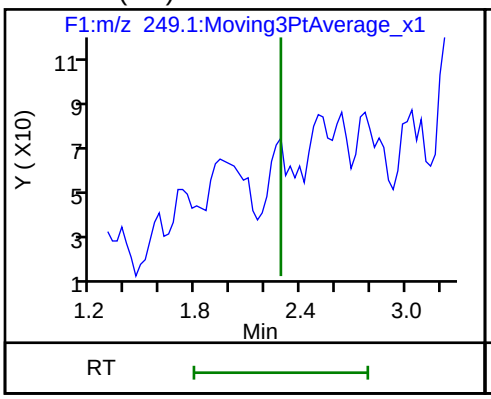
* 1 HMX-13C4



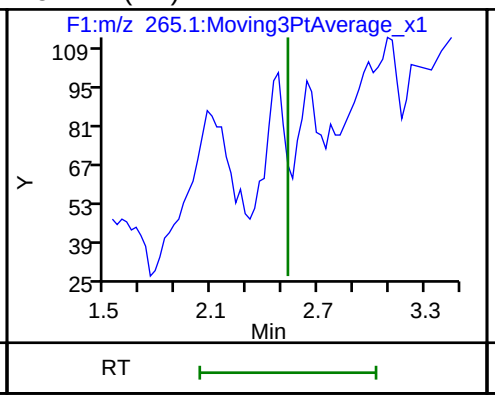
3 TNX (ND)



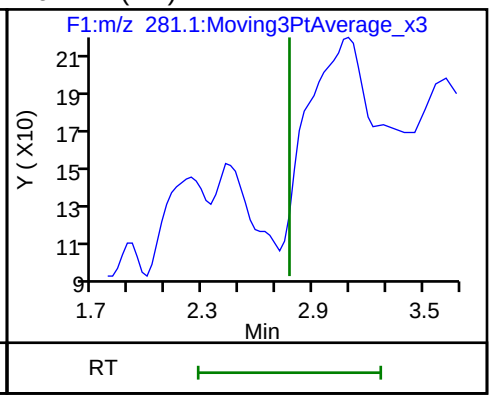
4 DNX (ND)



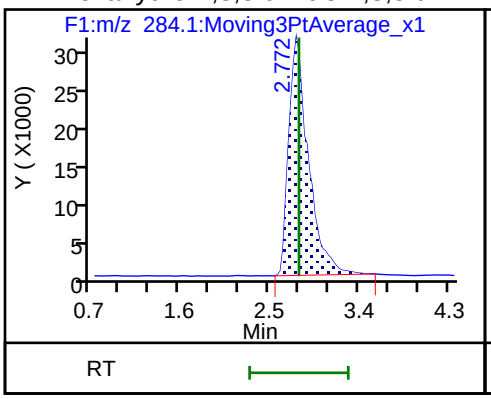
5 MNX (ND)



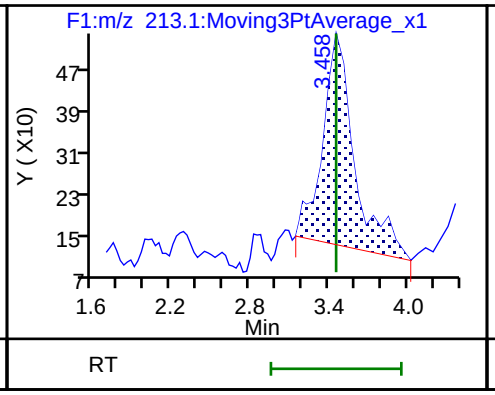
6 RDX (ND)



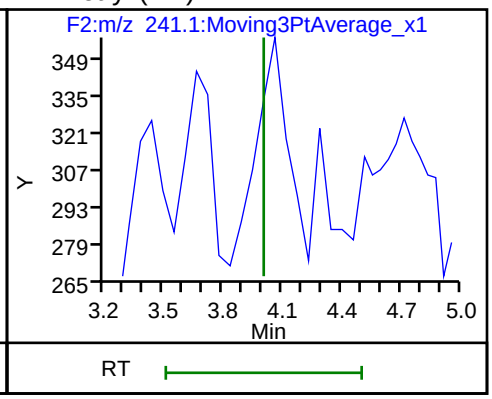
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t



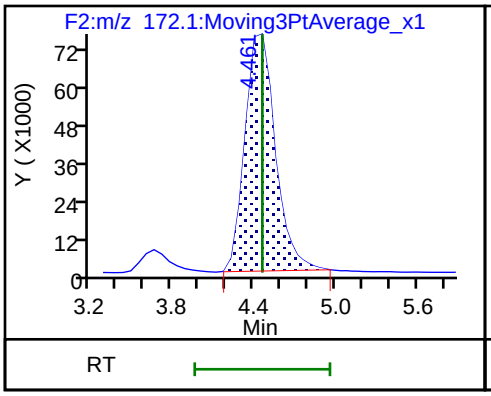
8 1,3,5-Trinitrobenzene



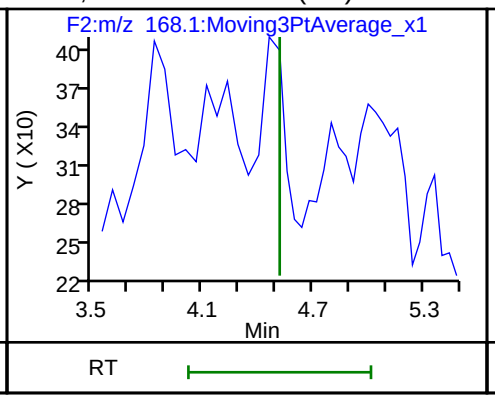
11 Tetryl (ND)



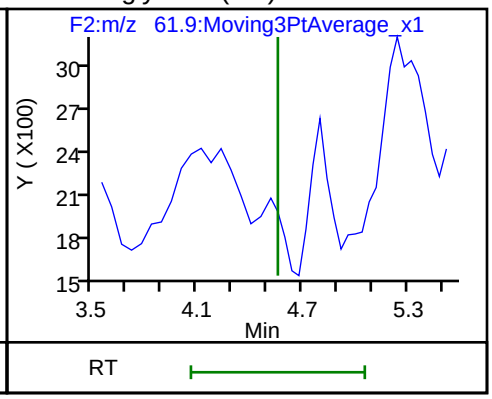
* 12 1,3-Dinitrobenzene-d4



13 1,3-Dinitrobenzene (ND)

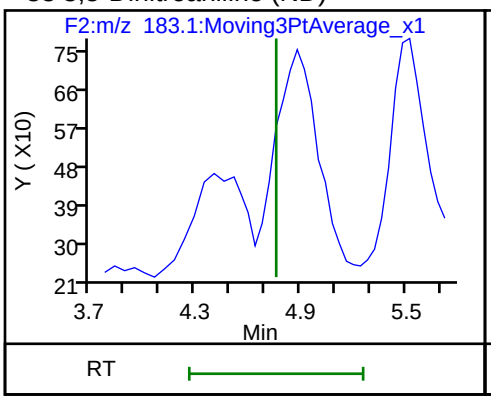


14 Nitroglycerin (ND)

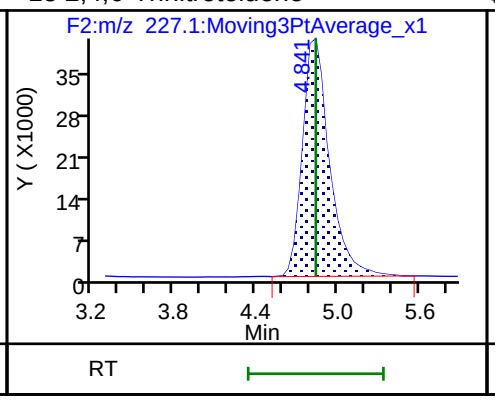


Report Date: 14-Apr-2022 10:33:46 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12072.d

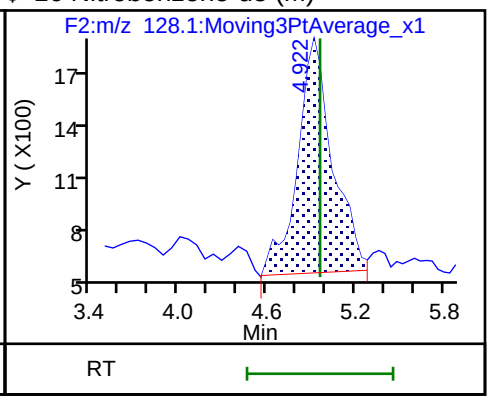
33 3,5-Dinitroaniline (ND)



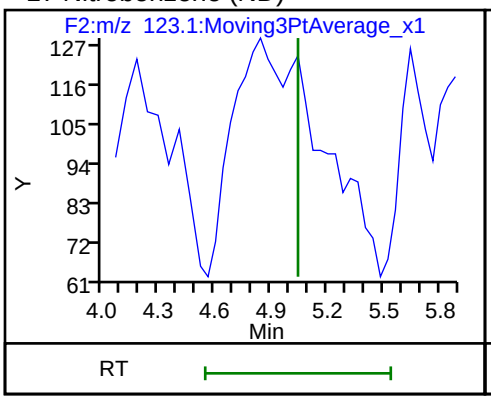
15 2,4,6-Trinitrotoluene



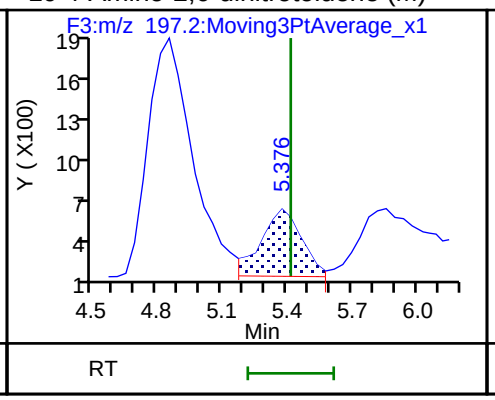
$ 16 Nitrobenzene-d5 (M)



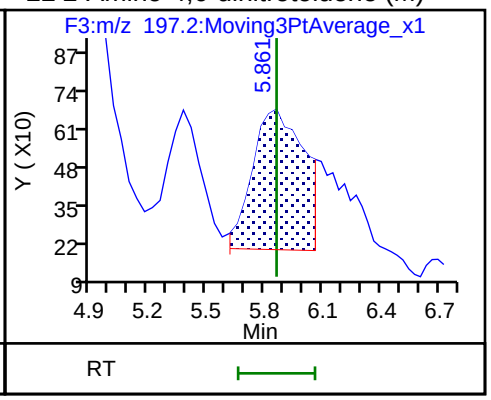
17 Nitrobenzene (ND)



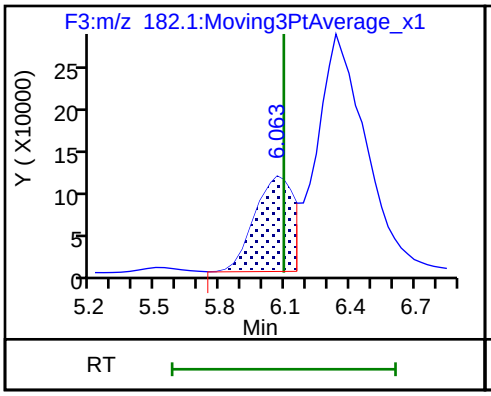
19 4-Amino-2,6-dinitrotoluene (M)



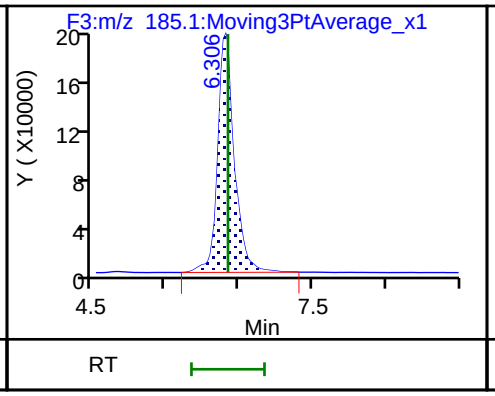
22 2-Amino-4,6-dinitrotoluene (M)



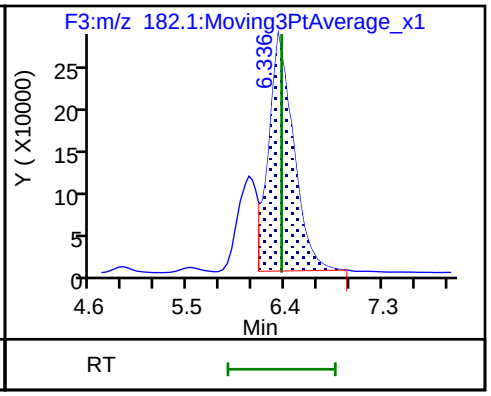
23 2,6-Dinitrotoluene



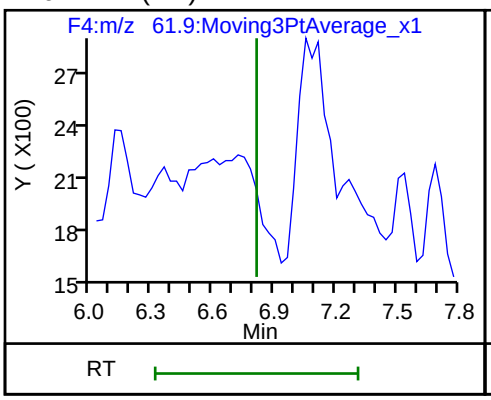
* 24 2,4-dinitrotoluene-d3



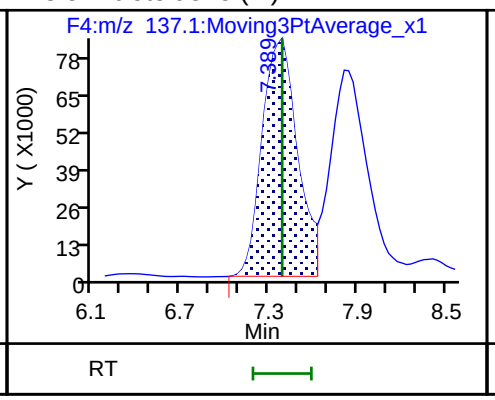
25 2,4-Dinitrotoluene



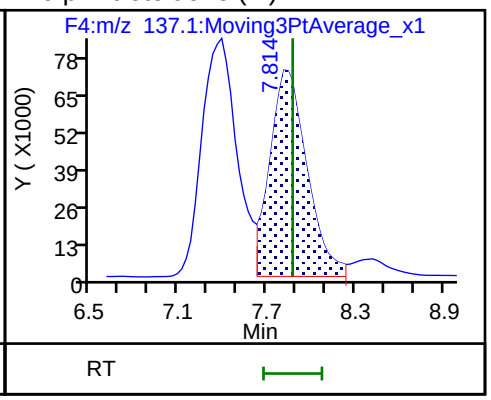
26 PETN (ND)



28 o-Nitrotoluene (M)

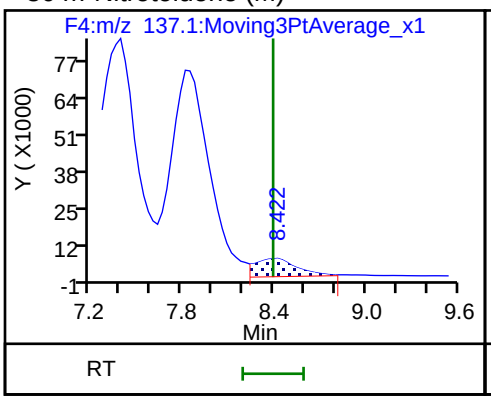


29 p-Nitrotoluene (M)

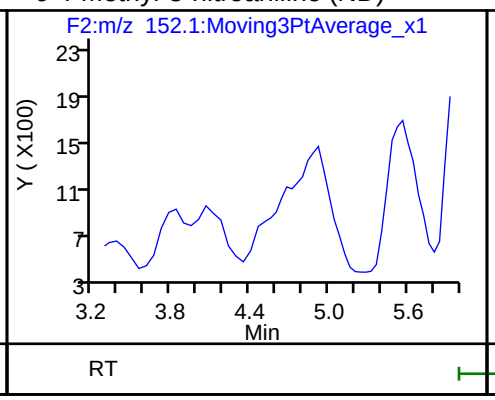


Report Date: 14-Apr-2022 10:33:46 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12072.d

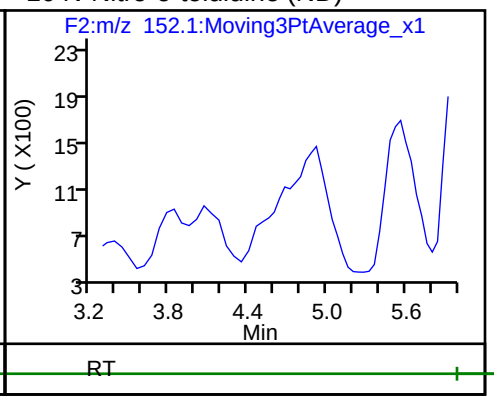
30 m-Nitrotoluene (M)



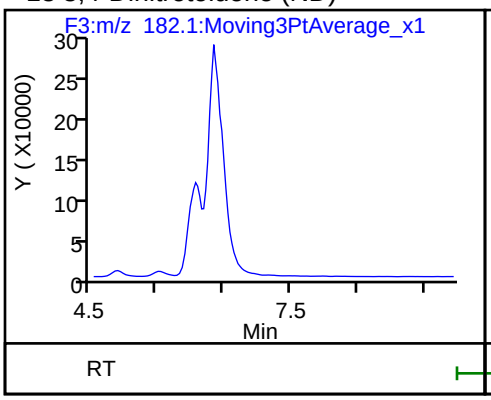
9 4-Methyl-3-nitroaniline (ND)



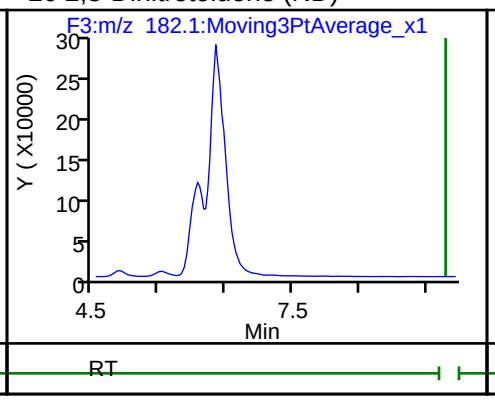
10 N-Nitro-o-toluidine (ND)



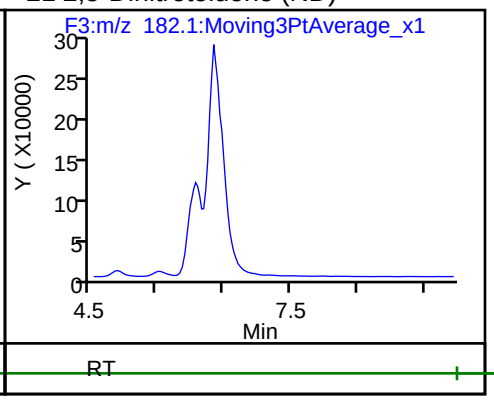
18 3,4-Dinitrotoluene (ND)



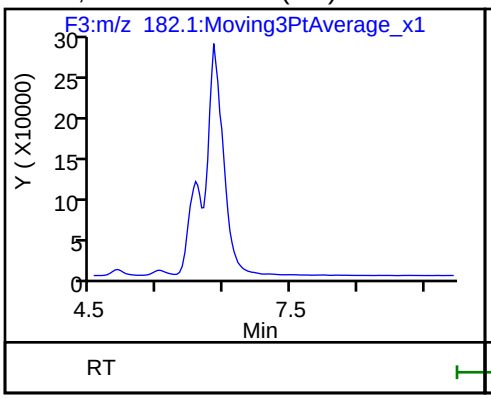
20 2,3-Dinitrotoluene (ND)



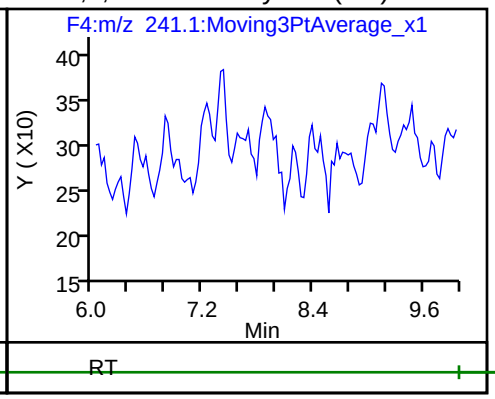
21 2,5-Dinitrotoluene (ND)



27 3,5-Dinitrotoluene (ND)



31 2,4,6-Trinitro-3-xylene (ND)



Report Date: 14-Apr-2022 10:33:46 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12072.d				
Lims ID:	280-160190-A-20-B				
Client ID:	29SB168 (11-12)				
Sample Type:	Client				
Inject. Date:	12-Apr-2022 22:47:06	ALS Bottle#:	65	Worklist Smp#:	73
Injection Vol:	40.0 ul	Dil. Factor:	50.0000		
Sample Info:	280-160190-A-20-B 50x				
Misc. Info.:	04/08/2022 0.1%HAC				
Operator ID:	acm	Instrument ID:	LC_LCMS4		
Method:	\\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\8321expDuPont.m				
Limit Group:	LC - 8321A Expl				
Last Update:	14-Apr-2022 10:33:46	Calib Date:	12-Apr-2022 10:31:58		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1619				
First Level Reviewer: meyera		Date:	14-Apr-2022 10:33:46		

Compound	Amount Added	Amount Recovered	% Rec.
$ 16 Nitrobenzene-d5	100.3	1.42	1.42

Report Date: 14-Apr-2022 10:33:46

Chrom Revision: 2.3 12-Apr-2022 20:29:44
Manual Integration/User Assign Peak Report

Eurofins Denver

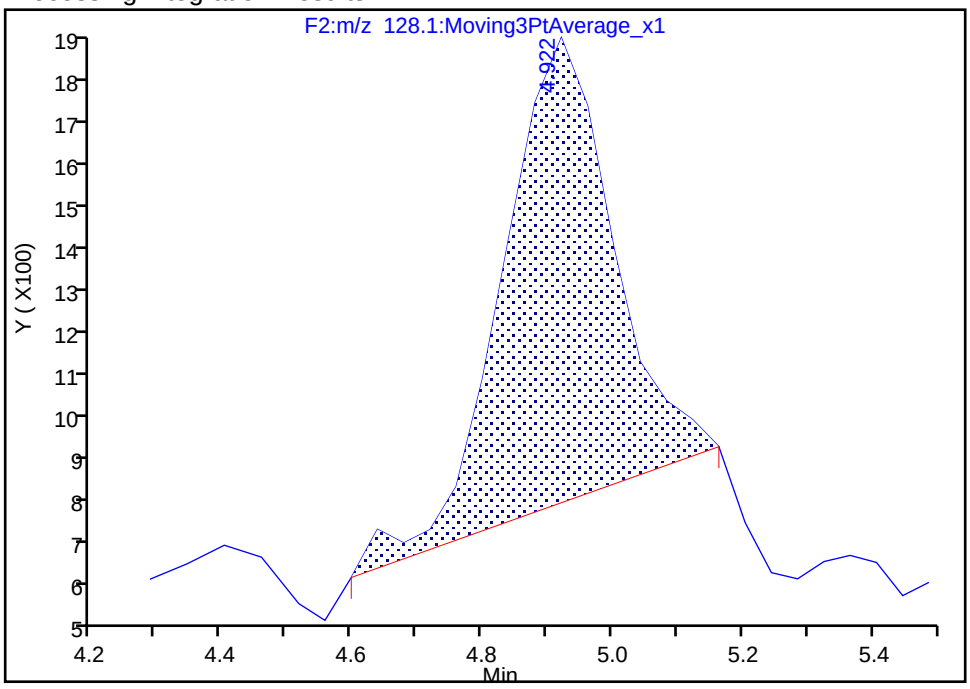
Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12072.d				
Injection Date:	12-Apr-2022 22:47:06	Instrument ID:	LC_LCMS4		
Lims ID:	280-160190-A-20-B	Lab Sample ID:	280-160190-20		
Client ID:	29SB168 (11-12)				
Operator ID:	acm	ALS Bottle#:	65	Worklist Smp#:	73
Injection Vol:	40.0 ul	Dil. Factor:	50.0000		
Method:	8321expDuPont	Limit Group:	LC - 8321A Expl		
Column:		Detector	F2:SIR		

$ 16 Nitrobenzene-d5, CAS: 4165-60-0

Signal: 1

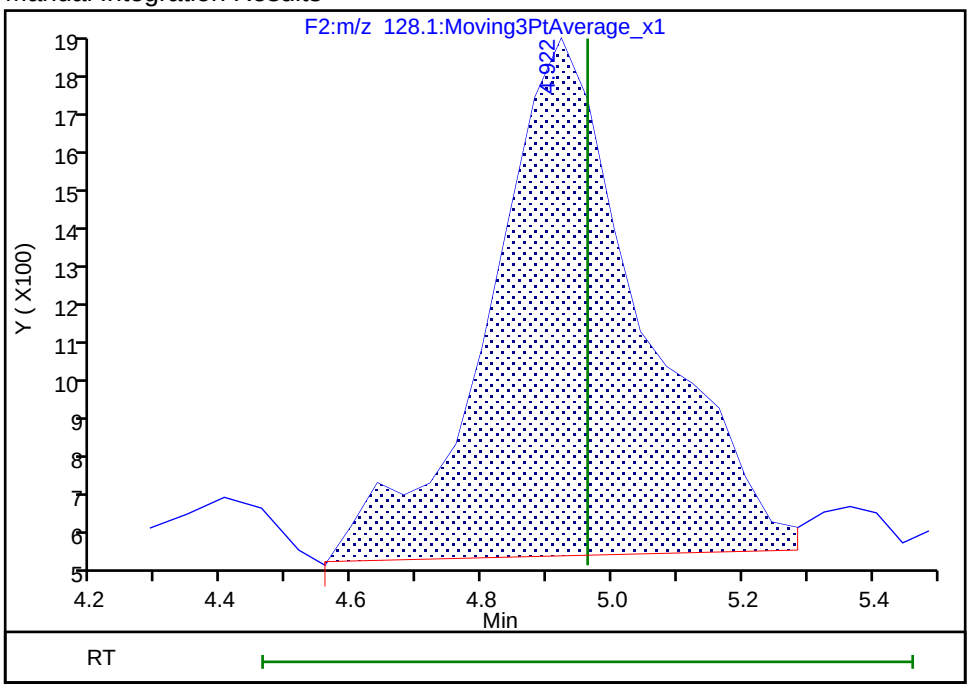
Processing Integration Results

RT: 4.92
Area: 12476
Amount: 0.297312
Amount Units: ug/l



Manual Integration Results

RT: 4.92
Area: 21269
Amount: 1.421432
Amount Units: ug/l



Reviewer: meyera, 14-Apr-2022 10:33:40
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:33:46 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12072.d

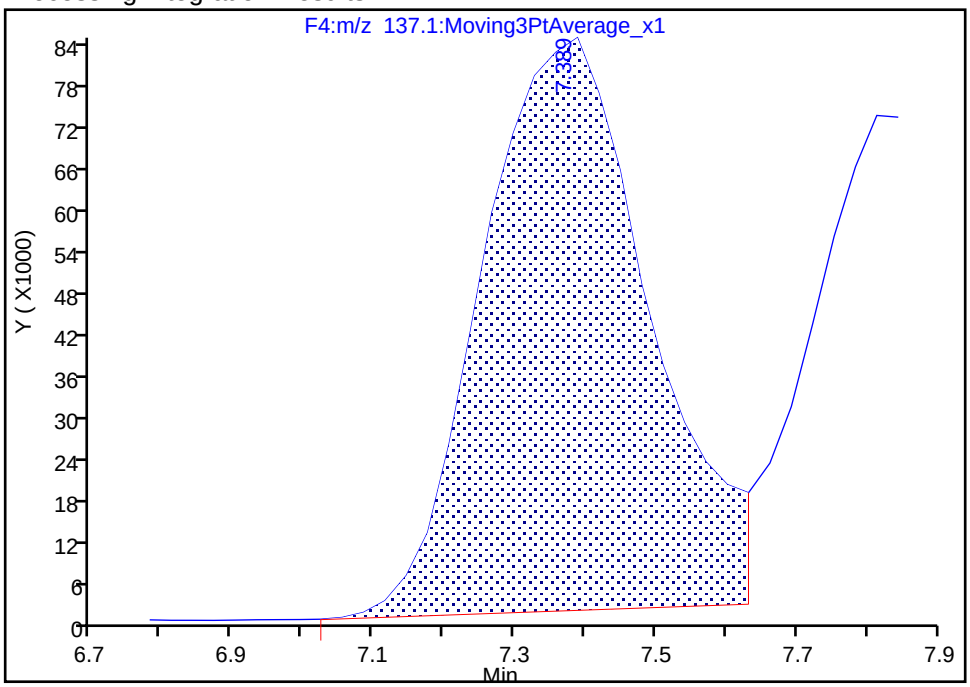
Injection Date:	12-Apr-2022 22:47:06	Instrument ID:	LC_LCMS4
Lims ID:	280-160190-A-20-B	Lab Sample ID:	280-160190-20
Client ID:	29SB168 (11-12)		
Operator ID:	acm	ALS Bottle#:	65 Worklist Smp#: 73
Injection Vol:	40.0 ul	Dil. Factor:	50.0000
Method:	8321expDuPont	Limit Group:	LC - 8321A Expl
Column:		Detector	F4:SIR

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

Signal: 1

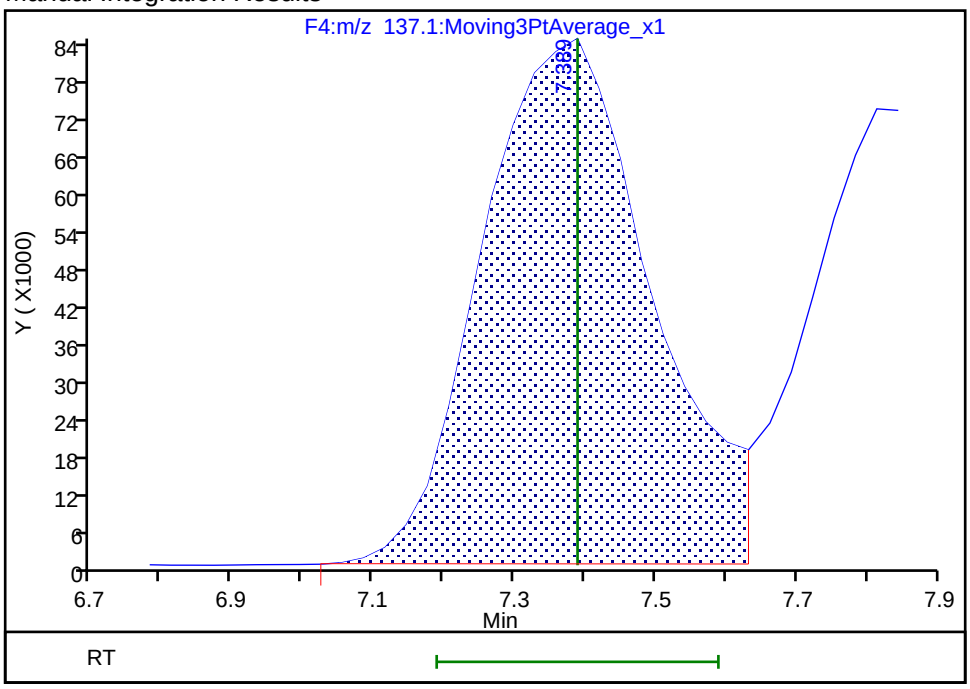
Processing Integration Results

RT: 7.39
Area: 1358437
Amount: 115.6969
Amount Units: ug/l



Manual Integration Results

RT: 7.39
Area: 1394640
Amount: 118.2233
Amount Units: ug/l



Reviewer: meyera, 13-Apr-2022 13:53:46

Audit Action: Assigned New Baseline Audit Reason: Baseline

Report Date: 14-Apr-2022 10:33:46 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12072.d

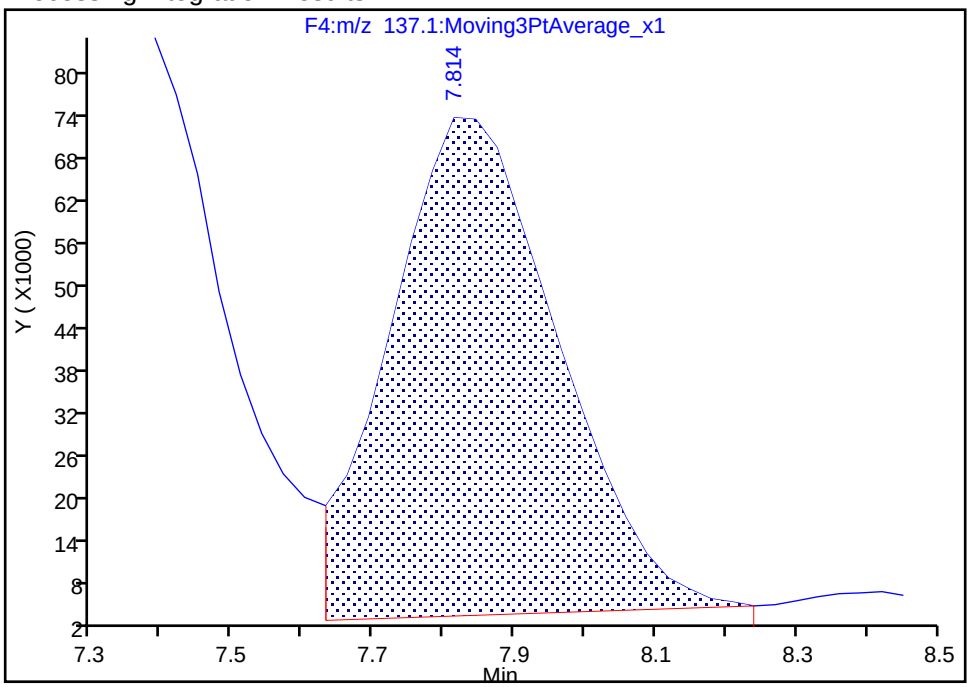
Injection Date:	12-Apr-2022 22:47:06	Instrument ID:	LC_LCMS4
Lims ID:	280-160190-A-20-B	Lab Sample ID:	280-160190-20
Client ID:	29SB168 (11-12)		
Operator ID:	acm	ALS Bottle#:	65 Worklist Smp#: 73
Injection Vol:	40.0 ul	Dil. Factor:	50.0000
Method:	8321expDuPont	Limit Group:	LC - 8321A Expl
Column:		Detector	F4:SIR

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

Signal: 1

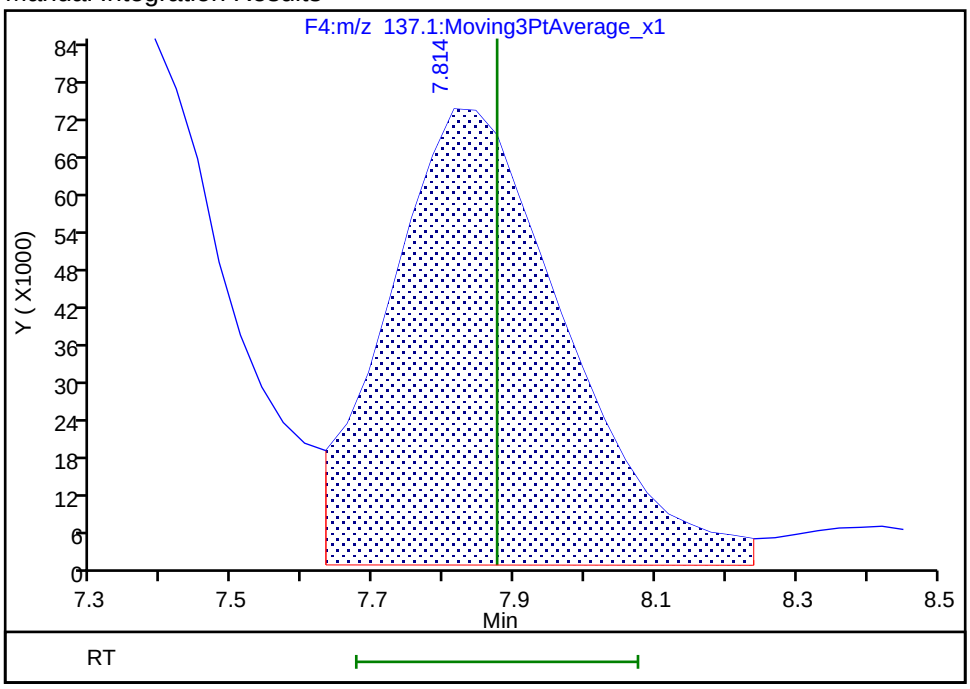
Processing Integration Results

RT: 7.81
Area: 1153681
Amount: 116.5729
Amount Units: ug/l



Manual Integration Results

RT: 7.81
Area: 1269204
Amount: 127.6916
Amount Units: ug/l



Reviewer: meyera, 13-Apr-2022 13:53:46

Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB168 (14.5-15) | Lab Sample ID: 280-160190-21
Matrix: Solid | Lab File ID: ex722D08036.d
Analysis Method: 8321A | Date Collected: 03/24/2022 12:04
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20
Sample wt/vol: 10.62(g) | Date Analyzed: 04/08/2022 13:25
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571224 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.047	U	0.094	0.047	0.042
99-65-0	1,3-Dinitrobenzene	0.047	U	0.094	0.047	0.042
118-96-7	2,4,6-Trinitrotoluene	0.047	U	0.094	0.047	0.035
121-14-2	2,4-Dinitrotoluene	0.19		0.094	0.047	0.044
606-20-2	2,6-Dinitrotoluene	0.047	U	0.094	0.047	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.047	U	0.094	0.047	0.047
19406-51-0	4-Amino-2,6-dinitrotoluene	0.047	U	0.094	0.047	0.029
2691-41-0	HMX	0.047	U Q	0.094	0.047	0.043
99-08-1	m-Nitrotoluene	0.047	U	0.094	0.047	0.041
98-95-3	Nitrobenzene	0.047	U	0.10	0.047	0.036
55-63-0	Nitroglycerin	0.047	U	0.094	0.047	0.027
88-72-2	o-Nitrotoluene	0.069	J	0.094	0.047	0.040
78-11-5	PETN	0.047	U	0.094	0.047	0.032
99-99-0	p-Nitrotoluene	0.093	J	0.094	0.047	0.047
121-82-4	RDX	0.047	U	0.11	0.047	0.041
479-45-8	Tetryl	0.047	U Q	0.094	0.047	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	98		68-140

Report Date: 14-Apr-2022 10:09:37 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08036.d
Lims ID: 280-160190-A-21-B
Client ID: 29SB168 (14.5-15)
Sample Type: Client
Inject. Date: 08-Apr-2022 13:25:47 ALS Bottle#: 32 Worklist Smp#: 36
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-21-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:07:02 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:54:00
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.234	1.246	-0.012	0.989	1444	-0.3776	1.1	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		116907	125.0	33.5	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		354416	125.0	126	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.008	3.008	0.0		1288153	129.4	352	
10 2,4,6-Trinitrotoluene								
227.0	3.321	3.316	0.011	0.768	56531	0.9228	14.9	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.354	0.011	0.777	599063	98.3	66.4	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.970	3.971	0.007	0.918	394692	5.60	15.1	
17 2,6-Dinitrotoluene								
182.0	4.132	4.138	0.006	0.956	281692	3.54	28.0	
* 18 2,4-dinitrotoluene-d3								
185.1	4.324	4.315	0.009		4133277	125.0	125	
19 2,4-Dinitrotoluene								
182.0	4.365	4.373	0.0	1.009	1738013	49.5	158	
22 o-Nitrotoluene								
137.0	4.972	4.987	-0.005	1.150	196992	18.4	24.3	
23 p-Nitrotoluene								
137.0	5.281	5.297	-0.005	1.221	232048	24.8	27.8	

Report Date: 14-Apr-2022 10:09:37 Chrom Revision: 2.3 12-Apr-2022 20:29:44

QC Flag Legend

Processing Flags

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

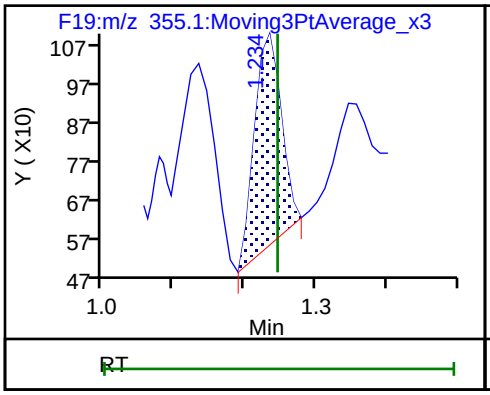
Report Date: 14-Apr-2022 10:09:38 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

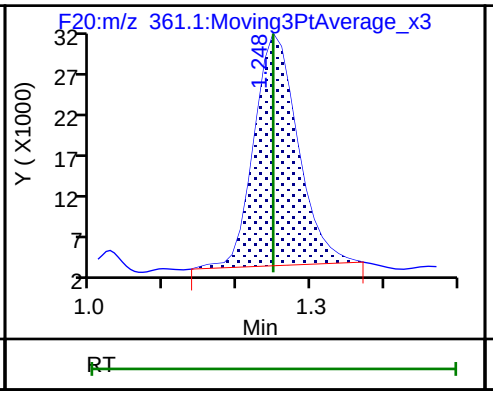
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08036.d

Injection Date:	08-Apr-2022 13:25:47	Instrument ID:	LC_LCMS7
Lims ID:	280-160190-A-21-B	Lab Sample ID:	280-160190-21
Client ID:	29SB168 (14.5-15)		
Operator ID:	acm	ALS Bottle#:	32 Worklist Smp#: 36
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl

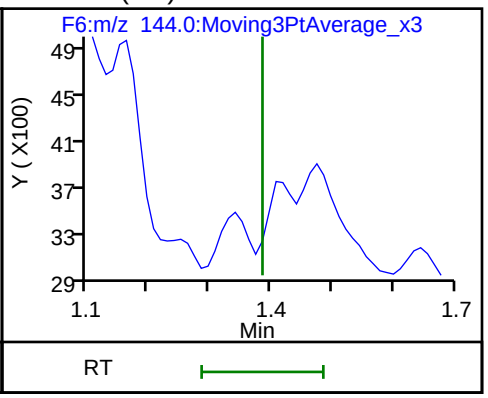
2 HMX



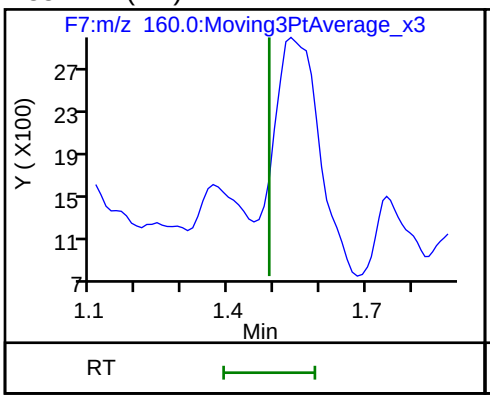
* 1 HMX-13C4



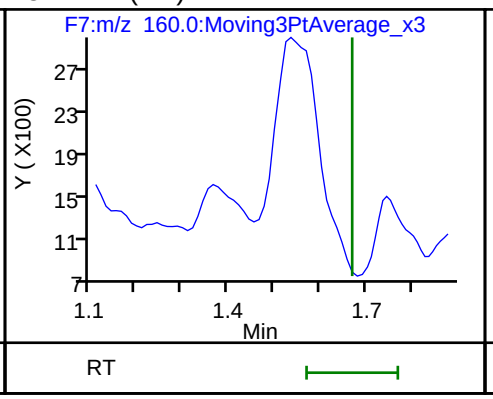
36 TNX (ND)



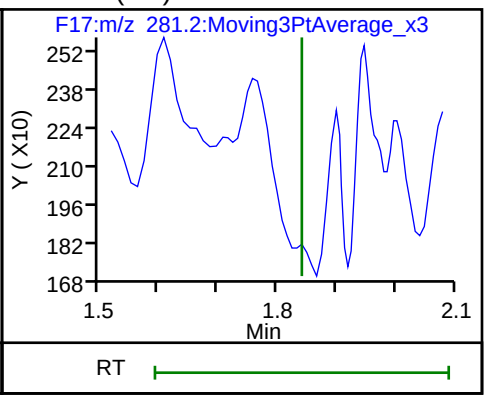
33 DNX (ND)



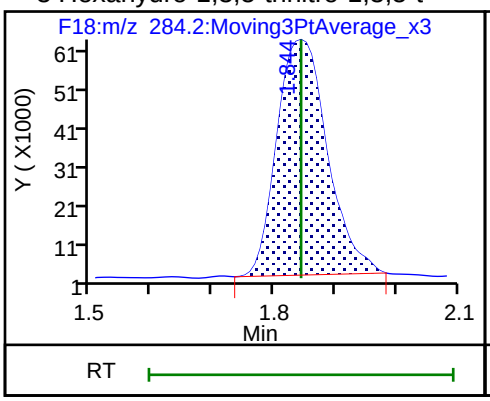
34 MNX (ND)



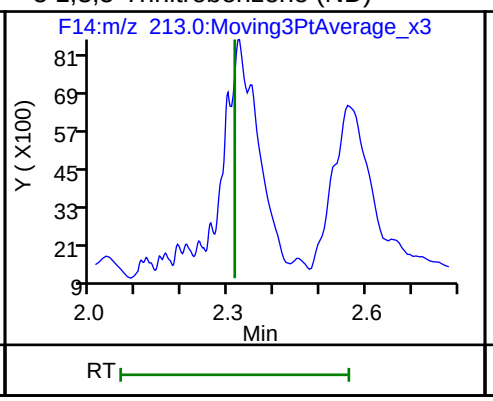
4 RDX (ND)



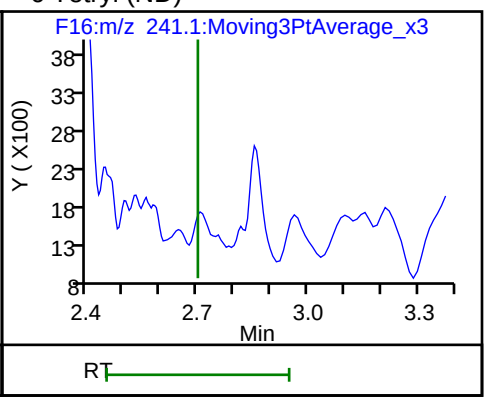
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



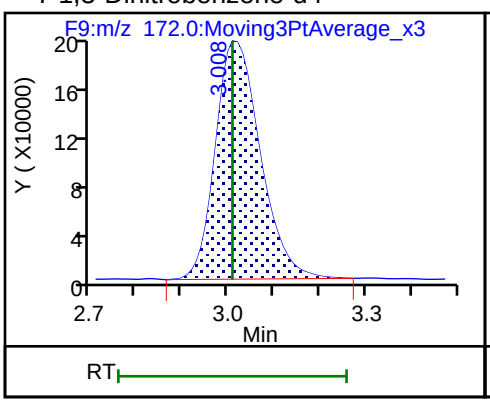
5 1,3,5-Trinitrobenzene (ND)



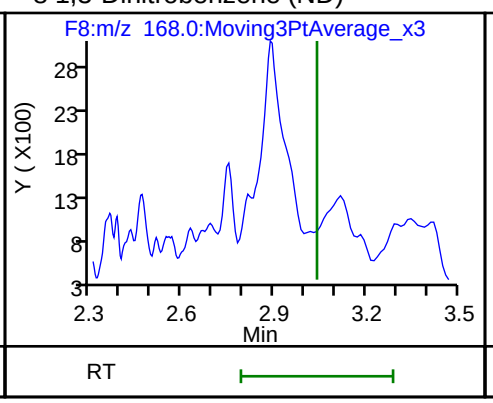
6 Tetryl (ND)



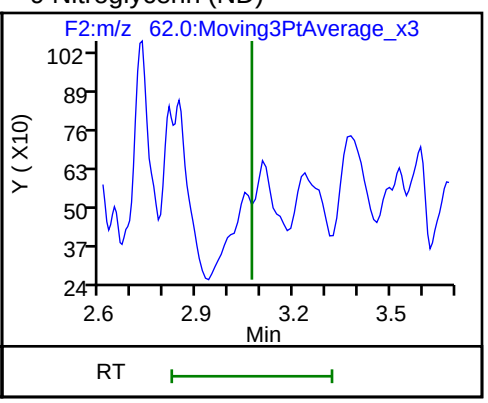
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

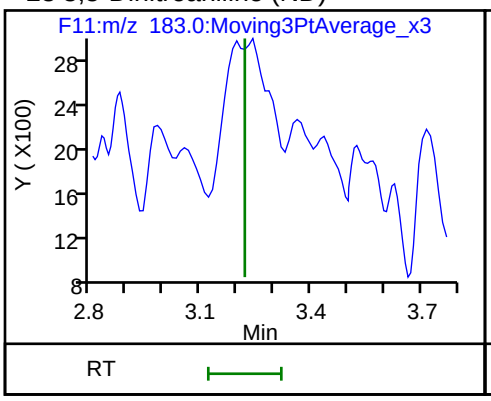


9 Nitroglycerin (ND)

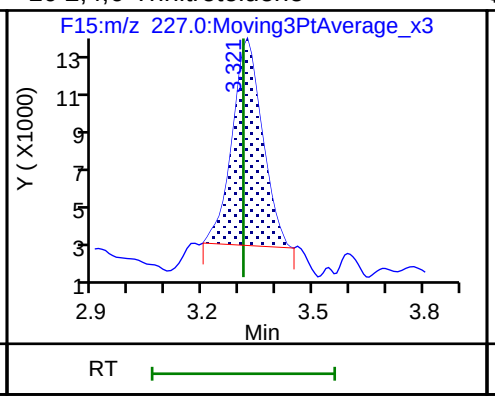


Report Date: 14-Apr-2022 10:09:38 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08036.d

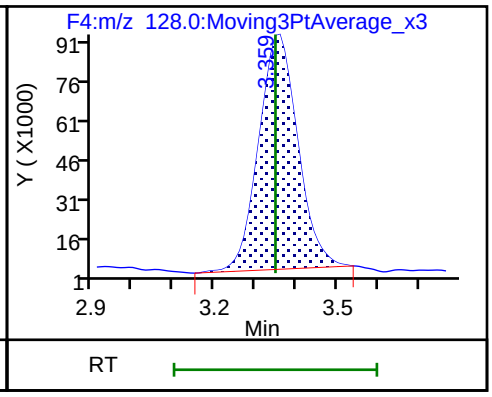
28 3,5-Dinitroaniline (ND)



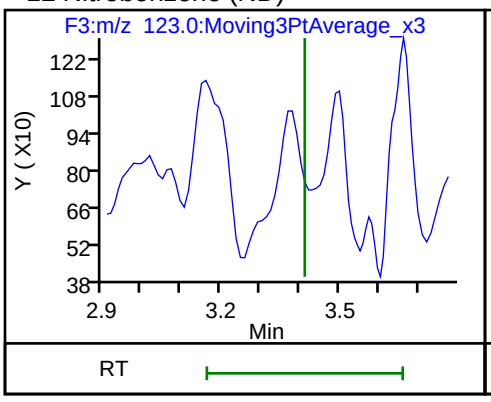
10 2,4,6-Trinitrotoluene



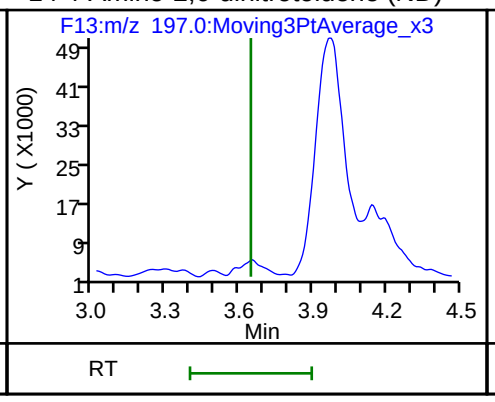
$ 11 Nitrobenzene-d5



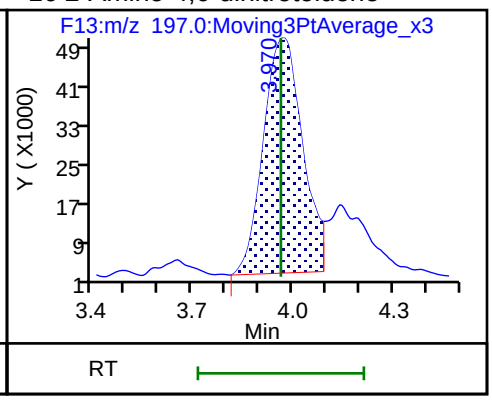
12 Nitrobenzene (ND)



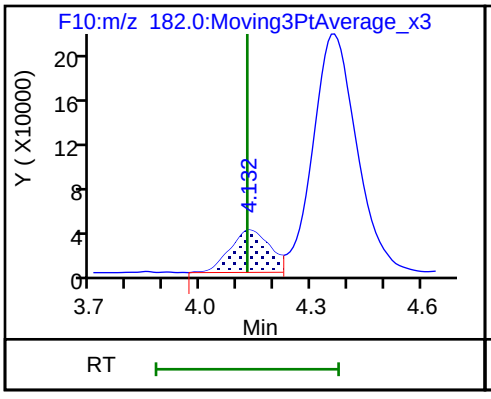
14 4-Amino-2,6-dinitrotoluene (ND)



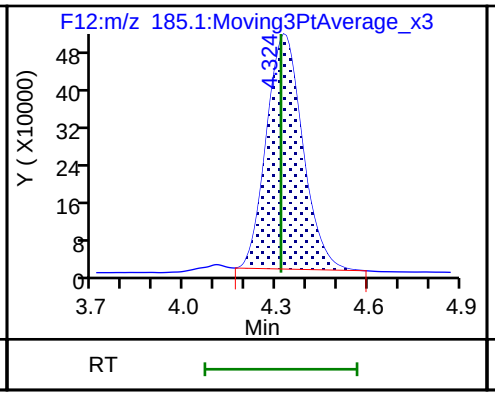
16 2-Amino-4,6-dinitrotoluene



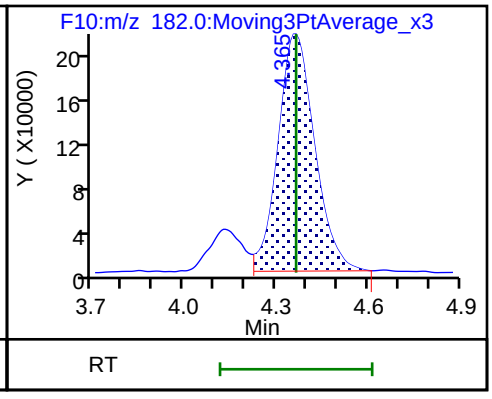
17 2,6-Dinitrotoluene



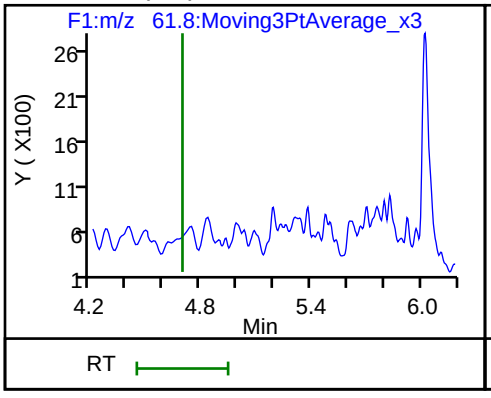
* 18 2,4-dinitrotoluene-d3



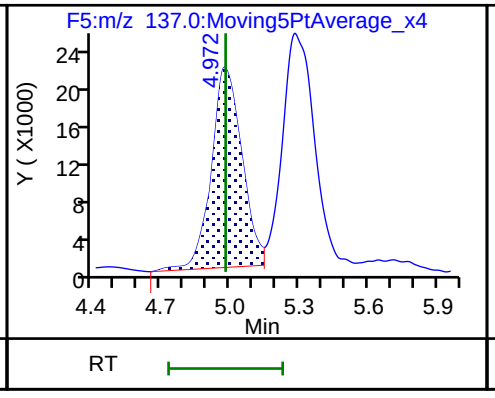
19 2,4-Dinitrotoluene



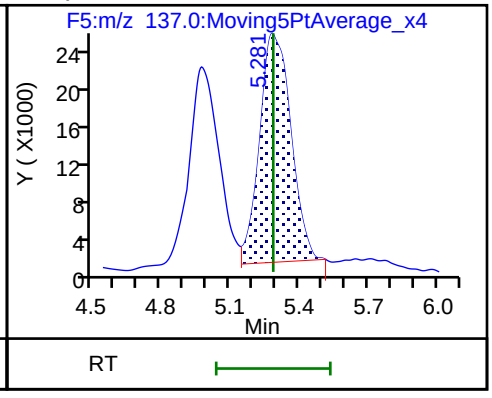
20 PETN (ND)



22 o-Nitrotoluene



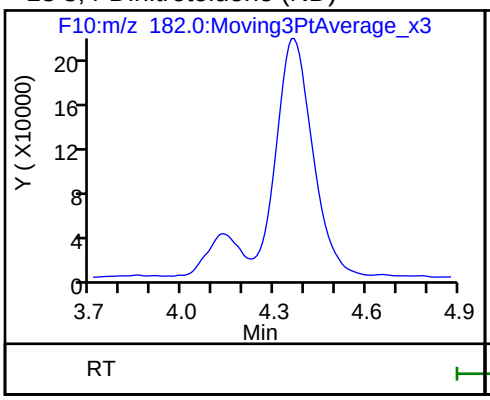
23 p-Nitrotoluene



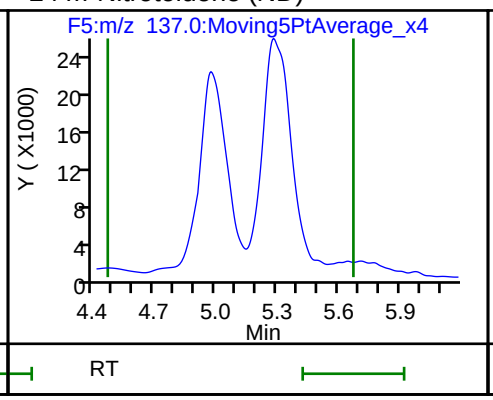
Report Date: 14-Apr-2022 10:09:38 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08036.d

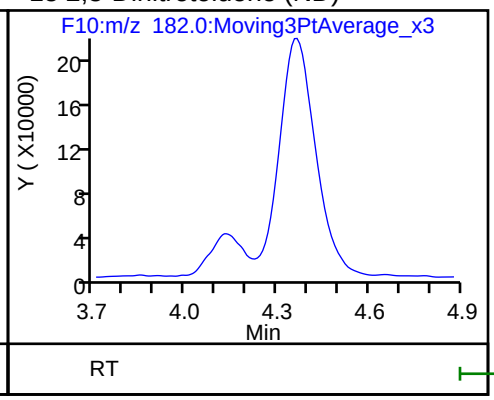
13 3,4-Dinitrotoluene (ND)



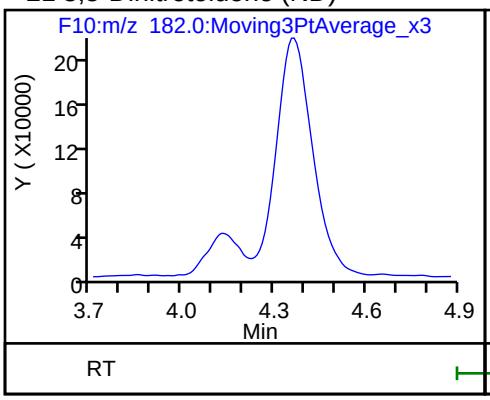
24 m-Nitrotoluene (ND)



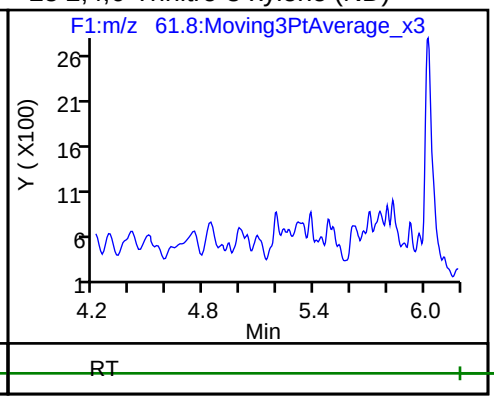
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 14-Apr-2022 10:09:38 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08036.d
Lims ID: 280-160190-A-21-B
Client ID: 29SB168 (14.5-15)
Sample Type: Client
Inject. Date: 08-Apr-2022 13:25:47 ALS Bottle#: 32 Worklist Smp#: 36
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-21-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:07:02 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:54:00

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	98.3	97.99

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB169 (3-4) | Lab Sample ID: 280-160190-22
Matrix: Solid | Lab File ID: ex722D08037.d
Analysis Method: 8321A | Date Collected: 03/24/2022 12:11
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20
Sample wt/vol: 10.42(g) | Date Analyzed: 04/08/2022 13:32
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571224 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.048	U	0.096	0.048	0.043
99-65-0	1,3-Dinitrobenzene	0.048	U	0.096	0.048	0.043
118-96-7	2,4,6-Trinitrotoluene	0.048	U	0.096	0.048	0.035
121-14-2	2,4-Dinitrotoluene	0.048	U	0.096	0.048	0.045
606-20-2	2,6-Dinitrotoluene	0.048	U	0.096	0.048	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.048	U	0.096	0.048	0.048
19406-51-0	4-Amino-2,6-dinitrotoluene	0.048	U	0.096	0.048	0.030
2691-41-0	HMX	0.048	U Q	0.096	0.048	0.044
99-08-1	m-Nitrotoluene	0.048	U	0.096	0.048	0.041
98-95-3	Nitrobenzene	0.048	U	0.11	0.048	0.036
55-63-0	Nitroglycerin	0.048	U	0.096	0.048	0.028
88-72-2	o-Nitrotoluene	0.048	U	0.096	0.048	0.041
78-11-5	PETN	0.048	U	0.096	0.048	0.033
99-99-0	p-Nitrotoluene	0.048	U	0.096	0.048	0.047
121-82-4	RDX	0.048	U	0.12	0.048	0.041
479-45-8	Tetryl	0.048	U Q	0.096	0.048	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	106		68-140

Report Date: 14-Apr-2022 10:09:38 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08037.d
Lims ID: 280-160190-A-22-B
Client ID: 29SB169 (3-4)
Sample Type: Client
Inject. Date: 08-Apr-2022 13:32:23 ALS Bottle#: 33 Worklist Smp#: 37
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-22-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:07:02 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:54:10
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		106503	125.0	9.8	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		385595	125.0	102	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.008	0.011		1626347	129.4	295	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.354	0.011	0.777	821500	106.8	117	
17 2,6-Dinitrotoluene								
182.0	4.126	4.138	0.0	0.954	119903	0.8473	20.1	
* 18 2,4-dinitrotoluene-d3								
185.1	4.324	4.315	0.009		5020023	125.0	119	
19 2,4-Dinitrotoluene								
182.0	4.365	4.373	0.0	1.009	141915	3.03	21.4	
22 o-Nitrotoluene								
137.0	4.972	4.987	-0.005	1.150	79059	5.91	15.4	
23 p-Nitrotoluene								
137.0	5.296	5.297	0.010	1.225	80766	6.71	14.7	

QC Flag Legend

Processing Flags

Reagents:

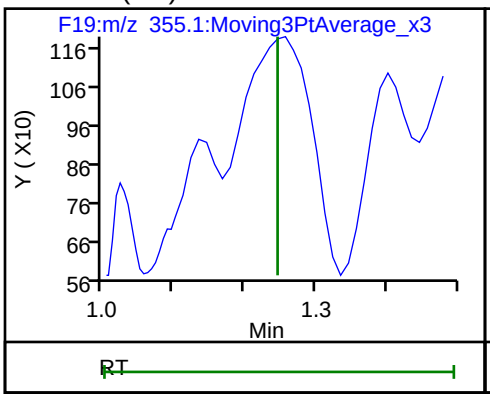
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 14-Apr-2022 10:09:38 Chrom Revision: 2.3 12-Apr-2022 20:29:44

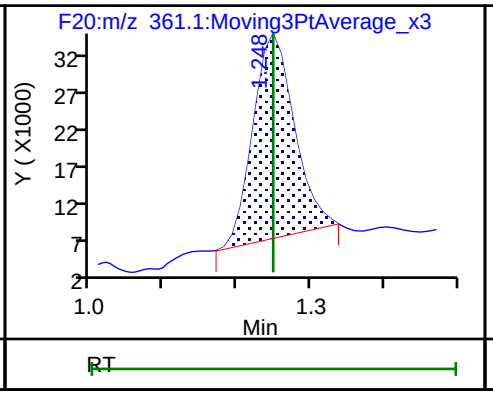
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08037.d
Injection Date: 08-Apr-2022 13:32:23 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-22-B Lab Sample ID: 280-160190-22
Client ID: 29SB169 (3-4)
Operator ID: acm ALS Bottle#: 33 Worklist Smp#: 37
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

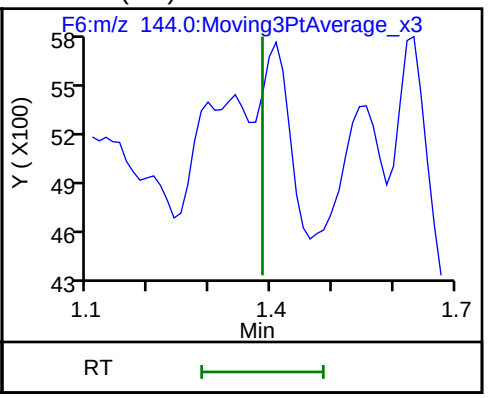
2 HMX (ND)



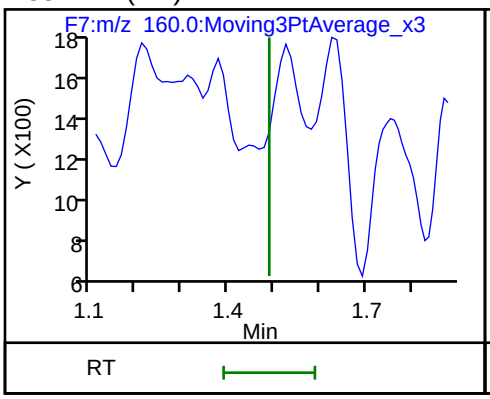
* 1 HMX-13C4



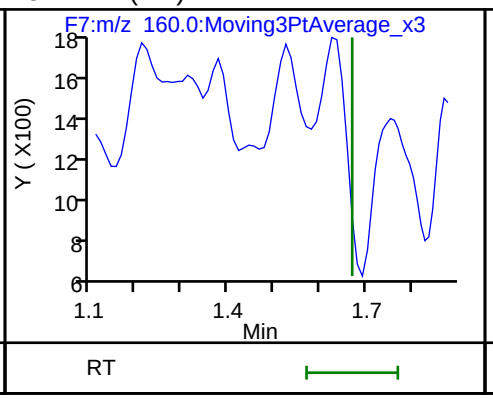
36 TNX (ND)



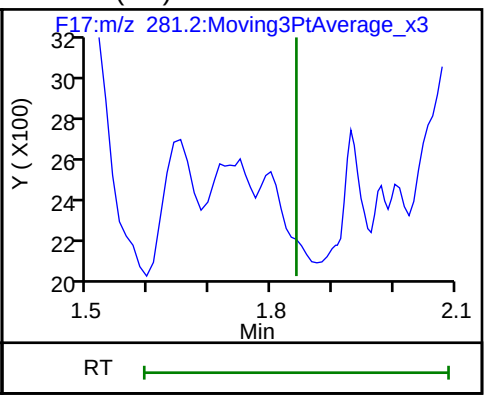
33 DNX (ND)



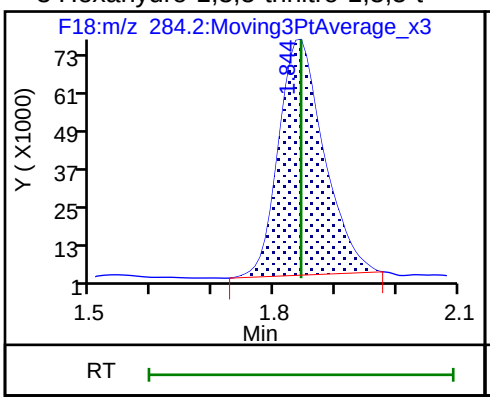
34 MNX (ND)



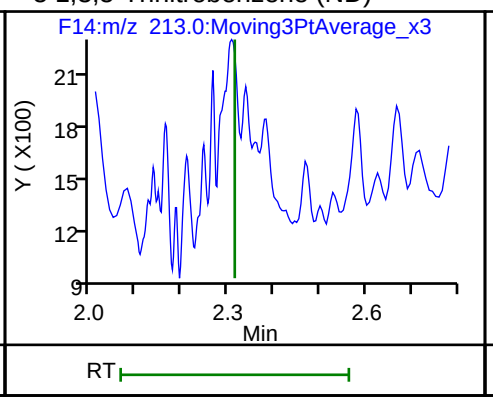
4 RDX (ND)



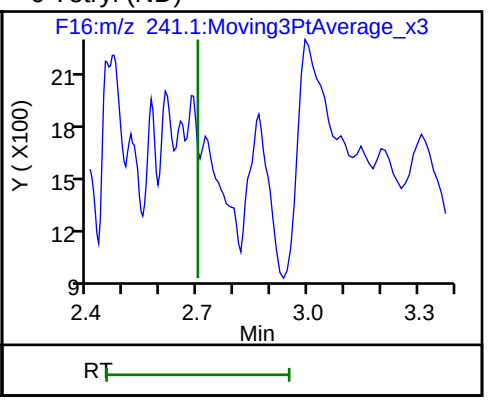
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



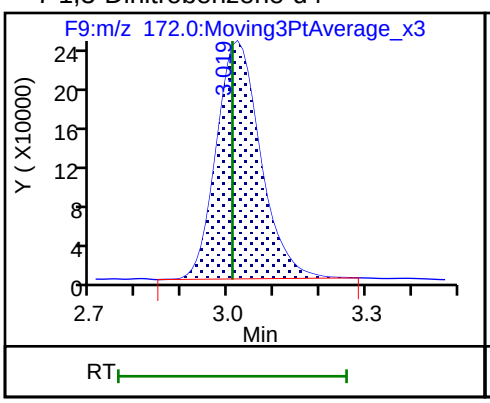
5 1,3,5-Trinitrobenzene (ND)



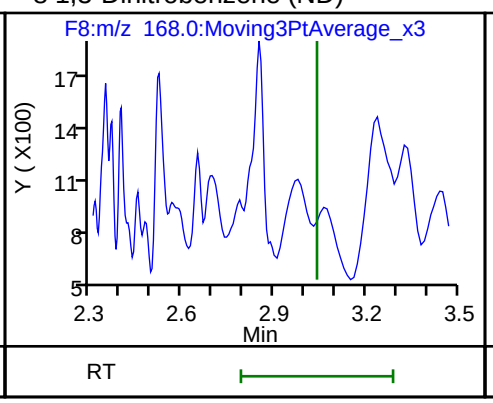
6 Tetryl (ND)



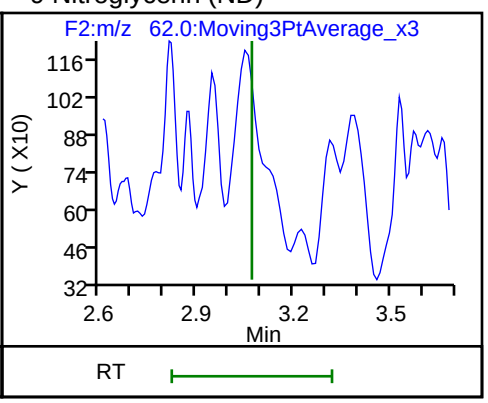
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



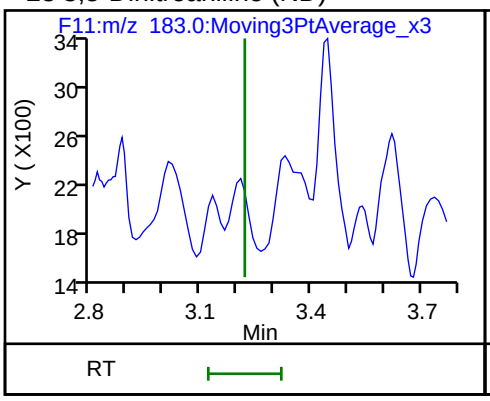
9 Nitroglycerin (ND)



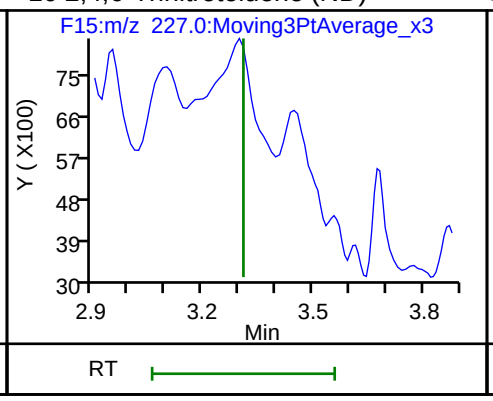
Report Date: 14-Apr-2022 10:09:38 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08037.d

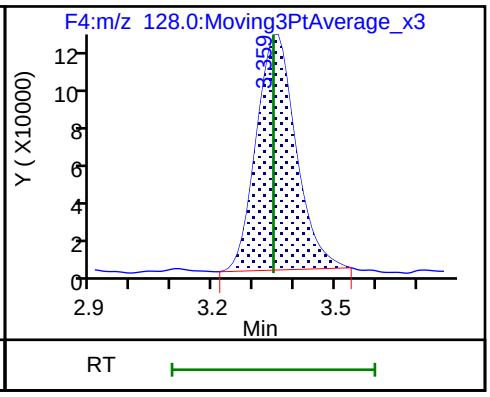
28 3,5-Dinitroaniline (ND)



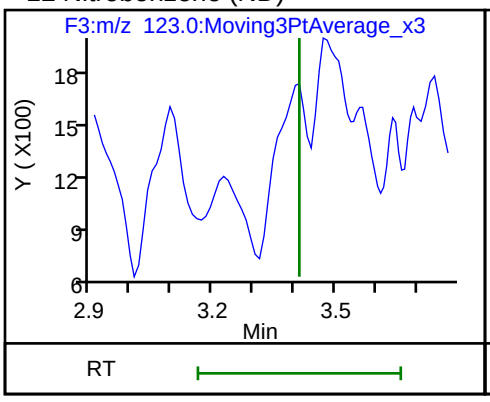
10 2,4,6-Trinitrotoluene (ND)



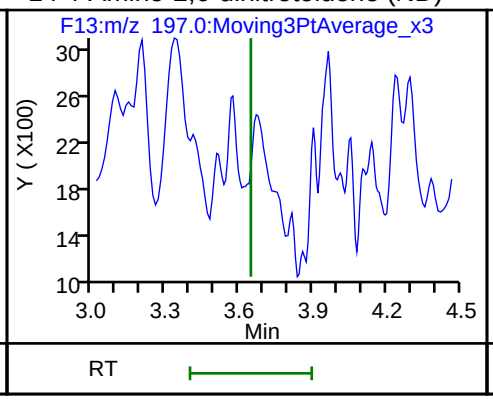
$ 11 Nitrobenzene-d5



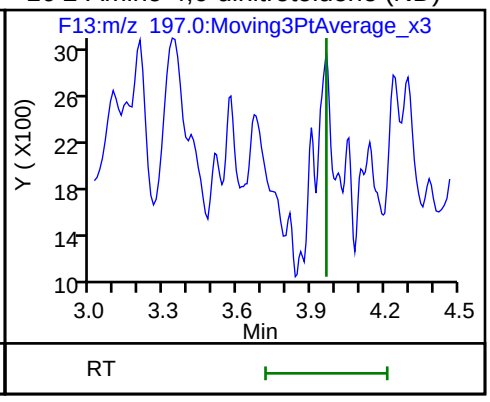
12 Nitrobenzene (ND)



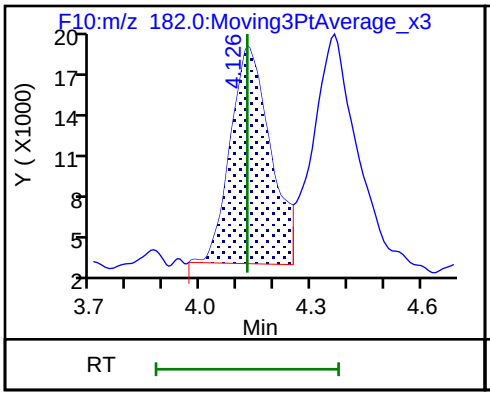
14 4-Amino-2,6-dinitrotoluene (ND)



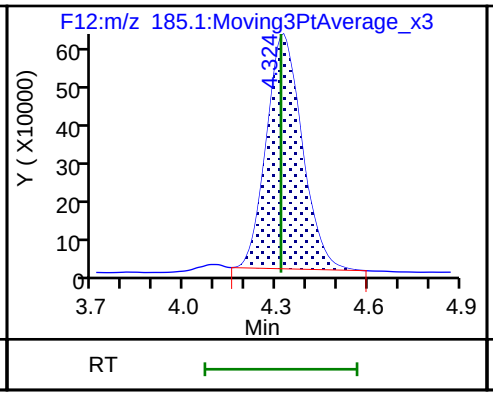
16 2-Amino-4,6-dinitrotoluene (ND)



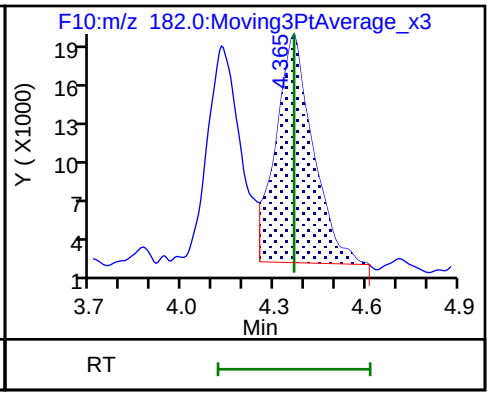
17 2,6-Dinitrotoluene



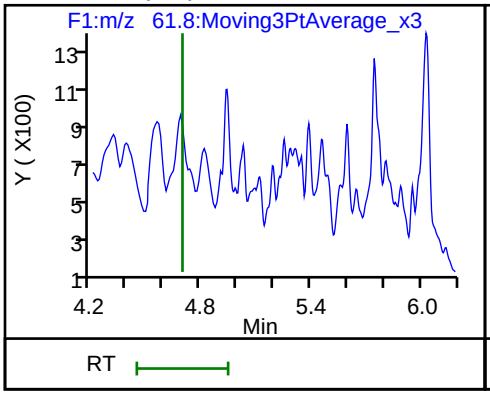
* 18 2,4-dinitrotoluene-d3



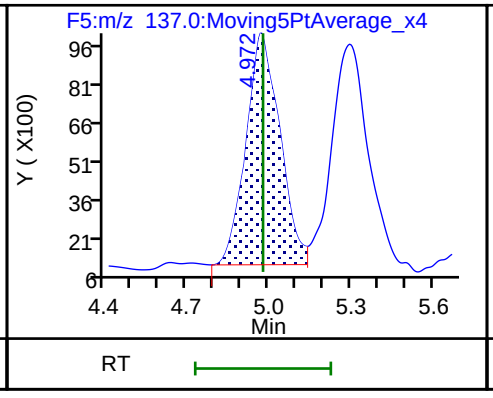
19 2,4-Dinitrotoluene



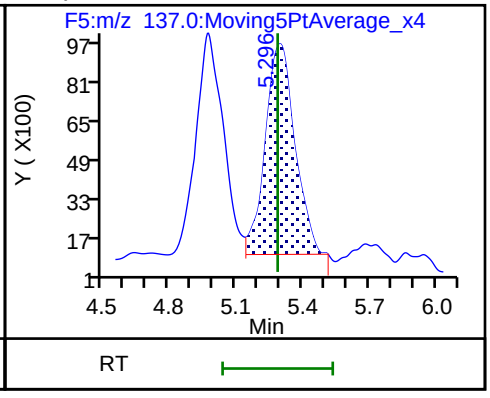
20 PETN (ND)



22 o-Nitrotoluene



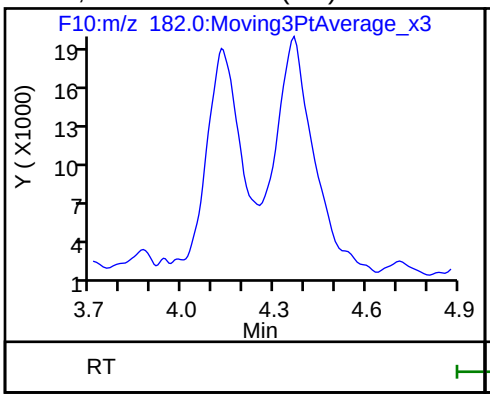
23 p-Nitrotoluene



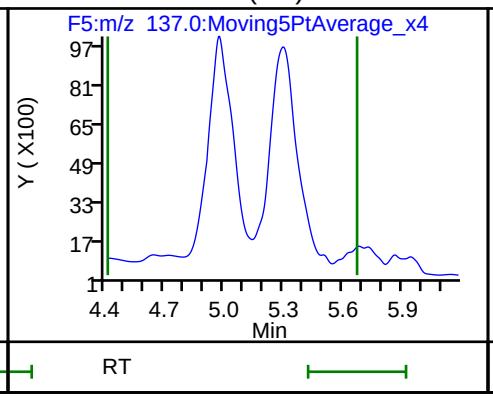
Report Date: 14-Apr-2022 10:09:38 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08037.d

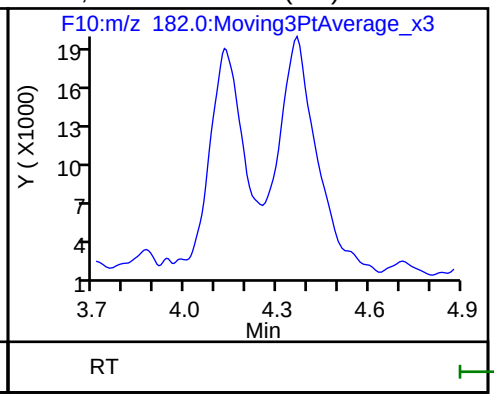
13 3,4-Dinitrotoluene (ND)



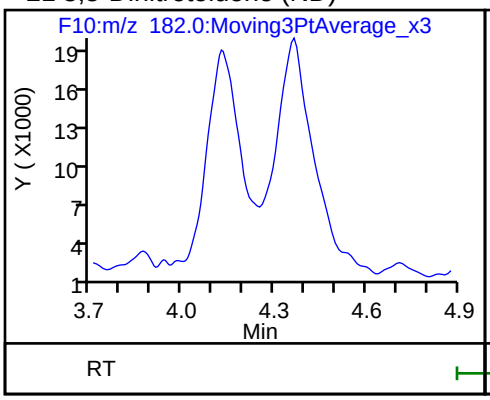
24 m-Nitrotoluene (ND)



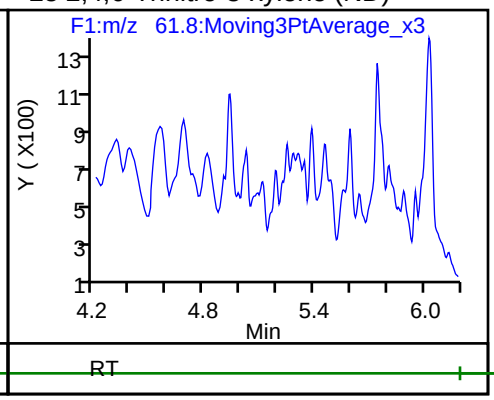
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 14-Apr-2022 10:09:38 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08037.d
Lims ID: 280-160190-A-22-B
Client ID: 29SB169 (3-4)
Sample Type: Client
Inject. Date: 08-Apr-2022 13:32:23 ALS Bottle#: 33 Worklist Smp#: 37
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-22-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:07:02 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:54:10

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	106.8	106.49

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB169 (6-7) | Lab Sample ID: 280-160190-23
Matrix: Solid | Lab File ID: ex722D08038.d
Analysis Method: 8321A | Date Collected: 03/24/2022 12:13
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20
Sample wt/vol: 10.07(g) | Date Analyzed: 04/08/2022 13:38
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571224 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.050	U	0.099	0.050	0.044
99-65-0	1,3-Dinitrobenzene	0.050	U	0.099	0.050	0.044
118-96-7	2,4,6-Trinitrotoluene	0.22		0.099	0.050	0.037
121-14-2	2,4-Dinitrotoluene	0.75	M	0.099	0.050	0.046
606-20-2	2,6-Dinitrotoluene	0.050	U M	0.099	0.050	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.050	U M	0.099	0.050	0.049
19406-51-0	4-Amino-2,6-dinitrotoluene	0.050	U M	0.099	0.050	0.031
2691-41-0	HMX	0.050	U Q	0.099	0.050	0.046
99-08-1	m-Nitrotoluene	0.050	U	0.099	0.050	0.043
98-95-3	Nitrobenzene	0.050	U	0.11	0.050	0.038
55-63-0	Nitroglycerin	0.050	U	0.099	0.050	0.029
88-72-2	o-Nitrotoluene	0.050	U	0.099	0.050	0.043
78-11-5	PETN	0.050	U	0.099	0.050	0.034
99-99-0	p-Nitrotoluene	0.050	U	0.099	0.050	0.049
121-82-4	RDX	0.050	U	0.12	0.050	0.043
479-45-8	Tetryl	0.050	U Q	0.099	0.050	0.039

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	94		68-140

Report Date: 14-Apr-2022 10:09:39 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08038.d
Lims ID: 280-160190-A-23-B
Client ID: 29SB169 (6-7)
Sample Type: Client
Inject. Date: 08-Apr-2022 13:38:58 ALS Bottle#: 34 Worklist Smp#: 38
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-23-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:07:02 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:55:06
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		130325	125.0	47.7	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		406633	125.0	155	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.008	0.011		1388153	129.4	444	
28 3,5-Dinitroaniline								M
183.0	3.230	3.231	0.011	1.070	23239	-0.0878	4.4	M
10 2,4,6-Trinitrotoluene								
227.0	3.310	3.316	0.0	0.765	4029657	56.4	258	
$ 11 Nitrobenzene-d5								
128.0	3.348	3.354	0.0	0.774	620821	94.5	88.4	
14 4-Amino-2,6-dinitrotoluene								M
197.0	3.630	3.652	-0.015	0.840	351881	6.22	2.4	M
16 2-Amino-4,6-dinitrotoluene								M
197.0	3.963	3.971	0.0	0.917	284159	3.81	2.0	M
17 2,6-Dinitrotoluene								M
182.0	4.120	4.138	-0.006	0.953	332131	4.19	14.2	M
* 18 2,4-dinitrotoluene-d3								
185.1	4.324	4.315	0.009		4212556	125.0	111	
19 2,4-Dinitrotoluene								M
182.0	4.365	4.373	0.0	1.009	6717777	188.7	250	M
22 o-Nitrotoluene								
137.0	4.977	4.987	0.0	1.151	45665	3.99	9.4	
23 p-Nitrotoluene								
137.0	5.301	5.297	0.015	1.226	89852	9.08	17.5	

Report Date: 14-Apr-2022 10:09:39 Chrom Revision: 2.3 12-Apr-2022 20:29:44

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

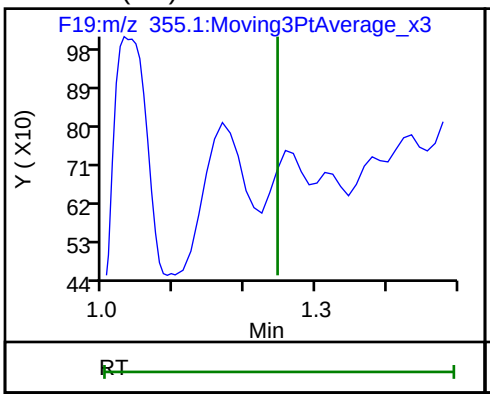
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 14-Apr-2022 10:09:39 Chrom Revision: 2.3 12-Apr-2022 20:29:44

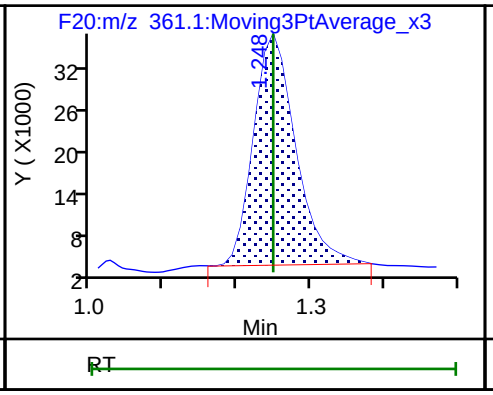
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08038.d
Injection Date: 08-Apr-2022 13:38:58 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-23-B Lab Sample ID: 280-160190-23
Client ID: 29SB169 (6-7)
Operator ID: acm ALS Bottle#: 34 Worklist Smp#: 38
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

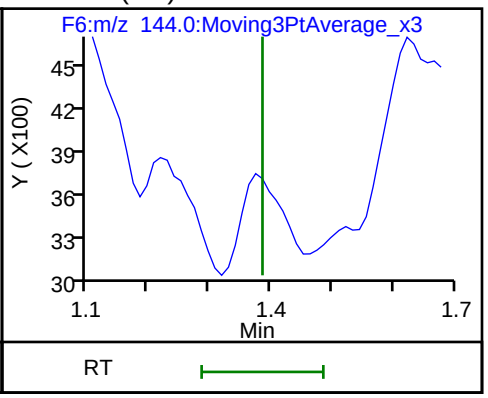
2 HMX (ND)



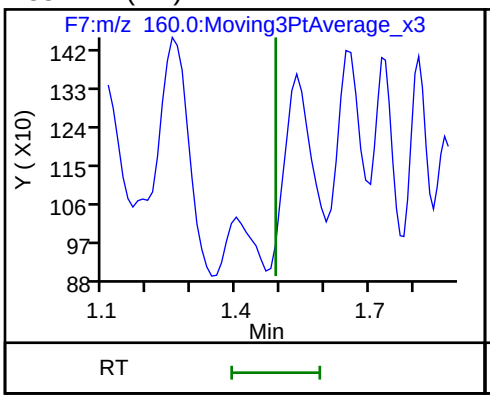
* 1 HMX-13C4



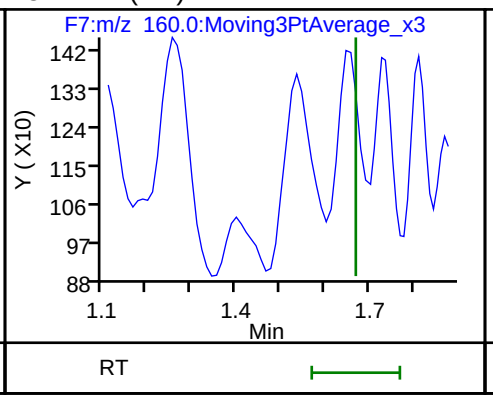
36 TNX (ND)



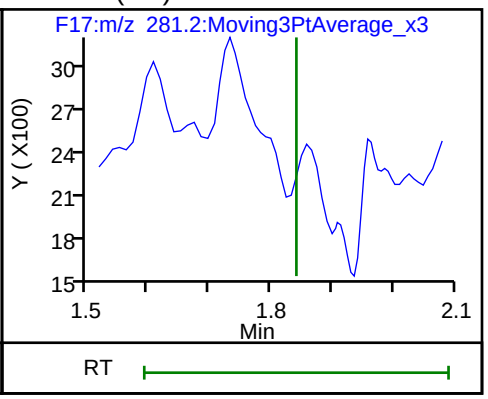
33 DNX (ND)



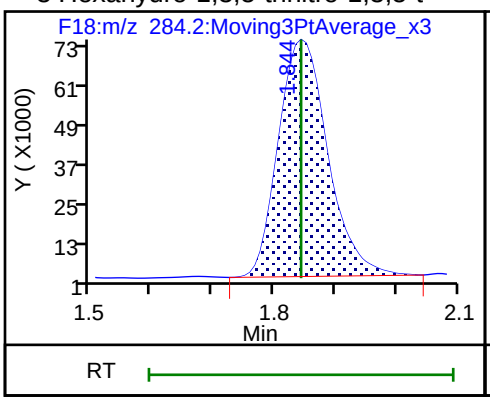
34 MNX (ND)



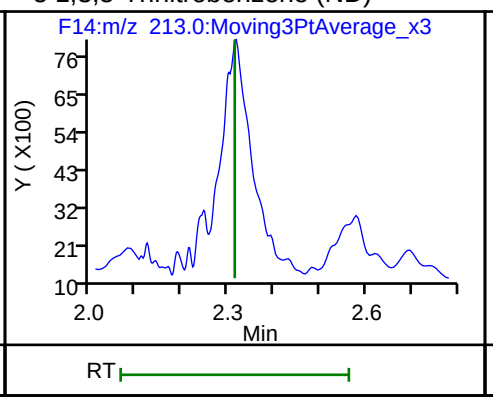
4 RDX (ND)



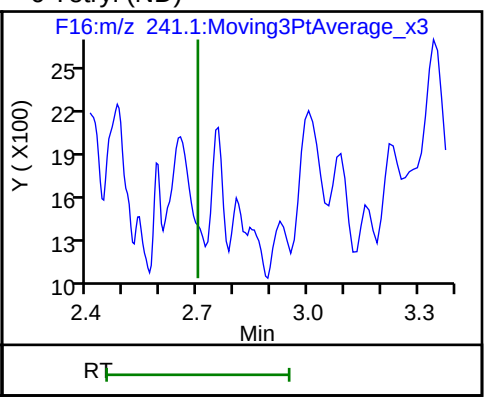
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



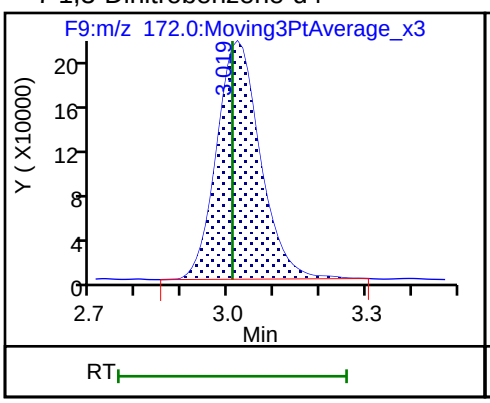
5 1,3,5-Trinitrobenzene (ND)



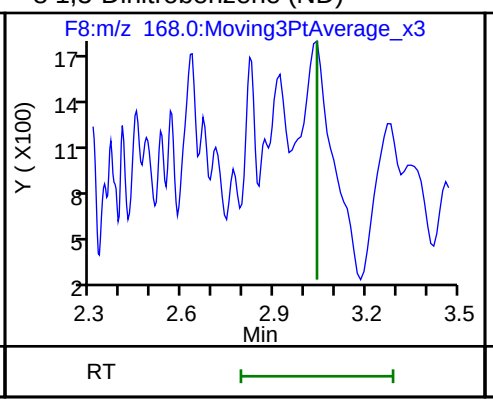
6 Tetryl (ND)



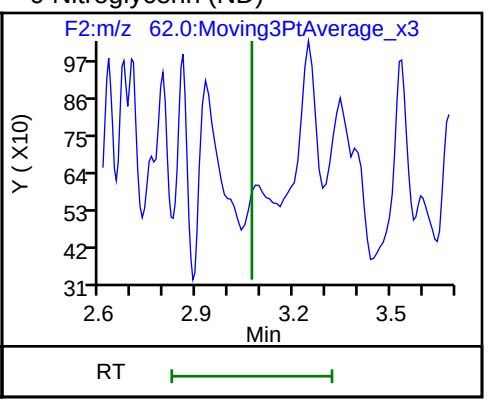
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

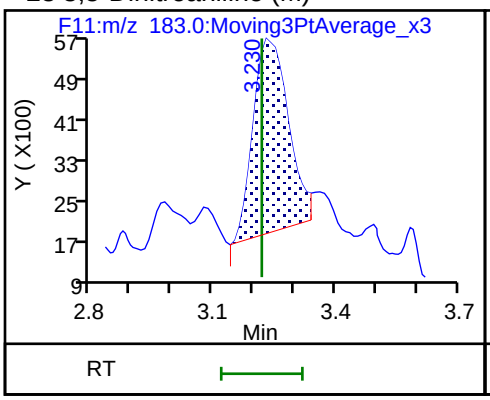


9 Nitroglycerin (ND)

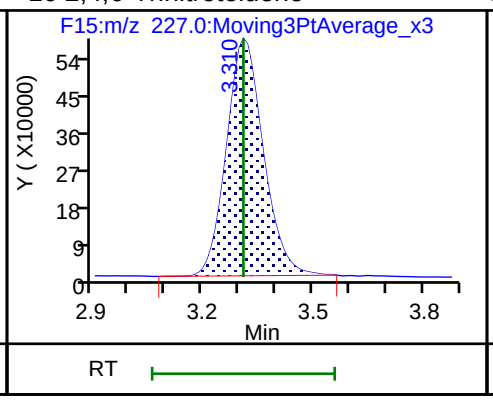


Report Date: 14-Apr-2022 10:09:39 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08038.d

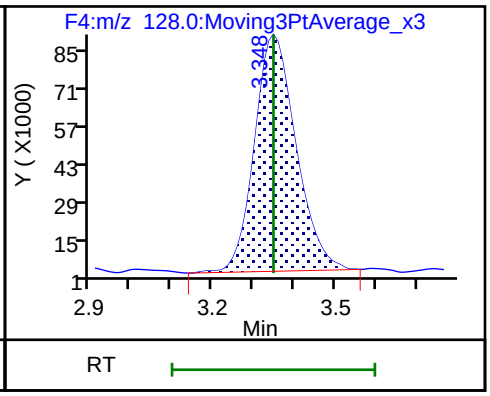
28 3,5-Dinitroaniline (M)



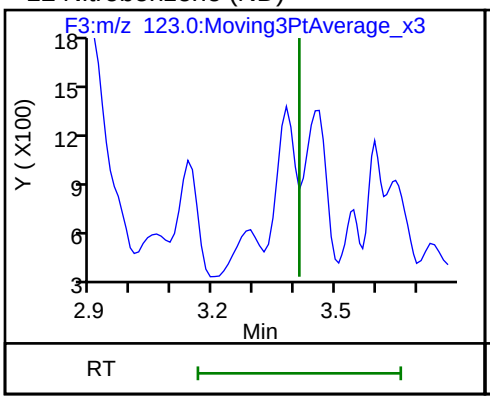
10 2,4,6-Trinitrotoluene



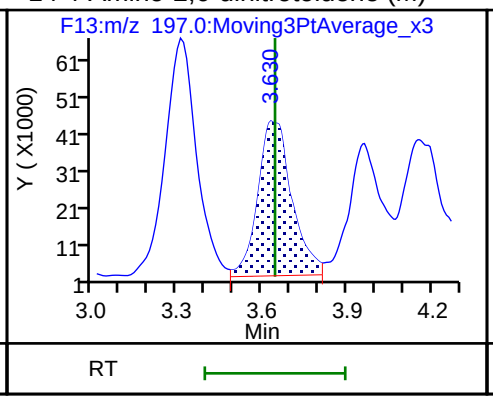
$ 11 Nitrobenzene-d5



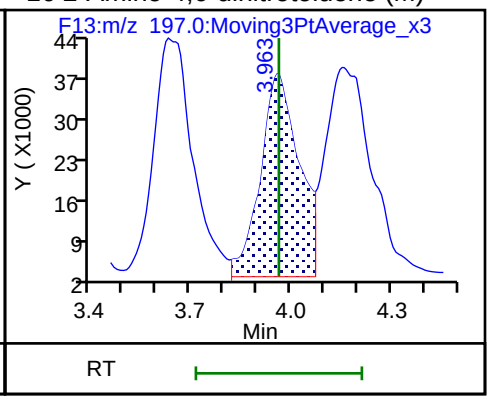
12 Nitrobenzene (ND)



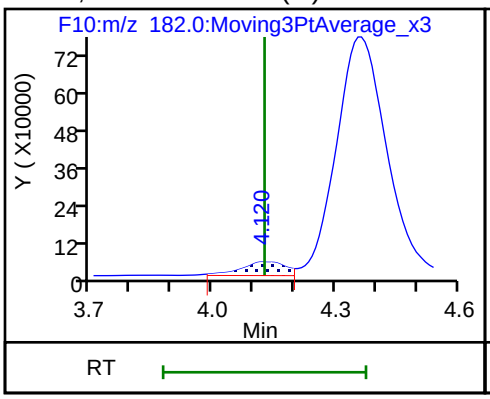
14 4-Amino-2,6-dinitrotoluene (M)



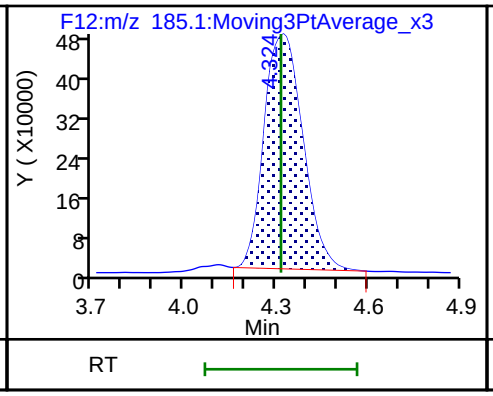
16 2-Amino-4,6-dinitrotoluene (M)



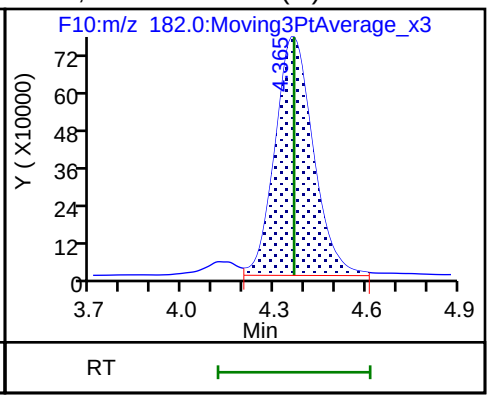
17 2,6-Dinitrotoluene (M)



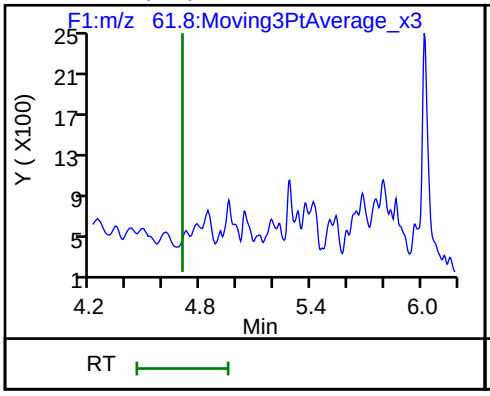
* 18 2,4-dinitrotoluene-d3



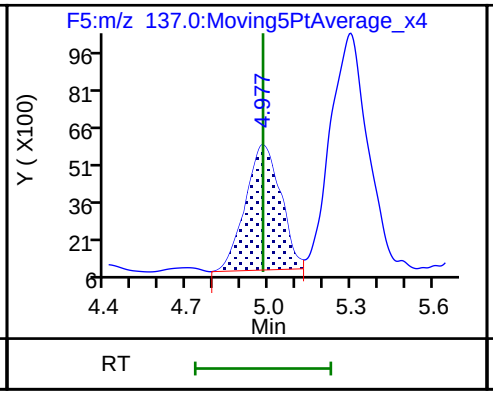
19 2,4-Dinitrotoluene (M)



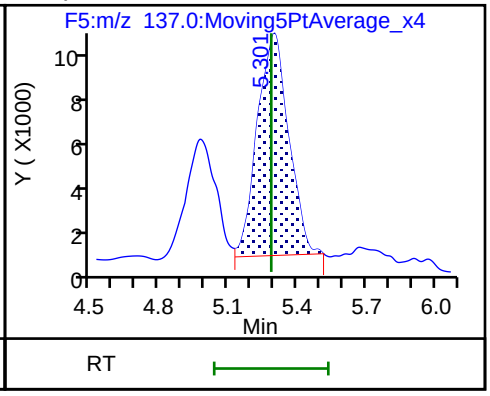
20 PETN (ND)



22 o-Nitrotoluene



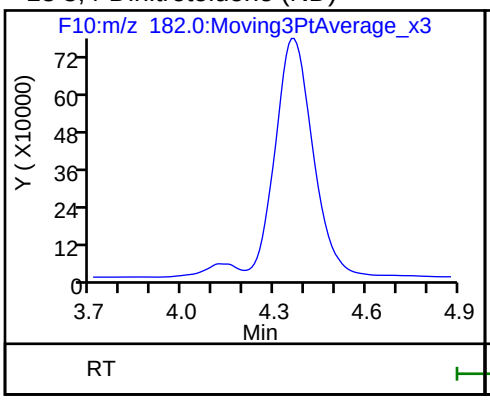
23 p-Nitrotoluene



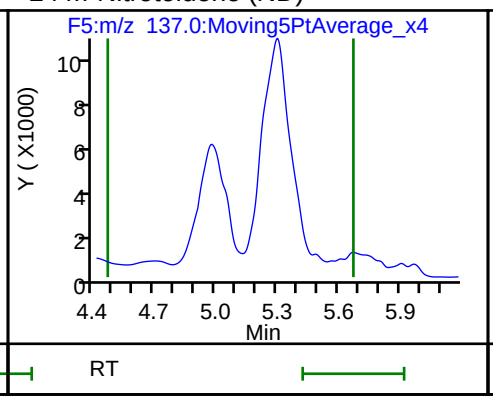
Report Date: 14-Apr-2022 10:09:39 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08038.d

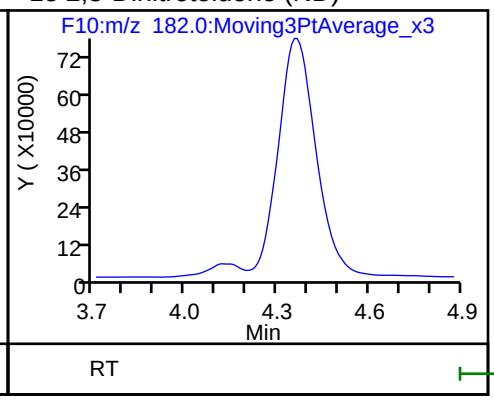
13 3,4-Dinitrotoluene (ND)



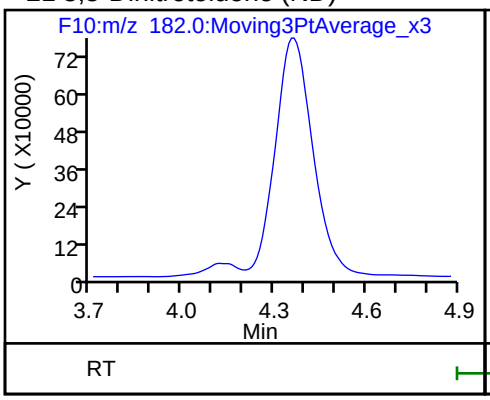
24 m-Nitrotoluene (ND)



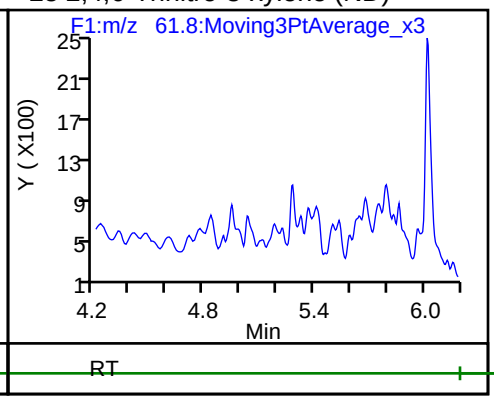
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 14-Apr-2022 10:09:39 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08038.d
Lims ID: 280-160190-A-23-B
Client ID: 29SB169 (6-7)
Sample Type: Client
Inject. Date: 08-Apr-2022 13:38:58 ALS Bottle#: 34 Worklist Smp#: 38
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-23-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:07:02 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:55:06

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	94.5	94.21

Report Date: 14-Apr-2022 10:09:39 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

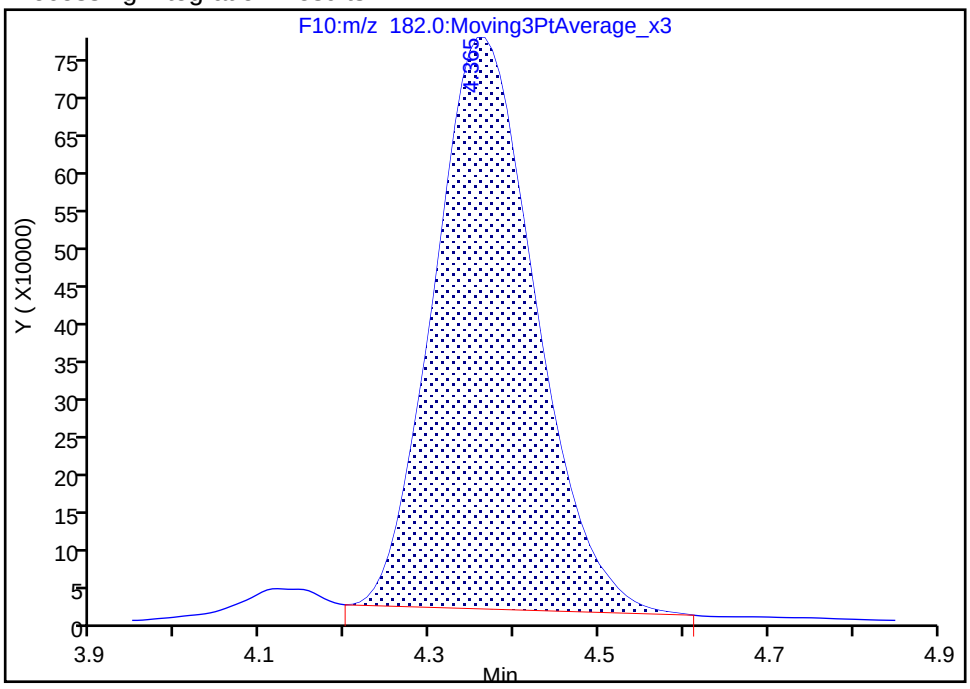
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08038.d				
Injection Date:	08-Apr-2022 13:38:58	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-23-B	Lab Sample ID:	280-160190-23		
Client ID:	29SB169 (6-7)				
Operator ID:	acm	ALS Bottle#:	34	Worklist Smp#:	38
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F10:SIR		

19 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

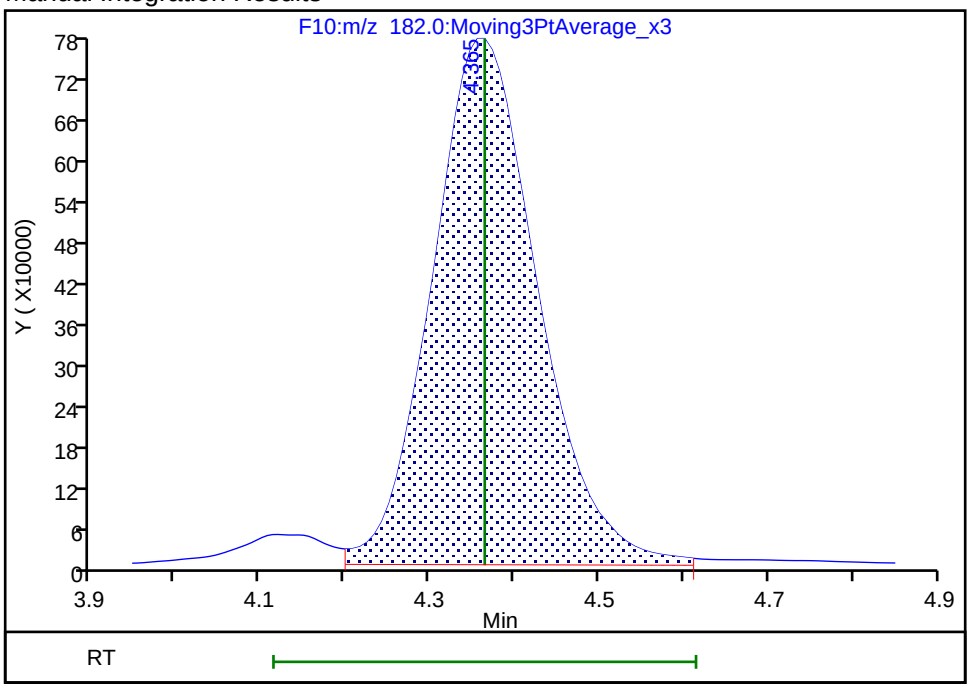
Processing Integration Results

RT: 4.36
Area: 6313953
Amount: 177.3530
Amount Units: ug/l



Manual Integration Results

RT: 4.36
Area: 6717777
Amount: 188.7164
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:54:37

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:09:39 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

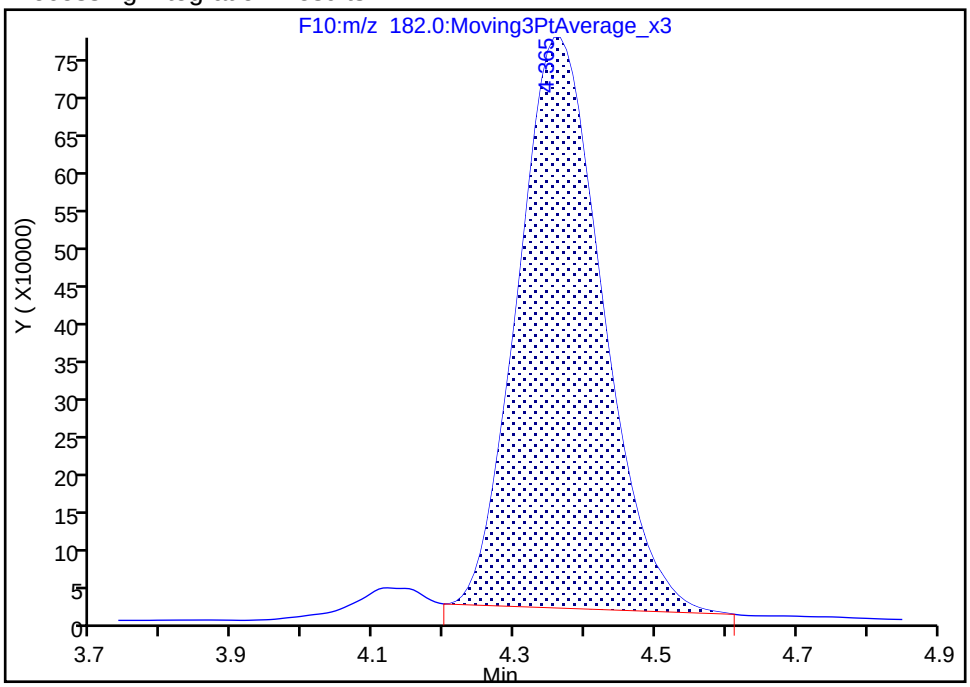
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08038.d				
Injection Date:	08-Apr-2022 13:38:58	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-23-B	Lab Sample ID:	280-160190-23		
Client ID:	29SB169 (6-7)				
Operator ID:	acm	ALS Bottle#:	34	Worklist Smp#:	38
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F10:SIR		

17 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

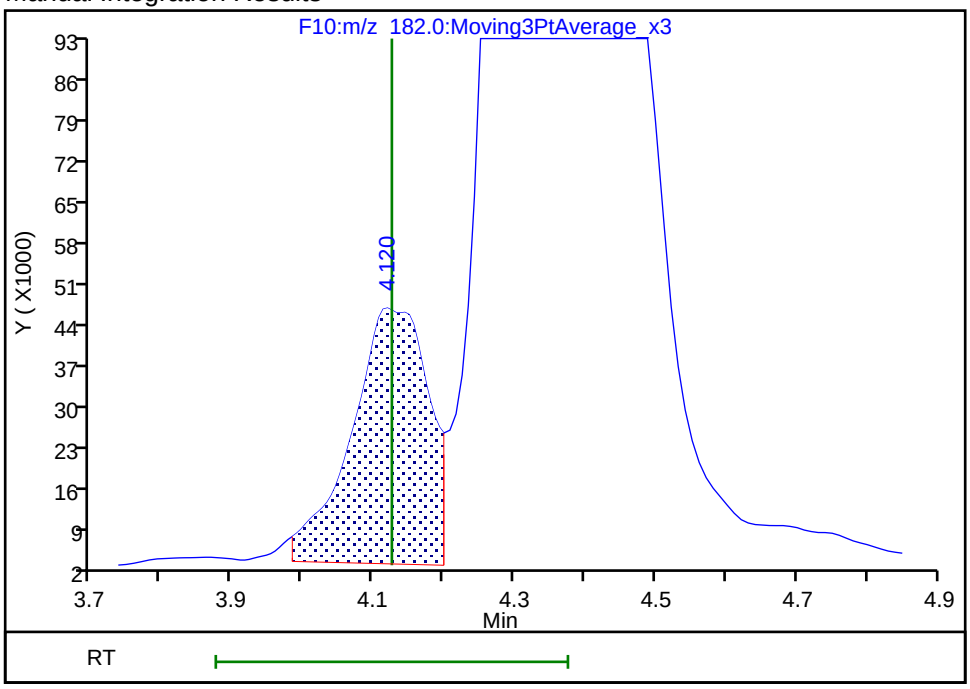
Processing Integration Results

RT: 4.36
Area: 6313953
Amount: 90.428685
Amount Units: ug/l



Manual Integration Results

RT: 4.12
Area: 332131
Amount: 4.185166
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:54:37

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:09:39 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

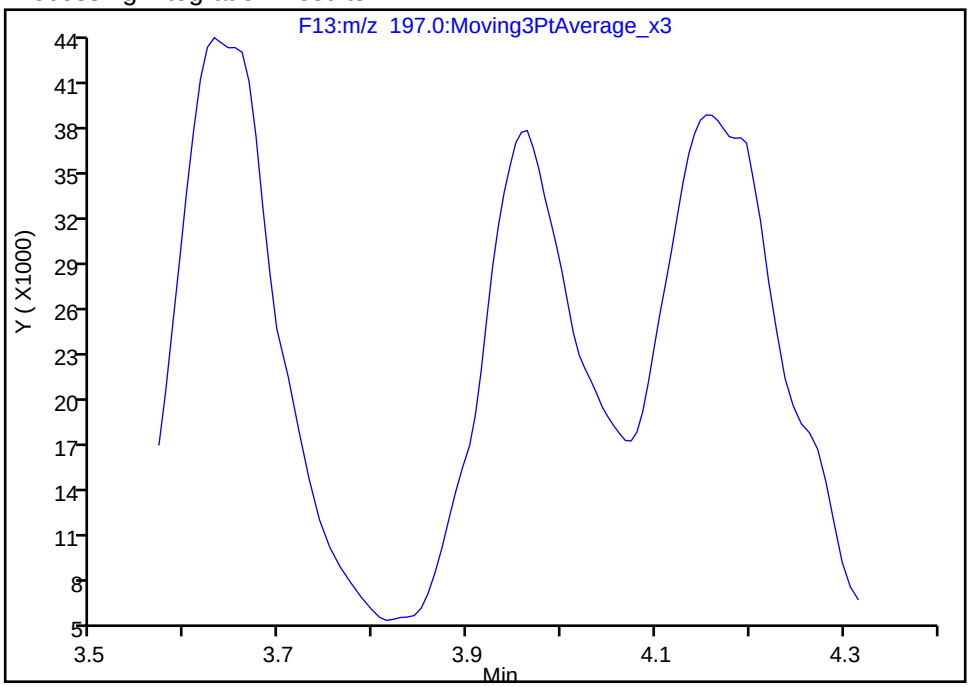
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08038.d				
Injection Date:	08-Apr-2022 13:38:58	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-23-B	Lab Sample ID:	280-160190-23		
Client ID:	29SB169 (6-7)				
Operator ID:	acm	ALS Bottle#:	34	Worklist Smp#:	38
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

16 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

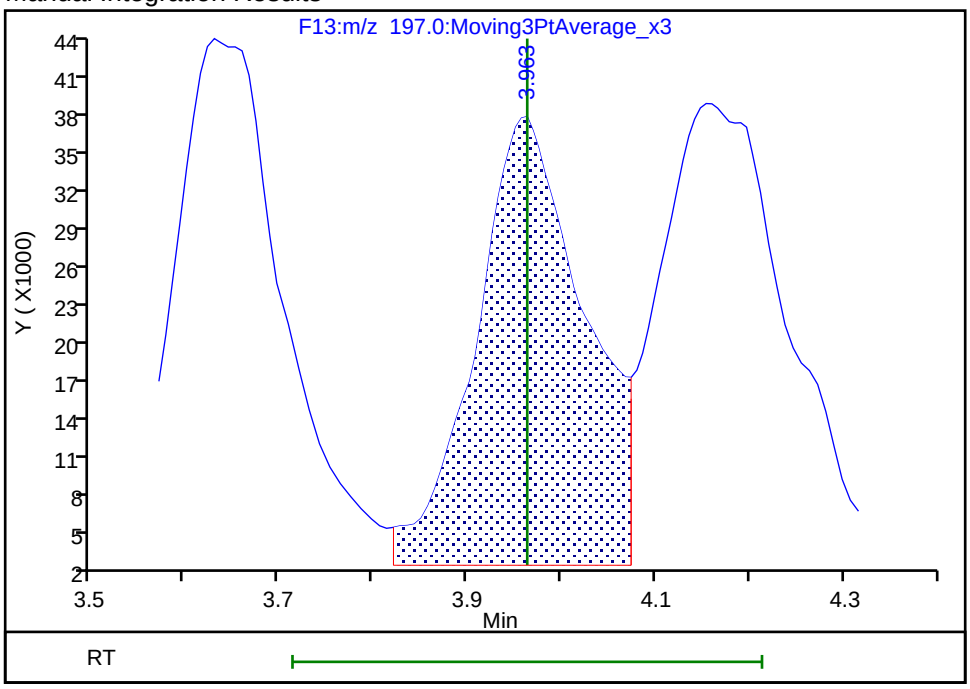
Not Detected
Expected RT: 3.96

Processing Integration Results



Manual Integration Results

RT: 3.96
Area: 284159
Amount: 3.812799
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:54:48
Audit Action: Manually Integrated Audit Reason: Assign Peak

Report Date: 14-Apr-2022 10:09:39

Chrom Revision: 2.3 12-Apr-2022 20:29:44
Manual Integration/User Assign Peak Report

Eurofins Denver

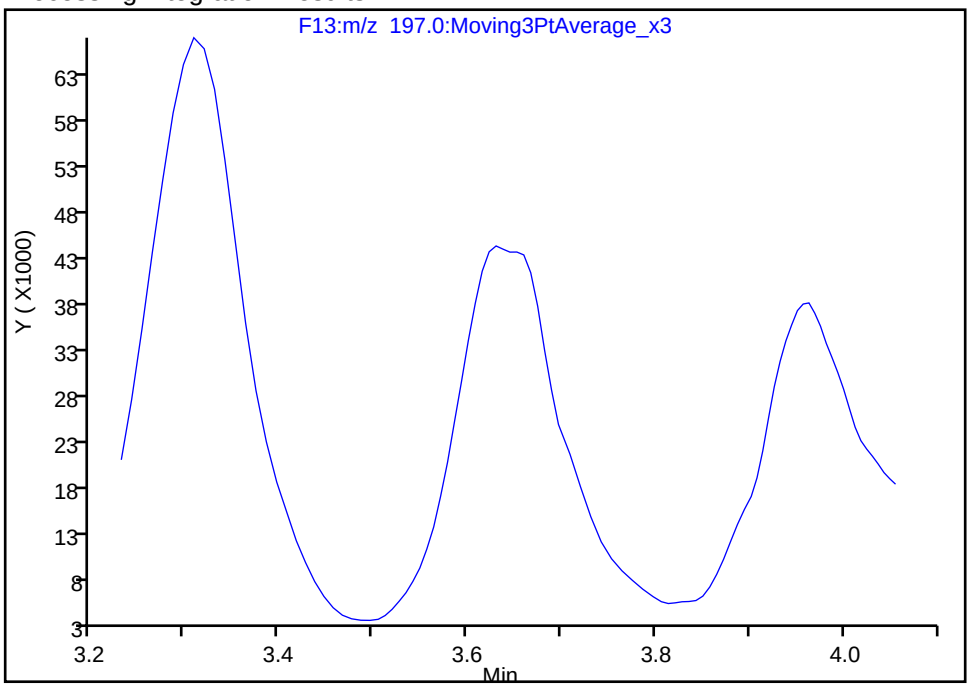
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08038.d				
Injection Date:	08-Apr-2022 13:38:58	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-23-B	Lab Sample ID:	280-160190-23		
Client ID:	29SB169 (6-7)				
Operator ID:	acm	ALS Bottle#:	34	Worklist Smp#:	38
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

14 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

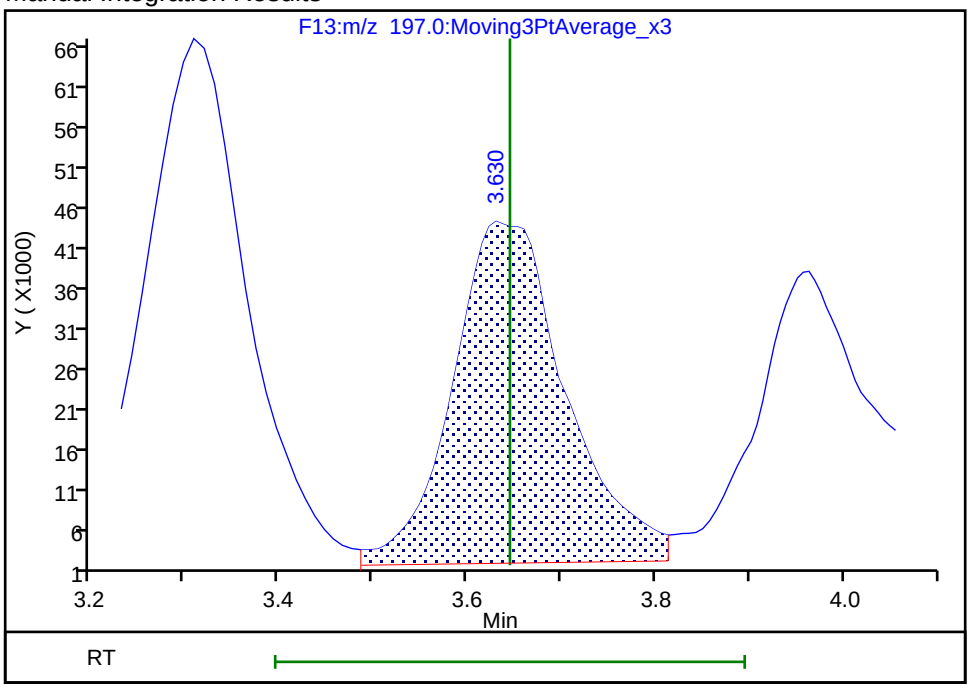
Not Detected
Expected RT: 3.65

Processing Integration Results



Manual Integration Results

RT: 3.63
Area: 351881
Amount: 6.221733
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:54:52
Audit Action: Manually Integrated
Audit Reason: Assign Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB169 (11-12) | Lab Sample ID: 280-160190-24
Matrix: Solid | Lab File ID: ex722D08039.d
Analysis Method: 8321A | Date Collected: 03/24/2022 12:15
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20
Sample wt/vol: 10.33(g) | Date Analyzed: 04/08/2022 13:45
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571224 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.048	U	0.097	0.048	0.043
99-65-0	1,3-Dinitrobenzene	0.048	U	0.097	0.048	0.043
118-96-7	2,4,6-Trinitrotoluene	0.048	U	0.097	0.048	0.036
121-14-2	2,4-Dinitrotoluene	0.14		0.097	0.048	0.045
606-20-2	2,6-Dinitrotoluene	0.048	U	0.097	0.048	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.048	U M	0.097	0.048	0.048
19406-51-0	4-Amino-2,6-dinitrotoluene	0.048	U M	0.097	0.048	0.030
2691-41-0	HMX	0.048	U Q	0.097	0.048	0.045
99-08-1	m-Nitrotoluene	0.048	U	0.097	0.048	0.042
98-95-3	Nitrobenzene	0.048	U M	0.11	0.048	0.037
55-63-0	Nitroglycerin	0.048	U	0.097	0.048	0.028
88-72-2	o-Nitrotoluene	0.048	U M	0.097	0.048	0.041
78-11-5	PETN	0.048	U	0.097	0.048	0.033
99-99-0	p-Nitrotoluene	0.048	U M	0.097	0.048	0.048
121-82-4	RDX	0.048	U	0.12	0.048	0.042
479-45-8	Tetryl	0.048	U Q	0.097	0.048	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	102		68-140

Report Date: 14-Apr-2022 10:09:40 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08039.d
Lims ID: 280-160190-A-24-B
Client ID: 29SB169 (11-12)
Sample Type: Client
Inject. Date: 08-Apr-2022 13:45:34 ALS Bottle#: 35 Worklist Smp#: 39
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-24-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:07:02 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:55:44
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		116315	125.0	21.2	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		364597	125.0	90.1	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.008	0.011		1351355	129.4	350	
28 3,5-Dinitroaniline								
183.0	3.230	3.231	0.011	1.070	45243	0.4552	7.1	
10 2,4,6-Trinitrotoluene								
227.0	3.310	3.316	0.0	0.765	316040	4.61	48.1	
$ 11 Nitrobenzene-d5								
128.0	3.348	3.354	0.0	0.774	653798	102.3	157	
14 4-Amino-2,6-dinitrotoluene								M
197.0	3.645	3.652	0.0	0.843	109557	1.56	2.9	M
16 2-Amino-4,6-dinitrotoluene								M
197.0	3.976	3.971	0.013	0.920	108483	1.18	2.8	M
17 2,6-Dinitrotoluene								
182.0	4.126	4.138	0.0	0.954	112278	1.05	7.2	
* 18 2,4-dinitrotoluene-d3								
185.1	4.324	4.315	0.009		4134396	125.0	111	
19 2,4-Dinitrotoluene								
182.0	4.365	4.373	0.0	1.009	1232295	35.0	65.5	
22 o-Nitrotoluene								M
137.0	4.972	4.987	-0.005	1.150	32008	2.77	7.0	M
23 p-Nitrotoluene								M
137.0	5.306	5.297	0.020	1.227	41541	3.98	9.4	M

Report Date: 14-Apr-2022 10:09:40 Chrom Revision: 2.3 12-Apr-2022 20:29:44

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

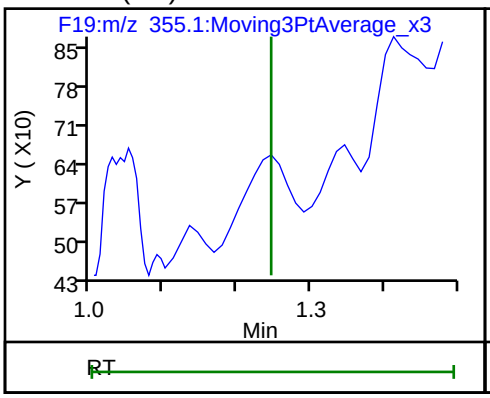
Report Date: 14-Apr-2022 10:09:40 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

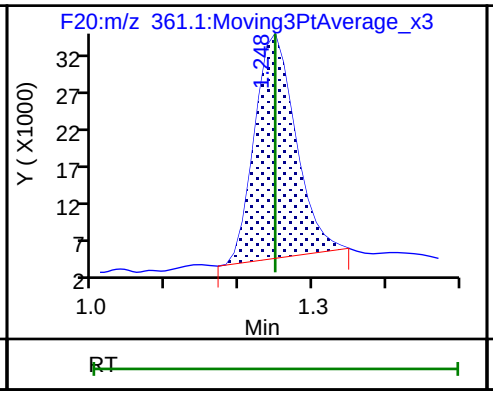
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08039.d

Injection Date:	08-Apr-2022 13:45:34	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-24-B	Lab Sample ID:	280-160190-24		
Client ID:	29SB169 (11-12)				
Operator ID:	acm	ALS Bottle#:	35	Worklist Smp#:	39
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		

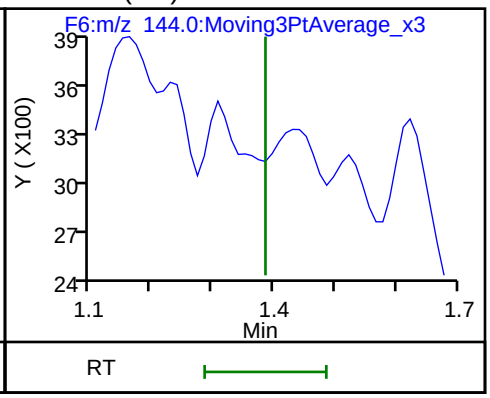
2 HMX (ND)



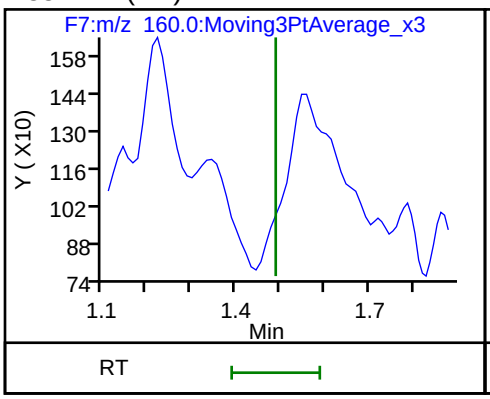
* 1 HMX-13C4



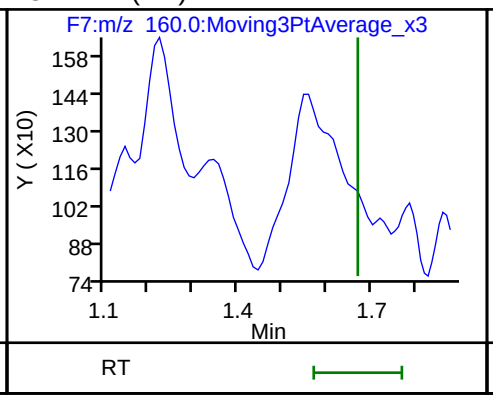
36 TNX (ND)



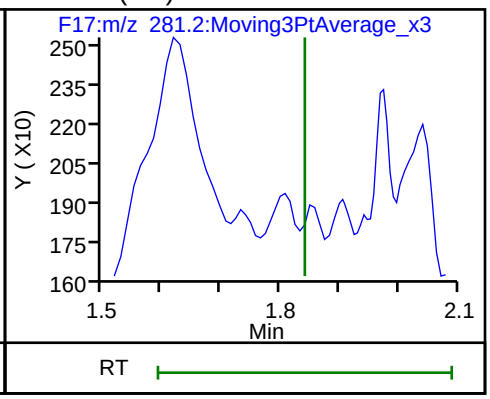
33 DNX (ND)



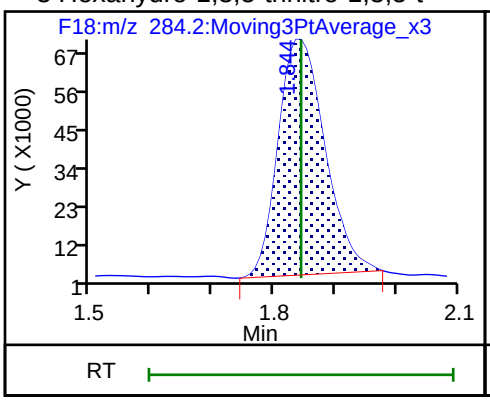
34 MNX (ND)



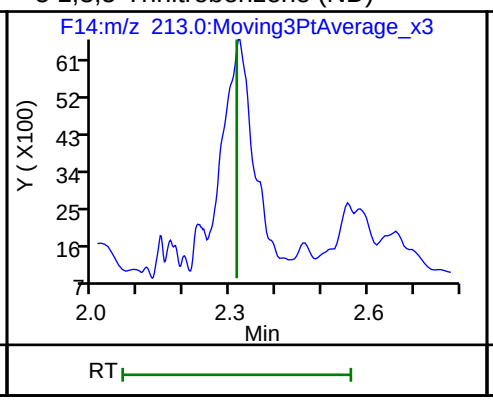
4 RDX (ND)



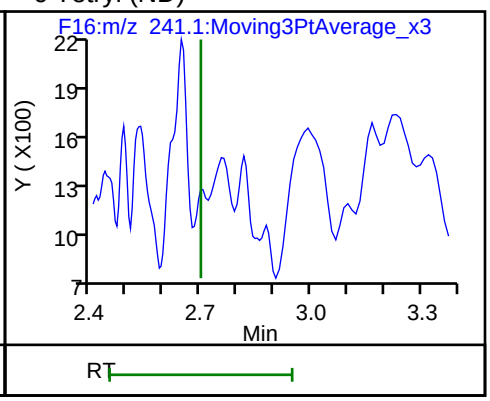
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



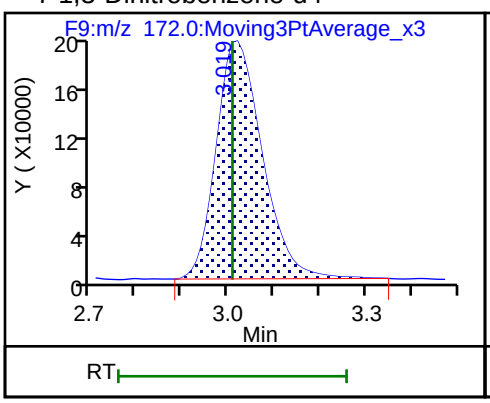
5 1,3,5-Trinitrobenzene (ND)



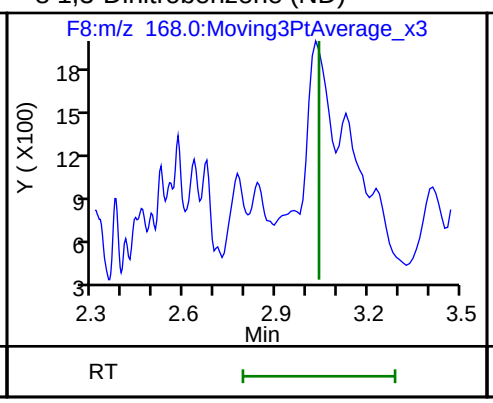
6 Tetryl (ND)



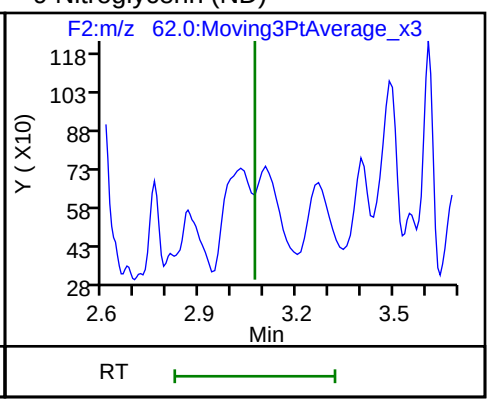
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

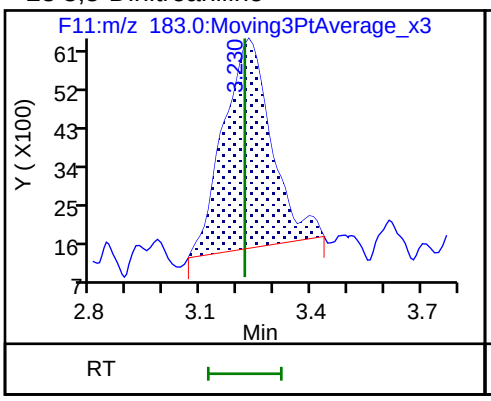


9 Nitroglycerin (ND)

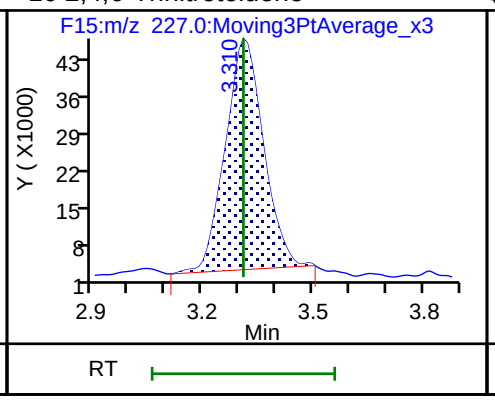


Report Date: 14-Apr-2022 10:09:40 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08039.d

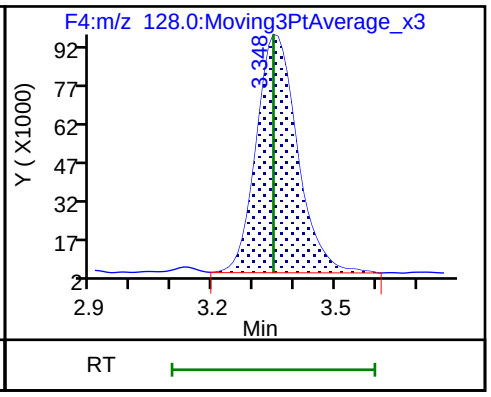
28 3,5-Dinitroaniline



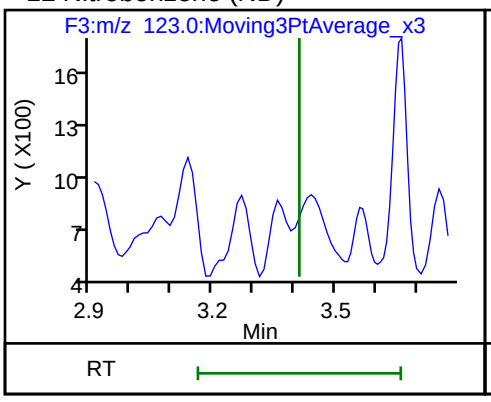
10 2,4,6-Trinitrotoluene



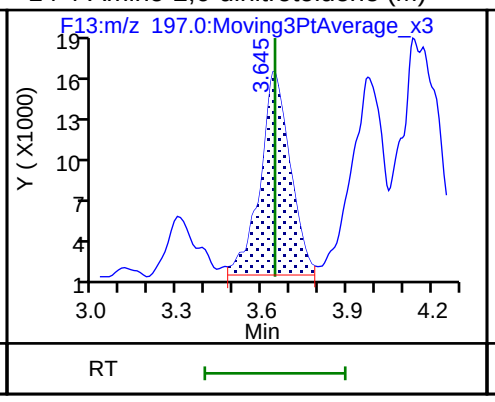
$ 11 Nitrobenzene-d5



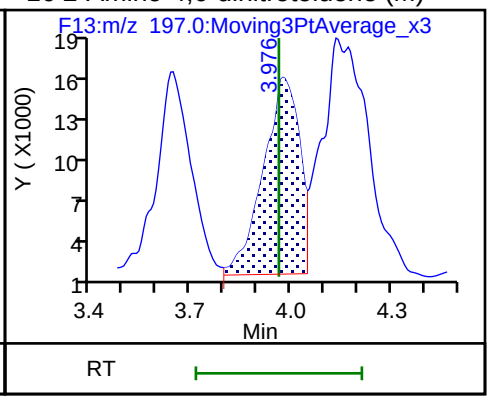
12 Nitrobenzene (ND)



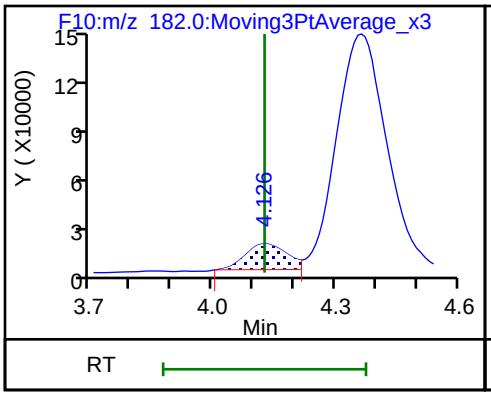
14 4-Amino-2,6-dinitrotoluene (M)



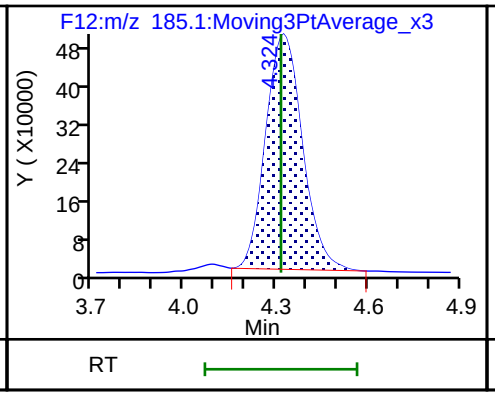
16 2-Amino-4,6-dinitrotoluene (M)



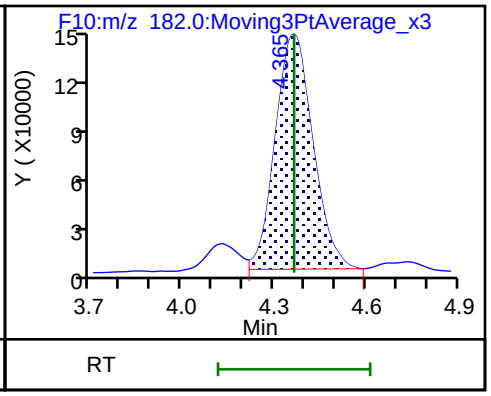
17 2,6-Dinitrotoluene



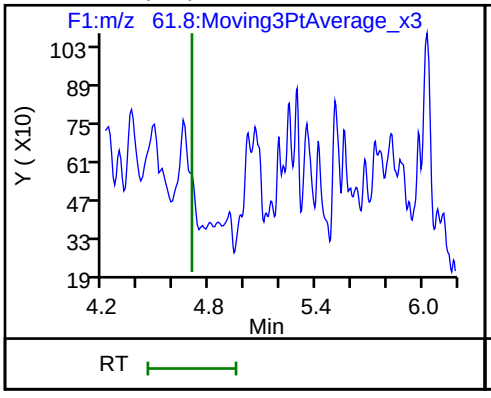
* 18 2,4-dinitrotoluene-d3



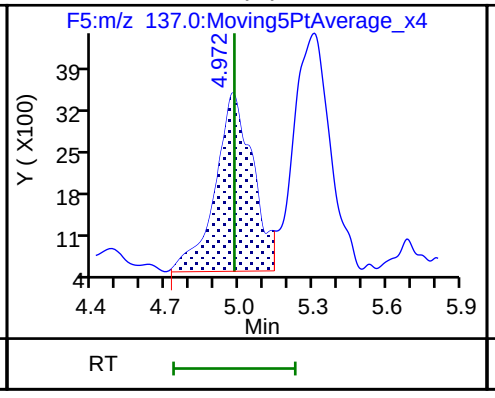
19 2,4-Dinitrotoluene



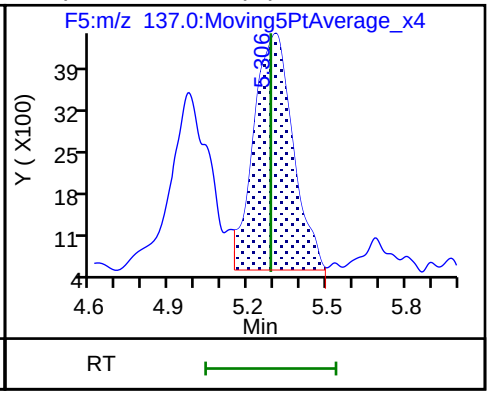
20 PETN (ND)



22 o-Nitrotoluene (M)



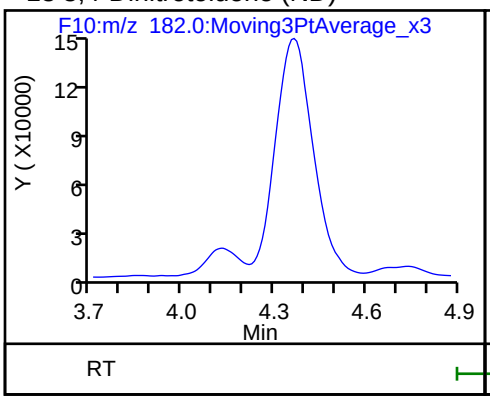
23 p-Nitrotoluene (M)



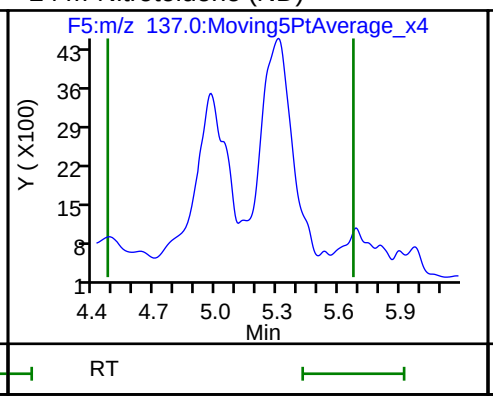
Report Date: 14-Apr-2022 10:09:40 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08039.d

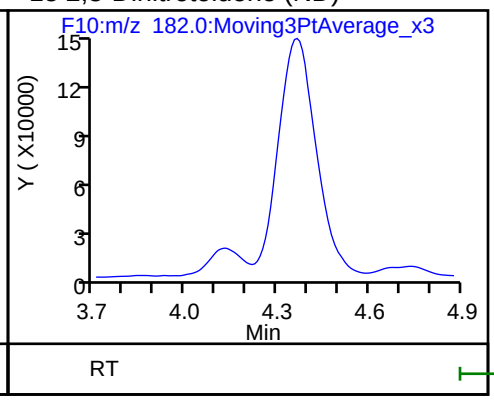
13 3,4-Dinitrotoluene (ND)



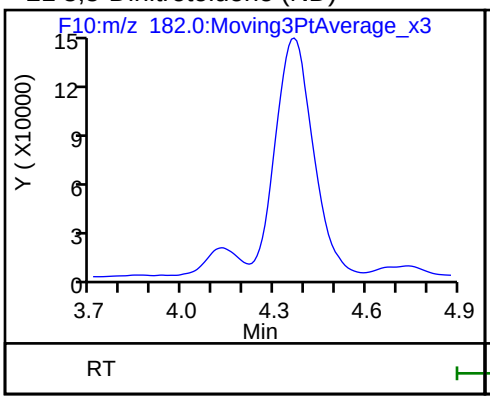
24 m-Nitrotoluene (ND)



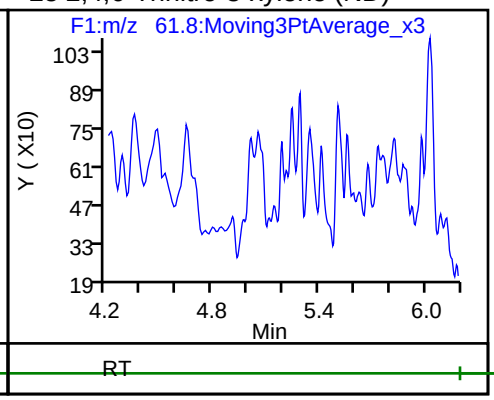
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 14-Apr-2022 10:09:40 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08039.d
Lims ID: 280-160190-A-24-B
Client ID: 29SB169 (11-12)
Sample Type: Client
Inject. Date: 08-Apr-2022 13:45:34 ALS Bottle#: 35 Worklist Smp#: 39
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-24-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:07:02 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:55:44

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	102.3	101.97

Report Date: 14-Apr-2022 10:09:40 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

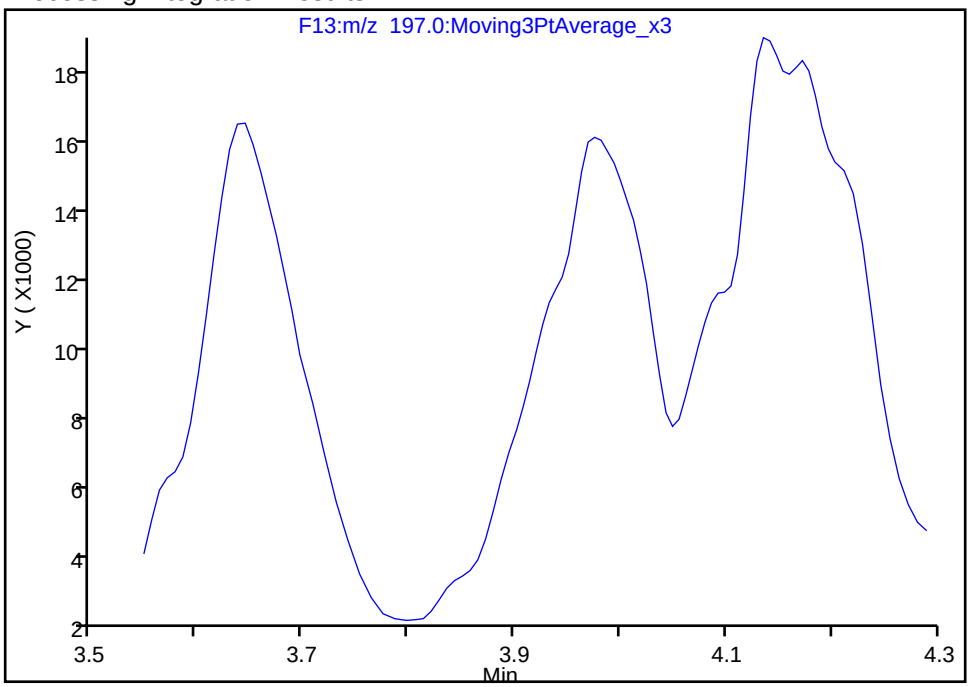
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08039.d				
Injection Date:	08-Apr-2022 13:45:34	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-24-B	Lab Sample ID:	280-160190-24		
Client ID:	29SB169 (11-12)				
Operator ID:	acm	ALS Bottle#:	35	Worklist Smp#:	39
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

16 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

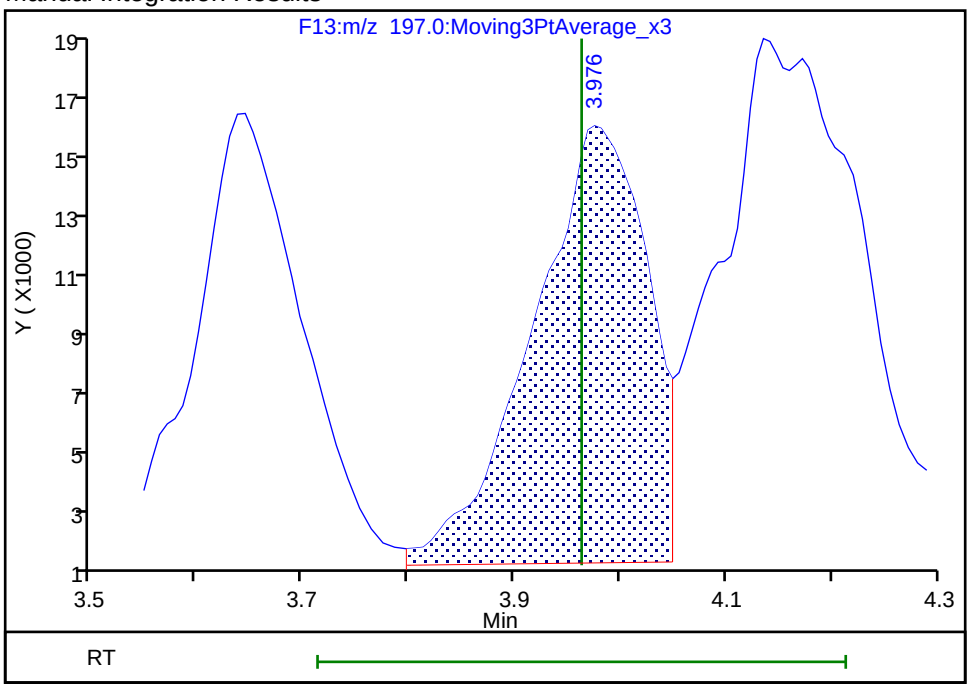
Not Detected
Expected RT: 3.96

Processing Integration Results



Manual Integration Results

RT: 3.98
Area: 108483
Amount: 1.184620
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:55:26
Audit Action: Manually Integrated Audit Reason: Assign Peak

Report Date: 14-Apr-2022 10:09:40 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

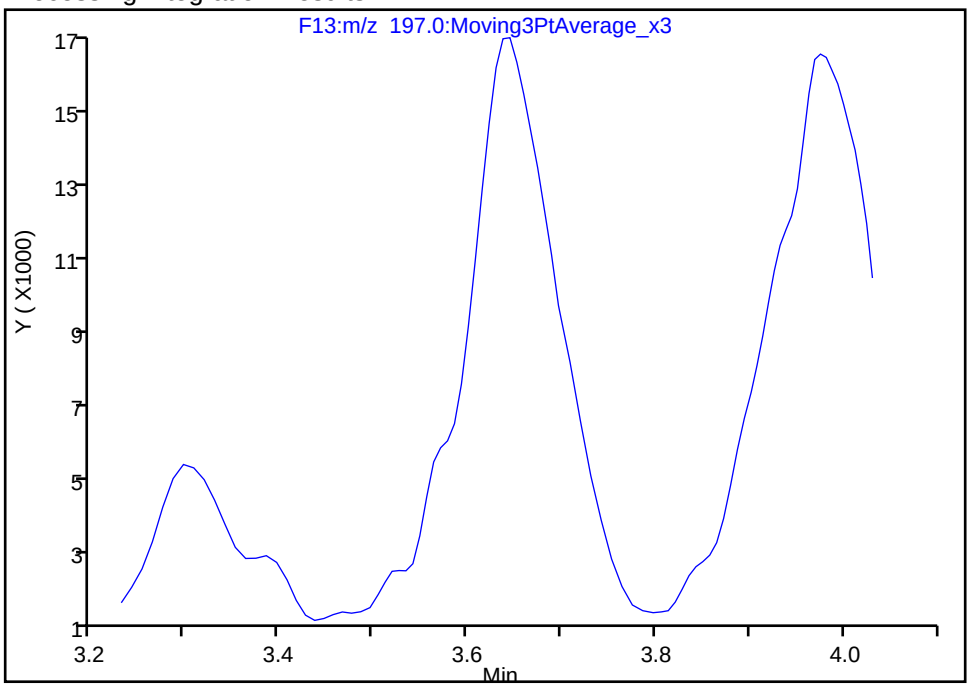
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08039.d				
Injection Date:	08-Apr-2022 13:45:34	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-24-B	Lab Sample ID:	280-160190-24		
Client ID:	29SB169 (11-12)				
Operator ID:	acm	ALS Bottle#:	35	Worklist Smp#:	39
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

14 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

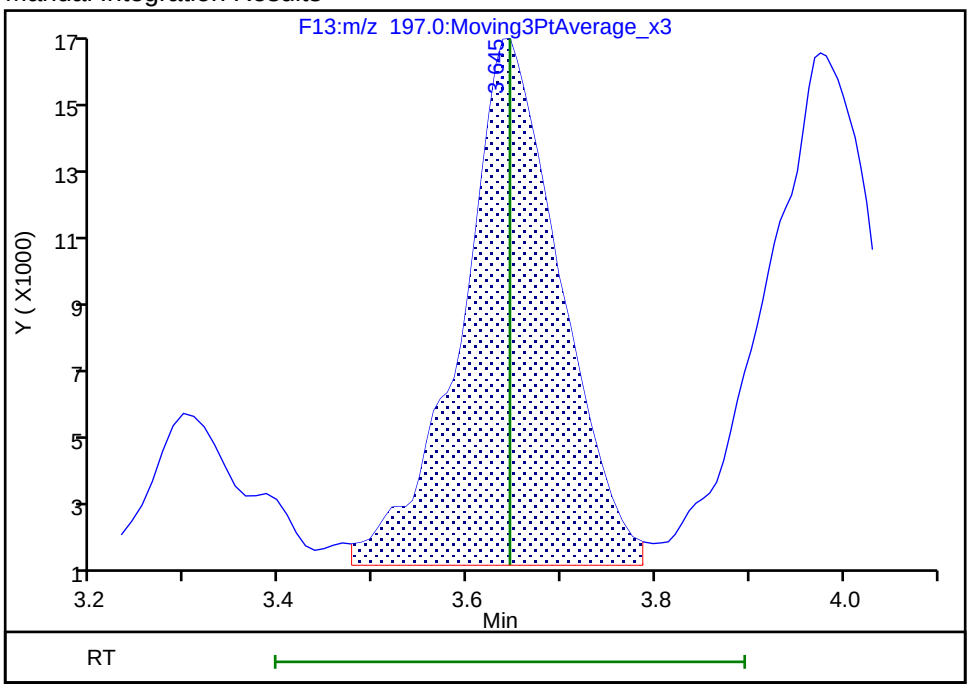
Not Detected
Expected RT: 3.65

Processing Integration Results



Manual Integration Results

RT: 3.65
Area: 109557
Amount: 1.563175
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:55:23
Audit Action: Manually Integrated Audit Reason: Assign Peak

Report Date: 14-Apr-2022 10:09:40 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

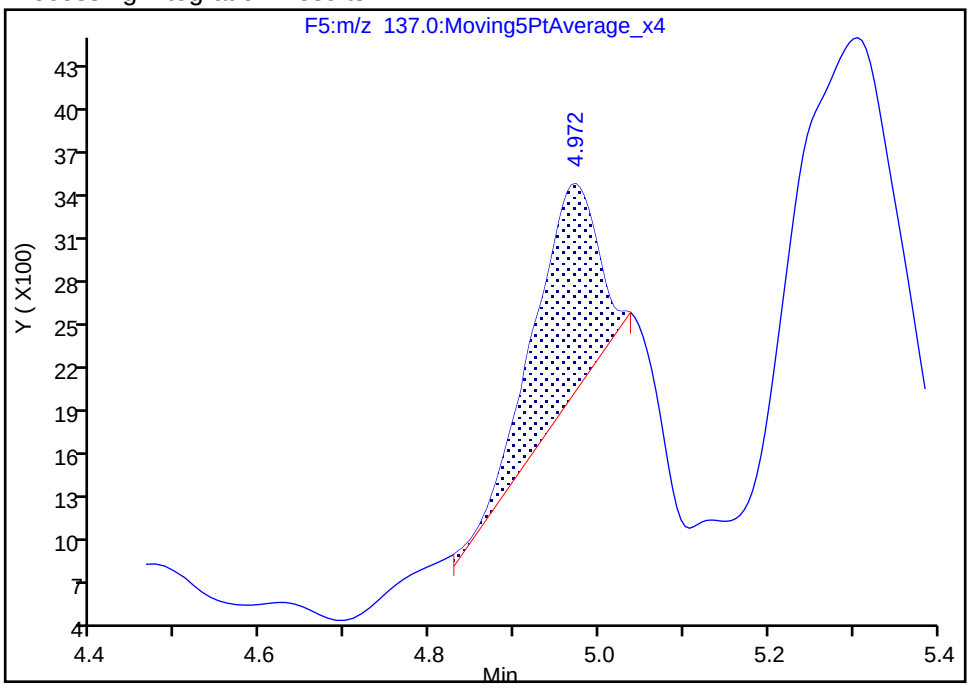
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08039.d				
Injection Date:	08-Apr-2022 13:45:34	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-24-B	Lab Sample ID:	280-160190-24		
Client ID:	29SB169 (11-12)				
Operator ID:	acm	ALS Bottle#:	35	Worklist Smp#:	39
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F5:SIR		

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

Signal: 1

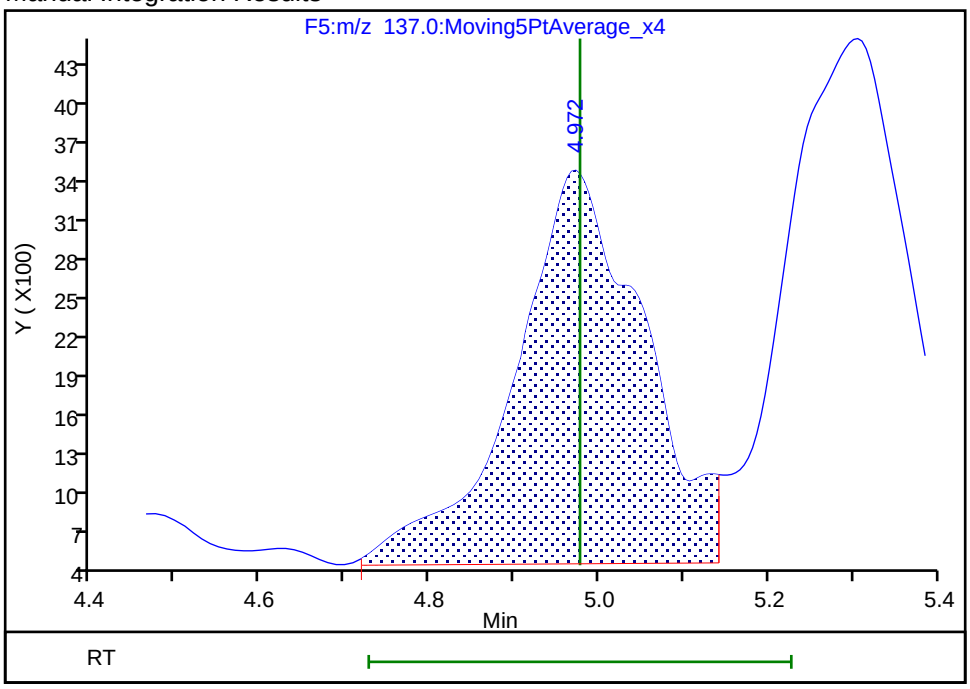
Processing Integration Results

RT: 4.97
Area: 7487
Amount: 0.450772
Amount Units: ug/l



Manual Integration Results

RT: 4.97
Area: 32008
Amount: 2.774032
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:55:37

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:09:40 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08039.d

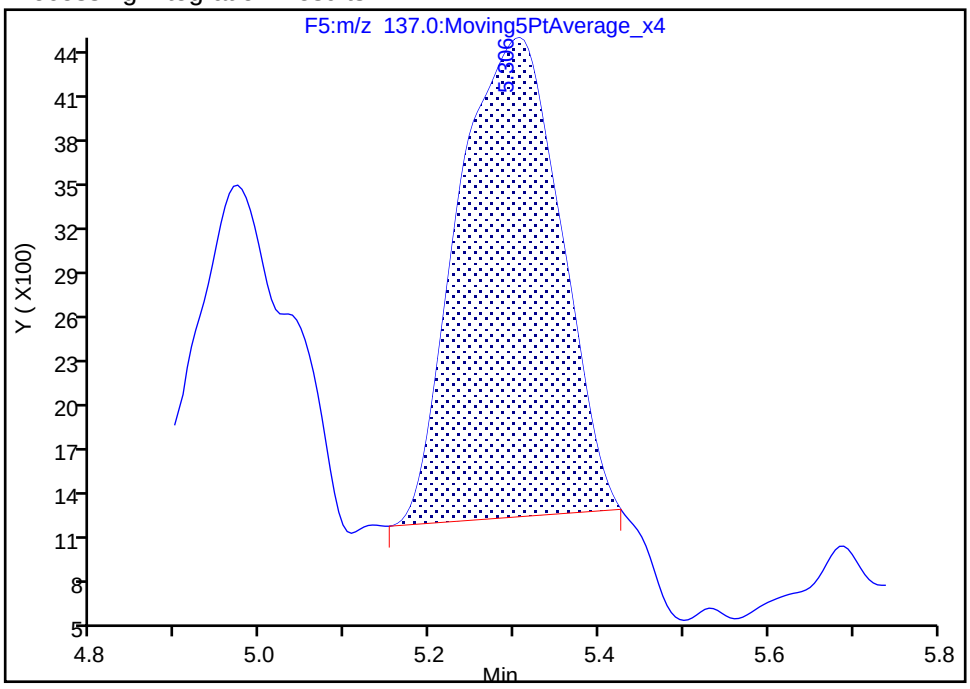
Injection Date:	08-Apr-2022 13:45:34	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-24-B	Lab Sample ID:	280-160190-24		
Client ID:	29SB169 (11-12)				
Operator ID:	acm	ALS Bottle#:	35	Worklist Smp#:	39
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F5:SIR		

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

Signal: 1

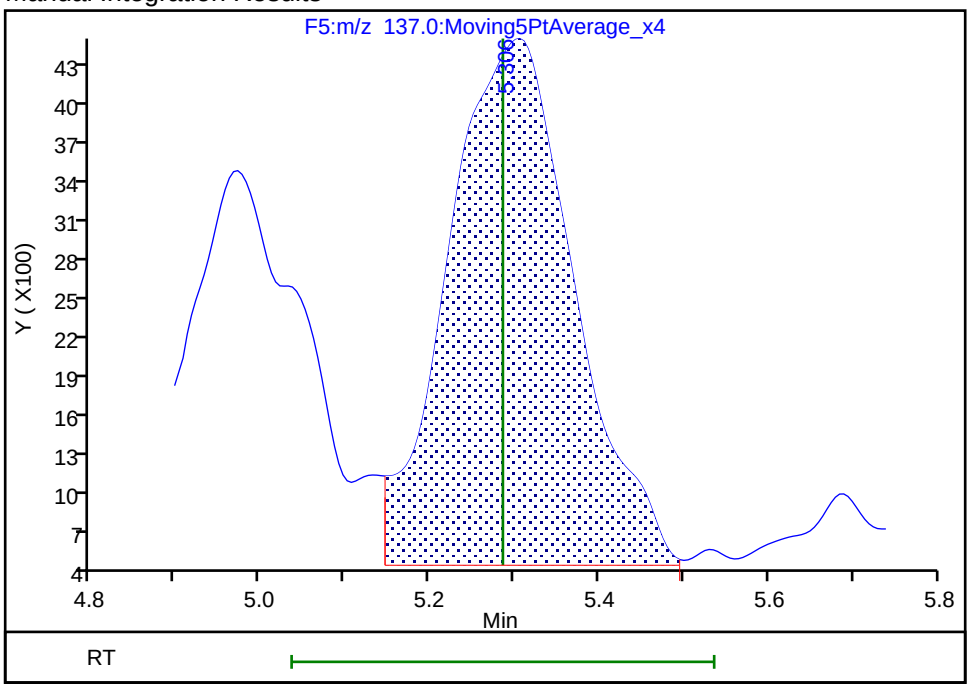
Processing Integration Results

RT: 5.31
Area: 27461
Amount: 2.442659
Amount Units: ug/l



Manual Integration Results

RT: 5.31
Area: 41541
Amount: 3.980756
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:55:41

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB169 (14.5-15) | Lab Sample ID: 280-160190-25
Matrix: Solid | Lab File ID: ex722D08040.d
Analysis Method: 8321A | Date Collected: 03/24/2022 12:17
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20
Sample wt/vol: 10.72(g) | Date Analyzed: 04/08/2022 13:52
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571224 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.047	U	0.093	0.047	0.042
99-65-0	1,3-Dinitrobenzene	0.047	U	0.093	0.047	0.042
118-96-7	2,4,6-Trinitrotoluene	0.047	U	0.093	0.047	0.034
121-14-2	2,4-Dinitrotoluene	0.11		0.093	0.047	0.043
606-20-2	2,6-Dinitrotoluene	0.047	U	0.093	0.047	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.047	U M	0.093	0.047	0.046
19406-51-0	4-Amino-2,6-dinitrotoluene	0.047	U	0.093	0.047	0.029
2691-41-0	HMX	0.047	U Q	0.093	0.047	0.043
99-08-1	m-Nitrotoluene	0.047	U	0.093	0.047	0.040
98-95-3	Nitrobenzene	0.047	U	0.10	0.047	0.035
55-63-0	Nitroglycerin	0.047	U	0.093	0.047	0.027
88-72-2	o-Nitrotoluene	0.047	U	0.093	0.047	0.040
78-11-5	PETN	0.047	U	0.093	0.047	0.032
99-99-0	p-Nitrotoluene	0.047	U	0.093	0.047	0.046
121-82-4	RDX	0.047	U	0.11	0.047	0.040
479-45-8	Tetryl	0.047	U Q	0.093	0.047	0.036

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	94		68-140

Report Date: 14-Apr-2022 10:09:41 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08040.d
Lims ID: 280-160190-A-25-B
Client ID: 29SB169 (14.5-15)
Sample Type: Client
Inject. Date: 08-Apr-2022 13:52:10 ALS Bottle#: 36 Worklist Smp#: 40
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-25-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:07:02 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:56:06
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		113517	125.0	27.6	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		365973	125.0	261	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.008	0.011		1236747	129.4	273	
28 3,5-Dinitroaniline								
183.0	3.219	3.231	0.0	1.066	65645	1.05	17.0	
$ 11 Nitrobenzene-d5								
128.0	3.348	3.354	0.0	0.774	549394	93.9	51.3	
16 2-Amino-4,6-dinitrotoluene								M
197.0	3.957	3.971	-0.006	0.915	130567	1.65	3.1	M
17 2,6-Dinitrotoluene								
182.0	4.120	4.138	-0.006	0.953	86243	0.7450	10.5	
* 18 2,4-dinitrotoluene-d3								
185.1	4.324	4.315	0.009		3884638	125.0	120	
19 2,4-Dinitrotoluene								
182.0	4.365	4.373	0.0	1.009	1008142	30.4	98.8	
22 o-Nitrotoluene								
137.0	4.967	4.987	-0.010	1.149	40343	3.81	9.3	
23 p-Nitrotoluene								
137.0	5.281	5.297	-0.005	1.221	42442	4.38	9.5	

QC Flag Legend
Processing Flags

Report Date: 14-Apr-2022 10:09:41 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Review Flags

M - Manually Integrated

Reagents:

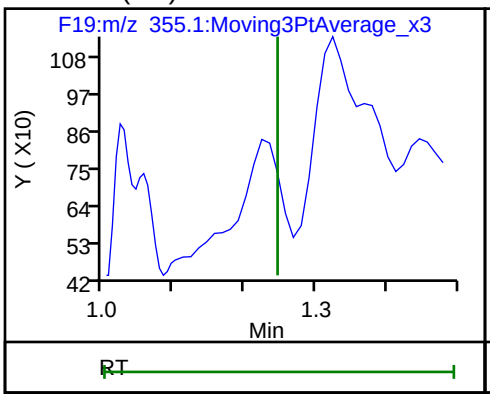
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 14-Apr-2022 10:09:41 Chrom Revision: 2.3 12-Apr-2022 20:29:44

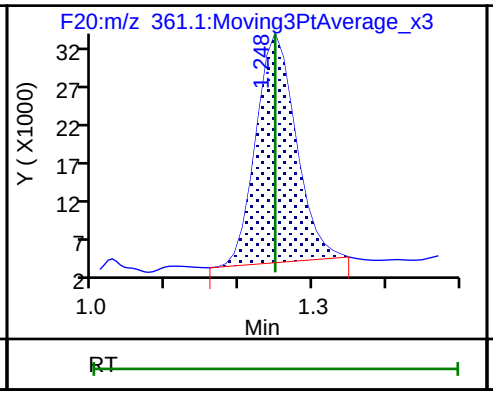
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08040.d
Injection Date: 08-Apr-2022 13:52:10 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-25-B Lab Sample ID: 280-160190-25
Client ID: 29SB169 (14.5-15)
Operator ID: acm ALS Bottle#: 36 Worklist Smp#: 40
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

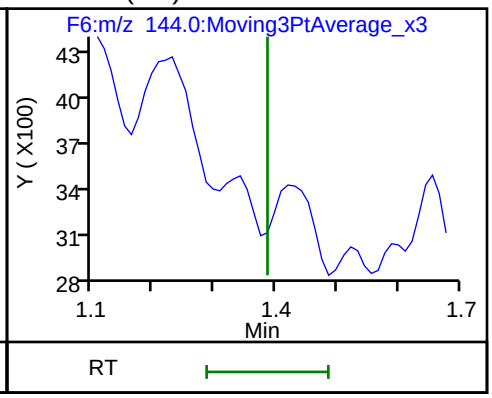
2 HMX (ND)



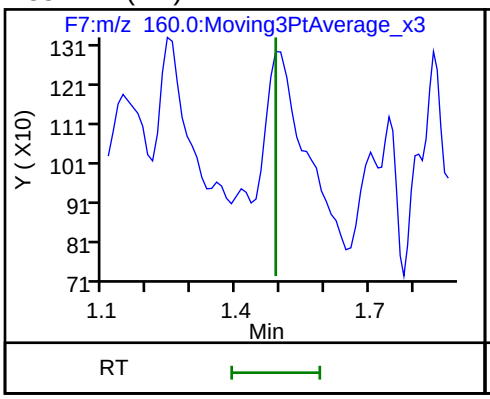
* 1 HMX-13C4



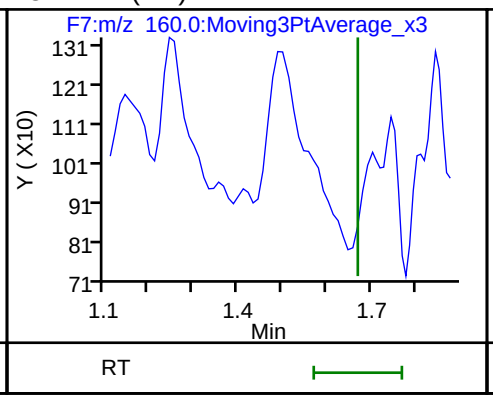
36 TNX (ND)



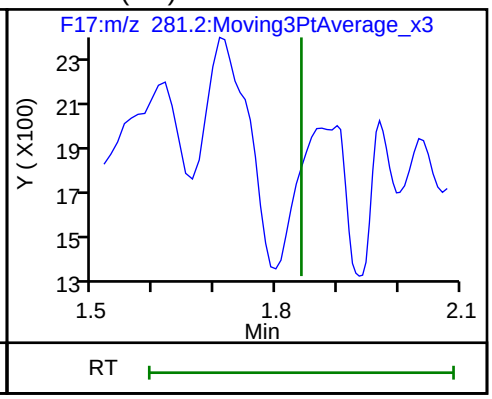
33 DNX (ND)



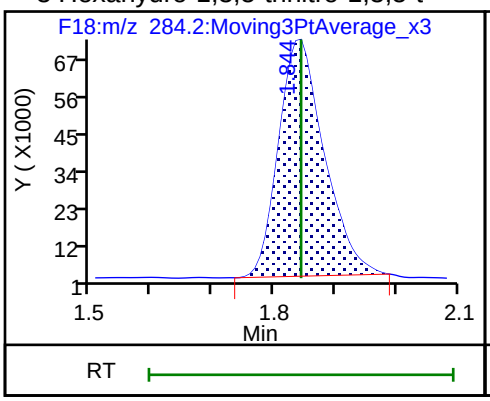
34 MNX (ND)



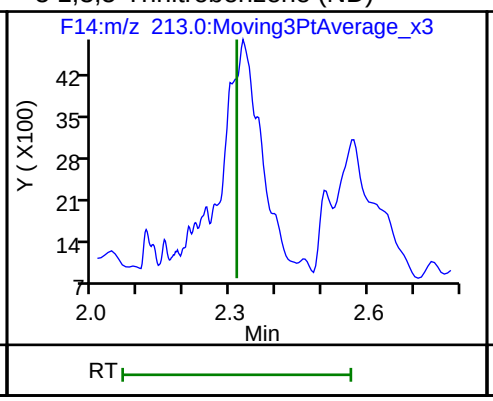
4 RDX (ND)



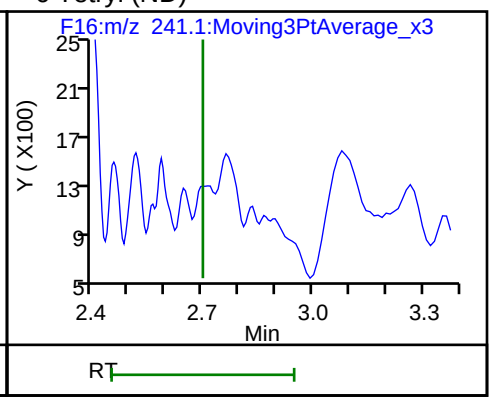
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



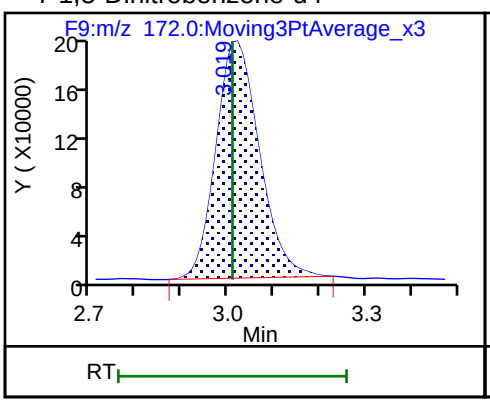
5 1,3,5-Trinitrobenzene (ND)



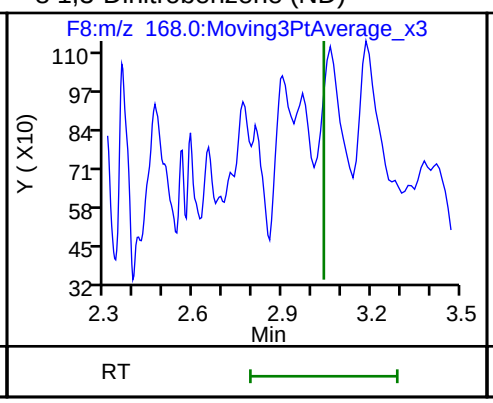
6 Tetryl (ND)



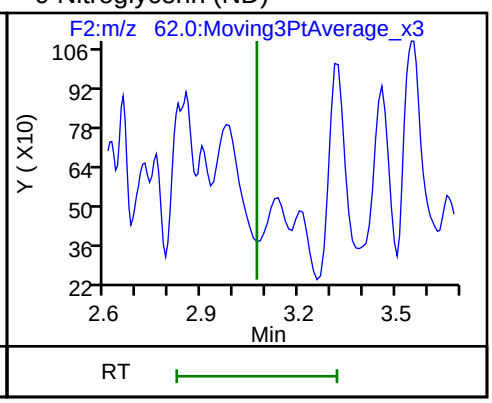
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

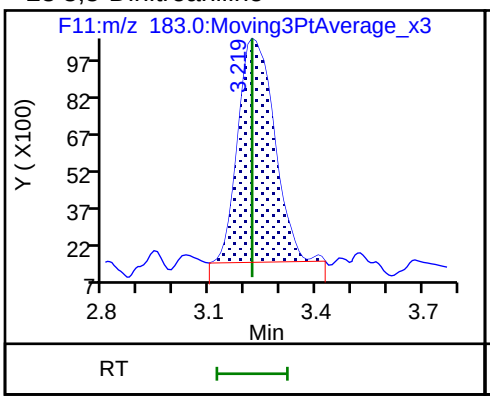


9 Nitroglycerin (ND)

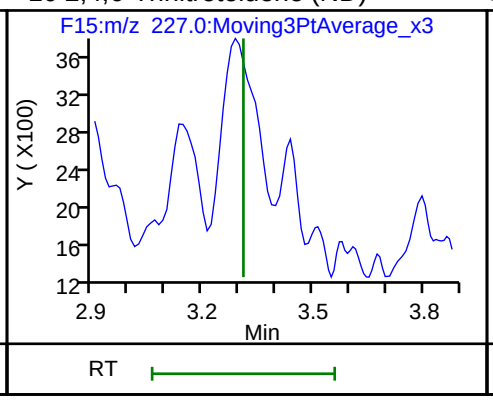


Report Date: 14-Apr-2022 10:09:41 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08040.d

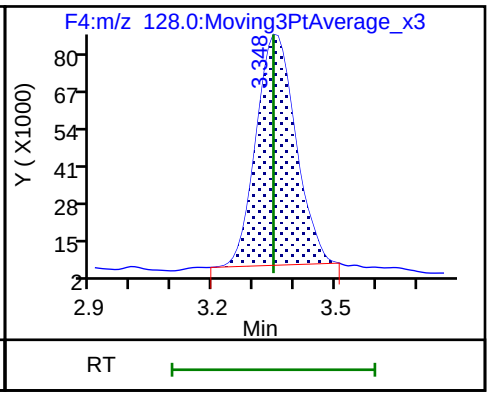
28 3,5-Dinitroaniline



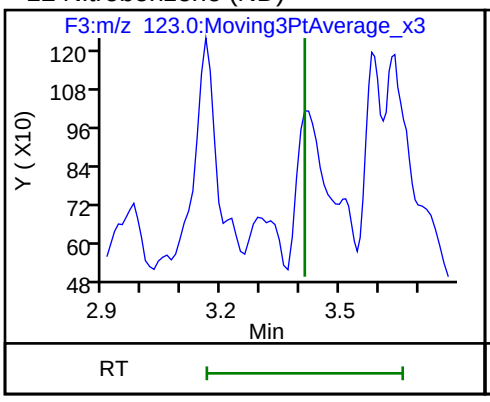
10 2,4,6-Trinitrotoluene (ND)



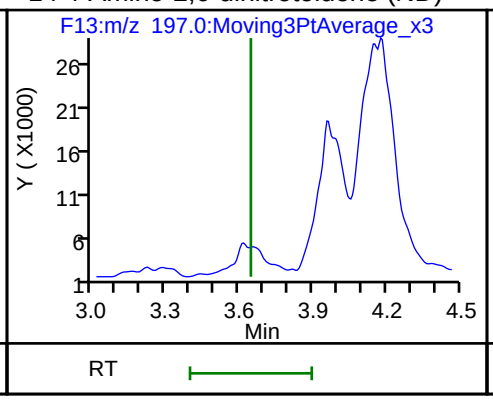
$ 11 Nitrobenzene-d5



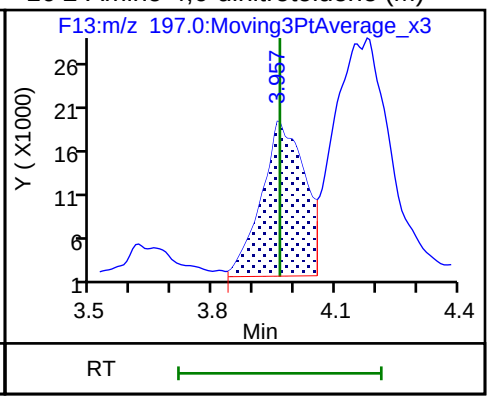
12 Nitrobenzene (ND)



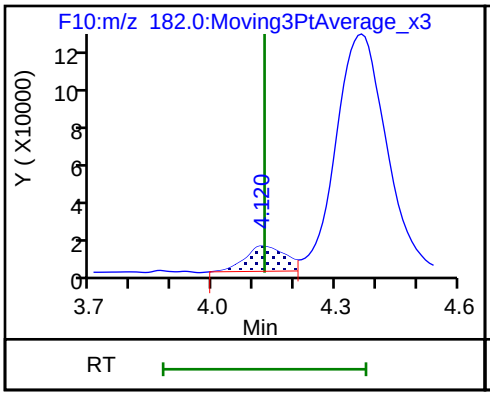
14 4-Amino-2,6-dinitrotoluene (ND)



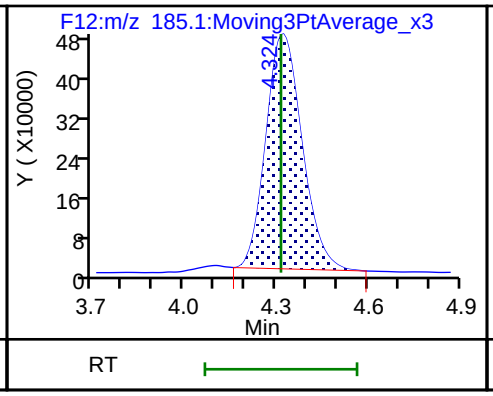
16 2-Amino-4,6-dinitrotoluene (M)



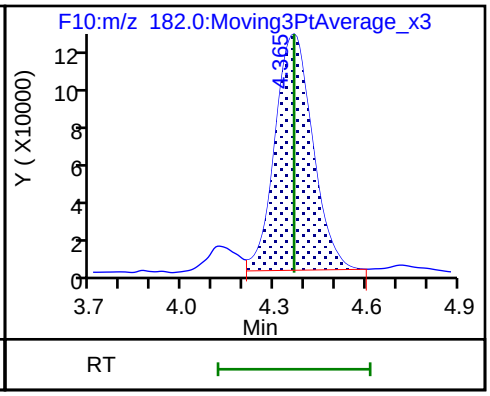
17 2,6-Dinitrotoluene



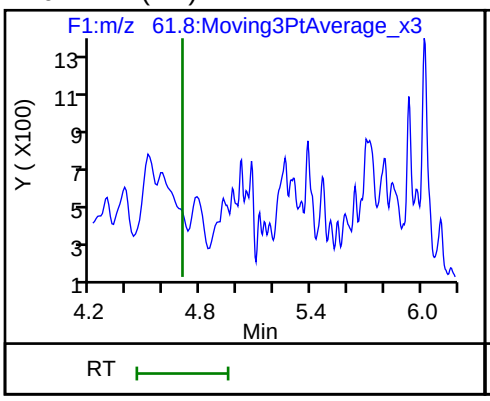
* 18 2,4-dinitrotoluene-d3



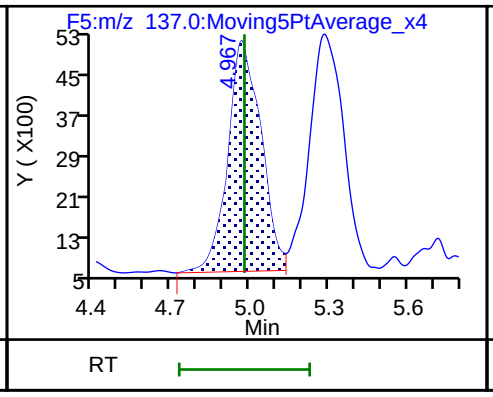
19 2,4-Dinitrotoluene



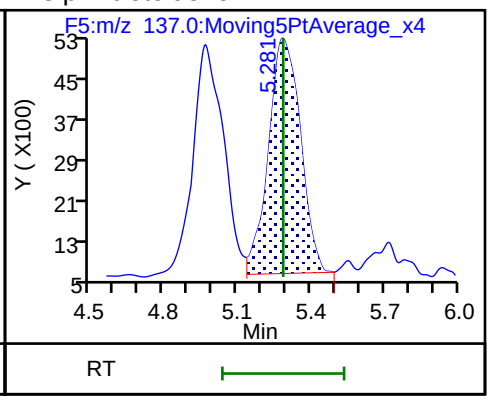
20 PETN (ND)



22 o-Nitrotoluene



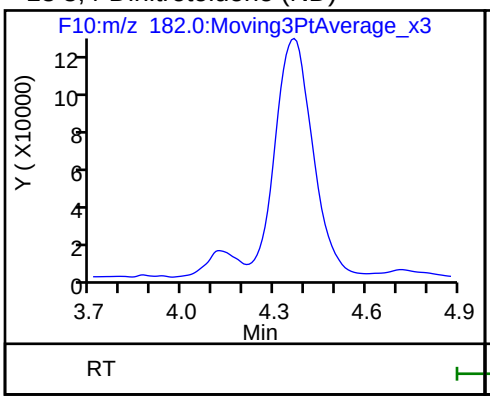
23 p-Nitrotoluene



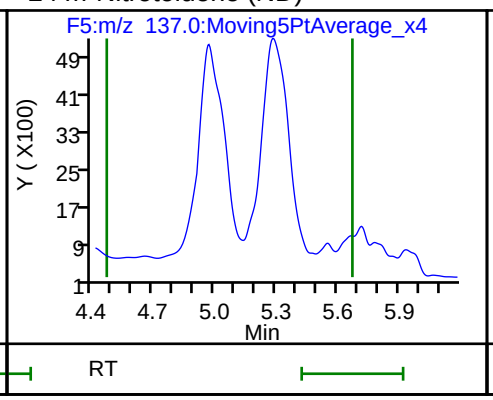
Report Date: 14-Apr-2022 10:09:41 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08040.d

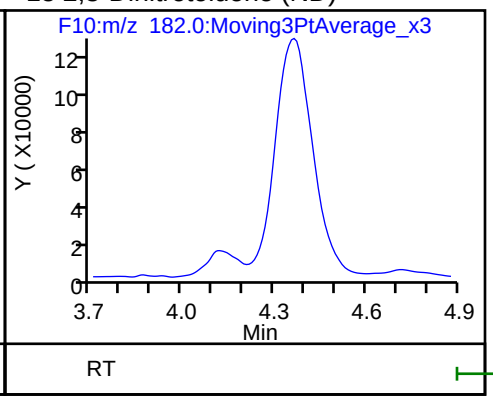
13 3,4-Dinitrotoluene (ND)



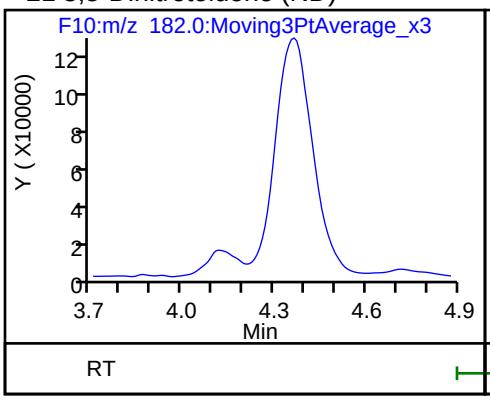
24 m-Nitrotoluene (ND)



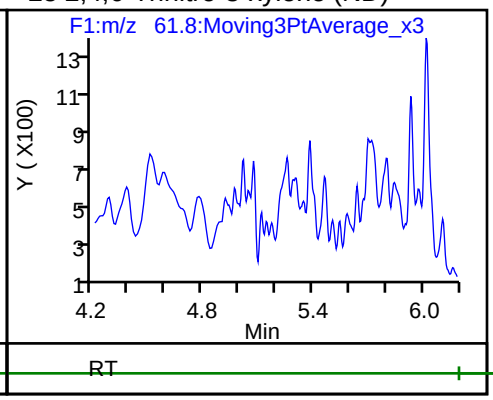
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 14-Apr-2022 10:09:41 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08040.d
Lims ID: 280-160190-A-25-B
Client ID: 29SB169 (14.5-15)
Sample Type: Client
Inject. Date: 08-Apr-2022 13:52:10 ALS Bottle#: 36 Worklist Smp#: 40
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-25-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:07:02 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:56:06

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	93.9	93.58

Report Date: 14-Apr-2022 10:09:41 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

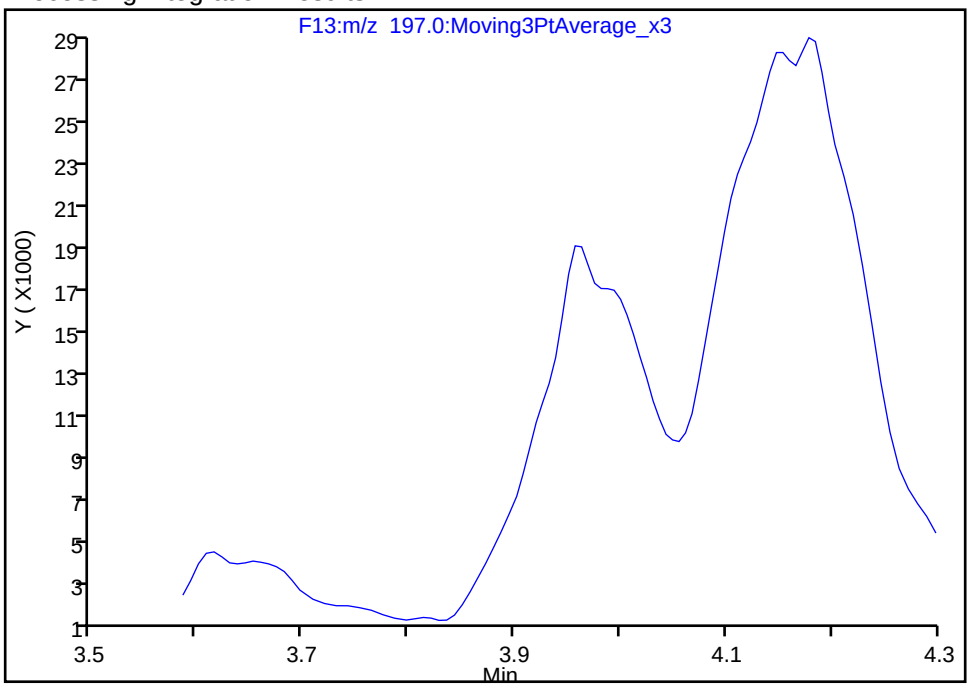
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08040.d				
Injection Date:	08-Apr-2022 13:52:10	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-25-B	Lab Sample ID:	280-160190-25		
Client ID:	29SB169 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	36	Worklist Smp#:	40
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

16 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

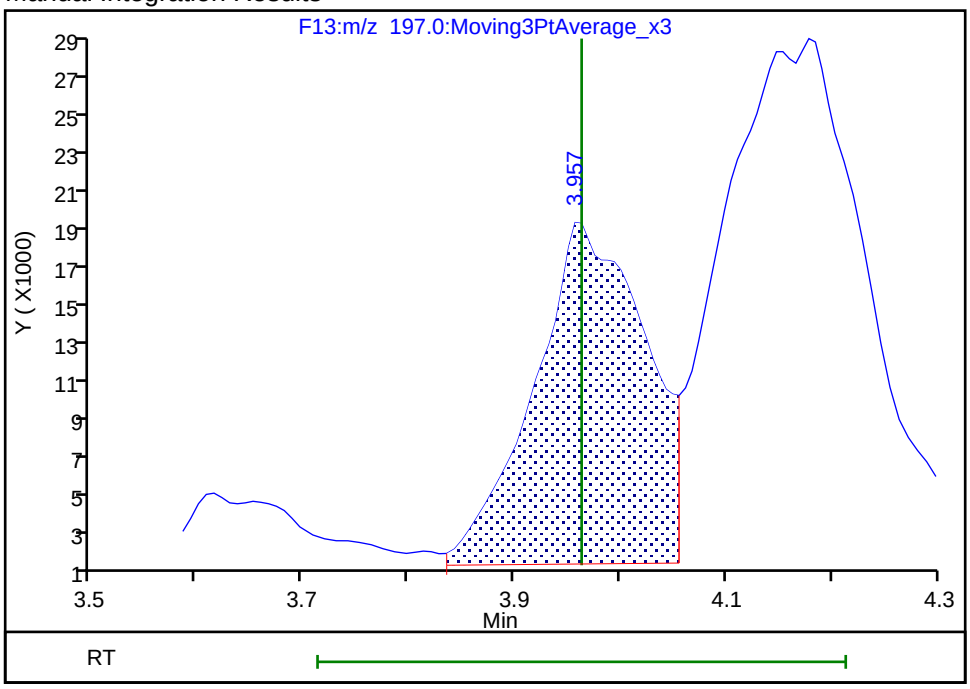
Not Detected
Expected RT: 3.96

Processing Integration Results



Manual Integration Results

RT: 3.96
Area: 130567
Amount: 1.654700
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:55:59
Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: DUP-07 | Lab Sample ID: 280-160190-26
Matrix: Solid | Lab File ID: ex722D08041.d
Analysis Method: 8321A | Date Collected: 03/24/2022 13:00
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20
Sample wt/vol: 10.84(g) | Date Analyzed: 04/08/2022 13:58
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571224 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.046	U	0.092	0.046	0.041
99-65-0	1,3-Dinitrobenzene	0.046	U	0.092	0.046	0.041
118-96-7	2,4,6-Trinitrotoluene	0.25		0.092	0.046	0.034
121-14-2	2,4-Dinitrotoluene	0.76	M	0.092	0.046	0.043
606-20-2	2,6-Dinitrotoluene	0.046	U M	0.092	0.046	0.037
35572-78-2	2-Amino-4,6-dinitrotoluene	0.046	U M	0.092	0.046	0.046
19406-51-0	4-Amino-2,6-dinitrotoluene	0.046	U M	0.092	0.046	0.029
2691-41-0	HMX	0.046	U M Q	0.092	0.046	0.043
99-08-1	m-Nitrotoluene	0.046	U	0.092	0.046	0.040
98-95-3	Nitrobenzene	0.046	U	0.10	0.046	0.035
55-63-0	Nitroglycerin	0.046	U	0.092	0.046	0.027
88-72-2	o-Nitrotoluene	0.046	U	0.092	0.046	0.039
78-11-5	PETN	0.046	U	0.092	0.046	0.031
99-99-0	p-Nitrotoluene	0.046	U	0.092	0.046	0.046
121-82-4	RDX	0.046	U	0.11	0.046	0.040
479-45-8	Tetryl	0.046	U Q	0.092	0.046	0.036

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	98		68-140

Report Date: 14-Apr-2022 10:09:42 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08041.d
Lims ID: 280-160190-A-26-B
Client ID: DUP-07
Sample Type: Client
Inject. Date: 08-Apr-2022 13:58:47 ALS Bottle#: 37 Worklist Smp#: 41
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-26-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:07:02 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:56:39
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		124228	125.0	47.2	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		391886	125.0	181	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.008	3.008	0.0		1347402	129.4	507	
10 2,4,6-Trinitrotoluene								
227.0	3.310	3.316	0.0	0.765	4663127	67.2	373	
$ 11 Nitrobenzene-d5								
128.0	3.348	3.354	0.0	0.774	624370	98.0	114	
14 4-Amino-2,6-dinitrotoluene								M
197.0	3.638	3.652	-0.007	0.841	387152	7.00	2.3	M
16 2-Amino-4,6-dinitrotoluene								M
197.0	3.963	3.971	0.0	0.917	300868	4.12	2.1	M
17 2,6-Dinitrotoluene								M
182.0	4.126	4.138	0.0	0.954	389051	5.07	13.7	M
* 18 2,4-dinitrotoluene-d3								
185.1	4.324	4.315	0.009		4162871	125.0	111	
19 2,4-Dinitrotoluene								M
182.0	4.365	4.373	0.0	1.009	7256620	206.3	252	M
22 o-Nitrotoluene								
137.0	4.962	4.987	-0.015	1.148	43744	3.86	10.0	
23 p-Nitrotoluene								
137.0	5.286	5.297	0.0	1.223	84233	8.58	19.9	

Report Date: 14-Apr-2022 10:09:42 Chrom Revision: 2.3 12-Apr-2022 20:29:44

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 14-Apr-2022 10:09:42 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08041.d

Injection Date: 08-Apr-2022 13:58:47 Instrument ID: LC_LCMS7

Lims ID: 280-160190-A-26-B Lab Sample ID: 280-160190-26

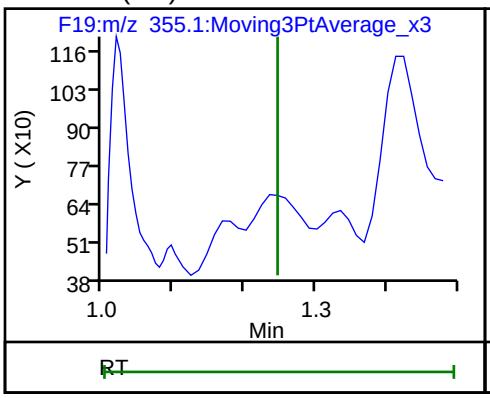
Client ID: DUP-07

Operator ID: acm ALS Bottle#: 37 Worklist Smp#: 41

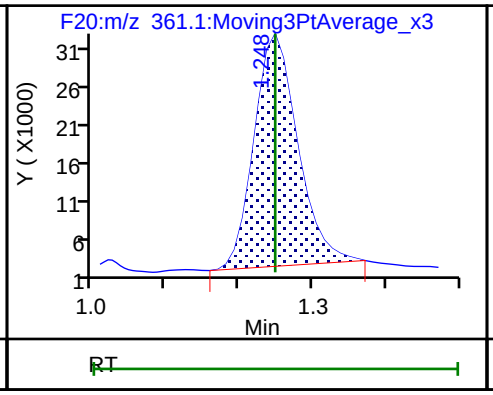
Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

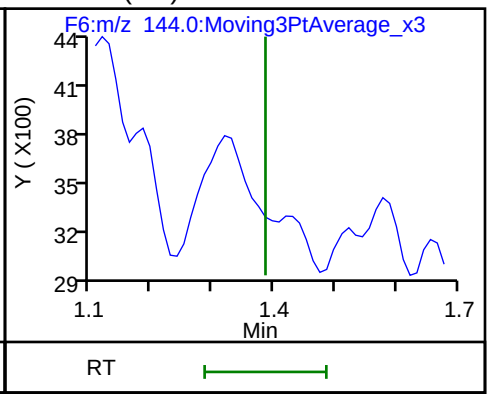
2 HMX (ND)



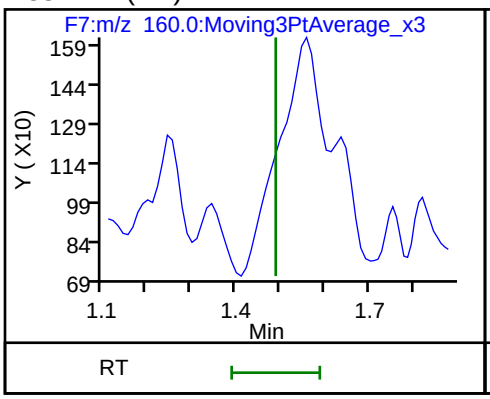
* 1 HMX-13C4



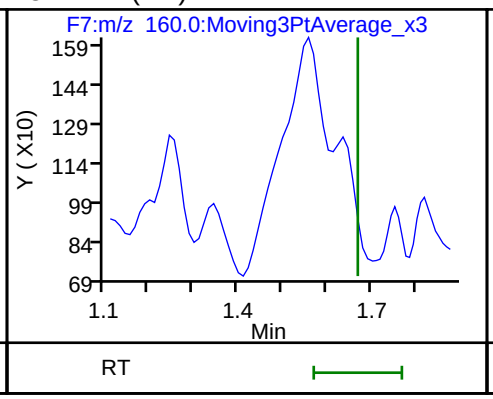
36 TNX (ND)



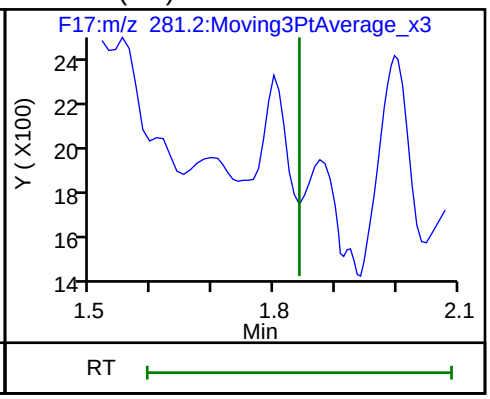
33 DNX (ND)



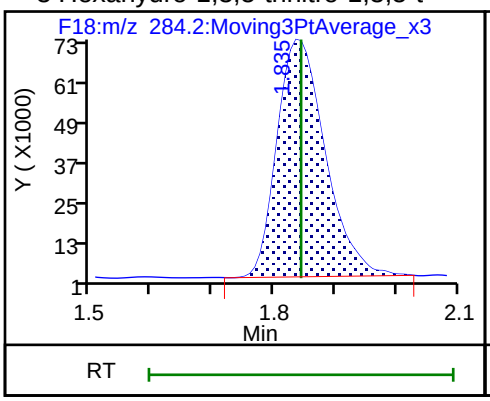
34 MNX (ND)



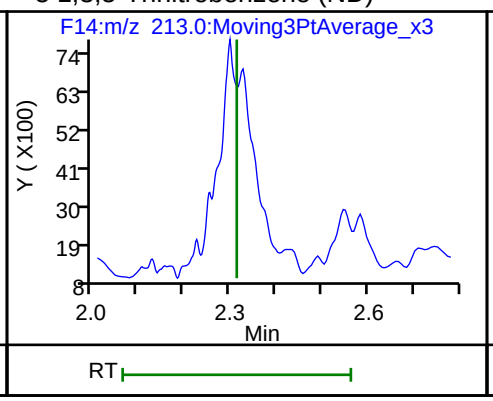
4 RDX (ND)



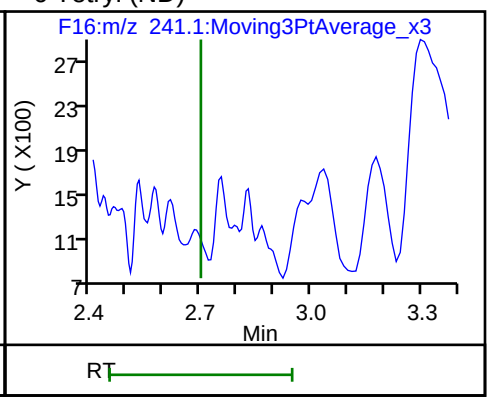
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



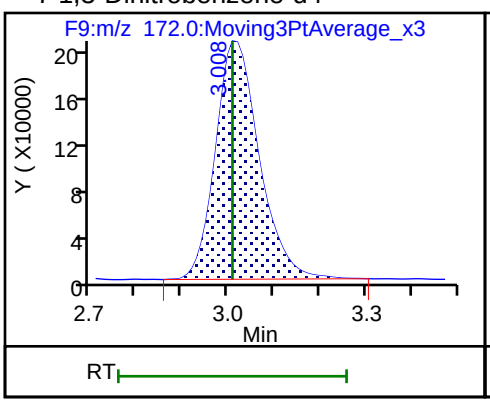
5 1,3,5-Trinitrobenzene (ND)



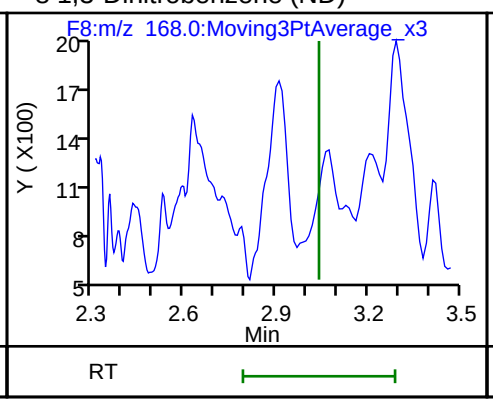
6 Tetryl (ND)



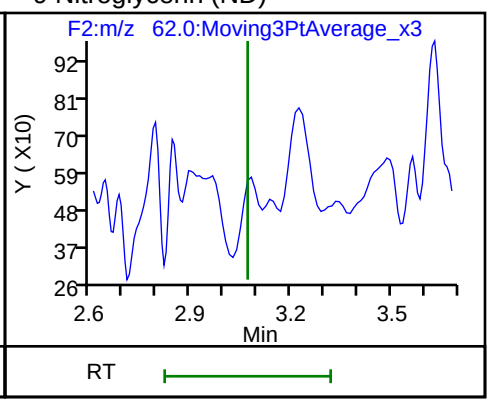
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



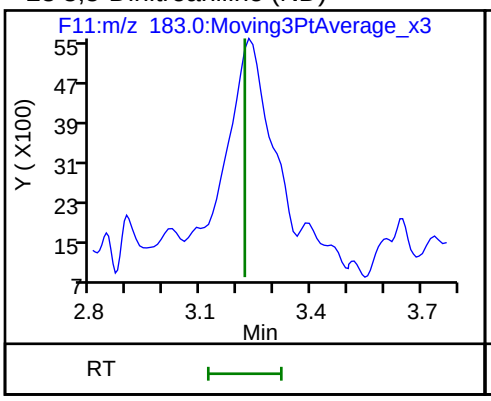
9 Nitroglycerin (ND)



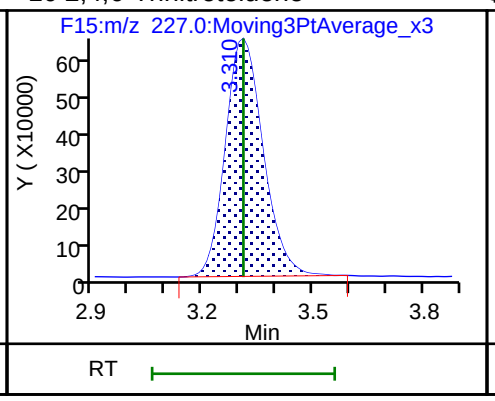
Report Date: 14-Apr-2022 10:09:42 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08041.d

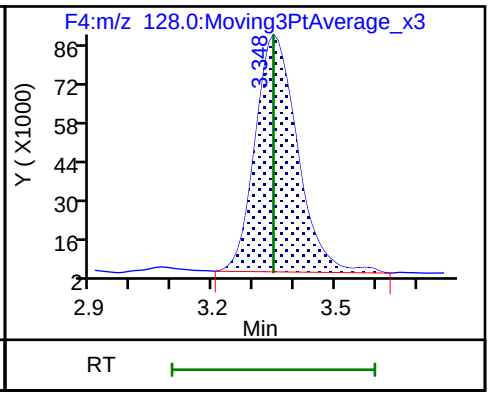
28 3,5-Dinitroaniline (ND)



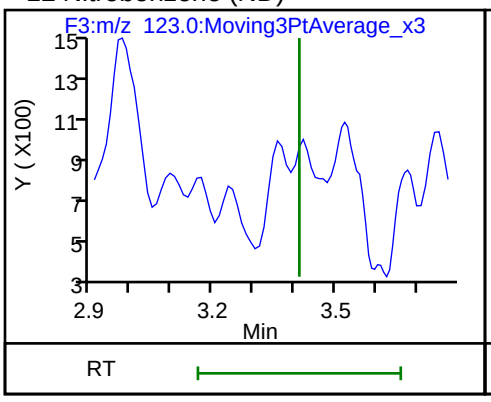
10 2,4,6-Trinitrotoluene



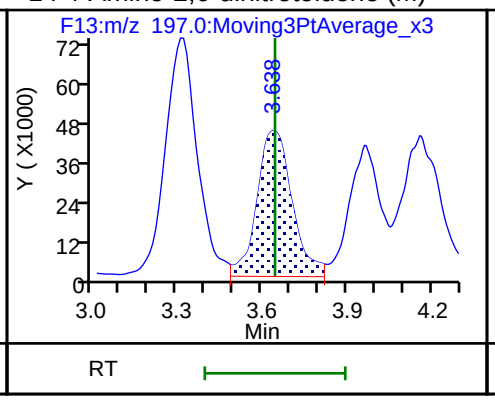
$ 11 Nitrobenzene-d5



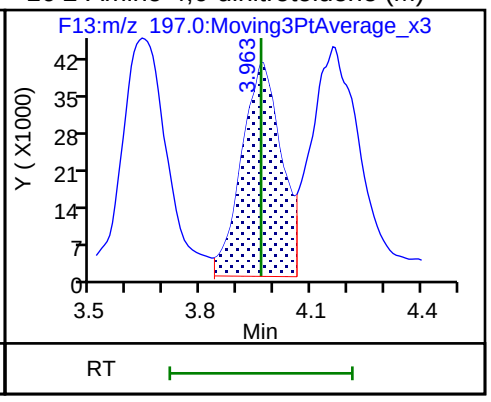
12 Nitrobenzene (ND)



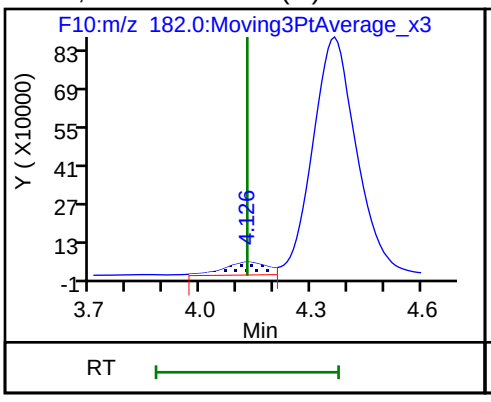
14 4-Amino-2,6-dinitrotoluene (M)



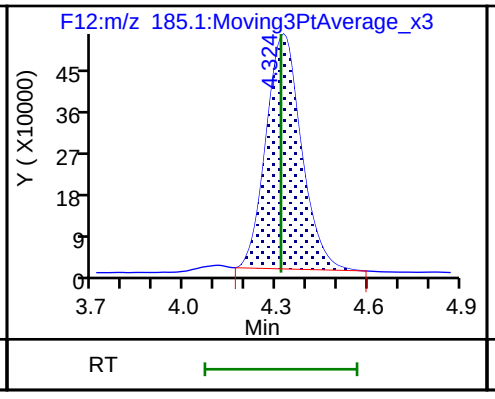
16 2-Amino-4,6-dinitrotoluene (M)



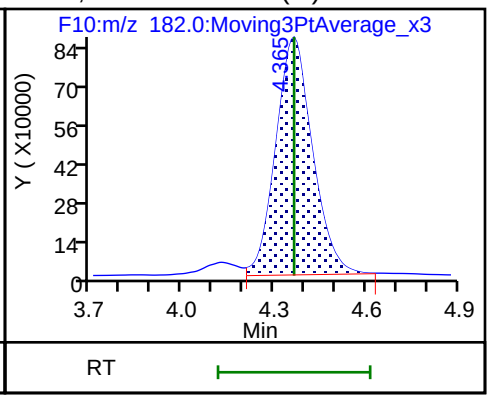
17 2,6-Dinitrotoluene (M)



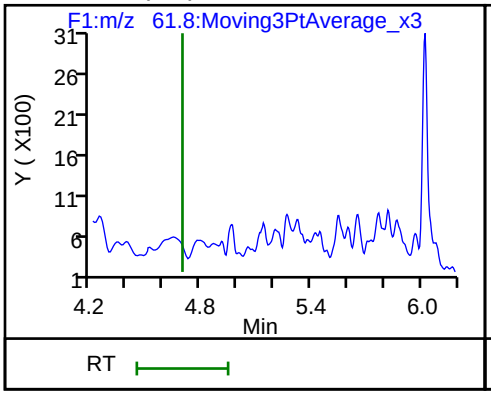
* 18 2,4-dinitrotoluene-d3



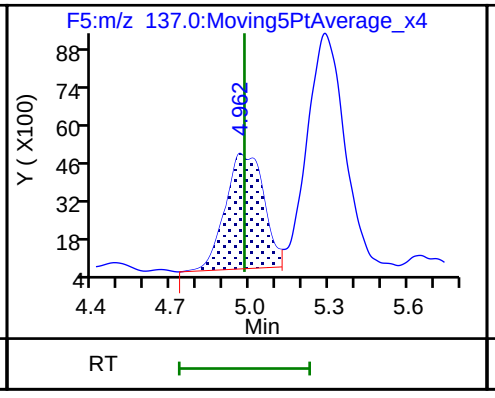
19 2,4-Dinitrotoluene (M)



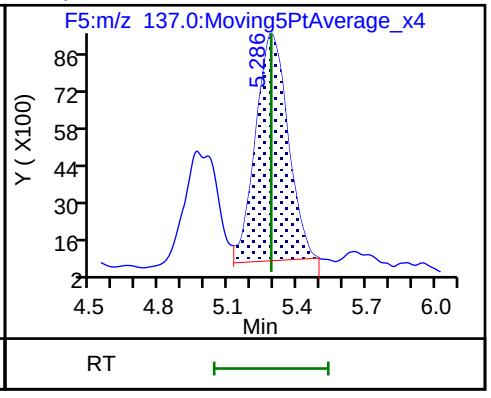
20 PETN (ND)



22 o-Nitrotoluene



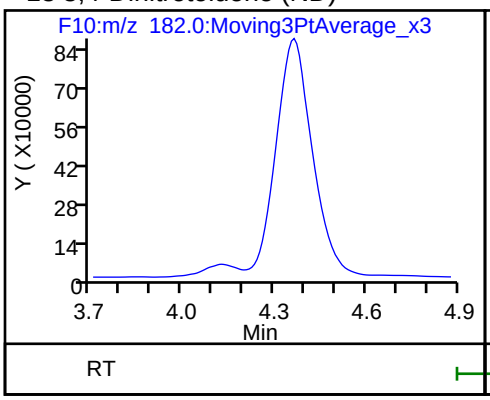
23 p-Nitrotoluene



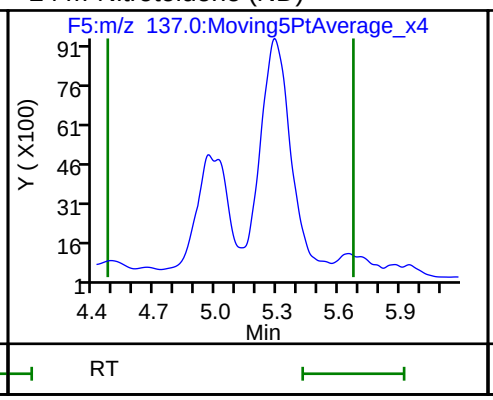
Report Date: 14-Apr-2022 10:09:42 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08041.d

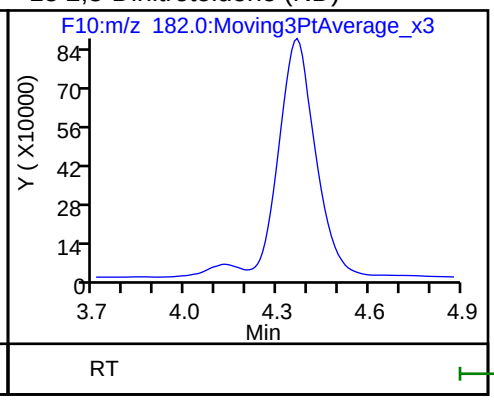
13 3,4-Dinitrotoluene (ND)



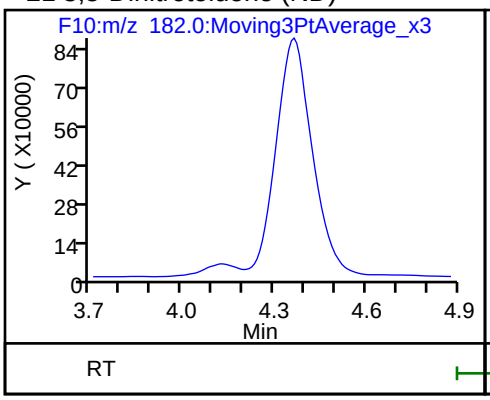
24 m-Nitrotoluene (ND)



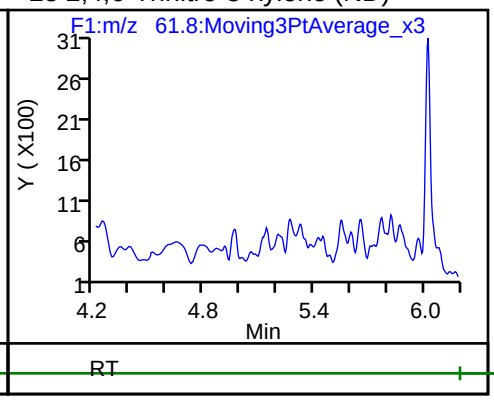
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 14-Apr-2022 10:09:42 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08041.d
Lims ID: 280-160190-A-26-B
Client ID: DUP-07
Sample Type: Client
Inject. Date: 08-Apr-2022 13:58:47 ALS Bottle#: 37 Worklist Smp#: 41
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-26-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:07:02 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:56:39

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	98.0	97.64

Report Date: 14-Apr-2022 10:09:42 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

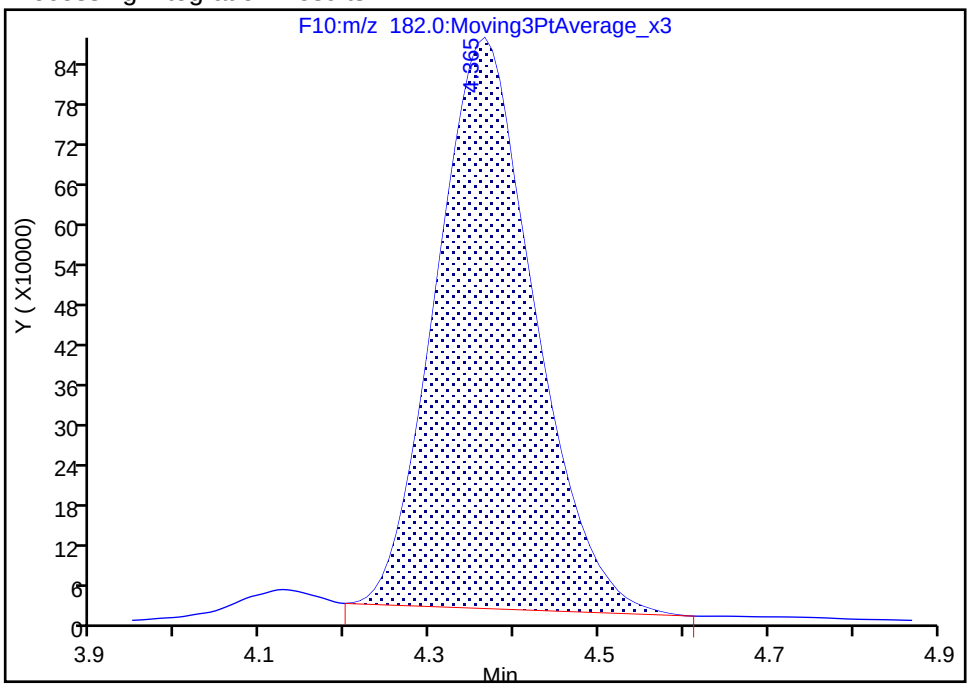
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08041.d				
Injection Date:	08-Apr-2022 13:58:47	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-26-B	Lab Sample ID:	280-160190-26		
Client ID:	DUP-07				
Operator ID:	acm	ALS Bottle#:	37	Worklist Smp#:	41
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F10:SIR		

19 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

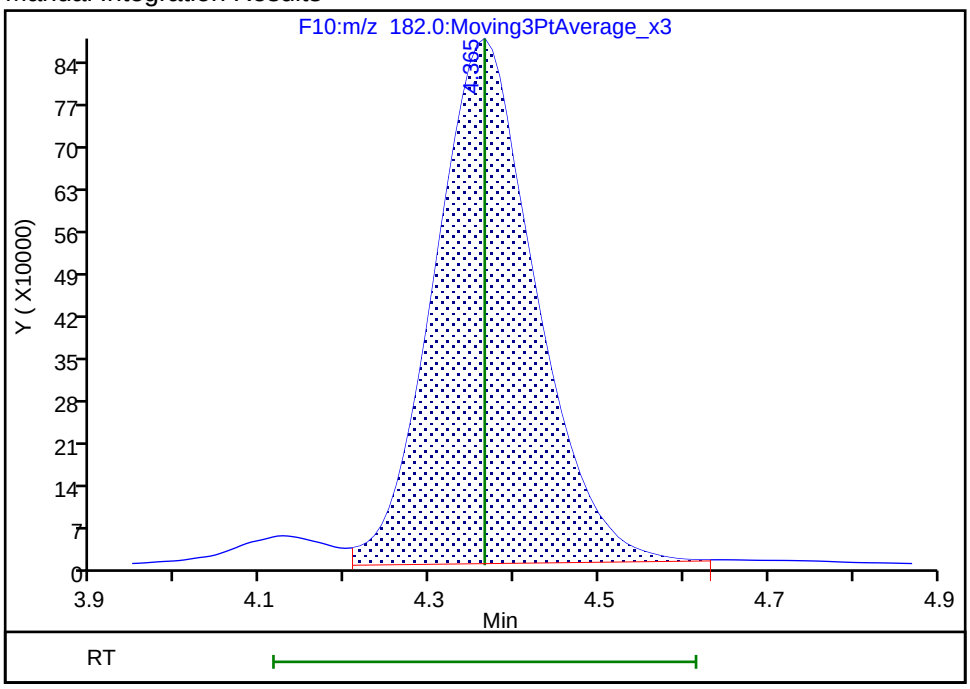
Processing Integration Results

RT: 4.36
Area: 6891242
Amount: 195.9120
Amount Units: ug/l



Manual Integration Results

RT: 4.36
Area: 7256620
Amount: 206.3163
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:56:34

Audit Action: Manually Integrated Audit Reason: Assign Peak

Report Date: 14-Apr-2022 10:09:42 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08041.d

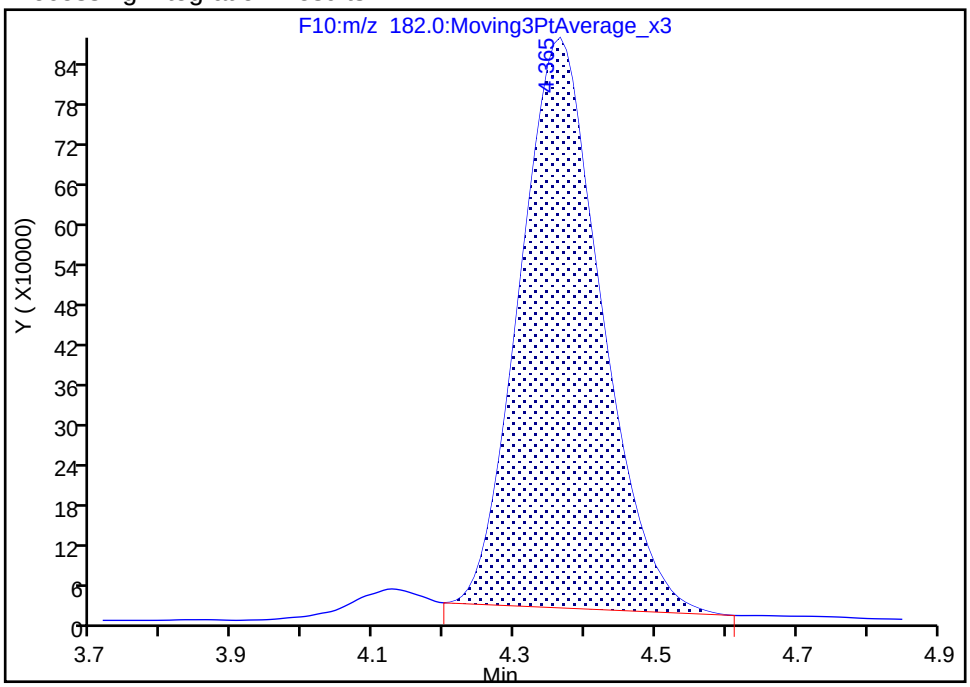
Injection Date:	08-Apr-2022 13:58:47	Instrument ID:	LC_LCMS7
Lims ID:	280-160190-A-26-B	Lab Sample ID:	280-160190-26
Client ID:	DUP-07		
Operator ID:	acm	ALS Bottle#:	37 Worklist Smp#: 41
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F10:SIR

17 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

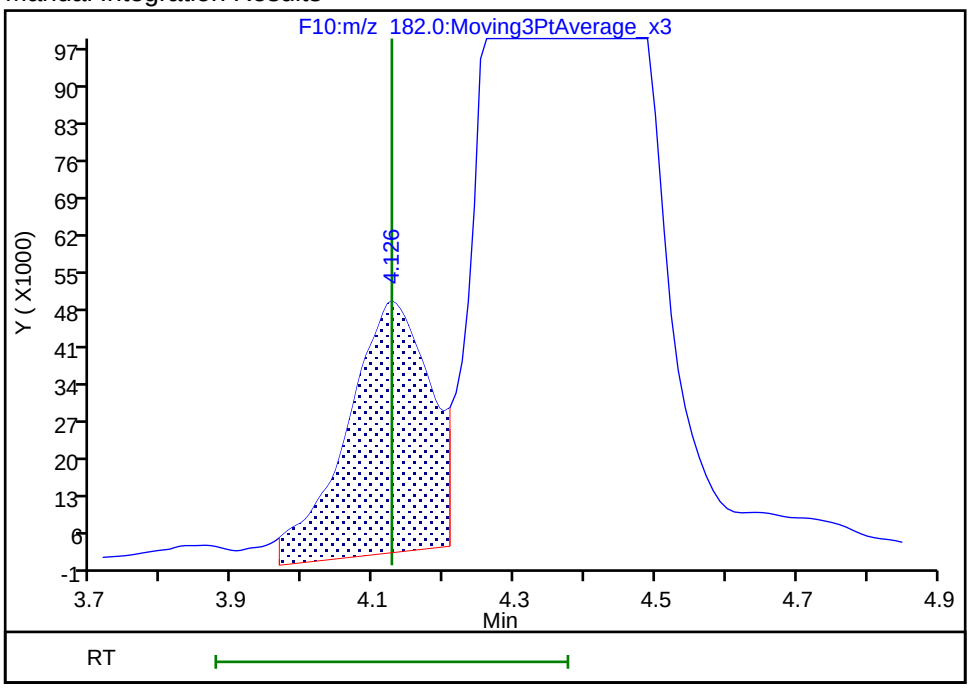
Processing Integration Results

RT: 4.36
Area: 6891242
Amount: 99.937638
Amount Units: ug/l



Manual Integration Results

RT: 4.13
Area: 389051
Amount: 5.072763
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:56:29

Audit Action: Manually Integrated Audit Reason: Assign Peak

Report Date: 14-Apr-2022 10:09:42 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08041.d

Injection Date:	08-Apr-2022 13:58:47	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-26-B	Lab Sample ID:	280-160190-26		
Client ID:	DUP-07				
Operator ID:	acm	ALS Bottle#:	37	Worklist Smp#:	41
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

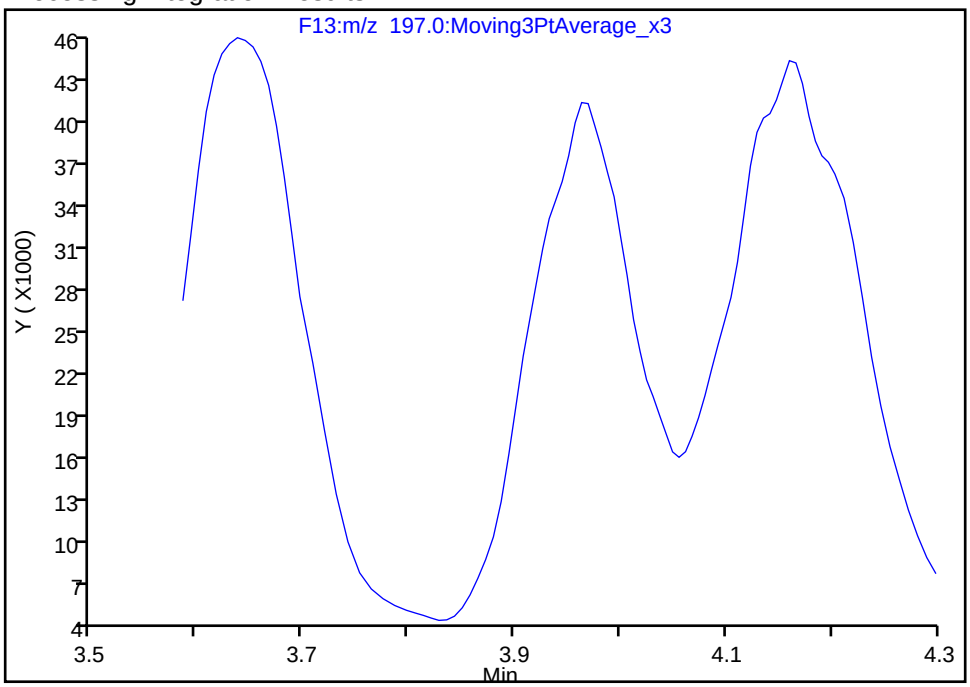
16 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

Not Detected

Expected RT: 3.96

Processing Integration Results



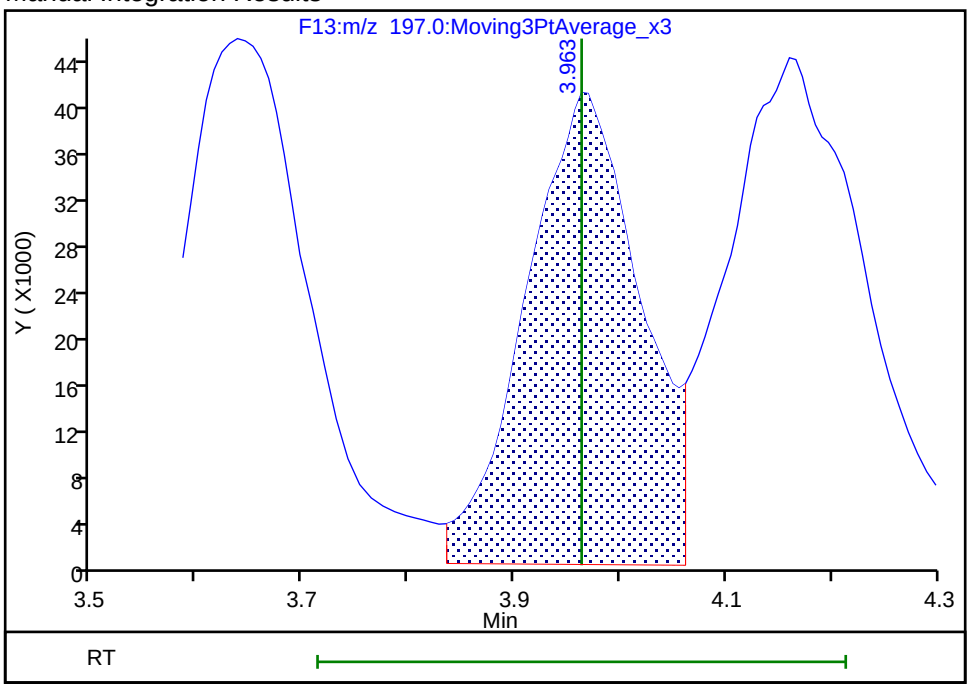
Manual Integration Results

RT: 3.96

Area: 300868

Amount: 4.120080

Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:56:23

Audit Action: Manually Integrated Audit Reason: Assign Peak

Report Date: 14-Apr-2022 10:09:42 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08041.d				
Injection Date:	08-Apr-2022 13:58:47	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-26-B	Lab Sample ID:	280-160190-26		
Client ID:	DUP-07				
Operator ID:	acm	ALS Bottle#:	37	Worklist Smp#:	41
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

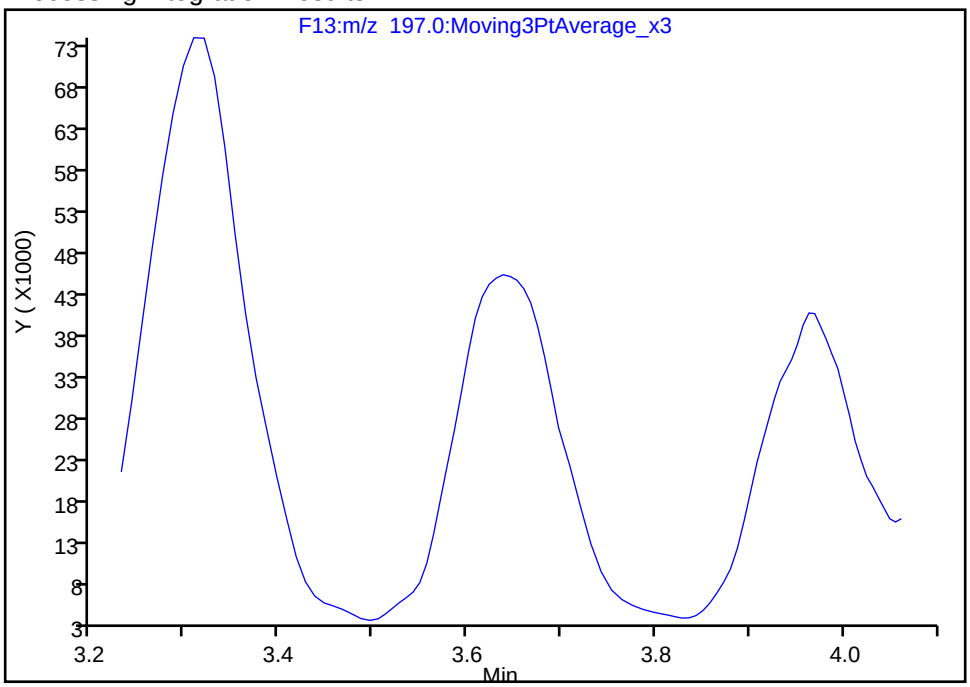
14 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

Not Detected

Expected RT: 3.65

Processing Integration Results



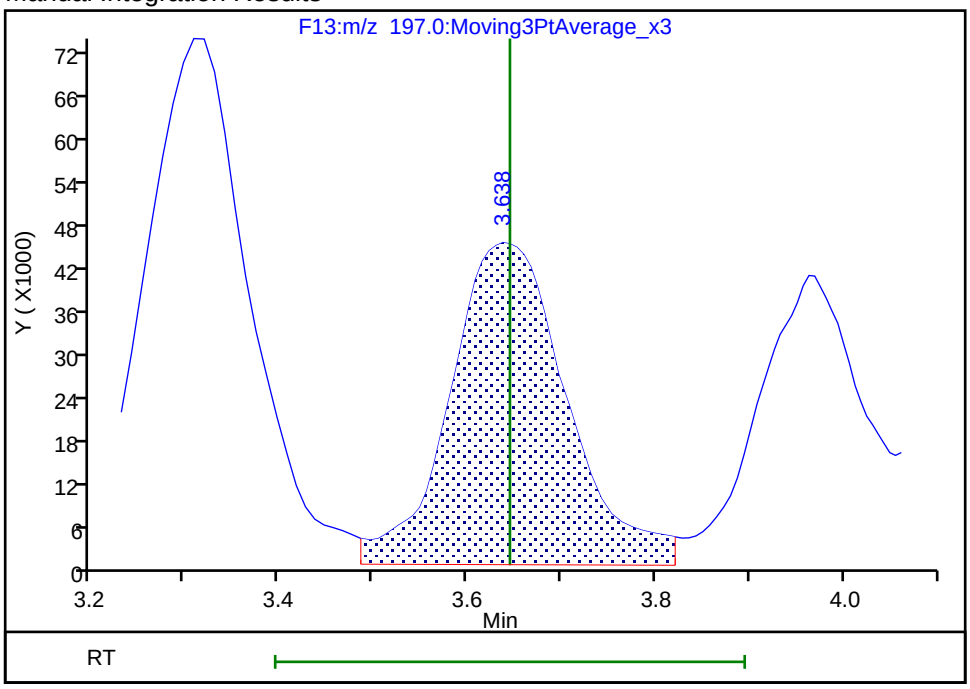
Manual Integration Results

RT: 3.64

Area: 387152

Amount: 6.995244

Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:56:19

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB170 (3-4) | Lab Sample ID: 280-160190-27
Matrix: Solid | Lab File ID: ex722D08042.d
Analysis Method: 8321A | Date Collected: 03/24/2022 12:30
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20
Sample wt/vol: 10.26(g) | Date Analyzed: 04/08/2022 14:05
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571224 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.049	U	0.097	0.049	0.044
99-65-0	1,3-Dinitrobenzene	0.049	U	0.097	0.049	0.044
118-96-7	2,4,6-Trinitrotoluene	0.049	U	0.097	0.049	0.036
121-14-2	2,4-Dinitrotoluene	0.049	U M	0.097	0.049	0.045
606-20-2	2,6-Dinitrotoluene	0.049	U	0.097	0.049	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.049	U	0.097	0.049	0.048
19406-51-0	4-Amino-2,6-dinitrotoluene	0.049	U	0.097	0.049	0.030
2691-41-0	HMX	0.049	U Q	0.097	0.049	0.045
99-08-1	m-Nitrotoluene	0.049	U	0.097	0.049	0.042
98-95-3	Nitrobenzene	0.049	U	0.11	0.049	0.037
55-63-0	Nitroglycerin	0.049	U	0.097	0.049	0.028
88-72-2	o-Nitrotoluene	0.049	U	0.097	0.049	0.042
78-11-5	PETN	0.049	U	0.097	0.049	0.033
99-99-0	p-Nitrotoluene	0.049	U	0.097	0.049	0.048
121-82-4	RDX	0.049	U M	0.12	0.049	0.042
479-45-8	Tetryl	0.049	U Q	0.097	0.049	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	102		68-140

Report Date: 14-Apr-2022 10:09:43 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08042.d
Lims ID: 280-160190-A-27-B
Client ID: 29SB170 (3-4)
Sample Type: Client
Inject. Date: 08-Apr-2022 14:05:23 ALS Bottle#: 38 Worklist Smp#: 42
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-27-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:07:02 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:57:08
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	1004	-0.5857	0.7	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		115710	125.0	50.3	
36 TNX								
144.0	1.396	1.379	0.011	0.757	1316	-0.7426	1.3	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		390613	125.0	150	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.008	0.011		1291248	129.4	401	
$ 11 Nitrobenzene-d5								
128.0	3.348	3.354	0.0	0.774	627363	102.7	117	
17 2,6-Dinitrotoluene								M
182.0	4.138	4.138	0.012	0.957	9450	-0.4612	6.6	M
* 18 2,4-dinitrotoluene-d3								
185.1	4.324	4.315	0.009		4036021	125.0	112	
19 2,4-Dinitrotoluene								M
182.0	4.356	4.373	-0.009	1.007	55154	1.30	24.3	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 14-Apr-2022 10:09:43 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08042.d

Injection Date: 08-Apr-2022 14:05:23 Instrument ID: LC_LCMS7

Lims ID: 280-160190-A-27-B Lab Sample ID: 280-160190-27

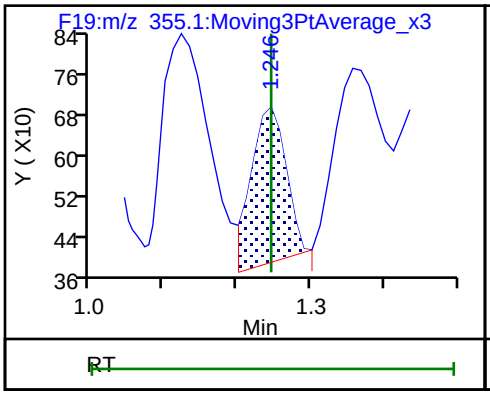
Client ID: 29SB170 (3-4)

Operator ID: acm ALS Bottle#: 38 Worklist Smp#: 42

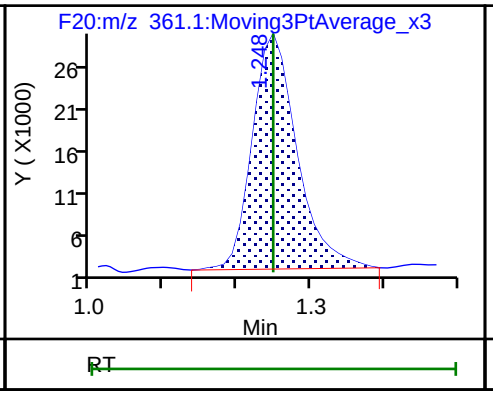
Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

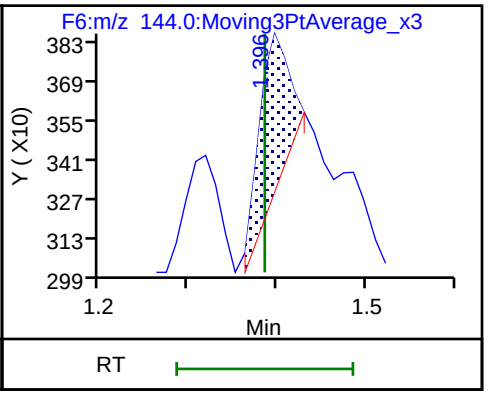
2 HMX



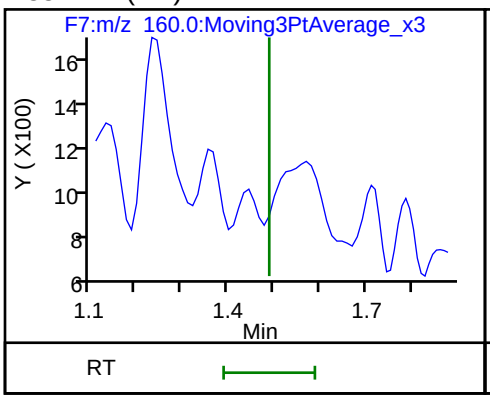
* 1 HMX-13C4



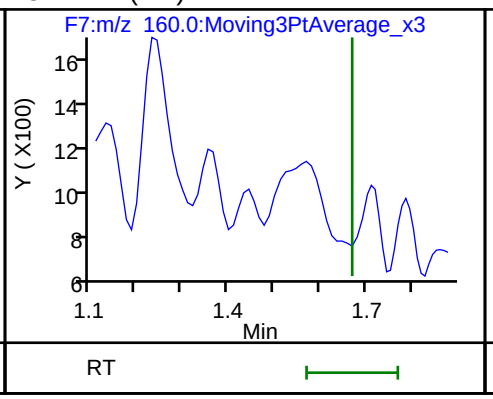
36 TNX



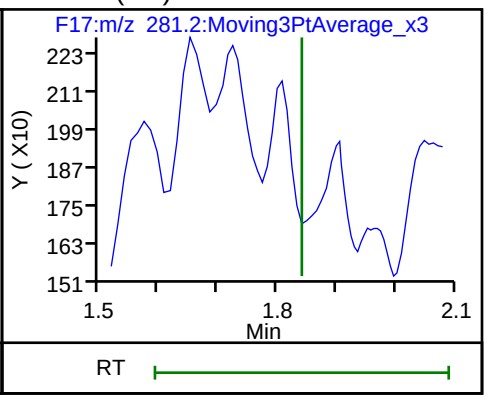
33 DNX (ND)



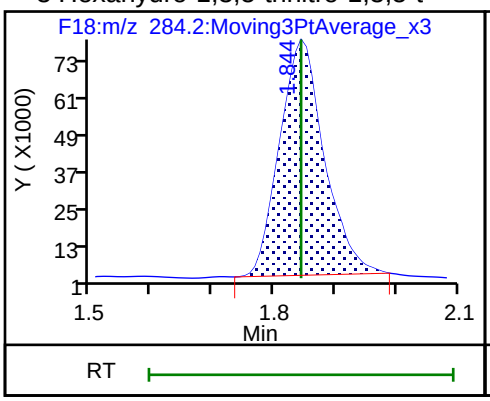
34 MNX (ND)



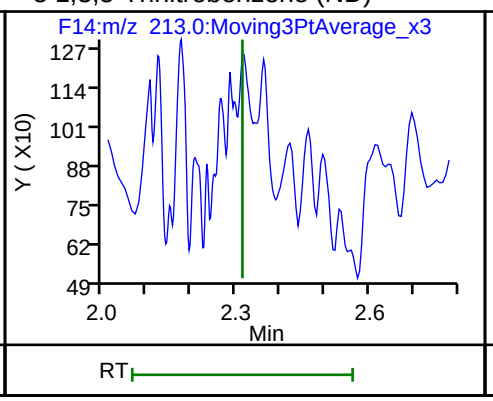
4 RDX (ND)



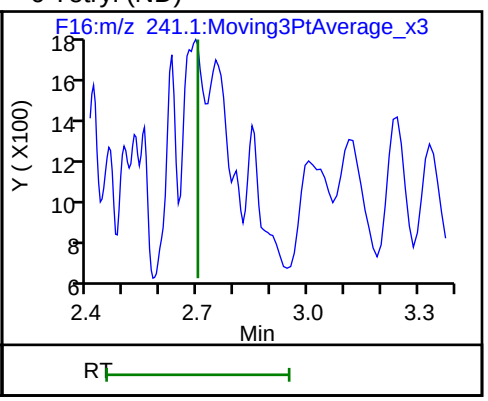
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



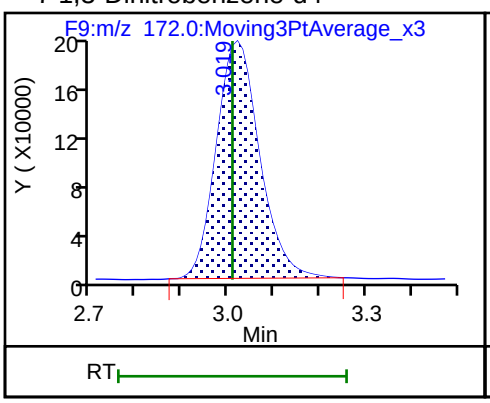
5 1,3,5-Trinitrobenzene (ND)



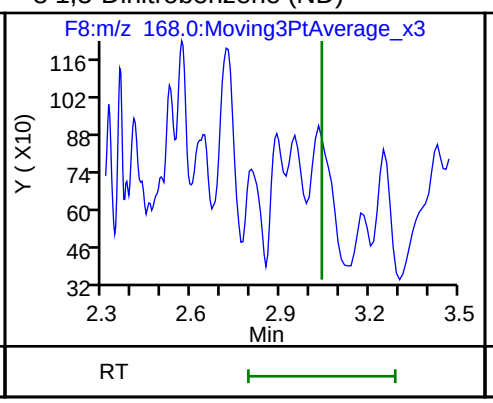
6 Tetryl (ND)



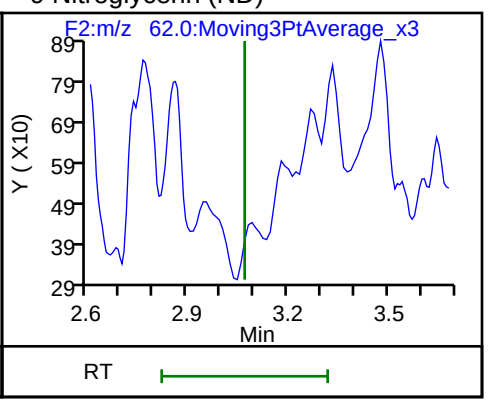
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

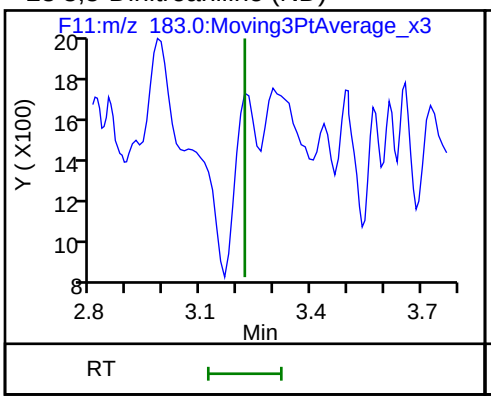


9 Nitroglycerin (ND)

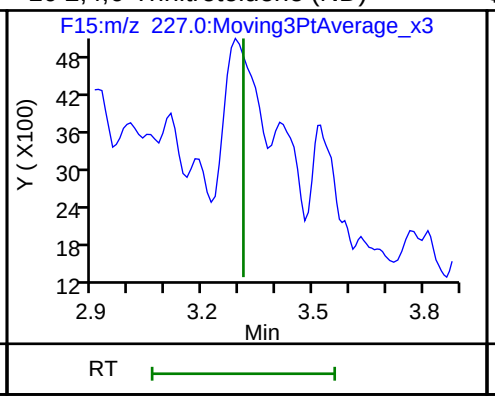


Report Date: 14-Apr-2022 10:09:43 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08042.d

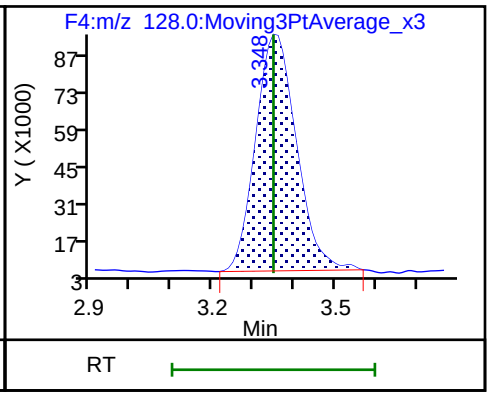
28 3,5-Dinitroaniline (ND)



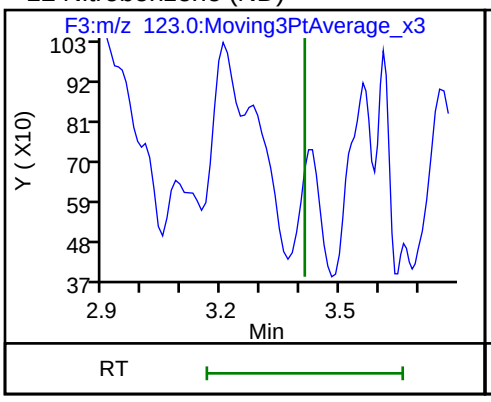
10 2,4,6-Trinitrotoluene (ND)



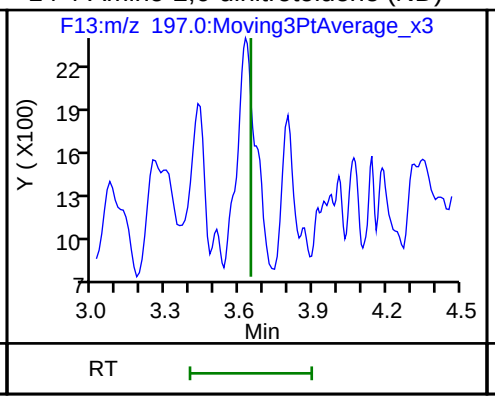
$ 11 Nitrobenzene-d5



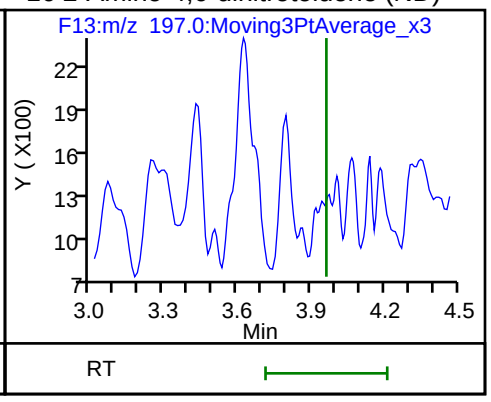
12 Nitrobenzene (ND)



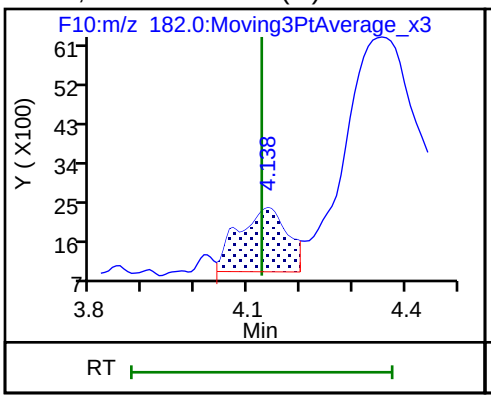
14 4-Amino-2,6-dinitrotoluene (ND)



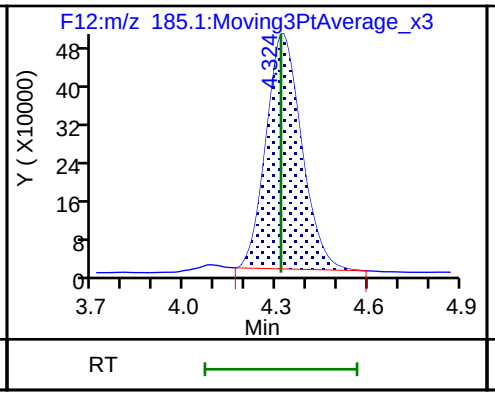
16 2-Amino-4,6-dinitrotoluene (ND)



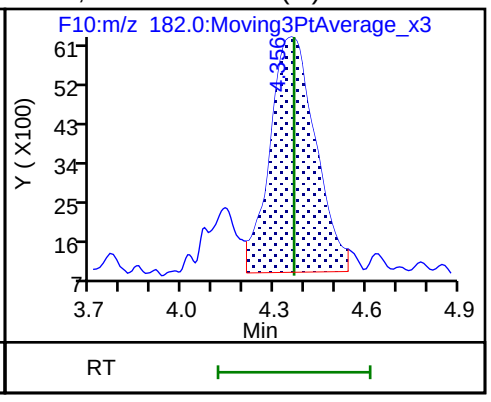
17 2,6-Dinitrotoluene (M)



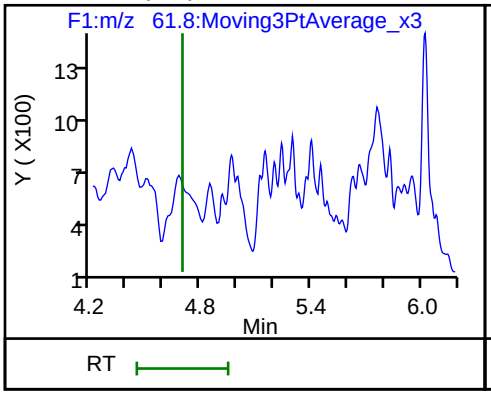
* 18 2,4-dinitrotoluene-d3



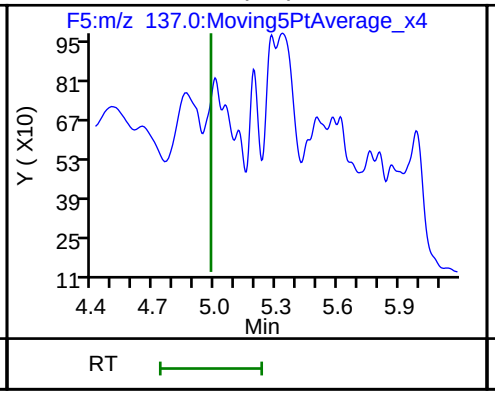
19 2,4-Dinitrotoluene (M)



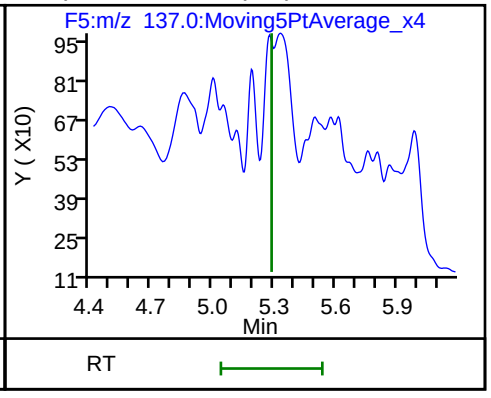
20 PETN (ND)



22 o-Nitrotoluene (ND)

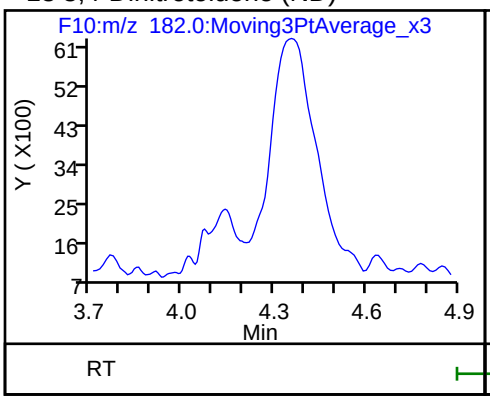


23 p-Nitrotoluene (ND)

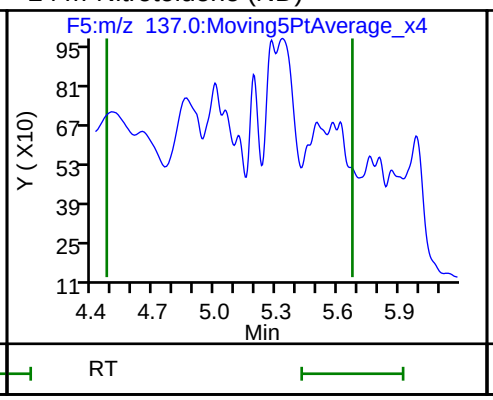


Report Date: 14-Apr-2022 10:09:43 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08042.d

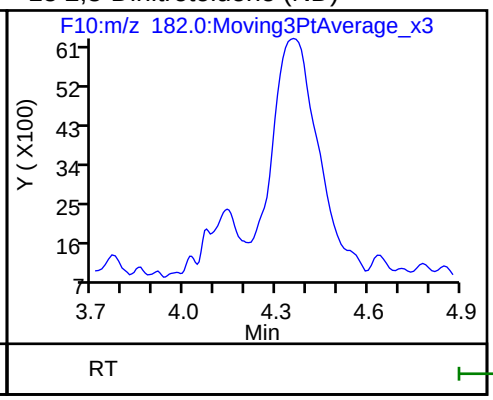
13 3,4-Dinitrotoluene (ND)



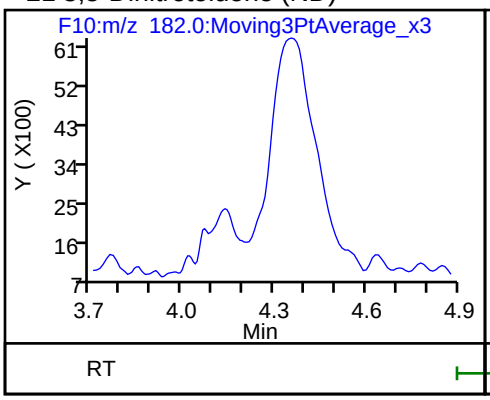
24 m-Nitrotoluene (ND)



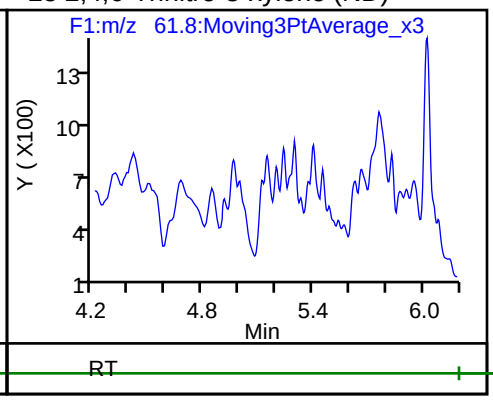
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 14-Apr-2022 10:09:43 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08042.d				
Lims ID:	280-160190-A-27-B				
Client ID:	29SB170 (3-4)				
Sample Type:	Client				
Inject. Date:	08-Apr-2022 14:05:23	ALS Bottle#:	38	Worklist Smp#:	42
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160190-A-27-B				
Misc. Info.:	ex722D08				
Operator ID:	acm	Instrument ID:	LC_LCMS7		
Method:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m				
Limit Group:	LC - 8321A Expl				
Last Update:	14-Apr-2022 10:07:02	Calib Date:	08-Apr-2022 10:27:37		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1619				
First Level Reviewer: meyera		Date:	11-Apr-2022 11:57:08		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	102.7	102.40

Report Date: 14-Apr-2022 10:09:43 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

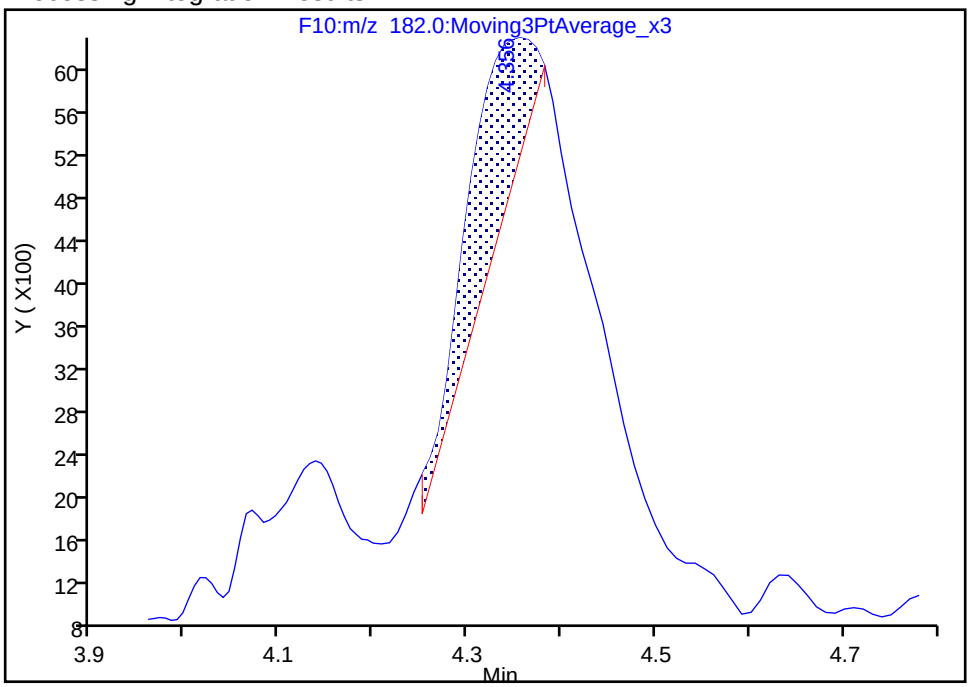
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08042.d				
Injection Date:	08-Apr-2022 14:05:23	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-27-B	Lab Sample ID:	280-160190-27		
Client ID:	29SB170 (3-4)				
Operator ID:	acm	ALS Bottle#:	38	Worklist Smp#:	42
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F10:SIR		

19 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

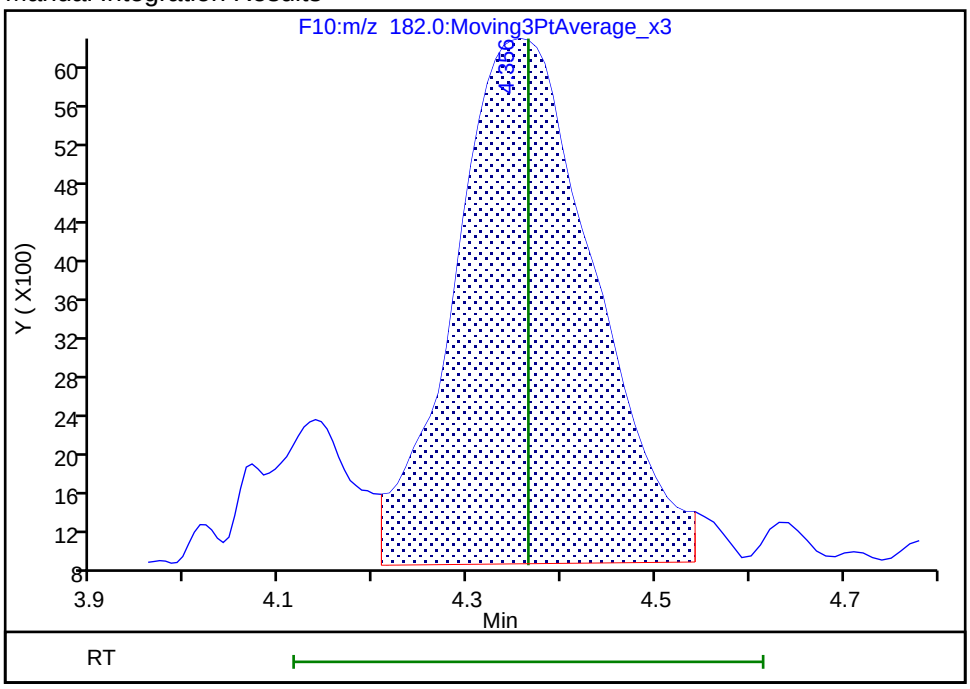
Processing Integration Results

RT: 4.36
Area: 7626
Amount: -0.094492
Amount Units: ug/l



Manual Integration Results

RT: 4.36
Area: 55154
Amount: 1.301420
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:56:50

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:09:43 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08042.d

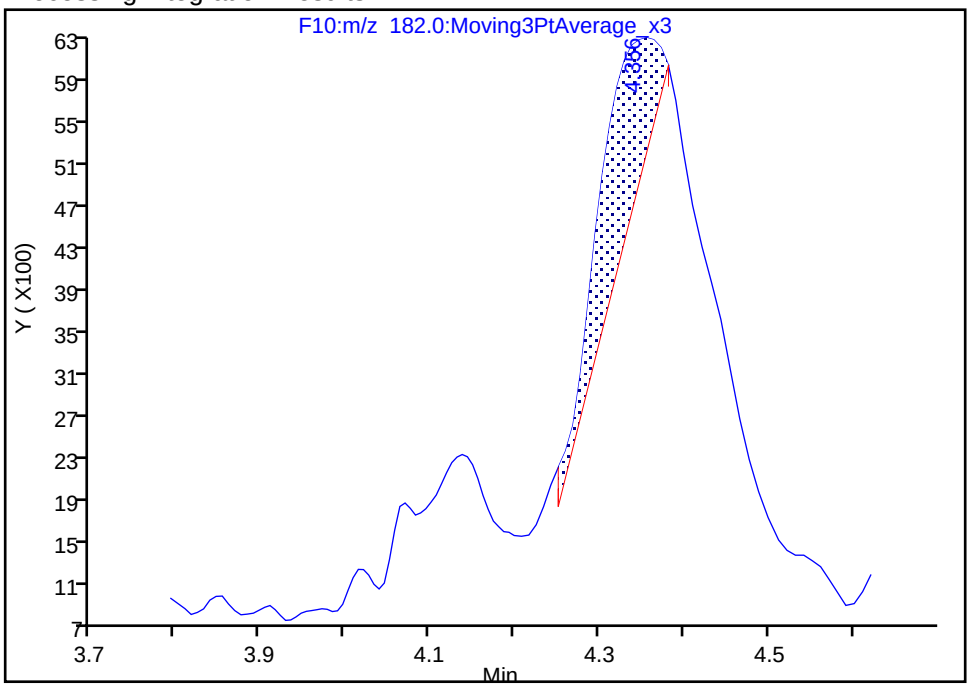
Injection Date:	08-Apr-2022 14:05:23	Instrument ID:	LC_LCMS7
Lims ID:	280-160190-A-27-B	Lab Sample ID:	280-160190-27
Client ID:	29SB170 (3-4)		
Operator ID:	acm	ALS Bottle#:	38 Worklist Smp#: 42
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F10:SIR

17 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

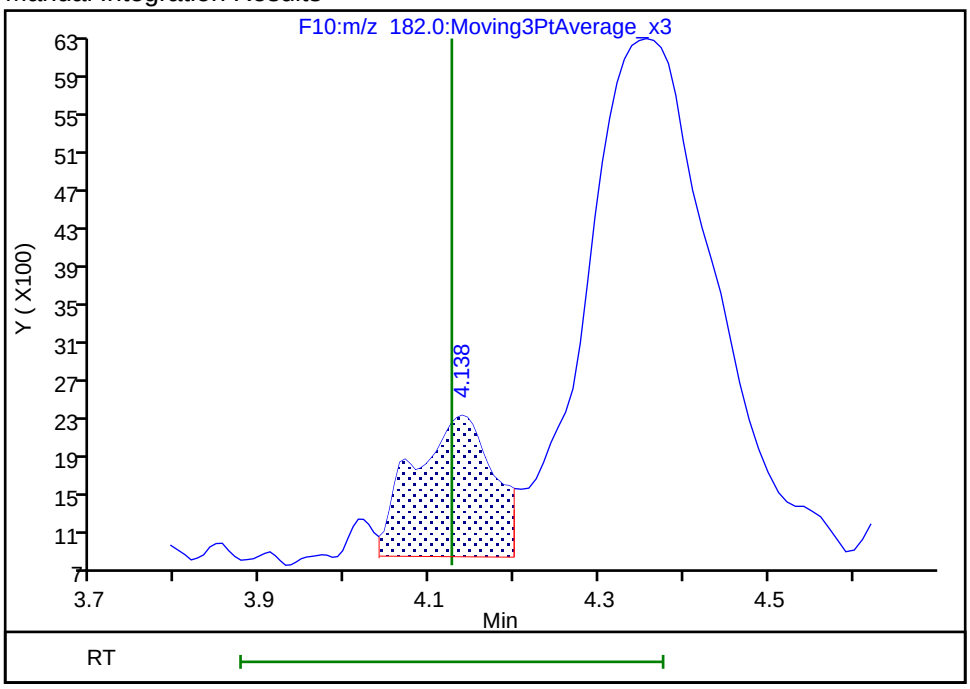
Processing Integration Results

RT: 4.36
Area: 7626
Amount: -0.488608
Amount Units: ug/l



Manual Integration Results

RT: 4.14
Area: 9450
Amount: -0.461160
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:56:56

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB170 (6-7) | Lab Sample ID: 280-160190-28
Matrix: Solid | Lab File ID: ex722D14017.d
Analysis Method: 8321A | Date Collected: 03/24/2022 12:35
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:23
Sample wt/vol: 10.54(g) | Date Analyzed: 04/14/2022 14:00
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571896 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.047	U M	0.095	0.047	0.043
99-65-0	1,3-Dinitrobenzene	0.047	U	0.095	0.047	0.042
118-96-7	2,4,6-Trinitrotoluene	0.15		0.095	0.047	0.035
121-14-2	2,4-Dinitrotoluene	0.37	M	0.095	0.047	0.044
606-20-2	2,6-Dinitrotoluene	0.047	U M	0.095	0.047	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.047	U M	0.095	0.047	0.047
19406-51-0	4-Amino-2,6-dinitrotoluene	0.047	U J1	0.095	0.047	0.030
2691-41-0	HMX	0.047	U M	0.095	0.047	0.044
99-08-1	m-Nitrotoluene	0.047	U	0.095	0.047	0.041
98-95-3	Nitrobenzene	0.047	U	0.10	0.047	0.036
55-63-0	Nitroglycerin	0.047	U	0.095	0.047	0.028
88-72-2	o-Nitrotoluene	0.047	U	0.095	0.047	0.041
78-11-5	PETN	0.047	U	0.095	0.047	0.032
99-99-0	p-Nitrotoluene	0.047	U	0.095	0.047	0.047
121-82-4	RDX	0.047	U	0.11	0.047	0.041
479-45-8	Tetryl	0.047	U Q J1	0.095	0.047	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	100		68-140

Report Date: 15-Apr-2022 08:03:04 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14017.d
Lims ID: 280-160190-A-28-D
Client ID: 29SB170 (6-7)
Sample Type: Client
Inject. Date: 14-Apr-2022 14:00:07 ALS Bottle#: 15 Worklist Smp#: 17
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-28-D
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:00 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 14-Apr-2022 14:29:02
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		145866	125.0	177	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		474507	125.0	149	
5 1,3,5-Trinitrobenzene								M
213.0	2.292	2.299	-0.007	0.766	16495	0.7159	8.0	M
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1165031	129.4	250	
28 3,5-Dinitroaniline								
183.0	3.200	3.200	0.0	1.070	5196	-0.7977	2.1	
10 2,4,6-Trinitrotoluene								
227.0	3.281	3.281	0.0	0.768	2733833	38.2	305	
$ 11 Nitrobenzene-d5								
128.0	3.324	3.324	0.0	0.778	524915	100.6	113	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.601	3.611	-0.010	0.842	117574	1.59	3.8	
16 2-Amino-4,6-dinitrotoluene								M
197.0	3.931	3.924	0.007	0.919	132686	1.47	4.6	M
17 2,6-Dinitrotoluene								M
182.0	4.081	4.093	-0.012	0.954	185729	2.50	13.2	M
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3667613	125.0	122	
19 2,4-Dinitrotoluene								M
182.0	4.325	4.316	0.009	1.012	3061480	98.2	196	M

Report Date: 15-Apr-2022 08:03:04 Chrom Revision: 2.3 12-Apr-2022 20:29:44

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

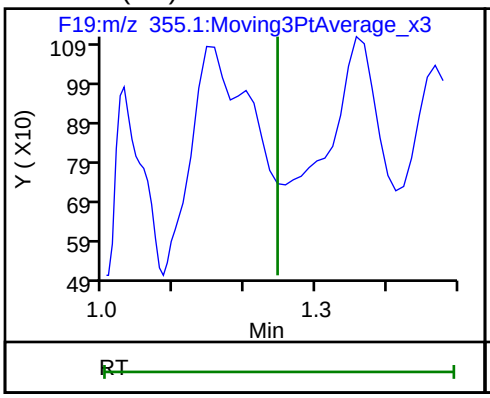
Report Date: 15-Apr-2022 08:03:04 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

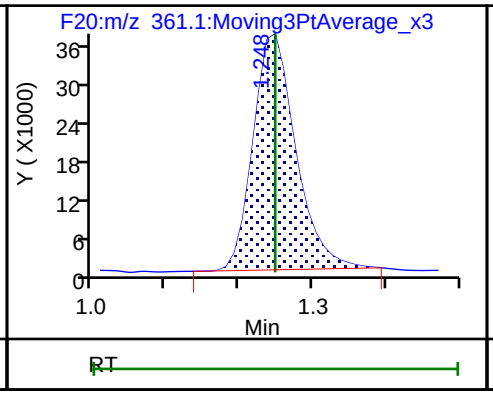
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14017.d

Injection Date:	14-Apr-2022 14:00:07	Instrument ID:	LC_LCMS7
Lims ID:	280-160190-A-28-D	Lab Sample ID:	280-160190-28
Client ID:	29SB170 (6-7)		
Operator ID:	acm	ALS Bottle#:	15 Worklist Smp#: 17
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl

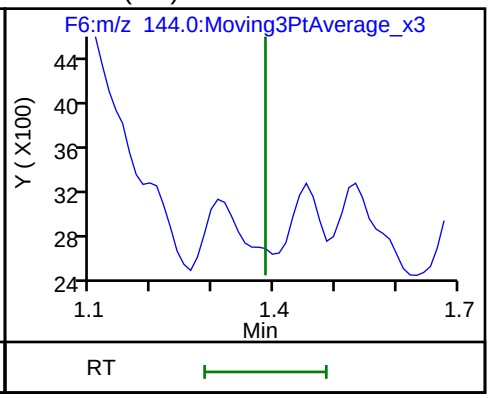
2 HMX (ND)



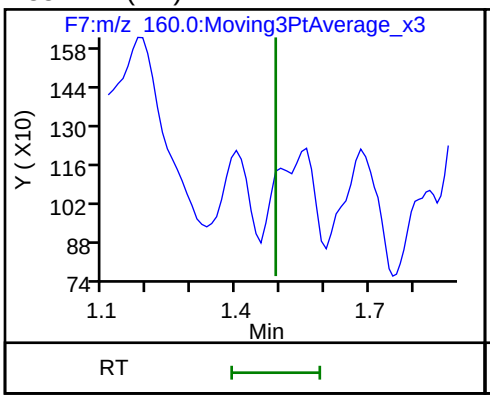
* 1 HMX-13C4



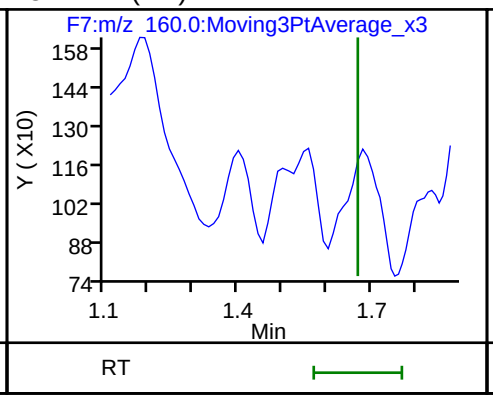
36 TNX (ND)



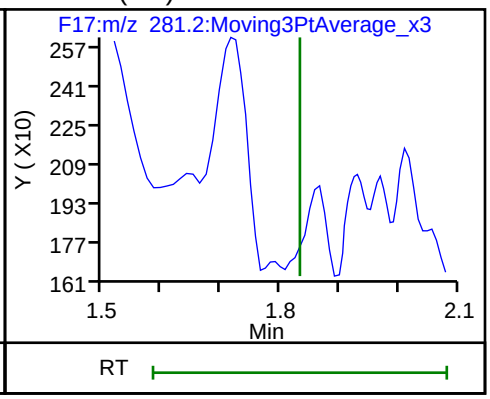
33 DNX (ND)



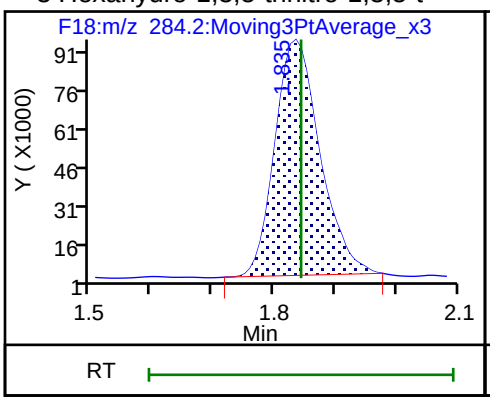
34 MNX (ND)



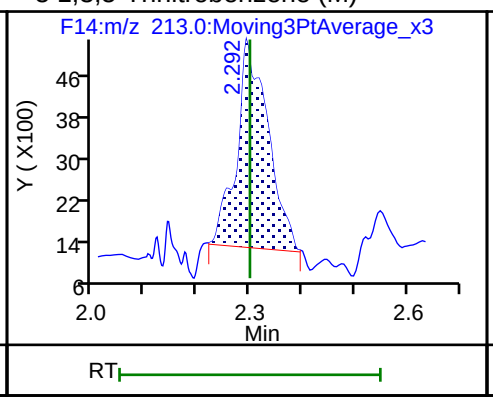
4 RDX (ND)



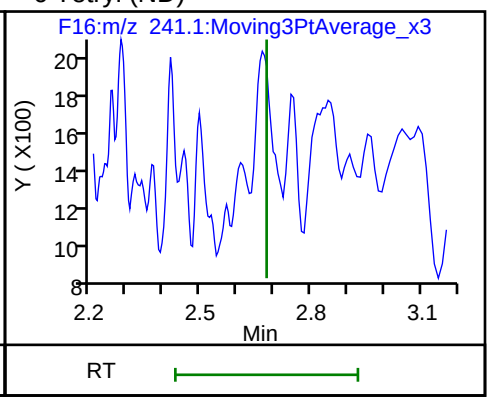
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



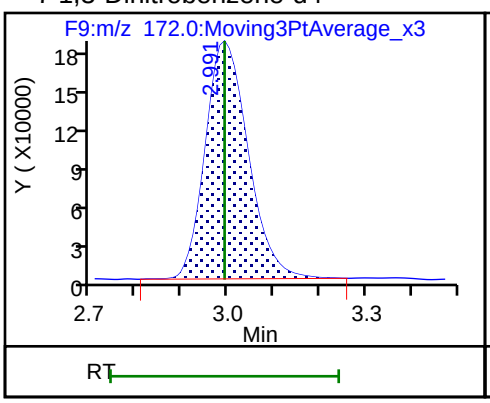
5 1,3,5-Trinitrobenzene (M)



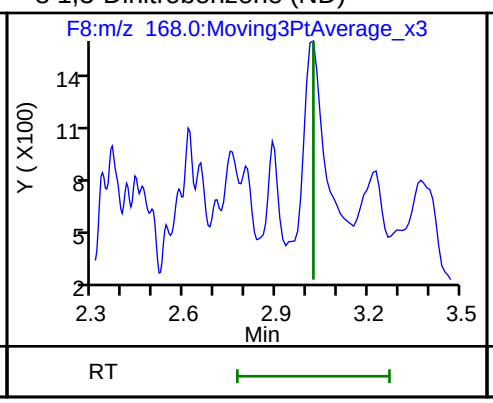
6 Tetryl (ND)



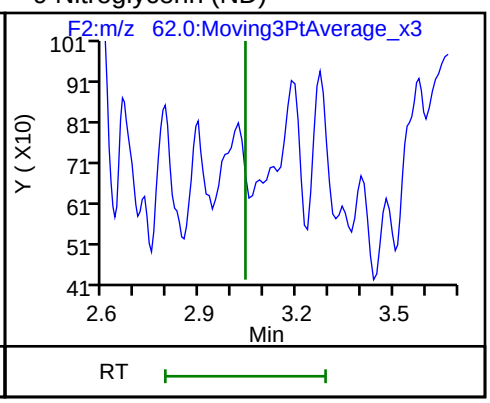
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

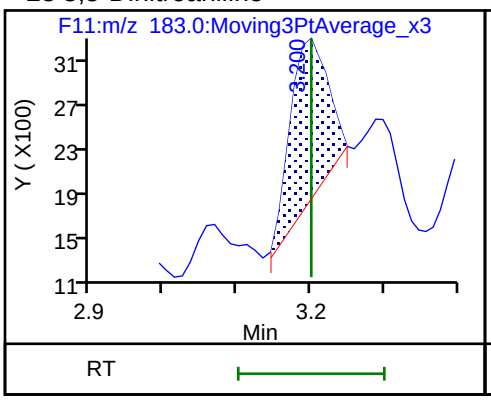


9 Nitroglycerin (ND)

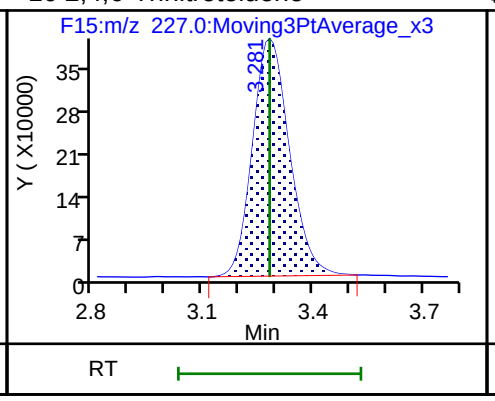


Report Date: 15-Apr-2022 08:03:04 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14017.d

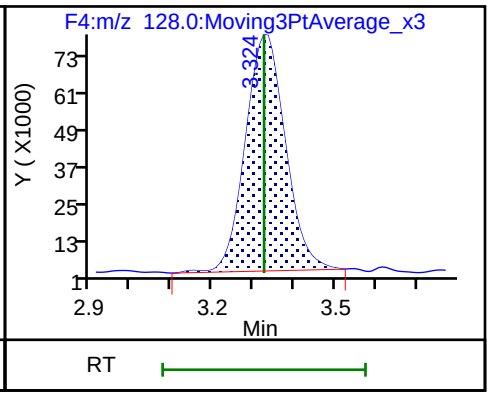
28 3,5-Dinitroaniline



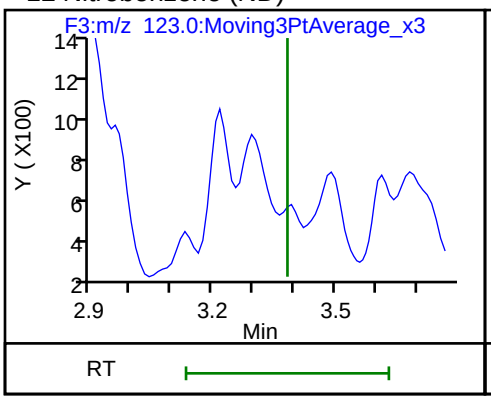
10 2,4,6-Trinitrotoluene



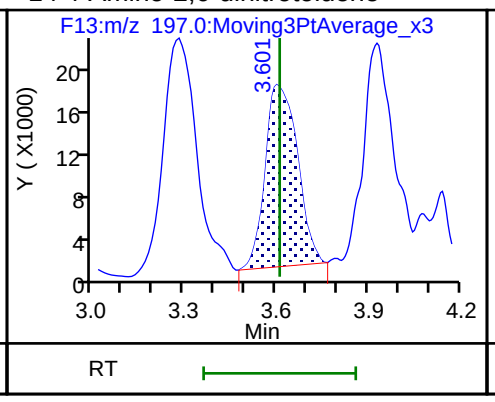
$ 11 Nitrobenzene-d5



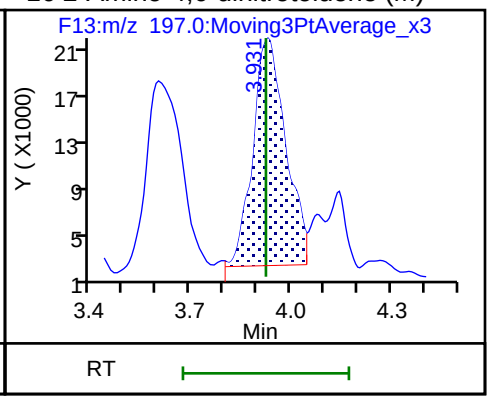
12 Nitrobenzene (ND)



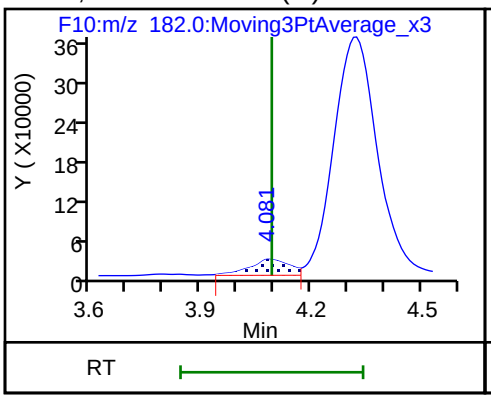
14 4-Amino-2,6-dinitrotoluene



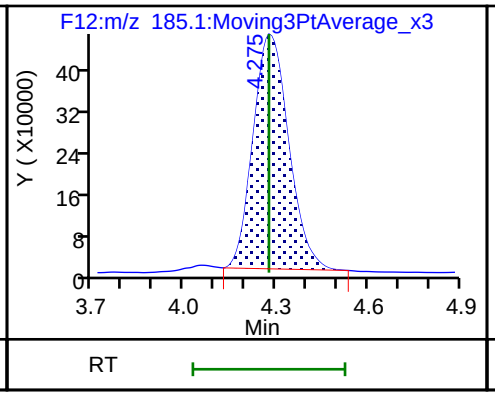
16 2-Amino-4,6-dinitrotoluene (M)



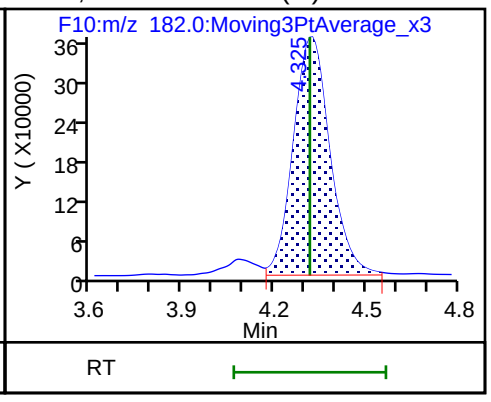
17 2,6-Dinitrotoluene (M)



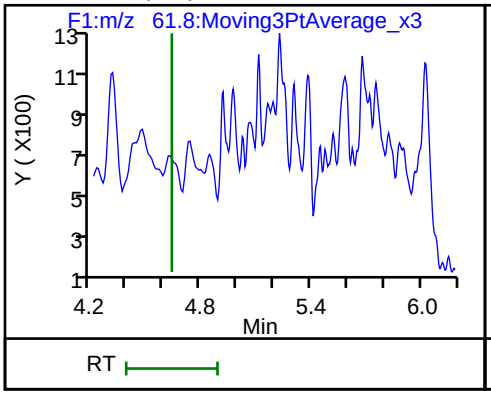
* 18 2,4-dinitrotoluene-d3



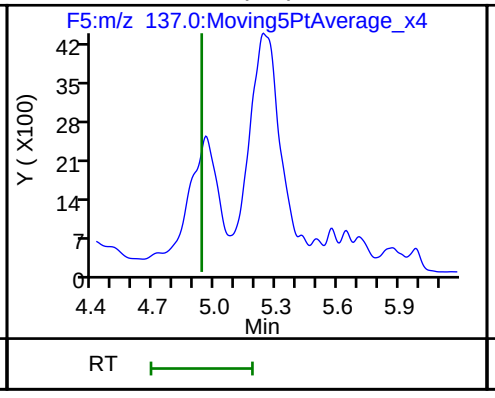
19 2,4-Dinitrotoluene (M)



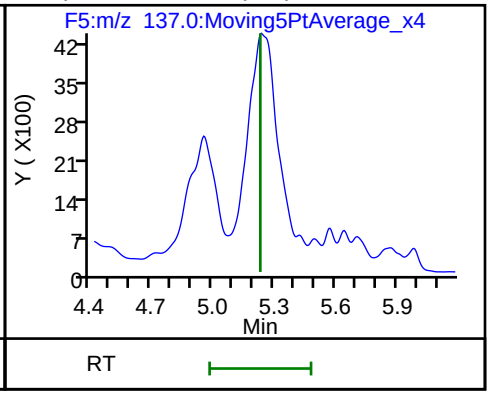
20 PETN (ND)



22 o-Nitrotoluene (ND)



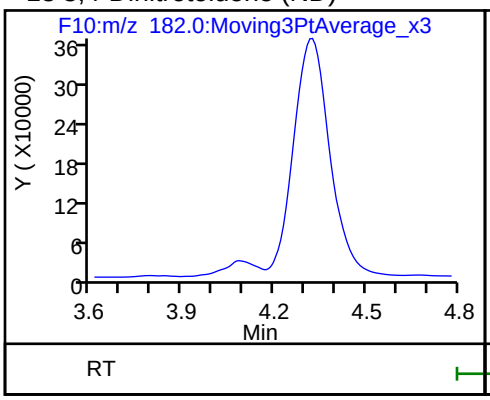
23 p-Nitrotoluene (ND)



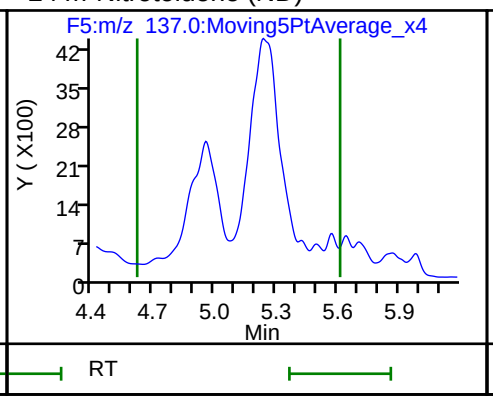
Report Date: 15-Apr-2022 08:03:04 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14017.d

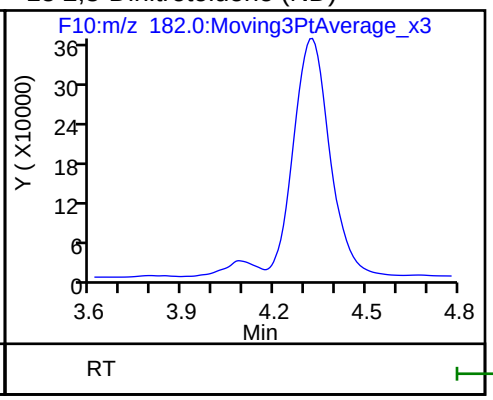
13 3,4-Dinitrotoluene (ND)



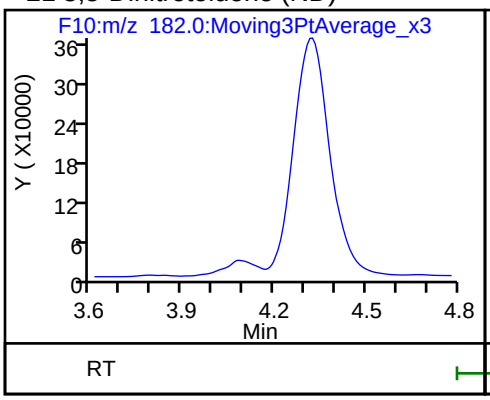
24 m-Nitrotoluene (ND)



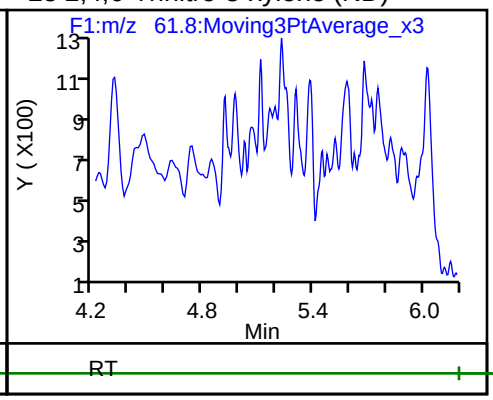
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:04 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14017.d
Lims ID: 280-160190-A-28-D
Client ID: 29SB170 (6-7)
Sample Type: Client
Inject. Date: 14-Apr-2022 14:00:07 ALS Bottle#: 15 Worklist Smp#: 17
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-28-D
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:00 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 14-Apr-2022 14:29:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	100.6	100.28

Report Date: 15-Apr-2022 08:03:04 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

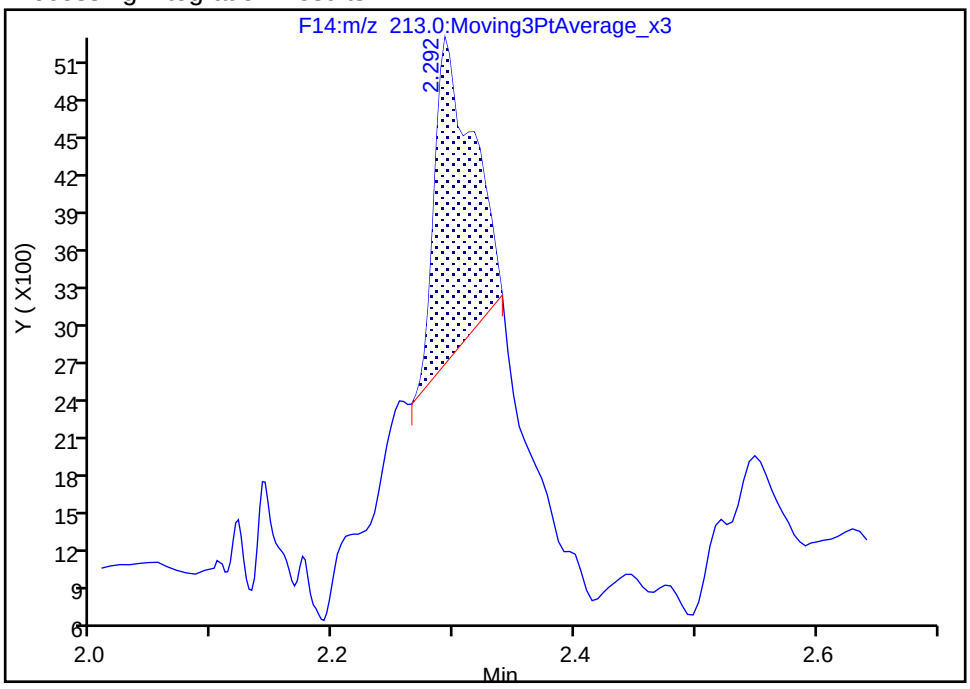
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14017.d				
Injection Date:	14-Apr-2022 14:00:07	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-28-D	Lab Sample ID:	280-160190-28		
Client ID:	29SB170 (6-7)				
Operator ID:	acm	ALS Bottle#:	15	Worklist Smp#:	17
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F14:SIR		

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

Signal: 1

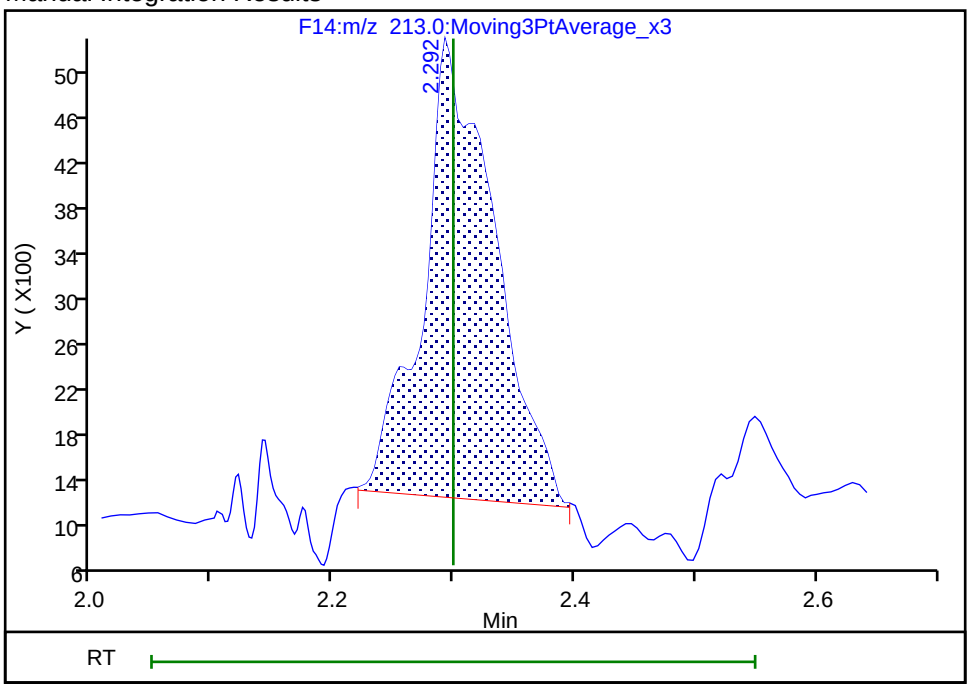
Processing Integration Results

RT: 2.29
Area: 5505
Amount: 0.017562
Amount Units: ug/l



Manual Integration Results

RT: 2.29
Area: 16495
Amount: 0.715874
Amount Units: ug/l



Reviewer: meyera, 14-Apr-2022 14:28:56

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:03:04 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

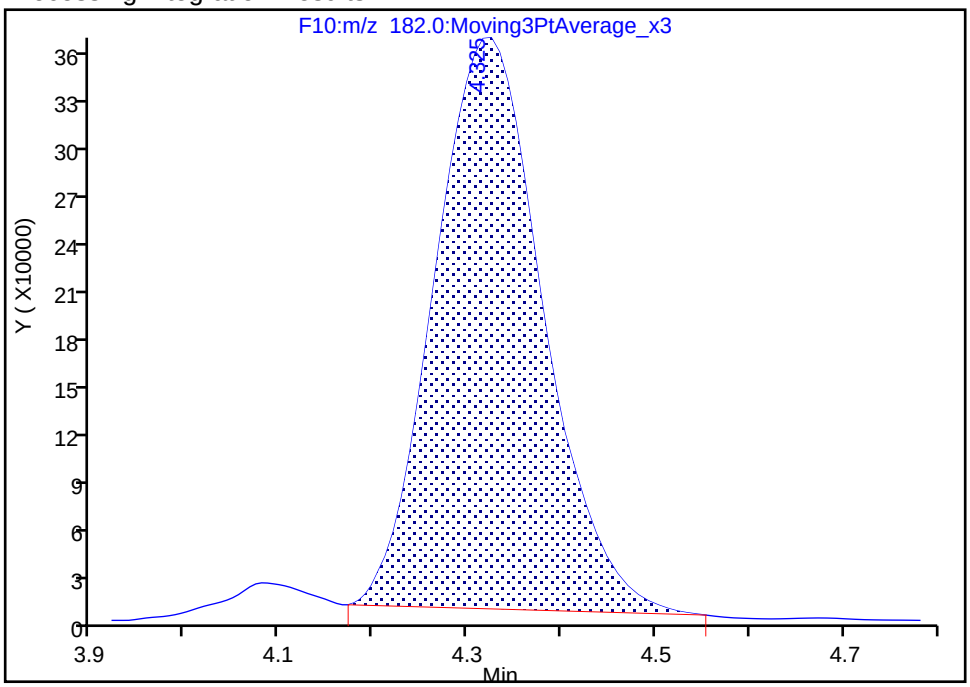
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14017.d				
Injection Date:	14-Apr-2022 14:00:07	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-28-D	Lab Sample ID:	280-160190-28		
Client ID:	29SB170 (6-7)				
Operator ID:	acm	ALS Bottle#:	15	Worklist Smp#:	17
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F10:SIR		

19 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

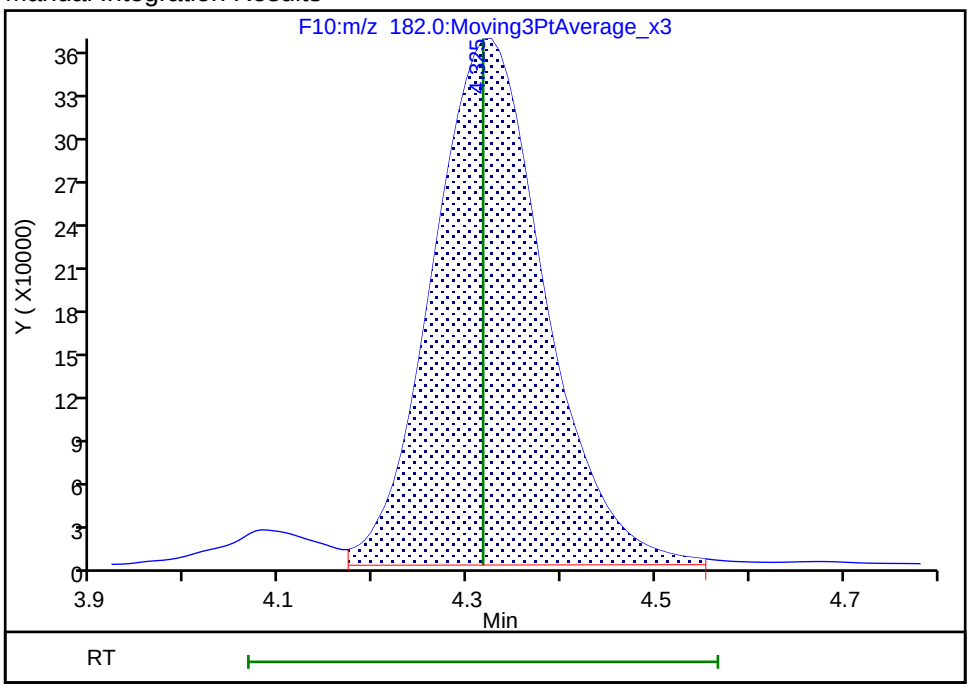
Processing Integration Results

RT: 4.33
Area: 2891090
Amount: 92.656119
Amount Units: ug/l



Manual Integration Results

RT: 4.33
Area: 3061480
Amount: 98.176211
Amount Units: ug/l



Reviewer: meyera, 14-Apr-2022 14:28:37

Audit Action: Assigned New Baseline Audit Reason: Baseline

Report Date: 15-Apr-2022 08:03:04 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

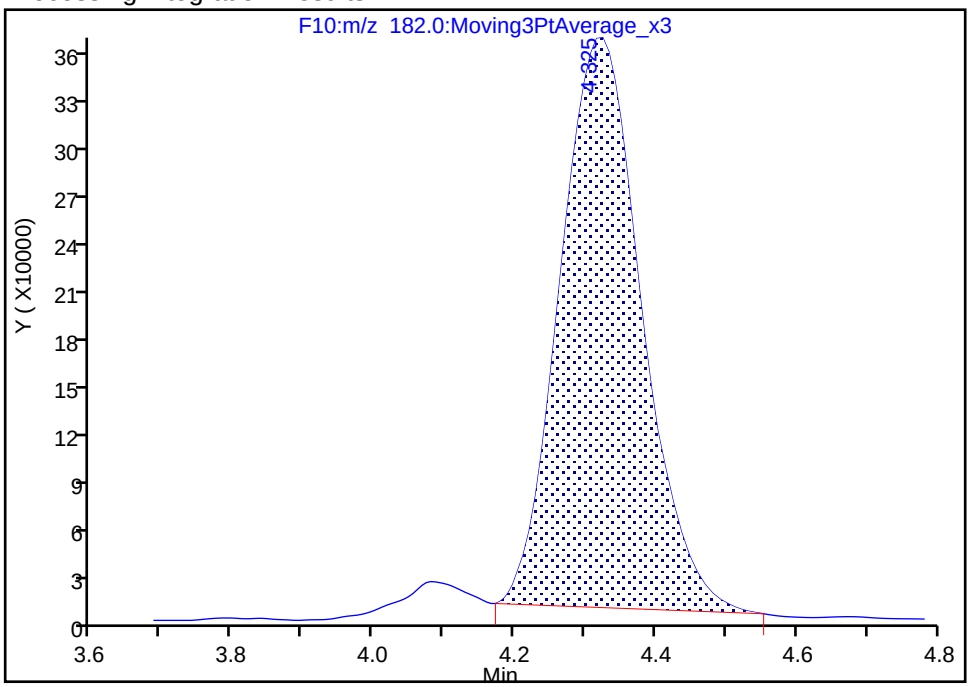
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14017.d				
Injection Date:	14-Apr-2022 14:00:07	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-28-D	Lab Sample ID:	280-160190-28		
Client ID:	29SB170 (6-7)				
Operator ID:	acm	ALS Bottle#:	15	Worklist Smp#:	17
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F10:SIR		

17 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

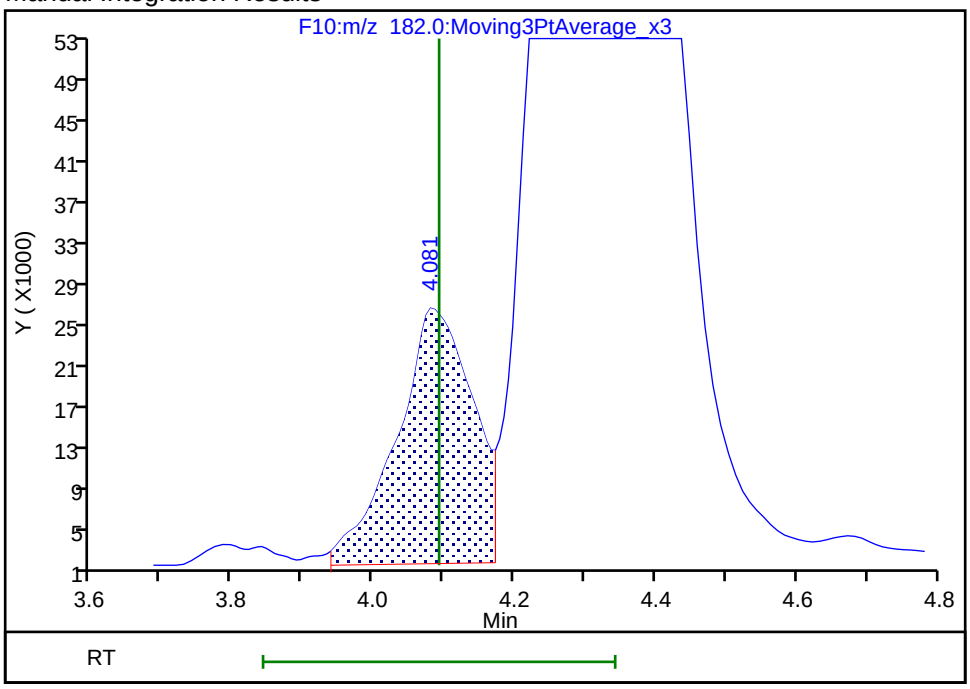
Processing Integration Results

RT: 4.33
Area: 2891090
Amount: 48.550896
Amount Units: ug/l



Manual Integration Results

RT: 4.08
Area: 185729
Amount: 2.497624
Amount Units: ug/l



Reviewer: meyera, 14-Apr-2022 14:28:37

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:03:04 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14017.d

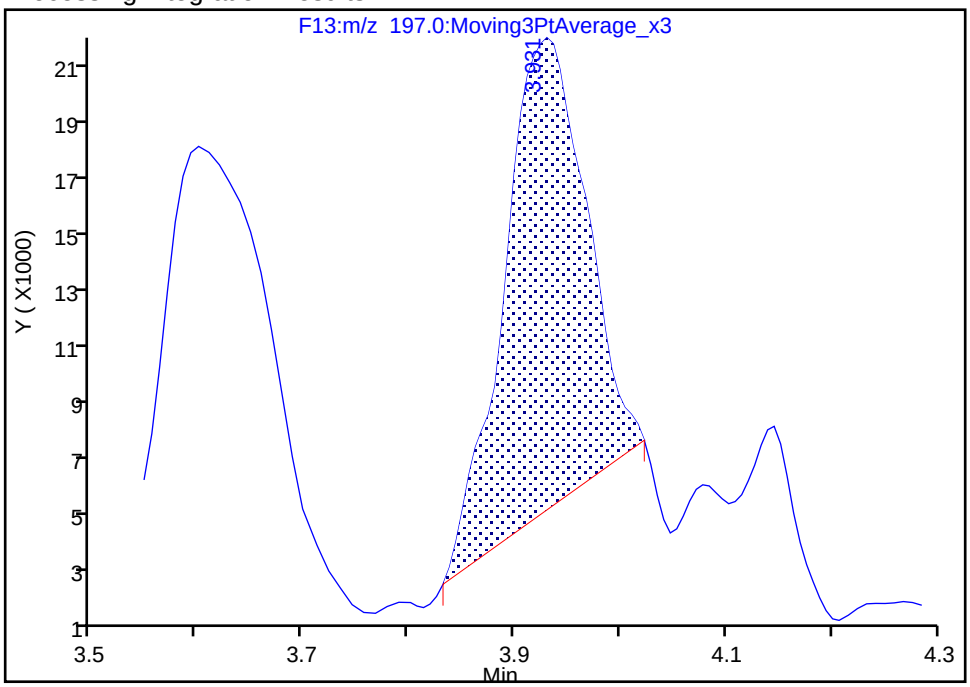
Injection Date:	14-Apr-2022 14:00:07	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-28-D	Lab Sample ID:	280-160190-28		
Client ID:	29SB170 (6-7)				
Operator ID:	acm	ALS Bottle#:	15	Worklist Smp#:	17
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

16 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

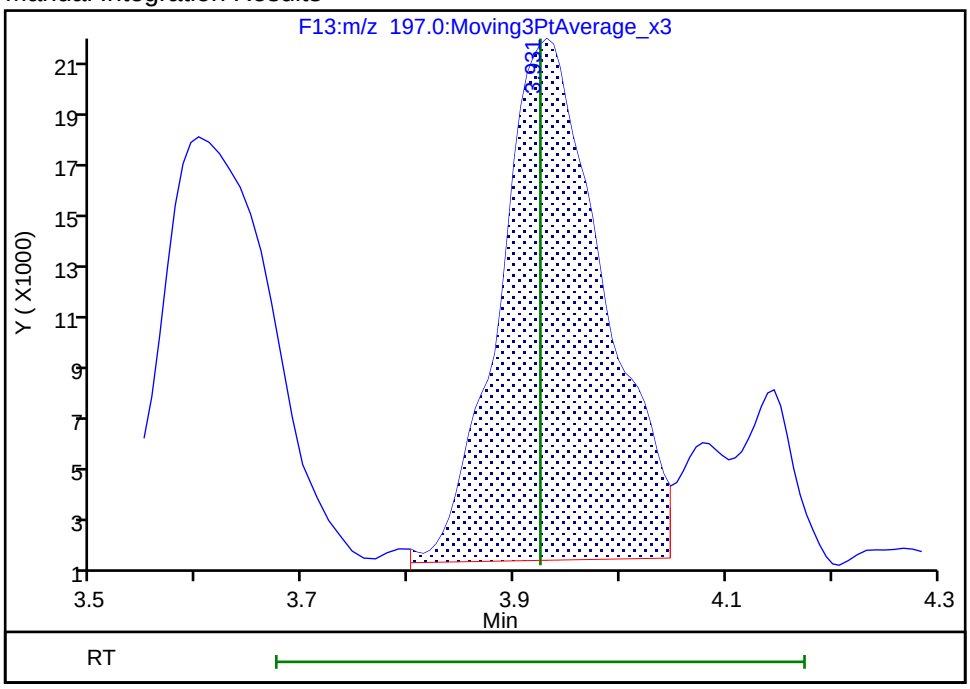
Processing Integration Results

RT: 3.93
Area: 86083
Amount: 0.755254
Amount Units: ug/l



Manual Integration Results

RT: 3.93
Area: 132686
Amount: 1.466817
Amount Units: ug/l



Reviewer: meyera, 14-Apr-2022 14:28:47

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB170 (11-12) | Lab Sample ID: 280-160190-29
Matrix: Solid | Lab File ID: ex722D14020.d
Analysis Method: 8321A | Date Collected: 03/24/2022 12:37
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:23
Sample wt/vol: 10.2(g) | Date Analyzed: 04/14/2022 14:19
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571896 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.049	U	0.098	0.049	0.044
99-65-0	1,3-Dinitrobenzene	0.049	U	0.098	0.049	0.044
118-96-7	2,4,6-Trinitrotoluene	0.049	U	0.098	0.049	0.036
121-14-2	2,4-Dinitrotoluene	0.049	U	0.098	0.049	0.046
606-20-2	2,6-Dinitrotoluene	0.049	U	0.098	0.049	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.049	U	0.098	0.049	0.049
19406-51-0	4-Amino-2,6-dinitrotoluene	0.049	U	0.098	0.049	0.030
2691-41-0	HMX	0.049	U	0.098	0.049	0.045
99-08-1	m-Nitrotoluene	0.049	U	0.098	0.049	0.042
98-95-3	Nitrobenzene	0.049	U	0.11	0.049	0.037
55-63-0	Nitroglycerin	0.049	U	0.098	0.049	0.028
88-72-2	o-Nitrotoluene	0.049	U M	0.098	0.049	0.042
78-11-5	PETN	0.049	U	0.098	0.049	0.033
99-99-0	p-Nitrotoluene	0.049	U M	0.098	0.049	0.048
121-82-4	RDX	0.049	U	0.12	0.049	0.042
479-45-8	Tetryl	0.049	U Q	0.098	0.049	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	90		68-140

Report Date: 15-Apr-2022 08:03:06 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14020.d
Lims ID: 280-160190-A-29-D
Client ID: 29SB170 (11-12)
Sample Type: Client
Inject. Date: 14-Apr-2022 14:19:53 ALS Bottle#: 18 Worklist Smp#: 20
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-29-D
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:00 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:27:16
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		155221	125.0	133	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		512166	125.0	163	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1230460	129.4	440	
10 2,4,6-Trinitrotoluene								M
227.0	3.272	3.281	-0.009	0.765	29393	-0.7005	8.6	M
$ 11 Nitrobenzene-d5								
128.0	3.315	3.324	-0.009	0.775	500366	90.6	56.9	
16 2-Amino-4,6-dinitrotoluene								M
197.0	3.611	3.924	-0.313	0.845	25379	-0.1749	2.2	M
17 2,6-Dinitrotoluene								
182.0	4.105	4.093	0.012	0.960	37554	-0.0302	13.7	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3698989	125.0	139	
19 2,4-Dinitrotoluene								
182.0	4.325	4.316	0.009	1.012	342789	10.0	113	
22 o-Nitrotoluene								M
137.0	4.967	4.932	0.035	1.162	6042	0.2556	2.8	M
23 p-Nitrotoluene								M
137.0	5.235	5.230	0.005	1.225	14220	1.24	5.2	M

QC Flag Legend

Processing Flags

Report Date: 15-Apr-2022 08:03:06 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Review Flags

M - Manually Integrated

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

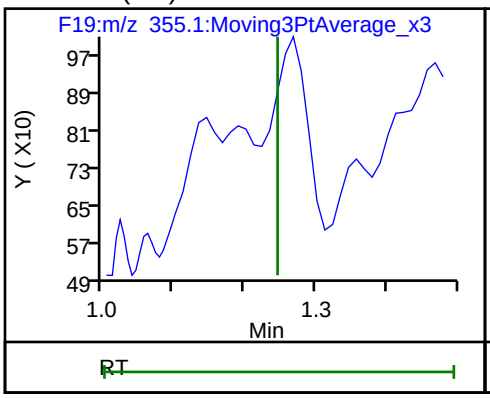
Report Date: 15-Apr-2022 08:03:06 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

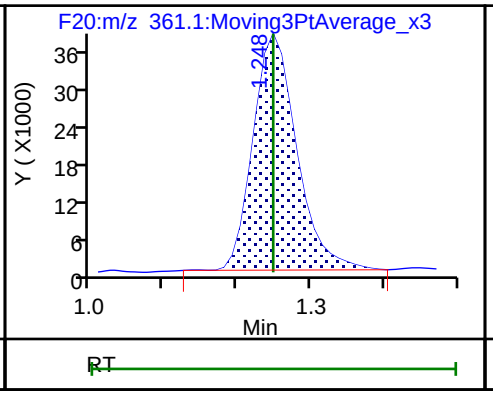
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14020.d

Injection Date:	14-Apr-2022 14:19:53	Instrument ID:	LC_LCMS7
Lims ID:	280-160190-A-29-D	Lab Sample ID:	280-160190-29
Client ID:	29SB170 (11-12)		
Operator ID:	acm	ALS Bottle#:	18 Worklist Smp#: 20
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl

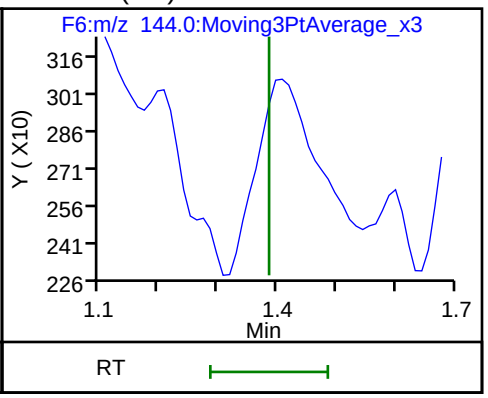
2 HMX (ND)



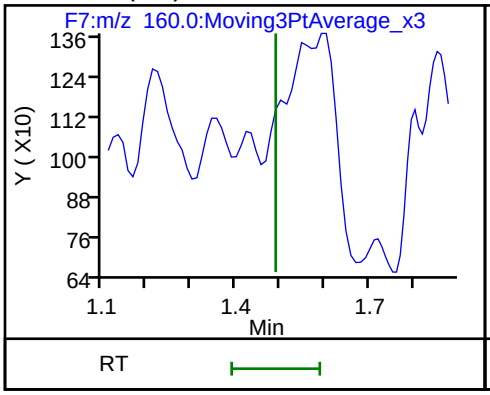
* 1 HMX-13C4



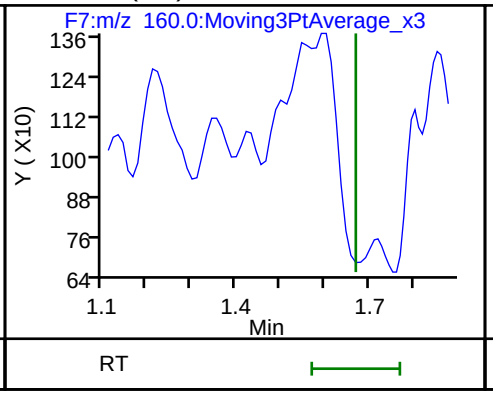
36 TNX (ND)



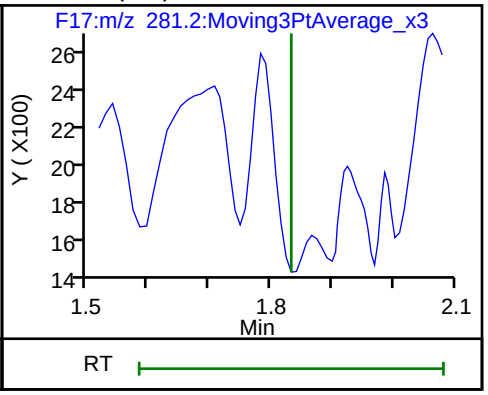
33 DNX (ND)



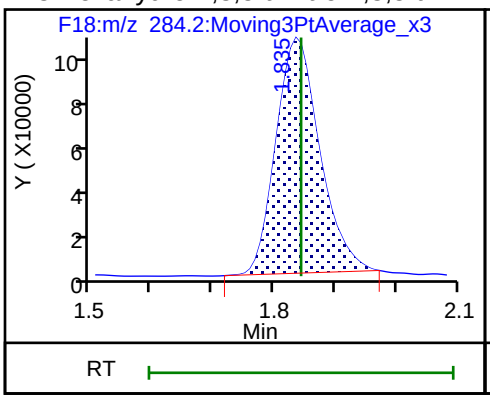
34 MNX (ND)



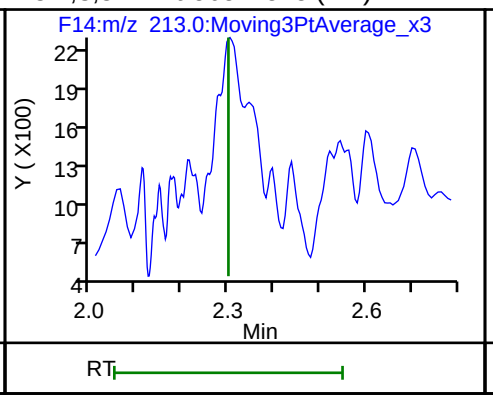
4 RDX (ND)



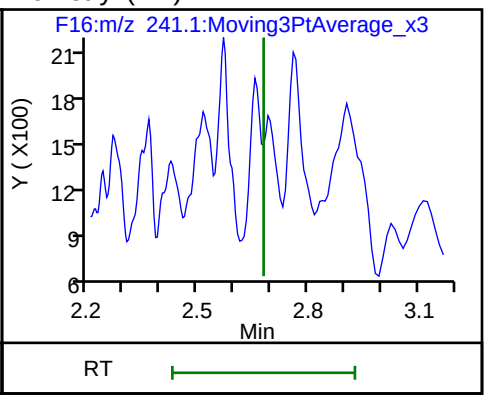
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



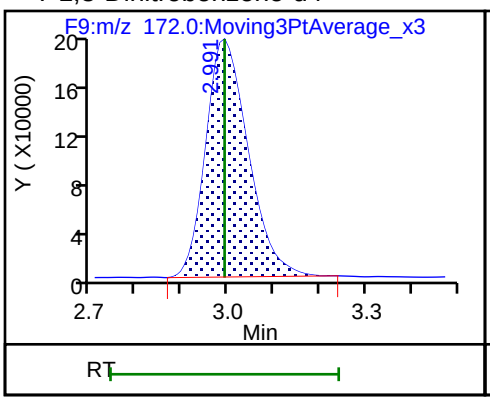
5 1,3,5-Trinitrobenzene (ND)



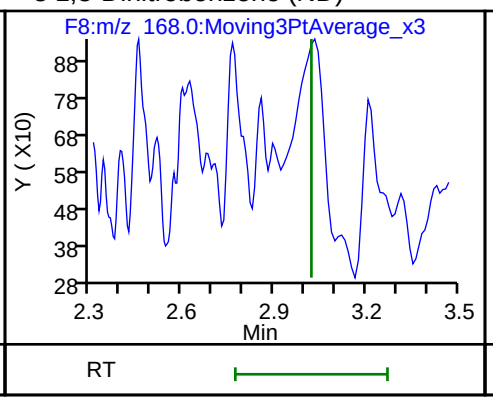
6 Tetryl (ND)



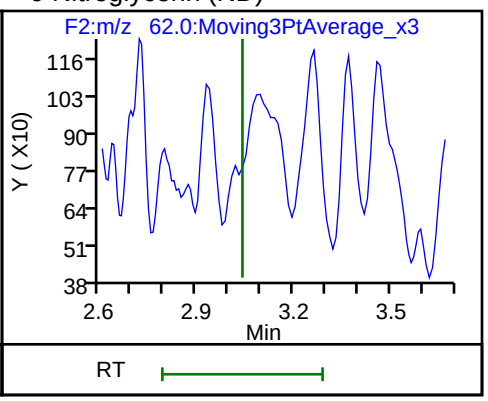
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

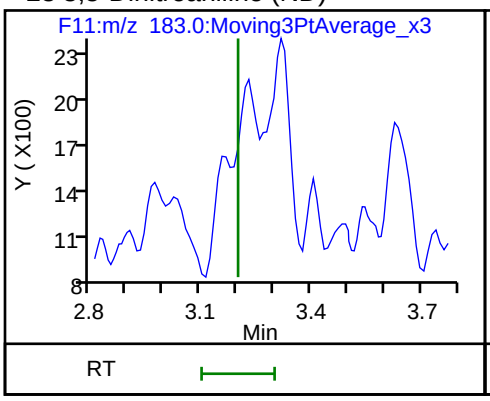


9 Nitroglycerin (ND)

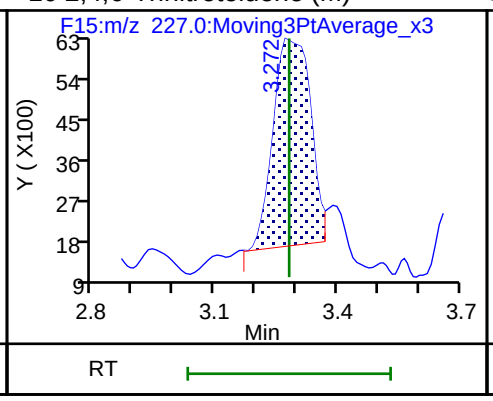


Report Date: 15-Apr-2022 08:03:06 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14020.d

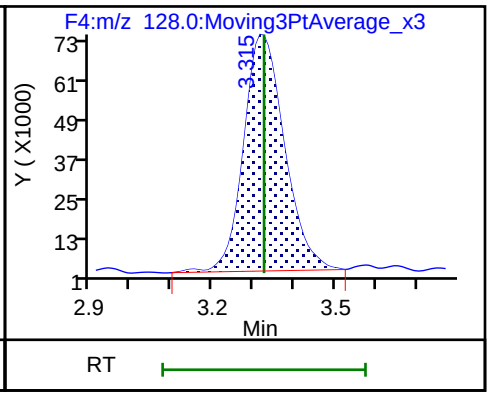
28 3,5-Dinitroaniline (ND)



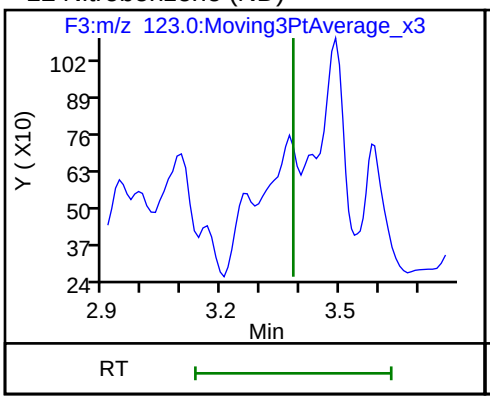
10 2,4,6-Trinitrotoluene (M)



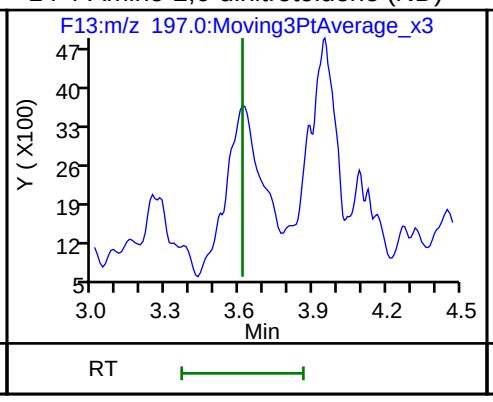
$ 11 Nitrobenzene-d5



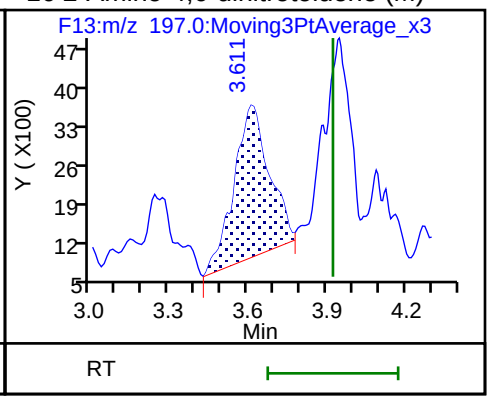
12 Nitrobenzene (ND)



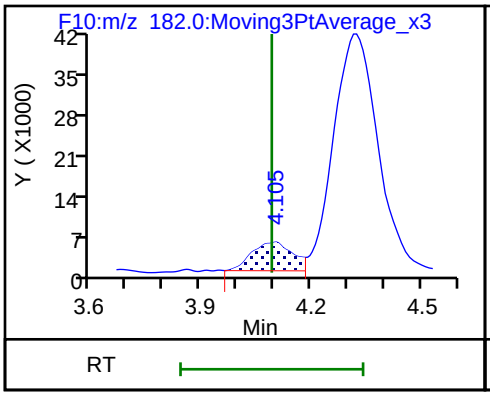
14 4-Amino-2,6-dinitrotoluene (ND)



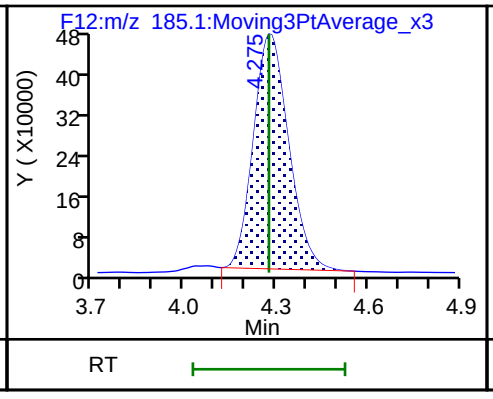
16 2-Amino-4,6-dinitrotoluene (M)



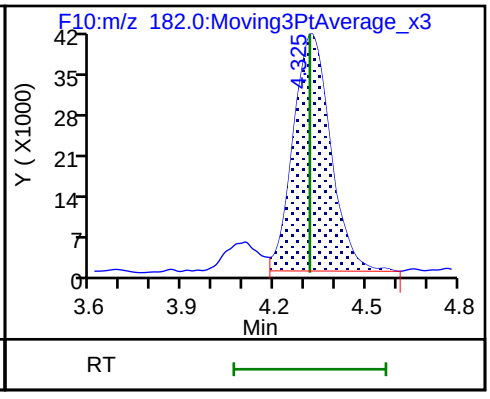
17 2,6-Dinitrotoluene



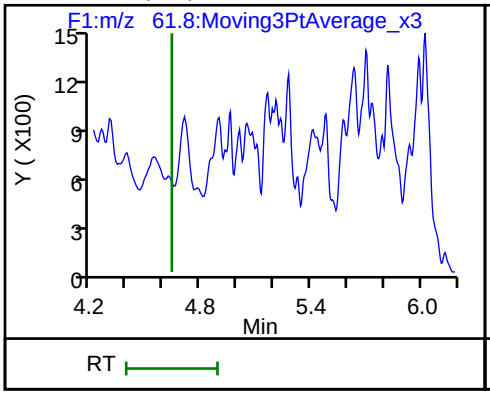
* 18 2,4-dinitrotoluene-d3



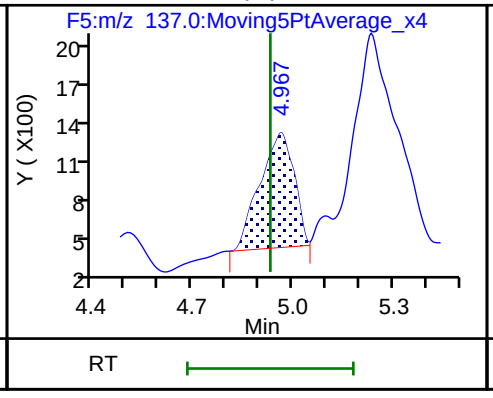
19 2,4-Dinitrotoluene



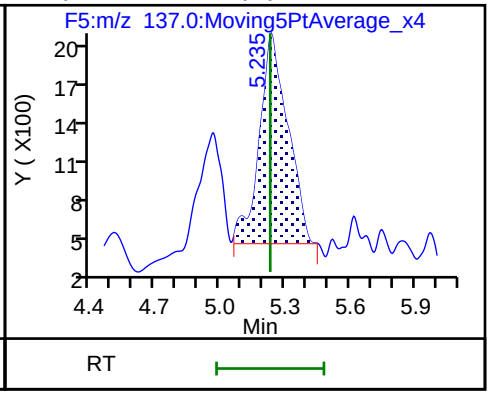
20 PETN (ND)



22 o-Nitrotoluene (M)



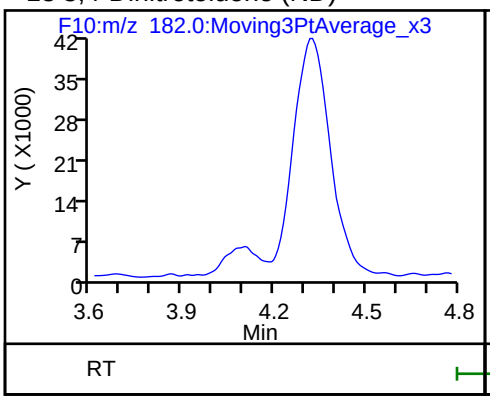
23 p-Nitrotoluene (M)



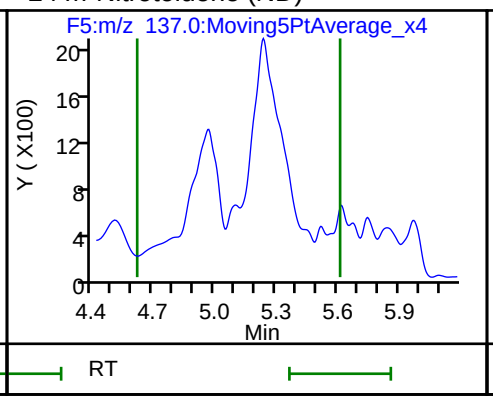
Report Date: 15-Apr-2022 08:03:06 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14020.d

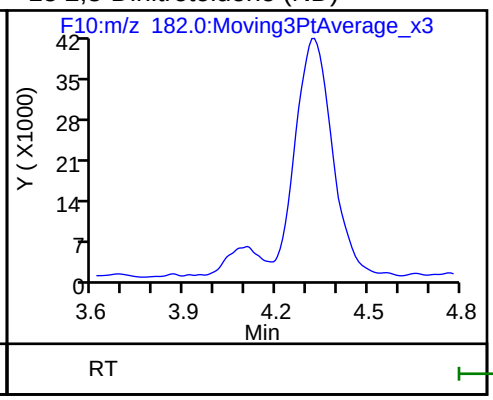
13 3,4-Dinitrotoluene (ND)



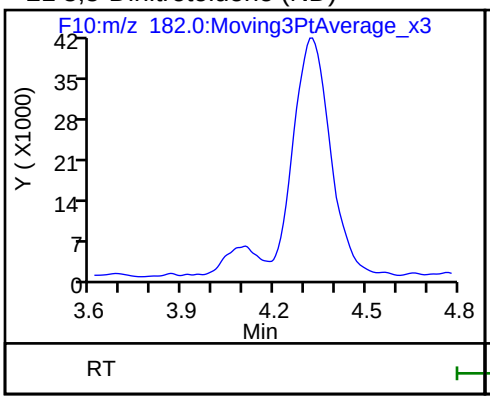
24 m-Nitrotoluene (ND)



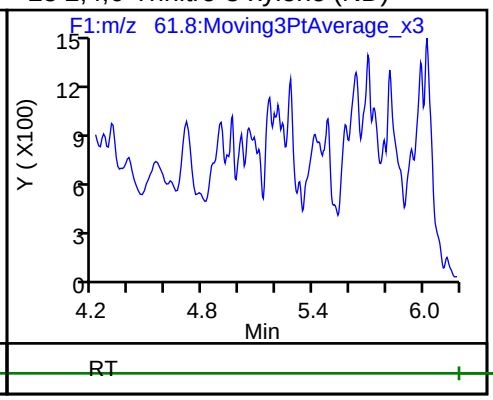
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:06 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14020.d				
Lims ID:	280-160190-A-29-D				
Client ID:	29SB170 (11-12)				
Sample Type:	Client				
Inject. Date:	14-Apr-2022 14:19:53	ALS Bottle#:	18	Worklist Smp#:	20
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160190-A-29-D				
Misc. Info.:	ex722D14				
Operator ID:	acm	Instrument ID:	LC_LCMS7		
Method:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m				
Limit Group:	LC - 8321A Expl				
Last Update:	15-Apr-2022 08:03:00	Calib Date:	14-Apr-2022 13:07:22		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1652				
First Level Reviewer: meyera		Date:	15-Apr-2022 07:27:16		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	90.6	90.33

Report Date: 15-Apr-2022 08:03:06 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

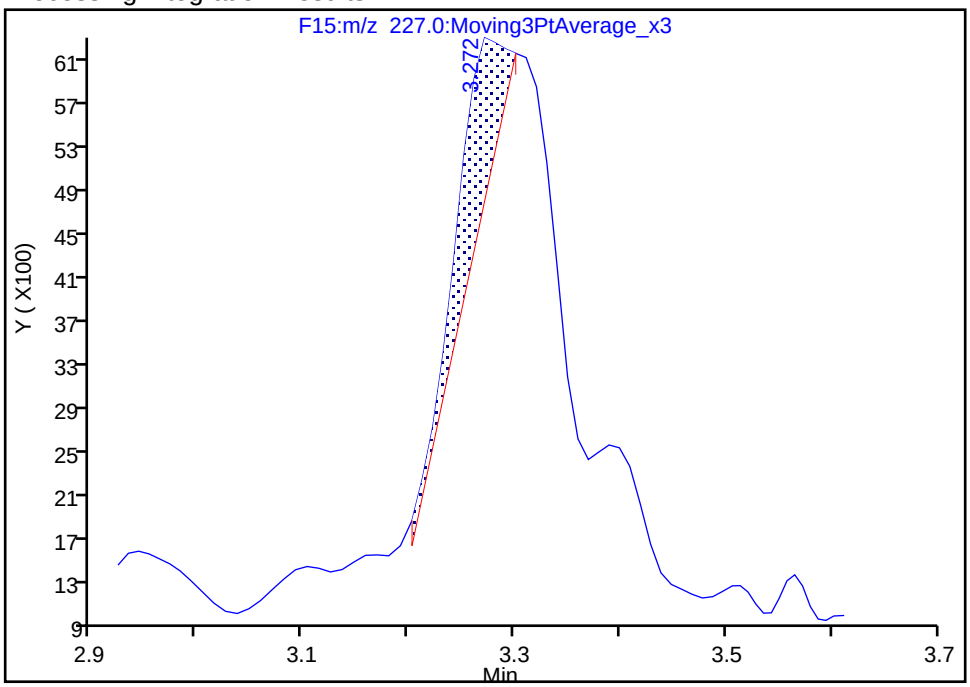
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14020.d				
Injection Date:	14-Apr-2022 14:19:53	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-29-D	Lab Sample ID:	280-160190-29		
Client ID:	29SB170 (11-12)				
Operator ID:	acm	ALS Bottle#:	18	Worklist Smp#:	20
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F15:SIR		

10 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

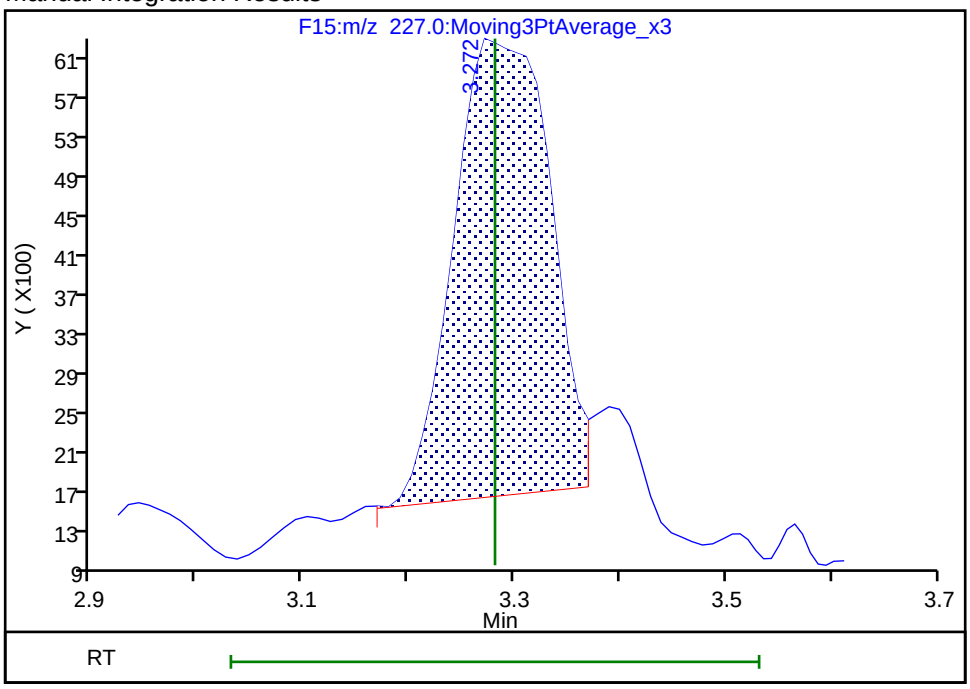
Processing Integration Results

RT: 3.27
Area: 4445
Amount: -1.234090
Amount Units: ug/l



Manual Integration Results

RT: 3.27
Area: 29393
Amount: -0.700457
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:26:36

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:03:06 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

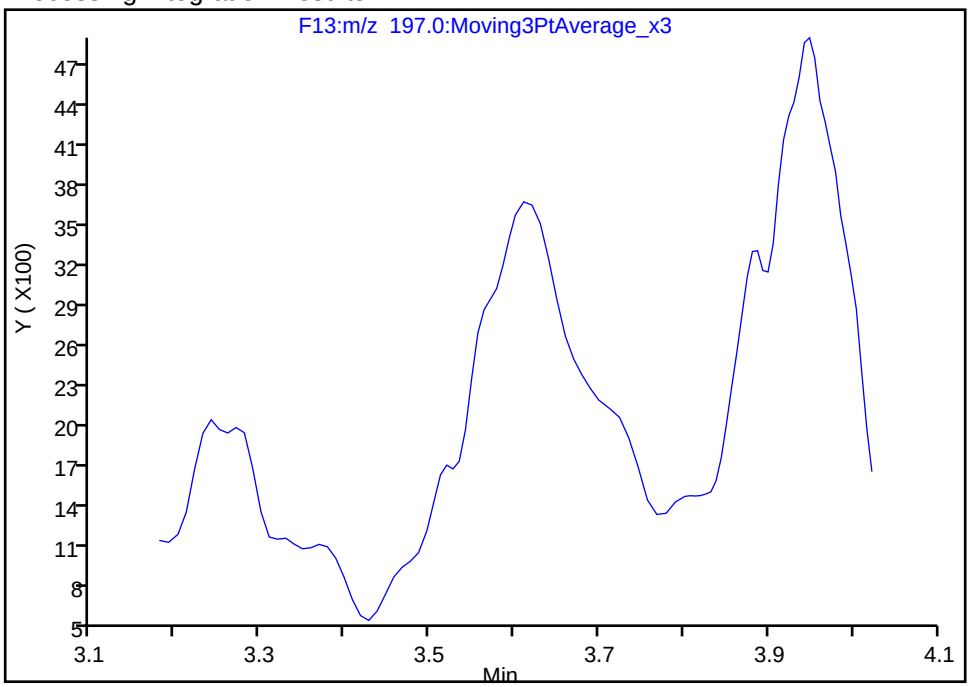
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14020.d				
Injection Date:	14-Apr-2022 14:19:53	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-29-D	Lab Sample ID:	280-160190-29		
Client ID:	29SB170 (11-12)				
Operator ID:	acm	ALS Bottle#:	18	Worklist Smp#:	20
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

16 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

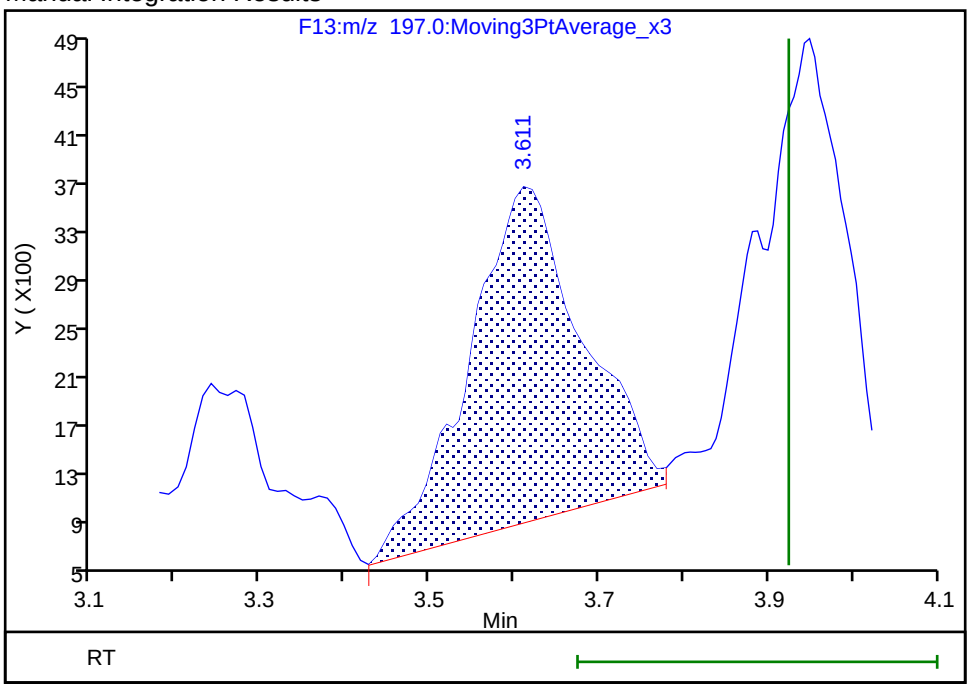
Not Detected
Expected RT: 3.92

Processing Integration Results



Manual Integration Results

RT: 3.61
Area: 25379
Amount: -0.174899
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:27:03
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:03:06 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

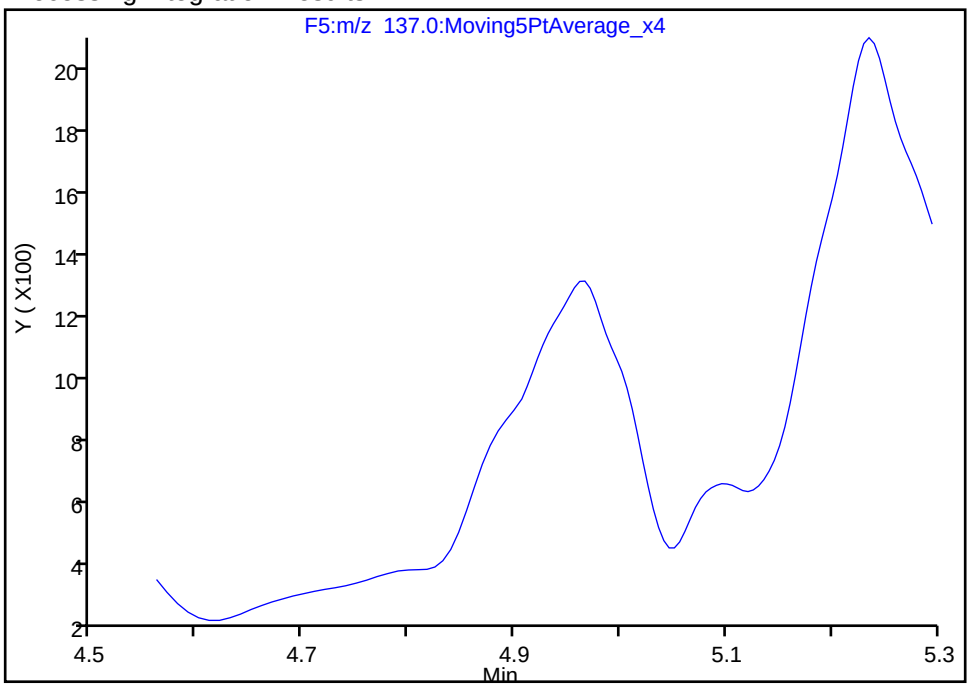
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14020.d				
Injection Date:	14-Apr-2022 14:19:53	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-29-D	Lab Sample ID:	280-160190-29		
Client ID:	29SB170 (11-12)				
Operator ID:	acm	ALS Bottle#:	18	Worklist Smp#:	20
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F5:SIR		

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

Signal: 1

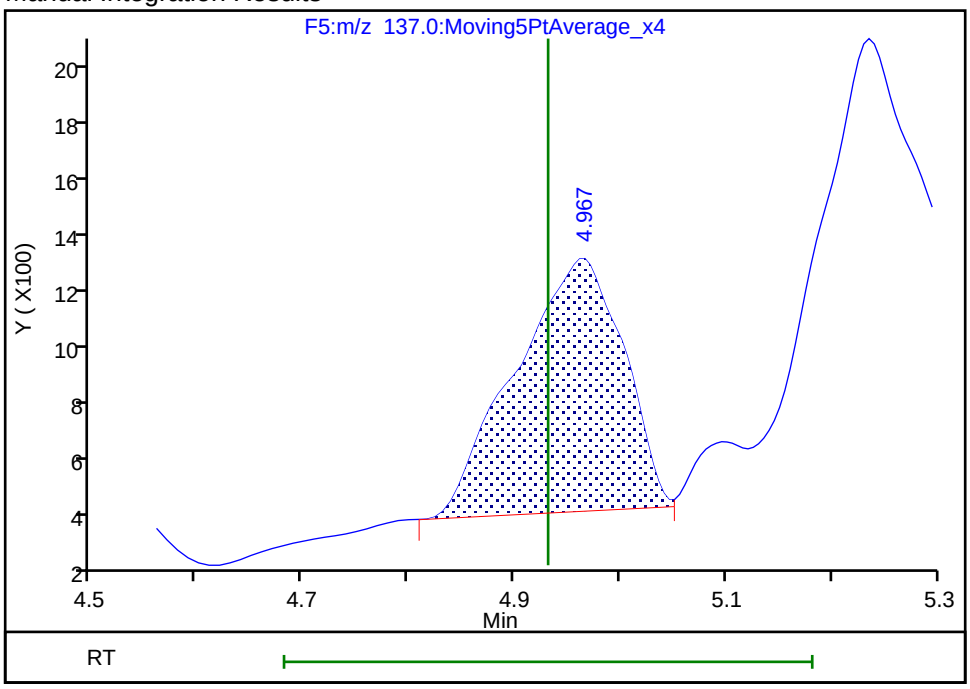
Not Detected
Expected RT: 4.93

Processing Integration Results



Manual Integration Results

RT: 4.97
Area: 6042
Amount: 0.255567
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:26:47
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:03:06 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

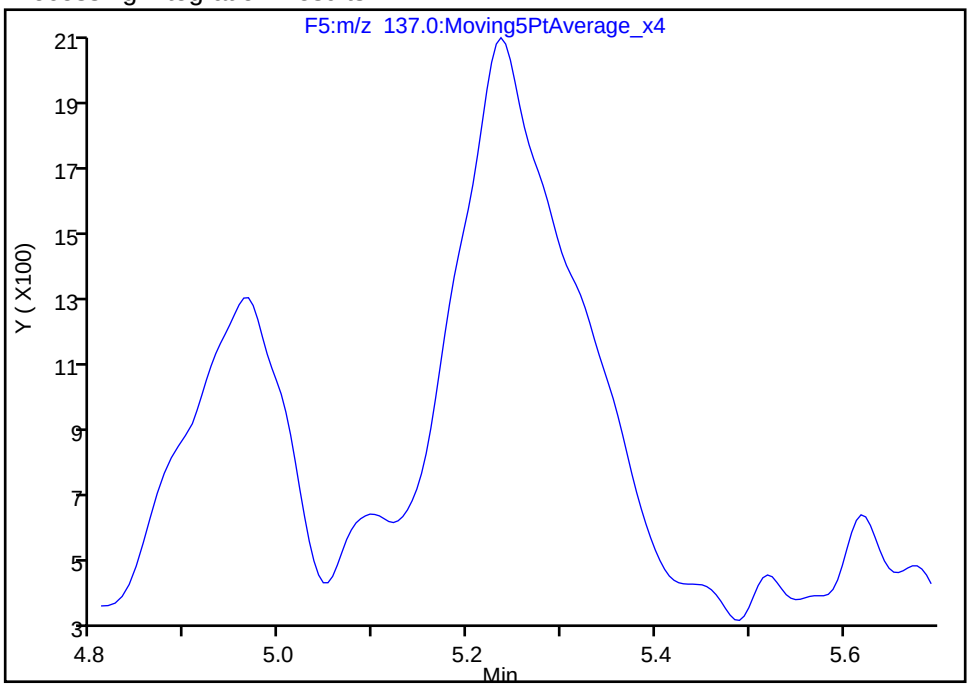
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14020.d				
Injection Date:	14-Apr-2022 14:19:53	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-29-D	Lab Sample ID:	280-160190-29		
Client ID:	29SB170 (11-12)				
Operator ID:	acm	ALS Bottle#:	18	Worklist Smp#:	20
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F5:SIR		

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

Signal: 1

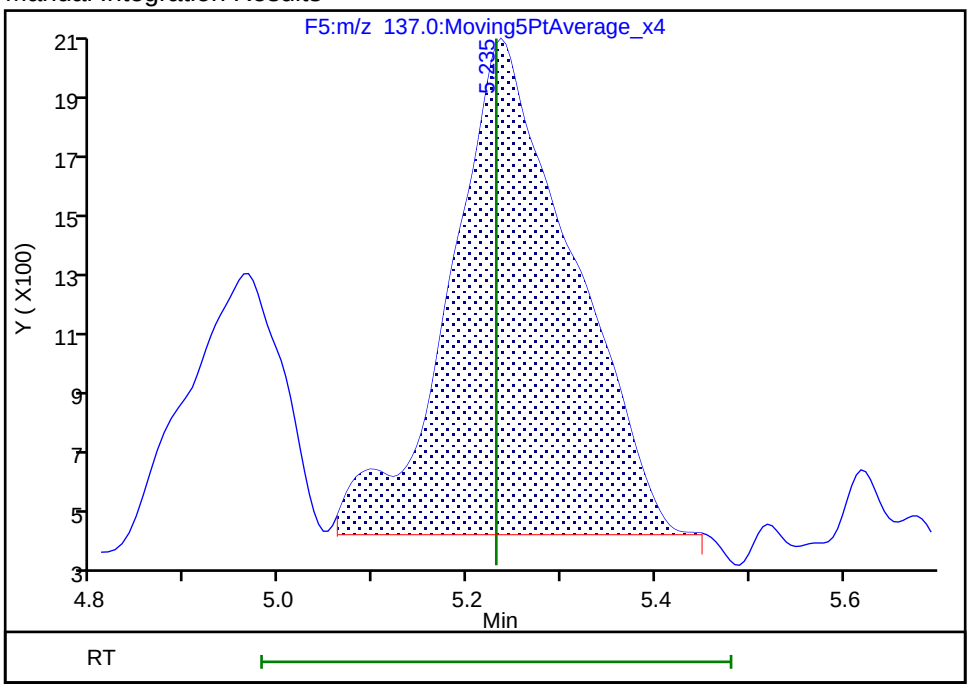
Not Detected
Expected RT: 5.23

Processing Integration Results



Manual Integration Results

RT: 5.24
Area: 14220
Amount: 1.244731
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:26:50
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB170 (14.5-15) | Lab Sample ID: 280-160190-30
Matrix: Solid | Lab File ID: ex722D14024.d
Analysis Method: 8321A | Date Collected: 03/24/2022 12:40
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:23
Sample wt/vol: 10.33(g) | Date Analyzed: 04/14/2022 14:46
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571896 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.048	U M	0.097	0.048	0.043
99-65-0	1,3-Dinitrobenzene	0.048	U	0.097	0.048	0.043
118-96-7	2,4,6-Trinitrotoluene	0.048	U	0.097	0.048	0.036
121-14-2	2,4-Dinitrotoluene	0.079	J M	0.097	0.048	0.045
606-20-2	2,6-Dinitrotoluene	0.048	U M	0.097	0.048	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.048	U M	0.097	0.048	0.048
19406-51-0	4-Amino-2,6-dinitrotoluene	0.048	U	0.097	0.048	0.030
2691-41-0	HMX	0.048	U	0.097	0.048	0.045
99-08-1	m-Nitrotoluene	0.048	U	0.097	0.048	0.042
98-95-3	Nitrobenzene	0.048	U	0.11	0.048	0.037
55-63-0	Nitroglycerin	0.048	U M	0.097	0.048	0.028
88-72-2	o-Nitrotoluene	0.048	U M	0.097	0.048	0.041
78-11-5	PETN	0.048	U	0.097	0.048	0.033
99-99-0	p-Nitrotoluene	0.048	U M	0.097	0.048	0.048
121-82-4	RDX	0.048	U	0.12	0.048	0.042
479-45-8	Tetryl	0.048	U Q	0.097	0.048	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	95		68-140

Report Date: 15-Apr-2022 08:03:08 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14024.d
Lims ID: 280-160190-A-30-B
Client ID: 29SB170 (14.5-15)
Sample Type: Client
Inject. Date: 14-Apr-2022 14:46:14 ALS Bottle#: 21 Worklist Smp#: 24
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-30-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:06 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:30:04
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		152052	125.0	108	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		490444	125.0	138	
5 1,3,5-Trinitrobenzene								M
213.0	2.317	2.299	0.018	0.775	8962	0.2258	4.4	M
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1188819	129.4	520	
10 2,4,6-Trinitrotoluene								M
227.0	3.262	3.281	-0.019	0.763	16925	-0.8760	5.0	M
$ 11 Nitrobenzene-d5								
128.0	3.324	3.324	0.0	0.778	509348	95.6	23.9	
14 4-Amino-2,6-dinitrotoluene								M
197.0	3.601	3.611	-0.010	0.842	10865	-0.6697	1.2	M
16 2-Amino-4,6-dinitrotoluene								M
197.0	3.949	3.924	0.025	0.924	61782	0.3858	4.1	M
17 2,6-Dinitrotoluene								M
182.0	4.105	4.093	0.012	0.960	42451	0.0598	12.8	M
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3661556	125.0	126	
19 2,4-Dinitrotoluene								M
182.0	4.316	4.316	0.0	1.010	663221	20.5	166	M
22 o-Nitrotoluene								M
137.0	4.922	4.932	-0.010	1.151	6011	0.2591	2.8	M
23 p-Nitrotoluene								M
137.0	5.221	5.230	-0.009	1.221	18567	1.84	6.1	M

Report Date: 15-Apr-2022 08:03:08 Chrom Revision: 2.3 12-Apr-2022 20:29:44

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

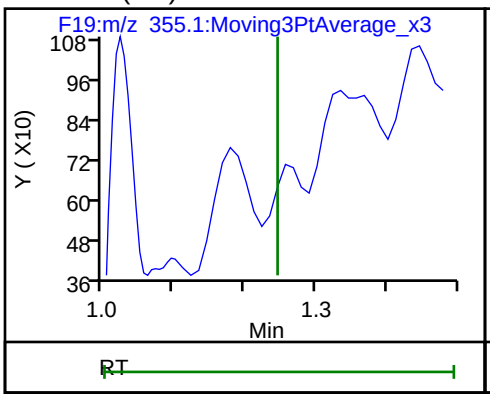
Report Date: 15-Apr-2022 08:03:08 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

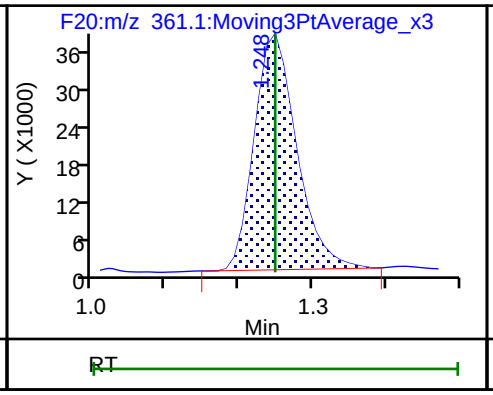
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14024.d

Injection Date:	14-Apr-2022 14:46:14	Instrument ID:	LC_LCMS7
Lims ID:	280-160190-A-30-B	Lab Sample ID:	280-160190-30
Client ID:	29SB170 (14.5-15)		
Operator ID:	acm	ALS Bottle#:	21 Worklist Smp#: 24
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl

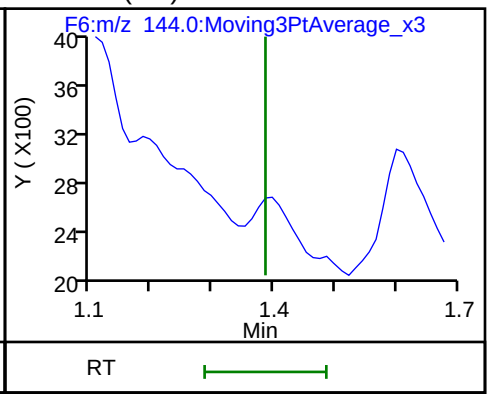
2 HMX (ND)



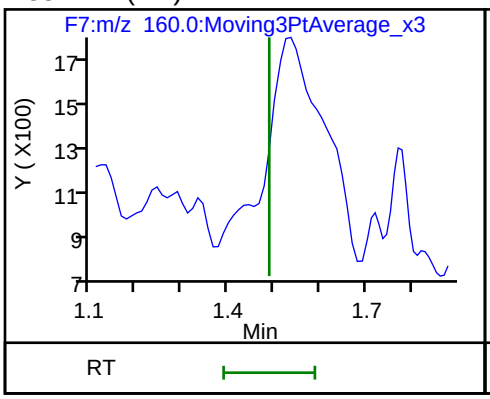
* 1 HMX-13C4



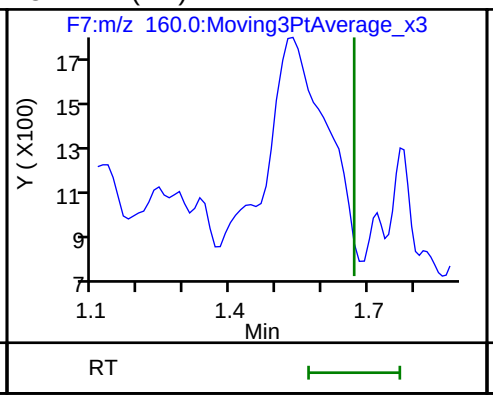
36 TNX (ND)



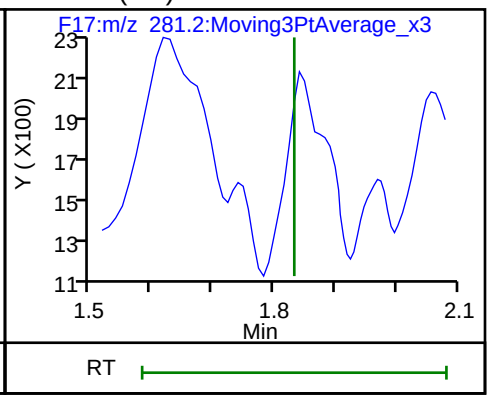
33 DNX (ND)



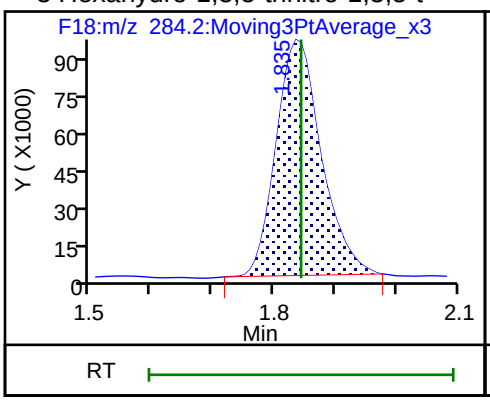
34 MNX (ND)



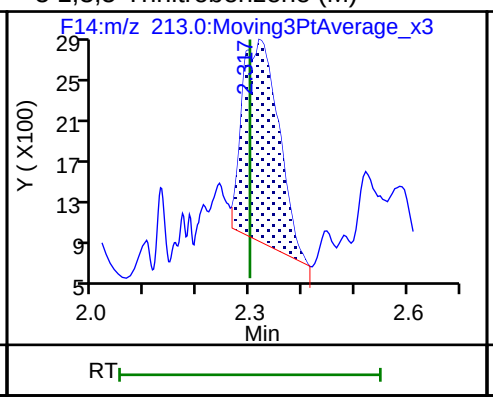
4 RDX (ND)



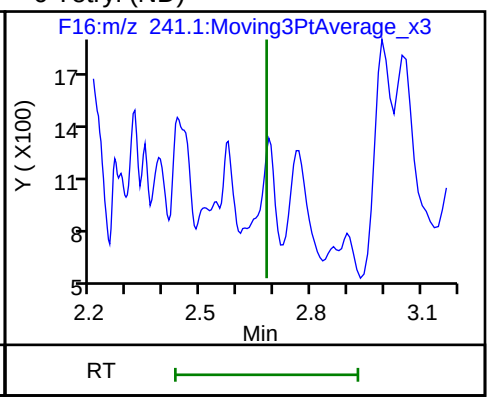
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



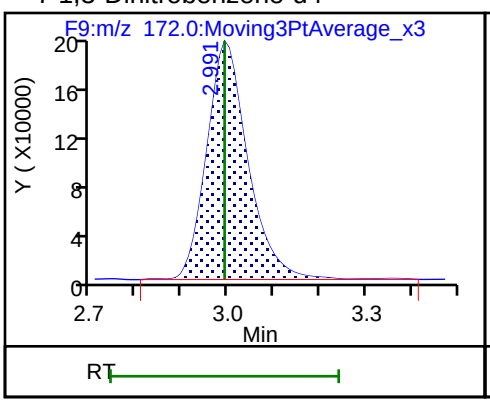
5 1,3,5-Trinitrobenzene (M)



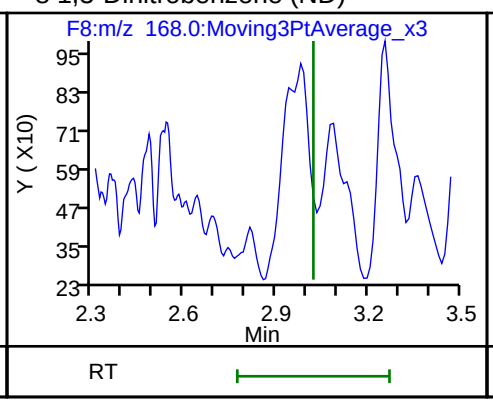
6 Tetryl (ND)



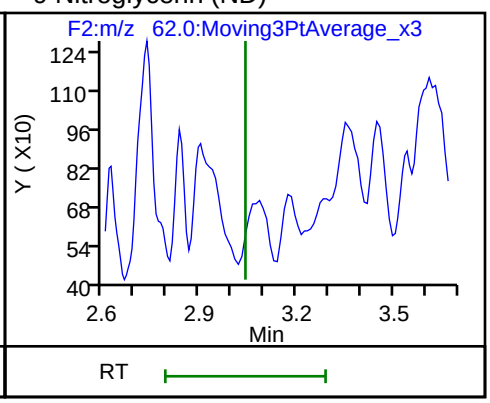
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

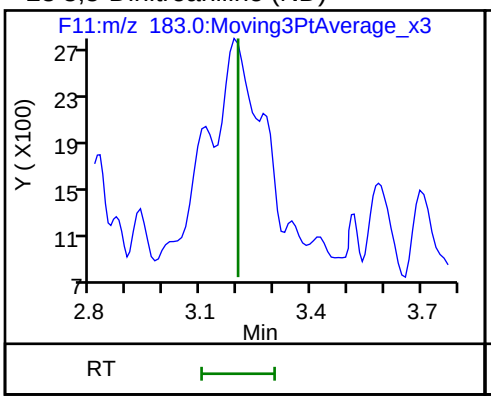


9 Nitroglycerin (ND)

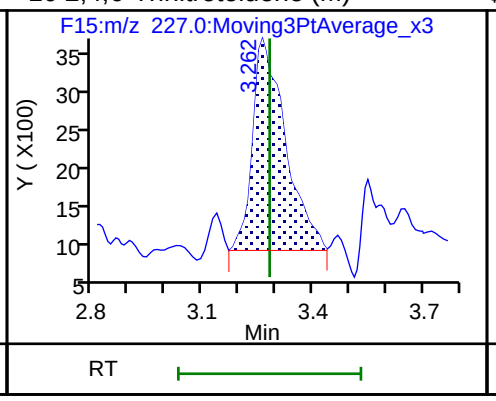


Report Date: 15-Apr-2022 08:03:08 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14024.d

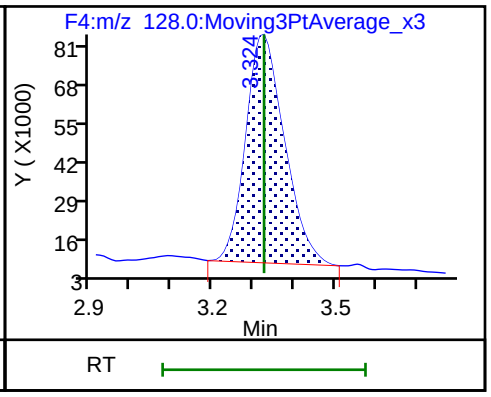
28 3,5-Dinitroaniline (ND)



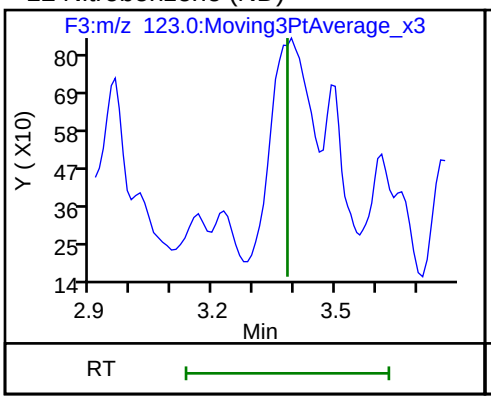
10 2,4,6-Trinitrotoluene (M)



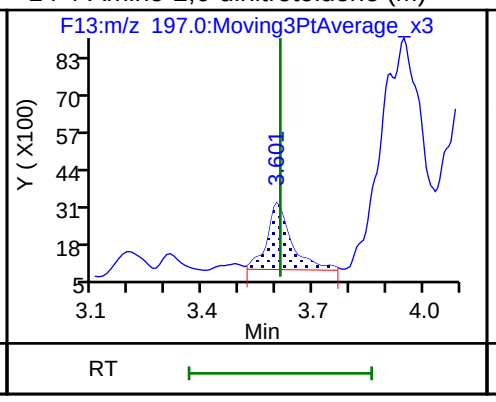
$ 11 Nitrobenzene-d5



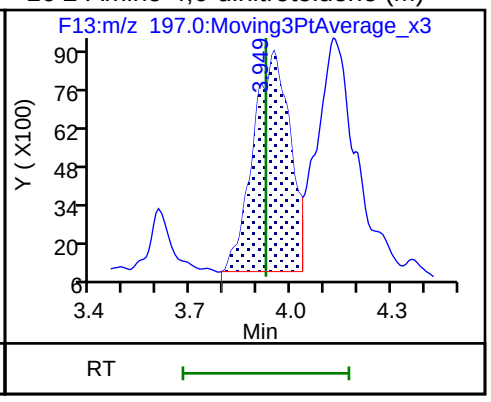
12 Nitrobenzene (ND)



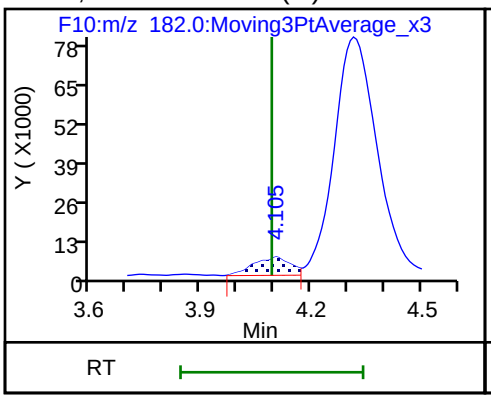
14 4-Amino-2,6-dinitrotoluene (M)



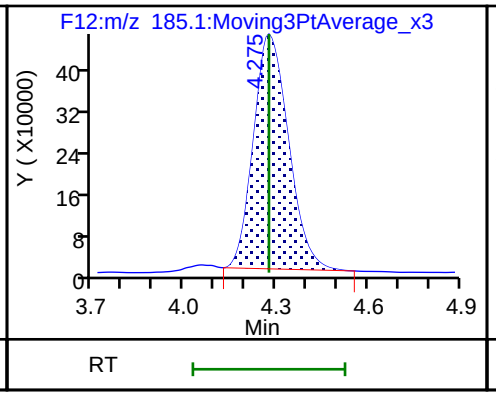
16 2-Amino-4,6-dinitrotoluene (M)



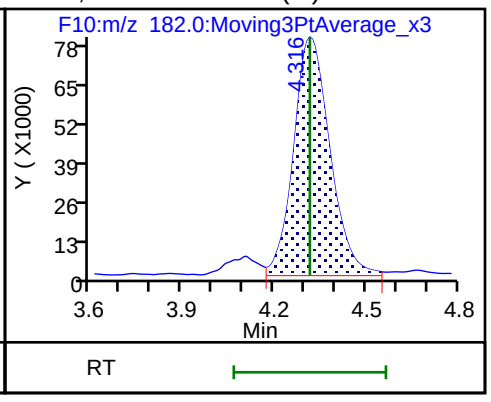
17 2,6-Dinitrotoluene (M)



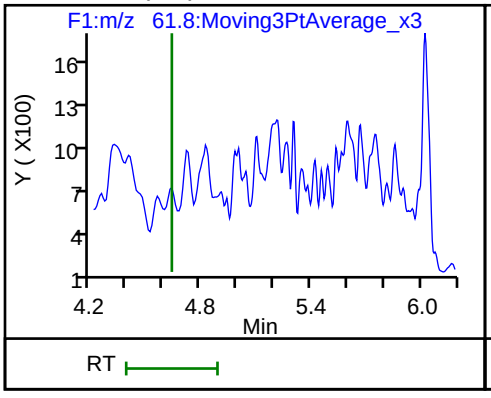
* 18 2,4-dinitrotoluene-d3



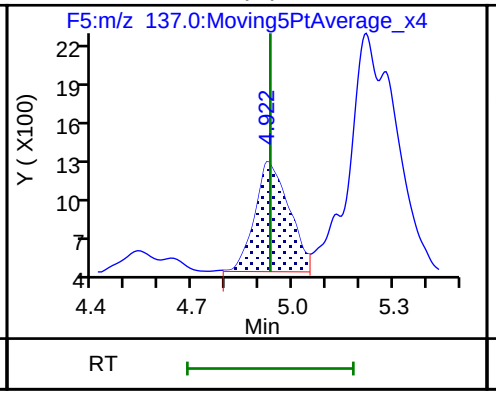
19 2,4-Dinitrotoluene (M)



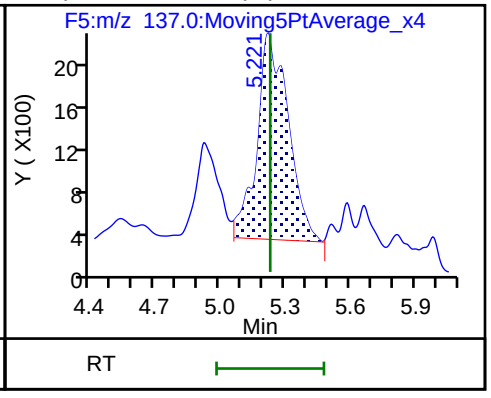
20 PETN (ND)



22 o-Nitrotoluene (M)

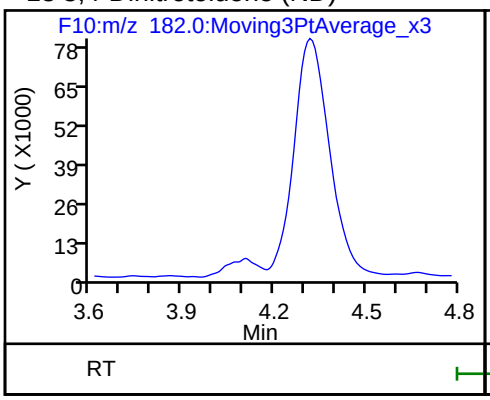


23 p-Nitrotoluene (M)

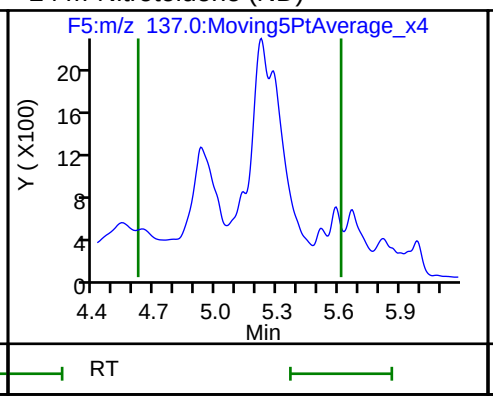


Report Date: 15-Apr-2022 08:03:08 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14024.d

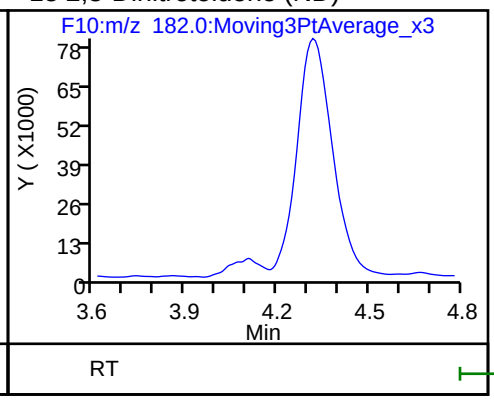
13 3,4-Dinitrotoluene (ND)



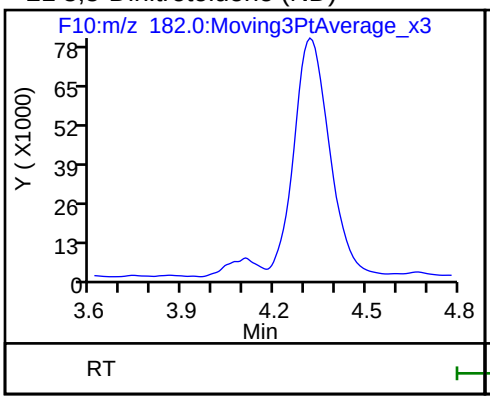
24 m-Nitrotoluene (ND)



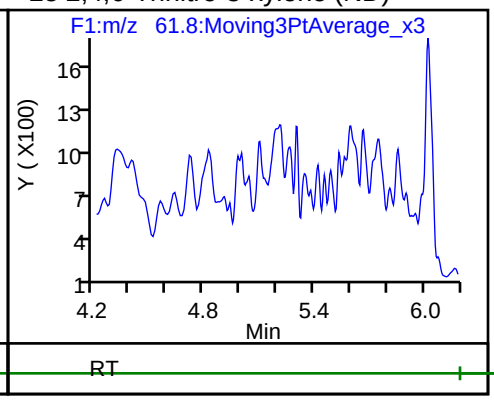
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:08 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14024.d
Lims ID: 280-160190-A-30-B
Client ID: 29SB170 (14.5-15)
Sample Type: Client
Inject. Date: 14-Apr-2022 14:46:14 ALS Bottle#: 21 Worklist Smp#: 24
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-30-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:06 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:30:04

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	95.6	95.27

Report Date: 15-Apr-2022 08:03:08 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

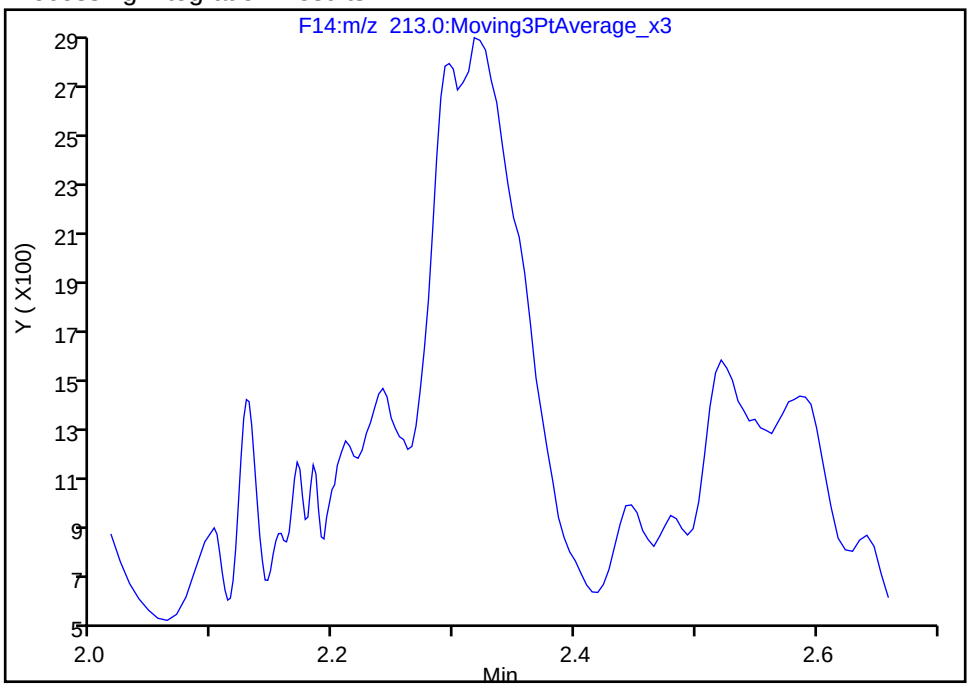
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14024.d				
Injection Date:	14-Apr-2022 14:46:14	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-30-B	Lab Sample ID:	280-160190-30		
Client ID:	29SB170 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F14:SIR		

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

Signal: 1

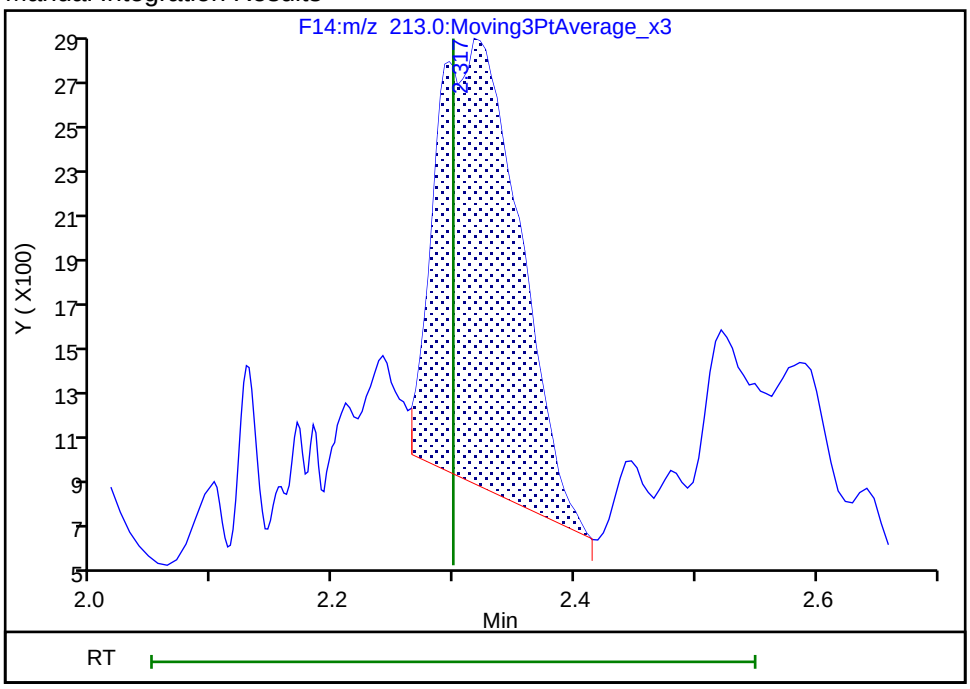
Not Detected
Expected RT: 2.30

Processing Integration Results



Manual Integration Results

RT: 2.32
Area: 8962
Amount: 0.225827
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:30:00
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:03:08 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14024.d

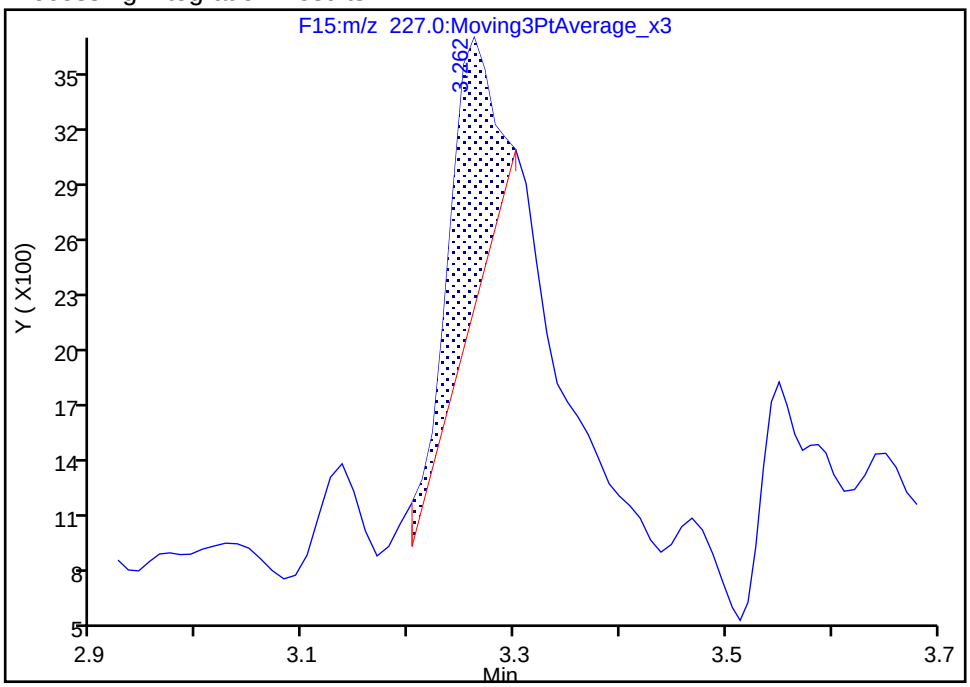
Injection Date:	14-Apr-2022 14:46:14	Instrument ID:	LC_LCMS7
Lims ID:	280-160190-A-30-B	Lab Sample ID:	280-160190-30
Client ID:	29SB170 (14.5-15)		
Operator ID:	acm	ALS Bottle#:	21 Worklist Smp#: 24
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F15:SIR

10 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

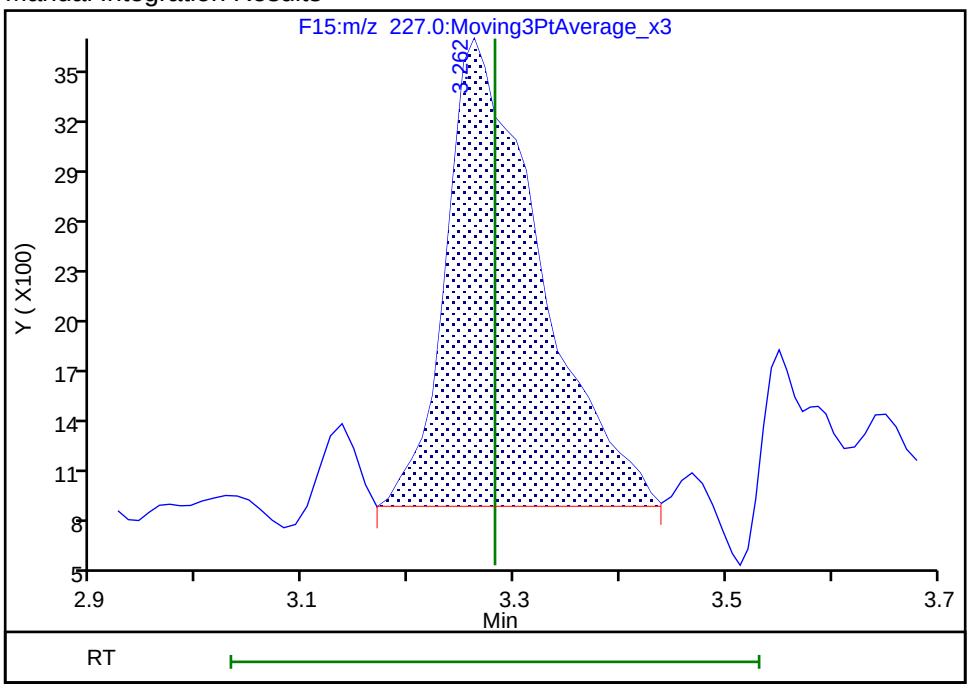
RT: 3.26
Area: 4045
Amount: -1.237679
Amount Units: ug/l

Processing Integration Results



RT: 3.26
Area: 16925
Amount: -0.876009
Amount Units: ug/l

Manual Integration Results



Reviewer: meyera, 15-Apr-2022 07:29:49

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:03:08 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

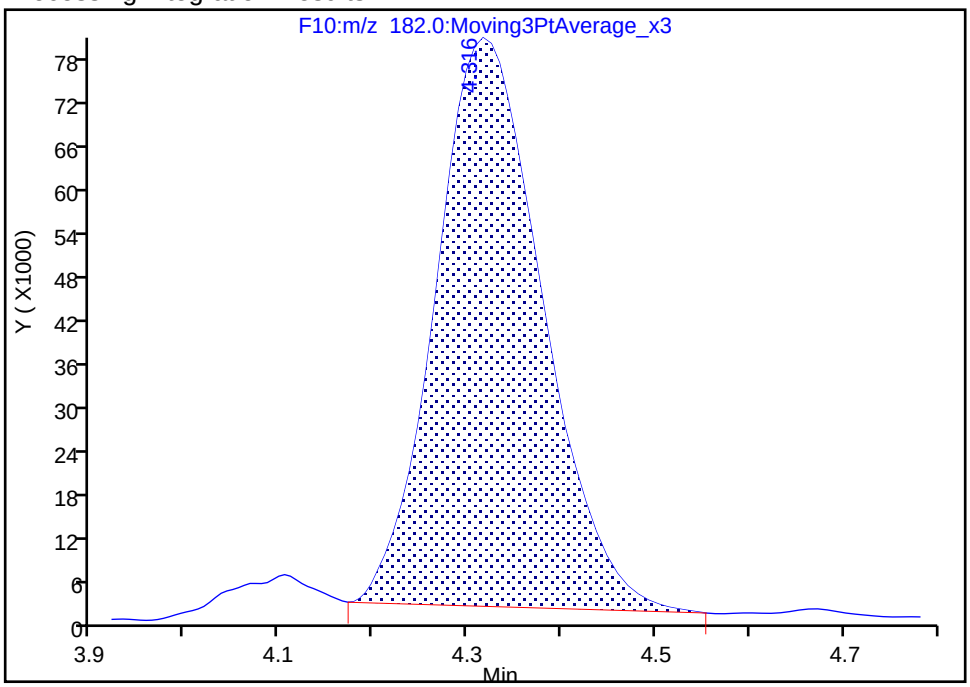
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14024.d				
Injection Date:	14-Apr-2022 14:46:14	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-30-B	Lab Sample ID:	280-160190-30		
Client ID:	29SB170 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F10:SIR		

19 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

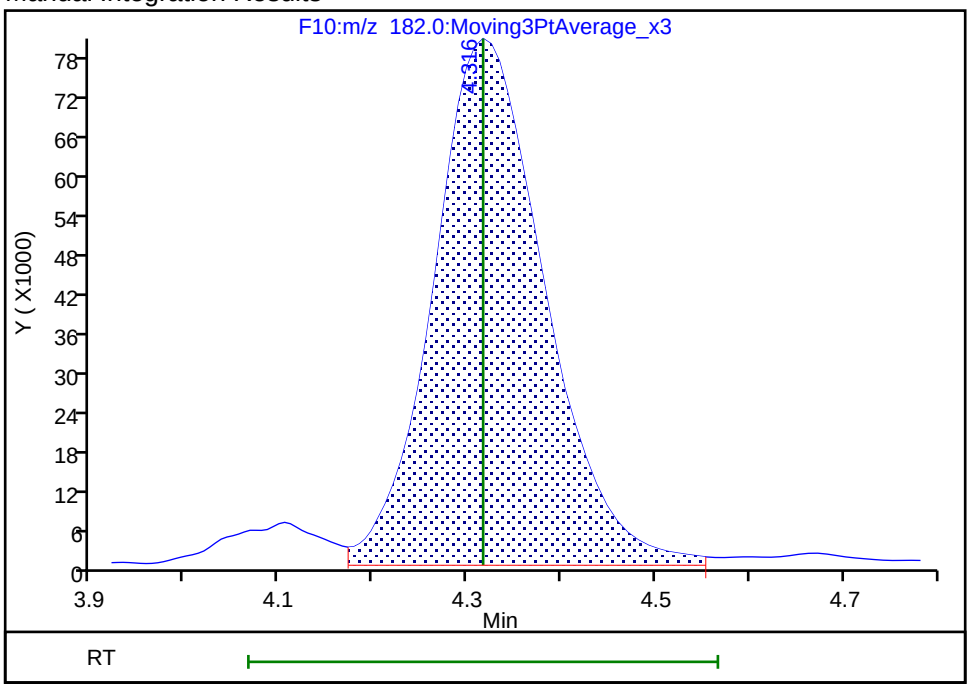
Processing Integration Results

RT: 4.32
Area: 617324
Amount: 19.026442
Amount Units: ug/l



Manual Integration Results

RT: 4.32
Area: 663221
Amount: 20.515818
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:29:16

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:03:08 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

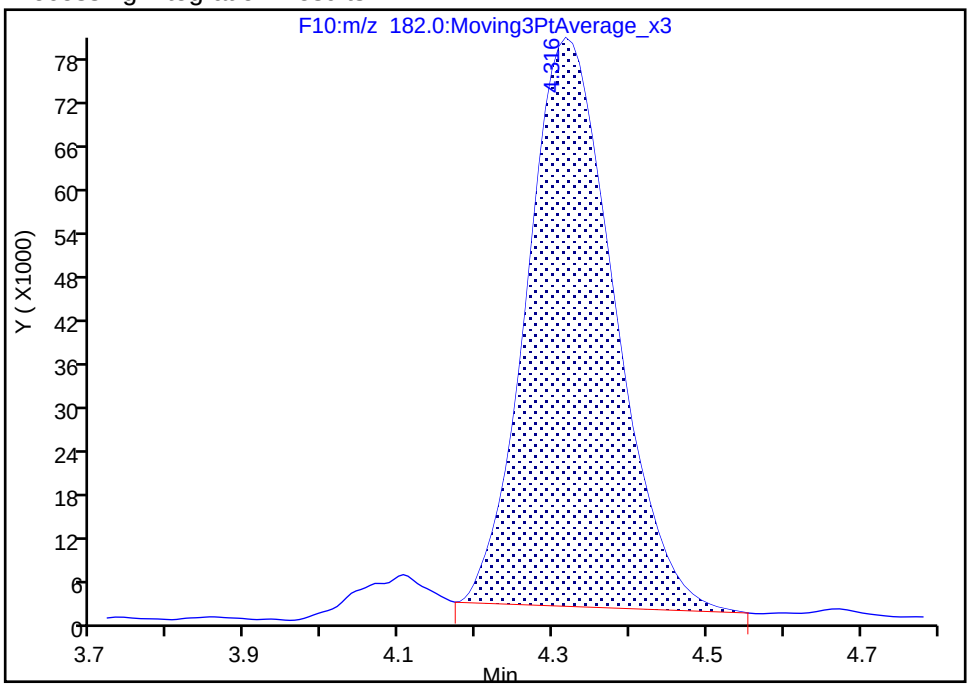
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14024.d				
Injection Date:	14-Apr-2022 14:46:14	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-30-B	Lab Sample ID:	280-160190-30		
Client ID:	29SB170 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F10:SIR		

17 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

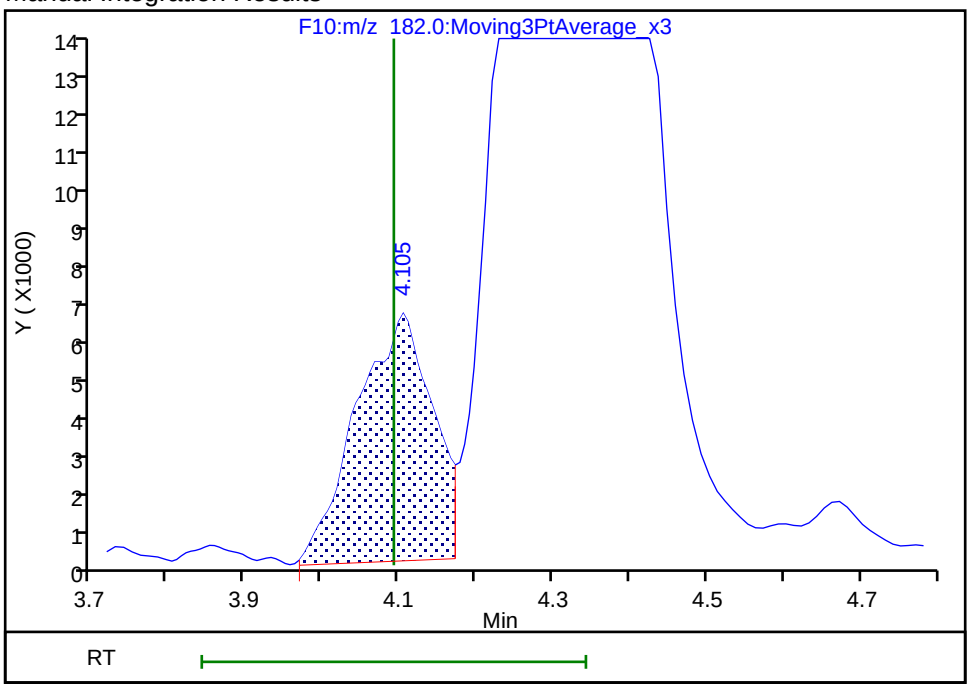
Processing Integration Results

RT: 4.32
Area: 617324
Amount: 9.862035
Amount Units: ug/l



Manual Integration Results

RT: 4.11
Area: 42451
Amount: 0.059802
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:29:22

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:03:08 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

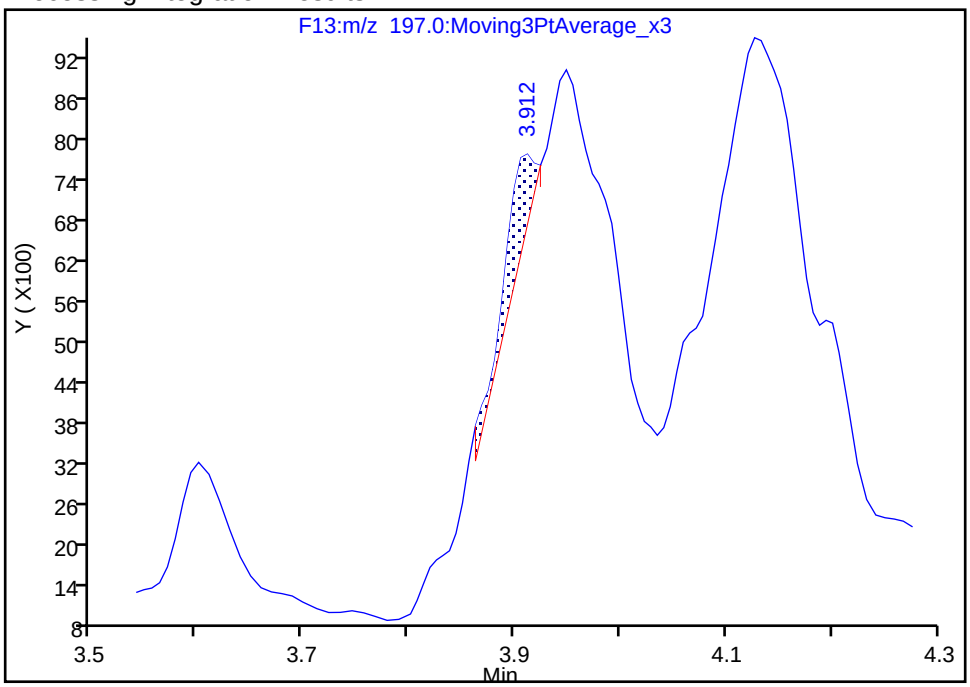
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14024.d				
Injection Date:	14-Apr-2022 14:46:14	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-30-B	Lab Sample ID:	280-160190-30		
Client ID:	29SB170 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

16 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

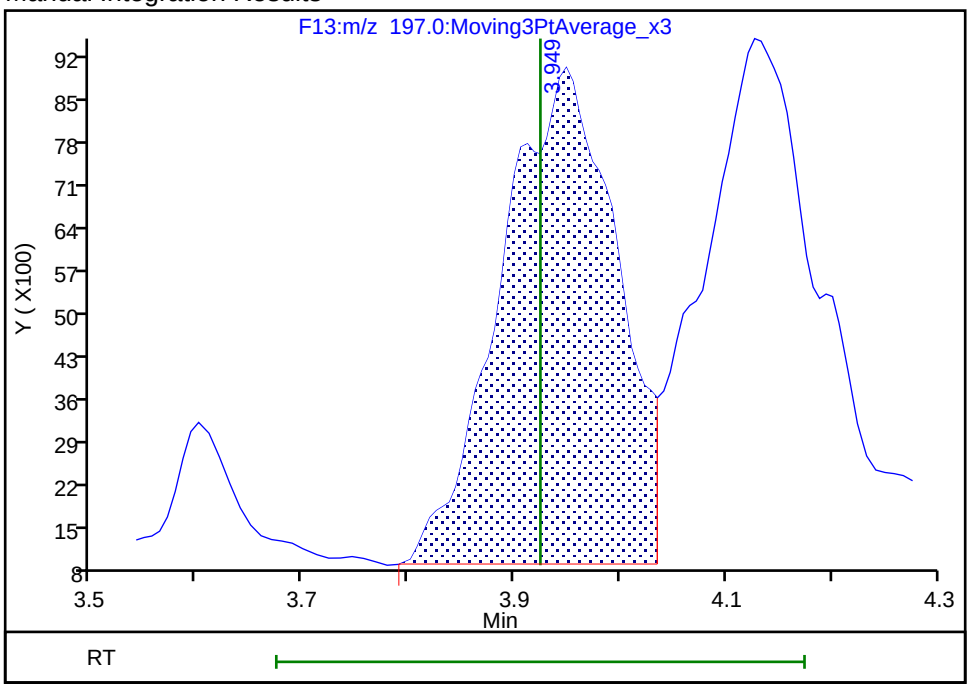
Processing Integration Results

RT: 3.91
Area: 2575
Amount: -0.519732
Amount Units: ug/l



Manual Integration Results

RT: 3.95
Area: 61782
Amount: 0.385772
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:29:39

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:03:08 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

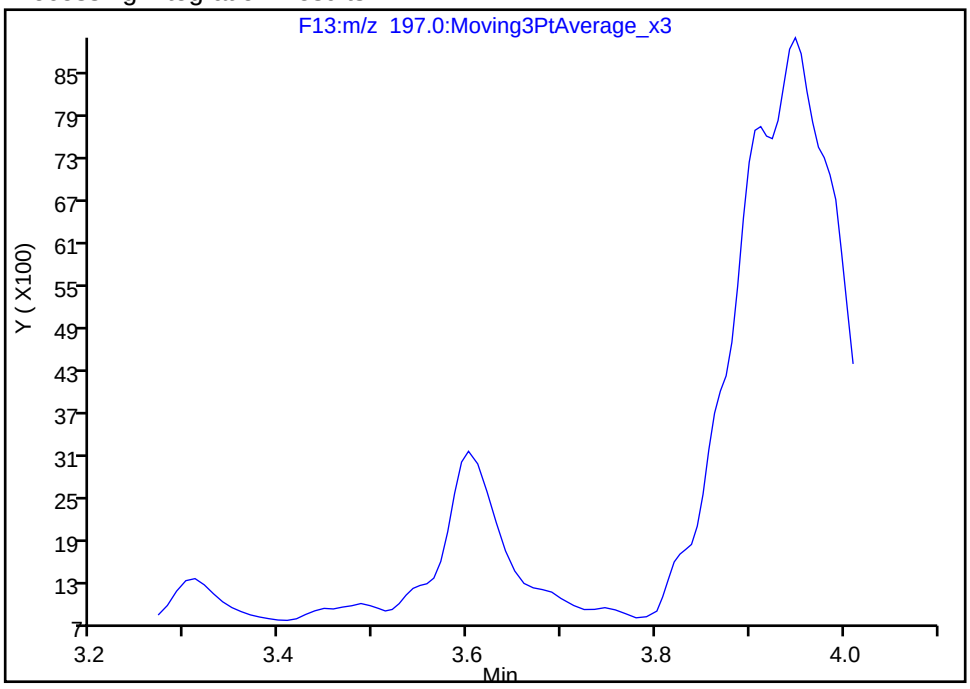
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14024.d				
Injection Date:	14-Apr-2022 14:46:14	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-30-B	Lab Sample ID:	280-160190-30		
Client ID:	29SB170 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

14 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

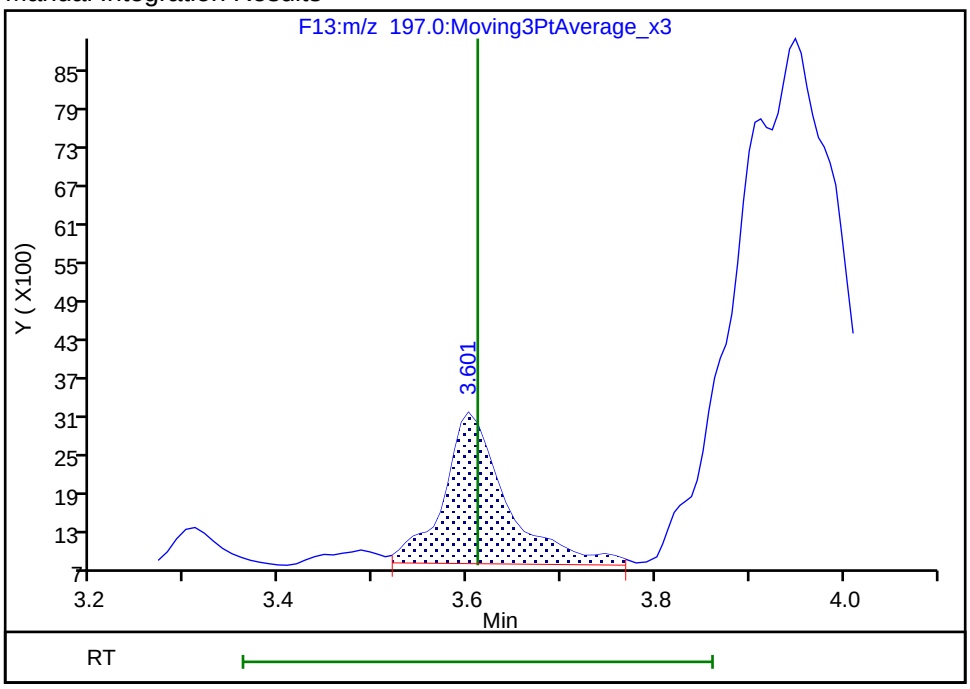
Processing Integration Results

Not Detected
Expected RT: 3.61



Manual Integration Results

RT: 3.60
Area: 10865
Amount: -0.669689
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:29:44
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:03:09 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

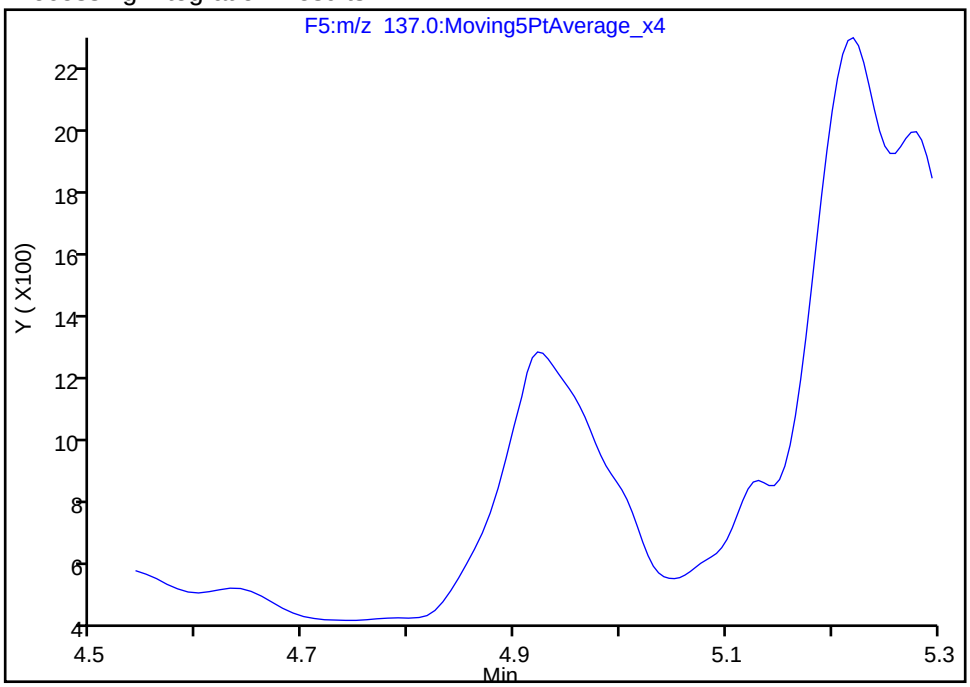
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14024.d				
Injection Date:	14-Apr-2022 14:46:14	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-30-B	Lab Sample ID:	280-160190-30		
Client ID:	29SB170 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F5:SIR		

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

Signal: 1

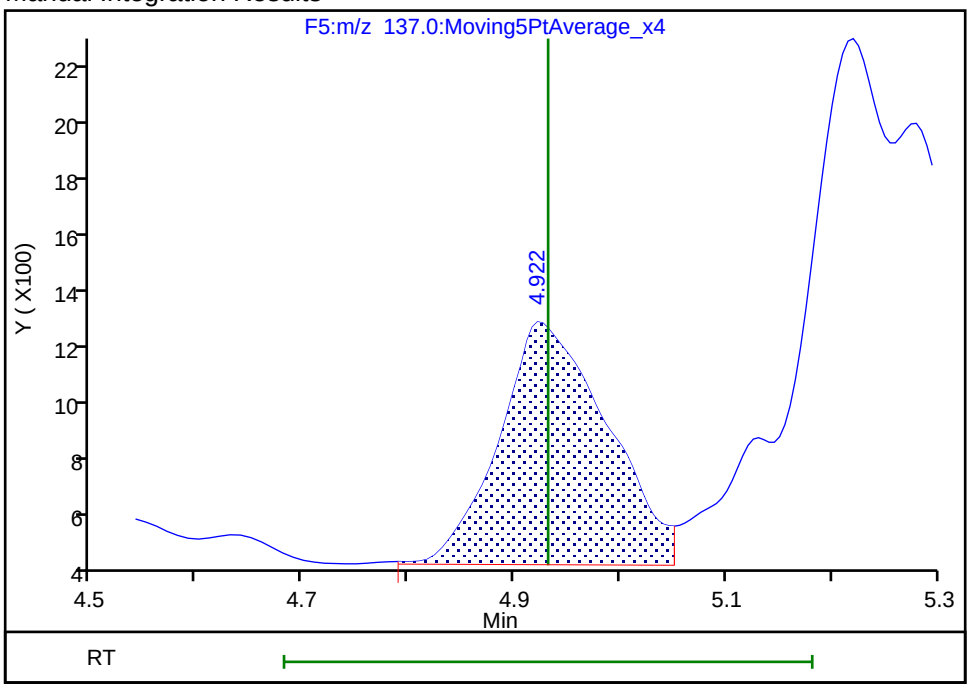
Not Detected
Expected RT: 4.93

Processing Integration Results



Manual Integration Results

RT: 4.92
Area: 6011
Amount: 0.259075
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:29:29
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:03:09 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14024.d

Injection Date:	14-Apr-2022 14:46:14	Instrument ID:	LC_LCMS7
Lims ID:	280-160190-A-30-B	Lab Sample ID:	280-160190-30
Client ID:	29SB170 (14.5-15)		
Operator ID:	acm	ALS Bottle#:	21 Worklist Smp#: 24
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F5:SIR

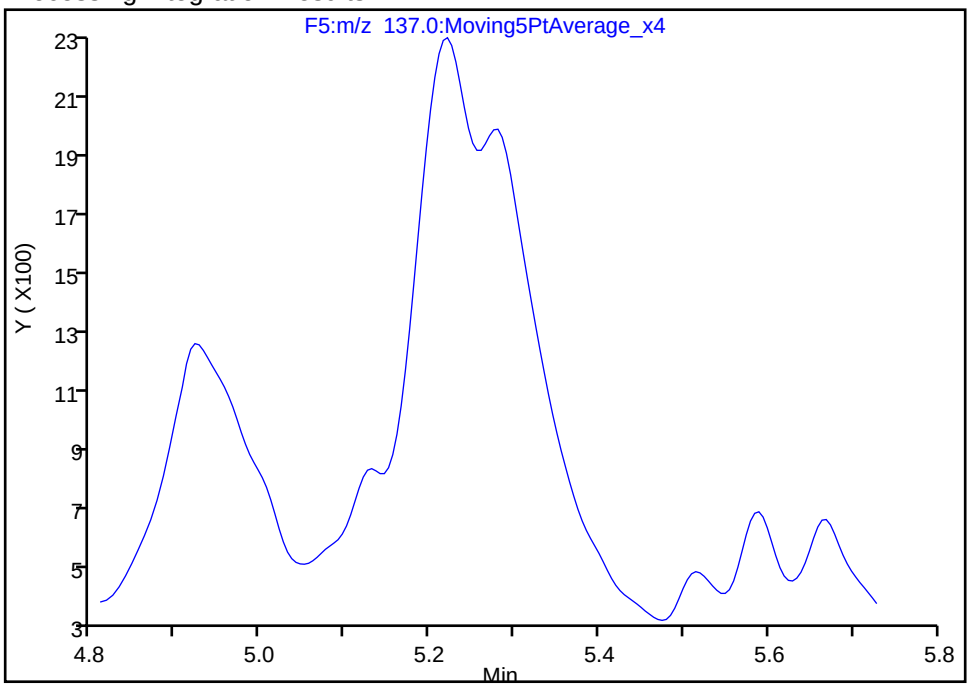
23 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

Processing Integration Results

Not Detected

Expected RT: 5.23



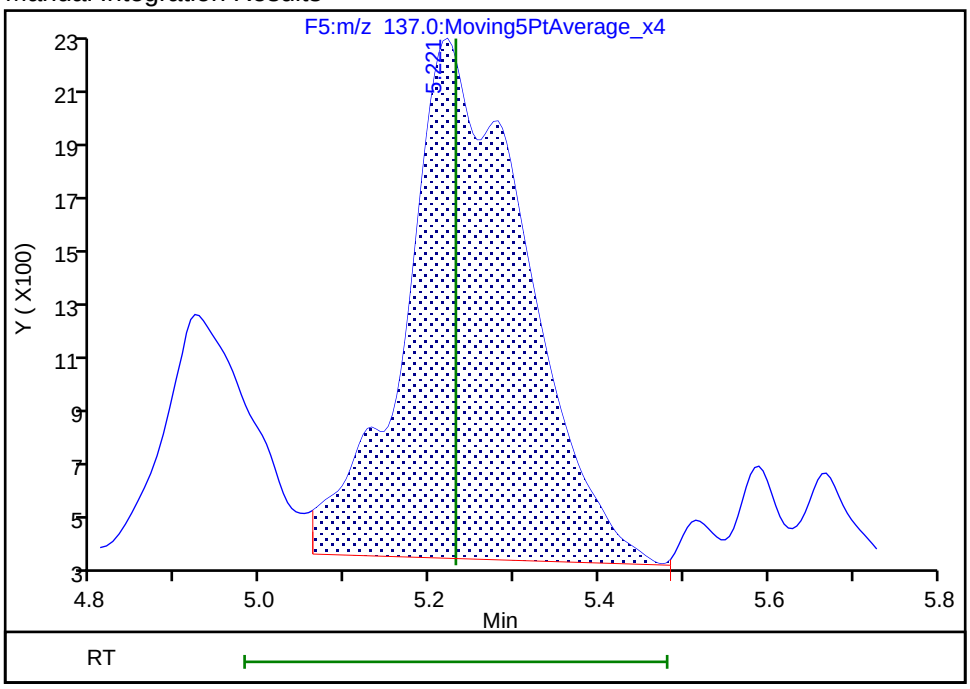
Manual Integration Results

RT: 5.22

Area: 18567

Amount: 1.837226

Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:29:33

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB171 (3-4) | Lab Sample ID: 280-160190-31
Matrix: Solid | Lab File ID: ex722D14025.d
Analysis Method: 8321A | Date Collected: 03/24/2022 12:48
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:23
Sample wt/vol: 10.3(g) | Date Analyzed: 04/14/2022 14:52
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571896 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.049	U	0.097	0.049	0.043
99-65-0	1,3-Dinitrobenzene	0.049	U	0.097	0.049	0.043
118-96-7	2,4,6-Trinitrotoluene	0.049	U	0.097	0.049	0.036
121-14-2	2,4-Dinitrotoluene	0.049	U	0.097	0.049	0.045
606-20-2	2,6-Dinitrotoluene	0.049	U	0.097	0.049	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.049	U	0.097	0.049	0.048
19406-51-0	4-Amino-2,6-dinitrotoluene	0.049	U	0.097	0.049	0.030
2691-41-0	HMX	0.049	U M	0.097	0.049	0.045
99-08-1	m-Nitrotoluene	0.049	U	0.097	0.049	0.042
98-95-3	Nitrobenzene	0.049	U	0.11	0.049	0.037
55-63-0	Nitroglycerin	0.049	U	0.097	0.049	0.028
88-72-2	o-Nitrotoluene	0.049	U	0.097	0.049	0.042
78-11-5	PETN	0.049	U	0.097	0.049	0.033
99-99-0	p-Nitrotoluene	0.049	U	0.097	0.049	0.048
121-82-4	RDX	0.049	U	0.12	0.049	0.042
479-45-8	Tetryl	0.049	U Q	0.097	0.049	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	94		68-140

Report Date: 15-Apr-2022 08:03:09 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14025.d
Lims ID: 280-160190-A-31-B
Client ID: 29SB171 (3-4)
Sample Type: Client
Inject. Date: 14-Apr-2022 14:52:49 ALS Bottle#: 22 Worklist Smp#: 25
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-31-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:06 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:30:16
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		149339	125.0	63.3	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		437848	125.0	96.6	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1134634	129.4	418	
10 2,4,6-Trinitrotoluene								
227.0	3.291	3.281	0.010	0.770	7641	-1.00	4.1	
$ 11 Nitrobenzene-d5								
128.0	3.324	3.324	0.0	0.778	478614	94.1	42.8	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3476906	125.0	130	

QC Flag Legend

Processing Flags

Reagents:

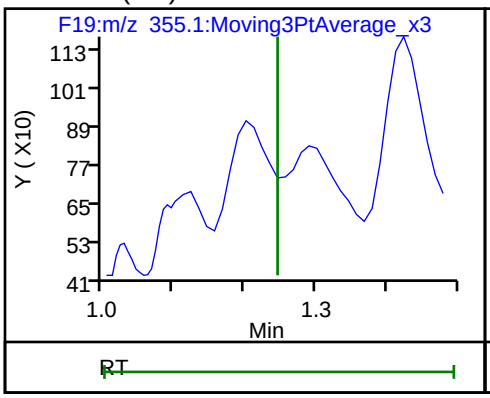
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:09 Chrom Revision: 2.3 12-Apr-2022 20:29:44

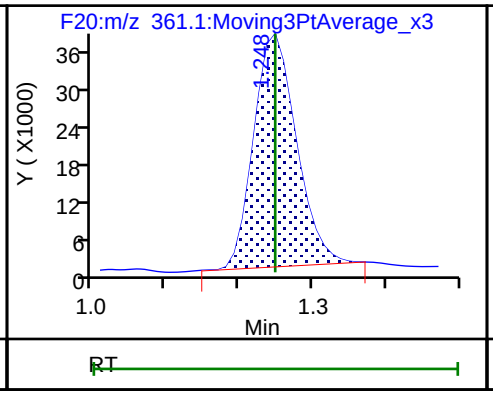
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14025.d
Injection Date: 14-Apr-2022 14:52:49 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-31-B Lab Sample ID: 280-160190-31
Client ID: 29SB171 (3-4)
Operator ID: acm ALS Bottle#: 22 Worklist Smp#: 25
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

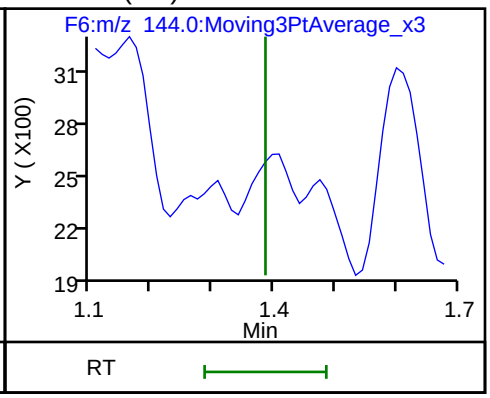
2 HMX (ND)



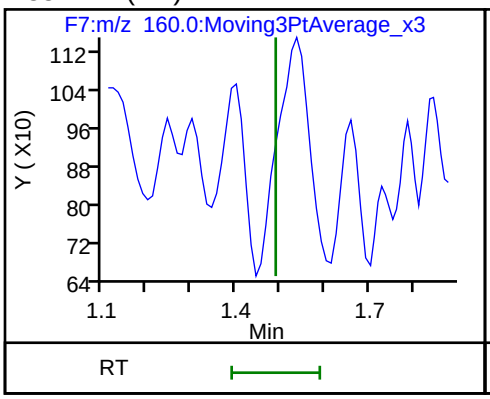
* 1 HMX-13C4



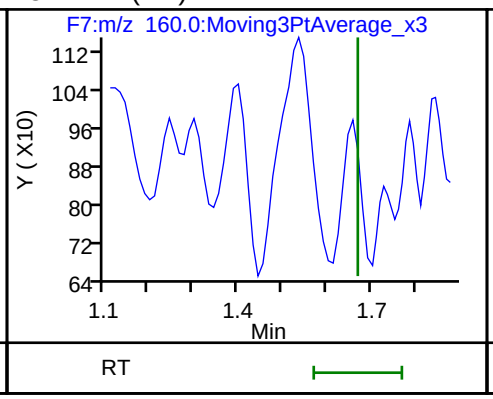
36 TNX (ND)



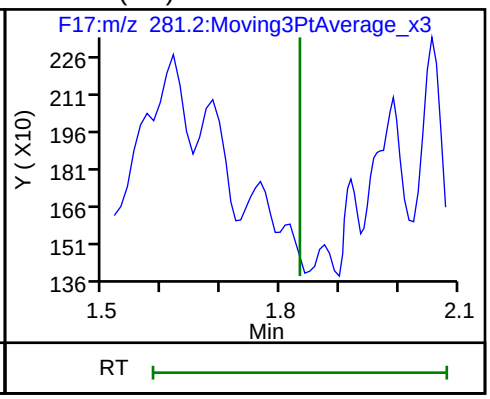
33 DNX (ND)



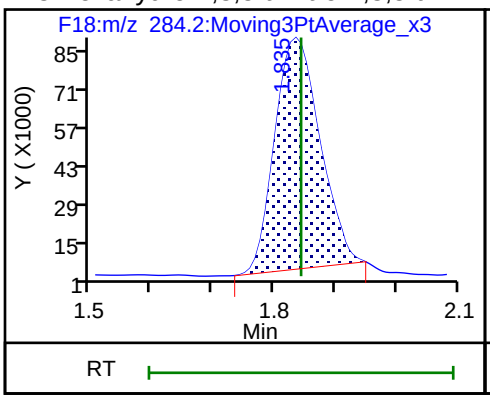
34 MNX (ND)



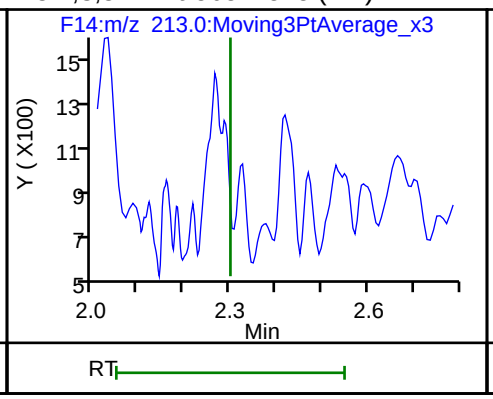
4 RDX (ND)



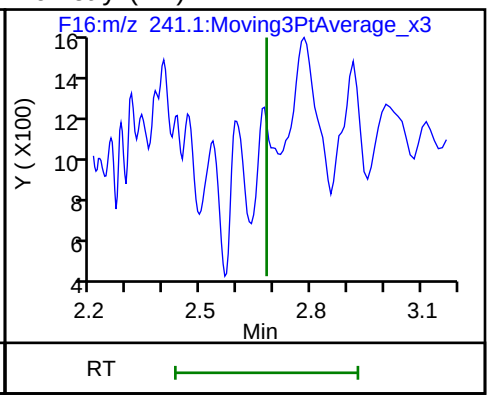
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



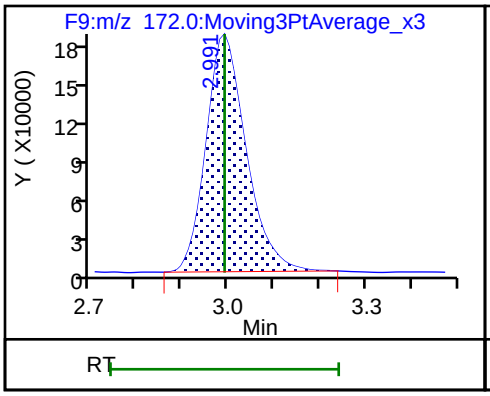
5 1,3,5-Trinitrobenzene (ND)



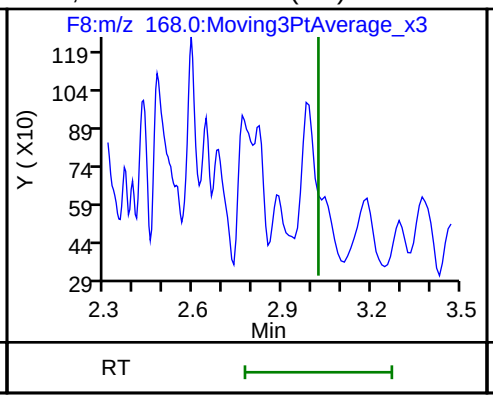
6 Tetryl (ND)



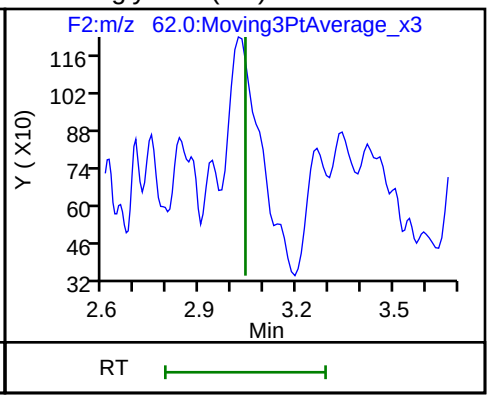
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

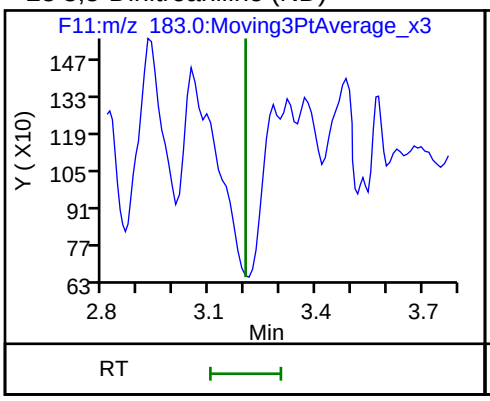


9 Nitroglycerin (ND)

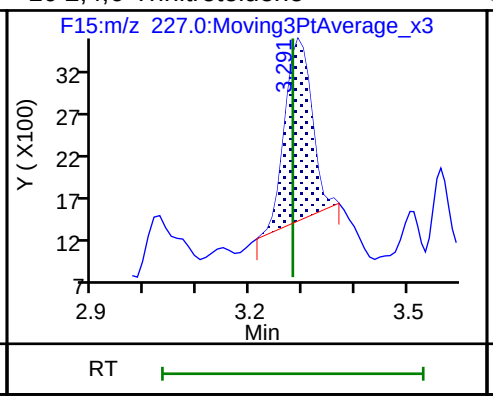


Report Date: 15-Apr-2022 08:03:09 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14025.d

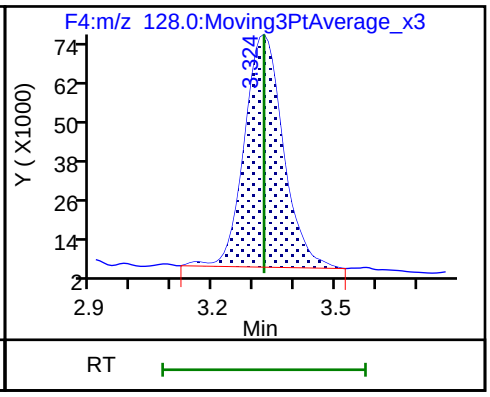
28 3,5-Dinitroaniline (ND)



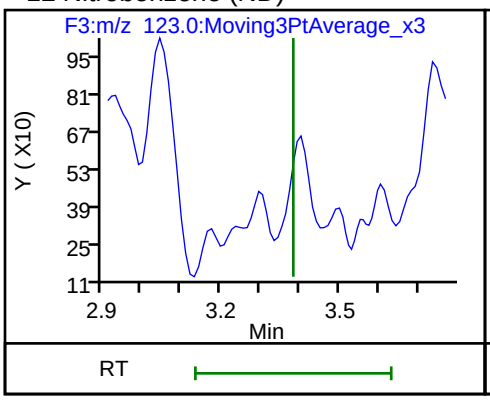
10 2,4,6-Trinitrotoluene



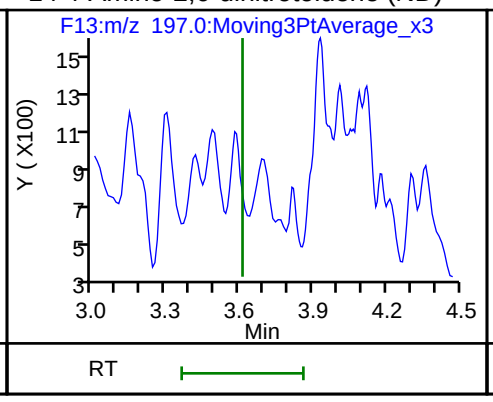
$ 11 Nitrobenzene-d5



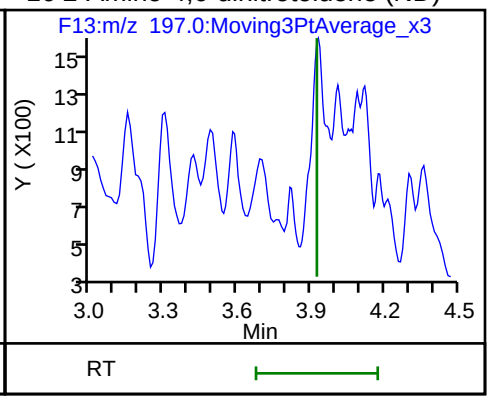
12 Nitrobenzene (ND)



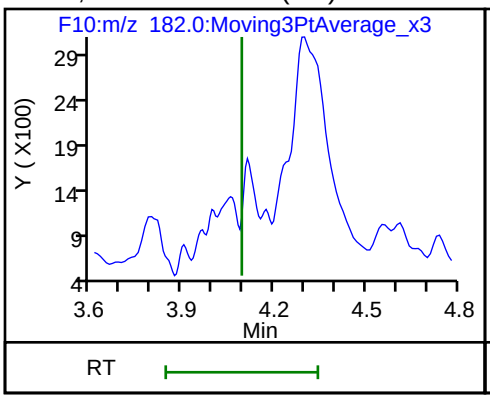
14 4-Amino-2,6-dinitrotoluene (ND)



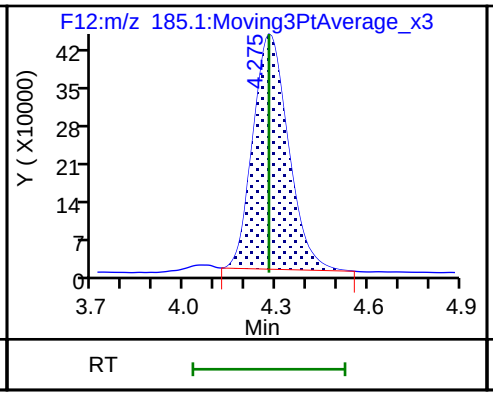
16 2-Amino-4,6-dinitrotoluene (ND)



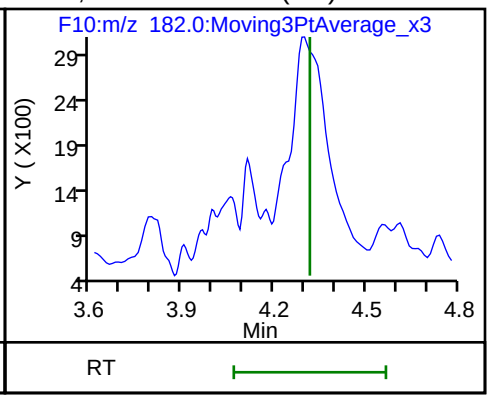
17 2,6-Dinitrotoluene (ND)



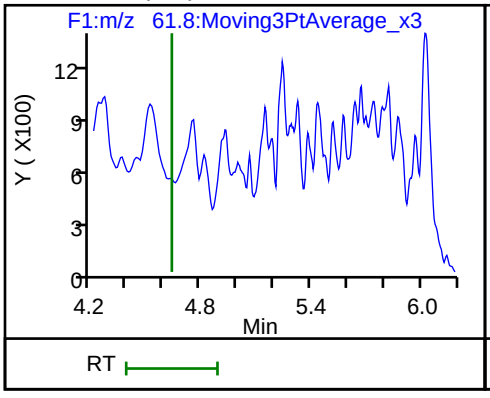
* 18 2,4-dinitrotoluene-d3



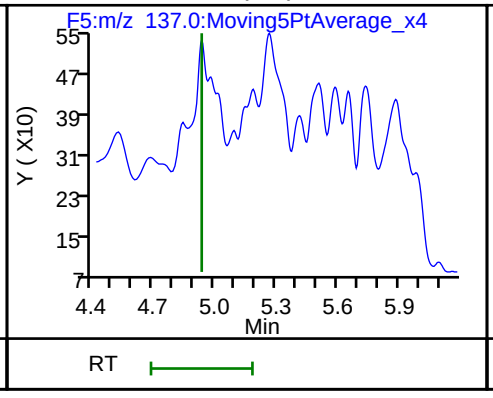
19 2,4-Dinitrotoluene (ND)



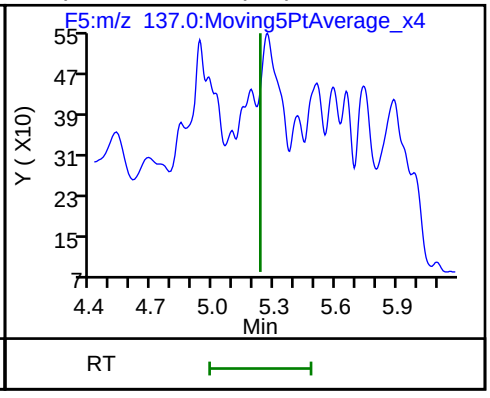
20 PETN (ND)



22 o-Nitrotoluene (ND)



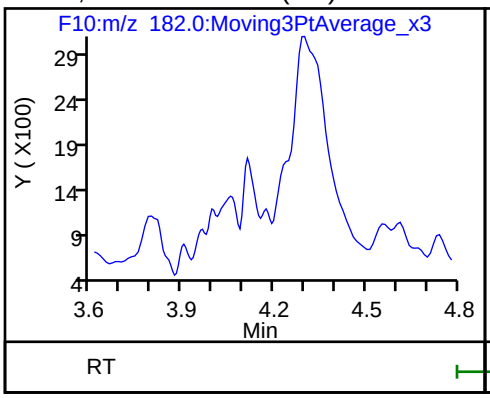
23 p-Nitrotoluene (ND)



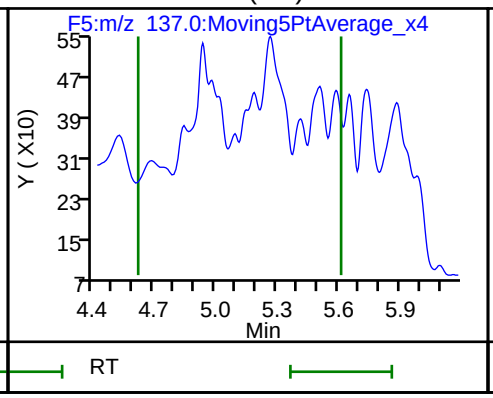
Report Date: 15-Apr-2022 08:03:09 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14025.d

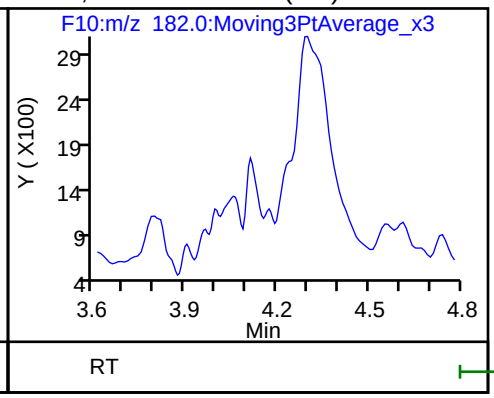
13 3,4-Dinitrotoluene (ND)



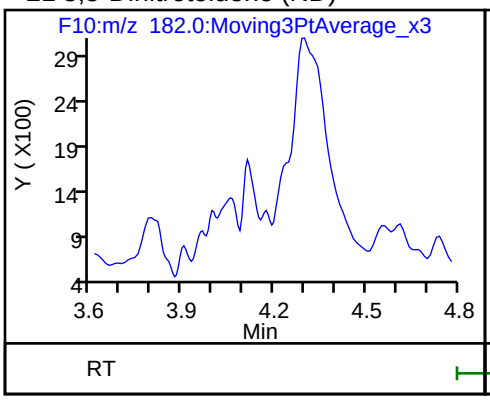
24 m-Nitrotoluene (ND)



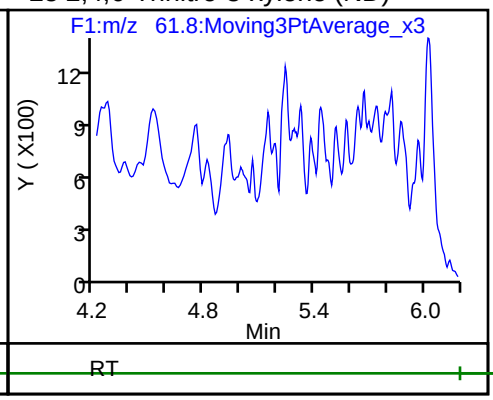
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:09 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14025.d				
Lims ID:	280-160190-A-31-B				
Client ID:	29SB171 (3-4)				
Sample Type:	Client				
Inject. Date:	14-Apr-2022 14:52:49	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160190-A-31-B				
Misc. Info.:	ex722D14				
Operator ID:	acm	Instrument ID:	LC_LCMS7		
Method:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m				
Limit Group:	LC - 8321A Expl				
Last Update:	15-Apr-2022 08:03:06	Calib Date:	14-Apr-2022 13:07:22		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1652				
First Level Reviewer: meyera		Date:	15-Apr-2022 07:30:16		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	94.1	93.77

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB171 (6-7) | Lab Sample ID: 280-160190-32
Matrix: Solid | Lab File ID: ex722D14026.d
Analysis Method: 8321A | Date Collected: 03/24/2022 12:50
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:23
Sample wt/vol: 10.05(g) | Date Analyzed: 04/14/2022 14:59
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571896 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.050	U	0.10	0.050	0.045
99-65-0	1,3-Dinitrobenzene	0.050	U	0.10	0.050	0.044
118-96-7	2,4,6-Trinitrotoluene	0.050	U	0.10	0.050	0.037
121-14-2	2,4-Dinitrotoluene	0.066	J	0.10	0.050	0.046
606-20-2	2,6-Dinitrotoluene	0.050	U	0.10	0.050	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.050	U	0.10	0.050	0.049
19406-51-0	4-Amino-2,6-dinitrotoluene	0.050	U	0.10	0.050	0.031
2691-41-0	HMX	0.050	U M	0.10	0.050	0.046
99-08-1	m-Nitrotoluene	0.050	U	0.10	0.050	0.043
98-95-3	Nitrobenzene	0.050	U	0.11	0.050	0.038
55-63-0	Nitroglycerin	0.050	U	0.10	0.050	0.029
88-72-2	o-Nitrotoluene	0.050	U M	0.10	0.050	0.043
78-11-5	PETN	0.050	U	0.10	0.050	0.034
99-99-0	p-Nitrotoluene	0.050	U M	0.10	0.050	0.049
121-82-4	RDX	0.050	U	0.12	0.050	0.043
479-45-8	Tetryl	0.050	U Q	0.10	0.050	0.039

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	89		68-140

Report Date: 15-Apr-2022 08:03:10 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14026.d
Lims ID: 280-160190-A-32-B
Client ID: 29SB171 (6-7)
Sample Type: Client
Inject. Date: 14-Apr-2022 14:59:25 ALS Bottle#: 23 Worklist Smp#: 26
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-32-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:06 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:31:11
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		145706	125.0	122	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		468420	125.0	197	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1193606	129.4	438	
$ 11 Nitrobenzene-d5								
128.0	3.324	3.324	0.0	0.778	480423	89.7	94.4	
14 4-Amino-2,6-dinitrotoluene								M
197.0	3.640	3.611	0.029	0.851	17075	-0.5399	3.8	M
16 2-Amino-4,6-dinitrotoluene								M
197.0	3.888	3.924	-0.036	0.909	26191	-0.1609	6.5	M
17 2,6-Dinitrotoluene								
182.0	4.087	4.093	-0.006	0.956	43208	0.0683	25.1	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3683598	125.0	126	
19 2,4-Dinitrotoluene								
182.0	4.316	4.316	0.0	1.010	547067	16.6	266	
22 o-Nitrotoluene								M
137.0	4.927	4.932	-0.005	1.152	7788	0.4604	3.3	M
23 p-Nitrotoluene								M
137.0	5.235	5.230	0.005	1.225	9512	0.6351	4.0	M

QC Flag Legend
Processing Flags

Report Date: 15-Apr-2022 08:03:10 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Review Flags

M - Manually Integrated

Reagents:

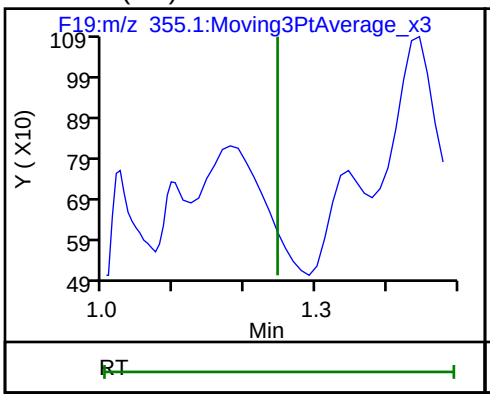
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:10 Chrom Revision: 2.3 12-Apr-2022 20:29:44

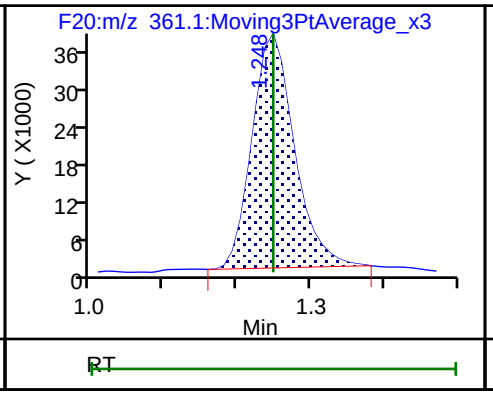
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14026.d
Injection Date: 14-Apr-2022 14:59:25 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-32-B Lab Sample ID: 280-160190-32
Client ID: 29SB171 (6-7)
Operator ID: acm ALS Bottle#: 23 Worklist Smp#: 26
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

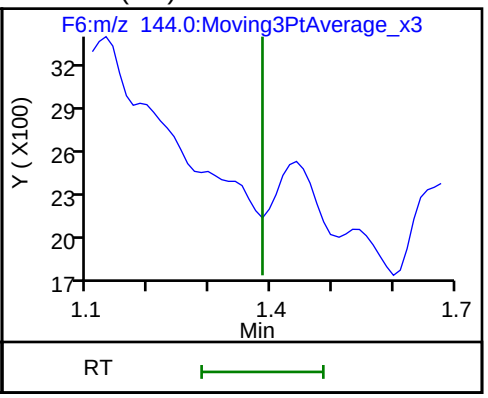
2 HMX (ND)



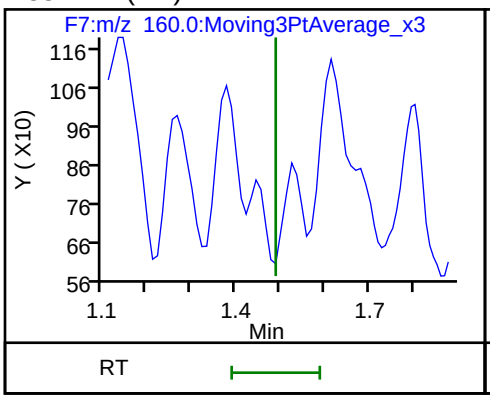
* 1 HMX-13C4



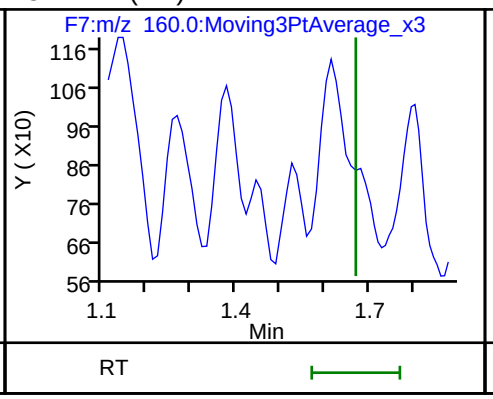
36 TNX (ND)



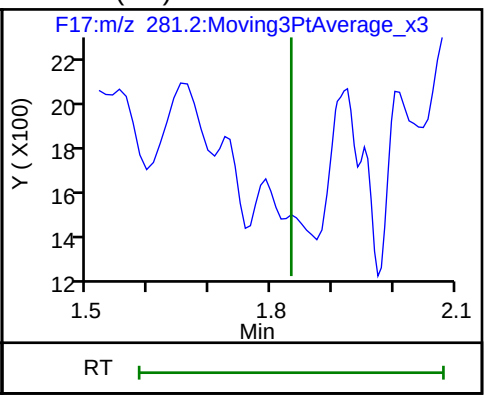
33 DNX (ND)



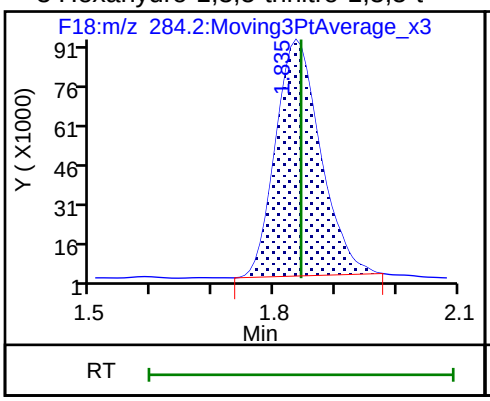
34 MNX (ND)



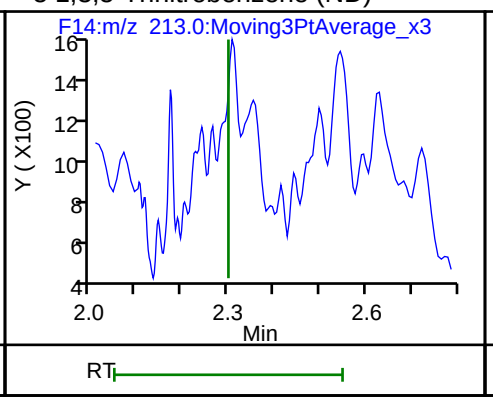
4 RDX (ND)



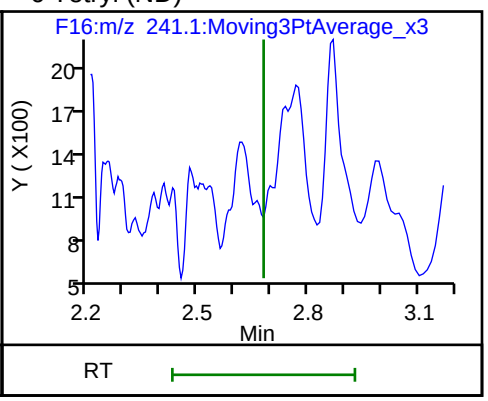
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



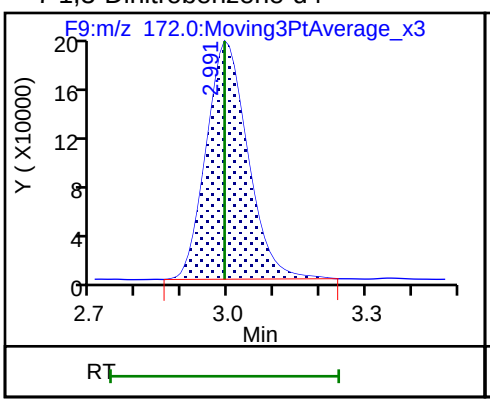
5 1,3,5-Trinitrobenzene (ND)



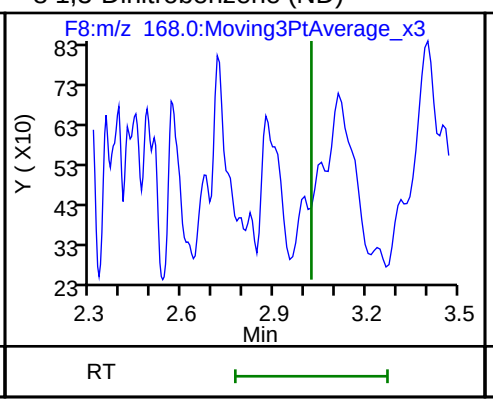
6 Tetryl (ND)



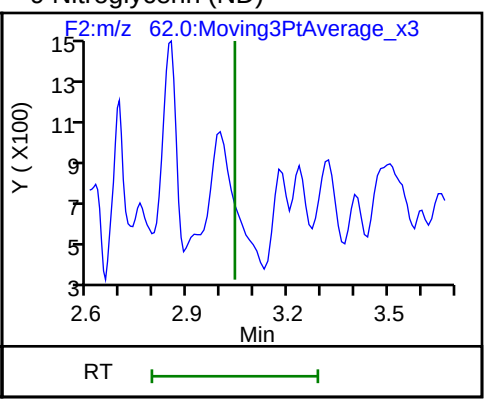
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

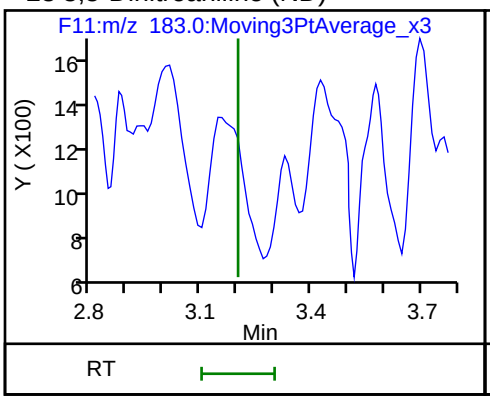


9 Nitroglycerin (ND)

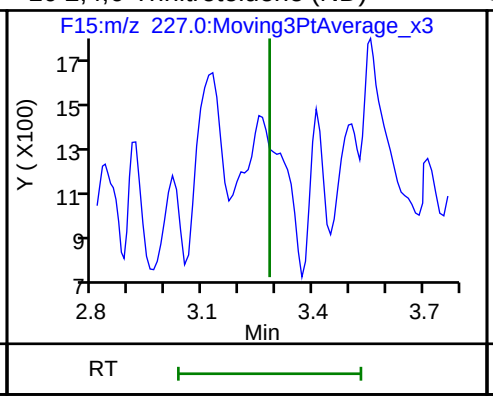


Report Date: 15-Apr-2022 08:03:10 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14026.d

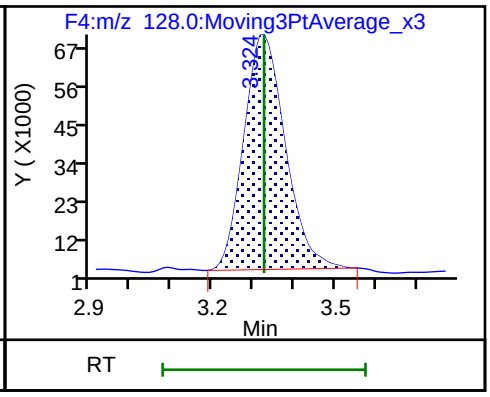
28 3,5-Dinitroaniline (ND)



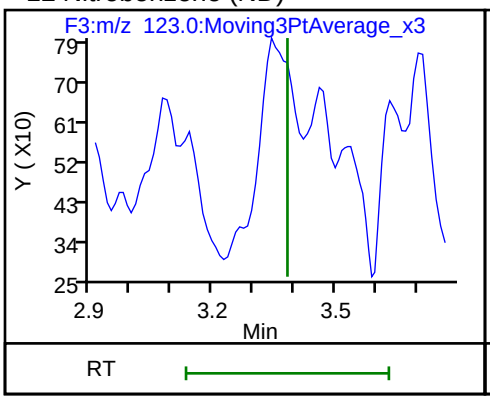
10 2,4,6-Trinitrotoluene (ND)



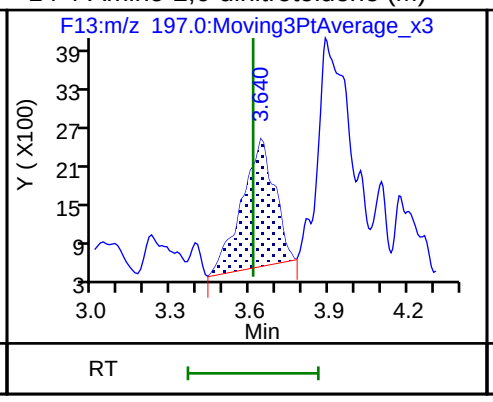
$ 11 Nitrobenzene-d5



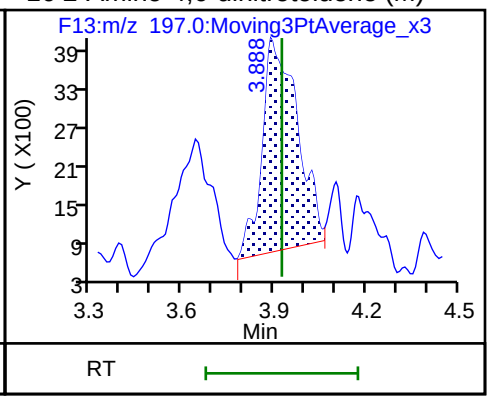
12 Nitrobenzene (ND)



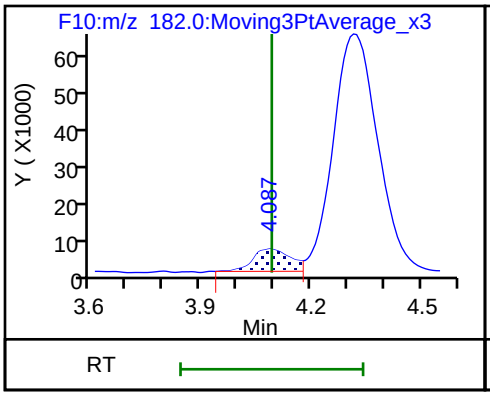
14 4-Amino-2,6-dinitrotoluene (M)



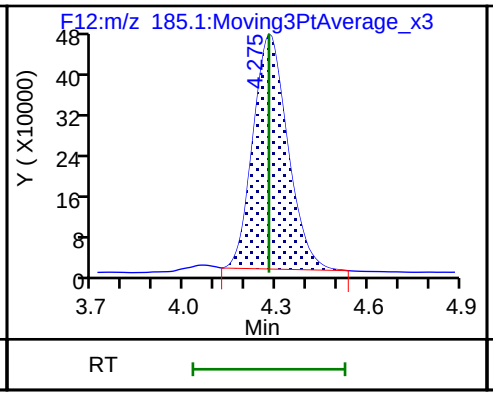
16 2-Amino-4,6-dinitrotoluene (M)



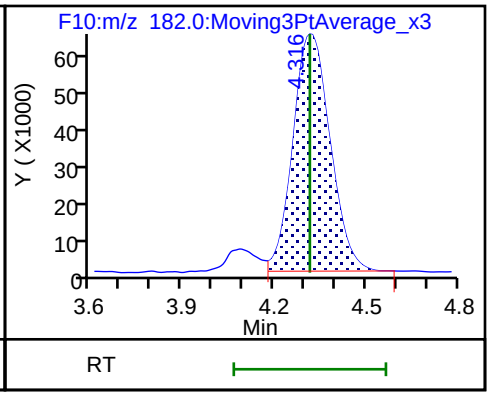
17 2,6-Dinitrotoluene



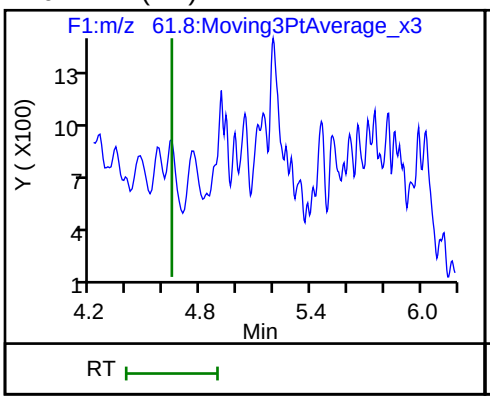
* 18 2,4-dinitrotoluene-d3



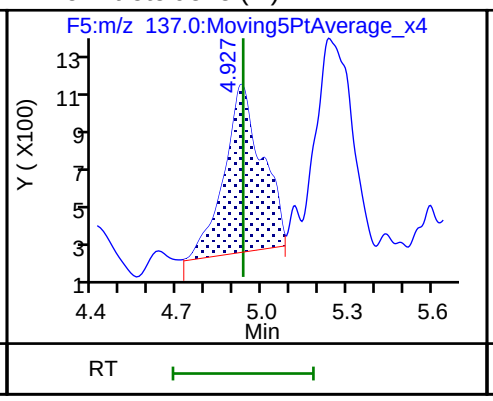
19 2,4-Dinitrotoluene



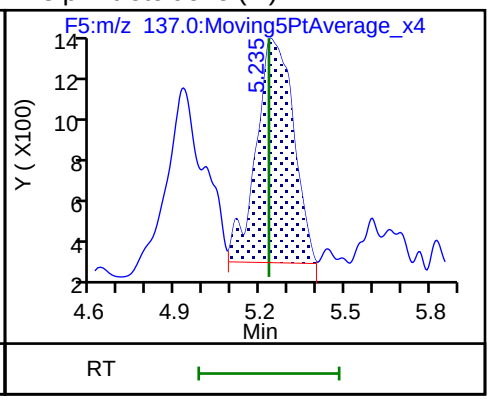
20 PETN (ND)



22 o-Nitrotoluene (M)



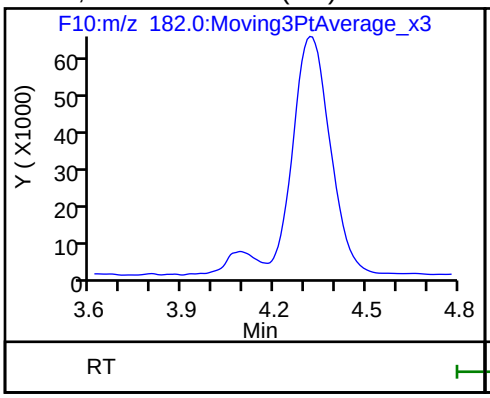
23 p-Nitrotoluene (M)



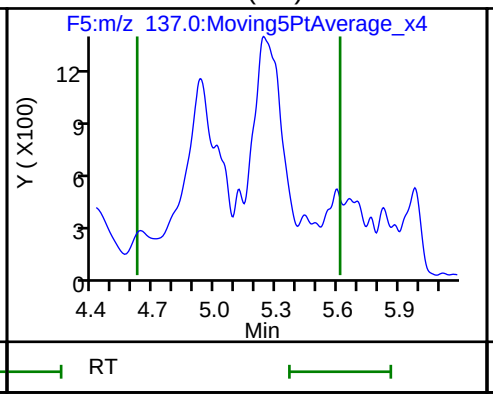
Report Date: 15-Apr-2022 08:03:10 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14026.d

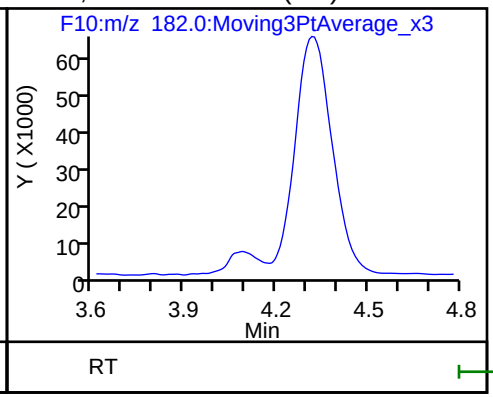
13 3,4-Dinitrotoluene (ND)



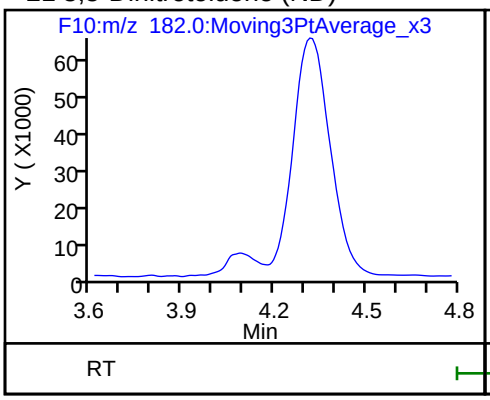
24 m-Nitrotoluene (ND)



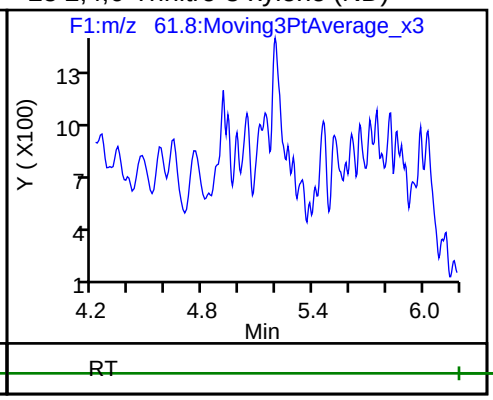
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:10 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14026.d				
Lims ID:	280-160190-A-32-B				
Client ID:	29SB171 (6-7)				
Sample Type:	Client				
Inject. Date:	14-Apr-2022 14:59:25	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160190-A-32-B				
Misc. Info.:	ex722D14				
Operator ID:	acm	Instrument ID:	LC_LCMS7		
Method:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m				
Limit Group:	LC - 8321A Expl				
Last Update:	15-Apr-2022 08:03:06	Calib Date:	14-Apr-2022 13:07:22		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1652				
First Level Reviewer: meyera		Date:	15-Apr-2022 07:31:11		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	89.7	89.38

Report Date: 15-Apr-2022 08:03:10 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

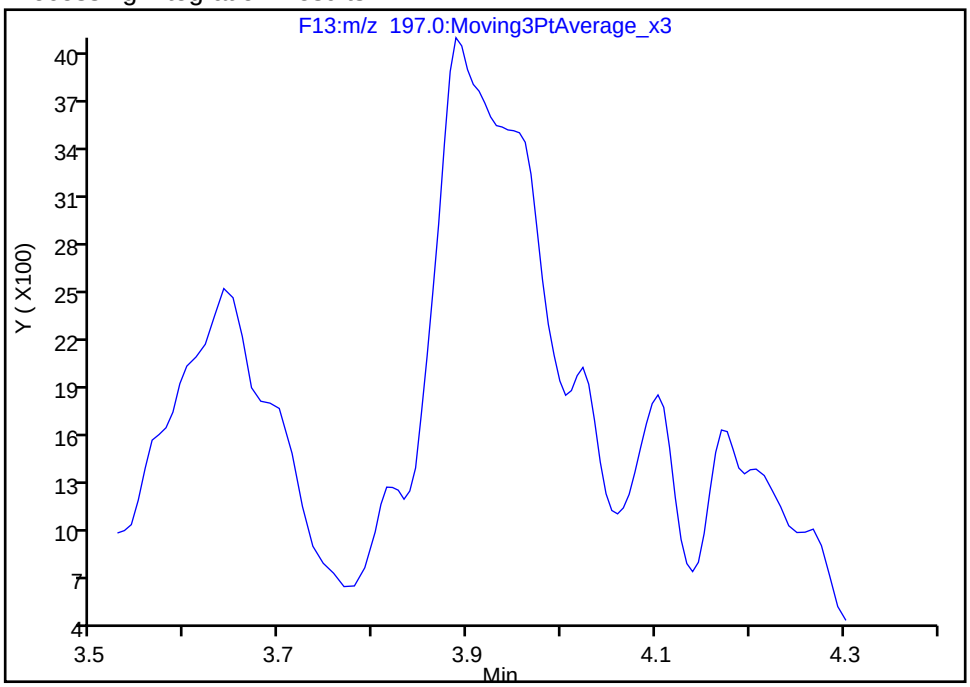
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14026.d				
Injection Date:	14-Apr-2022 14:59:25	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-32-B	Lab Sample ID:	280-160190-32		
Client ID:	29SB171 (6-7)				
Operator ID:	acm	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

16 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

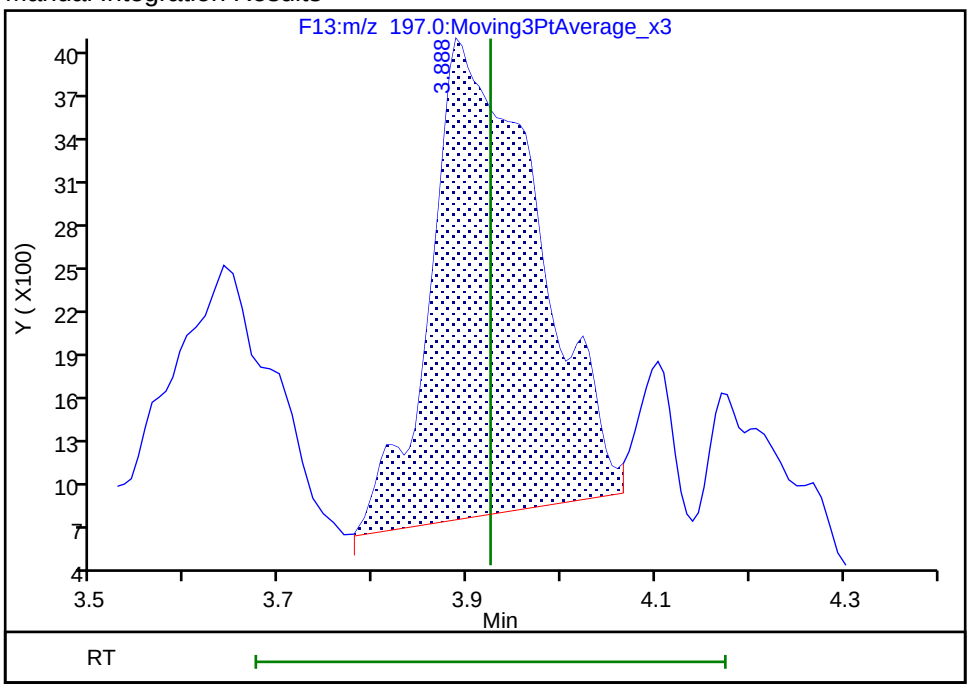
Not Detected
Expected RT: 3.92

Processing Integration Results



Manual Integration Results

RT: 3.89
Area: 26191
Amount: -0.160949
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:31:03
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:03:10 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

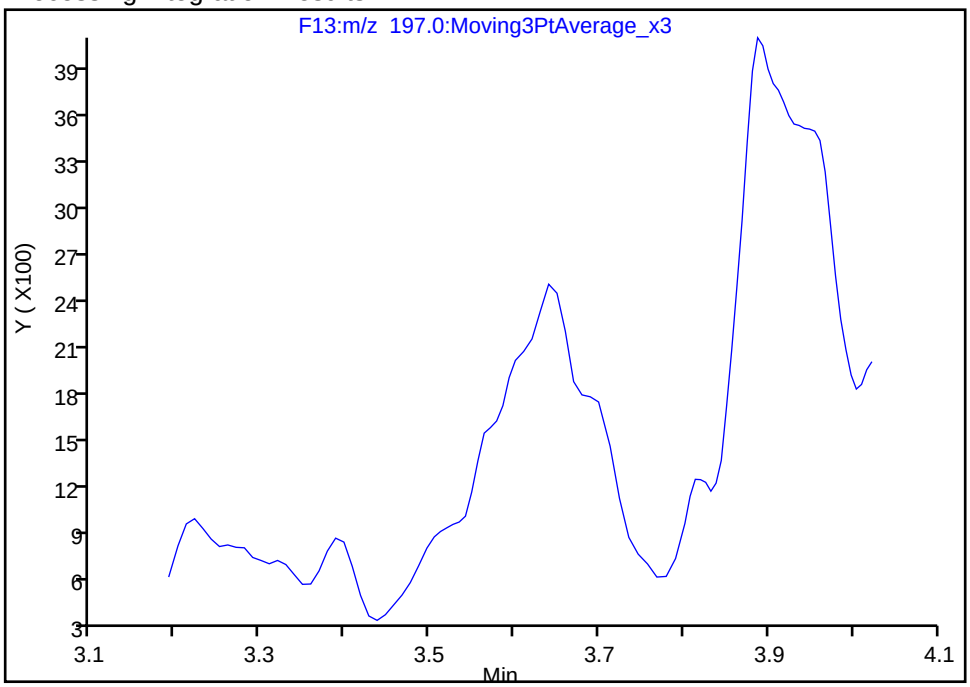
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14026.d				
Injection Date:	14-Apr-2022 14:59:25	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-32-B	Lab Sample ID:	280-160190-32		
Client ID:	29SB171 (6-7)				
Operator ID:	acm	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

14 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

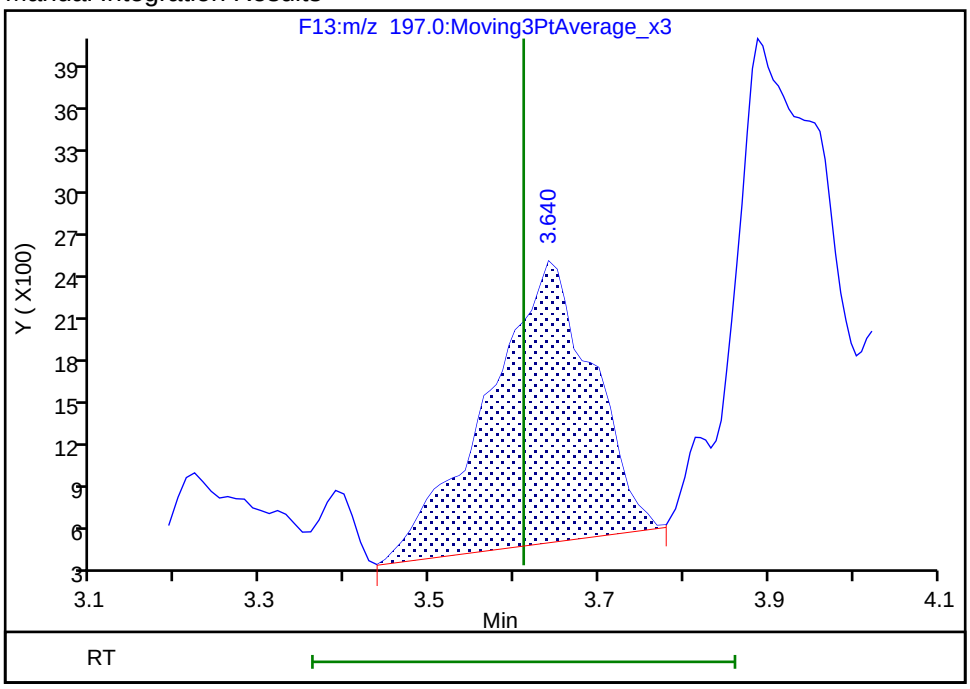
Not Detected
Expected RT: 3.61

Processing Integration Results



Manual Integration Results

RT: 3.64
Area: 17075
Amount: -0.539891
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:30:58
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:03:10 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

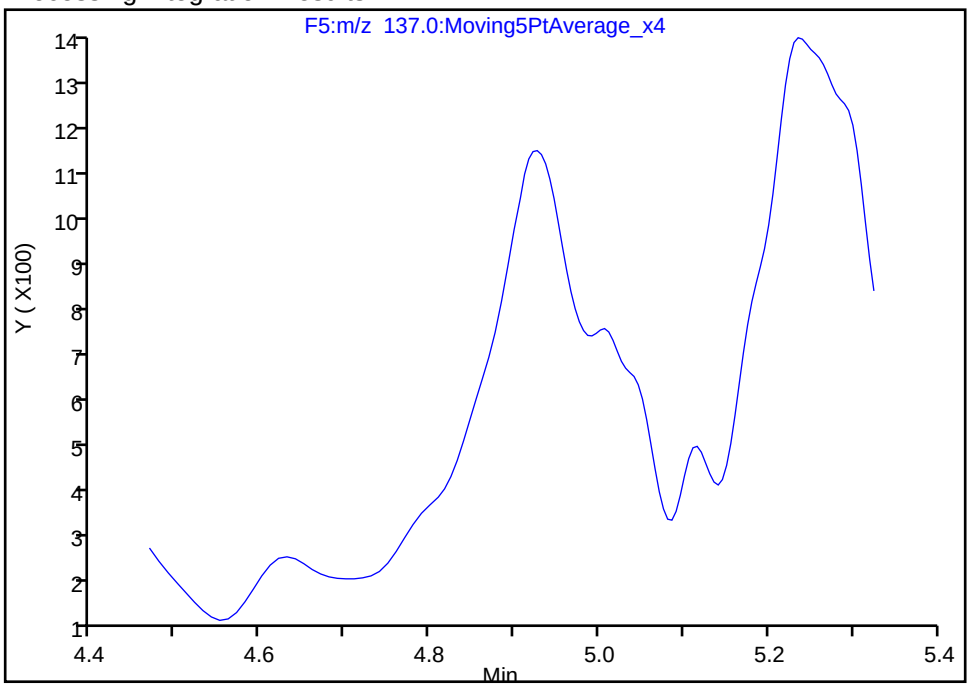
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14026.d				
Injection Date:	14-Apr-2022 14:59:25	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-32-B	Lab Sample ID:	280-160190-32		
Client ID:	29SB171 (6-7)				
Operator ID:	acm	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F5:SIR		

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

Signal: 1

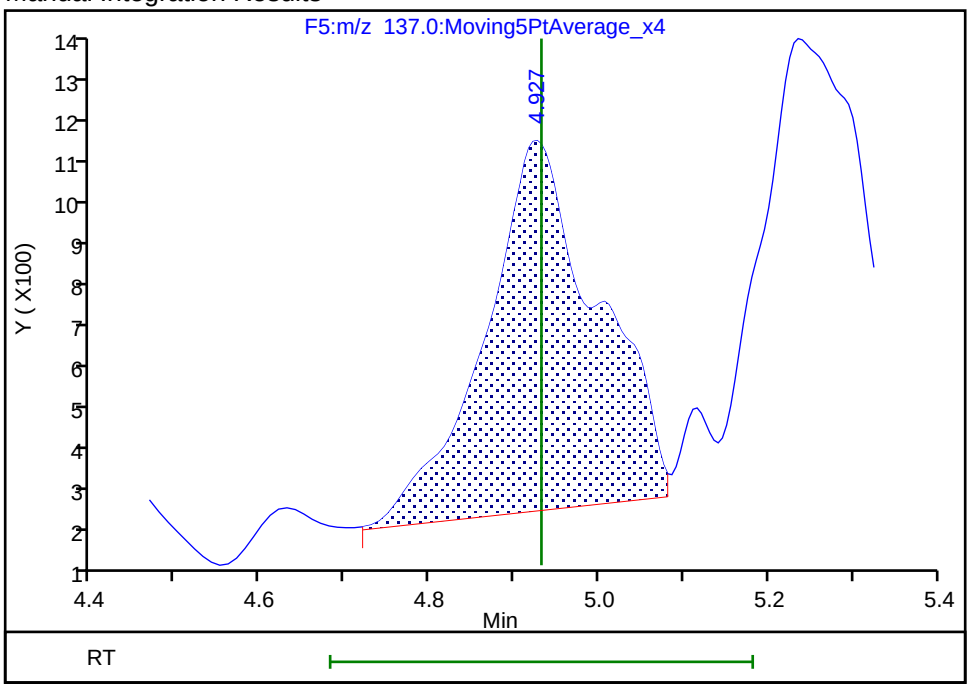
Not Detected
Expected RT: 4.93

Processing Integration Results



Manual Integration Results

RT: 4.93
Area: 7788
Amount: 0.460419
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:30:47
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:03:10 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

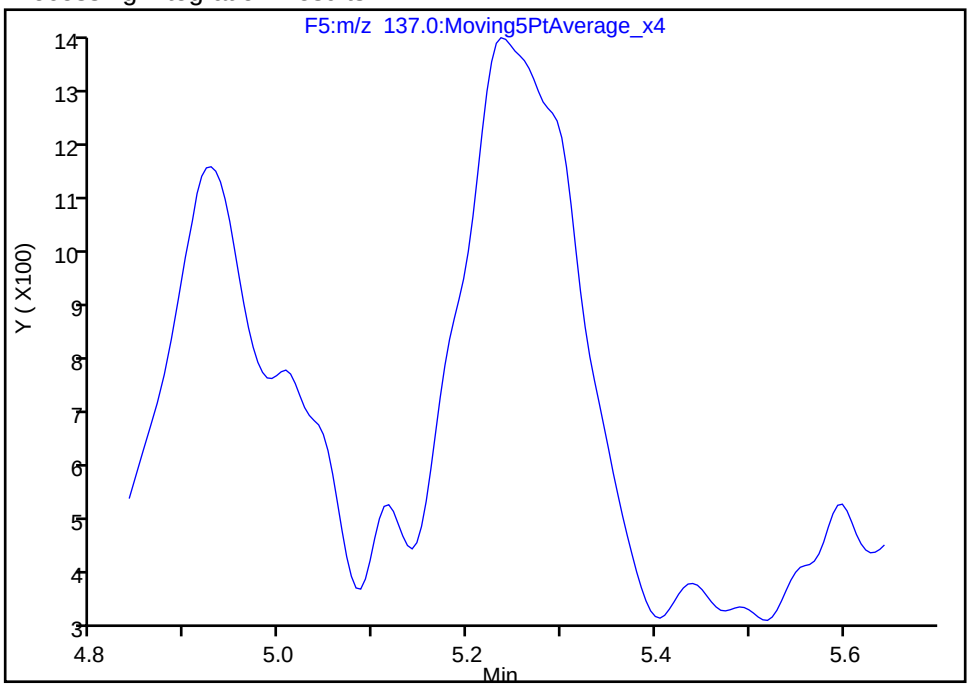
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14026.d				
Injection Date:	14-Apr-2022 14:59:25	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-32-B	Lab Sample ID:	280-160190-32		
Client ID:	29SB171 (6-7)				
Operator ID:	acm	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F5:SIR		

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

Signal: 1

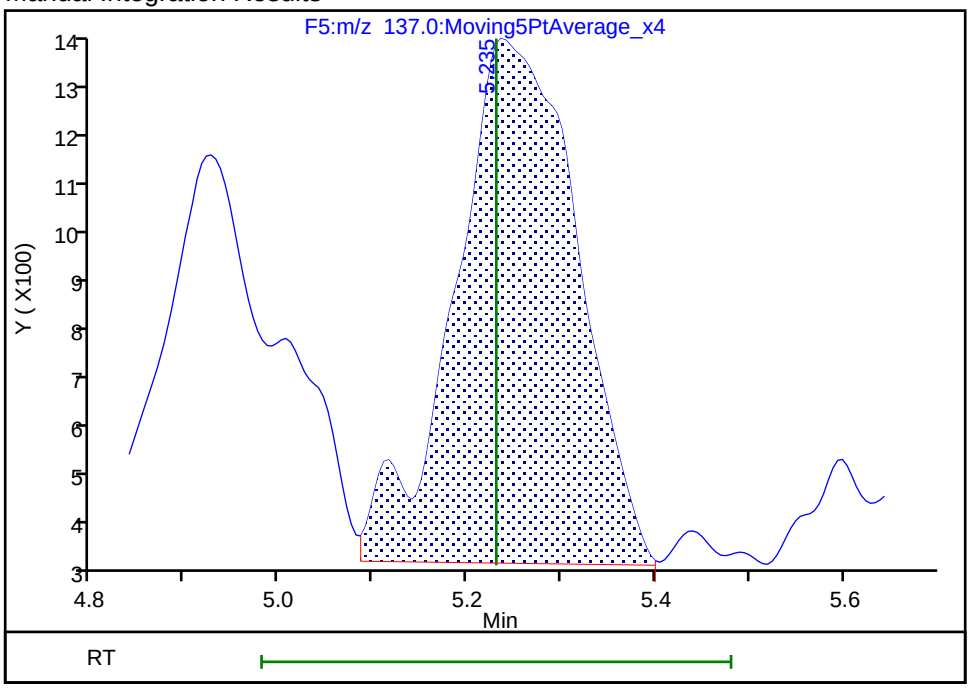
Not Detected
Expected RT: 5.23

Processing Integration Results



Manual Integration Results

RT: 5.24
Area: 9512
Amount: 0.635071
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:30:43
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB171 (11-12) | Lab Sample ID: 280-160190-33
Matrix: Solid | Lab File ID: ex722D14027.d
Analysis Method: 8321A | Date Collected: 03/24/2022 12:52
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:23
Sample wt/vol: 10.13(g) | Date Analyzed: 04/14/2022 15:06
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571896 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.049	U	0.099	0.049	0.044
99-65-0	1,3-Dinitrobenzene	0.049	U	0.099	0.049	0.044
118-96-7	2,4,6-Trinitrotoluene	0.049	U M	0.099	0.049	0.036
121-14-2	2,4-Dinitrotoluene	0.049	U	0.099	0.049	0.046
606-20-2	2,6-Dinitrotoluene	0.049	U M	0.099	0.049	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.049	U	0.099	0.049	0.049
19406-51-0	4-Amino-2,6-dinitrotoluene	0.049	U	0.099	0.049	0.031
2691-41-0	HMX	0.049	U M	0.099	0.049	0.046
99-08-1	m-Nitrotoluene	0.049	U	0.099	0.049	0.043
98-95-3	Nitrobenzene	0.049	U	0.11	0.049	0.038
55-63-0	Nitroglycerin	0.049	U	0.099	0.049	0.029
88-72-2	o-Nitrotoluene	0.049	U	0.099	0.049	0.042
78-11-5	PETN	0.049	U	0.099	0.049	0.034
99-99-0	p-Nitrotoluene	0.049	U	0.099	0.049	0.049
121-82-4	RDX	0.049	U	0.12	0.049	0.043
479-45-8	Tetryl	0.049	U Q	0.099	0.049	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	112		68-140

Report Date: 15-Apr-2022 08:03:10 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14027.d
Lims ID: 280-160190-A-33-B
Client ID: 29SB171 (11-12)
Sample Type: Client
Inject. Date: 14-Apr-2022 15:06:01 ALS Bottle#: 24 Worklist Smp#: 27
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-33-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:06 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:31:37
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		136662	125.0	86.6	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		485885	125.0	153	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1121624	129.4	199	
$ 11 Nitrobenzene-d5								
128.0	3.324	3.324	0.0	0.778	563188	112.3	49.4	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3558187	125.0	126	
19 2,4-Dinitrotoluene								M
182.0	4.316	4.316	0.0	1.010	9481	-0.6894	5.8	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:10 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14027.d

Injection Date: 14-Apr-2022 15:06:01 Instrument ID: LC_LCMS7

Lims ID: 280-160190-A-33-B Lab Sample ID: 280-160190-33

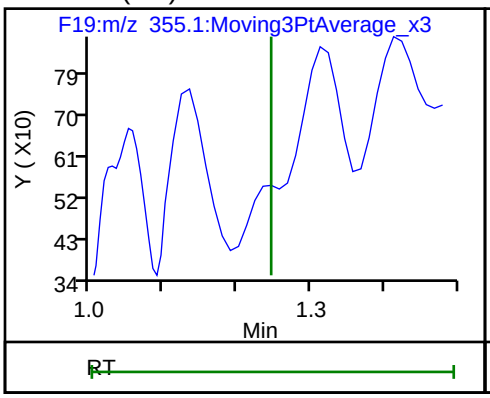
Client ID: 29SB171 (11-12)

Operator ID: acm ALS Bottle#: 24 Worklist Smp#: 27

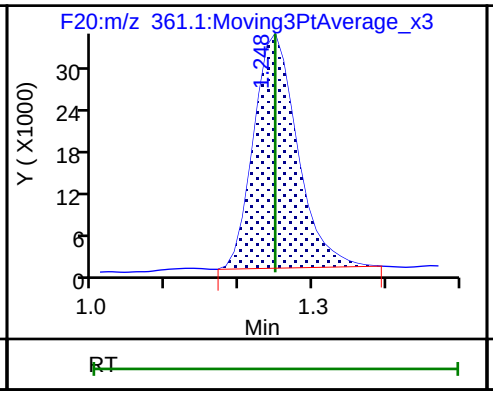
Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

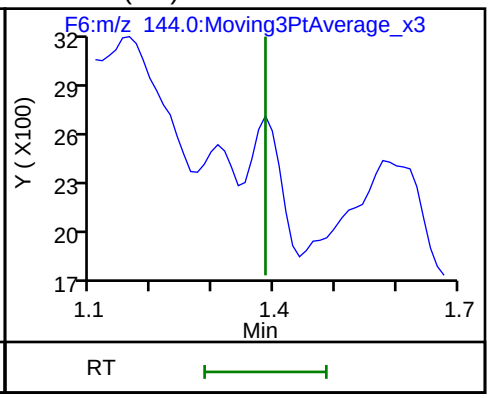
2 HMX (ND)



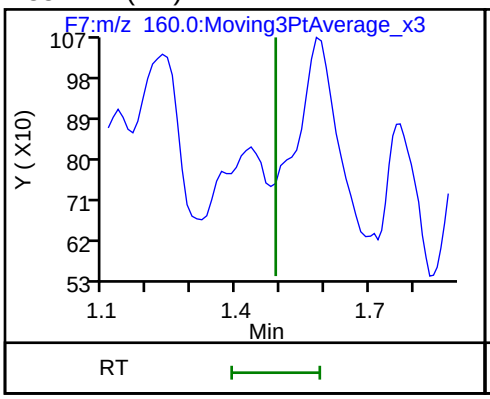
* 1 HMX-13C4



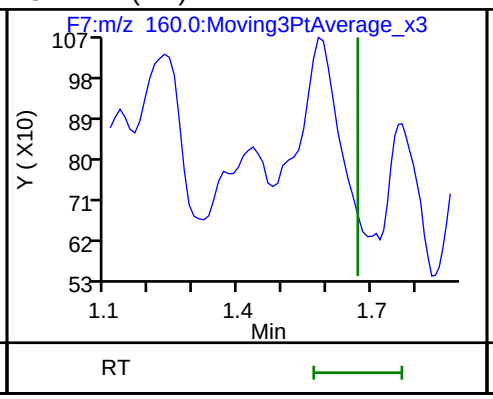
36 TNX (ND)



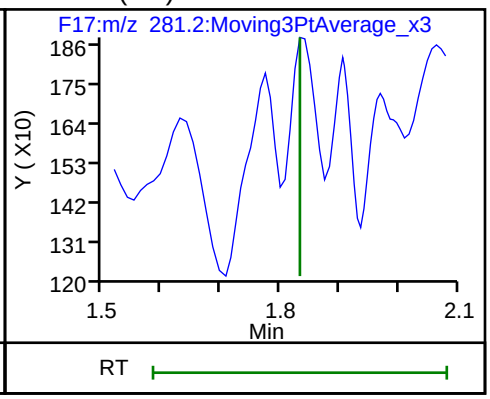
33 DNX (ND)



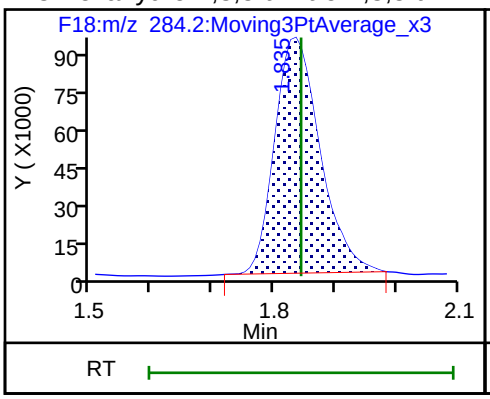
34 MNX (ND)



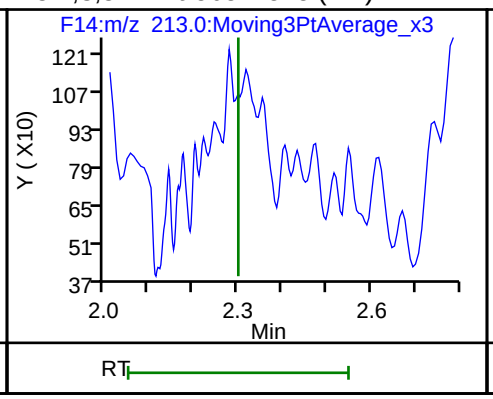
4 RDX (ND)



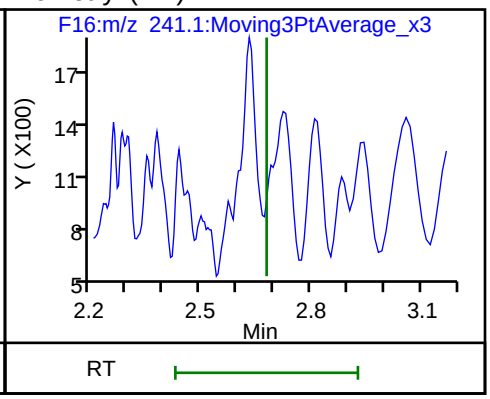
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



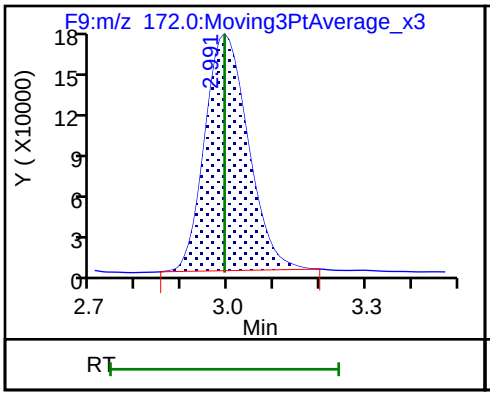
5 1,3,5-Trinitrobenzene (ND)



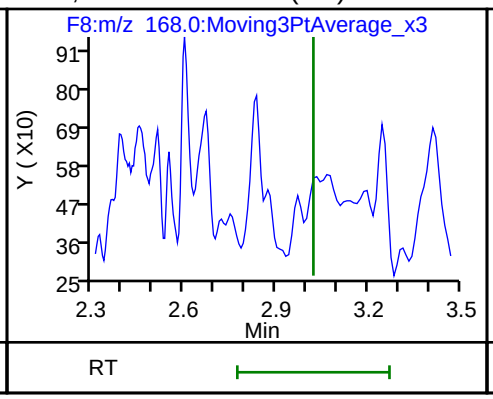
6 Tetryl (ND)



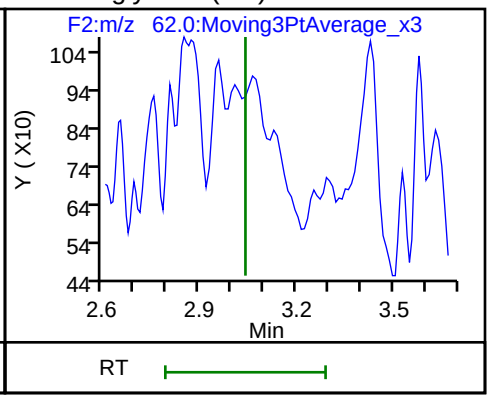
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

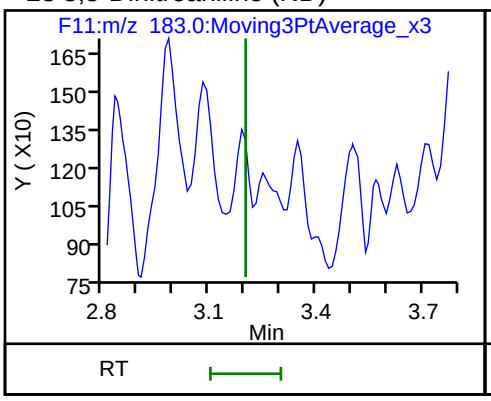


9 Nitroglycerin (ND)

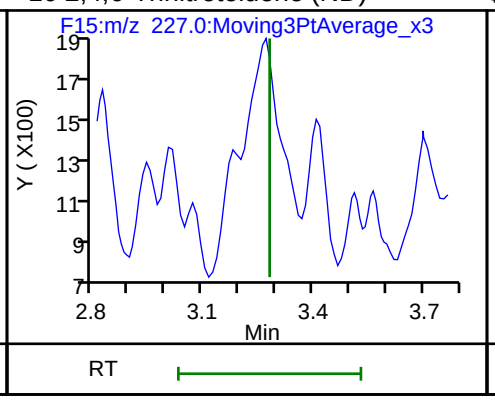


Report Date: 15-Apr-2022 08:03:10 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14027.d

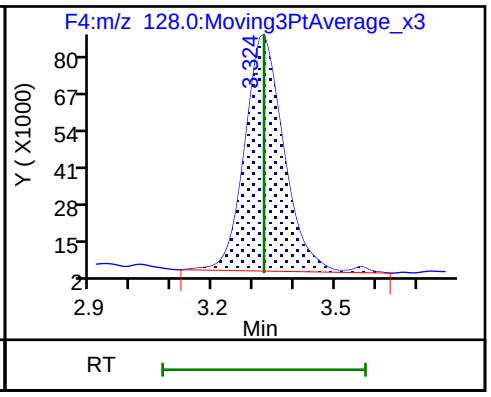
28 3,5-Dinitroaniline (ND)



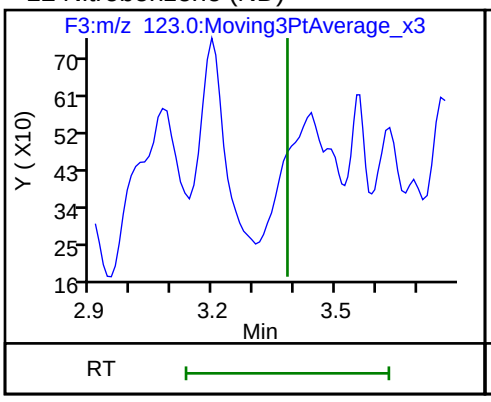
10 2,4,6-Trinitrotoluene (ND)



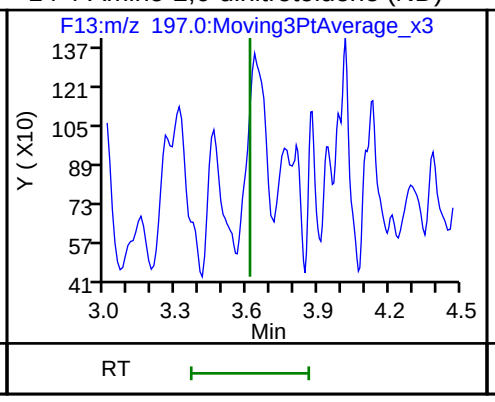
$ 11 Nitrobenzene-d5



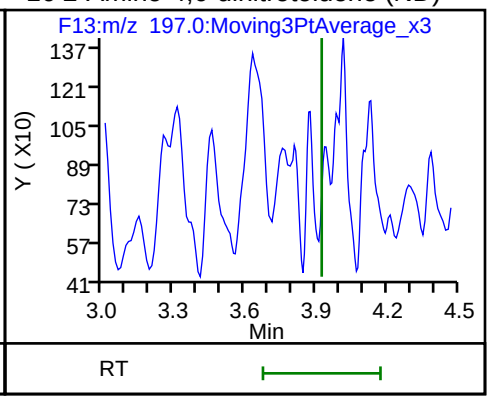
12 Nitrobenzene (ND)



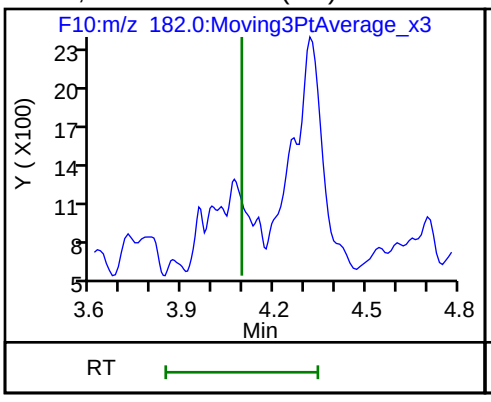
14 4-Amino-2,6-dinitrotoluene (ND)



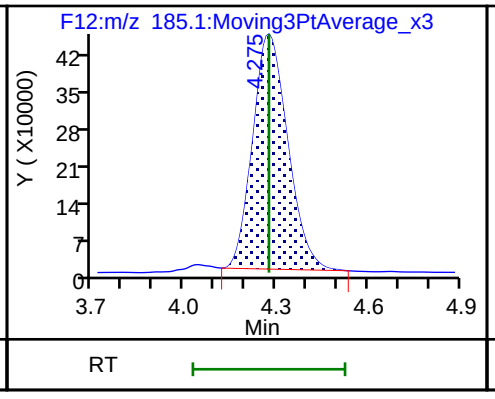
16 2-Amino-4,6-dinitrotoluene (ND)



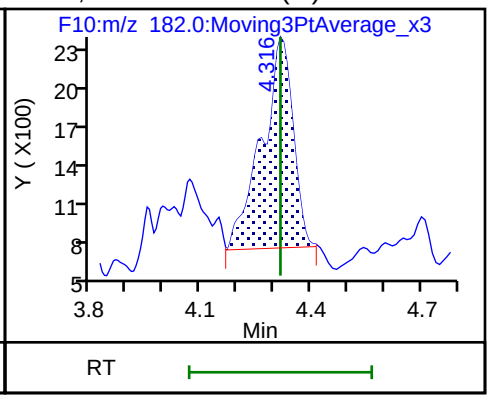
17 2,6-Dinitrotoluene (ND)



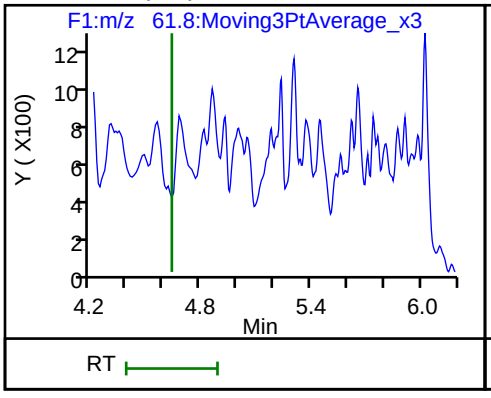
* 18 2,4-dinitrotoluene-d3



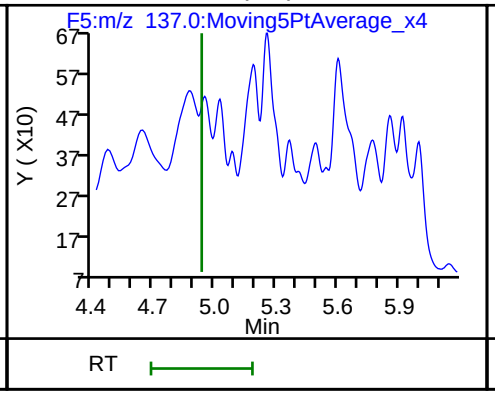
19 2,4-Dinitrotoluene (M)



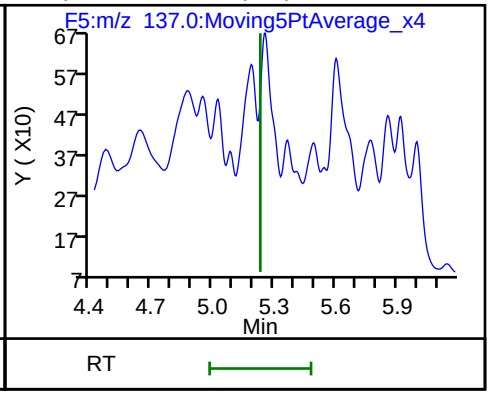
20 PETN (ND)



22 o-Nitrotoluene (ND)

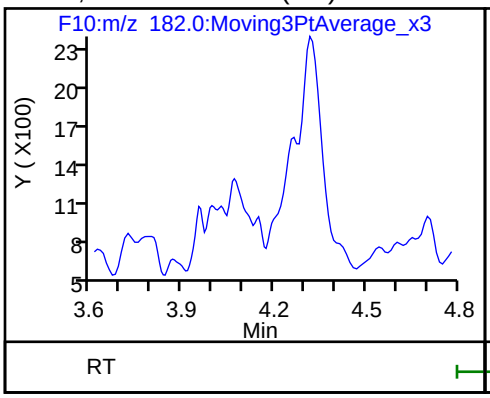


23 p-Nitrotoluene (ND)

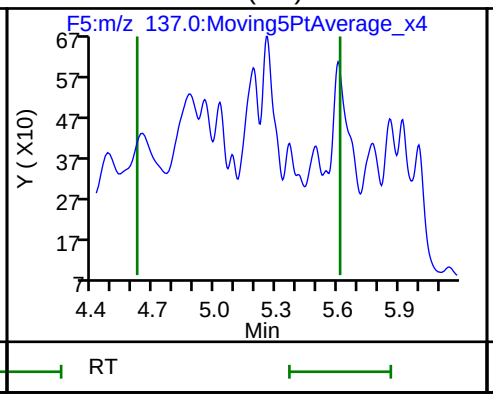


Report Date: 15-Apr-2022 08:03:10 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14027.d

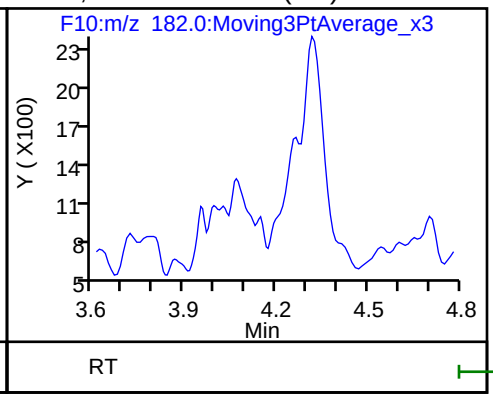
13 3,4-Dinitrotoluene (ND)



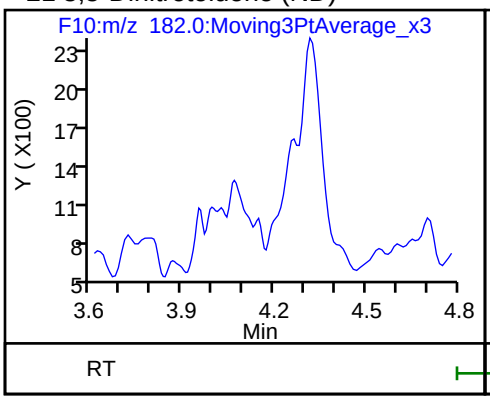
24 m-Nitrotoluene (ND)



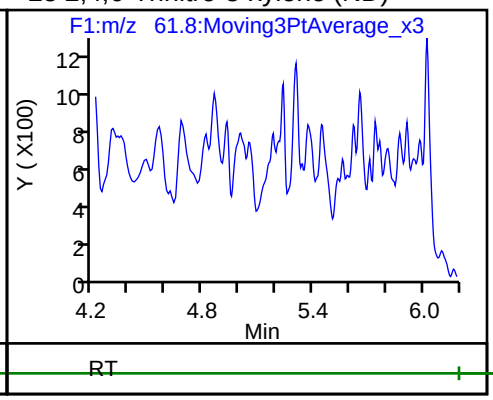
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:10 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14027.d				
Lims ID:	280-160190-A-33-B				
Client ID:	29SB171 (11-12)				
Sample Type:	Client				
Inject. Date:	14-Apr-2022 15:06:01	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160190-A-33-B				
Misc. Info.:	ex722D14				
Operator ID:	acm	Instrument ID:	LC_LCMS7		
Method:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m				
Limit Group:	LC - 8321A Expl				
Last Update:	15-Apr-2022 08:03:06	Calib Date:	14-Apr-2022 13:07:22		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1652				
First Level Reviewer: meyera		Date:	15-Apr-2022 07:31:37		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	112.3	111.97

Report Date: 15-Apr-2022 08:03:10 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

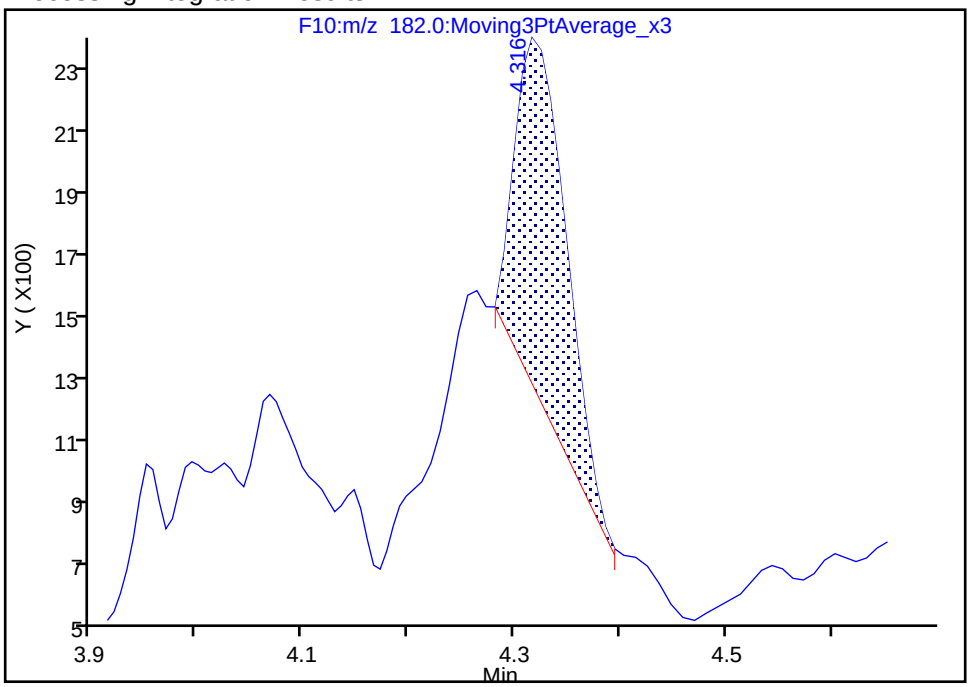
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14027.d				
Injection Date:	14-Apr-2022 15:06:01	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-33-B	Lab Sample ID:	280-160190-33		
Client ID:	29SB171 (11-12)				
Operator ID:	acm	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F10:SIR		

19 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

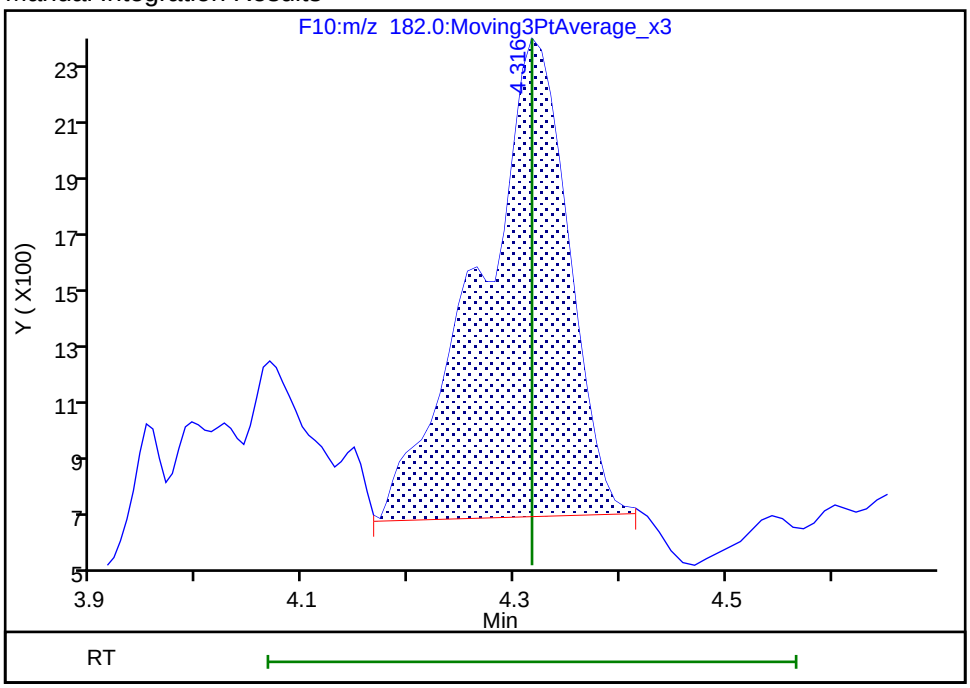
Processing Integration Results

RT: 4.32
Area: 3628
Amount: -0.884817
Amount Units: ug/l



Manual Integration Results

RT: 4.32
Area: 9481
Amount: -0.689368
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:31:30

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB171 (14.5-15) | Lab Sample ID: 280-160190-34
Matrix: Solid | Lab File ID: ex722D14028.d
Analysis Method: 8321A | Date Collected: 03/24/2022 12:54
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:23
Sample wt/vol: 10.5(g) | Date Analyzed: 04/14/2022 15:12
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571896 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.048	U	0.095	0.048	0.043
99-65-0	1,3-Dinitrobenzene	0.048	U	0.095	0.048	0.043
118-96-7	2,4,6-Trinitrotoluene	0.048	U	0.095	0.048	0.035
121-14-2	2,4-Dinitrotoluene	0.048	U	0.095	0.048	0.044
606-20-2	2,6-Dinitrotoluene	0.048	U	0.095	0.048	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.048	U	0.095	0.048	0.047
19406-51-0	4-Amino-2,6-dinitrotoluene	0.048	U	0.095	0.048	0.030
2691-41-0	HMX	0.048	U	0.095	0.048	0.044
99-08-1	m-Nitrotoluene	0.048	U	0.095	0.048	0.041
98-95-3	Nitrobenzene	0.048	U	0.10	0.048	0.036
55-63-0	Nitroglycerin	0.048	U	0.095	0.048	0.028
88-72-2	o-Nitrotoluene	0.048	U	0.095	0.048	0.041
78-11-5	PETN	0.048	U	0.095	0.048	0.032
99-99-0	p-Nitrotoluene	0.048	U	0.095	0.048	0.047
121-82-4	RDX	0.048	U	0.11	0.048	0.041
479-45-8	Tetryl	0.048	U Q	0.095	0.048	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	104		68-140

Report Date: 15-Apr-2022 08:03:11 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14028.d
Lims ID: 280-160190-A-34-B
Client ID: 29SB171 (14.5-15)
Sample Type: Client
Inject. Date: 14-Apr-2022 15:12:36 ALS Bottle#: 25 Worklist Smp#: 28
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-34-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:06 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:31:48
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		144434	125.0	55.1	
33 DNX								
160.0	1.536	1.489	0.047	0.837	11076	-1.52	8.9	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		474436	125.0	279	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1082374	129.4	276	
$ 11 Nitrobenzene-d5								
128.0	3.324	3.324	0.0	0.778	504085	104.1	54.1	
17 2,6-Dinitrotoluene								
182.0	4.093	4.093	0.0	0.957	24557	-0.2318	11.9	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3546765	125.0	130	
19 2,4-Dinitrotoluene								
182.0	4.316	4.316	0.0	1.010	281224	8.42	107	

QC Flag Legend
Processing Flags

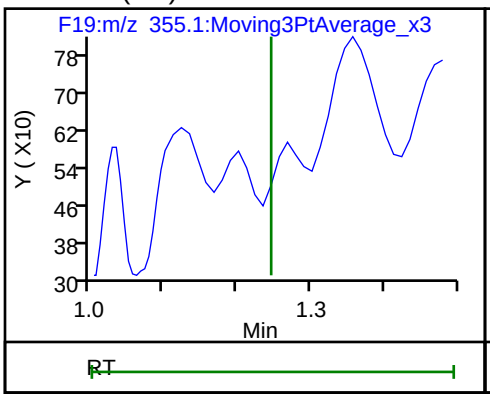
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:11 Chrom Revision: 2.3 12-Apr-2022 20:29:44

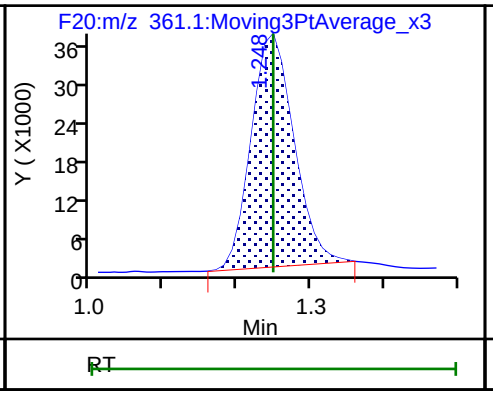
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14028.d
Injection Date: 14-Apr-2022 15:12:36 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-34-B Lab Sample ID: 280-160190-34
Client ID: 29SB171 (14.5-15)
Operator ID: acm ALS Bottle#: 25 Worklist Smp#: 28
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

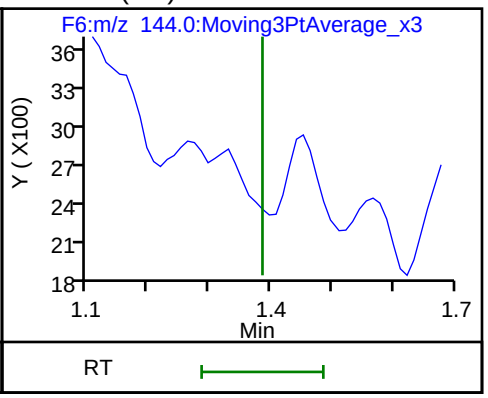
2 HMX (ND)



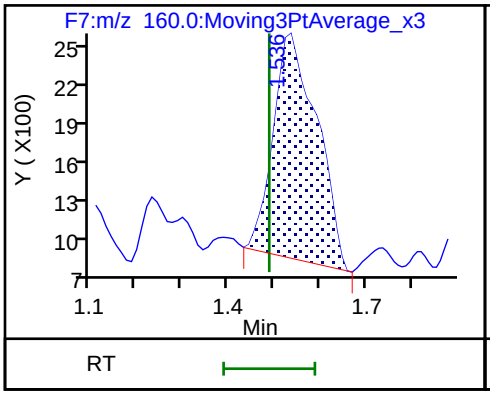
* 1 HMX-13C4



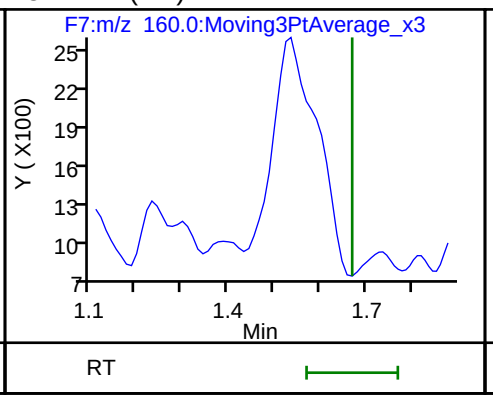
36 TNX (ND)



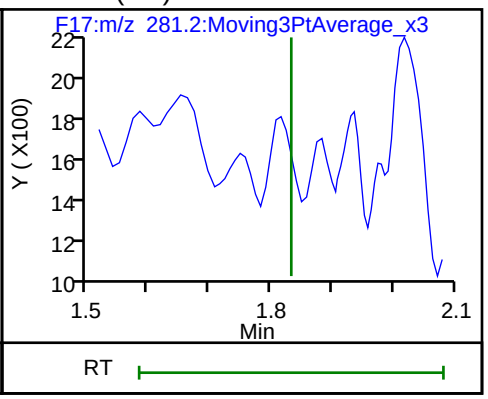
33 DNX



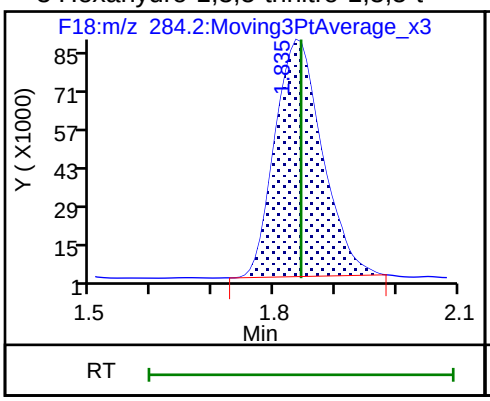
34 MNX (ND)



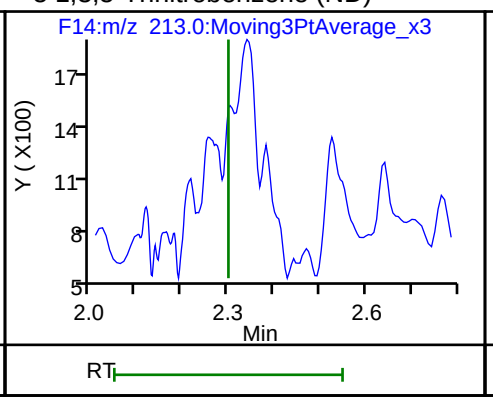
4 RDX (ND)



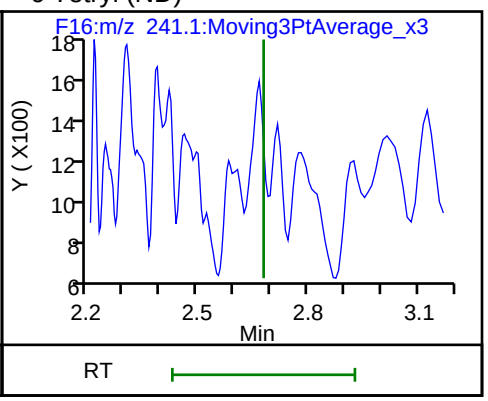
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



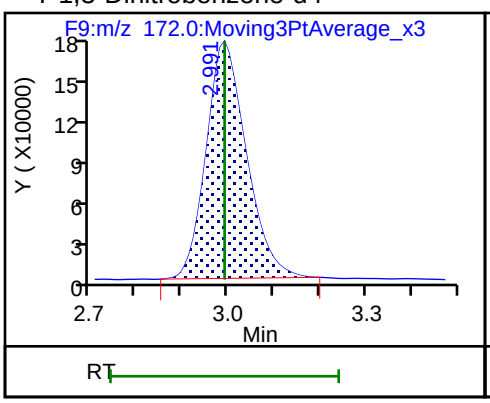
5 1,3,5-Trinitrobenzene (ND)



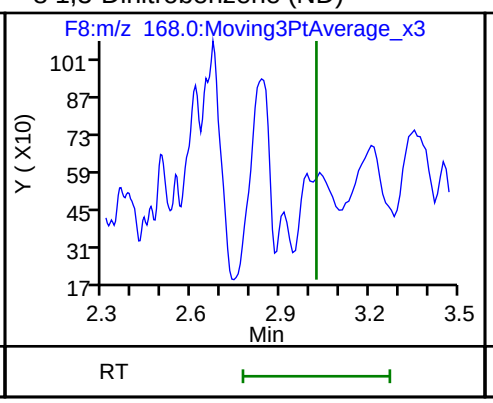
6 Tetryl (ND)



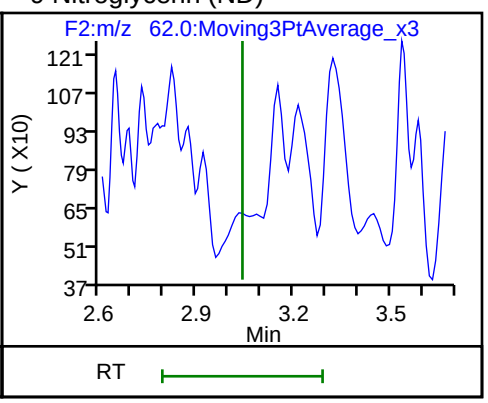
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

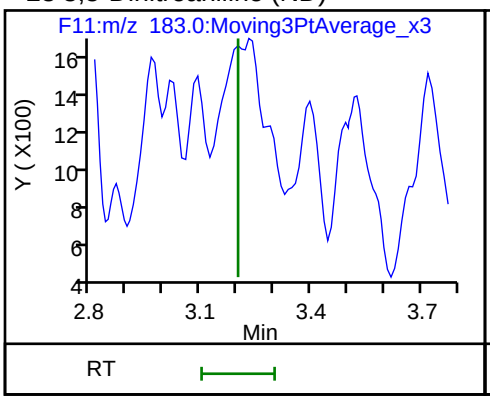


9 Nitroglycerin (ND)

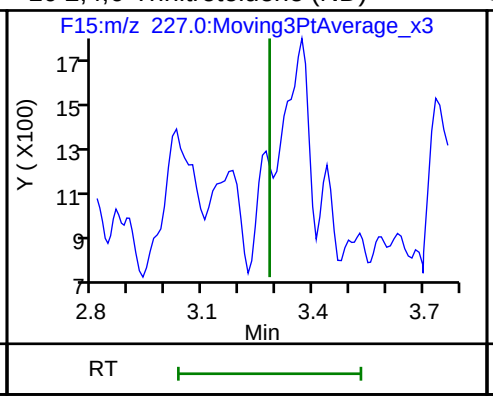


Report Date: 15-Apr-2022 08:03:11 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14028.d

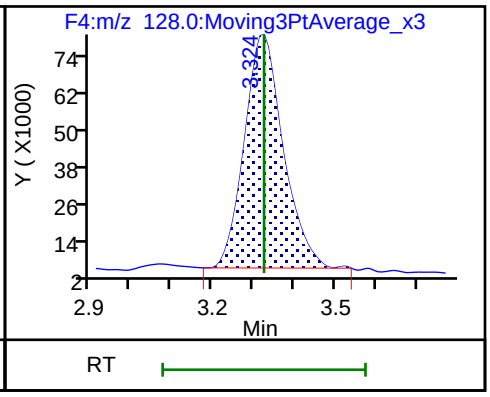
28 3,5-Dinitroaniline (ND)



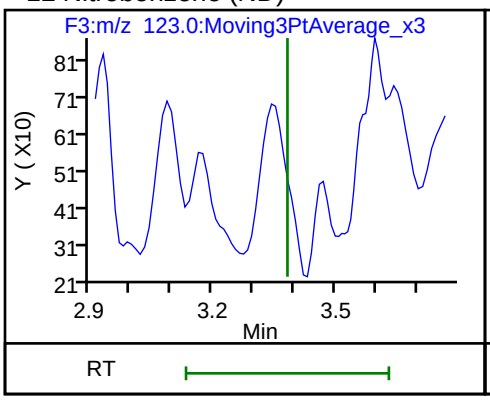
10 2,4,6-Trinitrotoluene (ND)



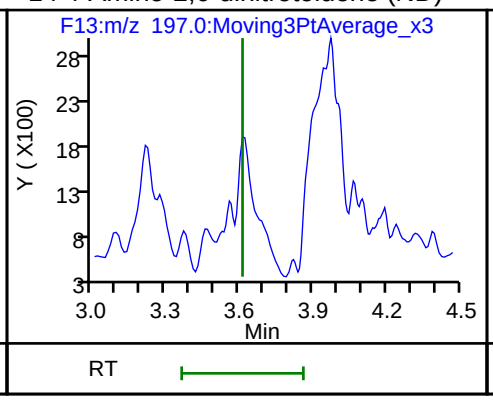
$ 11 Nitrobenzene-d5



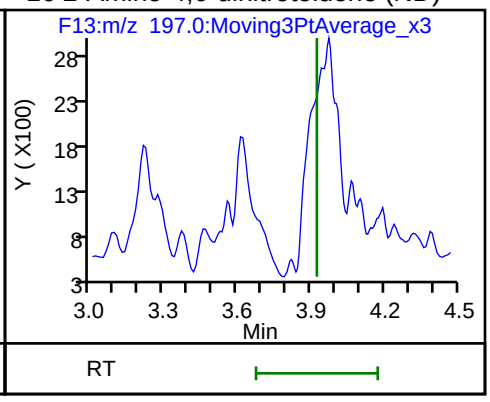
12 Nitrobenzene (ND)



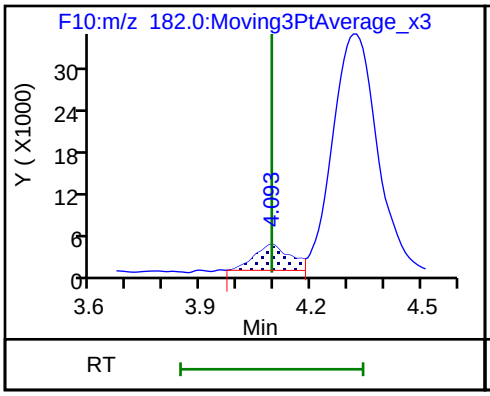
14 4-Amino-2,6-dinitrotoluene (ND)



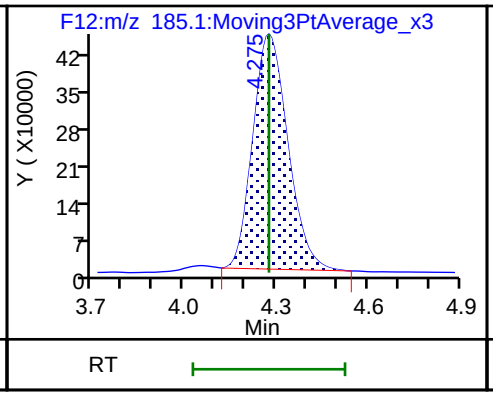
16 2-Amino-4,6-dinitrotoluene (ND)



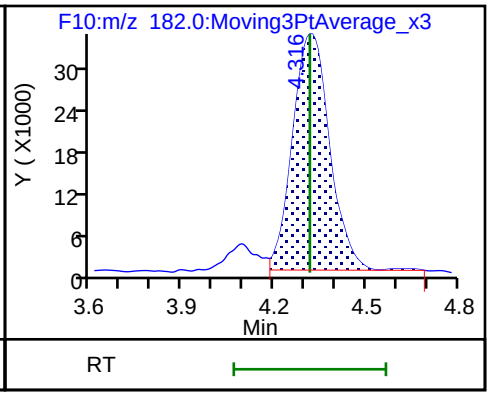
17 2,6-Dinitrotoluene



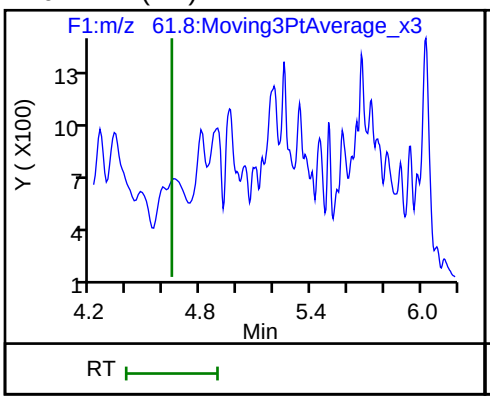
* 18 2,4-dinitrotoluene-d3



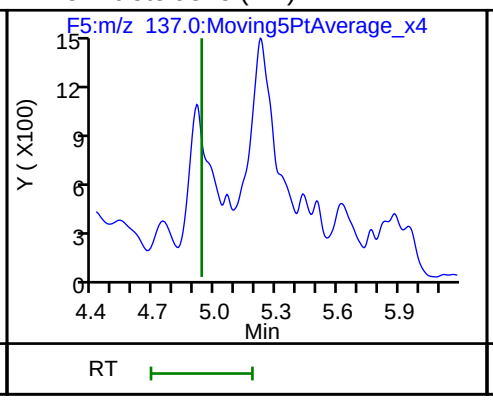
19 2,4-Dinitrotoluene



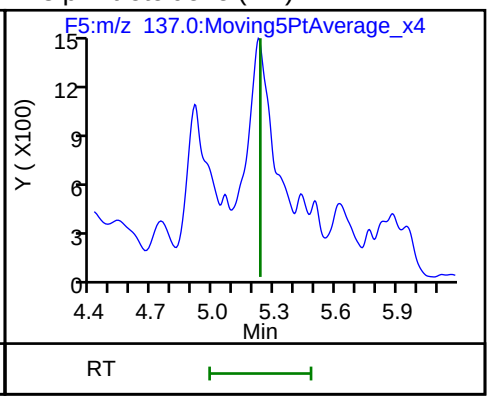
20 PETN (ND)



22 o-Nitrotoluene (ND)



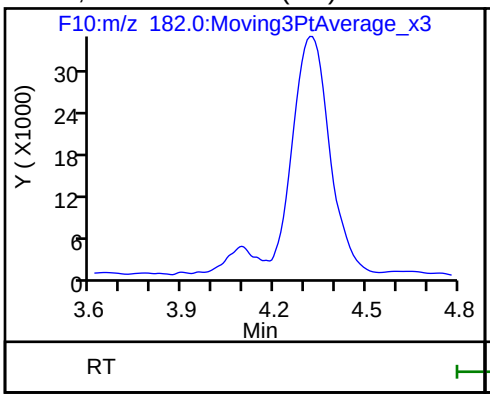
23 p-Nitrotoluene (ND)



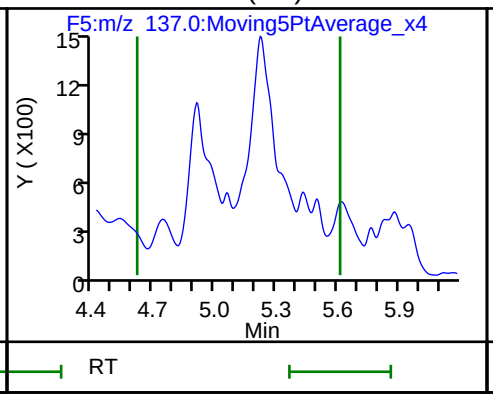
Report Date: 15-Apr-2022 08:03:11 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14028.d

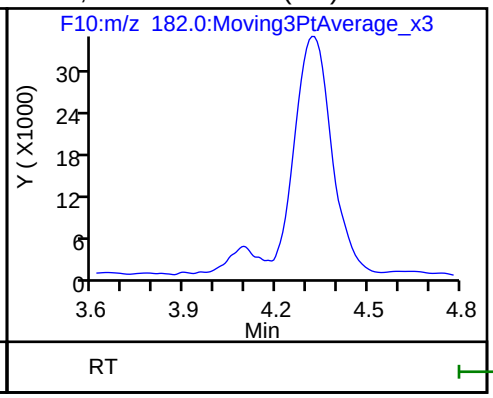
13 3,4-Dinitrotoluene (ND)



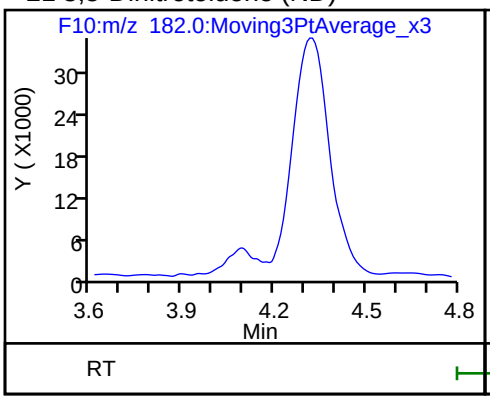
24 m-Nitrotoluene (ND)



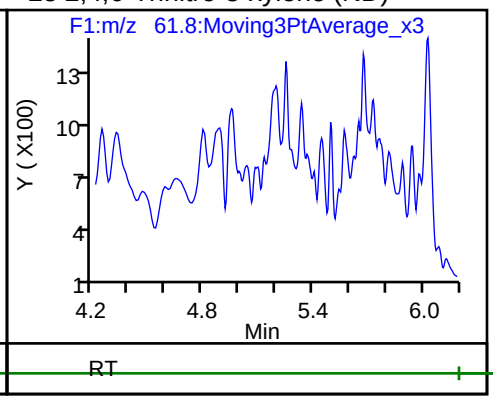
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:11 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14028.d
Lims ID: 280-160190-A-34-B
Client ID: 29SB171 (14.5-15)
Sample Type: Client
Inject. Date: 14-Apr-2022 15:12:36 ALS Bottle#: 25 Worklist Smp#: 28
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-34-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:06 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:31:48

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	104.1	103.72

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: DUP-08 | Lab Sample ID: 280-160190-35
Matrix: Solid | Lab File ID: ex722D14029.d
Analysis Method: 8321A | Date Collected: 03/24/2022 14:00
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:23
Sample wt/vol: 10.45(g) | Date Analyzed: 04/14/2022 15:19
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571896 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.048	U	0.096	0.048	0.043
99-65-0	1,3-Dinitrobenzene	0.048	U	0.096	0.048	0.043
118-96-7	2,4,6-Trinitrotoluene	0.048	U	0.096	0.048	0.035
121-14-2	2,4-Dinitrotoluene	0.048	U	0.096	0.048	0.045
606-20-2	2,6-Dinitrotoluene	0.048	U	0.096	0.048	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.048	U	0.096	0.048	0.047
19406-51-0	4-Amino-2,6-dinitrotoluene	0.048	U	0.096	0.048	0.030
2691-41-0	HMX	0.048	U	0.096	0.048	0.044
99-08-1	m-Nitrotoluene	0.048	U	0.096	0.048	0.041
98-95-3	Nitrobenzene	0.048	U M	0.11	0.048	0.036
55-63-0	Nitroglycerin	0.048	U	0.096	0.048	0.028
88-72-2	o-Nitrotoluene	0.048	U	0.096	0.048	0.041
78-11-5	PETN	0.048	U	0.096	0.048	0.033
99-99-0	p-Nitrotoluene	0.048	U	0.096	0.048	0.047
121-82-4	RDX	0.048	U	0.11	0.048	0.041
479-45-8	Tetryl	0.048	U Q	0.096	0.048	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	97		68-140

Report Date: 15-Apr-2022 08:03:11 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14029.d
Lims ID: 280-160190-A-35-B
Client ID: DUP-08
Sample Type: Client
Inject. Date: 14-Apr-2022 15:19:12 ALS Bottle#: 26 Worklist Smp#: 29
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-35-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:06 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:32:00
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		155806	125.0	48.4	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		509663	125.0	181	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1207458	129.4	439	
$ 11 Nitrobenzene-d5								
128.0	3.324	3.324	0.0	0.778	524864	97.0	51.0	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3698178	125.0	131	

QC Flag Legend
Processing Flags

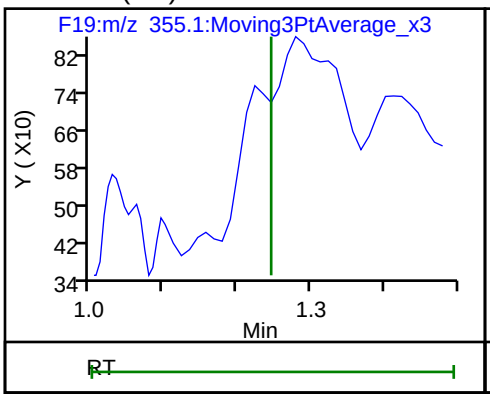
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:11 Chrom Revision: 2.3 12-Apr-2022 20:29:44

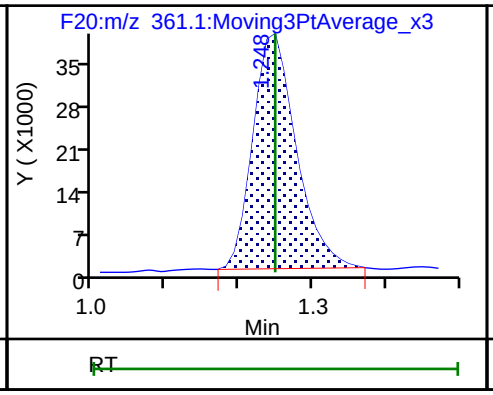
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14029.d
Injection Date: 14-Apr-2022 15:19:12 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-35-B Lab Sample ID: 280-160190-35
Client ID: DUP-08
Operator ID: acm ALS Bottle#: 26 Worklist Smp#: 29
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

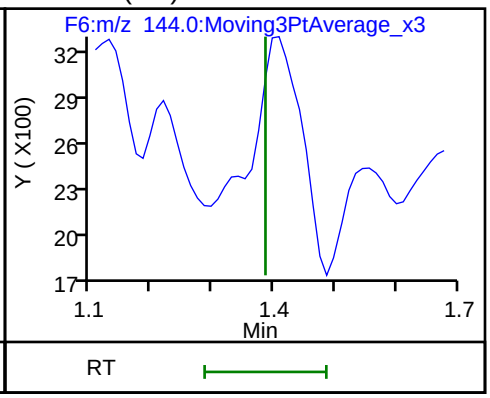
2 HMX (ND)



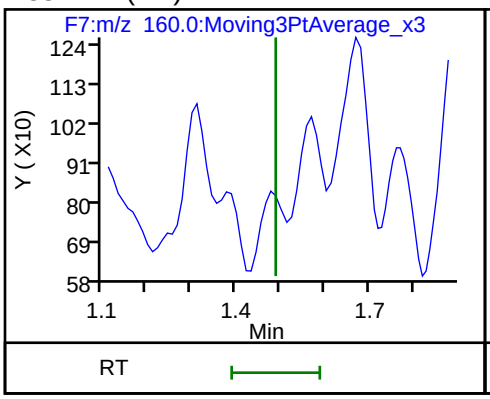
* 1 HMX-13C4



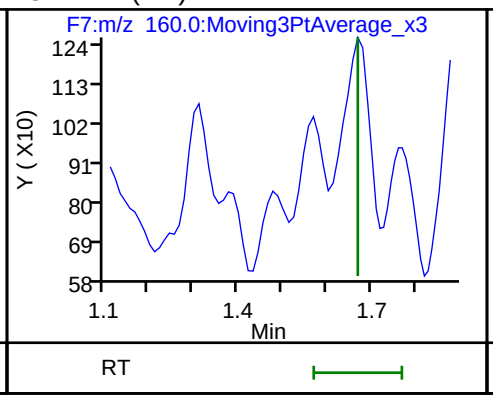
36 TNX (ND)



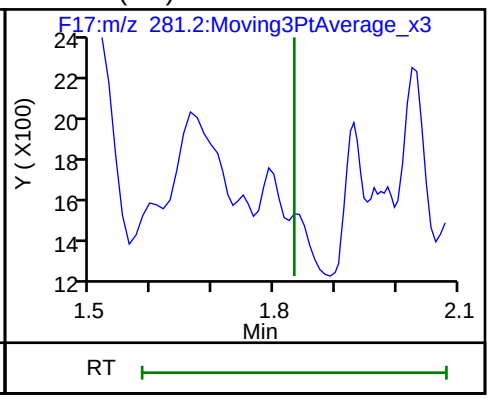
33 DNX (ND)



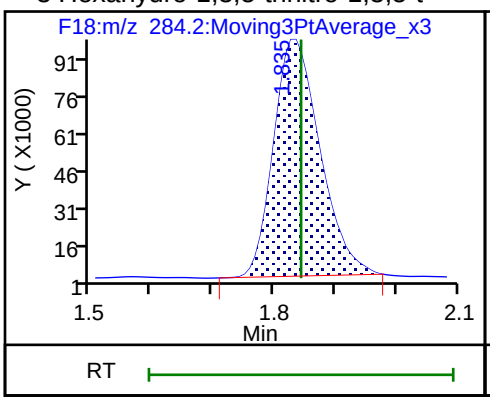
34 MNX (ND)



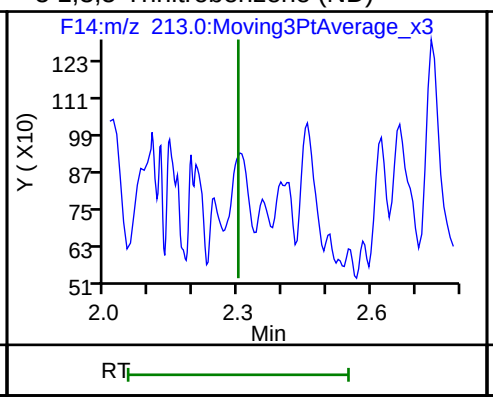
4 RDX (ND)



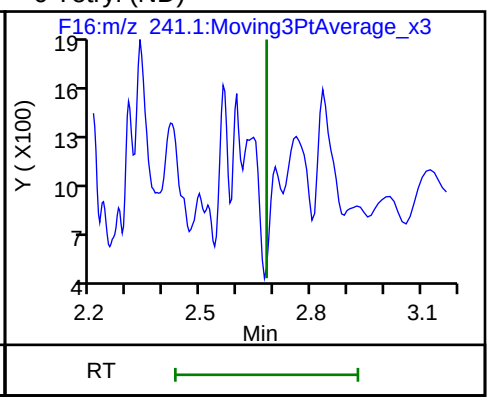
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



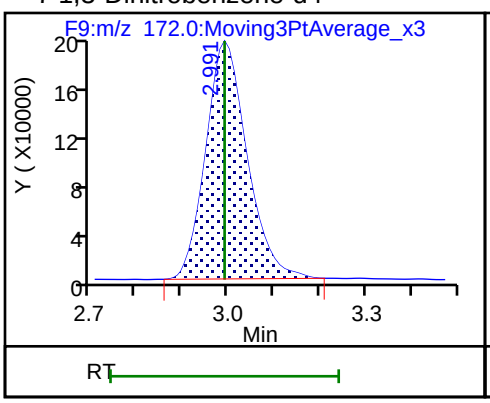
5 1,3,5-Trinitrobenzene (ND)



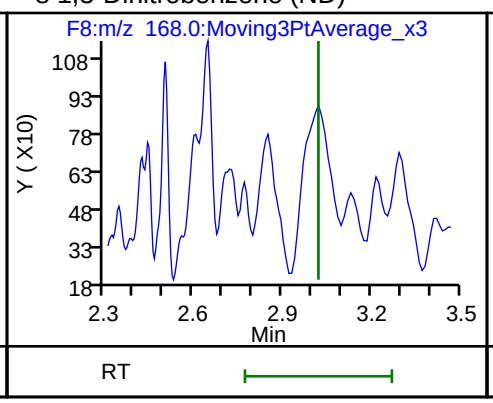
6 Tetryl (ND)



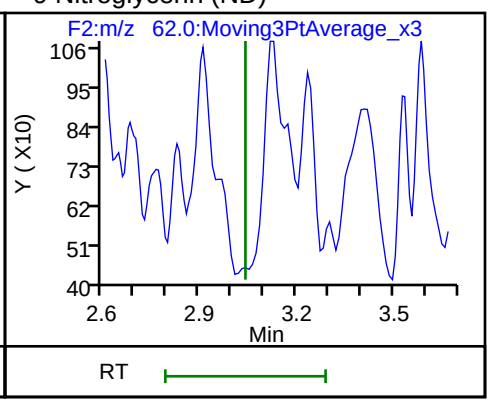
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

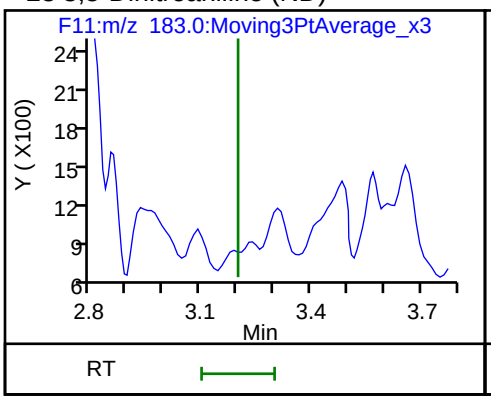


9 Nitroglycerin (ND)

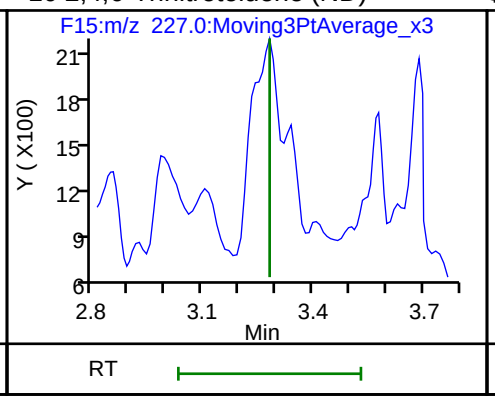


Report Date: 15-Apr-2022 08:03:11 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14029.d

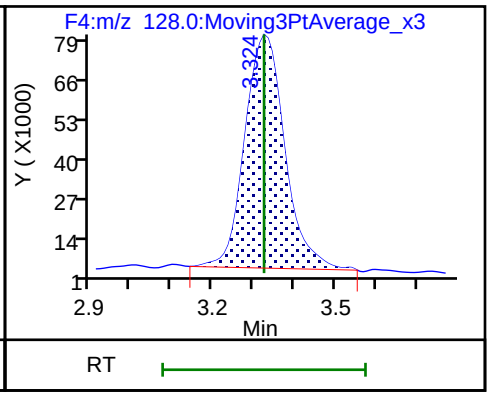
28 3,5-Dinitroaniline (ND)



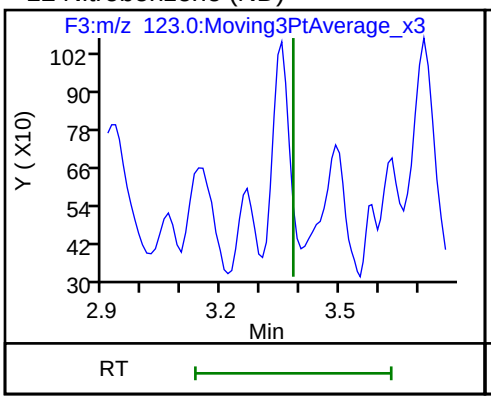
10 2,4,6-Trinitrotoluene (ND)



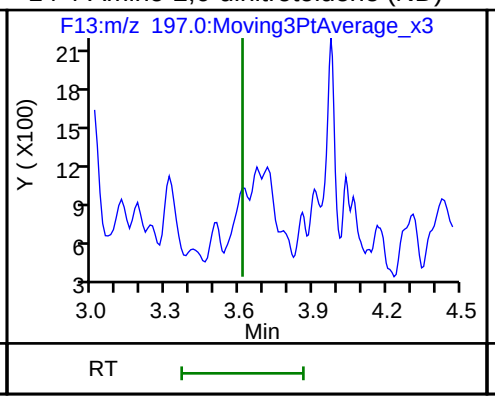
$ 11 Nitrobenzene-d5



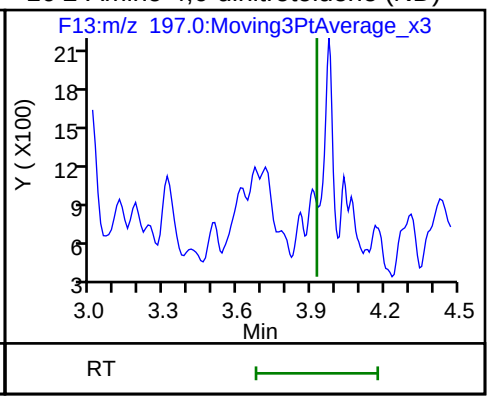
12 Nitrobenzene (ND)



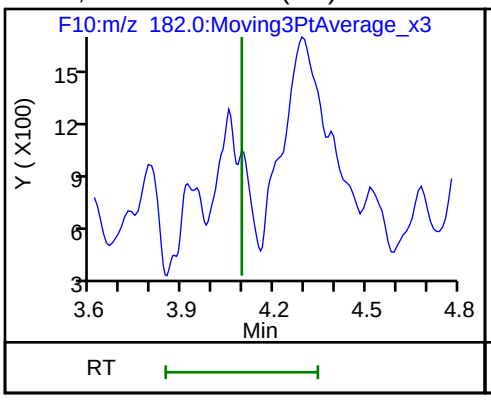
14 4-Amino-2,6-dinitrotoluene (ND)



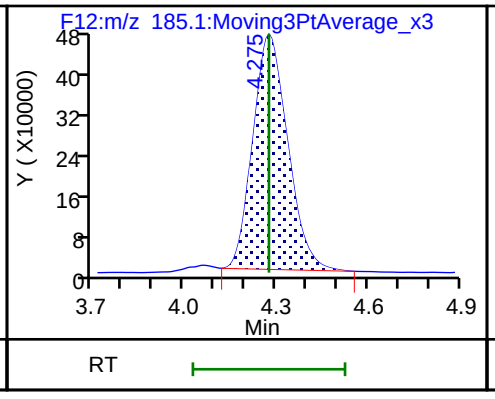
16 2-Amino-4,6-dinitrotoluene (ND)



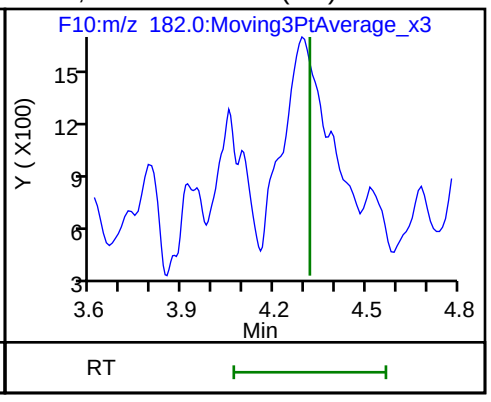
17 2,6-Dinitrotoluene (ND)



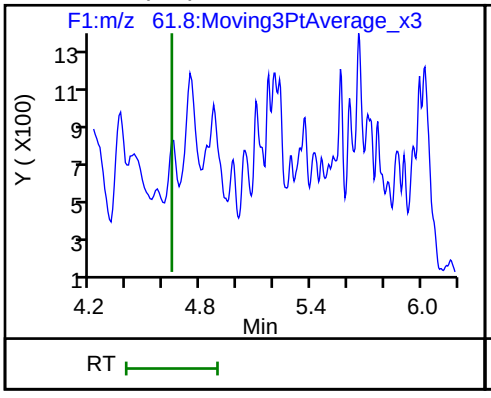
* 18 2,4-dinitrotoluene-d3



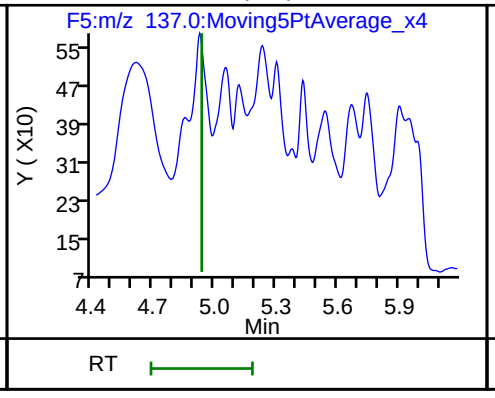
19 2,4-Dinitrotoluene (ND)



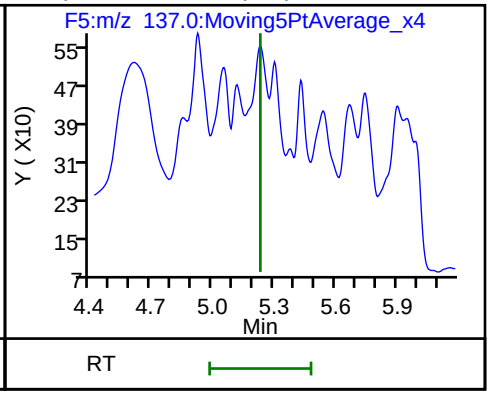
20 PETN (ND)



22 o-Nitrotoluene (ND)



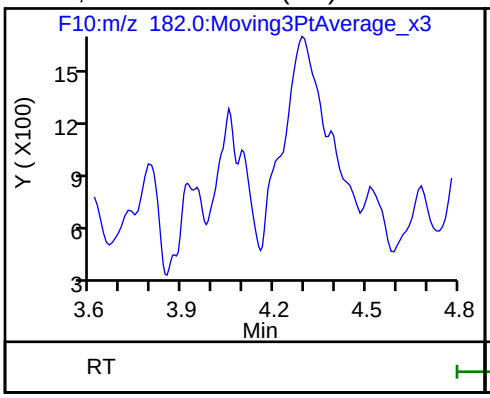
23 p-Nitrotoluene (ND)



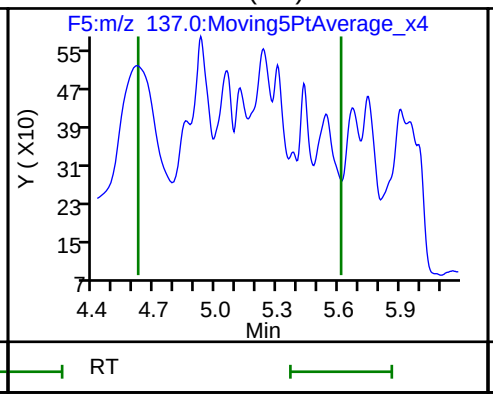
Report Date: 15-Apr-2022 08:03:11 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14029.d

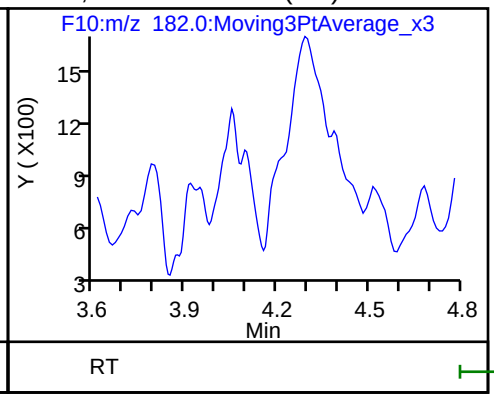
13 3,4-Dinitrotoluene (ND)



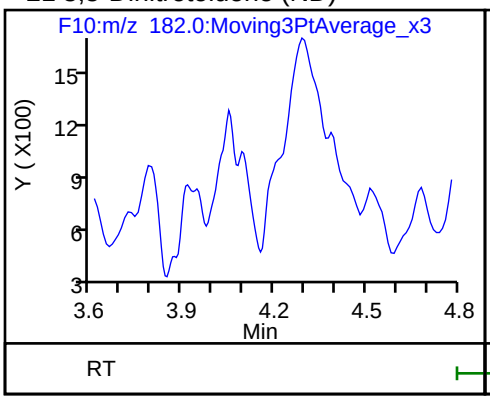
24 m-Nitrotoluene (ND)



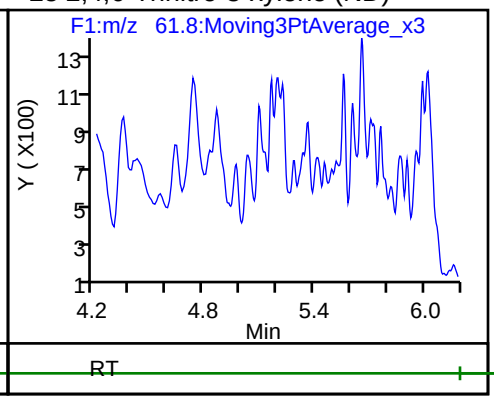
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:11 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14029.d				
Lims ID:	280-160190-A-35-B				
Client ID:	DUP-08				
Sample Type:	Client				
Inject. Date:	14-Apr-2022 15:19:12	ALS Bottle#:	26	Worklist Smp#:	29
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160190-A-35-B				
Misc. Info.:	ex722D14				
Operator ID:	acm	Instrument ID:	LC_LCMS7		
Method:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m				
Limit Group:	LC - 8321A Expl				
Last Update:	15-Apr-2022 08:03:06	Calib Date:	14-Apr-2022 13:07:22		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1652				

First Level Reviewer: meyera Date: 15-Apr-2022 07:32:00

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	97.0	96.68

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB174 (3-4) | Lab Sample ID: 280-160190-36
Matrix: Solid | Lab File ID: ex722D14030.d
Analysis Method: 8321A | Date Collected: 03/24/2022 13:10
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:23
Sample wt/vol: 10.7(g) | Date Analyzed: 04/14/2022 15:25
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571896 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.047	U	0.093	0.047	0.042
99-65-0	1,3-Dinitrobenzene	0.047	U	0.093	0.047	0.042
118-96-7	2,4,6-Trinitrotoluene	0.047	U	0.093	0.047	0.034
121-14-2	2,4-Dinitrotoluene	0.047	U	0.093	0.047	0.044
606-20-2	2,6-Dinitrotoluene	0.047	U	0.093	0.047	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.047	U M	0.093	0.047	0.046
19406-51-0	4-Amino-2,6-dinitrotoluene	0.047	U M	0.093	0.047	0.029
2691-41-0	HMX	0.047	U M	0.093	0.047	0.043
99-08-1	m-Nitrotoluene	0.047	U	0.093	0.047	0.040
98-95-3	Nitrobenzene	0.047	U	0.10	0.047	0.036
55-63-0	Nitroglycerin	0.047	U	0.093	0.047	0.027
88-72-2	o-Nitrotoluene	0.047	U	0.093	0.047	0.040
78-11-5	PETN	0.047	U	0.093	0.047	0.032
99-99-0	p-Nitrotoluene	0.047	U	0.093	0.047	0.046
121-82-4	RDX	0.047	U	0.11	0.047	0.040
479-45-8	Tetryl	0.047	U Q	0.093	0.047	0.036

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	100		68-140

Report Date: 15-Apr-2022 08:03:12 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14030.d
Lims ID: 280-160190-A-36-B
Client ID: 29SB174 (3-4)
Sample Type: Client
Inject. Date: 14-Apr-2022 15:25:49 ALS Bottle#: 27 Worklist Smp#: 30
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-36-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:06 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:32:14
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		156053	125.0	85.0	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		524572	125.0	199	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1194617	129.4	311	
$ 11 Nitrobenzene-d5								
128.0	3.324	3.324	0.0	0.778	536764	100.3	50.9	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3584542	125.0	129	

QC Flag Legend
Processing Flags

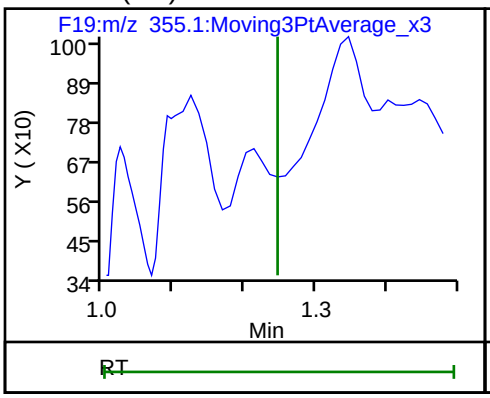
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:12 Chrom Revision: 2.3 12-Apr-2022 20:29:44

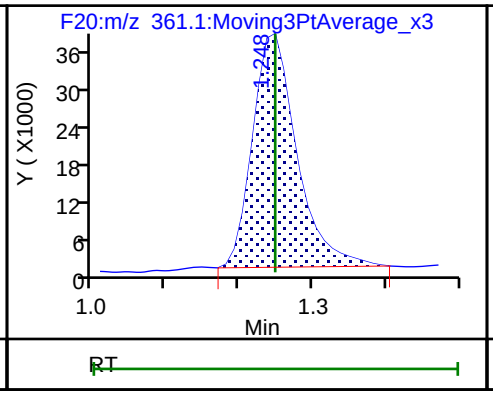
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14030.d
Injection Date: 14-Apr-2022 15:25:49 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-36-B Lab Sample ID: 280-160190-36
Client ID: 29SB174 (3-4)
Operator ID: acm ALS Bottle#: 27 Worklist Smp#: 30
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

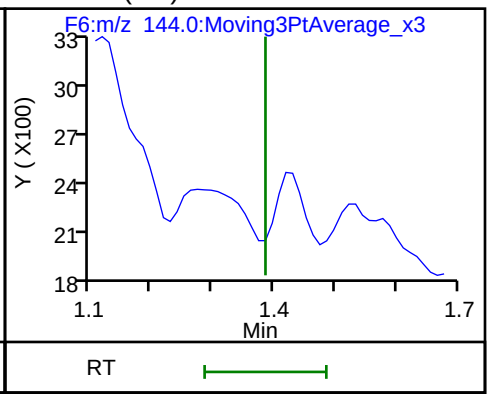
2 HMX (ND)



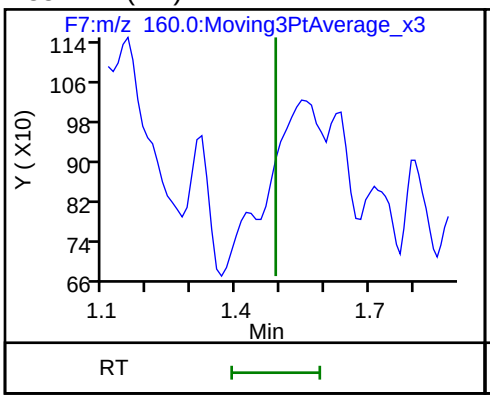
* 1 HMX-13C4



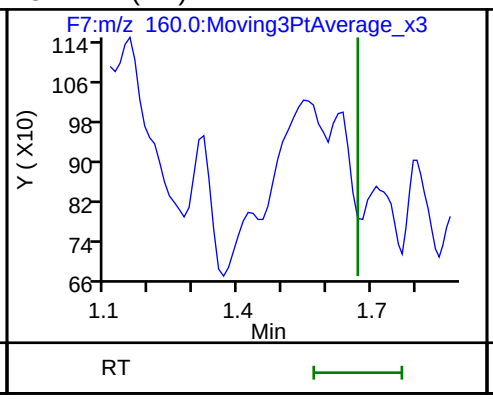
36 TNX (ND)



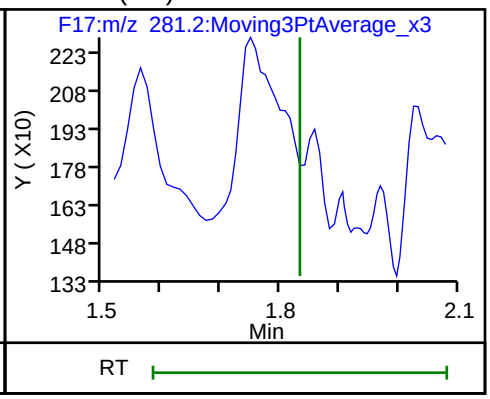
33 DNX (ND)



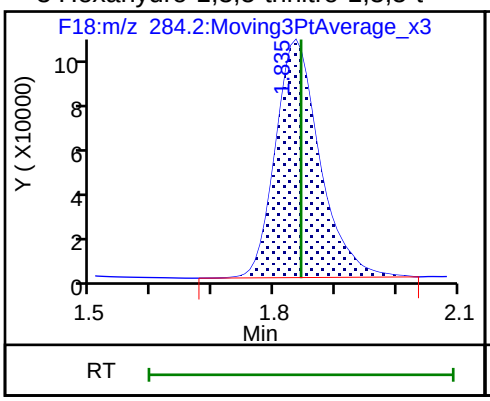
34 MNX (ND)



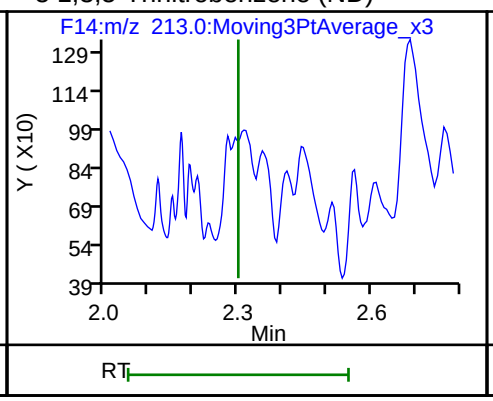
4 RDX (ND)



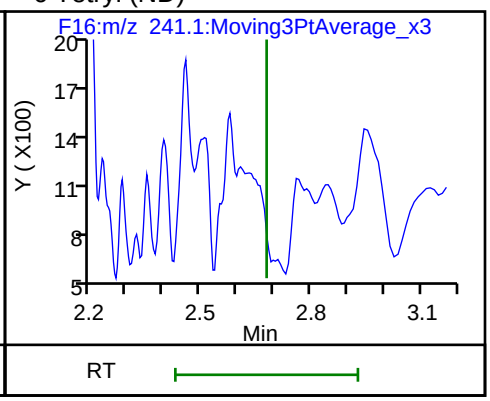
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



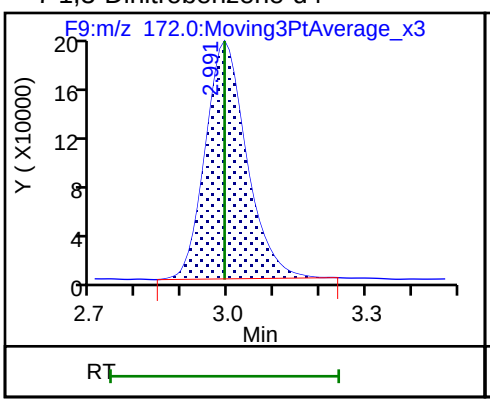
5 1,3,5-Trinitrobenzene (ND)



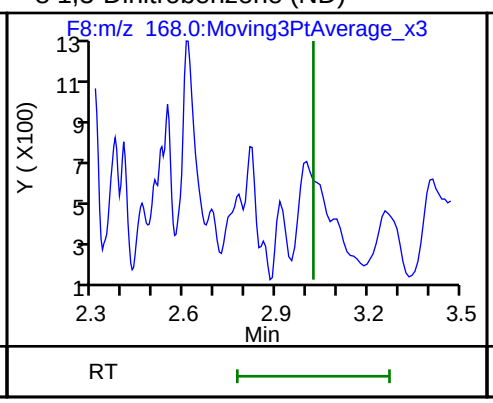
6 Tetryl (ND)



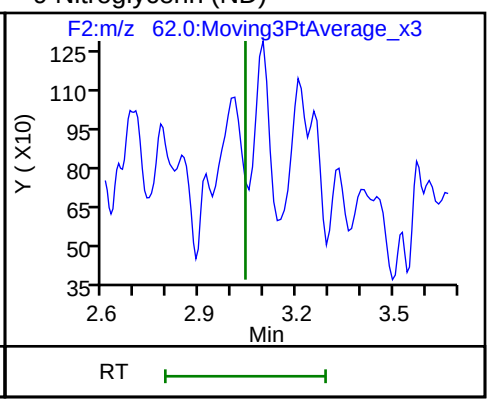
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

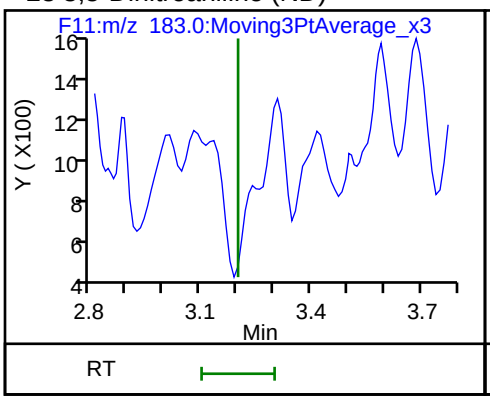


9 Nitroglycerin (ND)

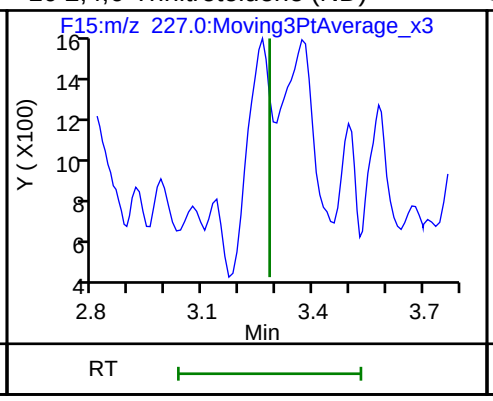


Report Date: 15-Apr-2022 08:03:12 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14030.d

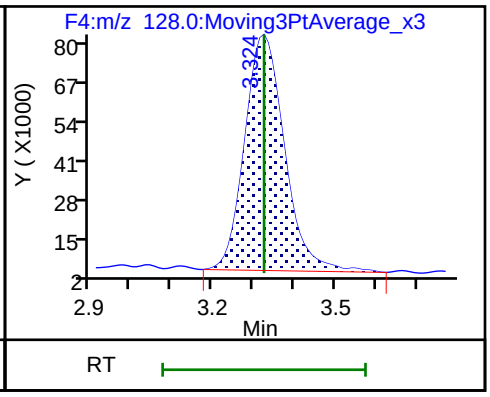
28 3,5-Dinitroaniline (ND)



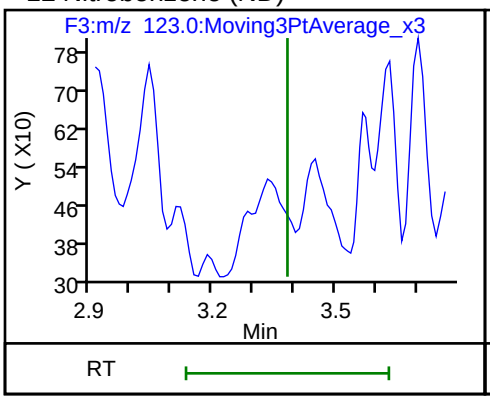
10 2,4,6-Trinitrotoluene (ND)



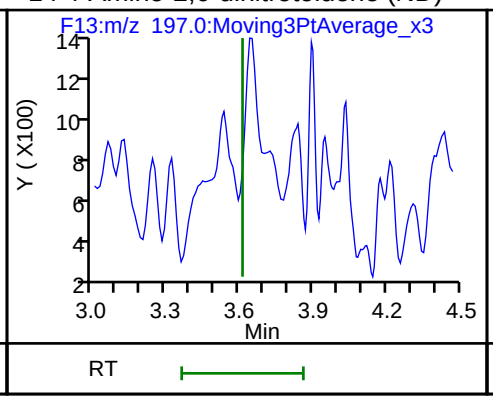
$ 11 Nitrobenzene-d5



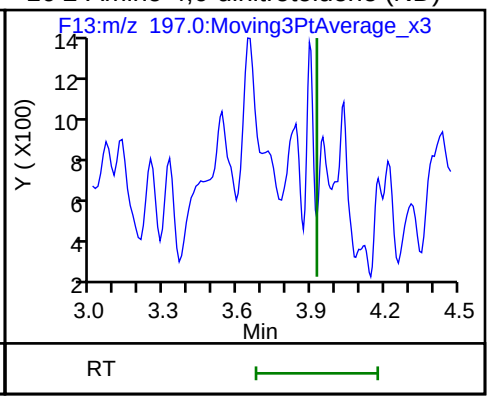
12 Nitrobenzene (ND)



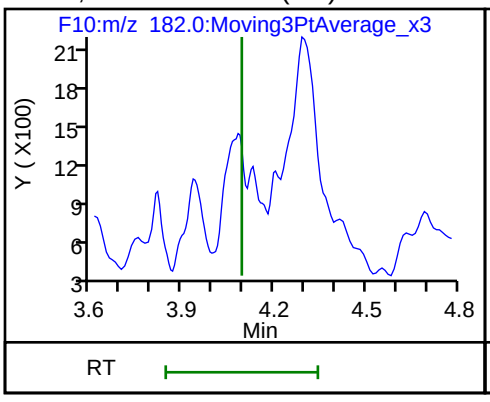
14 4-Amino-2,6-dinitrotoluene (ND)



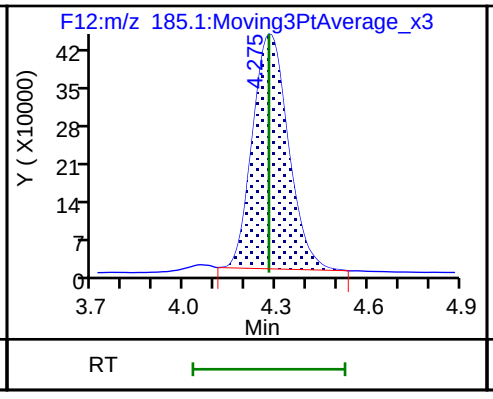
16 2-Amino-4,6-dinitrotoluene (ND)



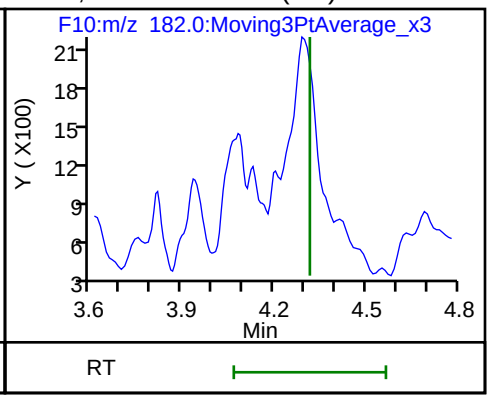
17 2,6-Dinitrotoluene (ND)



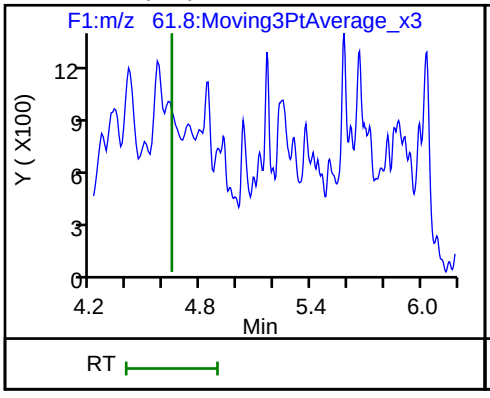
* 18 2,4-dinitrotoluene-d3



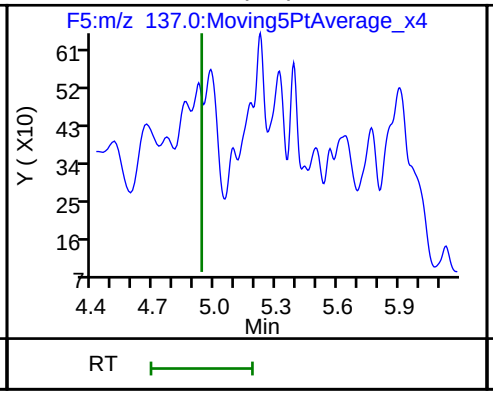
19 2,4-Dinitrotoluene (ND)



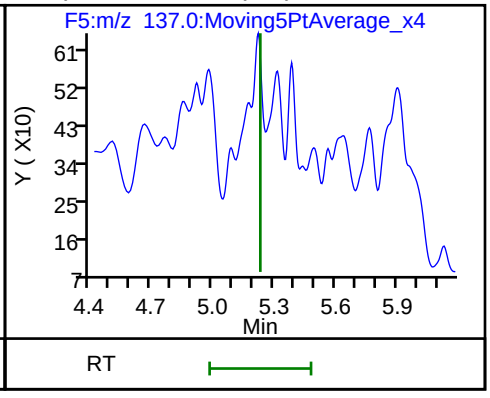
20 PETN (ND)



22 o-Nitrotoluene (ND)

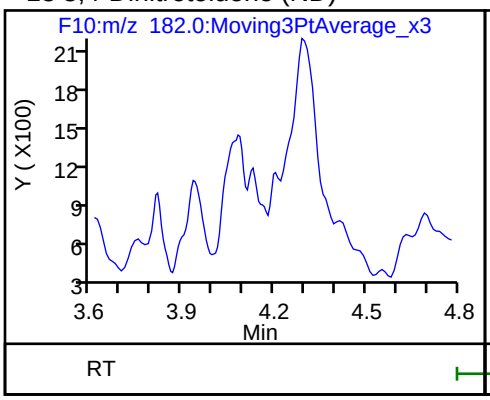


23 p-Nitrotoluene (ND)

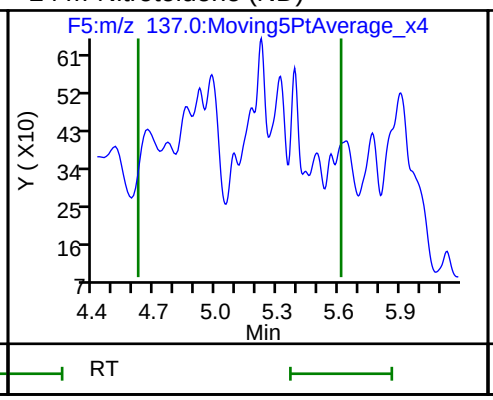


Report Date: 15-Apr-2022 08:03:12 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14030.d

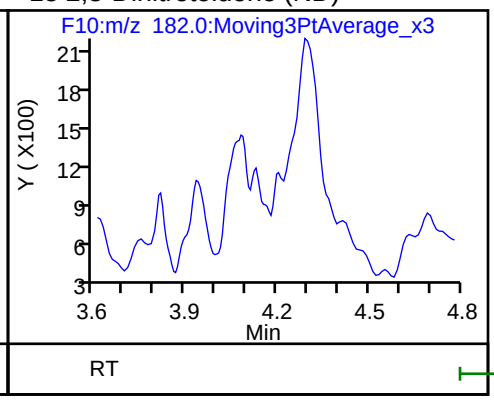
13 3,4-Dinitrotoluene (ND)



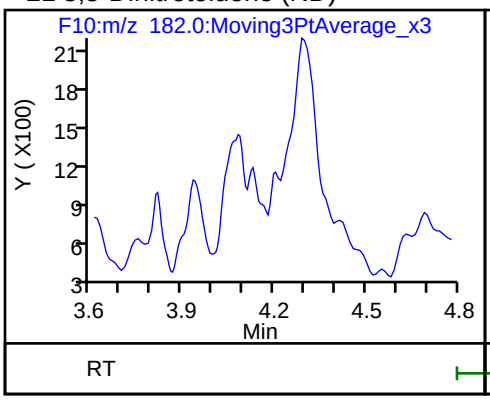
24 m-Nitrotoluene (ND)



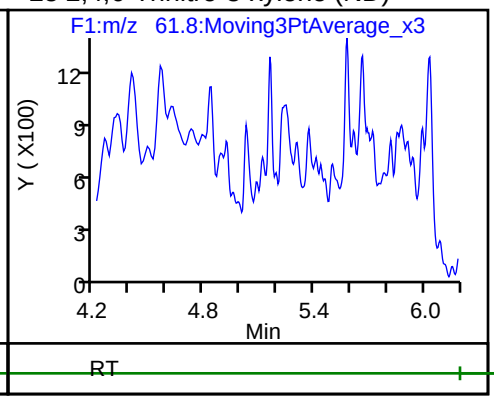
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:12 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14030.d				
Lims ID:	280-160190-A-36-B				
Client ID:	29SB174 (3-4)				
Sample Type:	Client				
Inject. Date:	14-Apr-2022 15:25:49	ALS Bottle#:	27	Worklist Smp#:	30
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160190-A-36-B				
Misc. Info.:	ex722D14				
Operator ID:	acm	Instrument ID:	LC_LCMS7		
Method:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m				
Limit Group:	LC - 8321A Expl				
Last Update:	15-Apr-2022 08:03:06	Calib Date:	14-Apr-2022 13:07:22		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1652				
First Level Reviewer: meyera		Date:	15-Apr-2022 07:32:14		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	100.3	100.00

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB174 (6-7) | Lab Sample ID: 280-160190-37
Matrix: Solid | Lab File ID: ex722D14031.d
Analysis Method: 8321A | Date Collected: 03/24/2022 13:11
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:23
Sample wt/vol: 10.37(g) | Date Analyzed: 04/14/2022 15:32
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571896 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.048	U	0.096	0.048	0.043
99-65-0	1,3-Dinitrobenzene	0.048	U	0.096	0.048	0.043
118-96-7	2,4,6-Trinitrotoluene	0.048	U	0.096	0.048	0.035
121-14-2	2,4-Dinitrotoluene	0.048	U	0.096	0.048	0.045
606-20-2	2,6-Dinitrotoluene	0.048	U	0.096	0.048	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.048	U	0.096	0.048	0.048
19406-51-0	4-Amino-2,6-dinitrotoluene	0.048	U	0.096	0.048	0.030
2691-41-0	HMX	0.048	U	0.096	0.048	0.044
99-08-1	m-Nitrotoluene	0.048	U	0.096	0.048	0.042
98-95-3	Nitrobenzene	0.048	U	0.11	0.048	0.037
55-63-0	Nitroglycerin	0.048	U	0.096	0.048	0.028
88-72-2	o-Nitrotoluene	0.048	U	0.096	0.048	0.041
78-11-5	PETN	0.048	U	0.096	0.048	0.033
99-99-0	p-Nitrotoluene	0.048	U	0.096	0.048	0.048
121-82-4	RDX	0.048	U	0.12	0.048	0.042
479-45-8	Tetryl	0.048	U Q	0.096	0.048	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	97		68-140

Report Date: 15-Apr-2022 08:03:12 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14031.d
Lims ID: 280-160190-A-37-B
Client ID: 29SB174 (6-7)
Sample Type: Client
Inject. Date: 14-Apr-2022 15:32:25 ALS Bottle#: 28 Worklist Smp#: 31
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-37-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:06 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:32:22
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		154168	125.0	139	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		473695	125.0	175	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1185597	129.4	489	
$ 11 Nitrobenzene-d5								
128.0	3.324	3.324	0.0	0.778	518364	97.6	99.5	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3566335	125.0	140	

QC Flag Legend
Processing Flags

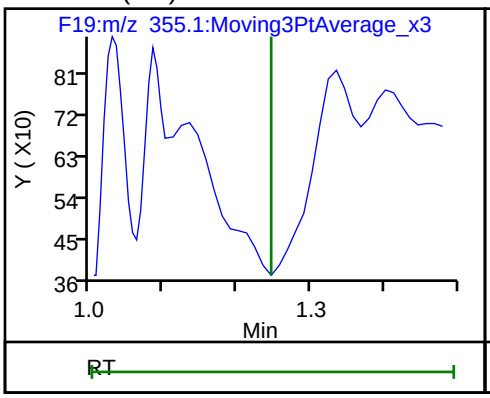
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:12 Chrom Revision: 2.3 12-Apr-2022 20:29:44

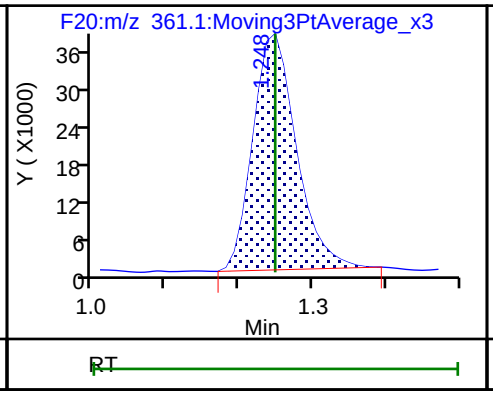
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14031.d
Injection Date: 14-Apr-2022 15:32:25 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-37-B Lab Sample ID: 280-160190-37
Client ID: 29SB174 (6-7)
Operator ID: acm ALS Bottle#: 28 Worklist Smp#: 31
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

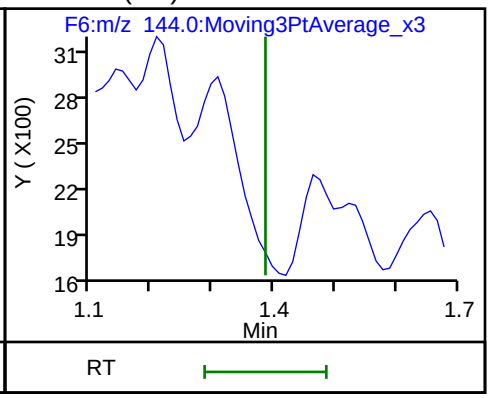
2 HMX (ND)



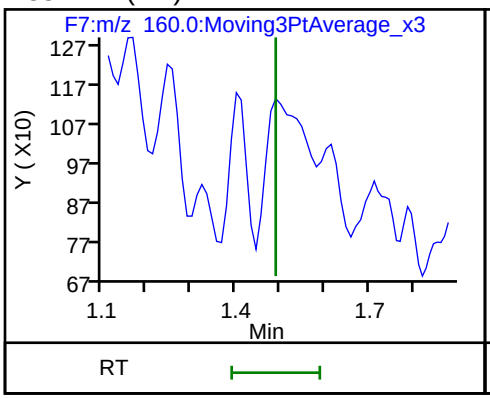
* 1 HMX-13C4



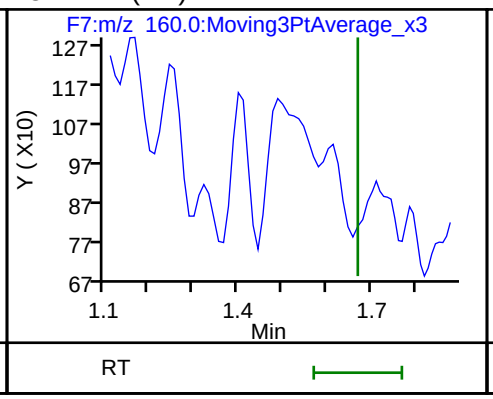
36 TNX (ND)



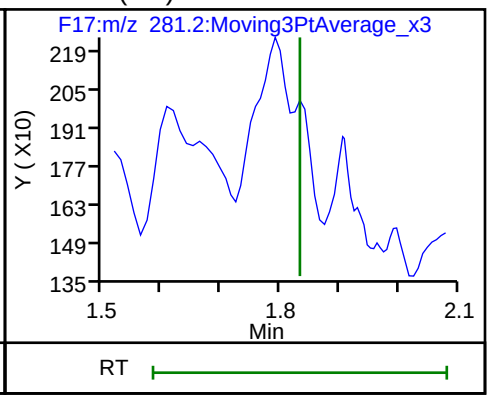
33 DNX (ND)



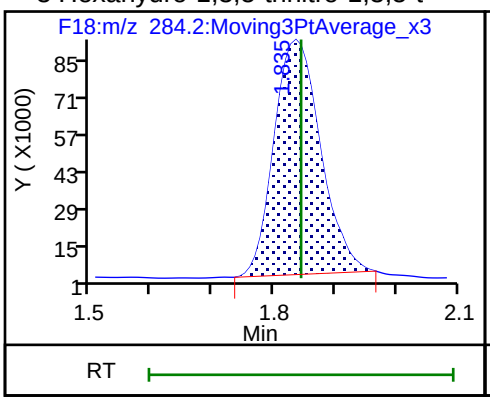
34 MNX (ND)



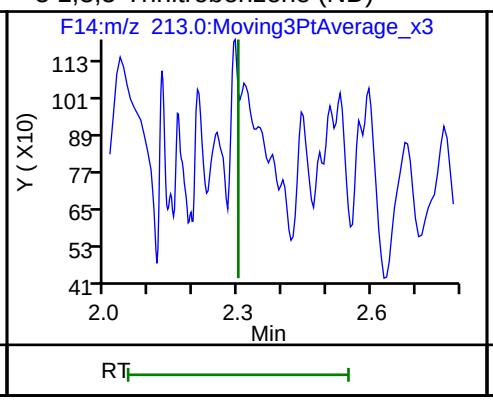
4 RDX (ND)



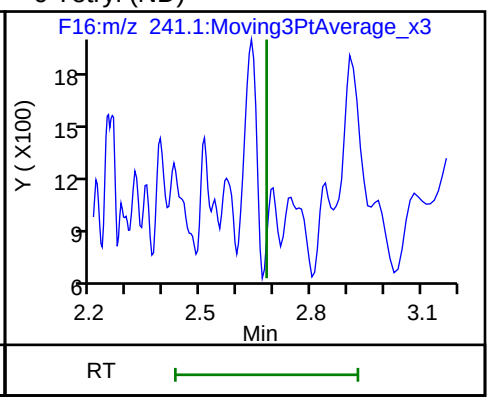
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



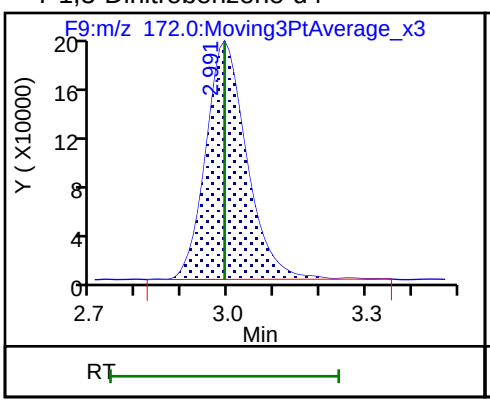
5 1,3,5-Trinitrobenzene (ND)



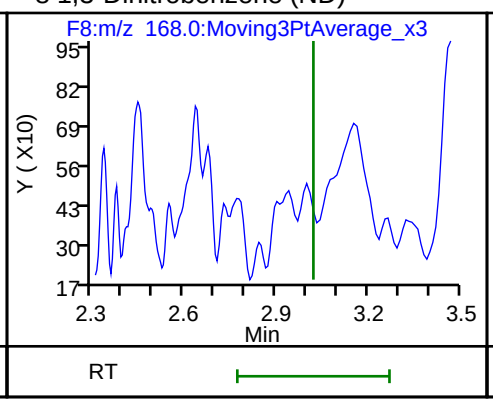
6 Tetryl (ND)



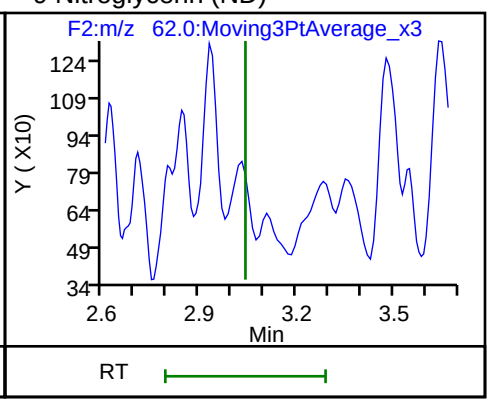
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

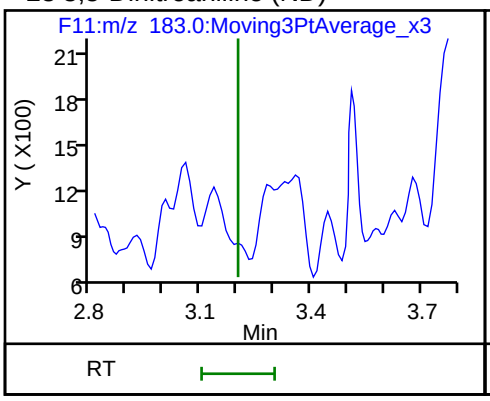


9 Nitroglycerin (ND)

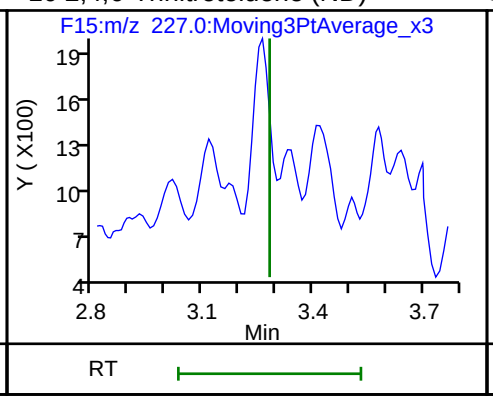


Report Date: 15-Apr-2022 08:03:13
Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14031.d

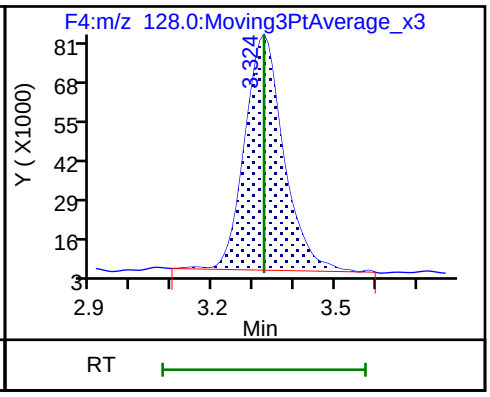
28 3,5-Dinitroaniline (ND)



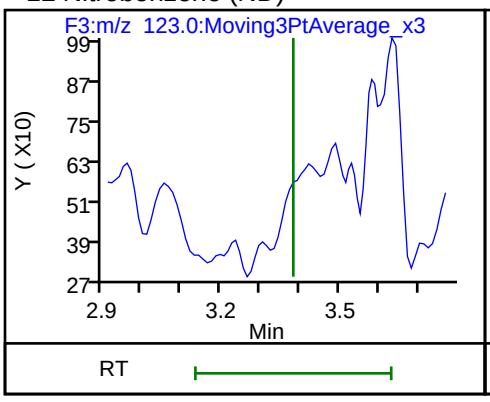
10 2,4,6-Trinitrotoluene (ND)



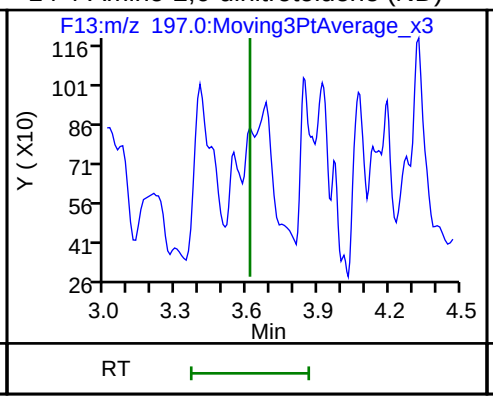
$ 11 Nitrobenzene-d5



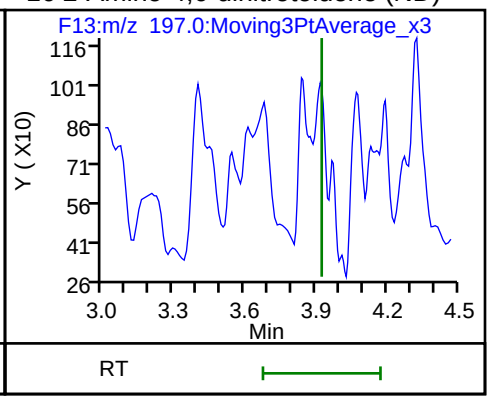
12 Nitrobenzene (ND)



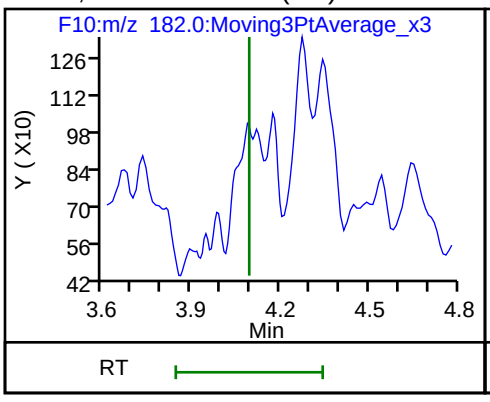
14 4-Amino-2,6-dinitrotoluene (ND)



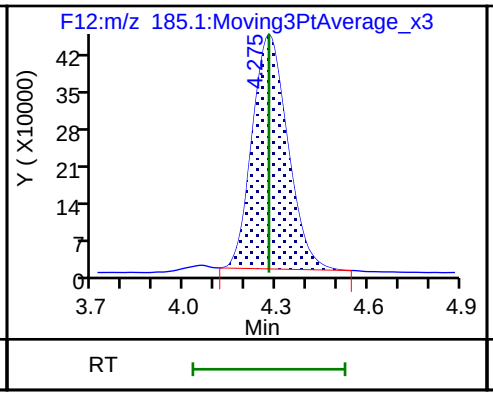
16 2-Amino-4,6-dinitrotoluene (ND)



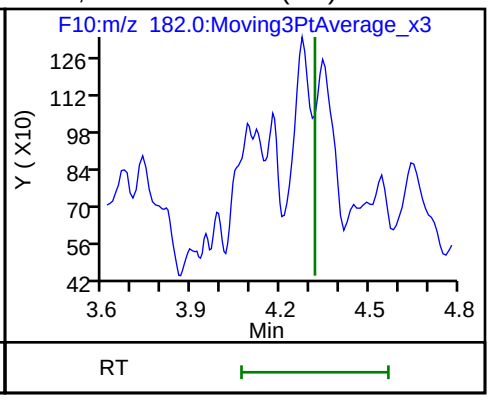
17 2,6-Dinitrotoluene (ND)



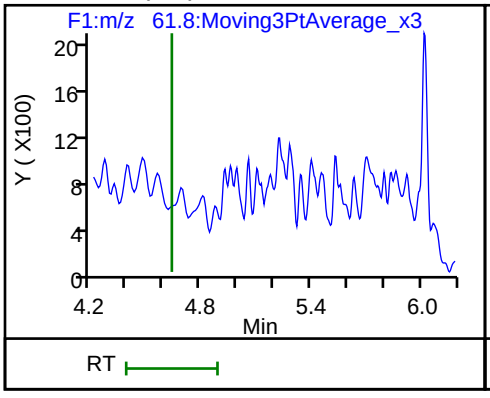
* 18 2,4-dinitrotoluene-d3



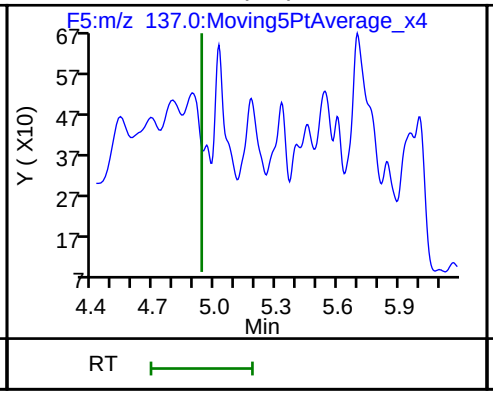
19 2,4-Dinitrotoluene (ND)



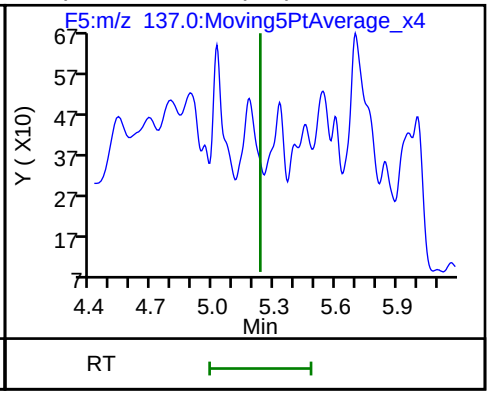
20 PETN (ND)



22 o-Nitrotoluene (ND)

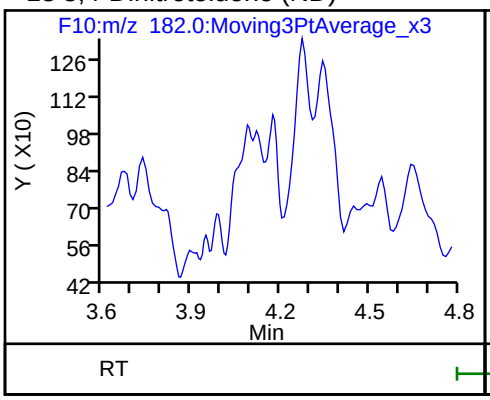


23 p-Nitrotoluene (ND)

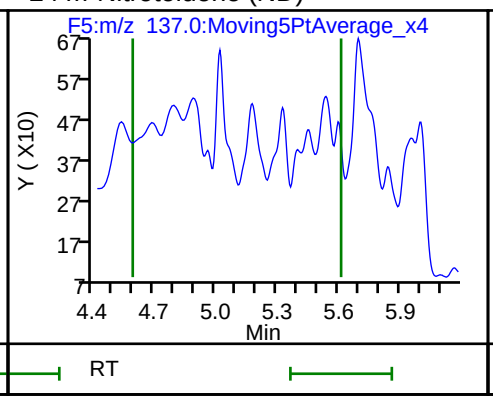


Report Date: 15-Apr-2022 08:03:13 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14031.d

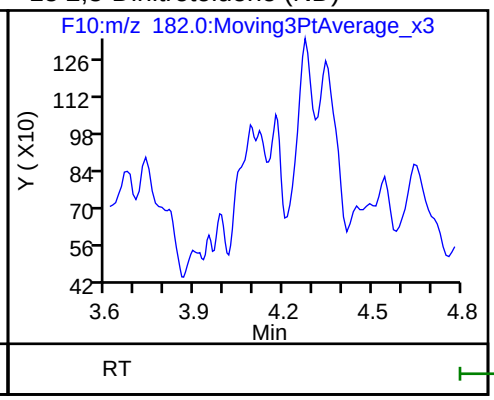
13 3,4-Dinitrotoluene (ND)



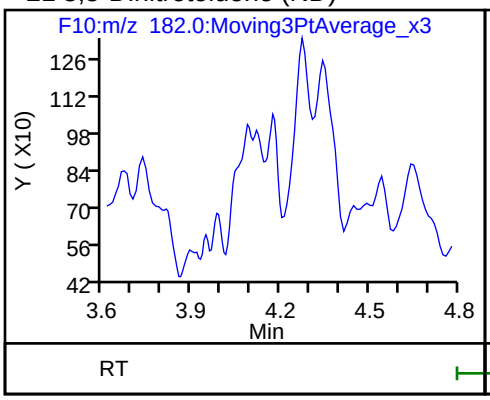
24 m-Nitrotoluene (ND)



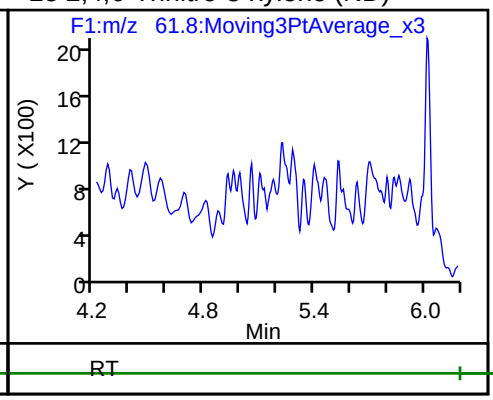
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:12 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14031.d				
Lims ID:	280-160190-A-37-B				
Client ID:	29SB174 (6-7)				
Sample Type:	Client				
Inject. Date:	14-Apr-2022 15:32:25	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160190-A-37-B				
Misc. Info.:	ex722D14				
Operator ID:	acm	Instrument ID:	LC_LCMS7		
Method:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m				
Limit Group:	LC - 8321A Expl				
Last Update:	15-Apr-2022 08:03:06	Calib Date:	14-Apr-2022 13:07:22		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1652				
First Level Reviewer: meyera		Date:	15-Apr-2022 07:32:22		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	97.6	97.26

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB174 (11-12) | Lab Sample ID: 280-160190-38
Matrix: Solid | Lab File ID: ex722D14033.d
Analysis Method: 8321A | Date Collected: 03/24/2022 13:12
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:23
Sample wt/vol: 10.23(g) | Date Analyzed: 04/14/2022 15:45
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571896 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.049	U	0.098	0.049	0.044
99-65-0	1,3-Dinitrobenzene	0.049	U	0.098	0.049	0.044
118-96-7	2,4,6-Trinitrotoluene	0.049	U	0.098	0.049	0.036
121-14-2	2,4-Dinitrotoluene	0.049	U	0.098	0.049	0.046
606-20-2	2,6-Dinitrotoluene	0.049	U	0.098	0.049	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.049	U	0.098	0.049	0.048
19406-51-0	4-Amino-2,6-dinitrotoluene	0.049	U	0.098	0.049	0.030
2691-41-0	HMX	0.049	U M	0.098	0.049	0.045
99-08-1	m-Nitrotoluene	0.049	U	0.098	0.049	0.042
98-95-3	Nitrobenzene	0.049	U	0.11	0.049	0.037
55-63-0	Nitroglycerin	0.049	U	0.098	0.049	0.028
88-72-2	o-Nitrotoluene	0.049	U	0.098	0.049	0.042
78-11-5	PETN	0.049	U	0.098	0.049	0.033
99-99-0	p-Nitrotoluene	0.049	U	0.098	0.049	0.048
121-82-4	RDX	0.049	U	0.12	0.049	0.042
479-45-8	Tetryl	0.049	U Q	0.098	0.049	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	93		68-140

Report Date: 15-Apr-2022 08:03:14 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14033.d
Lims ID: 280-160190-A-38-B
Client ID: 29SB174 (11-12)
Sample Type: Client
Inject. Date: 14-Apr-2022 15:45:37 ALS Bottle#: 29 Worklist Smp#: 33
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-38-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:13 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:32:52
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		163926	125.0	133	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		518441	125.0	146	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1194186	129.4	345	
$ 11 Nitrobenzene-d5								
128.0	3.324	3.324	0.0	0.778	500774	93.5	78.6	
17 2,6-Dinitrotoluene								M
182.0	4.117	4.093	0.024	0.963	3366	-0.6057	3.3	M
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3601265	125.0	132	
19 2,4-Dinitrotoluene								M
182.0	4.290	4.316	-0.026	1.003	7579	-0.7559	5.3	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

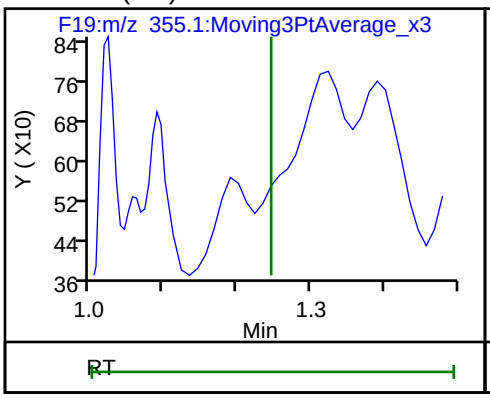
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:14 Chrom Revision: 2.3 12-Apr-2022 20:29:44

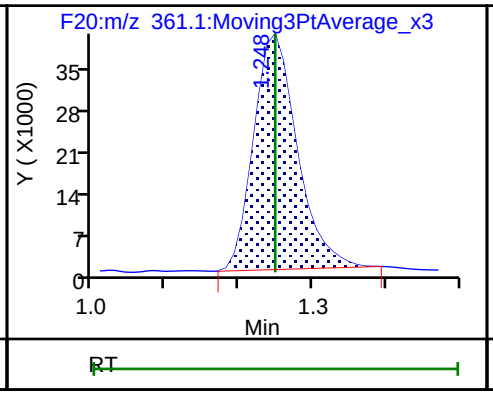
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14033.d
Injection Date: 14-Apr-2022 15:45:37 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-38-B Lab Sample ID: 280-160190-38
Client ID: 29SB174 (11-12)
Operator ID: acm ALS Bottle#: 29 Worklist Smp#: 33
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

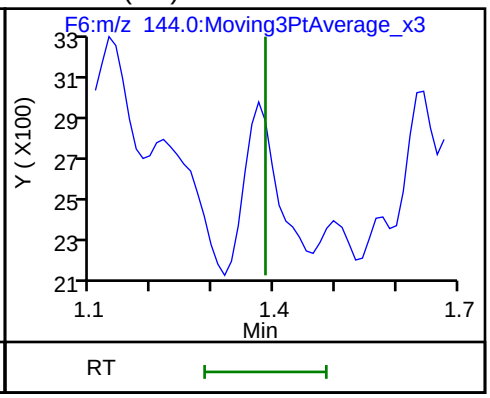
2 HMX (ND)



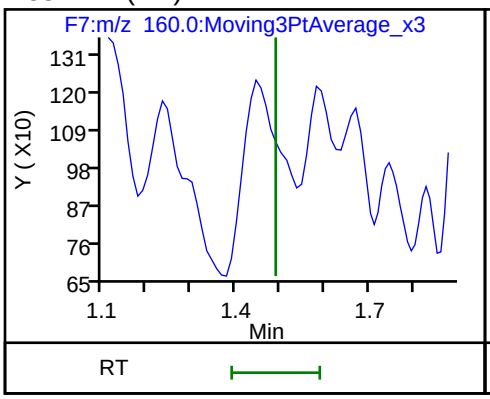
* 1 HMX-13C4



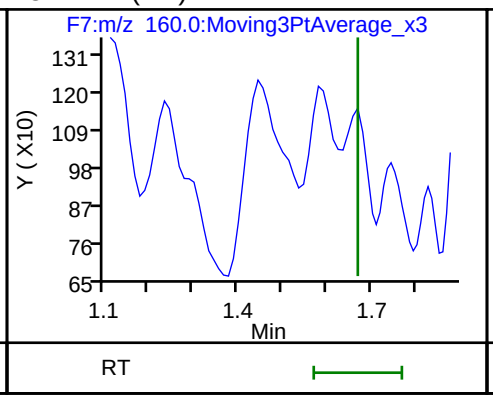
36 TNX (ND)



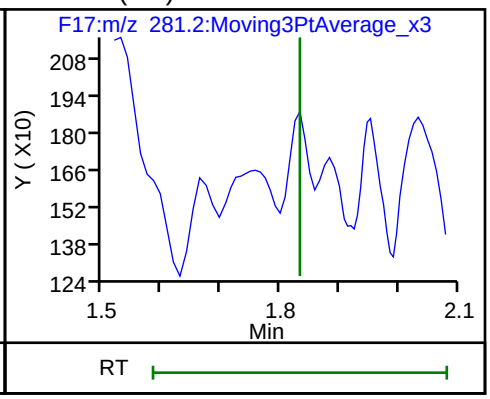
33 DNX (ND)



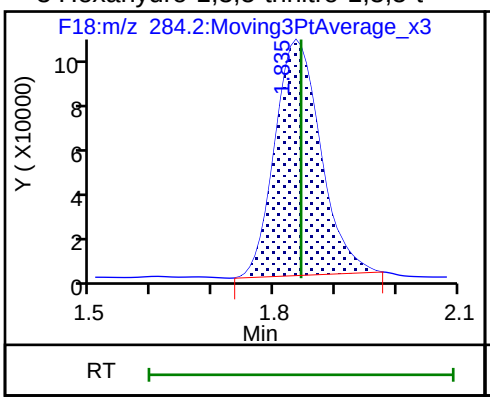
34 MNX (ND)



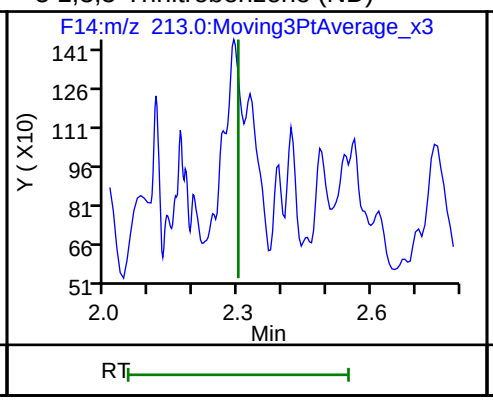
4 RDX (ND)



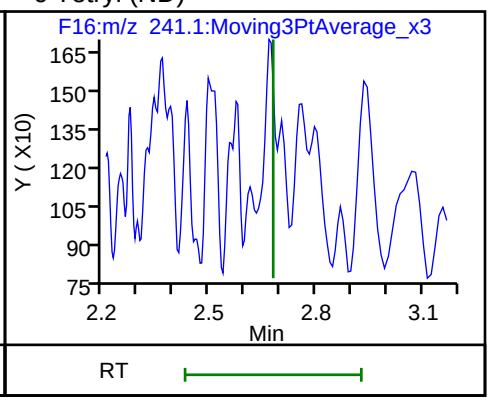
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



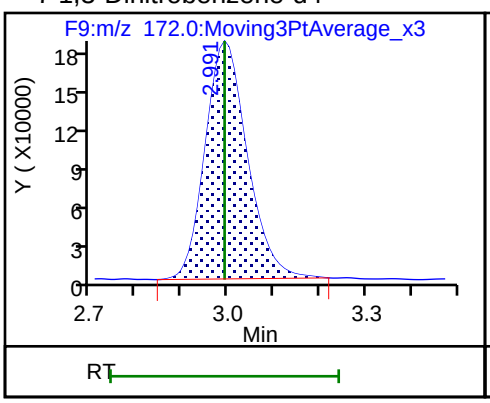
5 1,3,5-Trinitrobenzene (ND)



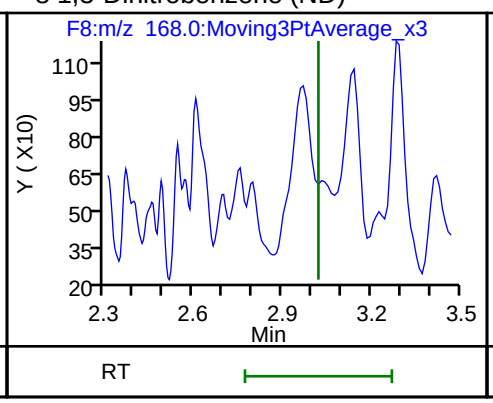
6 Tetryl (ND)



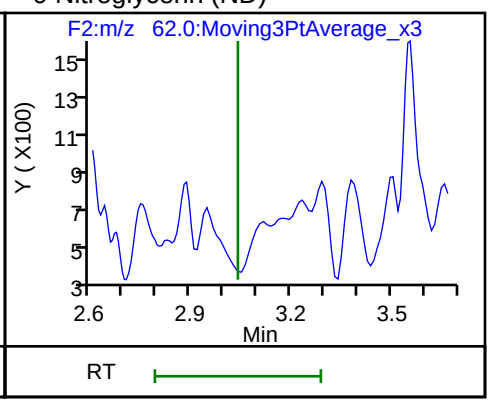
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

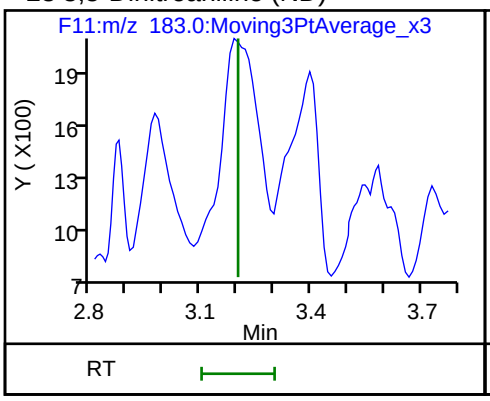


9 Nitroglycerin (ND)

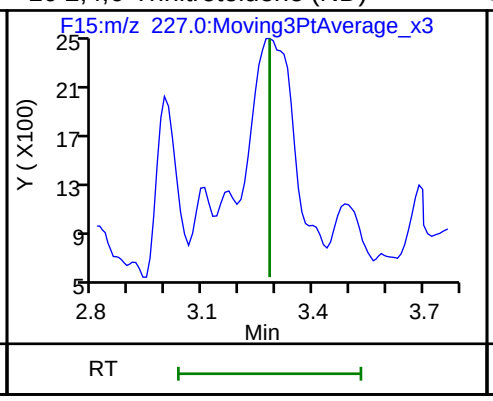


Report Date: 15-Apr-2022 08:03:14 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14033.d

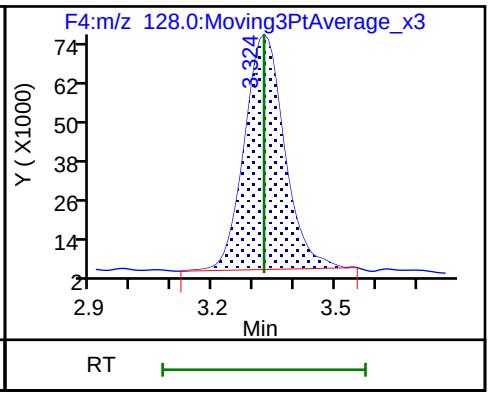
28 3,5-Dinitroaniline (ND)



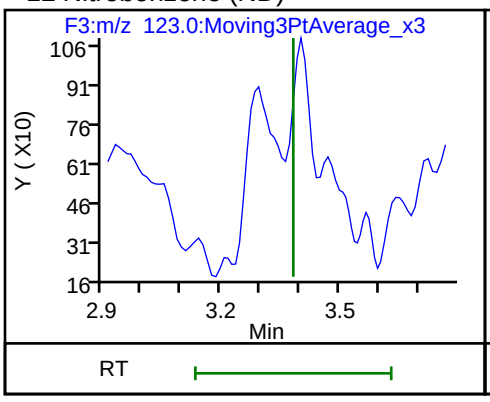
10 2,4,6-Trinitrotoluene (ND)



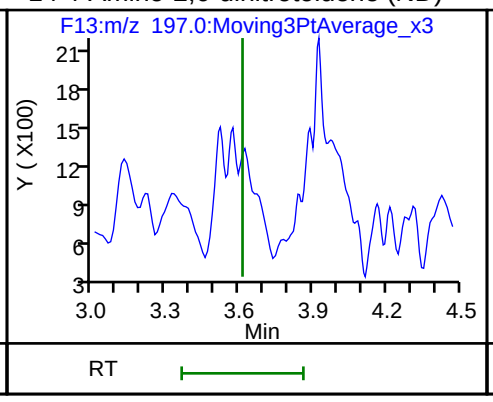
$ 11 Nitrobenzene-d5



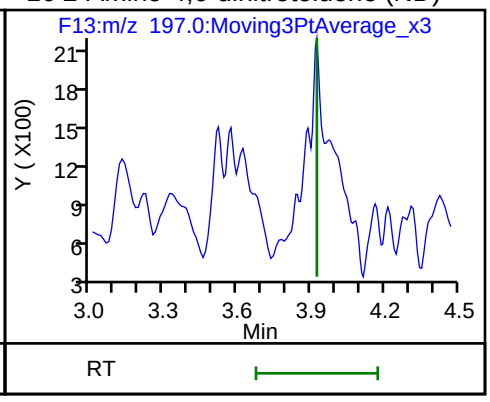
12 Nitrobenzene (ND)



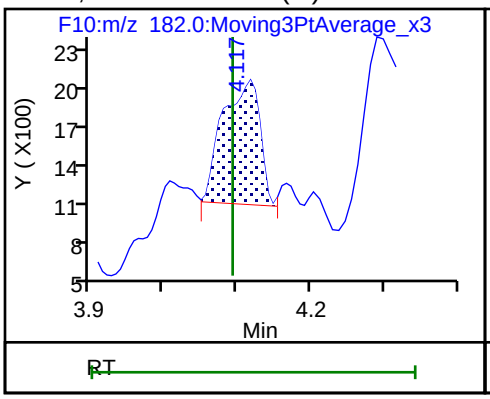
14 4-Amino-2,6-dinitrotoluene (ND)



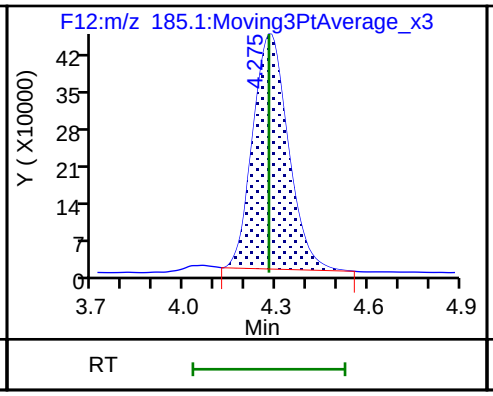
16 2-Amino-4,6-dinitrotoluene (ND)



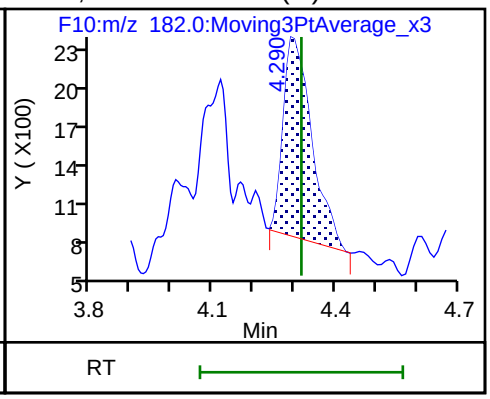
17 2,6-Dinitrotoluene (M)



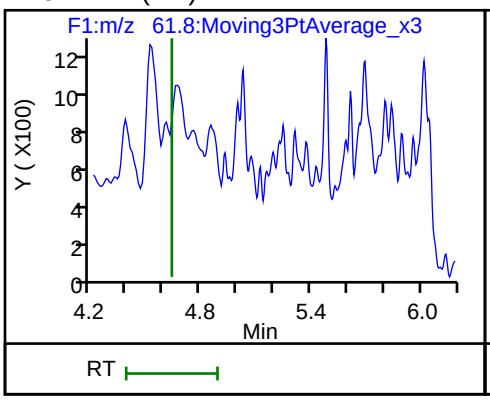
* 18 2,4-dinitrotoluene-d3



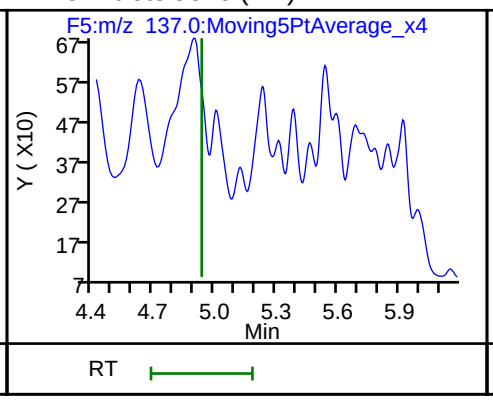
19 2,4-Dinitrotoluene (M)



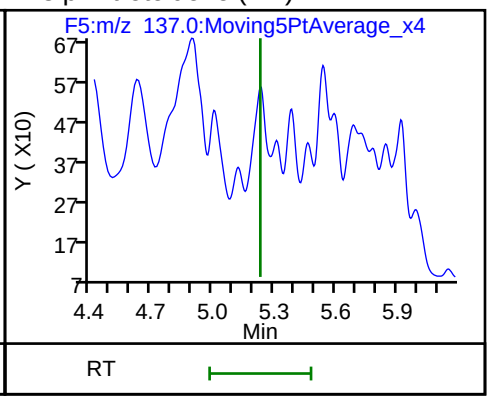
20 PETN (ND)



22 o-Nitrotoluene (ND)

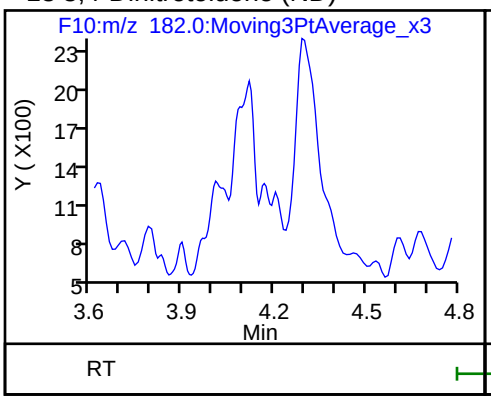


23 p-Nitrotoluene (ND)

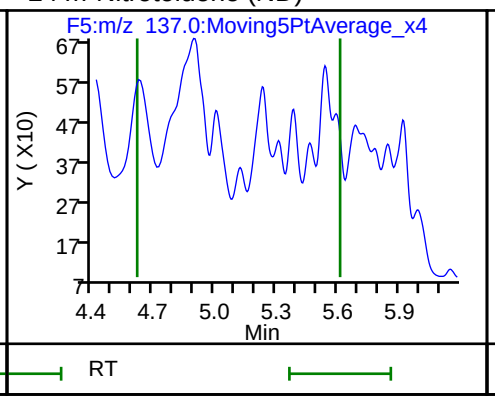


Report Date: 15-Apr-2022 08:03:14 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14033.d

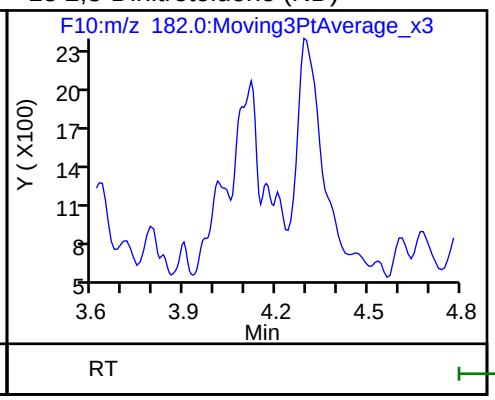
13 3,4-Dinitrotoluene (ND)



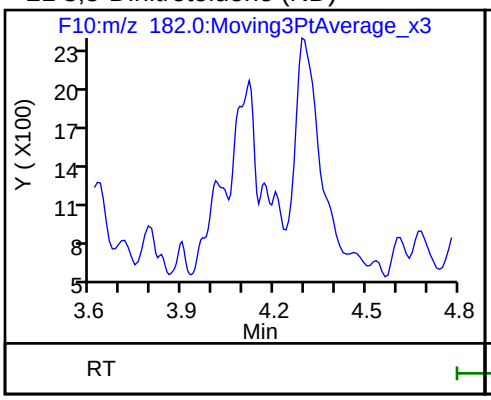
24 m-Nitrotoluene (ND)



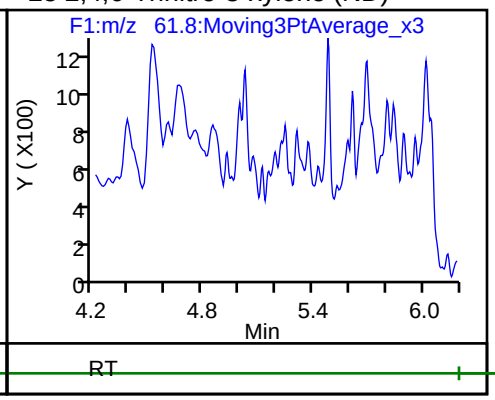
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:14 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14033.d				
Lims ID:	280-160190-A-38-B				
Client ID:	29SB174 (11-12)				
Sample Type:	Client				
Inject. Date:	14-Apr-2022 15:45:37	ALS Bottle#:	29	Worklist Smp#:	33
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160190-A-38-B				
Misc. Info.:	ex722D14				
Operator ID:	acm	Instrument ID:	LC_LCMS7		
Method:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m				
Limit Group:	LC - 8321A Expl				
Last Update:	15-Apr-2022 08:03:13	Calib Date:	14-Apr-2022 13:07:22		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1652				
First Level Reviewer: meyera		Date:	15-Apr-2022 07:32:52		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	93.5	93.20

Report Date: 15-Apr-2022 08:03:14 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

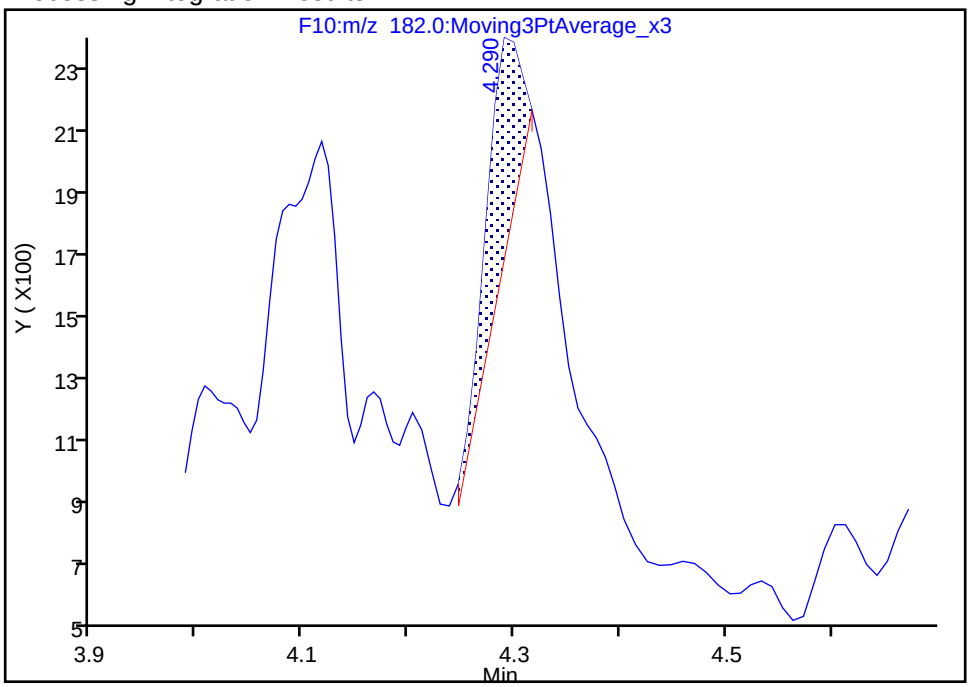
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14033.d				
Injection Date:	14-Apr-2022 15:45:37	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-38-B	Lab Sample ID:	280-160190-38		
Client ID:	29SB174 (11-12)				
Operator ID:	acm	ALS Bottle#:	29	Worklist Smp#:	33
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F10:SIR		

19 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

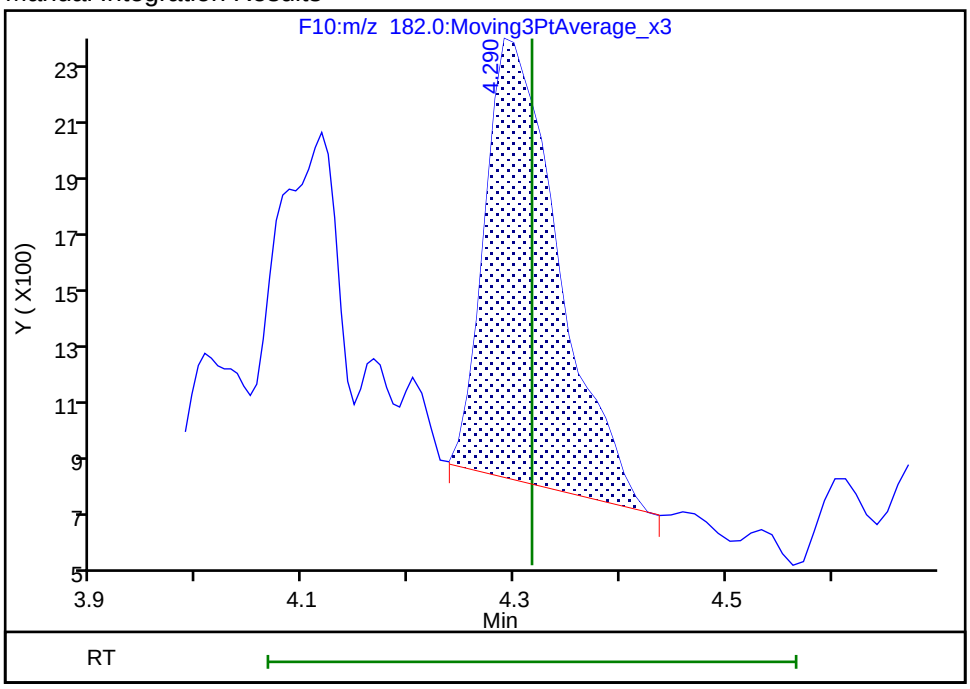
Processing Integration Results

RT: 4.29
Area: 1517
Amount: -0.955916
Amount Units: ug/l



Manual Integration Results

RT: 4.29
Area: 7579
Amount: -0.755909
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:32:49

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:03:14 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14033.d

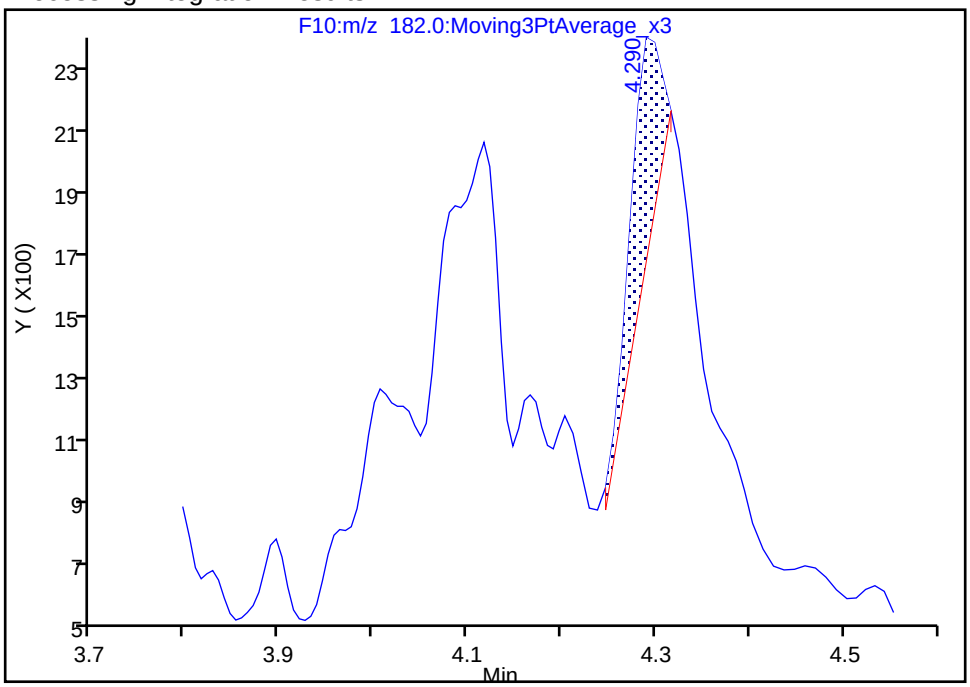
Injection Date:	14-Apr-2022 15:45:37	Instrument ID:	LC_LCMS7
Lims ID:	280-160190-A-38-B	Lab Sample ID:	280-160190-38
Client ID:	29SB174 (11-12)		
Operator ID:	acm	ALS Bottle#:	29 Worklist Smp#: 33
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F10:SIR

17 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

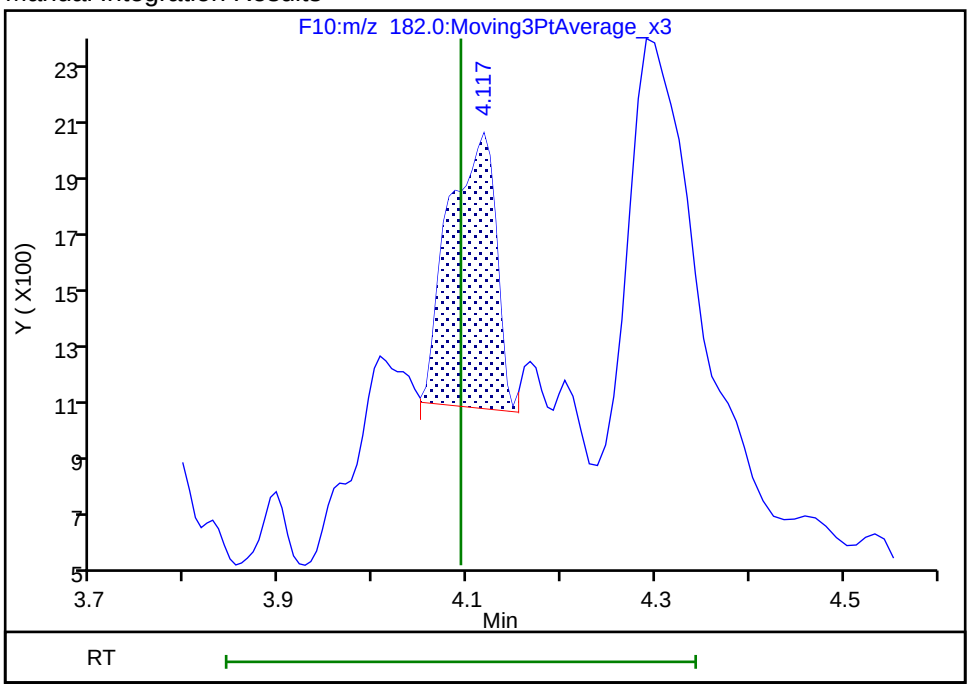
Processing Integration Results

RT: 4.29
Area: 1517
Amount: -0.637735
Amount Units: ug/l



Manual Integration Results

RT: 4.12
Area: 3366
Amount: -0.605680
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:32:45

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB174 (14.5-15) | Lab Sample ID: 280-160190-39
Matrix: Solid | Lab File ID: ex722D14034.d
Analysis Method: 8321A | Date Collected: 03/24/2022 13:15
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:23
Sample wt/vol: 10.21(g) | Date Analyzed: 04/14/2022 15:52
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571896 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.049	U	0.098	0.049	0.044
99-65-0	1,3-Dinitrobenzene	0.049	U	0.098	0.049	0.044
118-96-7	2,4,6-Trinitrotoluene	0.049	U	0.098	0.049	0.036
121-14-2	2,4-Dinitrotoluene	0.049	U	0.098	0.049	0.046
606-20-2	2,6-Dinitrotoluene	0.049	U	0.098	0.049	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.049	U	0.098	0.049	0.049
19406-51-0	4-Amino-2,6-dinitrotoluene	0.049	U	0.098	0.049	0.030
2691-41-0	HMX	0.049	U M	0.098	0.049	0.045
99-08-1	m-Nitrotoluene	0.049	U	0.098	0.049	0.042
98-95-3	Nitrobenzene	0.049	U	0.11	0.049	0.037
55-63-0	Nitroglycerin	0.049	U	0.098	0.049	0.028
88-72-2	o-Nitrotoluene	0.049	U	0.098	0.049	0.042
78-11-5	PETN	0.049	U	0.098	0.049	0.033
99-99-0	p-Nitrotoluene	0.049	U	0.098	0.049	0.048
121-82-4	RDX	0.049	U	0.12	0.049	0.042
479-45-8	Tetryl	0.049	U Q	0.098	0.049	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	103		68-140

Report Date: 15-Apr-2022 08:03:14 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14034.d
Lims ID: 280-160190-A-39-B
Client ID: 29SB174 (14.5-15)
Sample Type: Client
Inject. Date: 14-Apr-2022 15:52:13 ALS Bottle#: 30 Worklist Smp#: 34
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-39-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:13 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:33:02
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		155188	125.0	153	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		477914	125.0	132	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1124198	129.4	430	
$ 11 Nitrobenzene-d5								
128.0	3.324	3.324	0.0	0.778	522196	103.8	64.2	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3516187	125.0	127	

QC Flag Legend
Processing Flags

Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:14 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14034.d

Injection Date: 14-Apr-2022 15:52:13 Instrument ID: LC_LCMS7

Lims ID: 280-160190-A-39-B Lab Sample ID: 280-160190-39

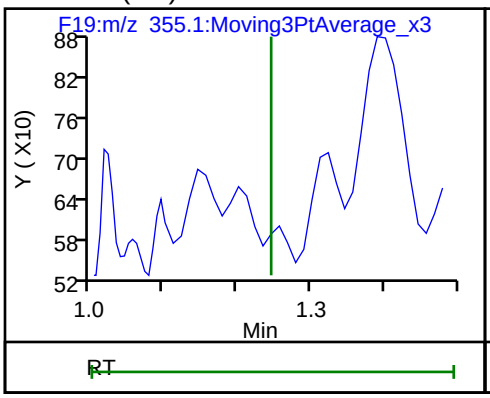
Client ID: 29SB174 (14.5-15)

Operator ID: acm ALS Bottle#: 30 Worklist Smp#: 34

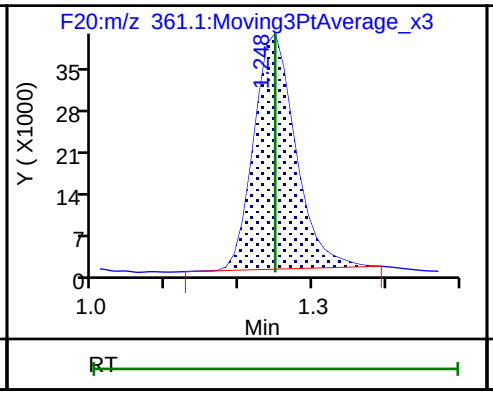
Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

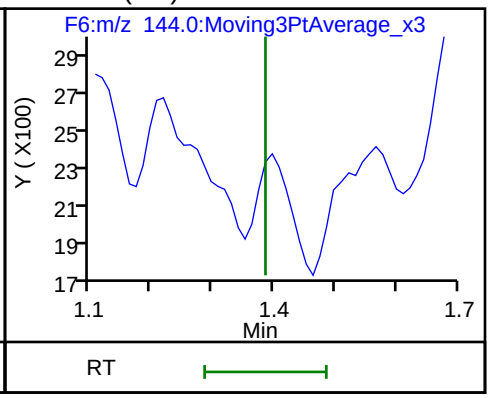
2 HMX (ND)



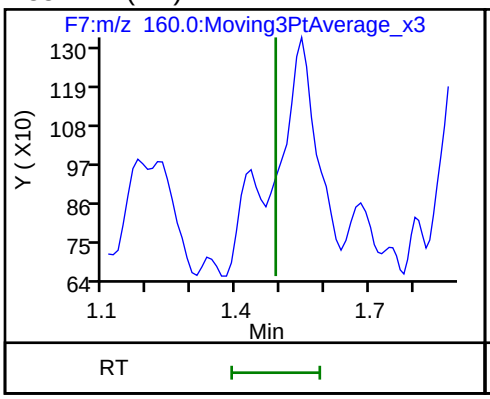
* 1 HMX-13C4



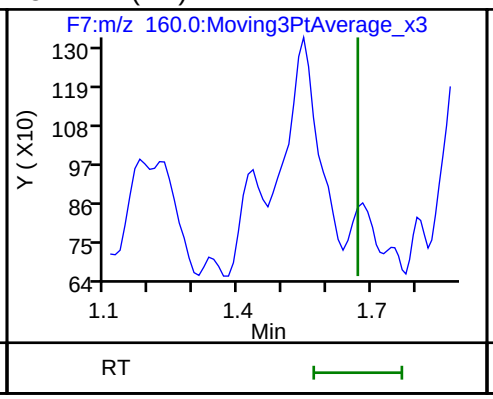
36 TNX (ND)



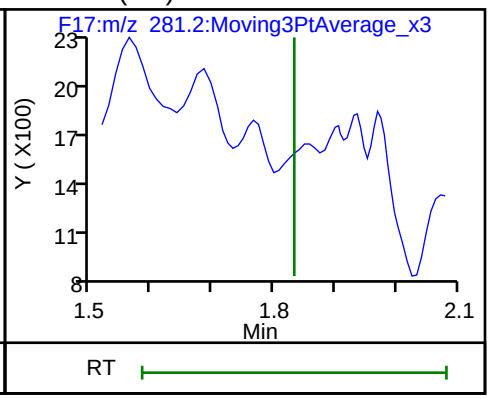
33 DNX (ND)



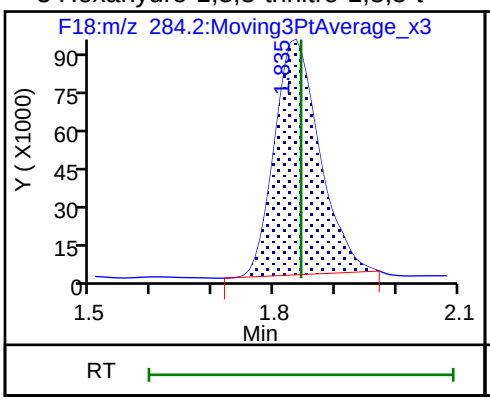
34 MNX (ND)



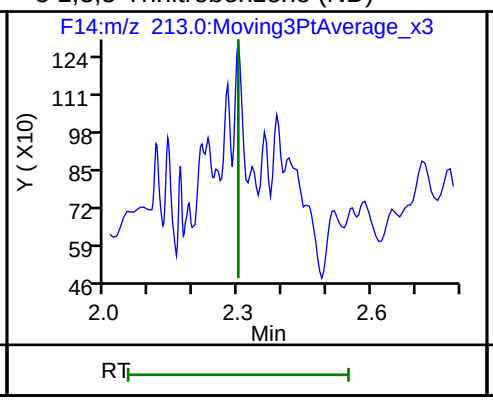
4 RDX (ND)



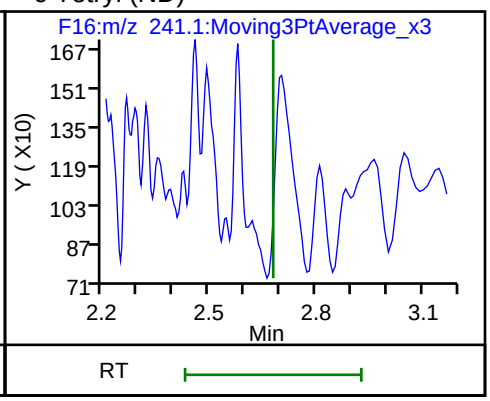
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



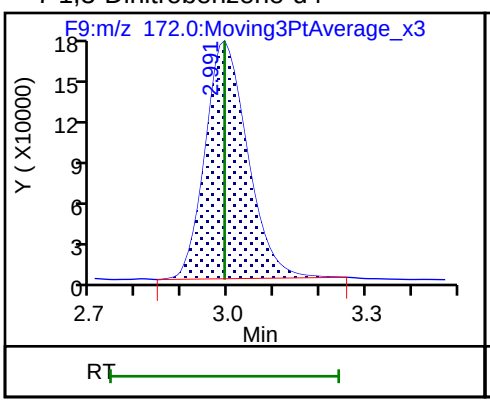
5 1,3,5-Trinitrobenzene (ND)



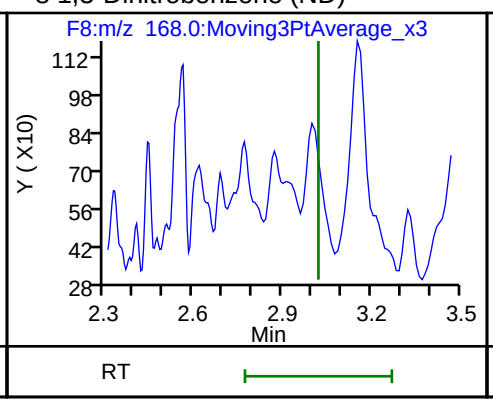
6 Tetryl (ND)



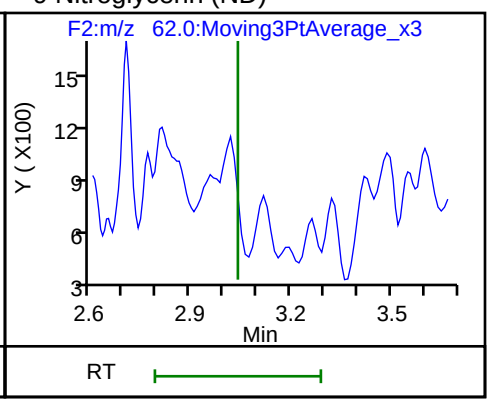
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

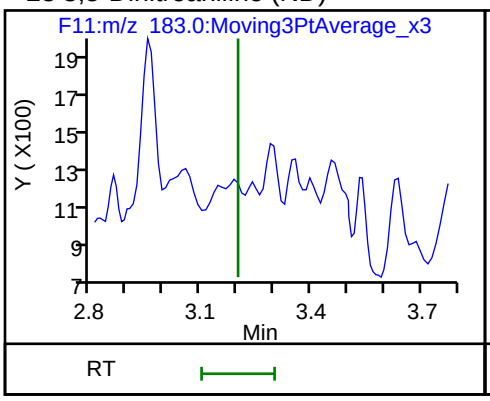


9 Nitroglycerin (ND)

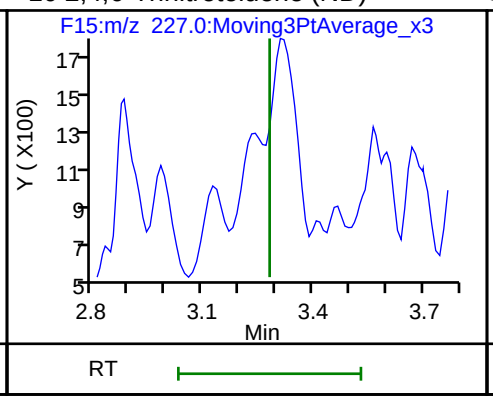


Report Date: 15-Apr-2022 08:03:14 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14034.d

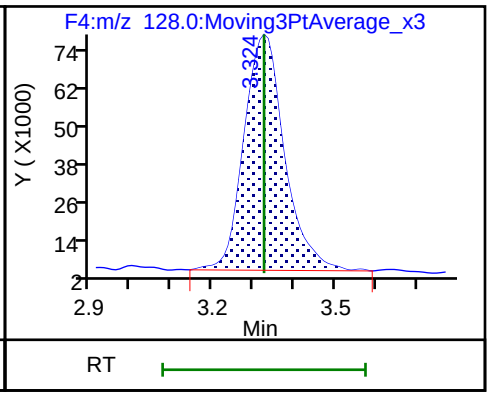
28 3,5-Dinitroaniline (ND)



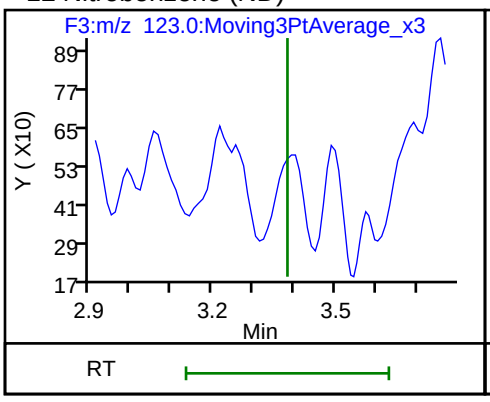
10 2,4,6-Trinitrotoluene (ND)



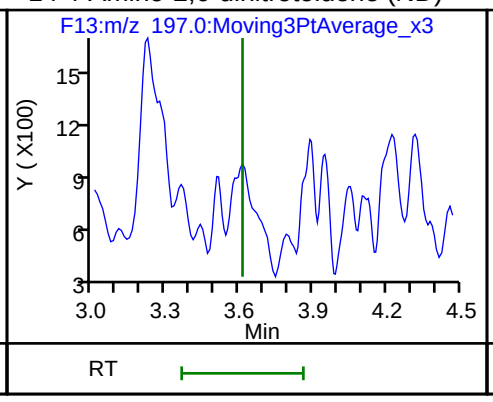
$ 11 Nitrobenzene-d5



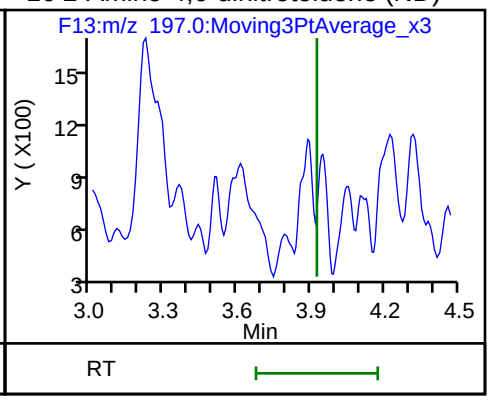
12 Nitrobenzene (ND)



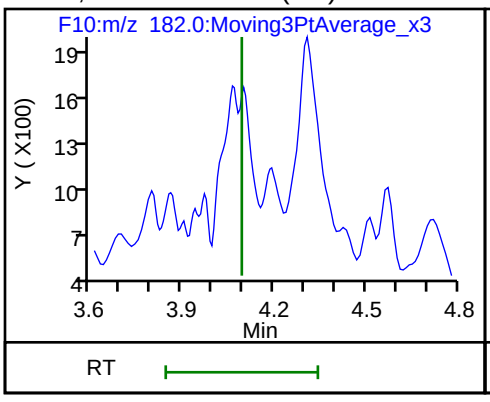
14 4-Amino-2,6-dinitrotoluene (ND)



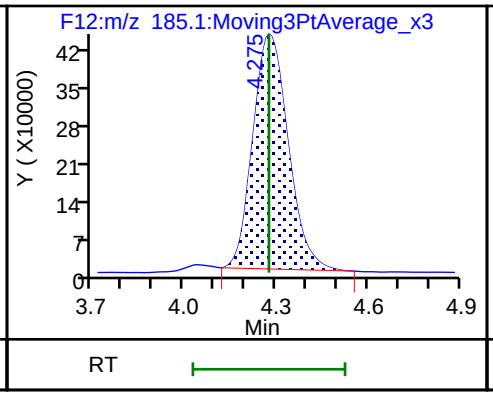
16 2-Amino-4,6-dinitrotoluene (ND)



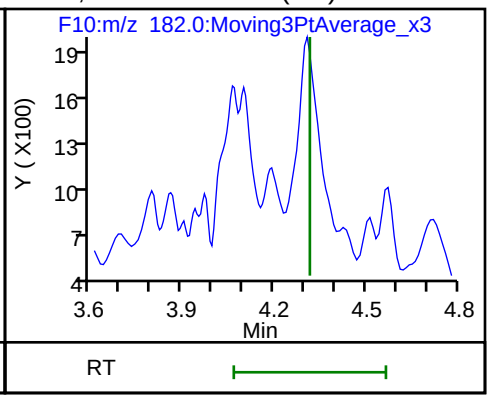
17 2,6-Dinitrotoluene (ND)



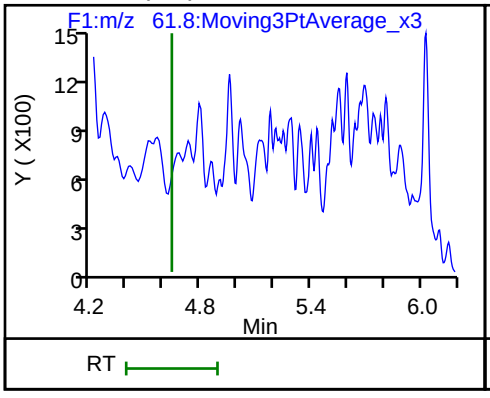
* 18 2,4-dinitrotoluene-d3



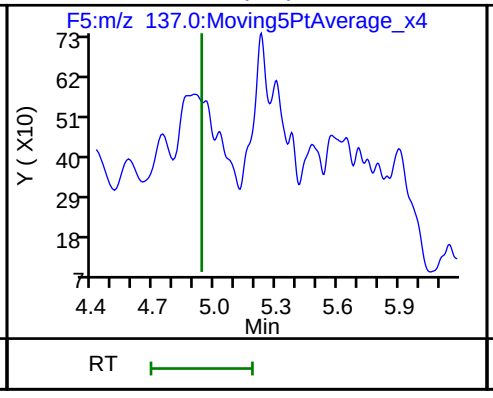
19 2,4-Dinitrotoluene (ND)



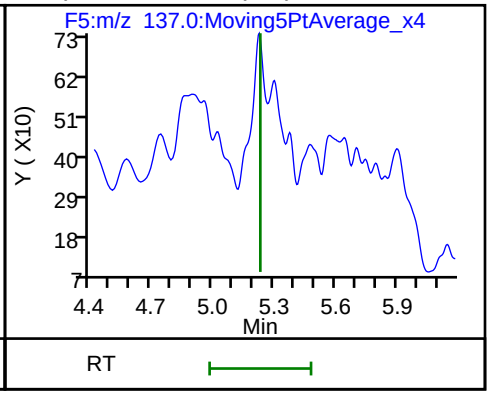
20 PETN (ND)



22 o-Nitrotoluene (ND)

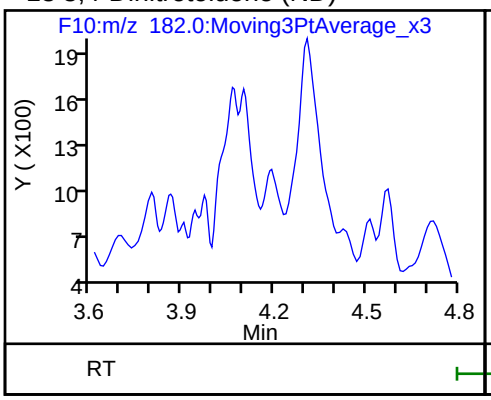


23 p-Nitrotoluene (ND)

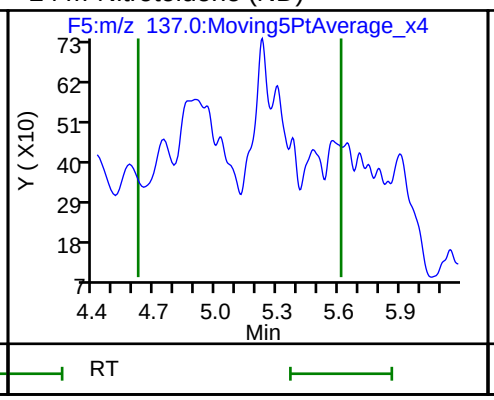


Report Date: 15-Apr-2022 08:03:14 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14034.d

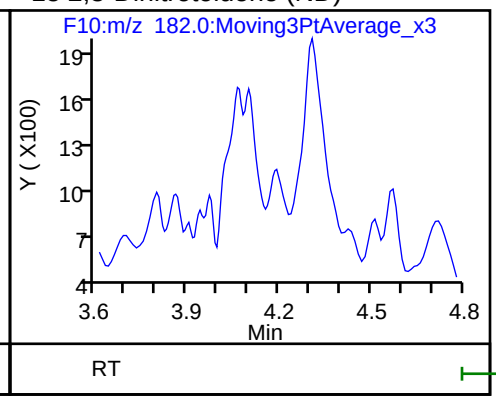
13 3,4-Dinitrotoluene (ND)



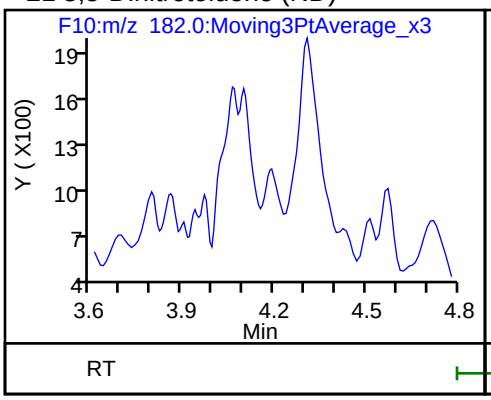
24 m-Nitrotoluene (ND)



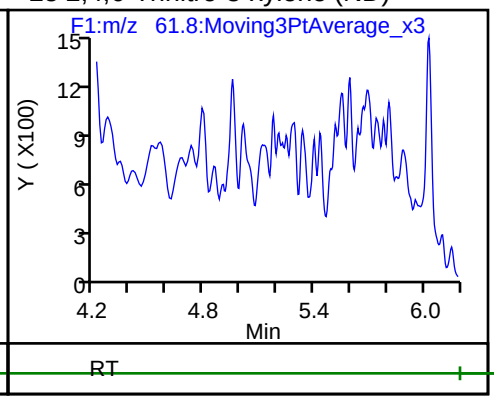
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:14 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14034.d				
Lims ID:	280-160190-A-39-B				
Client ID:	29SB174 (14.5-15)				
Sample Type:	Client				
Inject. Date:	14-Apr-2022 15:52:13	ALS Bottle#:	30	Worklist Smp#:	34
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160190-A-39-B				
Misc. Info.:	ex722D14				
Operator ID:	acm	Instrument ID:	LC_LCMS7		
Method:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m				
Limit Group:	LC - 8321A Expl				
Last Update:	15-Apr-2022 08:03:13	Calib Date:	14-Apr-2022 13:07:22		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1652				
First Level Reviewer: meyera		Date:	15-Apr-2022 07:33:02		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	103.8	103.44

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB190 (3-4) | Lab Sample ID: 280-160190-40
Matrix: Solid | Lab File ID: ex722D14035.d
Analysis Method: 8321A | Date Collected: 03/24/2022 13:55
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:23
Sample wt/vol: 10.11(g) | Date Analyzed: 04/14/2022 15:58
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571896 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.049	U	0.099	0.049	0.044
99-65-0	1,3-Dinitrobenzene	0.049	U	0.099	0.049	0.044
118-96-7	2,4,6-Trinitrotoluene	0.049	U M	0.099	0.049	0.036
121-14-2	2,4-Dinitrotoluene	0.049	U	0.099	0.049	0.046
606-20-2	2,6-Dinitrotoluene	0.049	U	0.099	0.049	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.049	U	0.099	0.049	0.049
19406-51-0	4-Amino-2,6-dinitrotoluene	0.049	U	0.099	0.049	0.031
2691-41-0	HMX	0.049	U	0.099	0.049	0.046
99-08-1	m-Nitrotoluene	0.049	U	0.099	0.049	0.043
98-95-3	Nitrobenzene	0.049	U M	0.11	0.049	0.038
55-63-0	Nitroglycerin	0.049	U	0.099	0.049	0.029
88-72-2	o-Nitrotoluene	0.049	U	0.099	0.049	0.042
78-11-5	PETN	0.049	U	0.099	0.049	0.034
99-99-0	p-Nitrotoluene	0.049	U	0.099	0.049	0.049
121-82-4	RDX	0.049	U	0.12	0.049	0.043
479-45-8	Tetryl	0.049	U Q	0.099	0.049	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	102		68-140

Report Date: 15-Apr-2022 08:03:15 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14035.d
Lims ID: 280-160190-A-40-B
Client ID: 29SB190 (3-4)
Sample Type: Client
Inject. Date: 14-Apr-2022 15:58:49 ALS Bottle#: 31 Worklist Smp#: 35
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-40-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:13 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:33:16
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		152045	125.0	236	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.827	1.844	-0.017		458861	125.0	285	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1090957	129.4	359	
$ 11 Nitrobenzene-d5								
128.0	3.324	3.324	0.0	0.778	498242	102.0	102	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3351334	125.0	128	

QC Flag Legend
Processing Flags

Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

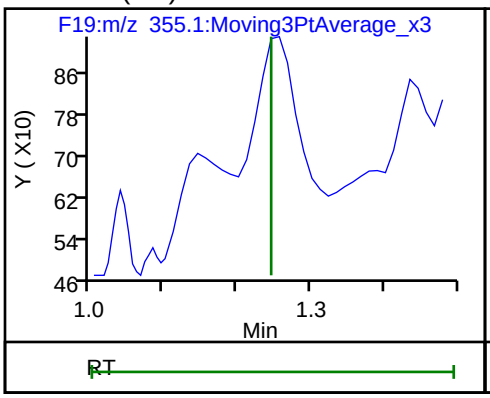
Report Date: 15-Apr-2022 08:03:15 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

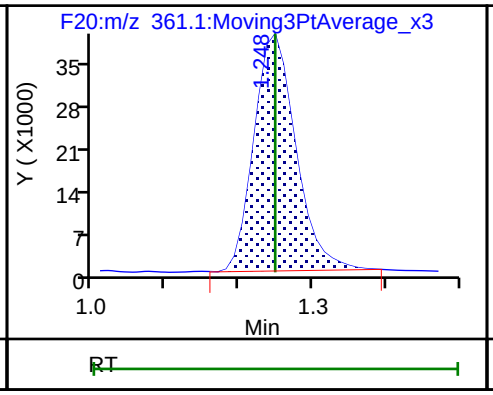
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14035.d

Injection Date:	14-Apr-2022 15:58:49	Instrument ID:	LC_LCMS7
Lims ID:	280-160190-A-40-B	Lab Sample ID:	280-160190-40
Client ID:	29SB190 (3-4)		
Operator ID:	acm	ALS Bottle#:	31 Worklist Smp#: 35
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl

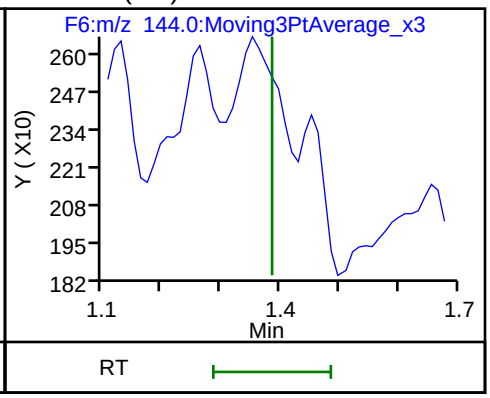
2 HMX (ND)



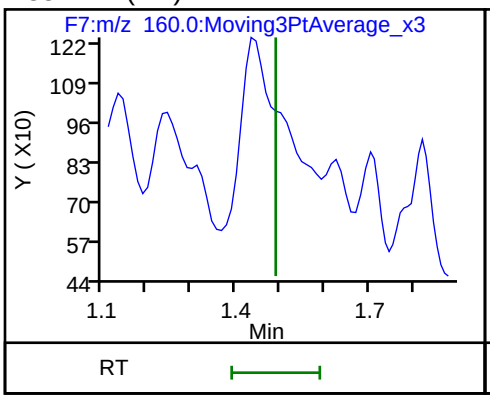
* 1 HMX-13C4



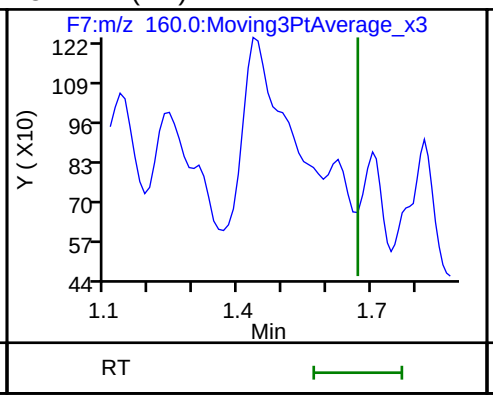
36 TNX (ND)



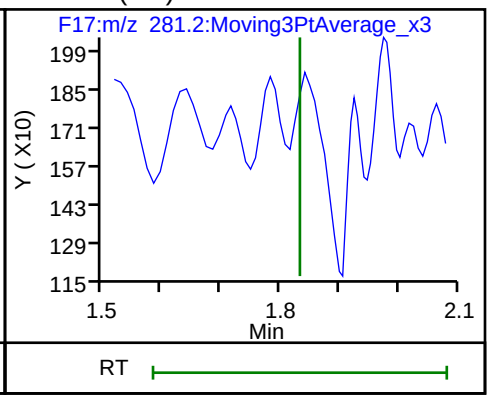
33 DNX (ND)



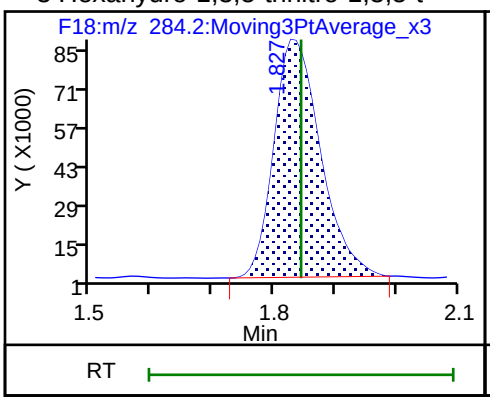
34 MNX (ND)



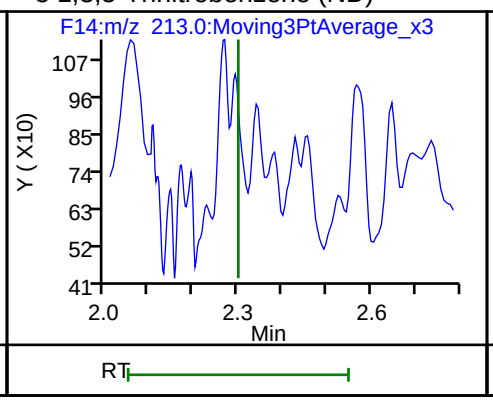
4 RDX (ND)



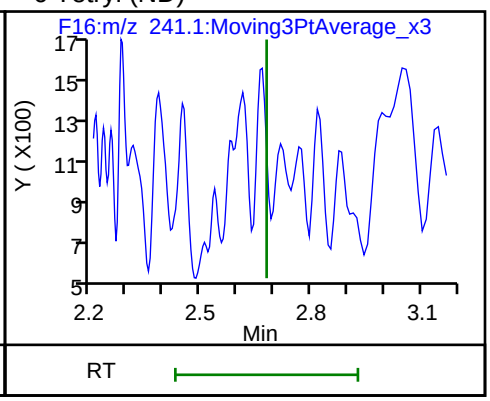
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



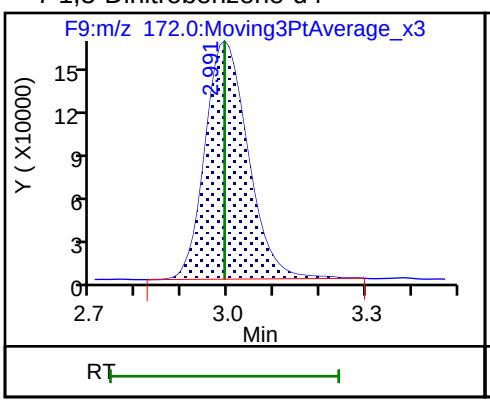
5 1,3,5-Trinitrobenzene (ND)



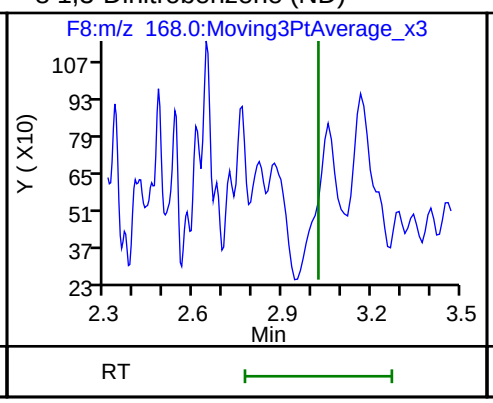
6 Tetryl (ND)



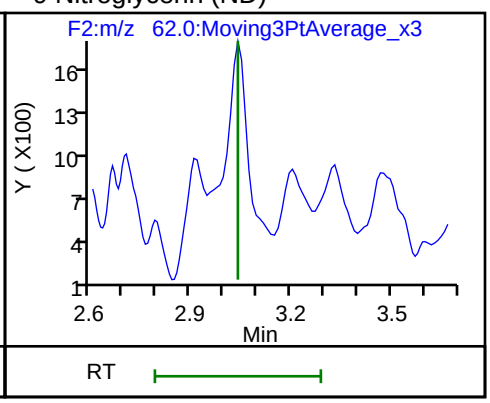
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

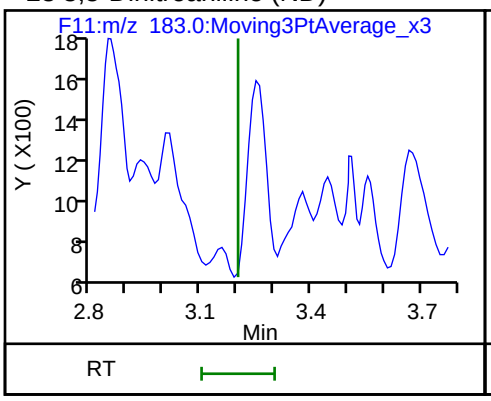


9 Nitroglycerin (ND)

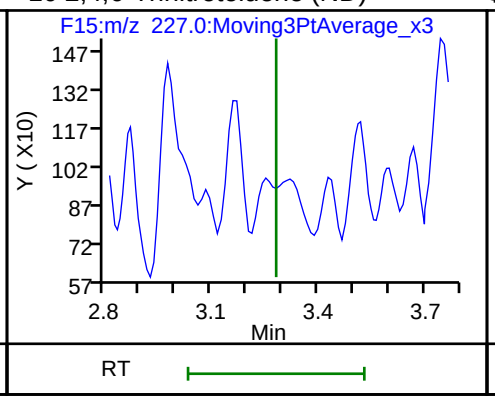


Report Date: 15-Apr-2022 08:03:15 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14035.d

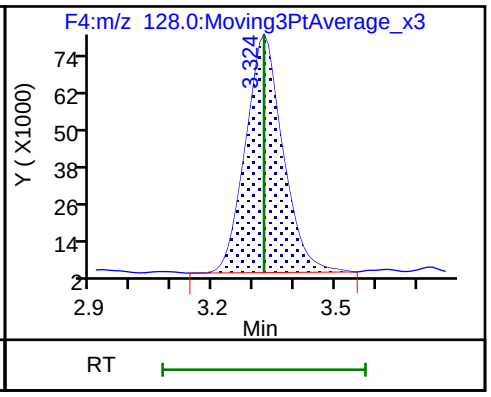
28 3,5-Dinitroaniline (ND)



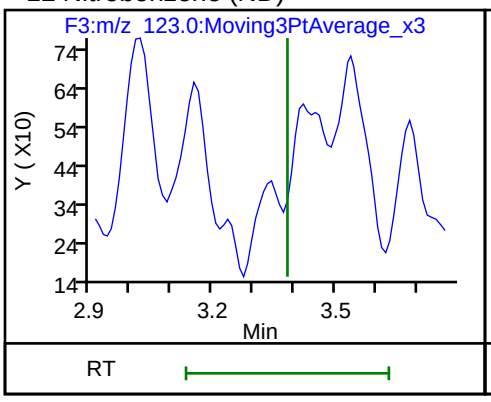
10 2,4,6-Trinitrotoluene (ND)



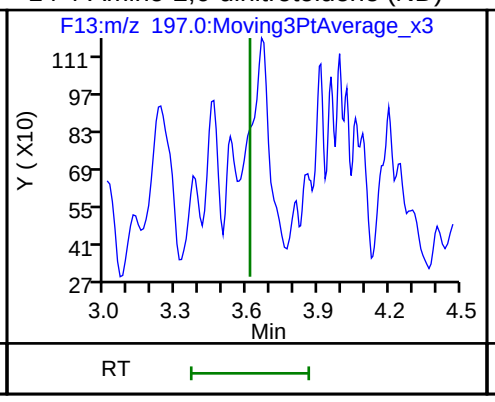
$ 11 Nitrobenzene-d5



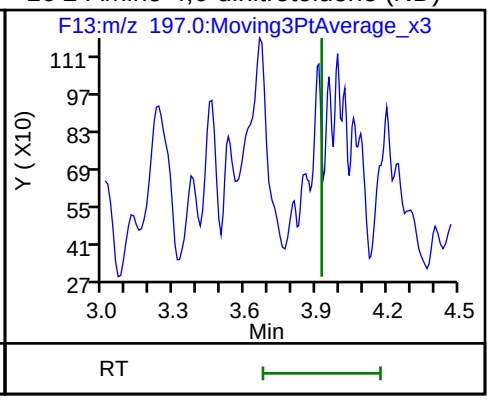
12 Nitrobenzene (ND)



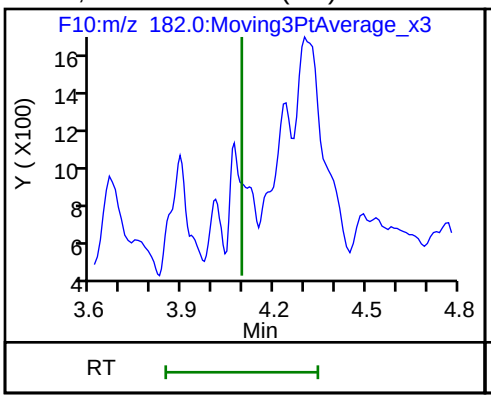
14 4-Amino-2,6-dinitrotoluene (ND)



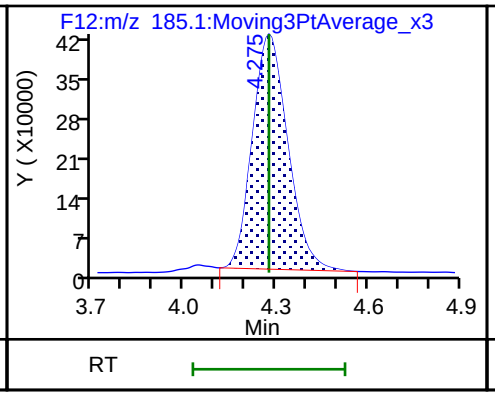
16 2-Amino-4,6-dinitrotoluene (ND)



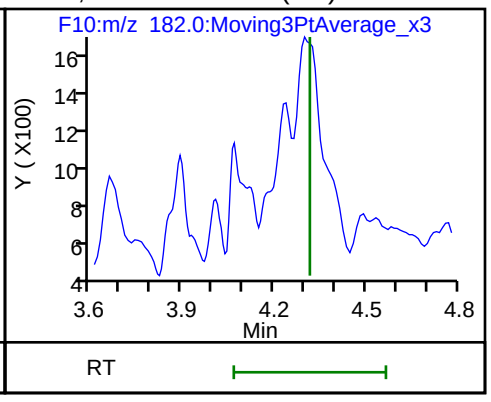
17 2,6-Dinitrotoluene (ND)



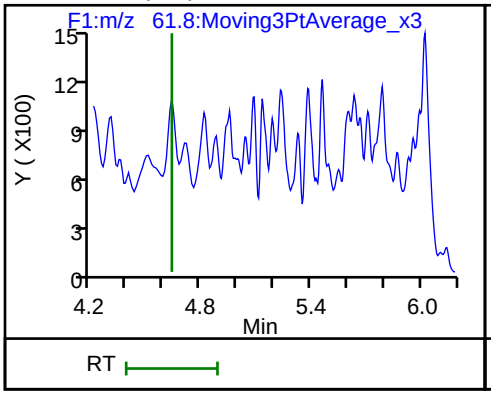
* 18 2,4-dinitrotoluene-d3



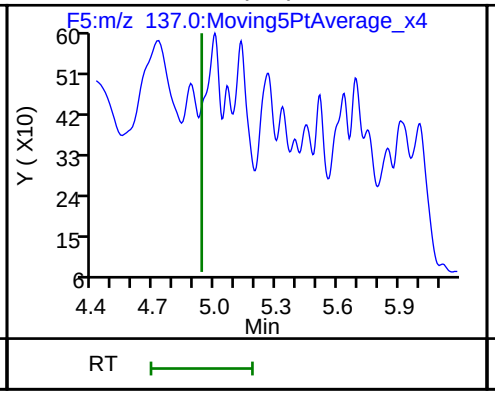
19 2,4-Dinitrotoluene (ND)



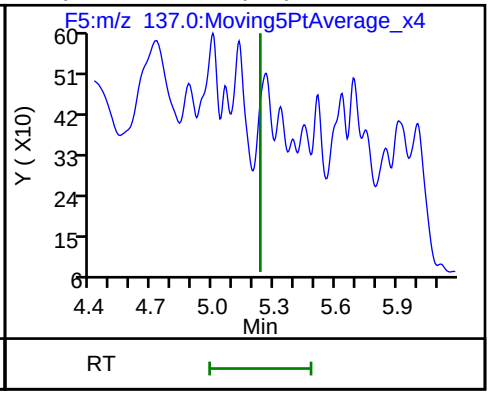
20 PETN (ND)



22 o-Nitrotoluene (ND)



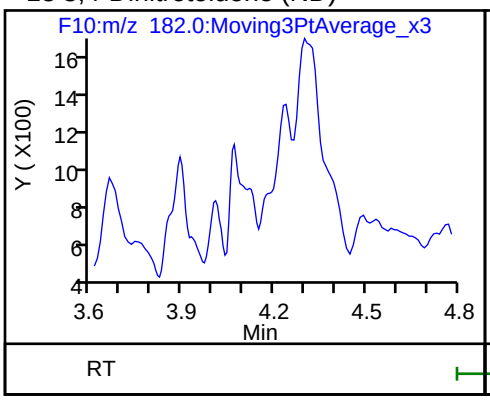
23 p-Nitrotoluene (ND)



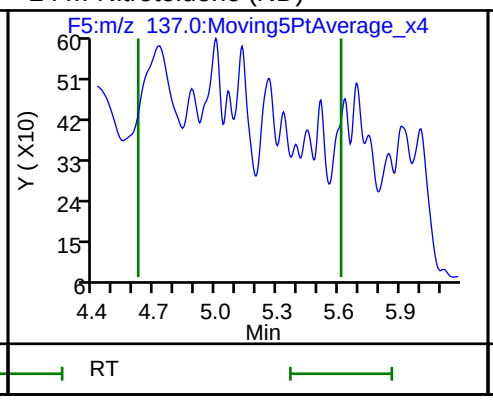
Report Date: 15-Apr-2022 08:03:15 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14035.d

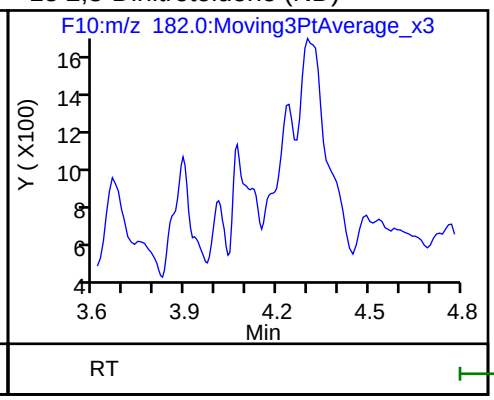
13 3,4-Dinitrotoluene (ND)



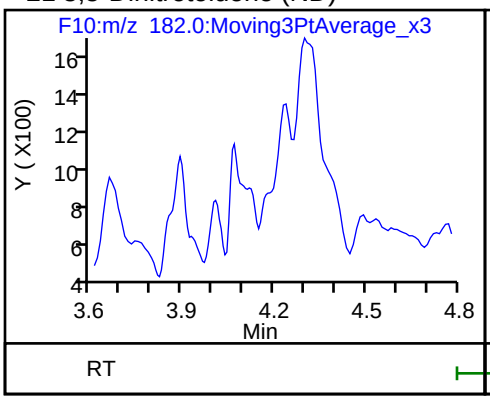
24 m-Nitrotoluene (ND)



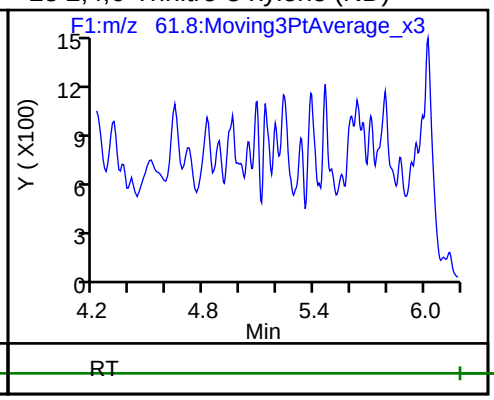
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:15 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14035.d				
Lims ID:	280-160190-A-40-B				
Client ID:	29SB190 (3-4)				
Sample Type:	Client				
Inject. Date:	14-Apr-2022 15:58:49	ALS Bottle#:	31	Worklist Smp#:	35
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160190-A-40-B				
Misc. Info.:	ex722D14				
Operator ID:	acm	Instrument ID:	LC_LCMS7		
Method:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m				
Limit Group:	LC - 8321A Expl				
Last Update:	15-Apr-2022 08:03:13	Calib Date:	14-Apr-2022 13:07:22		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1652				
First Level Reviewer: meyera		Date:	15-Apr-2022 07:33:16		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	102.0	101.67

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB190 (19-20) | Lab Sample ID: 280-160190-41
Matrix: Solid | Lab File ID: ex722D14036.d
Analysis Method: 8321A | Date Collected: 03/24/2022 14:05
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:23
Sample wt/vol: 10.34(g) | Date Analyzed: 04/14/2022 16:05
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571896 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.048	U	0.097	0.048	0.043
99-65-0	1,3-Dinitrobenzene	0.048	U	0.097	0.048	0.043
118-96-7	2,4,6-Trinitrotoluene	0.048	U	0.097	0.048	0.036
121-14-2	2,4-Dinitrotoluene	0.048	U M	0.097	0.048	0.045
606-20-2	2,6-Dinitrotoluene	0.048	U	0.097	0.048	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.048	U	0.097	0.048	0.048
19406-51-0	4-Amino-2,6-dinitrotoluene	0.048	U M	0.097	0.048	0.030
2691-41-0	HMX	0.048	U M	0.097	0.048	0.045
99-08-1	m-Nitrotoluene	0.048	U	0.097	0.048	0.042
98-95-3	Nitrobenzene	0.048	U	0.11	0.048	0.037
55-63-0	Nitroglycerin	0.048	U	0.097	0.048	0.028
88-72-2	o-Nitrotoluene	0.048	U	0.097	0.048	0.041
78-11-5	PETN	0.048	U	0.097	0.048	0.033
99-99-0	p-Nitrotoluene	0.048	U	0.097	0.048	0.048
121-82-4	RDX	0.048	U	0.12	0.048	0.042
479-45-8	Tetryl	0.048	U Q	0.097	0.048	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	100		68-140

Report Date: 15-Apr-2022 08:03:15 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14036.d
Lims ID: 280-160190-A-41-B
Client ID: 29SB190 (19-20)
Sample Type: Client
Inject. Date: 14-Apr-2022 16:05:24 ALS Bottle#: 32 Worklist Smp#: 36
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-41-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:13 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:33:50
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		154051	125.0	177	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		494746	125.0	192	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1119166	129.4	360	
$ 11 Nitrobenzene-d5								
128.0	3.324	3.324	0.0	0.776	503077	100.4	60.9	
17 2,6-Dinitrotoluene								M
182.0	4.093	4.093	0.0	0.955	34040	-0.0667	18.2	M
* 18 2,4-dinitrotoluene-d3								
185.1	4.284	4.275	0.009		3558049	125.0	130	
19 2,4-Dinitrotoluene								M
182.0	4.308	4.316	-0.008	1.006	40068	0.3321	18.6	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

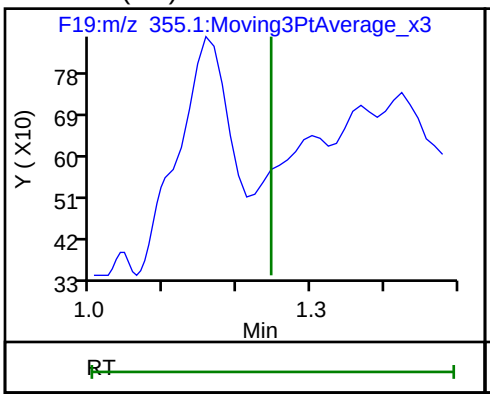
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:15 Chrom Revision: 2.3 12-Apr-2022 20:29:44

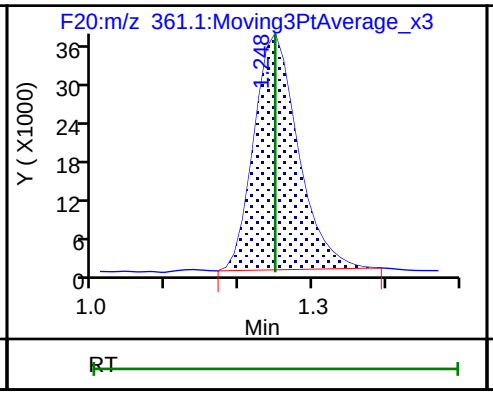
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14036.d
Injection Date: 14-Apr-2022 16:05:24 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-41-B Lab Sample ID: 280-160190-41
Client ID: 29SB190 (19-20)
Operator ID: acm ALS Bottle#: 32 Worklist Smp#: 36
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

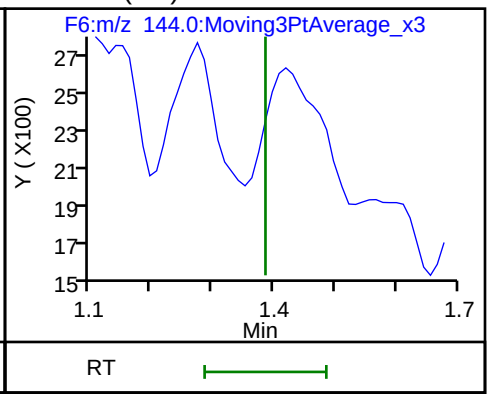
2 HMX (ND)



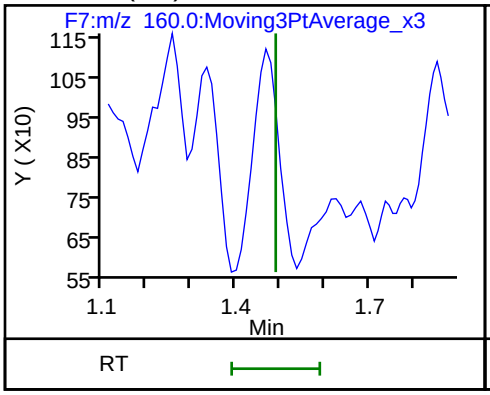
* 1 HMX-13C4



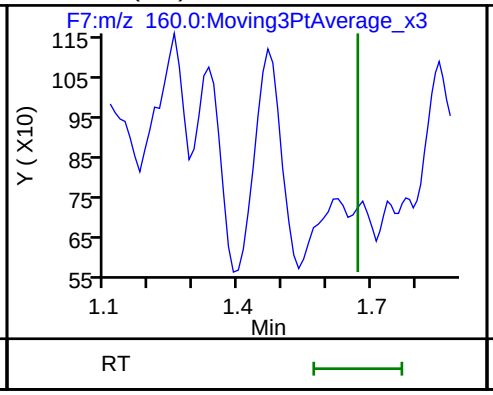
36 TNX (ND)



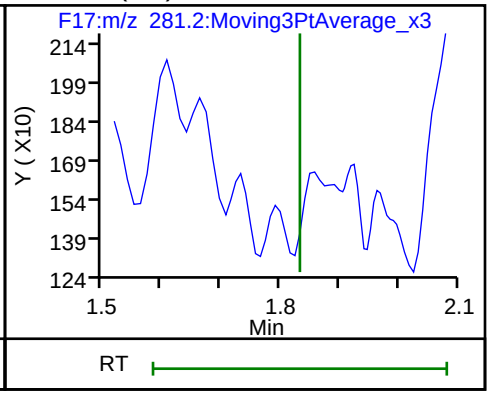
33 DNX (ND)



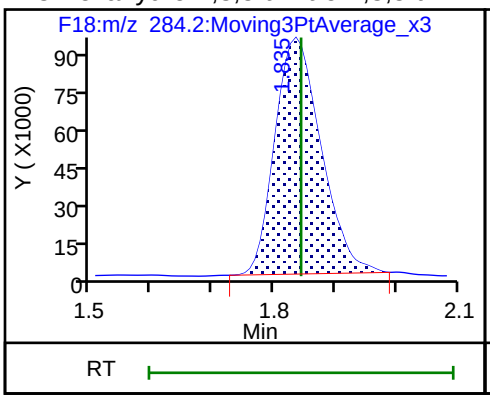
34 MNX (ND)



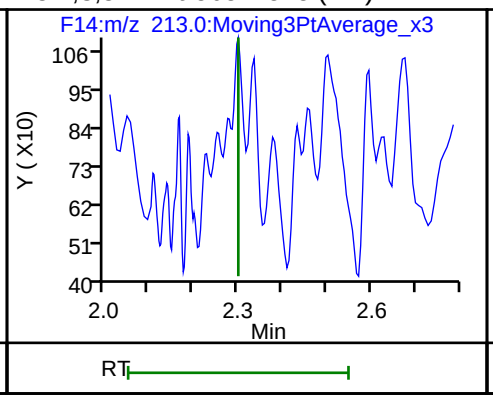
4 RDX (ND)



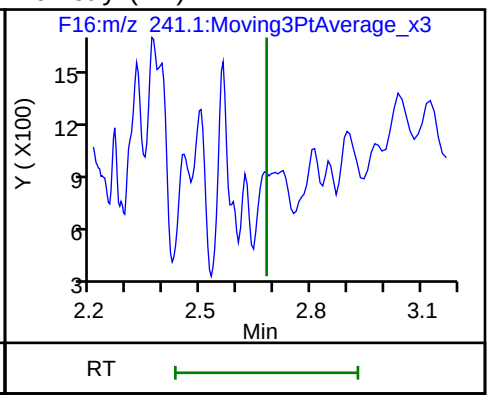
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



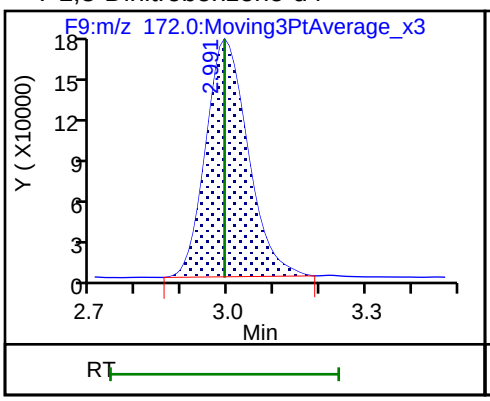
5 1,3,5-Trinitrobenzene (ND)



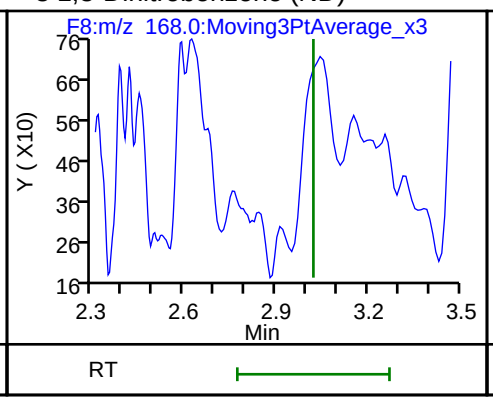
6 Tetryl (ND)



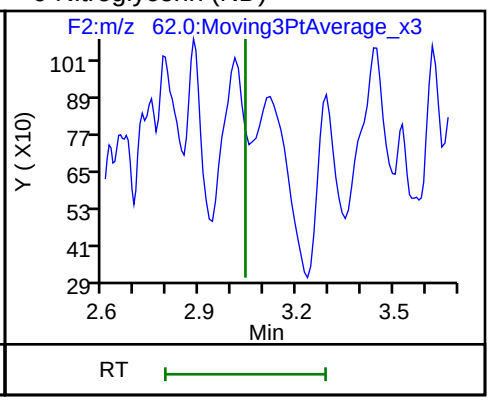
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

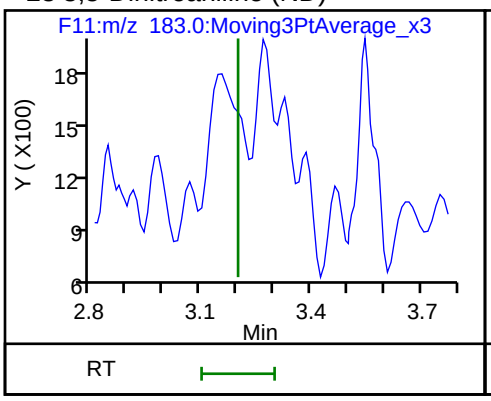


9 Nitroglycerin (ND)

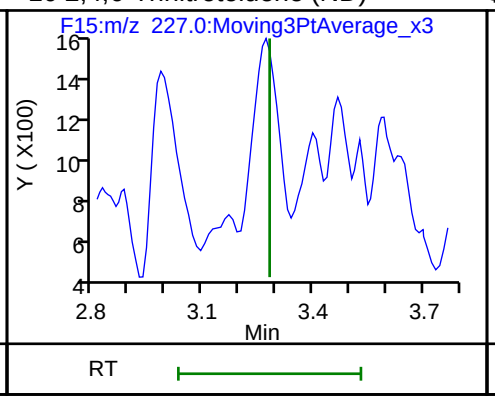


Report Date: 15-Apr-2022 08:03:15 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14036.d

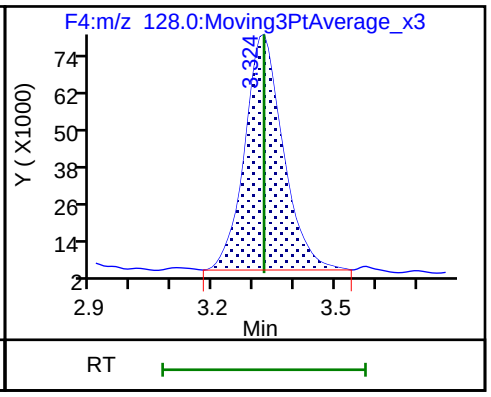
28 3,5-Dinitroaniline (ND)



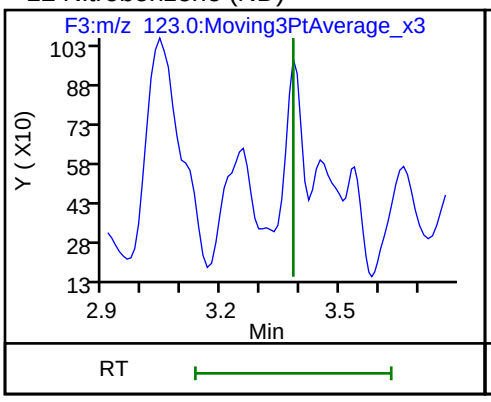
10 2,4,6-Trinitrotoluene (ND)



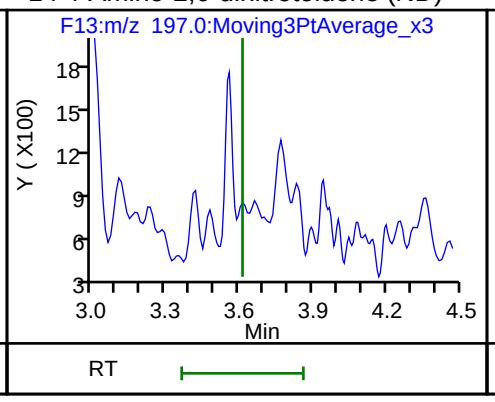
$ 11 Nitrobenzene-d5



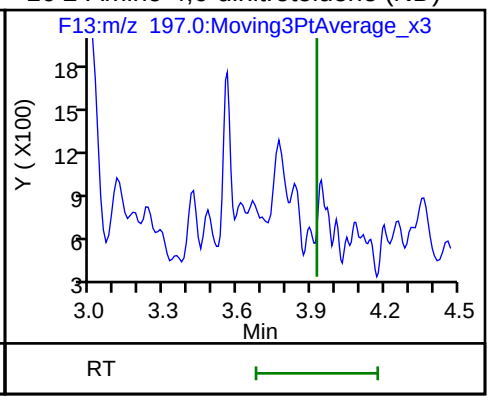
12 Nitrobenzene (ND)



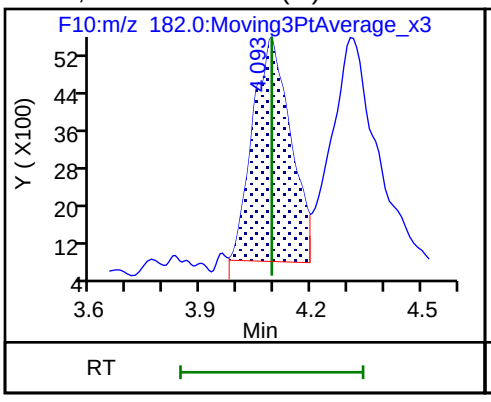
14 4-Amino-2,6-dinitrotoluene (ND)



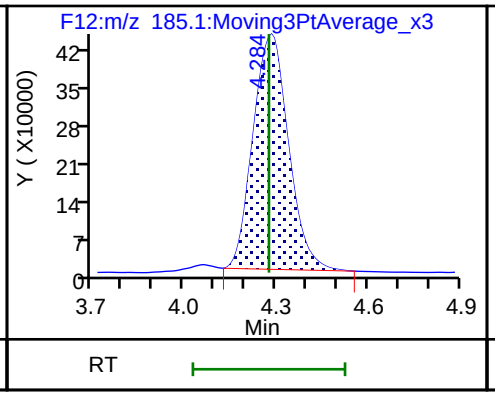
16 2-Amino-4,6-dinitrotoluene (ND)



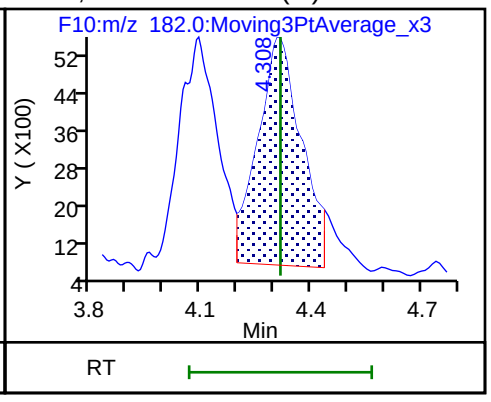
17 2,6-Dinitrotoluene (M)



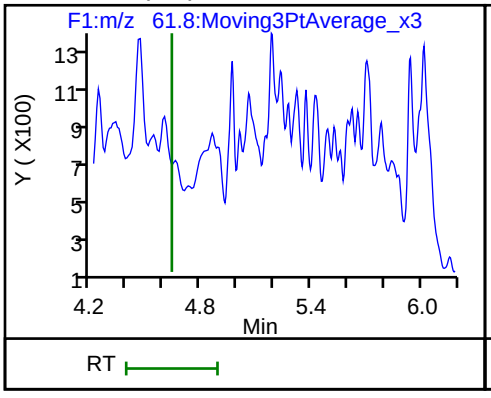
* 18 2,4-dinitrotoluene-d3



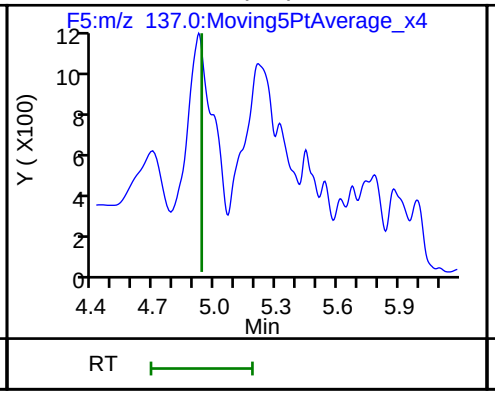
19 2,4-Dinitrotoluene (M)



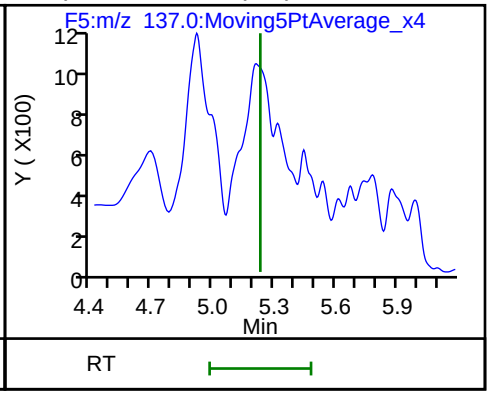
20 PETN (ND)



22 o-Nitrotoluene (ND)

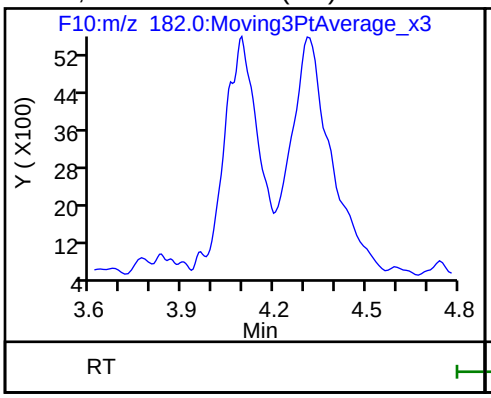


23 p-Nitrotoluene (ND)

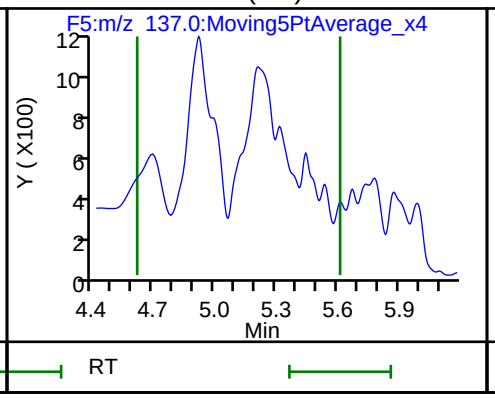


Report Date: 15-Apr-2022 08:03:15 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14036.d

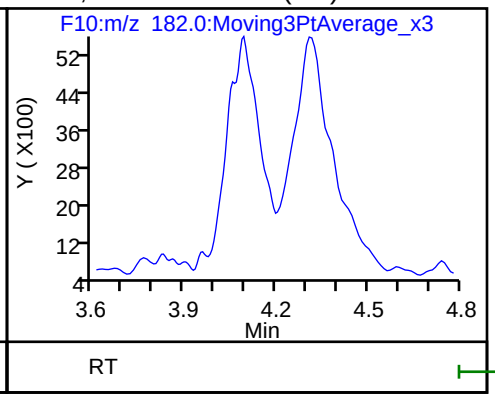
13 3,4-Dinitrotoluene (ND)



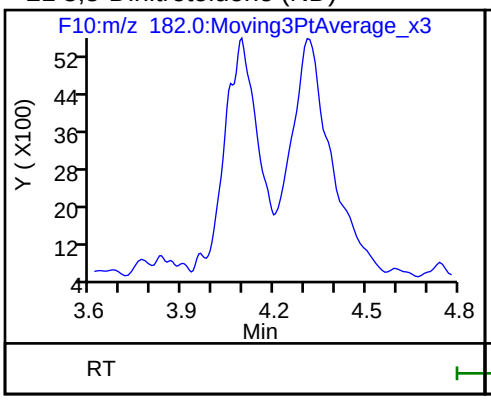
24 m-Nitrotoluene (ND)



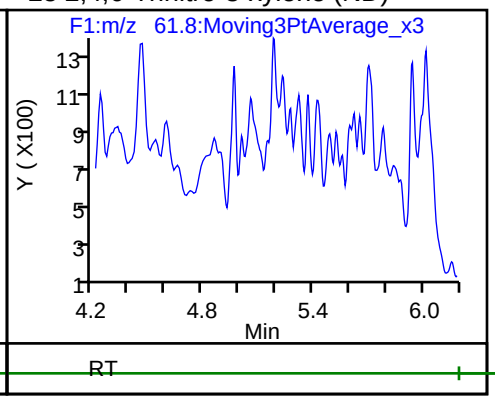
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:15 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14036.d
Lims ID: 280-160190-A-41-B
Client ID: 29SB190 (19-20)
Sample Type: Client
Inject. Date: 14-Apr-2022 16:05:24 ALS Bottle#: 32 Worklist Smp#: 36
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-41-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:13 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:33:50

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	100.4	100.04

Report Date: 15-Apr-2022 08:03:16 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

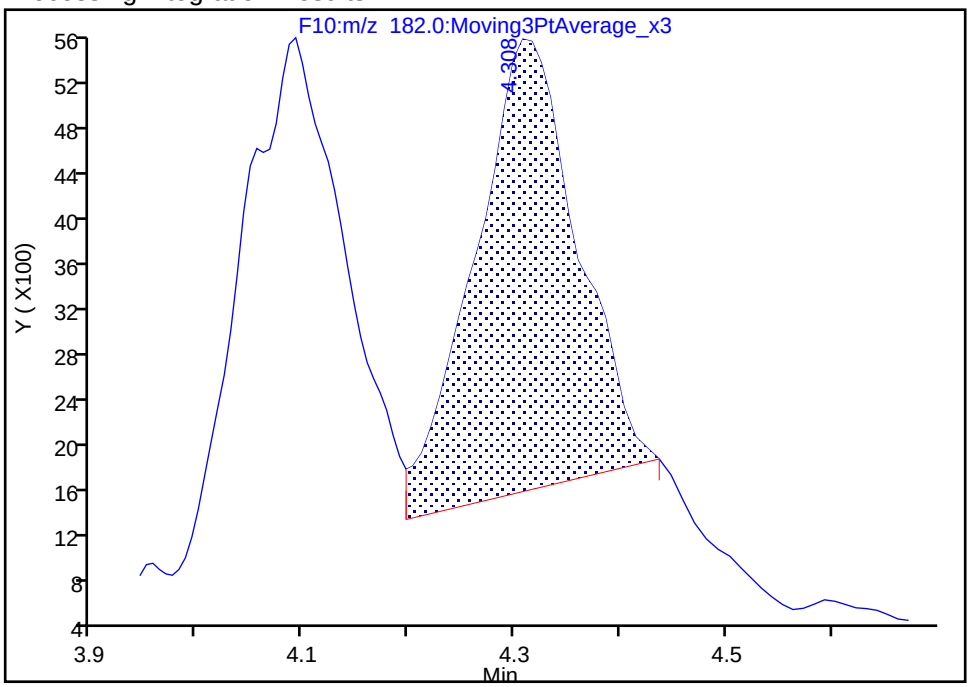
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14036.d				
Injection Date:	14-Apr-2022 16:05:24	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-41-B	Lab Sample ID:	280-160190-41		
Client ID:	29SB190 (19-20)				
Operator ID:	acm	ALS Bottle#:	32	Worklist Smp#:	36
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F10:SIR		

19 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

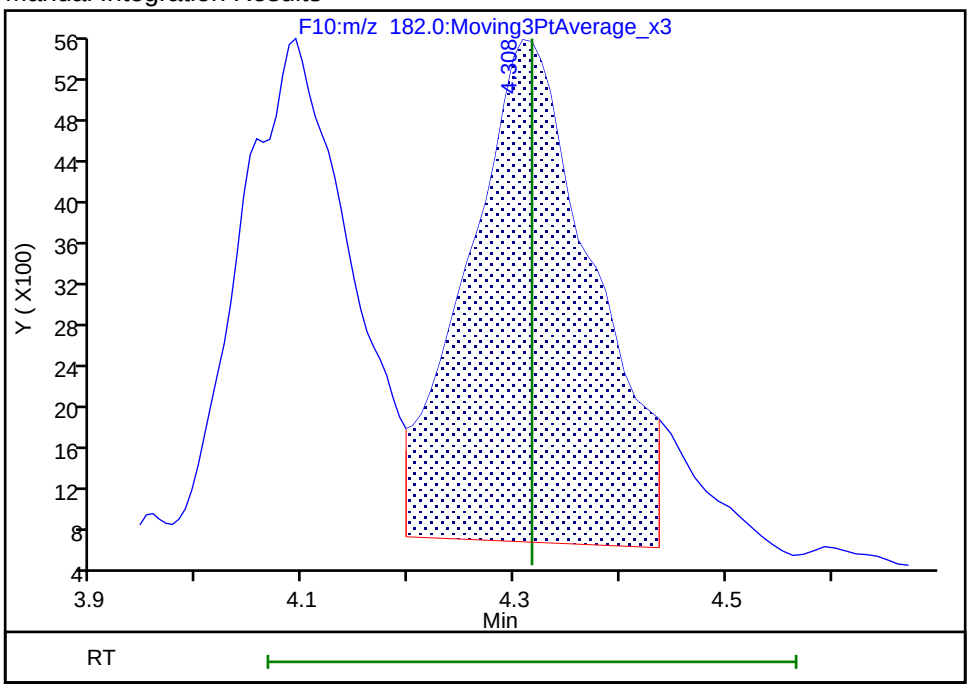
Processing Integration Results

RT: 4.31
Area: 26771
Amount: -0.111966
Amount Units: ug/l



Manual Integration Results

RT: 4.31
Area: 40068
Amount: 0.332080
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:33:31

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:03:16 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

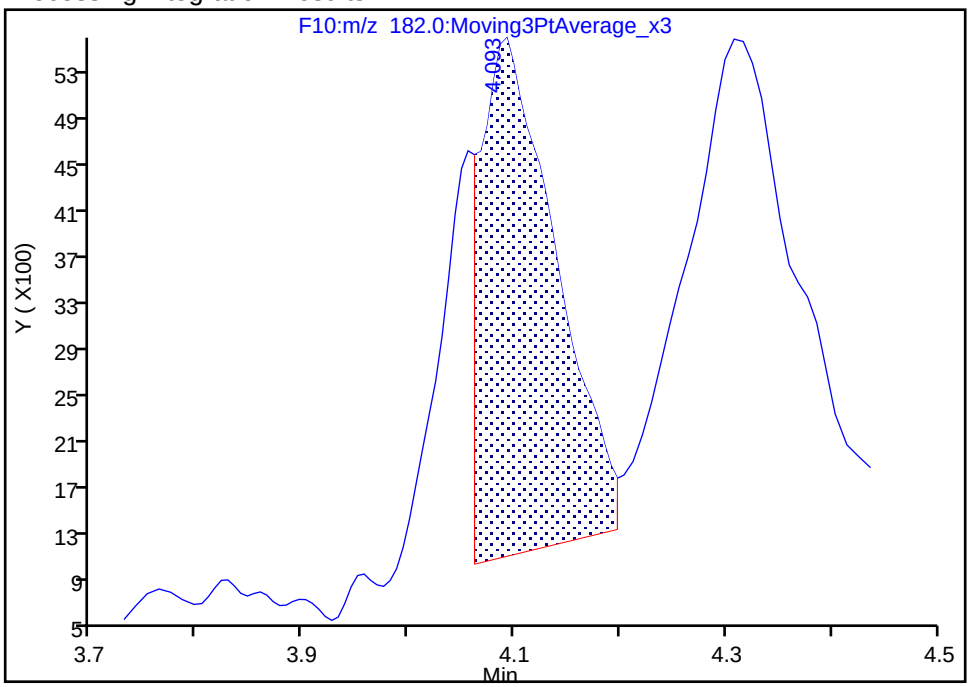
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14036.d				
Injection Date:	14-Apr-2022 16:05:24	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-41-B	Lab Sample ID:	280-160190-41		
Client ID:	29SB190 (19-20)				
Operator ID:	acm	ALS Bottle#:	32	Worklist Smp#:	36
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F10:SIR		

17 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

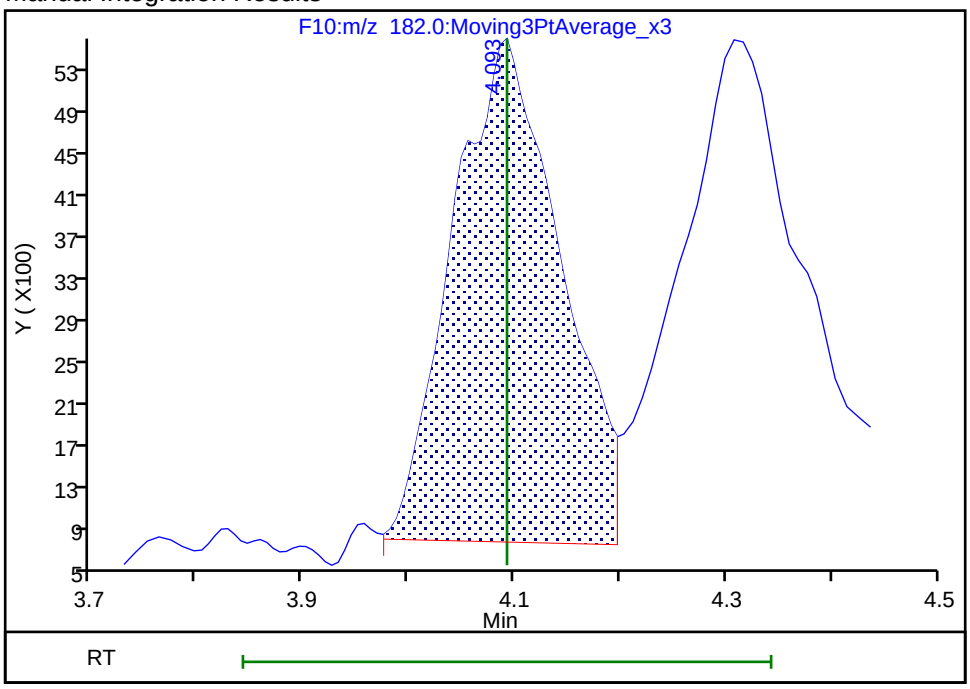
Processing Integration Results

RT: 4.09
Area: 21672
Amount: -0.283753
Amount Units: ug/l



Manual Integration Results

RT: 4.09
Area: 34040
Amount: -0.066730
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:33:38

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB192 (7-8) | Lab Sample ID: 280-160190-42
Matrix: Solid | Lab File ID: ex722D14037.d
Analysis Method: 8321A | Date Collected: 03/24/2022 14:15
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:23
Sample wt/vol: 10.36(g) | Date Analyzed: 04/14/2022 16:12
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571896 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.048	U	0.097	0.048	0.043
99-65-0	1,3-Dinitrobenzene	0.048	U	0.097	0.048	0.043
118-96-7	2,4,6-Trinitrotoluene	0.048	U	0.097	0.048	0.036
121-14-2	2,4-Dinitrotoluene	0.048	U	0.097	0.048	0.045
606-20-2	2,6-Dinitrotoluene	0.048	U	0.097	0.048	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.048	U	0.097	0.048	0.048
19406-51-0	4-Amino-2,6-dinitrotoluene	0.048	U	0.097	0.048	0.030
2691-41-0	HMX	0.048	U	0.097	0.048	0.044
99-08-1	m-Nitrotoluene	0.048	U	0.097	0.048	0.042
98-95-3	Nitrobenzene	0.048	U	0.11	0.048	0.037
55-63-0	Nitroglycerin	0.048	U	0.097	0.048	0.028
88-72-2	o-Nitrotoluene	0.048	U	0.097	0.048	0.041
78-11-5	PETN	0.048	U	0.097	0.048	0.033
99-99-0	p-Nitrotoluene	0.048	U	0.097	0.048	0.048
121-82-4	RDX	0.048	U	0.12	0.048	0.042
479-45-8	Tetryl	0.048	U Q	0.097	0.048	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	97		68-140

Report Date: 15-Apr-2022 08:03:16 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14037.d
Lims ID: 280-160190-A-42-B
Client ID: 29SB192 (7-8)
Sample Type: Client
Inject. Date: 14-Apr-2022 16:12:01 ALS Bottle#: 33 Worklist Smp#: 37
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-42-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:13 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:34:00
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	2494	-0.5379	1.3	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		163864	125.0	150	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		538232	125.0	364	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1167178	129.4	277	
$ 11 Nitrobenzene-d5								
128.0	3.315	3.324	-0.009	0.775	510531	97.6	110	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3604807	125.0	136	

QC Flag Legend

Processing Flags

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:16 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14037.d

Injection Date: 14-Apr-2022 16:12:01 Instrument ID: LC_LCMS7

Lims ID: 280-160190-A-42-B Lab Sample ID: 280-160190-42

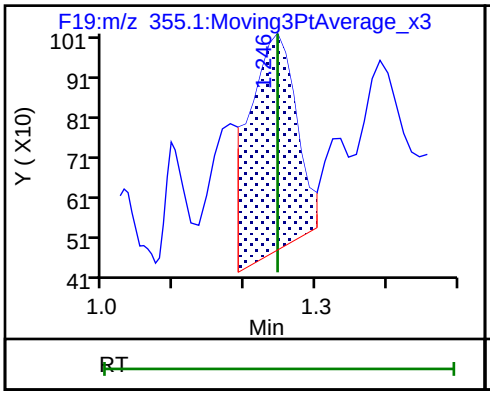
Client ID: 29SB192 (7-8)

Operator ID: acm ALS Bottle#: 33 Worklist Smp#: 37

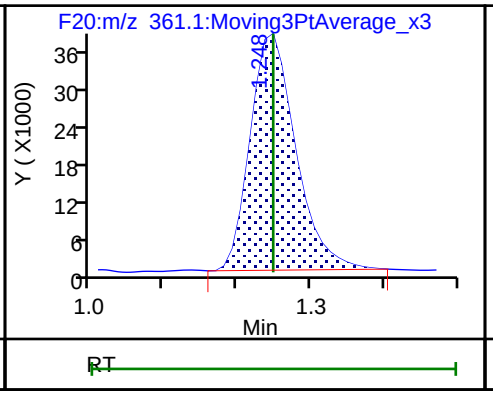
Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

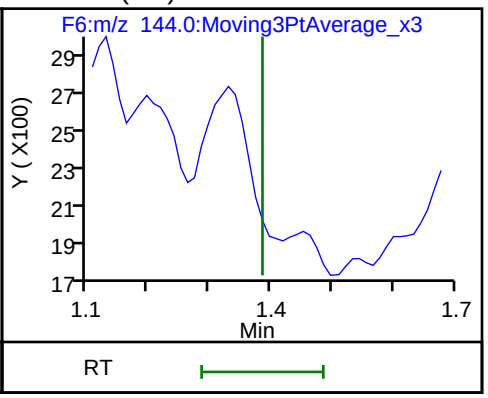
2 HMX



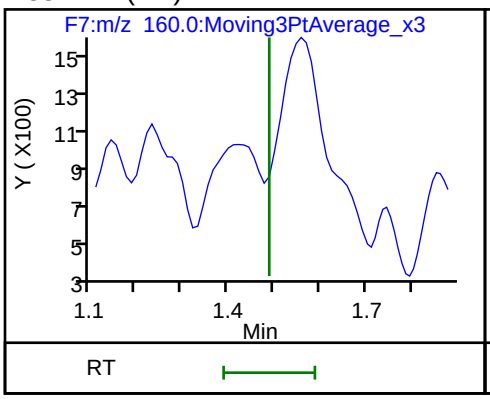
* 1 HMX-13C4



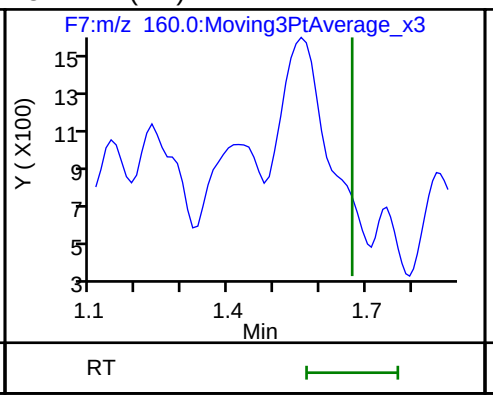
36 TNX (ND)



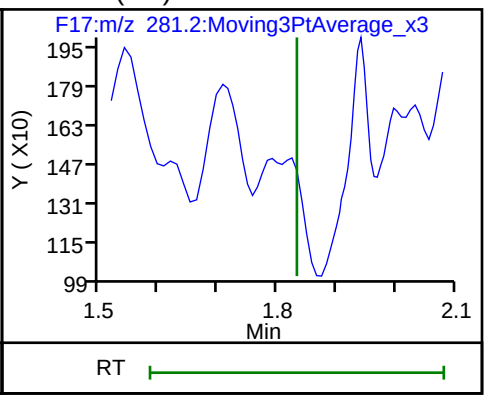
33 DNX (ND)



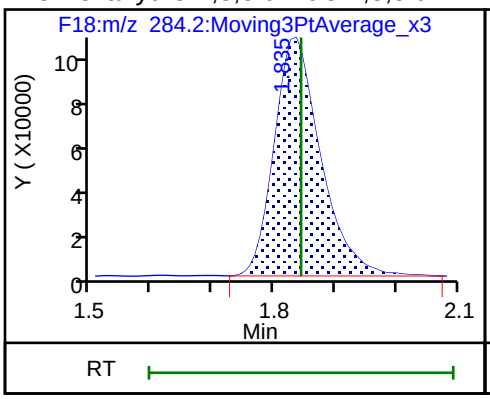
34 MNX (ND)



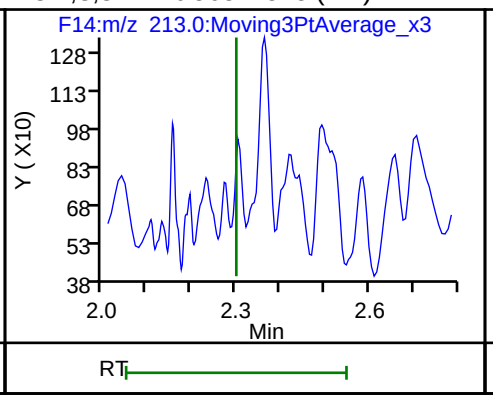
4 RDX (ND)



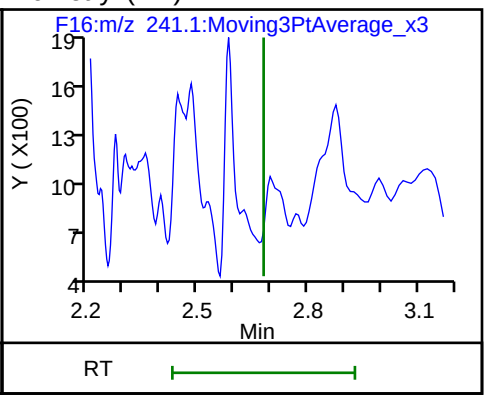
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



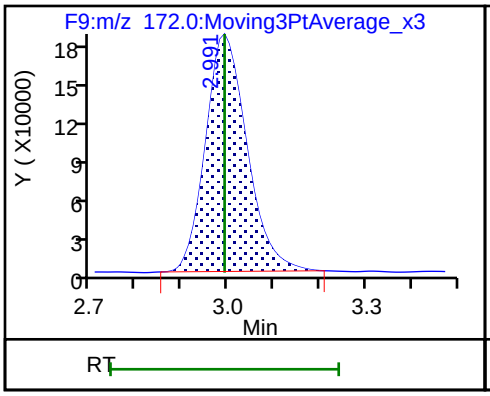
5 1,3,5-Trinitrobenzene (ND)



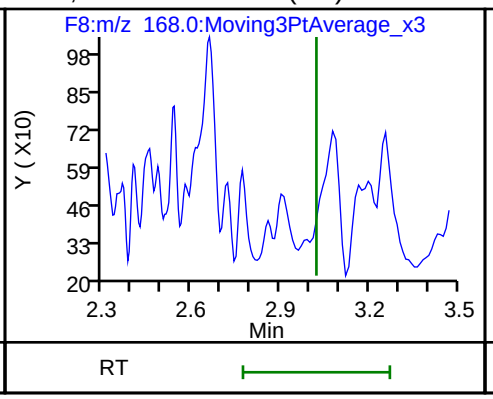
6 Tetryl (ND)



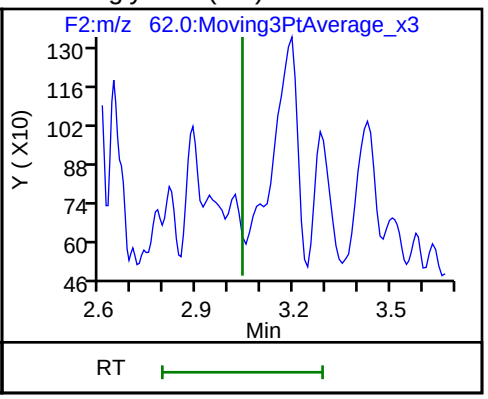
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

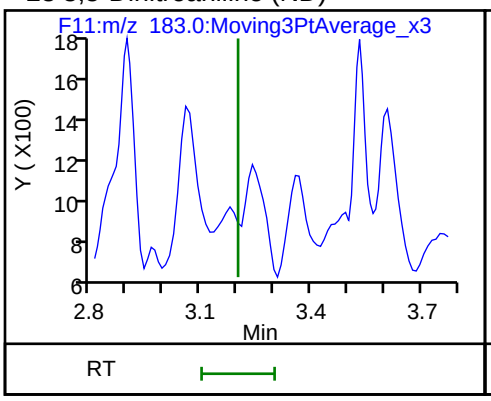


9 Nitroglycerin (ND)

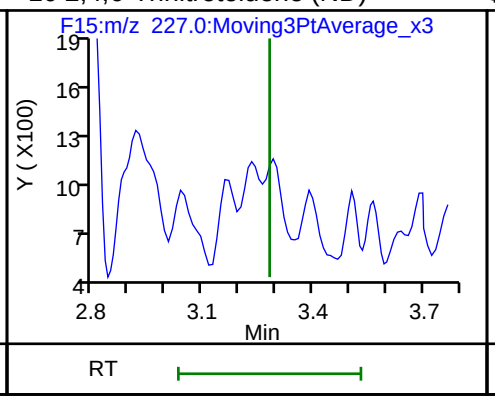


Report Date: 15-Apr-2022 08:03:16 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14037.d

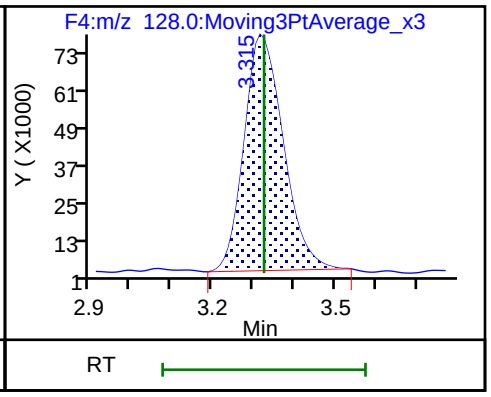
28 3,5-Dinitroaniline (ND)



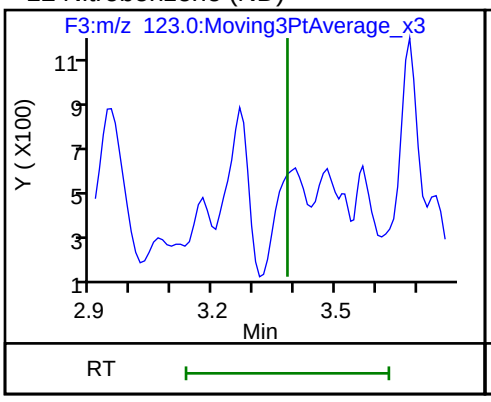
10 2,4,6-Trinitrotoluene (ND)



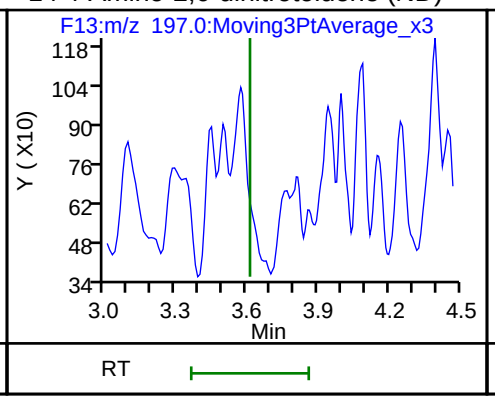
$ 11 Nitrobenzene-d5



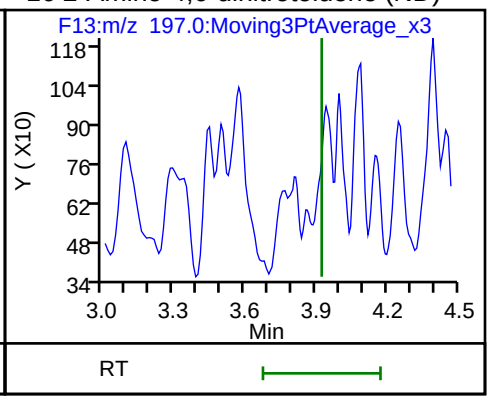
12 Nitrobenzene (ND)



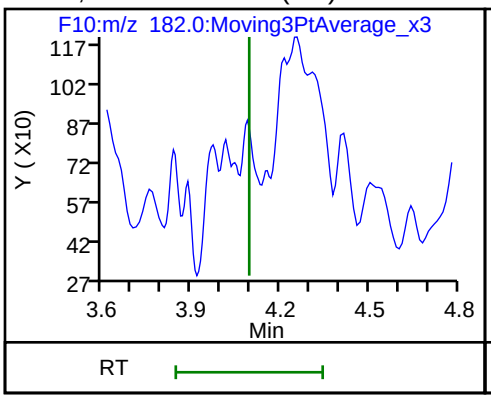
14 4-Amino-2,6-dinitrotoluene (ND)



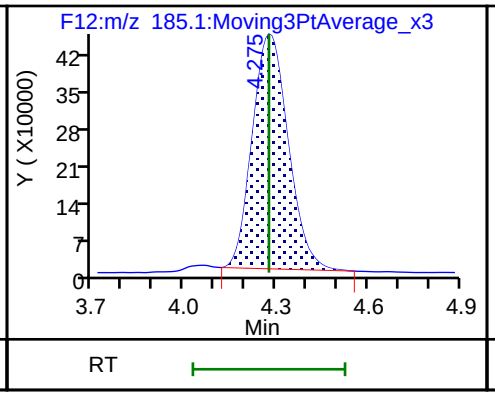
16 2-Amino-4,6-dinitrotoluene (ND)



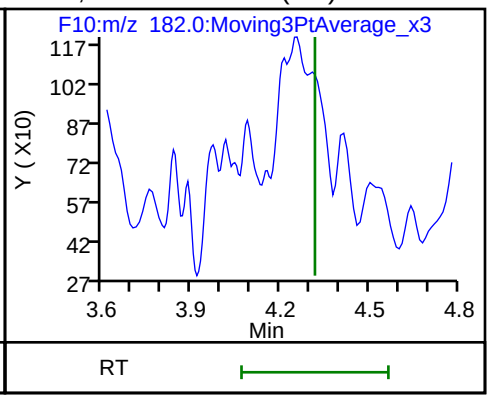
17 2,6-Dinitrotoluene (ND)



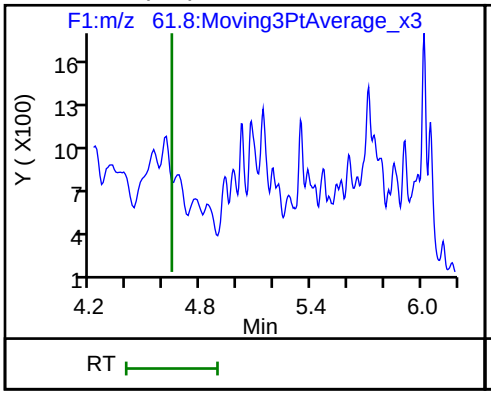
* 18 2,4-dinitrotoluene-d3



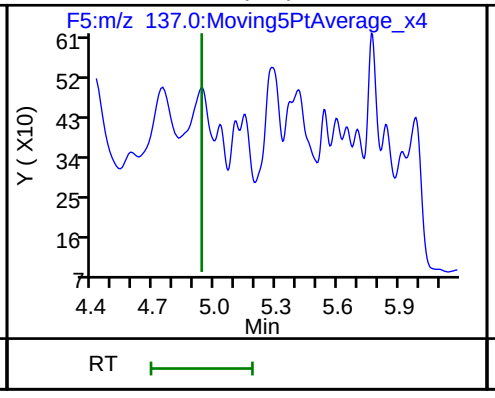
19 2,4-Dinitrotoluene (ND)



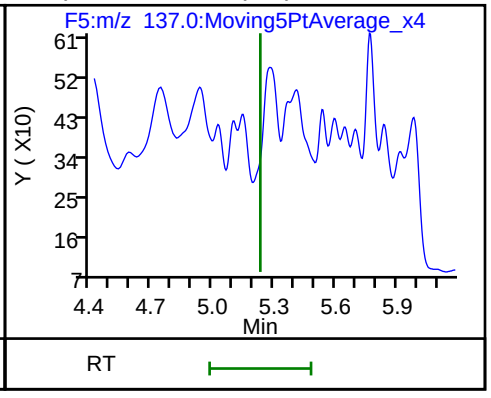
20 PETN (ND)



22 o-Nitrotoluene (ND)



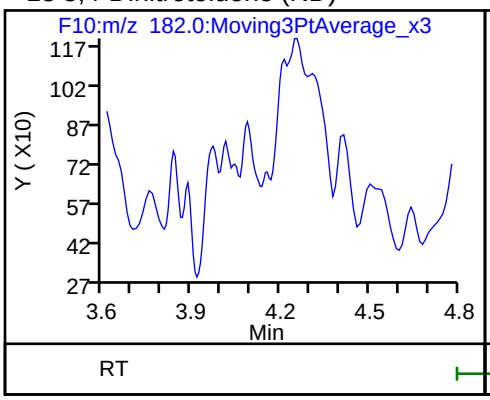
23 p-Nitrotoluene (ND)



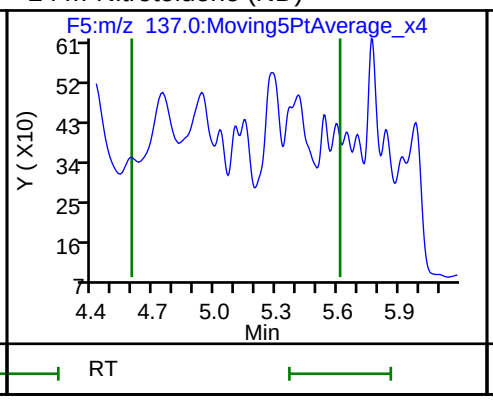
Report Date: 15-Apr-2022 08:03:16 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14037.d

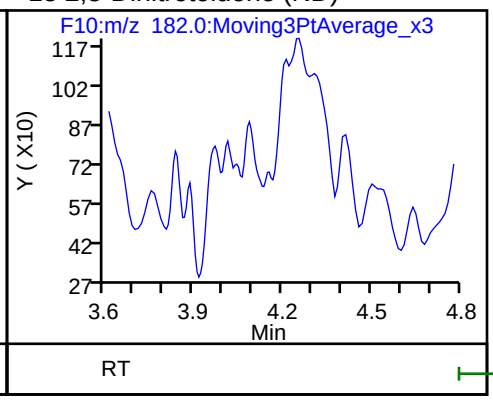
13 3,4-Dinitrotoluene (ND)



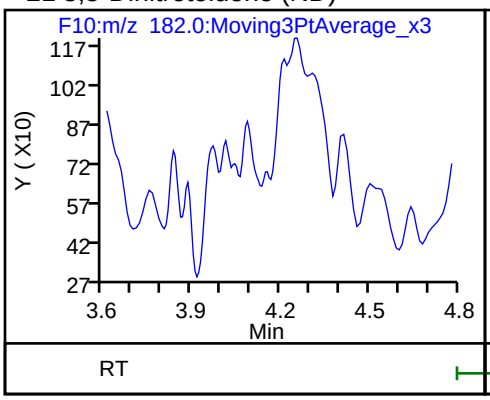
24 m-Nitrotoluene (ND)



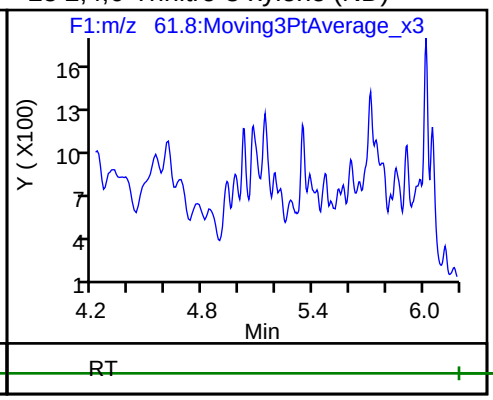
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:16 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14037.d				
Lims ID:	280-160190-A-42-B				
Client ID:	29SB192 (7-8)				
Sample Type:	Client				
Inject. Date:	14-Apr-2022 16:12:01	ALS Bottle#:	33	Worklist Smp#:	37
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160190-A-42-B				
Misc. Info.:	ex722D14				
Operator ID:	acm	Instrument ID:	LC_LCMS7		
Method:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m				
Limit Group:	LC - 8321A Expl				
Last Update:	15-Apr-2022 08:03:13	Calib Date:	14-Apr-2022 13:07:22		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1652				
First Level Reviewer: meyera		Date:	15-Apr-2022 07:34:00		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	97.6	97.30

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB192 (11-12) | Lab Sample ID: 280-160190-43
Matrix: Solid | Lab File ID: ex722D14038.d
Analysis Method: 8321A | Date Collected: 03/24/2022 14:20
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:23
Sample wt/vol: 10.09(g) | Date Analyzed: 04/14/2022 16:18
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571896 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.050	U	0.099	0.050	0.044
99-65-0	1,3-Dinitrobenzene	0.050	U	0.099	0.050	0.044
118-96-7	2,4,6-Trinitrotoluene	0.050	U	0.099	0.050	0.036
121-14-2	2,4-Dinitrotoluene	0.050	U	0.099	0.050	0.046
606-20-2	2,6-Dinitrotoluene	0.050	U	0.099	0.050	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.050	U M	0.099	0.050	0.049
19406-51-0	4-Amino-2,6-dinitrotoluene	0.050	U	0.099	0.050	0.031
2691-41-0	HMX	0.050	U M	0.099	0.050	0.046
99-08-1	m-Nitrotoluene	0.050	U	0.099	0.050	0.043
98-95-3	Nitrobenzene	0.050	U	0.11	0.050	0.038
55-63-0	Nitroglycerin	0.050	U	0.099	0.050	0.029
88-72-2	o-Nitrotoluene	0.050	U	0.099	0.050	0.042
78-11-5	PETN	0.050	U	0.099	0.050	0.034
99-99-0	p-Nitrotoluene	0.050	U	0.099	0.050	0.049
121-82-4	RDX	0.050	U	0.12	0.050	0.043
479-45-8	Tetryl	0.050	U Q	0.099	0.050	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	100		68-140

Report Date: 15-Apr-2022 08:03:17 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14038.d
Lims ID: 280-160190-A-43-B
Client ID: 29SB192 (11-12)
Sample Type: Client
Inject. Date: 14-Apr-2022 16:18:37 ALS Bottle#: 34 Worklist Smp#: 38
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-43-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:13 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:34:13
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		150530	125.0	195	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		507131	125.0	142	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.981	2.991	-0.010		1119685	129.4	278	
$ 11 Nitrobenzene-d5								
128.0	3.315	3.324	-0.009	0.775	500886	99.9	98.1	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3531300	125.0	136	

QC Flag Legend
Processing Flags

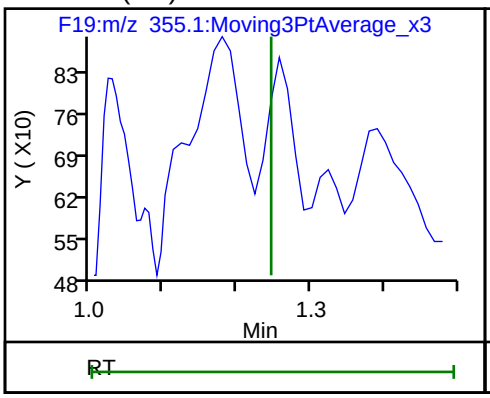
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:17 Chrom Revision: 2.3 12-Apr-2022 20:29:44

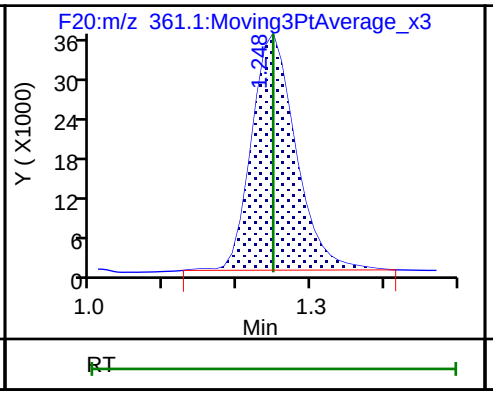
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14038.d
Injection Date: 14-Apr-2022 16:18:37 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-43-B Lab Sample ID: 280-160190-43
Client ID: 29SB192 (11-12)
Operator ID: acm ALS Bottle#: 34 Worklist Smp#: 38
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

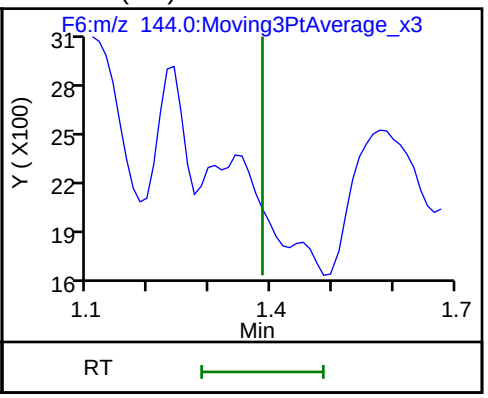
2 HMX (ND)



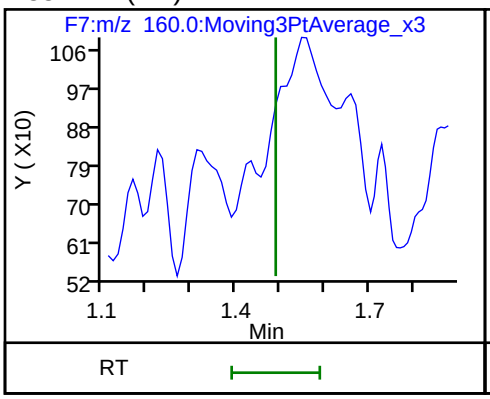
* 1 HMX-13C4



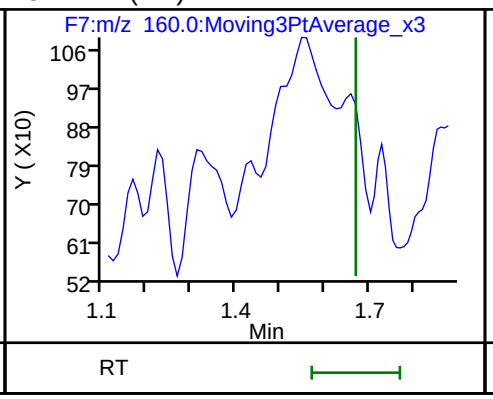
36 TNX (ND)



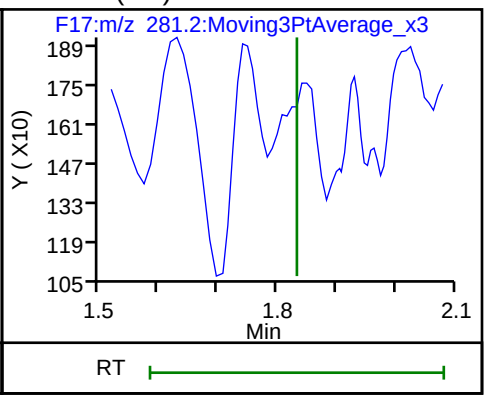
33 DNX (ND)



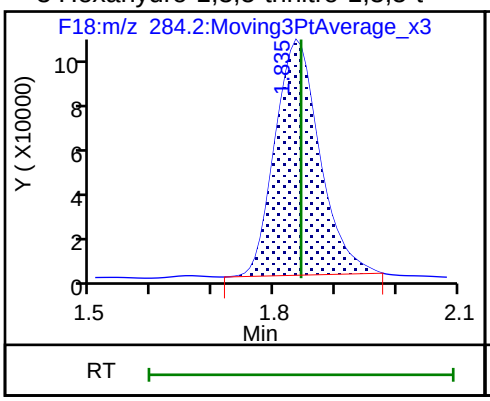
34 MNX (ND)



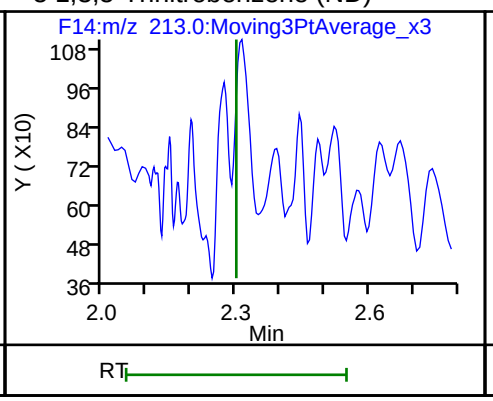
4 RDX (ND)



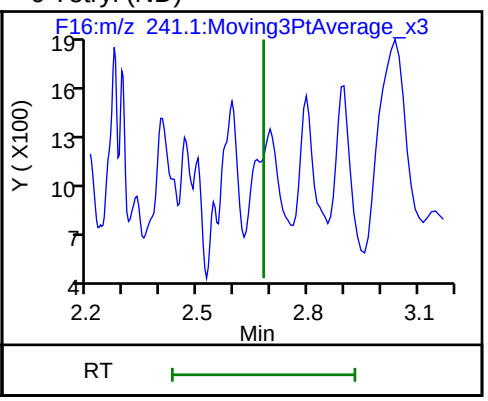
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



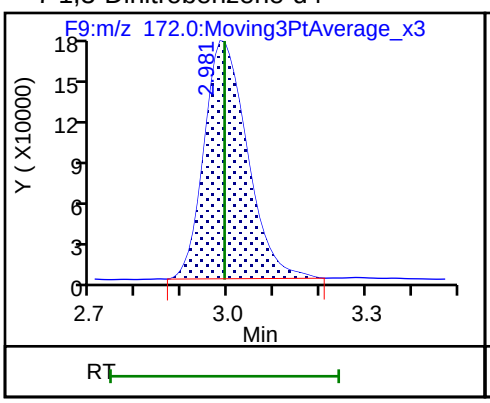
5 1,3,5-Trinitrobenzene (ND)



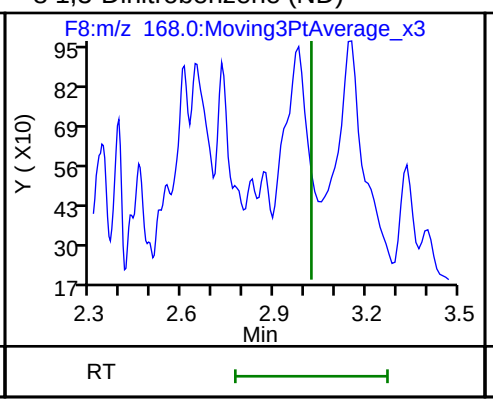
6 Tetryl (ND)



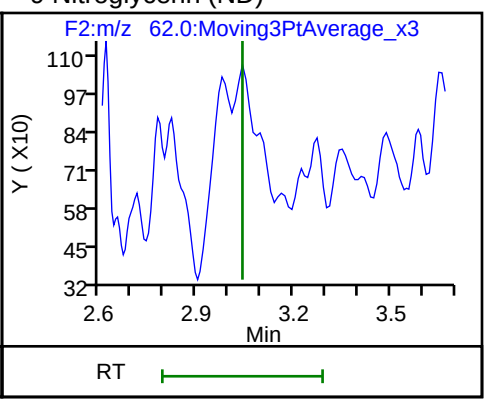
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

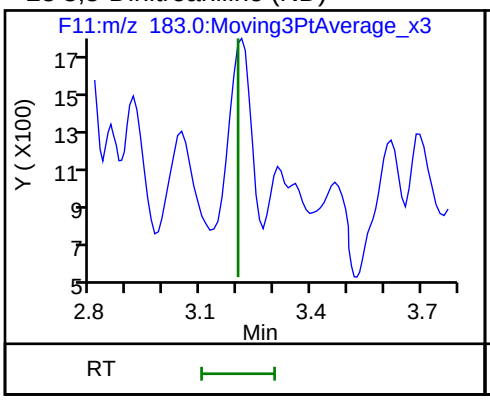


9 Nitroglycerin (ND)

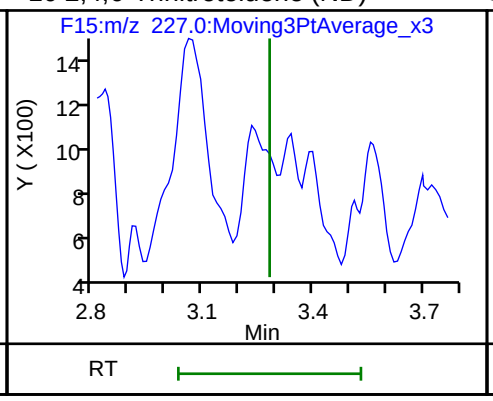


Report Date: 15-Apr-2022 08:03:17 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14038.d

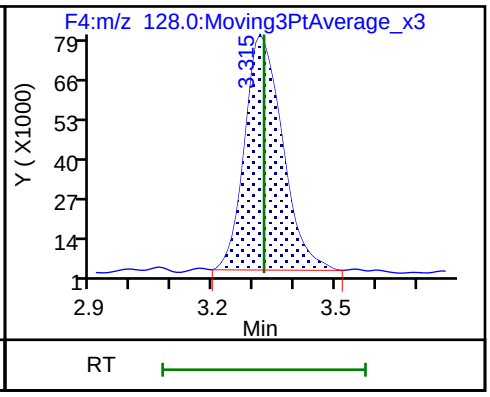
28 3,5-Dinitroaniline (ND)



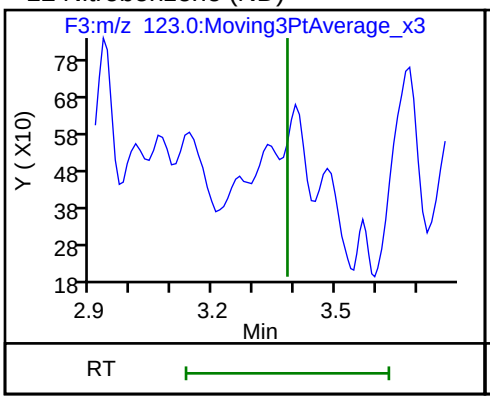
10 2,4,6-Trinitrotoluene (ND)



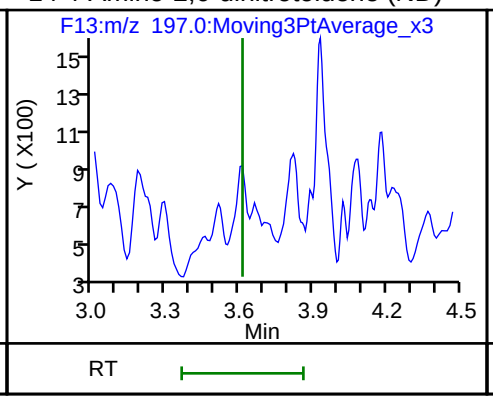
$ 11 Nitrobenzene-d5



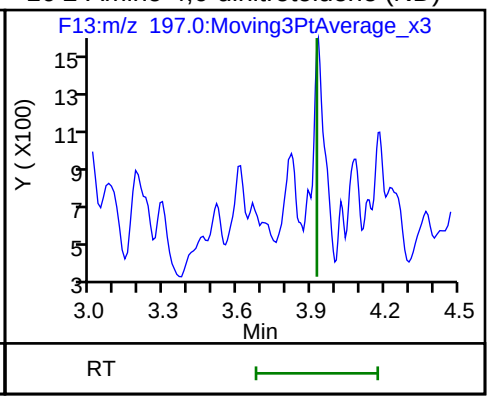
12 Nitrobenzene (ND)



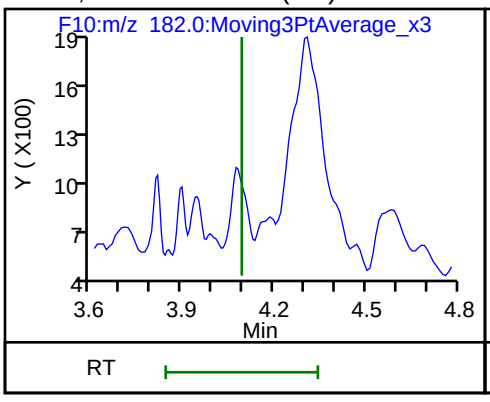
14 4-Amino-2,6-dinitrotoluene (ND)



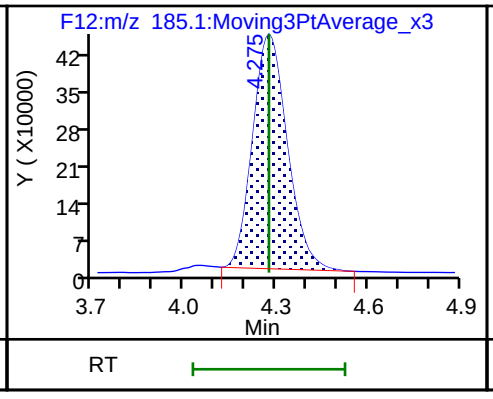
16 2-Amino-4,6-dinitrotoluene (ND)



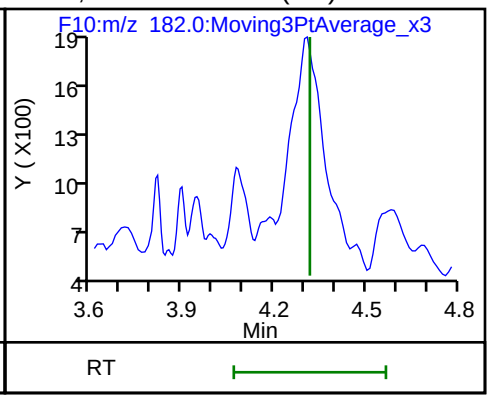
17 2,6-Dinitrotoluene (ND)



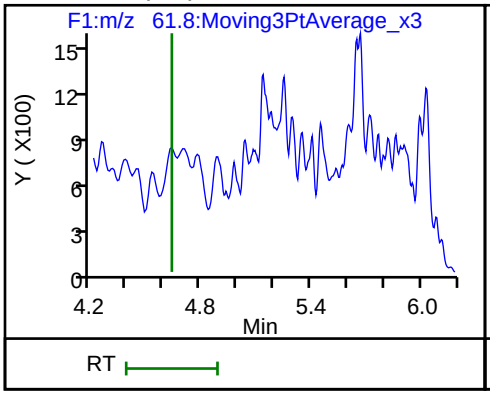
* 18 2,4-dinitrotoluene-d3



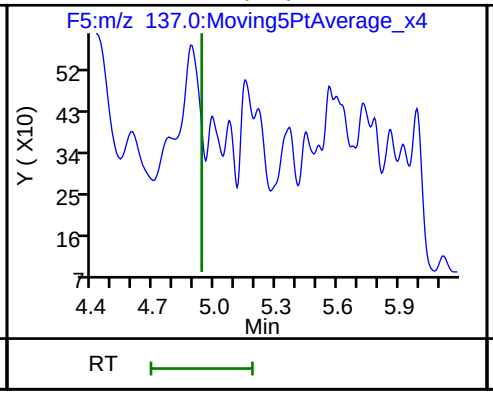
19 2,4-Dinitrotoluene (ND)



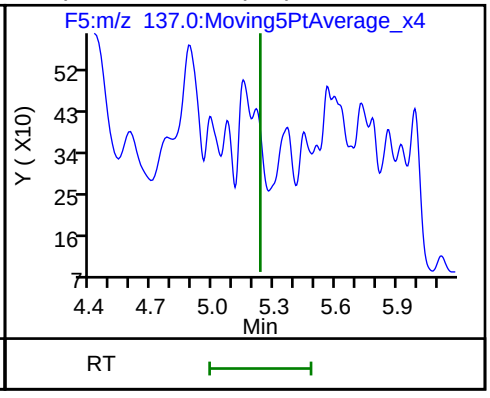
20 PETN (ND)



22 o-Nitrotoluene (ND)



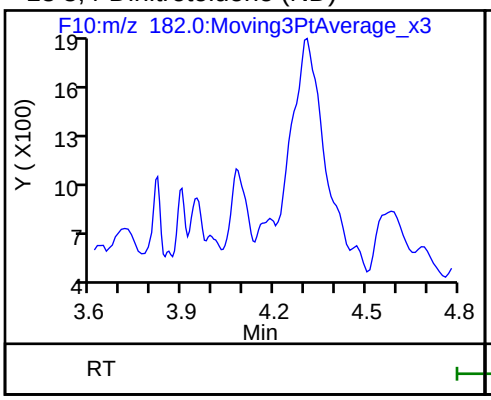
23 p-Nitrotoluene (ND)



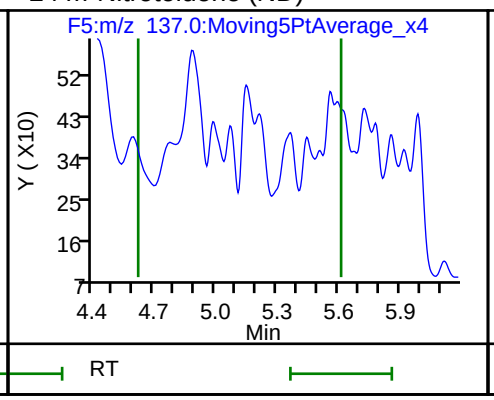
Report Date: 15-Apr-2022 08:03:17 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14038.d

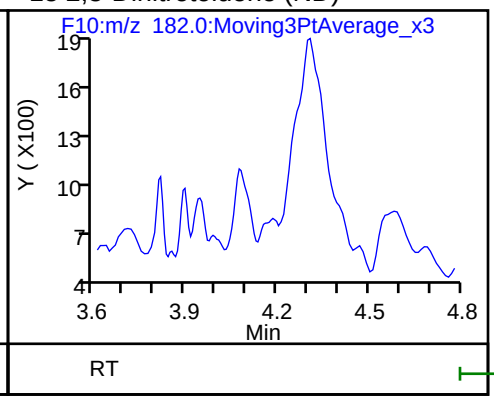
13 3,4-Dinitrotoluene (ND)



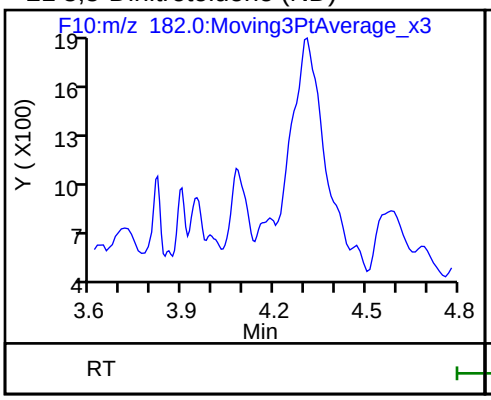
24 m-Nitrotoluene (ND)



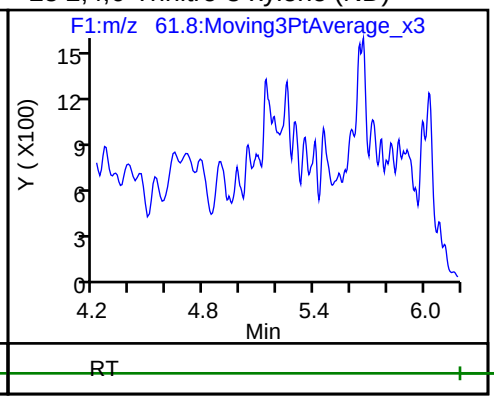
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:17 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14038.d
Lims ID: 280-160190-A-43-B
Client ID: 29SB192 (11-12)
Sample Type: Client
Inject. Date: 14-Apr-2022 16:18:37 ALS Bottle#: 34 Worklist Smp#: 38
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-43-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:13 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:34:13

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	99.9	99.55

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB192 (15-16) | Lab Sample ID: 280-160190-44
Matrix: Solid | Lab File ID: ex722D14039.d
Analysis Method: 8321A | Date Collected: 03/24/2022 14:25
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:23
Sample wt/vol: 10.66(g) | Date Analyzed: 04/14/2022 16:25
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571896 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.047	U M	0.094	0.047	0.042
99-65-0	1,3-Dinitrobenzene	0.047	U	0.094	0.047	0.042
118-96-7	2,4,6-Trinitrotoluene	0.047	U	0.094	0.047	0.035
121-14-2	2,4-Dinitrotoluene	0.047	U	0.094	0.047	0.044
606-20-2	2,6-Dinitrotoluene	0.047	U	0.094	0.047	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.047	U	0.094	0.047	0.047
19406-51-0	4-Amino-2,6-dinitrotoluene	0.047	U	0.094	0.047	0.029
2691-41-0	HMX	0.047	U	0.094	0.047	0.043
99-08-1	m-Nitrotoluene	0.047	U	0.094	0.047	0.041
98-95-3	Nitrobenzene	0.047	U	0.10	0.047	0.036
55-63-0	Nitroglycerin	0.047	U	0.094	0.047	0.027
88-72-2	o-Nitrotoluene	0.047	U	0.094	0.047	0.040
78-11-5	PETN	0.047	U	0.094	0.047	0.032
99-99-0	p-Nitrotoluene	0.047	U	0.094	0.047	0.046
121-82-4	RDX	0.047	U	0.11	0.047	0.040
479-45-8	Tetryl	0.047	U Q	0.094	0.047	0.036

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	86		68-140

Report Date: 15-Apr-2022 08:03:17 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14039.d
Lims ID: 280-160190-A-44-B
Client ID: 29SB192 (15-16)
Sample Type: Client
Inject. Date: 14-Apr-2022 16:25:12 ALS Bottle#: 35 Worklist Smp#: 39
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-44-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:13 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:34:25
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		162803	125.0	175	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		518339	125.0	214	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1185766	129.4	275	
8 1,3-Dinitrobenzene								
168.0	2.999	3.022	-0.023	1.003	1928	-0.7844	2.0	
$ 11 Nitrobenzene-d5								
128.0	3.324	3.324	0.0	0.778	458677	86.1	48.7	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3685603	125.0	138	

QC Flag Legend

Processing Flags

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:17 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14039.d

Injection Date: 14-Apr-2022 16:25:12 Instrument ID: LC_LCMS7

Lims ID: 280-160190-A-44-B Lab Sample ID: 280-160190-44

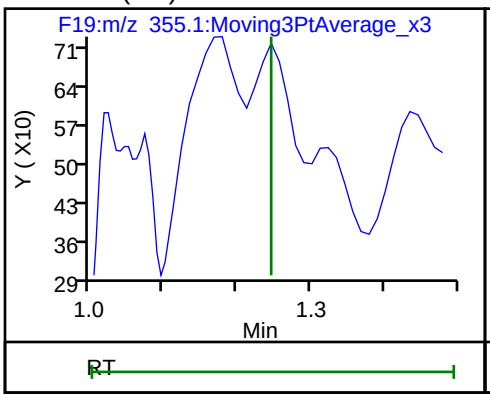
Client ID: 29SB192 (15-16)

Operator ID: acm ALS Bottle#: 35 Worklist Smp#: 39

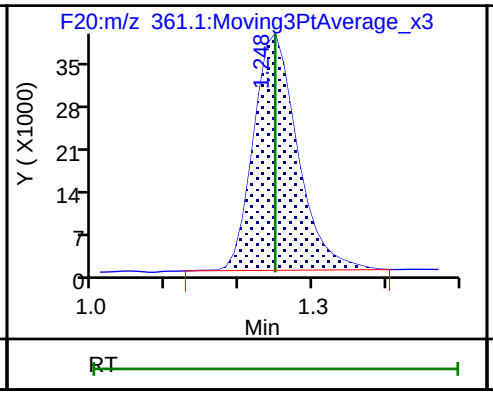
Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

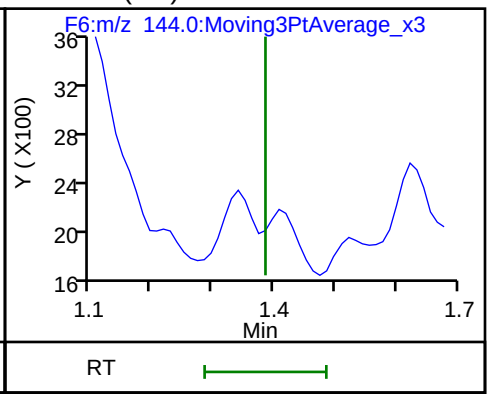
2 HMX (ND)



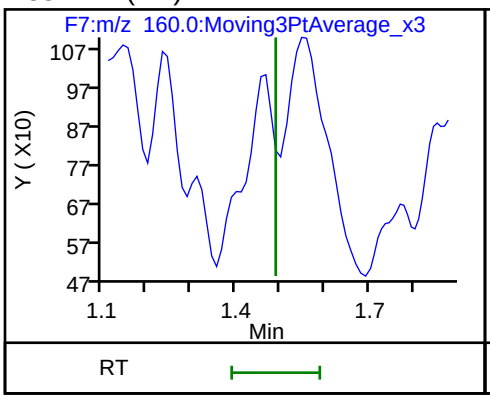
* 1 HMX-13C4



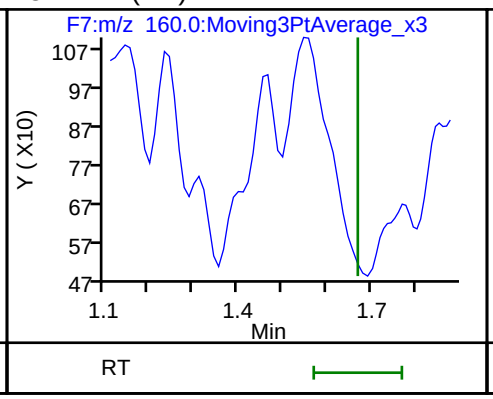
36 TNX (ND)



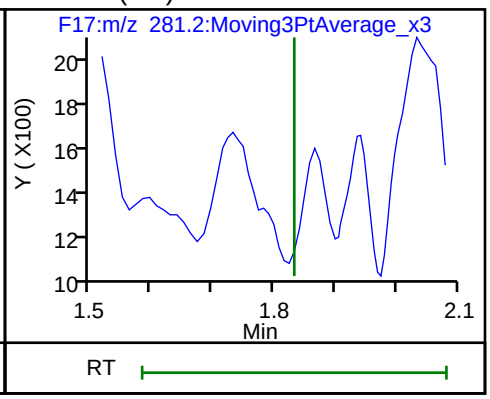
33 DNX (ND)



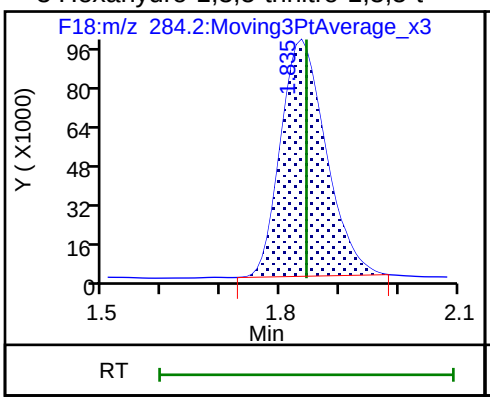
34 MNX (ND)



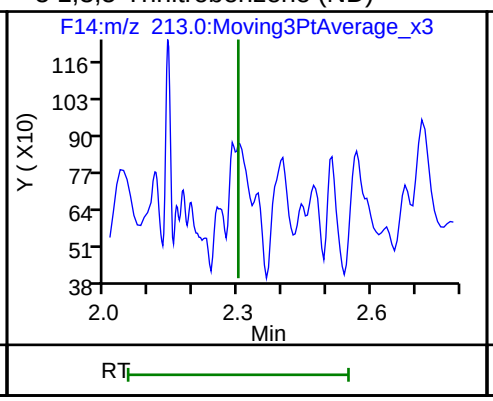
4 RDX (ND)



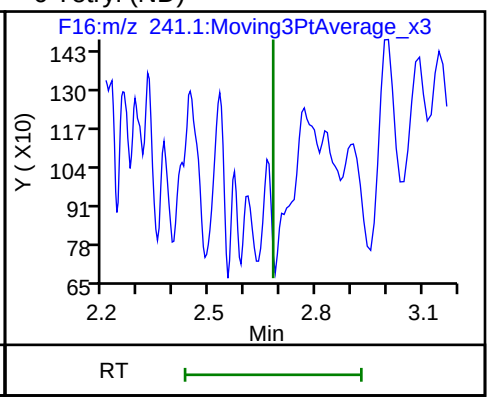
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



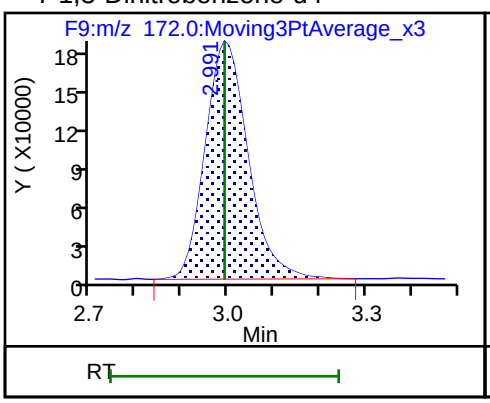
5 1,3,5-Trinitrobenzene (ND)



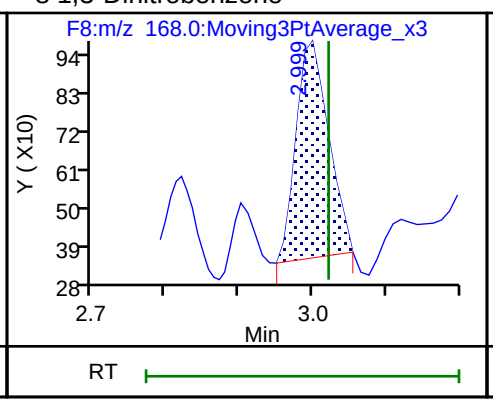
6 Tetryl (ND)



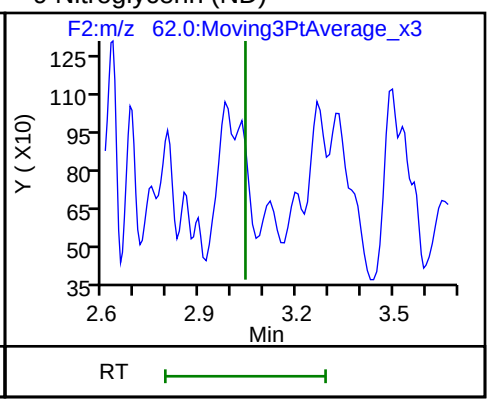
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



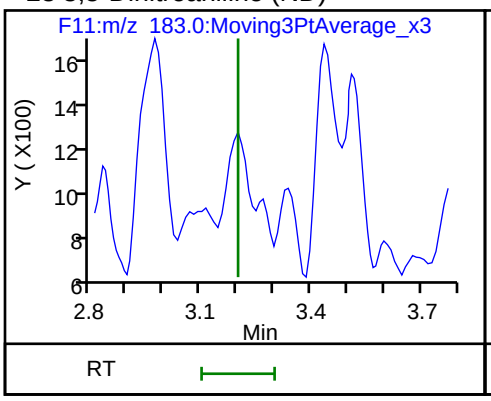
9 Nitroglycerin (ND)



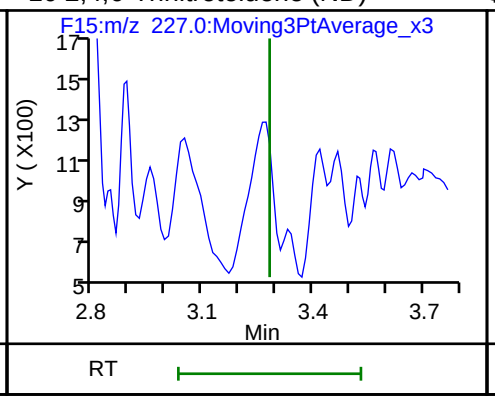
Report Date: 15-Apr-2022 08:03:17 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14039.d

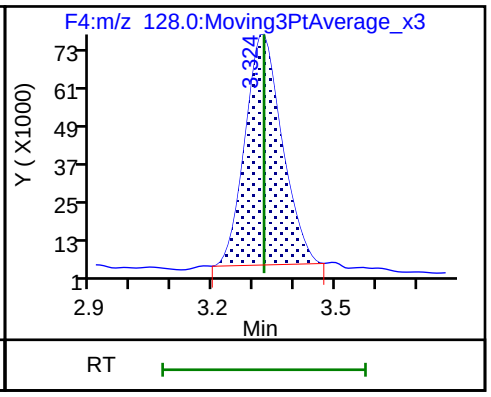
28 3,5-Dinitroaniline (ND)



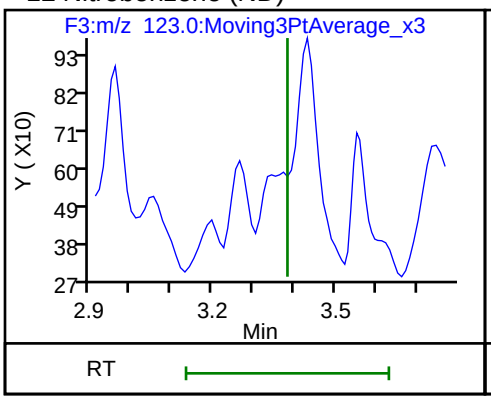
10 2,4,6-Trinitrotoluene (ND)



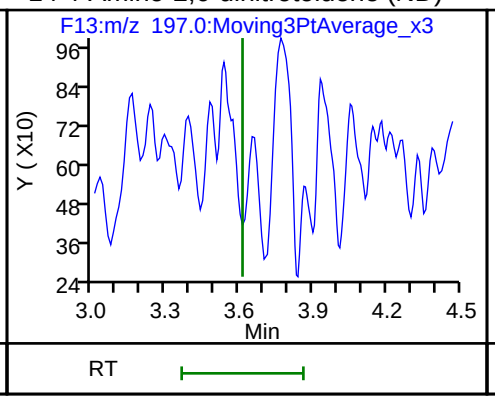
$ 11 Nitrobenzene-d5



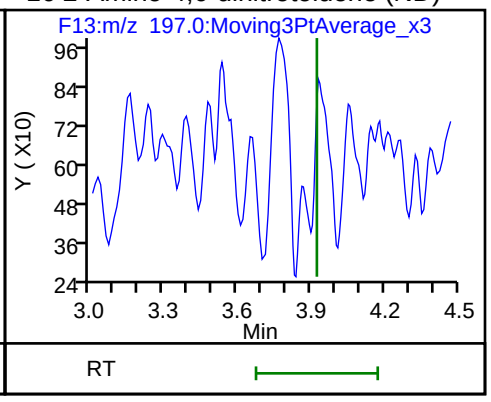
12 Nitrobenzene (ND)



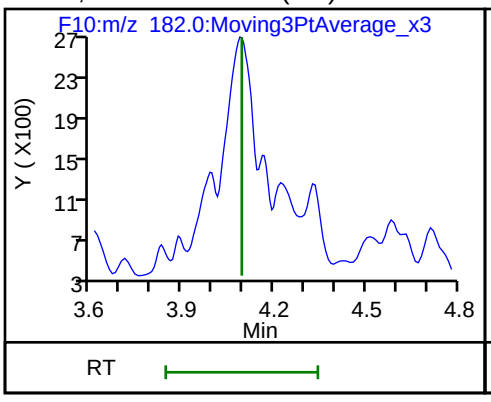
14 4-Amino-2,6-dinitrotoluene (ND)



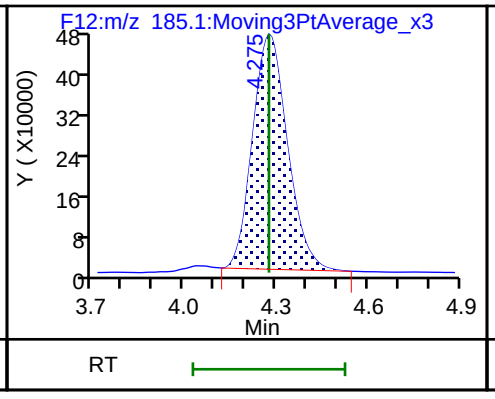
16 2-Amino-4,6-dinitrotoluene (ND)



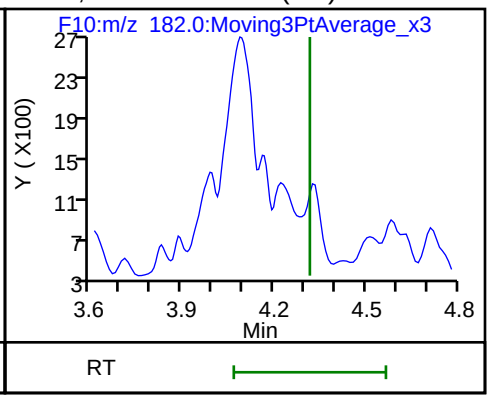
17 2,6-Dinitrotoluene (ND)



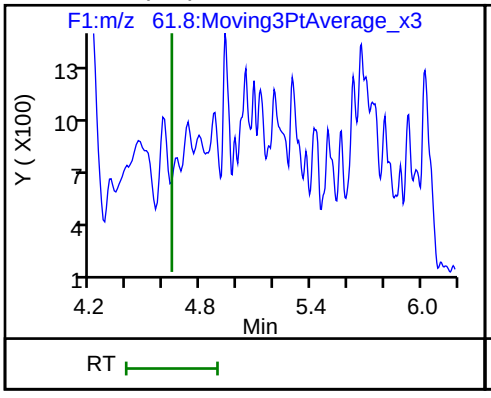
* 18 2,4-dinitrotoluene-d3



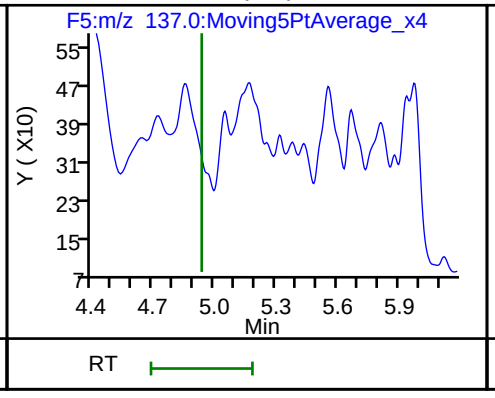
19 2,4-Dinitrotoluene (ND)



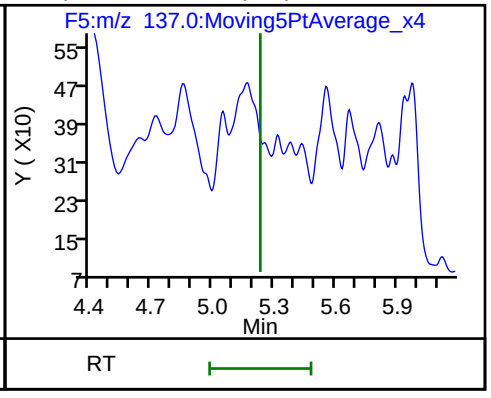
20 PETN (ND)



22 o-Nitrotoluene (ND)



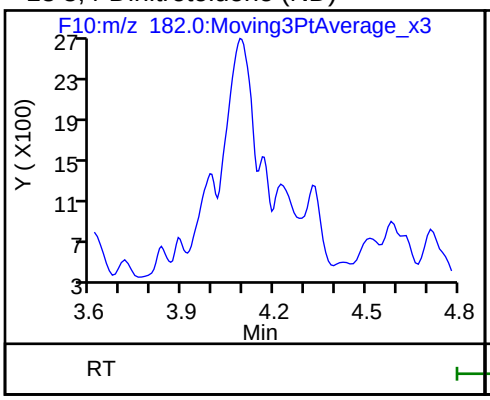
23 p-Nitrotoluene (ND)



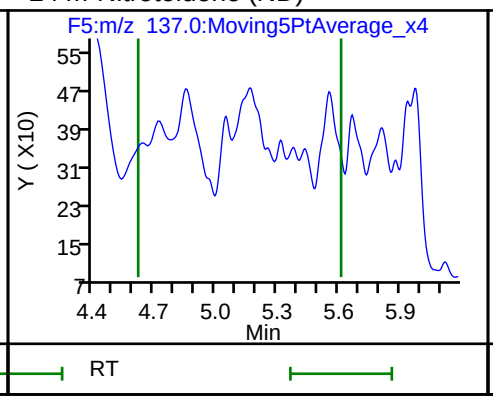
Report Date: 15-Apr-2022 08:03:17 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14039.d

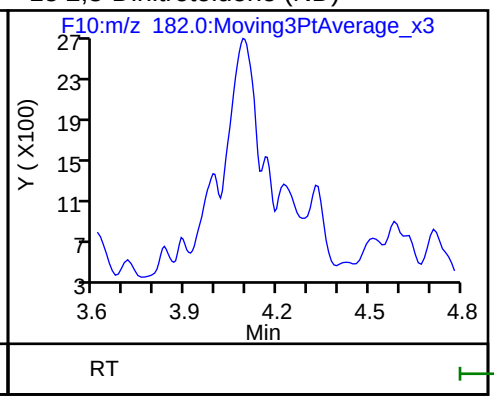
13 3,4-Dinitrotoluene (ND)



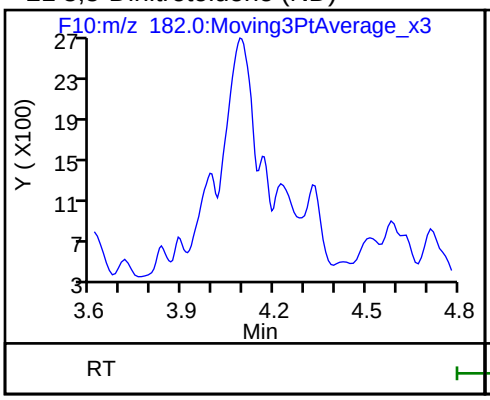
24 m-Nitrotoluene (ND)



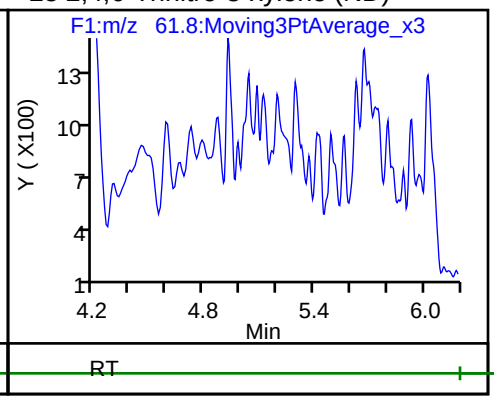
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:17 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14039.d				
Lims ID:	280-160190-A-44-B				
Client ID:	29SB192 (15-16)				
Sample Type:	Client				
Inject. Date:	14-Apr-2022 16:25:12	ALS Bottle#:	35	Worklist Smp#:	39
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160190-A-44-B				
Misc. Info.:	ex722D14				
Operator ID:	acm	Instrument ID:	LC_LCMS7		
Method:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m				
Limit Group:	LC - 8321A Expl				
Last Update:	15-Apr-2022 08:03:13	Calib Date:	14-Apr-2022 13:07:22		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1652				

First Level Reviewer: meyera Date: 15-Apr-2022 07:34:25

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	86.1	85.83

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB192 (19-20) | Lab Sample ID: 280-160190-45
Matrix: Solid | Lab File ID: ex722D14040.d
Analysis Method: 8321A | Date Collected: 03/24/2022 14:27
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:23
Sample wt/vol: 10.21(g) | Date Analyzed: 04/14/2022 16:31
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571896 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.049	U	0.098	0.049	0.044
99-65-0	1,3-Dinitrobenzene	0.049	U	0.098	0.049	0.044
118-96-7	2,4,6-Trinitrotoluene	0.049	U	0.098	0.049	0.036
121-14-2	2,4-Dinitrotoluene	0.049	U	0.098	0.049	0.046
606-20-2	2,6-Dinitrotoluene	0.049	U	0.098	0.049	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.049	U	0.098	0.049	0.049
19406-51-0	4-Amino-2,6-dinitrotoluene	0.049	U	0.098	0.049	0.030
2691-41-0	HMX	0.049	U M	0.098	0.049	0.045
99-08-1	m-Nitrotoluene	0.049	U	0.098	0.049	0.042
98-95-3	Nitrobenzene	0.049	U M	0.11	0.049	0.037
55-63-0	Nitroglycerin	0.049	U	0.098	0.049	0.028
88-72-2	o-Nitrotoluene	0.049	U	0.098	0.049	0.042
78-11-5	PETN	0.049	U	0.098	0.049	0.033
99-99-0	p-Nitrotoluene	0.049	U	0.098	0.049	0.048
121-82-4	RDX	0.049	U	0.12	0.049	0.042
479-45-8	Tetryl	0.049	U Q	0.098	0.049	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	93		68-140

Report Date: 15-Apr-2022 08:03:18 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14040.d
Lims ID: 280-160190-A-45-B
Client ID: 29SB192 (19-20)
Sample Type: Client
Inject. Date: 14-Apr-2022 16:31:49 ALS Bottle#: 36 Worklist Smp#: 40
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-45-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:13 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:34:39
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		177140	125.0	157	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		481238	125.0	184	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1181809	129.4	343	
10 2,4,6-Trinitrotoluene								
227.0	3.281	3.281	0.0	0.768	2818	-1.08	1.8	
$ 11 Nitrobenzene-d5								
128.0	3.324	3.324	0.0	0.778	494266	93.3	88.3	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3576343	125.0	135	

QC Flag Legend
Processing Flags

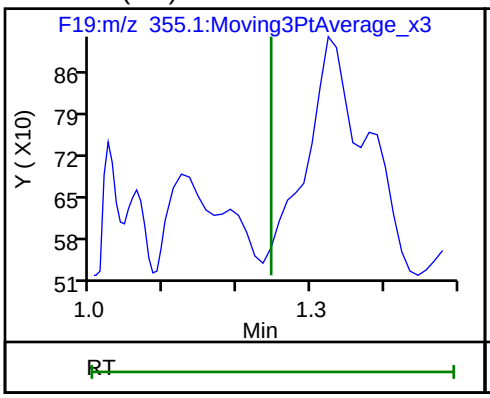
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:18 Chrom Revision: 2.3 12-Apr-2022 20:29:44

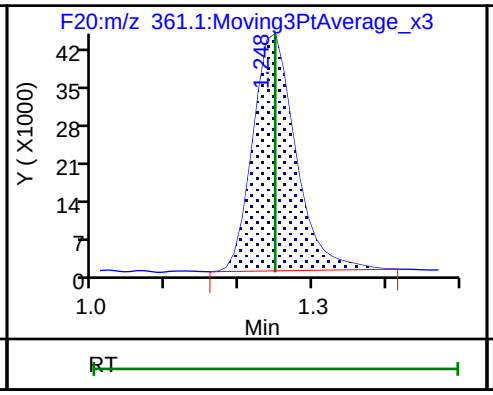
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14040.d
Injection Date: 14-Apr-2022 16:31:49 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-45-B Lab Sample ID: 280-160190-45
Client ID: 29SB192 (19-20)
Operator ID: acm ALS Bottle#: 36 Worklist Smp#: 40
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

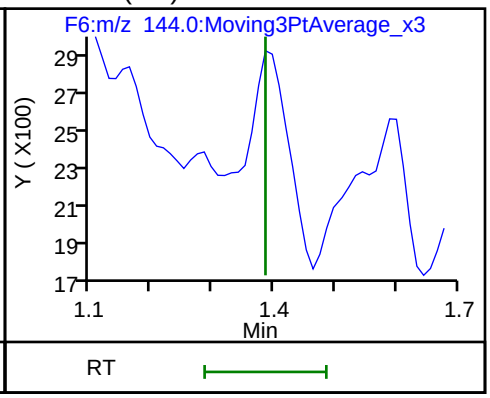
2 HMX (ND)



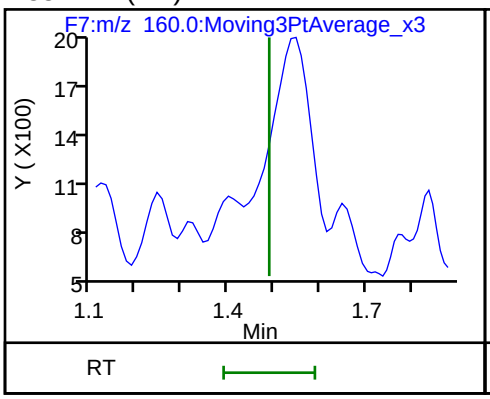
* 1 HMX-13C4



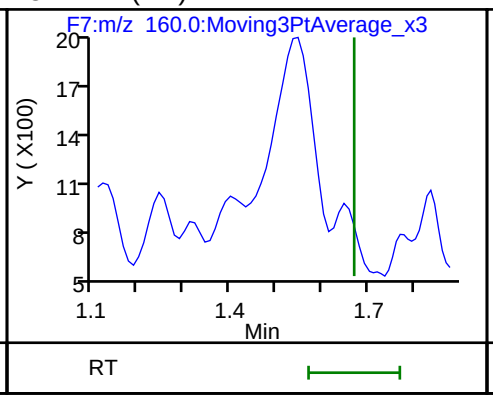
36 TNX (ND)



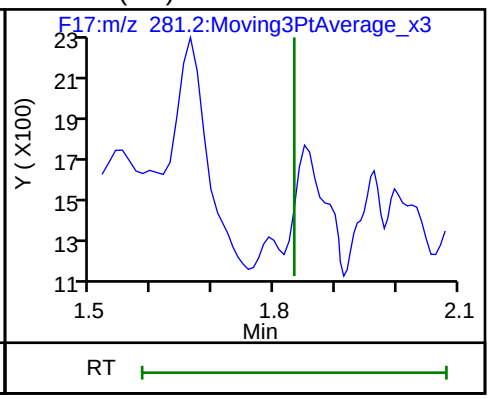
33 DNX (ND)



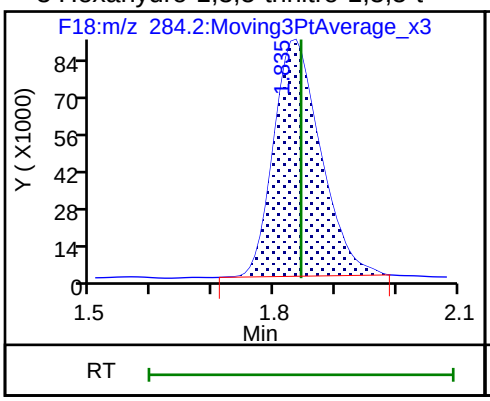
34 MNX (ND)



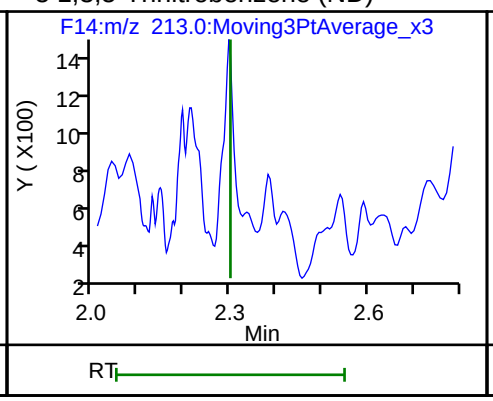
4 RDX (ND)



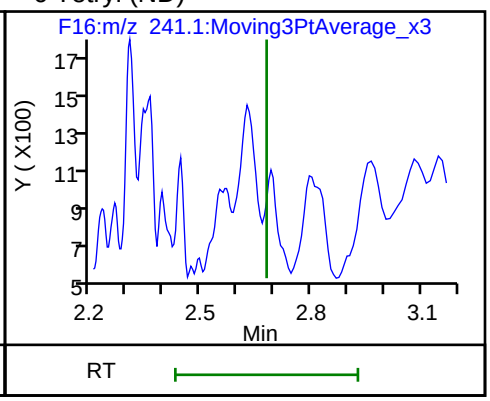
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



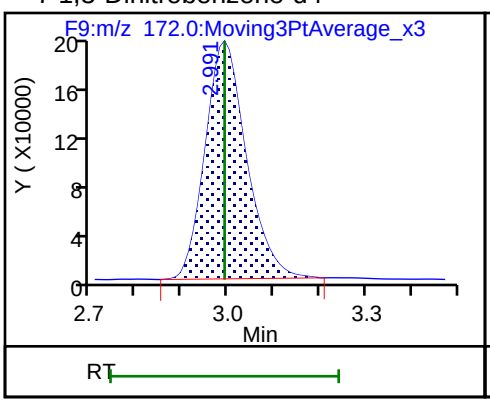
5 1,3,5-Trinitrobenzene (ND)



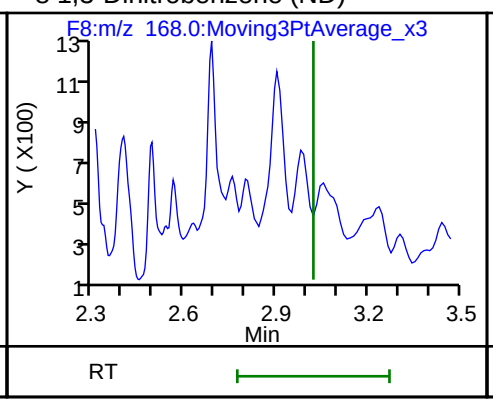
6 Tetryl (ND)



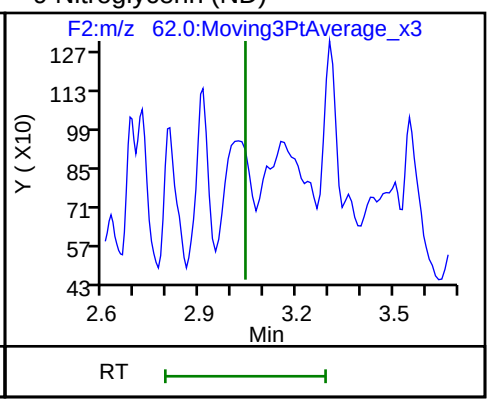
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

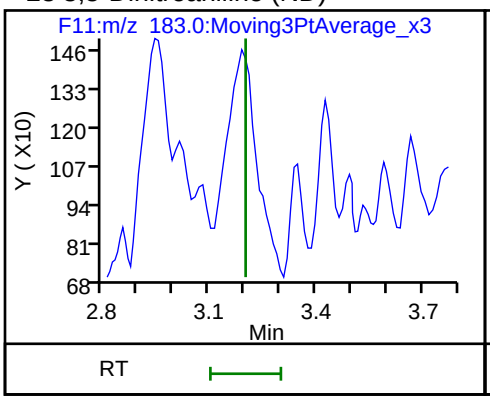


9 Nitroglycerin (ND)

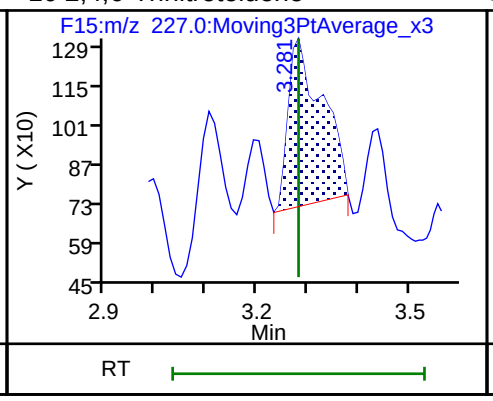


Report Date: 15-Apr-2022 08:03:18 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14040.d

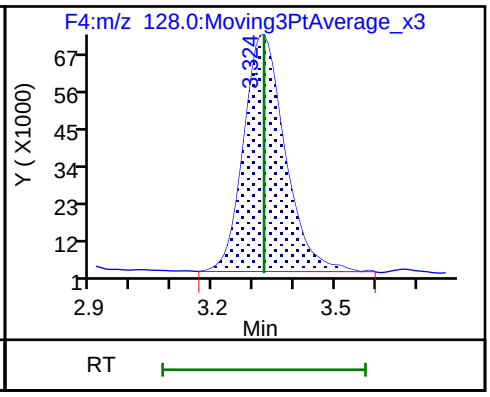
28 3,5-Dinitroaniline (ND)



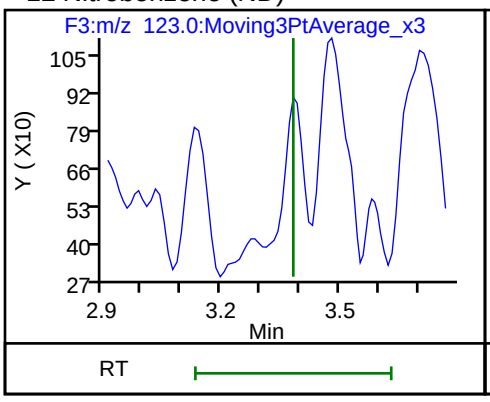
10 2,4,6-Trinitrotoluene



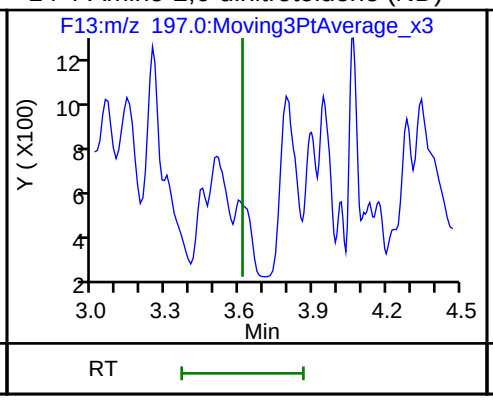
$ 11 Nitrobenzene-d5



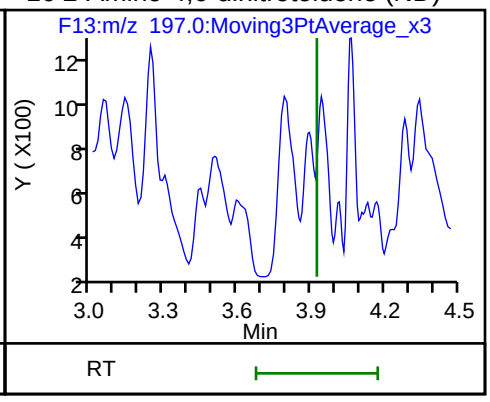
12 Nitrobenzene (ND)



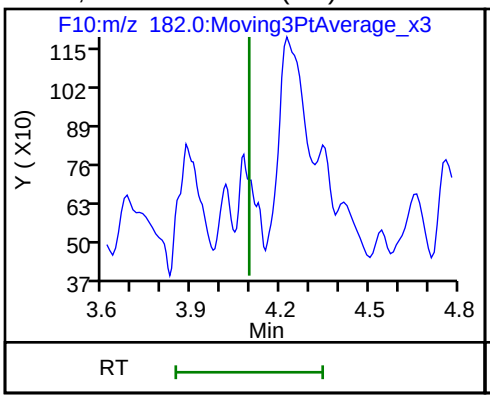
14 4-Amino-2,6-dinitrotoluene (ND)



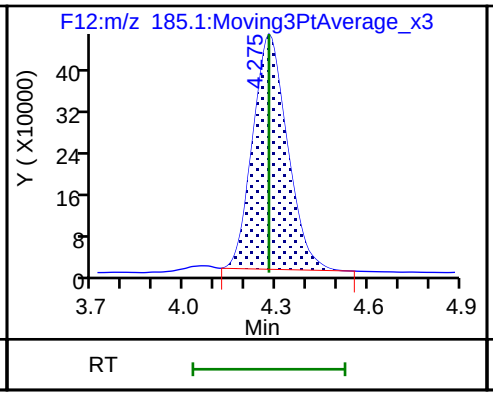
16 2-Amino-4,6-dinitrotoluene (ND)



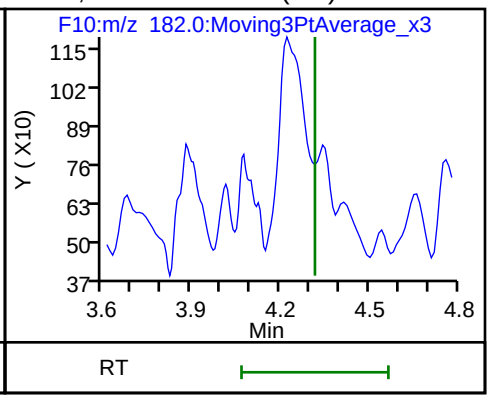
17 2,6-Dinitrotoluene (ND)



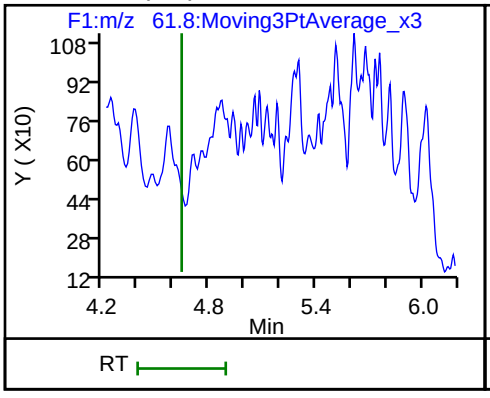
* 18 2,4-dinitrotoluene-d3



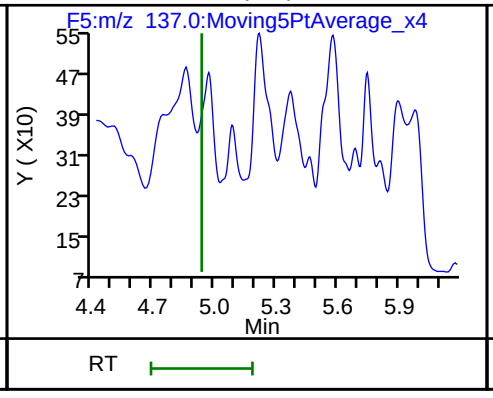
19 2,4-Dinitrotoluene (ND)



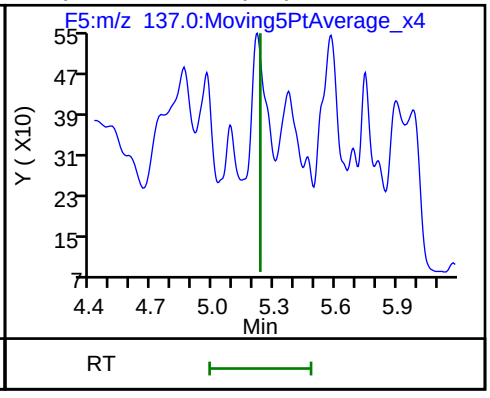
20 PETN (ND)



22 o-Nitrotoluene (ND)

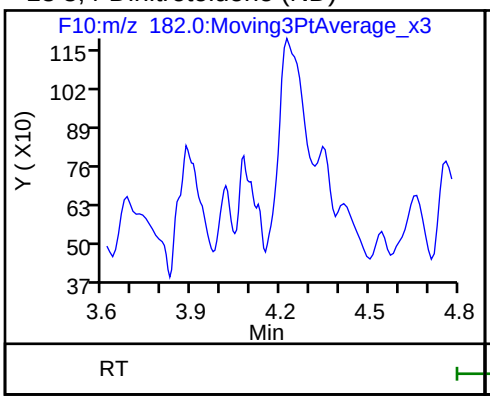


23 p-Nitrotoluene (ND)

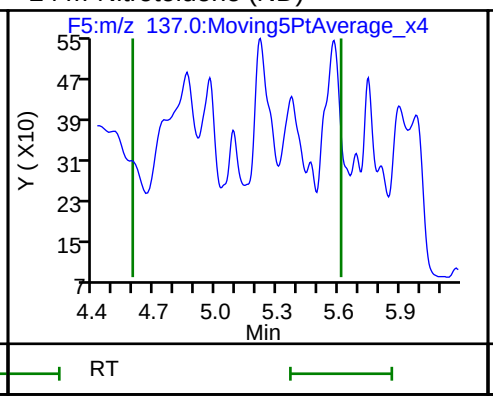


Report Date: 15-Apr-2022 08:03:18 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14040.d

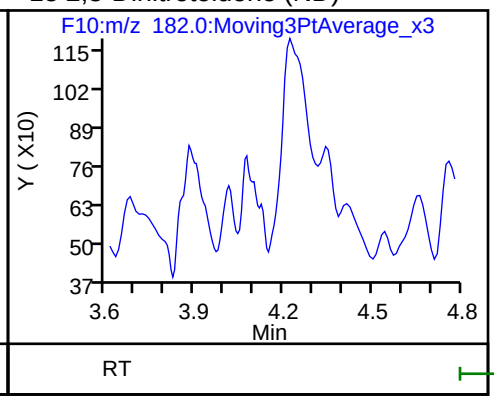
13 3,4-Dinitrotoluene (ND)



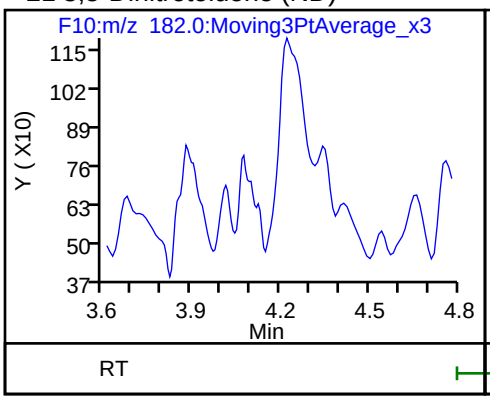
24 m-Nitrotoluene (ND)



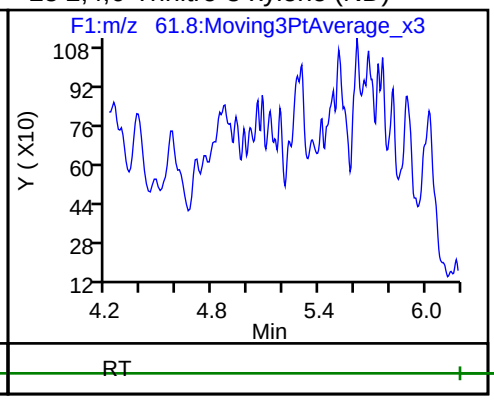
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:18 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14040.d				
Lims ID:	280-160190-A-45-B				
Client ID:	29SB192 (19-20)				
Sample Type:	Client				
Inject. Date:	14-Apr-2022 16:31:49	ALS Bottle#:	36	Worklist Smp#:	40
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160190-A-45-B				
Misc. Info.:	ex722D14				
Operator ID:	acm	Instrument ID:	LC_LCMS7		
Method:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m				
Limit Group:	LC - 8321A Expl				
Last Update:	15-Apr-2022 08:03:13	Calib Date:	14-Apr-2022 13:07:22		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1652				
First Level Reviewer: meyera		Date:	15-Apr-2022 07:34:39		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	93.3	92.95

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: DUP-09 | Lab Sample ID: 280-160190-46
Matrix: Solid | Lab File ID: ex722D14041.d
Analysis Method: 8321A | Date Collected: 03/24/2022 15:00
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:23
Sample wt/vol: 10.52(g) | Date Analyzed: 04/14/2022 16:38
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571896 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.048	U M	0.095	0.048	0.043
99-65-0	1,3-Dinitrobenzene	0.048	U	0.095	0.048	0.042
118-96-7	2,4,6-Trinitrotoluene	0.048	U	0.095	0.048	0.035
121-14-2	2,4-Dinitrotoluene	0.048	U	0.095	0.048	0.044
606-20-2	2,6-Dinitrotoluene	0.048	U	0.095	0.048	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.048	U	0.095	0.048	0.047
19406-51-0	4-Amino-2,6-dinitrotoluene	0.048	U	0.095	0.048	0.030
2691-41-0	HMX	0.048	U	0.095	0.048	0.044
99-08-1	m-Nitrotoluene	0.048	U	0.095	0.048	0.041
98-95-3	Nitrobenzene	0.048	U	0.10	0.048	0.036
55-63-0	Nitroglycerin	0.048	U	0.095	0.048	0.028
88-72-2	o-Nitrotoluene	0.048	U	0.095	0.048	0.041
78-11-5	PETN	0.048	U	0.095	0.048	0.032
99-99-0	p-Nitrotoluene	0.048	U	0.095	0.048	0.047
121-82-4	RDX	0.048	U	0.11	0.048	0.041
479-45-8	Tetryl	0.048	U Q	0.095	0.048	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	100		68-140

Report Date: 15-Apr-2022 08:03:18 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14041.d
Lims ID: 280-160190-A-46-B
Client ID: DUP-09
Sample Type: Client
Inject. Date: 14-Apr-2022 16:38:25 ALS Bottle#: 37 Worklist Smp#: 41
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-46-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:13 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:34:52
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.402	1.246	0.156	1.123	820	-1.13	0.9	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		156301	125.0	99.7	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		470084	125.0	206	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1137365	129.4	319	
$ 11 Nitrobenzene-d5								
128.0	3.324	3.324	0.0	0.778	512955	100.7	161	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3531153	125.0	130	

QC Flag Legend

Processing Flags

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:19 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14041.d

Injection Date: 14-Apr-2022 16:38:25 Instrument ID: LC_LCMS7

Lims ID: 280-160190-A-46-B Lab Sample ID: 280-160190-46

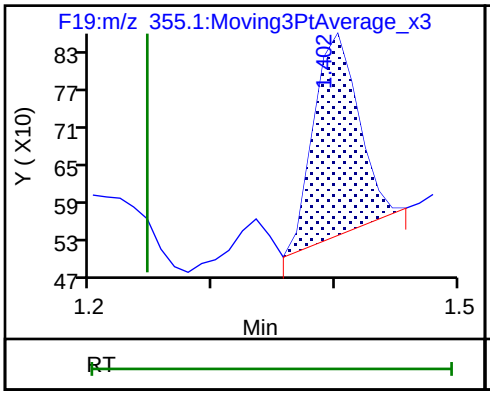
Client ID: DUP-09

Operator ID: acm ALS Bottle#: 37 Worklist Smp#: 41

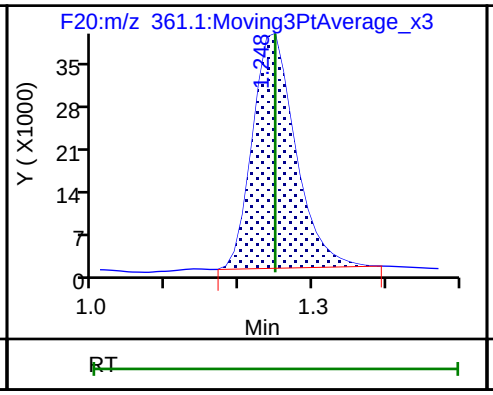
Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

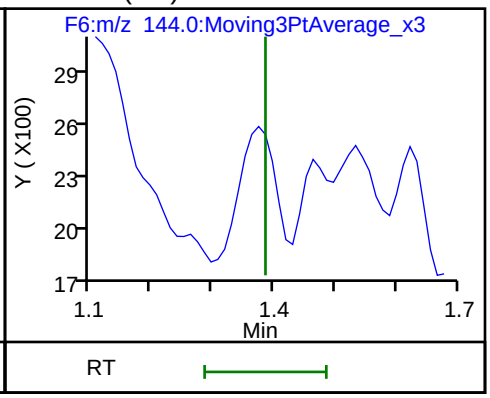
2 HMX



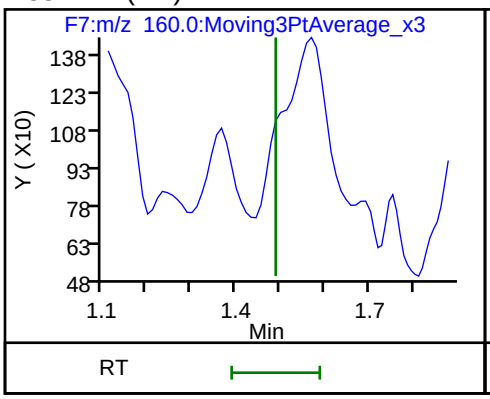
* 1 HMX-13C4



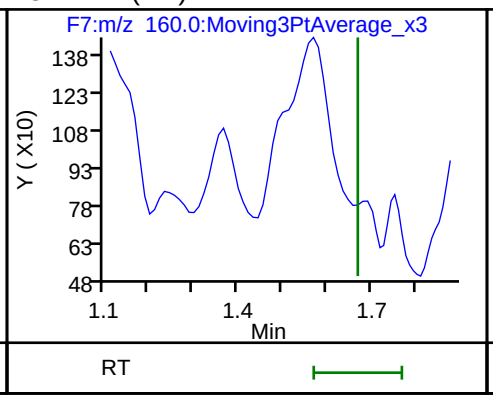
36 TNX (ND)



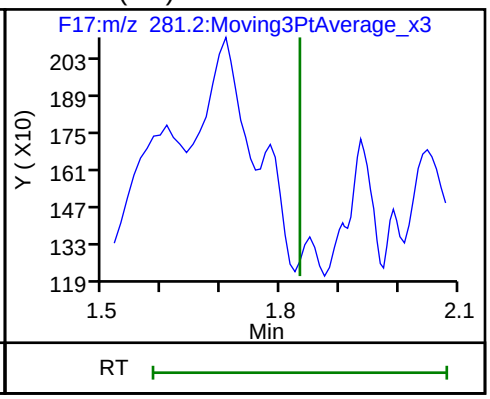
33 DNX (ND)



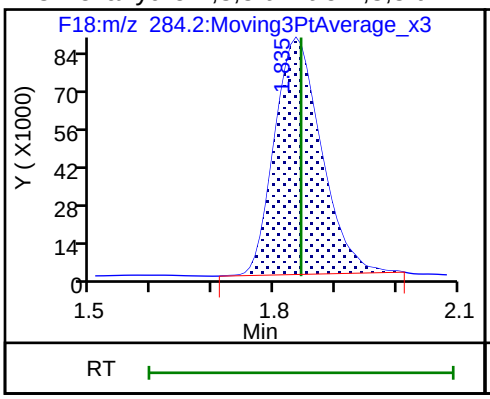
34 MNX (ND)



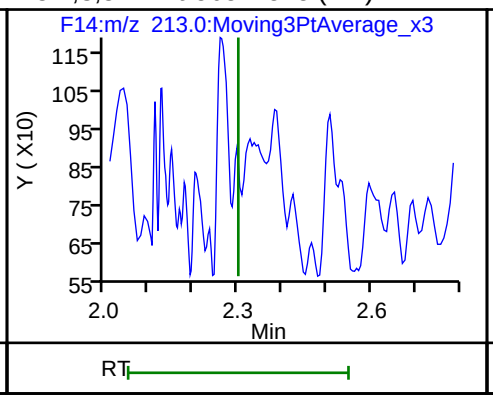
4 RDX (ND)



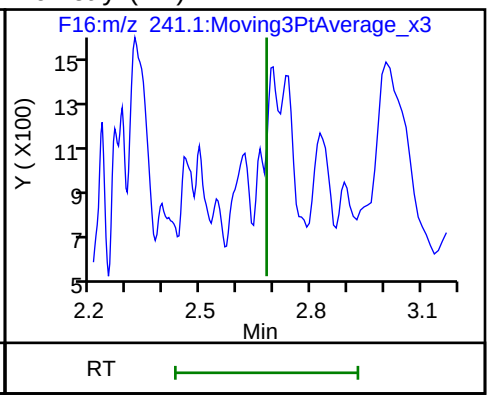
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



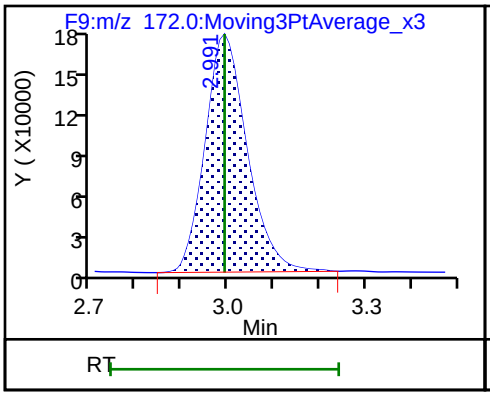
5 1,3,5-Trinitrobenzene (ND)



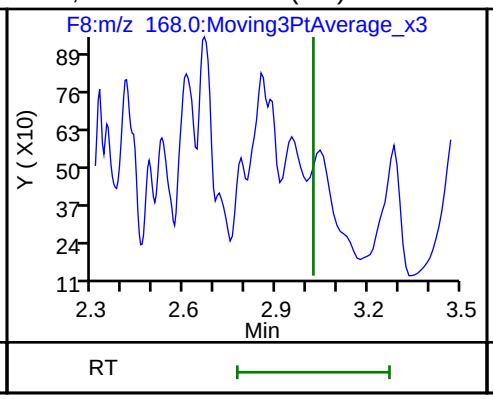
6 Tetryl (ND)



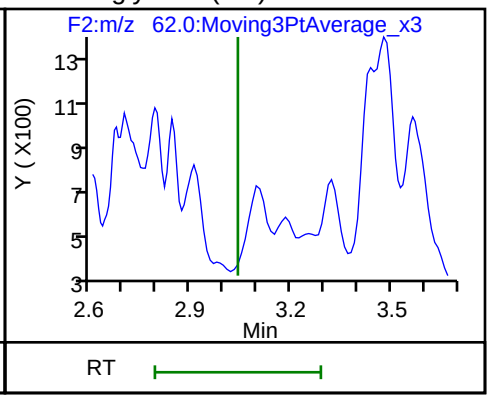
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

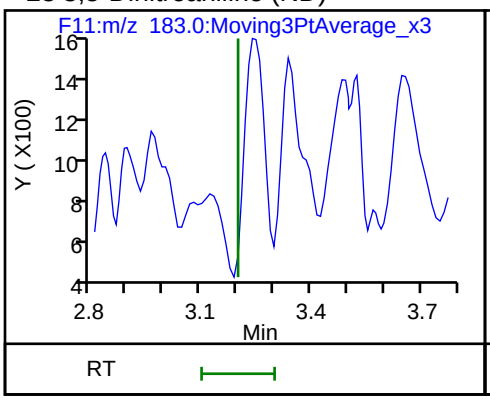


9 Nitroglycerin (ND)

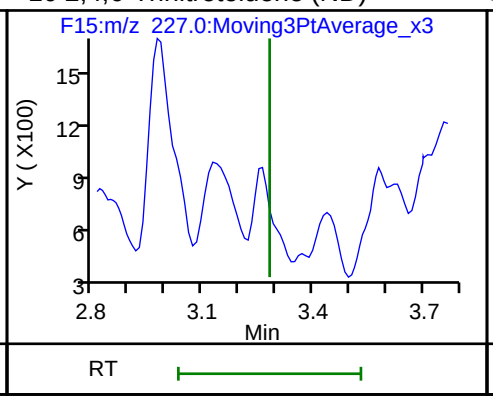


Report Date: 15-Apr-2022 08:03:19 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14041.d

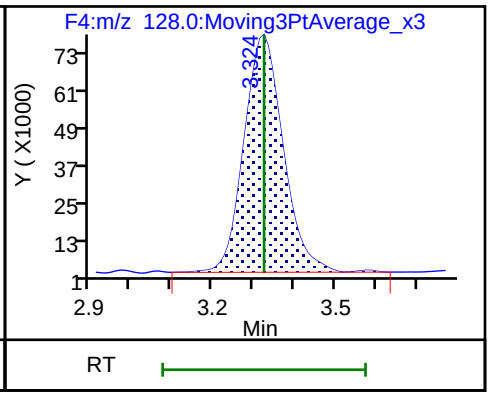
28 3,5-Dinitroaniline (ND)



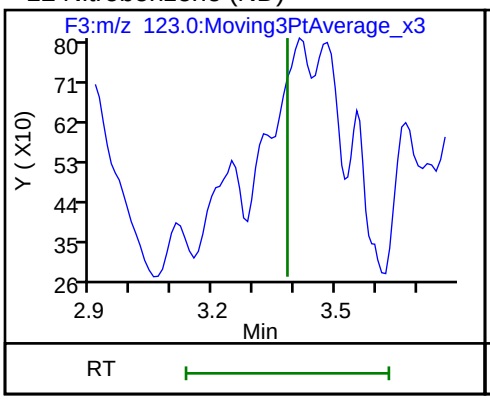
10 2,4,6-Trinitrotoluene (ND)



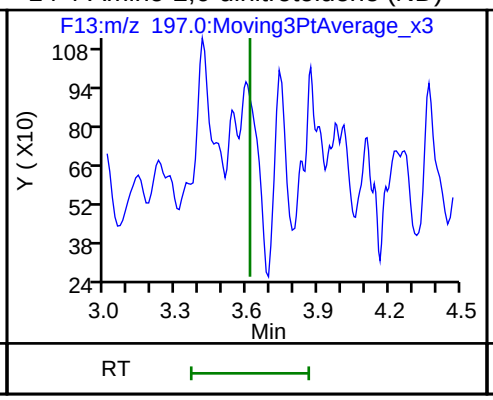
$ 11 Nitrobenzene-d5



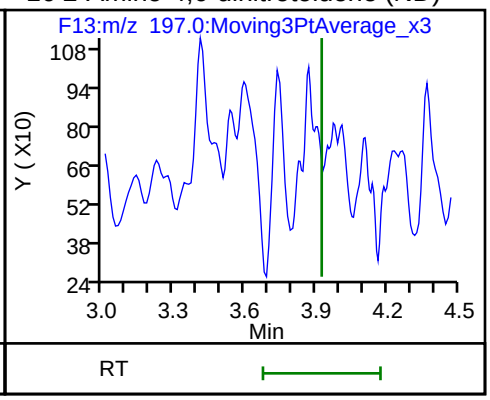
12 Nitrobenzene (ND)



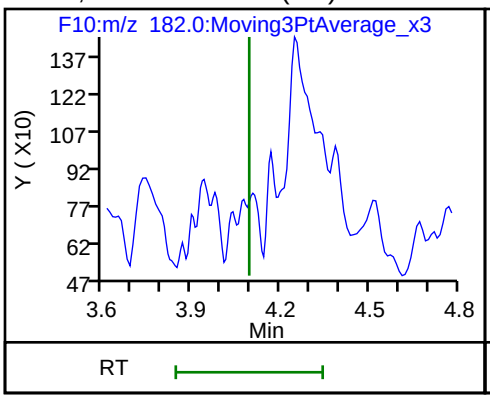
14 4-Amino-2,6-dinitrotoluene (ND)



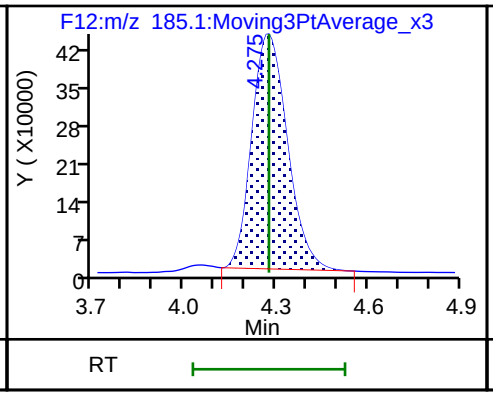
16 2-Amino-4,6-dinitrotoluene (ND)



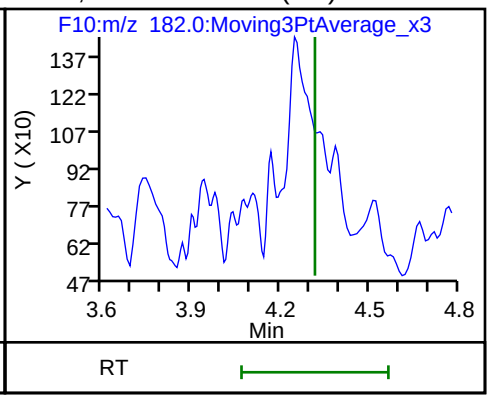
17 2,6-Dinitrotoluene (ND)



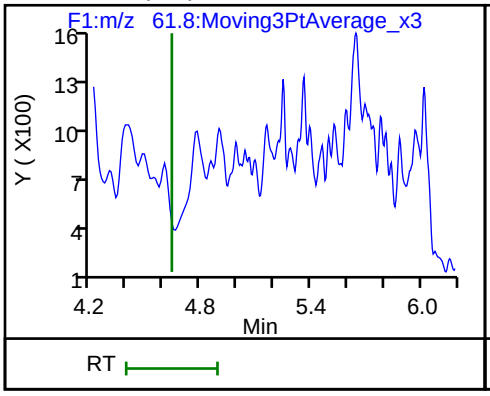
* 18 2,4-dinitrotoluene-d3



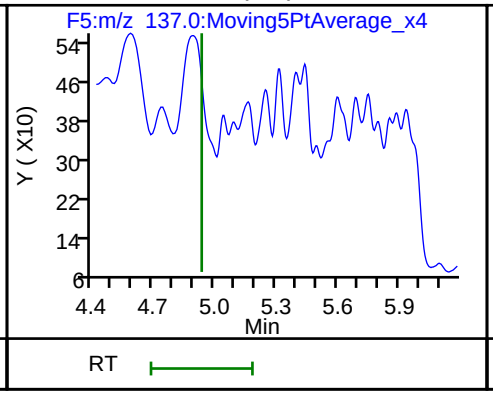
19 2,4-Dinitrotoluene (ND)



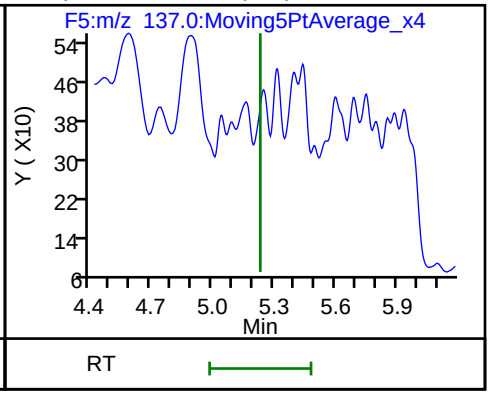
20 PETN (ND)



22 o-Nitrotoluene (ND)

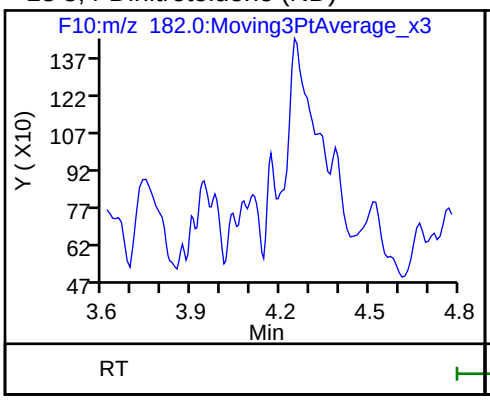


23 p-Nitrotoluene (ND)

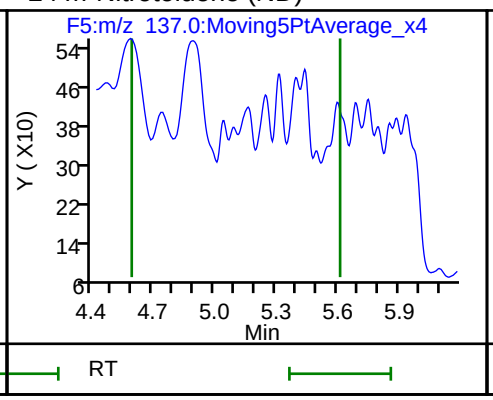


Report Date: 15-Apr-2022 08:03:19 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14041.d

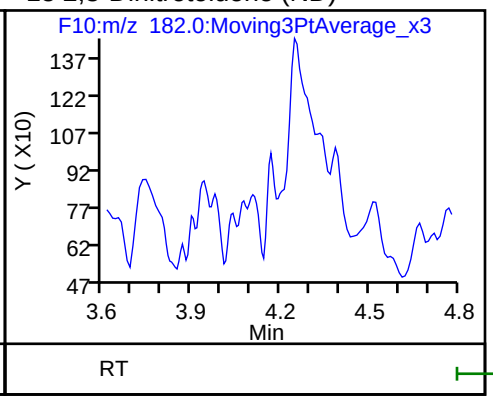
13 3,4-Dinitrotoluene (ND)



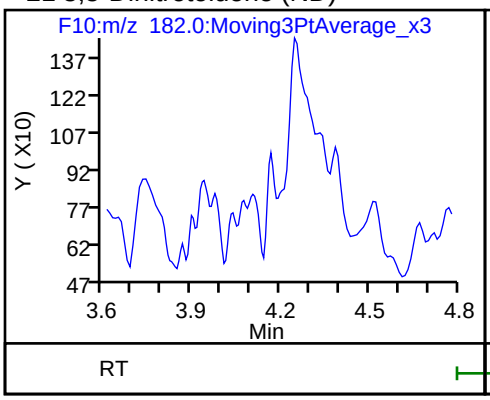
24 m-Nitrotoluene (ND)



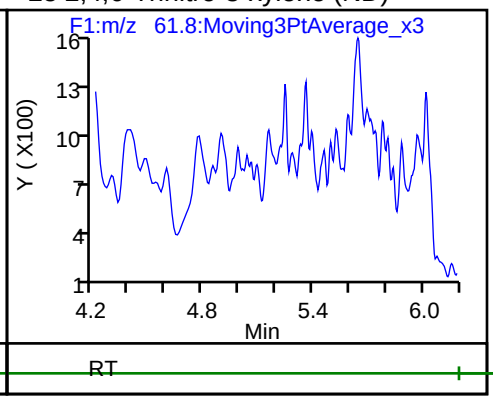
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:19 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14041.d
Lims ID: 280-160190-A-46-B
Client ID: DUP-09
Sample Type: Client
Inject. Date: 14-Apr-2022 16:38:25 ALS Bottle#: 37 Worklist Smp#: 41
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-46-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:13 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:34:52

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	100.7	100.38

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB193 (7-8) | Lab Sample ID: 280-160190-47
Matrix: Solid | Lab File ID: ex722D14042.d
Analysis Method: 8321A | Date Collected: 03/24/2022 14:40
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:23
Sample wt/vol: 10.75(g) | Date Analyzed: 04/14/2022 16:45
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571896 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.047	U	0.093	0.047	0.042
99-65-0	1,3-Dinitrobenzene	0.047	U	0.093	0.047	0.042
118-96-7	2,4,6-Trinitrotoluene	0.047	U	0.093	0.047	0.034
121-14-2	2,4-Dinitrotoluene	0.047	U	0.093	0.047	0.043
606-20-2	2,6-Dinitrotoluene	0.047	U	0.093	0.047	0.037
35572-78-2	2-Amino-4,6-dinitrotoluene	0.047	U	0.093	0.047	0.046
19406-51-0	4-Amino-2,6-dinitrotoluene	0.047	U	0.093	0.047	0.029
2691-41-0	HMX	0.047	U	0.093	0.047	0.043
99-08-1	m-Nitrotoluene	0.047	U	0.093	0.047	0.040
98-95-3	Nitrobenzene	0.047	U	0.10	0.047	0.035
55-63-0	Nitroglycerin	0.047	U	0.093	0.047	0.027
88-72-2	o-Nitrotoluene	0.047	U	0.093	0.047	0.040
78-11-5	PETN	0.047	U	0.093	0.047	0.032
99-99-0	p-Nitrotoluene	0.047	U	0.093	0.047	0.046
121-82-4	RDX	0.047	U	0.11	0.047	0.040
479-45-8	Tetryl	0.047	U Q	0.093	0.047	0.036

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	96		68-140

Report Date: 15-Apr-2022 08:03:19 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14042.d
Lims ID: 280-160190-A-47-B
Client ID: 29SB193 (7-8)
Sample Type: Client
Inject. Date: 14-Apr-2022 16:45:01 ALS Bottle#: 38 Worklist Smp#: 42
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-47-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:13 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:35:03
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.237	1.248	-0.011		157054	125.0	132	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		441261	125.0	126	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1147439	129.4	373	
9 Nitroglycerin								
62.0	3.062	3.040	0.022	1.024	2227	-0.8629	2.2	
$ 11 Nitrobenzene-d5								
128.0	3.324	3.324	0.0	0.778	496401	96.5	194	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3548479	125.0	126	

QC Flag Legend

Processing Flags

Reagents:

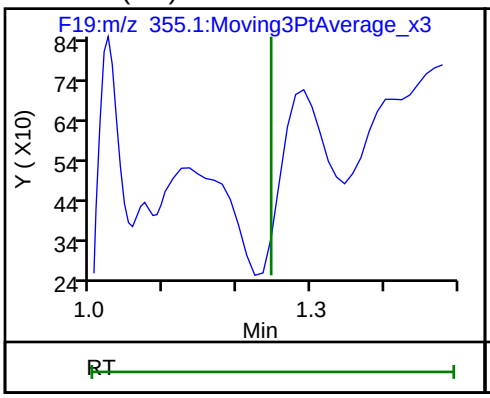
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:19 Chrom Revision: 2.3 12-Apr-2022 20:29:44

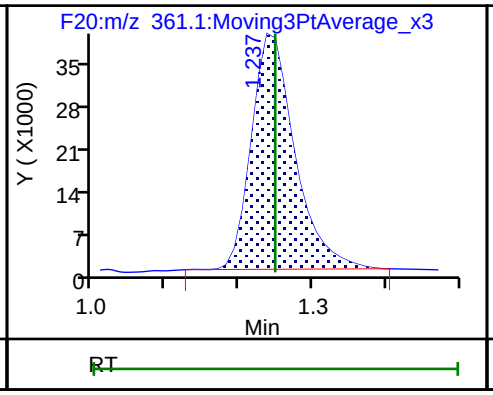
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14042.d
Injection Date: 14-Apr-2022 16:45:01 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-47-B Lab Sample ID: 280-160190-47
Client ID: 29SB193 (7-8)
Operator ID: acm ALS Bottle#: 38 Worklist Smp#: 42
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

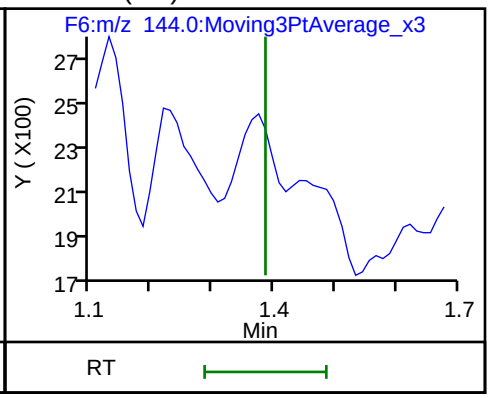
2 HMX (ND)



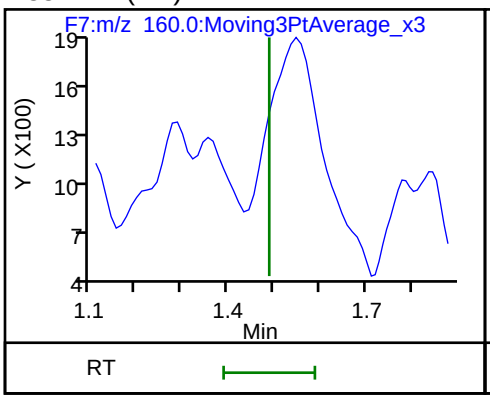
* 1 HMX-13C4



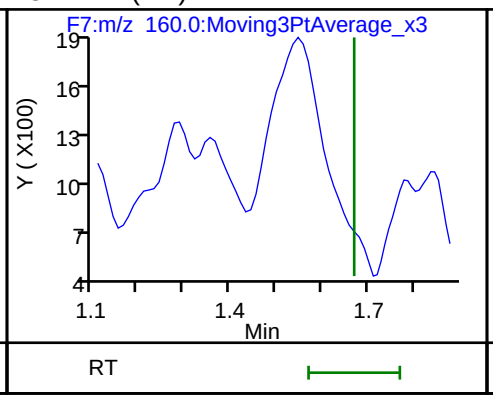
36 TNX (ND)



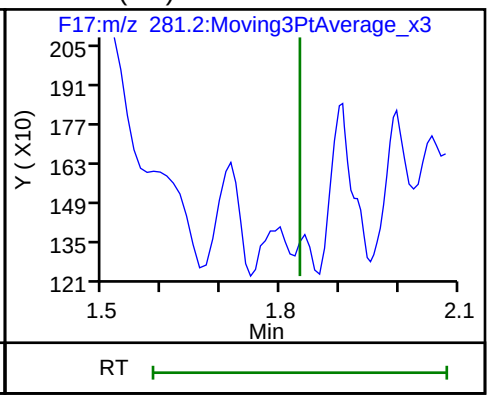
33 DNX (ND)



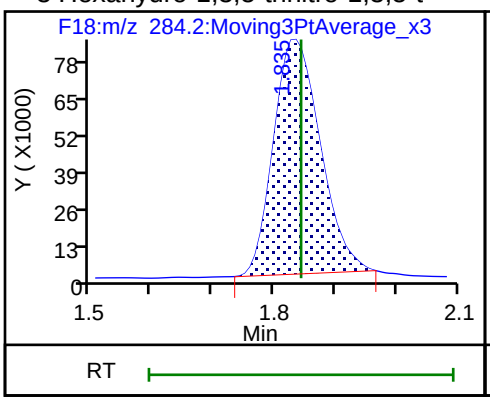
34 MNX (ND)



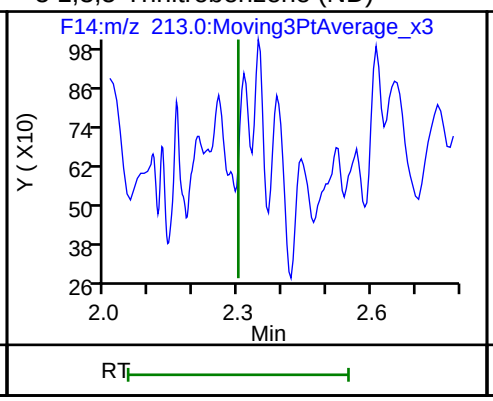
4 RDX (ND)



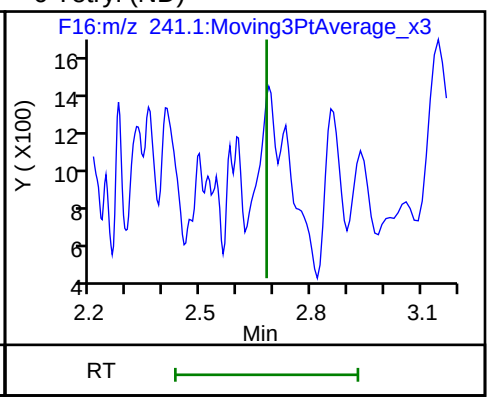
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



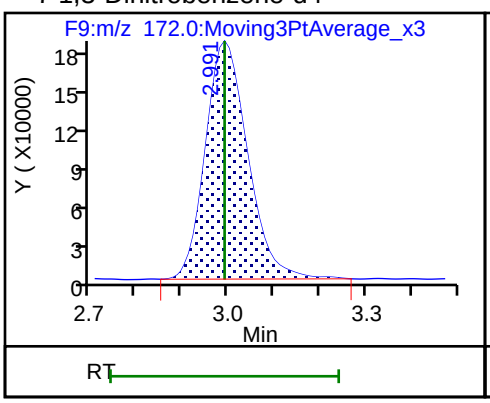
5 1,3,5-Trinitrobenzene (ND)



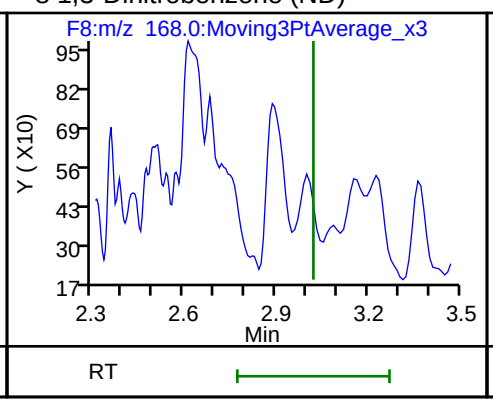
6 Tetryl (ND)



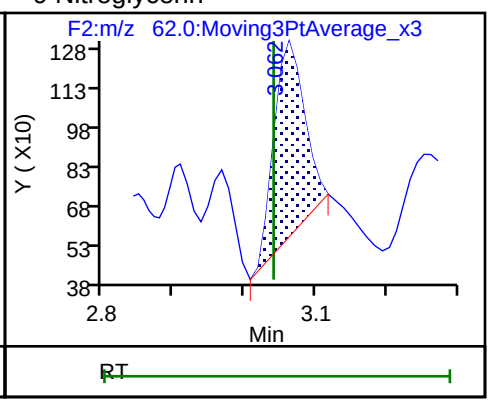
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



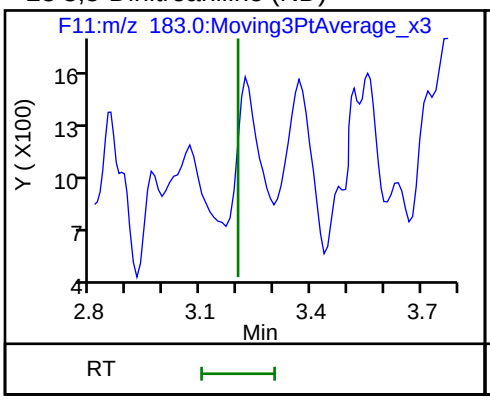
9 Nitroglycerin



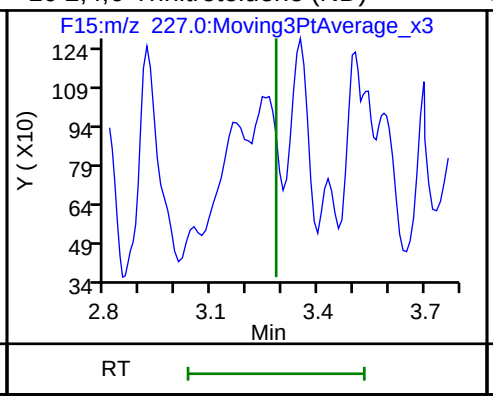
Report Date: 15-Apr-2022 08:03:19 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14042.d

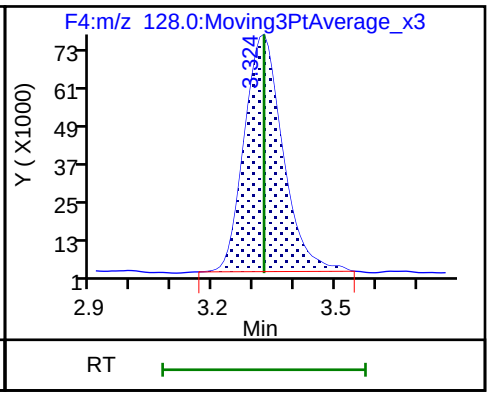
28 3,5-Dinitroaniline (ND)



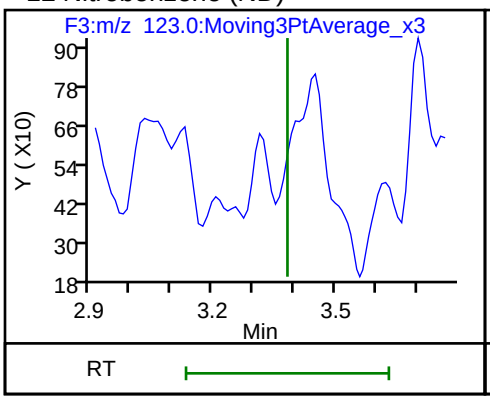
10 2,4,6-Trinitrotoluene (ND)



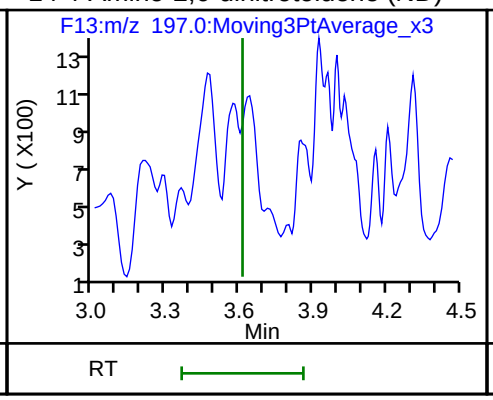
$ 11 Nitrobenzene-d5



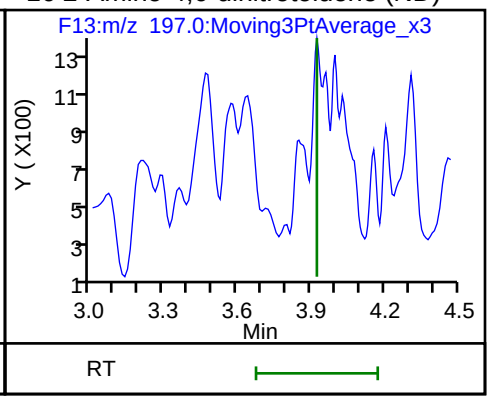
12 Nitrobenzene (ND)



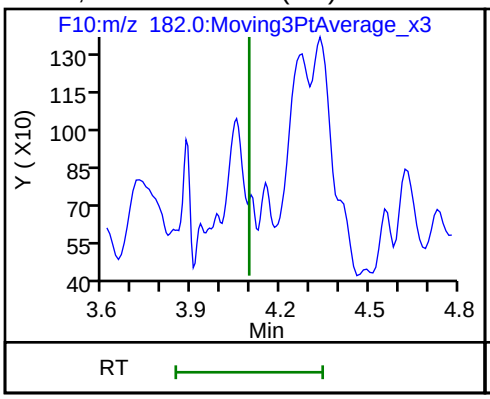
14 4-Amino-2,6-dinitrotoluene (ND)



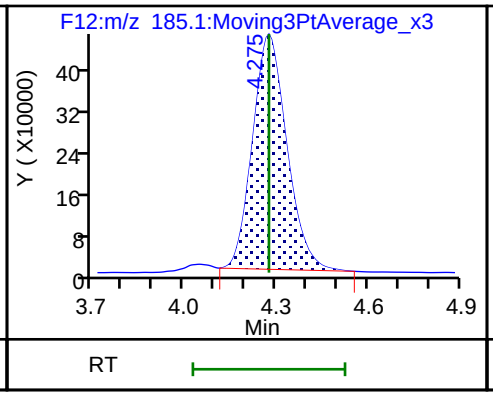
16 2-Amino-4,6-dinitrotoluene (ND)



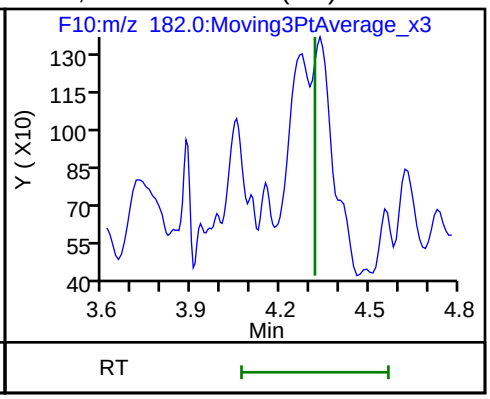
17 2,6-Dinitrotoluene (ND)



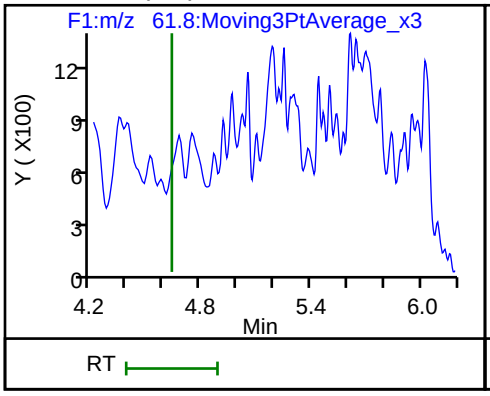
* 18 2,4-dinitrotoluene-d3



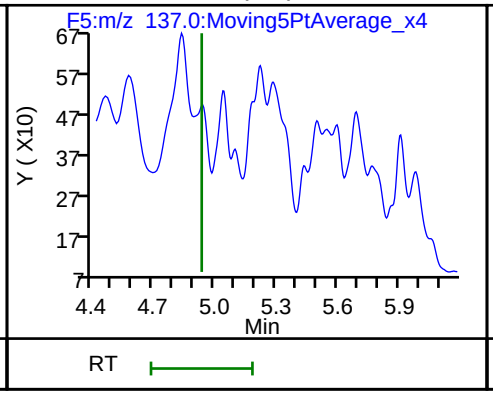
19 2,4-Dinitrotoluene (ND)



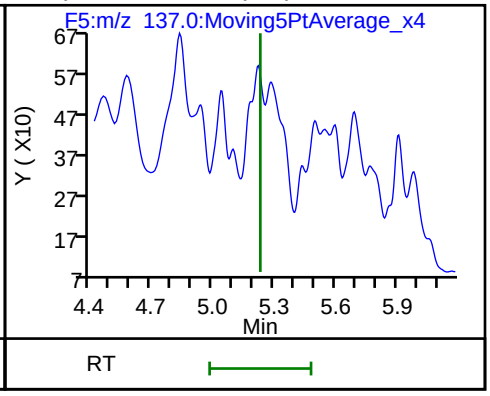
20 PETN (ND)



22 o-Nitrotoluene (ND)



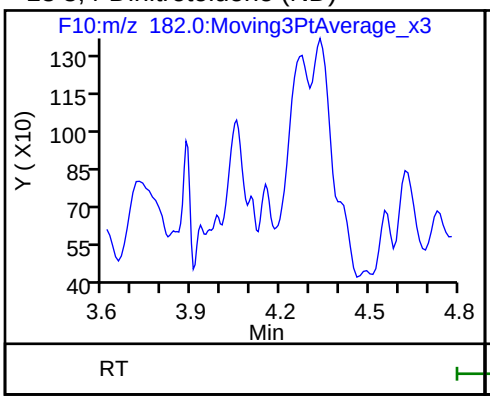
23 p-Nitrotoluene (ND)



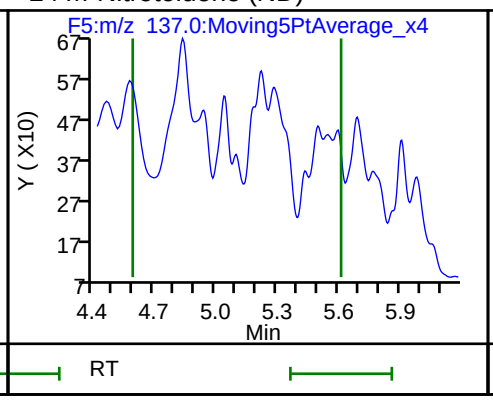
Report Date: 15-Apr-2022 08:03:19 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14042.d

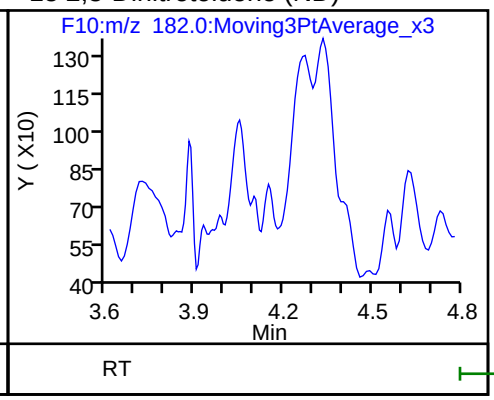
13 3,4-Dinitrotoluene (ND)



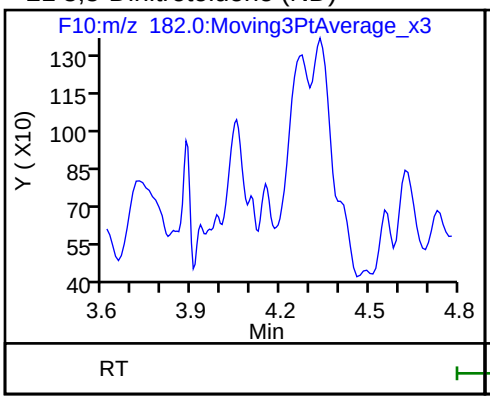
24 m-Nitrotoluene (ND)



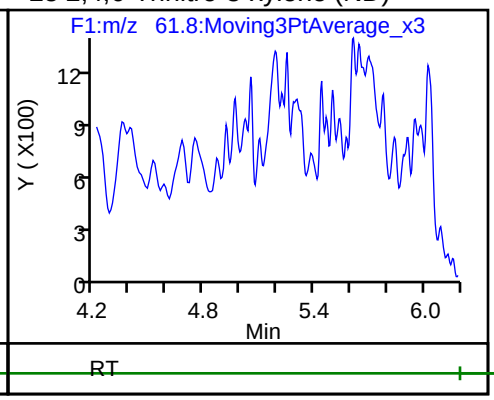
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:19 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14042.d
Lims ID: 280-160190-A-47-B
Client ID: 29SB193 (7-8)
Sample Type: Client
Inject. Date: 14-Apr-2022 16:45:01 ALS Bottle#: 38 Worklist Smp#: 42
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-47-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:13 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:35:03

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	96.5	96.21

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB193 (11-12) | Lab Sample ID: 280-160190-48
Matrix: Solid | Lab File ID: ex722D14049.d
Analysis Method: 8321A | Date Collected: 03/24/2022 14:42
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:17
Sample wt/vol: 10.19(g) | Date Analyzed: 04/14/2022 17:31
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571897 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.049	U	0.098	0.049	0.044
99-65-0	1,3-Dinitrobenzene	0.049	U	0.098	0.049	0.044
118-96-7	2,4,6-Trinitrotoluene	0.049	U Q	0.098	0.049	0.036
121-14-2	2,4-Dinitrotoluene	0.049	U	0.098	0.049	0.046
606-20-2	2,6-Dinitrotoluene	0.049	U	0.098	0.049	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.049	U	0.098	0.049	0.049
19406-51-0	4-Amino-2,6-dinitrotoluene	0.049	U	0.098	0.049	0.031
2691-41-0	HMX	0.049	U	0.098	0.049	0.045
99-08-1	m-Nitrotoluene	0.049	U	0.098	0.049	0.042
98-95-3	Nitrobenzene	0.049	U	0.11	0.049	0.037
55-63-0	Nitroglycerin	0.049	U M	0.098	0.049	0.028
88-72-2	o-Nitrotoluene	0.049	U	0.098	0.049	0.042
78-11-5	PETN	0.049	U	0.098	0.049	0.033
99-99-0	p-Nitrotoluene	0.049	U	0.098	0.049	0.048
121-82-4	RDX	0.049	U	0.12	0.049	0.042
479-45-8	Tetryl	0.049	U Q	0.098	0.049	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	91		68-140

Report Date: 15-Apr-2022 08:03:24 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14049.d
Lims ID: 280-160190-A-48-B
Client ID: 29SB193 (11-12)
Sample Type: Client
Inject. Date: 14-Apr-2022 17:31:12 ALS Bottle#: 44 Worklist Smp#: 49
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-48-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:20 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:36:34
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		145440	125.0	73.2	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		488722	125.0	161	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1118349	129.4	327	
$ 11 Nitrobenzene-d5								
128.0	3.315	3.324	-0.009	0.777	460552	91.8	29.4	
* 18 2,4-dinitrotoluene-d3								
185.1	4.267	4.275	-0.008		3458590	125.0	132	

QC Flag Legend

Processing Flags

Reagents:

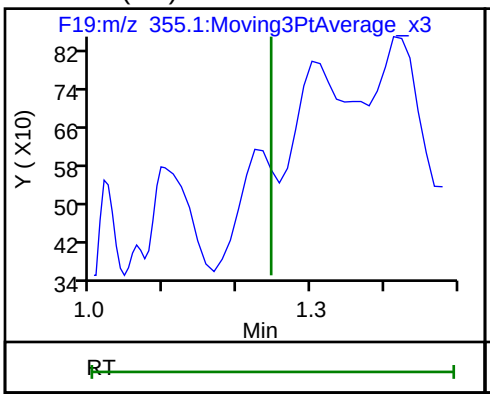
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:24 Chrom Revision: 2.3 12-Apr-2022 20:29:44

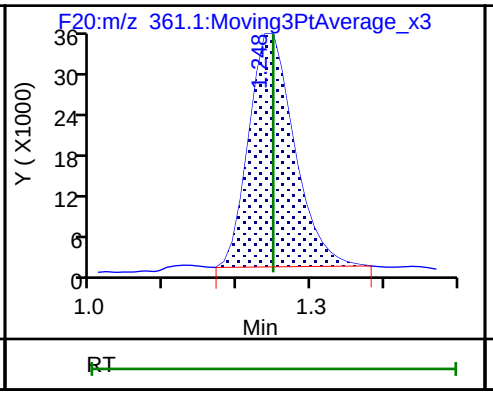
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14049.d
Injection Date: 14-Apr-2022 17:31:12 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-48-B Lab Sample ID: 280-160190-48
Client ID: 29SB193 (11-12)
Operator ID: acm ALS Bottle#: 44 Worklist Smp#: 49
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

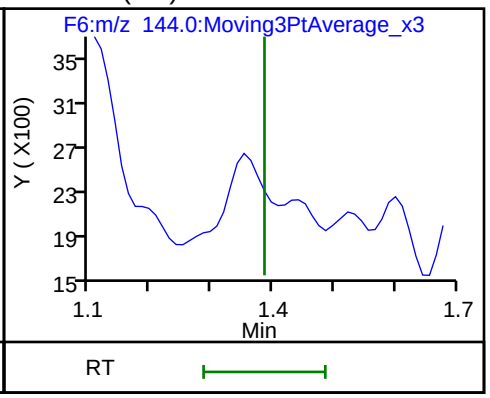
2 HMX (ND)



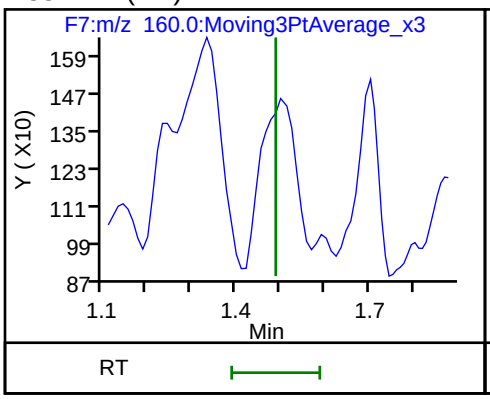
* 1 HMX-13C4



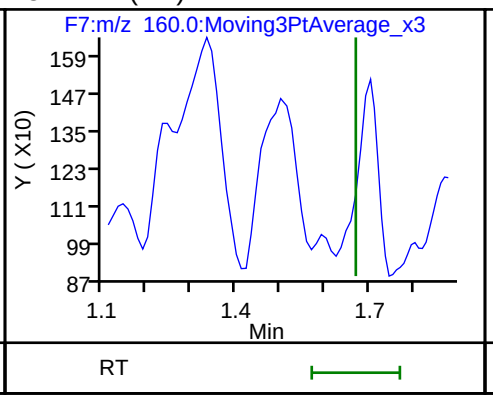
36 TNX (ND)



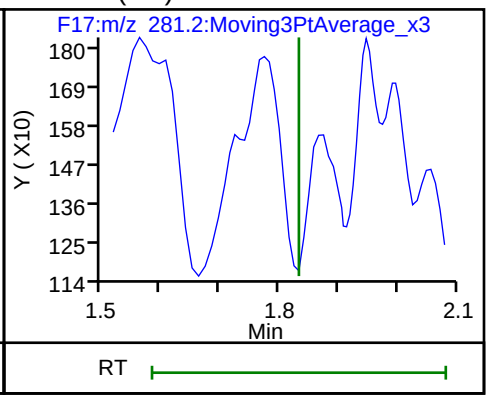
33 DNX (ND)



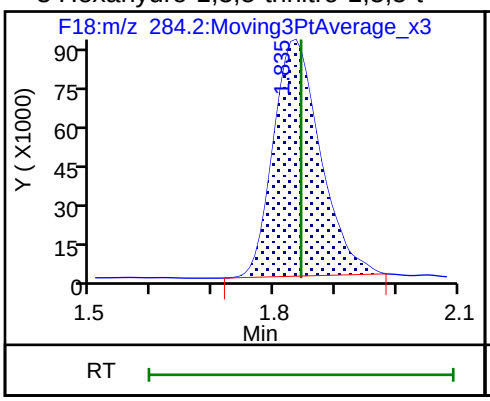
34 MNX (ND)



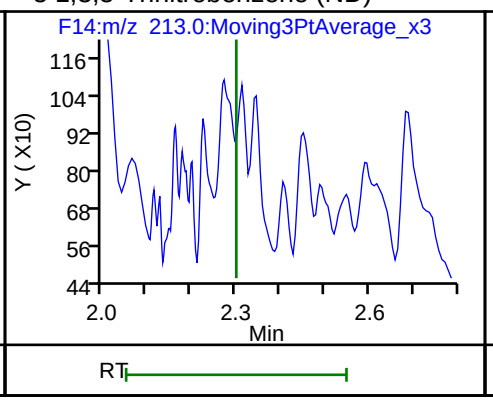
4 RDX (ND)



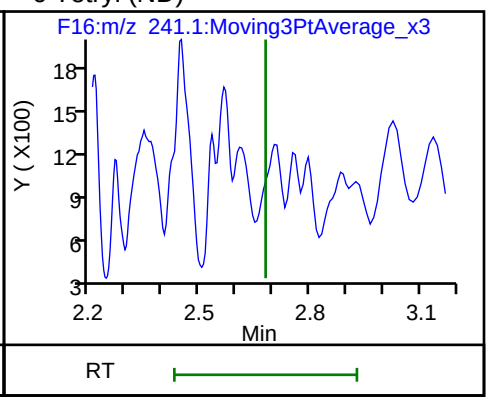
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



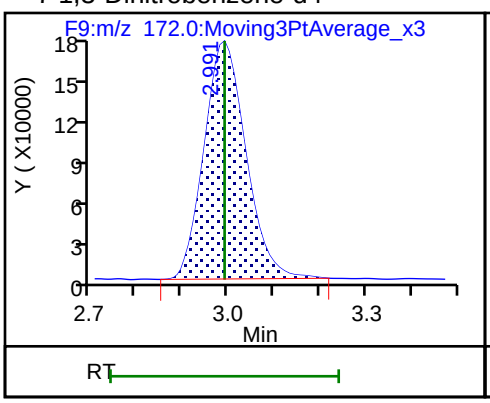
5 1,3,5-Trinitrobenzene (ND)



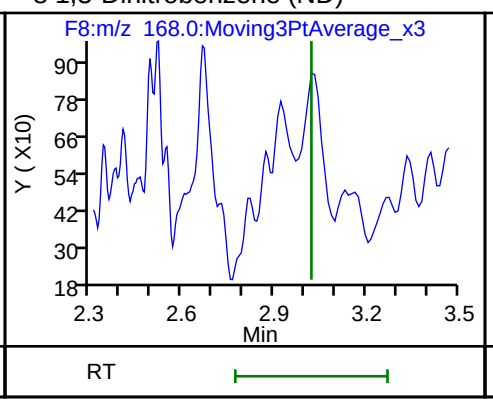
6 Tetryl (ND)



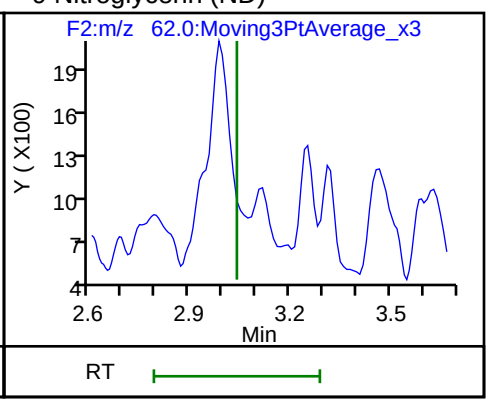
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

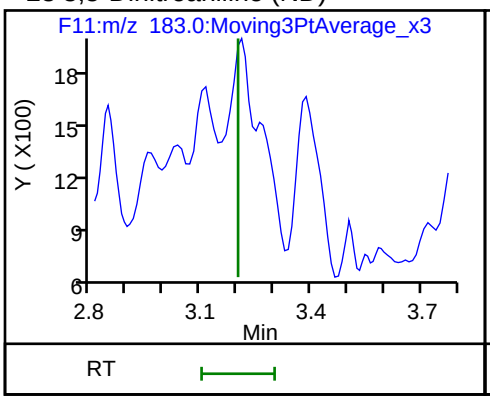


9 Nitroglycerin (ND)

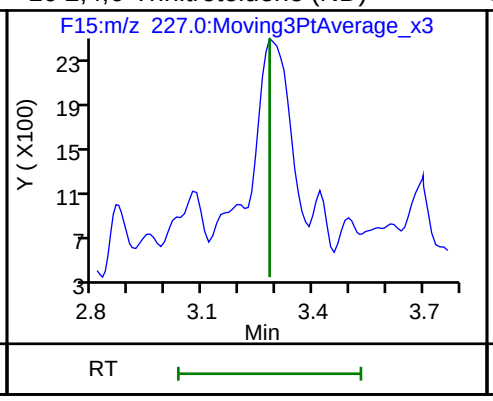


Report Date: 15-Apr-2022 08:03:24 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14049.d

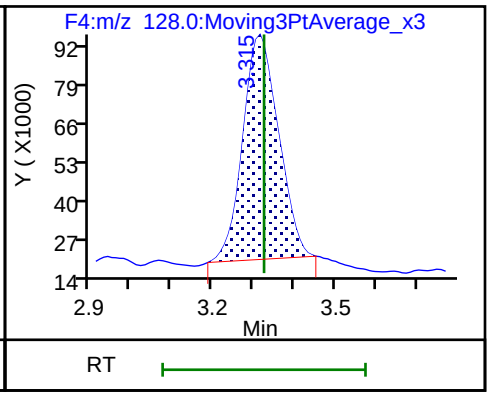
28 3,5-Dinitroaniline (ND)



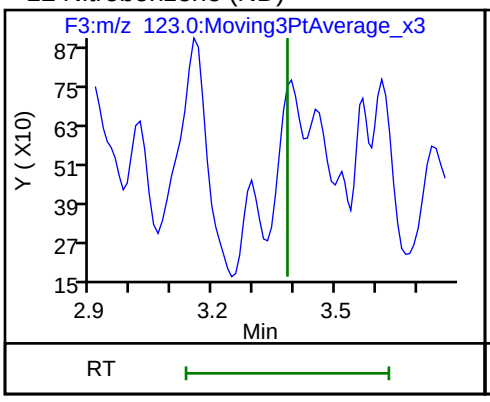
10 2,4,6-Trinitrotoluene (ND)



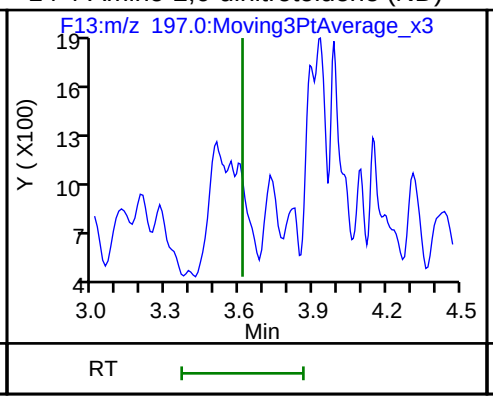
$ 11 Nitrobenzene-d5



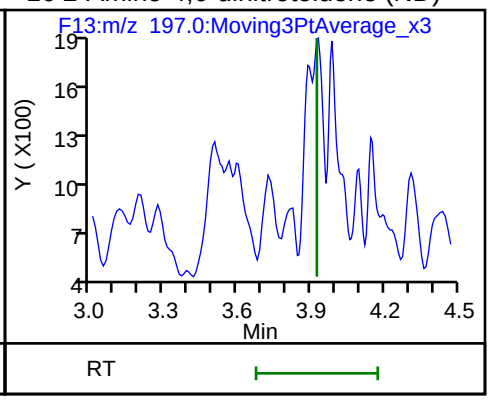
12 Nitrobenzene (ND)



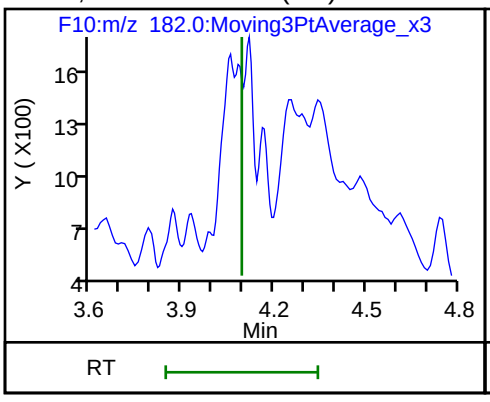
14 4-Amino-2,6-dinitrotoluene (ND)



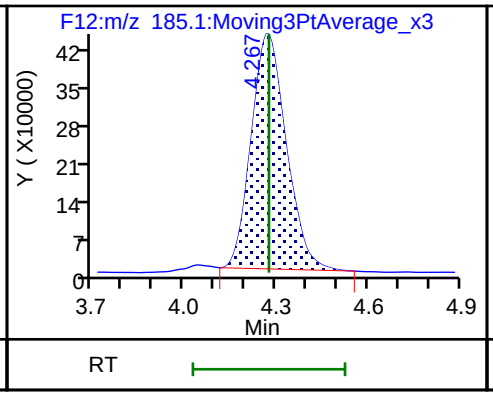
16 2-Amino-4,6-dinitrotoluene (ND)



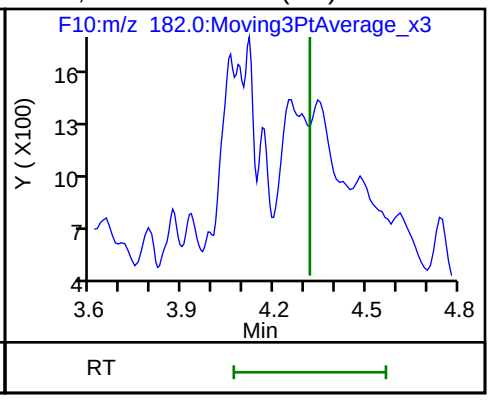
17 2,6-Dinitrotoluene (ND)



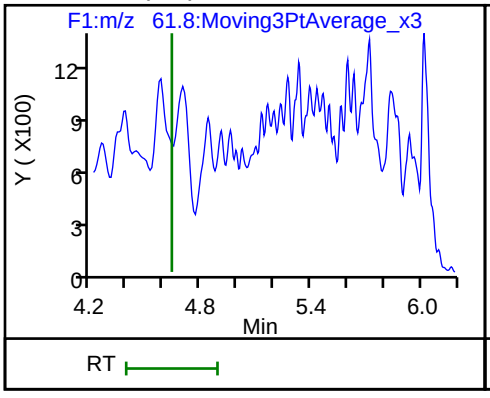
* 18 2,4-dinitrotoluene-d3



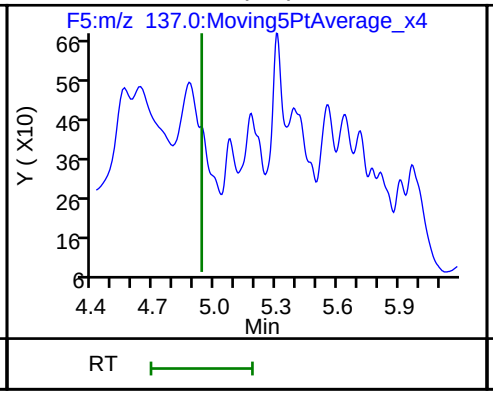
19 2,4-Dinitrotoluene (ND)



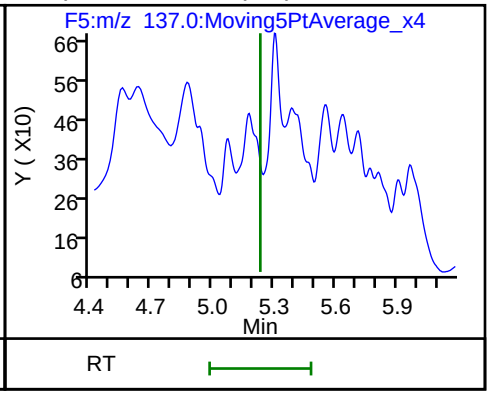
20 PETN (ND)



22 o-Nitrotoluene (ND)



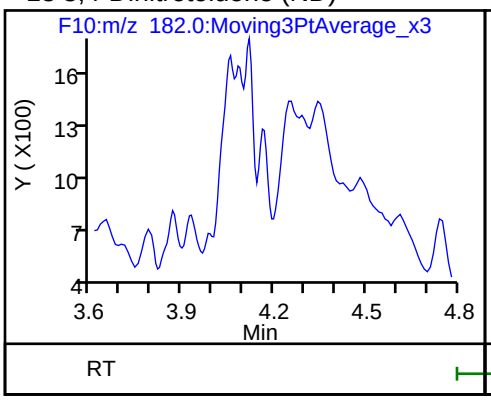
23 p-Nitrotoluene (ND)



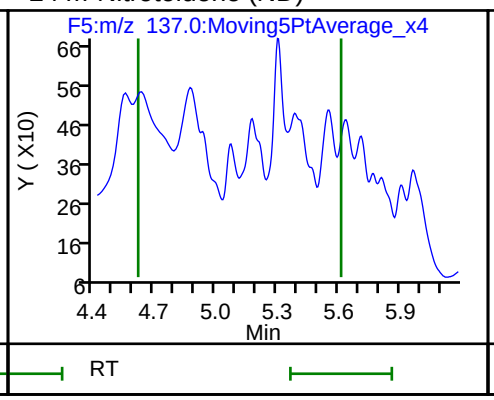
Report Date: 15-Apr-2022 08:03:24 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14049.d

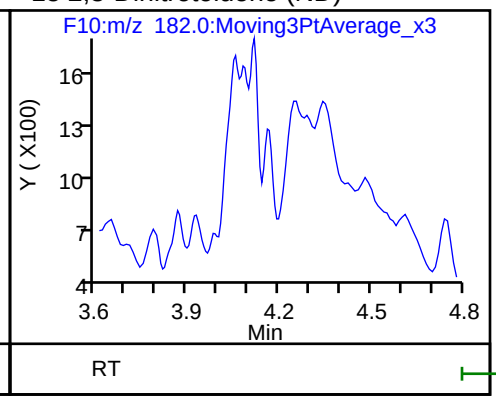
13 3,4-Dinitrotoluene (ND)



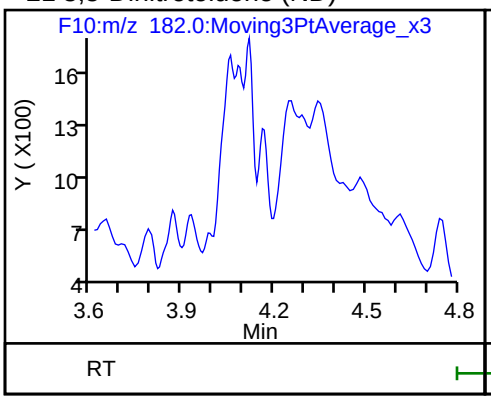
24 m-Nitrotoluene (ND)



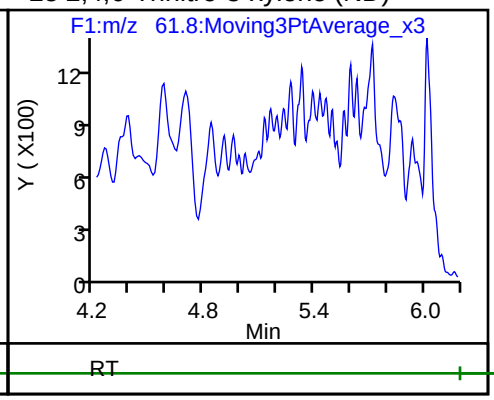
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:24 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14049.d				
Lims ID:	280-160190-A-48-B				
Client ID:	29SB193 (11-12)				
Sample Type:	Client				
Inject. Date:	14-Apr-2022 17:31:12	ALS Bottle#:	44	Worklist Smp#:	49
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160190-A-48-B				
Misc. Info.:	ex722D14				
Operator ID:	acm	Instrument ID:	LC_LCMS7		
Method:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m				
Limit Group:	LC - 8321A Expl				
Last Update:	15-Apr-2022 08:03:20	Calib Date:	14-Apr-2022 13:07:22		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1652				
First Level Reviewer: meyera		Date:	15-Apr-2022 07:36:34		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	91.8	91.50

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB193 (15-16) | Lab Sample ID: 280-160190-49
Matrix: Solid | Lab File ID: ex722D14050.d
Analysis Method: 8321A | Date Collected: 03/24/2022 14:45
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:17
Sample wt/vol: 10.08(g) | Date Analyzed: 04/14/2022 17:37
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571897 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.050	U	0.099	0.050	0.044
99-65-0	1,3-Dinitrobenzene	0.050	U	0.099	0.050	0.044
118-96-7	2,4,6-Trinitrotoluene	0.050	U Q	0.099	0.050	0.037
121-14-2	2,4-Dinitrotoluene	0.050	U	0.099	0.050	0.046
606-20-2	2,6-Dinitrotoluene	0.050	U	0.099	0.050	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.050	U M	0.099	0.050	0.049
19406-51-0	4-Amino-2,6-dinitrotoluene	0.050	U M	0.099	0.050	0.031
2691-41-0	HMX	0.050	U	0.099	0.050	0.046
99-08-1	m-Nitrotoluene	0.050	U	0.099	0.050	0.043
98-95-3	Nitrobenzene	0.050	U	0.11	0.050	0.038
55-63-0	Nitroglycerin	0.050	U	0.099	0.050	0.029
88-72-2	o-Nitrotoluene	0.050	U	0.099	0.050	0.042
78-11-5	PETN	0.050	U	0.099	0.050	0.034
99-99-0	p-Nitrotoluene	0.050	U	0.099	0.050	0.049
121-82-4	RDX	0.050	U	0.12	0.050	0.043
479-45-8	Tetryl	0.050	U Q	0.099	0.050	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	96		68-140

Report Date: 15-Apr-2022 08:03:25 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14050.d
Lims ID: 280-160190-A-49-B
Client ID: 29SB193 (15-16)
Sample Type: Client
Inject. Date: 14-Apr-2022 17:37:48 ALS Bottle#: 45 Worklist Smp#: 50
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-49-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:20 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:36:47
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		155917	125.0	14.2	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		536445	125.0	386	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1147180	129.4	353	
$ 11 Nitrobenzene-d5								
128.0	3.315	3.324	-0.009	0.777	495446	96.4	144	
12 Nitrobenzene								
123.0	3.372	3.382	-0.010	0.790	3093	0.4728	3.4	
* 18 2,4-dinitrotoluene-d3								
185.1	4.267	4.275	-0.008		3578782	125.0	129	

QC Flag Legend

Processing Flags

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

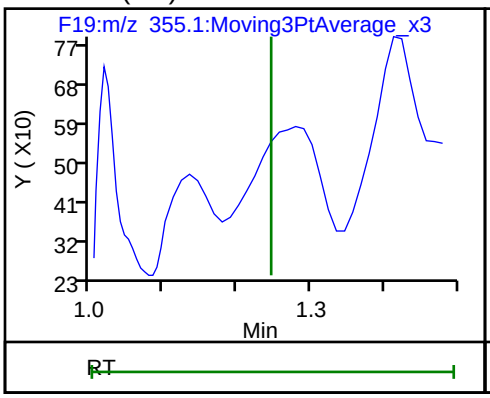
Report Date: 15-Apr-2022 08:03:25 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

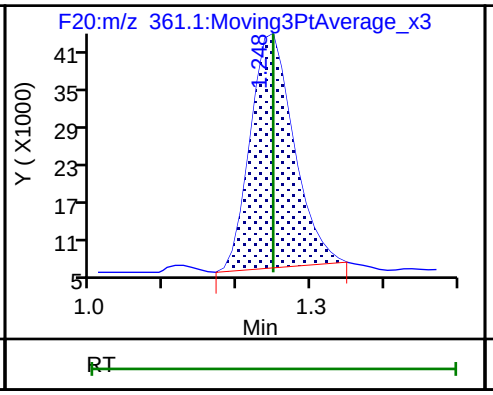
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14050.d

Injection Date:	14-Apr-2022 17:37:48	Instrument ID:	LC_LCMS7
Lims ID:	280-160190-A-49-B	Lab Sample ID:	280-160190-49
Client ID:	29SB193 (15-16)		
Operator ID:	acm	ALS Bottle#:	45 Worklist Smp#: 50
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl

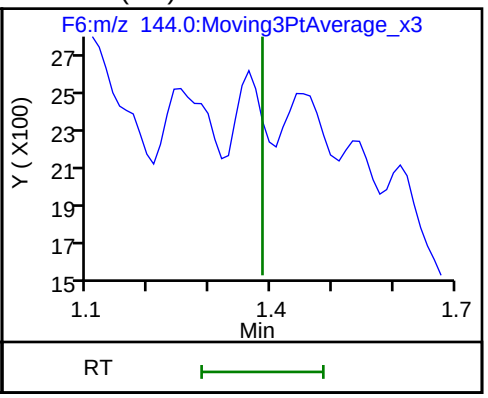
2 HMX (ND)



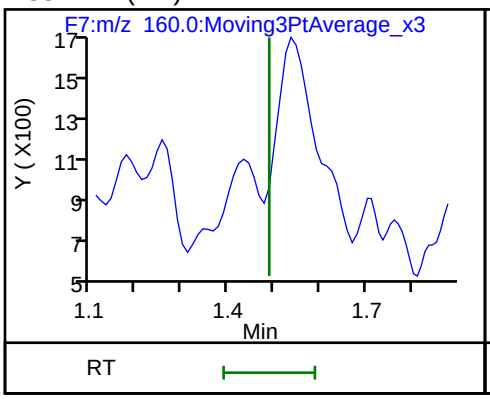
* 1 HMX-13C4



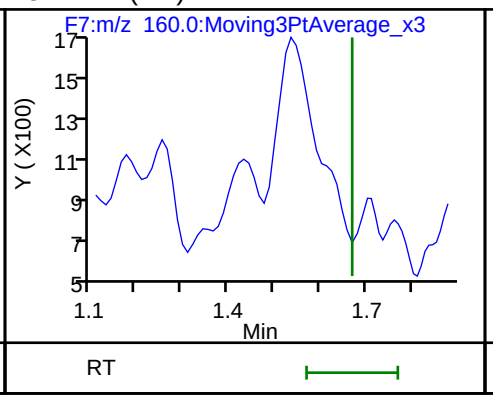
36 TNX (ND)



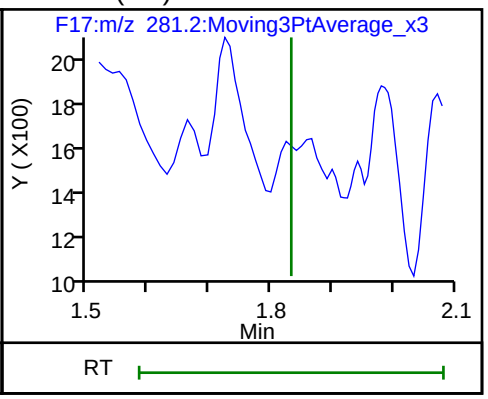
33 DNX (ND)



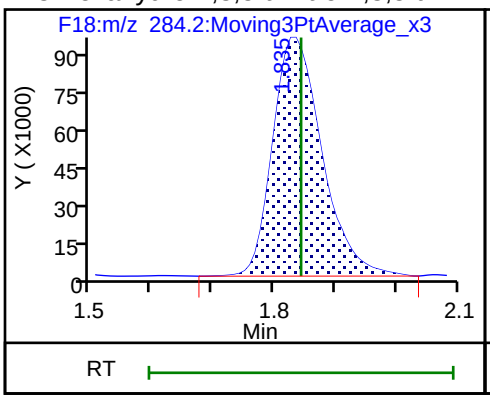
34 MNX (ND)



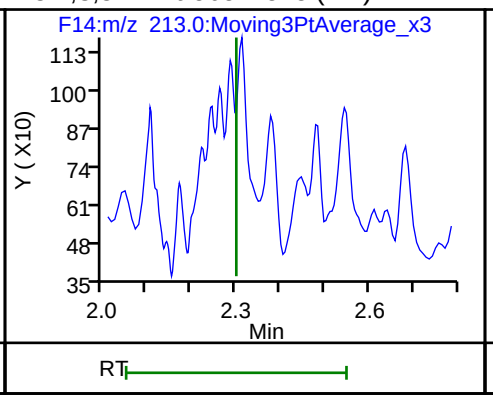
4 RDX (ND)



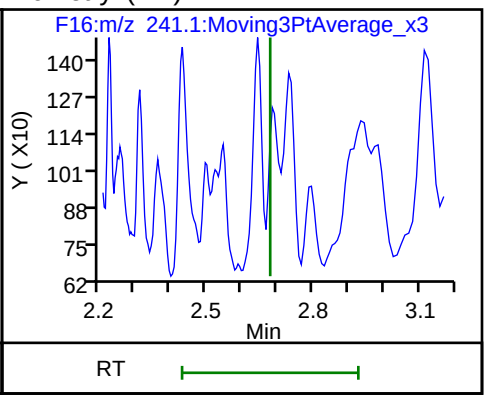
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



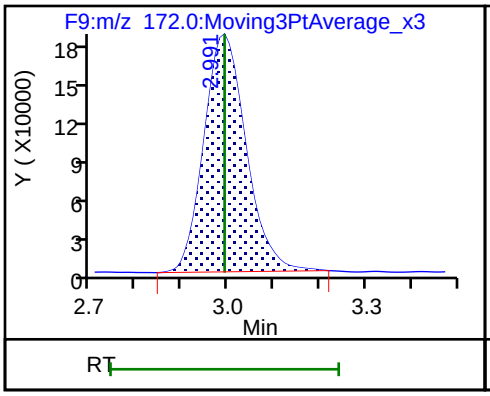
5 1,3,5-Trinitrobenzene (ND)



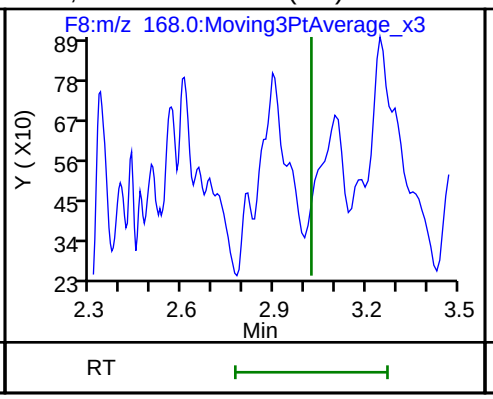
6 Tetryl (ND)



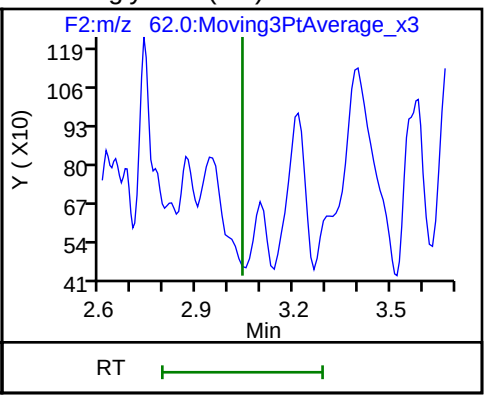
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

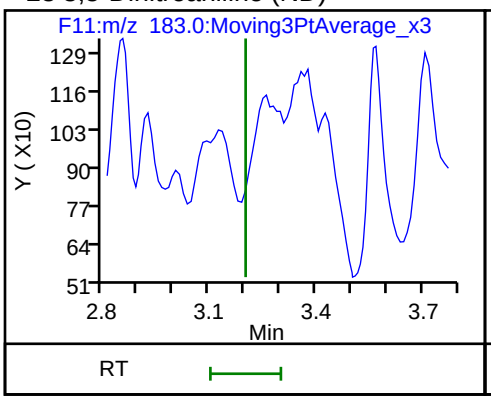


9 Nitroglycerin (ND)

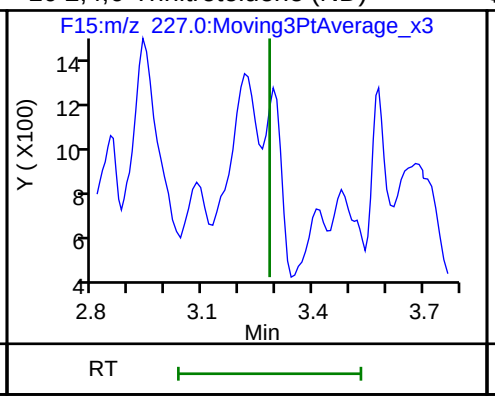


Report Date: 15-Apr-2022 08:03:25 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14050.d

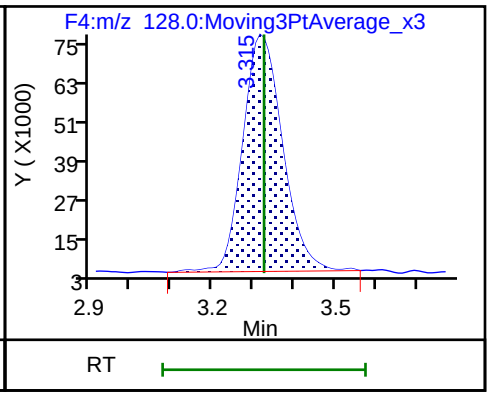
28 3,5-Dinitroaniline (ND)



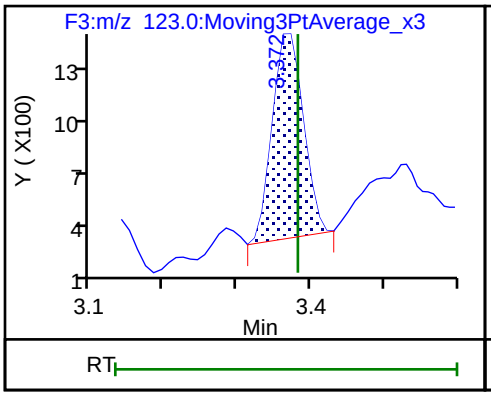
10 2,4,6-Trinitrotoluene (ND)



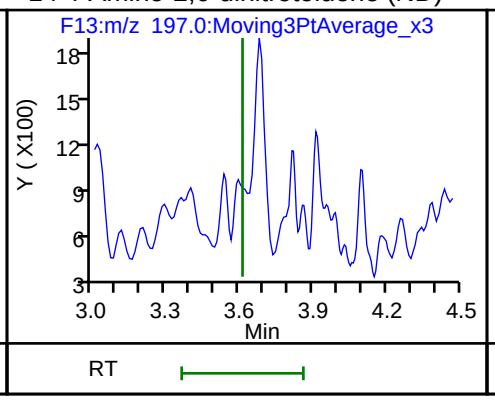
$ 11 Nitrobenzene-d5



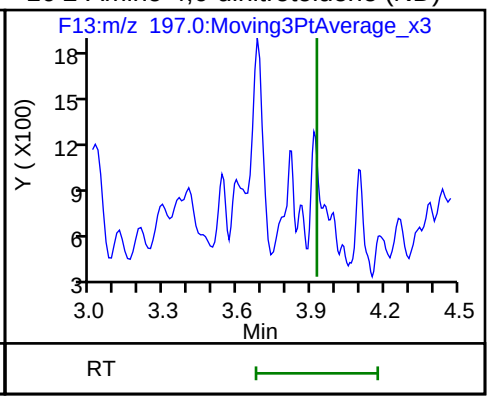
12 Nitrobenzene



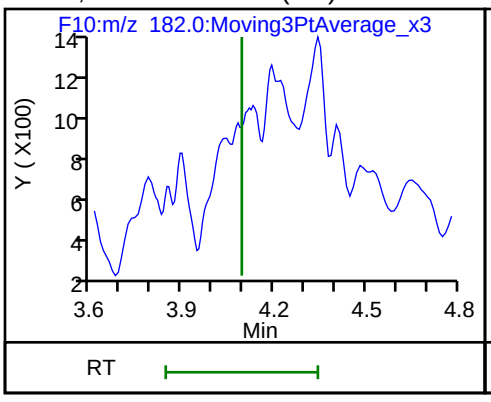
14 4-Amino-2,6-dinitrotoluene (ND)



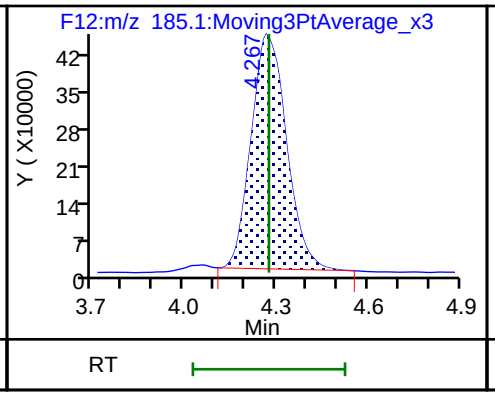
16 2-Amino-4,6-dinitrotoluene (ND)



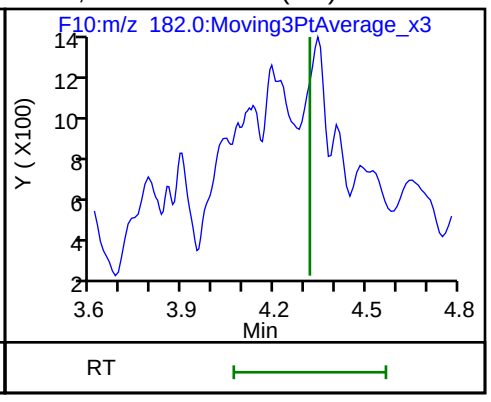
17 2,6-Dinitrotoluene (ND)



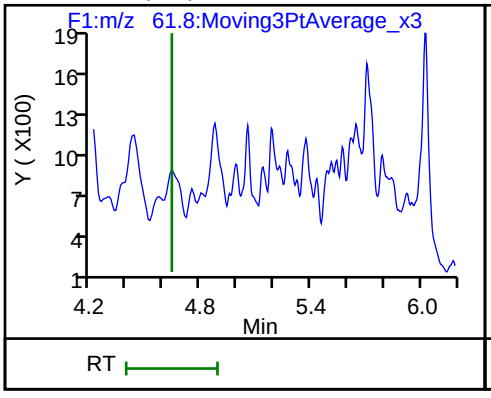
* 18 2,4-dinitrotoluene-d3



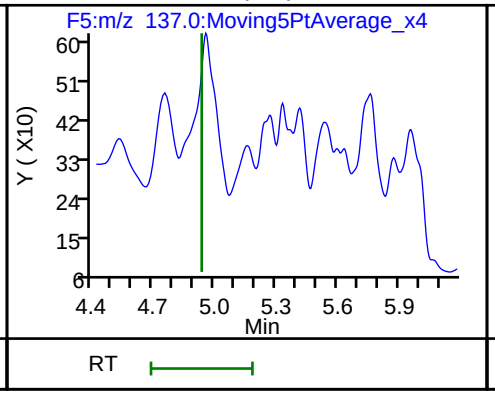
19 2,4-Dinitrotoluene (ND)



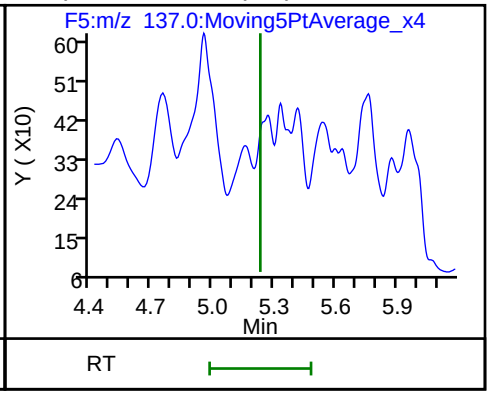
20 PETN (ND)



22 o-Nitrotoluene (ND)



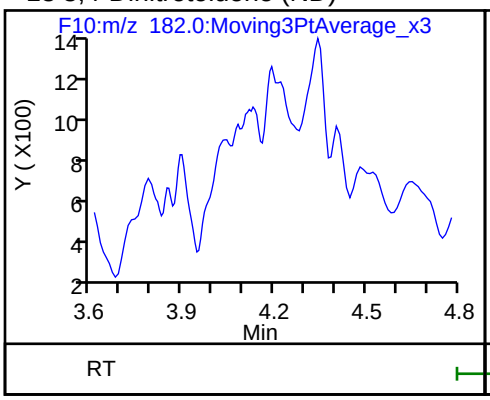
23 p-Nitrotoluene (ND)



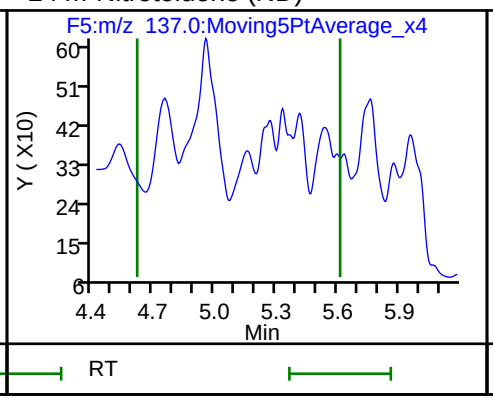
Report Date: 15-Apr-2022 08:03:25 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14050.d

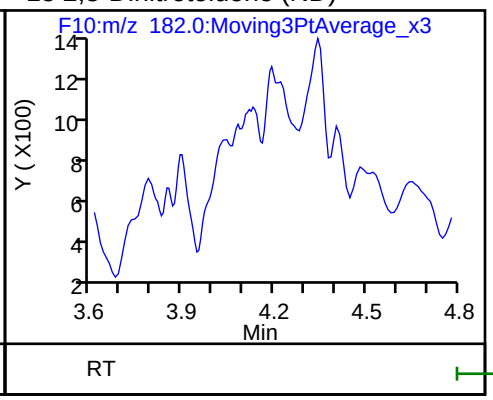
13 3,4-Dinitrotoluene (ND)



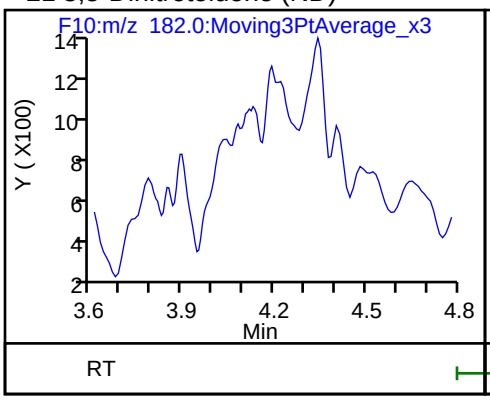
24 m-Nitrotoluene (ND)



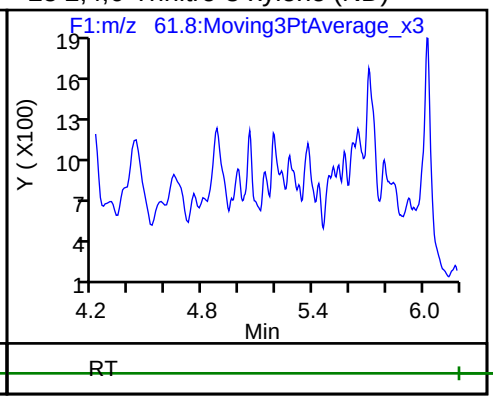
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:25 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14050.d				
Lims ID:	280-160190-A-49-B				
Client ID:	29SB193 (15-16)				
Sample Type:	Client				
Inject. Date:	14-Apr-2022 17:37:48	ALS Bottle#:	45	Worklist Smp#:	50
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160190-A-49-B				
Misc. Info.:	ex722D14				
Operator ID:	acm	Instrument ID:	LC_LCMS7		
Method:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m				
Limit Group:	LC - 8321A Expl				
Last Update:	15-Apr-2022 08:03:20	Calib Date:	14-Apr-2022 13:07:22		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1652				

First Level Reviewer: meyera Date: 15-Apr-2022 07:36:47

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	96.4	96.05

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB193 (19-20) | Lab Sample ID: 280-160190-50
Matrix: Solid | Lab File ID: ex722D14051.d
Analysis Method: 8321A | Date Collected: 03/24/2022 14:50
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:17
Sample wt/vol: 10.49(g) | Date Analyzed: 04/14/2022 17:44
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571897 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.048	U	0.095	0.048	0.043
99-65-0	1,3-Dinitrobenzene	0.048	U	0.095	0.048	0.043
118-96-7	2,4,6-Trinitrotoluene	0.048	U Q	0.095	0.048	0.035
121-14-2	2,4-Dinitrotoluene	0.048	U	0.095	0.048	0.044
606-20-2	2,6-Dinitrotoluene	0.048	U	0.095	0.048	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.048	U	0.095	0.048	0.047
19406-51-0	4-Amino-2,6-dinitrotoluene	0.048	U	0.095	0.048	0.030
2691-41-0	HMX	0.048	U	0.095	0.048	0.044
99-08-1	m-Nitrotoluene	0.048	U	0.095	0.048	0.041
98-95-3	Nitrobenzene	0.048	U M	0.10	0.048	0.036
55-63-0	Nitroglycerin	0.048	U	0.095	0.048	0.028
88-72-2	o-Nitrotoluene	0.048	U	0.095	0.048	0.041
78-11-5	PETN	0.048	U	0.095	0.048	0.032
99-99-0	p-Nitrotoluene	0.048	U	0.095	0.048	0.047
121-82-4	RDX	0.048	U	0.11	0.048	0.041
479-45-8	Tetryl	0.048	U Q	0.095	0.048	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	98		68-140

Report Date: 15-Apr-2022 08:03:25 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14051.d
Lims ID: 280-160190-A-50-B
Client ID: 29SB193 (19-20)
Sample Type: Client
Inject. Date: 14-Apr-2022 17:44:23 ALS Bottle#: 46 Worklist Smp#: 51
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-50-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:20 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:37:00
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		134090	125.0	4.2	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.827	1.844	-0.017		522236	125.0	160	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1191541	129.4	394	
$ 11 Nitrobenzene-d5								
128.0	3.315	3.324	-0.009	0.777	523370	98.0	96.4	
* 18 2,4-dinitrotoluene-d3								
185.1	4.267	4.275	-0.008		3724454	125.0	132	

QC Flag Legend

Processing Flags

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

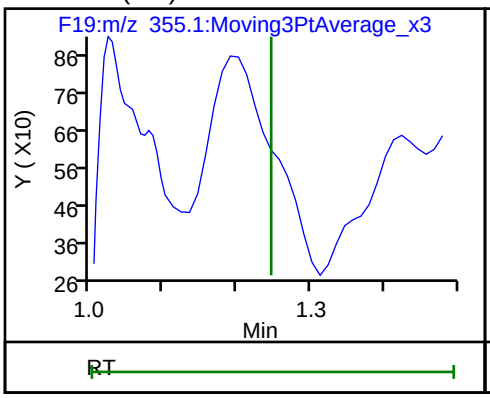
Report Date: 15-Apr-2022 08:03:25 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

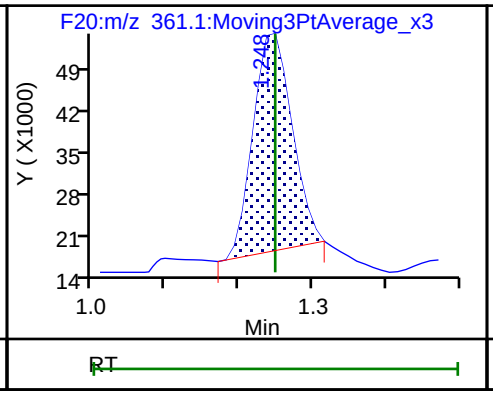
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14051.d

Injection Date:	14-Apr-2022 17:44:23	Instrument ID:	LC_LCMS7
Lims ID:	280-160190-A-50-B	Lab Sample ID:	280-160190-50
Client ID:	29SB193 (19-20)		
Operator ID:	acm	ALS Bottle#:	46 Worklist Smp#: 51
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl

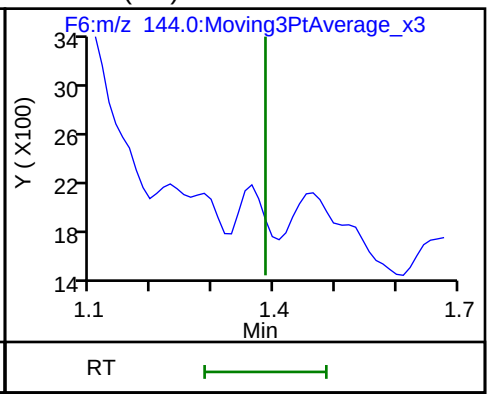
2 HMX (ND)



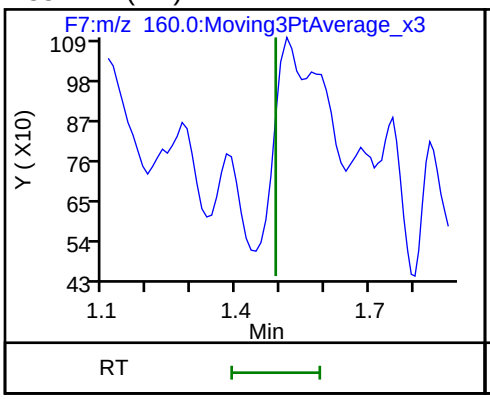
* 1 HMX-13C4



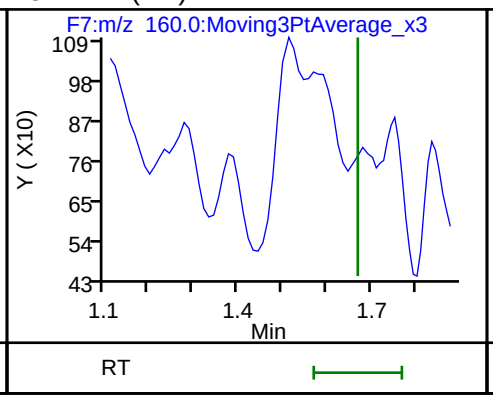
36 TNX (ND)



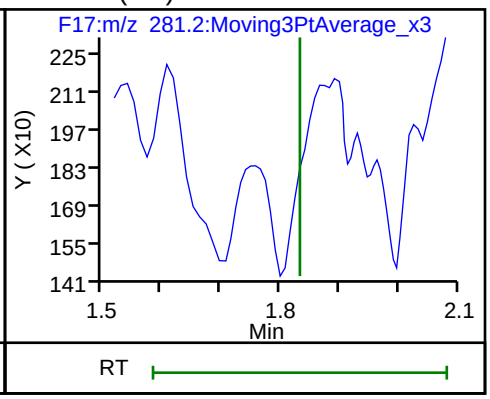
33 DNX (ND)



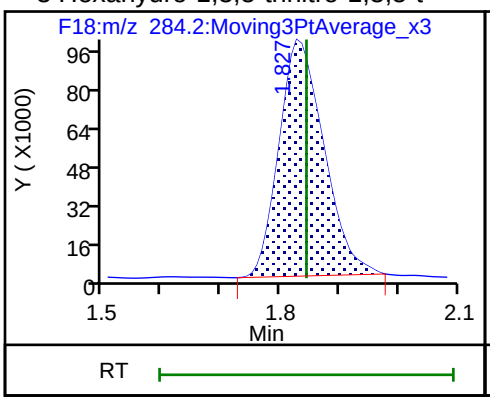
34 MNX (ND)



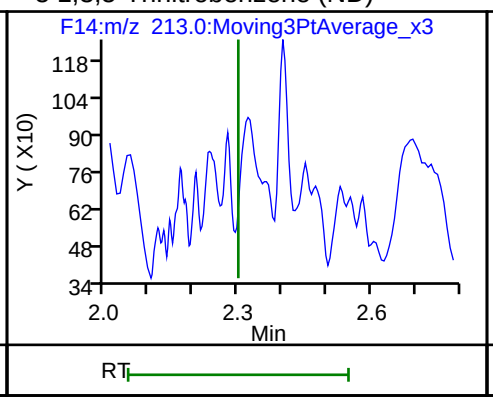
4 RDX (ND)



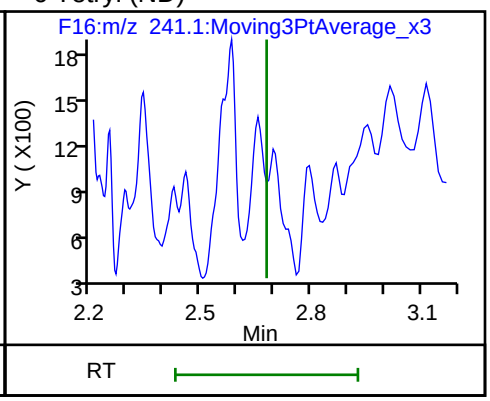
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



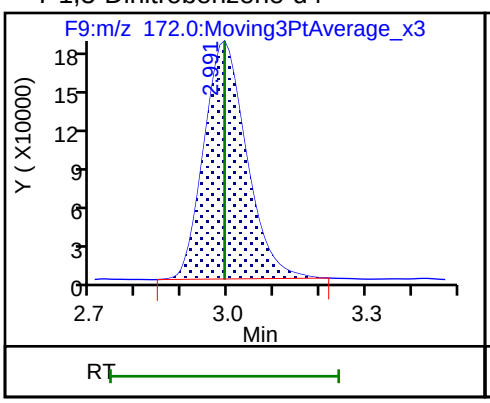
5 1,3,5-Trinitrobenzene (ND)



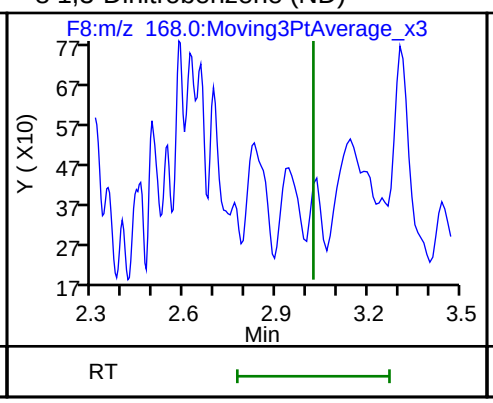
6 Tetryl (ND)



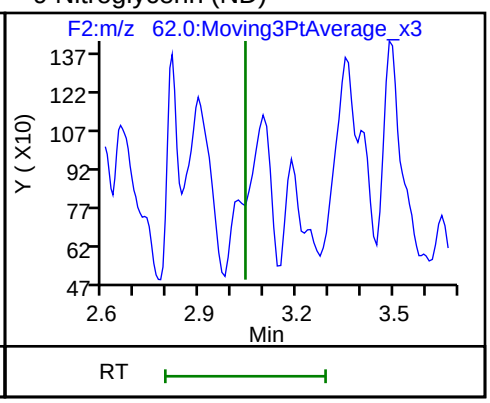
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

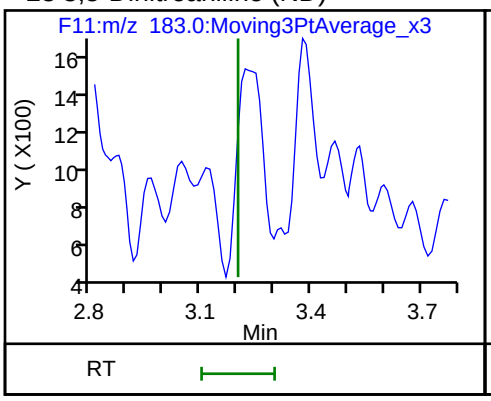


9 Nitroglycerin (ND)

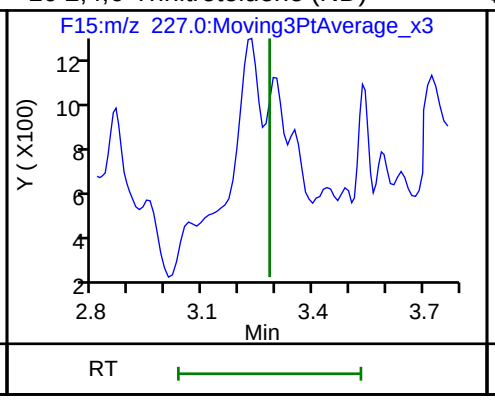


Report Date: 15-Apr-2022 08:03:25 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14051.d

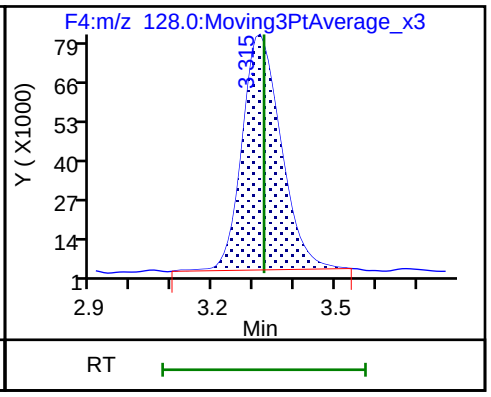
28 3,5-Dinitroaniline (ND)



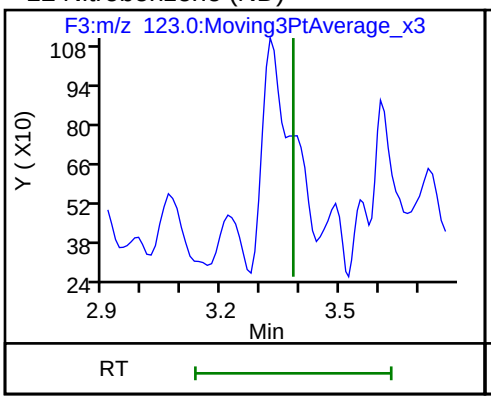
10 2,4,6-Trinitrotoluene (ND)



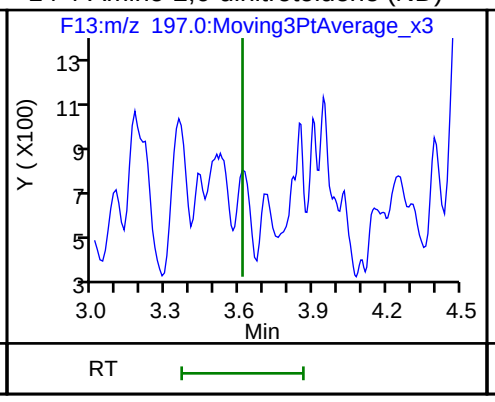
$ 11 Nitrobenzene-d5



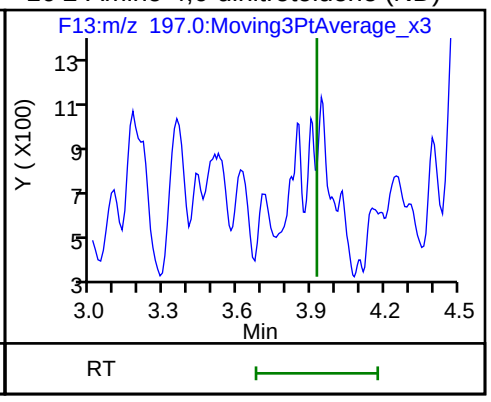
12 Nitrobenzene (ND)



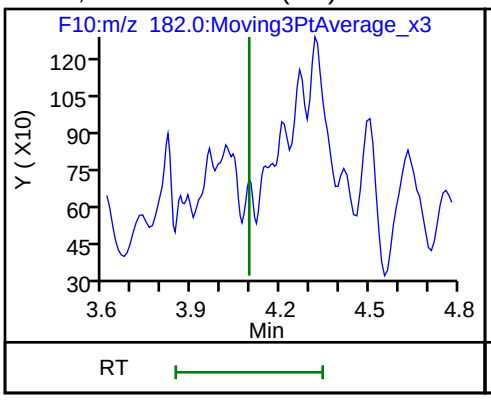
14 4-Amino-2,6-dinitrotoluene (ND)



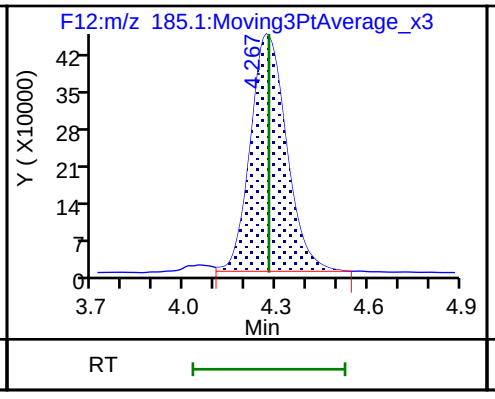
16 2-Amino-4,6-dinitrotoluene (ND)



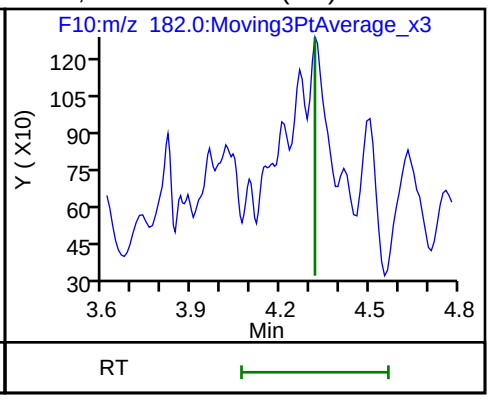
17 2,6-Dinitrotoluene (ND)



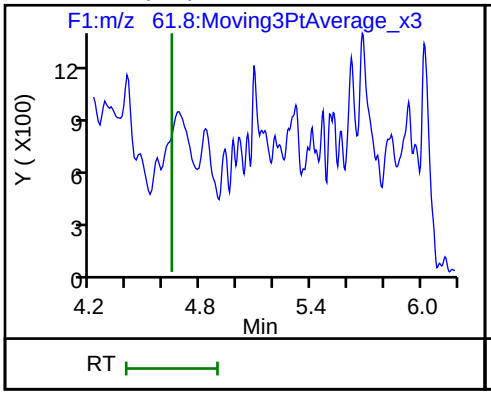
* 18 2,4-dinitrotoluene-d3



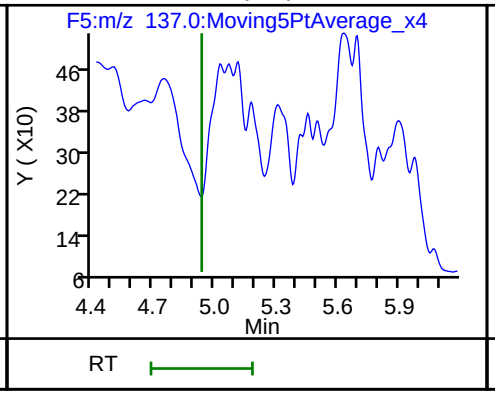
19 2,4-Dinitrotoluene (ND)



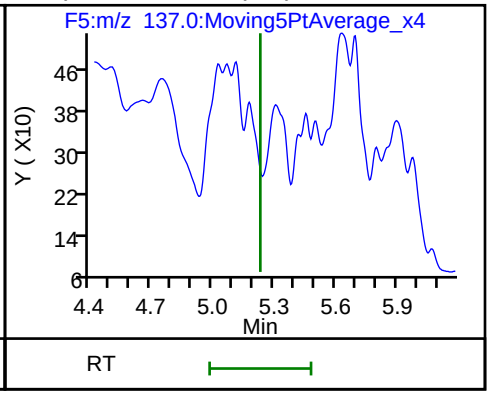
20 PETN (ND)



22 o-Nitrotoluene (ND)



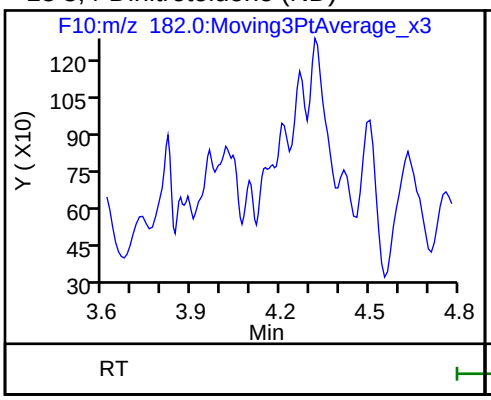
23 p-Nitrotoluene (ND)



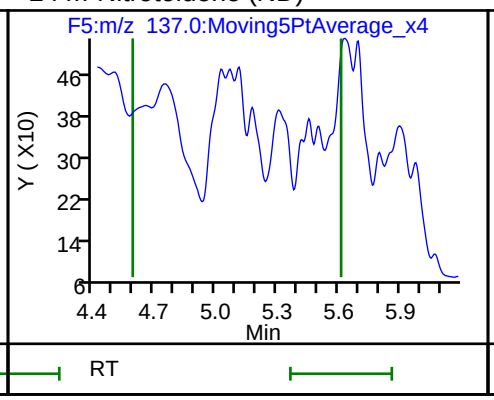
Report Date: 15-Apr-2022 08:03:25 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14051.d

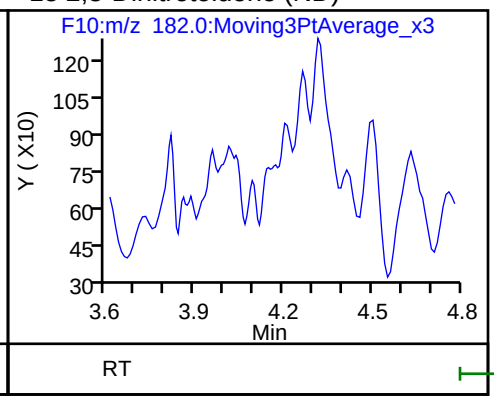
13 3,4-Dinitrotoluene (ND)



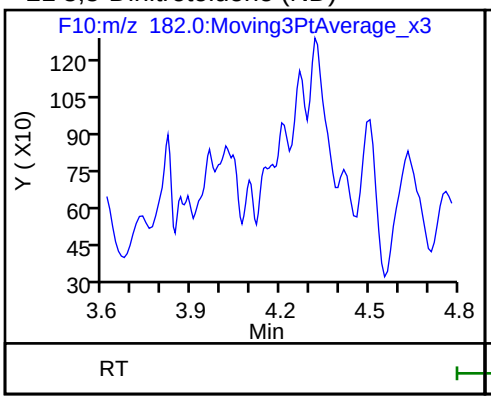
24 m-Nitrotoluene (ND)



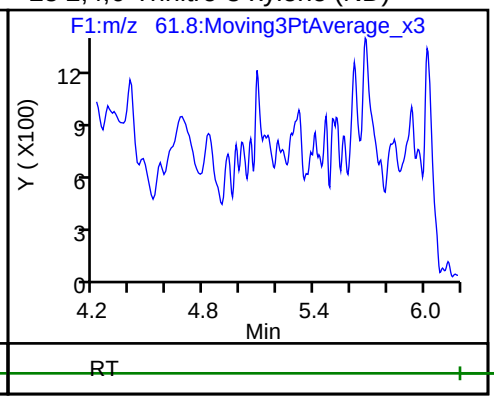
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:25 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14051.d
Lims ID: 280-160190-A-50-B
Client ID: 29SB193 (19-20)
Sample Type: Client
Inject. Date: 14-Apr-2022 17:44:23 ALS Bottle#: 46 Worklist Smp#: 51
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-50-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:20 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:37:00

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	98.0	97.71

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: DUP-10 | Lab Sample ID: 280-160190-51
Matrix: Solid | Lab File ID: ex722D14052.d
Analysis Method: 8321A | Date Collected: 03/24/2022 15:30
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:17
Sample wt/vol: 10.15(g) | Date Analyzed: 04/14/2022 17:50
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571897 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.049	U	0.099	0.049	0.044
99-65-0	1,3-Dinitrobenzene	0.049	U	0.099	0.049	0.044
118-96-7	2,4,6-Trinitrotoluene	0.049	U Q	0.099	0.049	0.036
121-14-2	2,4-Dinitrotoluene	0.049	U	0.099	0.049	0.046
606-20-2	2,6-Dinitrotoluene	0.049	U	0.099	0.049	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.049	U	0.099	0.049	0.049
19406-51-0	4-Amino-2,6-dinitrotoluene	0.049	U	0.099	0.049	0.031
2691-41-0	HMX	0.049	U	0.099	0.049	0.045
99-08-1	m-Nitrotoluene	0.049	U	0.099	0.049	0.043
98-95-3	Nitrobenzene	0.049	U	0.11	0.049	0.037
55-63-0	Nitroglycerin	0.049	U	0.099	0.049	0.029
88-72-2	o-Nitrotoluene	0.049	U	0.099	0.049	0.042
78-11-5	PETN	0.049	U	0.099	0.049	0.033
99-99-0	p-Nitrotoluene	0.049	U	0.099	0.049	0.049
121-82-4	RDX	0.049	U	0.12	0.049	0.042
479-45-8	Tetryl	0.049	U Q	0.099	0.049	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	103		68-140

Report Date: 15-Apr-2022 08:03:26 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14052.d
Lims ID: 280-160190-A-51-B
Client ID: DUP-10
Sample Type: Client
Inject. Date: 14-Apr-2022 17:50:59 ALS Bottle#: 47 Worklist Smp#: 52
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-51-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:20 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:37:18
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								M
361.1	1.248	1.248	0.0		136322	125.0	3.0	M
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		520255	125.0	150	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1099646	129.4	325	
$ 11 Nitrobenzene-d5								
128.0	3.315	3.324	-0.009	0.777	506877	103.0	45.8	
* 18 2,4-dinitrotoluene-d3								
185.1	4.267	4.275	-0.008		3474956	125.0	136	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:26 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14052.d

Injection Date: 14-Apr-2022 17:50:59 Instrument ID: LC_LCMS7

Lims ID: 280-160190-A-51-B Lab Sample ID: 280-160190-51

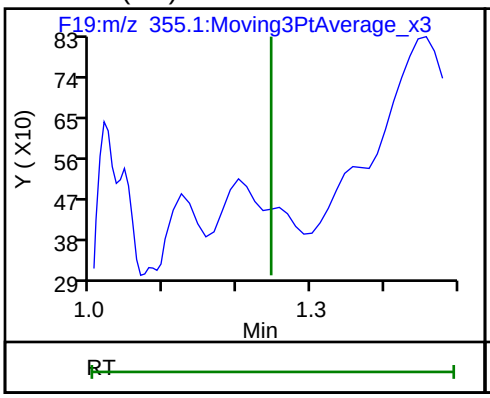
Client ID: DUP-10

Operator ID: acm ALS Bottle#: 47 Worklist Smp#: 52

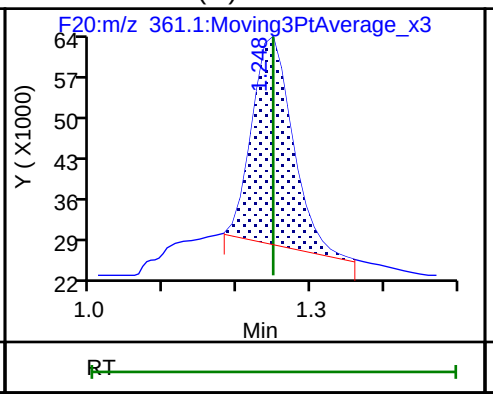
Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

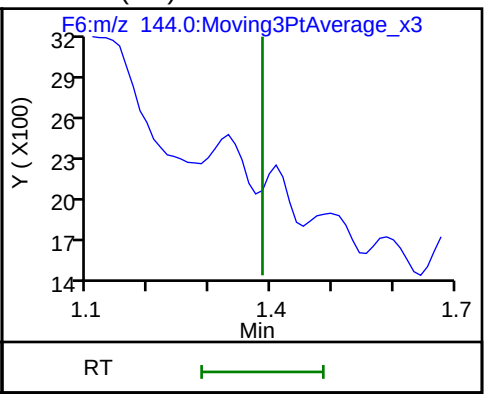
2 HMX (ND)



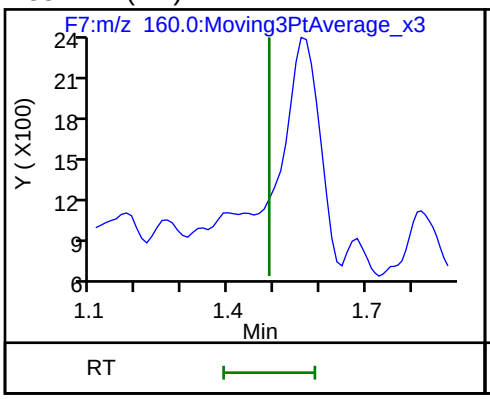
* 1 HMX-13C4 (M)



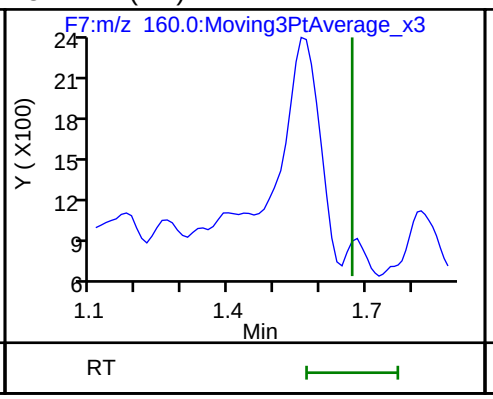
36 TNX (ND)



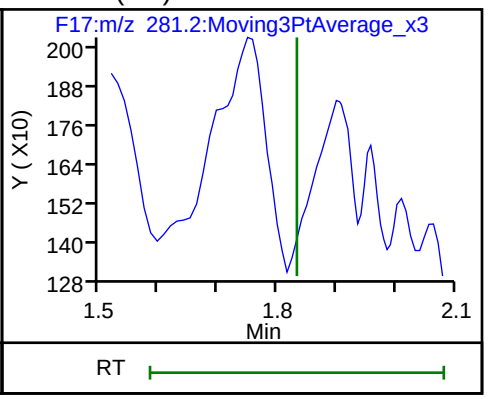
33 DNX (ND)



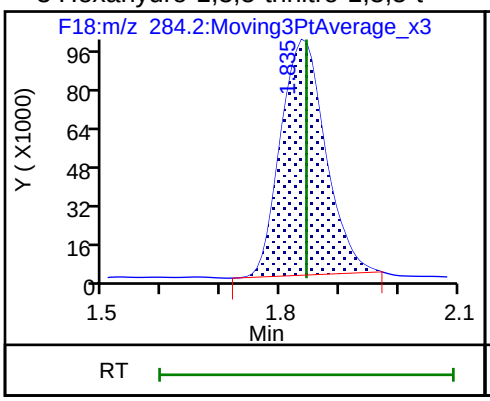
34 MNX (ND)



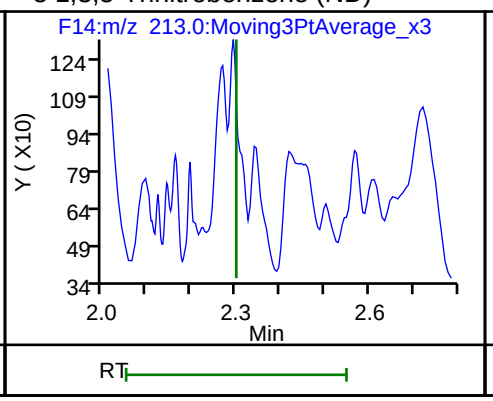
4 RDX (ND)



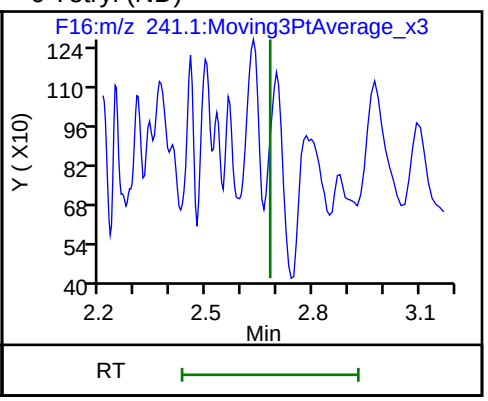
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



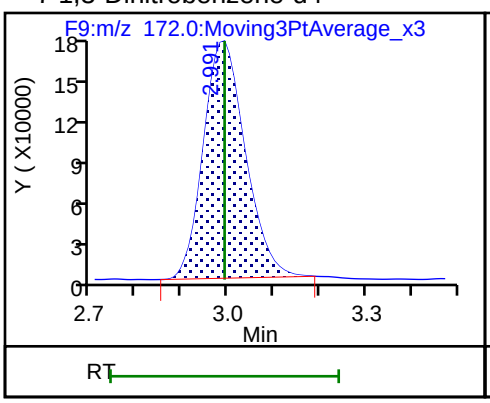
5 1,3,5-Trinitrobenzene (ND)



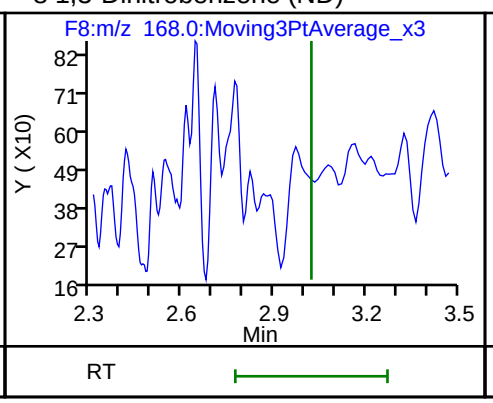
6 Tetryl (ND)



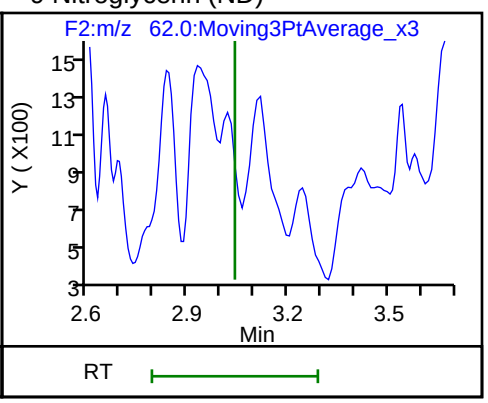
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

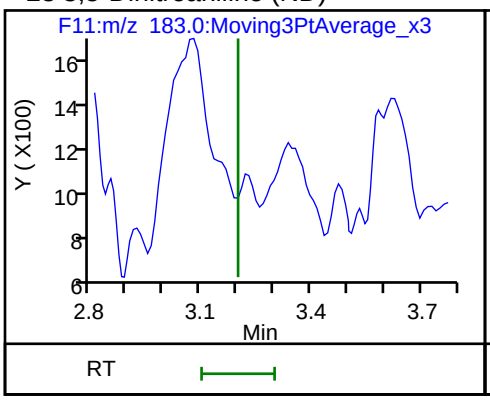


9 Nitroglycerin (ND)

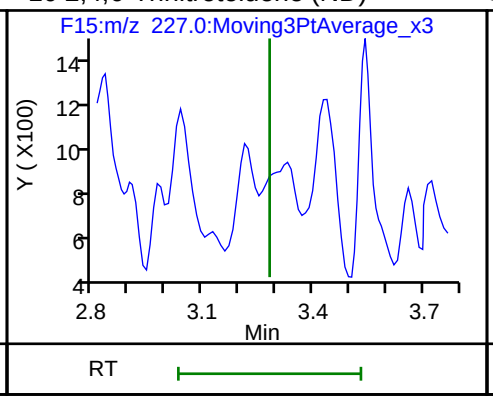


Report Date: 15-Apr-2022 08:03:26 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14052.d

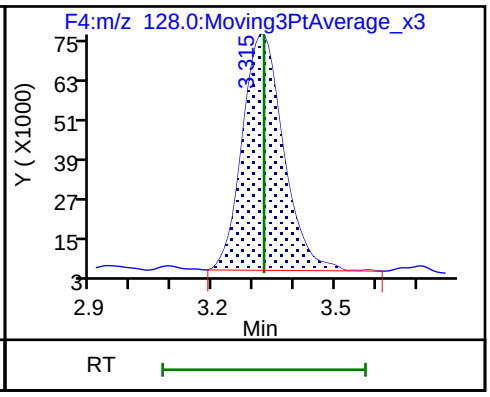
28 3,5-Dinitroaniline (ND)



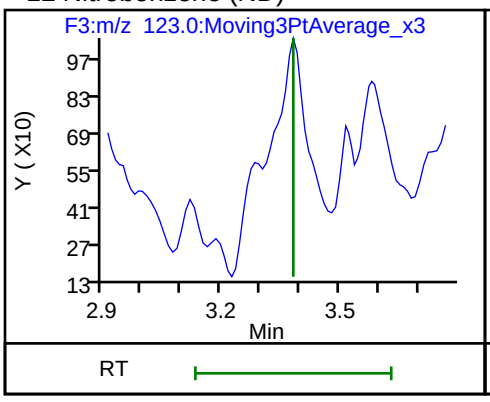
10 2,4,6-Trinitrotoluene (ND)



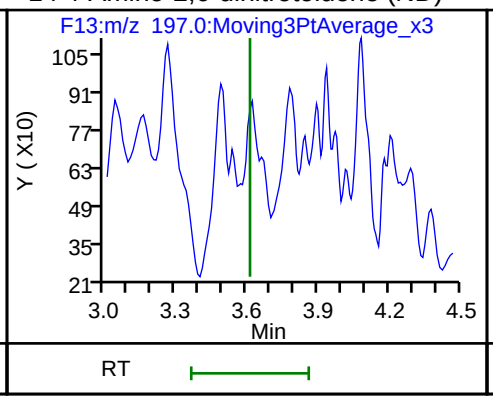
$ 11 Nitrobenzene-d5



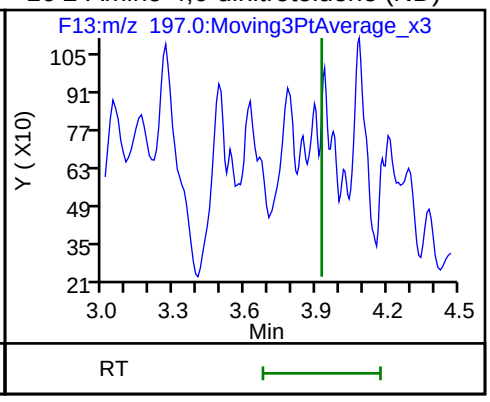
12 Nitrobenzene (ND)



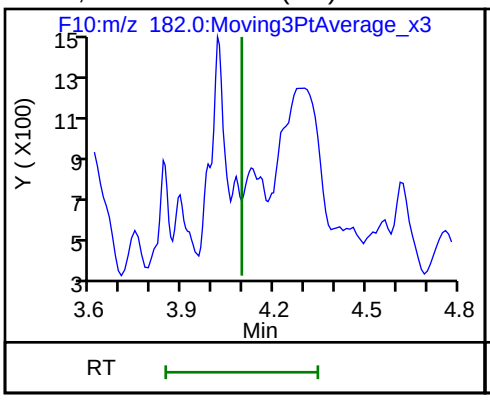
14 4-Amino-2,6-dinitrotoluene (ND)



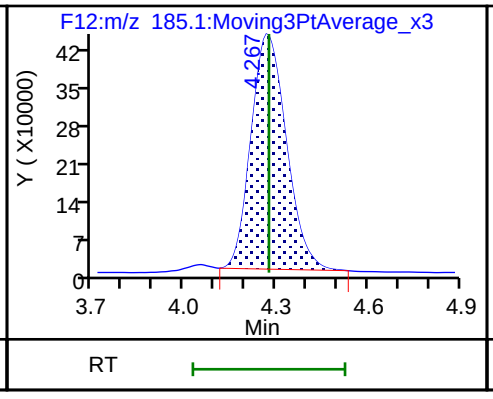
16 2-Amino-4,6-dinitrotoluene (ND)



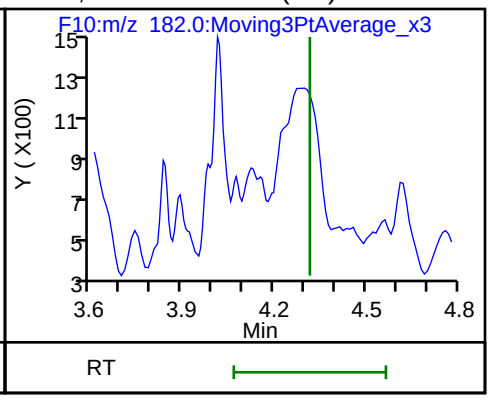
17 2,6-Dinitrotoluene (ND)



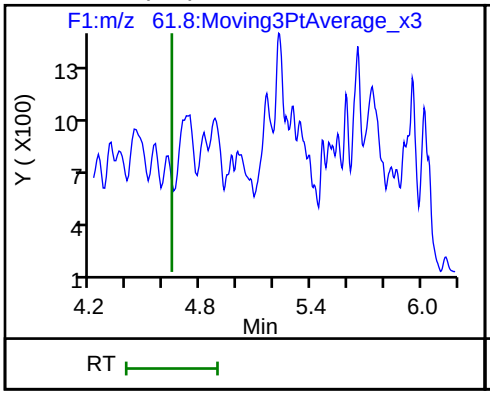
* 18 2,4-dinitrotoluene-d3



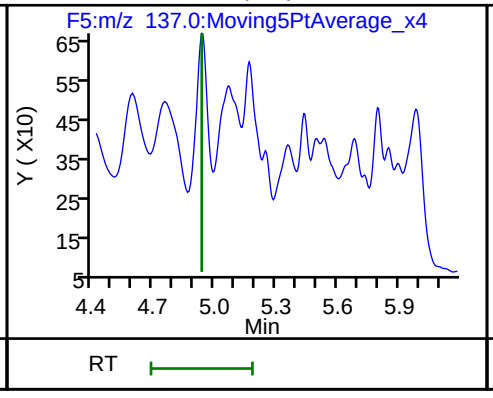
19 2,4-Dinitrotoluene (ND)



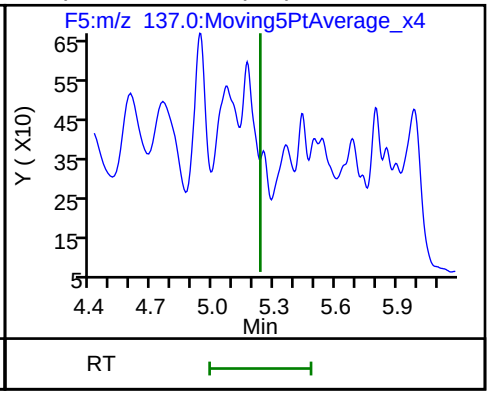
20 PETN (ND)



22 o-Nitrotoluene (ND)



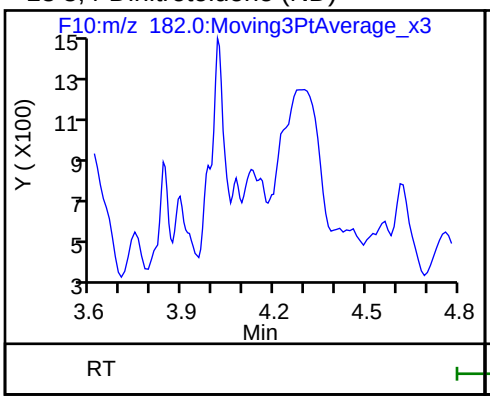
23 p-Nitrotoluene (ND)



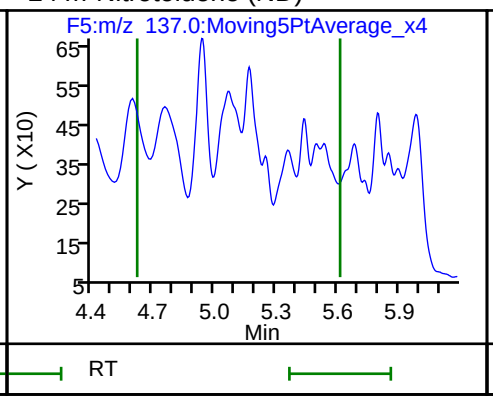
Report Date: 15-Apr-2022 08:03:26 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14052.d

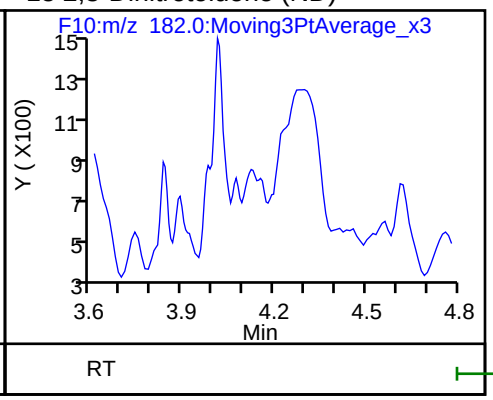
13 3,4-Dinitrotoluene (ND)



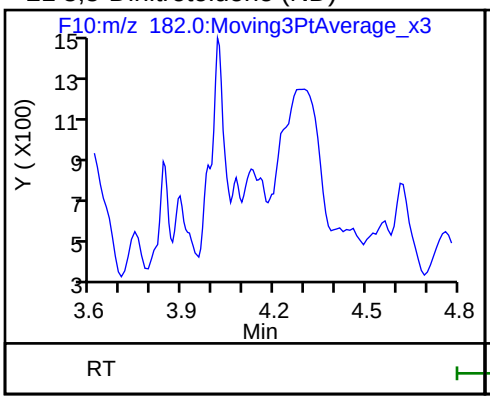
24 m-Nitrotoluene (ND)



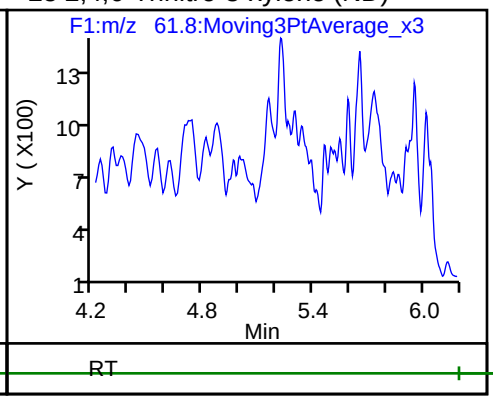
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:26 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14052.d
Lims ID: 280-160190-A-51-B
Client ID: DUP-10
Sample Type: Client
Inject. Date: 14-Apr-2022 17:50:59 ALS Bottle#: 47 Worklist Smp#: 52
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-51-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:20 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:37:18

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	103.0	102.64

Report Date: 15-Apr-2022 08:03:26 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14052.d

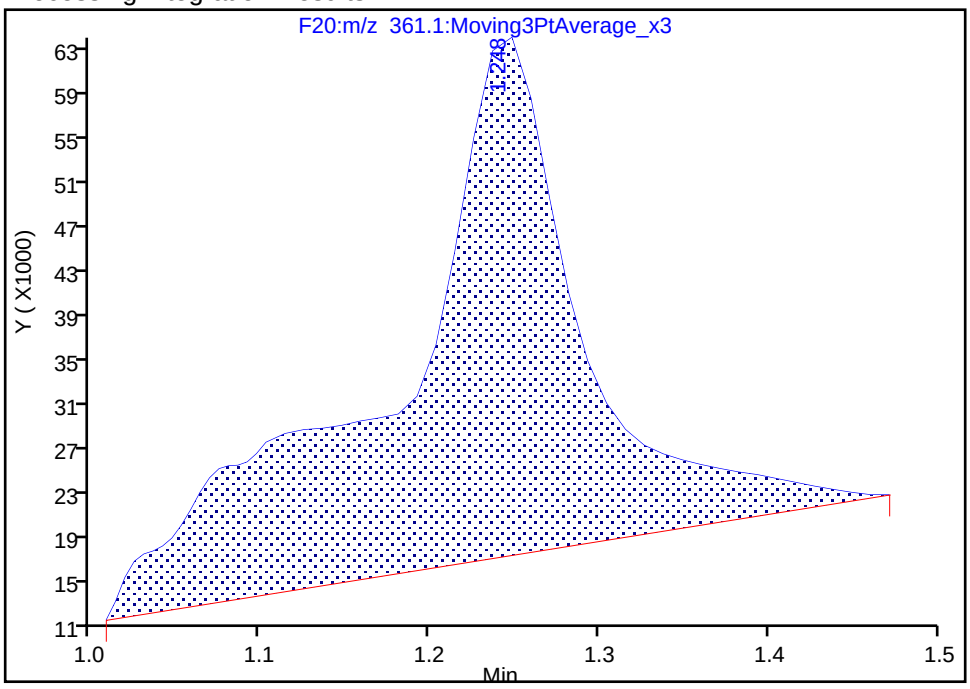
Injection Date:	14-Apr-2022 17:50:59	Instrument ID:	LC_LCMS7
Lims ID:	280-160190-A-51-B	Lab Sample ID:	280-160190-51
Client ID:	DUP-10		
Operator ID:	acm	ALS Bottle#:	47 Worklist Smp#: 52
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F20:SIR

* 1 HMX-13C4, CAS: STL00986

Signal: 1

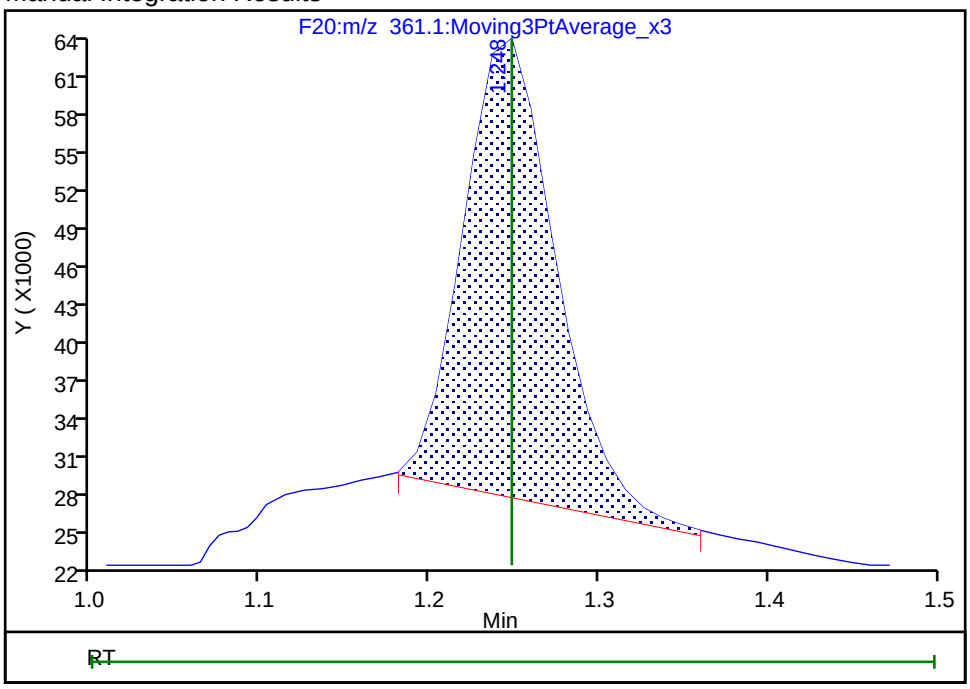
Processing Integration Results

RT: 1.25
Area: 366580
Amount: 125.0000
Amount Units: ug/l



Manual Integration Results

RT: 1.25
Area: 136322
Amount: 125.0000
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:37:15

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB203 (3-4) | Lab Sample ID: 280-160190-52
Matrix: Solid | Lab File ID: ex722D14054.d
Analysis Method: 8321A | Date Collected: 03/24/2022 15:15
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:17
Sample wt/vol: 10.57(g) | Date Analyzed: 04/14/2022 18:04
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571897 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.047	U	0.095	0.047	0.042
99-65-0	1,3-Dinitrobenzene	0.047	U	0.095	0.047	0.042
118-96-7	2,4,6-Trinitrotoluene	0.047	U Q	0.095	0.047	0.035
121-14-2	2,4-Dinitrotoluene	0.047	U	0.095	0.047	0.044
606-20-2	2,6-Dinitrotoluene	0.047	U	0.095	0.047	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.047	U J1	0.095	0.047	0.047
19406-51-0	4-Amino-2,6-dinitrotoluene	0.047	U J1	0.095	0.047	0.029
2691-41-0	HMX	0.047	U	0.095	0.047	0.044
99-08-1	m-Nitrotoluene	0.047	U	0.095	0.047	0.041
98-95-3	Nitrobenzene	0.047	U	0.10	0.047	0.036
55-63-0	Nitroglycerin	0.047	U	0.095	0.047	0.027
88-72-2	o-Nitrotoluene	0.047	U	0.095	0.047	0.040
78-11-5	PETN	0.047	U	0.095	0.047	0.032
99-99-0	p-Nitrotoluene	0.047	U	0.095	0.047	0.047
121-82-4	RDX	0.047	U	0.11	0.047	0.041
479-45-8	Tetryl	0.047	U Q J1	0.095	0.047	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	102		68-140

Report Date: 15-Apr-2022 08:03:27 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14054.d
Lims ID: 280-160190-A-52-F
Client ID: 29SB203 (3-4)
Sample Type: Client
Inject. Date: 14-Apr-2022 18:04:11 ALS Bottle#: 48 Worklist Smp#: 54
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-52-F
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:26 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:38:11
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		153997	125.0	13.9	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.827	1.844	-0.017		532483	125.0	214	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1119636	129.4	363	
10 2,4,6-Trinitrotoluene								M
227.0	3.272	3.281	-0.009	0.767	9485	-0.9777	4.1	M
$ 11 Nitrobenzene-d5								
128.0	3.305	3.324	-0.019	0.775	512832	102.3	123	
12 Nitrobenzene								
123.0	3.402	3.382	0.020	0.797	1876	0.1968	2.9	
17 2,6-Dinitrotoluene								M
182.0	4.062	4.093	-0.031	0.952	8019	-0.5216	9.1	M
* 18 2,4-dinitrotoluene-d3								
185.1	4.267	4.275	-0.008		3515800	125.0	122	
19 2,4-Dinitrotoluene								M
182.0	4.264	4.316	-0.052	0.999	10465	-0.6523	8.3	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

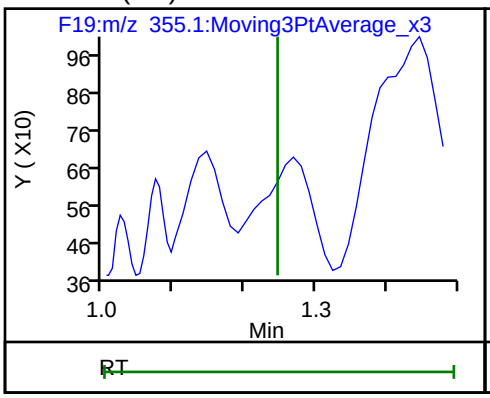
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:27 Chrom Revision: 2.3 12-Apr-2022 20:29:44

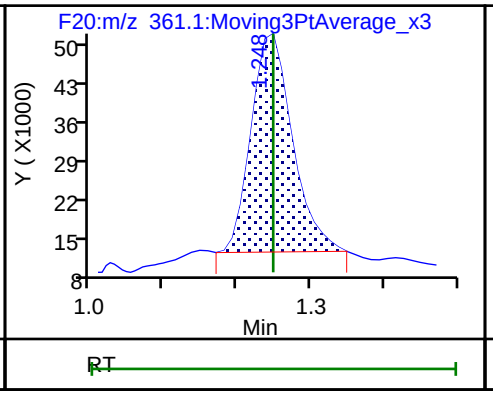
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14054.d
Injection Date: 14-Apr-2022 18:04:11 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-52-F Lab Sample ID: 280-160190-52
Client ID: 29SB203 (3-4)
Operator ID: acm ALS Bottle#: 48 Worklist Smp#: 54
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

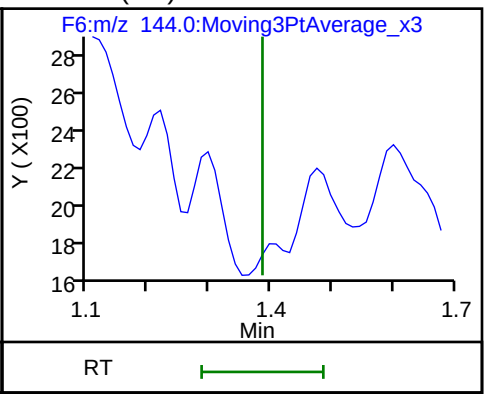
2 HMX (ND)



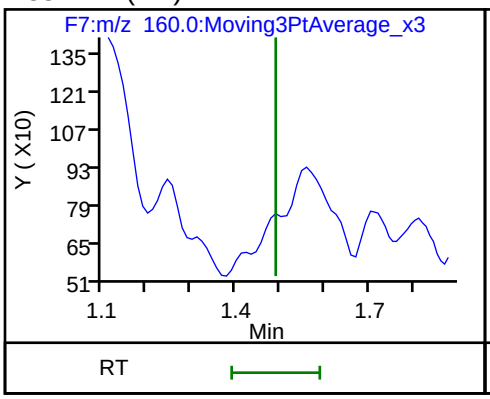
* 1 HMX-13C4



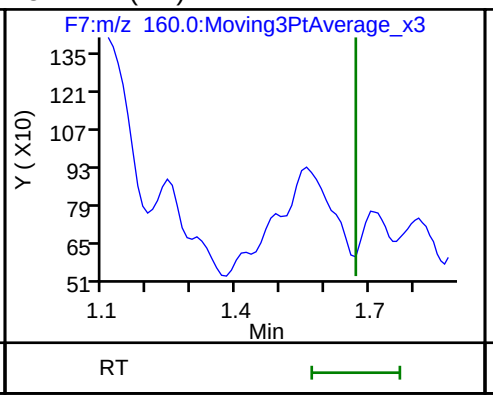
36 TNX (ND)



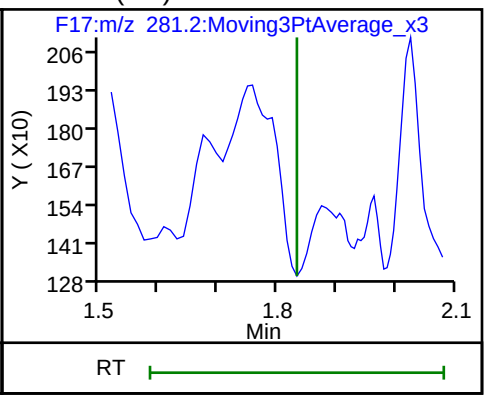
33 DNX (ND)



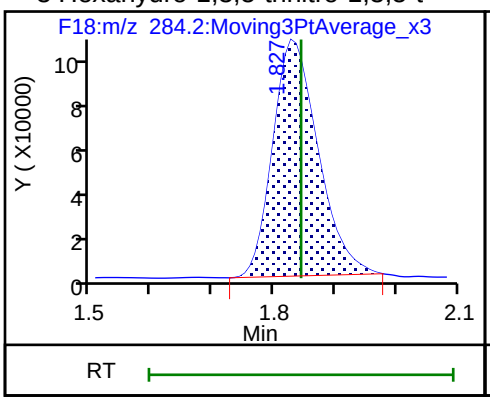
34 MNX (ND)



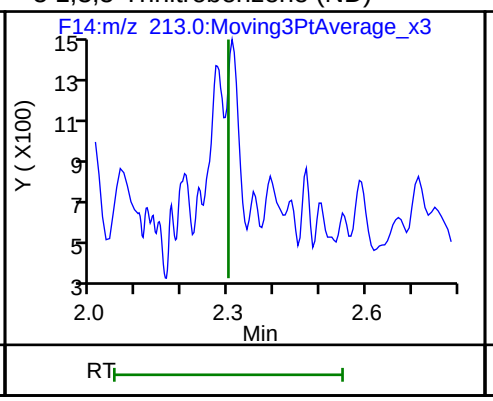
4 RDX (ND)



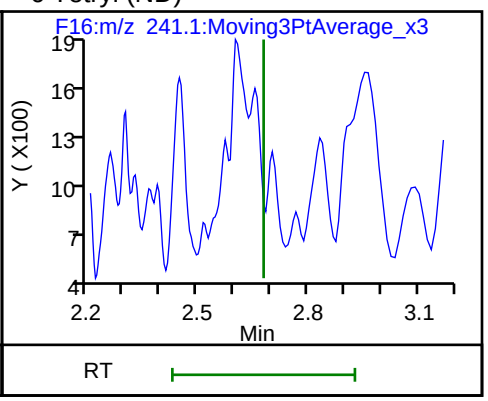
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



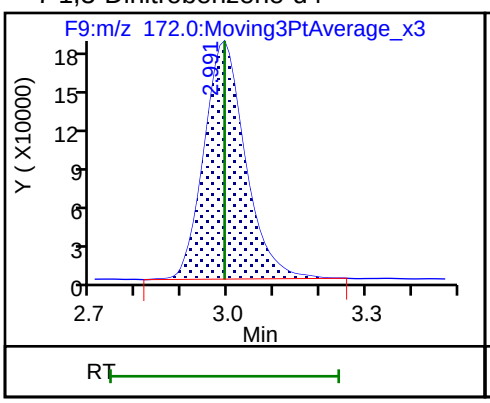
5 1,3,5-Trinitrobenzene (ND)



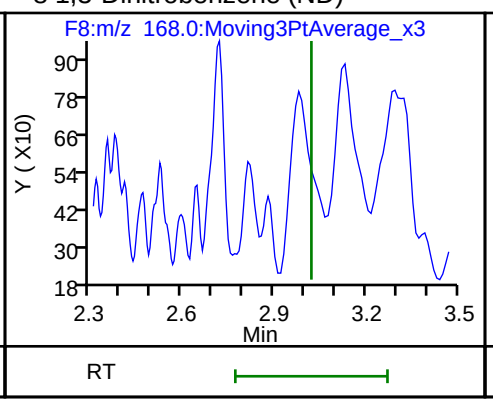
6 Tetryl (ND)



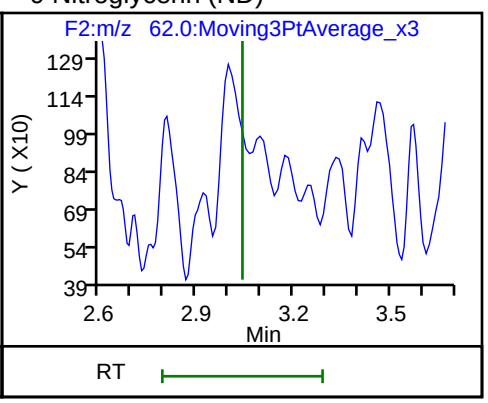
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

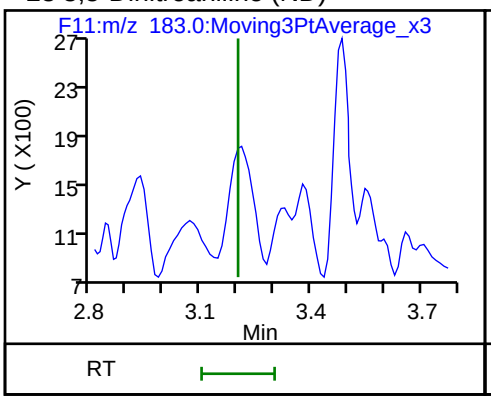


9 Nitroglycerin (ND)

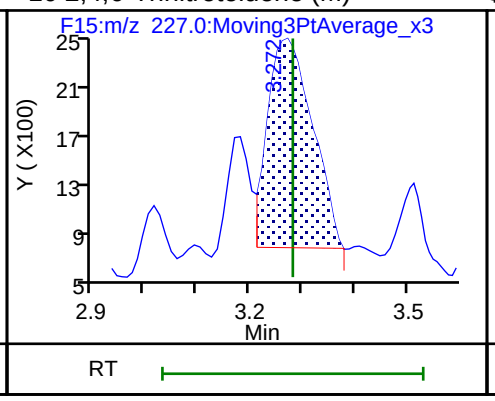


Report Date: 15-Apr-2022 08:03:27 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14054.d

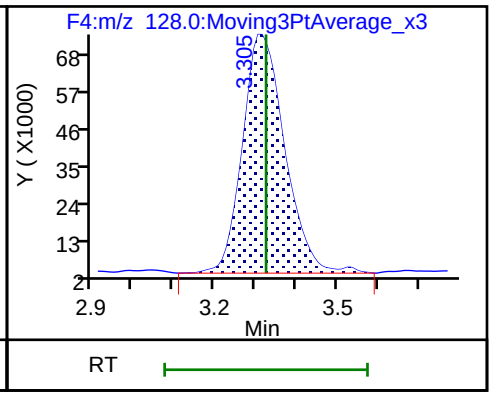
28 3,5-Dinitroaniline (ND)



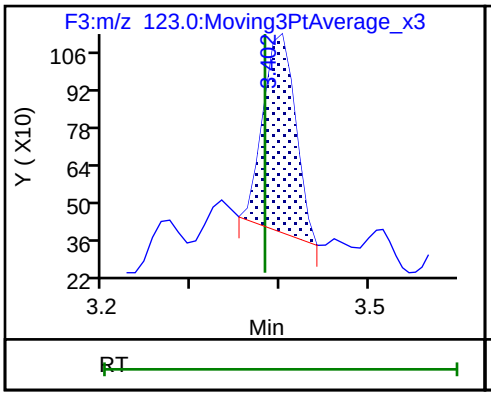
10 2,4,6-Trinitrotoluene (M)



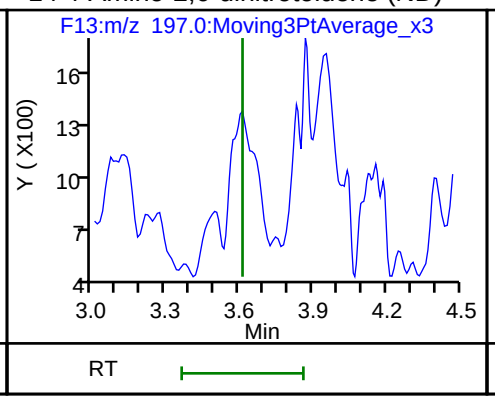
$ 11 Nitrobenzene-d5



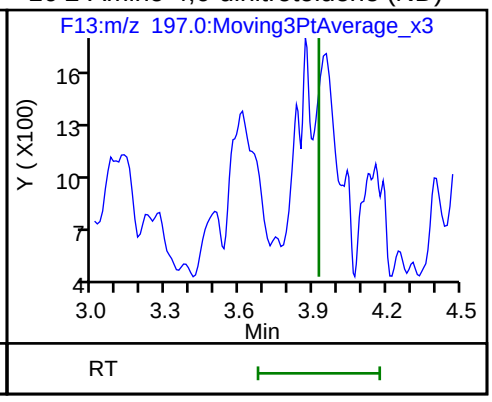
12 Nitrobenzene



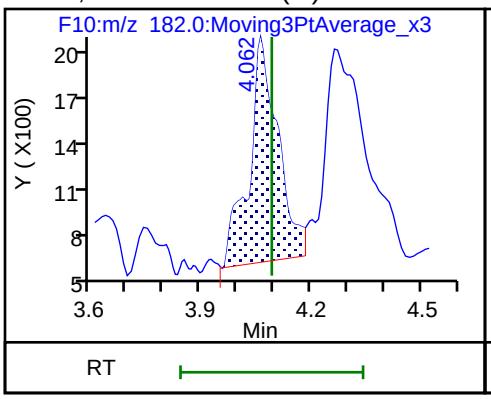
14 4-Amino-2,6-dinitrotoluene (ND)



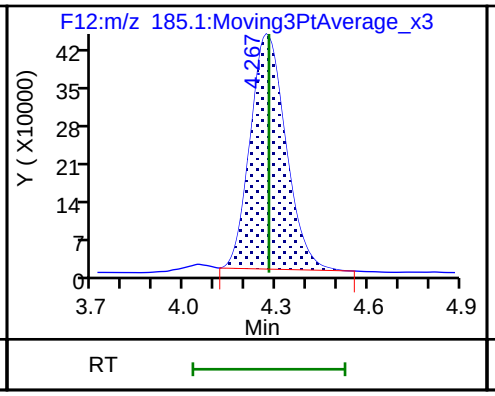
16 2-Amino-4,6-dinitrotoluene (ND)



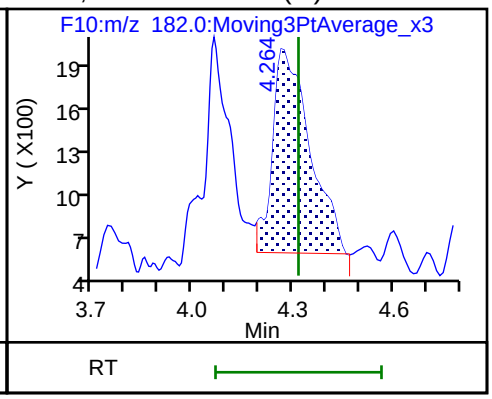
17 2,6-Dinitrotoluene (M)



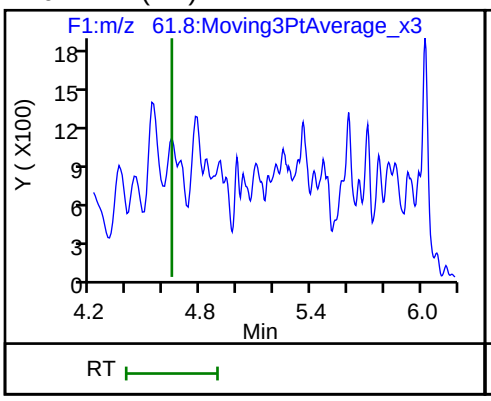
* 18 2,4-dinitrotoluene-d3



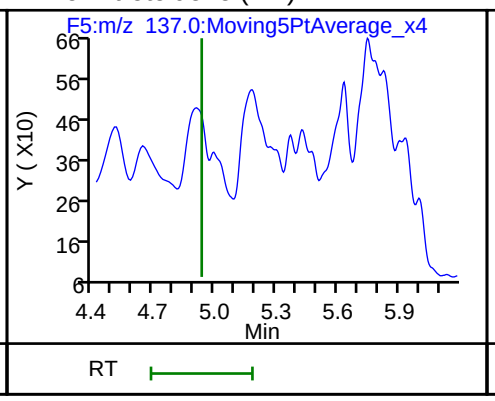
19 2,4-Dinitrotoluene (M)



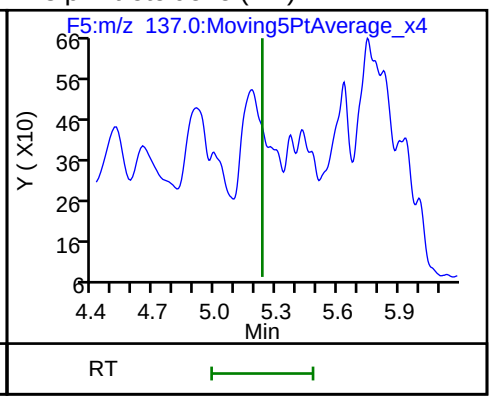
20 PETN (ND)



22 o-Nitrotoluene (ND)



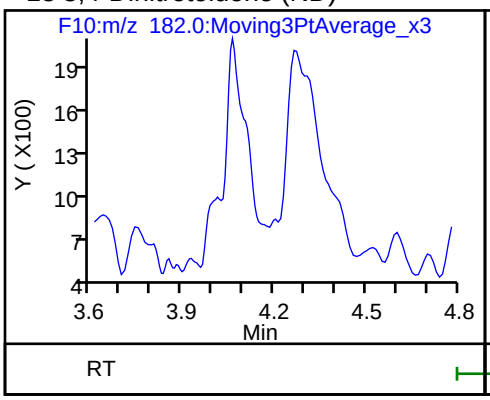
23 p-Nitrotoluene (ND)



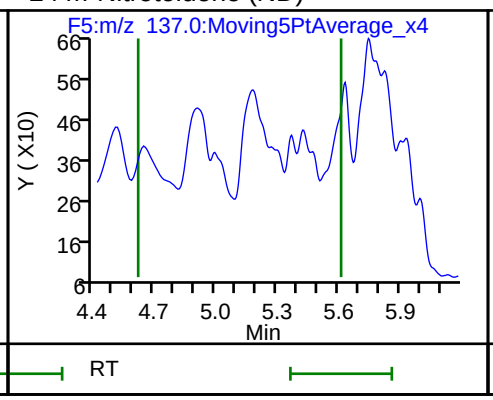
Report Date: 15-Apr-2022 08:03:27 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14054.d

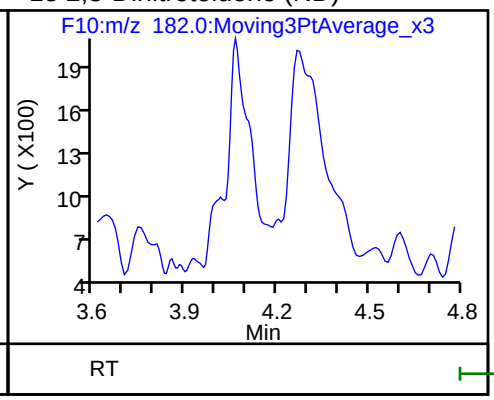
13 3,4-Dinitrotoluene (ND)



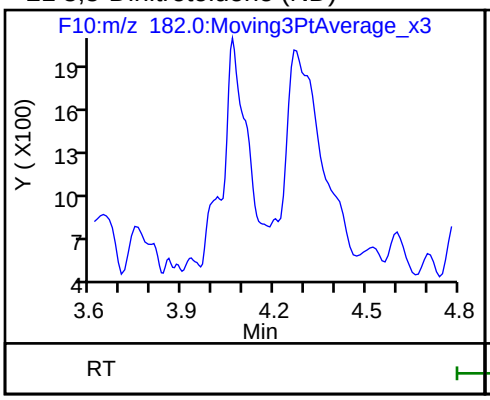
24 m-Nitrotoluene (ND)



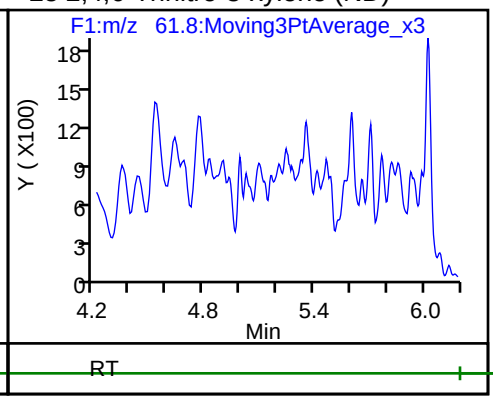
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:27 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14054.d				
Lims ID:	280-160190-A-52-F				
Client ID:	29SB203 (3-4)				
Sample Type:	Client				
Inject. Date:	14-Apr-2022 18:04:11	ALS Bottle#:	48	Worklist Smp#:	54
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160190-A-52-F				
Misc. Info.:	ex722D14				
Operator ID:	acm	Instrument ID:	LC_LCMS7		
Method:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m				
Limit Group:	LC - 8321A Expl				
Last Update:	15-Apr-2022 08:03:26	Calib Date:	14-Apr-2022 13:07:22		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1652				
First Level Reviewer: meyera		Date:	15-Apr-2022 07:38:11		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	102.3	101.98

Report Date: 15-Apr-2022 08:03:27 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

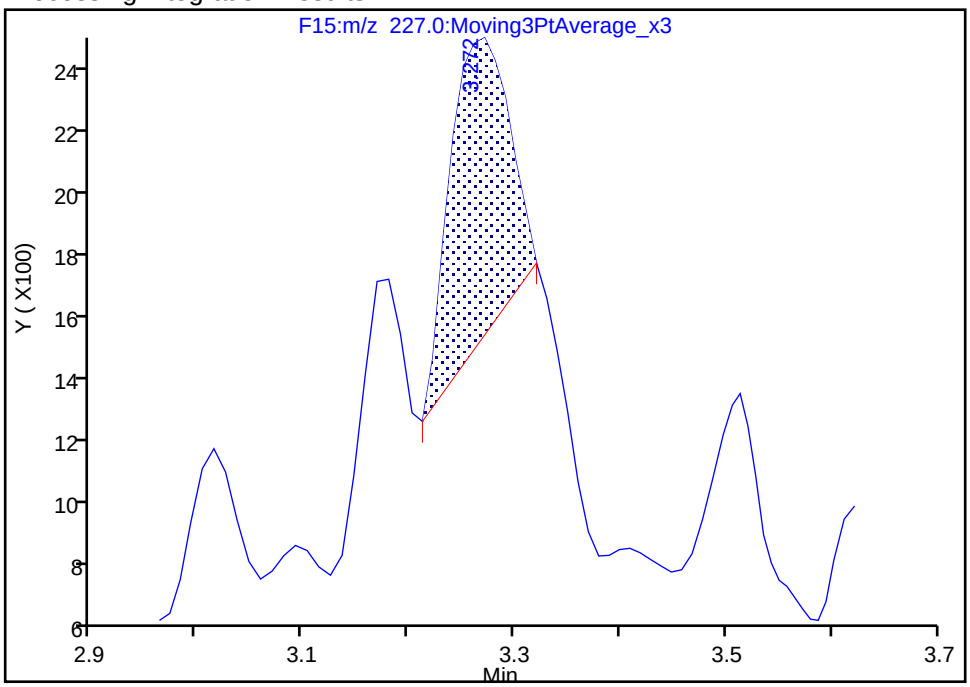
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14054.d				
Injection Date:	14-Apr-2022 18:04:11	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-52-F	Lab Sample ID:	280-160190-52		
Client ID:	29SB203 (3-4)				
Operator ID:	acm	ALS Bottle#:	48	Worklist Smp#:	54
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F15:SIR		

10 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

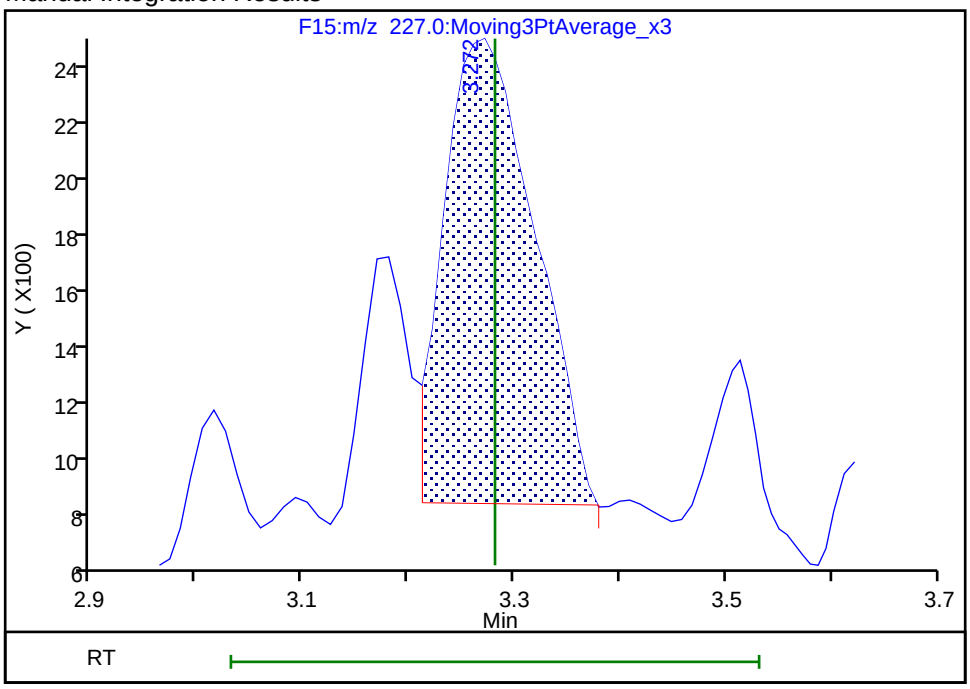
Processing Integration Results

RT: 3.27
Area: 3703
Amount: -1.239307
Amount Units: ug/l



Manual Integration Results

RT: 3.27
Area: 9485
Amount: -0.977654
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:38:05

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:03:27 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

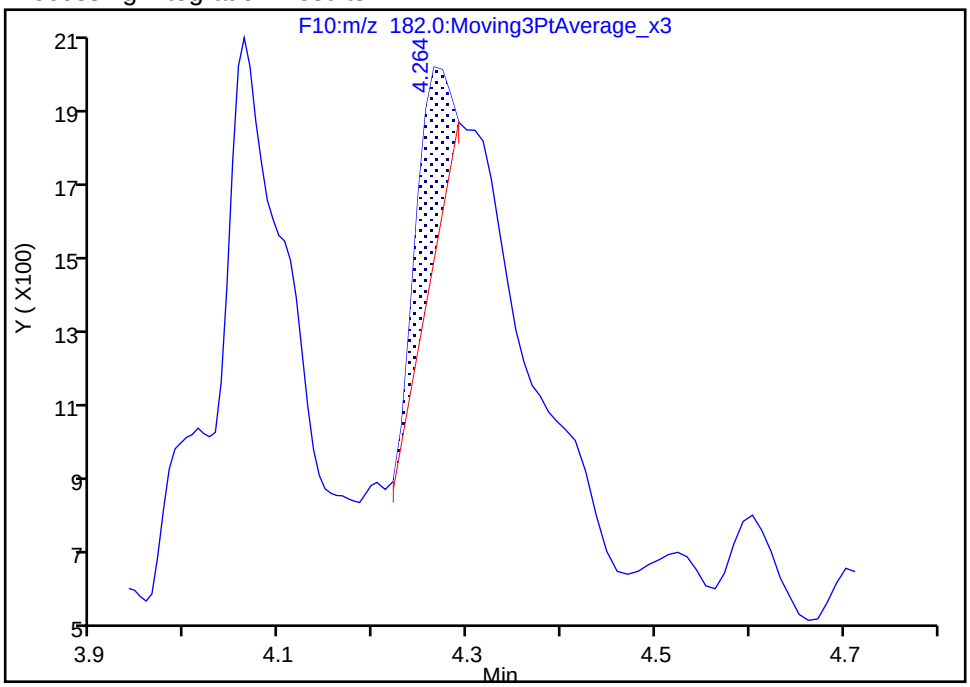
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14054.d				
Injection Date:	14-Apr-2022 18:04:11	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-52-F	Lab Sample ID:	280-160190-52		
Client ID:	29SB203 (3-4)				
Operator ID:	acm	ALS Bottle#:	48	Worklist Smp#:	54
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F10:SIR		

19 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

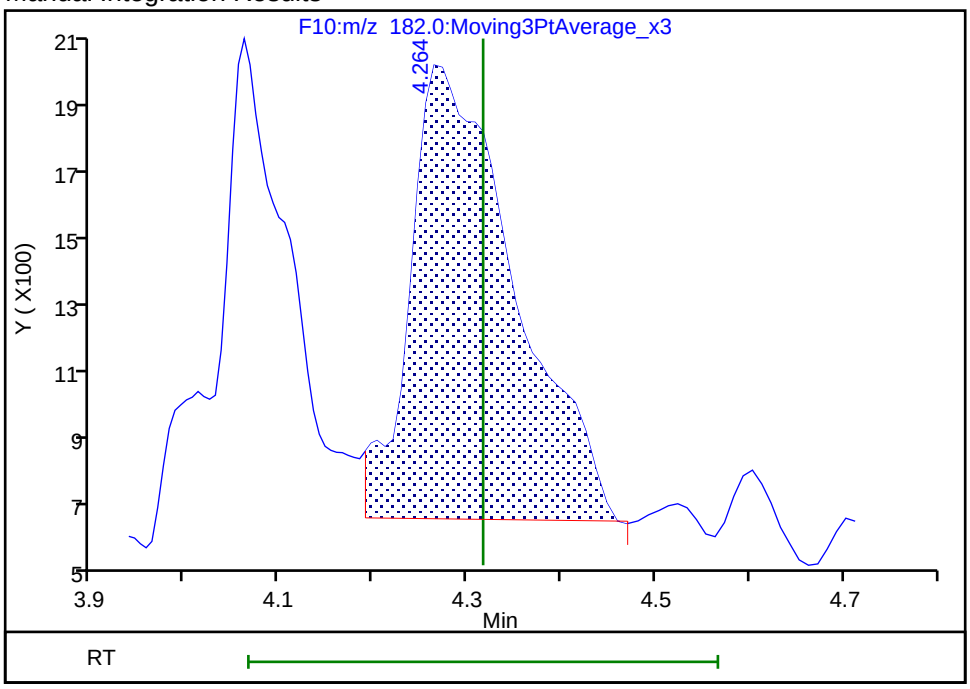
Processing Integration Results

RT: 4.26
Area: 1202
Amount: -0.965345
Amount Units: ug/l



Manual Integration Results

RT: 4.26
Area: 10465
Amount: -0.652296
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:37:49

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:03:27 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

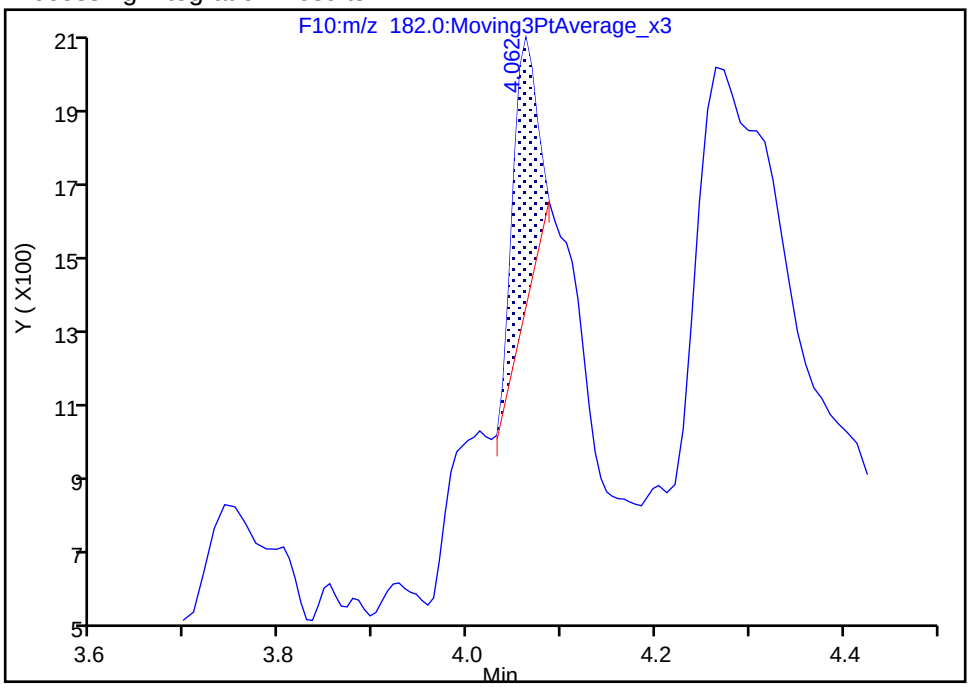
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14054.d				
Injection Date:	14-Apr-2022 18:04:11	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-52-F	Lab Sample ID:	280-160190-52		
Client ID:	29SB203 (3-4)				
Operator ID:	acm	ALS Bottle#:	48	Worklist Smp#:	54
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F10:SIR		

17 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

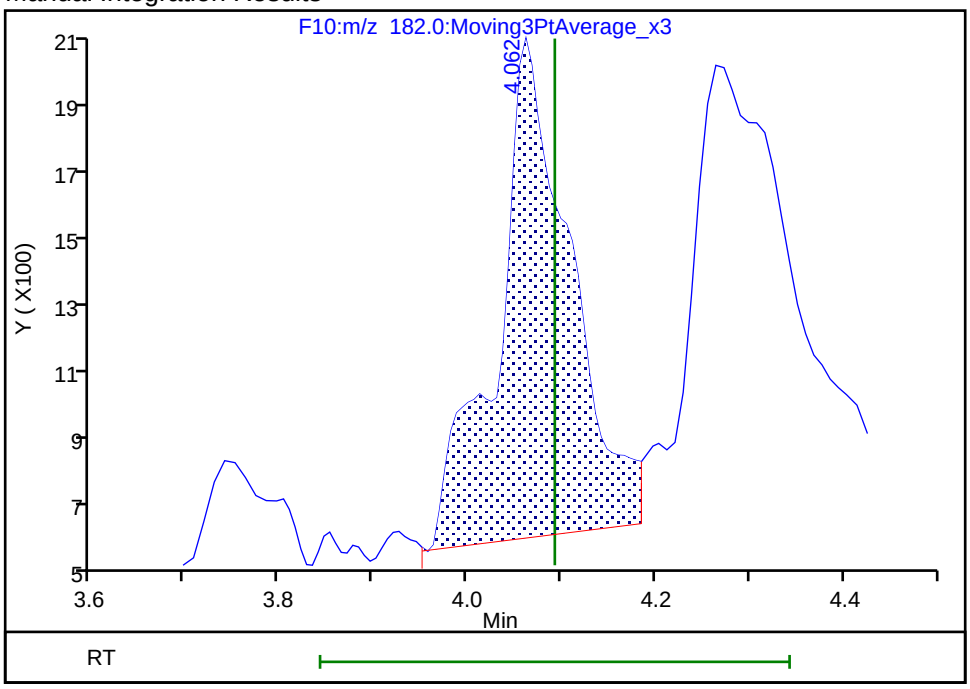
Processing Integration Results

RT: 4.06
Area: 1254
Amount: -0.641766
Amount Units: ug/l



Manual Integration Results

RT: 4.06
Area: 8019
Amount: -0.521633
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:37:57

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB203 (7-8) | Lab Sample ID: 280-160190-53
Matrix: Solid | Lab File ID: ex722D14059.d
Analysis Method: 8321A | Date Collected: 03/24/2022 15:17
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:17
Sample wt/vol: 10.25(g) | Date Analyzed: 04/14/2022 18:37
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571897 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.049	U	0.098	0.049	0.044
99-65-0	1,3-Dinitrobenzene	0.049	U	0.098	0.049	0.044
118-96-7	2,4,6-Trinitrotoluene	0.049	U Q	0.098	0.049	0.036
121-14-2	2,4-Dinitrotoluene	0.049	U	0.098	0.049	0.045
606-20-2	2,6-Dinitrotoluene	0.049	U	0.098	0.049	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.049	U M	0.098	0.049	0.048
19406-51-0	4-Amino-2,6-dinitrotoluene	0.049	U	0.098	0.049	0.030
2691-41-0	HMX	0.049	U	0.098	0.049	0.045
99-08-1	m-Nitrotoluene	0.049	U	0.098	0.049	0.042
98-95-3	Nitrobenzene	0.049	U	0.11	0.049	0.037
55-63-0	Nitroglycerin	0.049	U	0.098	0.049	0.028
88-72-2	o-Nitrotoluene	0.049	U	0.098	0.049	0.042
78-11-5	PETN	0.049	U	0.098	0.049	0.033
99-99-0	p-Nitrotoluene	0.049	U	0.098	0.049	0.048
121-82-4	RDX	0.049	U	0.12	0.049	0.042
479-45-8	Tetryl	0.049	U Q	0.098	0.049	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	112		68-140

Report Date: 15-Apr-2022 08:03:30 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14059.d
Lims ID: 280-160190-A-53-B
Client ID: 29SB203 (7-8)
Sample Type: Client
Inject. Date: 14-Apr-2022 18:37:10 ALS Bottle#: 5 Worklist Smp#: 59
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-53-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:26 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:39:07
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		164634	125.0	127	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		522977	125.0	185	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.981	2.991	-0.010		1103246	129.4	209	
8 1,3-Dinitrobenzene								
168.0	3.044	3.022	0.022	1.021	1666	-0.7986	2.7	
$ 11 Nitrobenzene-d5								
128.0	3.315	3.324	-0.009	0.777	553834	112.3	74.8	
* 18 2,4-dinitrotoluene-d3								
185.1	4.267	4.275	-0.008		3531141	125.0	136	

QC Flag Legend

Processing Flags

Reagents:

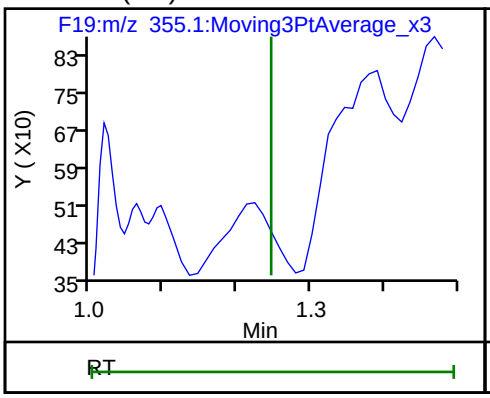
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:30 Chrom Revision: 2.3 12-Apr-2022 20:29:44

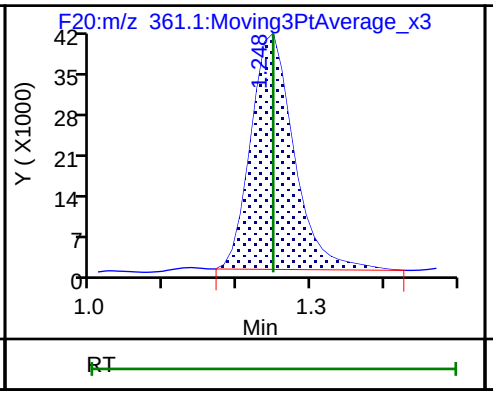
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14059.d
Injection Date: 14-Apr-2022 18:37:10 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-53-B Lab Sample ID: 280-160190-53
Client ID: 29SB203 (7-8)
Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 59
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

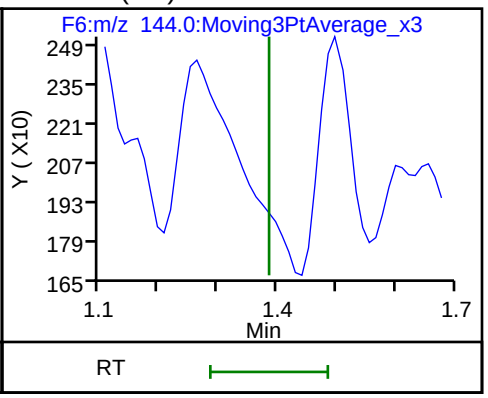
2 HMX (ND)



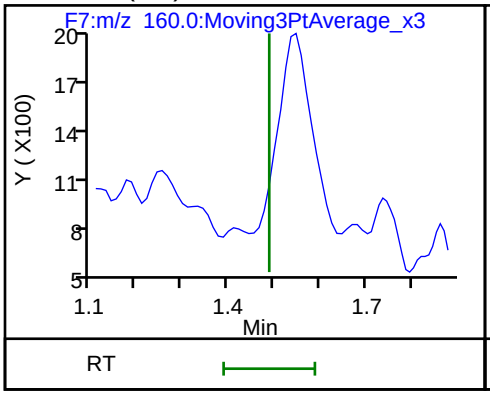
* 1 HMX-13C4



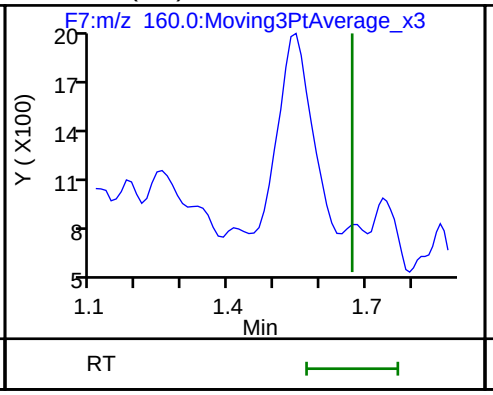
36 TNX (ND)



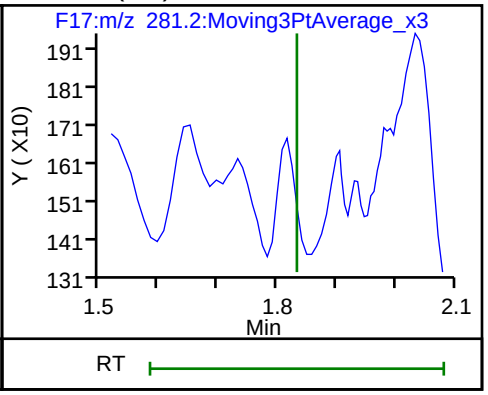
33 DNX (ND)



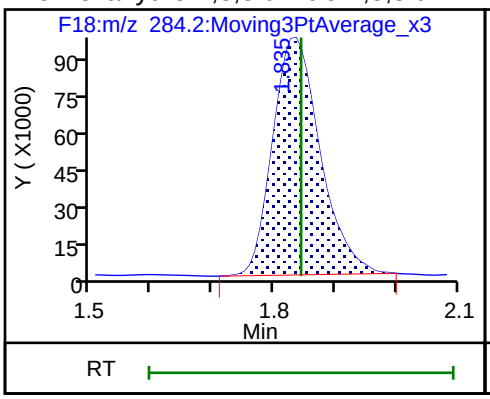
34 MNX (ND)



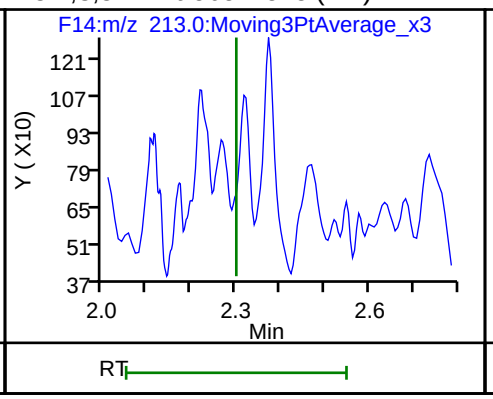
4 RDX (ND)



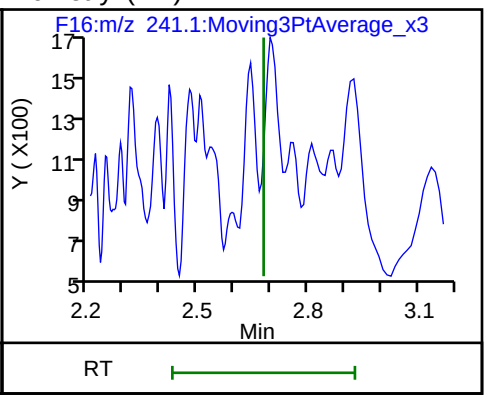
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



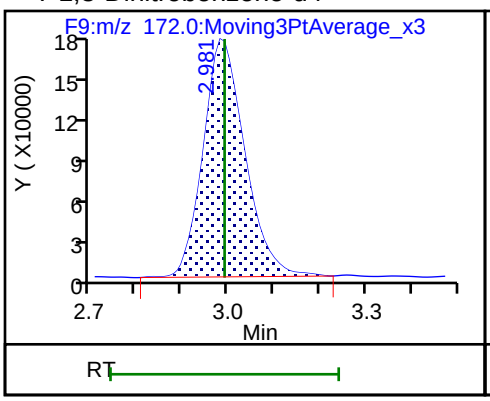
5 1,3,5-Trinitrobenzene (ND)



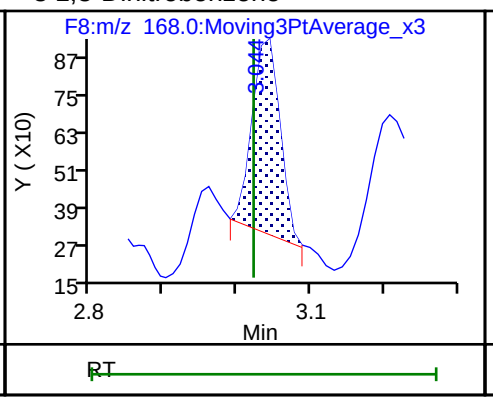
6 Tetryl (ND)



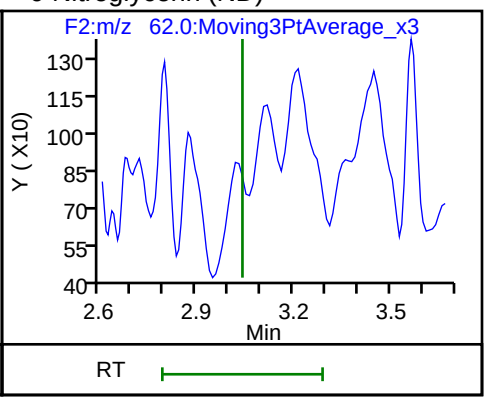
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

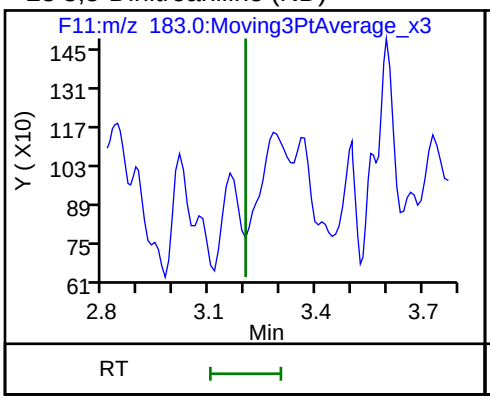


9 Nitroglycerin (ND)

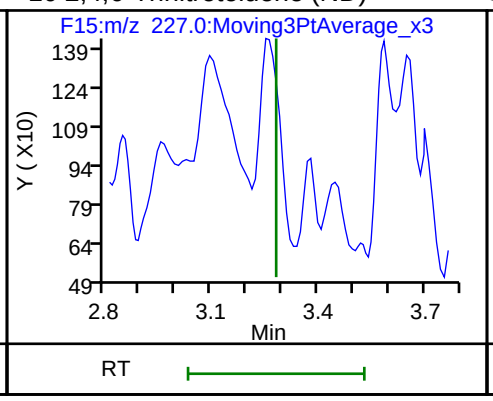


Report Date: 15-Apr-2022 08:03:30 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14059.d

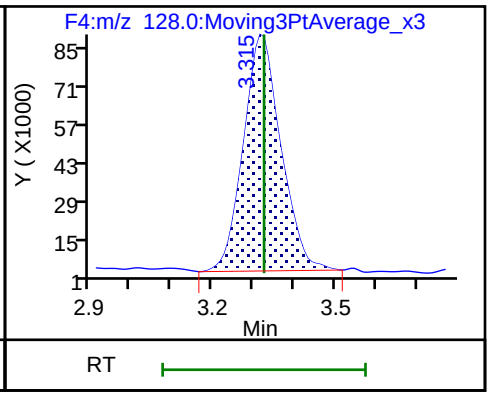
28 3,5-Dinitroaniline (ND)



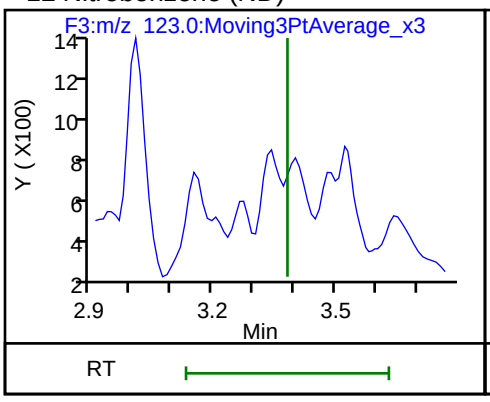
10 2,4,6-Trinitrotoluene (ND)



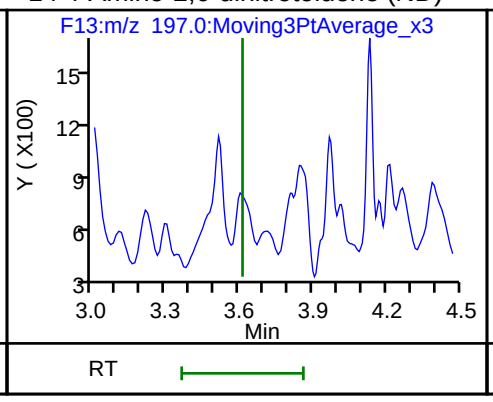
$ 11 Nitrobenzene-d5



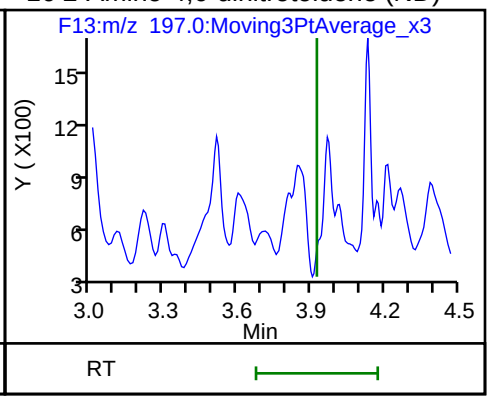
12 Nitrobenzene (ND)



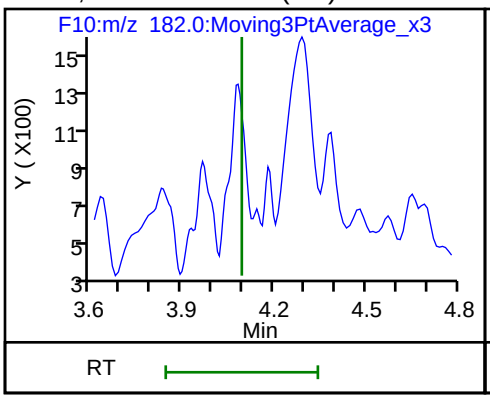
14 4-Amino-2,6-dinitrotoluene (ND)



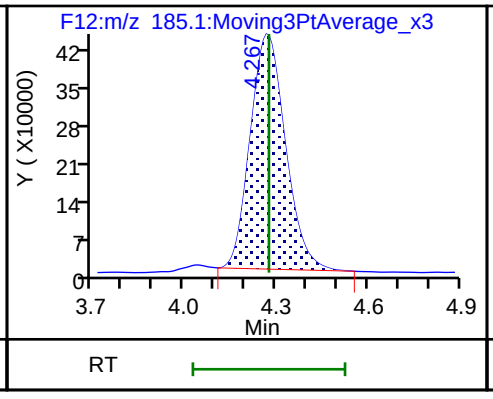
16 2-Amino-4,6-dinitrotoluene (ND)



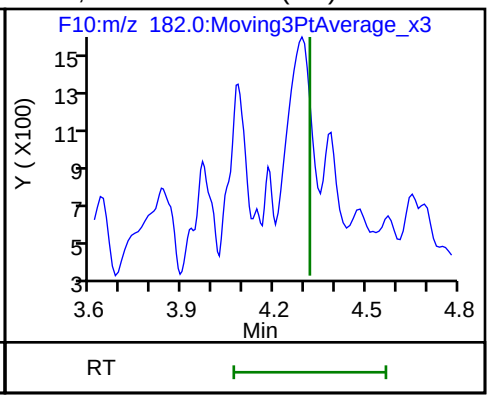
17 2,6-Dinitrotoluene (ND)



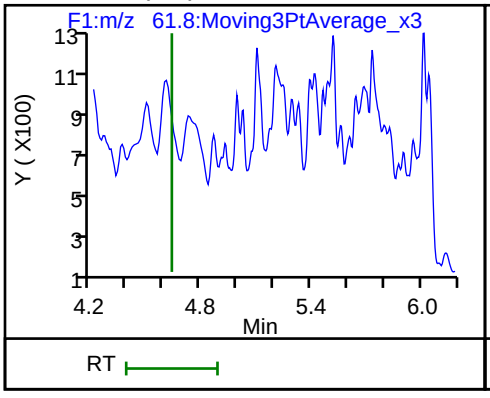
* 18 2,4-dinitrotoluene-d3



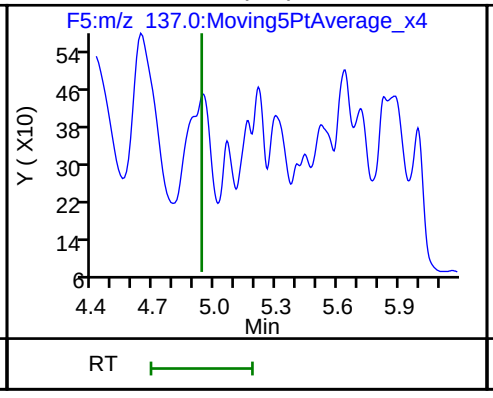
19 2,4-Dinitrotoluene (ND)



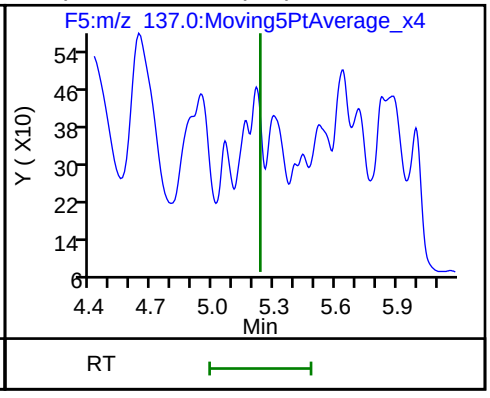
20 PETN (ND)



22 o-Nitrotoluene (ND)

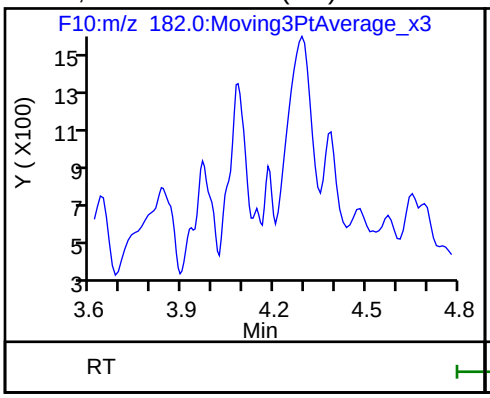


23 p-Nitrotoluene (ND)

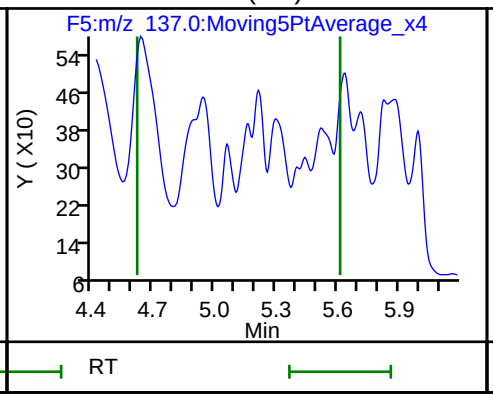


Report Date: 15-Apr-2022 08:03:30 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14059.d

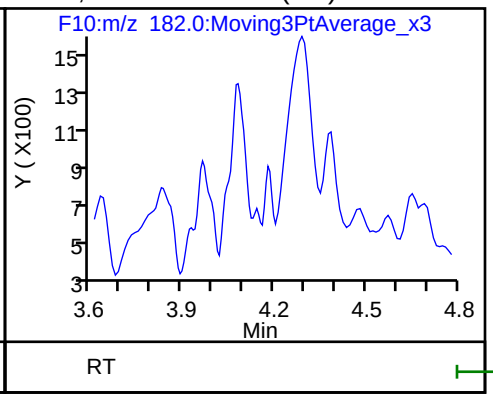
13 3,4-Dinitrotoluene (ND)



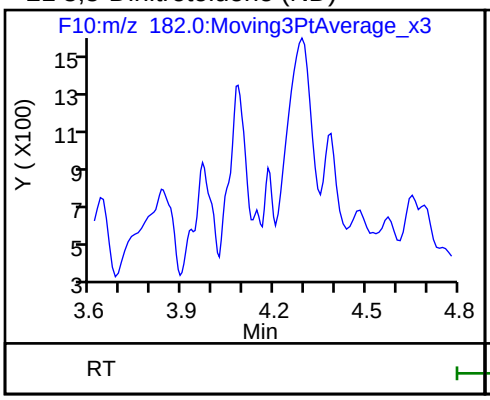
24 m-Nitrotoluene (ND)



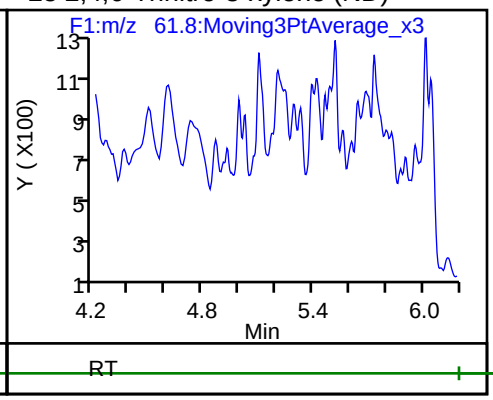
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:30 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14059.d				
Lims ID:	280-160190-A-53-B				
Client ID:	29SB203 (7-8)				
Sample Type:	Client				
Inject. Date:	14-Apr-2022 18:37:10	ALS Bottle#:	5	Worklist Smp#:	59
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160190-A-53-B				
Misc. Info.:	ex722D14				
Operator ID:	acm	Instrument ID:	LC_LCMS7		
Method:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m				
Limit Group:	LC - 8321A Expl				
Last Update:	15-Apr-2022 08:03:26	Calib Date:	14-Apr-2022 13:07:22		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1652				
First Level Reviewer: meyera		Date:	15-Apr-2022 07:39:07		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	112.3	111.95

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB204 (3-4) | Lab Sample ID: 280-160190-54
Matrix: Solid | Lab File ID: ex722D14060.d
Analysis Method: 8321A | Date Collected: 03/24/2022 15:25
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:17
Sample wt/vol: 10.52(g) | Date Analyzed: 04/14/2022 18:43
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571897 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.048	U	0.095	0.048	0.043
99-65-0	1,3-Dinitrobenzene	0.048	U	0.095	0.048	0.042
118-96-7	2,4,6-Trinitrotoluene	0.048	U Q	0.095	0.048	0.035
121-14-2	2,4-Dinitrotoluene	0.048	U	0.095	0.048	0.044
606-20-2	2,6-Dinitrotoluene	0.048	U M	0.095	0.048	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.048	U	0.095	0.048	0.047
19406-51-0	4-Amino-2,6-dinitrotoluene	0.048	U	0.095	0.048	0.030
2691-41-0	HMX	0.048	U M	0.095	0.048	0.044
99-08-1	m-Nitrotoluene	0.048	U	0.095	0.048	0.041
98-95-3	Nitrobenzene	0.048	U	0.10	0.048	0.036
55-63-0	Nitroglycerin	0.048	U	0.095	0.048	0.028
88-72-2	o-Nitrotoluene	0.048	U	0.095	0.048	0.041
78-11-5	PETN	0.048	U	0.095	0.048	0.032
99-99-0	p-Nitrotoluene	0.048	U	0.095	0.048	0.047
121-82-4	RDX	0.048	U	0.11	0.048	0.041
479-45-8	Tetryl	0.048	U Q	0.095	0.048	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	104		68-140

Report Date: 15-Apr-2022 08:03:31 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14060.d
Lims ID: 280-160190-A-54-B
Client ID: 29SB204 (3-4)
Sample Type: Client
Inject. Date: 14-Apr-2022 18:43:46 ALS Bottle#: 6 Worklist Smp#: 60
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-54-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:26 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:39:21
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		153035	125.0	109	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.827	1.844	-0.017		537989	125.0	174	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.981	2.991	-0.010		1081375	129.4	319	
10 2,4,6-Trinitrotoluene								
227.0	3.281	3.281	0.0	0.769	40490	-0.4798	13.5	
$ 11 Nitrobenzene-d5								
128.0	3.315	3.324	-0.009	0.777	506772	104.7	107	
* 18 2,4-dinitrotoluene-d3								
185.1	4.267	4.275	-0.008		3339415	125.0	130	
19 2,4-Dinitrotoluene								
182.0	4.308	4.316	-0.008	1.010	139491	3.96	41.4	

QC Flag Legend

Processing Flags

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

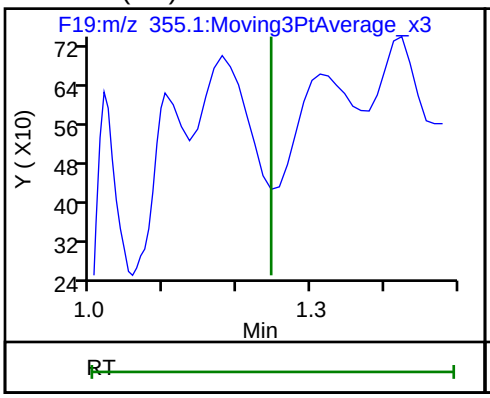
Report Date: 15-Apr-2022 08:03:31 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

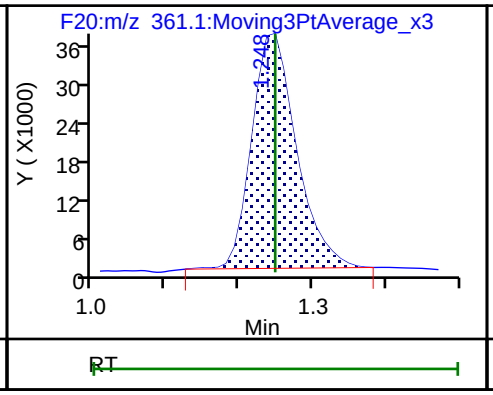
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14060.d

Injection Date:	14-Apr-2022 18:43:46	Instrument ID:	LC_LCMS7
Lims ID:	280-160190-A-54-B	Lab Sample ID:	280-160190-54
Client ID:	29SB204 (3-4)		
Operator ID:	acm	ALS Bottle#:	6 Worklist Smp#: 60
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl

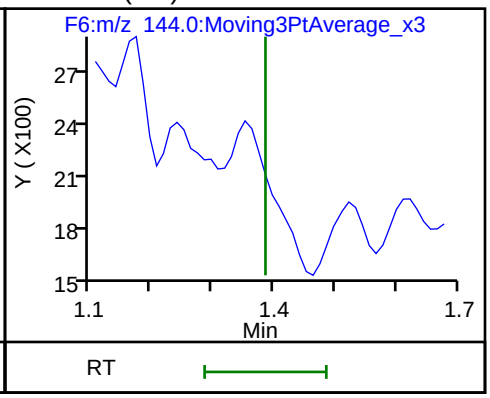
2 HMX (ND)



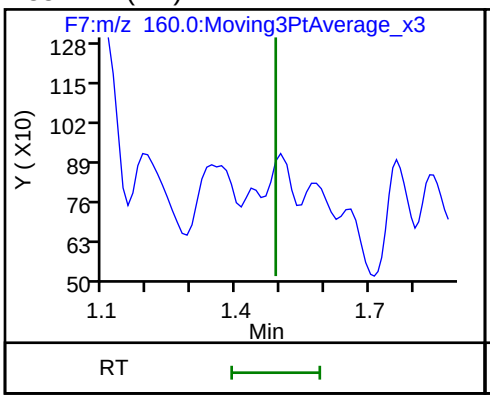
* 1 HMX-13C4



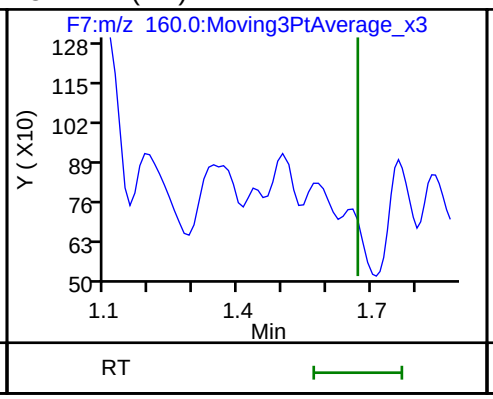
36 TNX (ND)



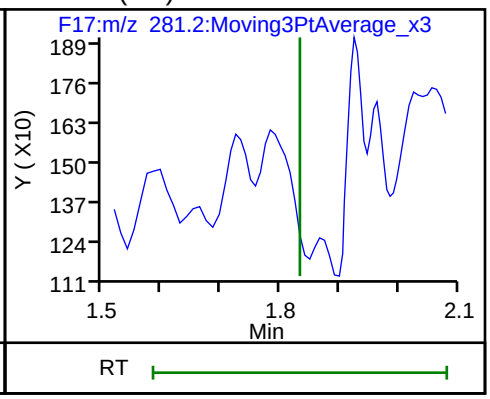
33 DNX (ND)



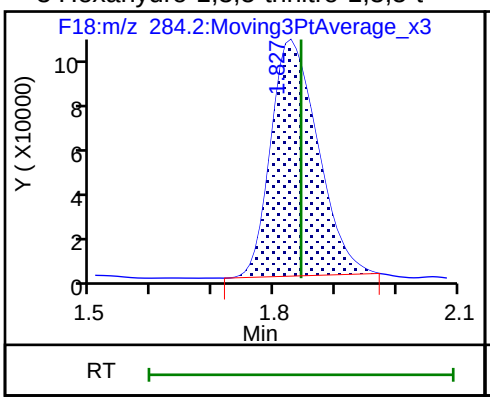
34 MNX (ND)



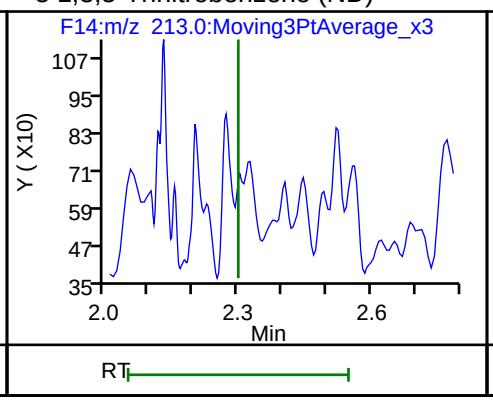
4 RDX (ND)



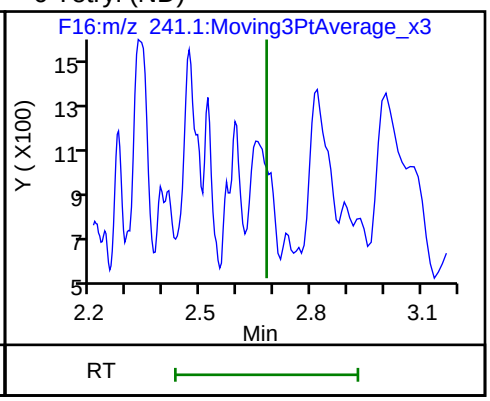
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



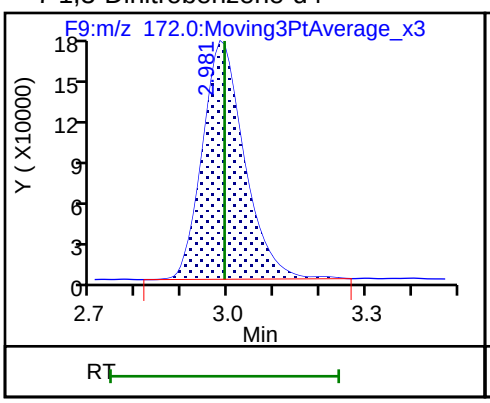
5 1,3,5-Trinitrobenzene (ND)



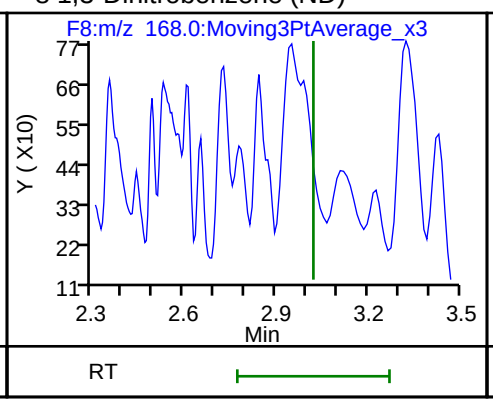
6 Tetryl (ND)



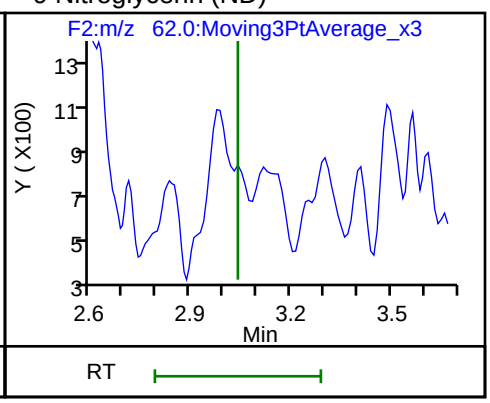
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

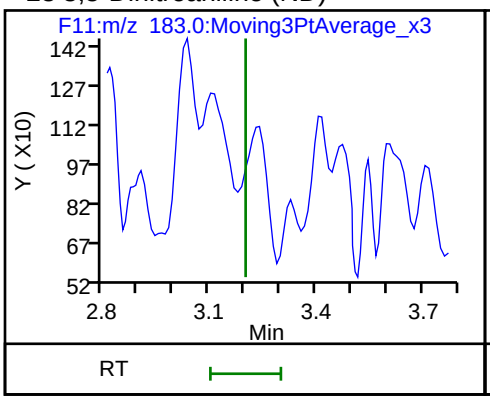


9 Nitroglycerin (ND)

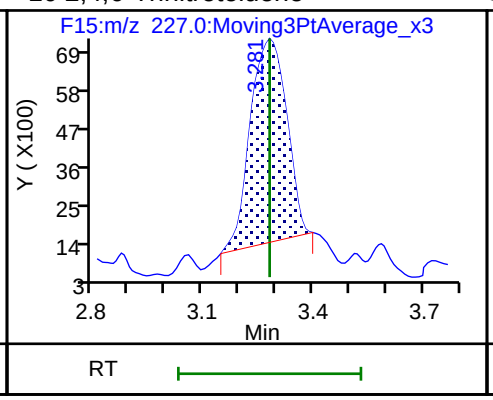


Report Date: 15-Apr-2022 08:03:31 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14060.d

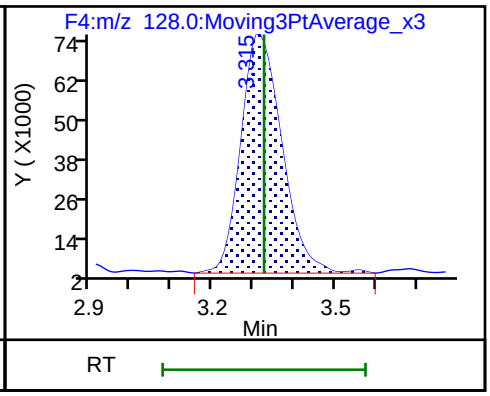
28 3,5-Dinitroaniline (ND)



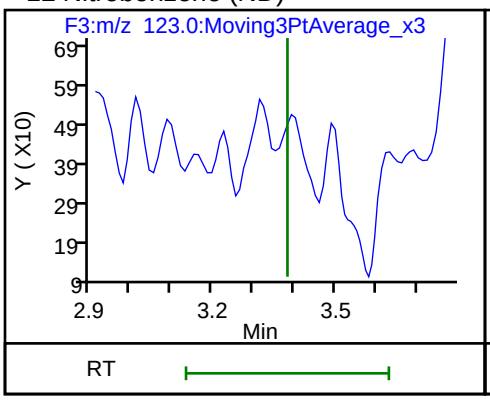
10 2,4,6-Trinitrotoluene



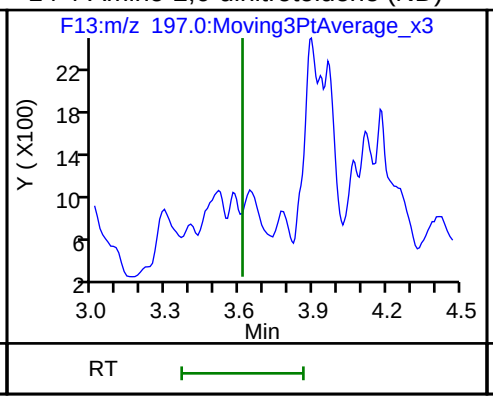
$ 11 Nitrobenzene-d5



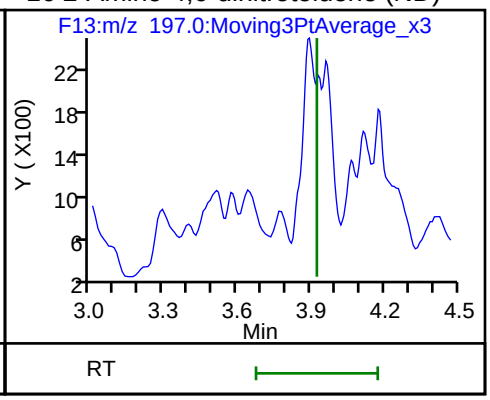
12 Nitrobenzene (ND)



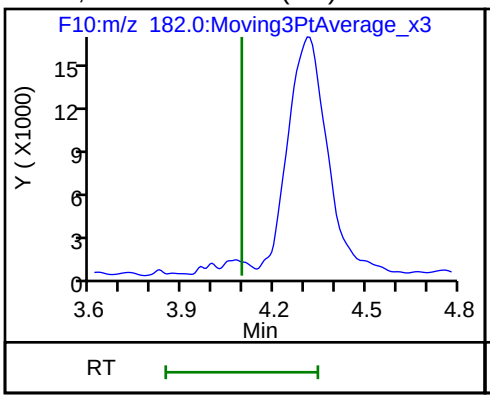
14 4-Amino-2,6-dinitrotoluene (ND)



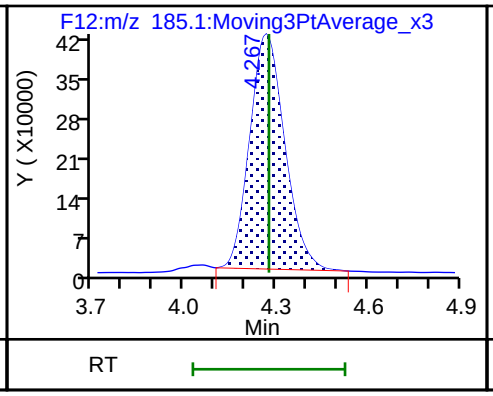
16 2-Amino-4,6-dinitrotoluene (ND)



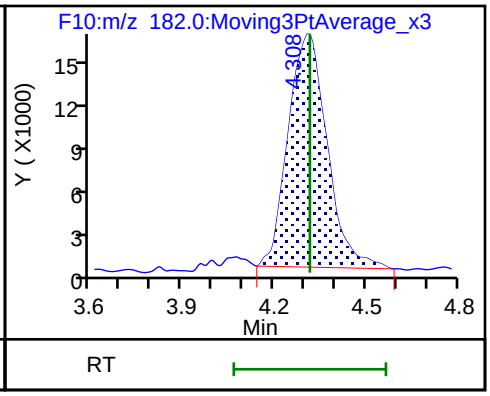
17 2,6-Dinitrotoluene (ND)



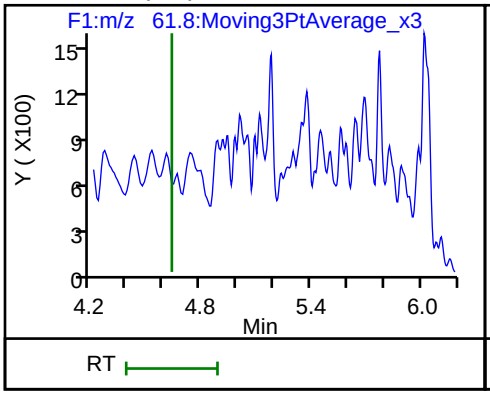
* 18 2,4-dinitrotoluene-d3



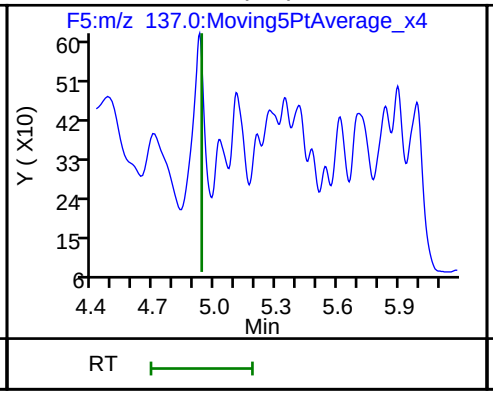
19 2,4-Dinitrotoluene



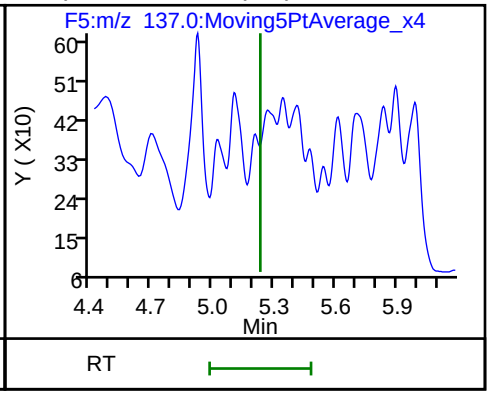
20 PETN (ND)



22 o-Nitrotoluene (ND)

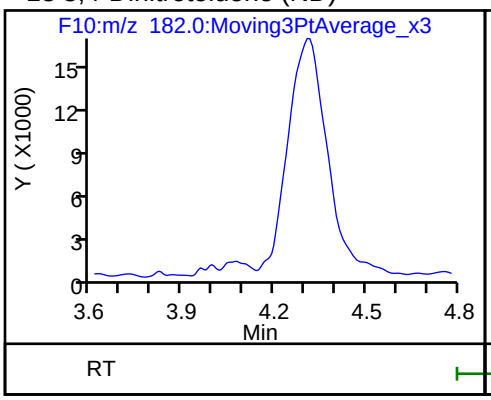


23 p-Nitrotoluene (ND)

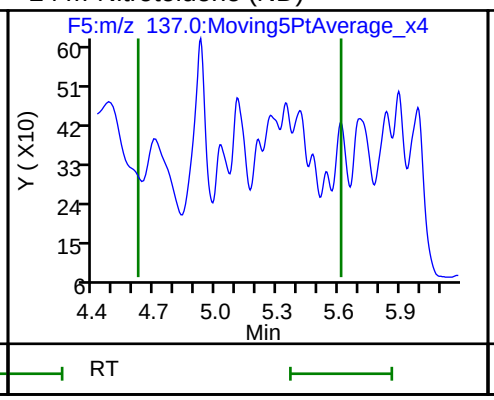


Report Date: 15-Apr-2022 08:03:31 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14060.d

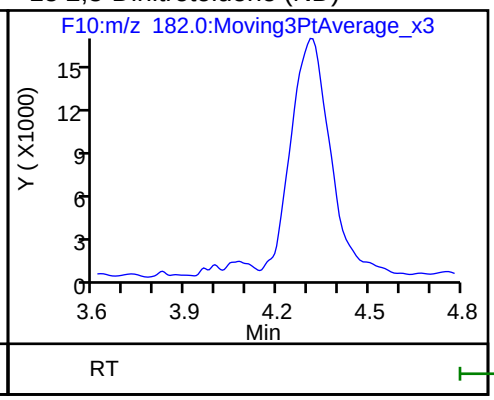
13 3,4-Dinitrotoluene (ND)



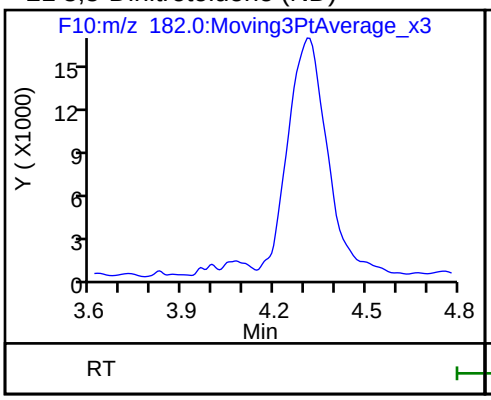
24 m-Nitrotoluene (ND)



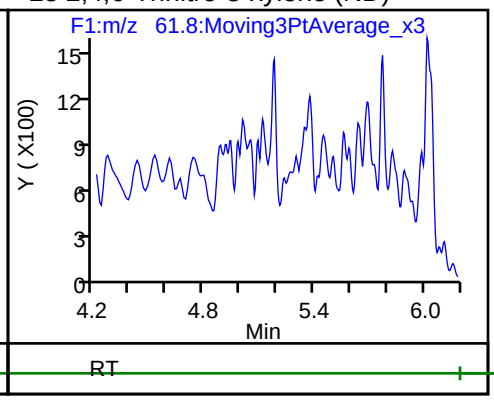
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:31 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14060.d
Lims ID: 280-160190-A-54-B
Client ID: 29SB204 (3-4)
Sample Type: Client
Inject. Date: 14-Apr-2022 18:43:46 ALS Bottle#: 6 Worklist Smp#: 60
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-54-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:26 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:39:21

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	104.7	104.38

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB204 (7-8) | Lab Sample ID: 280-160190-55
Matrix: Solid | Lab File ID: ex722D14061.d
Analysis Method: 8321A | Date Collected: 03/24/2022 15:26
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:17
Sample wt/vol: 10.34(g) | Date Analyzed: 04/14/2022 18:50
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571897 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.048	U	0.097	0.048	0.043
99-65-0	1,3-Dinitrobenzene	0.048	U M	0.097	0.048	0.043
118-96-7	2,4,6-Trinitrotoluene	0.048	U Q	0.097	0.048	0.036
121-14-2	2,4-Dinitrotoluene	0.048	U	0.097	0.048	0.045
606-20-2	2,6-Dinitrotoluene	0.048	U M	0.097	0.048	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.048	U	0.097	0.048	0.048
19406-51-0	4-Amino-2,6-dinitrotoluene	0.048	U	0.097	0.048	0.030
2691-41-0	HMX	0.048	U M	0.097	0.048	0.045
99-08-1	m-Nitrotoluene	0.048	U	0.097	0.048	0.042
98-95-3	Nitrobenzene	0.048	U	0.11	0.048	0.037
55-63-0	Nitroglycerin	0.048	U	0.097	0.048	0.028
88-72-2	o-Nitrotoluene	0.048	U	0.097	0.048	0.041
78-11-5	PETN	0.048	U	0.097	0.048	0.033
99-99-0	p-Nitrotoluene	0.048	U	0.097	0.048	0.048
121-82-4	RDX	0.048	U M	0.12	0.048	0.042
479-45-8	Tetryl	0.048	U M Q	0.097	0.048	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	88		68-140

Report Date: 15-Apr-2022 08:03:31 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14061.d
Lims ID: 280-160190-A-55-B
Client ID: 29SB204 (7-8)
Sample Type: Client
Inject. Date: 14-Apr-2022 18:50:22 ALS Bottle#: 7 Worklist Smp#: 61
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-55-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:26 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:39:51
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.237	1.248	-0.011		147160	125.0	77.8	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		499251	125.0	155	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.981	2.991	-0.010		1179879	129.4	618	
10 2,4,6-Trinitrotoluene								M
227.0	3.272	3.281	-0.009	0.767	5216	-1.04	2.7	M
$ 11 Nitrobenzene-d5								
128.0	3.315	3.324	-0.009	0.777	469516	88.6	52.3	
* 18 2,4-dinitrotoluene-d3								
185.1	4.267	4.275	-0.008		3507641	125.0	145	
19 2,4-Dinitrotoluene								M
182.0	4.290	4.316	-0.026	1.006	4088	-0.8675	4.6	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:32 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14061.d

Injection Date: 14-Apr-2022 18:50:22 Instrument ID: LC_LCMS7

Lims ID: 280-160190-A-55-B Lab Sample ID: 280-160190-55

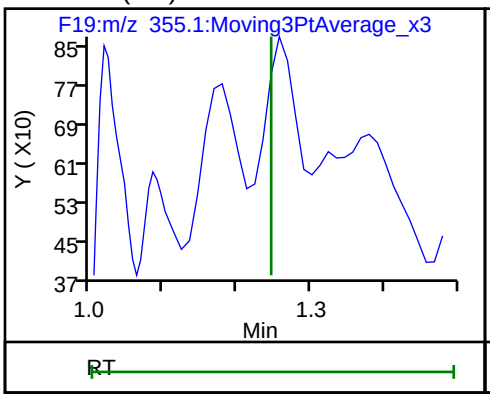
Client ID: 29SB204 (7-8)

Operator ID: acm ALS Bottle#: 7 Worklist Smp#: 61

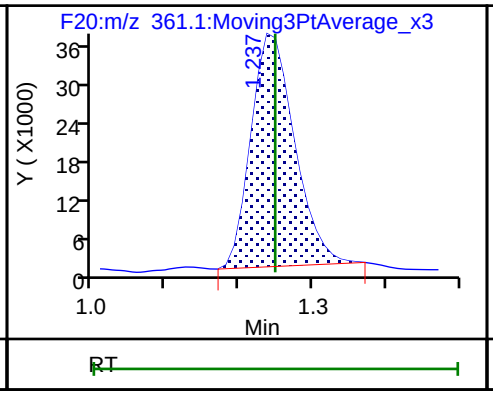
Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

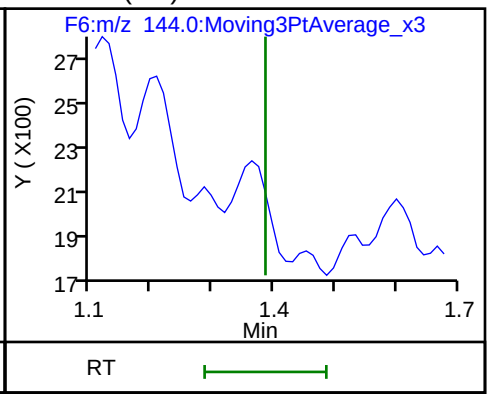
2 HMX (ND)



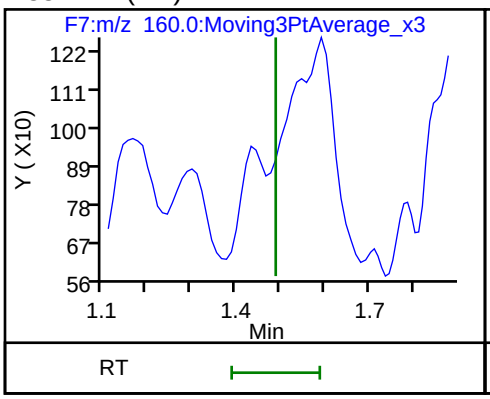
* 1 HMX-13C4



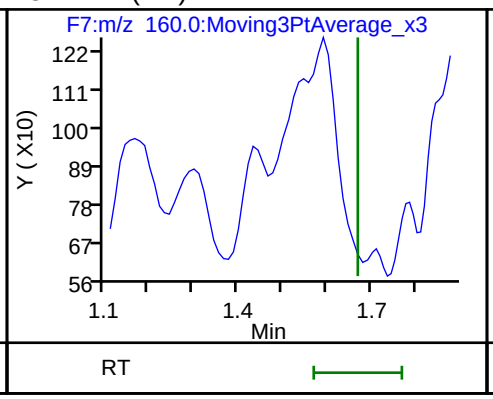
36 TNX (ND)



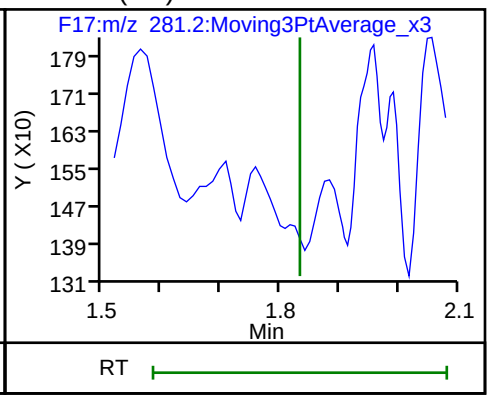
33 DNX (ND)



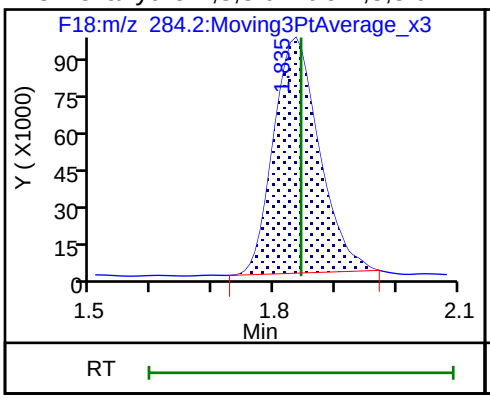
34 MNX (ND)



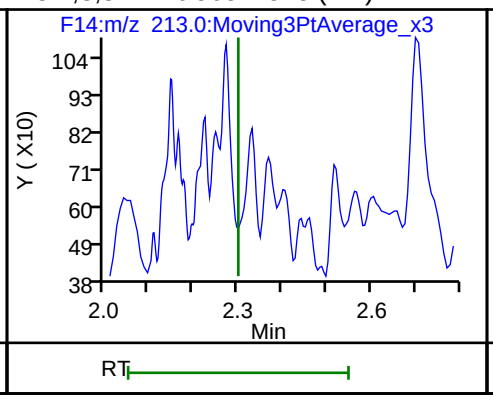
4 RDX (ND)



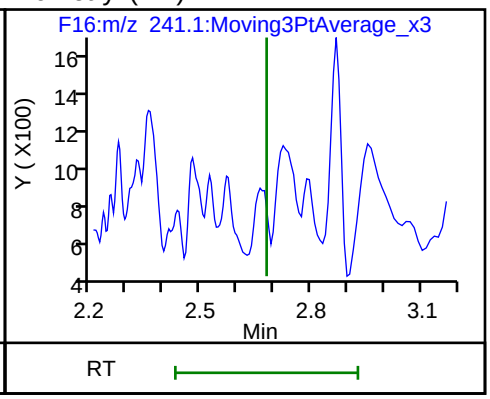
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



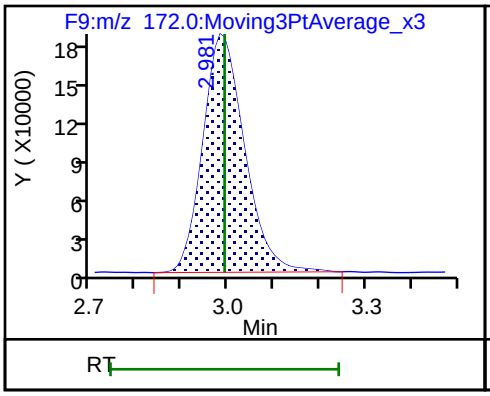
5 1,3,5-Trinitrobenzene (ND)



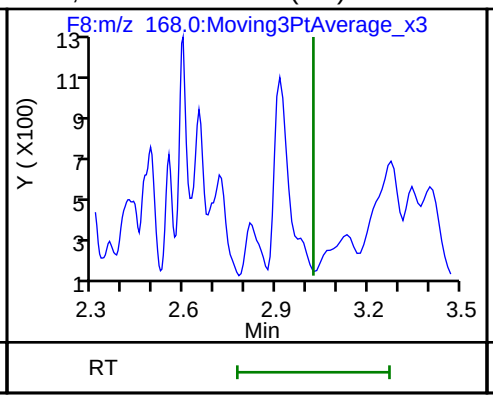
6 Tetryl (ND)



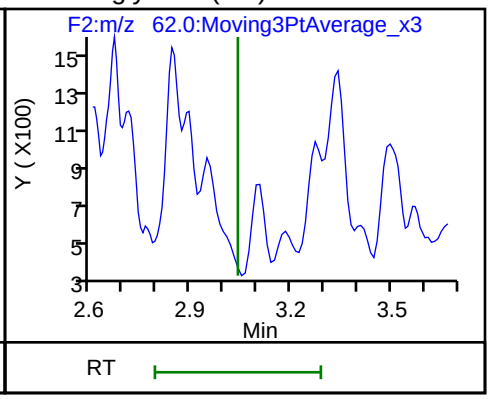
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

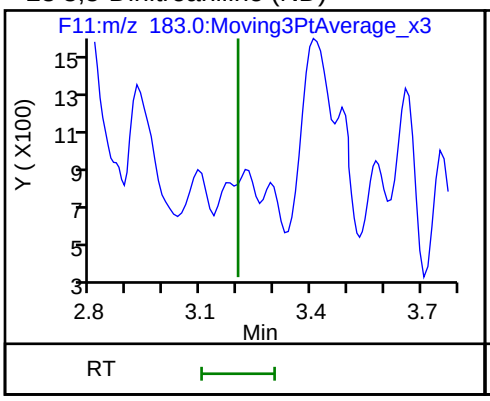


9 Nitroglycerin (ND)

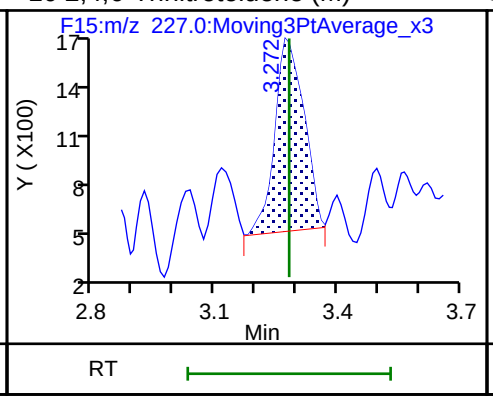


Report Date: 15-Apr-2022 08:03:32 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14061.d

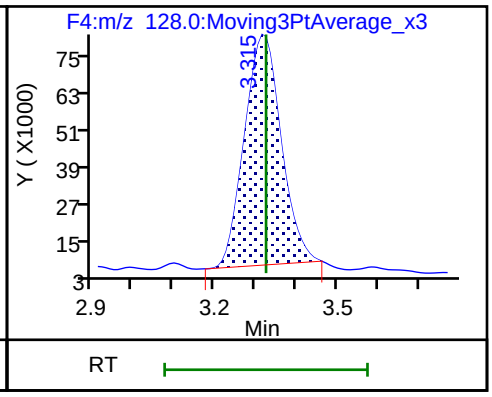
28 3,5-Dinitroaniline (ND)



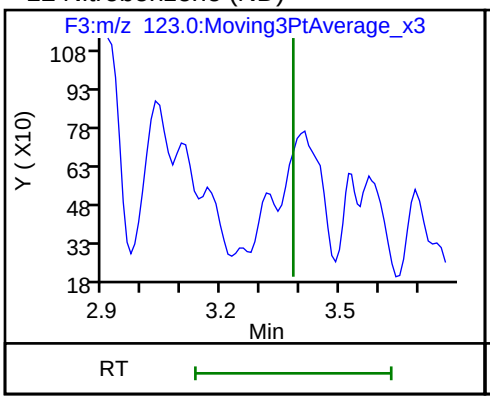
10 2,4,6-Trinitrotoluene (M)



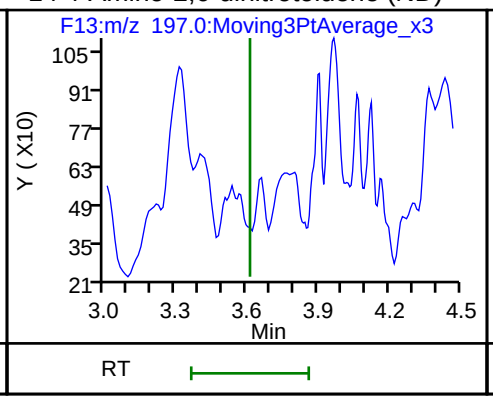
$ 11 Nitrobenzene-d5



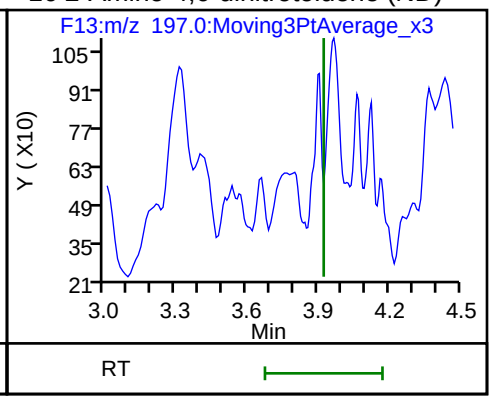
12 Nitrobenzene (ND)



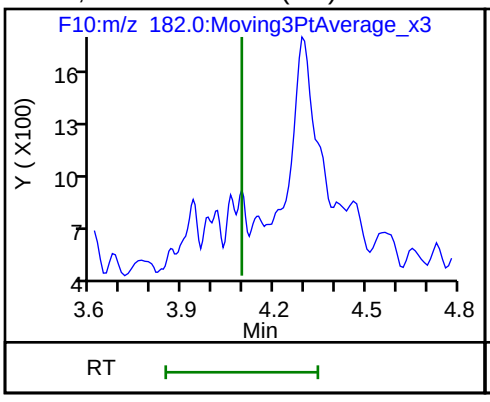
14 4-Amino-2,6-dinitrotoluene (ND)



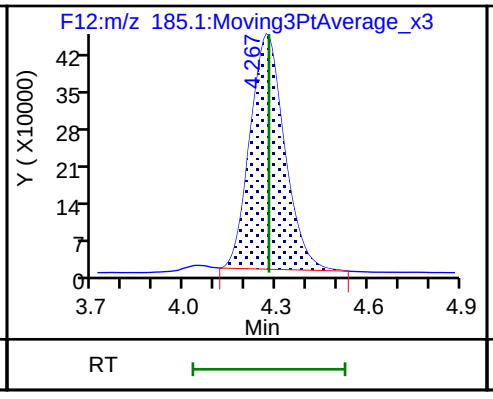
16 2-Amino-4,6-dinitrotoluene (ND)



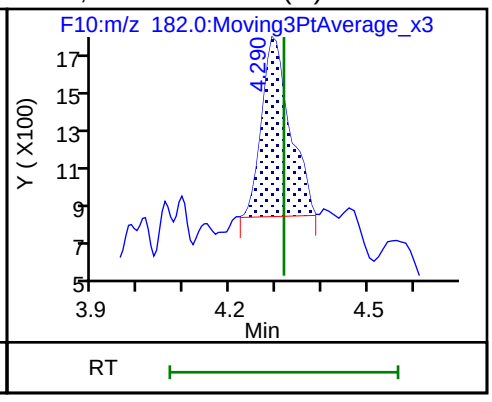
17 2,6-Dinitrotoluene (ND)



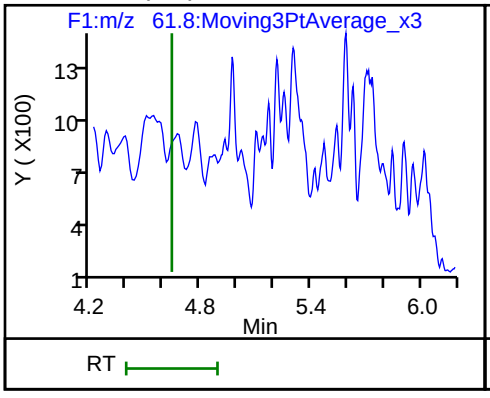
* 18 2,4-dinitrotoluene-d3



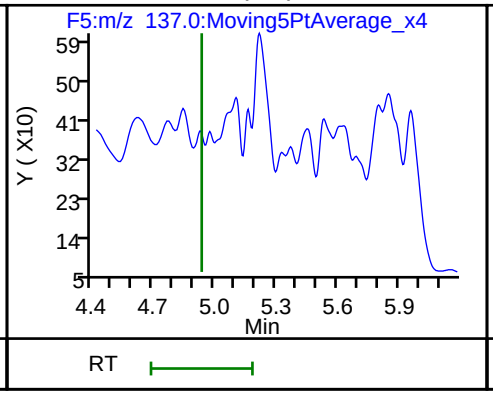
19 2,4-Dinitrotoluene (M)



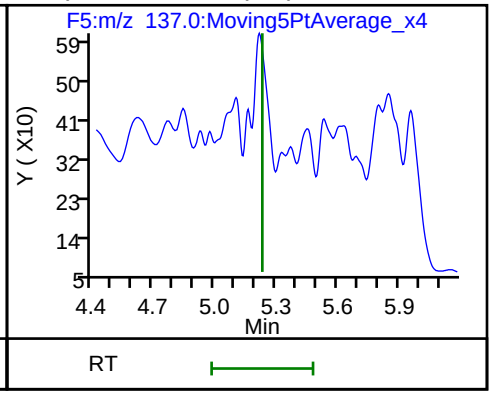
20 PETN (ND)



22 o-Nitrotoluene (ND)



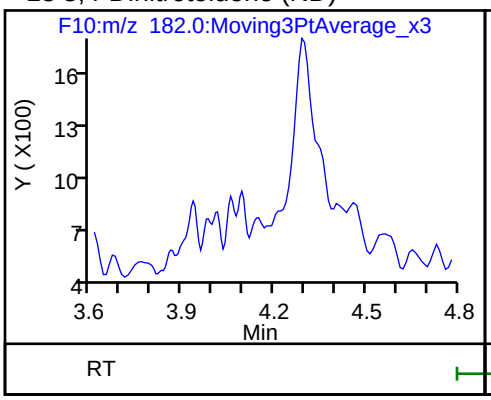
23 p-Nitrotoluene (ND)



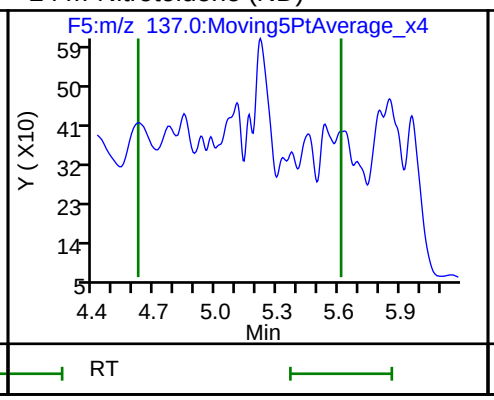
Report Date: 15-Apr-2022 08:03:32 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14061.d

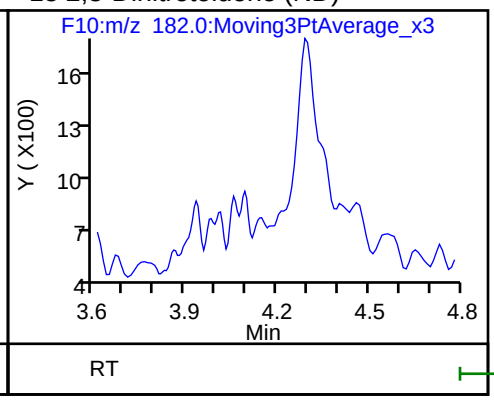
13 3,4-Dinitrotoluene (ND)



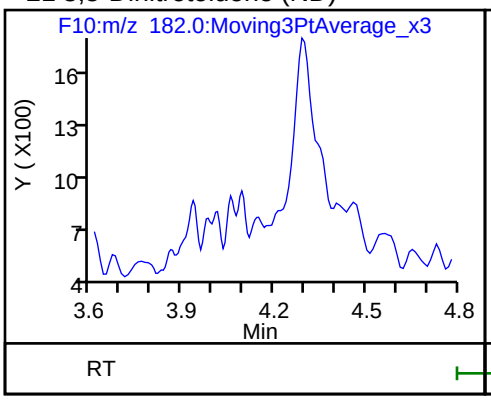
24 m-Nitrotoluene (ND)



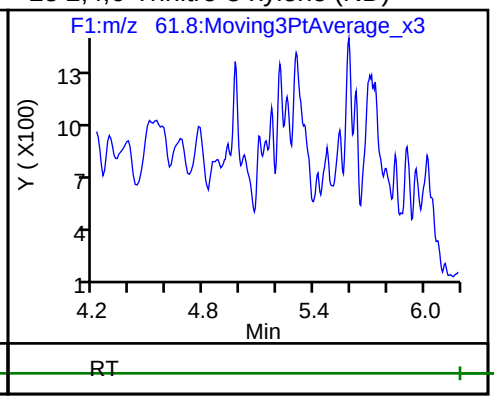
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:32 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14061.d				
Lims ID:	280-160190-A-55-B				
Client ID:	29SB204 (7-8)				
Sample Type:	Client				
Inject. Date:	14-Apr-2022 18:50:22	ALS Bottle#:	7	Worklist Smp#:	61
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160190-A-55-B				
Misc. Info.:	ex722D14				
Operator ID:	acm	Instrument ID:	LC_LCMS7		
Method:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m				
Limit Group:	LC - 8321A Expl				
Last Update:	15-Apr-2022 08:03:26	Calib Date:	14-Apr-2022 13:07:22		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1652				
First Level Reviewer: meyera		Date:	15-Apr-2022 07:39:51		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	88.6	88.35

Report Date: 15-Apr-2022 08:03:32 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

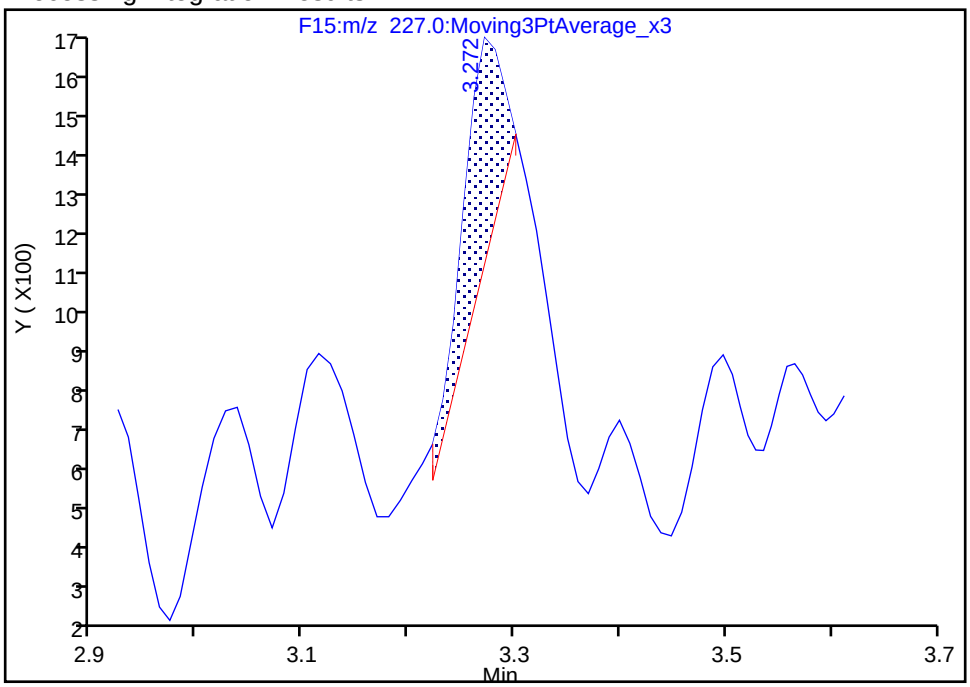
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14061.d				
Injection Date:	14-Apr-2022 18:50:22	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-55-B	Lab Sample ID:	280-160190-55		
Client ID:	29SB204 (7-8)				
Operator ID:	acm	ALS Bottle#:	7	Worklist Smp#:	61
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F15:SIR		

10 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

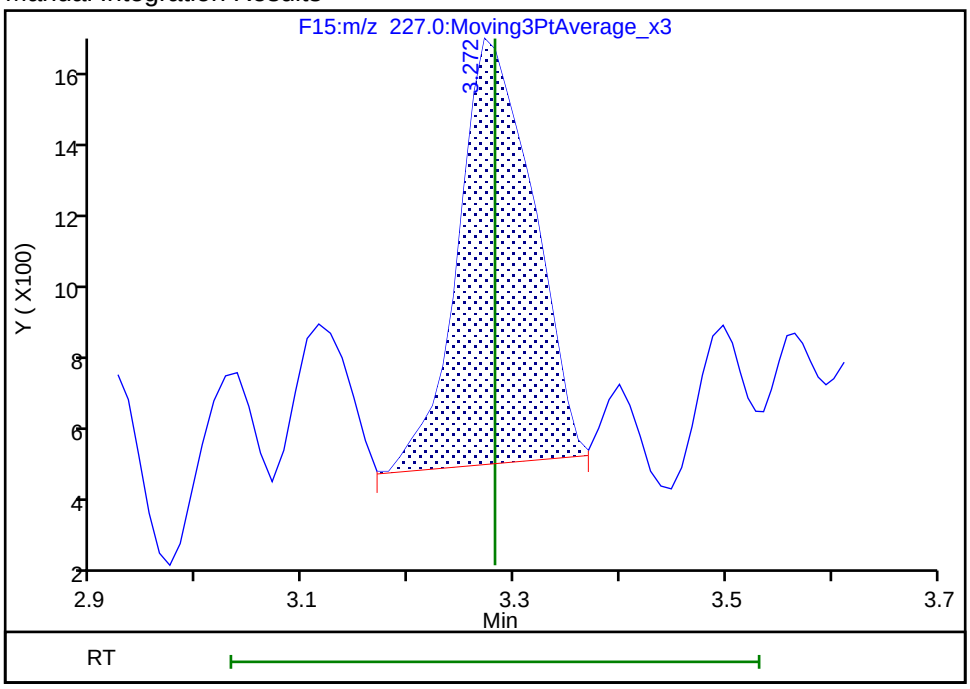
Processing Integration Results

RT: 3.27
Area: 1278
Amount: -1.277331
Amount Units: ug/l



Manual Integration Results

RT: 3.27
Area: 5216
Amount: -1.041602
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:39:39

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:03:32 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

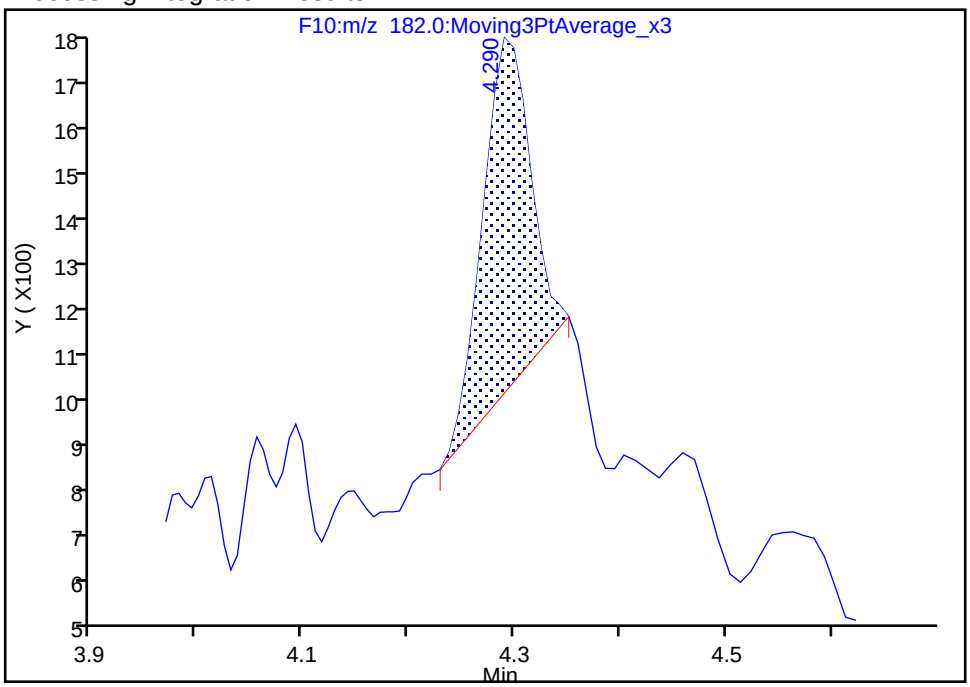
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14061.d				
Injection Date:	14-Apr-2022 18:50:22	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-55-B	Lab Sample ID:	280-160190-55		
Client ID:	29SB204 (7-8)				
Operator ID:	acm	ALS Bottle#:	7	Worklist Smp#:	61
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F10:SIR		

19 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

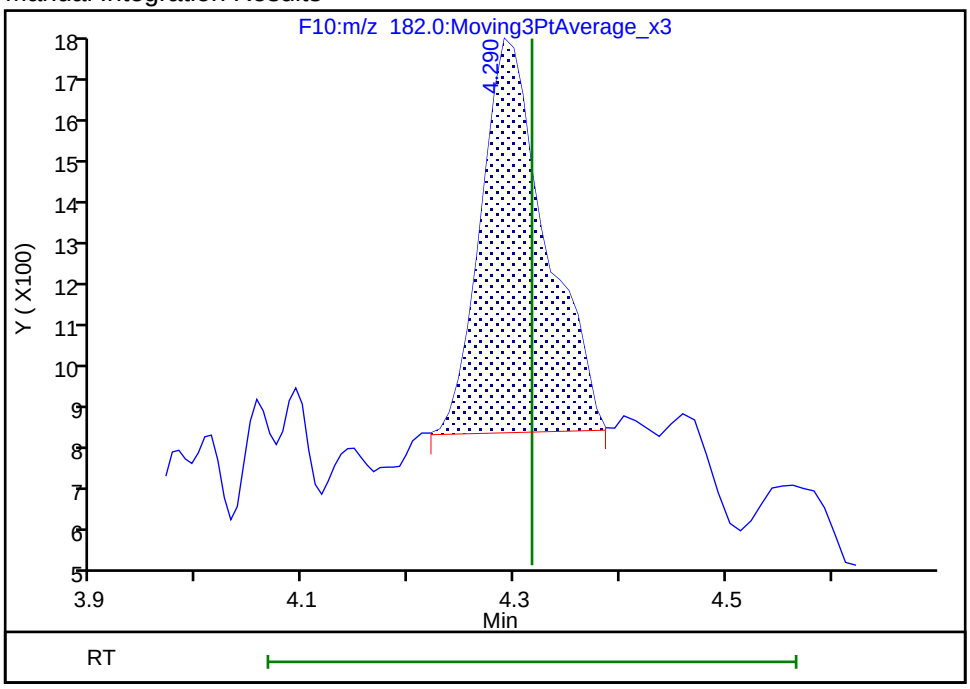
Processing Integration Results

RT: 4.29
Area: 2431
Amount: -0.923619
Amount Units: ug/l



Manual Integration Results

RT: 4.29
Area: 4088
Amount: -0.867489
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:39:47

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: EB-03 | Lab Sample ID: 280-160190-56
Matrix: Water | Lab File ID: ex722D05017.d
Analysis Method: 8321A | Date Collected: 03/24/2022 16:00
Extraction Method: 3535 | Date Extracted: 03/29/2022 13:01
Sample wt/vol: 928.3(mL) | Date Analyzed: 04/05/2022 11:50
Con. Extract Vol.: 5(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 570784 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.065	U	0.11	0.065	0.025
99-65-0	1,3-Dinitrobenzene	0.065	U	0.11	0.065	0.024
118-96-7	2,4,6-Trinitrotoluene	0.065	U	0.11	0.065	0.032
121-14-2	2,4-Dinitrotoluene	0.065	U	0.11	0.065	0.029
606-20-2	2,6-Dinitrotoluene	0.065	U	0.11	0.065	0.027
35572-78-2	2-Amino-4,6-dinitrotoluene	0.065	U	0.11	0.065	0.032
19406-51-0	4-Amino-2,6-dinitrotoluene	0.065	U	0.11	0.065	0.042
2691-41-0	HMX	0.065	U M	0.11	0.065	0.036
99-08-1	m-Nitrotoluene	0.065	U	0.11	0.065	0.030
98-95-3	Nitrobenzene	0.065	U M	0.16	0.065	0.030
55-63-0	Nitroglycerin	0.065	U	0.16	0.065	0.031
88-72-2	o-Nitrotoluene	0.065	U	0.11	0.065	0.034
78-11-5	PETN	0.065	U	0.11	0.065	0.038
99-99-0	p-Nitrotoluene	0.065	U	0.11	0.065	0.031
121-82-4	RDX	0.065	U	0.11	0.065	0.029
479-45-8	Tetryl	0.065	U Q	0.11	0.065	0.030

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	89		48-130

Report Date: 06-Apr-2022 06:44:12 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05017.d
Lims ID: 280-160190-B-56-A
Client ID: EB-03
Sample Type: Client
Inject. Date: 05-Apr-2022 11:50:02 ALS Bottle#: 15 Worklist Smp#: 17
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-B-56-A
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 06:44:08 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 12:48:05
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		269178	125.0	114	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.793	1.777	0.016		878431	125.0	122	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.872	2.850	0.022		1765132	129.4	174	
$ 11 Nitrobenzene-d5								
128.0	3.170	3.150	0.020	0.782	770645	89.5	115	
* 18 2,4-dinitrotoluene-d3								
185.1	4.054	4.028	0.026		5509266	125.0	122	

QC Flag Legend
Processing Flags

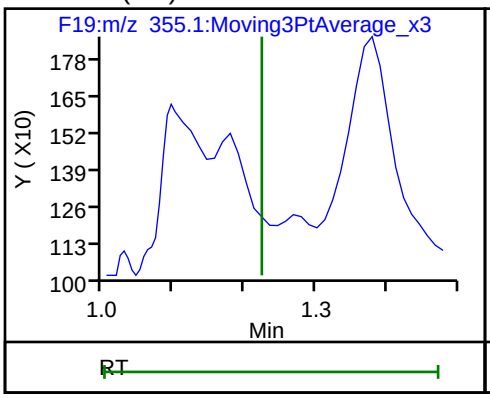
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 06:44:12 Chrom Revision: 2.3 18-Mar-2022 09:07:22

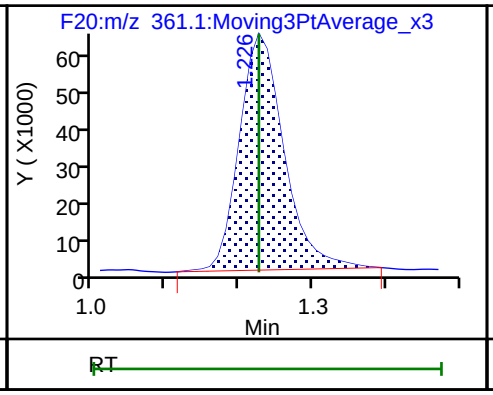
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05017.d
Injection Date: 05-Apr-2022 11:50:02 Instrument ID: LC_LCMS7
Lims ID: 280-160190-B-56-A Lab Sample ID: 280-160190-56
Client ID: EB-03
Operator ID: acm ALS Bottle#: 15 Worklist Smp#: 17
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

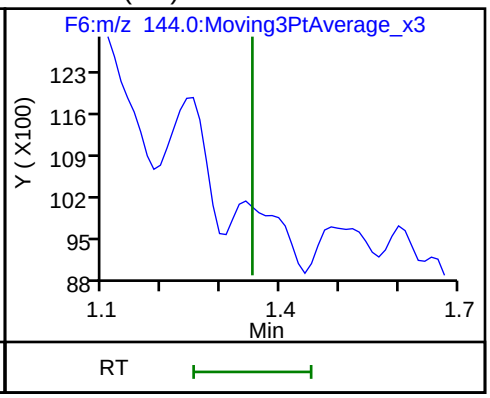
2 HMX (ND)



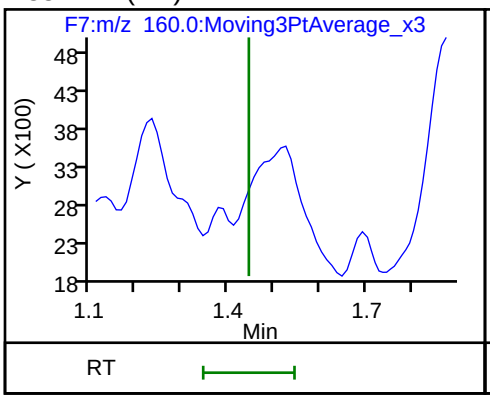
* 1 HMX-13C4



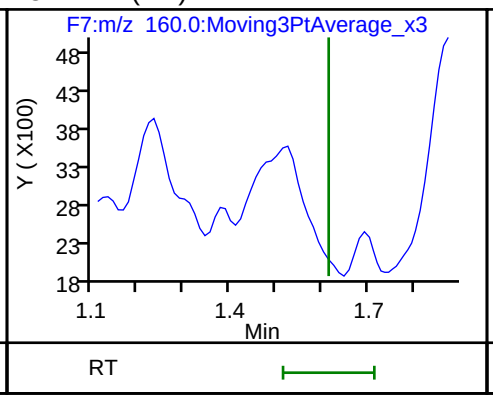
36 TNX (ND)



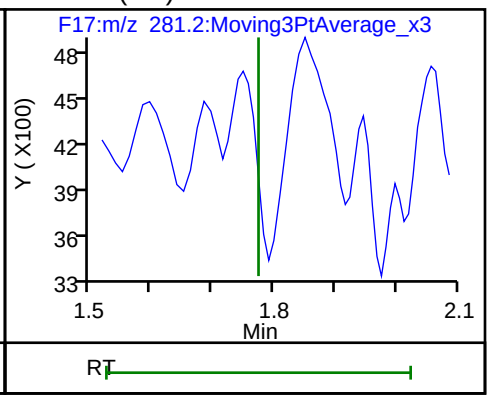
33 DNX (ND)



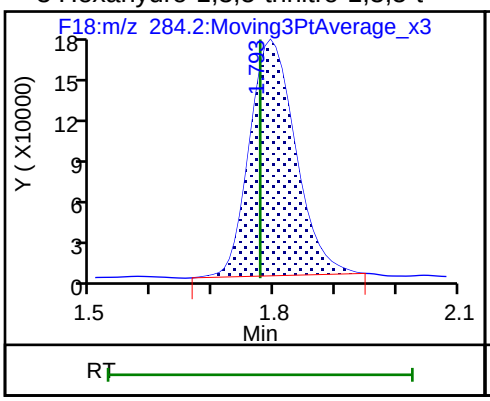
34 MNX (ND)



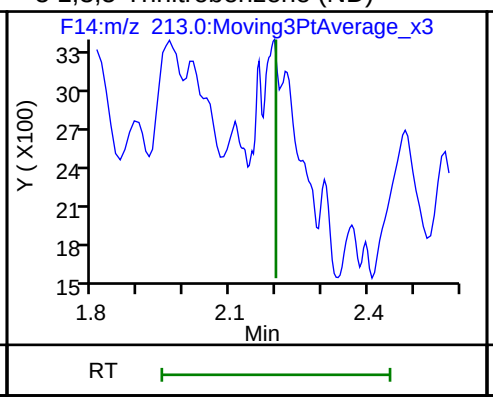
4 RDX (ND)



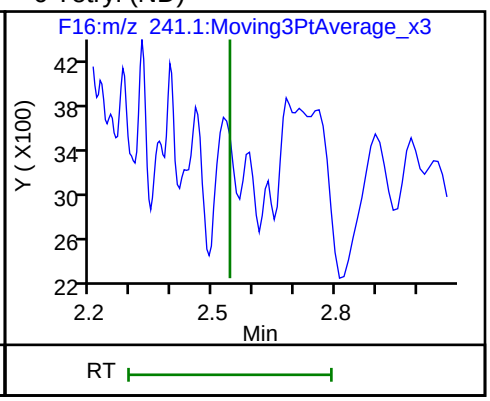
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



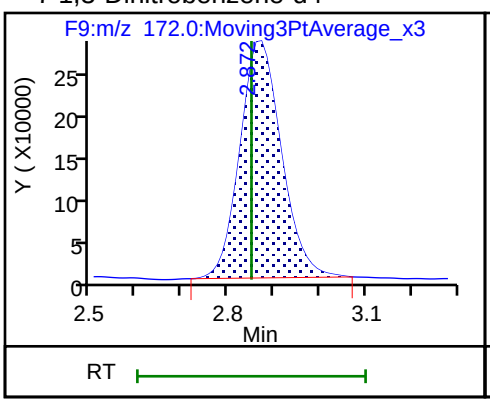
5 1,3,5-Trinitrobenzene (ND)



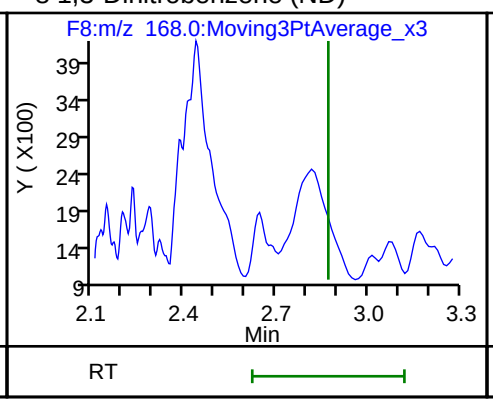
6 Tetryl (ND)



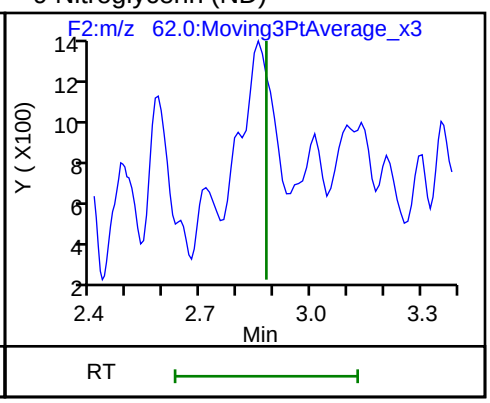
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

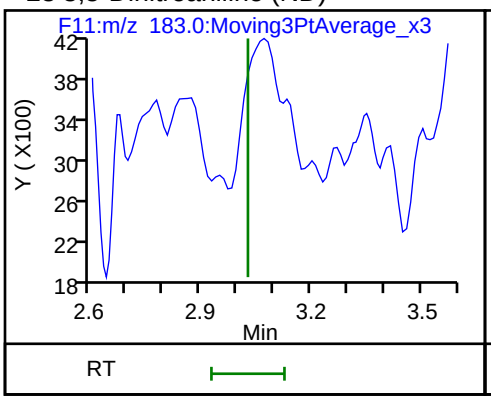


9 Nitroglycerin (ND)

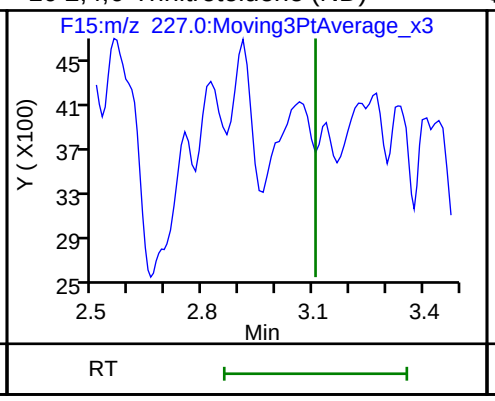


Report Date: 06-Apr-2022 06:44:12 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05017.d

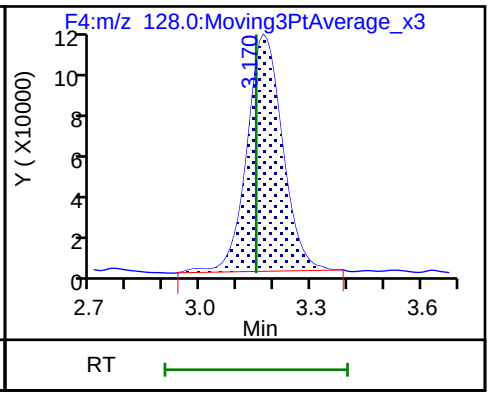
28 3,5-Dinitroaniline (ND)



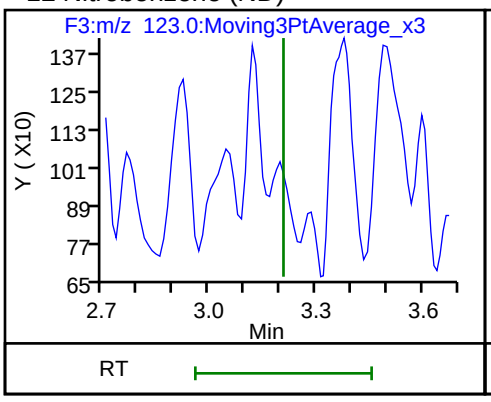
10 2,4,6-Trinitrotoluene (ND)



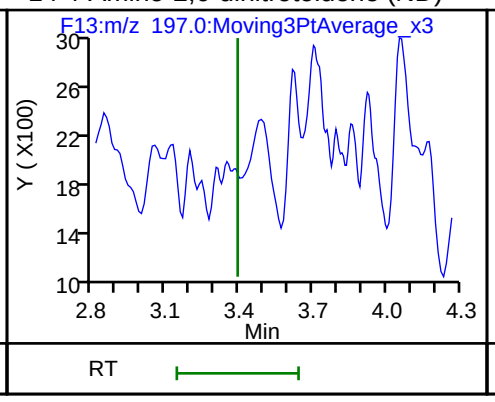
$ 11 Nitrobenzene-d5



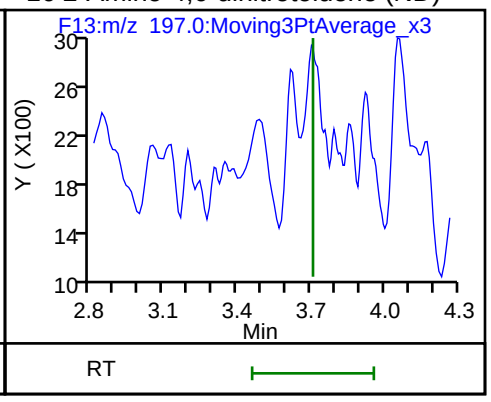
12 Nitrobenzene (ND)



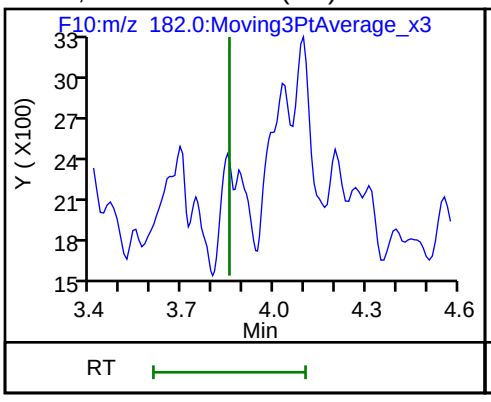
14 4-Amino-2,6-dinitrotoluene (ND)



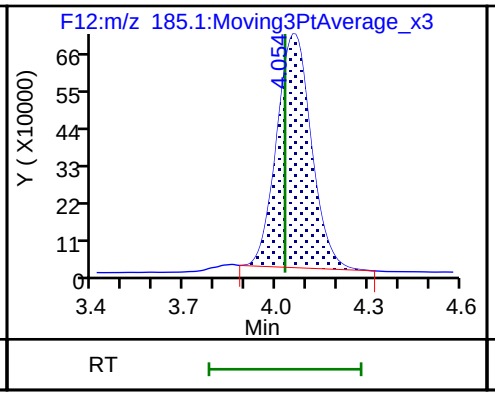
16 2-Amino-4,6-dinitrotoluene (ND)



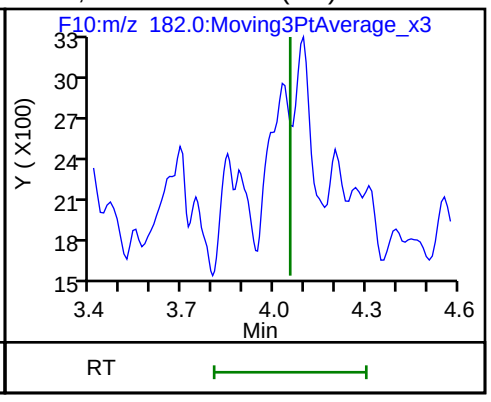
17 2,6-Dinitrotoluene (ND)



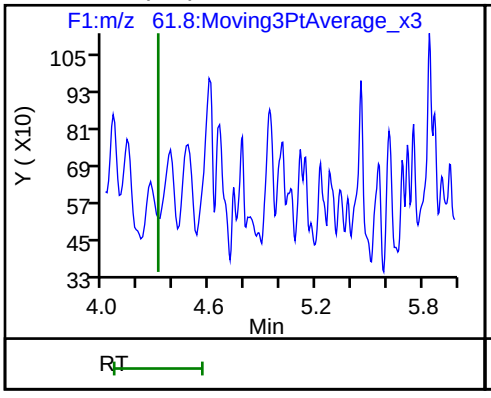
* 18 2,4-dinitrotoluene-d3



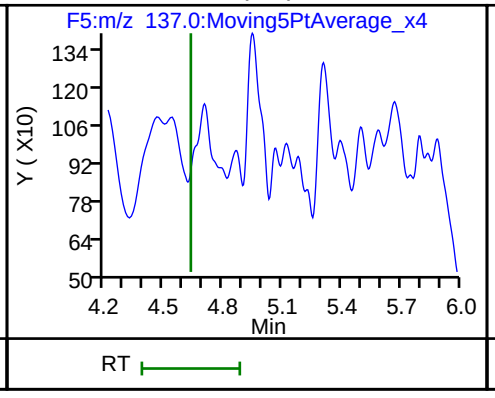
19 2,4-Dinitrotoluene (ND)



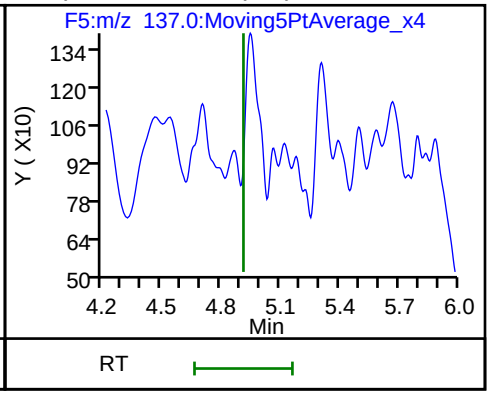
20 PETN (ND)



22 o-Nitrotoluene (ND)



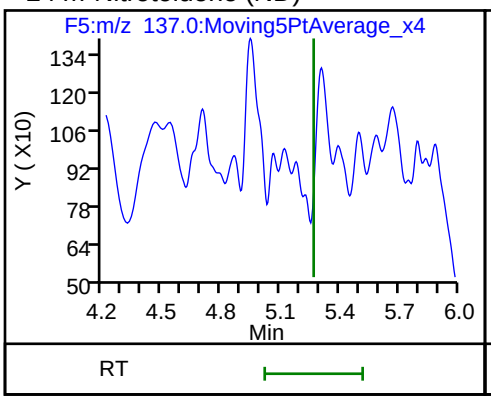
23 p-Nitrotoluene (ND)



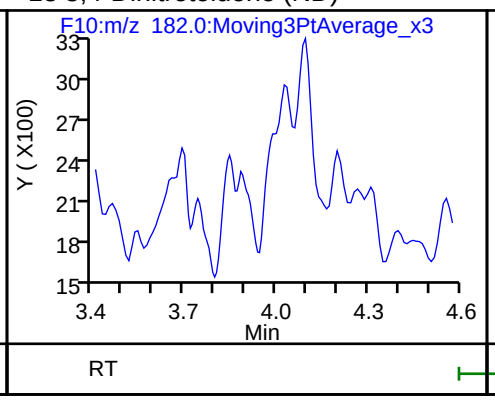
Report Date: 06-Apr-2022 06:44:12 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05017.d

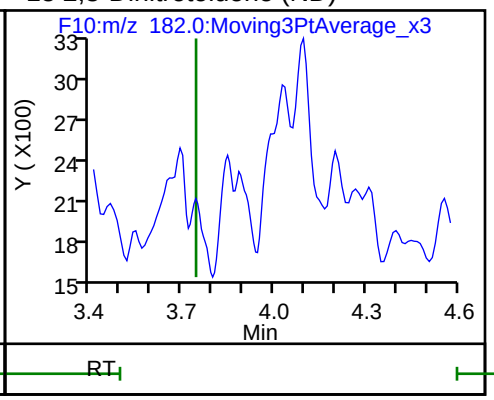
24 m-Nitrotoluene (ND)



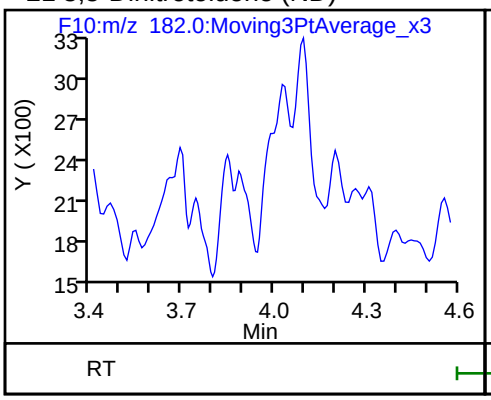
13 3,4-Dinitrotoluene (ND)



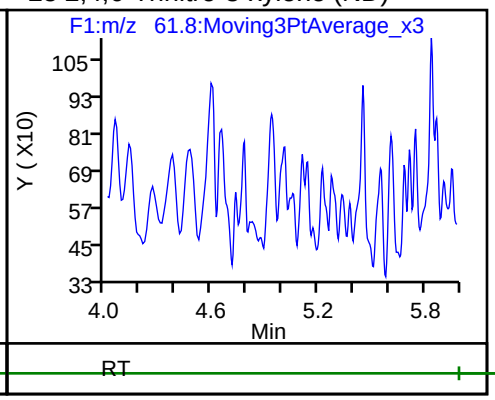
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 06-Apr-2022 06:44:12 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05017.d
Lims ID: 280-160190-B-56-A
Client ID: EB-03
Sample Type: Client
Inject. Date: 05-Apr-2022 11:50:02 ALS Bottle#: 15 Worklist Smp#: 17
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-B-56-A
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 06:44:08 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 12:48:05

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	89.5	89.17

FORM VI
LCMS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-160190-1 Analy Batch No.: 571614

SDG No.:

Instrument ID: LC_LCMS4 GC Column: IonPac ID: 2(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/12/2022 09:22 Calibration End Date: 04/12/2022 10:31 Calibration ID: 64076

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 280-571614/4	ex422D12003.d
Level 2	STD010 280-571614/5	ex422D12004.d
Level 3	STD025 280-571614/6	ex422D12005.d
Level 4	STD050 280-571614/7	ex422D12006.d
Level 5	STD100 280-571614/8	ex422D12007.d
Level 6	STD200 280-571614/9	ex422D12008.d
Level 7	STD300 280-571614/10	ex422D12009.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
HMX	2.1961 1.8326	2.0464 1.6968	2.0766	1.9743	1.8547	Lin1	3.4701	1.7664							0.9970		0.9900
TNX	2.8281 1.7703	2.4927 2.0041	2.4103	2.3221	2.1876	Lin1	6.2505	1.9504							0.9920		0.9900
DNX	3.5126 1.9756	2.8453 1.7873	2.5211	2.2065	1.7884	Lin1	10.257	1.8229							0.9950		0.9900
MNX	3.5872 2.2161	3.3317 +++++	2.6879	2.3609	2.0637	Lin1	10.797	2.1297							0.9960		0.9900
RDX	0.8125 0.6062	0.9639 0.5737	0.9647	0.8381	0.7472	Qua1	0.7076	0.8447	-0.000977						0.9950		0.9900
1,3,5-Trinitrobenzene	1.0180 1.0933	1.0476 1.0787	0.9618	1.0170	1.0202	Lin1	-0.709	1.0720							0.9990		0.9900
Tetryl	1.0642 0.8274	0.8672 1.0024	0.9102	0.9075	0.9536	Lin1	0.0074	0.9328							0.9920		0.9900
1,3-Dinitrobenzene	1.0110 1.1008	1.0784 1.0420	1.1059	1.0724	1.0954	Lin1	0.0157	1.0714							0.9990		0.9900
Nitroglycerin	7.8344 6.5354	7.7741 6.3512	6.9484	7.5422	6.6644	Lin1	11.539	6.4729							0.9980		0.9900
2,4,6-Trinitrotoluene	3.6546 3.6272	3.8281 3.4781	3.6301	3.4937	3.7147	Lin1	1.4580	3.5539							0.9990		0.9900
Nitrobenzene	0.7834 0.7155	0.7799 0.6559	0.7320	0.6629	0.7005	Lin1	0.7541	0.6780							0.9980		0.9900
4-Amino-2,6-dinitrotoluene	1.2935 1.2036	1.1452 1.0954	1.3020	1.1468	1.2090	Lin1	0.9754	1.1467							0.9970		0.9900
2-Amino-4,6-dinitrotoluene	1.5763 1.3268	1.2729 1.3292	1.4287	1.3265	1.5492	Lin1	0.8369	1.3563							0.9960		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-160190-1 Analy Batch No.: 571614

SDG No.:

Instrument ID: LC_LCMS4 GC Column: IonPac ID: 2(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/12/2022 09:22 Calibration End Date: 04/12/2022 10:31 Calibration ID: 64076

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
2,6-Dinitrotoluene	2.1581 1.9466	1.9160 1.9427	1.9954	2.0166	1.9109	Lin1	0.8258	1.9393							1.0000		0.9900
2,4-Dinitrotoluene	1.1486 3.2837	1.0799 1.0649	1.0268	1.0607	1.1460	Ave		1.1011				5.2		15.0			
PETN	2.8045 2.2377	2.4746 2.3628	2.1738	2.5423	2.4019	Lin1	1.9297	2.3235							0.9980		0.9900
o-Nitrotoluene	0.4865 0.4410	0.5247 0.5081	0.4119	0.4780	0.4720	Lin1	-0.073	0.4786							0.9950		0.9900
p-Nitrotoluene	0.4058 0.3857	0.4126 0.4186	0.4039	0.4124	0.3829	Lin1	0.0091	0.4026							0.9980		0.9900
m-Nitrotoluene	0.2577 0.2655	0.2961 0.2886	0.2771	0.2832	0.2494	Lin1	-0.031	0.2756							0.9970		0.9900
Nitrobenzene-d5	1.0298 0.9121	0.9507 0.8275	0.9705	0.8737	0.9000	Lin1	1.1198	0.8630							0.9980		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-160190-1 Analy Batch No.: 571614

SDG No.:

Instrument ID: LC_LCMS4 GC Column: IonPac ID: 2(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/12/2022 09:22 Calibration End Date: 04/12/2022 10:31 Calibration ID: 64076

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 280-571614/4	ex422D12003.d
Level 2	STD010 280-571614/5	ex422D12004.d
Level 3	STD025 280-571614/6	ex422D12005.d
Level 4	STD050 280-571614/7	ex422D12006.d
Level 5	STD100 280-571614/8	ex422D12007.d
Level 6	STD200 280-571614/9	ex422D12008.d
Level 7	STD300 280-571614/10	ex422D12009.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
HMX	HXC4	Lin1	13332 295825	24557 435110	70299	119551	211019	5.00 200	10.0 300	25.0	50.0	100
TNX	HXC4	Lin1	17186 286064	29943 514443	81677	140747	249143	5.01 200	10.0 300	25.0	50.1	100
DNX	HXC4	Lin1	21346 319241	34178 458777	85429	133742	203676	5.01 200	10.0 300	25.0	50.1	100
MNX	HXC4	Lin1	25414 417480	46657 +++++	106186	166830	274006	5.84 233	11.7 +++++	29.2	58.4	117
RDX	HHTT	Qua1	10183 348213	26289 533743	65243	130944	230193	5.00 200	10.0 300	25.0	50.0	100
1,3,5-Trinitrobenzene	DNB4	Lin1	39676 1835720	79434 2938535	206706	396614	887238	5.01 200	10.0 301	25.1	50.1	100
Tetryl	DNB4	Lin1	41474 1389166	65750 2730790	195606	353902	829355	5.01 200	10.0 301	25.1	50.1	100
1,3-Dinitrobenzene	DNB4	Lin1	39404 1848204	81763 2838523	237674	418231	952661	5.01 200	10.0 301	25.1	50.1	100
Nitroglycerin	DNB4	Lin1	306555 11016743	591798 17371137	1499245	2953141	5819162	5.03 201	10.1 302	25.2	50.3	101
2,4,6-Trinitrotoluene	DNB4	Lin1	142717 6102202	290834 9494022	781698	1365220	3237171	5.02 201	10.0 301	25.1	50.2	100
Nitrobenzene	DNB4	Lin1	30593 1203653	59254 1790353	157630	259034	610428	5.02 201	10.0 301	25.1	50.2	100
4-Amino-2,6-dinitrotoluene	DNT3	Lin1	144843 5614003	268685 7874129	780656	1176566	2932454	5.01 200	10.0 300	25.0	50.1	100
2-Amino-4,6-dinitrotoluene	DNT3	Lin1	177045 6207443	299539 9583761	859160	1365012	3768666	5.02 201	10.0 301	25.1	50.2	100
2,6-Dinitrotoluene	DNT3	Lin1	242386	450871	1199966	2075070	4648724	5.02	10.0	25.1	50.2	100

FORM VI
LCMS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-160190-1 Analy Batch No.: 571614

SDG No.:

Instrument ID: LC_LCMS4 GC Column: IonPac ID: 2(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/12/2022 09:22 Calibration End Date: 04/12/2022 10:31 Calibration ID: 64076

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			9106883	14006831				201	301			
2,4-Dinitrotoluene	DNT3	Ave	129008 5524419	254128 7678431	617504	1091440	2787928	5.02 201	10.0 301	25.1	50.2	100
PETN	DNT3	Lin1	312479 10385398	577691 16900226	1296825	2595252	5796488	4.98 199	9.96 299	24.9	49.8	99.6
o-Nitrotoluene	DNT3	Lin1	54428 2055057	122972 3648660	246741	489916	1143752	5.00 200	10.0 300	25.0	50.0	100
p-Nitrotoluene	DNT3	Lin1	45488 1800878	96905 3012368	242436	423467	929614	5.01 200	10.0 301	25.1	50.1	100
m-Nitrotoluene	DNT3	Lin1	28862 1238307	69481 2074737	166167	290510	604952	5.01 200	10.0 300	25.0	50.1	100
Nitrobenzene-d5	DNB4	Lin1	40064 1528701	71956 2250430	208211	340130	781386	5.00 200	10.0 300	25.0	50.0	100

Curve Type Legend

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua1 = Quadratic 1/conc ISTD

Report Date: 13-Apr-2022 14:15:51 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12003.d
Lims ID: STD005
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 12-Apr-2022 09:22:48 ALS Bottle#: 2 Worklist Smp#: 4
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 04/08/22EX1 STD005 ug/L
Misc. Info.: 04/08/2022 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4
Sublist: chrom-8321expDuPont*sub15

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\8321expDuPont.m
Limit Group: LC - 8321A Expl
Last Update: 13-Apr-2022 14:15:51 Calib Date: 12-Apr-2022 10:31:58
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d

Column 1 : Det: F1:SIR
Process Host: CTX1683

First Level Reviewer: meyera Date: 13-Apr-2022 13:14:16
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								M
355.1	1.991	1.964	0.027	1.014	13332	4.25	31.8	M
* 1 HMX-13C4								
360.9	1.964	1.964	0.0		151771	125.0	85.4	
3 TNX								M
233.1	2.153	2.153	0.0	0.769	17186	4.05	26.0	M
4 DNX								
249.1	2.287	2.287	0.0	0.817	21346	4.02	66.7	
5 MNX								
265.1	2.556	2.529	0.027	0.913	25414	4.76	46.7	
6 RDX								M
281.1	2.772	2.772	0.0	0.990	10183	3.99	8.7	M
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.1	2.799	2.798	0.001		313327	125.0	428	
8 1,3,5-Trinitrobenzene								
213.1	3.458	3.458	0.0	0.775	39676	5.42	51.9	
11 Tetryl								
241.1	4.003	4.003	0.0	0.897	41474	5.71	45.3	
* 12 1,3-Dinitrobenzene-d4								
172.1	4.461	4.461	0.0		1006316	129.4	85.8	
13 1,3-Dinitrobenzene								
168.1	4.461	4.518	-0.057	1.000	39404	4.71	25.7	
14 Nitroglycerin								
61.9	4.558	4.558	0.0	1.022	306555	4.31	38.7	
33 3,5-Dinitroaniline								
183.1	4.801	4.760	0.041	1.076	123655	5.45	72.7	

Report Date: 13-Apr-2022 14:15:51 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12003.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
15 2,4,6-Trinitrotoluene								
227.1	4.841	4.841	0.0	0.768	142717	4.75	213	
$ 16 Nitrobenzene-d5								
128.1	4.962	4.962	0.0	1.112	40064	4.67	20.7	
17 Nitrobenzene								
123.1	5.043	5.043	0.0	1.131	30593	4.69	34.5	
19 4-Amino-2,6-dinitrotoluene								
197.2	5.417	5.417	0.0	0.859	144843	4.79	119	
22 2-Amino-4,6-dinitrotoluene								
197.2	5.821	5.861	-0.040	0.923	177045	5.22	120	
23 2,6-Dinitrotoluene								
182.1	6.063	6.094	-0.031	0.961	242386	5.21	125	
* 24 2,4-dinitrotoluene-d3								
185.1	6.306	6.336	-0.030		2796727	125.0	597	
25 2,4-Dinitrotoluene								
182.1	6.397	6.367	0.030	1.014	129008	5.45	61.4	
26 PETN								
61.9	6.812	6.812	0.0	1.080	312479	5.18	55.2	
28 o-Nitrotoluene								
137.1	7.389	7.389	0.0	1.172	54428	5.24	25.8	
29 p-Nitrotoluene								
137.1	7.845	7.875	-0.030	1.244	45488	5.03	20.8	
30 m-Nitrotoluene								
137.1	8.422	8.391	0.031	1.335	28862	4.79	13.7	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

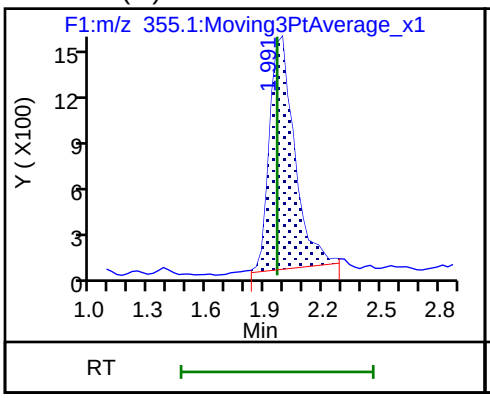
8321NB-D5-cal_00021	Amount Added: 0.50	Units: uL	
8321EXcalprim_00029	Amount Added: 0.50	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 13-Apr-2022 14:15:51 Chrom Revision: 2.3 18-Mar-2022 09:07:22

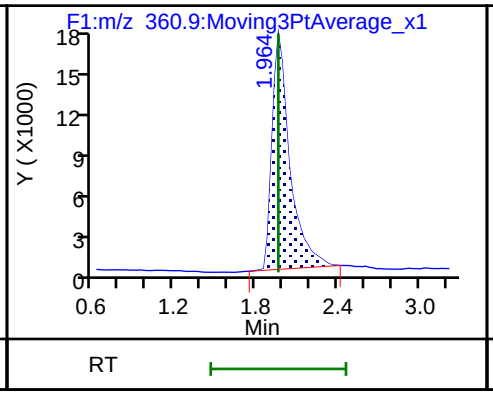
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12003.d
Injection Date: 12-Apr-2022 09:22:48 Instrument ID: LC_LCMS4
Lims ID: STD005
Client ID:
Operator ID: acm ALS Bottle#: 2 Worklist Smp#: 4
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Method: 8321expDuPont Limit Group: LC - 8321A Expl

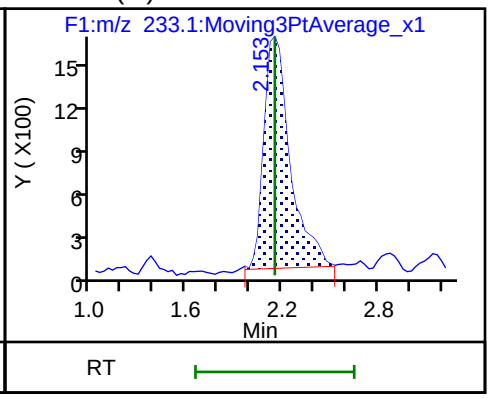
2 HMX (M)



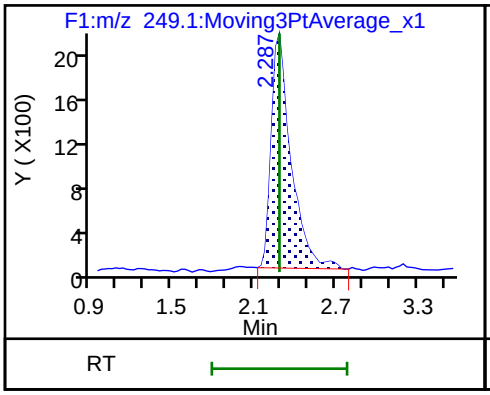
* 1 HMX-13C4



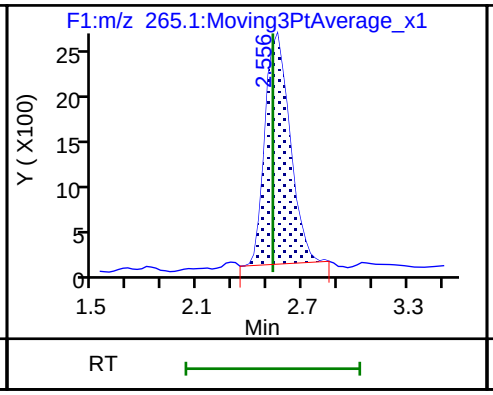
3 TNX (M)



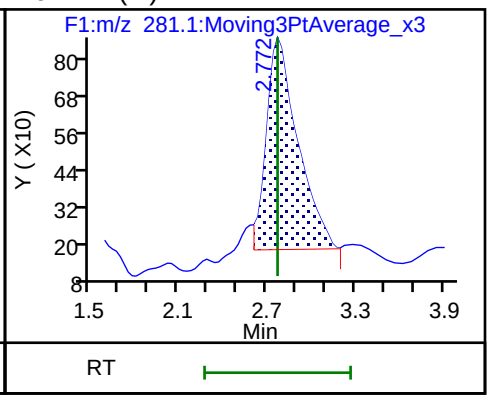
4 DNX



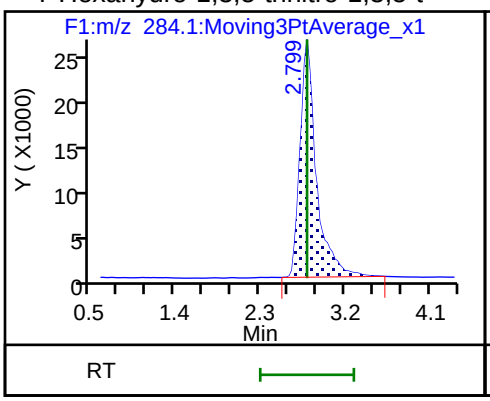
5 MNX



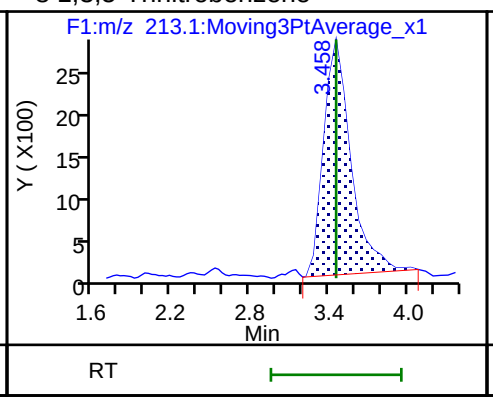
6 RDX (M)



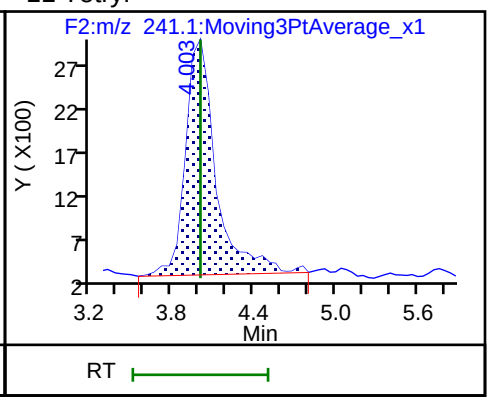
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t



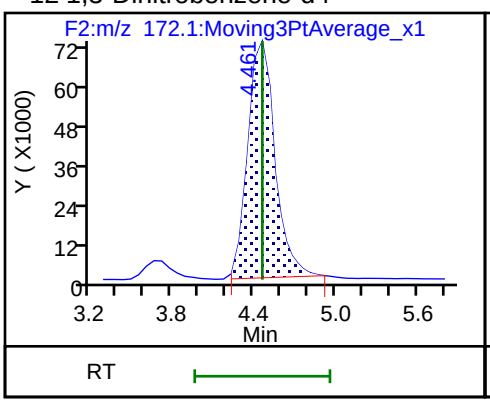
8 1,3,5-Trinitrobenzene



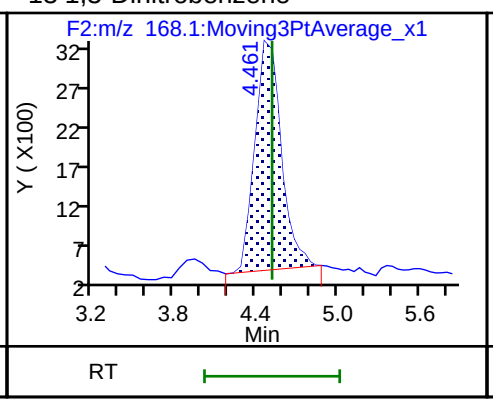
11 Tetryl



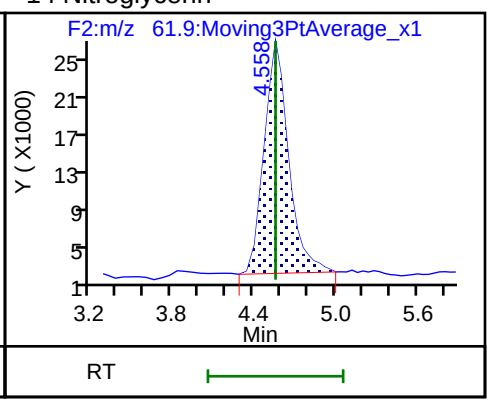
* 12 1,3-Dinitrobenzene-d4



13 1,3-Dinitrobenzene



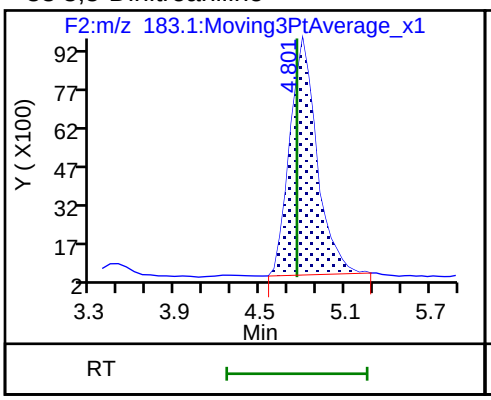
14 Nitroglycerin



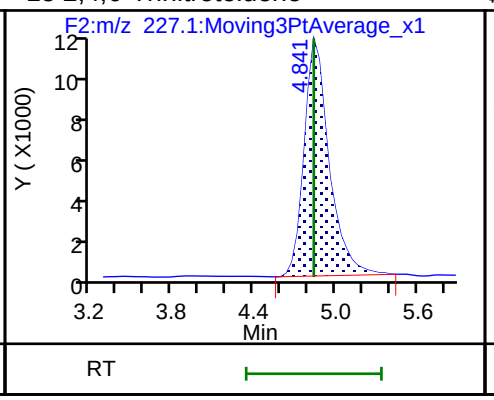
Report Date: 13-Apr-2022 14:15:51 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12003.d

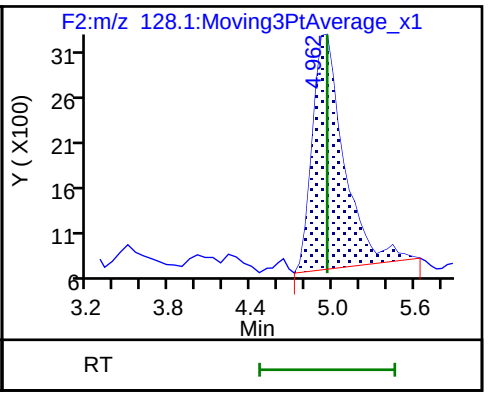
33 3,5-Dinitroaniline



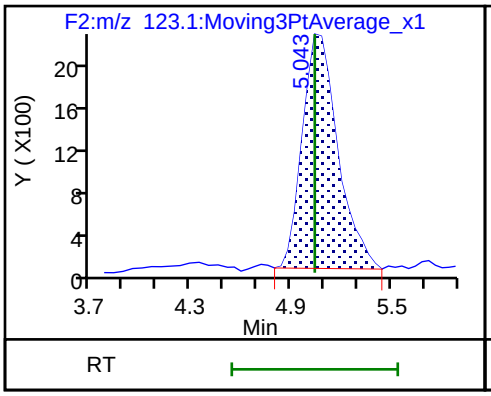
15 2,4,6-Trinitrotoluene



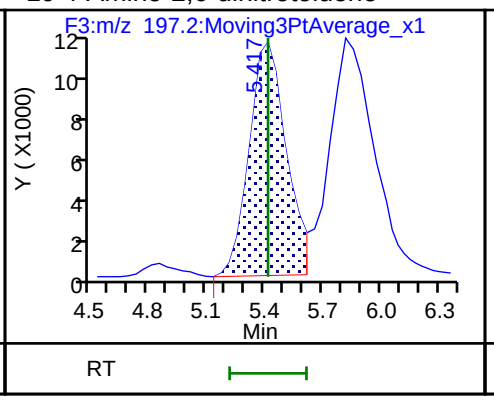
$ 16 Nitrobenzene-d5



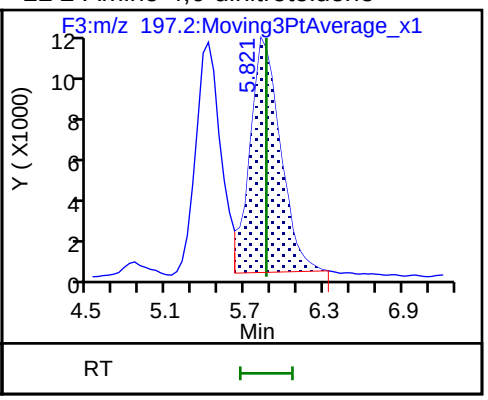
17 Nitrobenzene



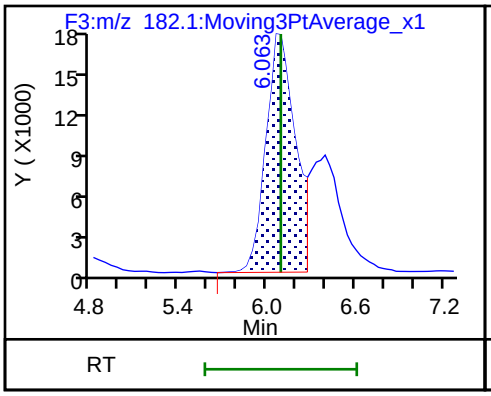
19 4-Amino-2,6-dinitrotoluene



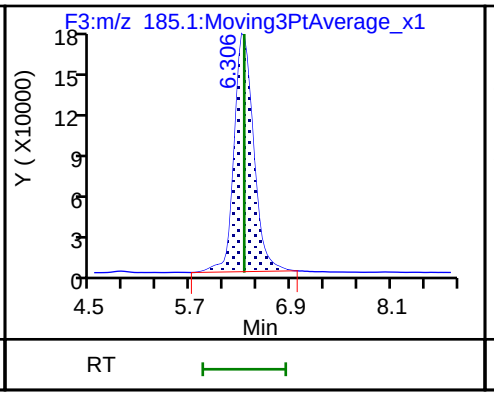
22 2-Amino-4,6-dinitrotoluene



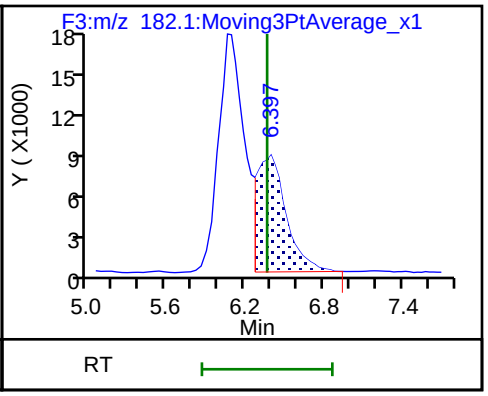
23 2,6-Dinitrotoluene



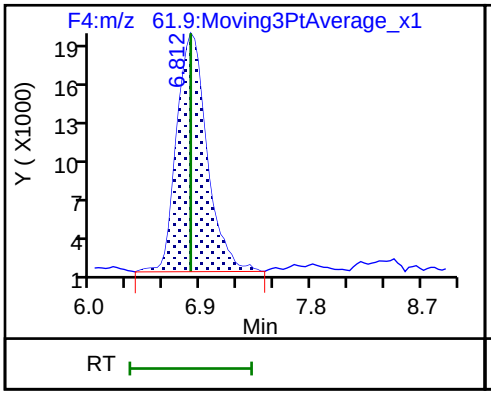
* 24 2,4-dinitrotoluene-d3



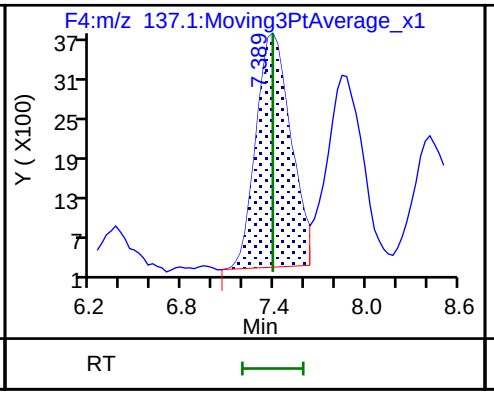
25 2,4-Dinitrotoluene



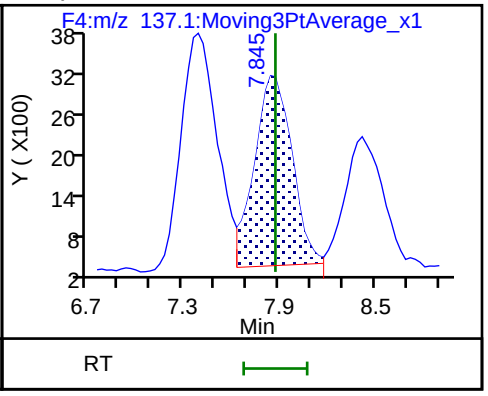
26 PETN



28 o-Nitrotoluene



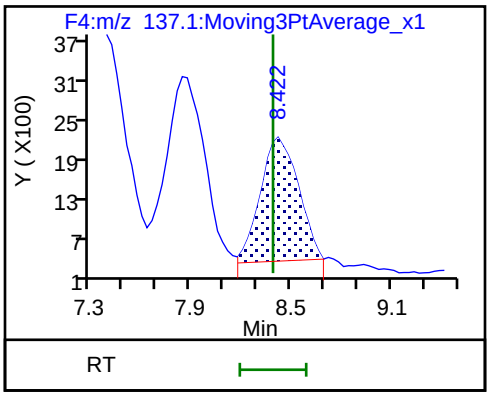
29 p-Nitrotoluene



Report Date: 13-Apr-2022 14:15:52 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12003.d

30 m-Nitrotoluene



Report Date: 13-Apr-2022 14:15:52 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

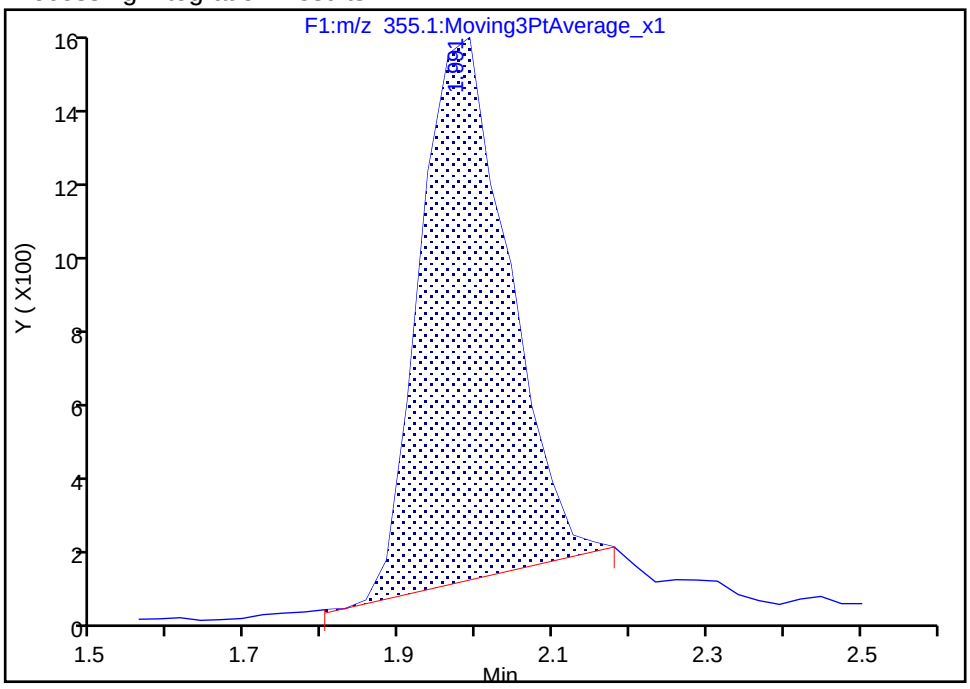
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12003.d
Injection Date: 12-Apr-2022 09:22:48 Instrument ID: LC_LCMS4
Lims ID: STD005
Client ID:
Operator ID: acm ALS Bottle#: 2 Worklist Smp#: 4
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Method: 8321expDuPont Limit Group: LC - 8321A Expl
Column: Detector F1:SIR

2 HMX, CAS: 2691-41-0

Signal: 1

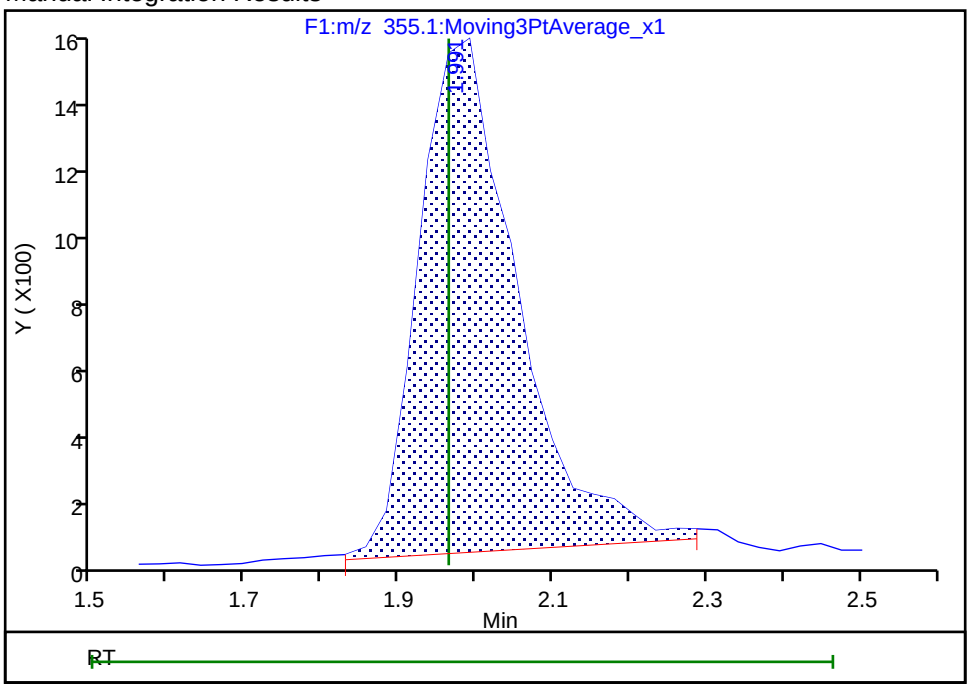
Processing Integration Results

RT: 1.99
Area: 11449
Amount: 3.899712
Amount Units: ug/l



Manual Integration Results

RT: 1.99
Area: 13332
Amount: 4.251795
Amount Units: ug/l



Reviewer: meyera, 13-Apr-2022 13:23:10
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 13-Apr-2022 14:15:52 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Manual Integration/User Assign Peak Report

Eurofins Denver

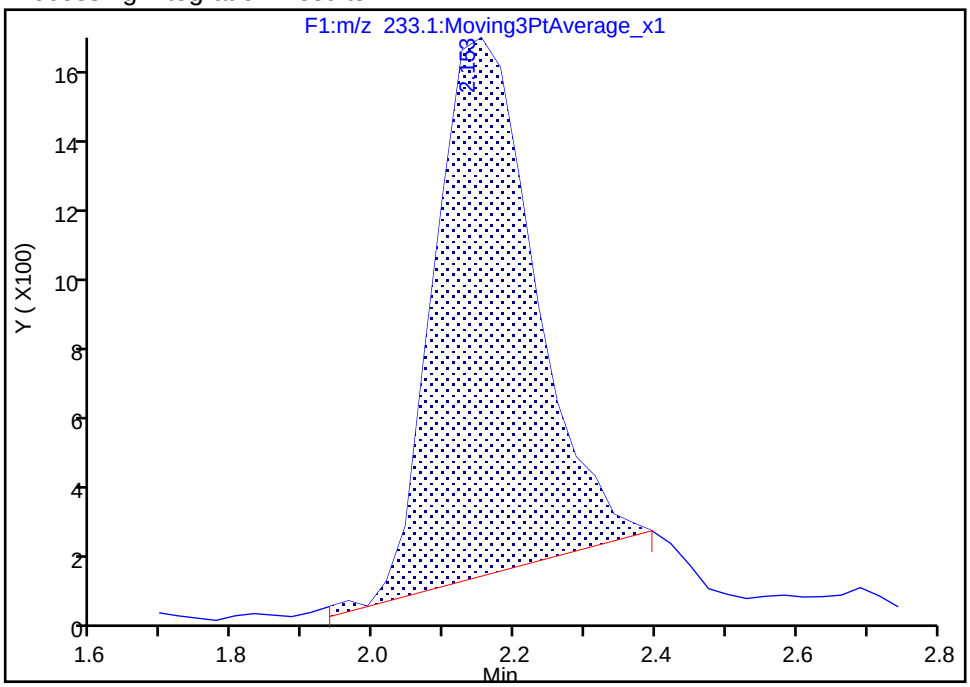
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12003.d
Injection Date: 12-Apr-2022 09:22:48 Instrument ID: LC_LCMS4
Lims ID: STD005
Client ID:
Operator ID: acm ALS Bottle#: 2 Worklist Smp#: 4
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Method: 8321expDuPont Limit Group: LC - 8321A Expl
Column: Detector F1:SIR

3 TNX, CAS: 13980-04-6

Signal: 1

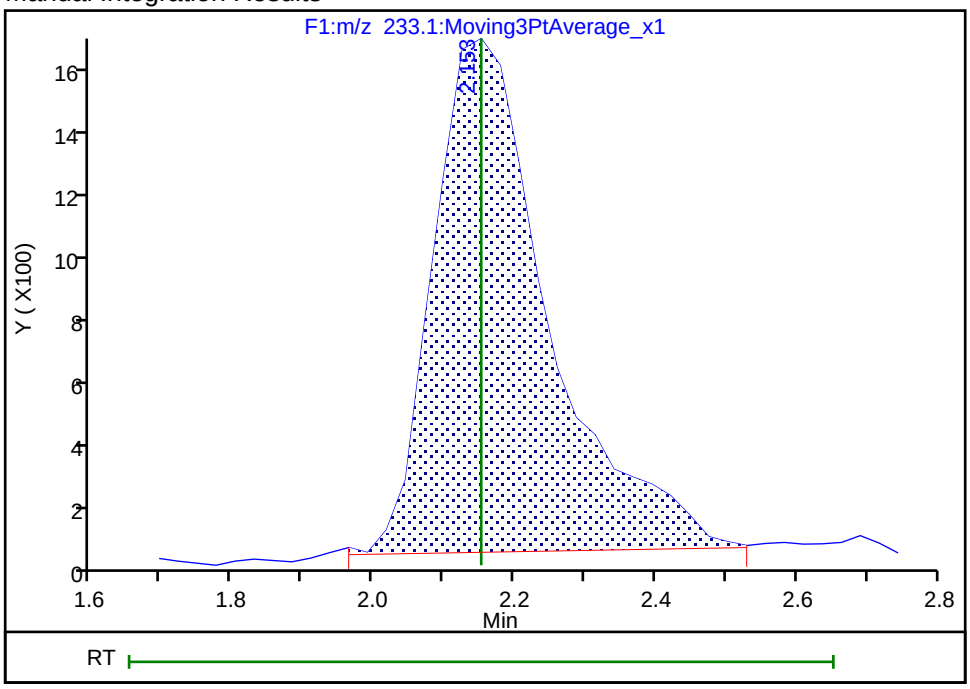
Processing Integration Results

RT: 2.15
Area: 14209
Amount: 3.550552
Amount Units: ug/l



Manual Integration Results

RT: 2.15
Area: 17186
Amount: 4.052532
Amount Units: ug/l



Reviewer: meyera, 13-Apr-2022 13:23:16
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 13-Apr-2022 14:15:52 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12003.d

Injection Date: 12-Apr-2022 09:22:48 Instrument ID: LC_LCMS4

Lims ID: STD005

Client ID:

Operator ID: acm ALS Bottle#: 2 Worklist Smp#: 4

Injection Vol: 40.0 ul Dil. Factor: 1.0000

Method: 8321expDuPont Limit Group: LC - 8321A Expl

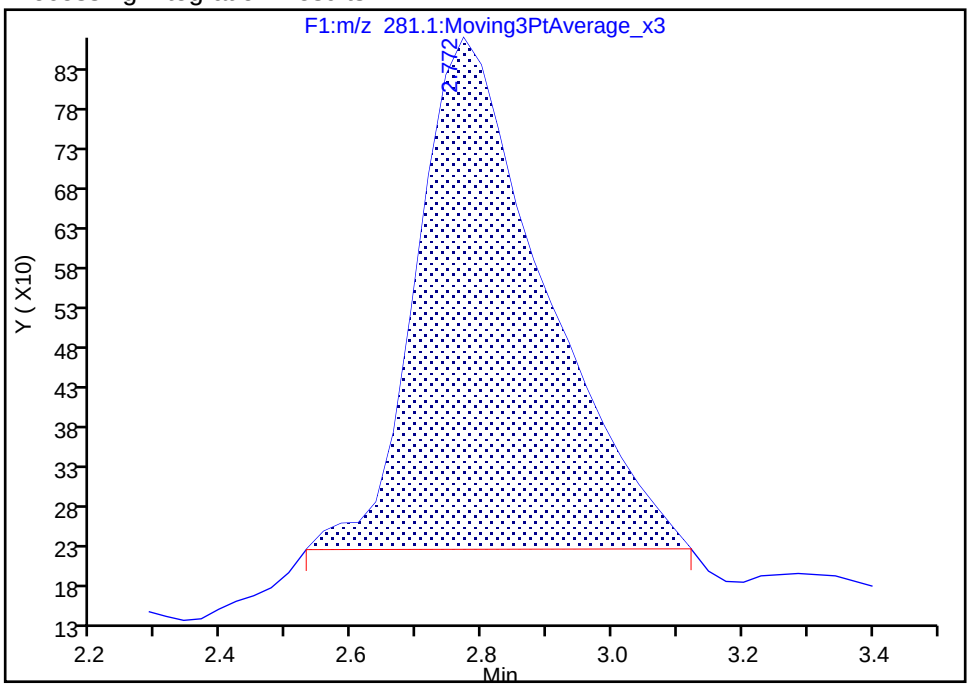
Column: Detector F1:SIR

6 RDX, CAS: 121-82-4

Signal: 1

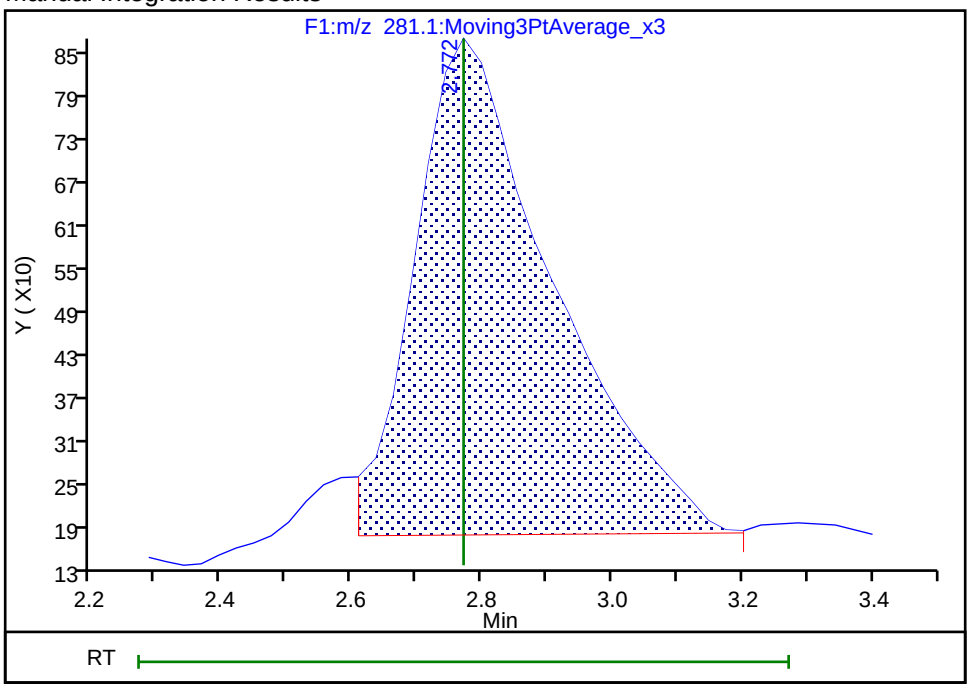
Processing Integration Results

RT: 2.77
Area: 8790
Amount: 3.788138
Amount Units: ug/l



Manual Integration Results

RT: 2.77
Area: 10183
Amount: 3.989972
Amount Units: ug/l



Reviewer: meyera, 13-Apr-2022 13:23:24

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12004.d
Lims ID: STD010
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 12-Apr-2022 09:34:21 ALS Bottle#: 3 Worklist Smp#: 5
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 04/08/22EX2 STD010 ug/L
Misc. Info.: 04/08/2022 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4
Sublist: chrom-8321expDuPont*sub15

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\8321expDuPont.m
Limit Group: LC - 8321A Expl
Last Update: 13-Apr-2022 14:15:52 Calib Date: 12-Apr-2022 10:31:58
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d

Column 1 : Det: F1:SIR
Process Host: CTX1683

First Level Reviewer: meyera Date: 13-Apr-2022 13:14:00
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.965	1.964	0.001	1.000	24557	9.62	51.6	
* 1 HMX-13C4								
360.9	1.965	1.964	0.001		150001	125.0	83.4	
3 TNX								
233.1	2.126	2.153	-0.027	0.767	29943	9.59	53.2	
4 DNX								
249.1	2.288	2.287	0.001	0.825	34178	10.0	98.2	
5 MNX								
265.1	2.530	2.529	0.001	0.913	46657	13.2	82.1	
6 RDX								M
281.1	2.799	2.772	0.027	1.010	26289	10.7	27.4	M
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.1	2.772	2.798	-0.026		340911	125.0	331	
8 1,3,5-Trinitrobenzene								
213.1	3.459	3.458	0.001	0.775	79434	10.5	119	
11 Tetryl								
241.1	4.004	4.003	0.001	0.897	65750	9.31	69.1	
* 12 1,3-Dinitrobenzene-d4								
172.1	4.461	4.461	0.0		978874	129.4	76.8	
13 1,3-Dinitrobenzene								
168.1	4.519	4.518	0.001	1.013	81763	10.1	36.1	
14 Nitroglycerin								
61.9	4.559	4.558	0.001	1.022	591798	10.3	127	
33 3,5-Dinitroaniline								
183.1	4.802	4.760	0.042	1.076	230616	9.52	57.7	

Report Date: 13-Apr-2022 14:15:53 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12004.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
15 2,4,6-Trinitrotoluene								
227.1	4.842	4.841	0.001	0.764	290834	10.4	530	
$ 16 Nitrobenzene-d5								
128.1	4.963	4.962	0.001	1.112	71956	9.72	23.4	
17 Nitrobenzene								
123.1	5.044	5.043	0.001	1.131	59254	10.4	175	
19 4-Amino-2,6-dinitrotoluene								
197.2	5.418	5.417	0.001	0.855	268685	9.15	123	
22 2-Amino-4,6-dinitrotoluene								
197.2	5.822	5.861	-0.039	0.919	299539	8.81	96.7	
23 2,6-Dinitrotoluene								
182.1	6.091	6.094	-0.003	0.962	450871	9.50	140	
* 24 2,4-dinitrotoluene-d3								
185.1	6.334	6.336	-0.002		2929808	125.0	501	
25 2,4-Dinitrotoluene								
182.1	6.395	6.367	0.028	1.010	254128	9.93	74.3	
26 PETN								
61.9	6.810	6.812	-0.002	1.075	577691	9.78	64.6	
28 o-Nitrotoluene								
137.1	7.417	7.389	0.028	1.171	122972	11.1	64.4	
29 p-Nitrotoluene								
137.1	7.873	7.875	-0.002	1.243	96905	10.2	44.6	
30 m-Nitrotoluene								
137.1	8.419	8.391	0.028	1.329	69481	10.9	31.8	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

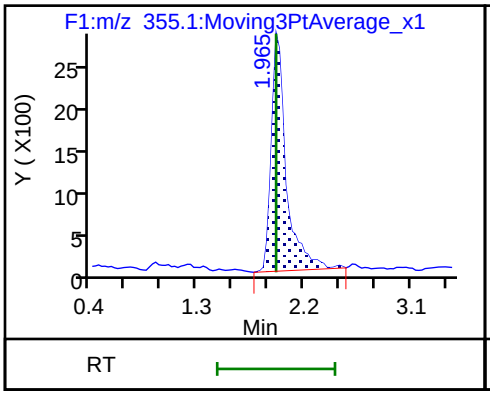
8321NB-D5-cal_00021	Amount Added: 1.00	Units: uL	
8321EXcalprim_00029	Amount Added: 1.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 13-Apr-2022 14:15:53 Chrom Revision: 2.3 18-Mar-2022 09:07:22

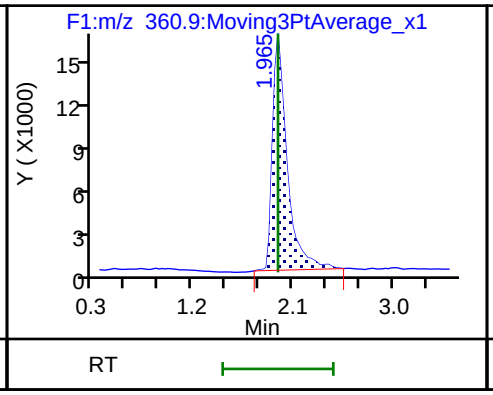
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12004.d
Injection Date: 12-Apr-2022 09:34:21 Instrument ID: LC_LCMS4
Lims ID: STD010
Client ID:
Operator ID: acm ALS Bottle#: 3 Worklist Smp#: 5
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Method: 8321expDuPont Limit Group: LC - 8321A Expl

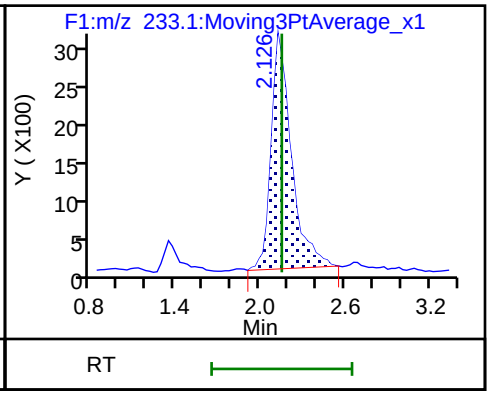
2 HMX



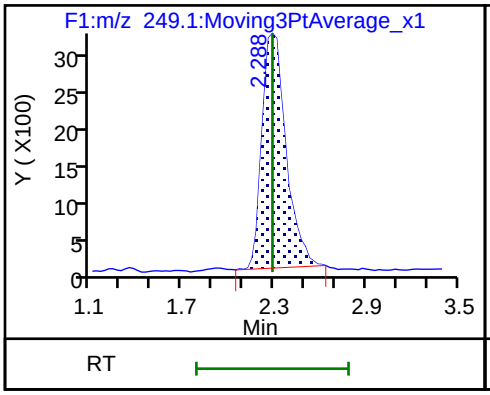
* 1 HMX-13C4



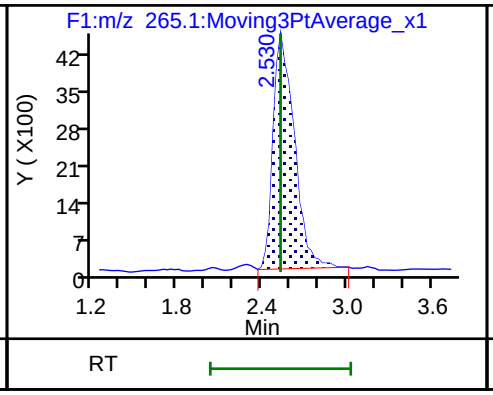
3 TNX



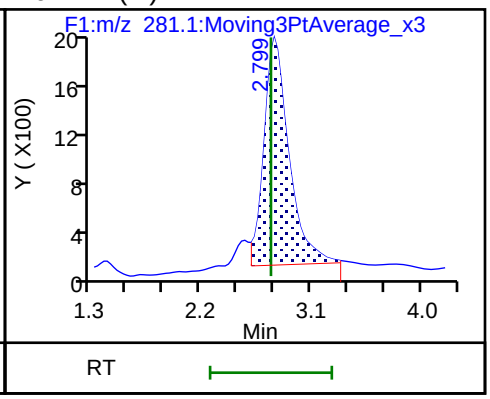
4 DNX



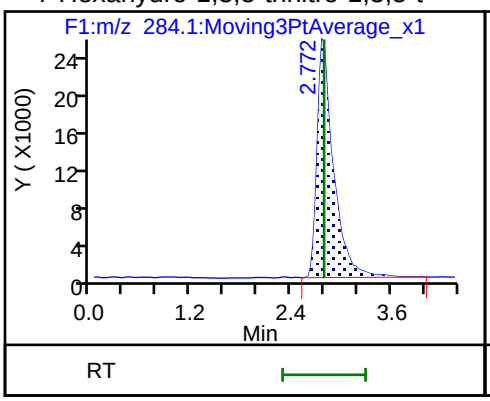
5 MNX



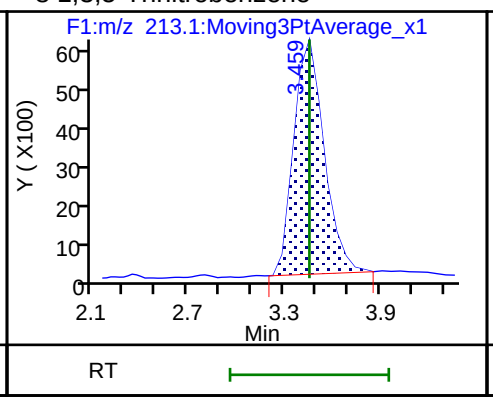
6 RDX (M)



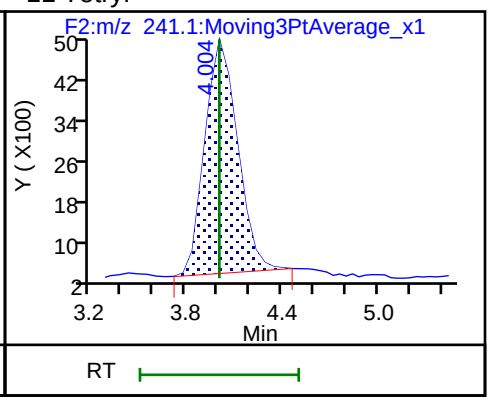
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t



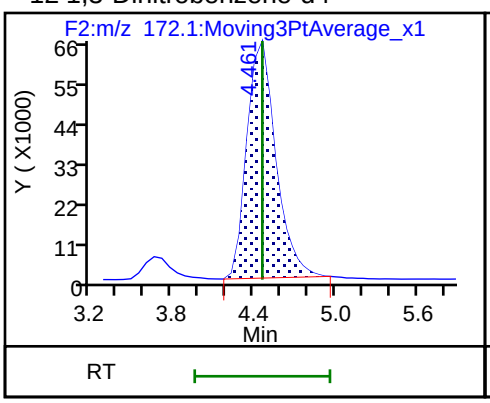
8 1,3,5-Trinitrobenzene



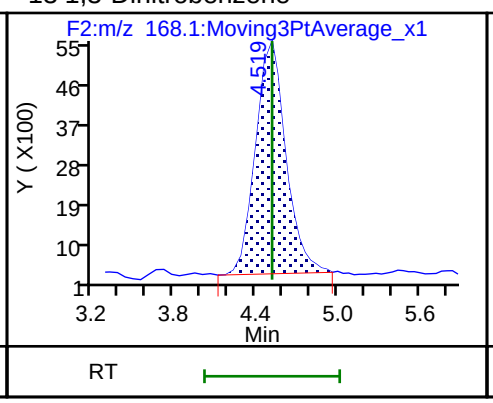
11 Tetryl



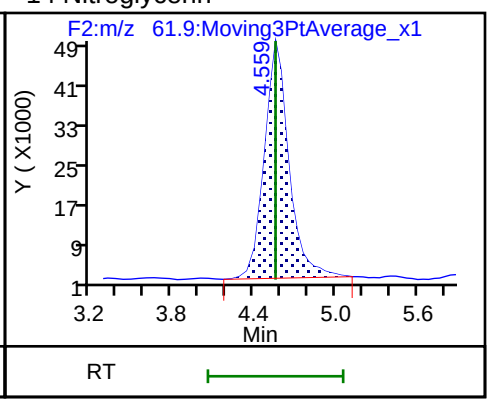
* 12 1,3-Dinitrobenzene-d4



13 1,3-Dinitrobenzene

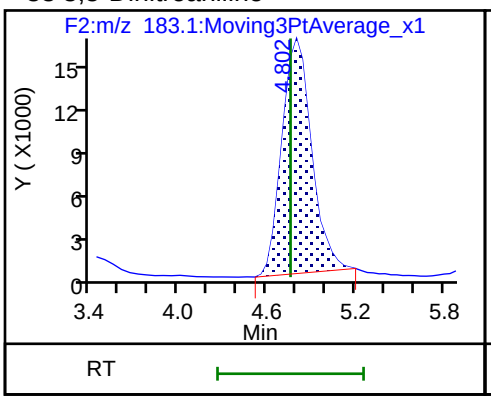


14 Nitroglycerin

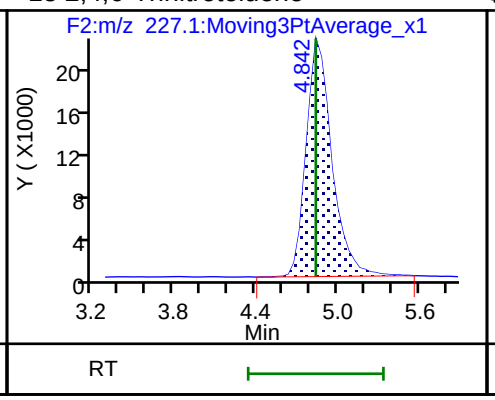


Report Date: 13-Apr-2022 14:15:53 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12004.d

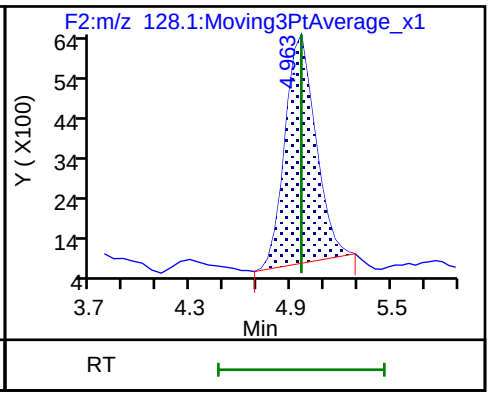
33 3,5-Dinitroaniline



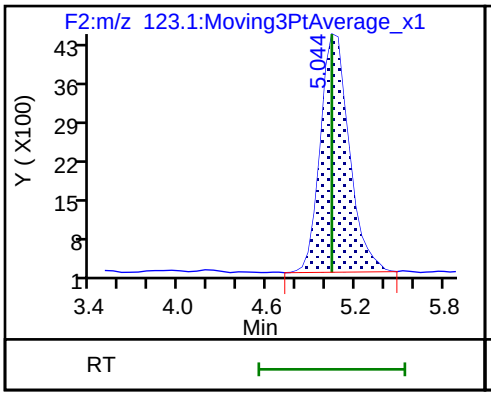
15 2,4,6-Trinitrotoluene



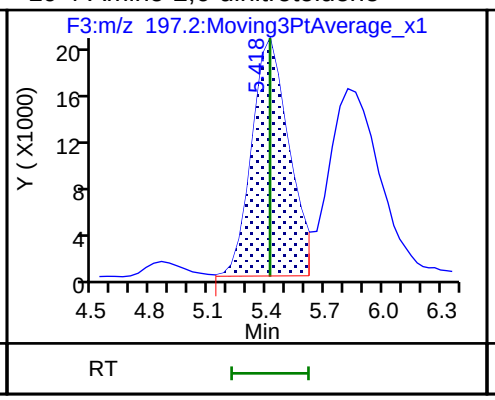
$ 16 Nitrobenzene-d5



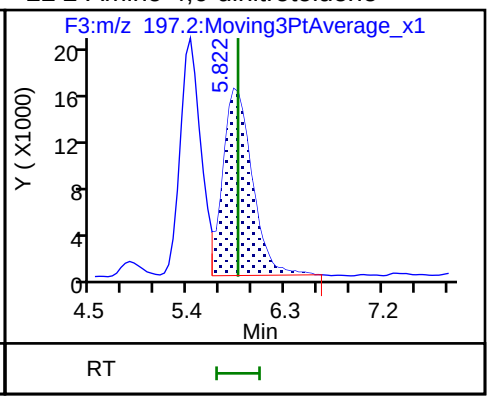
17 Nitrobenzene



19 4-Amino-2,6-dinitrotoluene



22 2-Amino-4,6-dinitrotoluene



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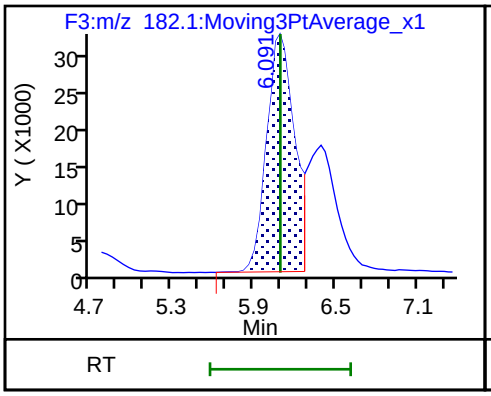
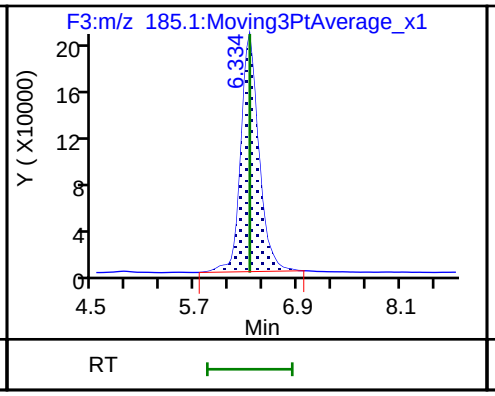
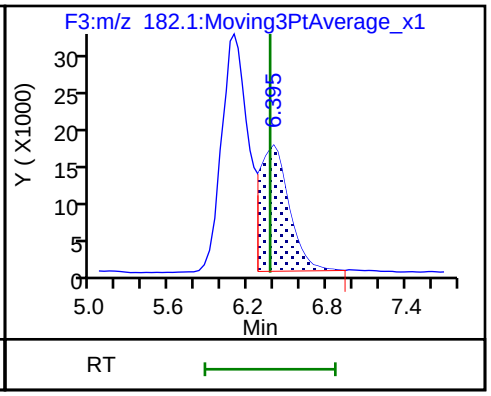


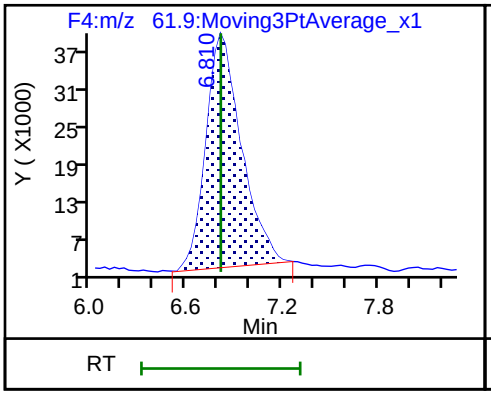
* 24 2,4-dinitrotoluene-d3



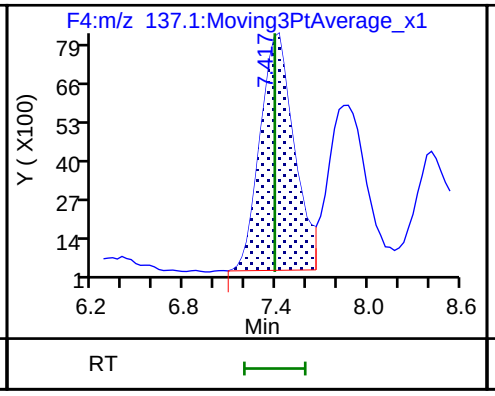
25 2,4-Dinitrotoluene



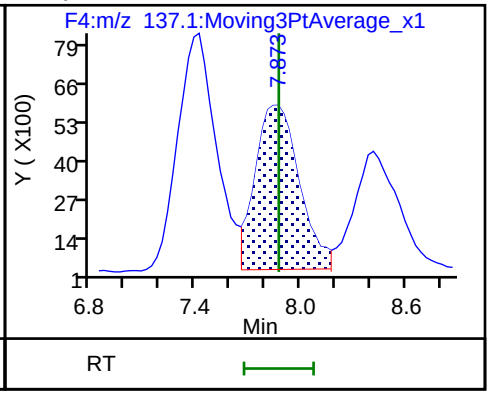
26 PETN



28 o-Nitrotoluene

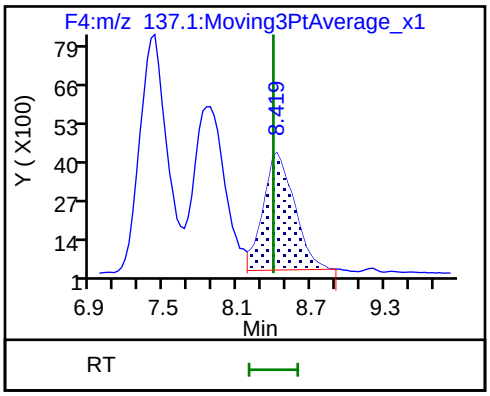


29 p-Nitrotoluene



Report Date: 13-Apr-2022 14:15:53 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12004.d

30 m-Nitrotoluene



Report Date: 13-Apr-2022 14:15:53 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Manual Integration/User Assign Peak Report

Eurofins Denver

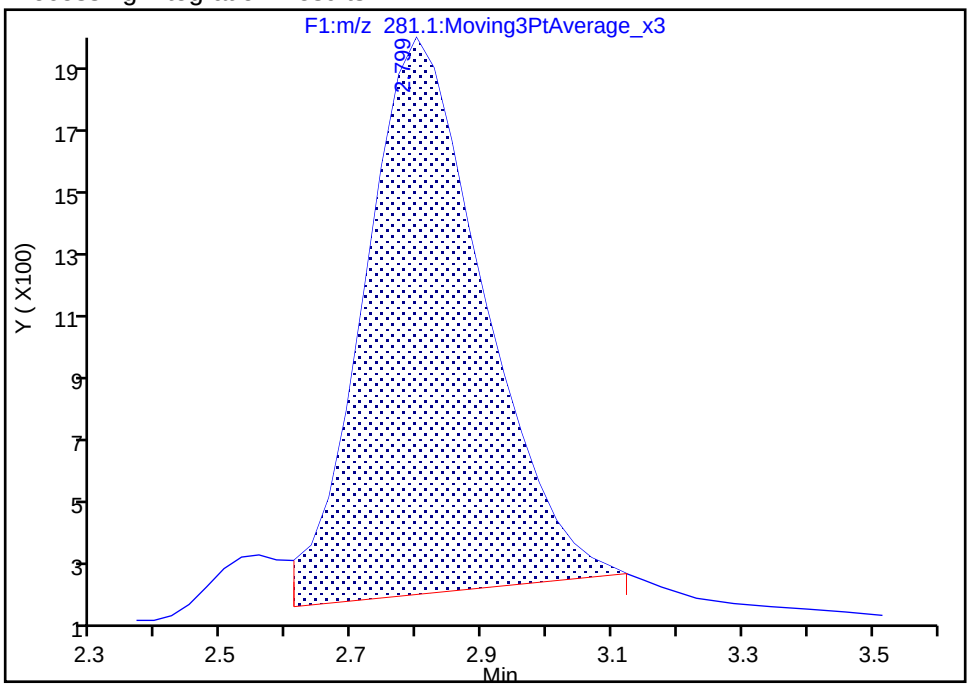
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12004.d
Injection Date: 12-Apr-2022 09:34:21 Instrument ID: LC_LCMS4
Lims ID: STD010
Client ID:
Operator ID: acm ALS Bottle#: 3 Worklist Smp#: 5
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Method: 8321expDuPont Limit Group: LC - 8321A Expl
Column: Detector F1:SIR

6 RDX, CAS: 121-82-4

Signal: 1

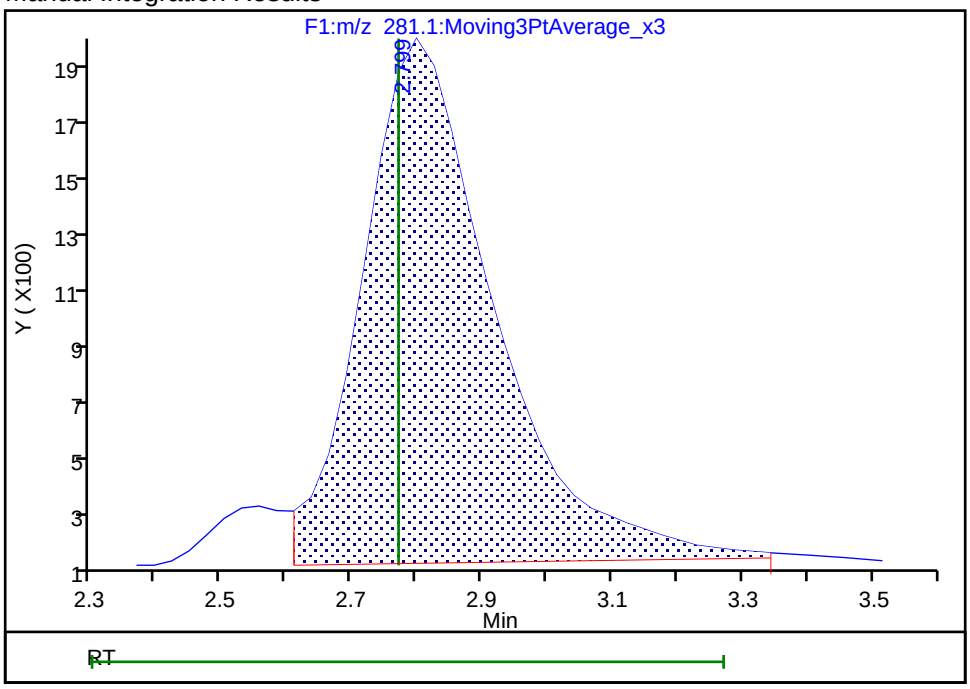
Processing Integration Results

RT: 2.80
Area: 22798
Amount: 9.980809
Amount Units: ug/l



Manual Integration Results

RT: 2.80
Area: 26289
Amount: 10.706171
Amount Units: ug/l



Reviewer: meyera, 13-Apr-2022 13:22:58
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 13-Apr-2022 14:15:54 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12005.d
Lims ID: STD025
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 12-Apr-2022 09:45:52 ALS Bottle#: 4 Worklist Smp#: 6
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 04/08/22EX3 STD025 ug/L
Misc. Info.: 04/08/2022 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4
Sublist: chrom-8321expDuPont*sub15

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\8321expDuPont.m
Limit Group: LC - 8321A Expl
Last Update: 13-Apr-2022 14:15:54 Calib Date: 12-Apr-2022 10:31:58
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d

Column 1 : Det: F1:SIR
Process Host: CTX1683

First Level Reviewer: meyera Date: 13-Apr-2022 13:13:45
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.965	1.964	0.001	1.000	70299	27.4	130	
* 1 HMX-13C4								
360.9	1.965	1.964	0.001		169262	125.0	97.9	
3 TNX								
233.1	2.126	2.153	-0.027	0.767	81677	27.7	138	
4 DNX								
249.1	2.261	2.287	-0.026	0.816	85429	29.0	261	
5 MNX								
265.1	2.557	2.529	0.028	0.922	106186	31.8	172	
6 RDX								M
281.1	2.772	2.772	0.0	1.000	65243	28.7	45.9	M
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.1	2.772	2.798	-0.026		338142	125.0	453	
8 1,3,5-Trinitrobenzene								
213.1	3.459	3.458	0.001	0.775	206706	23.1	187	
11 Tetryl								
241.1	4.004	4.003	0.001	0.897	195606	24.4	103	
* 12 1,3-Dinitrobenzene-d4								
172.1	4.462	4.461	0.001		1109806	129.4	81.3	
13 1,3-Dinitrobenzene								
168.1	4.519	4.518	0.001	1.013	237674	25.8	122	
14 Nitroglycerin								
61.9	4.559	4.558	0.001	1.022	1499245	25.2	172	
33 3,5-Dinitroaniline								
183.1	4.802	4.760	0.042	1.076	751736	25.8	66.0	

Report Date: 13-Apr-2022 14:15:54 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12005.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
15 2,4,6-Trinitrotoluene								
227.1	4.842	4.841	0.001	0.764	781698	25.2	498	
$ 16 Nitrobenzene-d5								
128.1	4.963	4.962	0.001	1.112	208211	26.8	103	
17 Nitrobenzene								
123.1	5.044	5.043	0.001	1.131	157630	26.0	221	
19 4-Amino-2,6-dinitrotoluene								
197.2	5.418	5.417	0.001	0.855	780656	27.6	164	
22 2-Amino-4,6-dinitrotoluene								
197.2	5.863	5.861	0.002	0.926	859160	25.8	151	
23 2,6-Dinitrotoluene								
182.1	6.092	6.094	-0.002	0.962	1199966	25.3	213	
* 24 2,4-dinitrotoluene-d3								
185.1	6.334	6.336	-0.002		2994830	125.0	766	
25 2,4-Dinitrotoluene								
182.1	6.395	6.367	0.028	1.010	617504	23.1	101	
26 PETN								
61.9	6.810	6.812	-0.002	1.075	1296825	22.5	129	
28 o-Nitrotoluene								
137.1	7.387	7.389	-0.002	1.166	246741	21.7	90.4	
29 p-Nitrotoluene								
137.1	7.843	7.875	-0.032	1.238	242436	25.1	73.8	
30 m-Nitrotoluene								
137.1	8.450	8.391	0.059	1.334	166167	25.3	51.4	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

8321NB-D5-cal_00021	Amount Added: 2.50	Units: uL	
8321EXcalprim_00029	Amount Added: 2.50	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 13-Apr-2022 14:15:54 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12005.d

Injection Date: 12-Apr-2022 09:45:52 Instrument ID: LC_LCMS4

Lims ID: STD025

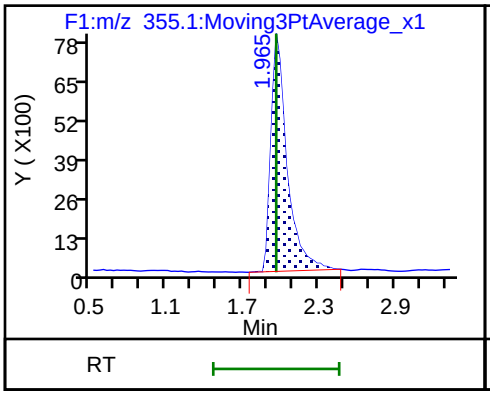
Client ID:

Operator ID: acm ALS Bottle#: 4 Worklist Smp#: 6

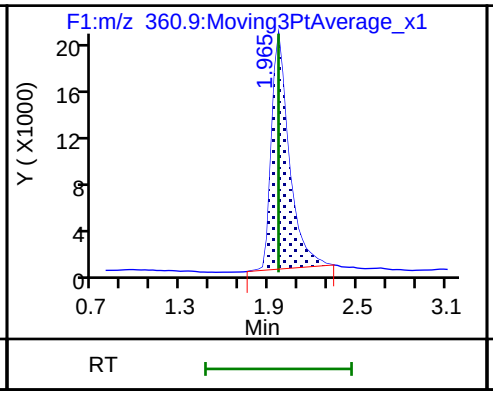
Injection Vol: 40.0 ul Dil. Factor: 1.0000

Method: 8321expDuPont Limit Group: LC - 8321A Expl

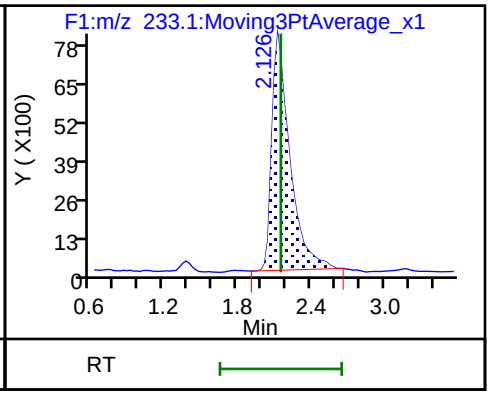
2 HMX



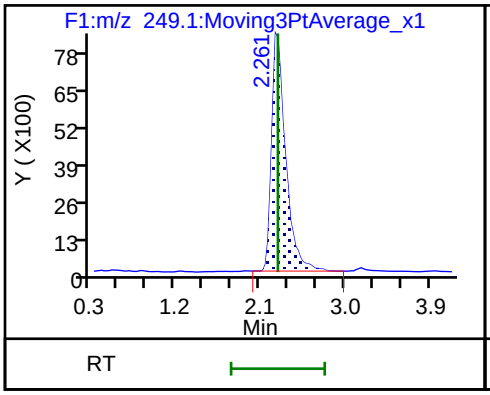
* 1 HMX-13C4



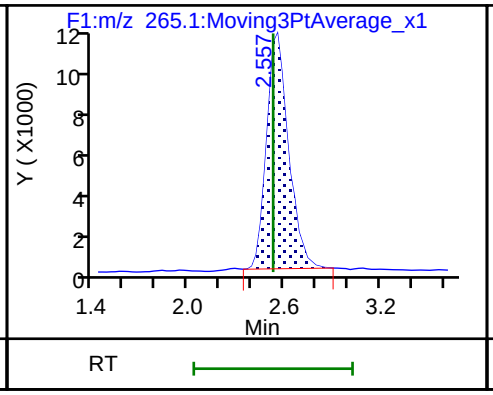
3 TNX



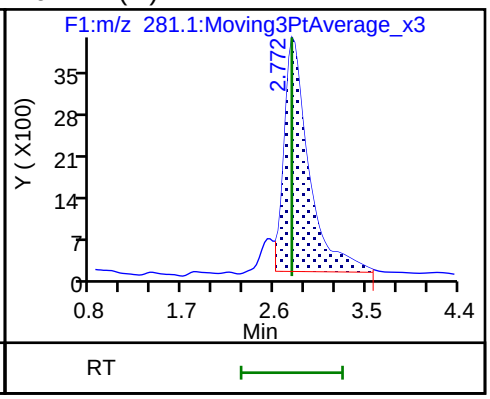
4 DNX



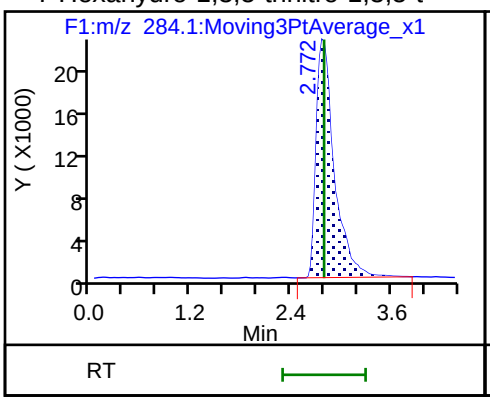
5 MNX



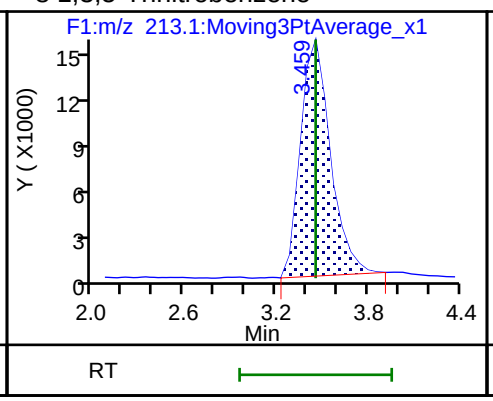
6 RDX (M)



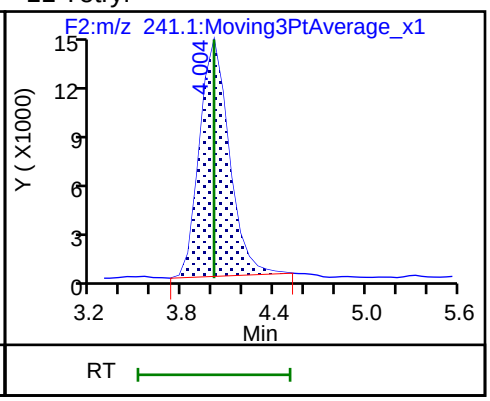
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t



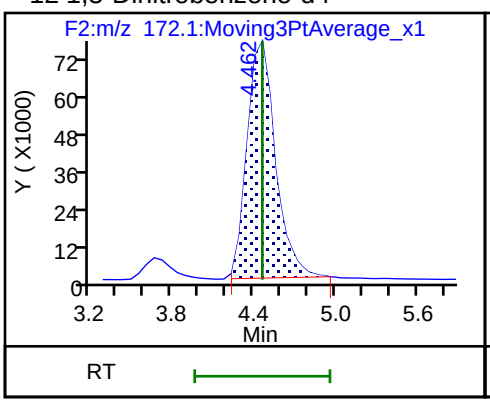
8 1,3,5-Trinitrobenzene



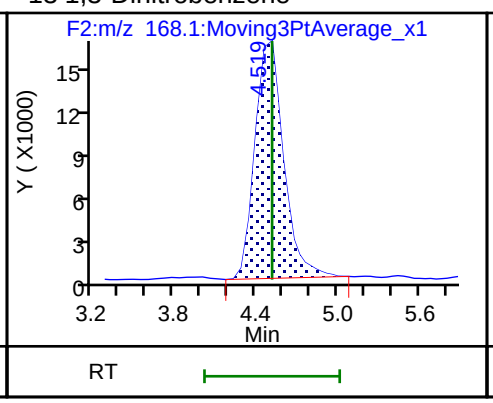
11 Tetryl



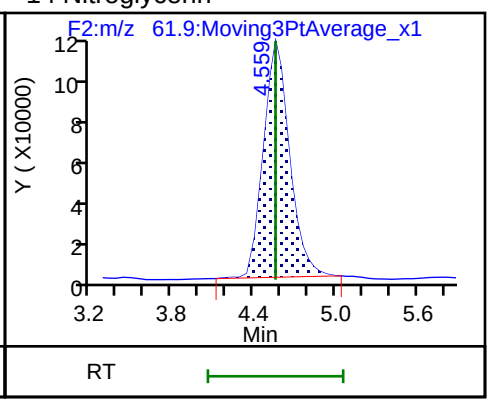
* 12 1,3-Dinitrobenzene-d4



13 1,3-Dinitrobenzene

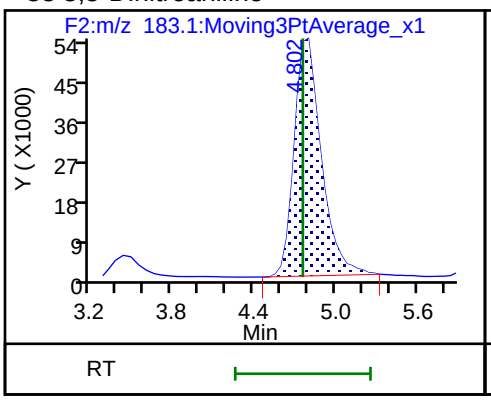


14 Nitroglycerin

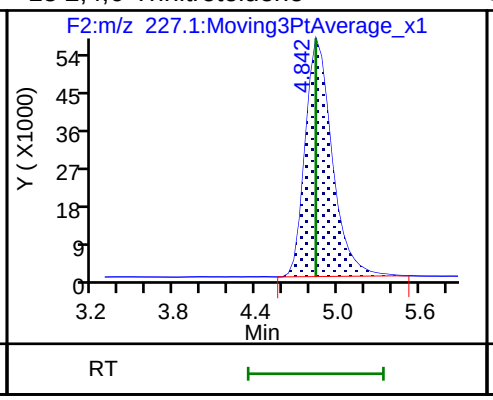


Report Date: 13-Apr-2022 14:15:54 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12005.d

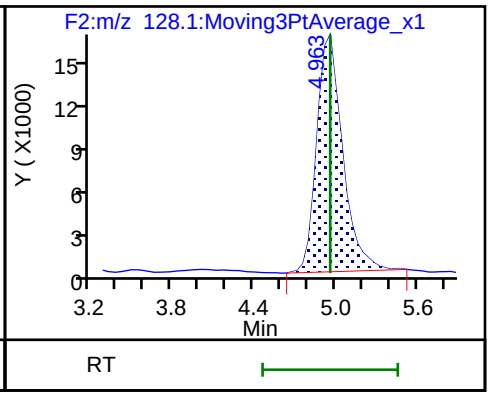
33 3,5-Dinitroaniline



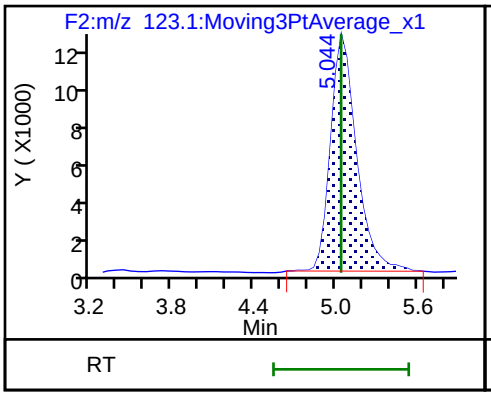
15 2,4,6-Trinitrotoluene



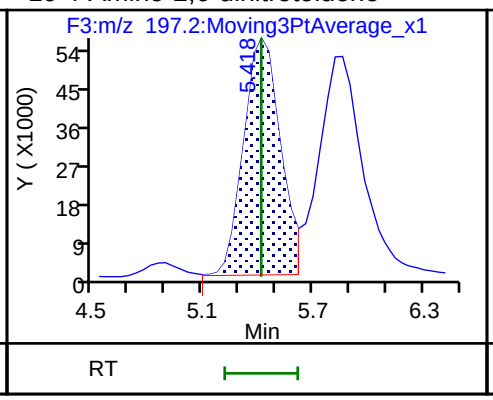
$ 16 Nitrobenzene-d5



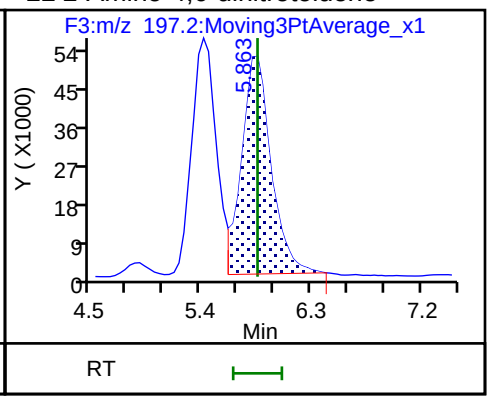
17 Nitrobenzene



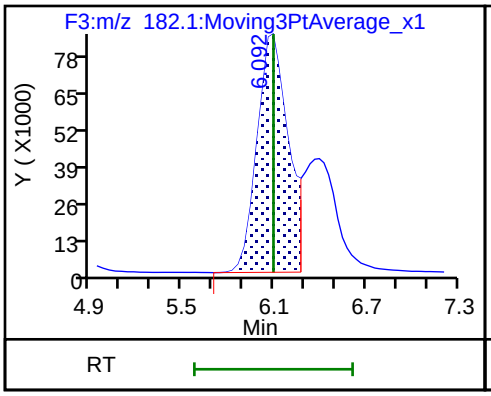
19 4-Amino-2,6-dinitrotoluene



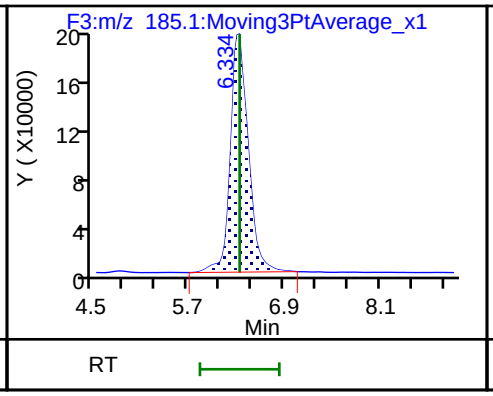
22 2-Amino-4,6-dinitrotoluene



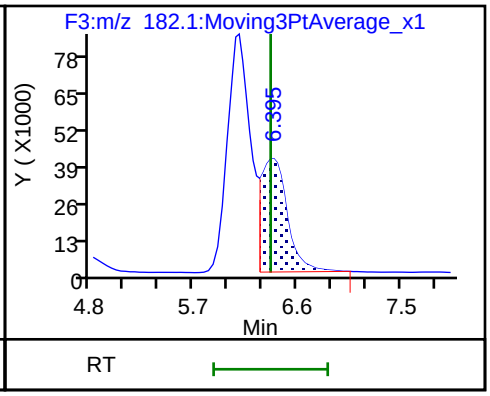
23 2,6-Dinitrotoluene



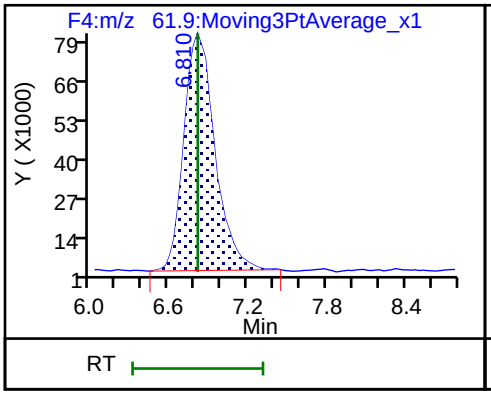
* 24 2,4-dinitrotoluene-d3



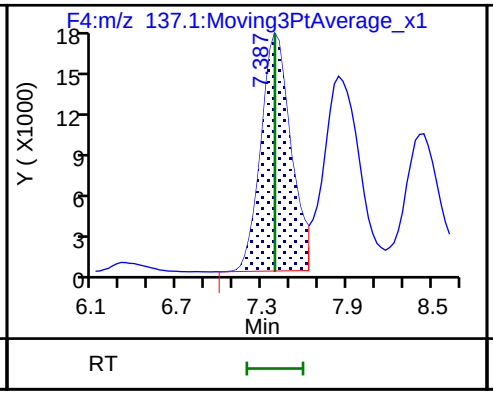
25 2,4-Dinitrotoluene



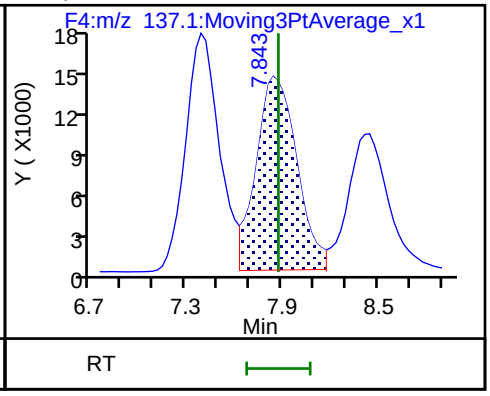
26 PETN



28 o-Nitrotoluene

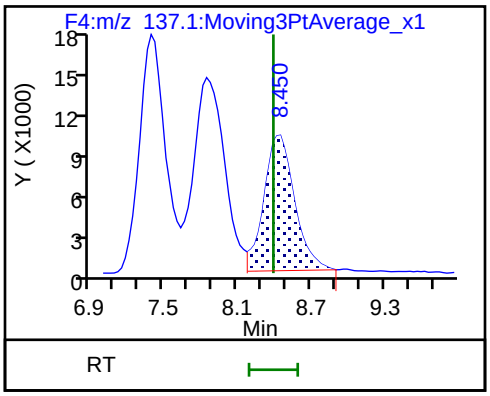


29 p-Nitrotoluene



Report Date: 13-Apr-2022 14:15:54 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12005.d

30 m-Nitrotoluene



Report Date: 13-Apr-2022 14:15:54 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12005.d

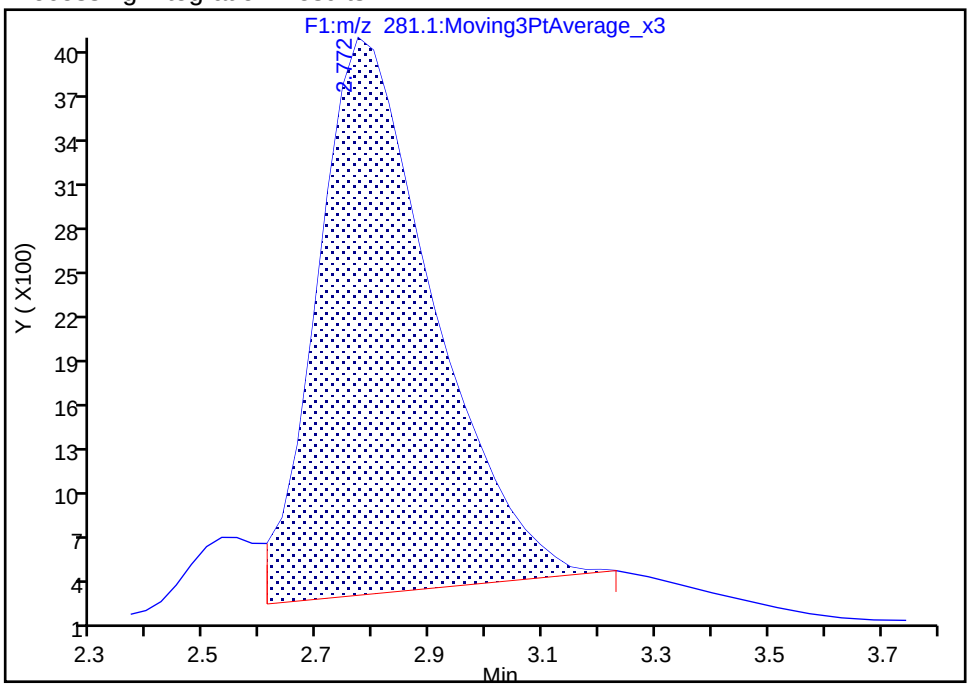
Injection Date:	12-Apr-2022 09:45:52	Instrument ID:	LC_LCMS4
Lims ID:	STD025		
Client ID:			
Operator ID:	acm	ALS Bottle#:	4 Worklist Smp#: 6
Injection Vol:	40.0 ul	Dil. Factor:	1.0000
Method:	8321expDuPont	Limit Group:	LC - 8321A Expl
Column:		Detector	F1:SIR

6 RDX, CAS: 121-82-4

Signal: 1

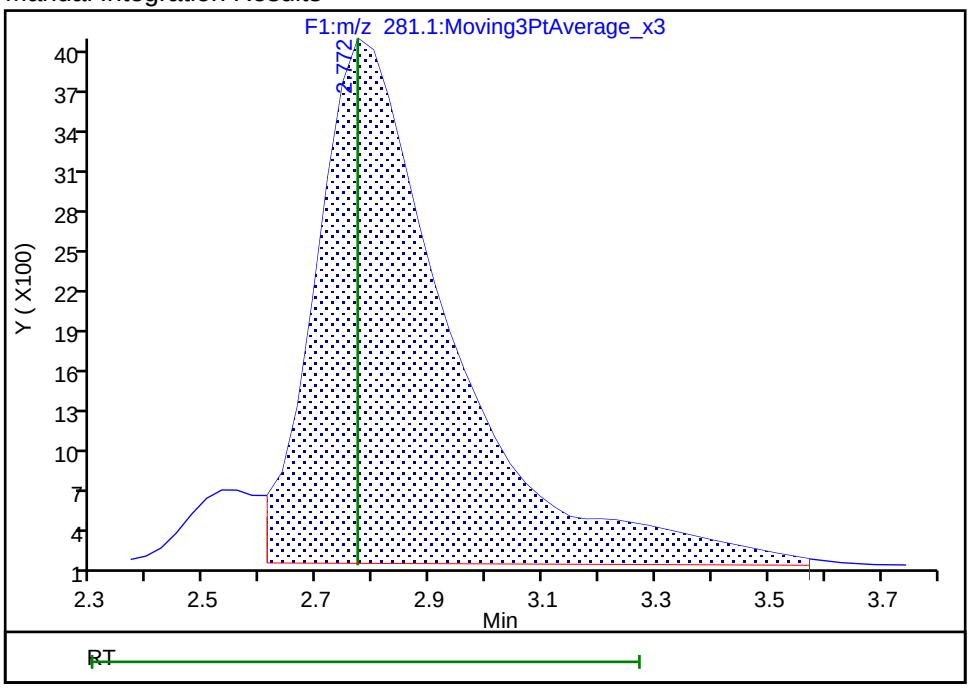
Processing Integration Results

RT: 2.77
Area: 53505
Amount: 27.181952
Amount Units: ug/l



Manual Integration Results

RT: 2.77
Area: 65243
Amount: 28.664960
Amount Units: ug/l



Reviewer: meyera, 13-Apr-2022 13:22:38

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 13-Apr-2022 14:15:55 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12006.d
Lims ID: STD050
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 12-Apr-2022 09:57:24 ALS Bottle#: 5 Worklist Smp#: 7
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 04/08/22EX4 STD050 ug/L
Misc. Info.: 04/08/2022 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4
Sublist: chrom-8321expDuPont*sub15

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\8321expDuPont.m
Limit Group: LC - 8321A Expl
Last Update: 13-Apr-2022 14:15:55 Calib Date: 12-Apr-2022 10:31:58
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d

Column 1 : Det: F1:SIR
Process Host: CTX1683

First Level Reviewer: meyera Date: 13-Apr-2022 13:13:32
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.965	1.964	0.001	1.000	119551	53.9	181	
* 1 HMX-13C4								
360.9	1.965	1.964	0.001		151381	125.0	79.9	
3 TNX								
233.1	2.126	2.153	-0.027	0.767	140747	56.4	215	
4 DNX								
249.1	2.288	2.287	0.001	0.825	133742	55.0	291	
5 MNX								
265.1	2.530	2.529	0.001	0.913	166830	59.6	144	
6 RDX								
281.1	2.799	2.772	0.027	1.010	130944	51.9	86.4	
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.1	2.772	2.798	-0.026		390602	125.0	392	
8 1,3,5-Trinitrobenzene								
213.1	3.459	3.458	0.001	0.775	396614	48.2	463	
11 Tetryl								
241.1	4.004	4.003	0.001	0.897	353902	48.7	379	
* 12 1,3-Dinitrobenzene-d4								
172.1	4.462	4.461	0.001		1006973	129.4	82.5	
13 1,3-Dinitrobenzene								
168.1	4.462	4.518	-0.056	1.000	418231	50.1	117	
14 Nitroglycerin								
61.9	4.559	4.558	0.001	1.022	2953141	56.8	247	
33 3,5-Dinitroaniline								
183.1	4.802	4.760	0.042	1.076	1127941	42.5	59.6	

Report Date: 13-Apr-2022 14:15:55 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12006.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
15 2,4,6-Trinitrotoluene								
227.1	4.842	4.841	0.001	0.764	1365220	48.9	633	
$ 16 Nitrobenzene-d5								
128.1	4.923	4.962	-0.039	1.103	340130	49.3	290	
17 Nitrobenzene								
123.1	5.044	5.043	0.001	1.131	259034	48.0	327	
19 4-Amino-2,6-dinitrotoluene								
197.2	5.418	5.417	0.001	0.855	1176566	49.2	129	
22 2-Amino-4,6-dinitrotoluene								
197.2	5.862	5.861	0.001	0.926	1365012	48.5	126	
23 2,6-Dinitrotoluene								
182.1	6.091	6.094	-0.003	0.962	2075070	51.4	189	
* 24 2,4-dinitrotoluene-d3								
185.1	6.334	6.336	-0.002		2562270	125.0	602	
25 2,4-Dinitrotoluene								
182.1	6.365	6.367	-0.002	1.005	1091440	47.4	100	
26 PETN								
61.9	6.840	6.812	0.028	1.080	2595252	53.7	166	
28 o-Nitrotoluene								
137.1	7.387	7.389	-0.002	1.166	489916	50.1	160	
29 p-Nitrotoluene								
137.1	7.873	7.875	-0.002	1.243	423467	51.3	132	
30 m-Nitrotoluene								
137.1	8.419	8.391	0.028	1.329	290510	51.5	81.7	

QC Flag Legend

Processing Flags

Reagents:

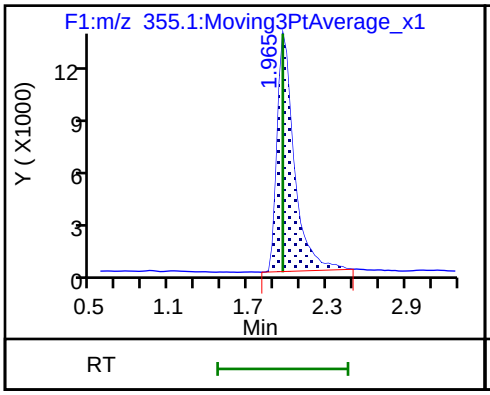
8321NB-D5-cal_00021	Amount Added: 5.00	Units: uL	
8321EXcalprim_00029	Amount Added: 5.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 13-Apr-2022 14:15:55 Chrom Revision: 2.3 18-Mar-2022 09:07:22

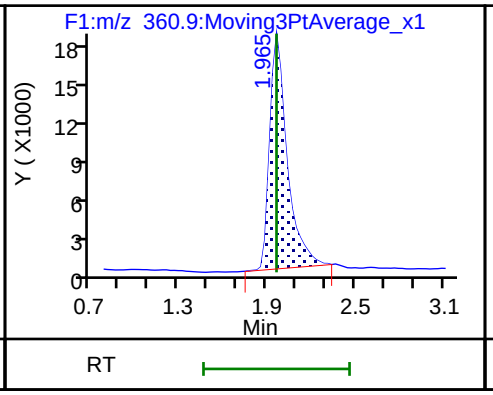
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12006.d
Injection Date: 12-Apr-2022 09:57:24 Instrument ID: LC_LCMS4
Lims ID: STD050
Client ID:
Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 7
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Method: 8321expDuPont Limit Group: LC - 8321A Expl

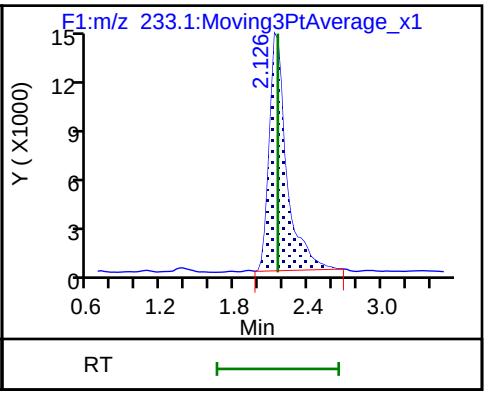
2 HMX



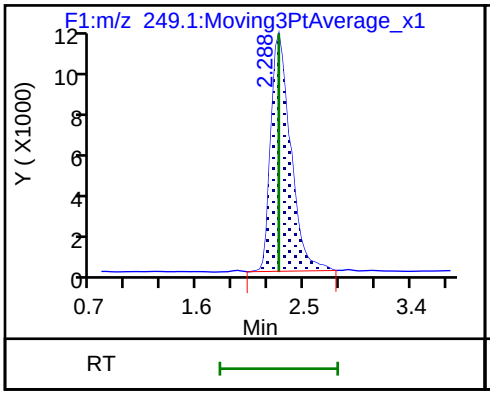
* 1 HMX-13C4



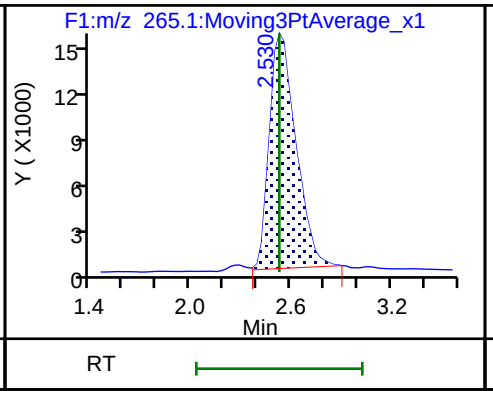
3 TNX



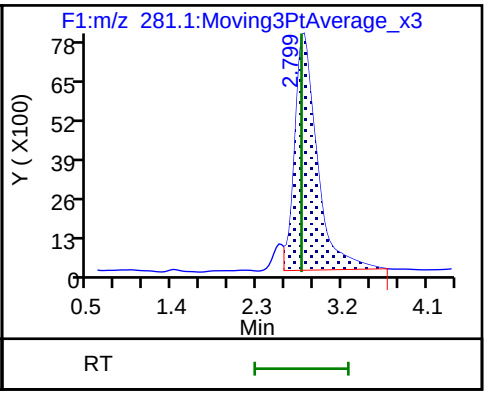
4 DNX



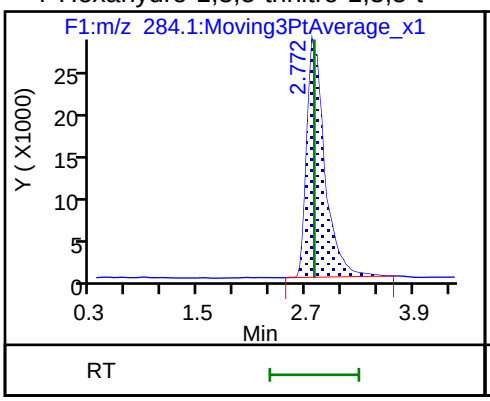
5 MNX



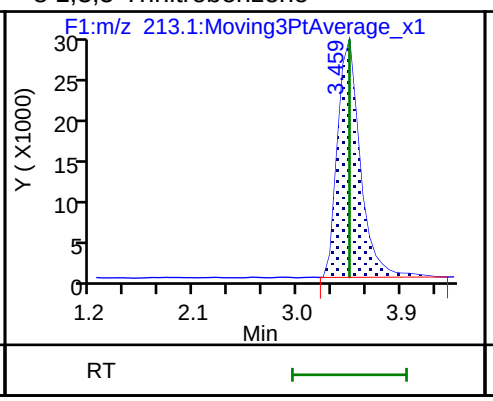
6 RDX



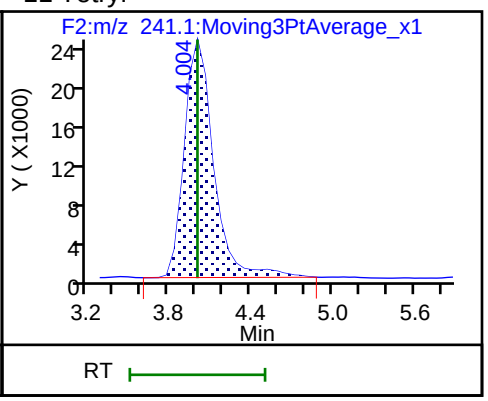
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t



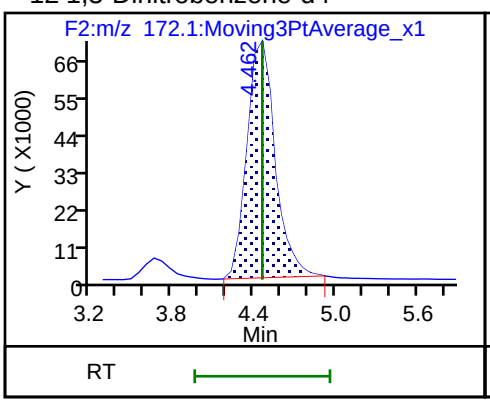
8 1,3,5-Trinitrobenzene



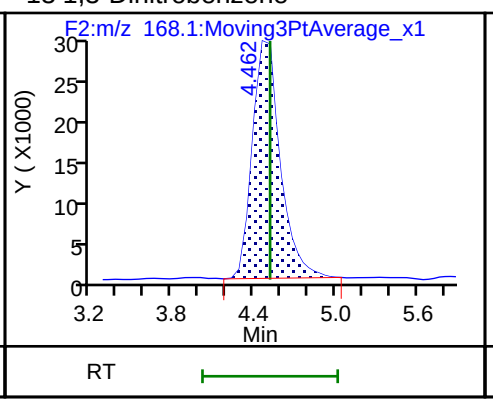
11 Tetryl



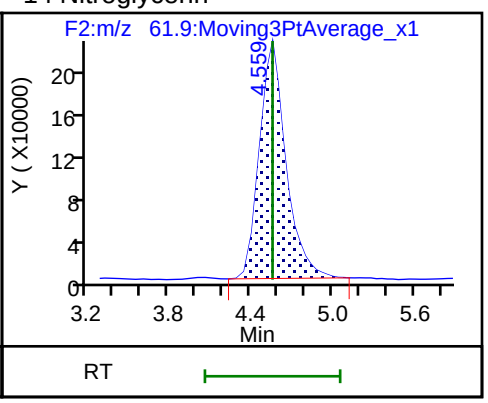
* 12 1,3-Dinitrobenzene-d4



13 1,3-Dinitrobenzene

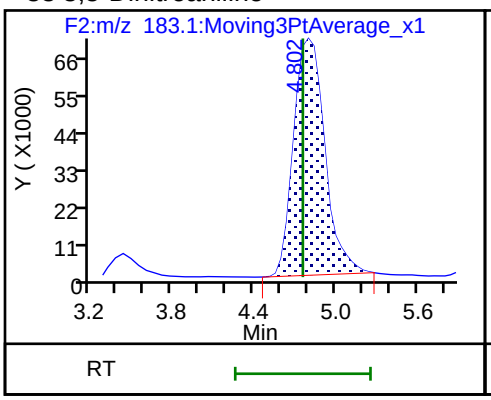


14 Nitroglycerin

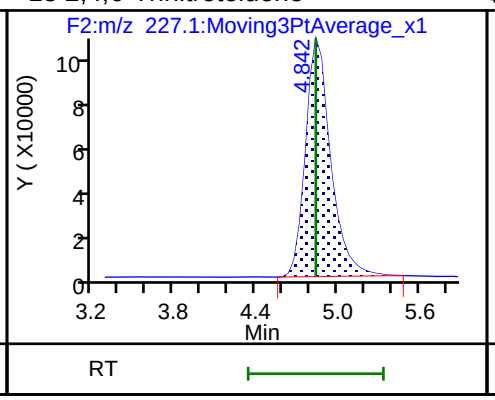


Report Date: 13-Apr-2022 14:15:55 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12006.d

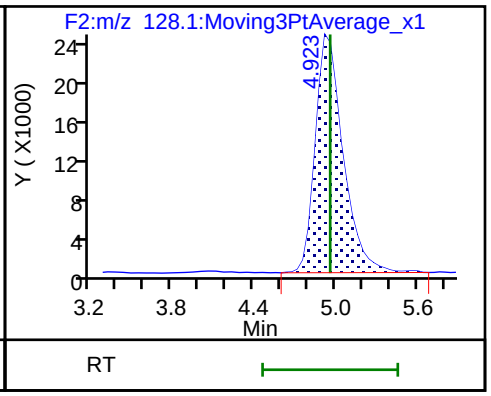
33 3,5-Dinitroaniline



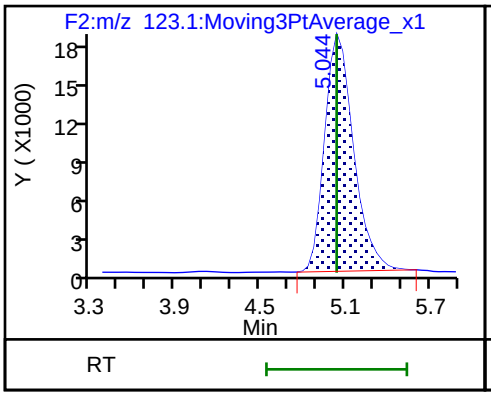
15 2,4,6-Trinitrotoluene



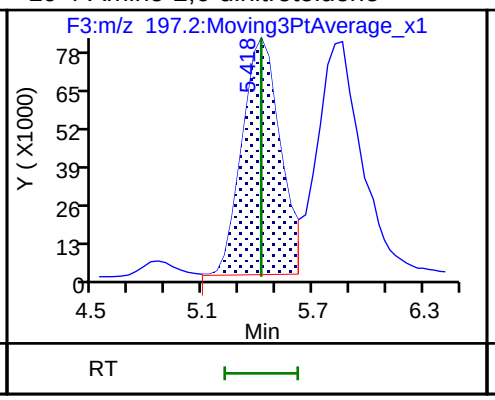
$ 16 Nitrobenzene-d5



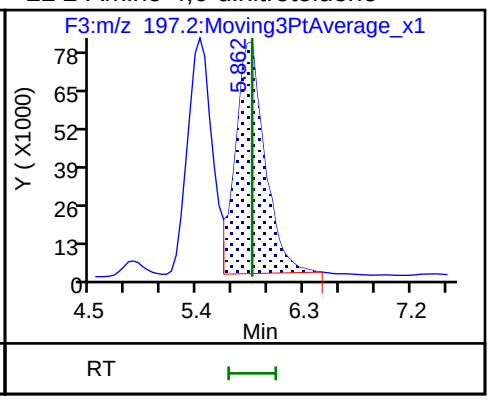
17 Nitrobenzene



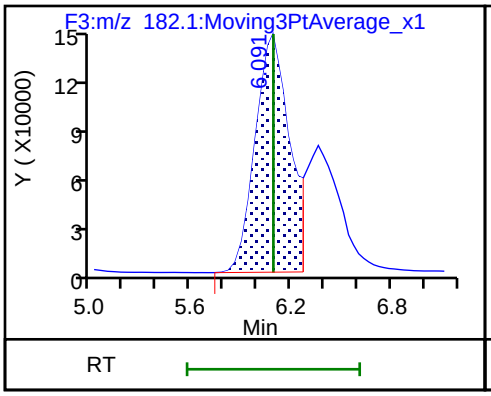
19 4-Amino-2,6-dinitrotoluene



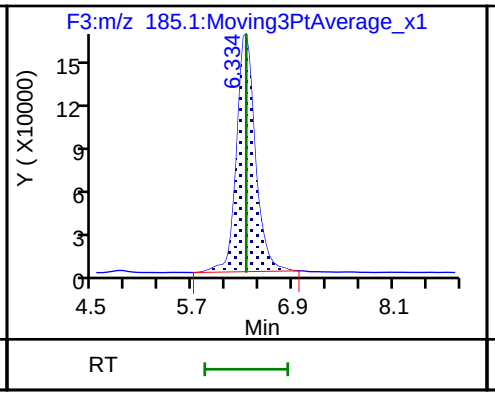
22 2-Amino-4,6-dinitrotoluene



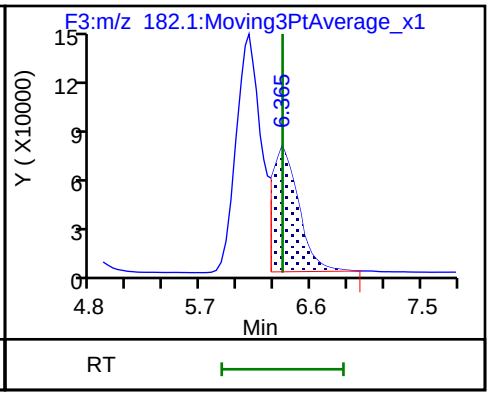
23 2,6-Dinitrotoluene



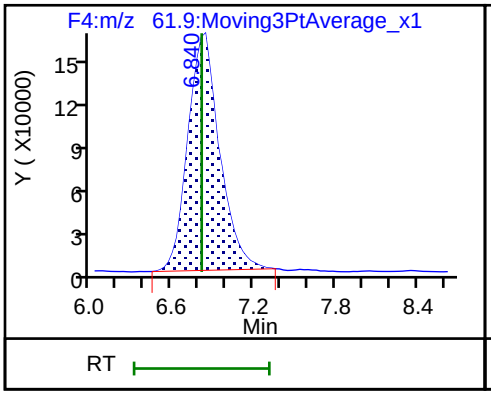
* 24 2,4-dinitrotoluene-d3



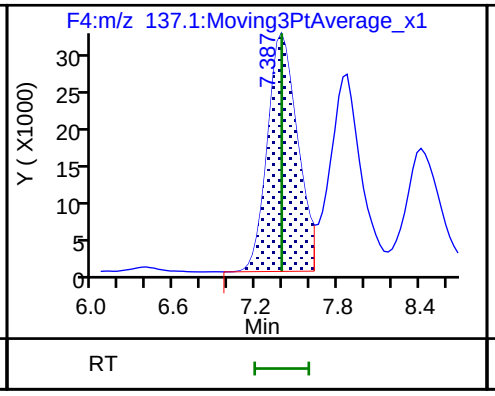
25 2,4-Dinitrotoluene



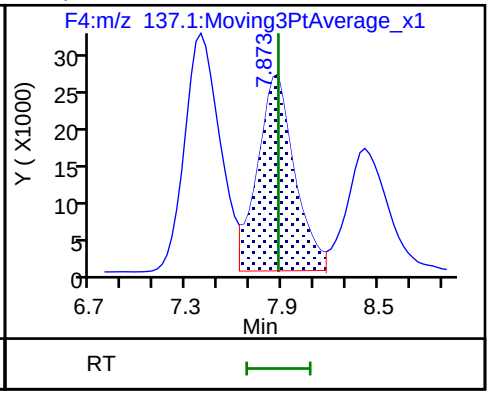
26 PETN



28 o-Nitrotoluene



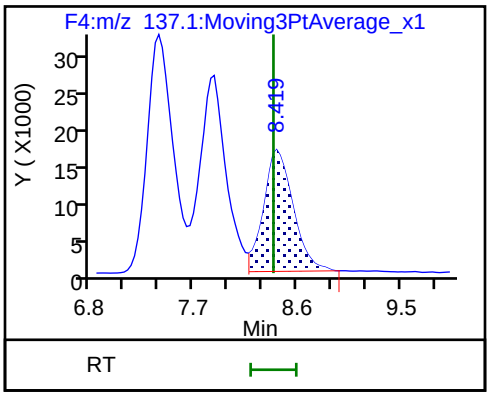
29 p-Nitrotoluene



Report Date: 13-Apr-2022 14:15:55 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12006.d

30 m-Nitrotoluene



Report Date: 13-Apr-2022 14:15:57 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12007.d
Lims ID: STD100
Client ID:
Sample Type: ICISAV Calib Level: 5
Inject. Date: 12-Apr-2022 10:08:55 ALS Bottle#: 6 Worklist Smp#: 8
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 04/08/22EX5 STD100 ug/L
Misc. Info.: 04/08/2022 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4
Sublist: chrom-8321expDuPont*sub15

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\8321expDuPont.m
Limit Group: LC - 8321A Expl
Last Update: 13-Apr-2022 14:15:57 Calib Date: 12-Apr-2022 10:31:58
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d

Column 1 : Det: F1:SIR
Process Host: CTX1683

First Level Reviewer: meyera Date: 13-Apr-2022 13:09:15
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.964	1.964	0.0	1.000	211019	103.0	247	
* 1 HMX-13C4								
360.9	1.964	1.964	0.0		142220	125.0	80.2	
3 TNX								
233.1	2.153	2.153	0.0	0.769	249143	109.1	377	
4 DNX								
249.1	2.287	2.287	0.0	0.817	203676	92.6	339	
5 MNX								
265.1	2.529	2.529	0.0	0.904	274006	108.0	279	
6 RDX								M
281.1	2.772	2.772	0.0	0.990	230193	98.9	101	M
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.1	2.798	2.798	0.0		385101	125.0	540	
8 1,3,5-Trinitrobenzene								
213.1	3.458	3.458	0.0	0.775	887238	96.0	875	
11 Tetryl								
241.1	4.003	4.003	0.0	0.897	829355	102.4	522	
* 12 1,3-Dinitrobenzene-d4								
172.1	4.461	4.461	0.0		1122800	129.4	76.0	
13 1,3-Dinitrobenzene								
168.1	4.518	4.518	0.0	1.013	952661	102.4	119	
14 Nitroglycerin								
61.9	4.558	4.558	0.0	1.022	5819162	101.8	316	
33 3,5-Dinitroaniline								
183.1	4.760	4.760	0.0	1.067	3033185	107.1	80.8	

Report Date: 13-Apr-2022 14:15:57 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12007.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
15 2,4,6-Trinitrotoluene								
227.1	4.841	4.841	0.0	0.764	3237171	104.5	809	
$ 16 Nitrobenzene-d5								
128.1	4.962	4.962	0.0	1.112	781386	103.0	209	
17 Nitrobenzene								
123.1	5.043	5.043	0.0	1.131	610428	102.6	754	
19 4-Amino-2,6-dinitrotoluene								
197.2	5.417	5.417	0.0	0.855	2932454	104.7	150	
22 2-Amino-4,6-dinitrotoluene								
197.2	5.861	5.861	0.0	0.925	3768666	114.1	165	
23 2,6-Dinitrotoluene								
182.1	6.094	6.094	0.0	0.962	4648724	97.6	239	
* 24 2,4-dinitrotoluene-d3								
185.1	6.336	6.336	0.0		3028792	125.0	529	
25 2,4-Dinitrotoluene								
182.1	6.367	6.367	0.0	1.005	2787928	102.1	124	
26 PETN								
61.9	6.812	6.812	0.0	1.075	5796488	102.1	423	
28 o-Nitrotoluene								
137.1	7.389	7.389	0.0	1.166	1143752	98.8	245	
29 p-Nitrotoluene								
137.1	7.875	7.875	0.0	1.243	929614	95.3	180	
30 m-Nitrotoluene								
137.1	8.391	8.391	0.0	1.324	604952	90.7	114	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

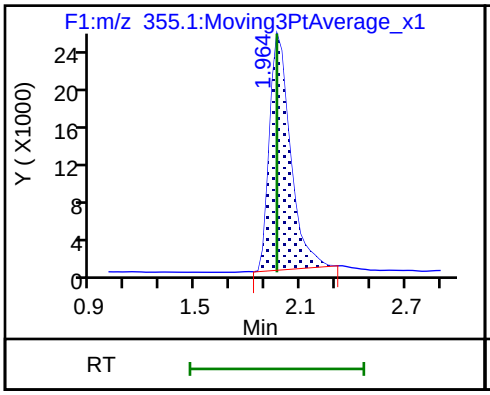
8321NB-D5-cal_00021	Amount Added: 10.00	Units: uL	
8321EXcalprim_00029	Amount Added: 10.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 13-Apr-2022 14:15:57 Chrom Revision: 2.3 18-Mar-2022 09:07:22

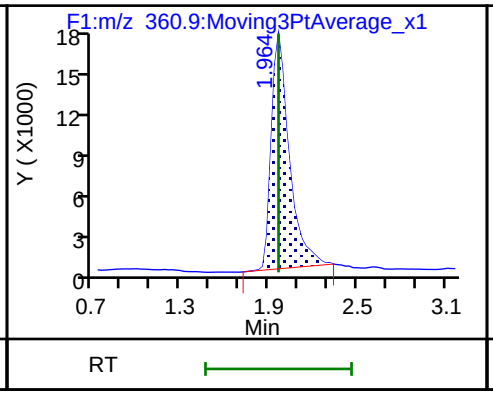
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12007.d
Injection Date: 12-Apr-2022 10:08:55 Instrument ID: LC_LCMS4
Lims ID: STD100
Client ID:
Operator ID: acm ALS Bottle#: 6 Worklist Smp#: 8
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Method: 8321expDuPont Limit Group: LC - 8321A Expl

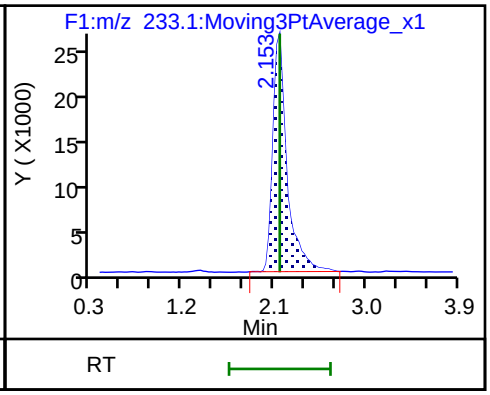
2 HMX



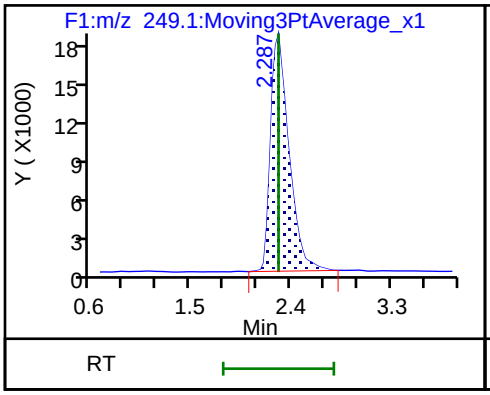
* 1 HMX-13C4



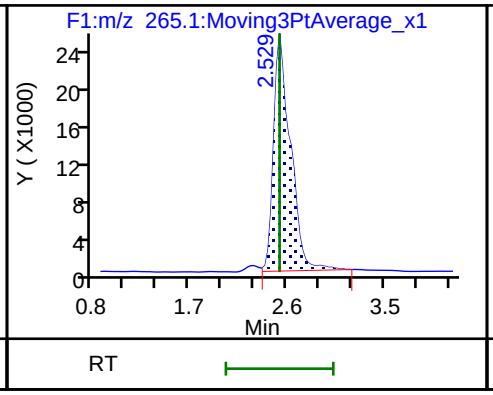
3 TNX



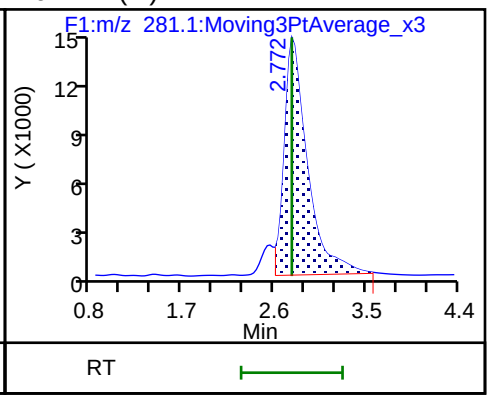
4 DNX



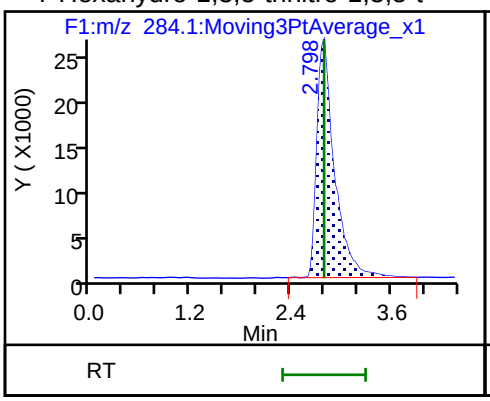
5 MNX



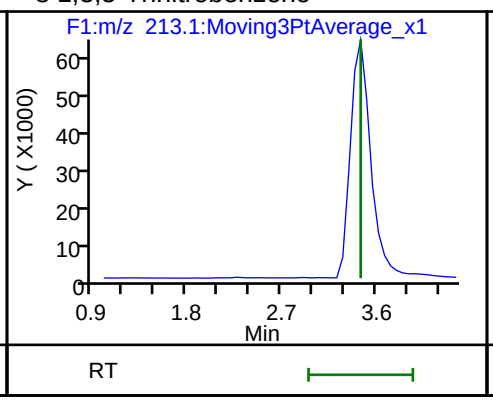
6 RDX (M)



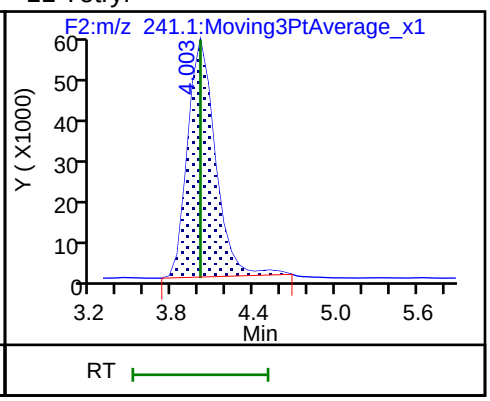
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t



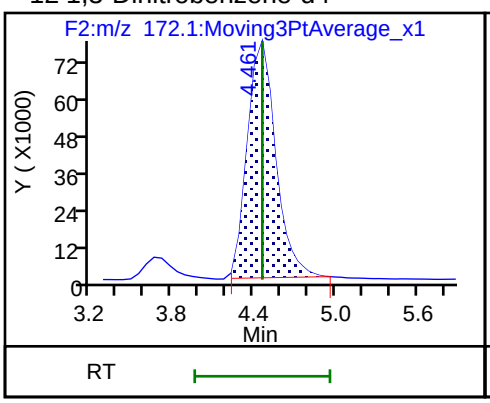
8 1,3,5-Trinitrobenzene



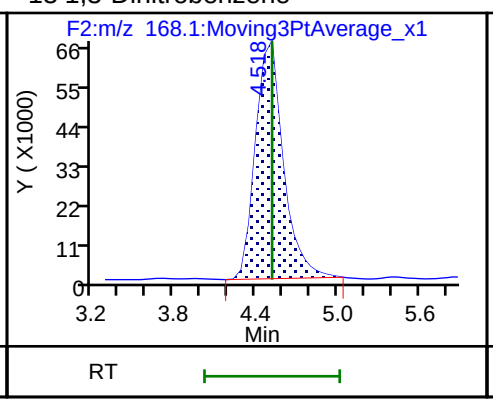
11 Tetryl



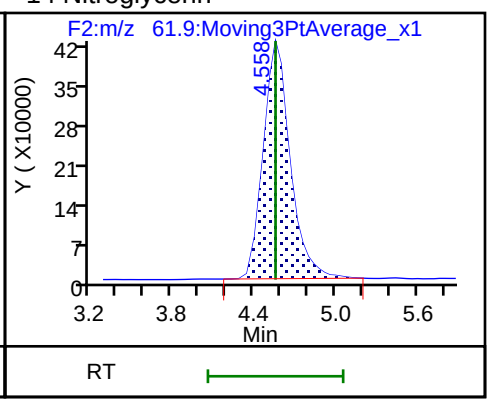
* 12 1,3-Dinitrobenzene-d4



13 1,3-Dinitrobenzene

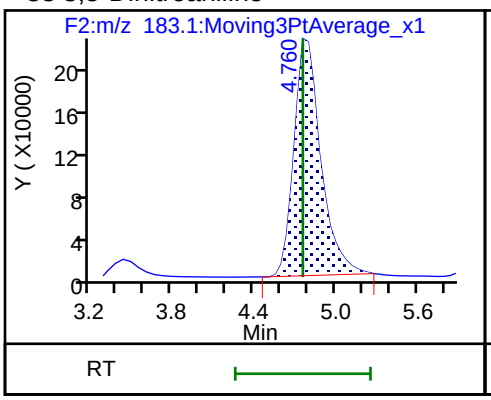


14 Nitroglycerin

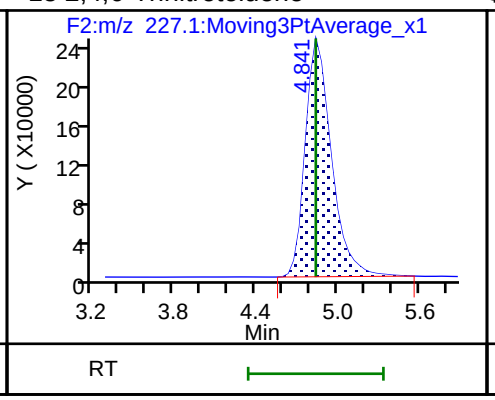


Report Date: 13-Apr-2022 14:15:57 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12007.d

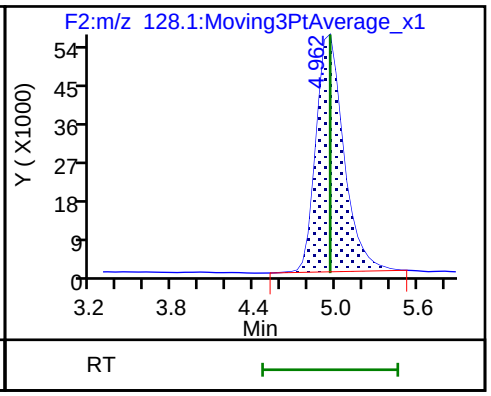
33 3,5-Dinitroaniline



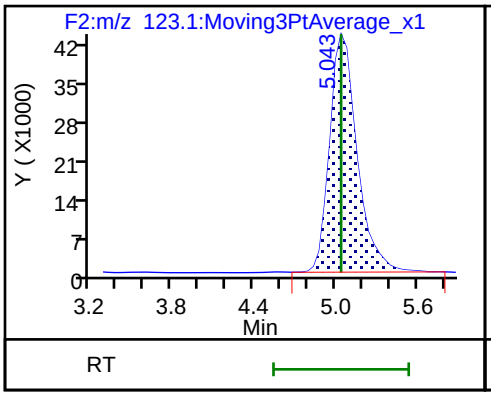
15 2,4,6-Trinitrotoluene



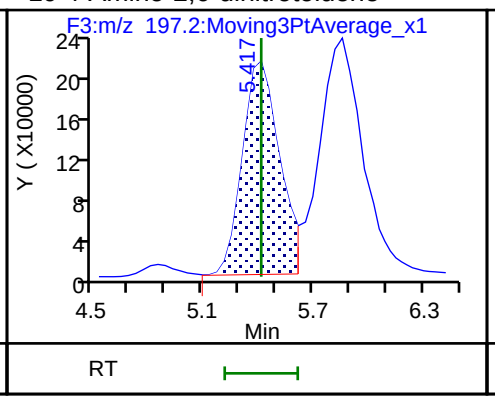
$ 16 Nitrobenzene-d5



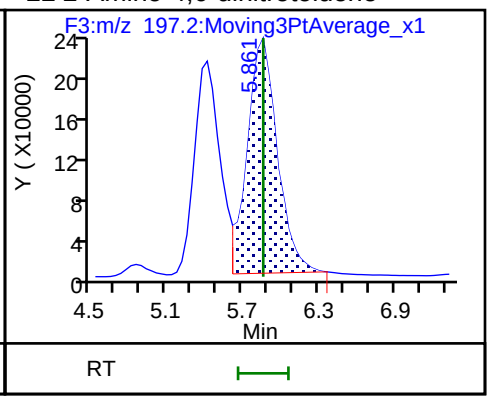
17 Nitrobenzene



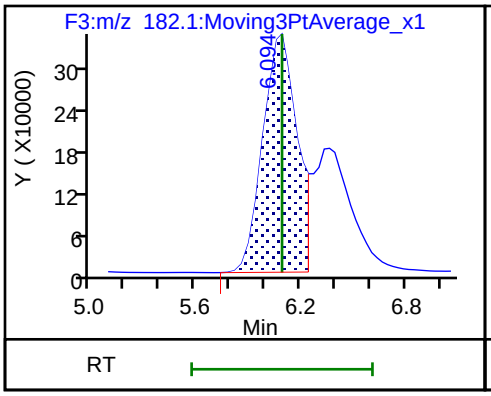
19 4-Amino-2,6-dinitrotoluene



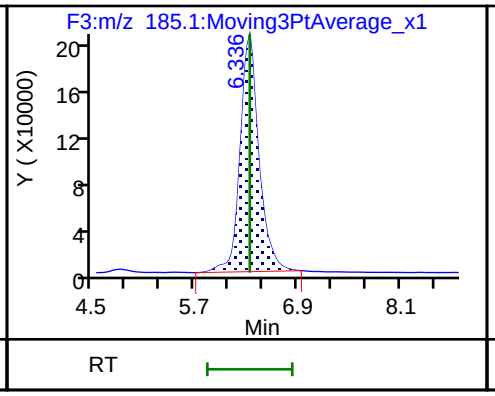
22 2-Amino-4,6-dinitrotoluene



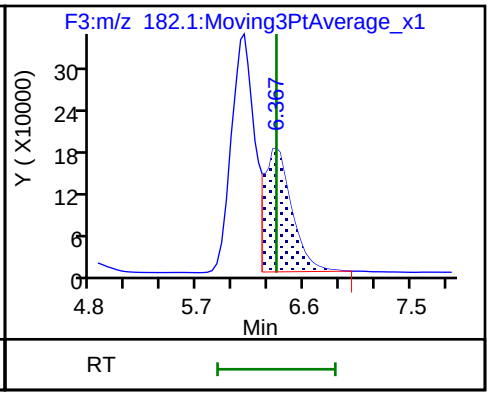
23 2,6-Dinitrotoluene



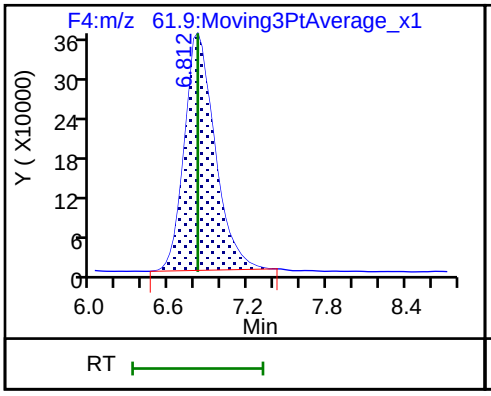
* 24 2,4-dinitrotoluene-d3



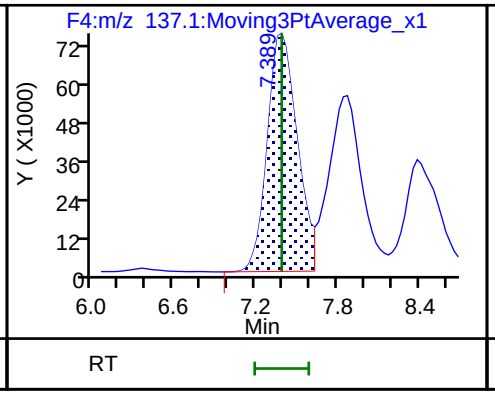
25 2,4-Dinitrotoluene



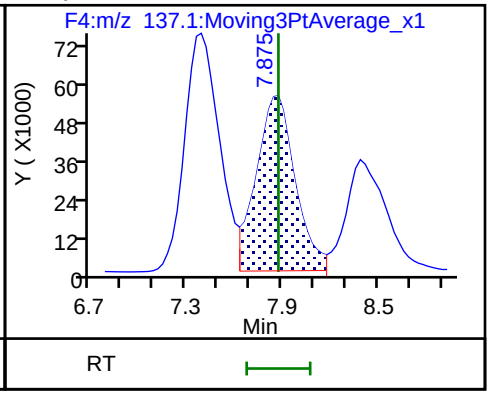
26 PETN



28 o-Nitrotoluene



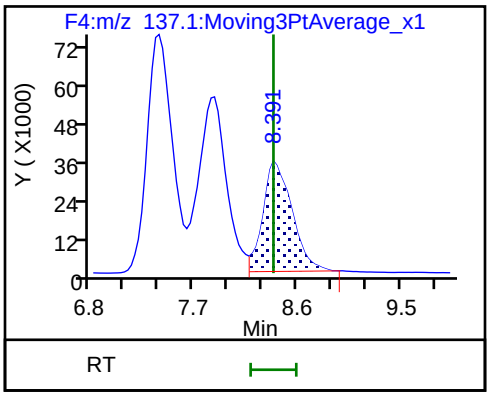
29 p-Nitrotoluene



Report Date: 13-Apr-2022 14:15:57 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12007.d

30 m-Nitrotoluene



Report Date: 13-Apr-2022 14:15:57 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12007.d

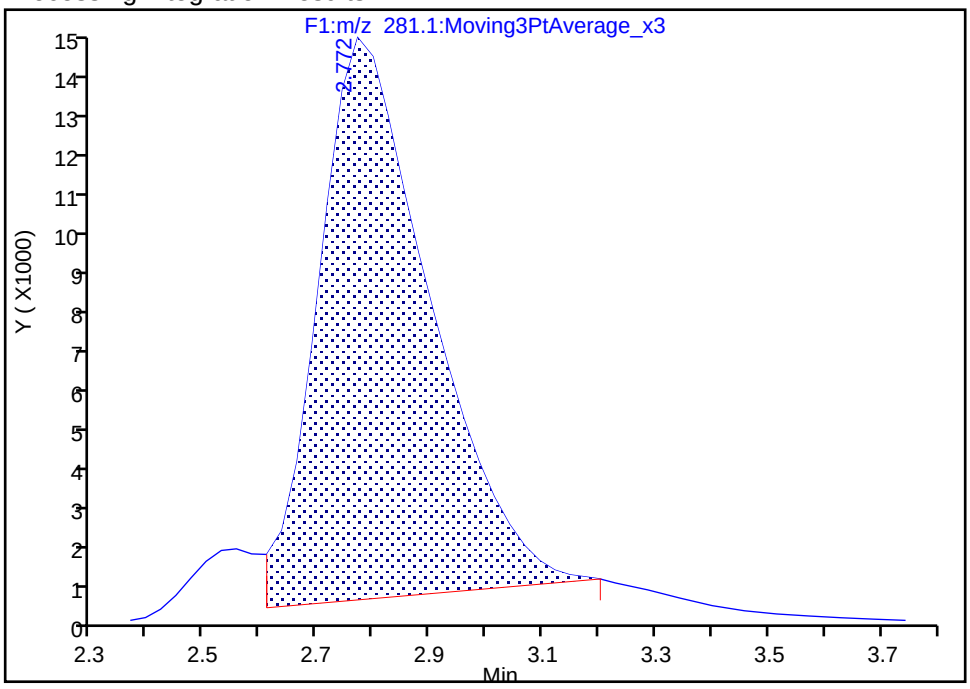
Injection Date:	12-Apr-2022 10:08:55	Instrument ID:	LC_LCMS4
Lims ID:	STD100		
Client ID:			
Operator ID:	acm	ALS Bottle#:	6 Worklist Smp#: 8
Injection Vol:	40.0 ul	Dil. Factor:	1.0000
Method:	8321expDuPont	Limit Group:	LC - 8321A Expl
Column:		Detector	F1:SIR

6 RDX, CAS: 121-82-4

Signal: 1

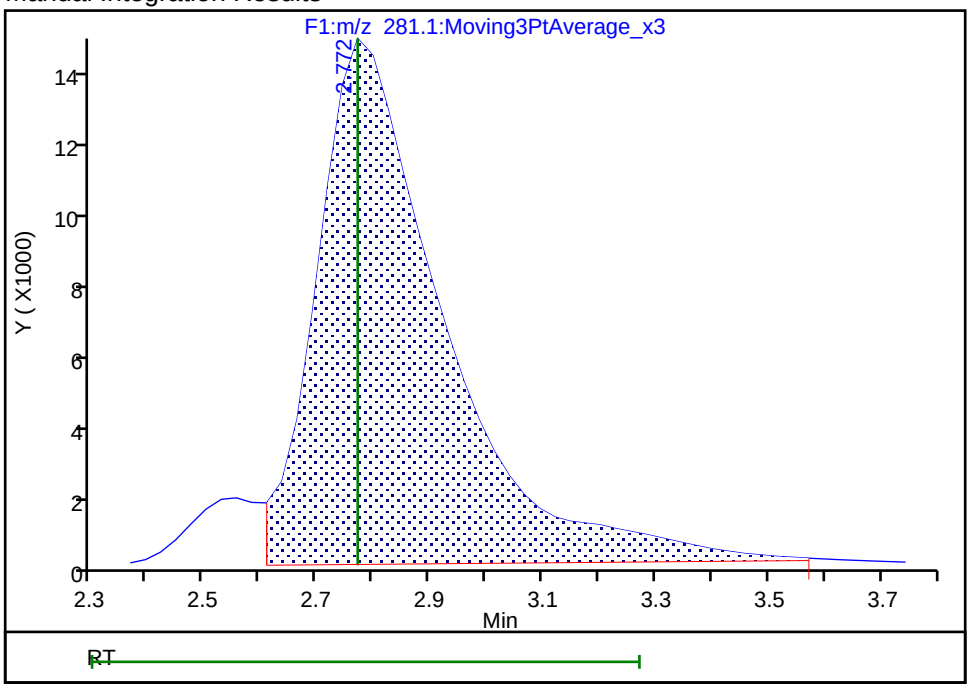
Processing Integration Results

RT: 2.77
Area: 194317
Amount: 90.374832
Amount Units: ug/l



Manual Integration Results

RT: 2.77
Area: 230193
Amount: 98.944498
Amount Units: ug/l



Reviewer: meyera, 13-Apr-2022 13:21:19

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 13-Apr-2022 14:28:23 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12008.d
Lims ID: STD200
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 12-Apr-2022 10:20:27 ALS Bottle#: 7 Worklist Smp#: 9
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 04/08/22EX6 STD200 ug/L
Misc. Info.: 04/08/2022 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4
Sublist: chrom-8321expDuPont*sub15

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\8321expDuPont.m
Limit Group: LC - 8321A Expl
Last Update: 13-Apr-2022 14:28:22 Calib Date: 12-Apr-2022 10:31:58
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d

Column 1 : Det: F1:SIR
Process Host: CTX1683

First Level Reviewer: meyera Date: 13-Apr-2022 13:09:54
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.964	1.964	0.0	1.000	295825	205.5	298	
* 1 HMX-13C4								
360.9	1.964	1.964	0.0		100892	125.0	55.0	
3 TNX								
233.1	2.126	2.153	-0.027	0.767	286064	178.5	350	
4 DNX								
249.1	2.287	2.287	0.0	0.825	319241	211.4	476	
5 MNX								
265.1	2.556	2.529	0.027	0.922	417480	237.8	311	
6 RDX								
281.1	2.799	2.772	0.027	1.010	348213	180.3	81.2	
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.1	2.772	2.798	-0.026		359038	125.0	275	
8 1,3,5-Trinitrobenzene								
213.1	3.458	3.458	0.0	0.775	1835720	205.0	1308	
11 Tetryl								
241.1	4.003	4.003	0.0	0.897	1389166	177.7	516	
* 12 1,3-Dinitrobenzene-d4								
172.1	4.461	4.461	0.0		1083810	129.4	82.3	
13 1,3-Dinitrobenzene								
168.1	4.518	4.518	0.0	1.013	1848204	205.9	161	
14 Nitroglycerin								
61.9	4.559	4.558	0.001	1.022	11016743	201.4	393	
33 3,5-Dinitroaniline								
183.1	4.801	4.760	0.041	1.076	5126352	205.4	74.7	

Report Date: 13-Apr-2022 14:28:23 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12008.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
15 2,4,6-Trinitrotoluene								
227.1	4.841	4.841	0.0	0.768	6102202	204.5	742	
$ 16 Nitrobenzene-d5								
128.1	4.922	4.962	-0.040	1.103	1528701	210.1	439	
17 Nitrobenzene								
123.1	5.043	5.043	0.0	1.131	1203653	210.8	509	
19 4-Amino-2,6-dinitrotoluene								
197.2	5.417	5.417	0.0	0.859	5614003	209.3	163	
22 2-Amino-4,6-dinitrotoluene								
197.2	5.821	5.861	-0.040	0.923	6207443	195.8	148	
23 2,6-Dinitrotoluene								M
182.1	6.094	6.094	0.0	0.966	9106883	201.1	283	M
* 24 2,4-dinitrotoluene-d3								
185.1	6.307	6.336	-0.029		2912395	125.0	450	
25 2,4-Dinitrotoluene								M
182.1	6.367	6.367	0.0	1.010	5524419	218.9	142	M
26 PETN								
61.9	6.813	6.812	0.0	1.080	10385398	191.0	673	
28 o-Nitrotoluene								
137.1	7.359	7.389	-0.030	1.167	2055057	184.5	260	
29 p-Nitrotoluene								
137.1	7.845	7.875	-0.030	1.244	1800878	191.9	220	
30 m-Nitrotoluene								
137.1	8.422	8.391	0.031	1.335	1238307	192.9	145	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

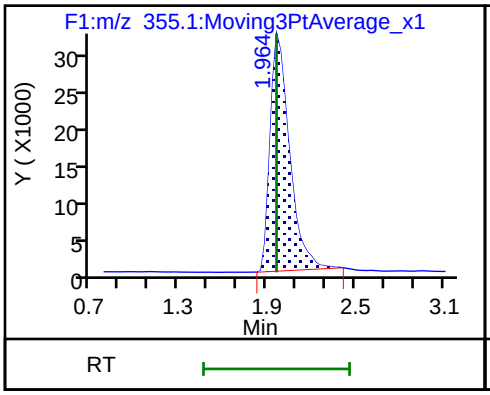
8321NB-D5-cal_00021	Amount Added: 20.00	Units: uL	
8321EXcalprim_00029	Amount Added: 20.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 13-Apr-2022 14:28:23 Chrom Revision: 2.3 18-Mar-2022 09:07:22

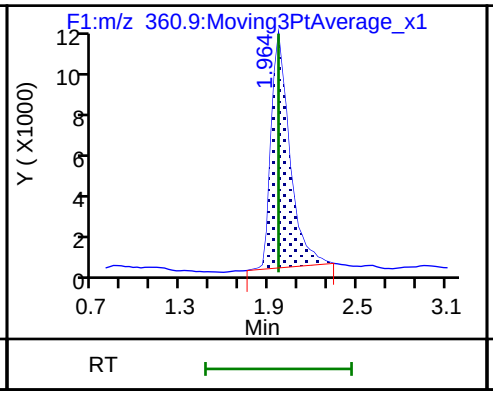
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12008.d
Injection Date: 12-Apr-2022 10:20:27 Instrument ID: LC_LCMS4
Lims ID: STD200
Client ID:
Operator ID: acm ALS Bottle#: 7 Worklist Smp#: 9
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Method: 8321expDuPont Limit Group: LC - 8321A Expl

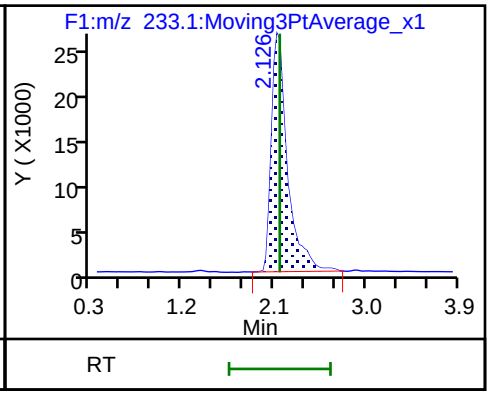
2 HMX



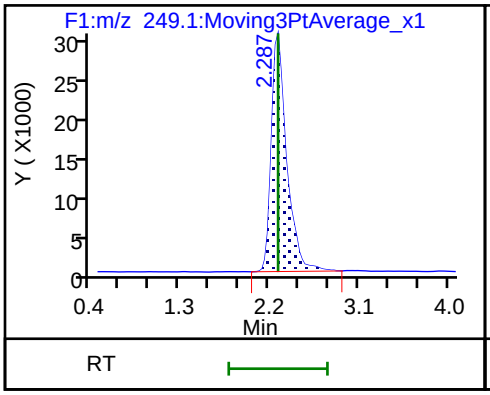
* 1 HMX-13C4



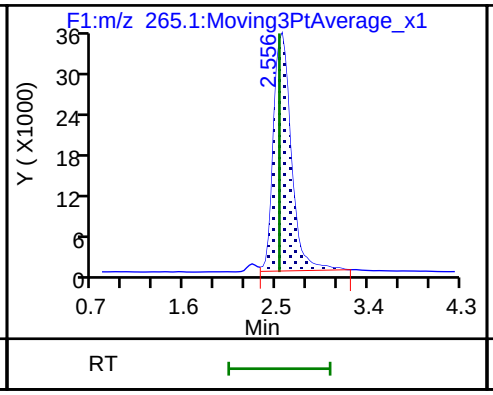
3 TNX



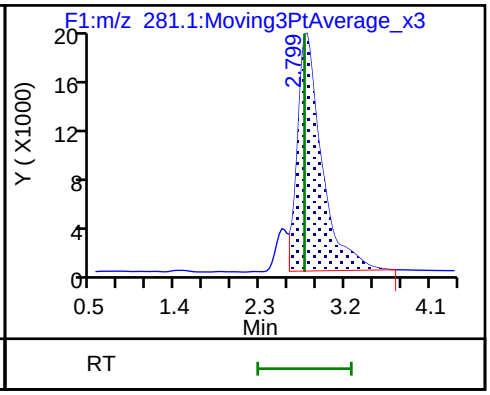
4 DNX



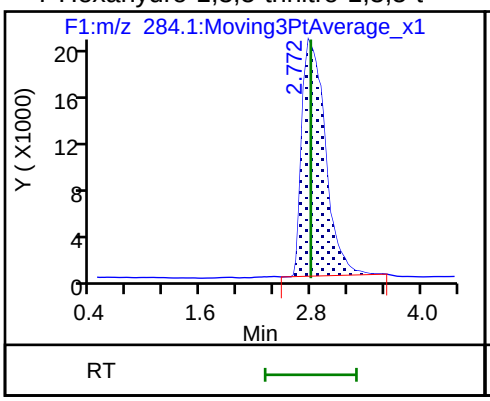
5 MNX



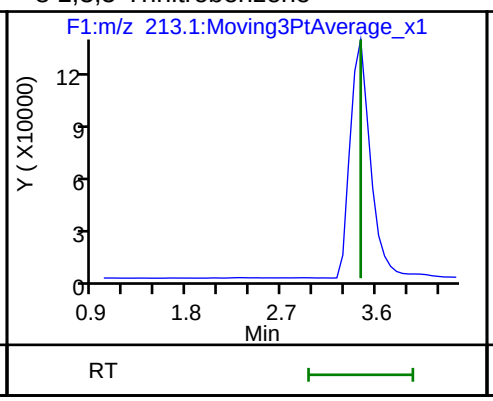
6 RDX



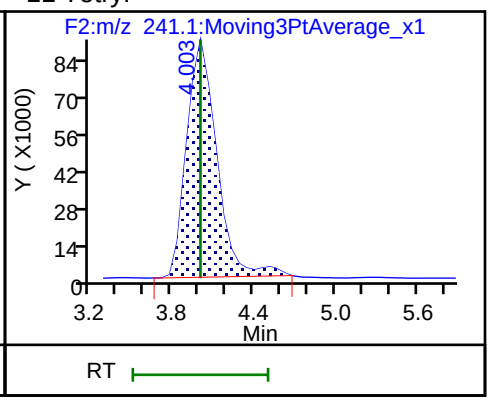
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t



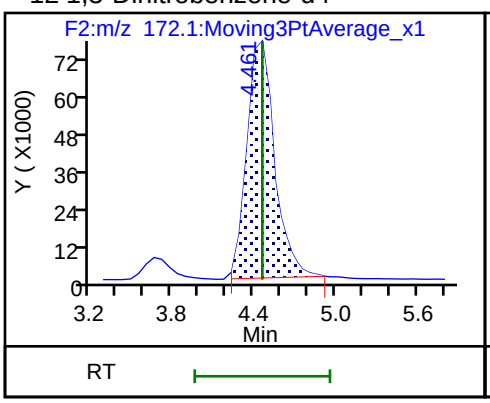
8 1,3,5-Trinitrobenzene



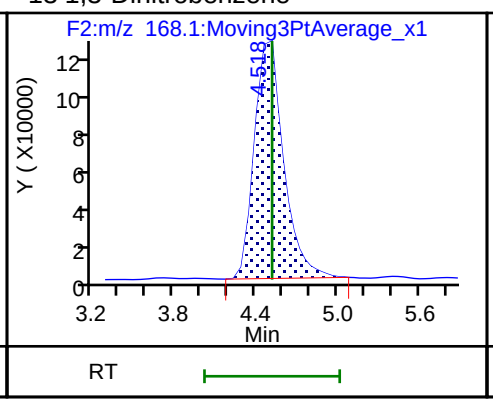
11 Tetryl



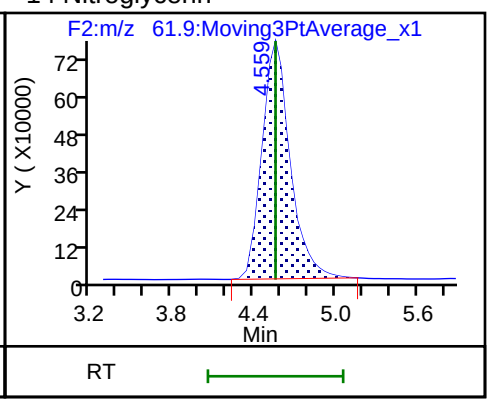
* 12 1,3-Dinitrobenzene-d4



13 1,3-Dinitrobenzene

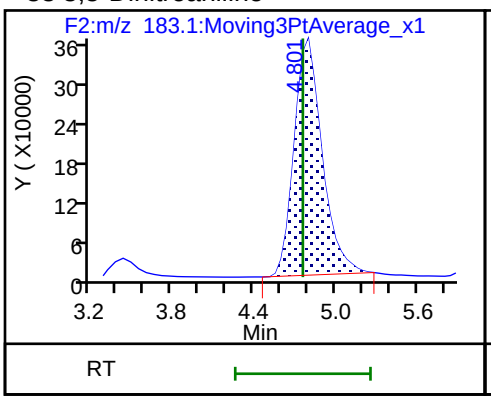


14 Nitroglycerin

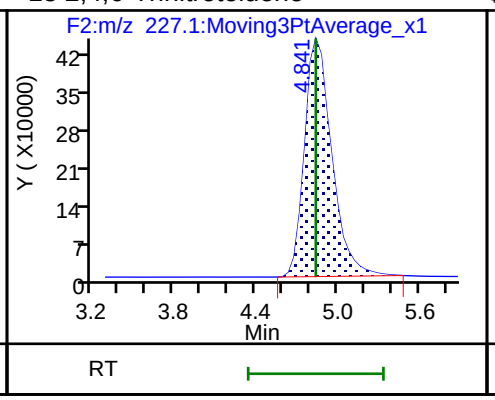


Report Date: 13-Apr-2022 14:28:23 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12008.d

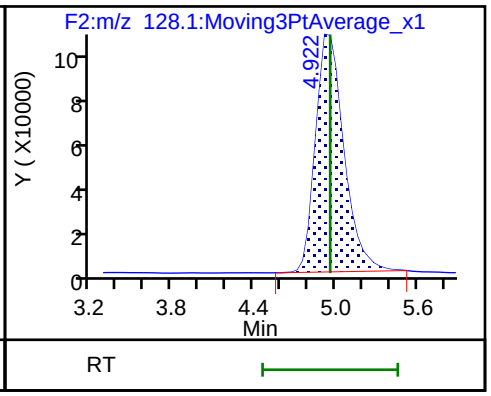
33 3,5-Dinitroaniline



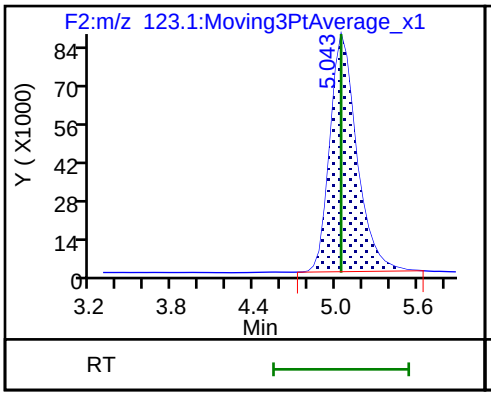
15 2,4,6-Trinitrotoluene



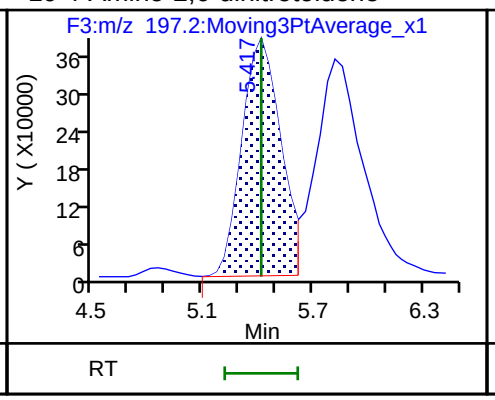
$ 16 Nitrobenzene-d5



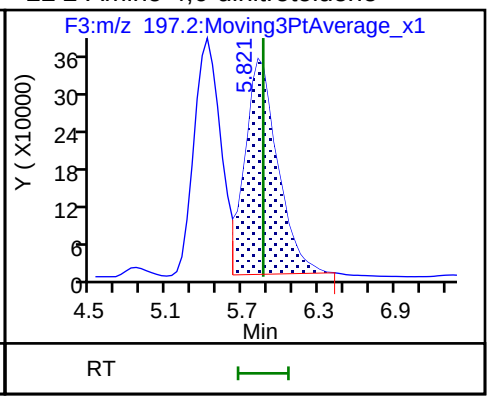
17 Nitrobenzene



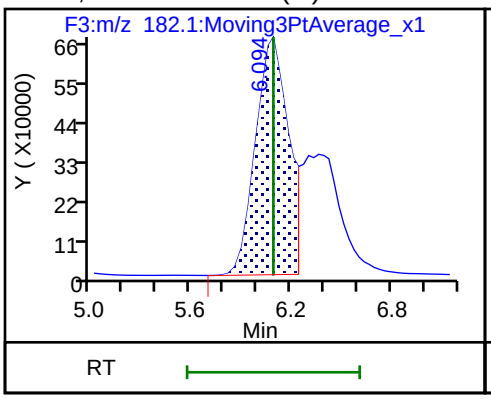
19 4-Amino-2,6-dinitrotoluene



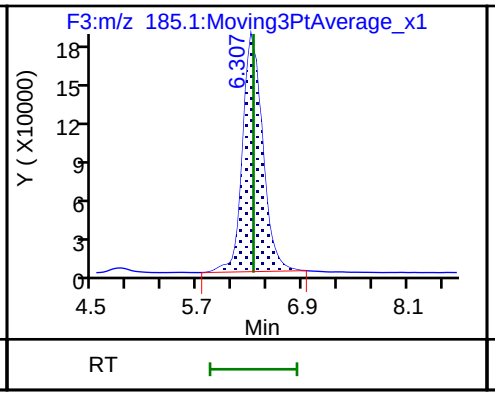
22 2-Amino-4,6-dinitrotoluene



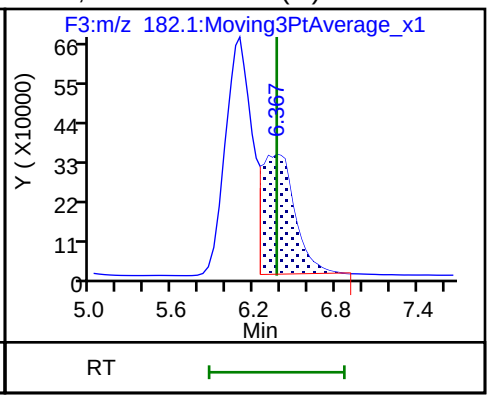
23 2,6-Dinitrotoluene (M)



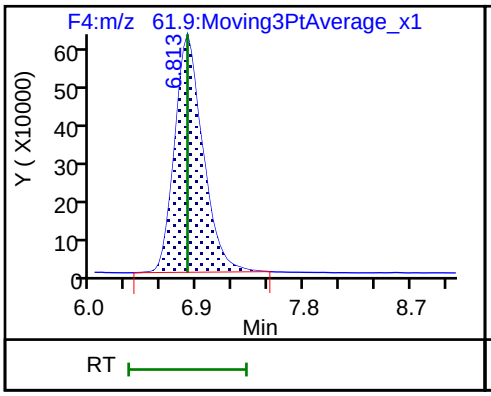
* 24 2,4-dinitrotoluene-d3



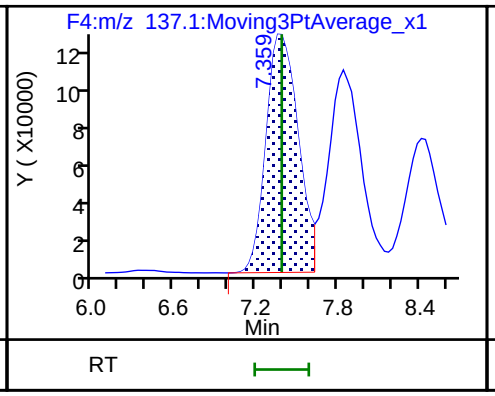
25 2,4-Dinitrotoluene (M)



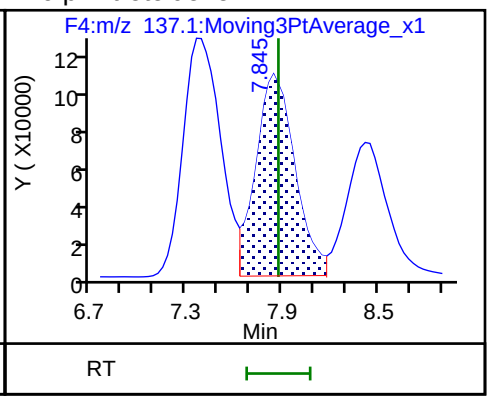
26 PETN



28 o-Nitrotoluene

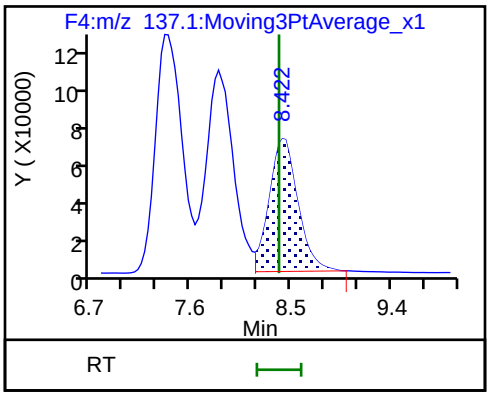


29 p-Nitrotoluene



Report Date: 13-Apr-2022 14:28:23 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12008.d

30 m-Nitrotoluene



Report Date: 13-Apr-2022 14:28:23 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12008.d

Injection Date: 12-Apr-2022 10:20:27 Instrument ID: LC_LCMS4

Lims ID: STD200

Client ID:

Operator ID: acm ALS Bottle#: 7 Worklist Smp#: 9

Injection Vol: 40.0 ul Dil. Factor: 1.0000

Method: 8321expDuPont Limit Group: LC - 8321A Expl

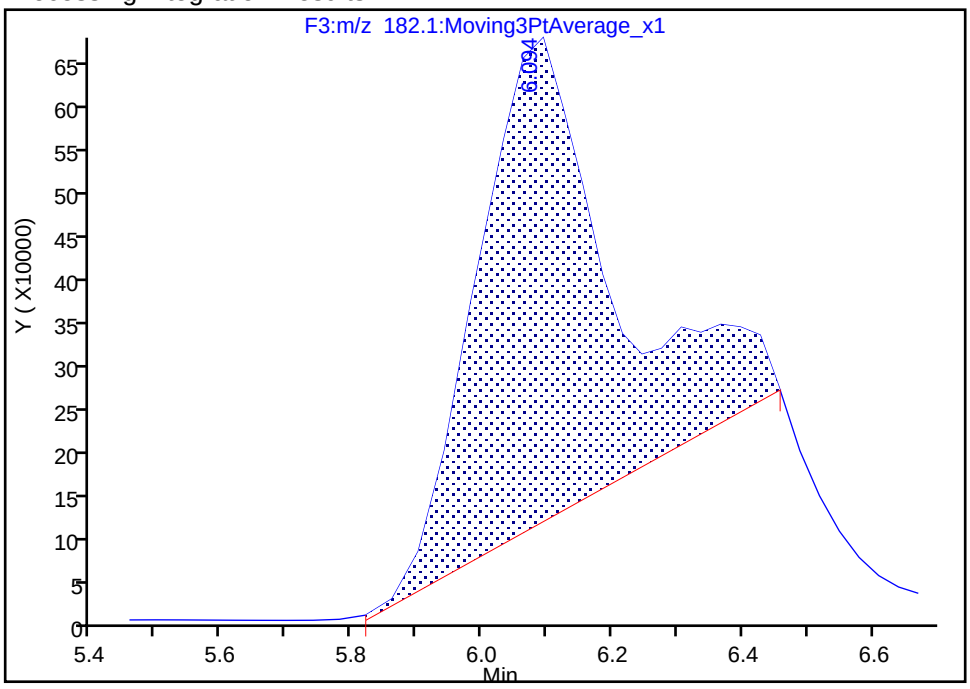
Column: Detector F3:SIR

23 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

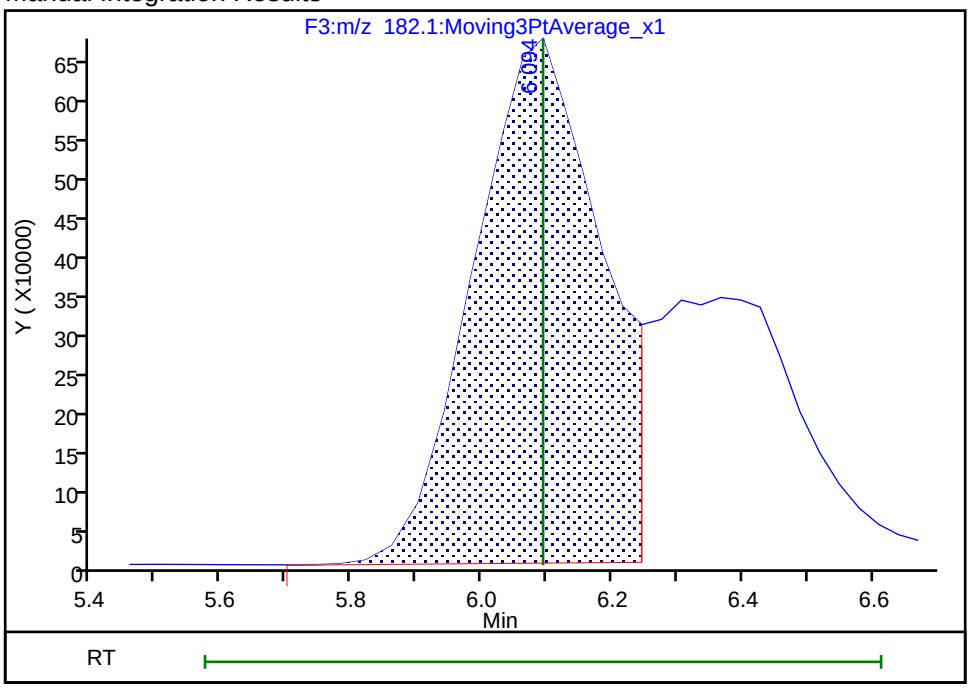
Processing Integration Results

RT: 6.09
Area: 8207368
Amount: 186.8856
Amount Units: ug/l



Manual Integration Results

RT: 6.09
Area: 9106883
Amount: 201.1269
Amount Units: ug/l



Reviewer: meyera, 13-Apr-2022 14:25:43

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 13-Apr-2022 14:28:23 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12008.d

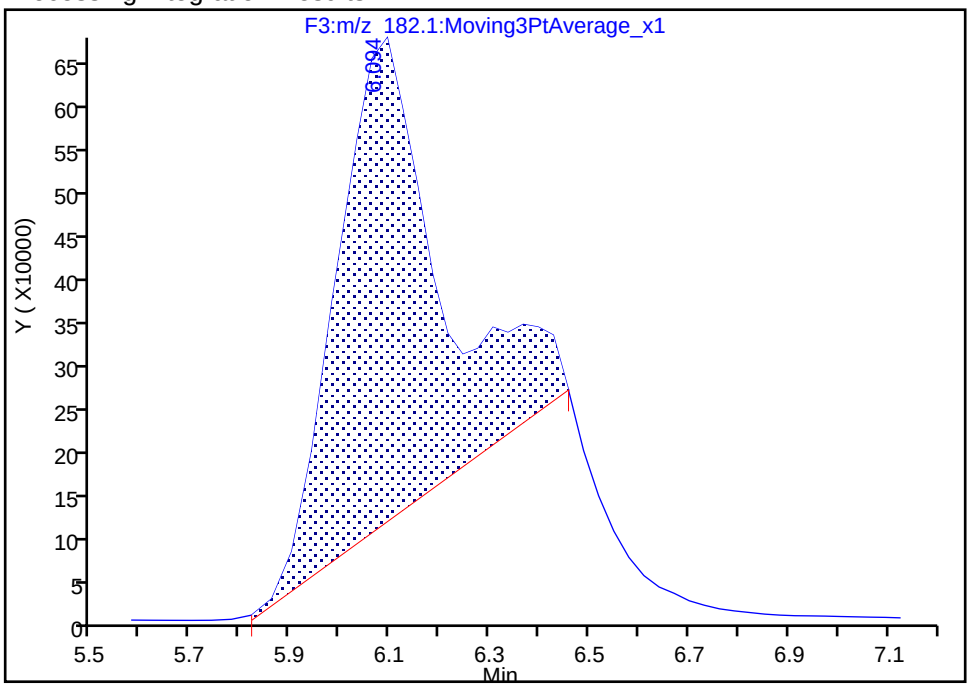
Injection Date:	12-Apr-2022 10:20:27	Instrument ID:	LC_LCMS4
Lims ID:	STD200		
Client ID:			
Operator ID:	acm	ALS Bottle#:	7 Worklist Smp#: 9
Injection Vol:	40.0 ul	Dil. Factor:	1.0000
Method:	8321expDuPont	Limit Group:	LC - 8321A Expl
Column:		Detector	F3:SIR

25 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

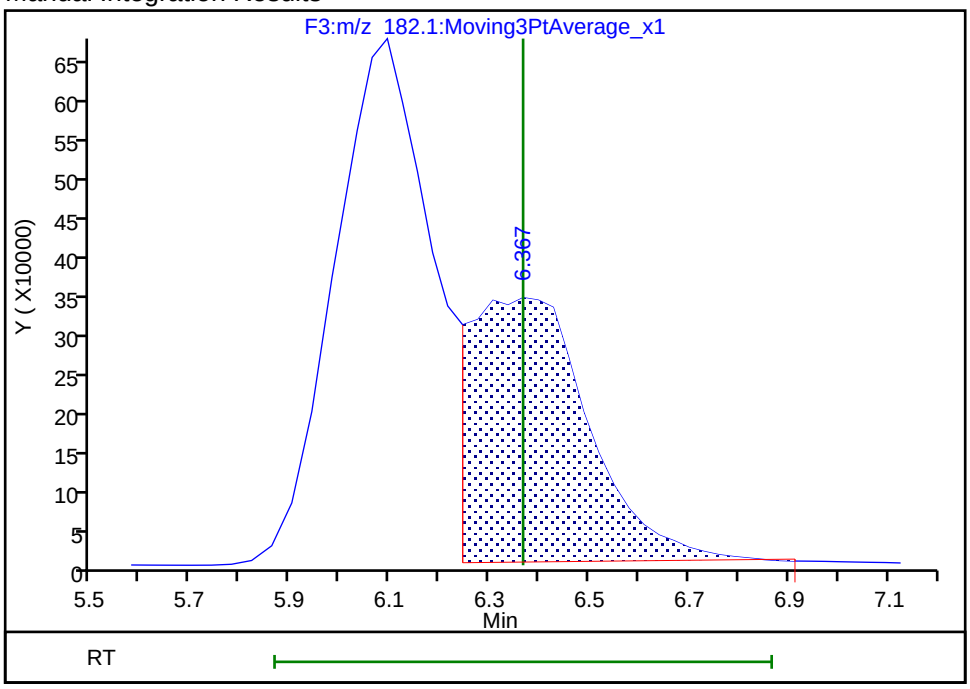
Processing Integration Results

RT: 6.09
Area: 8207368
Amount: 273.2220
Amount Units: ug/l



Manual Integration Results

RT: 6.37
Area: 5524419
Amount: 218.8838
Amount Units: ug/l



Reviewer: meyera, 13-Apr-2022 14:25:43

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 13-Apr-2022 14:29:33 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d
Lims ID: STD300
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 12-Apr-2022 10:31:58 ALS Bottle#: 8 Worklist Smp#: 10
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 04/08/22EX7 STD300 ug/L
Misc. Info.: 04/08/2022 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4
Sublist: chrom-8321expDuPont*sub15

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\8321expDuPont.m
Limit Group: LC - 8321A Expl
Last Update: 13-Apr-2022 14:29:33 Calib Date: 12-Apr-2022 10:31:58
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d

Column 1 : Det: F1:SIR
Process Host: CTX1683

First Level Reviewer: meyera Date: 13-Apr-2022 14:13:46
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.965	1.964	0.001	1.000	435110	286.2	311	
* 1 HMX-13C4								
360.9	1.965	1.964	0.001		106848	125.0	62.6	
3 TNX								
233.1	2.126	2.153	-0.027	0.760	514443	305.4	516	
4 DNX								
249.1	2.288	2.287	0.001	0.817	458777	288.8	505	
5 MNX								
265.1	2.530	2.529	0.001	0.904	470704	253.5	165	
6 RDX								
281.1	2.799	2.772	0.027	1.000	533743	325.6	96.2	
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.1	2.799	2.798	0.001		387636	125.0	510	
8 1,3,5-Trinitrobenzene								
213.1	3.459	3.458	0.001	0.785	2938535	303.1	1687	
11 Tetryl								
241.1	4.004	4.003	0.001	0.909	2730790	323.0	746	
* 12 1,3-Dinitrobenzene-d4								
172.1	4.404	4.461	-0.057		1172337	129.4	88.3	
13 1,3-Dinitrobenzene								
168.1	4.462	4.518	-0.056	1.013	2838523	292.3	152	
14 Nitroglycerin								
61.9	4.559	4.558	0.001	1.035	17371137	294.3	441	
33 3,5-Dinitroaniline								
183.1	4.761	4.760	0.001	1.081	7222000	293.6	67.3	

Report Date: 13-Apr-2022 14:29:33 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
15 2,4,6-Trinitrotoluene								
227.1	4.842	4.841	0.001	0.768	9494022	294.4	849	
$ 16 Nitrobenzene-d5								
128.1	4.923	4.962	-0.039	1.118	2250430	286.5	728	
17 Nitrobenzene								
123.1	5.044	5.043	0.001	1.145	1790353	290.3	954	
19 4-Amino-2,6-dinitrotoluene								
197.2	5.418	5.417	0.001	0.859	7874129	286.0	146	
22 2-Amino-4,6-dinitrotoluene								
197.2	5.822	5.861	-0.039	0.924	9583761	294.6	162	
23 2,6-Dinitrotoluene								
182.1	6.061	6.094	-0.033	0.961	14006831	301.3	254	
* 24 2,4-dinitrotoluene-d3								
185.1	6.304	6.336	-0.032		2992262	125.0	344	
25 2,4-Dinitrotoluene								
182.1	6.365	6.367	-0.002	1.010	7678431	291.3	150	
26 PETN								
61.9	6.810	6.812	-0.002	1.080	16900226	303.0	1000	
28 o-Nitrotoluene								
137.1	7.387	7.389	-0.002	1.172	3648660	318.6	295	
29 p-Nitrotoluene								
137.1	7.843	7.875	-0.032	1.244	3012368	312.5	224	
30 m-Nitrotoluene								
137.1	8.419	8.391	0.028	1.336	2074737	314.6	149	

QC Flag Legend

Processing Flags

Reagents:

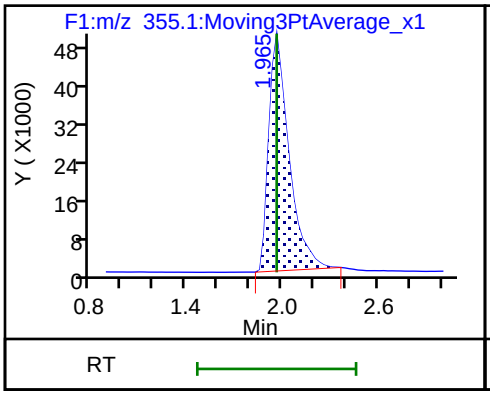
8321NB-D5-cal_00021	Amount Added: 30.00	Units: uL	
8321EXcalprim_00029	Amount Added: 30.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 13-Apr-2022 14:29:33 Chrom Revision: 2.3 18-Mar-2022 09:07:22

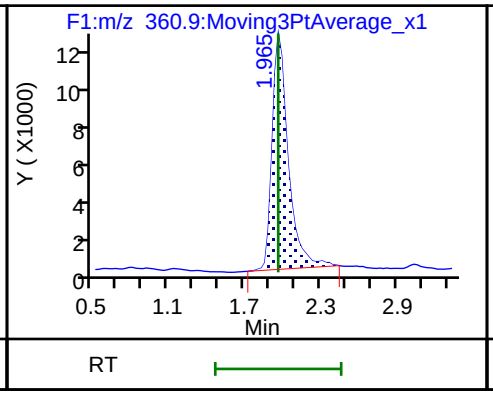
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d
Injection Date: 12-Apr-2022 10:31:58 Instrument ID: LC_LCMS4
Lims ID: STD300
Client ID:
Operator ID: acm ALS Bottle#: 8 Worklist Smp#: 10
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Method: 8321expDuPont Limit Group: LC - 8321A Expl

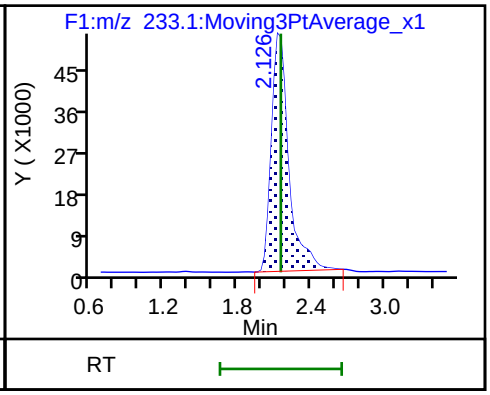
2 HMX



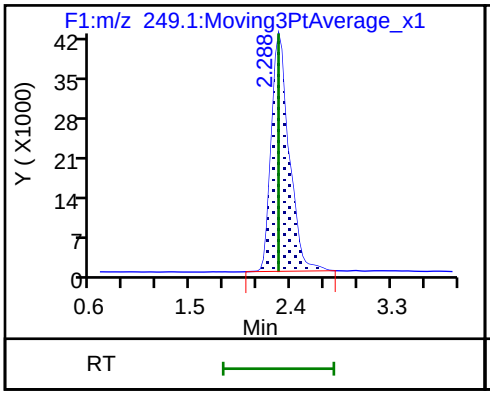
* 1 HMX-13C4



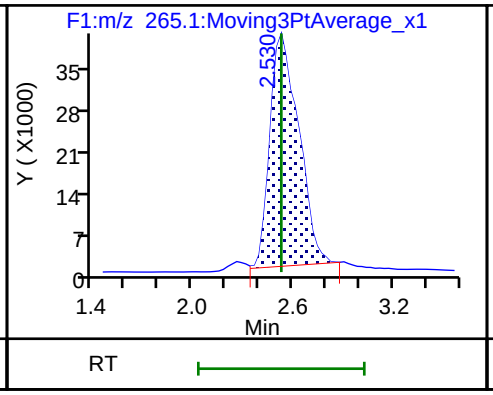
3 TNX



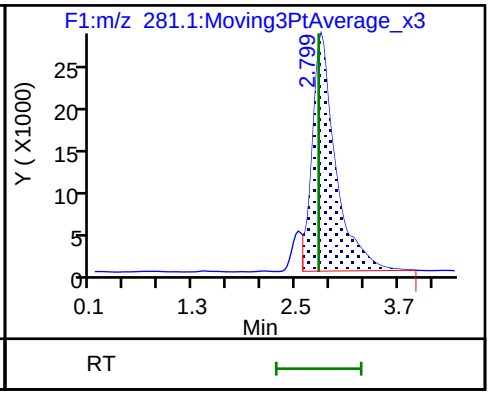
4 DNX



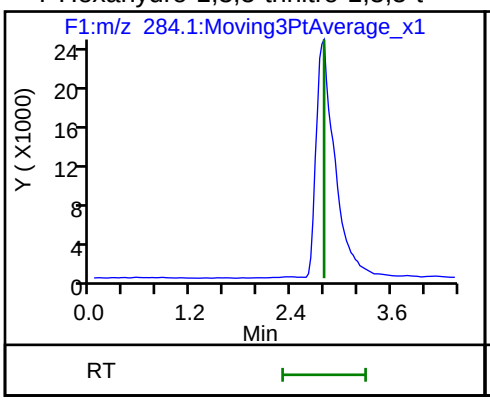
5 MNX



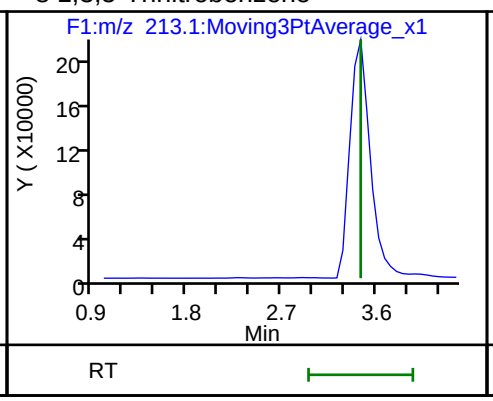
6 RDX



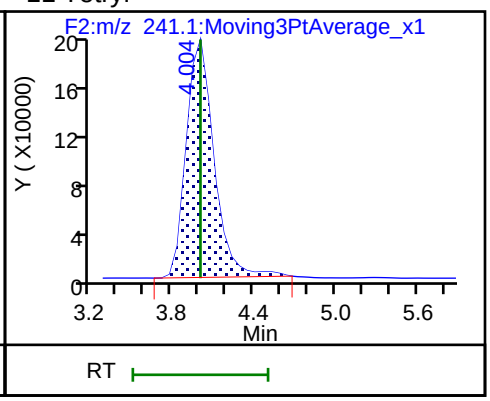
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t



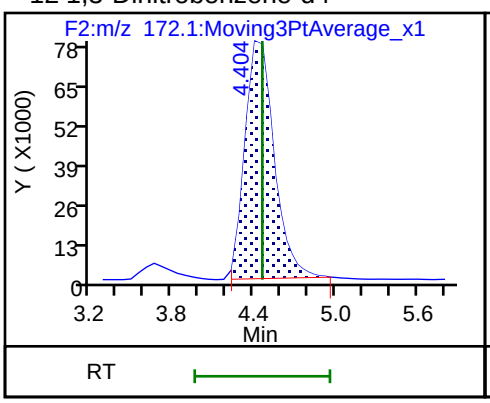
8 1,3,5-Trinitrobenzene



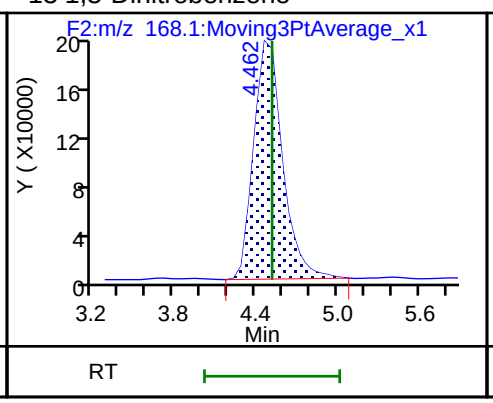
11 Tetryl



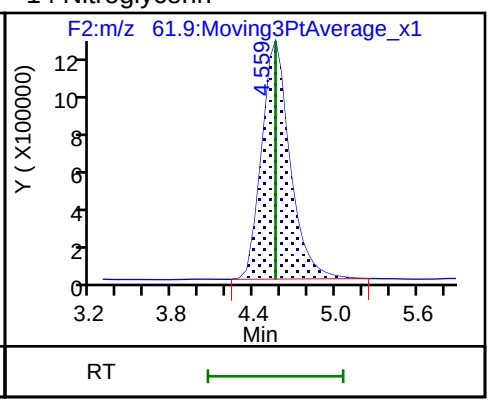
* 12 1,3-Dinitrobenzene-d4



13 1,3-Dinitrobenzene

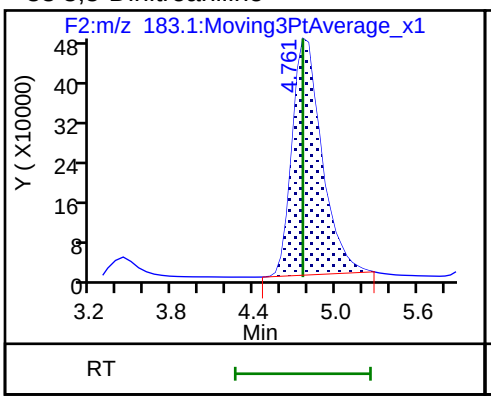


14 Nitroglycerin

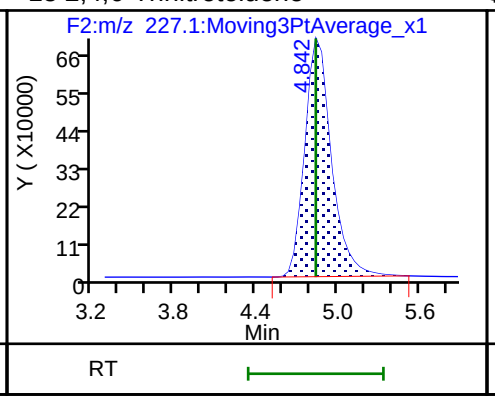


Report Date: 13-Apr-2022 14:29:33 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d

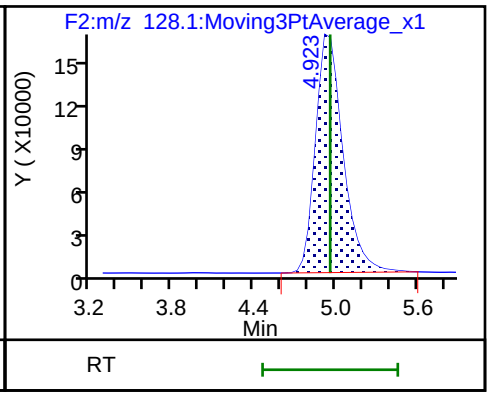
33 3,5-Dinitroaniline



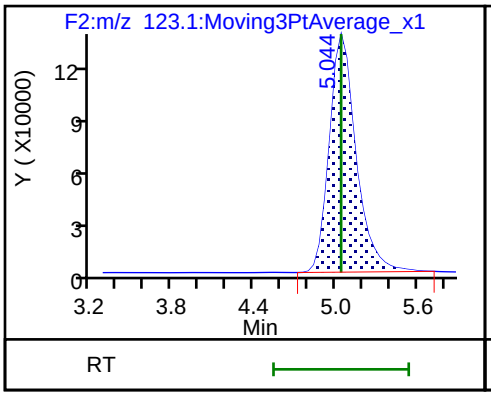
15 2,4,6-Trinitrotoluene



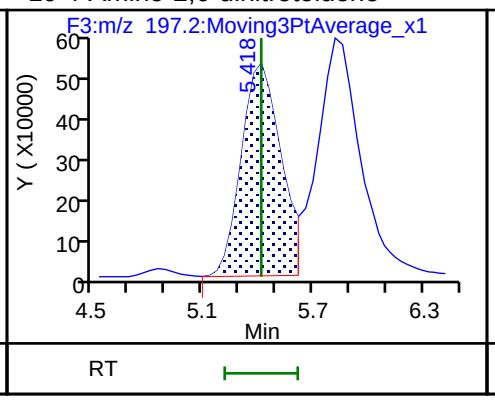
$ 16 Nitrobenzene-d5



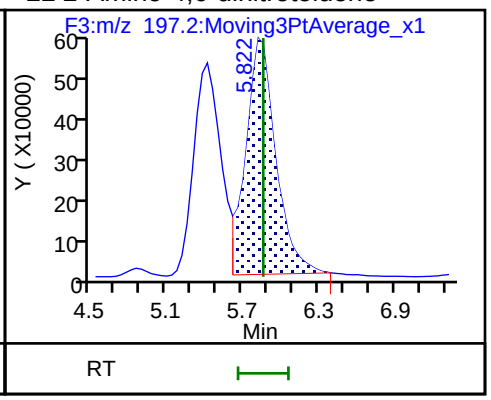
17 Nitrobenzene



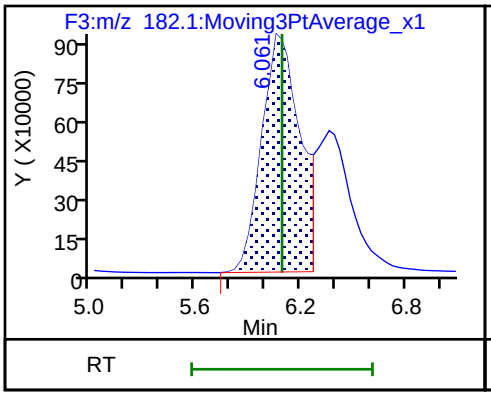
19 4-Amino-2,6-dinitrotoluene



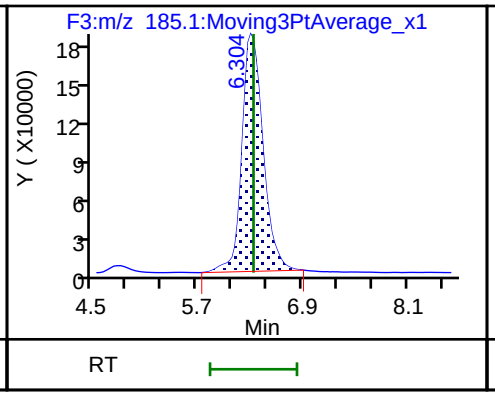
22 2-Amino-4,6-dinitrotoluene



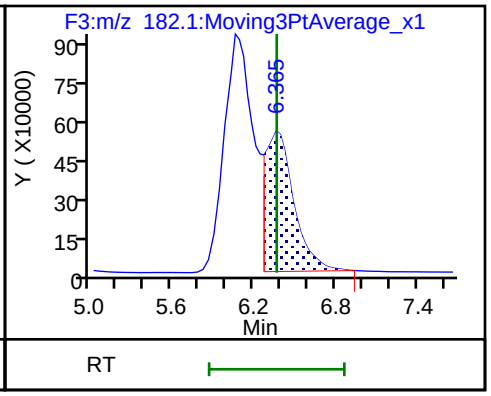
23 2,6-Dinitrotoluene



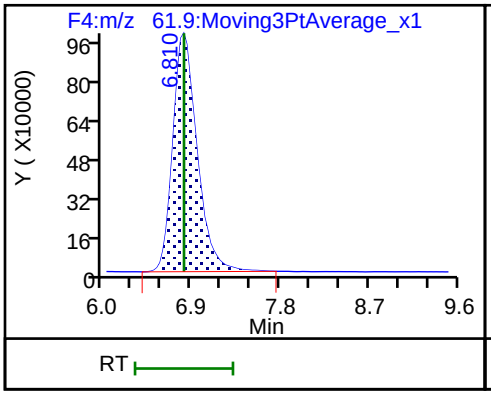
* 24 2,4-dinitrotoluene-d3



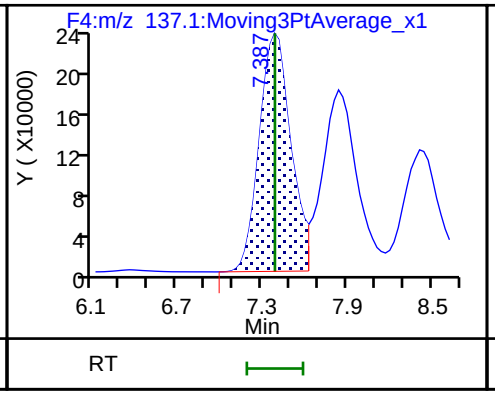
25 2,4-Dinitrotoluene



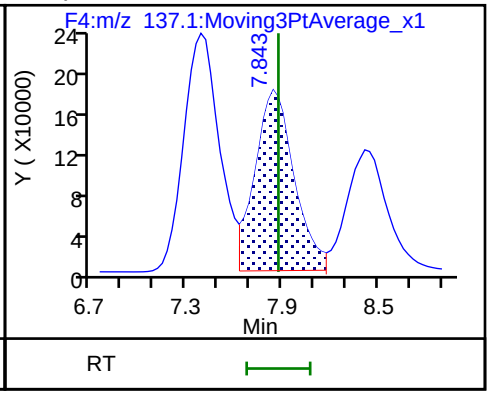
26 PETN



28 o-Nitrotoluene



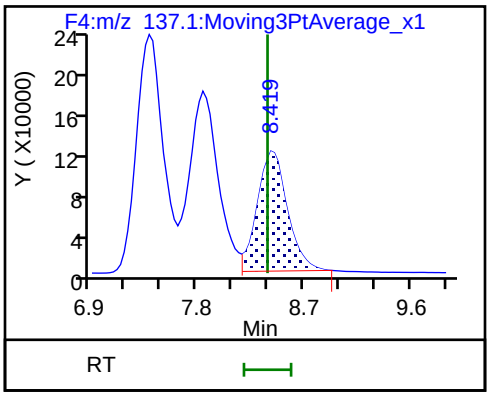
29 p-Nitrotoluene



Report Date: 13-Apr-2022 14:29:33 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d

30 m-Nitrotoluene



Calibration / HMX

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

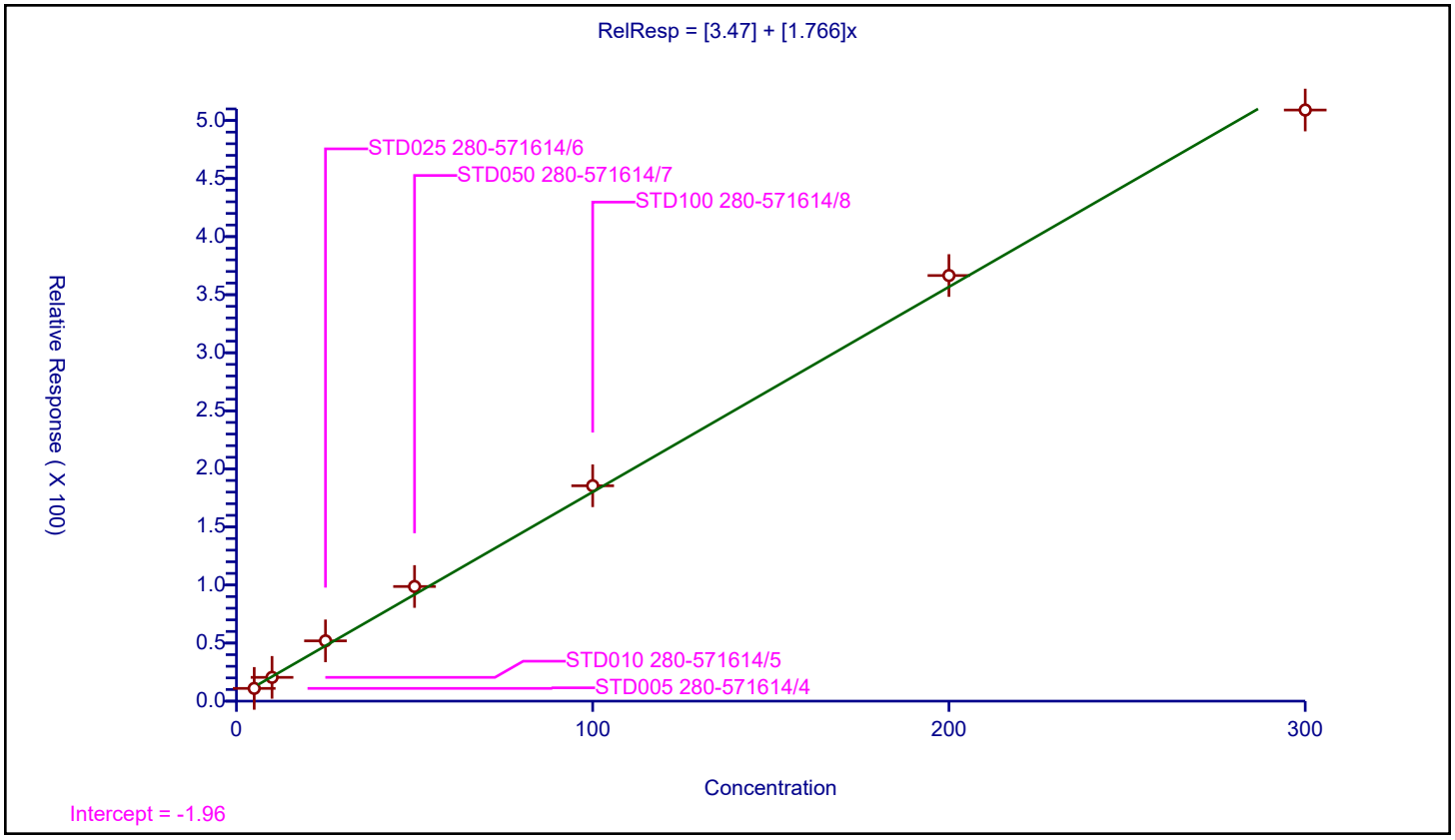
Curve Coefficients

Intercept:	3.47
Slope:	1.766

Error Coefficients

Standard Error:	261000
Relative Standard Error:	9.3
Correlation Coefficient:	0.977
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-571614/4	5.0	10.980359	125.0	151771.0	2.196072	Y
2	STD010 280-571614/5	10.0	20.46403	125.0	150001.0	2.046403	Y
3	STD025 280-571614/6	25.0	51.915817	125.0	169262.0	2.076633	Y
4	STD050 280-571614/7	50.0	98.716979	125.0	151381.0	1.97434	Y
5	STD100 280-571614/8	100.0	185.468816	125.0	142220.0	1.854688	Y
6	STD200 280-571614/9	200.0	366.511963	125.0	100892.0	1.83256	Y
7	STD300 280-571614/10	300.0	509.029182	125.0	106848.0	1.696764	Y



Calibration / TNX

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

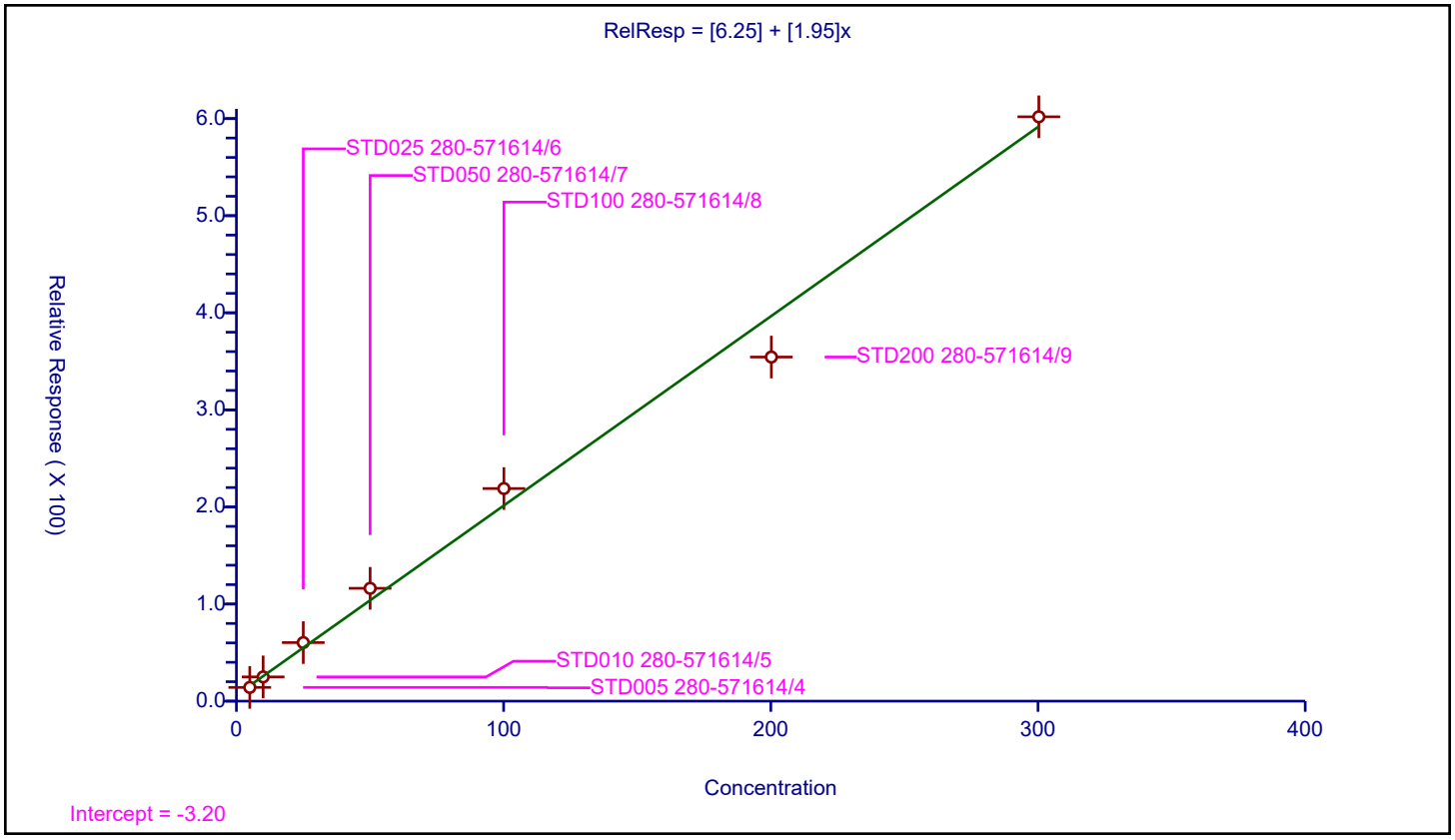
Curve Coefficients

Intercept:	6.25
Slope:	1.95

Error Coefficients

Standard Error:	295000
Relative Standard Error:	13.1
Correlation Coefficient:	0.951
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-571614/4	5.005	14.154549	125.0	151771.0	2.828082	Y
2	STD010 280-571614/5	10.01	24.952334	125.0	150001.0	2.492741	Y
3	STD025 280-571614/6	25.025	60.318471	125.0	169262.0	2.410329	Y
4	STD050 280-571614/7	50.05	116.219175	125.0	151381.0	2.322061	Y
5	STD100 280-571614/8	100.1	218.976761	125.0	142220.0	2.18758	Y
6	STD200 280-571614/9	200.2	354.418586	125.0	100892.0	1.770323	Y
7	STD300 280-571614/10	300.3	601.839763	125.0	106848.0	2.004128	Y



Calibration / DNX

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

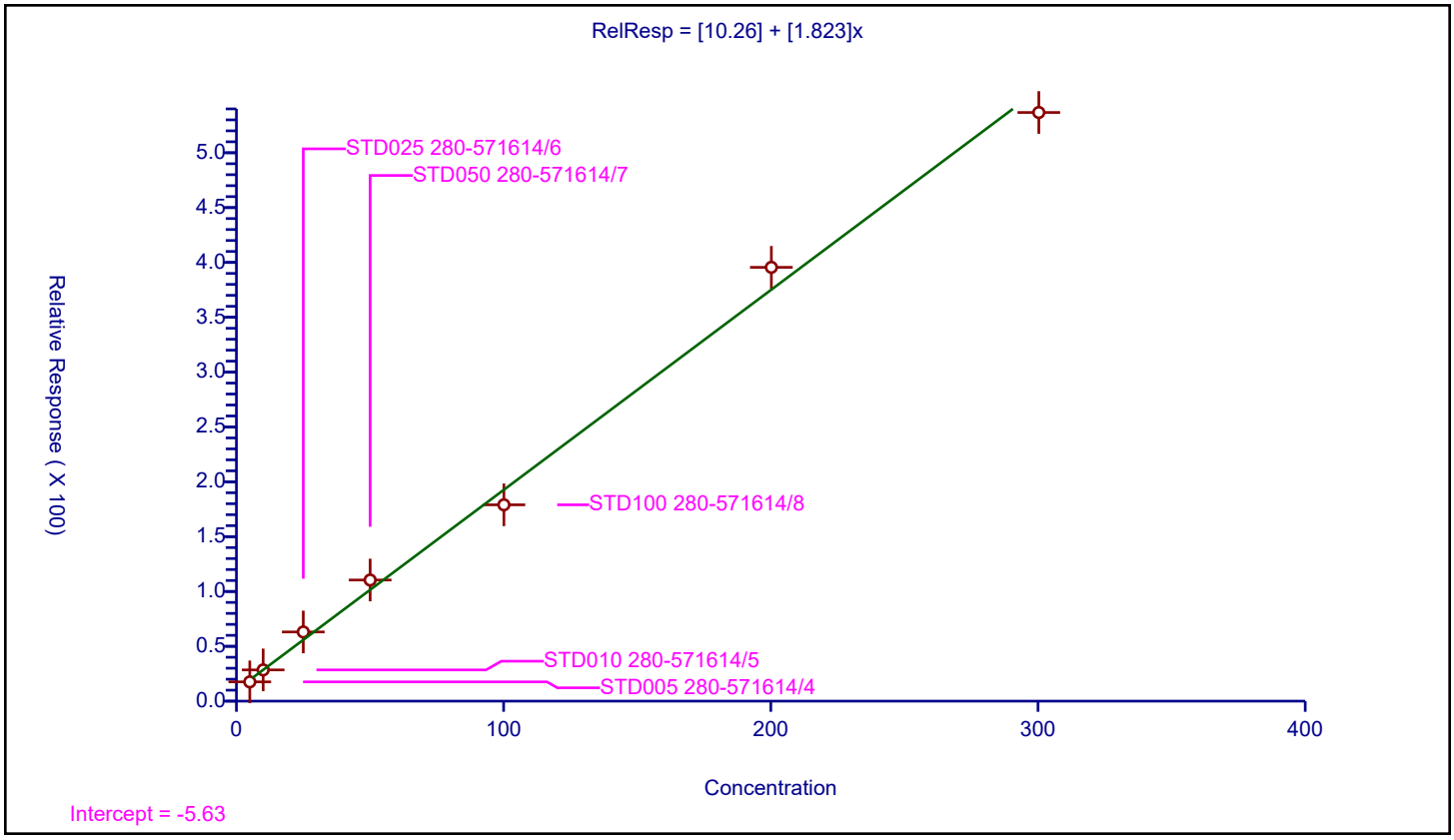
Curve Coefficients

Intercept:	10.26
Slope:	1.823

Error Coefficients

Standard Error:	276000
Relative Standard Error:	12.9
Correlation Coefficient:	0.986
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-571614/4	5.005	17.580763	125.0	151771.0	3.51264	Y
2	STD010 280-571614/5	10.01	28.481477	125.0	150001.0	2.845302	Y
3	STD025 280-571614/6	25.025	63.089323	125.0	169262.0	2.521052	Y
4	STD050 280-571614/7	50.05	110.434929	125.0	151381.0	2.206492	Y
5	STD100 280-571614/8	100.1	179.014906	125.0	142220.0	1.788361	Y
6	STD200 280-571614/9	200.2	395.523183	125.0	100892.0	1.97564	Y
7	STD300 280-571614/10	300.3	536.716878	125.0	106848.0	1.787269	Y



Calibration / MNX

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

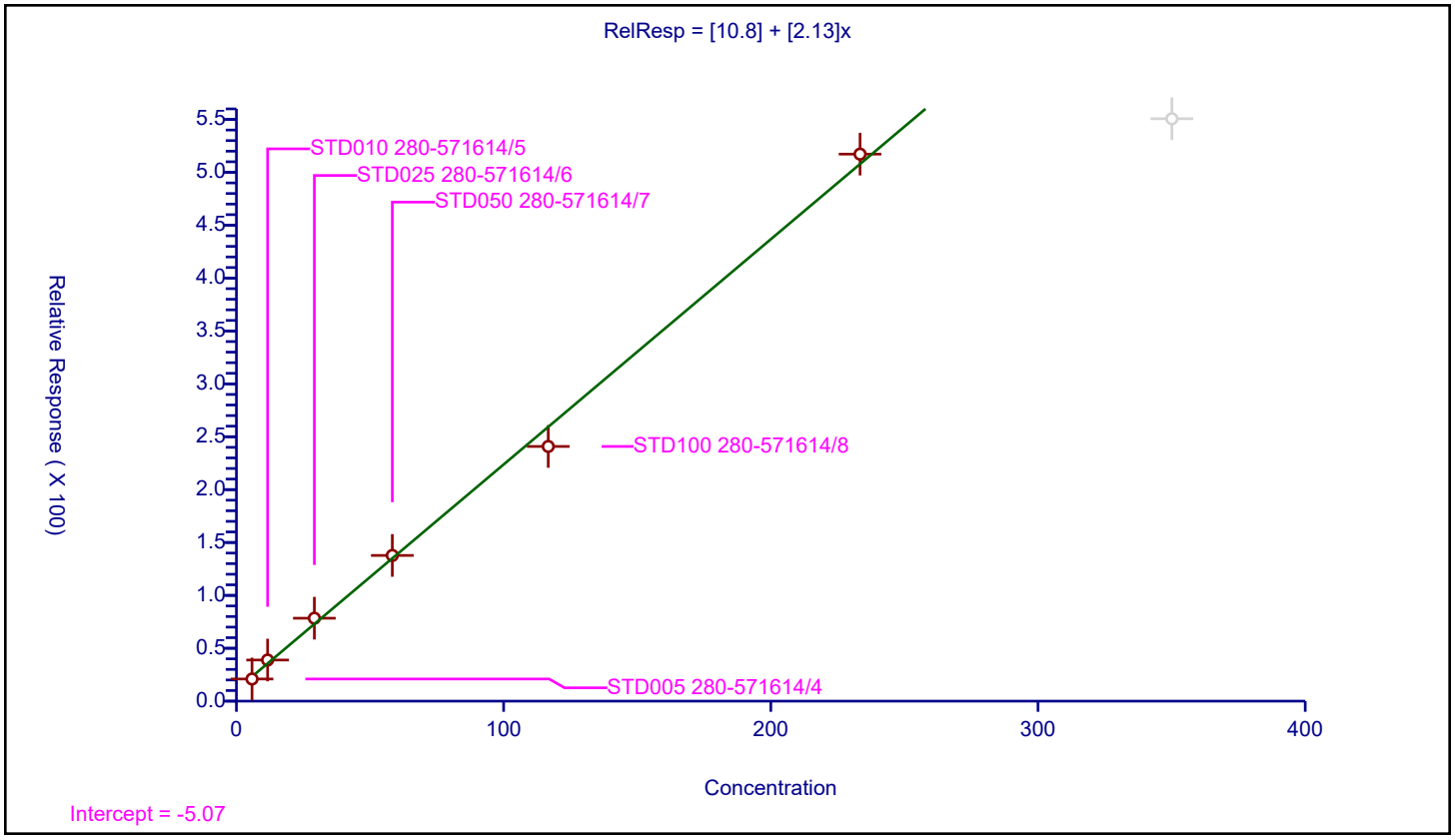
Curve Coefficients

Intercept:	10.8
Slope:	2.13

Error Coefficients

Standard Error:	270000
Relative Standard Error:	12.8
Correlation Coefficient:	0.970
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-571614/4	5.835	20.931206	125.0	151771.0	3.587182	Y
2	STD010 280-571614/5	11.67	38.880574	125.0	150001.0	3.331669	Y
3	STD025 280-571614/6	29.175	78.418369	125.0	169262.0	2.687862	Y
4	STD050 280-571614/7	58.35	137.75672	125.0	151381.0	2.360869	Y
5	STD100 280-571614/8	116.7	240.829349	125.0	142220.0	2.063662	Y
6	STD200 280-571614/9	233.4	517.236253	125.0	100892.0	2.216094	Y
7	STD300 280-571614/10	350.1	550.670111	125.0	106848.0	1.572894	N



Calibration / RDX

Curve Type:	Quadratic
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

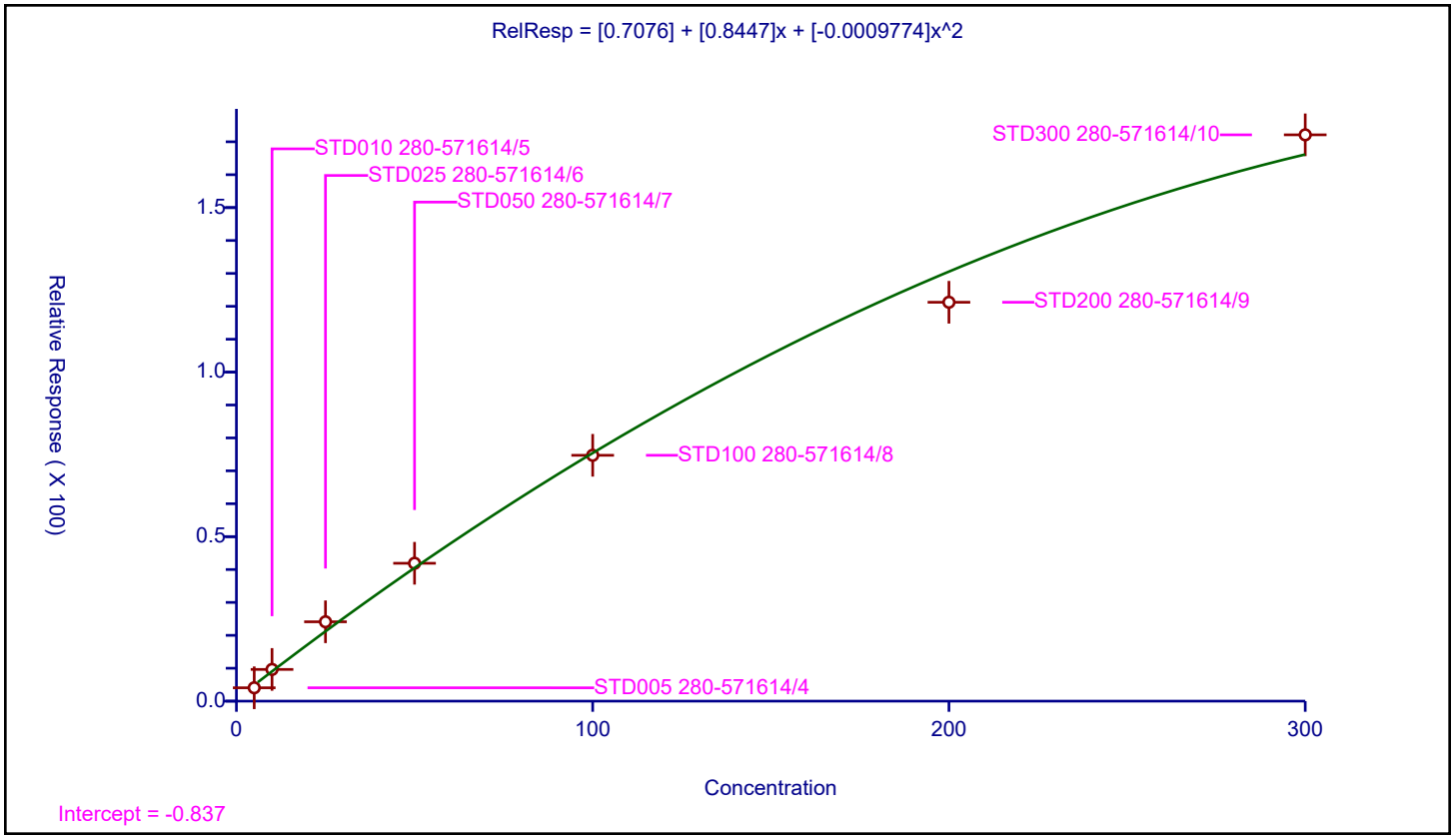
Curve Coefficients

Intercept:	0.7076
Slope:	0.8447
Second Order:	-0.0009774

Error Coefficients

Standard Error:	347000
Relative Standard Error:	14.6
Correlation Coefficient:	0.985
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-571614/4	5.0	4.062449	125.0	313327.0	0.81249	Y
2	STD010 280-571614/5	10.0	9.639246	125.0	340911.0	0.963925	Y
3	STD025 280-571614/6	25.0	24.118196	125.0	338142.0	0.964728	Y
4	STD050 280-571614/7	50.0	41.904547	125.0	390602.0	0.838091	Y
5	STD100 280-571614/8	100.0	74.718386	125.0	385101.0	0.747184	Y
6	STD200 280-571614/9	200.0	121.231249	125.0	359038.0	0.606156	Y
7	STD300 280-571614/10	300.0	172.114755	125.0	387636.0	0.573716	Y



Calibration / 1,3,5-Trinitrobenzene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

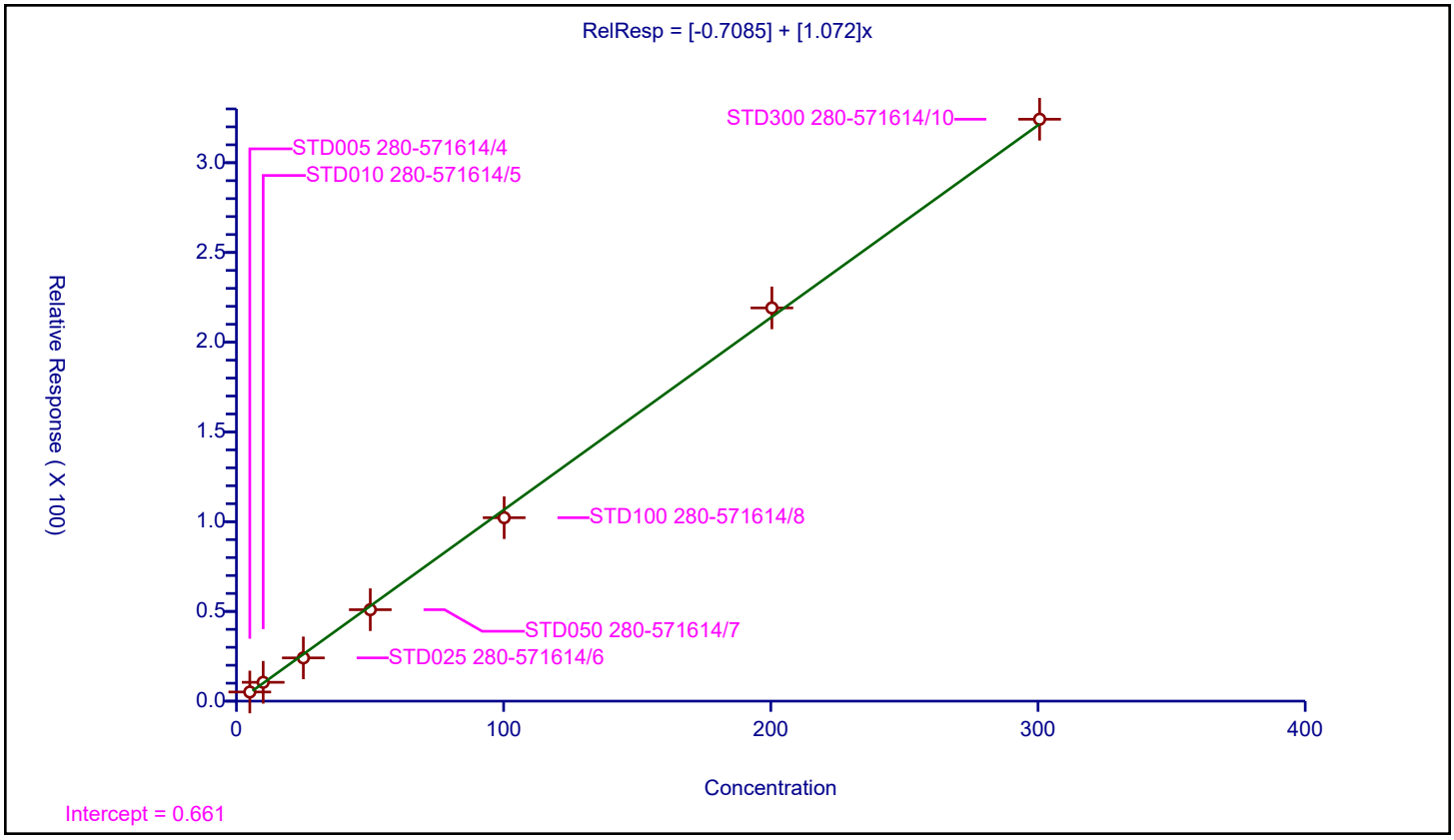
Curve Coefficients

Intercept:	-0.7085
Slope:	1.072

Error Coefficients

Standard Error:	1610000
Relative Standard Error:	6.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-571614/4	5.01	5.100274	129.36	1006316.0	1.018019	Y
2	STD010 280-571614/5	10.02	10.497349	129.36	978874.0	1.04764	Y
3	STD025 280-571614/6	25.05	24.09384	129.36	1109806.0	0.96183	Y
4	STD050 280-571614/7	50.1	50.950708	129.36	1006973.0	1.01698	Y
5	STD100 280-571614/8	100.2	102.220438	129.36	1122800.0	1.020164	Y
6	STD200 280-571614/9	200.4	219.105507	129.36	1083810.0	1.093341	Y
7	STD300 280-571614/10	300.6	324.248819	129.36	1172337.0	1.078672	Y



Calibration / Tetryl

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

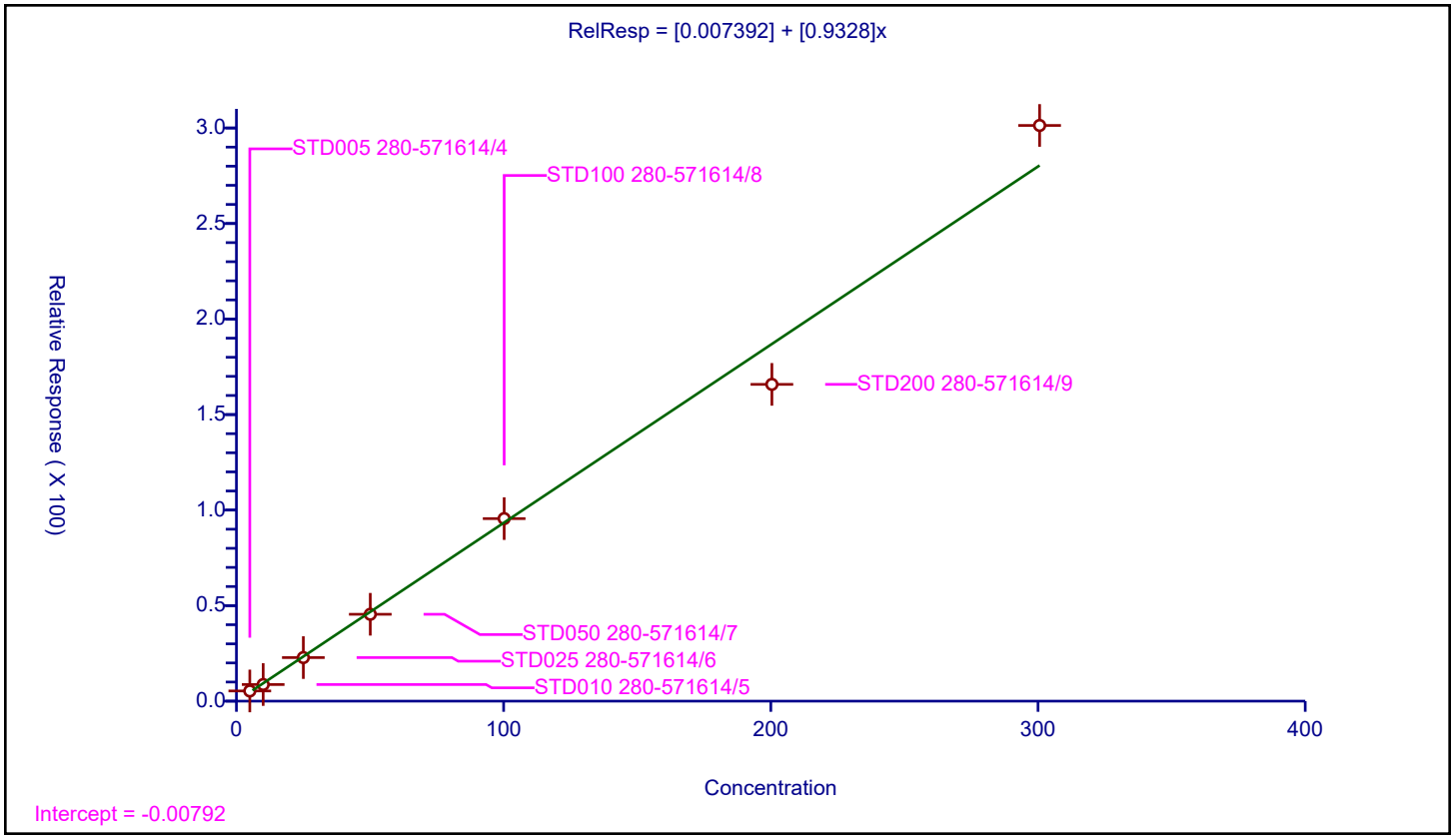
Curve Coefficients

Intercept:	0.007392
Slope:	0.9328

Error Coefficients

Standard Error:	1430000
Relative Standard Error:	9.4
Correlation Coefficient:	0.978
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-571614/4	5.01	5.331403	129.36	1006316.0	1.064152	Y
2	STD010 280-571614/5	10.02	8.688983	129.36	978874.0	0.867164	Y
3	STD025 280-571614/6	25.05	22.800014	129.36	1109806.0	0.91018	Y
4	STD050 280-571614/7	50.1	45.463744	129.36	1006973.0	0.90746	Y
5	STD100 280-571614/8	100.2	95.551623	129.36	1122800.0	0.953609	Y
6	STD200 280-571614/9	200.4	165.806289	129.36	1083810.0	0.827377	Y
7	STD300 280-571614/10	300.6	301.325467	129.36	1172337.0	1.002413	Y



Calibration / 1,3-Dinitrobenzene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

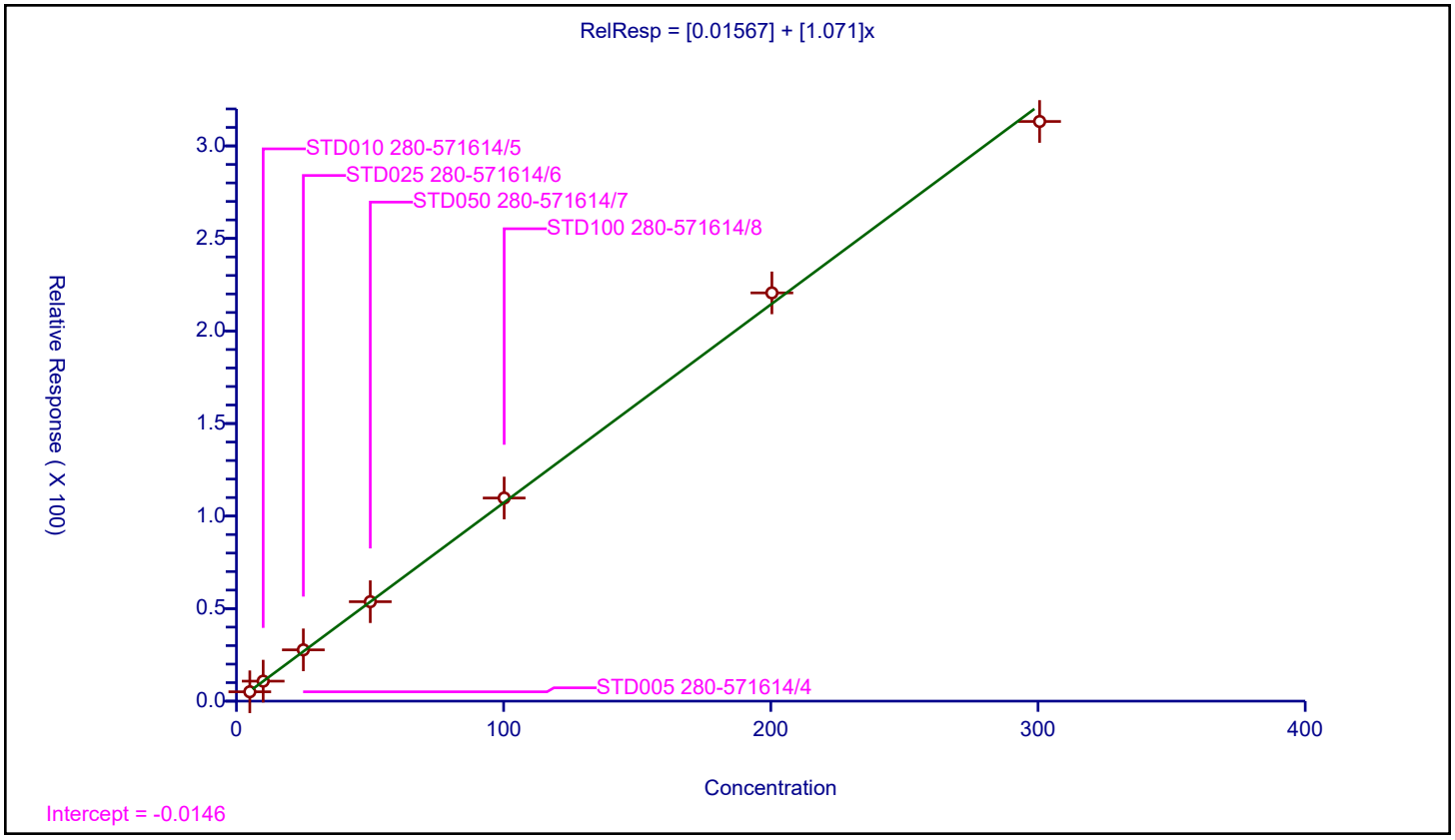
Curve Coefficients

Intercept:	0.01567
Slope:	1.071

Error Coefficients

Standard Error:	1590000
Relative Standard Error:	3.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-571614/4	5.01	5.065309	129.36	1006316.0	1.01104	Y
2	STD010 280-571614/5	10.02	10.805131	129.36	978874.0	1.078356	Y
3	STD025 280-571614/6	25.05	27.703498	129.36	1109806.0	1.105928	Y
4	STD050 280-571614/7	50.1	53.727719	129.36	1006973.0	1.07241	Y
5	STD100 280-571614/8	100.2	109.757951	129.36	1122800.0	1.095389	Y
6	STD200 280-571614/9	200.4	220.595556	129.36	1083810.0	1.100776	Y
7	STD300 280-571614/10	300.6	313.213125	129.36	1172337.0	1.04196	Y



Calibration / Nitroglycerin

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

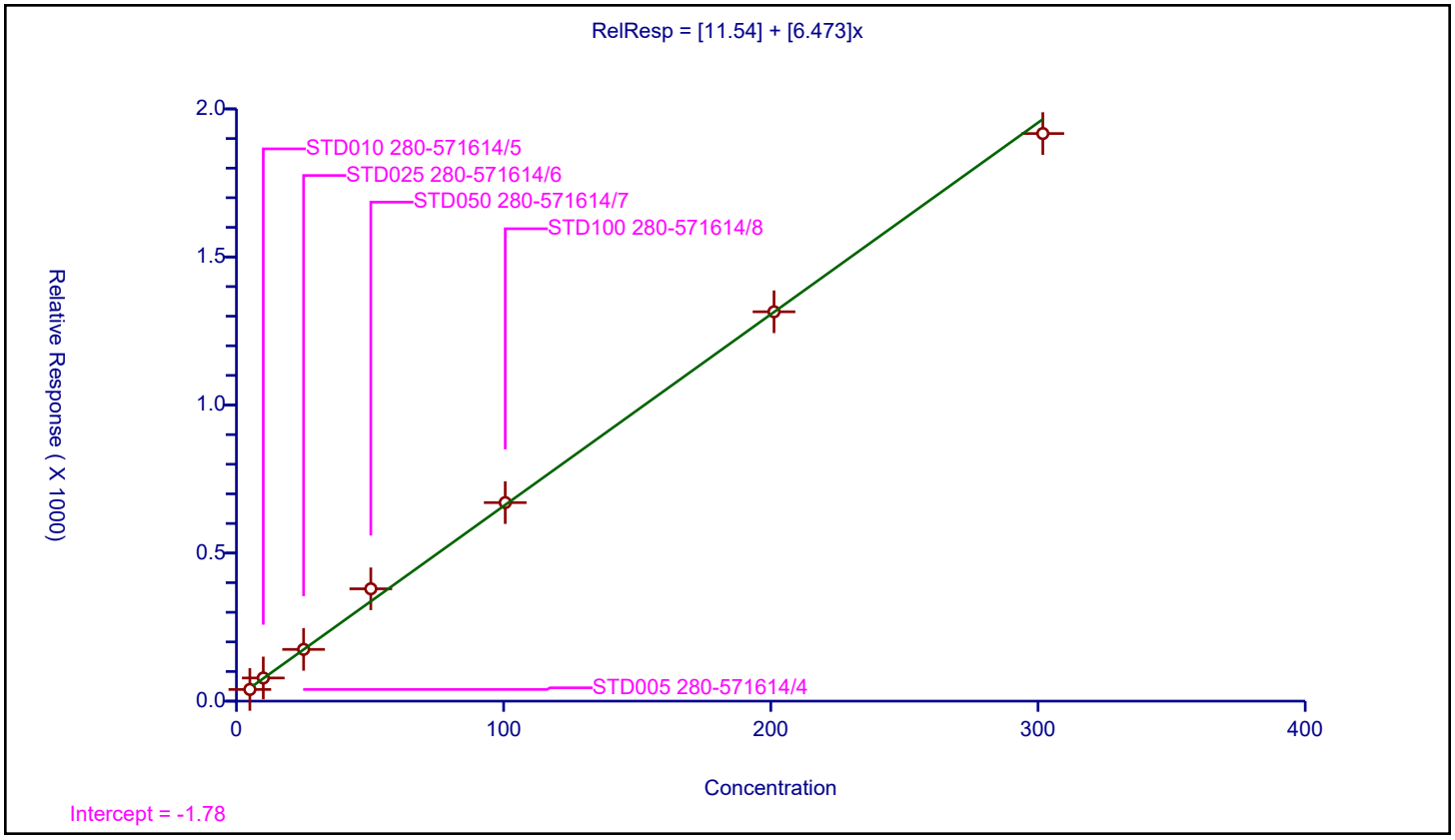
Curve Coefficients

Intercept:	11.54
Slope:	6.473

Error Coefficients

Standard Error:	9680000
Relative Standard Error:	8.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-571614/4	5.03	39.40706	129.36	1006316.0	7.834406	Y
2	STD010 280-571614/5	10.06	78.207194	129.36	978874.0	7.774075	Y
3	STD025 280-571614/6	25.15	174.753365	129.36	1109806.0	6.948444	Y
4	STD050 280-571614/7	50.3	379.372952	129.36	1006973.0	7.542206	Y
5	STD100 280-571614/8	100.6	670.437118	129.36	1122800.0	6.664385	Y
6	STD200 280-571614/9	201.2	1314.922241	129.36	1083810.0	6.535399	Y
7	STD300 280-571614/10	301.8	1916.795497	129.36	1172337.0	6.351211	Y



Calibration / 2,4,6-Trinitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

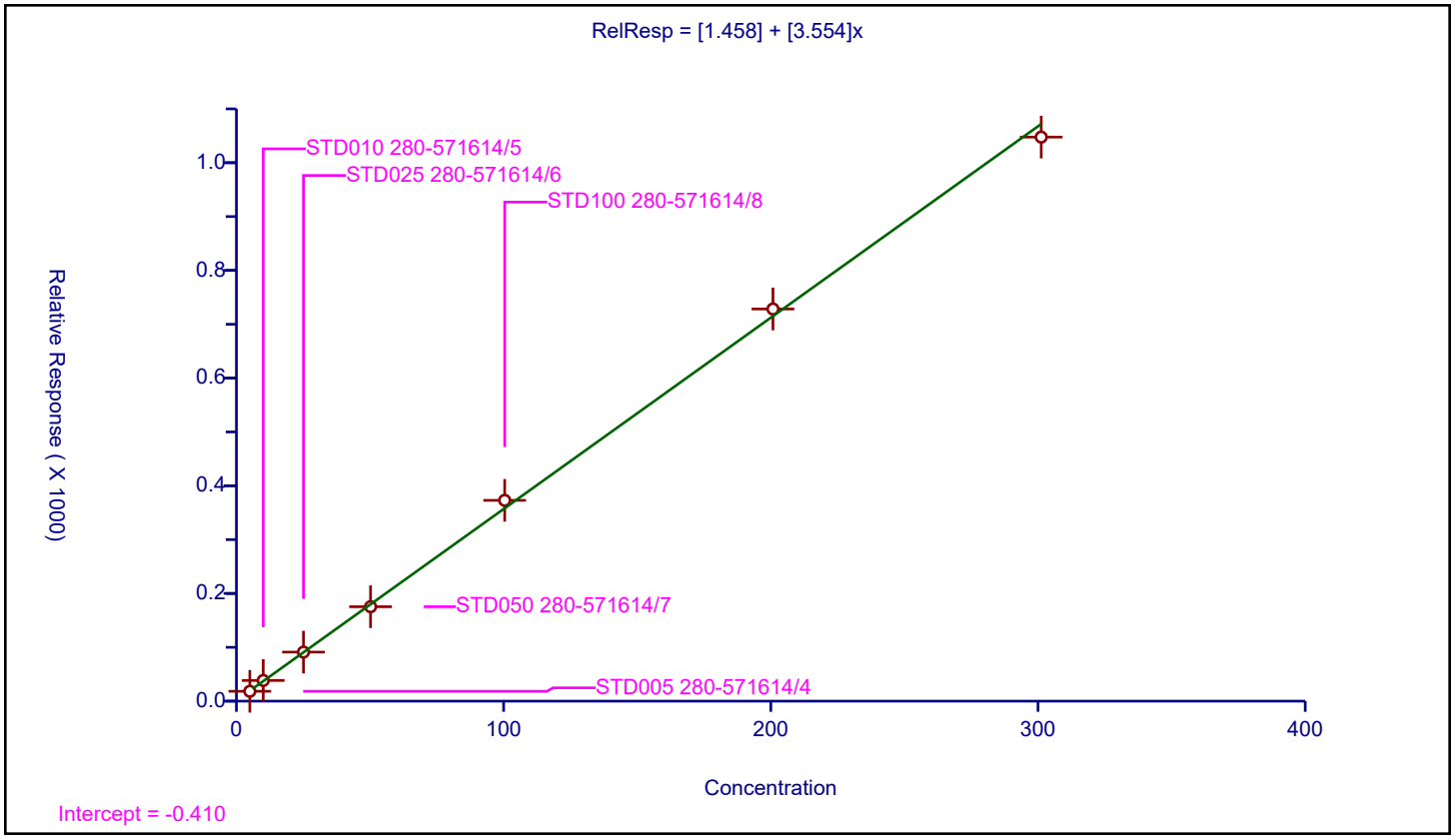
Curve Coefficients

Intercept:	1.458
Slope:	3.554

Error Coefficients

Standard Error:	5300000
Relative Standard Error:	3.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-571614/4	5.02	18.345998	129.36	1006316.0	3.654581	Y
2	STD010 280-571614/5	10.04	38.434248	129.36	978874.0	3.828112	Y
3	STD025 280-571614/6	25.1	91.115432	129.36	1109806.0	3.630097	Y
4	STD050 280-571614/7	50.2	175.381921	129.36	1006973.0	3.493664	Y
5	STD100 280-571614/8	100.4	372.960848	129.36	1122800.0	3.714749	Y
6	STD200 280-571614/9	200.8	728.338778	129.36	1083810.0	3.627185	Y
7	STD300 280-571614/10	301.2	1047.605497	129.36	1172337.0	3.478106	Y



Calibration / Nitrobenzene-d5

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

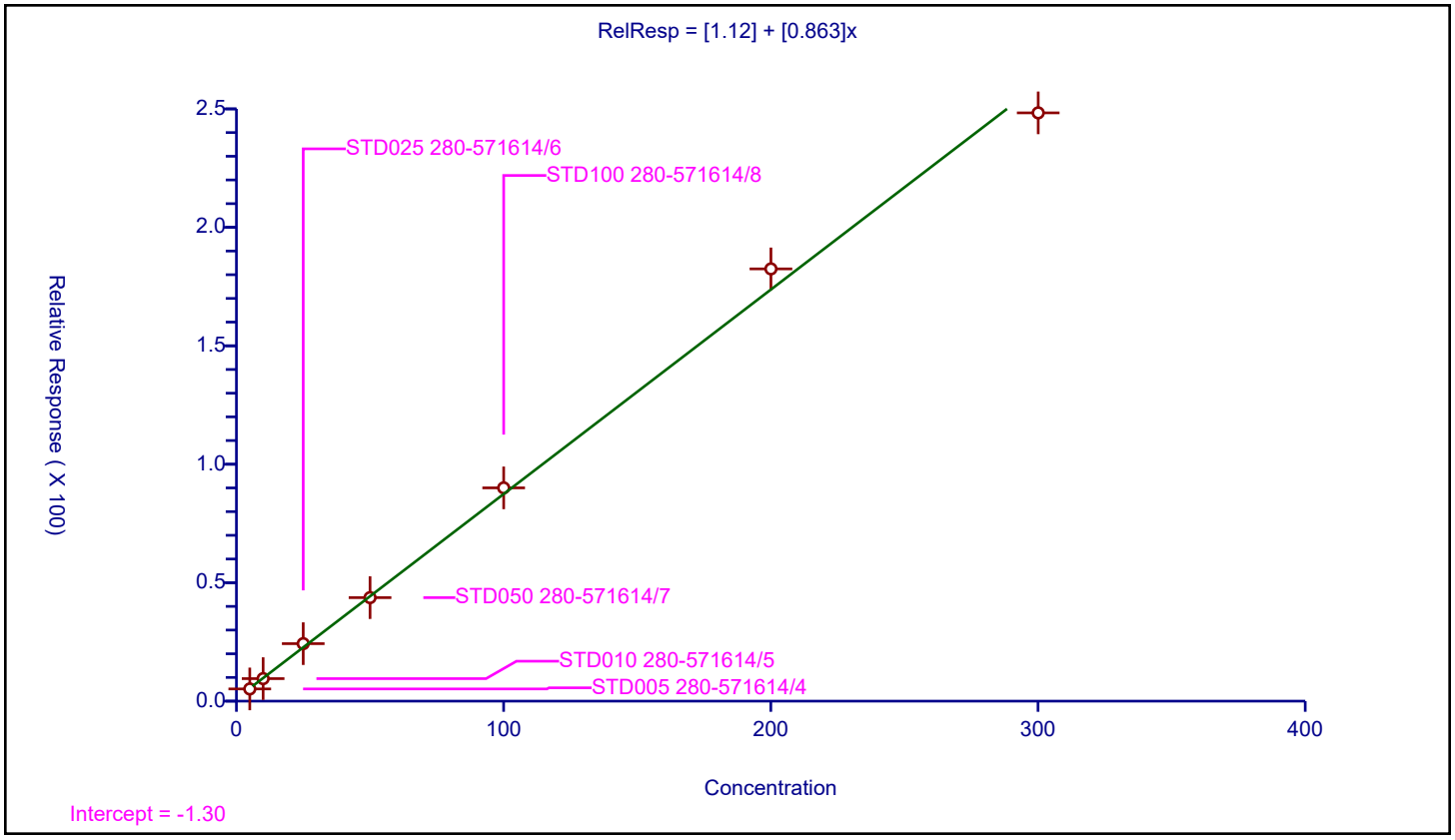
Curve Coefficients

Intercept:	1.12
Slope:	0.863

Error Coefficients

Standard Error:	1280000
Relative Standard Error:	5.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-571614/4	5.001233	5.150151	129.36	1006316.0	1.029776	Y
2	STD010 280-571614/5	10.002465	9.509118	129.36	978874.0	0.950677	Y
3	STD025 280-571614/6	25.006163	24.269264	129.36	1109806.0	0.970531	Y
4	STD050 280-571614/7	50.012325	43.694535	129.36	1006973.0	0.873675	Y
5	STD100 280-571614/8	100.02465	90.02502	129.36	1122800.0	0.900028	Y
6	STD200 280-571614/9	200.0493	182.460728	129.36	1083810.0	0.912079	Y
7	STD300 280-571614/10	300.07395	248.320769	129.36	1172337.0	0.827532	Y



Calibration / Nitrobenzene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

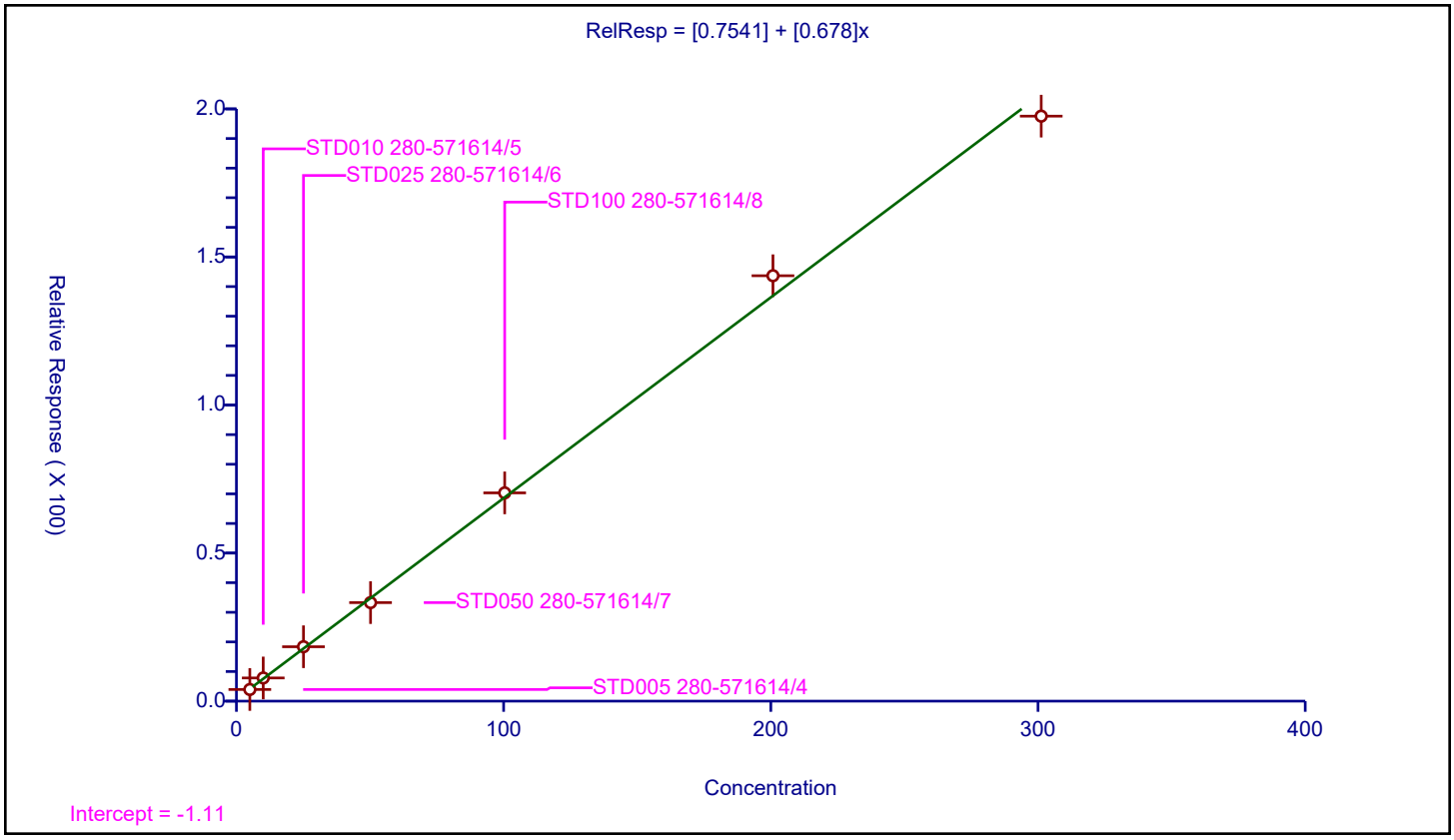
Curve Coefficients

Intercept:	0.7541
Slope:	0.678

Error Coefficients

Standard Error:	1010000
Relative Standard Error:	5.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-571614/4	5.02	3.932672	129.36	1006316.0	0.783401	Y
2	STD010 280-571614/5	10.04	7.830525	129.36	978874.0	0.779933	Y
3	STD025 280-571614/6	25.1	18.373497	129.36	1109806.0	0.732012	Y
4	STD050 280-571614/7	50.2	33.276601	129.36	1006973.0	0.66288	Y
5	STD100 280-571614/8	100.4	70.328612	129.36	1122800.0	0.700484	Y
6	STD200 280-571614/9	200.8	143.664067	129.36	1083810.0	0.715458	Y
7	STD300 280-571614/10	301.2	197.554171	129.36	1172337.0	0.65589	Y



Calibration / 4-Amino-2,6-dinitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

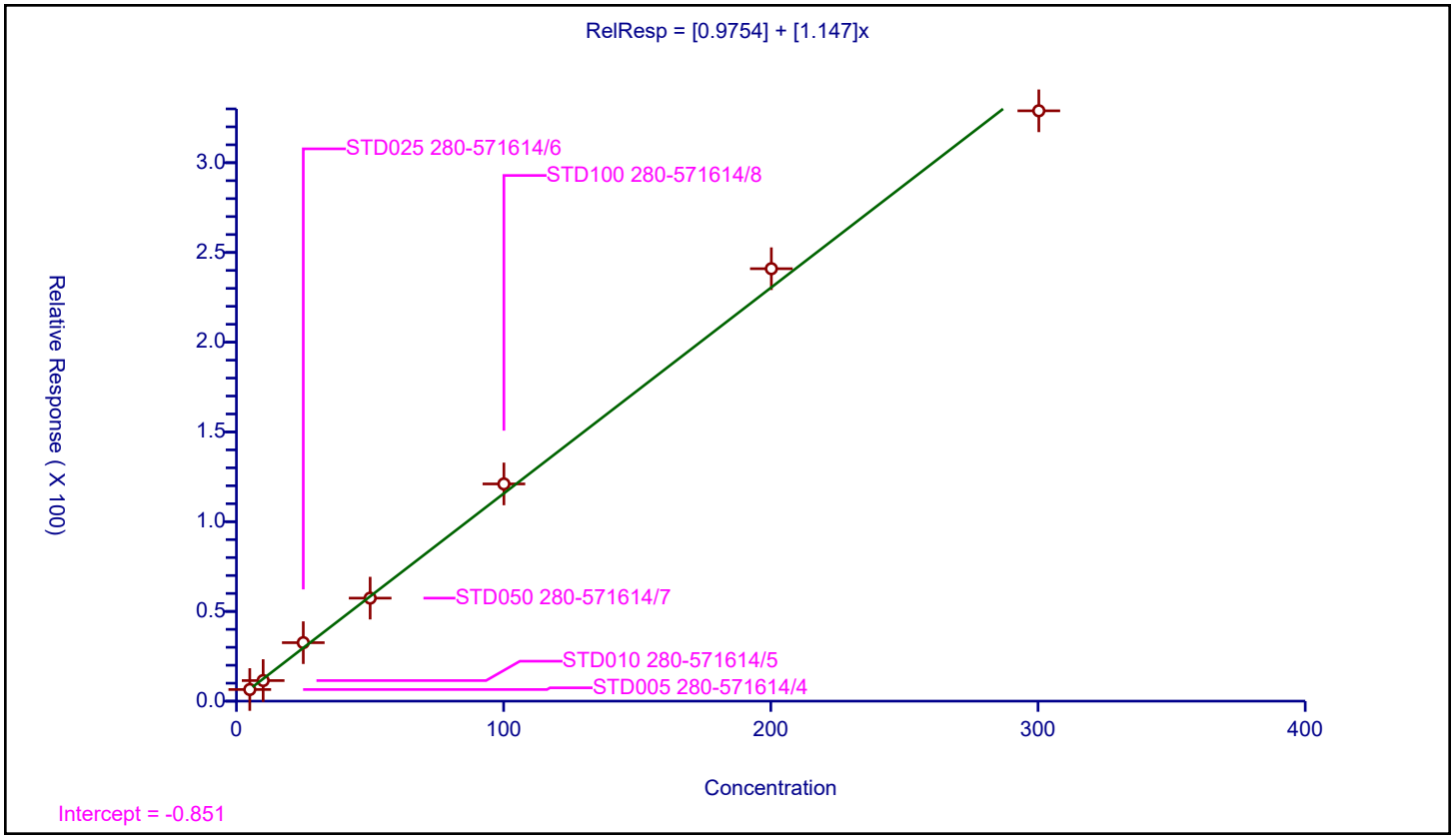
Curve Coefficients

Intercept:	0.9754
Slope:	1.147

Error Coefficients

Standard Error:	4570000
Relative Standard Error:	7.2
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-571614/4	5.005	6.473773	125.0	2796727.0	1.293461	Y
2	STD010 280-571614/5	10.01	11.463422	125.0	2929808.0	1.145197	Y
3	STD025 280-571614/6	25.025	32.583486	125.0	2994830.0	1.302037	Y
4	STD050 280-571614/7	50.05	57.398615	125.0	2562270.0	1.146825	Y
5	STD100 280-571614/8	100.1	121.024075	125.0	3028792.0	1.209032	Y
6	STD200 280-571614/9	200.2	240.953021	125.0	2912395.0	1.203562	Y
7	STD300 280-571614/10	300.3	328.937147	125.0	2992262.0	1.095362	Y



Calibration / 2-Amino-4,6-dinitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

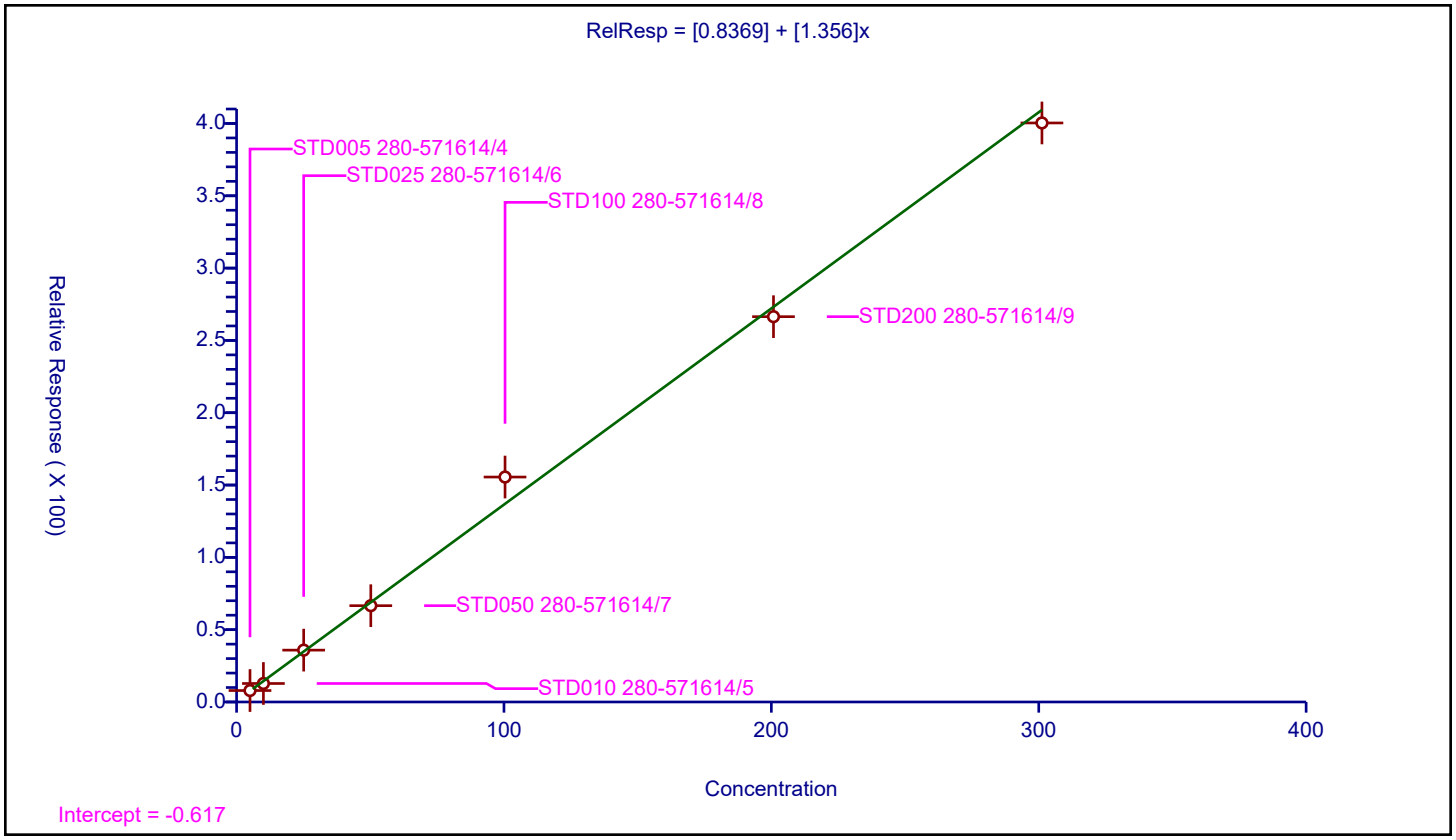
Curve Coefficients

Intercept:	0.8369
Slope:	1.356

Error Coefficients

Standard Error:	5430000
Relative Standard Error:	8.7
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-571614/4	5.02	7.913044	125.0	2796727.0	1.576304	Y
2	STD010 280-571614/5	10.04	12.779805	125.0	2929808.0	1.272889	Y
3	STD025 280-571614/6	25.1	35.860132	125.0	2994830.0	1.428691	Y
4	STD050 280-571614/7	50.2	66.591928	125.0	2562270.0	1.326532	Y
5	STD100 280-571614/8	100.4	155.535028	125.0	3028792.0	1.549154	Y
6	STD200 280-571614/9	200.8	266.423468	125.0	2912395.0	1.32681	Y
7	STD300 280-571614/10	301.2	400.356027	125.0	2992262.0	1.329203	Y



Calibration / 2,6-Dinitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

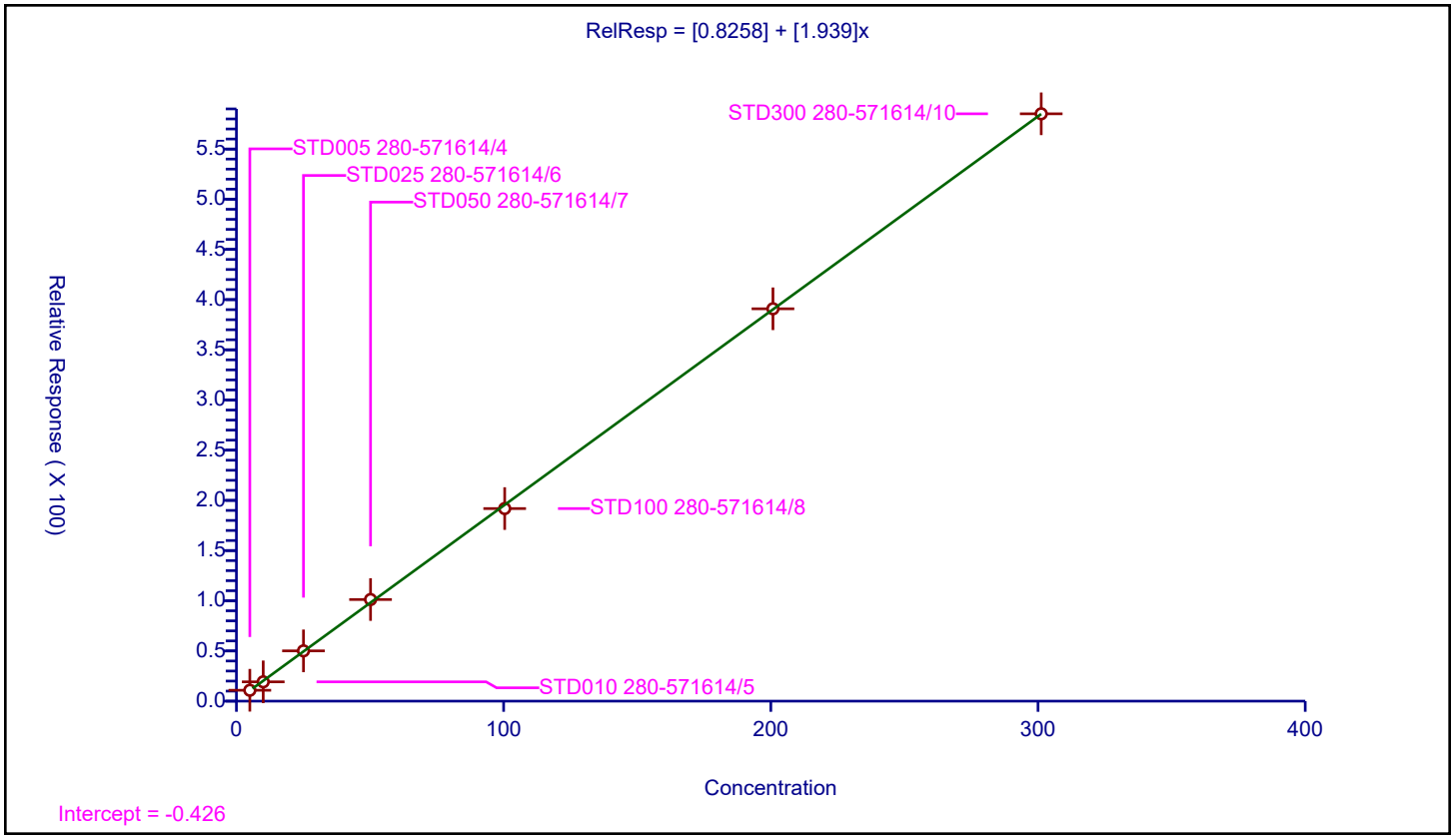
Curve Coefficients

Intercept:	0.8258
Slope:	1.939

Error Coefficients

Standard Error:	7830000
Relative Standard Error:	3.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-571614/4	5.02	10.833467	125.0	2796727.0	2.158061	Y
2	STD010 280-571614/5	10.04	19.236371	125.0	2929808.0	1.915973	Y
3	STD025 280-571614/6	25.1	50.084896	125.0	2994830.0	1.995414	Y
4	STD050 280-571614/7	50.2	101.232013	125.0	2562270.0	2.016574	Y
5	STD100 280-571614/8	100.4	191.855532	125.0	3028792.0	1.910912	Y
6	STD200 280-571614/9	200.8	390.867439	125.0	2912395.0	1.946551	Y
7	STD300 280-571614/10	301.2	585.127196	125.0	2992262.0	1.942653	Y



Calibration / 2,4-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

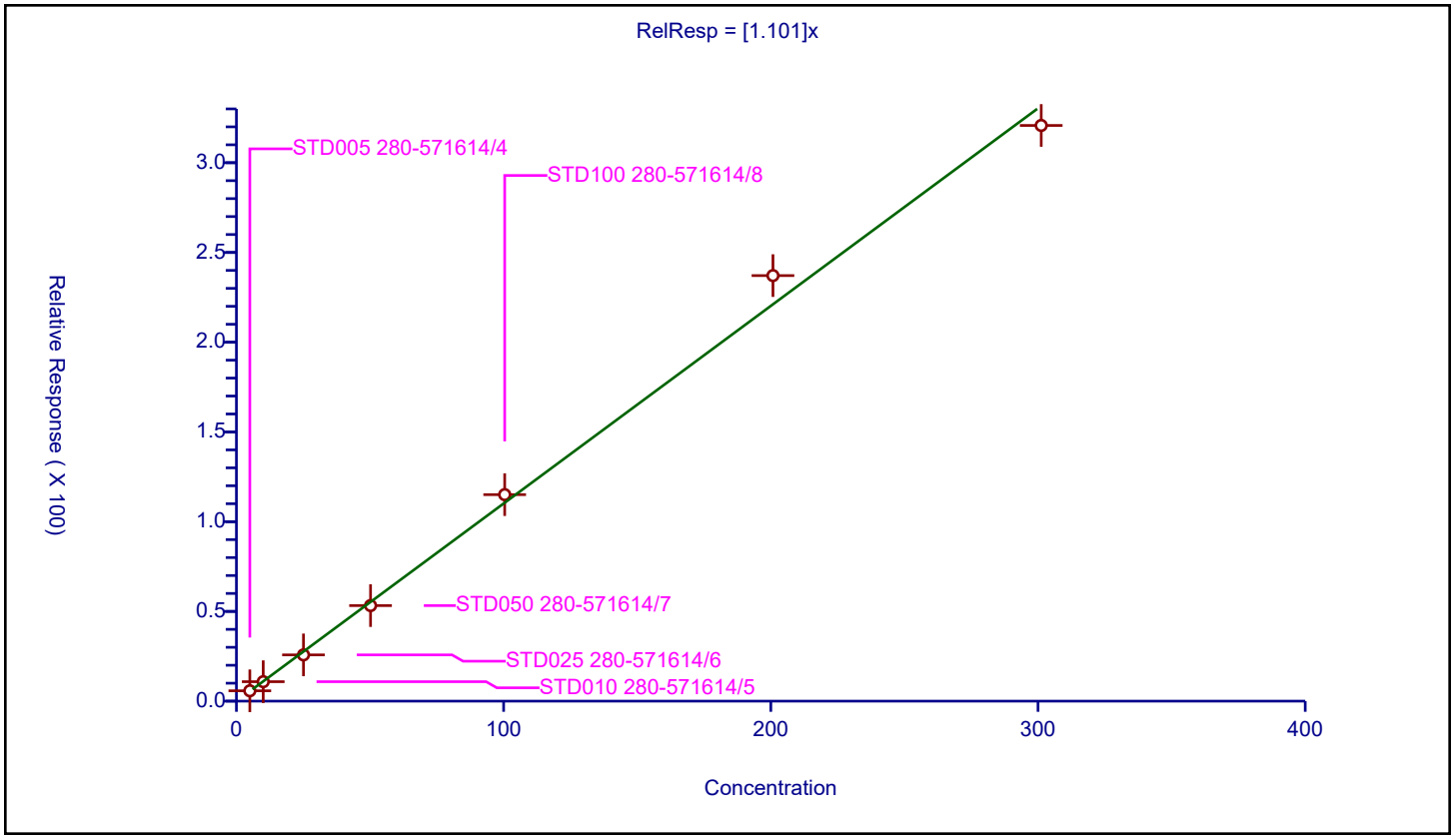
Curve Coefficients

Intercept:	0
Slope:	1.101

Error Coefficients

Standard Error:	4060000
Relative Standard Error:	5.2
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-571614/4	5.02	5.766026	125.0	2796727.0	1.148611	Y
2	STD010 280-571614/5	10.04	10.842349	125.0	2929808.0	1.079915	Y
3	STD025 280-571614/6	25.1	25.77375	125.0	2994830.0	1.026843	Y
4	STD050 280-571614/7	50.2	53.245755	125.0	2562270.0	1.060672	Y
5	STD100 280-571614/8	100.4	115.059403	125.0	3028792.0	1.14601	Y
6	STD200 280-571614/9	200.8	237.108076	125.0	2912395.0	1.180817	Y
7	STD300 280-571614/10	301.2	320.761977	125.0	2992262.0	1.064947	Y



Calibration / PETN

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

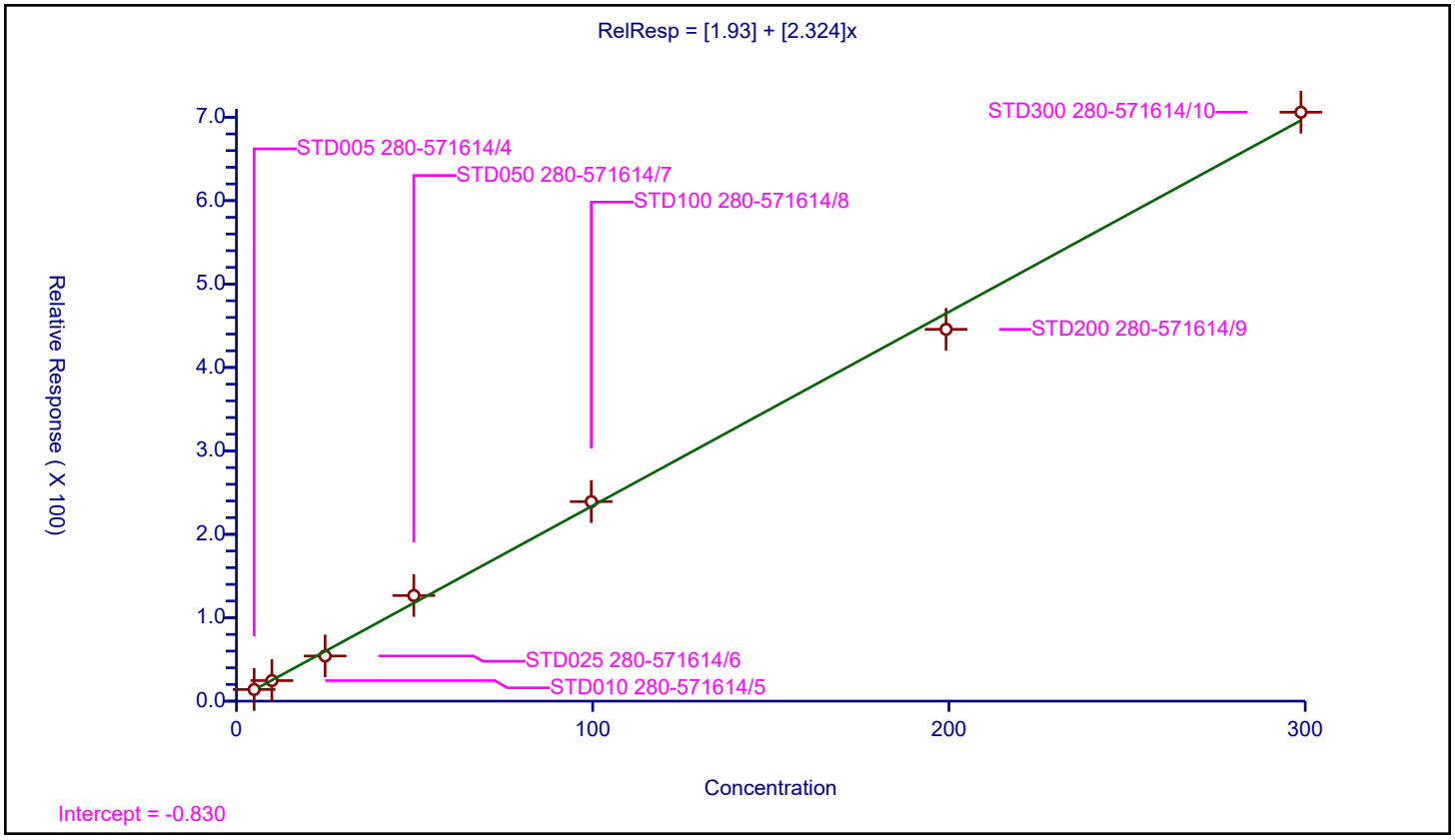
Curve Coefficients

Intercept:	1.93
Slope:	2.324

Error Coefficients

Standard Error:	9340000
Relative Standard Error:	6.3
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-571614/4	4.98	13.966281	125.0	2796727.0	2.804474	Y
2	STD010 280-571614/5	9.96	24.647136	125.0	2929808.0	2.474612	Y
3	STD025 280-571614/6	24.9	54.127655	125.0	2994830.0	2.173801	Y
4	STD050 280-571614/7	49.8	126.609022	125.0	2562270.0	2.54235	Y
5	STD100 280-571614/8	99.6	239.224417	125.0	3028792.0	2.401852	Y
6	STD200 280-571614/9	199.2	445.741306	125.0	2912395.0	2.237657	Y
7	STD300 280-571614/10	298.8	705.997085	125.0	2992262.0	2.362775	Y



Calibration / o-Nitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

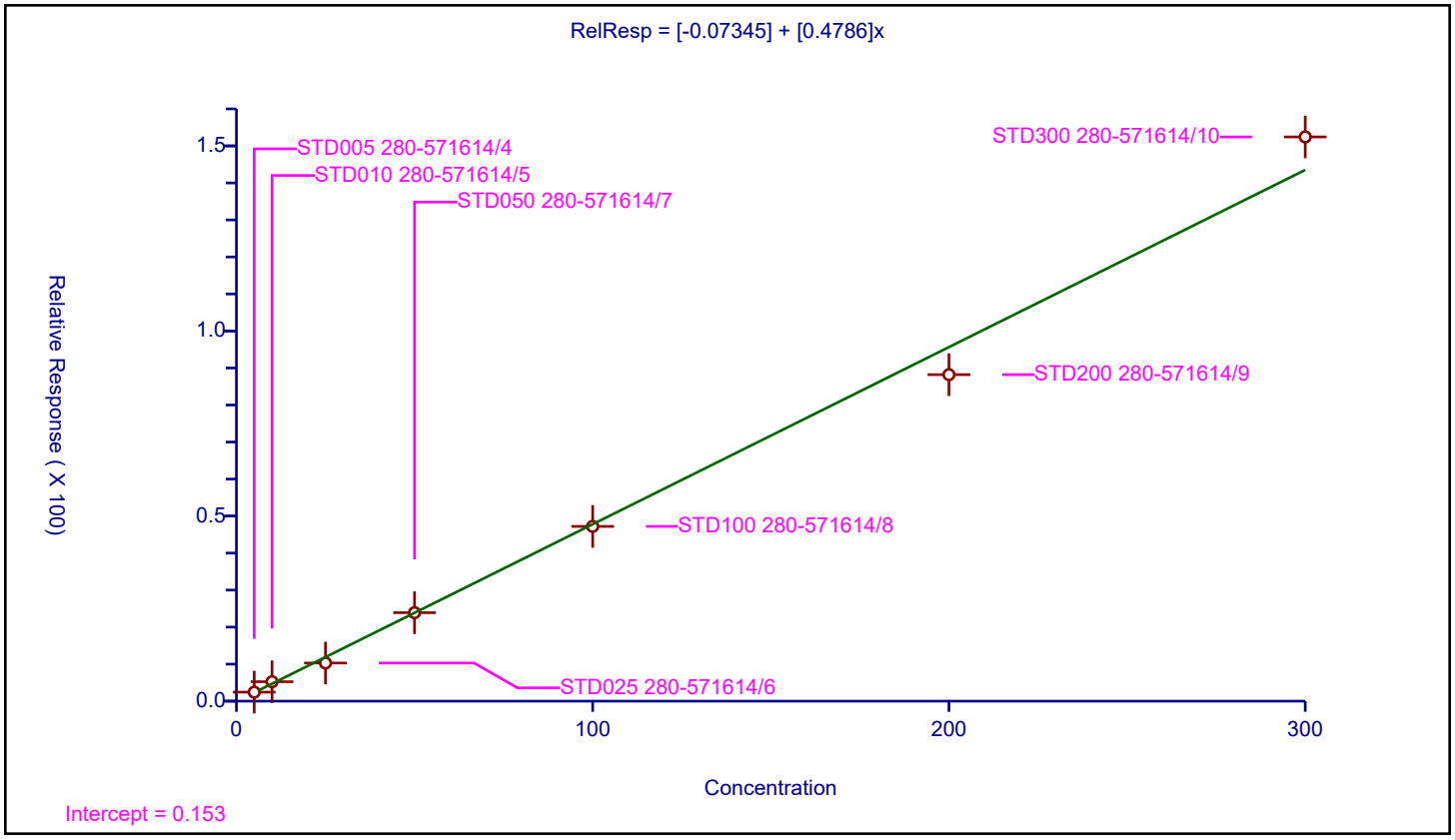
Curve Coefficients

Intercept:	-0.07345
Slope:	0.4786

Error Coefficients

Standard Error:	1960000
Relative Standard Error:	9.2
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-571614/4	5.0	2.432665	125.0	2796727.0	0.486533	Y
2	STD010 280-571614/5	10.0	5.24659	125.0	2929808.0	0.524659	Y
3	STD025 280-571614/6	25.0	10.298623	125.0	2994830.0	0.411945	Y
4	STD050 280-571614/7	50.0	23.900487	125.0	2562270.0	0.47801	Y
5	STD100 280-571614/8	100.0	47.203307	125.0	3028792.0	0.472033	Y
6	STD200 280-571614/9	200.0	88.203051	125.0	2912395.0	0.441015	Y
7	STD300 280-571614/10	300.0	152.420644	125.0	2992262.0	0.508069	Y



Calibration / p-Nitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

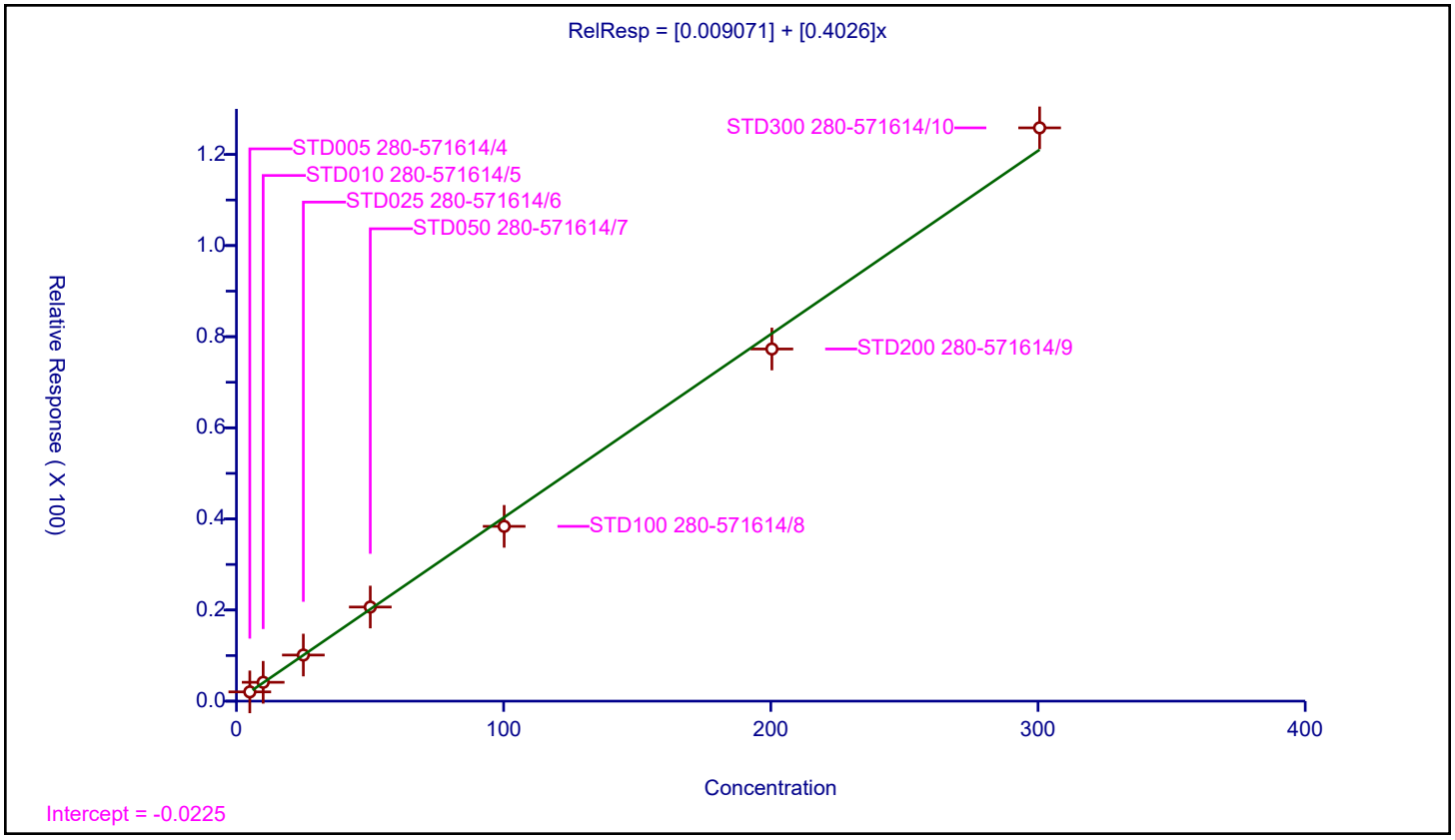
Curve Coefficients

Intercept:	0.009071
Slope:	0.4026

Error Coefficients

Standard Error:	1640000
Relative Standard Error:	3.7
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-571614/4	5.01	2.033091	125.0	2796727.0	0.405807	Y
2	STD010 280-571614/5	10.02	4.134443	125.0	2929808.0	0.412619	Y
3	STD025 280-571614/6	25.05	10.118938	125.0	2994830.0	0.40395	Y
4	STD050 280-571614/7	50.1	20.658781	125.0	2562270.0	0.412351	Y
5	STD100 280-571614/8	100.2	38.365708	125.0	3028792.0	0.382891	Y
6	STD200 280-571614/9	200.4	77.293688	125.0	2912395.0	0.385697	Y
7	STD300 280-571614/10	300.6	125.839916	125.0	2992262.0	0.418629	Y



Calibration / m-Nitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

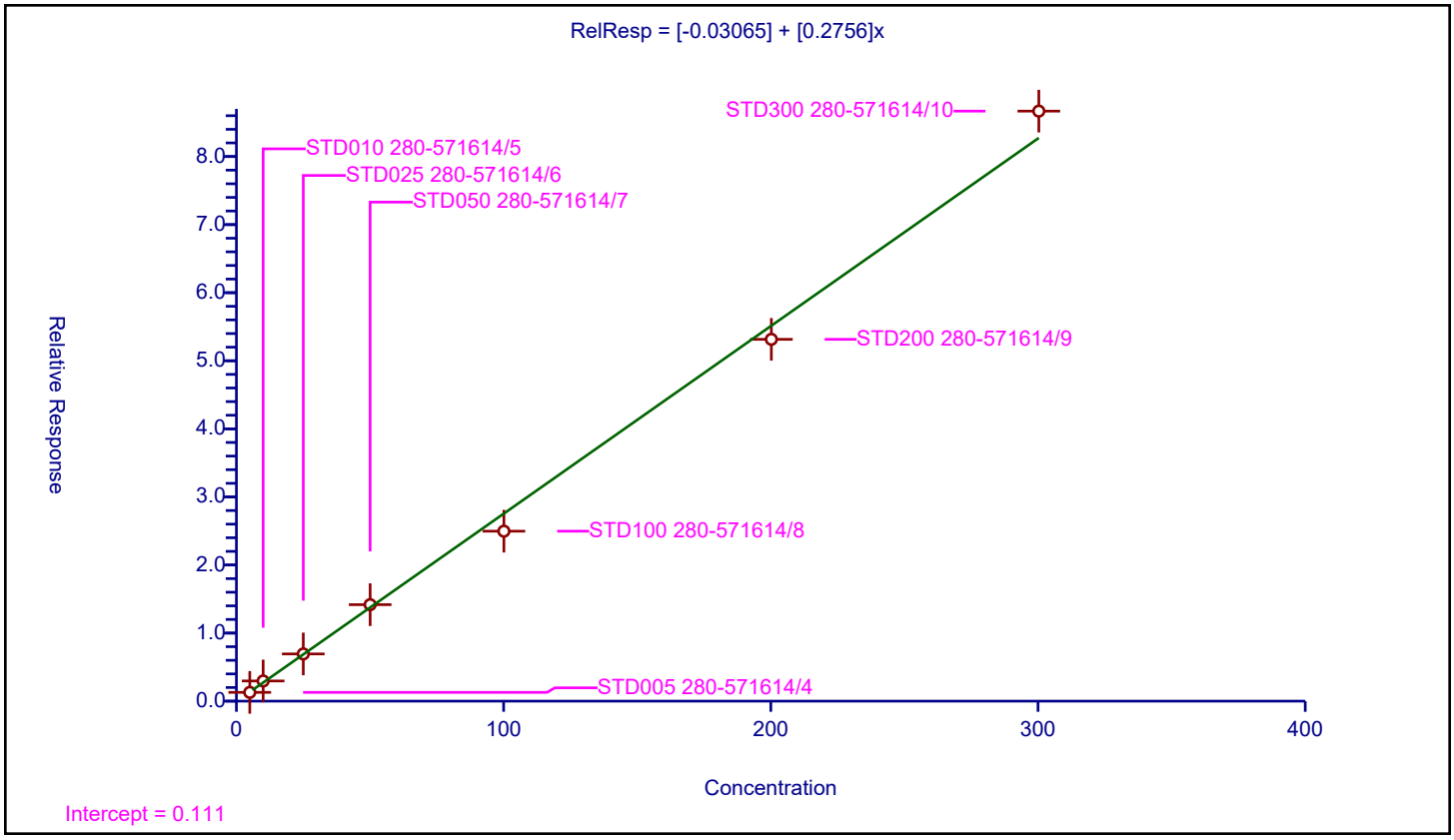
Curve Coefficients

Intercept:	-0.03065
Slope:	0.2756

Error Coefficients

Standard Error:	1120000
Relative Standard Error:	6.7
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-571614/4	5.005	1.28999	125.0	2796727.0	0.25774	Y
2	STD010 280-571614/5	10.01	2.964401	125.0	2929808.0	0.296144	Y
3	STD025 280-571614/6	25.025	6.935577	125.0	2994830.0	0.277146	Y
4	STD050 280-571614/7	50.05	14.172492	125.0	2562270.0	0.283167	Y
5	STD100 280-571614/8	100.1	24.966719	125.0	3028792.0	0.249418	Y
6	STD200 280-571614/9	200.2	53.148139	125.0	2912395.0	0.265475	Y
7	STD300 280-571614/10	300.3	86.670928	125.0	2992262.0	0.288614	Y



FORM VI
LCMS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-160190-1 Analy Batch No.: 570784

SDG No.:

Instrument ID: LC_LCMS7 GC Column: Synergi Hyd ID: Heated Purge: (Y/N) N

Calibration Start Date: 04/05/2022 10:20 Calibration End Date: 04/05/2022 10:58 Calibration ID: 63687

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD001 280-570784/3	ex722D05003.d
Level 2	STD002 280-570784/4	ex722D05004.d
Level 3	STD003 280-570784/5	ex722D05005.d
Level 4	STD004 280-570784/6	ex722D05006.d
Level 5	STD005 280-570784/7	ex722D05007.d
Level 6	STD006 280-570784/8	ex722D05008.d
Level 7	STD007 280-570784/9	ex722D05009.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
HMX	2.5727 2.1598	2.1768 2.1977	2.1531	2.3538	2.2077	Lin1	1.3653	2.1864							0.9990		0.9900
TNX	4.6883 5.1266	5.0480 5.0013	5.2304	5.4281	5.9513	Lin1	-0.0544	5.2135							0.9950		0.9900
DNX	8.6598 7.9730	8.7420 7.7718	8.3860	8.2124	8.2141	Lin1	7.0902	7.8970							0.9990		0.9900
MNX	2.4547 2.0680	2.4437 1.8980	2.3640	2.0903	2.0057	Lin1	4.8792	1.9632							0.9980		0.9900
RDX	0.8541 0.7629	0.9424 0.7260	0.8736	0.8947	0.8351	Lin1	1.5282	0.7587							0.9950		0.9900
1,3,5-Trinitrobenzene	1.8868 1.7487	1.7731 1.7748	1.7269	1.7218	1.6744	Lin1	0.2324	1.7456							0.9990		0.9900
Tetryl	2.8051 2.8832	2.7663 2.8790	2.6394	2.7443	2.7538	Lin1	-1.367	2.8553							0.9990		0.9900
1,3-Dinitrobenzene	1.0174 1.0998	1.0568 1.0705	1.1041	1.1153	1.1142	Lin1	-0.1511	1.0907							1.0000		0.9900
Nitroglycerin	1.0009 1.0430	1.1087 1.0448	1.0749	1.0976	1.0382	Lin1	0.2167	1.0467							1.0000		0.9900
2,4,6-Trinitrotoluene	8.2838 7.8463	8.4658 7.9729	7.6320	8.0171	7.7893	Lin1	2.0847	7.8888							1.0000		0.9900
Nitrobenzene	0.4386 0.5416	0.5248 0.5430	0.4944	0.5101	0.5355	Lin1	-0.543	0.5418							1.0000		0.9900
4-Amino-2,6-dinitrotoluene	1.7885 1.6678	1.7253 1.6552	1.4337	1.6567	1.6225	Lin1	0.0405	1.6478							0.9990		0.9900
2-Amino-4,6-dinitrotoluene	2.4771 2.2844	2.3493 2.2829	2.0296	2.3523	2.2310	Lin1	0.2887	2.2711							0.9990		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-160190-1 Analy Batch No.: 570784

SDG No.:

Instrument ID: LC_LCMS7 GC Column: Synergi Hyd ID: Heated Purge: (Y/N) N

Calibration Start Date: 04/05/2022 10:20 Calibration End Date: 04/05/2022 10:58 Calibration ID: 63687

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
2,6-Dinitrotoluene	2.3309 2.0446	2.1447 1.9974	1.7155	2.0938	1.9650	Lin1	0.7776	1.9998							0.9980		0.9900
2,4-Dinitrotoluene	1.1520 1.0464	1.1564 1.0492	1.0786	1.0660	1.0561	Lin1	0.7411	1.0465							1.0000		0.9900
PETN	0.2105 0.2367	0.2278 0.2312	0.1934	0.2541	0.2211	Lin1	-0.146	0.2329							0.9980		0.9900
o-Nitrotoluene	0.3195 0.3148	0.3232 0.3106	0.2599	0.3115	0.3093	Lin1	-0.071	0.3108							0.9990		0.9900
p-Nitrotoluene	0.3057 0.2719	0.2777 0.2698	0.2337	0.2930	0.2573	Lin1	0.0776	0.2686							0.9980		0.9900
m-Nitrotoluene	0.1494 0.1617	0.1822 0.1610	0.1335	0.1749	0.1550	Lin1	-0.020	0.1608							0.9970		0.9900
Nitrobenzene-d5	0.7028 0.6390	0.7835 0.6296	0.6591	0.5683	0.6223	Lin1	0.6185	0.6244							0.9980		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-160190-1 Analy Batch No.: 570784

SDG No.:

Instrument ID: LC_LCMS7 GC Column: Synergi Hyd ID: Heated Purge: (Y/N) N

Calibration Start Date: 04/05/2022 10:20 Calibration End Date: 04/05/2022 10:58 Calibration ID: 63687

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD001 280-570784/3	ex722D05003.d
Level 2	STD002 280-570784/4	ex722D05004.d
Level 3	STD003 280-570784/5	ex722D05005.d
Level 4	STD004 280-570784/6	ex722D05006.d
Level 5	STD005 280-570784/7	ex722D05007.d
Level 6	STD006 280-570784/8	ex722D05008.d
Level 7	STD007 280-570784/9	ex722D05009.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
HMX	HXC4	Lin1	22919 651619	43910 966976	99812	207300	353522	5.00 200	10.0 300	25.0	50.0	100
TNX	DNB4	Lin1	345057 14190695	707227 20156929	1889953	3771011	8507412	5.01 200	10.0 300	25.0	50.1	100
DNX	DNB4	Lin1	637362 22069551	1224740 31322751	3030158	5705342	11741943	5.01 200	10.0 300	25.0	50.1	100
MNX	DNB4	Lin1	210622 6673492	399143 8918135	995873	1692978	3342652	5.84 233	11.7 350	29.2	58.4	117
RDX	HHTT	Lin1	26411 1012129	59470 1374091	138465	279855	561601	5.00 200	10.0 300	25.0	50.0	100
1,3,5-Trinitrobenzene	DNB4	Lin1	139004 4845395	248662 7160063	624633	1197379	2395986	5.01 200	10.0 301	25.1	50.1	100
Tetryl	DNB4	Lin1	206662 7988769	387943 11614876	954669	1908415	3940409	5.01 200	10.0 301	25.1	50.1	100
1,3-Dinitrobenzene	DNB4	Lin1	74952 3047339	148210 4318549	399341	775574	1594374	5.01 200	10.0 301	25.1	50.1	100
Nitroglycerin	DNB4	Lin1	74037 2901547	156102 4231818	390328	766366	1491574	5.03 201	10.1 302	25.2	50.3	101
2,4,6-Trinitrotoluene	DNB4	Lin1	611513 21784019	1189602 32229660	2765979	5586313	11168170	5.02 201	10.0 301	25.1	50.2	100
Nitrobenzene	DNB4	Lin1	32381 1503771	73749 2194814	179183	355409	767853	5.02 201	10.0 301	25.1	50.2	100
4-Amino-2,6-dinitrotoluene	DNT3	Lin1	405289 15052562	781387 21828571	1968792	3747806	7648612	5.01 200	10.0 300	25.0	50.1	100
2-Amino-4,6-dinitrotoluene	DNT3	Lin1	563021 20679165	1067186 30197142	2795460	5337400	10548530	5.02 201	10.0 301	25.1	50.2	100
2,6-Dinitrotoluene	DNT3	Lin1	529778	974227	2362885	4750949	9291163	5.02	10.0	25.1	50.2	100

FORM VI
LCMS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-160190-1 Analy Batch No.: 570784

SDG No.:

Instrument ID: LC_LCMS7 GC Column: Synergi Hyd ID: Heated Purge: (Y/N) N

Calibration Start Date: 04/05/2022 10:20 Calibration End Date: 04/05/2022 10:58 Calibration ID: 63687

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			18508433	26419862				201	301			
2,4-Dinitrotoluene	DNT3	Lin1	261830 9472373	525276 13878266	1485635	2418696	4993456	5.02 201	10.0 301	25.1	50.2	100
PETN	DNT3	Lin1	47466 2125655	102657 3034184	264320	572054	1036876	4.98 199	9.96 299	24.9	49.8	99.6
o-Nitrotoluene	DNT3	Lin1	72338 2838178	146210 4092313	356589	704017	1456842	5.00 200	10.0 300	25.0	50.0	100
p-Nitrotoluene	DNT3	Lin1	69347 2456125	125897 3561551	321287	663539	1214334	5.01 200	10.0 301	25.1	50.1	100
m-Nitrotoluene	DNT3	Lin1	33865 1459541	82511 2123215	183318	395630	730728	5.01 200	10.0 300	25.0	50.1	100
Nitrobenzene-d5	DNB4	Lin1	51689 1767384	109686 2535644	237975	394526	888907	5.00 200	10.0 300	25.0	50.0	100

Curve Type Legend
Lin1 = Linear 1/conc ISTD

Report Date: 05-Apr-2022 14:53:59 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05003.d
Lims ID: STD001
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 05-Apr-2022 10:20:28 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: STD L1
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 05-Apr-2022 14:53:59 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1672

First Level Reviewer: meyera Date: 05-Apr-2022 11:38:14
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								M
355.1	1.223	1.223	0.0	0.998	22919	5.26	3.1	M
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		222710	125.0	97.0	
36 TNX								
144.0	1.352	1.352	0.0	0.761	345057	4.51	13.2	
33 DNX								
160.0	1.444	1.444	0.0	0.813	637362	4.59	205	
34 MNX								
160.0	1.615	1.615	0.0	0.909	210622	4.81	63.8	
4 RDX								M
281.2	1.774	1.774	0.0	0.998	26411	3.61	6.2	M
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		773055	125.0	145	
5 1,3,5-Trinitrobenzene								
213.0	2.199	2.199	0.0	0.775	139004	5.28	22.0	
6 Tetryl								
241.1	2.532	2.540	-0.008	0.892	206662	5.40	42.1	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.839	2.850	-0.011		1902272	129.4	280	
8 1,3-Dinitrobenzene								
168.0	2.871	2.871	0.0	1.011	74952	4.81	12.7	
9 Nitroglycerin								
62.0	2.867	2.878	-0.011	1.010	74037	4.60	28.3	
28 3,5-Dinitroaniline								
183.0	3.027	3.027	0.0	1.067	380254	5.10	16.0	

Report Date: 05-Apr-2022 14:53:59 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05003.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.096	3.107	-0.011	0.770	611513	5.01	67.6	
$ 11 Nitrobenzene-d5								M
128.0	3.160	3.150	0.010	0.786	51689	4.64	3.2	M
12 Nitrobenzene								
123.0	3.198	3.208	-0.010	0.796	32381	5.07	9.1	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.398	3.391	0.007	0.845	405289	5.41	34.4	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.694	3.708	-0.014	0.919	563021	5.35	44.9	
17 2,6-Dinitrotoluene								
182.0	3.840	3.852	-0.012	0.955	529778	5.46	89.8	
* 18 2,4-dinitrotoluene-d3								
185.1	4.020	4.028	-0.008		5659564	125.0	121	
19 2,4-Dinitrotoluene								
182.0	4.052	4.052	0.0	1.008	261830	4.82	41.9	
20 PETN								
61.8	4.315	4.305	0.010	1.074	47466	5.13	23.0	
22 o-Nitrotoluene								
137.0	4.636	4.631	0.005	1.153	72338	5.37	20.8	
23 p-Nitrotoluene								
137.0	4.910	4.910	0.0	1.221	69347	5.41	19.8	
24 m-Nitrotoluene								
137.0	5.253	5.268	-0.015	1.307	33865	4.78	9.9	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

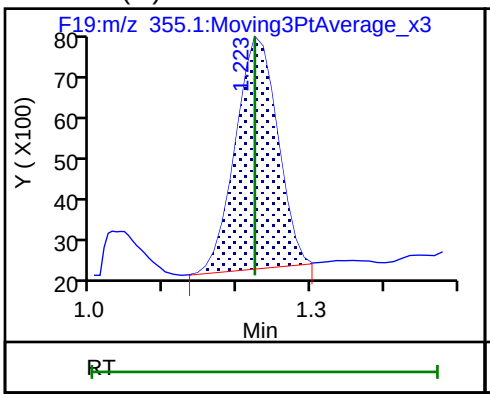
8321EXcalprim_00029	Amount Added: 0.50	Units: uL	
8321NB-D5-cal_00021	Amount Added: 0.50	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 05-Apr-2022 14:53:59 Chrom Revision: 2.3 18-Mar-2022 09:07:22

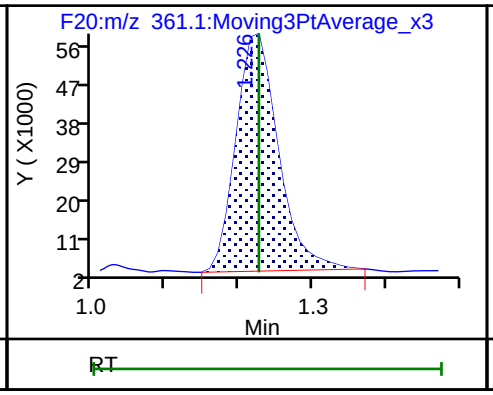
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05003.d
Injection Date: 05-Apr-2022 10:20:28 Instrument ID: LC_LCMS7
Lims ID: STD001
Client ID:
Operator ID: acm ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

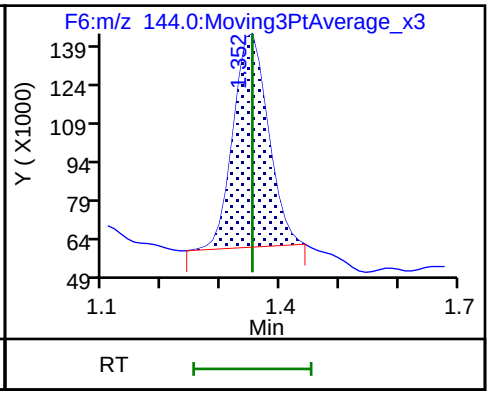
2 HMX (M)



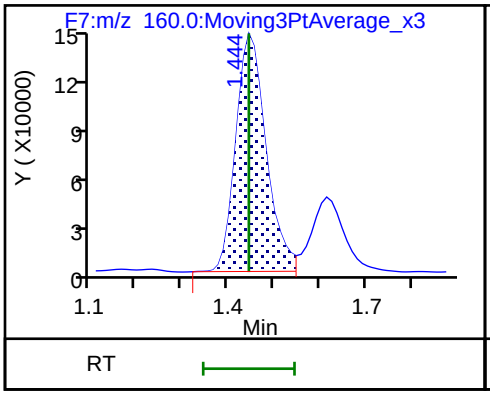
* 1 HMX-13C4



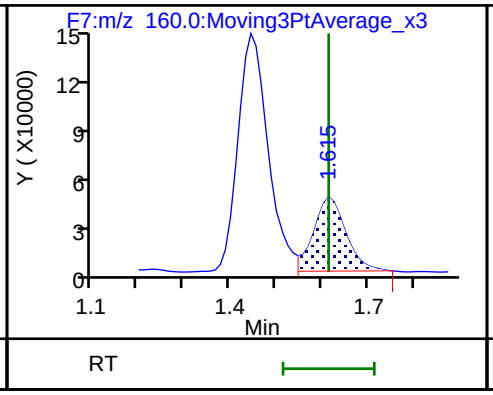
36 TNX



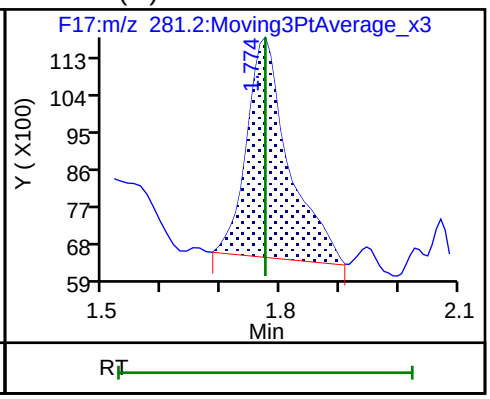
33 DNX



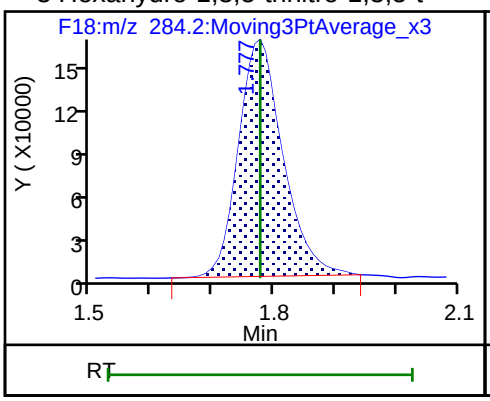
34 MNX



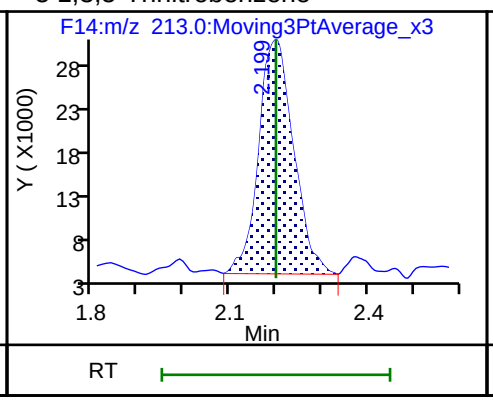
4 RDX (M)



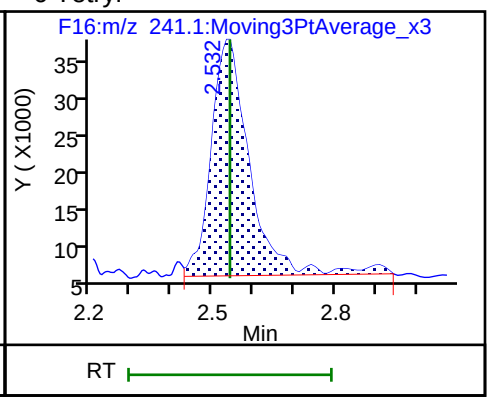
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



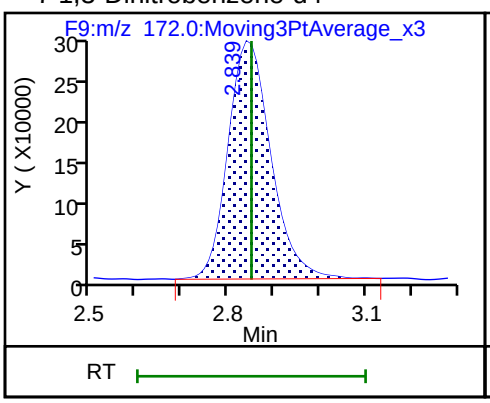
5 1,3,5-Trinitrobenzene



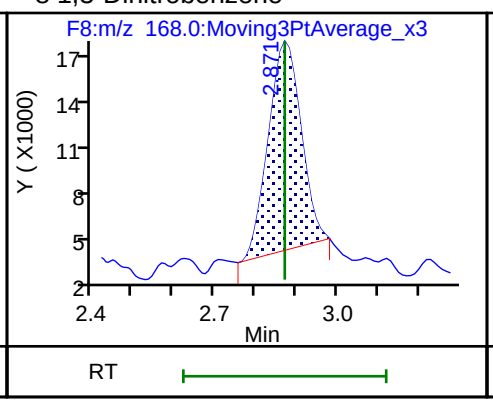
6 Tetryl



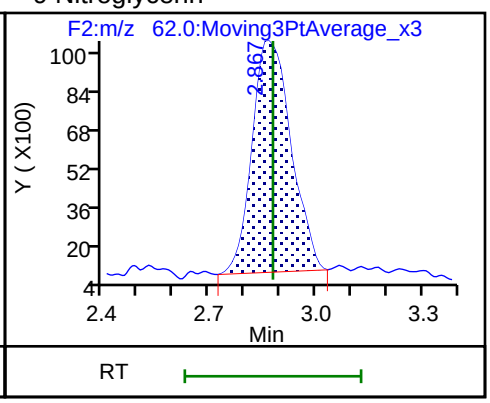
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



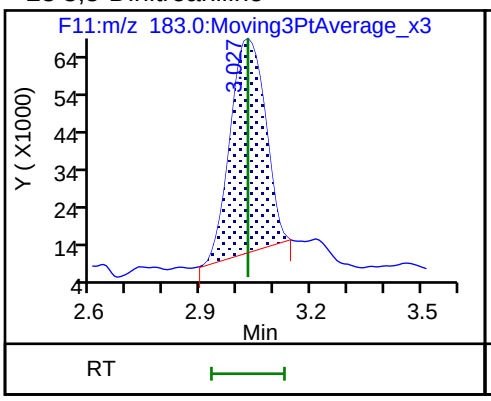
9 Nitroglycerin



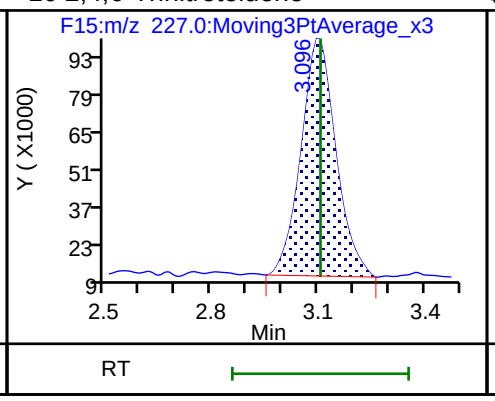
Report Date: 05-Apr-2022 14:53:59 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05003.d

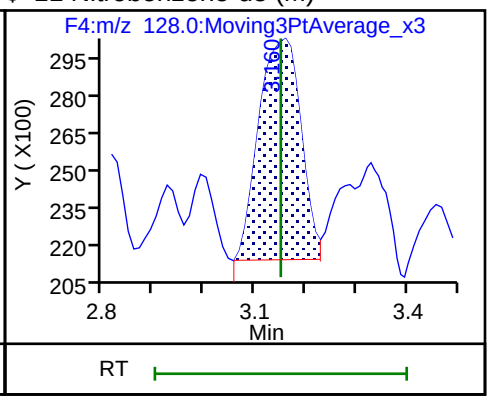
28 3,5-Dinitroaniline



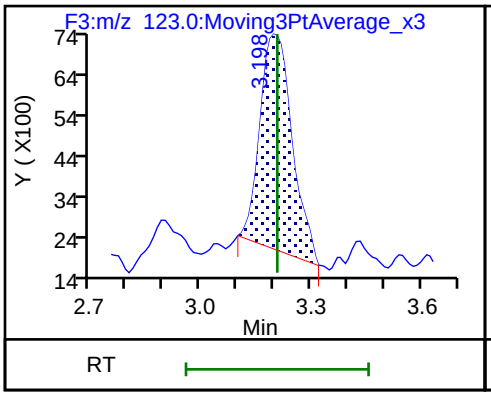
10 2,4,6-Trinitrotoluene



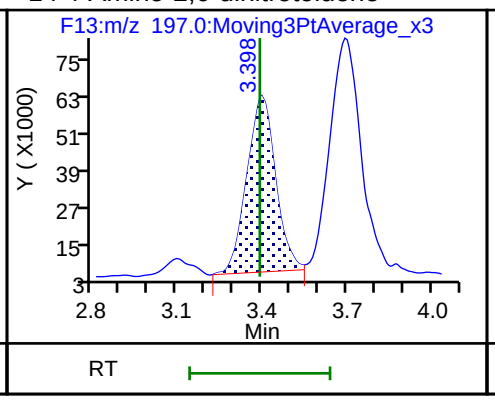
$ 11 Nitrobenzene-d5 (M)



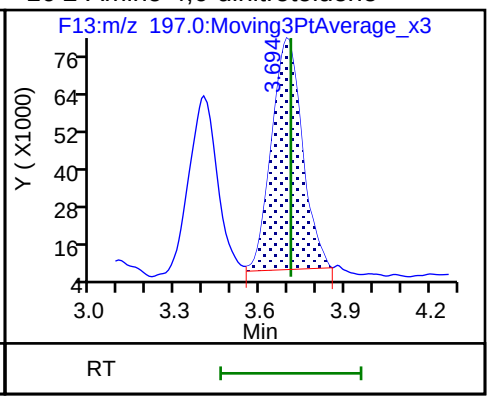
12 Nitrobenzene



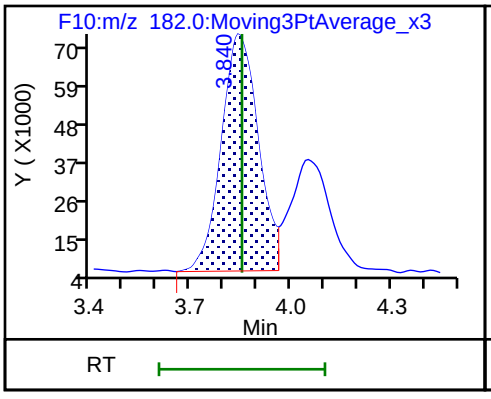
14 4-Amino-2,6-dinitrotoluene



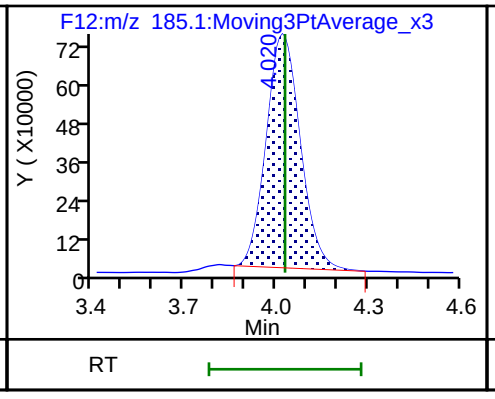
16 2-Amino-4,6-dinitrotoluene



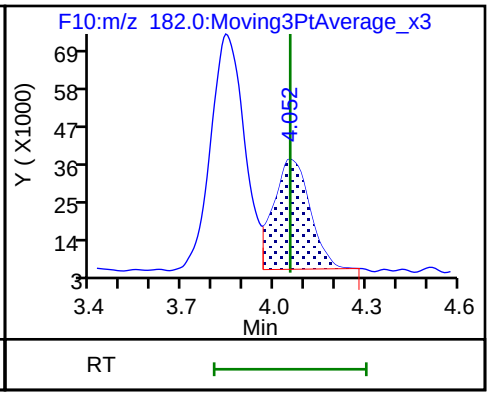
17 2,6-Dinitrotoluene



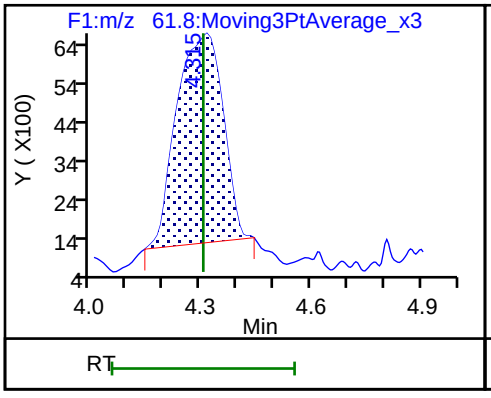
* 18 2,4-dinitrotoluene-d3



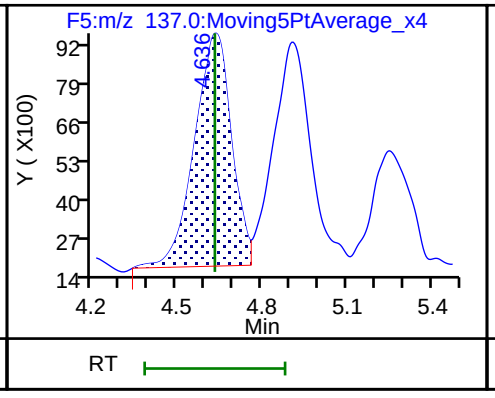
19 2,4-Dinitrotoluene



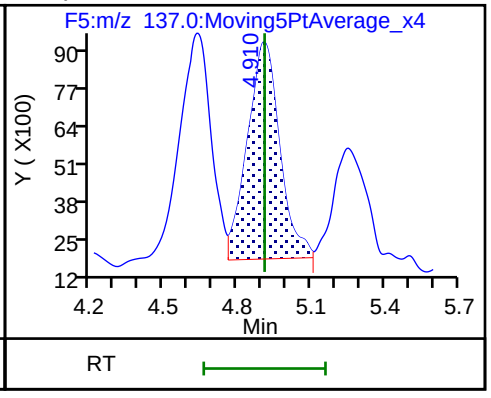
20 PETN



22 o-Nitrotoluene



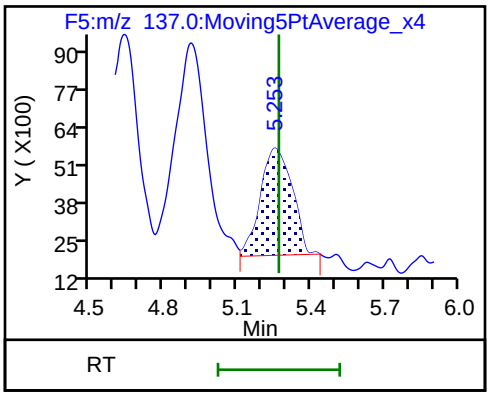
23 p-Nitrotoluene



Report Date: 05-Apr-2022 14:53:59 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05003.d

24 m-Nitrotoluene



Report Date: 05-Apr-2022 14:53:59 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05003.d

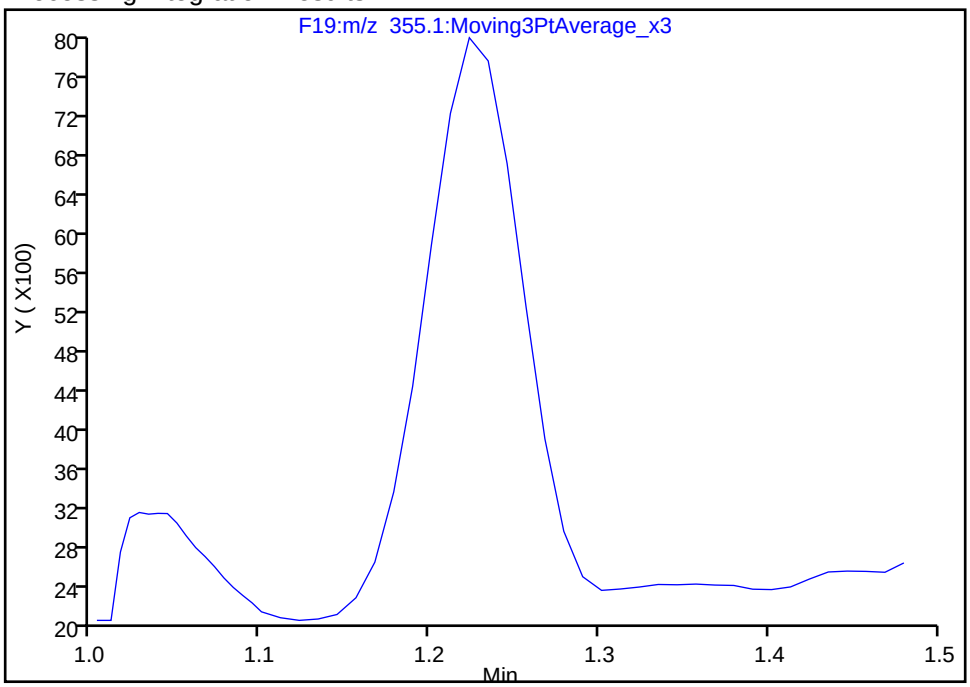
Injection Date:	05-Apr-2022 10:20:28	Instrument ID:	LC_LCMS7		
Lims ID:	STD001				
Client ID:					
Operator ID:	acm	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F19:SIR		

2 HMX, CAS: 2691-41-0

Signal: 1

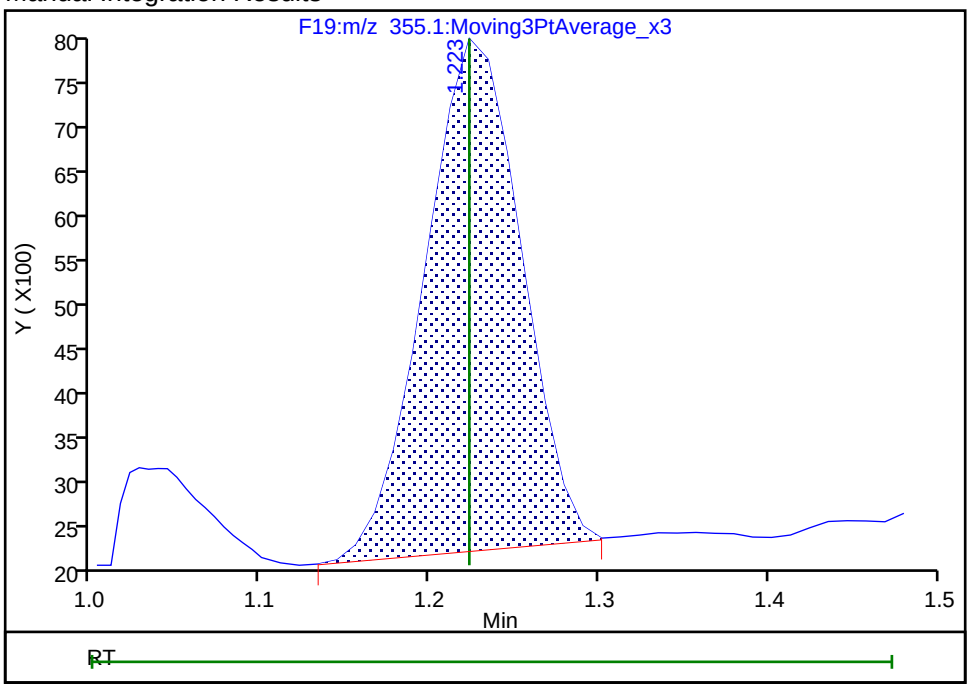
Not Detected
Expected RT: 1.22

Processing Integration Results



Manual Integration Results

RT: 1.22
Area: 22919
Amount: 5.258984
Amount Units: ug/l



Reviewer: meyera, 05-Apr-2022 11:37:48
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 05-Apr-2022 14:53:59

Chrom Revision: 2.3 18-Mar-2022 09:07:22
Manual Integration/User Assign Peak Report

Eurofins Denver

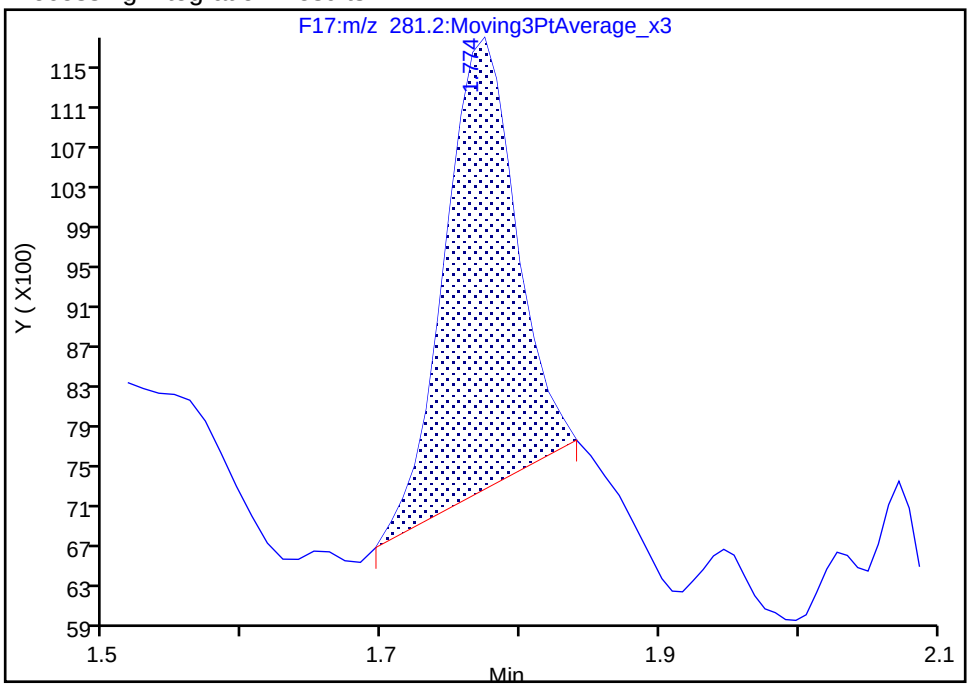
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05003.d
Injection Date: 05-Apr-2022 10:20:28 Instrument ID: LC_LCMS7
Lims ID: STD001
Client ID:
Operator ID: acm ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F17:SIR

4 RDX, CAS: 121-82-4

Signal: 1

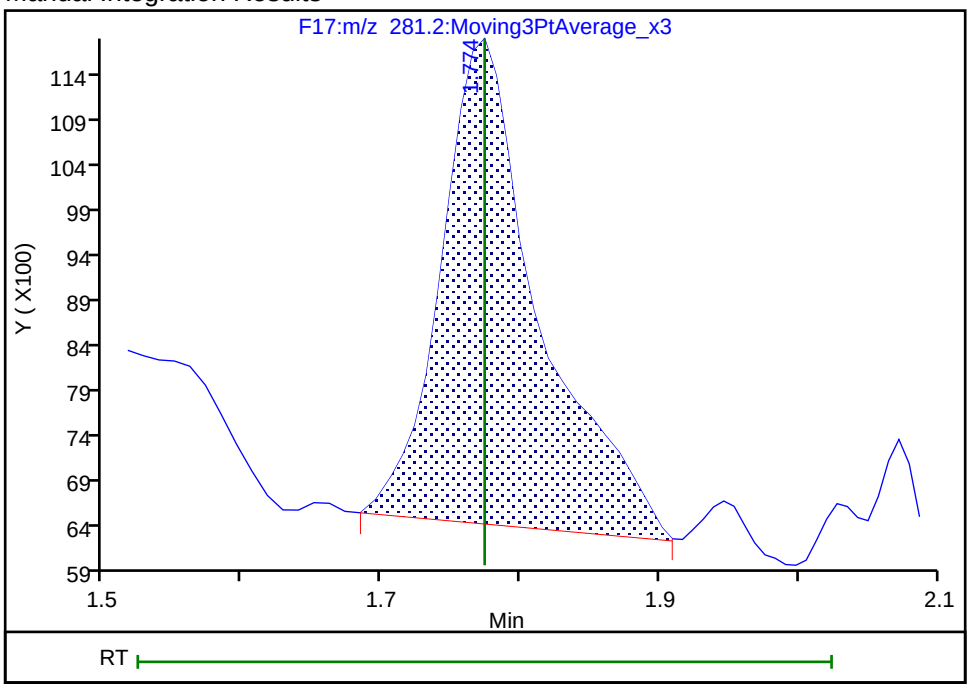
Processing Integration Results

RT: 1.77
Area: 16194
Amount: 2.753433
Amount Units: ug/l



Manual Integration Results

RT: 1.77
Area: 26411
Amount: 3.614632
Amount Units: ug/l



Reviewer: meyera, 05-Apr-2022 11:37:55
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 05-Apr-2022 14:53:59 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05003.d

Injection Date:	05-Apr-2022 10:20:28	Instrument ID:	LC_LCMS7
Lims ID:	STD001		
Client ID:			
Operator ID:	acm	ALS Bottle#:	2 Worklist Smp#: 3
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F4:SIR

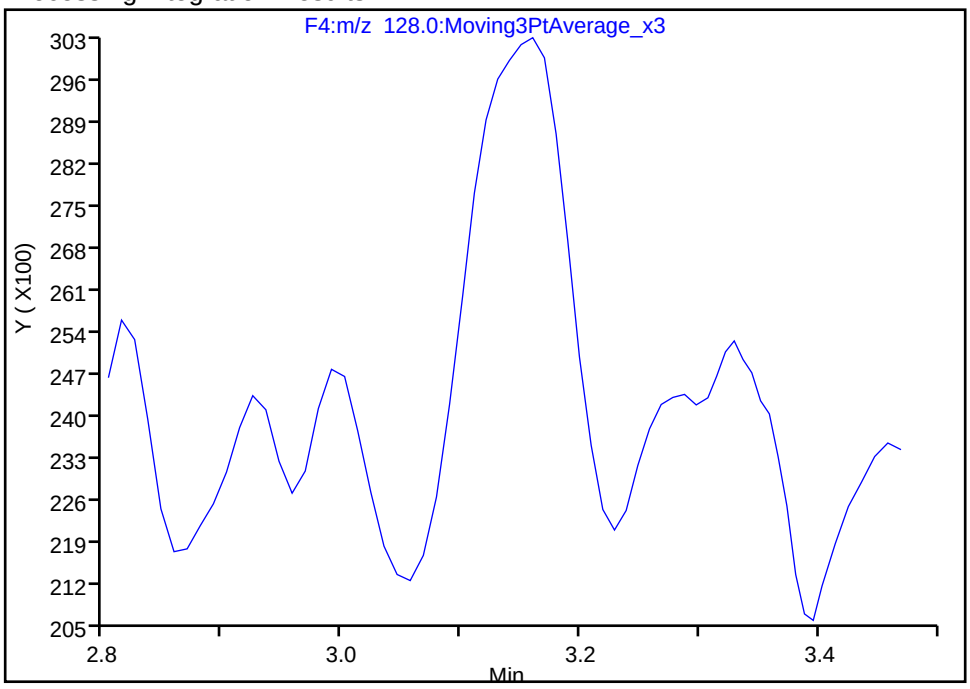
$ 11 Nitrobenzene-d5, CAS: 4165-60-0

Signal: 1

Not Detected

Expected RT: 3.15

Processing Integration Results



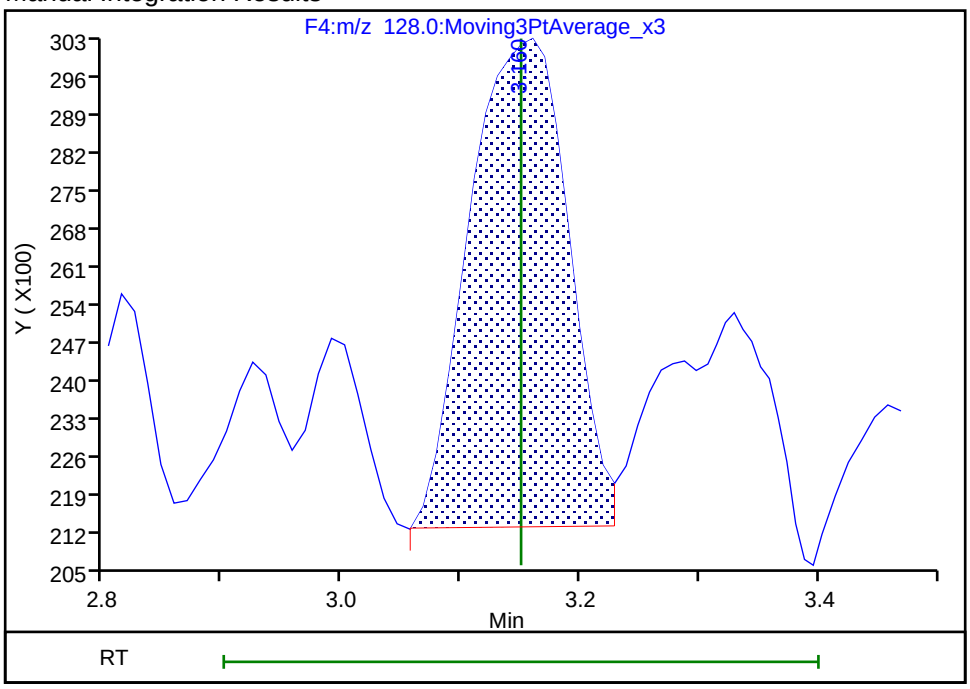
Manual Integration Results

RT: 3.16

Area: 51689

Amount: 4.638928

Amount Units: ug/l



Reviewer: meyera, 05-Apr-2022 11:38:03

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 05-Apr-2022 14:54:00 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05004.d
Lims ID: STD002
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 05-Apr-2022 10:26:51 ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: STD L2
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 05-Apr-2022 14:54:00 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1672

First Level Reviewer: meyera Date: 05-Apr-2022 11:37:39
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.223	1.223	0.0	1.007	43910	9.33	7.6	
* 1 HMX-13C4								
361.1	1.215	1.226	-0.011		252153	125.0	142	
36 TNX								
144.0	1.352	1.352	0.0	0.764	707227	9.70	18.7	
33 DNX								
160.0	1.444	1.444	0.0	0.817	1224740	10.2	161	
34 MNX								
160.0	1.615	1.615	0.0	0.913	399143	12.0	49.0	
4 RDX								
281.2	1.774	1.774	0.0	1.003	59470	10.4	17.1	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.768	1.777	-0.009		788814	125.0	222	
5 1,3,5-Trinitrobenzene								
213.0	2.199	2.199	0.0	0.772	248662	10.0	51.1	
6 Tetryl								
241.1	2.532	2.540	-0.008	0.889	387943	10.2	52.8	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.850	2.850	0.0		1810512	129.4	218	
8 1,3-Dinitrobenzene								
168.0	2.882	2.871	0.011	1.011	148210	9.85	26.9	
9 Nitroglycerin								
62.0	2.878	2.878	0.0	1.010	156102	10.4	43.9	
28 3,5-Dinitroaniline								
183.0	3.027	3.027	0.0	1.062	728566	10.4	43.0	

Report Date: 05-Apr-2022 14:54:00 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05004.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.107	3.107	0.0	0.773	1189602	10.5	94.9	
$ 11 Nitrobenzene-d5								M
128.0	3.131	3.150	-0.019	0.779	109686	11.6	9.1	M
12 Nitrobenzene								
123.0	3.218	3.208	0.010	0.800	73749	10.7	15.5	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.391	3.391	0.0	0.844	781387	10.5	48.1	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.694	3.708	-0.014	0.919	1067186	10.3	61.5	
17 2,6-Dinitrotoluene								
182.0	3.846	3.852	-0.006	0.957	974227	10.4	155	
* 18 2,4-dinitrotoluene-d3								
185.1	4.020	4.028	-0.008		5655495	125.0	109	
19 2,4-Dinitrotoluene								
182.0	4.061	4.052	0.009	1.010	525276	10.4	79.3	
20 PETN								
61.8	4.305	4.305	0.0	1.071	102657	10.4	42.6	
22 o-Nitrotoluene								
137.0	4.631	4.631	0.0	1.152	146210	10.6	69.2	
23 p-Nitrotoluene								
137.0	4.915	4.910	0.005	1.223	125897	10.1	59.6	
24 m-Nitrotoluene								
137.0	5.273	5.268	0.005	1.312	82511	11.5	35.8	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

8321EXcalprim_00029	Amount Added: 1.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 1.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 05-Apr-2022 14:54:00 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05004.d

Injection Date: 05-Apr-2022 10:26:51 Instrument ID: LC_LCMS7

Lims ID: STD002

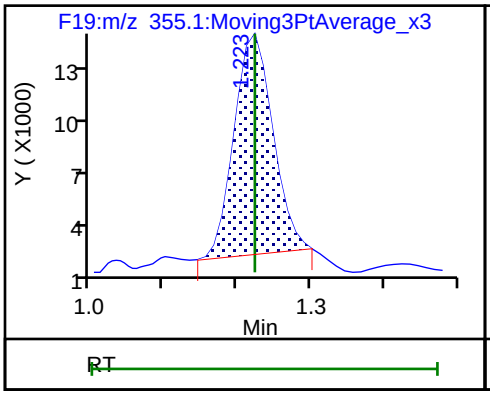
Client ID:

Operator ID: acm ALS Bottle#: 3 Worklist Smp#: 4

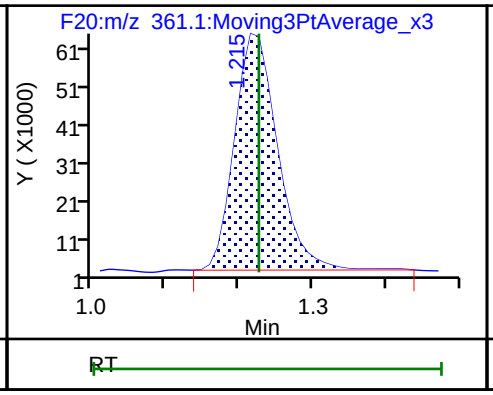
Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

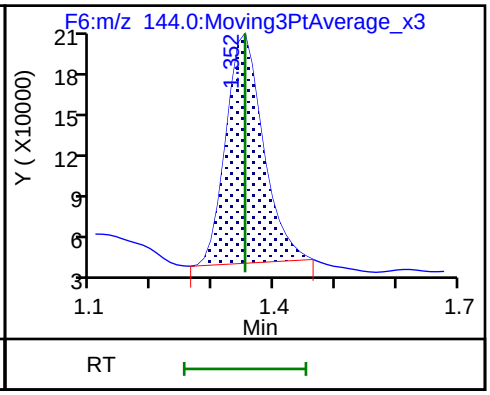
2 HMX



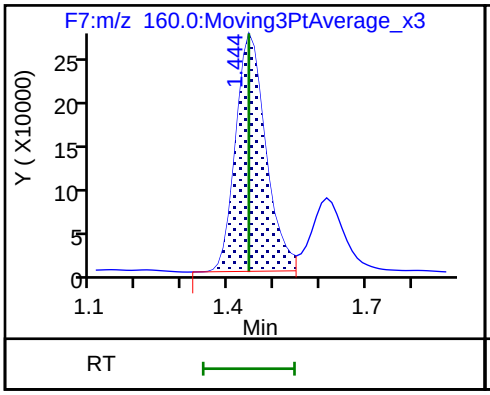
* 1 HMX-13C4



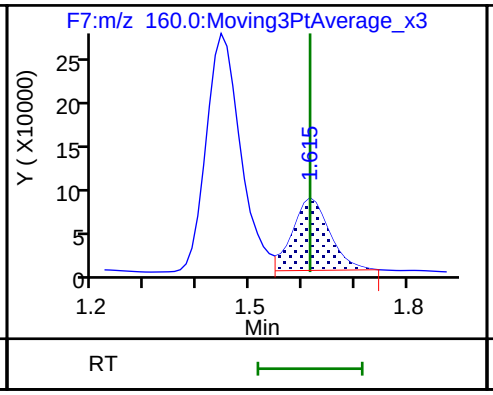
36 TNX



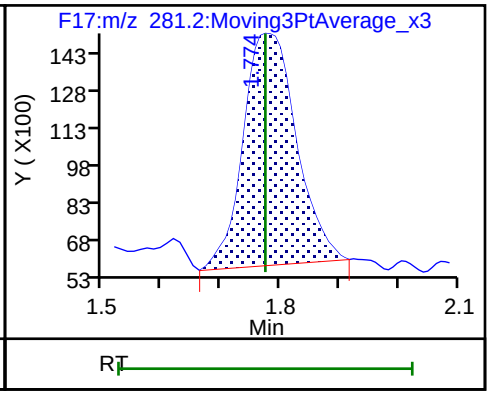
33 DNX



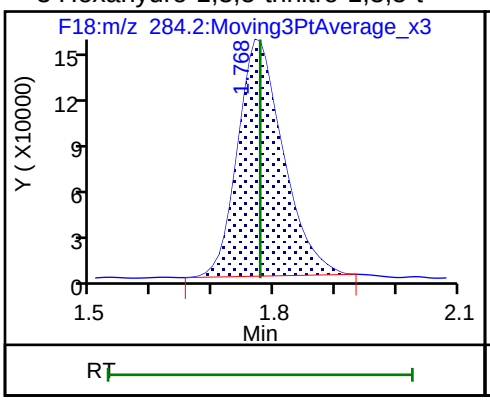
34 MNX



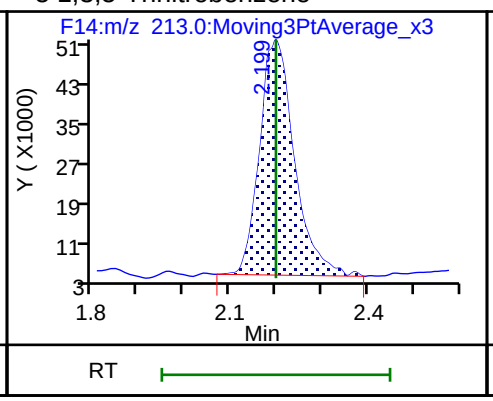
4 RDX



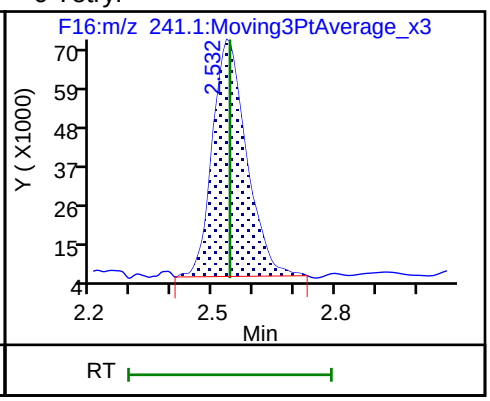
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



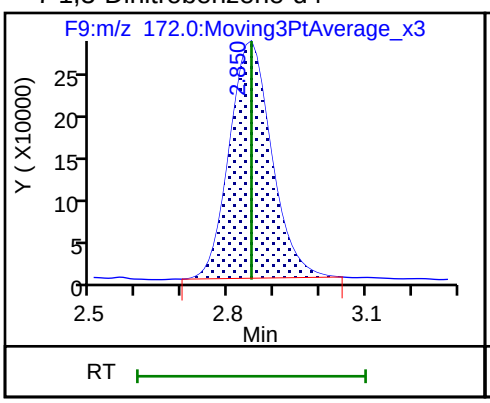
5 1,3,5-Trinitrobenzene



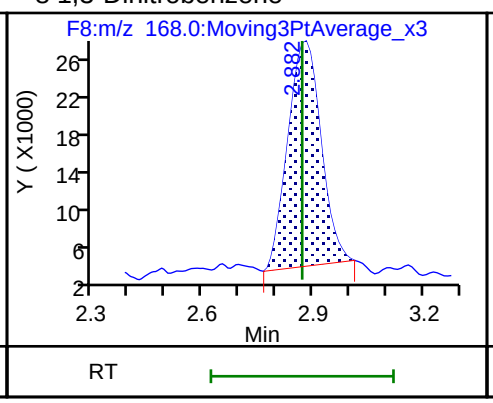
6 Tetryl



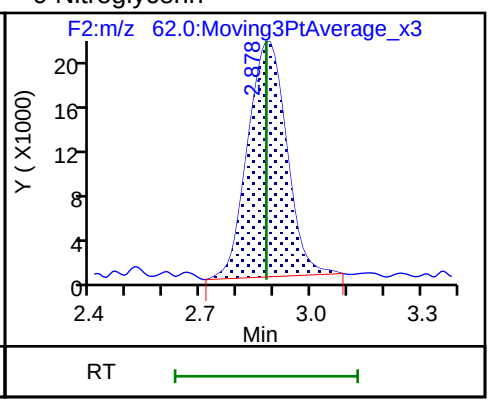
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

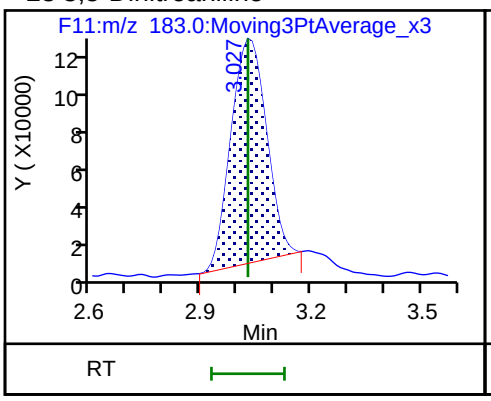


9 Nitroglycerin

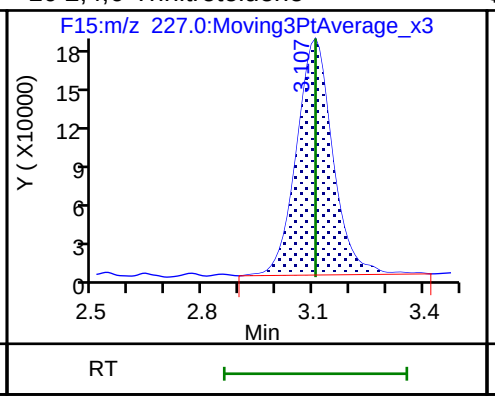


Report Date: 05-Apr-2022 14:54:00 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05004.d

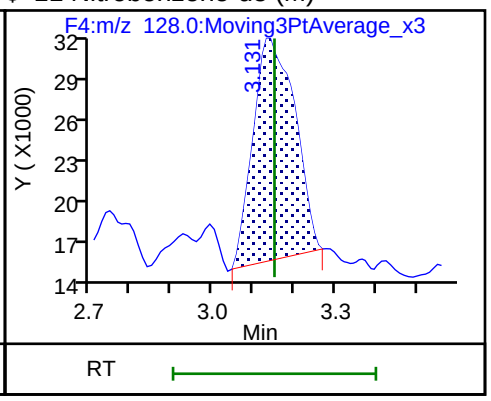
28 3,5-Dinitroaniline



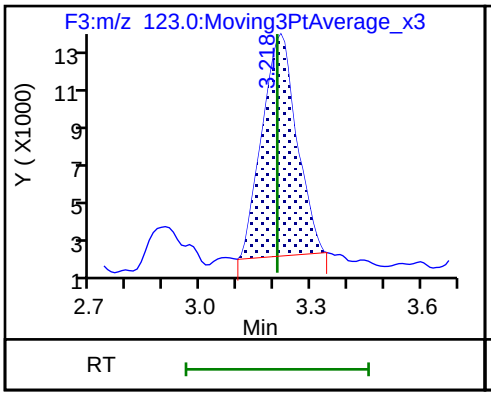
10 2,4,6-Trinitrotoluene



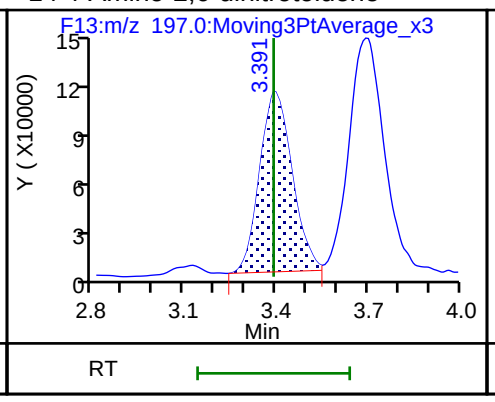
$ 11 Nitrobenzene-d5 (M)



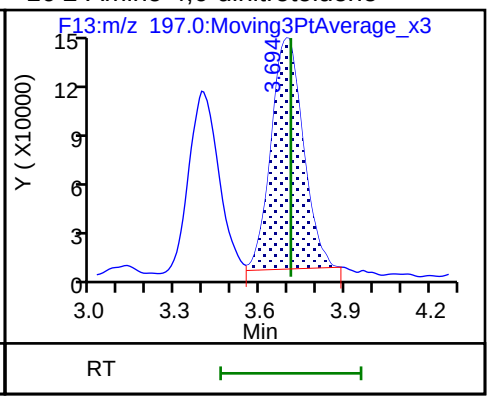
12 Nitrobenzene



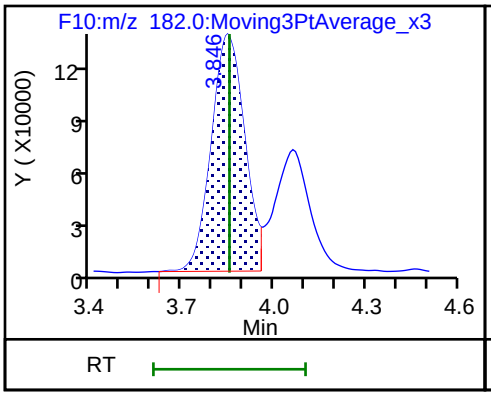
14 4-Amino-2,6-dinitrotoluene



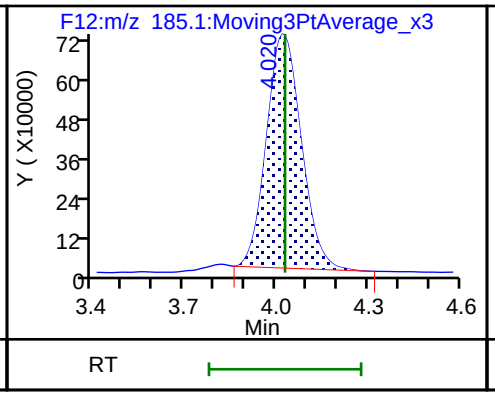
16 2-Amino-4,6-dinitrotoluene



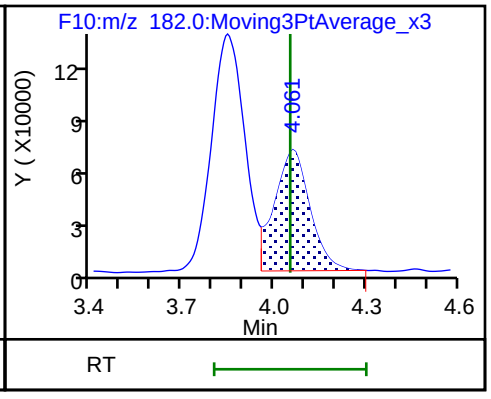
17 2,6-Dinitrotoluene



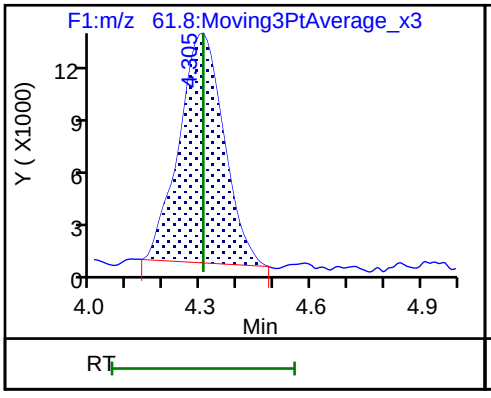
* 18 2,4-dinitrotoluene-d3



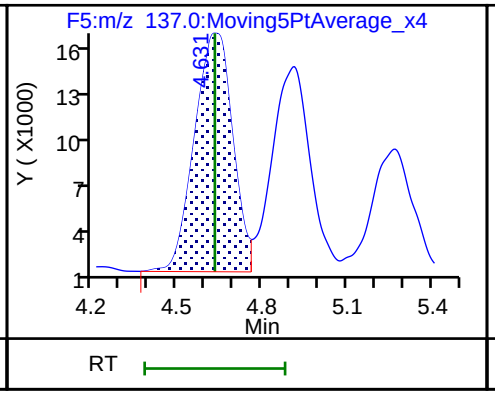
19 2,4-Dinitrotoluene



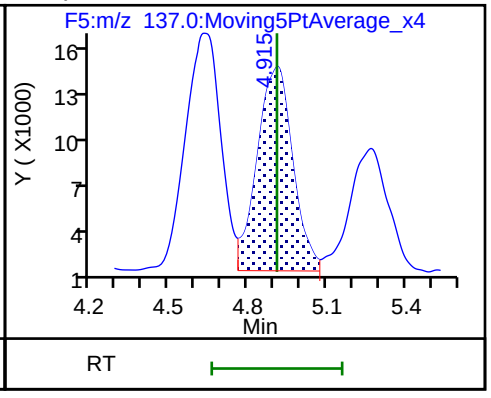
20 PETN



22 o-Nitrotoluene



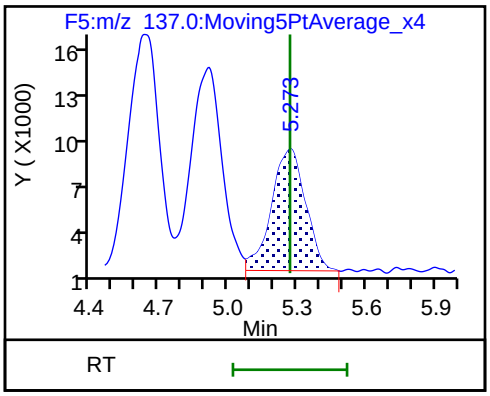
23 p-Nitrotoluene



Report Date: 05-Apr-2022 14:54:00 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05004.d

24 m-Nitrotoluene



Report Date: 05-Apr-2022 14:54:00 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05004.d

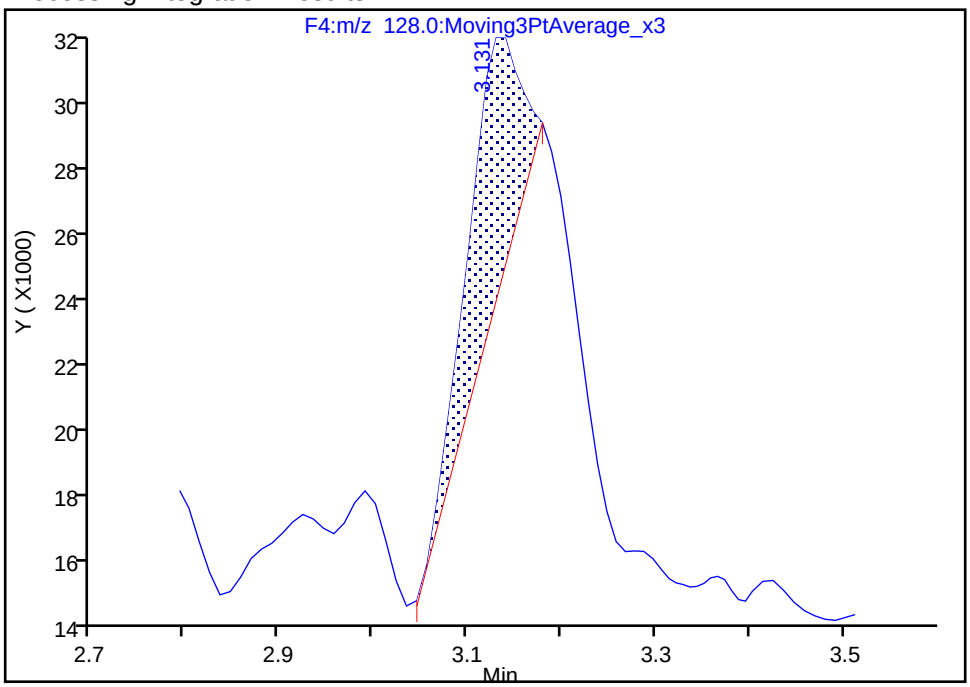
Injection Date:	05-Apr-2022 10:26:51	Instrument ID:	LC_LCMS7
Lims ID:	STD002		
Client ID:			
Operator ID:	acm	ALS Bottle#:	3 Worklist Smp#: 4
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F4:SIR

$ 11 Nitrobenzene-d5, CAS: 4165-60-0

Signal: 1

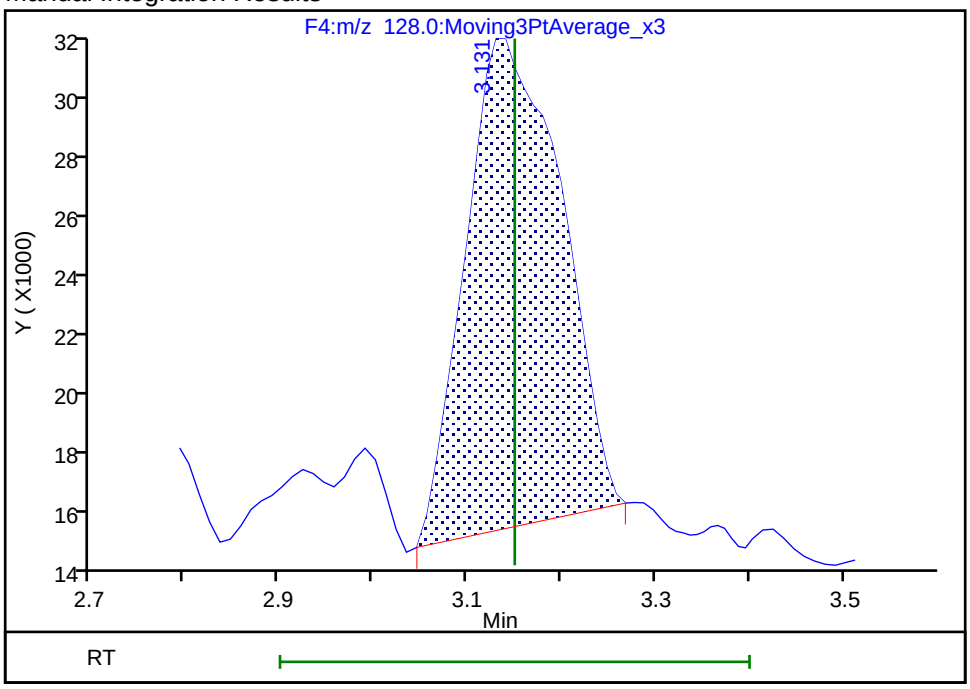
Processing Integration Results

RT: 3.13
Area: 27985
Amount: 5.295345
Amount Units: ug/l



Manual Integration Results

RT: 3.13
Area: 109686
Amount: 11.560943
Amount Units: ug/l



Reviewer: meyera, 05-Apr-2022 11:41:57

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 05-Apr-2022 14:54:01 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05005.d
Lims ID: STD003
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 05-Apr-2022 10:33:15 ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: STD L3
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 05-Apr-2022 14:54:01 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1672

First Level Reviewer: meyera Date: 05-Apr-2022 11:37:21
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.223	1.223	0.0	0.998	99812	24.0	17.6	
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		231792	125.0	125	
36 TNX								
144.0	1.352	1.352	0.0	0.761	1889953	25.1	113	
33 DNX								
160.0	1.444	1.444	0.0	0.813	3030158	25.7	386	
34 MNX								
160.0	1.615	1.615	0.0	0.909	995873	32.6	119	
4 RDX								
281.2	1.774	1.774	0.0	0.998	138465	26.8	47.8	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		792529	125.0	204	
5 1,3,5-Trinitrobenzene								
213.0	2.196	2.199	-0.003	0.771	624633	24.6	144	
6 Tetryl								
241.1	2.540	2.540	0.0	0.891	954669	23.6	65.2	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.850	2.850	0.0		1867836	129.4	251	
8 1,3-Dinitrobenzene								
168.0	2.871	2.871	0.0	1.007	399341	25.5	74.9	
9 Nitroglycerin								
62.0	2.878	2.878	0.0	1.010	390328	25.6	168	
28 3,5-Dinitroaniline								
183.0	3.027	3.027	0.0	1.062	1776797	21.7	75.4	

Report Date: 05-Apr-2022 14:54:01 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05005.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.107	3.107	0.0	0.773	2765979	24.0	235	
$ 11 Nitrobenzene-d5								M
128.0	3.150	3.150	0.0	0.784	237975	25.4	20.4	M
12 Nitrobenzene								
123.0	3.208	3.208	0.0	0.798	179183	23.9	30.0	
14 4-Amino-2,6-dinitrotoluene								M
197.0	3.391	3.391	0.0	0.844	1968792	21.7	64.5	M
16 2-Amino-4,6-dinitrotoluene								M
197.0	3.702	3.708	-0.006	0.921	2795460	22.3	82.1	M
17 2,6-Dinitrotoluene								
182.0	3.846	3.852	-0.006	0.957	2362885	21.1	479	
* 18 2,4-dinitrotoluene-d3								
185.1	4.020	4.028	-0.008		6859419	125.0	141	
19 2,4-Dinitrotoluene								
182.0	4.052	4.052	0.0	1.008	1485635	25.2	282	
20 PETN								
61.8	4.295	4.305	-0.010	1.069	264320	21.3	103	
22 o-Nitrotoluene								M
137.0	4.631	4.631	0.0	1.152	356589	21.1	112	M
23 p-Nitrotoluene								M
137.0	4.900	4.910	-0.010	1.219	321287	21.5	97.0	M
24 m-Nitrotoluene								M
137.0	5.258	5.268	-0.010	1.308	183318	20.9	52.5	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

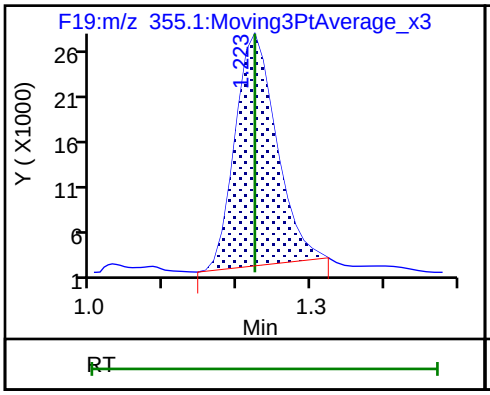
8321EXcalprim_00029	Amount Added: 2.50	Units: uL	
8321NB-D5-cal_00021	Amount Added: 2.50	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 05-Apr-2022 14:54:01 Chrom Revision: 2.3 18-Mar-2022 09:07:22

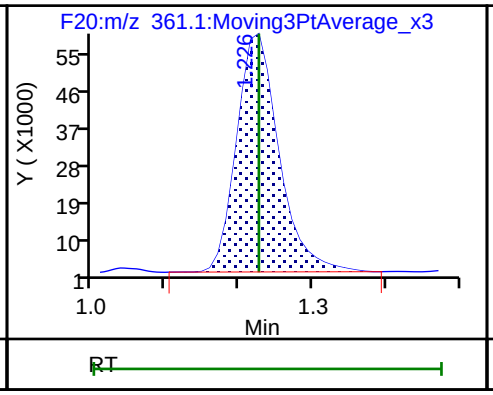
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05005.d
Injection Date: 05-Apr-2022 10:33:15 Instrument ID: LC_LCMS7
Lims ID: STD003
Client ID:
Operator ID: acm ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

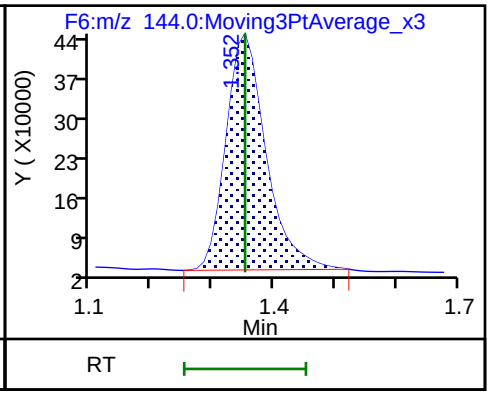
2 HMX



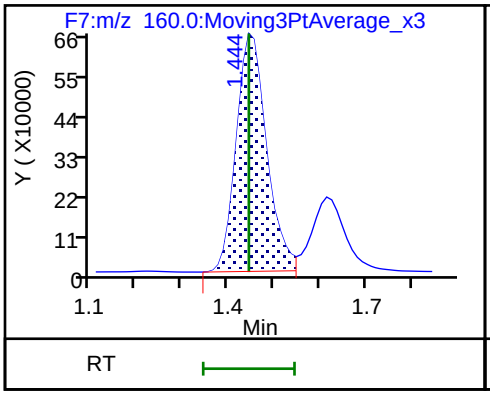
* 1 HMX-13C4



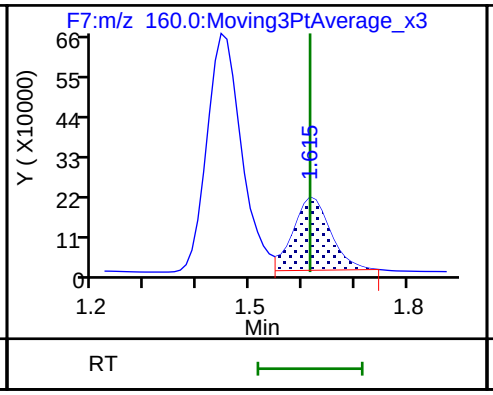
36 TNX



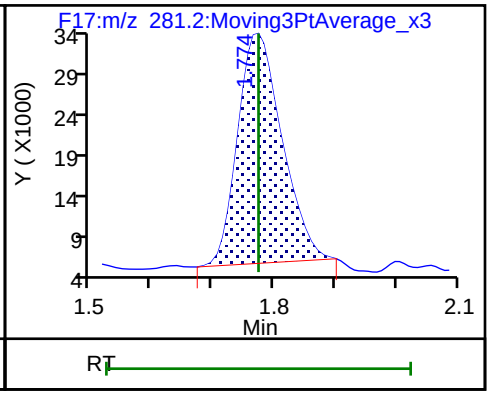
33 DNX



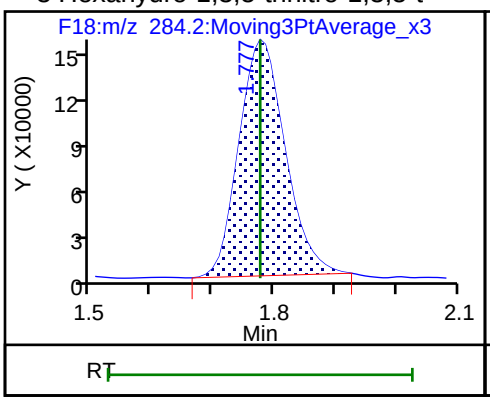
34 MNX



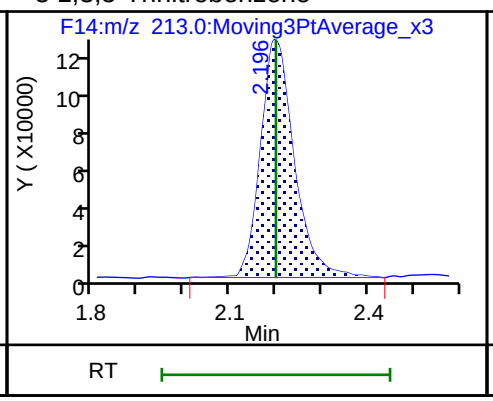
4 RDX



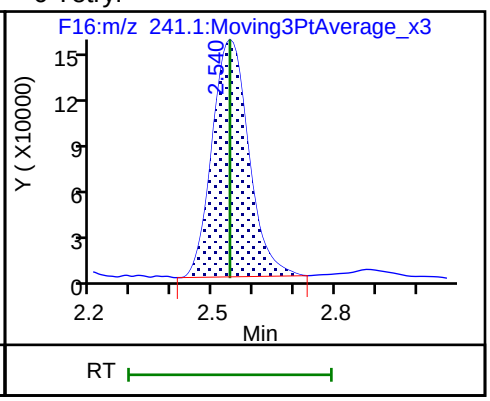
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



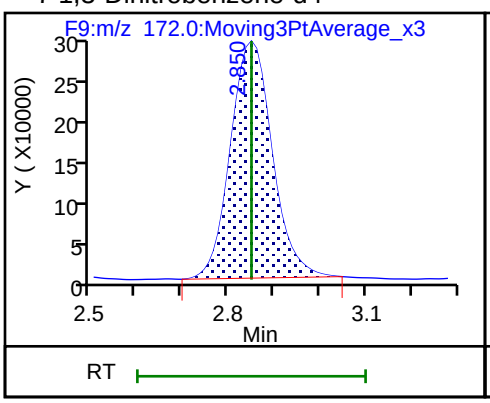
5 1,3,5-Trinitrobenzene



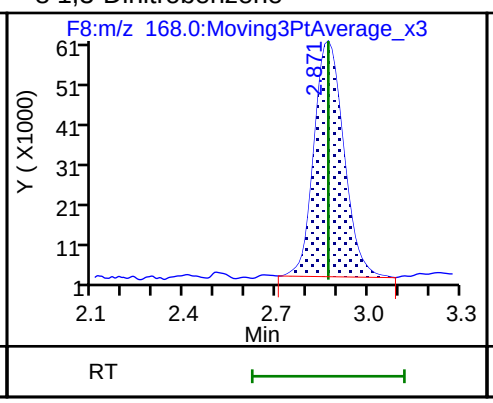
6 Tetryl



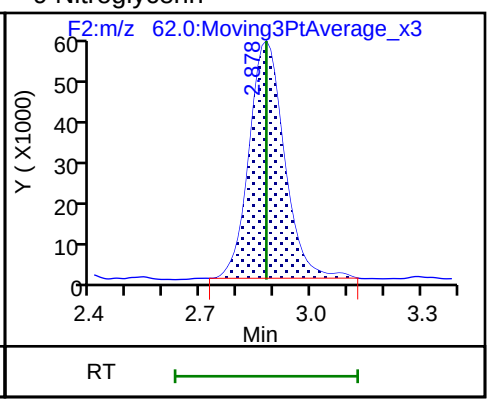
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

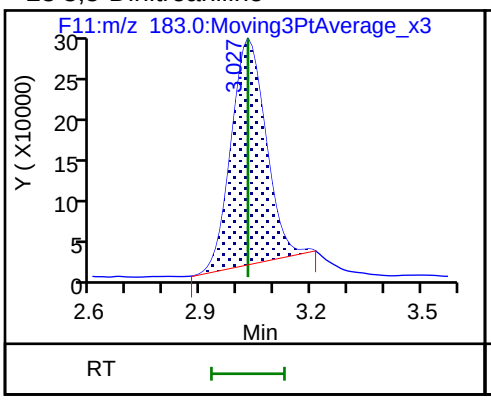


9 Nitroglycerin

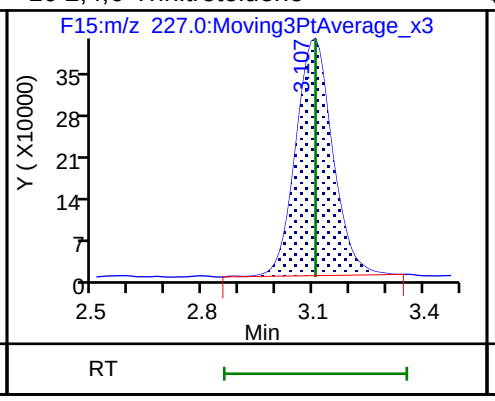


Report Date: 05-Apr-2022 14:54:01 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05005.d

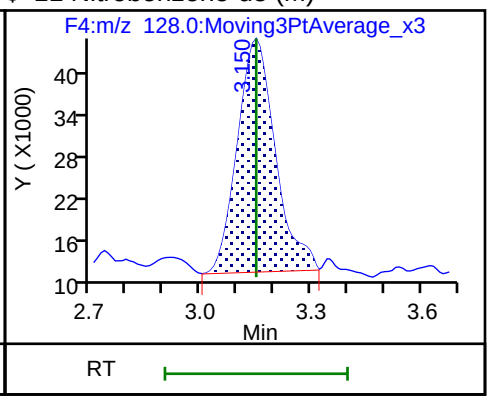
28 3,5-Dinitroaniline



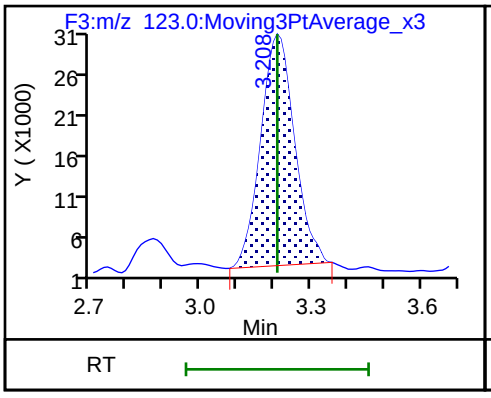
10 2,4,6-Trinitrotoluene



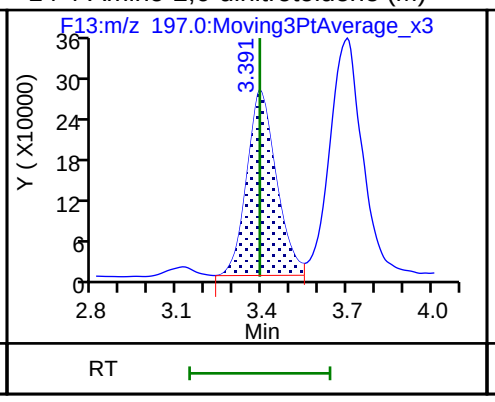
$ 11 Nitrobenzene-d5 (M)



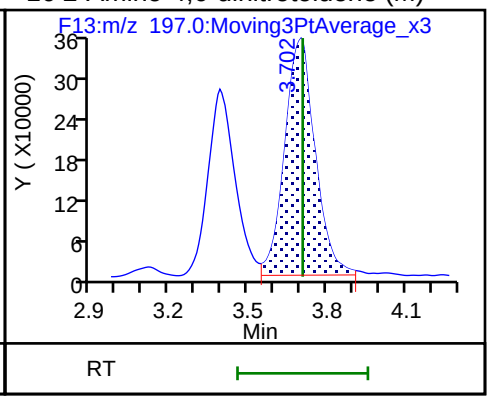
12 Nitrobenzene



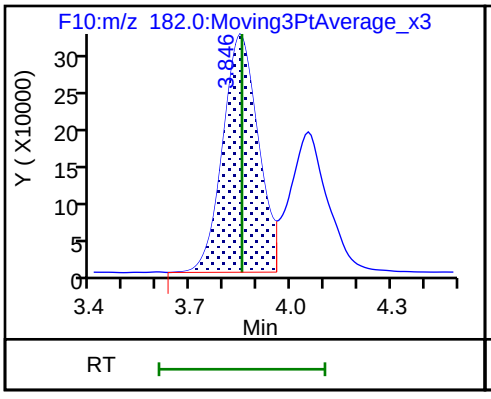
14 4-Amino-2,6-dinitrotoluene (M)



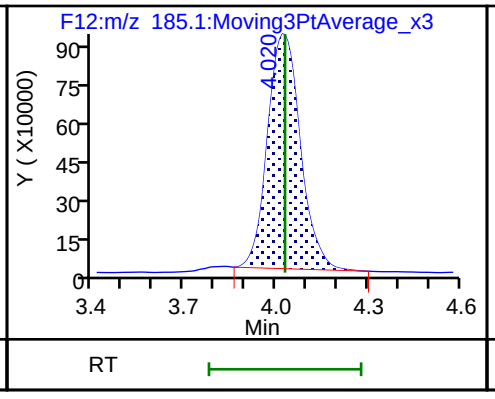
16 2-Amino-4,6-dinitrotoluene (M)



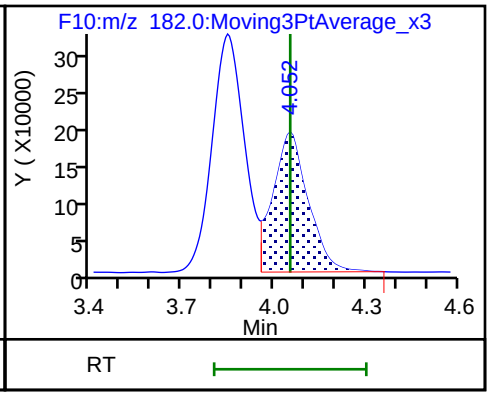
17 2,6-Dinitrotoluene



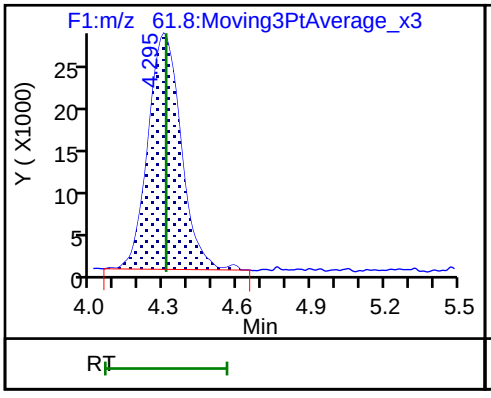
* 18 2,4-dinitrotoluene-d3



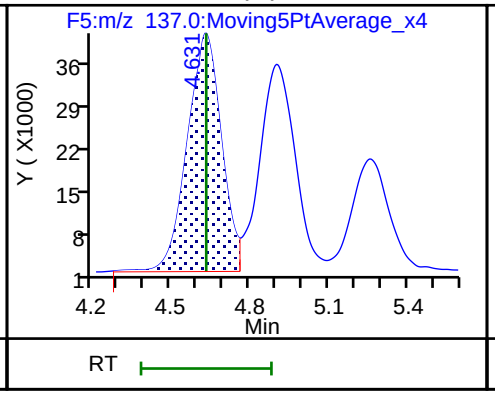
19 2,4-Dinitrotoluene



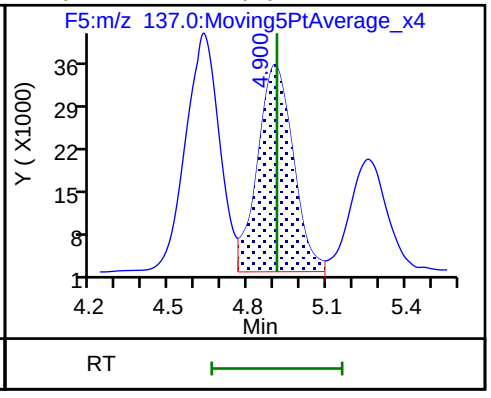
20 PETN



22 o-Nitrotoluene (M)



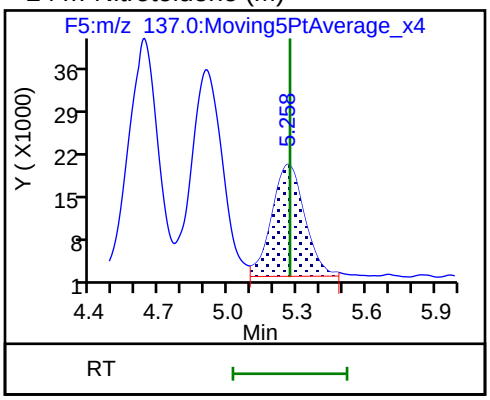
23 p-Nitrotoluene (M)



Report Date: 05-Apr-2022 14:54:01 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05005.d

24 m-Nitrotoluene (M)



Report Date: 05-Apr-2022 14:54:01 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05005.d

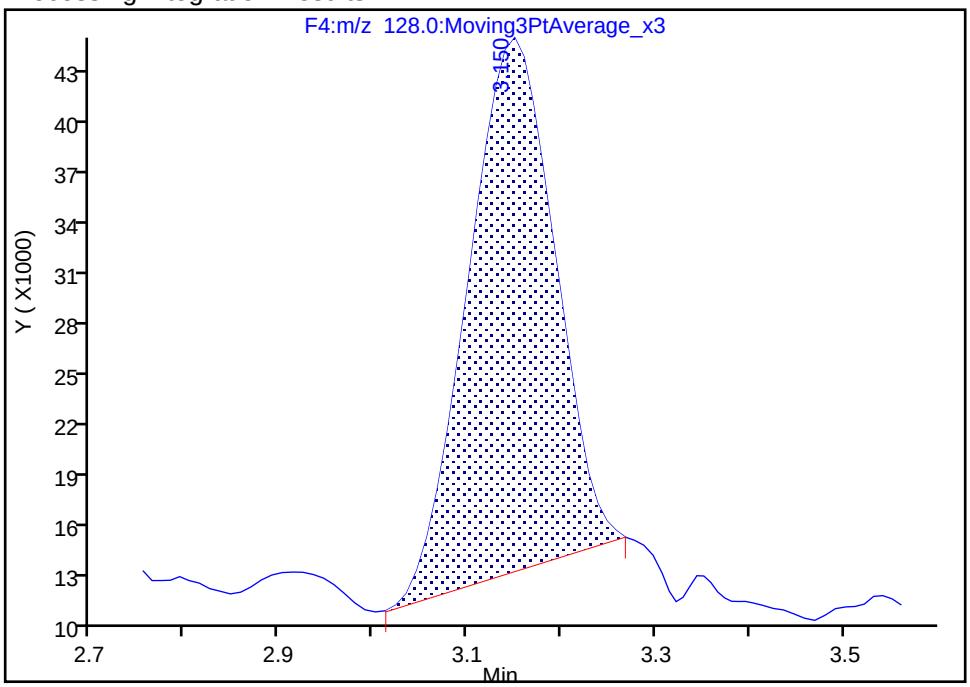
Injection Date:	05-Apr-2022 10:33:15	Instrument ID:	LC_LCMS7
Lims ID:	STD003		
Client ID:			
Operator ID:	acm	ALS Bottle#:	4 Worklist Smp#: 5
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F4:SIR

$ 11 Nitrobenzene-d5, CAS: 4165-60-0

Signal: 1

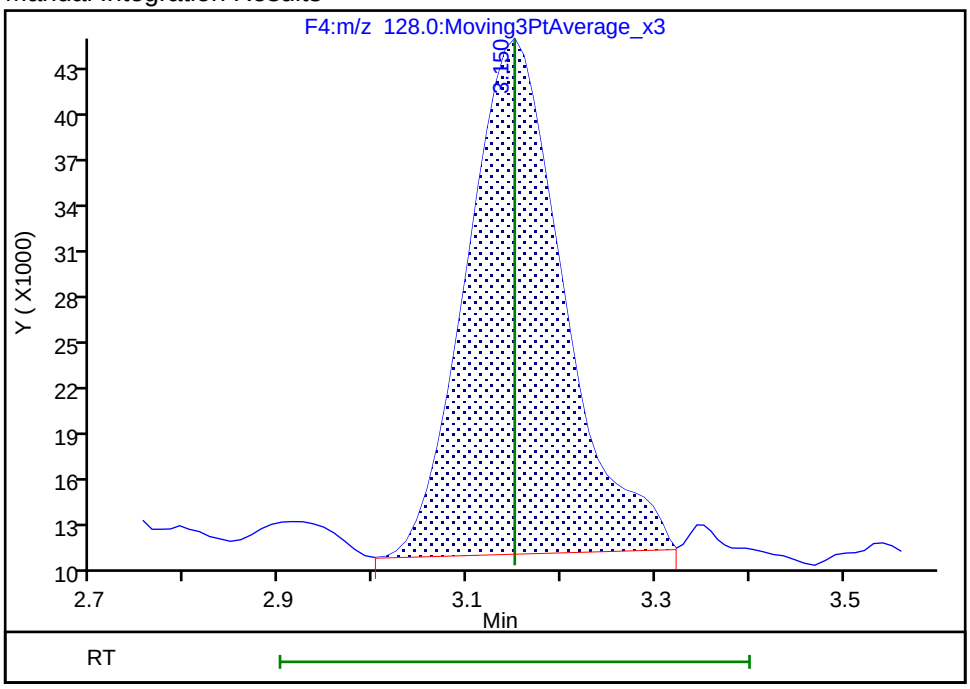
Processing Integration Results

RT: 3.15
Area: 199495
Amount: 21.594709
Amount Units: ug/l



Manual Integration Results

RT: 3.15
Area: 237975
Amount: 25.405531
Amount Units: ug/l



Reviewer: meyera, 05-Apr-2022 11:42:12

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 05-Apr-2022 14:54:01 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05005.d

Injection Date: 05-Apr-2022 10:33:15 Instrument ID: LC_LCMS7

Lims ID: STD003

Client ID:

Operator ID: acm ALS Bottle#: 4 Worklist Smp#: 5

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

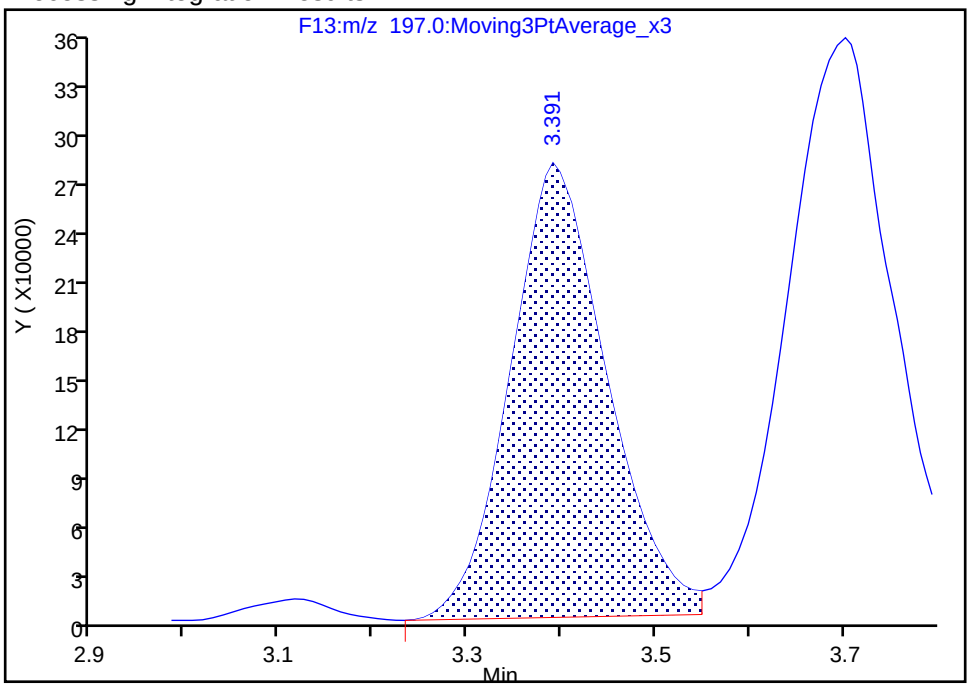
Column: Detector F13:SIR

14 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

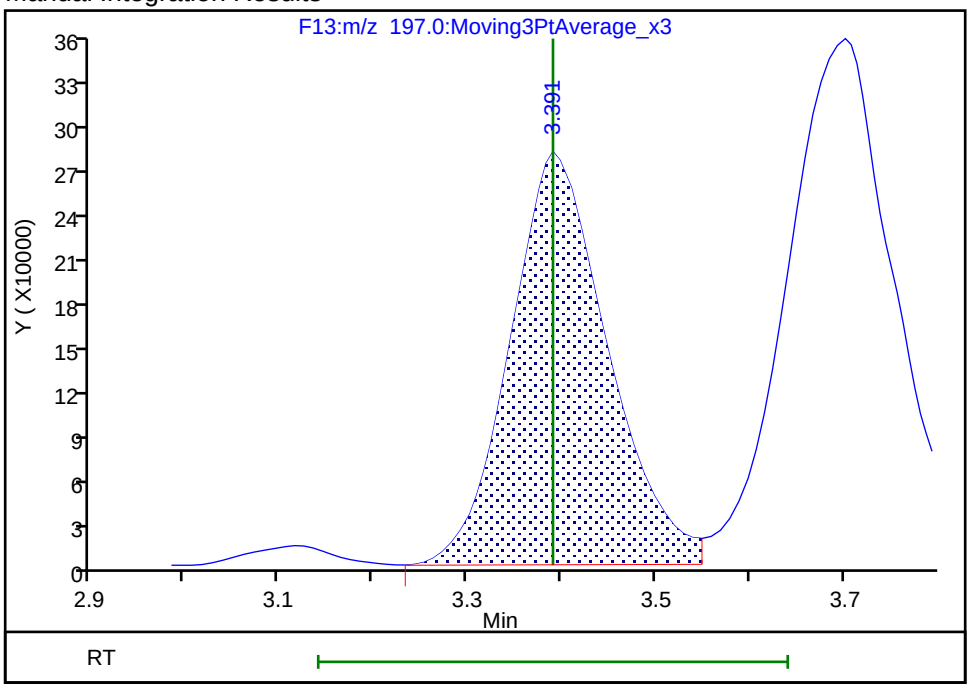
Processing Integration Results

RT: 3.39
Area: 1938298
Amount: 21.447708
Amount Units: ug/l



Manual Integration Results

RT: 3.39
Area: 1968792
Amount: 21.748836
Amount Units: ug/l



Reviewer: meyera, 05-Apr-2022 11:43:12

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 05-Apr-2022 14:54:01 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Manual Integration/User Assign Peak Report

Eurofins Denver

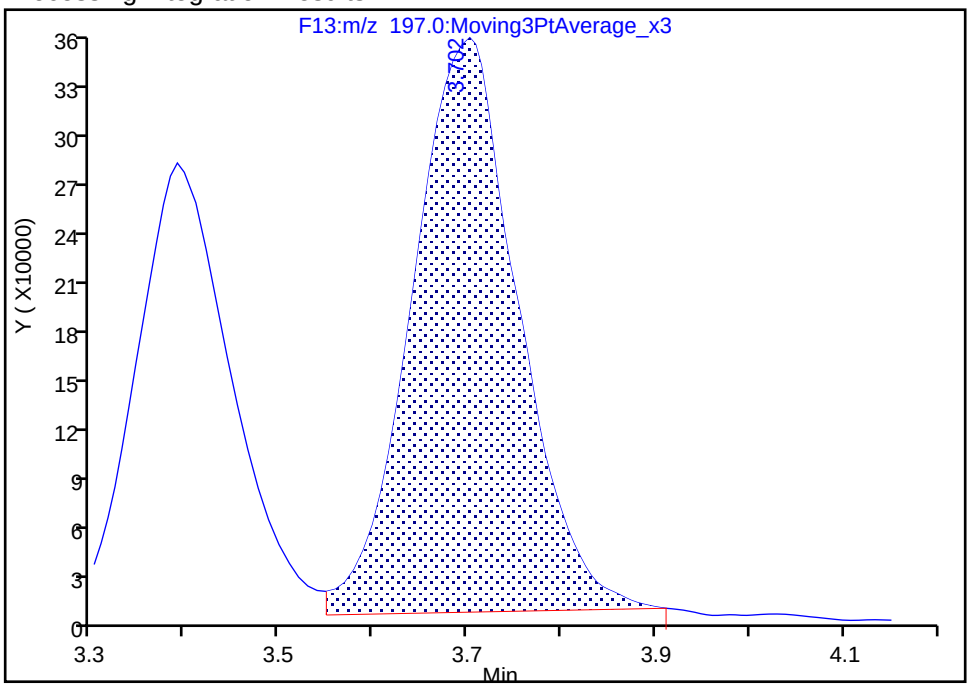
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05005.d
Injection Date: 05-Apr-2022 10:33:15 Instrument ID: LC_LCMS7
Lims ID: STD003
Client ID:
Operator ID: acm ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F13:SIR

16 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

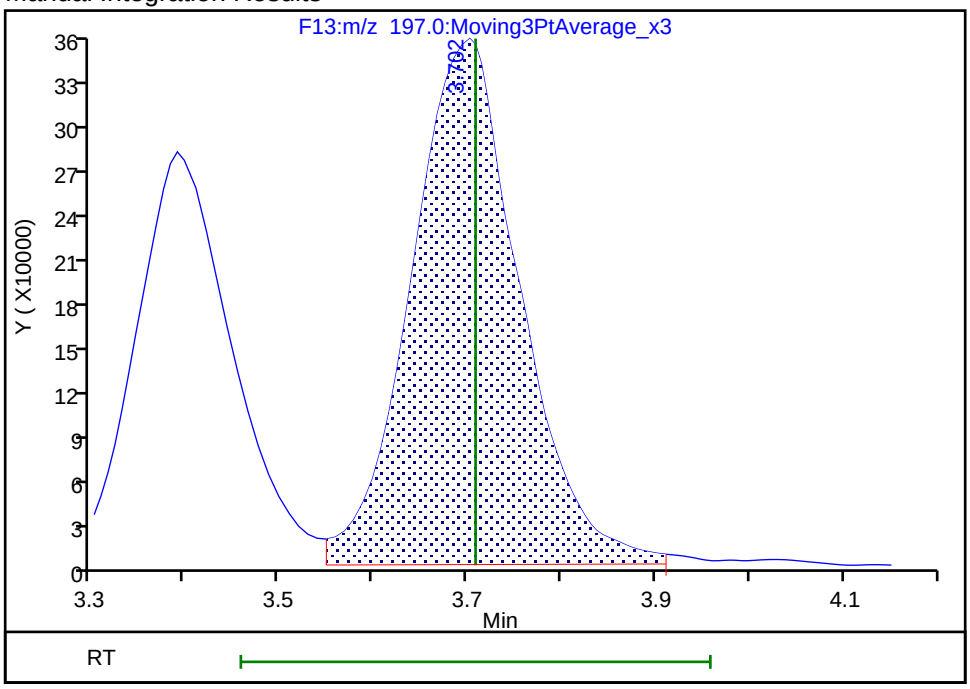
Processing Integration Results

RT: 3.70
Area: 2693084
Amount: 21.569792
Amount Units: ug/l



Manual Integration Results

RT: 3.70
Area: 2795460
Amount: 22.303257
Amount Units: ug/l



Reviewer: meyera, 05-Apr-2022 11:43:12
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 05-Apr-2022 14:54:01 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05005.d

Injection Date: 05-Apr-2022 10:33:15 Instrument ID: LC_LCMS7

Lims ID: STD003

Client ID:

Operator ID: acm ALS Bottle#: 4 Worklist Smp#: 5

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

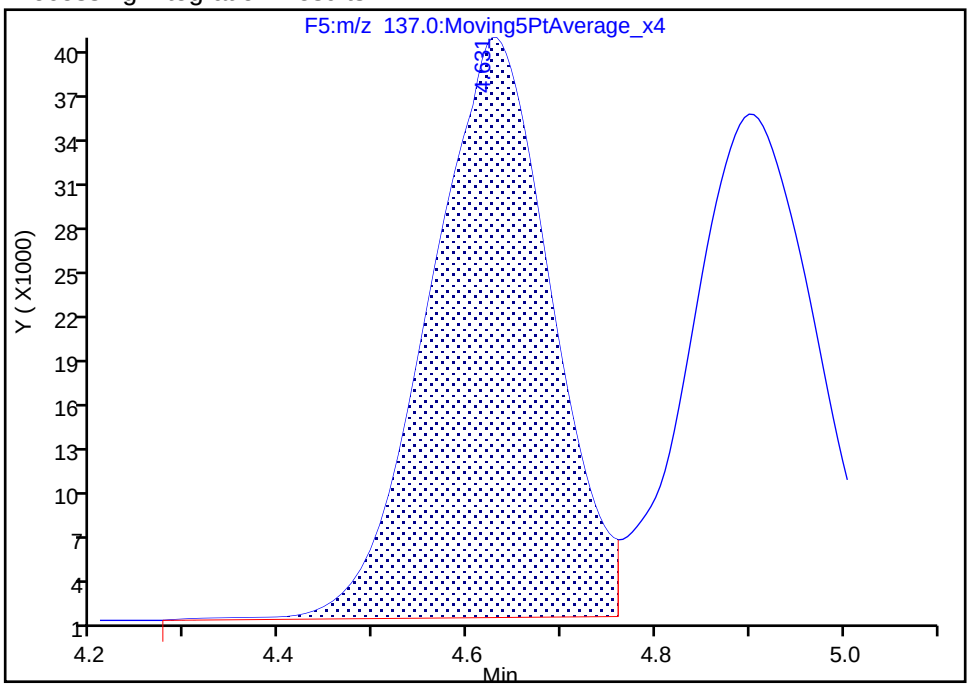
Column: Detector F5:SIR

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

Signal: 1

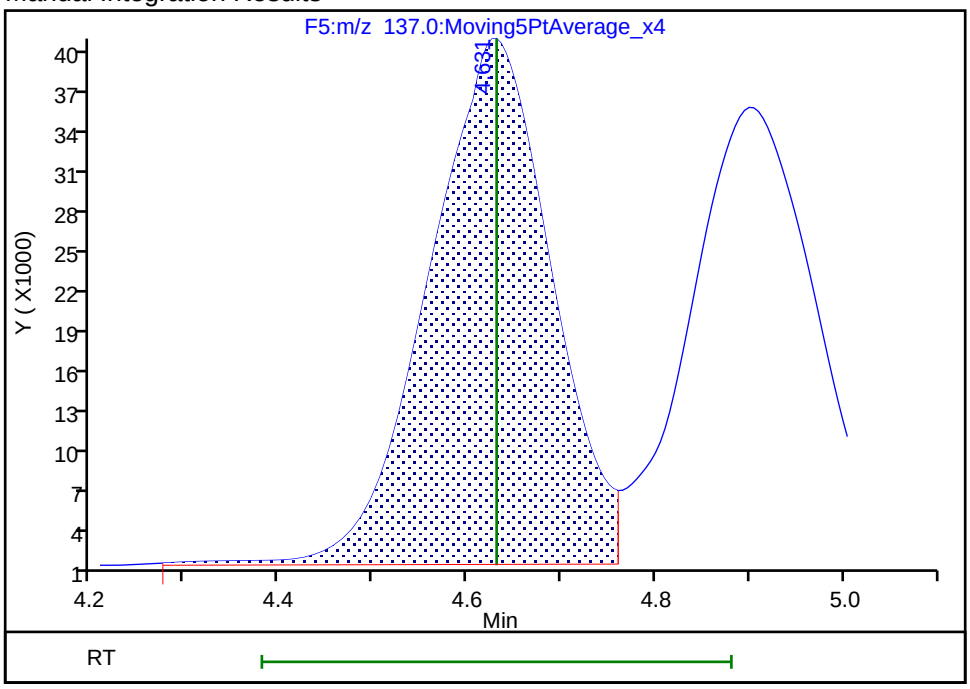
Processing Integration Results

RT: 4.63
Area: 349417
Amount: 20.759116
Amount Units: ug/l



Manual Integration Results

RT: 4.63
Area: 356589
Amount: 21.134683
Amount Units: ug/l



Reviewer: meyera, 05-Apr-2022 11:42:56

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 05-Apr-2022 14:54:01 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05005.d

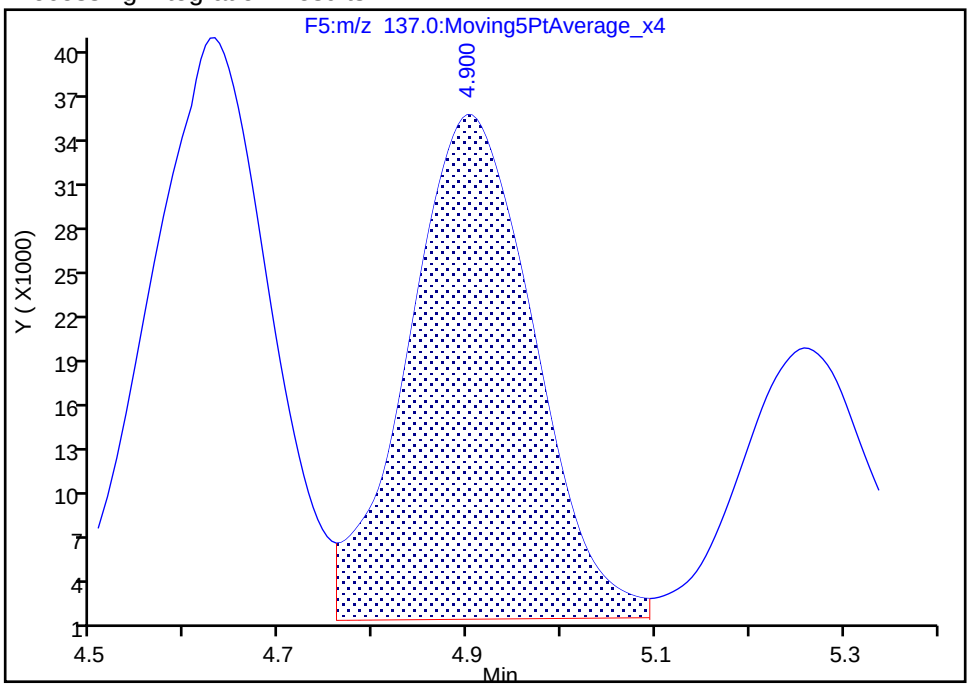
Injection Date:	05-Apr-2022 10:33:15	Instrument ID:	LC_LCMS7
Lims ID:	STD003		
Client ID:			
Operator ID:	acm	ALS Bottle#:	4 Worklist Smp#: 5
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F5:SIR

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

Signal: 1

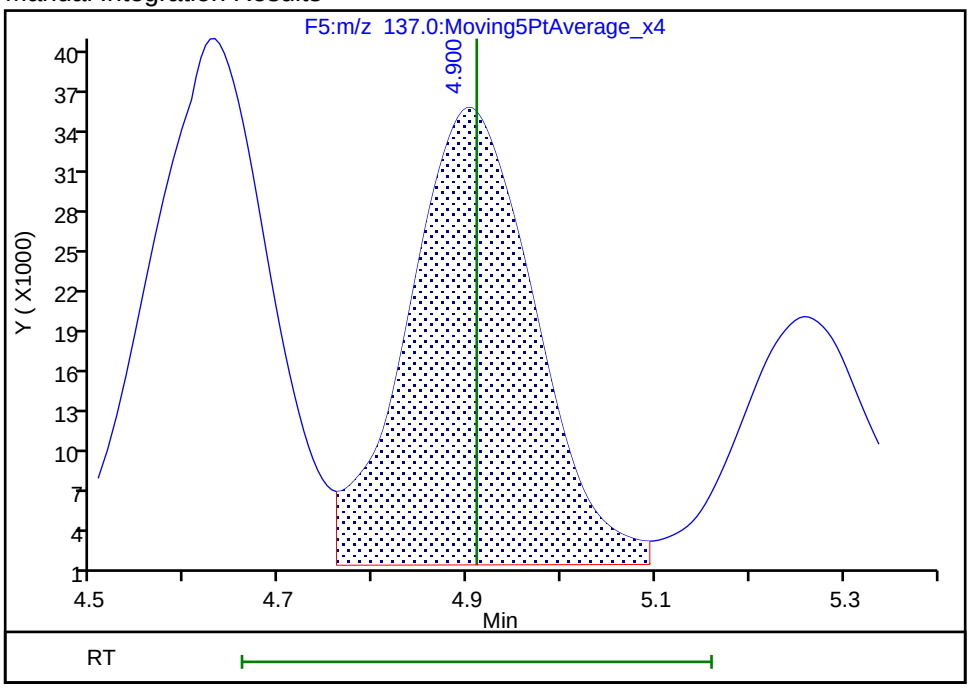
Processing Integration Results

RT: 4.90
Area: 313410
Amount: 21.035188
Amount Units: ug/l



Manual Integration Results

RT: 4.90
Area: 321287
Amount: 21.512563
Amount Units: ug/l



Reviewer: meyera, 05-Apr-2022 11:42:56

Audit Action: Assigned New Baseline Audit Reason: Baseline

Report Date: 05-Apr-2022 14:54:01 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05005.d

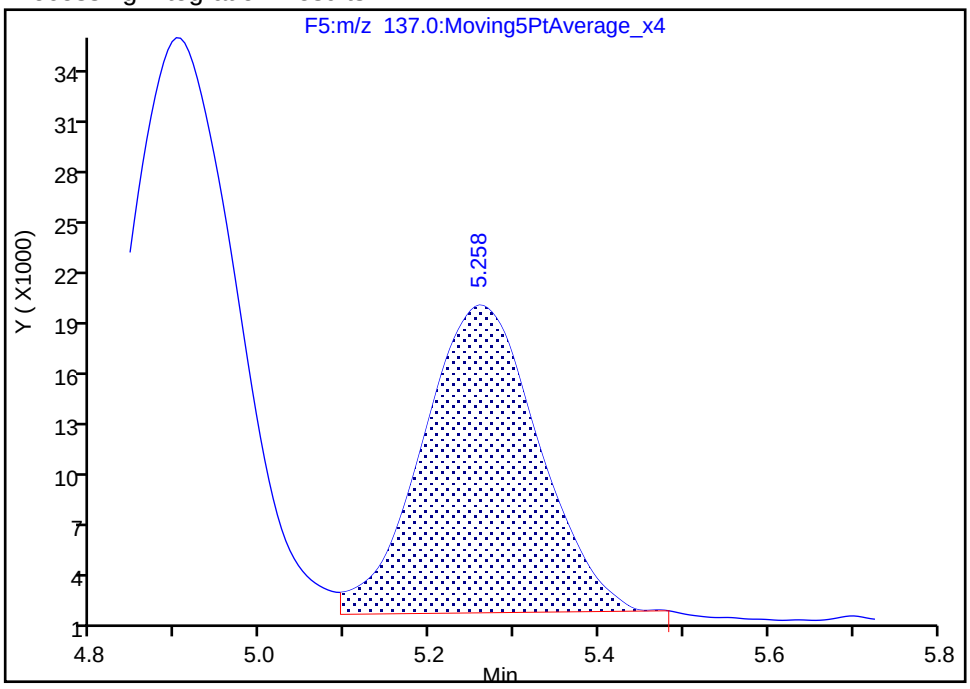
Injection Date:	05-Apr-2022 10:33:15	Instrument ID:	LC_LCMS7
Lims ID:	STD003		
Client ID:			
Operator ID:	acm	ALS Bottle#:	4 Worklist Smp#: 5
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F5:SIR

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

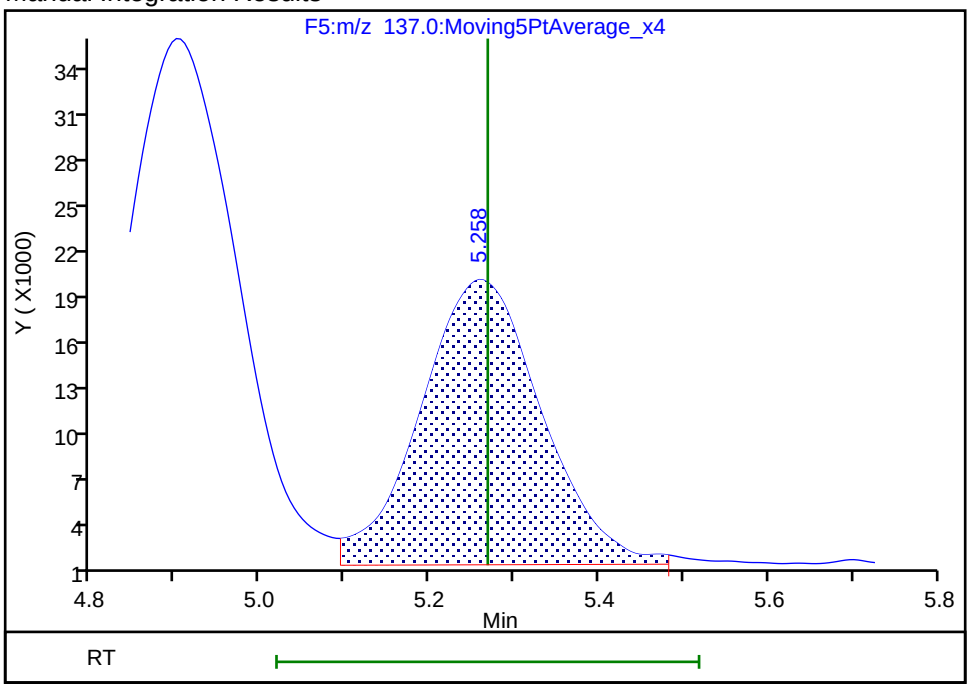
Processing Integration Results

RT: 5.26
Area: 171094
Amount: 19.666602
Amount Units: ug/l



Manual Integration Results

RT: 5.26
Area: 183318
Amount: 20.904892
Amount Units: ug/l



Reviewer: meyera, 05-Apr-2022 11:42:56

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 05-Apr-2022 14:54:02 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05006.d
Lims ID: STD004
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 05-Apr-2022 10:39:39 ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: STD L4
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 05-Apr-2022 14:54:02 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1672

First Level Reviewer: meyera Date: 05-Apr-2022 11:37:06
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.223	1.223	0.0	0.998	207300	53.2	32.4	
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		220175	125.0	116	
36 TNX								
144.0	1.352	1.352	0.0	0.761	3771011	52.1	169	
33 DNX								
160.0	1.444	1.444	0.0	0.813	5705342	51.2	242	
34 MNX								
160.0	1.615	1.615	0.0	0.909	1692978	59.6	70.2	
4 RDX								
281.2	1.774	1.774	0.0	0.998	279855	57.0	42.5	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		781986	125.0	203	
5 1,3,5-Trinitrobenzene								
213.0	2.199	2.199	0.0	0.775	1197379	49.3	141	
6 Tetryl								
241.1	2.540	2.540	0.0	0.895	1908415	48.6	104	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.839	2.850	-0.011		1795589	129.4	235	
8 1,3-Dinitrobenzene								
168.0	2.871	2.871	0.0	1.011	775574	51.4	101	
9 Nitroglycerin								
62.0	2.889	2.878	0.011	1.018	766366	52.5	488	
28 3,5-Dinitroaniline								
183.0	3.027	3.027	0.0	1.067	3572852	53.9	59.2	

Report Date: 05-Apr-2022 14:54:02 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05006.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.107	3.107	0.0	0.773	5586313	50.8	475	
$ 11 Nitrobenzene-d5								
128.0	3.150	3.150	0.0	0.784	394526	44.5	26.2	
12 Nitrobenzene								
123.0	3.208	3.208	0.0	0.798	355409	48.3	37.9	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.391	3.391	0.0	0.844	3747806	50.3	63.8	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.702	3.708	-0.006	0.921	5337400	51.9	83.6	
17 2,6-Dinitrotoluene								
182.0	3.852	3.852	0.0	0.958	4750949	52.2	684	
* 18 2,4-dinitrotoluene-d3								
185.1	4.020	4.028	-0.008		5649926	125.0	107	
19 2,4-Dinitrotoluene								
182.0	4.061	4.052	0.009	1.010	2418696	50.4	330	
20 PETN								
61.8	4.305	4.305	0.0	1.071	572054	55.0	202	
22 o-Nitrotoluene								
137.0	4.626	4.631	-0.005	1.151	704017	50.3	216	
23 p-Nitrotoluene								
137.0	4.885	4.910	-0.025	1.215	663539	54.4	200	
24 m-Nitrotoluene								
137.0	5.263	5.268	-0.005	1.309	395630	54.6	128	

QC Flag Legend

Processing Flags

Reagents:

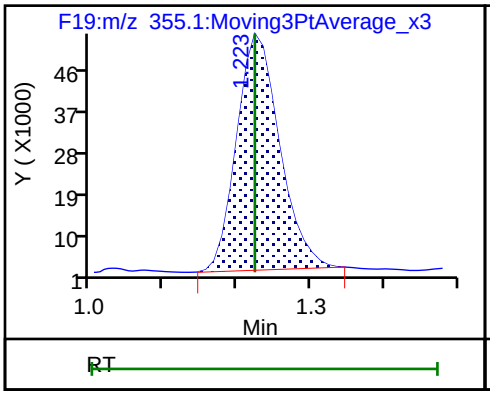
8321EXcalprim_00029	Amount Added: 5.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 5.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 05-Apr-2022 14:54:02 Chrom Revision: 2.3 18-Mar-2022 09:07:22

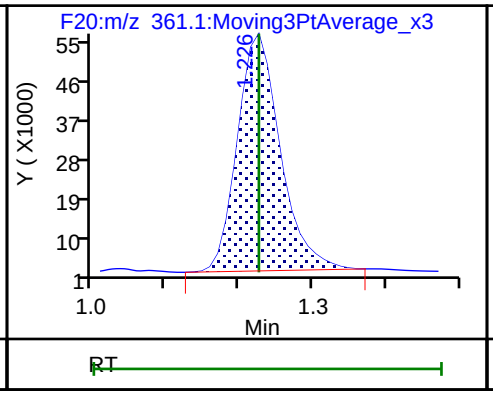
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05006.d
Injection Date: 05-Apr-2022 10:39:39 Instrument ID: LC_LCMS7
Lims ID: STD004
Client ID:
Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

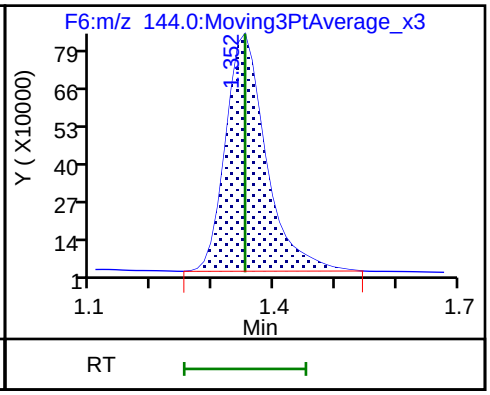
2 HMX



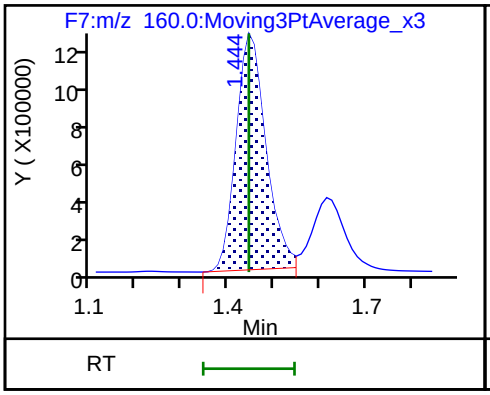
* 1 HMX-13C4



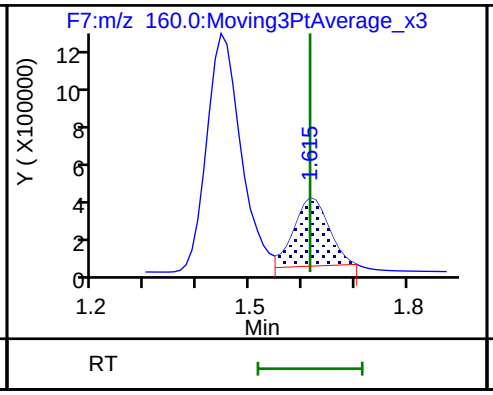
36 TNX



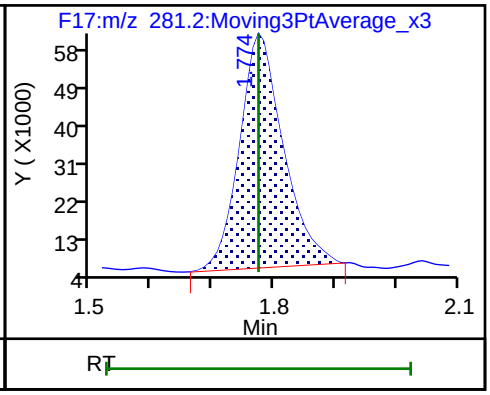
33 DNX



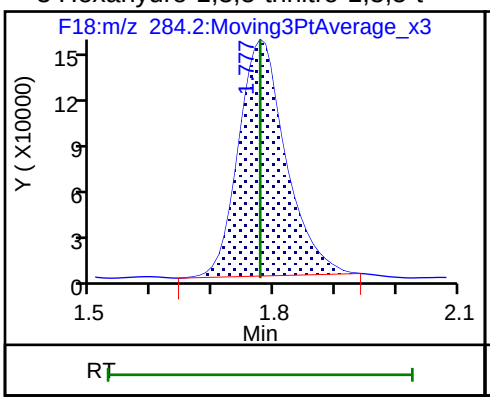
34 MNX



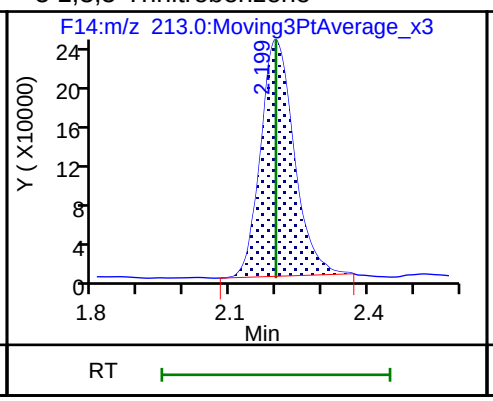
4 RDX



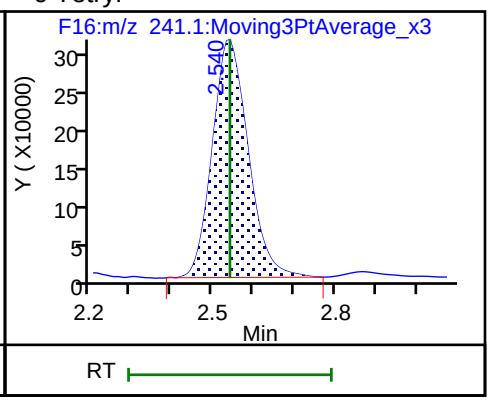
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



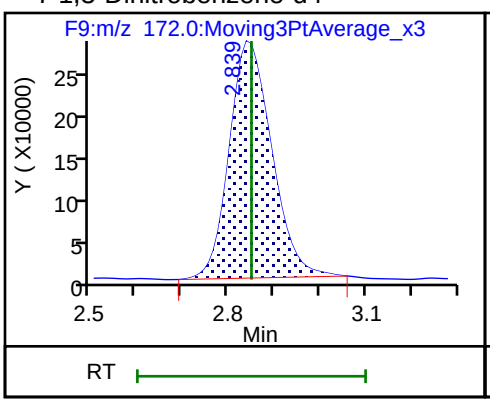
5 1,3,5-Trinitrobenzene



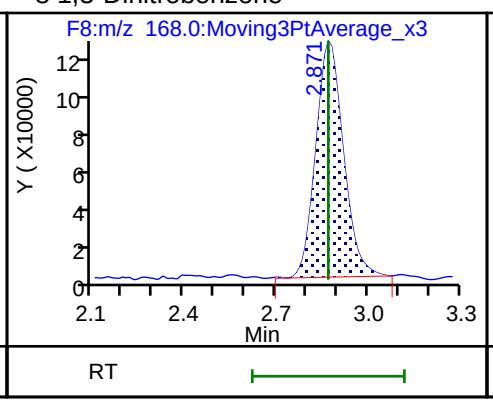
6 Tetryl



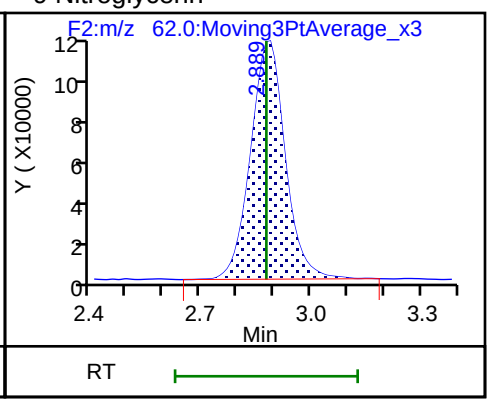
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

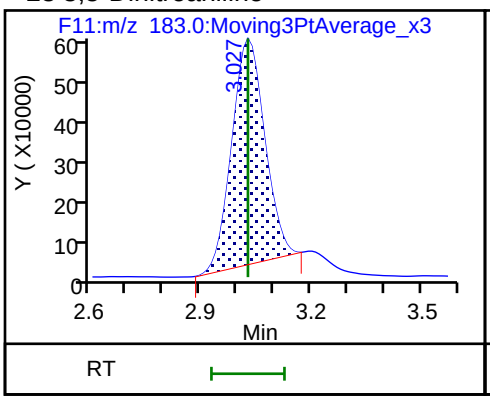


9 Nitroglycerin

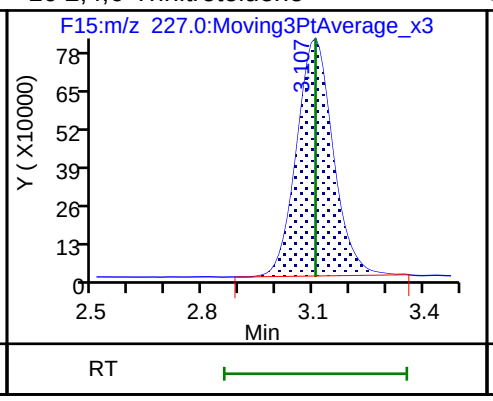


Report Date: 05-Apr-2022 14:54:02 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05006.d

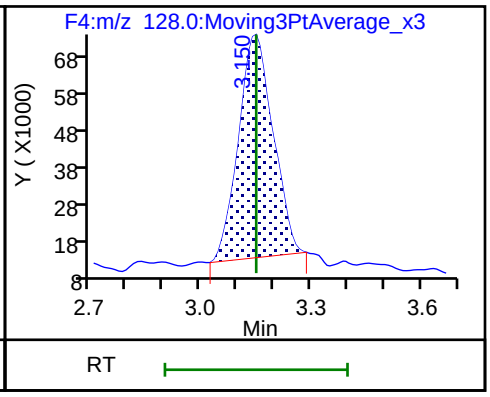
28 3,5-Dinitroaniline



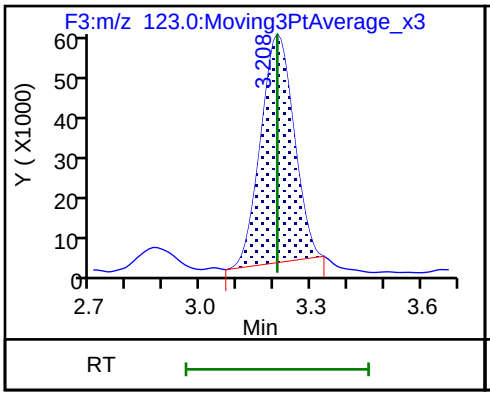
10 2,4,6-Trinitrotoluene



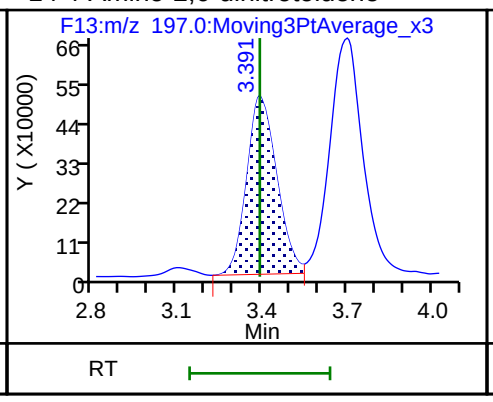
$ 11 Nitrobenzene-d5



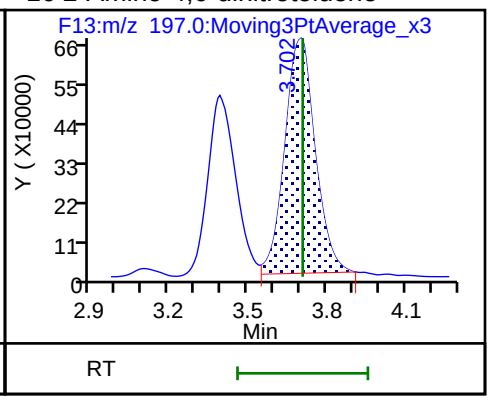
12 Nitrobenzene



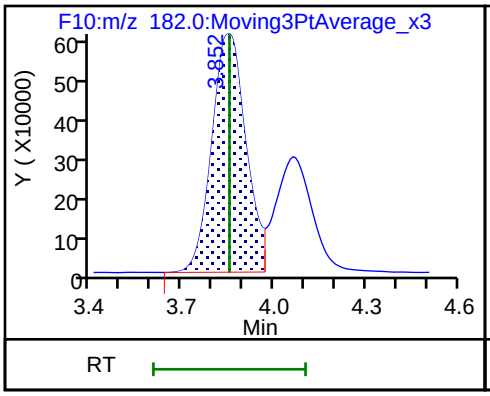
14 4-Amino-2,6-dinitrotoluene



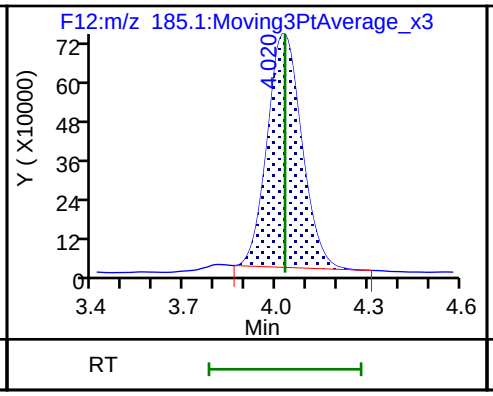
16 2-Amino-4,6-dinitrotoluene



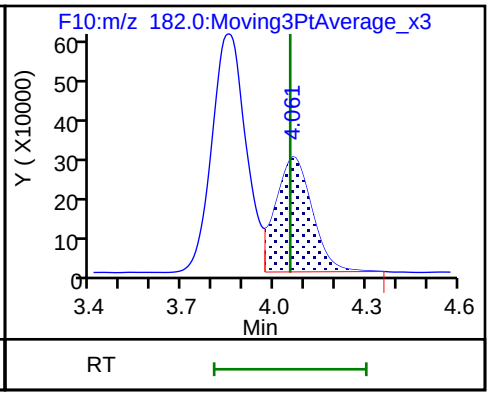
17 2,6-Dinitrotoluene



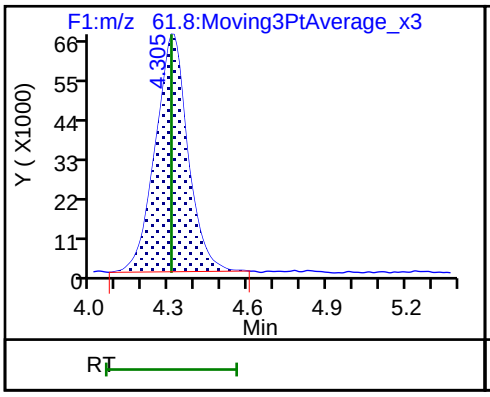
* 18 2,4-dinitrotoluene-d3



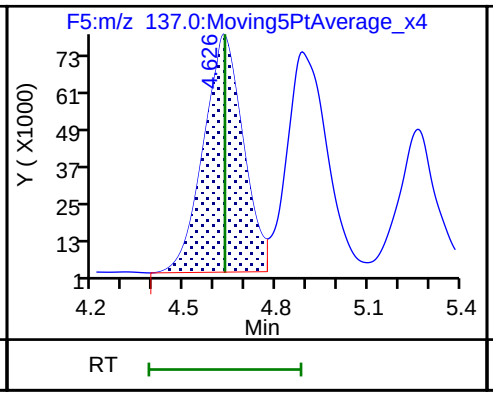
19 2,4-Dinitrotoluene



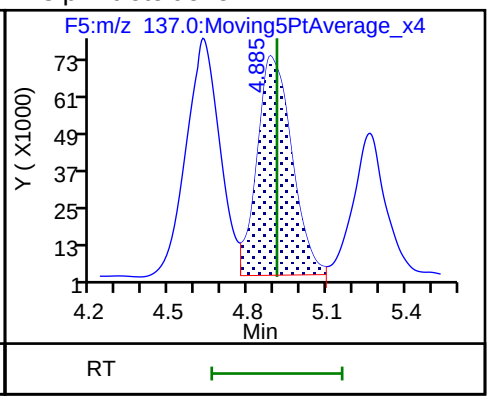
20 PETN



22 o-Nitrotoluene



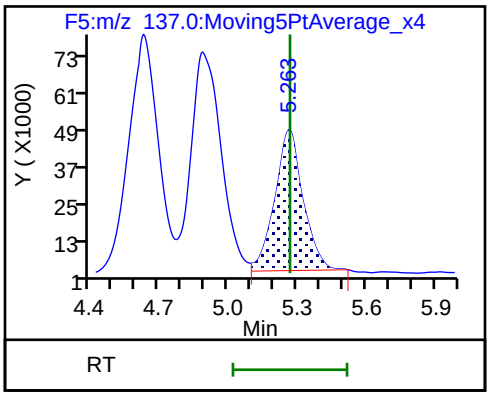
23 p-Nitrotoluene



Report Date: 05-Apr-2022 14:54:02 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05006.d

24 m-Nitrotoluene



Report Date: 05-Apr-2022 14:54:03 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05007.d
Lims ID: STD005
Client ID:
Sample Type: ICISAV Calib Level: 5
Inject. Date: 05-Apr-2022 10:46:02 ALS Bottle#: 6 Worklist Smp#: 7
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: STD L5
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 05-Apr-2022 14:54:03 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1672

First Level Reviewer: meyera Date: 05-Apr-2022 11:36:32
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.223	1.223	0.0	0.998	353522	100.3	51.9	
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		200166	125.0	80.4	
36 TNX								
144.0	1.352	1.352	0.0	0.761	8507412	114.3	1045	
33 DNX								
160.0	1.444	1.444	0.0	0.813	11741943	103.2	233	
34 MNX								
160.0	1.615	1.615	0.0	0.909	3342652	116.7	63.9	
4 RDX								
281.2	1.774	1.774	0.0	0.998	561601	108.1	104	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		840575	125.0	158	
5 1,3,5-Trinitrobenzene								
213.0	2.199	2.199	0.0	0.772	2395986	96.0	175	
6 Tetryl								
241.1	2.540	2.540	0.0	0.891	3940409	97.1	116	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.850	2.850	0.0		1847345	129.4	283	
8 1,3-Dinitrobenzene								
168.0	2.871	2.871	0.0	1.007	1594374	102.5	213	
9 Nitroglycerin								
62.0	2.878	2.878	0.0	1.010	1491574	99.6	525	
28 3,5-Dinitroaniline								
183.0	3.027	3.027	0.0	1.062	6739509	98.1	51.4	

Report Date: 05-Apr-2022 14:54:03 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05007.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.107	3.107	0.0	0.771	11168170	98.9	406	
$ 11 Nitrobenzene-d5								
128.0	3.150	3.150	0.0	0.782	888907	98.7	55.0	
12 Nitrobenzene								
123.0	3.208	3.208	0.0	0.796	767853	100.2	43.8	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.391	3.391	0.0	0.842	7648612	98.5	64.4	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.708	3.708	0.0	0.921	10548530	98.5	82.8	
17 2,6-Dinitrotoluene								
182.0	3.852	3.852	0.0	0.956	9291163	98.3	661	
* 18 2,4-dinitrotoluene-d3								
185.1	4.028	4.028	0.0		5886765	125.0	134	
19 2,4-Dinitrotoluene								
182.0	4.052	4.052	0.0	1.006	4993456	100.6	330	
20 PETN								
61.8	4.305	4.305	0.0	1.069	1036876	95.2	371	
22 o-Nitrotoluene								
137.0	4.631	4.631	0.0	1.150	1456842	99.7	333	
23 p-Nitrotoluene								
137.0	4.910	4.910	0.0	1.219	1214334	95.7	273	
24 m-Nitrotoluene								
137.0	5.268	5.268	0.0	1.308	730728	96.6	150	

QC Flag Legend

Processing Flags

Reagents:

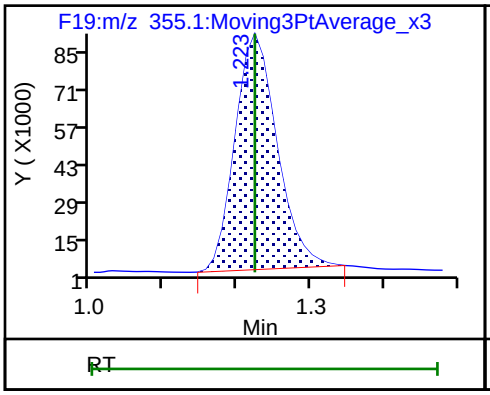
8321EXcalprim_00029	Amount Added: 10.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 10.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 05-Apr-2022 14:54:03 Chrom Revision: 2.3 18-Mar-2022 09:07:22

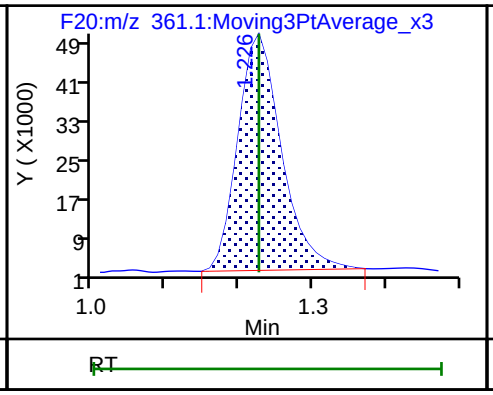
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05007.d
Injection Date: 05-Apr-2022 10:46:02 Instrument ID: LC_LCMS7
Lims ID: STD005
Client ID:
Operator ID: acm ALS Bottle#: 6 Worklist Smp#: 7
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

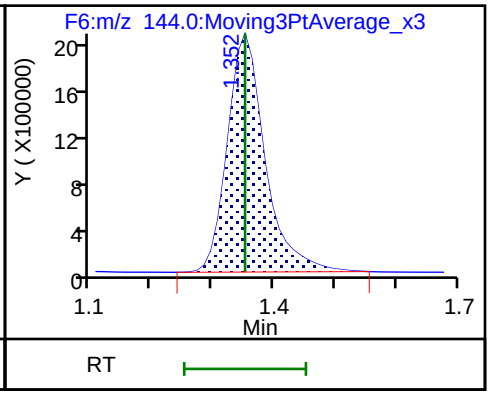
2 HMX



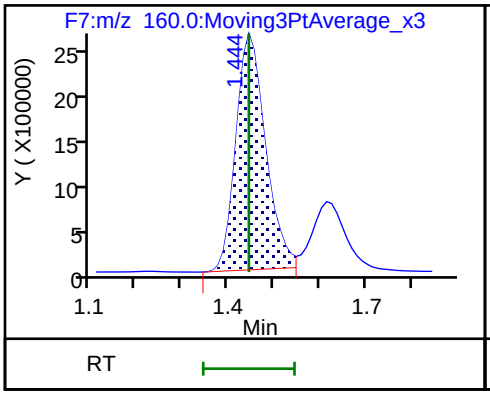
* 1 HMX-13C4



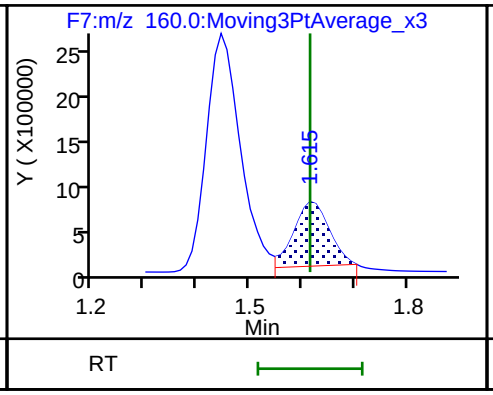
36 TNX



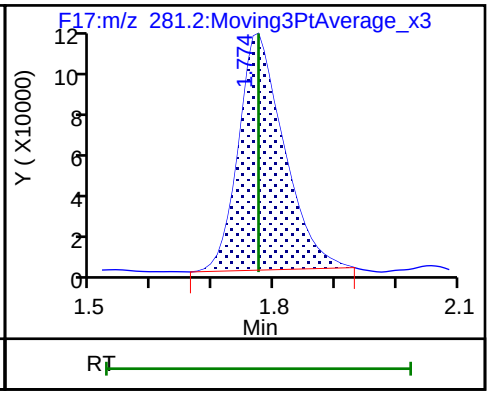
33 DNX



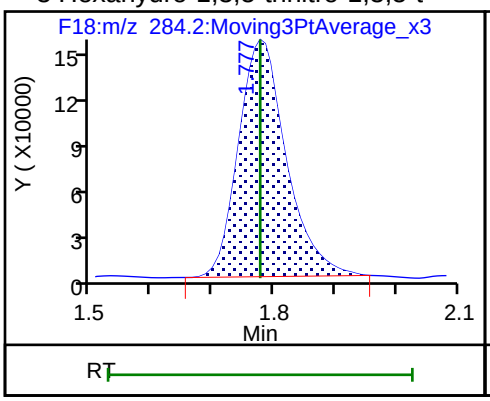
34 MNX



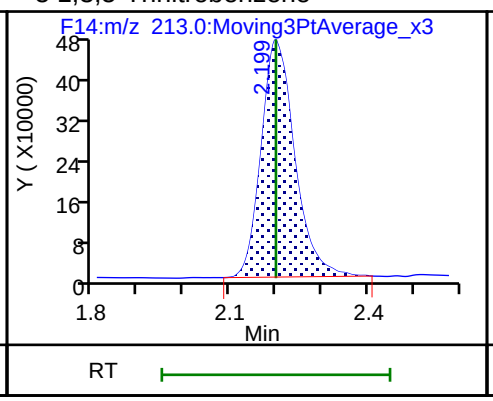
4 RDX



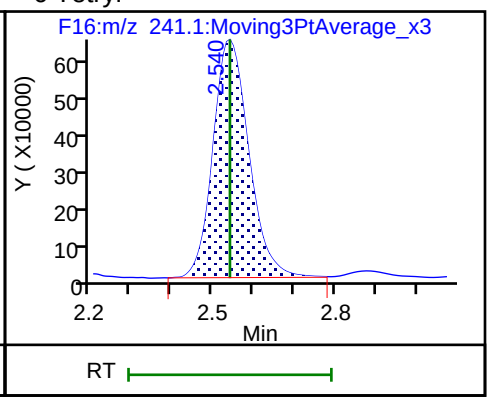
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



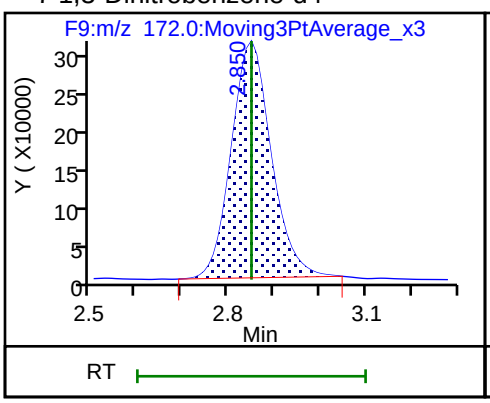
5 1,3,5-Trinitrobenzene



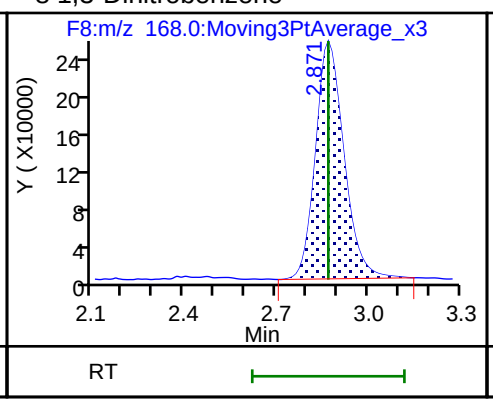
6 Tetryl



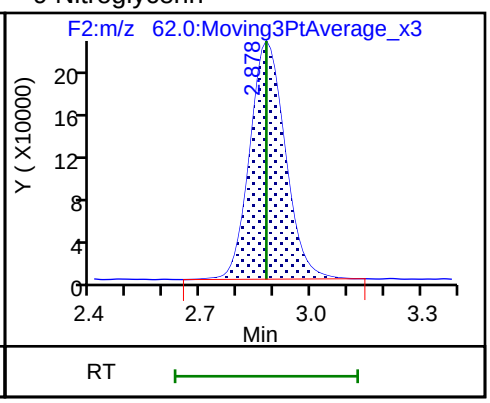
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

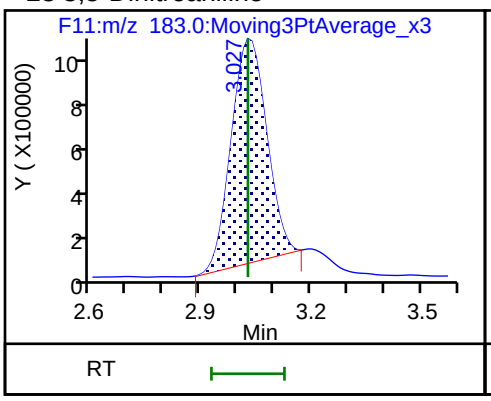


9 Nitroglycerin

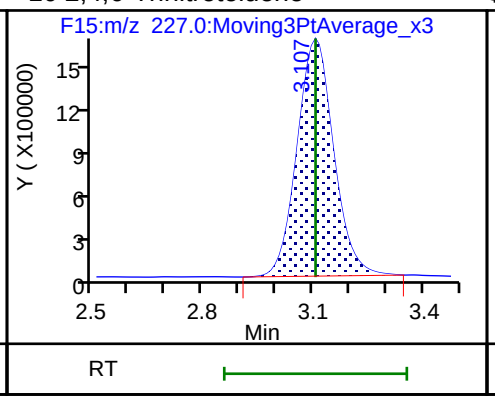


Report Date: 05-Apr-2022 14:54:03 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05007.d

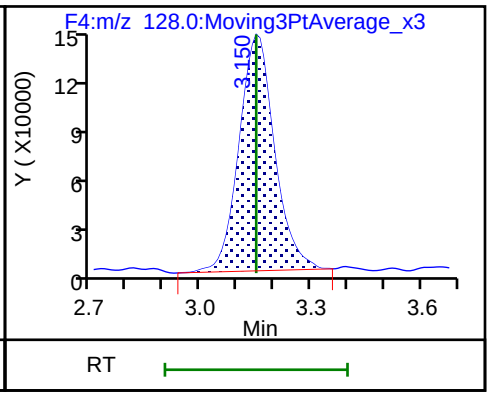
28 3,5-Dinitroaniline



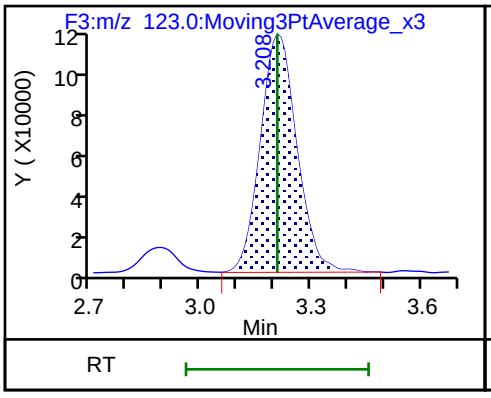
10 2,4,6-Trinitrotoluene



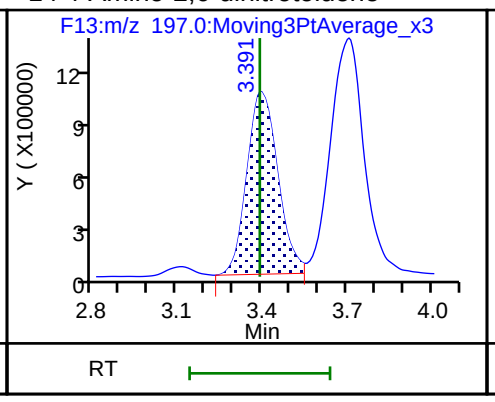
$ 11 Nitrobenzene-d5



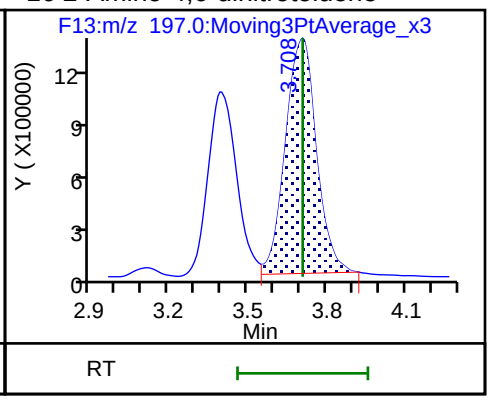
12 Nitrobenzene



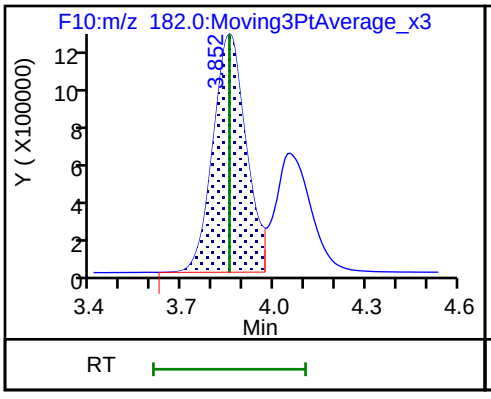
14 4-Amino-2,6-dinitrotoluene



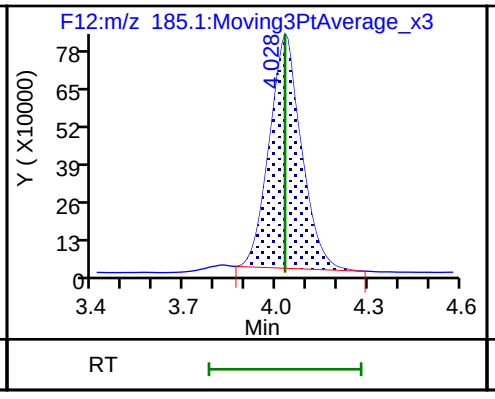
16 2-Amino-4,6-dinitrotoluene



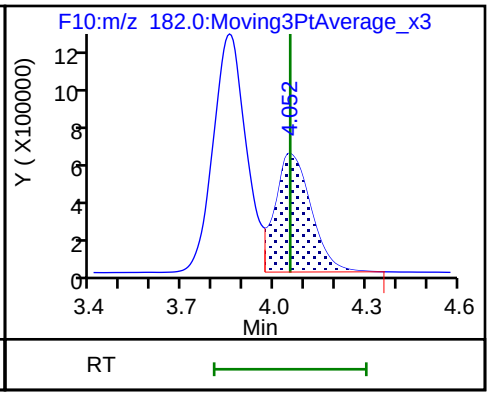
17 2,6-Dinitrotoluene



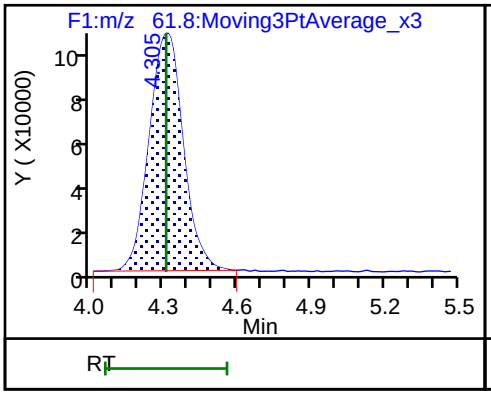
* 18 2,4-dinitrotoluene-d3



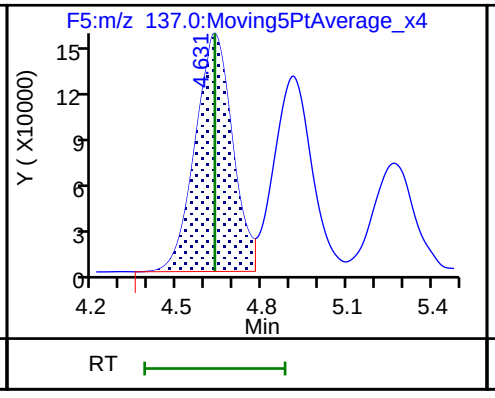
19 2,4-Dinitrotoluene



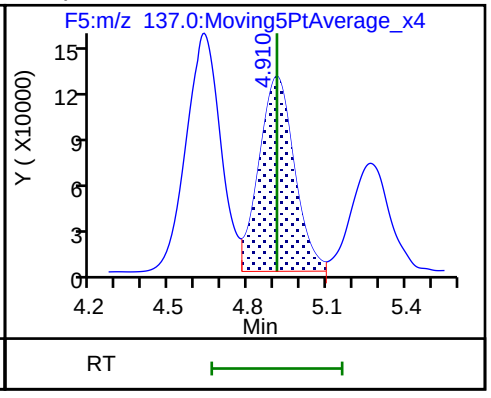
20 PETN



22 o-Nitrotoluene

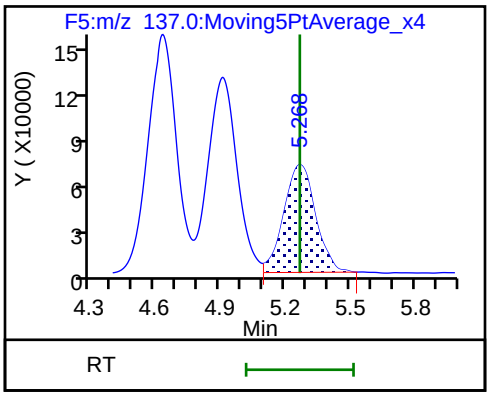


23 p-Nitrotoluene



Report Date: 05-Apr-2022 14:54:03 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05007.d

24 m-Nitrotoluene



Report Date: 05-Apr-2022 14:54:04 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05008.d
Lims ID: STD006
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 05-Apr-2022 10:52:25 ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: STD L6
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 05-Apr-2022 14:54:04 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1672

First Level Reviewer: meyera Date: 05-Apr-2022 11:36:42
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.223	1.223	0.0	0.998	651619	196.9	96.0	
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		188565	125.0	96.7	
36 TNX								
144.0	1.352	1.352	0.0	0.761	14190695	196.9	689	
33 DNX								
160.0	1.444	1.444	0.0	0.813	22069551	201.2	241	
34 MNX								
160.0	1.615	1.615	0.0	0.909	6673492	243.4	71.3	
4 RDX								
281.2	1.774	1.774	0.0	0.998	1012129	199.1	74.8	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		829158	125.0	128	
5 1,3,5-Trinitrobenzene								
213.0	2.202	2.199	0.003	0.773	4845395	200.6	239	
6 Tetryl								
241.1	2.540	2.540	0.0	0.891	7988769	202.8	132	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.850	2.850	0.0		1788578	129.4	305	
8 1,3-Dinitrobenzene								
168.0	2.871	2.871	0.0	1.007	3047339	202.2	277	
9 Nitroglycerin								
62.0	2.878	2.878	0.0	1.010	2901547	200.3	956	
28 3,5-Dinitroaniline								
183.0	3.027	3.027	0.0	1.062	13551592	206.8	53.6	

Report Date: 05-Apr-2022 14:54:04 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05008.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.107	3.107	0.0	0.773	21784019	199.5	591	
$ 11 Nitrobenzene-d5								
128.0	3.150	3.150	0.0	0.784	1767384	203.7	152	
12 Nitrobenzene								
123.0	3.208	3.208	0.0	0.798	1503771	201.7	47.9	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.398	3.391	0.007	0.845	15052562	202.6	66.8	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.708	3.708	0.0	0.923	20679165	201.8	82.6	
17 2,6-Dinitrotoluene								
182.0	3.852	3.852	0.0	0.958	18508433	204.9	703	
* 18 2,4-dinitrotoluene-d3								
185.1	4.020	4.028	-0.008		5635168	125.0	186	
19 2,4-Dinitrotoluene								
182.0	4.061	4.052	0.009	1.010	9472373	200.1	339	
20 PETN								
61.8	4.315	4.305	0.010	1.074	2125655	203.1	561	
22 o-Nitrotoluene								
137.0	4.631	4.631	0.0	1.152	2838178	202.8	611	
23 p-Nitrotoluene								
137.0	4.910	4.910	0.0	1.221	2456125	202.6	509	
24 m-Nitrotoluene								
137.0	5.273	5.268	0.005	1.312	1459541	201.5	290	

QC Flag Legend

Processing Flags

Reagents:

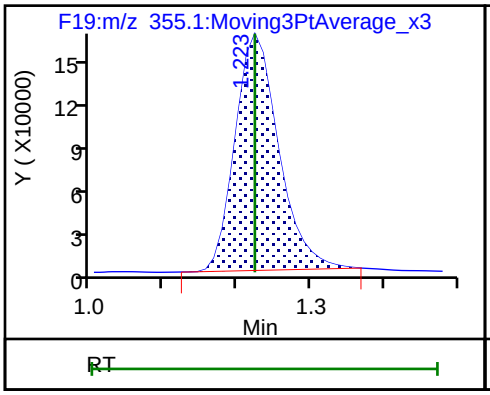
8321EXcalprim_00029	Amount Added: 20.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 20.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 05-Apr-2022 14:54:04 Chrom Revision: 2.3 18-Mar-2022 09:07:22

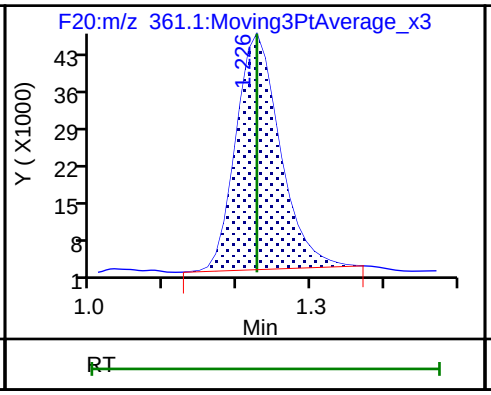
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05008.d
Injection Date: 05-Apr-2022 10:52:25 Instrument ID: LC_LCMS7
Lims ID: STD006
Client ID:
Operator ID: acm ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

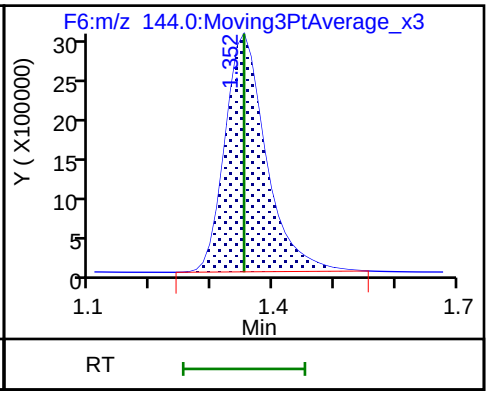
2 HMX



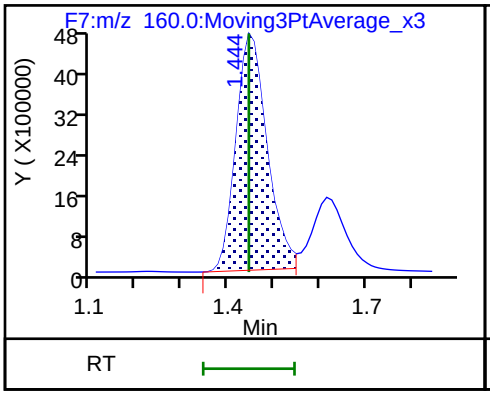
* 1 HMX-13C4



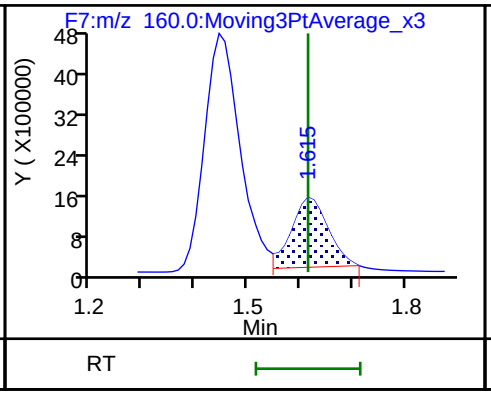
36 TNX



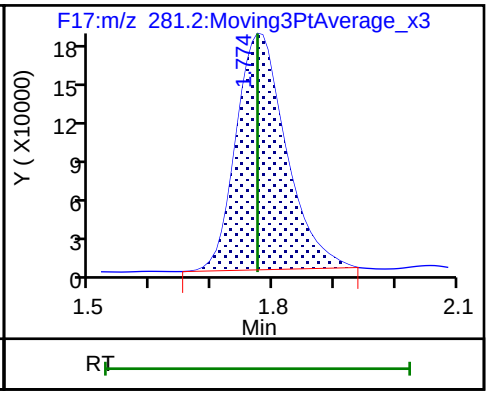
33 DNX



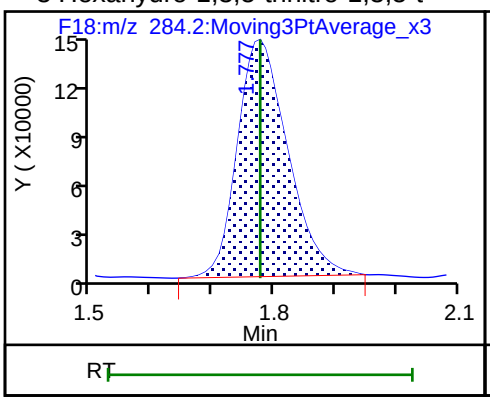
34 MNX



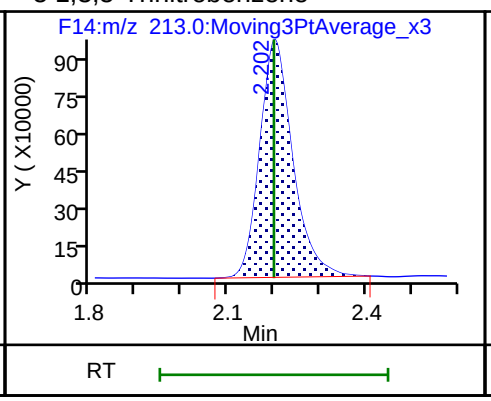
4 RDX



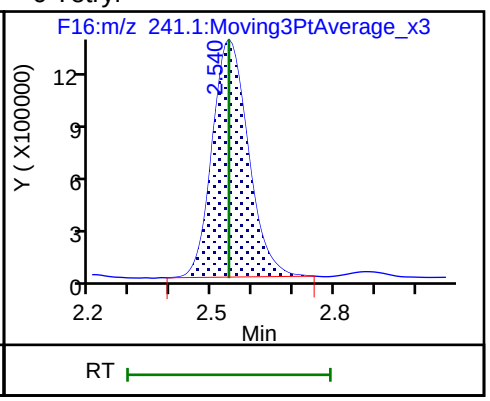
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



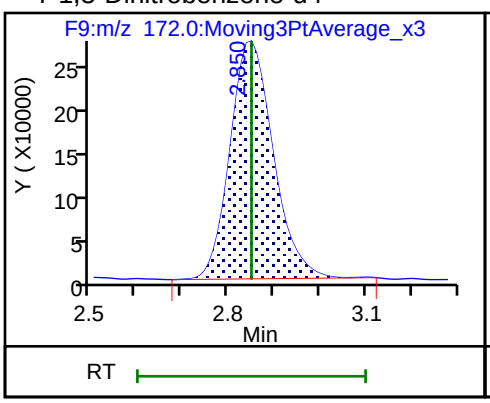
5 1,3,5-Trinitrobenzene



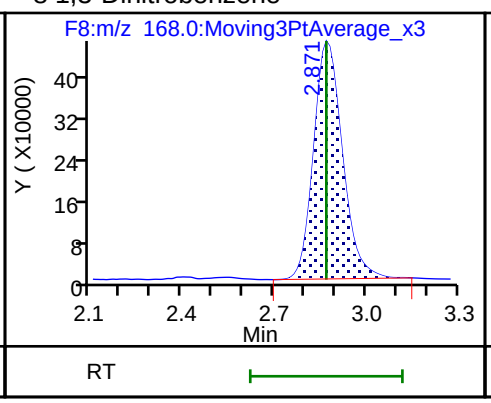
6 Tetryl



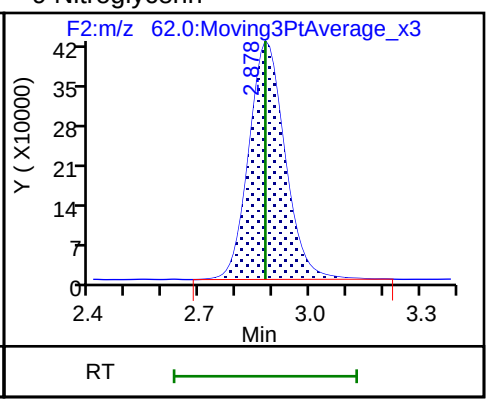
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



9 Nitroglycerin



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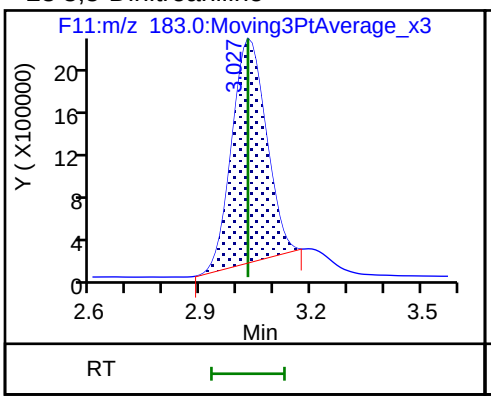
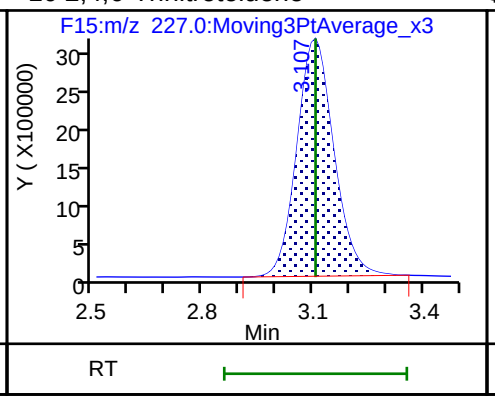
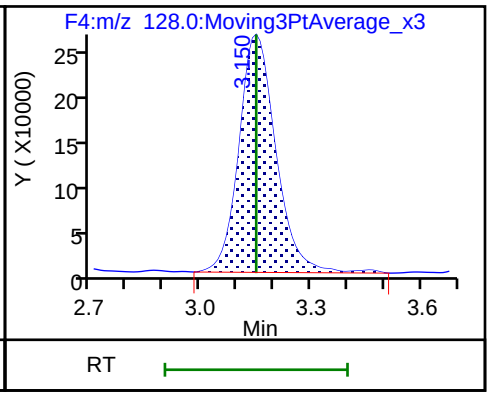
28 3,5-Dinitroaniline



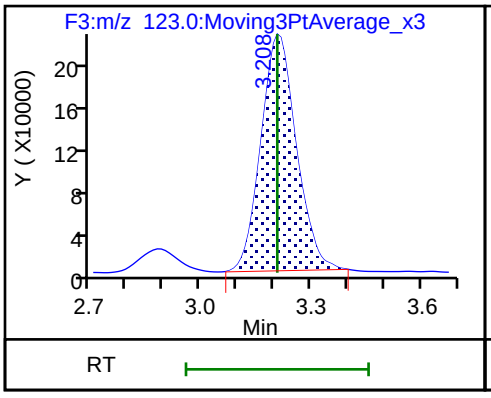
10 2,4,6-Trinitrotoluene



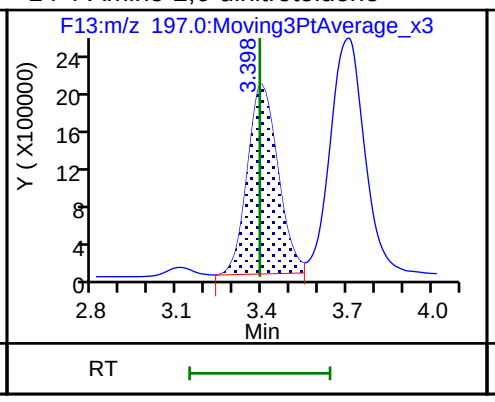
$ 11 Nitrobenzene-d5



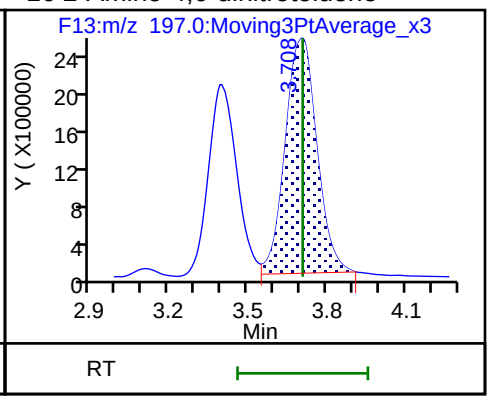
12 Nitrobenzene



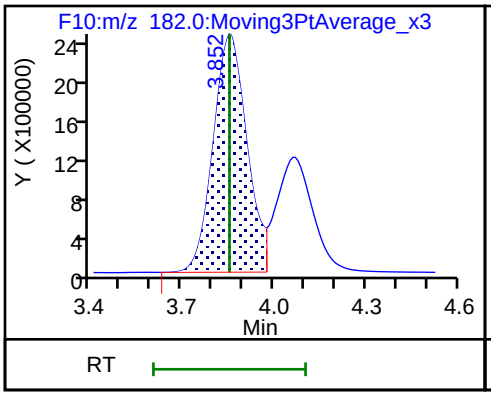
14 4-Amino-2,6-dinitrotoluene



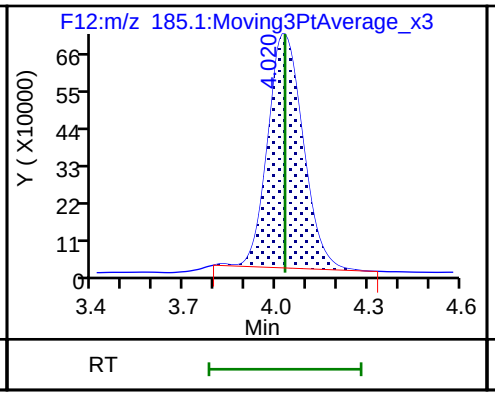
16 2-Amino-4,6-dinitrotoluene



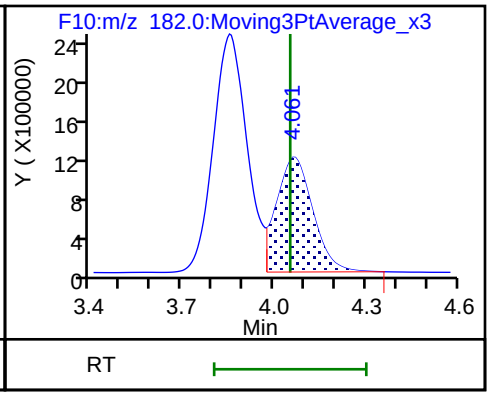
17 2,6-Dinitrotoluene



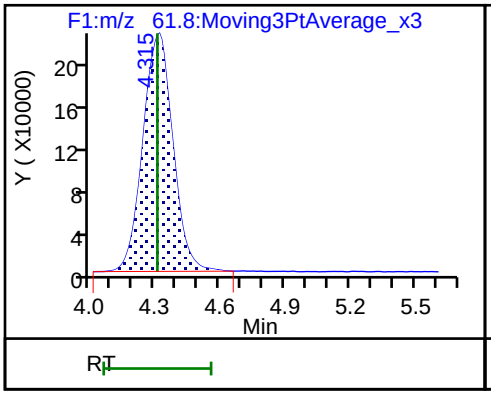
* 18 2,4-dinitrotoluene-d3



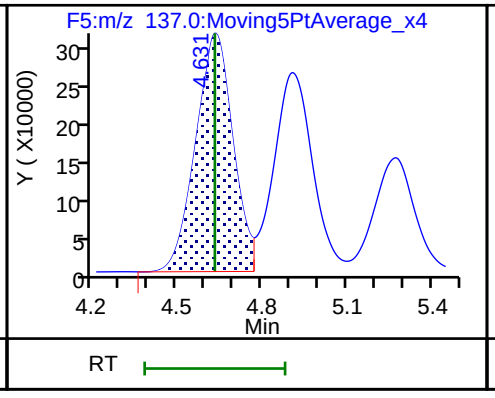
19 2,4-Dinitrotoluene



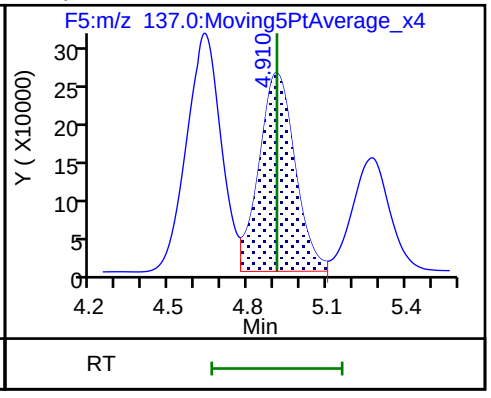
20 PETN



22 o-Nitrotoluene



23 p-Nitrotoluene



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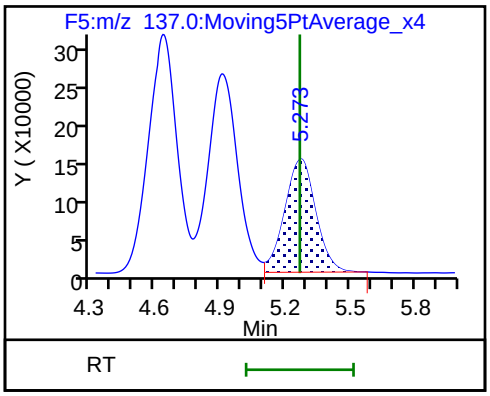
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05008.d

24 m-Nitrotoluene



Report Date: 05-Apr-2022 14:54:05 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d
Lims ID: STD007
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 05-Apr-2022 10:58:50 ALS Bottle#: 8 Worklist Smp#: 9
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: STD L7
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 05-Apr-2022 14:54:04 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1672

First Level Reviewer: meyera Date: 05-Apr-2022 11:36:53
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.223	1.223	0.0	0.998	966976	300.9	120	
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		183328	125.0	103	
36 TNX								
144.0	1.352	1.352	0.0	0.761	20156929	288.1	776	
33 DNX								
160.0	1.444	1.444	0.0	0.813	31322751	294.6	214	
34 MNX								
160.0	1.615	1.615	0.0	0.909	8918135	336.0	59.5	
4 RDX								
281.2	1.774	1.774	0.0	0.998	1374091	285.1	78.0	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		788573	125.0	189	
5 1,3,5-Trinitrobenzene								
213.0	2.199	2.199	0.0	0.772	7160063	305.5	216	
6 Tetryl								
241.1	2.540	2.540	0.0	0.891	11614876	303.6	153	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.850	2.850	0.0		1736131	129.4	245	
8 1,3-Dinitrobenzene								
168.0	2.871	2.871	0.0	1.007	4318549	295.2	248	
9 Nitroglycerin								
62.0	2.878	2.878	0.0	1.010	4231818	301.0	1429	
28 3,5-Dinitroaniline								
183.0	3.027	3.027	0.0	1.062	18758546	294.1	46.6	

Report Date: 05-Apr-2022 14:54:05 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.107	3.107	0.0	0.771	32229660	304.1	663	
$ 11 Nitrobenzene-d5								
128.0	3.150	3.150	0.0	0.782	2535644	301.6	202	
12 Nitrobenzene								
123.0	3.208	3.208	0.0	0.796	2194814	302.8	45.5	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.391	3.391	0.0	0.842	21828571	301.6	68.5	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.702	3.708	-0.006	0.919	30197142	302.6	90.2	
17 2,6-Dinitrotoluene								
182.0	3.852	3.852	0.0	0.956	26419862	300.4	801	
* 18 2,4-dinitrotoluene-d3								
185.1	4.028	4.028	0.0		5489480	125.0	212	
19 2,4-Dinitrotoluene								
182.0	4.061	4.052	0.009	1.008	13878266	301.3	400	
20 PETN								
61.8	4.305	4.305	0.0	1.069	3034184	297.3	858	
22 o-Nitrotoluene								
137.0	4.631	4.631	0.0	1.150	4092313	300.0	562	
23 p-Nitrotoluene								
137.0	4.910	4.910	0.0	1.219	3561551	301.7	476	
24 m-Nitrotoluene								
137.0	5.268	5.268	0.0	1.308	2123215	300.8	263	

QC Flag Legend

Processing Flags

Reagents:

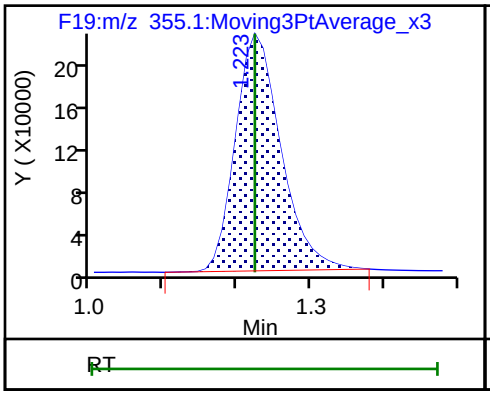
8321EXcalprim_00029	Amount Added: 30.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 30.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 05-Apr-2022 14:54:05 Chrom Revision: 2.3 18-Mar-2022 09:07:22

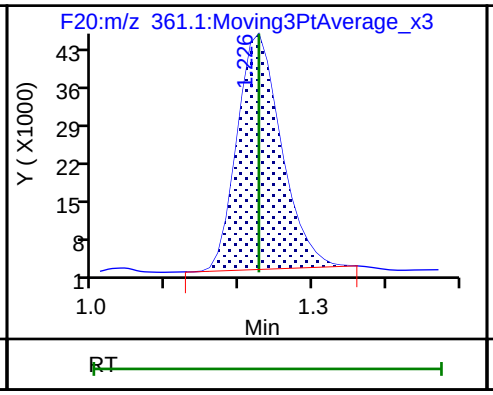
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d
Injection Date: 05-Apr-2022 10:58:50 Instrument ID: LC_LCMS7
Lims ID: STD007
Client ID:
Operator ID: acm ALS Bottle#: 8 Worklist Smp#: 9
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

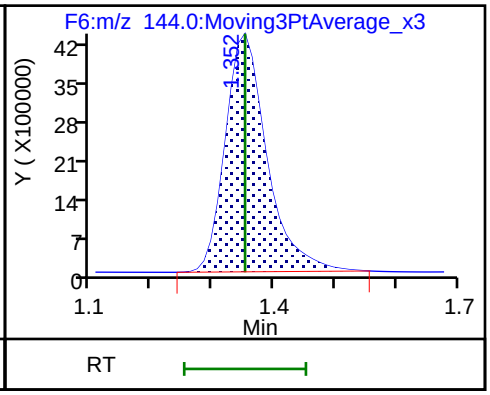
2 HMX



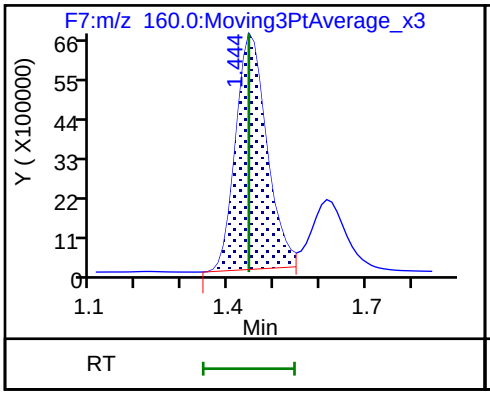
* 1 HMX-13C4



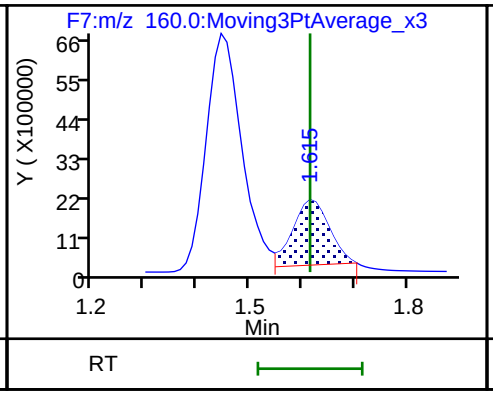
36 TNX



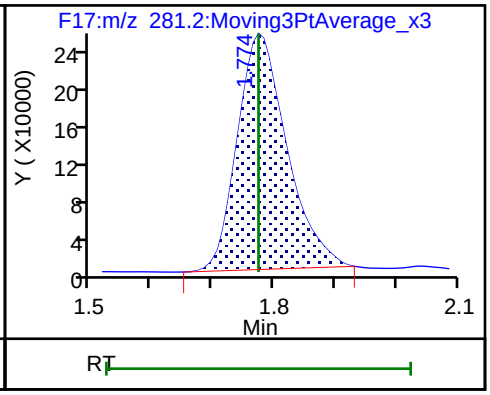
33 DNX



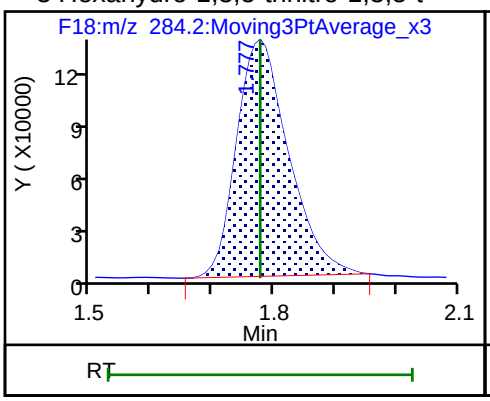
34 MNX



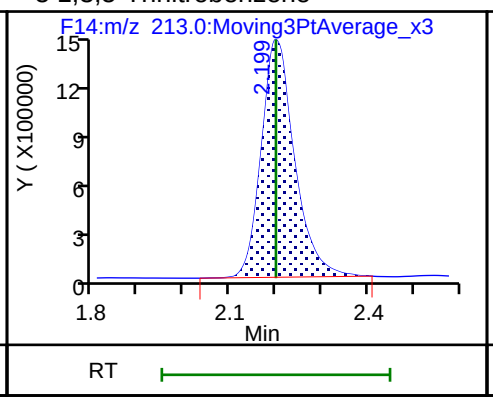
4 RDX



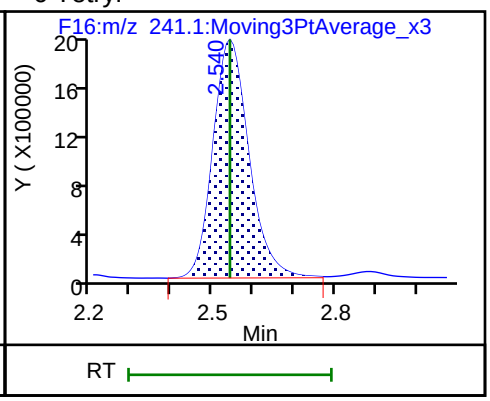
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



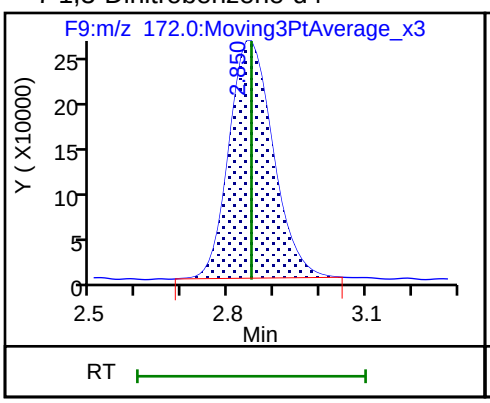
5 1,3,5-Trinitrobenzene



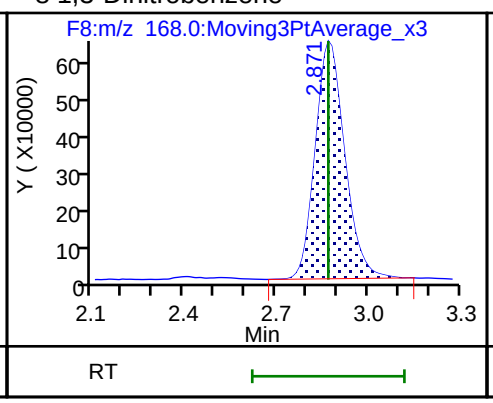
6 Tetryl



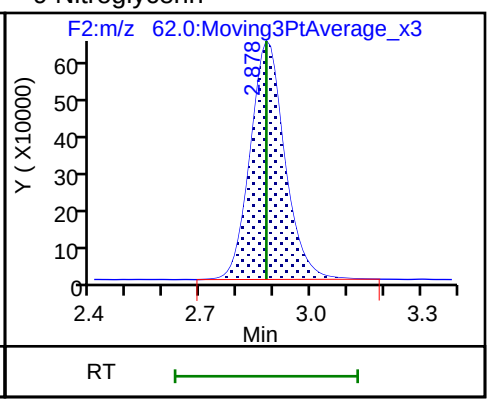
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



9 Nitroglycerin



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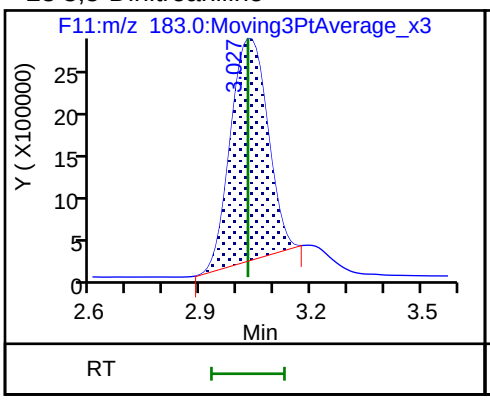
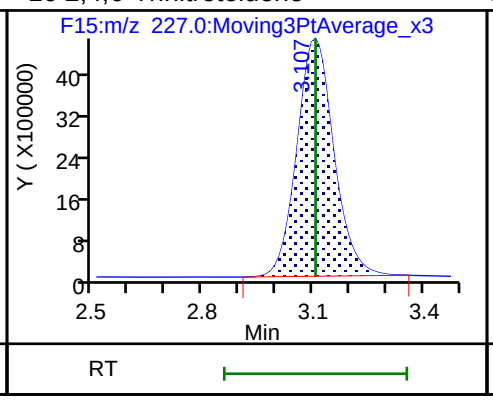
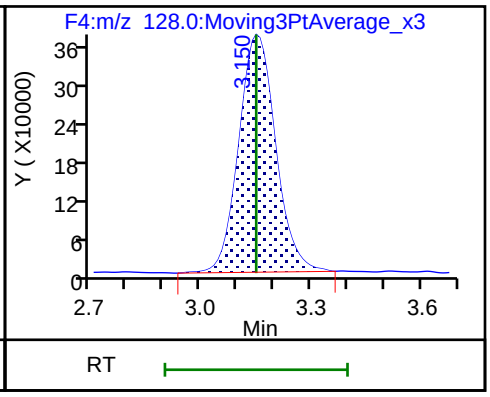
28 3,5-Dinitroaniline



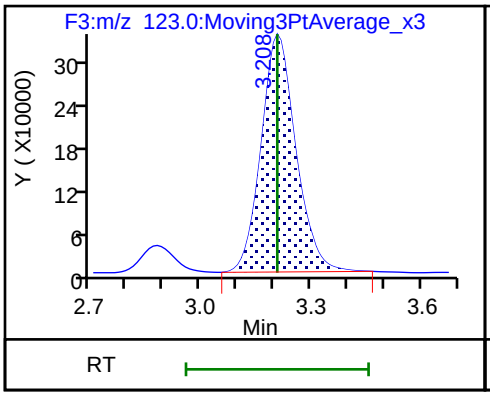
10 2,4,6-Trinitrotoluene



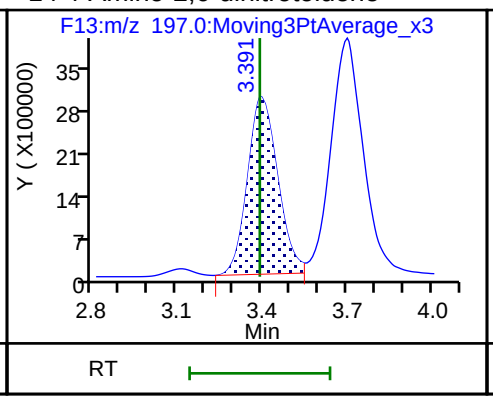
$ 11 Nitrobenzene-d5



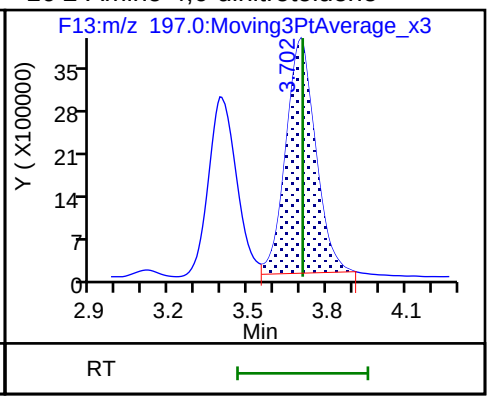
12 Nitrobenzene



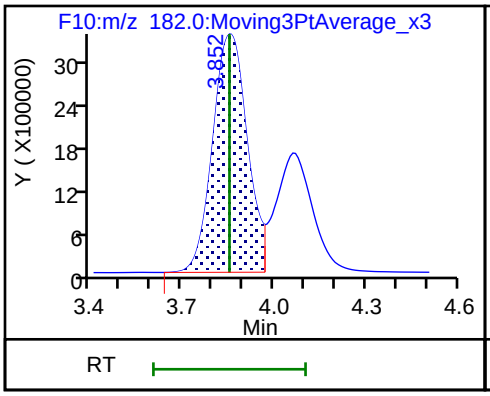
14 4-Amino-2,6-dinitrotoluene



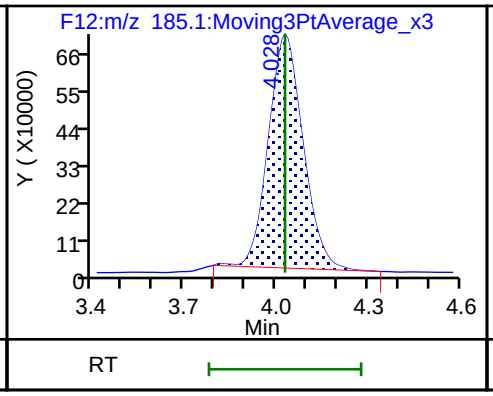
16 2-Amino-4,6-dinitrotoluene



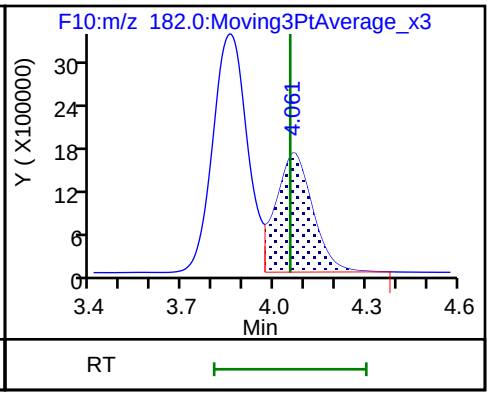
17 2,6-Dinitrotoluene



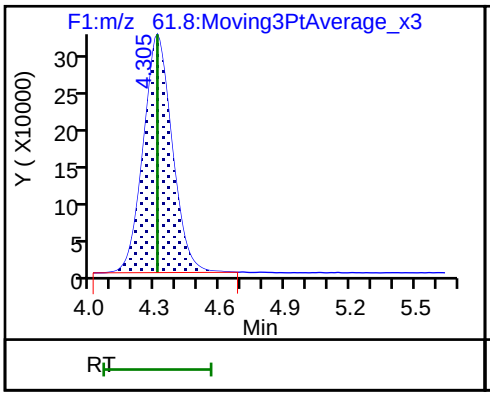
* 18 2,4-dinitrotoluene-d3



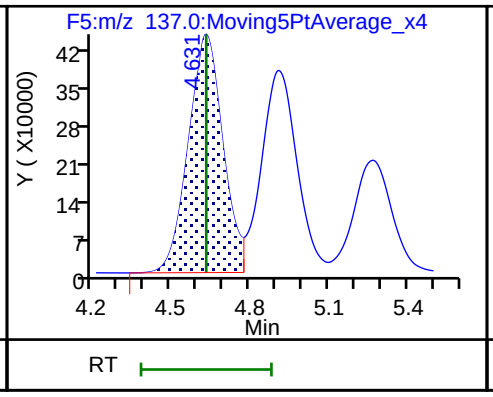
19 2,4-Dinitrotoluene



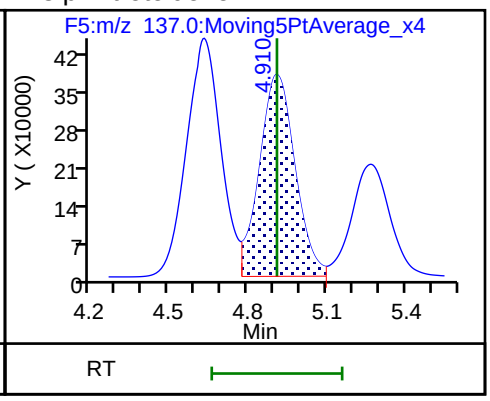
20 PETN



22 o-Nitrotoluene



23 p-Nitrotoluene



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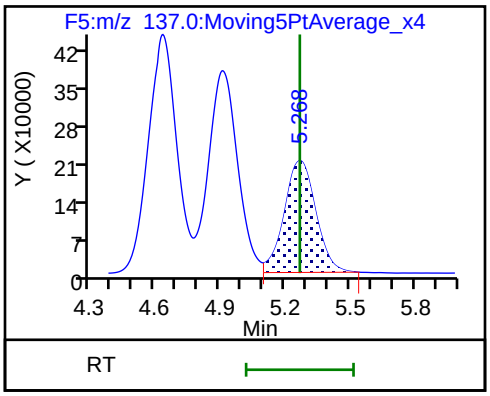
24 m-Nitrotoluene



Calibration / HMX

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

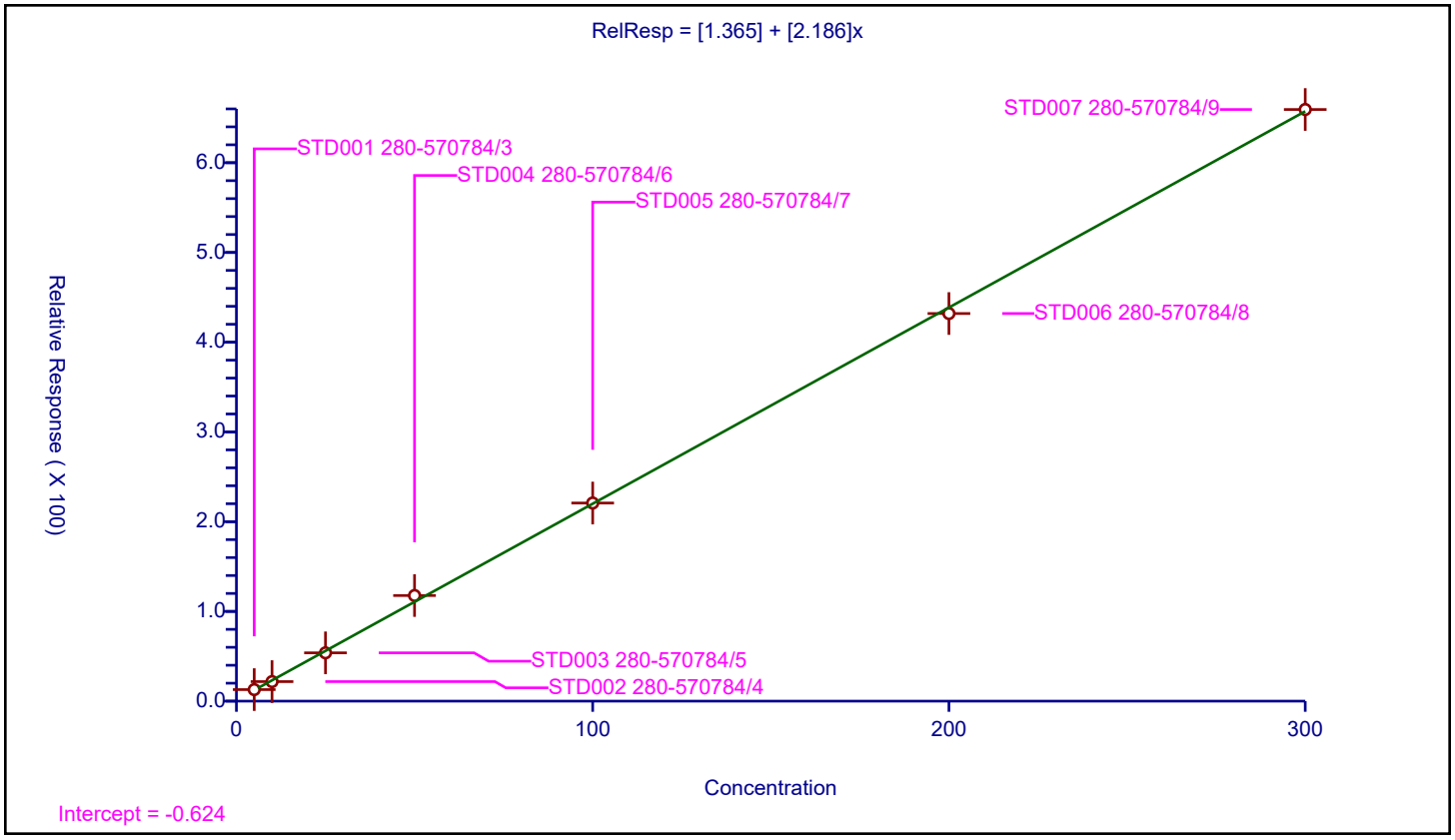
Curve Coefficients

Intercept:	1.365
Slope:	2.186

Error Coefficients

Standard Error:	555000
Relative Standard Error:	5.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-570784/3	5.0	12.863702	125.0	222710.0	2.57274	Y
2	STD002 280-570784/4	10.0	21.767538	125.0	252153.0	2.176754	Y
3	STD003 280-570784/5	25.0	53.826275	125.0	231792.0	2.153051	Y
4	STD004 280-570784/6	50.0	117.690473	125.0	220175.0	2.353809	Y
5	STD005 280-570784/7	100.0	220.768013	125.0	200166.0	2.20768	Y
6	STD006 280-570784/8	200.0	431.959139	125.0	188565.0	2.159796	Y
7	STD007 280-570784/9	300.0	659.320998	125.0	183328.0	2.197737	Y



Calibration / TNX

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

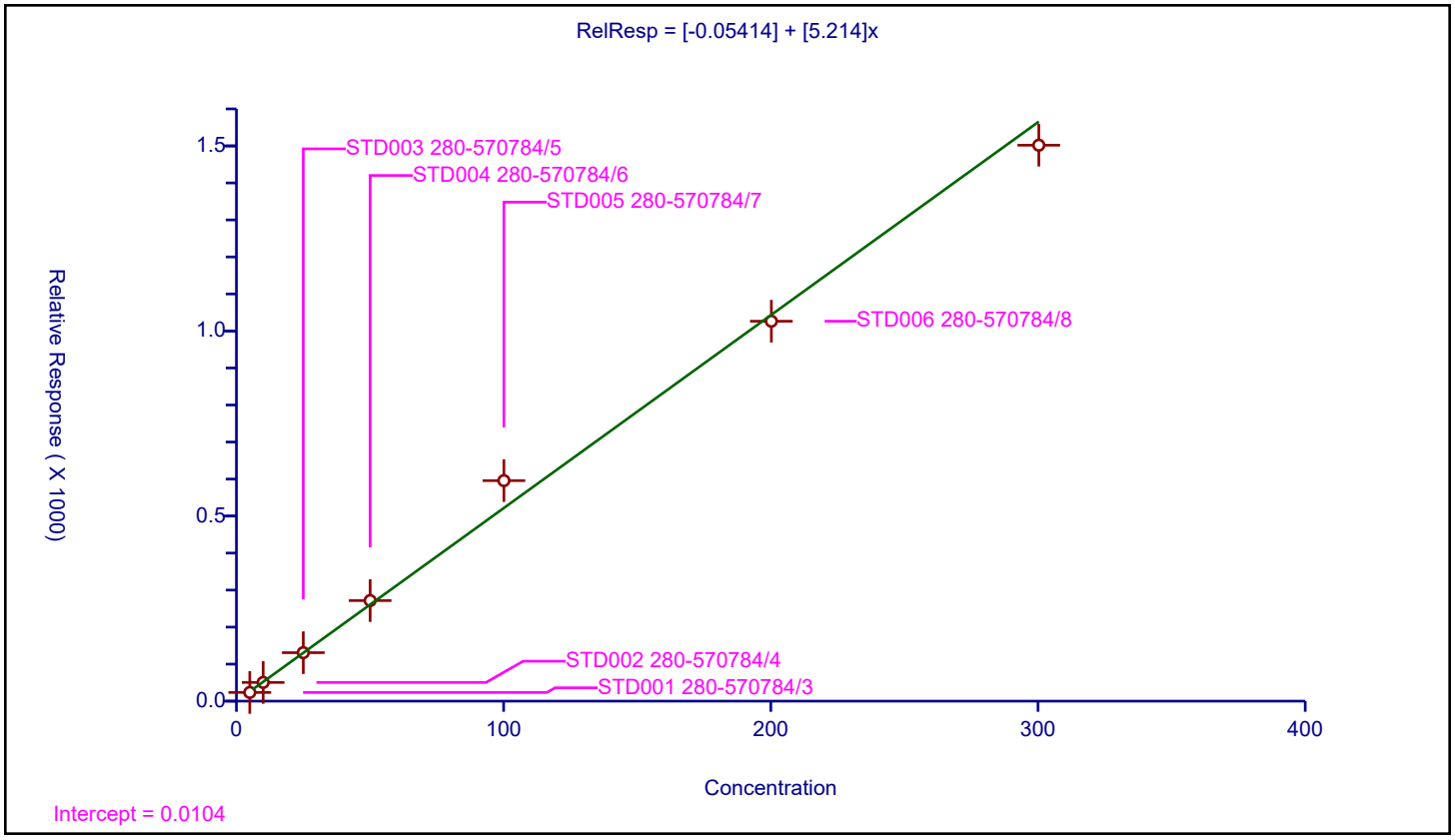
Curve Coefficients

Intercept:	-0.05414
Slope:	5.214

Error Coefficients

Standard Error:	11800000
Relative Standard Error:	8.3
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-570784/3	5.005	23.464874	129.36	1902272.0	4.688287	Y
2	STD002 280-570784/4	10.01	50.530946	129.36	1810512.0	5.048047	Y
3	STD003 280-570784/5	25.025	130.891749	129.36	1867836.0	5.23044	Y
4	STD004 280-570784/6	50.05	271.675747	129.36	1795589.0	5.428087	Y
5	STD005 280-570784/7	100.1	595.729989	129.36	1847345.0	5.951349	Y
6	STD006 280-570784/8	200.2	1026.350713	129.36	1788578.0	5.126627	Y
7	STD007 280-570784/9	300.3	1501.902987	129.36	1736131.0	5.001342	Y



Calibration / DNX

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

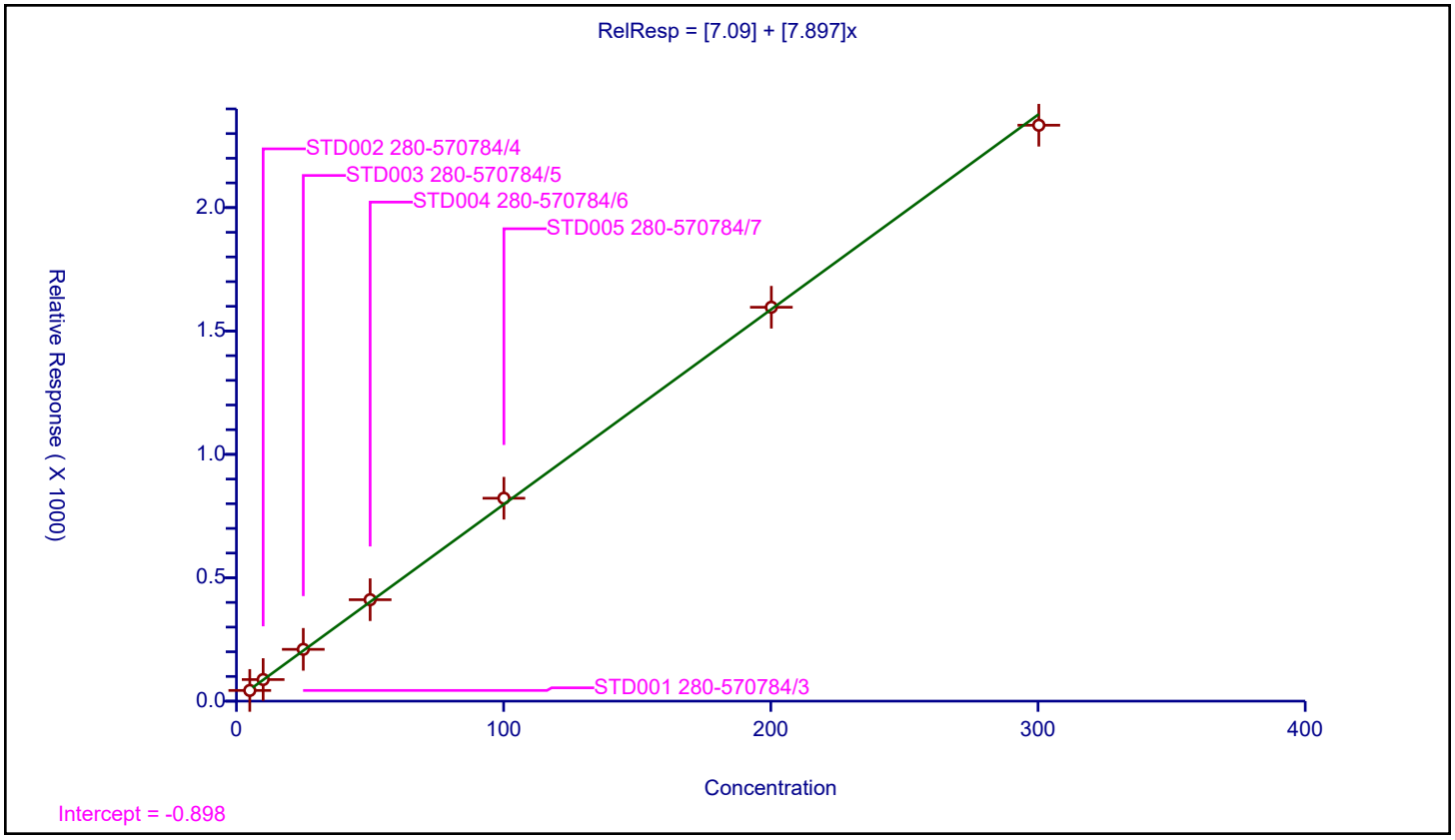
Curve Coefficients

Intercept:	7.09
Slope:	7.897

Error Coefficients

Standard Error:	18200000
Relative Standard Error:	4.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-570784/3	5.005	43.34246	129.36	1902272.0	8.659832	Y
2	STD002 280-570784/4	10.01	87.506941	129.36	1810512.0	8.741952	Y
3	STD003 280-570784/5	25.025	209.858488	129.36	1867836.0	8.385954	Y
4	STD004 280-570784/6	50.05	411.031166	129.36	1795589.0	8.212411	Y
5	STD005 280-570784/7	100.1	822.227438	129.36	1847345.0	8.21406	Y
6	STD006 280-570784/8	200.2	1596.193802	129.36	1788578.0	7.972996	Y
7	STD007 280-570784/9	300.3	2333.874039	129.36	1736131.0	7.771808	Y



Calibration / MNX

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

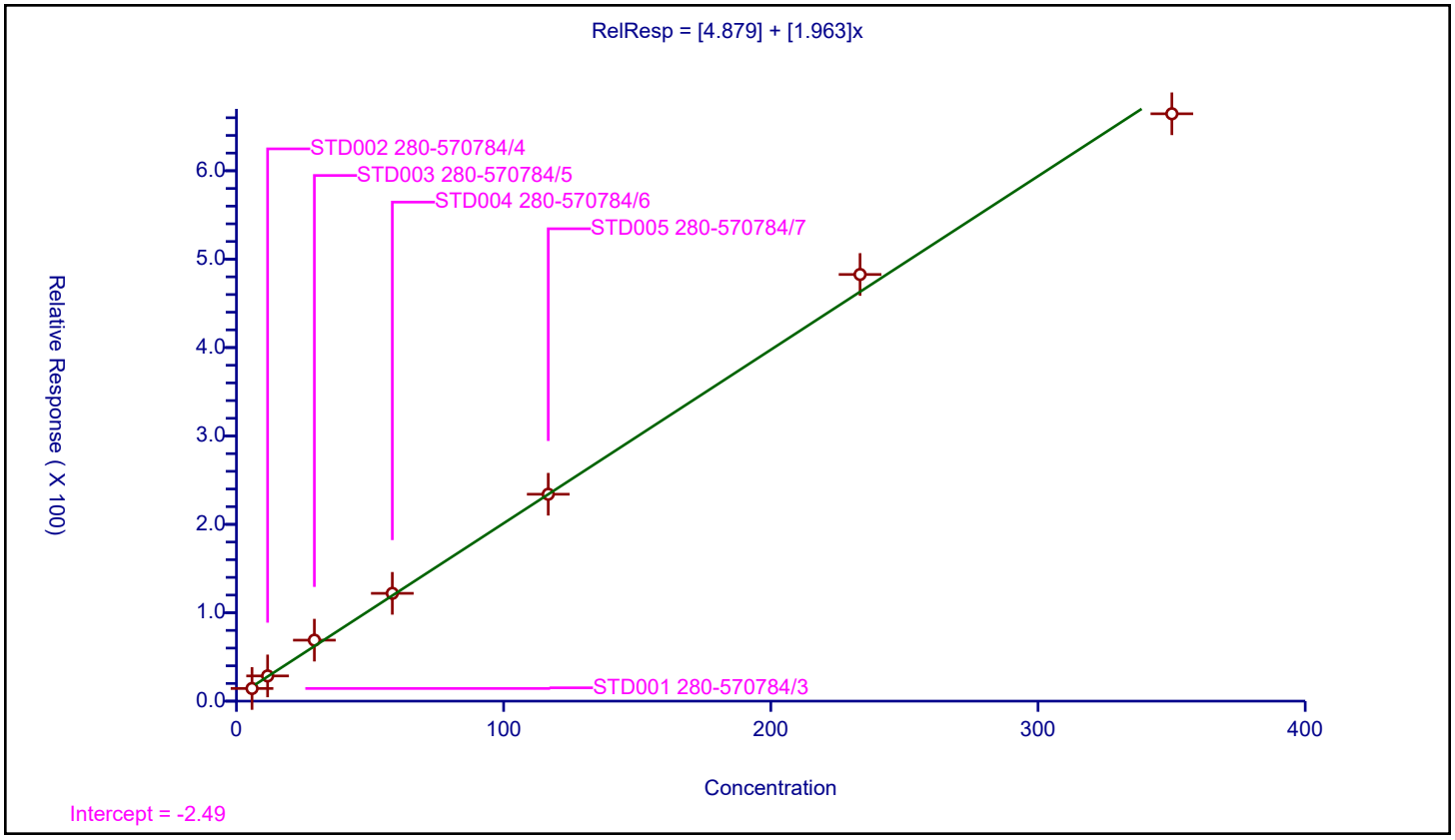
Curve Coefficients

Intercept:	4.879
Slope:	1.963

Error Coefficients

Standard Error:	5280000
Relative Standard Error:	10.0
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-570784/3	5.835	14.322905	129.36	1902272.0	2.454654	Y
2	STD002 280-570784/4	11.67	28.518529	129.36	1810512.0	2.443747	Y
3	STD003 280-570784/5	29.175	68.970794	129.36	1867836.0	2.364037	Y
4	STD004 280-570784/6	58.35	121.967574	129.36	1795589.0	2.090275	Y
5	STD005 280-570784/7	116.7	234.068603	129.36	1847345.0	2.005729	Y
6	STD006 280-570784/8	233.4	482.664399	129.36	1788578.0	2.067971	Y
7	STD007 280-570784/9	350.1	664.494755	129.36	1736131.0	1.898014	Y



Calibration / RDX

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

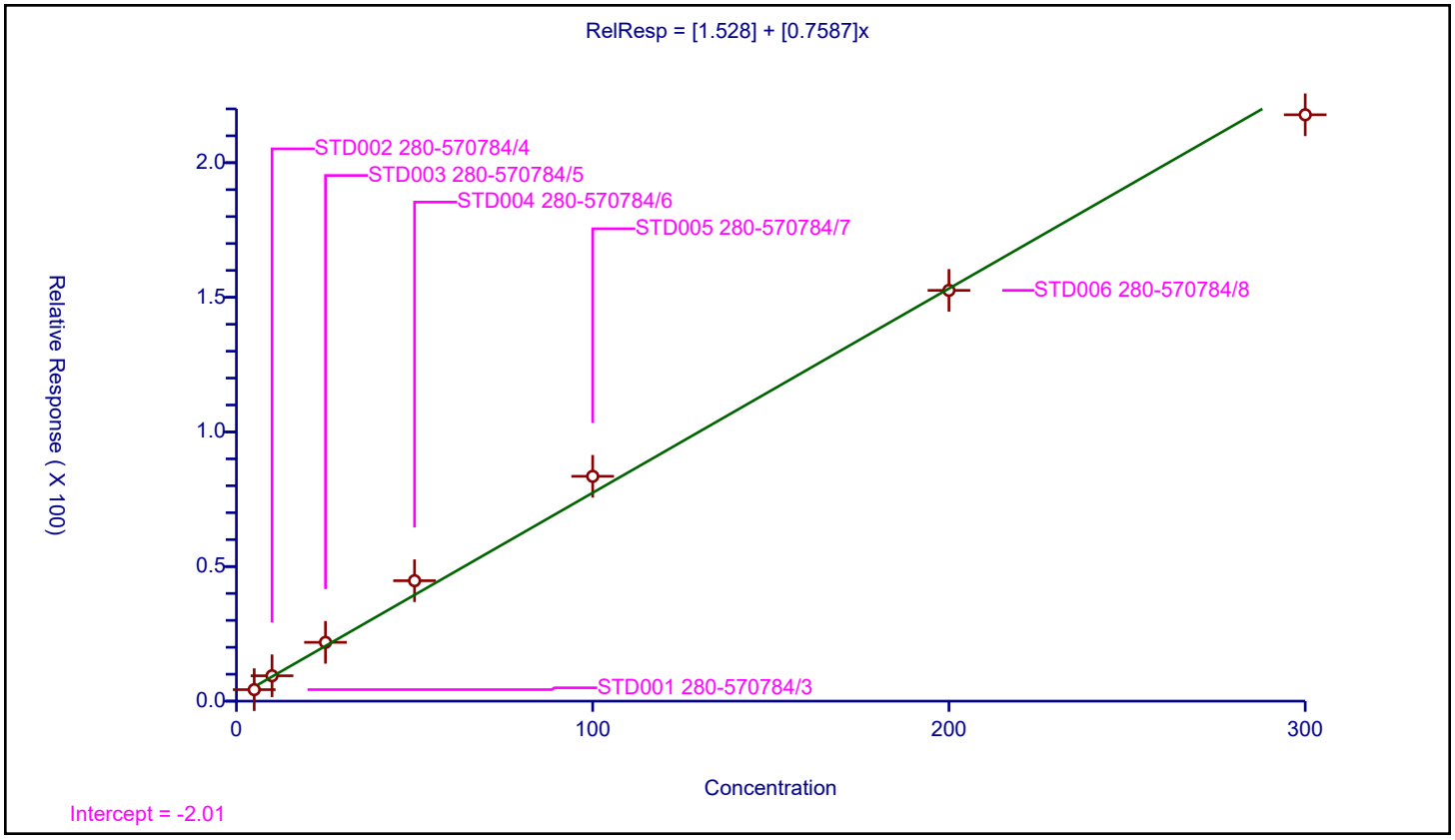
Curve Coefficients

Intercept:	1.528
Slope:	0.7587

Error Coefficients

Standard Error:	816000
Relative Standard Error:	15.0
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-570784/3	5.0	4.270556	125.0	773055.0	0.854111	Y
2	STD002 280-570784/4	10.0	9.423958	125.0	788814.0	0.942396	Y
3	STD003 280-570784/5	25.0	21.839106	125.0	792529.0	0.873564	Y
4	STD004 280-570784/6	50.0	44.734656	125.0	781986.0	0.894693	Y
5	STD005 280-570784/7	100.0	83.51441	125.0	840575.0	0.835144	Y
6	STD006 280-570784/8	200.0	152.583856	125.0	829158.0	0.762919	Y
7	STD007 280-570784/9	300.0	217.812904	125.0	788573.0	0.726043	Y



Calibration / 1,3,5-Trinitrobenzene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

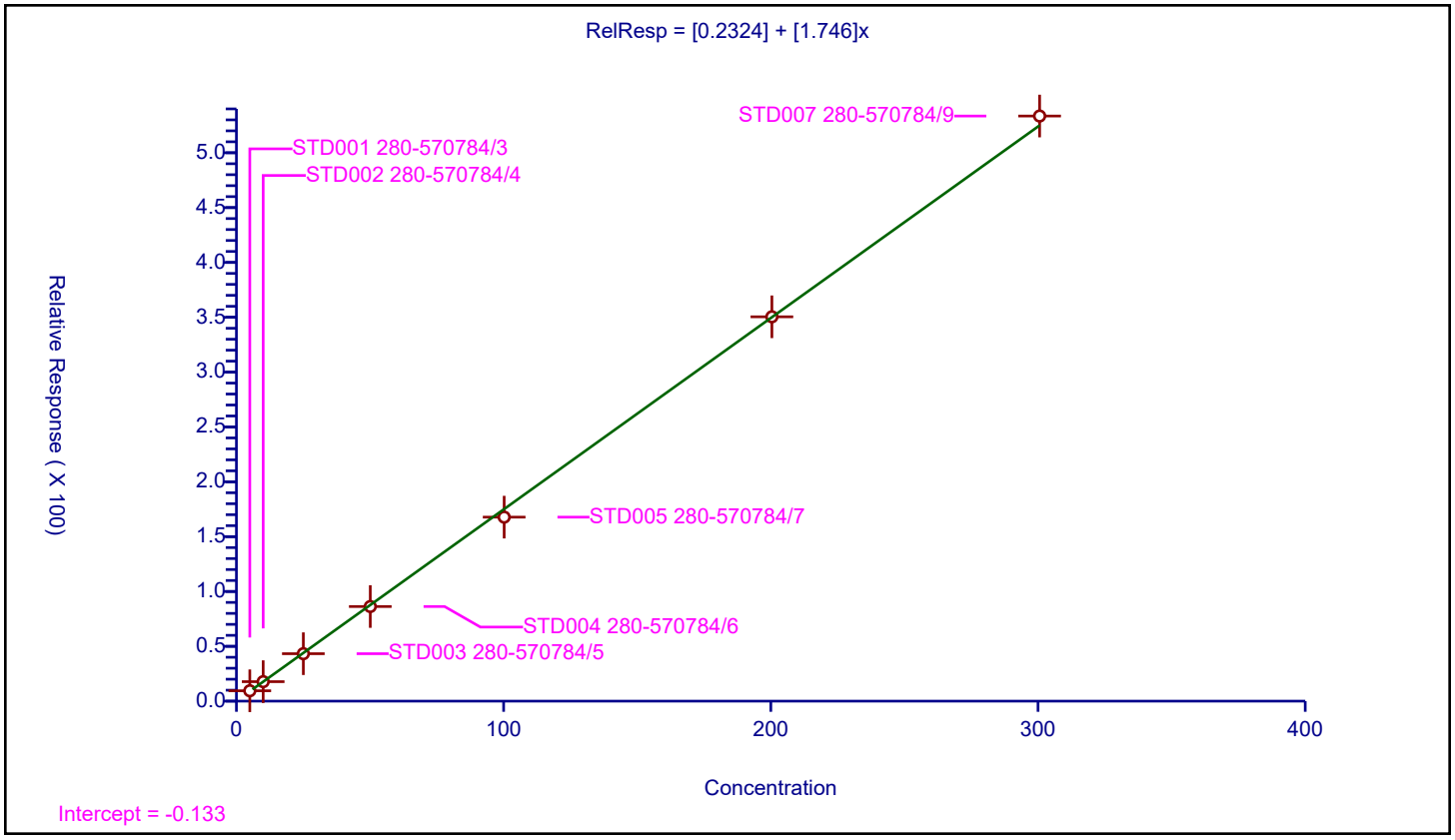
Curve Coefficients

Intercept:	0.2324
Slope:	1.746

Error Coefficients

Standard Error:	4060000
Relative Standard Error:	3.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-570784/3	5.01	9.452674	129.36	1902272.0	1.886761	Y
2	STD002 280-570784/4	10.02	17.766751	129.36	1810512.0	1.773129	Y
3	STD003 280-570784/5	25.05	43.259968	129.36	1867836.0	1.726945	Y
4	STD004 280-570784/6	50.1	86.26303	129.36	1795589.0	1.721817	Y
5	STD005 280-570784/7	100.2	167.778487	129.36	1847345.0	1.674436	Y
6	STD006 280-570784/8	200.4	350.446163	129.36	1788578.0	1.748733	Y
7	STD007 280-570784/9	300.6	533.49992	129.36	1736131.0	1.774783	Y



Calibration / Tetryl

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

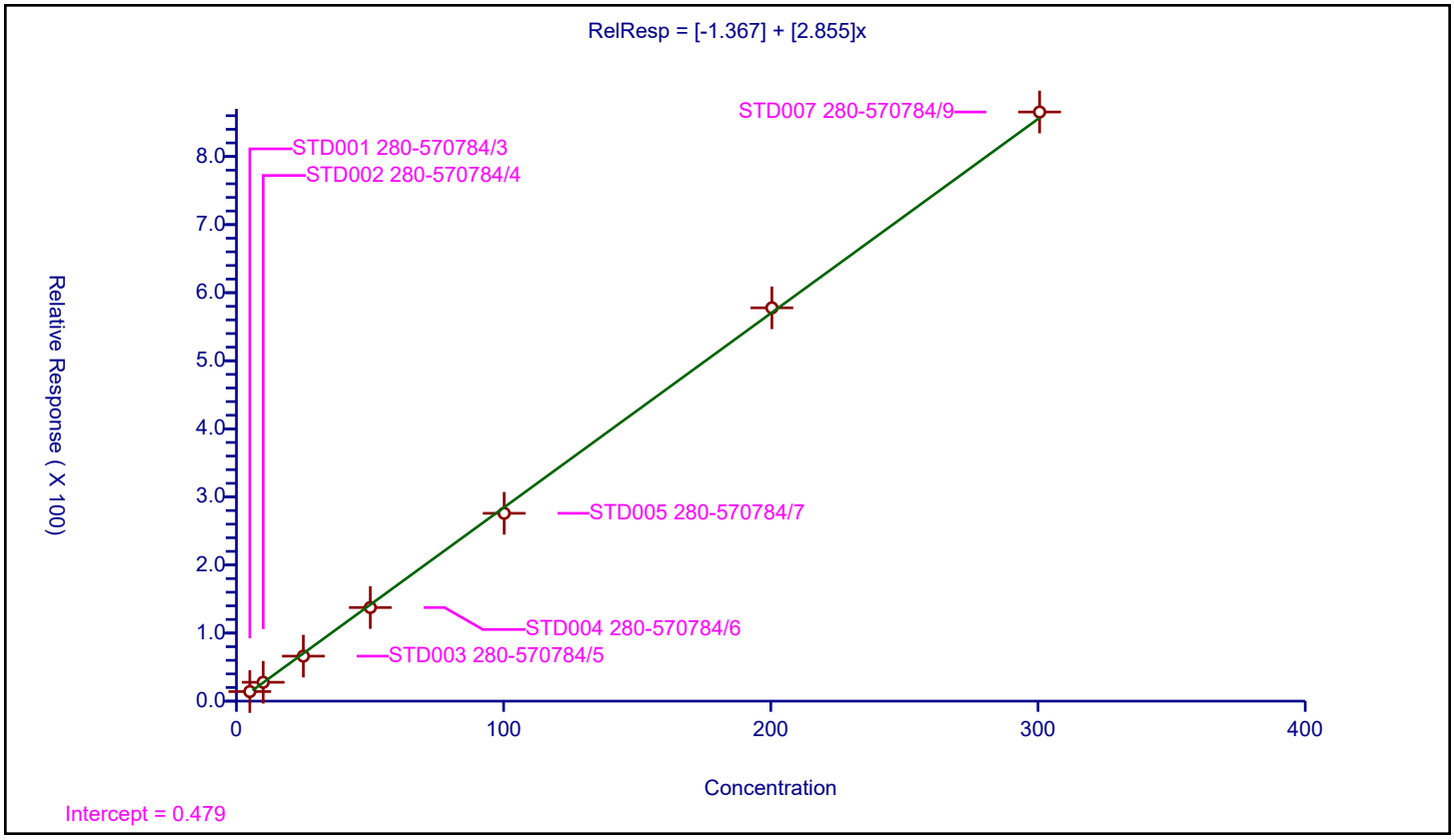
Curve Coefficients

Intercept:	-1.367
Slope:	2.855

Error Coefficients

Standard Error:	6620000
Relative Standard Error:	4.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-570784/3	5.01	14.053614	129.36	1902272.0	2.805113	Y
2	STD002 280-570784/4	10.02	27.718295	129.36	1810512.0	2.766297	Y
3	STD003 280-570784/5	25.05	66.117144	129.36	1867836.0	2.639407	Y
4	STD004 280-570784/6	50.1	137.488348	129.36	1795589.0	2.744278	Y
5	STD005 280-570784/7	100.2	275.926429	129.36	1847345.0	2.753757	Y
6	STD006 280-570784/8	200.4	577.792614	129.36	1788578.0	2.883197	Y
7	STD007 280-570784/9	300.6	865.430293	129.36	1736131.0	2.87901	Y



Calibration / Nitroglycerin

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

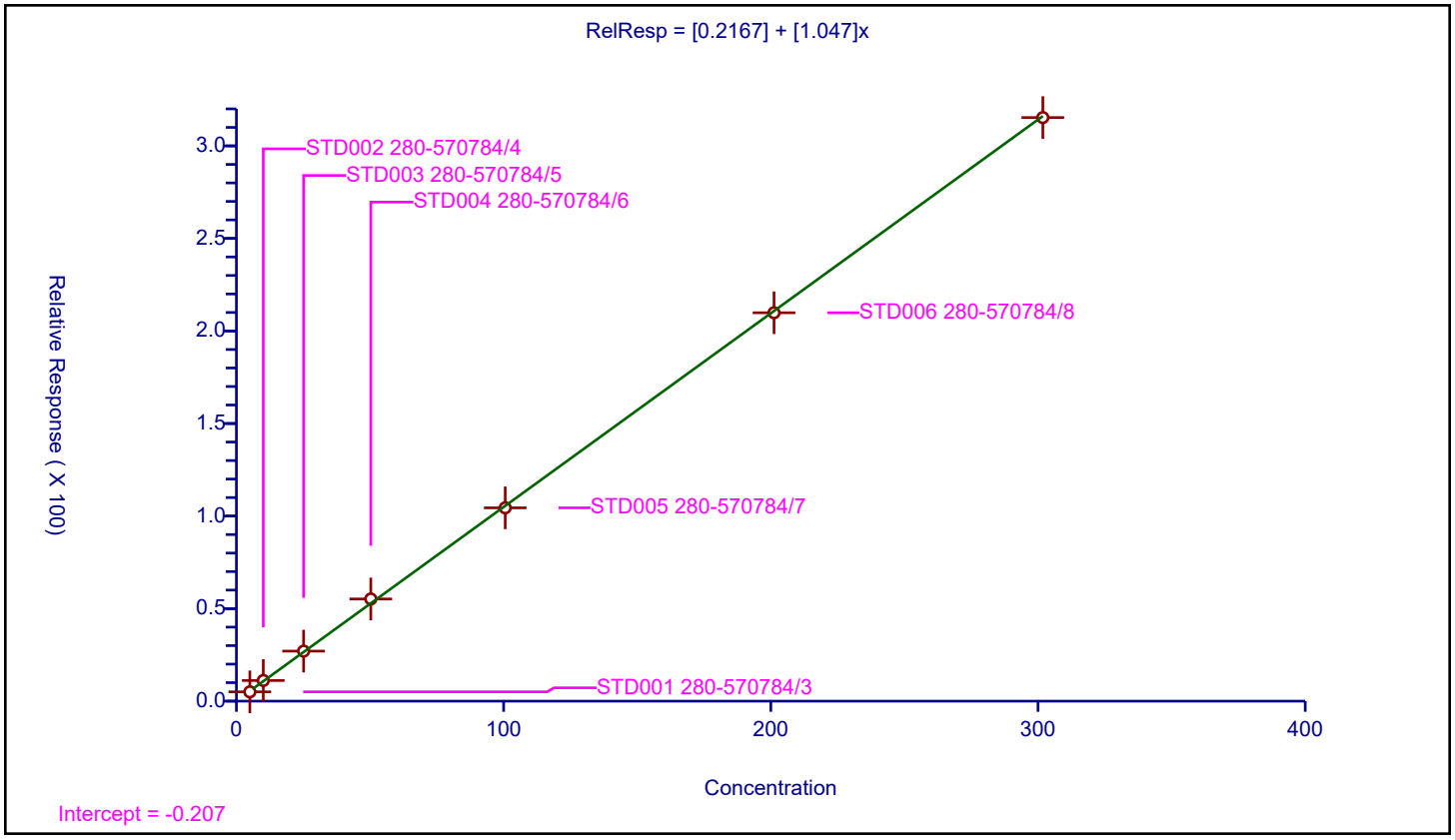
Curve Coefficients

Intercept:	0.2167
Slope:	1.047

Error Coefficients

Standard Error:	2420000
Relative Standard Error:	4.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-570784/3	5.03	5.03473	129.36	1902272.0	1.00094	Y
2	STD002 280-570784/4	10.06	11.153395	129.36	1810512.0	1.108687	Y
3	STD003 280-570784/5	25.15	27.032796	129.36	1867836.0	1.074863	Y
4	STD004 280-570784/6	50.3	55.211469	129.36	1795589.0	1.097644	Y
5	STD005 280-570784/7	100.6	104.4472	129.36	1847345.0	1.038243	Y
6	STD006 280-570784/8	201.2	209.856165	129.36	1788578.0	1.043023	Y
7	STD007 280-570784/9	301.8	315.314902	129.36	1736131.0	1.044781	Y



Calibration / 1,3-Dinitrobenzene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

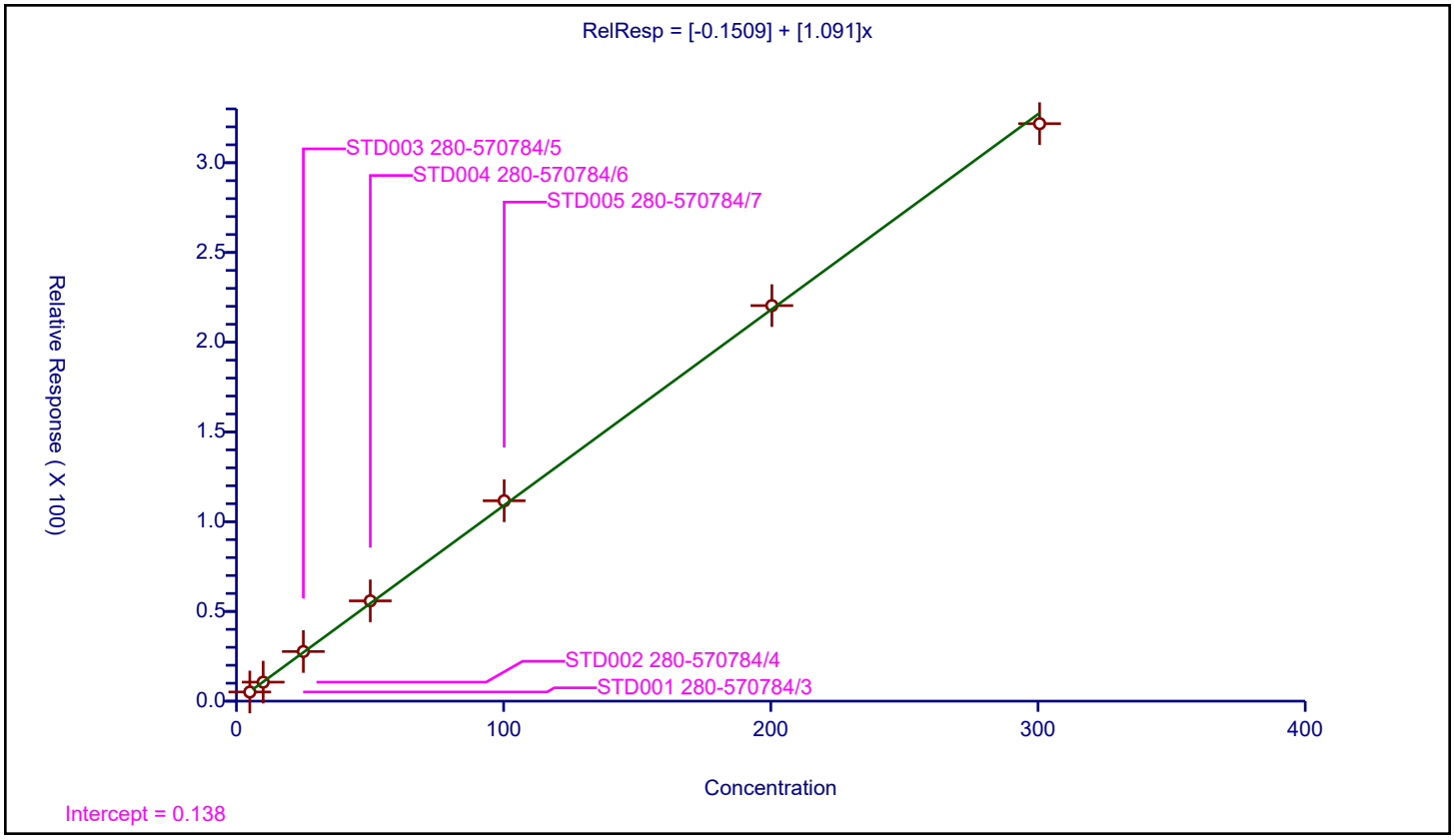
Curve Coefficients

Intercept:	-0.1509
Slope:	1.091

Error Coefficients

Standard Error:	2500000
Relative Standard Error:	2.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-570784/3	5.01	5.096953	129.36	1902272.0	1.017356	Y
2	STD002 280-570784/4	10.02	10.589516	129.36	1810512.0	1.056838	Y
3	STD003 280-570784/5	25.05	27.657006	129.36	1867836.0	1.104072	Y
4	STD004 280-570784/6	50.1	55.874843	129.36	1795589.0	1.115266	Y
5	STD005 280-570784/7	100.2	111.645751	129.36	1847345.0	1.114229	Y
6	STD006 280-570784/8	200.4	220.400661	129.36	1788578.0	1.099804	Y
7	STD007 280-570784/9	300.6	321.777273	129.36	1736131.0	1.07045	Y



Calibration / 2,4,6-Trinitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

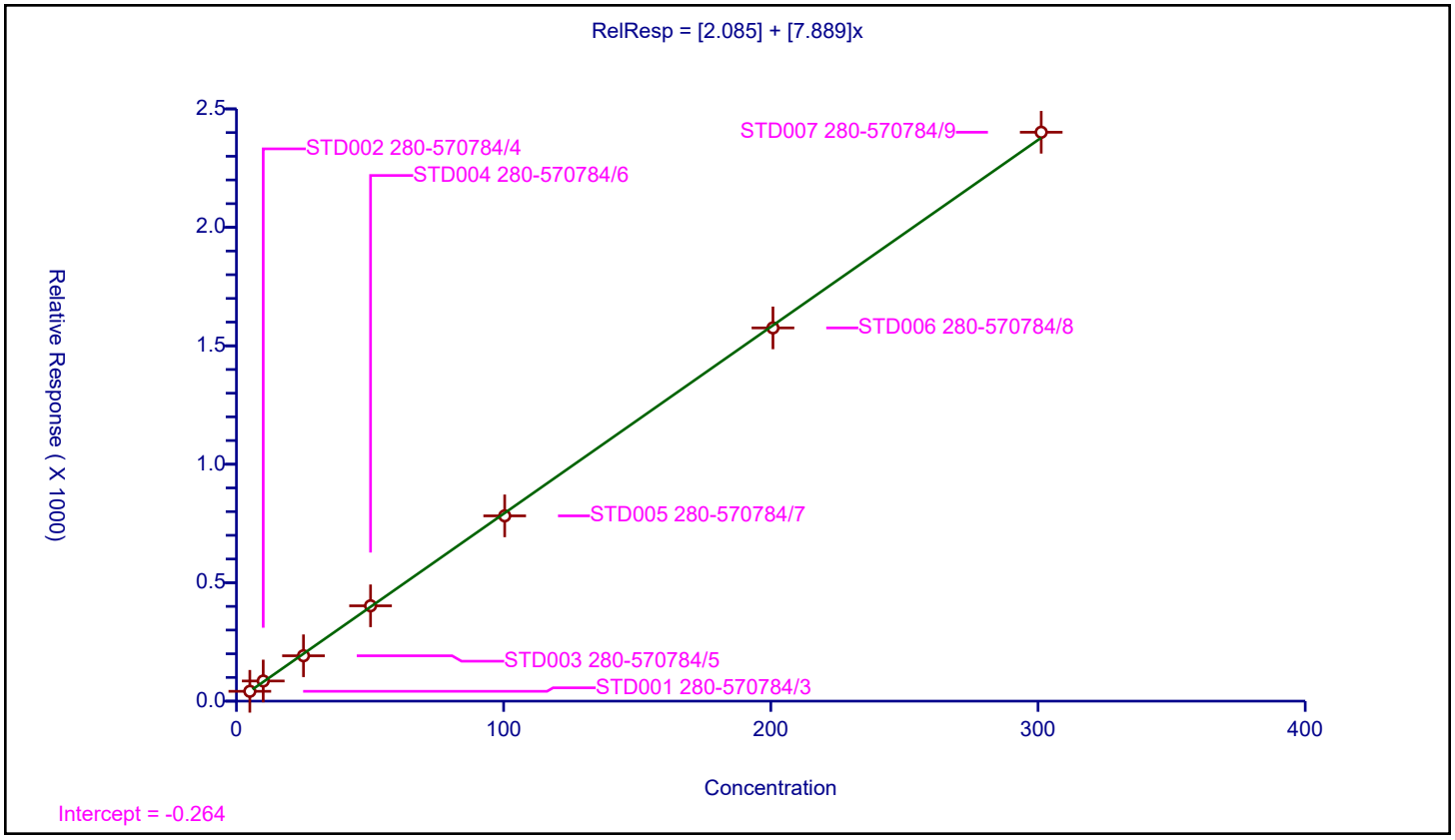
Curve Coefficients

Intercept:	2.085
Slope:	7.889

Error Coefficients

Standard Error:	18300000
Relative Standard Error:	3.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-570784/3	5.02	41.584653	129.36	1902272.0	8.283795	Y
2	STD002 280-570784/4	10.04	84.996352	129.36	1810512.0	8.465772	Y
3	STD003 280-570784/5	25.1	191.562345	129.36	1867836.0	7.631966	Y
4	STD004 280-570784/6	50.2	402.455935	129.36	1795589.0	8.01705	Y
5	STD005 280-570784/7	100.4	782.049087	129.36	1847345.0	7.789334	Y
6	STD006 280-570784/8	200.8	1575.542525	129.36	1788578.0	7.846327	Y
7	STD007 280-570784/9	301.2	2401.448288	129.36	1736131.0	7.972936	Y



Calibration / Nitrobenzene-d5

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

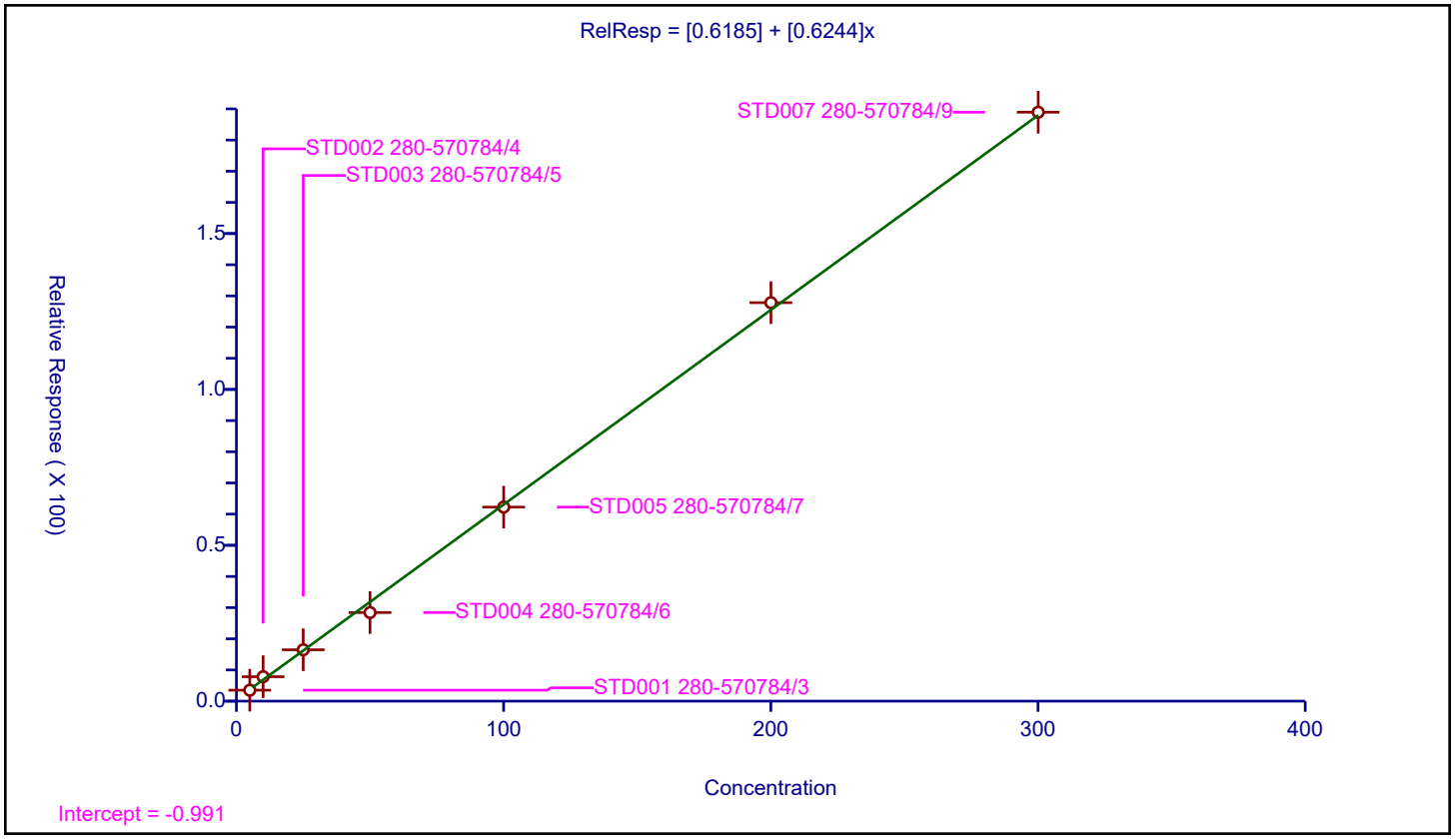
Curve Coefficients

Intercept:	0.6185
Slope:	0.6244

Error Coefficients

Standard Error:	1450000
Relative Standard Error:	9.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-570784/3	5.001233	3.515002	129.36	1902272.0	0.702827	Y
2	STD002 280-570784/4	10.002465	7.836999	129.36	1810512.0	0.783507	Y
3	STD003 280-570784/5	25.006163	16.481343	129.36	1867836.0	0.659091	Y
4	STD004 280-570784/6	50.012325	28.42292	129.36	1795589.0	0.568318	Y
5	STD005 280-570784/7	100.02465	62.245552	129.36	1847345.0	0.622302	Y
6	STD006 280-570784/8	200.0493	127.827131	129.36	1788578.0	0.638978	Y
7	STD007 280-570784/9	300.07395	188.932119	129.36	1736131.0	0.629619	Y



Calibration / Nitrobenzene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

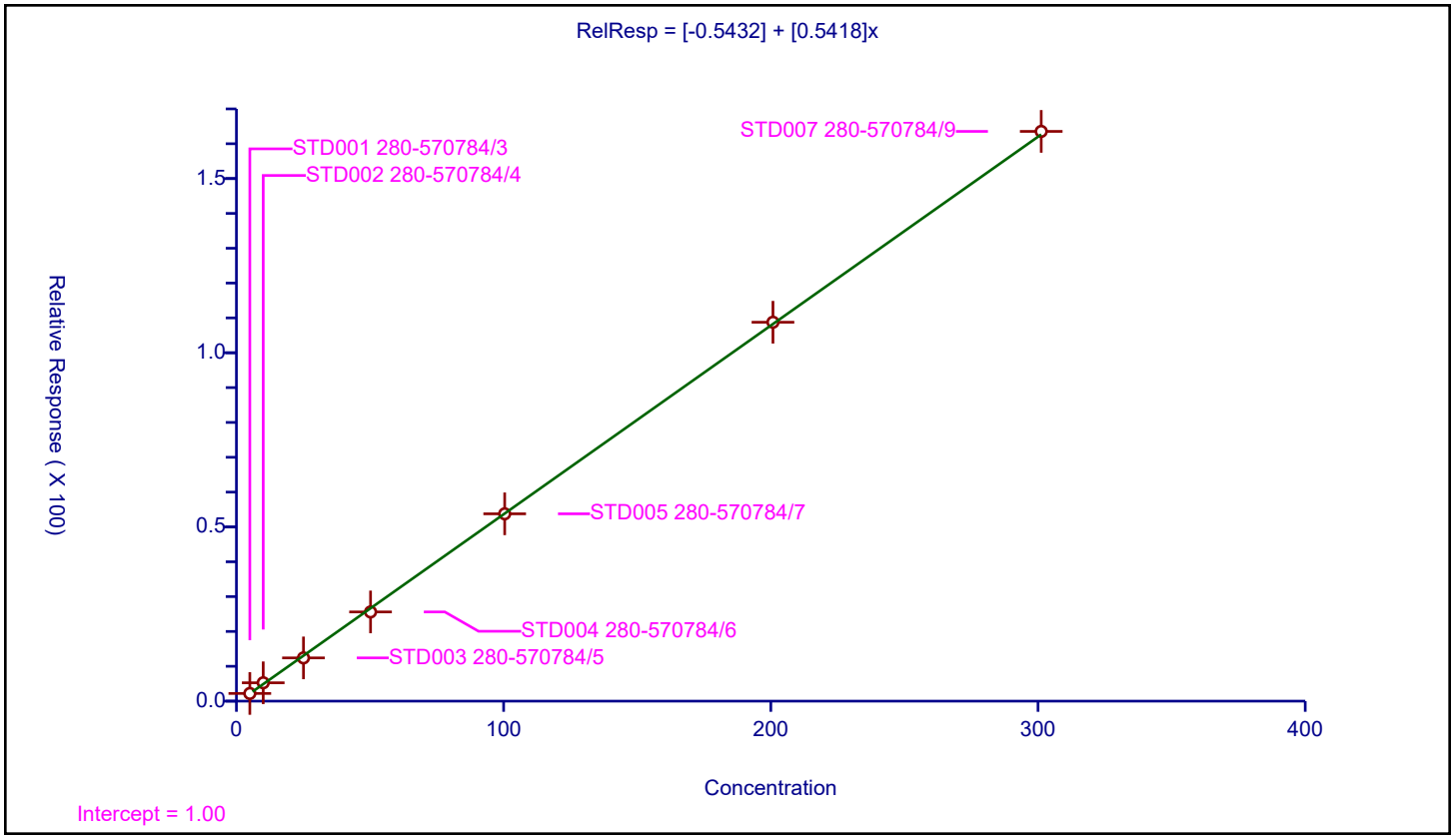
Curve Coefficients

Intercept:	-0.5432
Slope:	0.5418

Error Coefficients

Standard Error:	1250000
Relative Standard Error:	4.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-570784/3	5.02	2.202002	129.36	1902272.0	0.438646	Y
2	STD002 280-570784/4	10.04	5.269322	129.36	1810512.0	0.524833	Y
3	STD003 280-570784/5	25.1	12.409608	129.36	1867836.0	0.494407	Y
4	STD004 280-570784/6	50.2	25.604806	129.36	1795589.0	0.510056	Y
5	STD005 280-570784/7	100.4	53.768768	129.36	1847345.0	0.535545	Y
6	STD006 280-570784/8	200.8	108.761159	129.36	1788578.0	0.541639	Y
7	STD007 280-570784/9	301.2	163.536703	129.36	1736131.0	0.542951	Y



Calibration / 4-Amino-2,6-dinitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

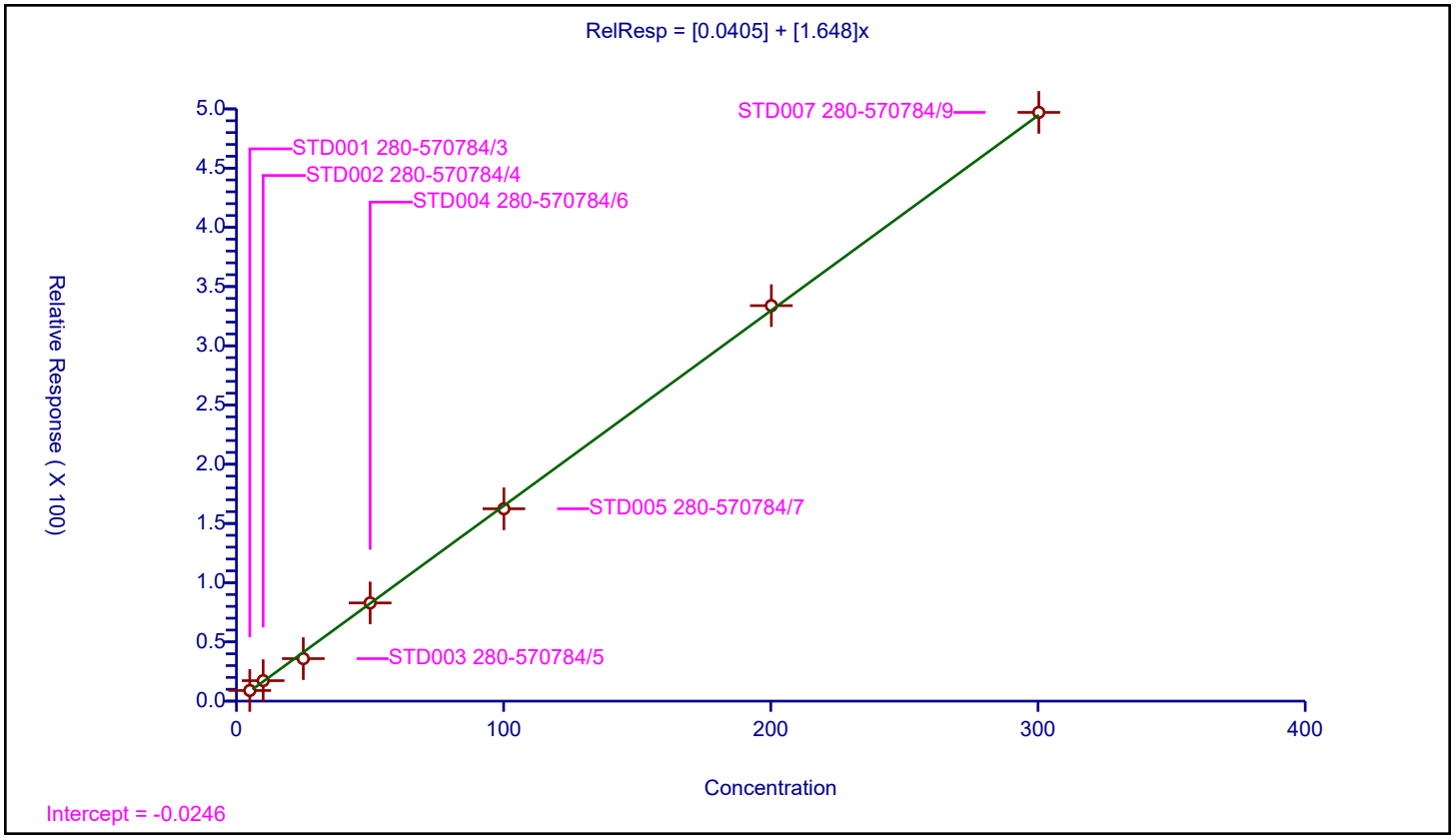
Curve Coefficients

Intercept:	0.0405
Slope:	1.648

Error Coefficients

Standard Error:	12500000
Relative Standard Error:	7.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-570784/3	5.005	8.951418	125.0	5659564.0	1.788495	Y
2	STD002 280-570784/4	10.01	17.270526	125.0	5655495.0	1.725327	Y
3	STD003 280-570784/5	25.025	35.877528	125.0	6859419.0	1.433667	Y
4	STD004 280-570784/6	50.05	82.917148	125.0	5649926.0	1.656686	Y
5	STD005 280-570784/7	100.1	162.411188	125.0	5886765.0	1.622489	Y
6	STD006 280-570784/8	200.2	333.897809	125.0	5635168.0	1.667821	Y
7	STD007 280-570784/9	300.3	497.054616	125.0	5489480.0	1.655194	Y



Calibration / 2-Amino-4,6-dinitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

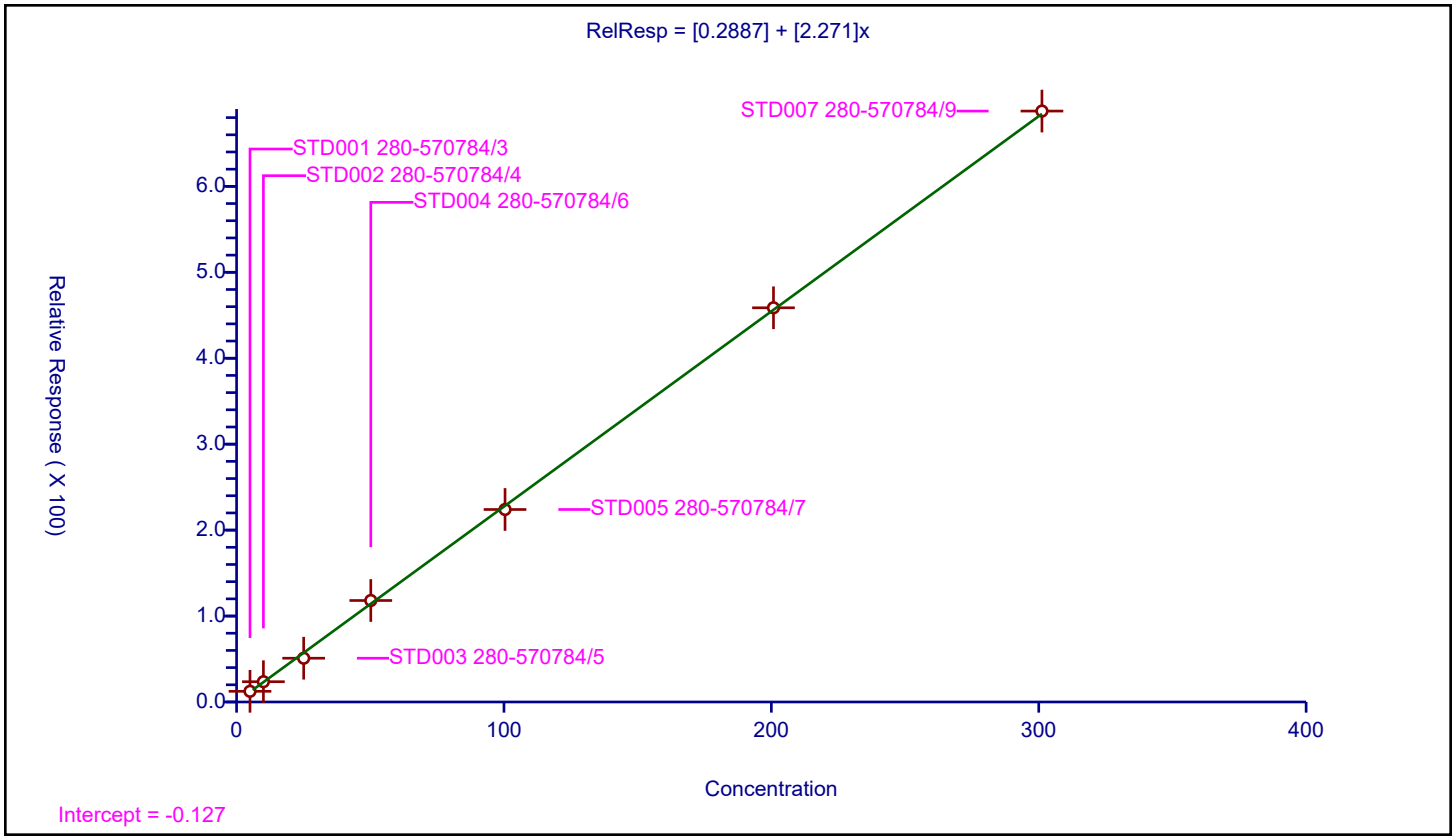
Curve Coefficients

Intercept:	0.2887
Slope:	2.271

Error Coefficients

Standard Error:	17300000
Relative Standard Error:	6.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-570784/3	5.02	12.435167	125.0	5659564.0	2.477125	Y
2	STD002 280-570784/4	10.04	23.587369	125.0	5655495.0	2.34934	Y
3	STD003 280-570784/5	25.1	50.941997	125.0	6859419.0	2.029562	Y
4	STD004 280-570784/6	50.2	118.085617	125.0	5649926.0	2.352303	Y
5	STD005 280-570784/7	100.4	223.98826	125.0	5886765.0	2.230959	Y
6	STD006 280-570784/8	200.8	458.707819	125.0	5635168.0	2.284401	Y
7	STD007 280-570784/9	301.2	687.6139	125.0	5489480.0	2.282915	Y



Calibration / 2,6-Dinitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

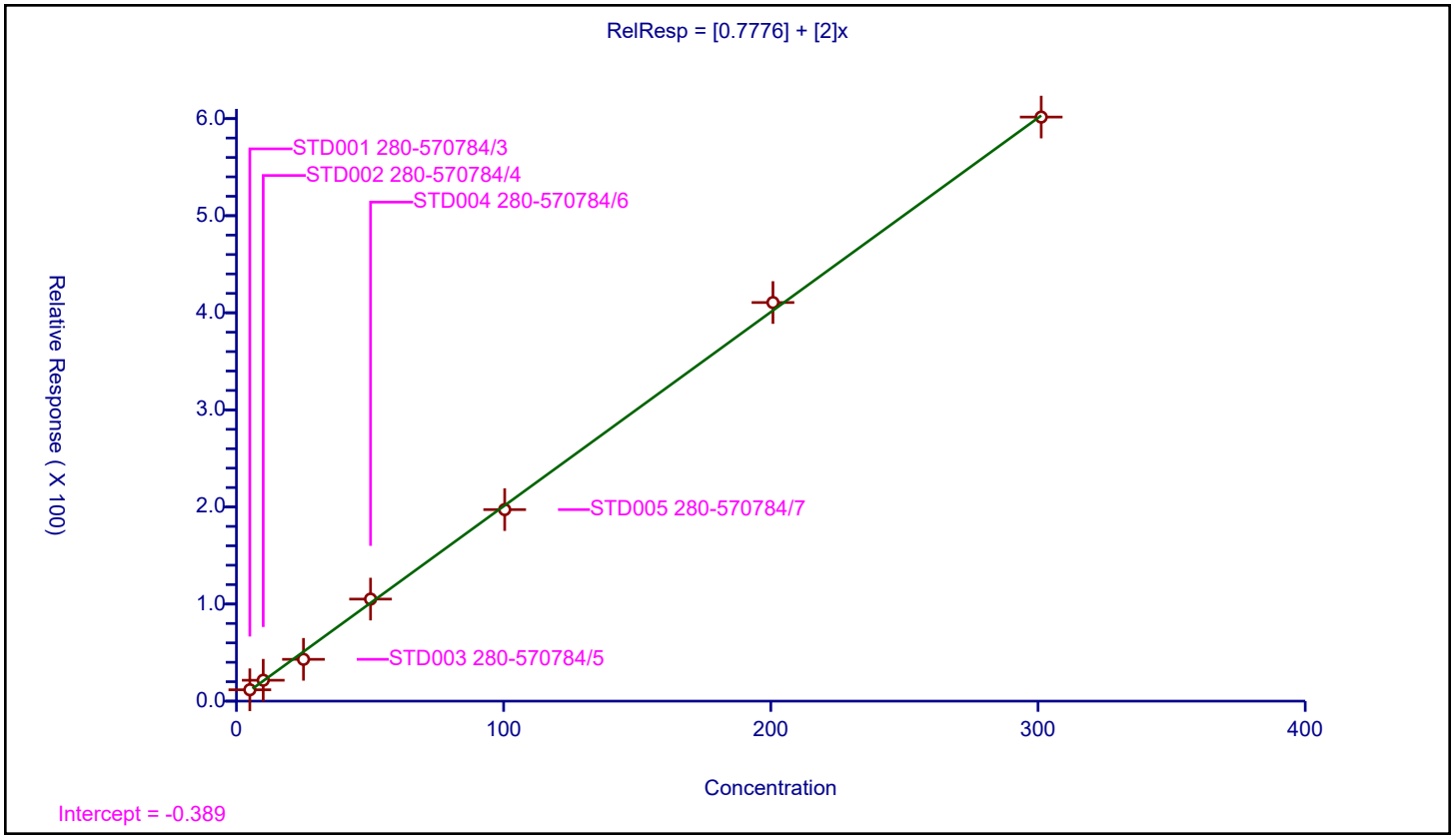
Curve Coefficients

Intercept:	0.7776
Slope:	2

Error Coefficients

Standard Error:	15200000
Relative Standard Error:	8.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-570784/3	5.02	11.700946	125.0	5659564.0	2.330866	Y
2	STD002 280-570784/4	10.04	21.532753	125.0	5655495.0	2.144696	Y
3	STD003 280-570784/5	25.1	43.059132	125.0	6859419.0	1.715503	Y
4	STD004 280-570784/6	50.2	105.110868	125.0	5649926.0	2.093842	Y
5	STD005 280-570784/7	100.4	197.289237	125.0	5886765.0	1.965032	Y
6	STD006 280-570784/8	200.8	410.556371	125.0	5635168.0	2.044603	Y
7	STD007 280-570784/9	301.2	601.60211	125.0	5489480.0	1.997351	Y



Calibration / 2,4-Dinitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

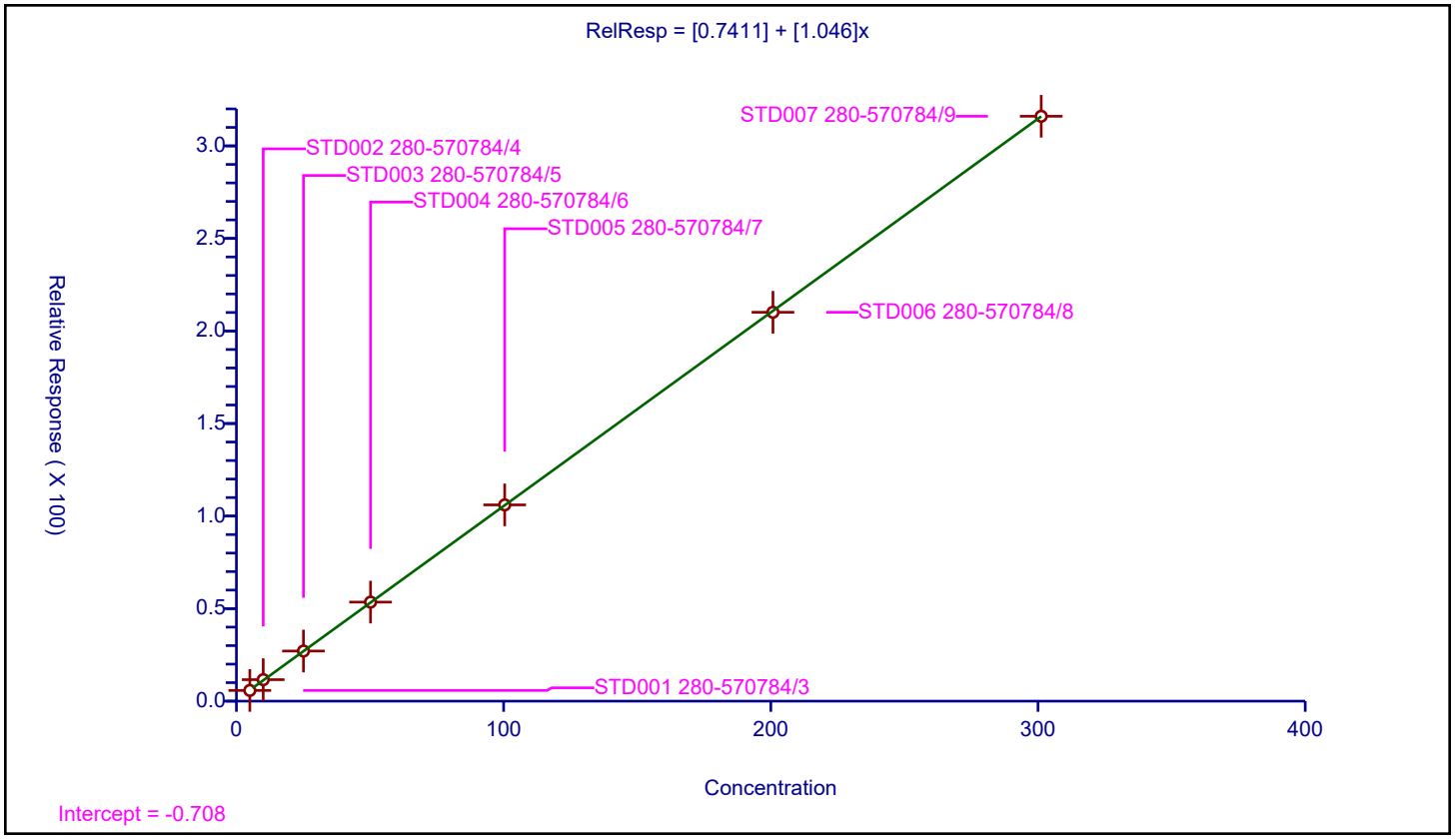
Curve Coefficients

Intercept:	0.7411
Slope:	1.046

Error Coefficients

Standard Error:	7950000
Relative Standard Error:	2.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-570784/3	5.02	5.78291	125.0	5659564.0	1.151974	Y
2	STD002 280-570784/4	10.04	11.609859	125.0	5655495.0	1.15636	Y
3	STD003 280-570784/5	25.1	27.072902	125.0	6859419.0	1.078602	Y
4	STD004 280-570784/6	50.2	53.511674	125.0	5649926.0	1.06597	Y
5	STD005 280-570784/7	100.4	106.031411	125.0	5886765.0	1.05609	Y
6	STD006 280-570784/8	200.8	210.11736	125.0	5635168.0	1.046401	Y
7	STD007 280-570784/9	301.2	316.019596	125.0	5489480.0	1.049202	Y



Calibration / PETN

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

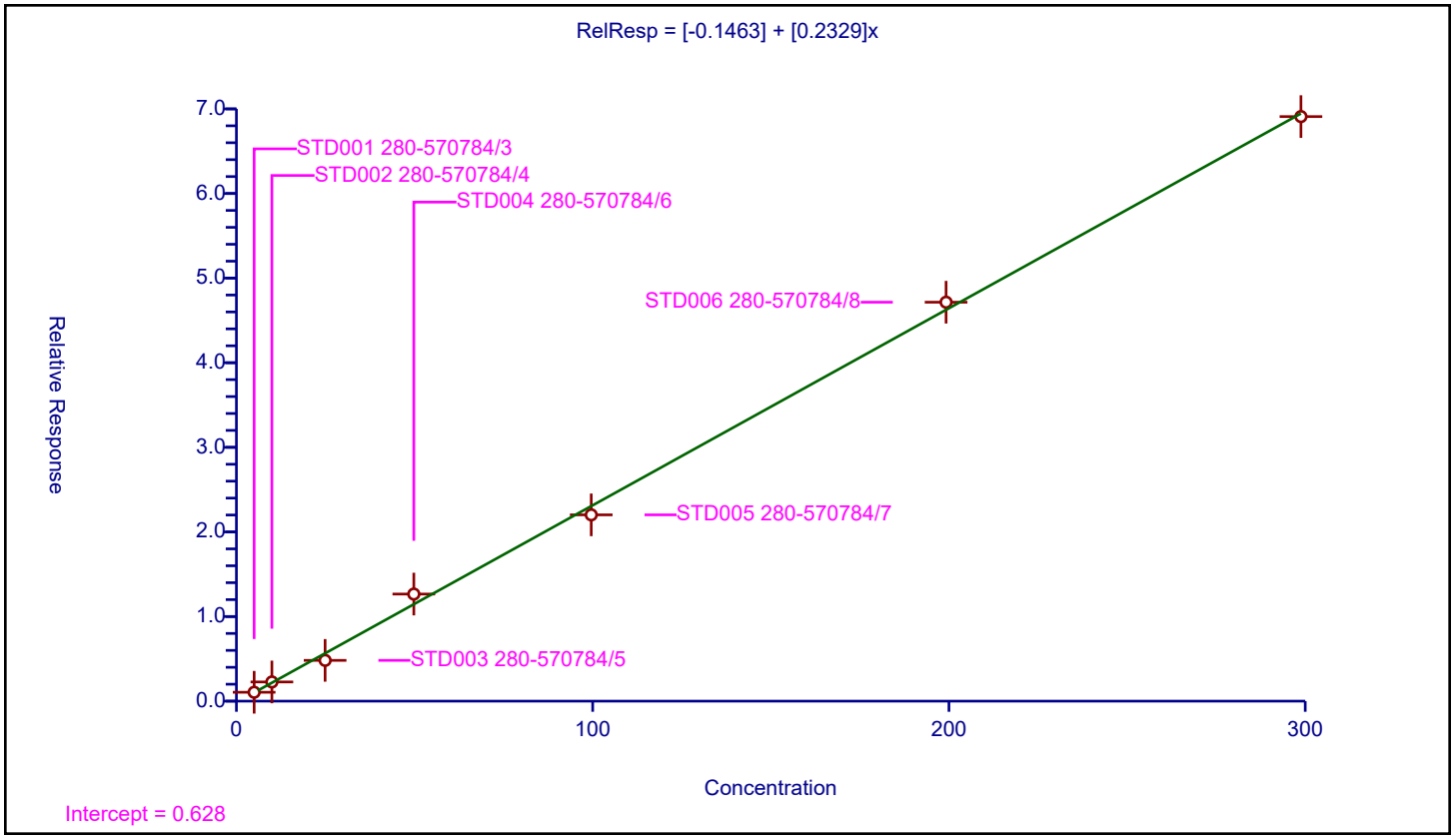
Curve Coefficients

Intercept:	-0.1463
Slope:	0.2329

Error Coefficients

Standard Error:	1740000
Relative Standard Error:	8.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-570784/3	4.98	1.048358	125.0	5659564.0	0.210514	Y
2	STD002 280-570784/4	9.96	2.268966	125.0	5655495.0	0.227808	Y
3	STD003 280-570784/5	24.9	4.816734	125.0	6859419.0	0.193443	Y
4	STD004 280-570784/6	49.8	12.656228	125.0	5649926.0	0.254141	Y
5	STD005 280-570784/7	99.6	22.017101	125.0	5886765.0	0.221055	Y
6	STD006 280-570784/8	199.2	47.151545	125.0	5635168.0	0.236705	Y
7	STD007 280-570784/9	298.8	69.090879	125.0	5489480.0	0.231228	Y



Calibration / o-Nitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

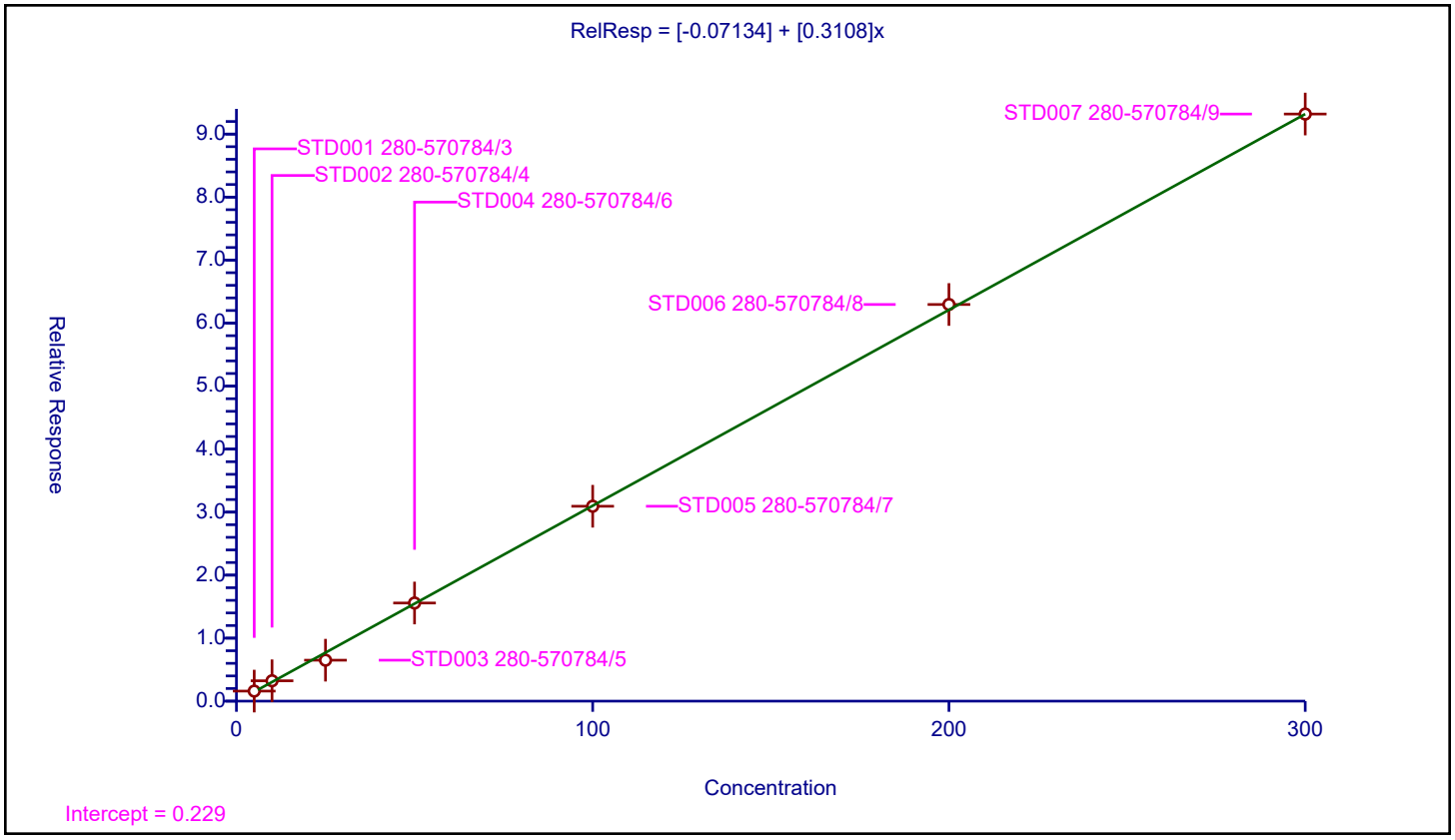
Curve Coefficients

Intercept:	-0.07134
Slope:	0.3108

Error Coefficients

Standard Error:	2350000
Relative Standard Error:	8.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-570784/3	5.0	1.597694	125.0	5659564.0	0.319539	Y
2	STD002 280-570784/4	10.0	3.231592	125.0	5655495.0	0.323159	Y
3	STD003 280-570784/5	25.0	6.498163	125.0	6859419.0	0.259927	Y
4	STD004 280-570784/6	50.0	15.575801	125.0	5649926.0	0.311516	Y
5	STD005 280-570784/7	100.0	30.93469	125.0	5886765.0	0.309347	Y
6	STD006 280-570784/8	200.0	62.956819	125.0	5635168.0	0.314784	Y
7	STD007 280-570784/9	300.0	93.185352	125.0	5489480.0	0.310618	Y



Calibration / p-Nitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

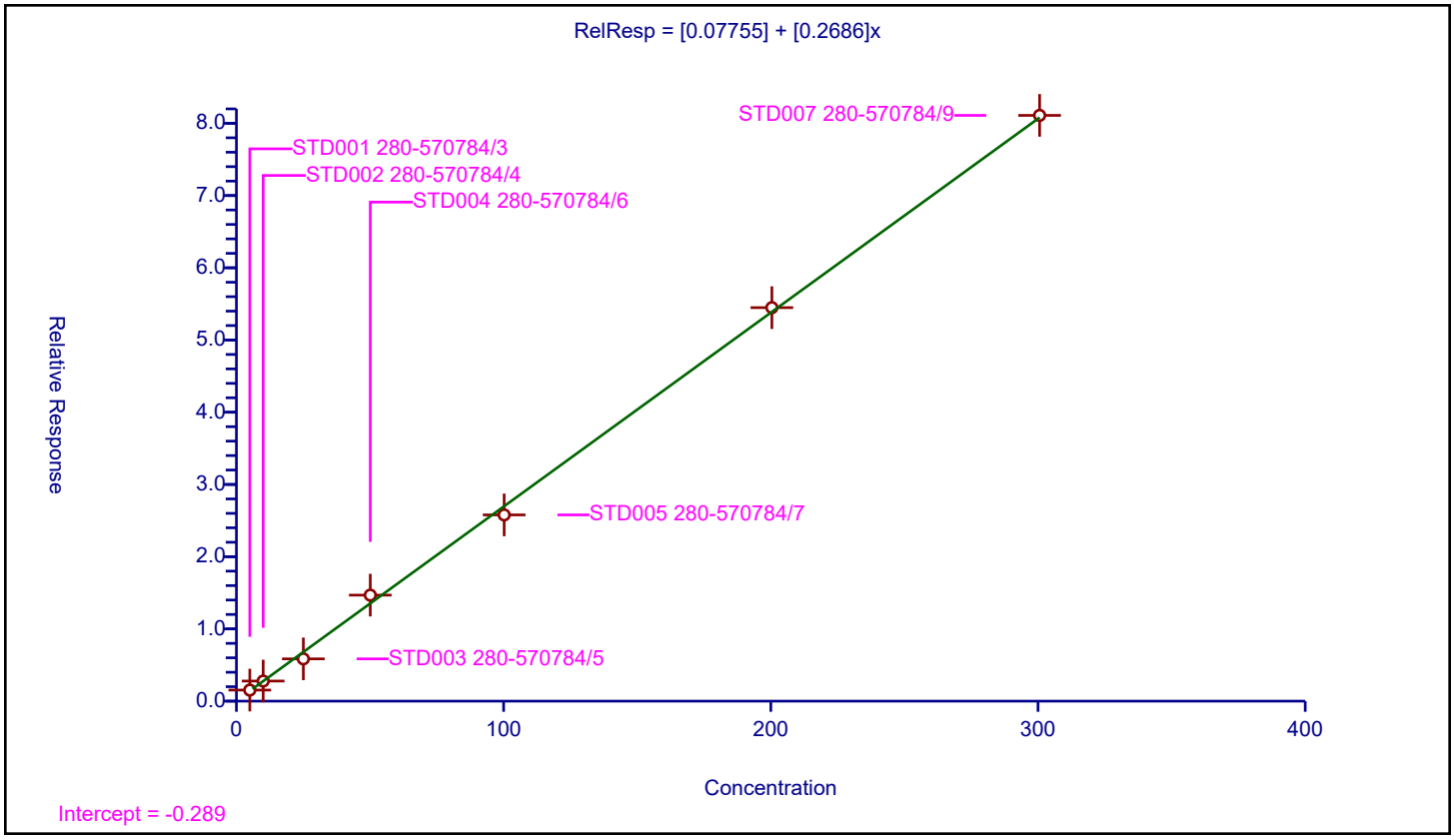
Curve Coefficients

Intercept:	0.07755
Slope:	0.2686

Error Coefficients

Standard Error:	2040000
Relative Standard Error:	8.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-570784/3	5.01	1.531633	125.0	5659564.0	0.305715	Y
2	STD002 280-570784/4	10.02	2.782626	125.0	5655495.0	0.277707	Y
3	STD003 280-570784/5	25.05	5.854851	125.0	6859419.0	0.233727	Y
4	STD004 280-570784/6	50.1	14.680259	125.0	5649926.0	0.293019	Y
5	STD005 280-570784/7	100.2	25.785257	125.0	5886765.0	0.257338	Y
6	STD006 280-570784/8	200.4	54.482071	125.0	5635168.0	0.271867	Y
7	STD007 280-570784/9	300.6	81.099462	125.0	5489480.0	0.269792	Y



Calibration / m-Nitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

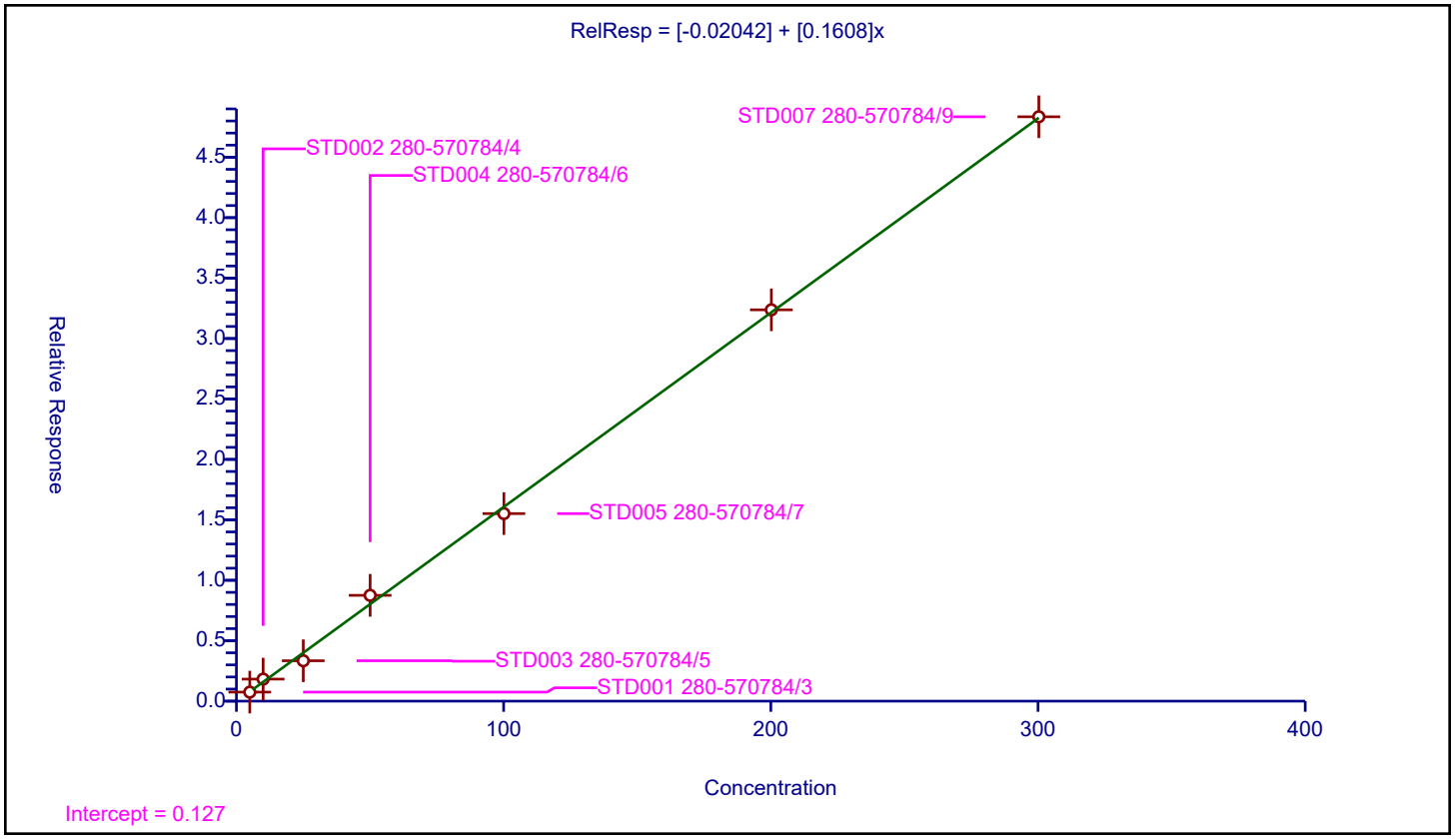
Curve Coefficients

Intercept:	-0.02042
Slope:	0.1608

Error Coefficients

Standard Error:	1210000
Relative Standard Error:	10.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-570784/3	5.005	0.74796	125.0	5659564.0	0.149442	Y
2	STD002 280-570784/4	10.01	1.823691	125.0	5655495.0	0.182187	Y
3	STD003 280-570784/5	25.025	3.340625	125.0	6859419.0	0.133492	Y
4	STD004 280-570784/6	50.05	8.752991	125.0	5649926.0	0.174885	Y
5	STD005 280-570784/7	100.1	15.516332	125.0	5886765.0	0.155008	Y
6	STD006 280-570784/8	200.2	32.375721	125.0	5635168.0	0.161717	Y
7	STD007 280-570784/9	300.3	48.347362	125.0	5489480.0	0.160997	Y



FORM VI
LCMS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-160190-1 Analy Batch No.: 571107

SDG No.:

Instrument ID: LC_LCMS7 GC Column: Synergi Hyd ID: Heated Purge: (Y/N) N

Calibration Start Date: 04/07/2022 10:39 Calibration End Date: 04/07/2022 11:18 Calibration ID: 63793

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD001 280-571107/3	ex722D07003.d
Level 2	STD002 280-571107/4	ex722D07004.d
Level 3	STD003 280-571107/5	ex722D07005.d
Level 4	STD004 280-571107/6	ex722D07006.d
Level 5	STD005 280-571107/7	ex722D07007.d
Level 6	STD006 280-571107/8	ex722D07008.d
Level 7	STD007 280-571107/9	ex722D07009.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
HMX	2.0286 2.0997	1.7459 2.3641	1.6891	2.0585	2.0144	Qua1	0.3978	1.8012	0.0017994						0.9990		0.9900
TNX	5.1082 4.3742	4.7085 4.3800	4.7615	4.5021	4.4360	Lin1	4.3535	4.3750							1.0000		0.9900
DNX	6.9022 6.6736	6.9900 6.5021	7.0014	6.8111	6.5797	Lin1	3.7964	6.5750							1.0000		0.9900
MNX	1.4667 1.7707	1.8920 1.6663	1.8202	1.7502	1.7297	Lin1	0.2326	1.7172							0.9990		0.9900
RDX	0.7920 0.7766	0.8372 0.6353	0.6340	0.7471	0.6651	Lin1	0.7765	0.6848							0.9900		0.9900
1,3,5-Trinitrobenzene	1.7384 1.5136	1.4908 1.5551	1.5459	1.4566	1.4712	Lin1	0.3410	1.5204							0.9990		0.9900
Tetryl	1.8345 2.1433	2.0070 2.1491	2.1664	1.9712	2.0435	Lin1	-1.609	2.1318							0.9990		0.9900
1,3-Dinitrobenzene	1.1617 1.0978	1.0287 1.0629	1.1935	1.0537	1.0857	Lin1	0.3900	1.0767							0.9990		0.9900
Nitroglycerin	1.1944 0.9412	0.9900 0.9590	1.0083	0.9931	0.9532	Lin1	1.0581	0.9488							1.0000		0.9900
2,4,6-Trinitrotoluene	7.5001 6.7468	6.8324 6.8524	6.9520	6.5510	6.6922	Lin1	2.0705	6.7638							1.0000		0.9900
Nitrobenzene	0.7275 0.5340	0.5994 0.5563	0.5304	0.5192	0.5136	Lin1	0.6114	0.5357							0.9980		0.9900
4-Amino-2,6-dinitrotoluene	1.7065 1.5619	1.6573 1.5457	1.5159	1.5624	1.5182	Lin1	0.7254	1.5420							1.0000		0.9900
2-Amino-4,6-dinitrotoluene	2.1267 2.0055	2.1193 1.9924	1.9614	2.0751	1.9991	Lin1	0.8024	1.9967							1.0000		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-160190-1 Analy Batch No.: 571107

SDG No.:

Instrument ID: LC_LCMS7 GC Column: Synergi Hyd ID: Heated Purge: (Y/N) N

Calibration Start Date: 04/07/2022 10:39 Calibration End Date: 04/07/2022 11:18 Calibration ID: 63793

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
2,6-Dinitrotoluene	2.2695 2.0712	2.1043 2.0469	2.0868	2.0881	2.0351	Lin1	0.9411	2.0496							1.0000		0.9900
2,4-Dinitrotoluene	1.1665 1.0477	1.1130 1.0460	1.0737	1.0519	1.0389	Lin1	0.6424	1.0422							1.0000		0.9900
PETN	0.1420 0.1696	0.1542 0.1627	0.1533	0.1462	0.1628	Lin1	-0.161	0.1645							0.9990		0.9900
o-Nitrotoluene	0.3307 0.3180	0.3464 0.3144	0.3079	0.3111	0.3120	Lin1	0.1108	0.3141							1.0000		0.9900
p-Nitrotoluene	0.2973 0.2737	0.2959 0.2711	0.2693	0.2741	0.2722	Lin1	0.1453	0.2713							1.0000		0.9900
m-Nitrotoluene	0.1933 0.1632	0.1655 0.1656	0.1559	0.1594	0.1655	Lin1	0.0598	0.1637							1.0000		0.9900
Nitrobenzene-d5	0.4168 0.6405	0.5742 0.6269	0.5255	0.6263	0.6501	Lin1	-1.097	0.6393							0.9990		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-160190-1 Analy Batch No.: 571107

SDG No.:

Instrument ID: LC_LCMS7 GC Column: Synergi Hyd ID: Heated Purge: (Y/N) N

Calibration Start Date: 04/07/2022 10:39 Calibration End Date: 04/07/2022 11:18 Calibration ID: 63793

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD001 280-571107/3	ex722D07003.d
Level 2	STD002 280-571107/4	ex722D07004.d
Level 3	STD003 280-571107/5	ex722D07005.d
Level 4	STD004 280-571107/6	ex722D07006.d
Level 5	STD005 280-571107/7	ex722D07007.d
Level 6	STD006 280-571107/8	ex722D07008.d
Level 7	STD007 280-571107/9	ex722D07009.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
HMX	HXC4	Qua1	9191 303574	14682 480096	39325	87091	167604	5.00 200	10.0 300	25.0	50.0	100
TNX	DNB4	Lin1	256747 8738352	477813 13296498	1158500	2269818	4424009	5.01 200	10.0 300	25.0	50.1	100
DNX	DNB4	Lin1	346921 13331894	709331 19738864	1703493	3433937	6561860	5.01 200	10.0 300	25.0	50.1	100
MNX	DNB4	Lin1	85942 4123947	223832 5897261	516325	1028761	2011086	5.84 233	11.7 350	29.2	58.4	117
RDX	HHTT	Lin1	11590 457885	24953 643721	49054	111850	207868	5.00 200	10.0 300	25.0	50.0	100
1,3,5-Trinitrobenzene	DNB4	Lin1	87461 3026802	151433 4725719	376496	735111	1468666	5.01 200	10.0 301	25.1	50.1	100
Tetryl	DNB4	Lin1	92299 4286053	203867 6530605	527628	994798	2039998	5.01 200	10.0 301	25.1	50.1	100
1,3-Dinitrobenzene	DNB4	Lin1	58447 2195358	104491 3229967	290667	531761	1083821	5.01 200	10.0 301	25.1	50.1	100
Nitroglycerin	DNB4	Lin1	60331 1889719	100969 2925941	246565	503185	955326	5.03 201	10.1 302	25.2	50.3	101
2,4,6-Trinitrotoluene	DNB4	Lin1	378101 13518546	695420 20864619	1696558	3312733	6694059	5.02 201	10.0 301	25.1	50.2	100
Nitrobenzene	DNB4	Lin1	36674 1069959	61006 1693860	129429	262553	513734	5.02 201	10.0 301	25.1	50.2	100
4-Amino-2,6-dinitrotoluene	DNT3	Lin1	278323 9988757	542949 15128171	1244642	2536530	4909196	5.01 200	10.0 300	25.0	50.1	100
2-Amino-4,6-dinitrotoluene	DNT3	Lin1	347890 12863660	696379 19558982	1615287	3378995	6483676	5.02 201	10.0 301	25.1	50.2	100
2,6-Dinitrotoluene	DNT3	Lin1	371245	691457	1718567	3400102	6600341	5.02	10.0	25.1	50.2	100

FORM VI
LCMS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-160190-1 Analy Batch No.: 571107

SDG No.:

Instrument ID: LC_LCMS7 GC Column: Synergi Hyd ID: Heated Purge: (Y/N) N

Calibration Start Date: 04/07/2022 10:39 Calibration End Date: 04/07/2022 11:18 Calibration ID: 63793

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			13285372	20094289				201	301			
2,4-Dinitrotoluene	DNT3	Lin1	190817 6720093	365728 10268026	884226	1712817	3369570	5.02 201	10.0 301	25.1	50.2	100
PETN	DNT3	Lin1	23036 1079333	50271 1584418	125218	236129	523792	4.98 199	9.96 299	24.9	49.8	99.6
o-Nitrotoluene	DNT3	Lin1	53884 2031791	113366 3073974	252539	504502	1007810	5.00 200	10.0 300	25.0	50.0	100
p-Nitrotoluene	DNT3	Lin1	48537 1752177	97049 2656361	221342	445418	881055	5.01 200	10.0 301	25.1	50.1	100
m-Nitrotoluene	DNT3	Lin1	31521 1043429	54224 1621114	128039	258772	535121	5.01 200	10.0 300	25.0	50.1	100
Nitrobenzene-d5	DNB4	Lin1	20934 1278659	58222 1901544	127766	315527	647894	5.00 200	10.0 300	25.0	50.0	100

Curve Type Legend
Lin1 = Linear 1/conc ISTD
Qua1 = Quadratic 1/conc ISTD

Report Date: 08-Apr-2022 07:31:45 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07003.d
Lims ID: STD001
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 07-Apr-2022 10:39:13 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: STD L1
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:31:45 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 12:32:39
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								M
355.1	1.246	1.246	0.0	0.998	9191	5.38	2.5	M
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		113268	125.0	99.8	
36 TNX								
144.0	1.385	1.385	0.0	0.751	256747	4.85	35.5	
33 DNX								
160.0	1.489	1.489	0.0	0.807	346921	4.68	79.7	
34 MNX								
160.0	1.670	1.670	0.0	0.906	85942	4.85	20.8	
4 RDX								M
281.2	1.841	1.841	0.0	0.998	11590	4.65	3.6	M
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		365826	125.0	127	
5 1,3,5-Trinitrobenzene								
213.0	2.320	2.317	0.003	0.768	87461	5.50	33.4	
6 Tetryl								
241.1	2.705	2.712	-0.007	0.896	92299	5.07	21.1	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.030	-0.011		1299083	129.4	236	
8 1,3-Dinitrobenzene								
168.0	3.062	3.051	0.011	1.014	58447	5.04	17.1	
9 Nitroglycerin								
62.0	3.091	3.080	0.011	1.024	60331	5.22	26.1	
28 3,5-Dinitroaniline								M
183.0	3.241	3.230	0.011	1.073	253503	4.94	27.8	M

Report Date: 08-Apr-2022 07:31:45 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07003.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.321	3.321	0.0	0.765	378101	5.26	60.4	
$ 11 Nitrobenzene-d5								M
128.0	3.337	3.370	-0.033	0.769	20934	4.98	3.2	M
12 Nitrobenzene								
123.0	3.411	3.431	-0.020	0.786	36674	5.68	11.8	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.660	3.645	0.015	0.843	278323	5.07	26.7	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.970	3.976	-0.006	0.914	347890	4.94	33.3	
17 2,6-Dinitrotoluene								
182.0	4.144	4.150	-0.006	0.955	371245	5.10	101	
* 18 2,4-dinitrotoluene-d3								
185.1	4.341	4.341	0.0		4073255	125.0	119	
19 2,4-Dinitrotoluene								
182.0	4.373	4.373	0.0	1.007	190817	5.00	46.6	
20 PETN								M
61.8	4.696	4.716	-0.020	1.082	23036	5.27	4.7	M
22 o-Nitrotoluene								M
137.0	4.992	5.002	-0.010	1.150	53884	4.91	10.4	M
23 p-Nitrotoluene								M
137.0	5.301	5.311	-0.010	1.221	48537	4.96	9.2	M
24 m-Nitrotoluene								M
137.0	5.709	5.704	0.005	1.315	31521	5.54	6.2	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

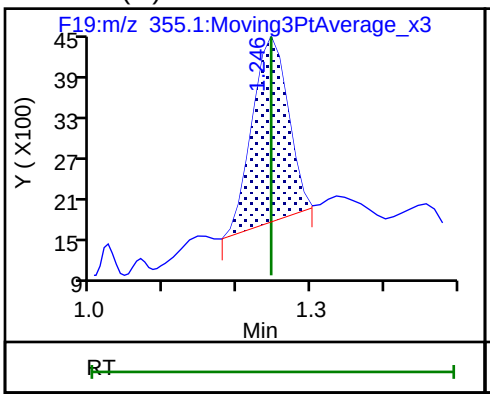
8321EXcalprim_00029	Amount Added: 0.50	Units: uL	
8321NB-D5-cal_00021	Amount Added: 0.50	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 08-Apr-2022 07:31:45 Chrom Revision: 2.3 18-Mar-2022 09:07:22

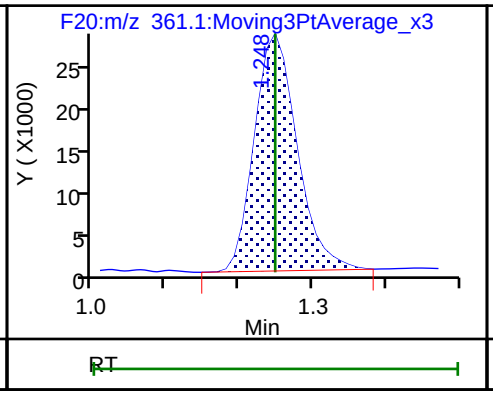
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07003.d
Injection Date: 07-Apr-2022 10:39:13 Instrument ID: LC_LCMS7
Lims ID: STD001
Client ID:
Operator ID: acm ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

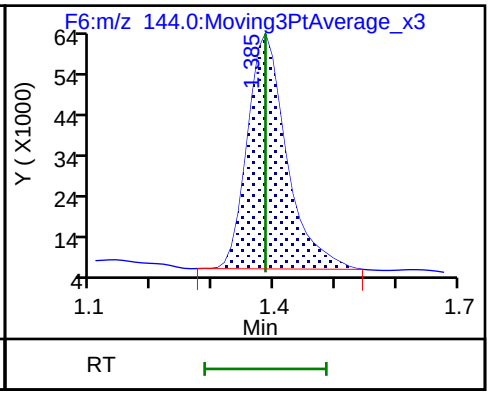
2 HMX (M)



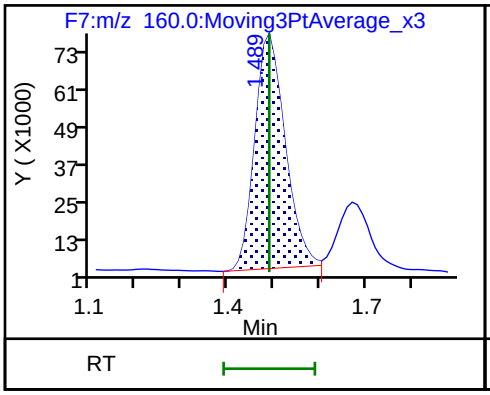
* 1 HMX-13C4



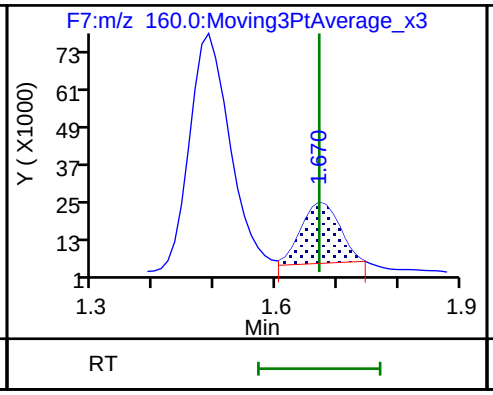
36 TNX



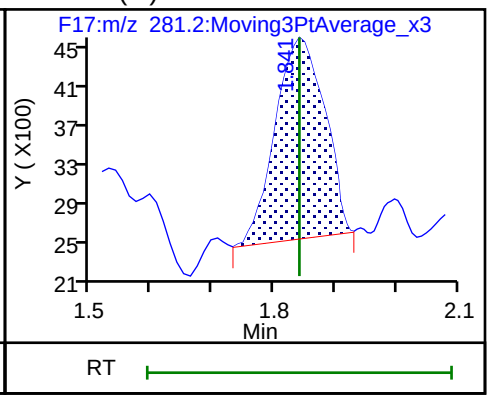
33 DNX



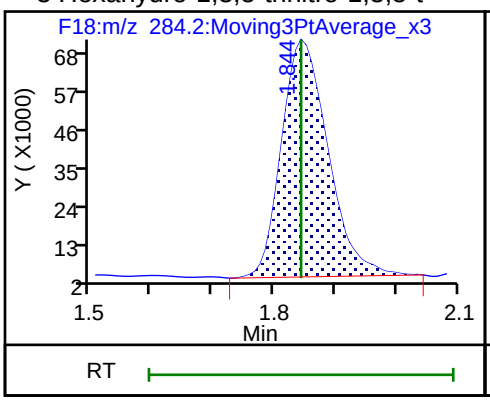
34 MNX



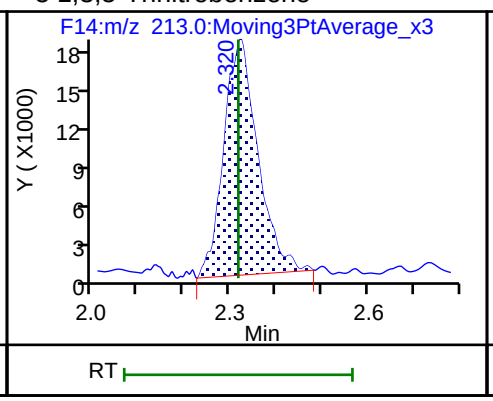
4 RDX (M)



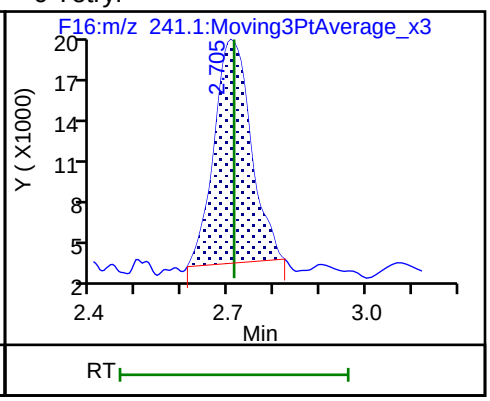
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



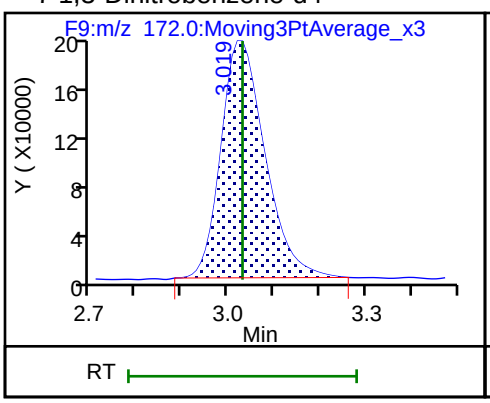
5 1,3,5-Trinitrobenzene



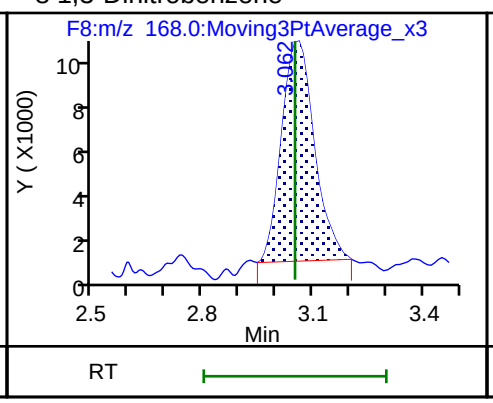
6 Tetryl



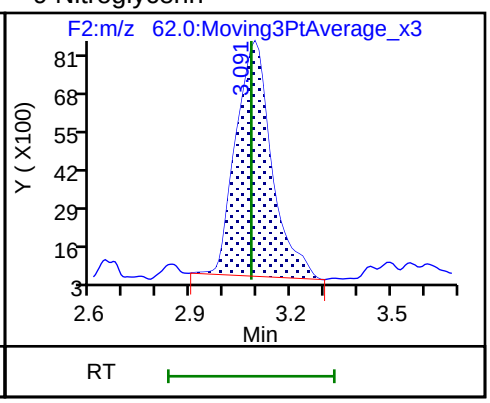
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

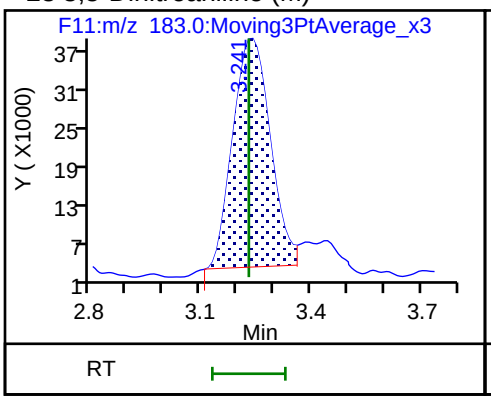


9 Nitroglycerin

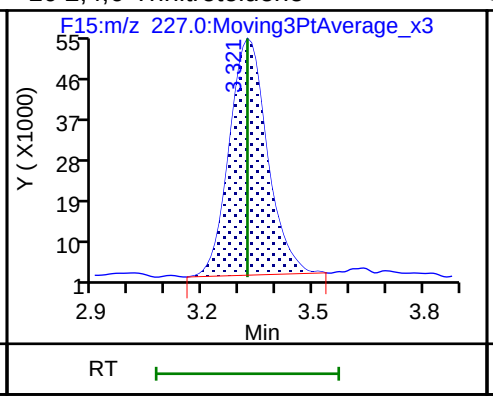


Report Date: 08-Apr-2022 07:31:45 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07003.d

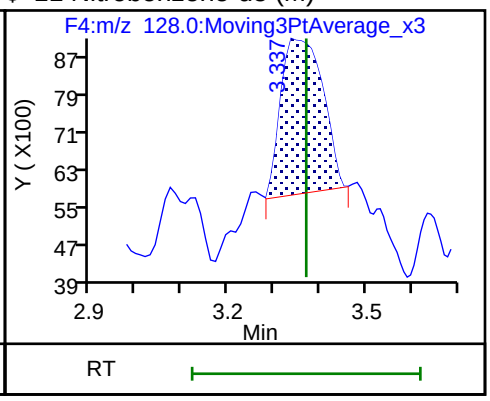
28 3,5-Dinitroaniline (M)



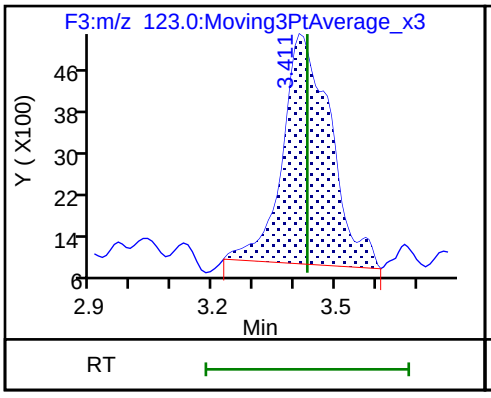
10 2,4,6-Trinitrotoluene



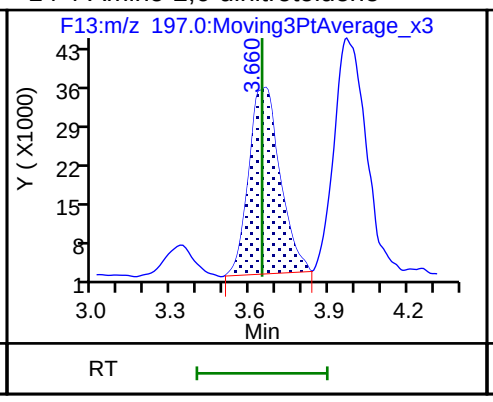
$ 11 Nitrobenzene-d5 (M)



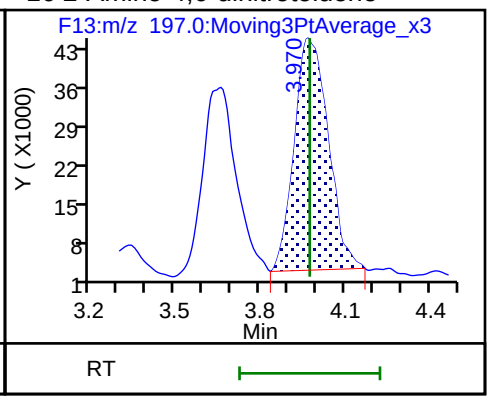
12 Nitrobenzene



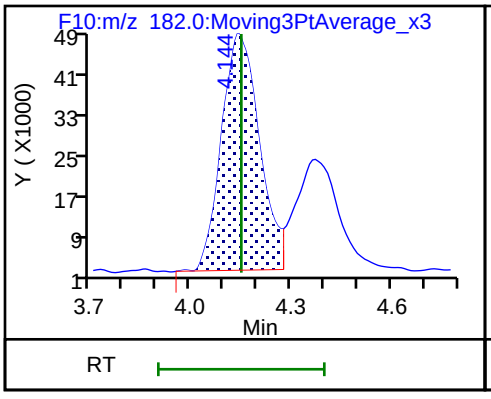
14 4-Amino-2,6-dinitrotoluene



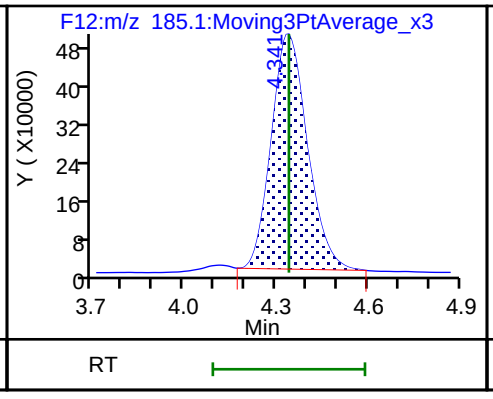
16 2-Amino-4,6-dinitrotoluene



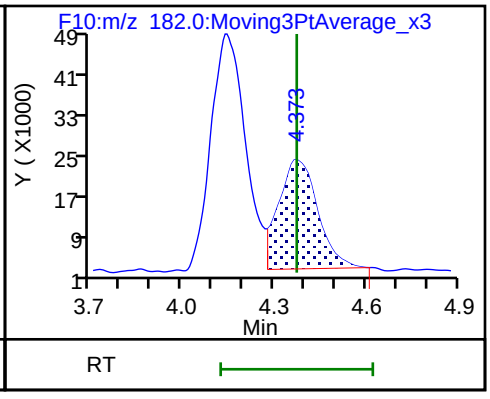
17 2,6-Dinitrotoluene



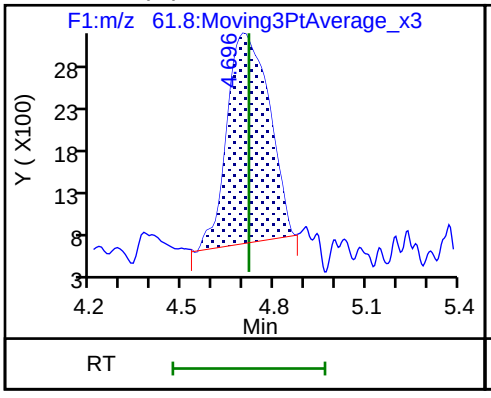
* 18 2,4-dinitrotoluene-d3



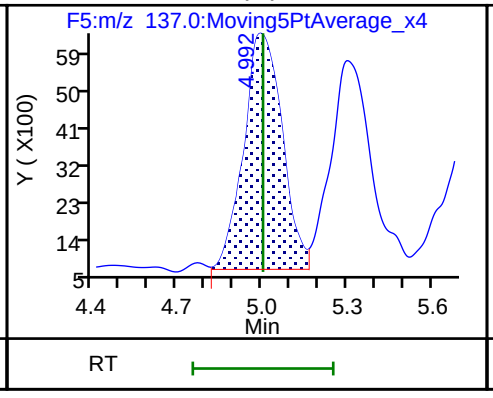
19 2,4-Dinitrotoluene



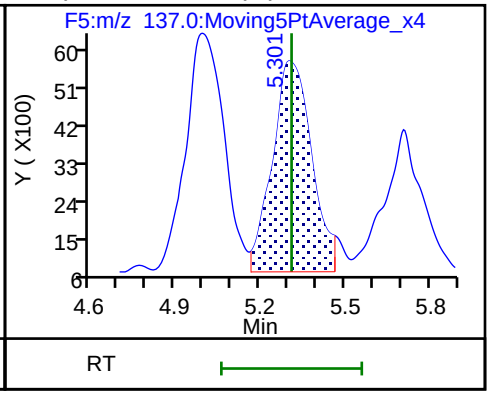
20 PETN (M)



22 o-Nitrotoluene (M)

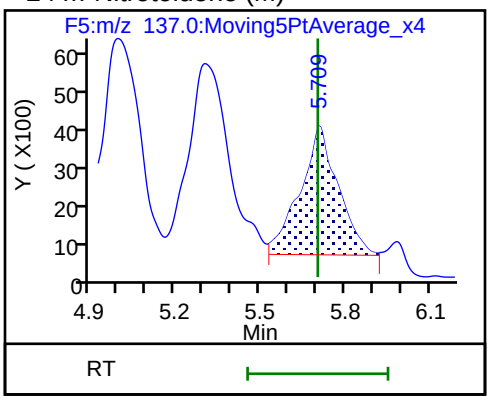


23 p-Nitrotoluene (M)



Report Date: 08-Apr-2022 07:31:45 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07003.d

24 m-Nitrotoluene (M)



Report Date: 08-Apr-2022 07:31:45 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07003.d

Injection Date: 07-Apr-2022 10:39:13 Instrument ID: LC_LCMS7

Lims ID: STD001

Client ID:

Operator ID: acm ALS Bottle#: 2 Worklist Smp#: 3

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

Column: Detector F19:SIR

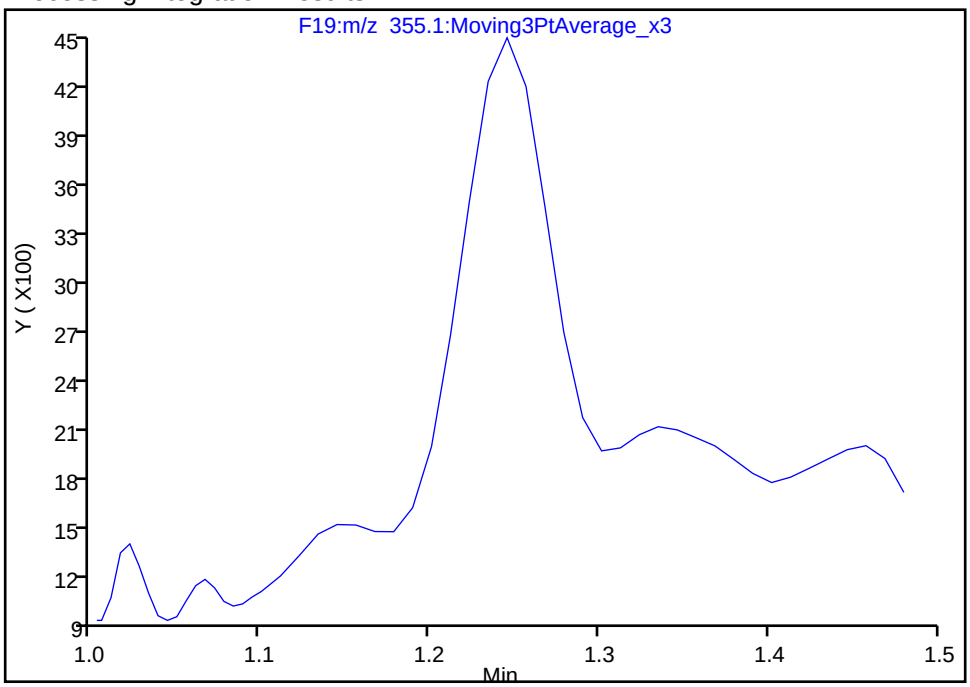
2 HMX, CAS: 2691-41-0

Signal: 1

Not Detected

Expected RT: 1.25

Processing Integration Results



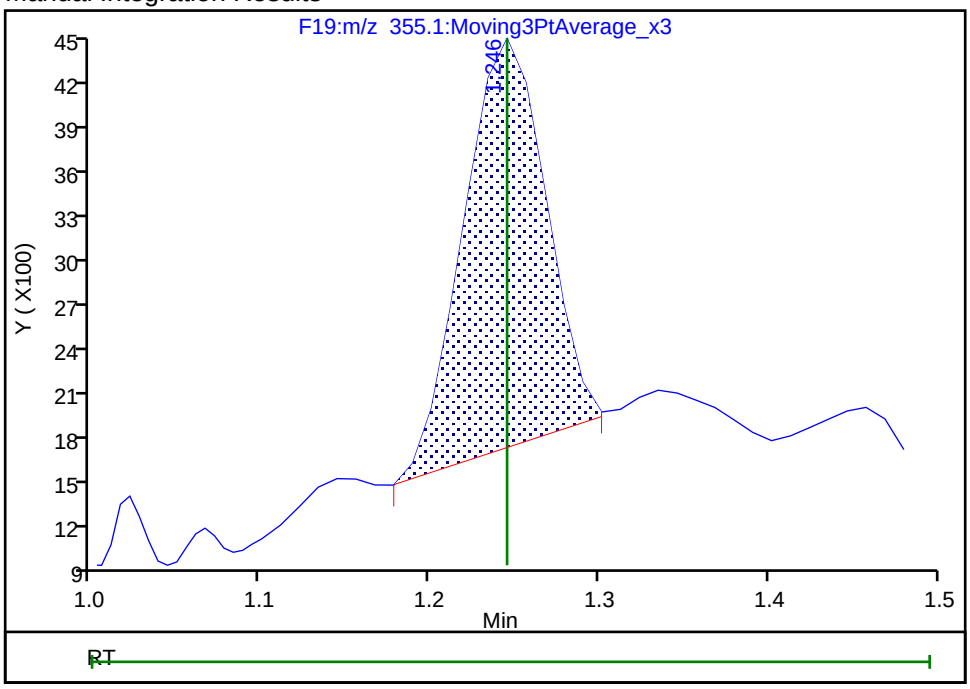
Manual Integration Results

RT: 1.25

Area: 9191

Amount: 5.381556

Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 12:31:35

Audit Action: Manually Integrated Audit Reason: Assign Peak

Report Date: 08-Apr-2022 07:31:45 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

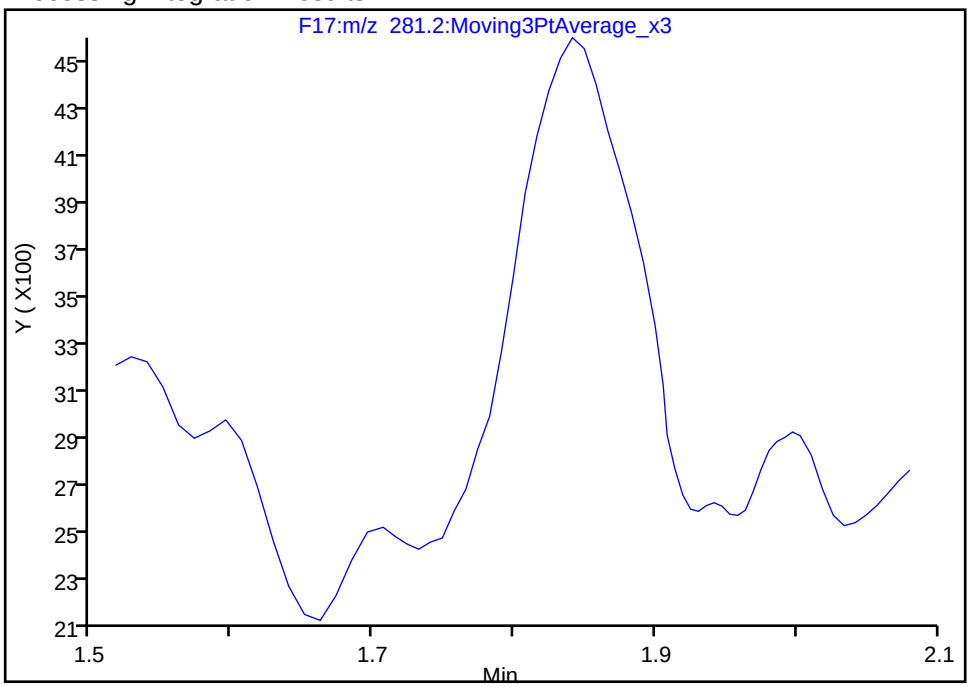
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07003.d
Injection Date: 07-Apr-2022 10:39:13 Instrument ID: LC_LCMS7
Lims ID: STD001
Client ID:
Operator ID: acm ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F17:SIR

4 RDX, CAS: 121-82-4

Signal: 1

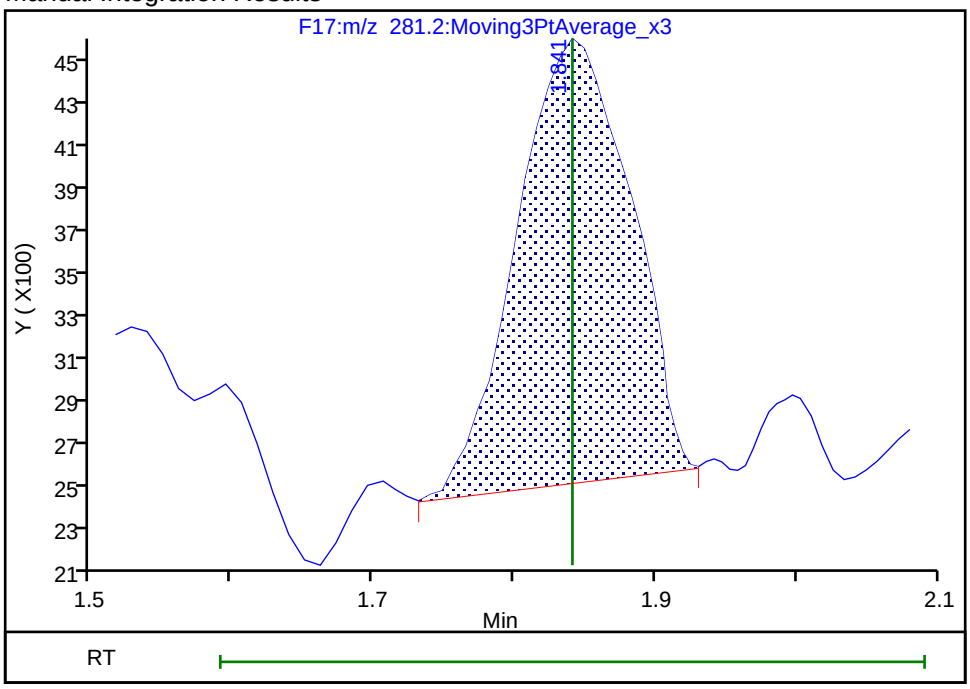
Not Detected
Expected RT: 1.84

Processing Integration Results



Manual Integration Results

RT: 1.84
Area: 11590
Amount: 4.649252
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 12:31:43
Audit Action: Manually Integrated Audit Reason: Assign Peak

Report Date: 08-Apr-2022 07:31:45 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07003.d

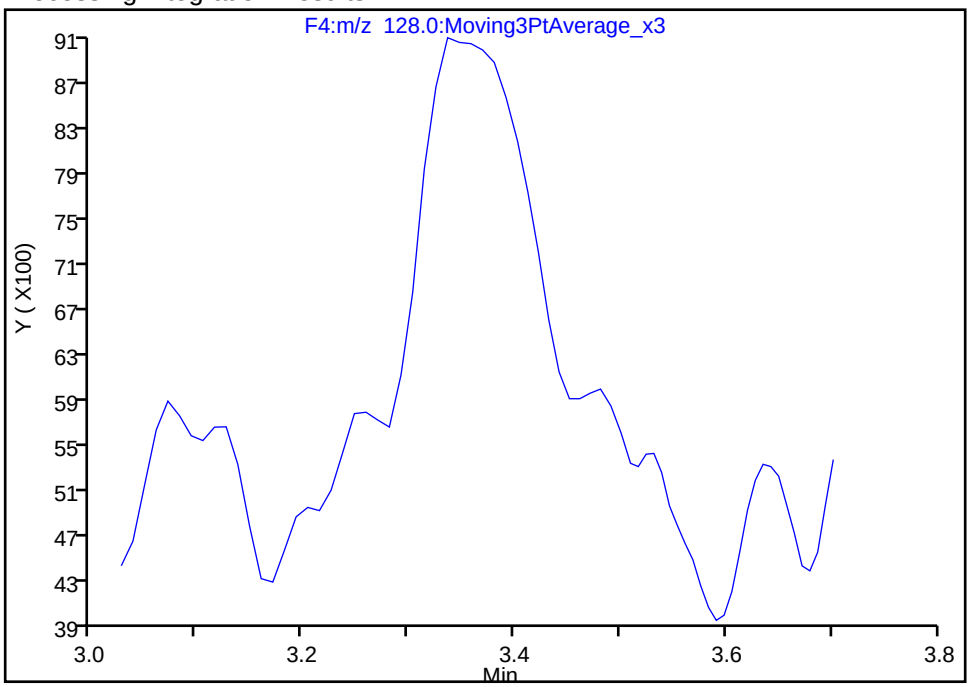
Injection Date:	07-Apr-2022 10:39:13	Instrument ID:	LC_LCMS7		
Lims ID:	STD001				
Client ID:					
Operator ID:	acm	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F4:SIR		

$ 11 Nitrobenzene-d5, CAS: 4165-60-0

Signal: 1

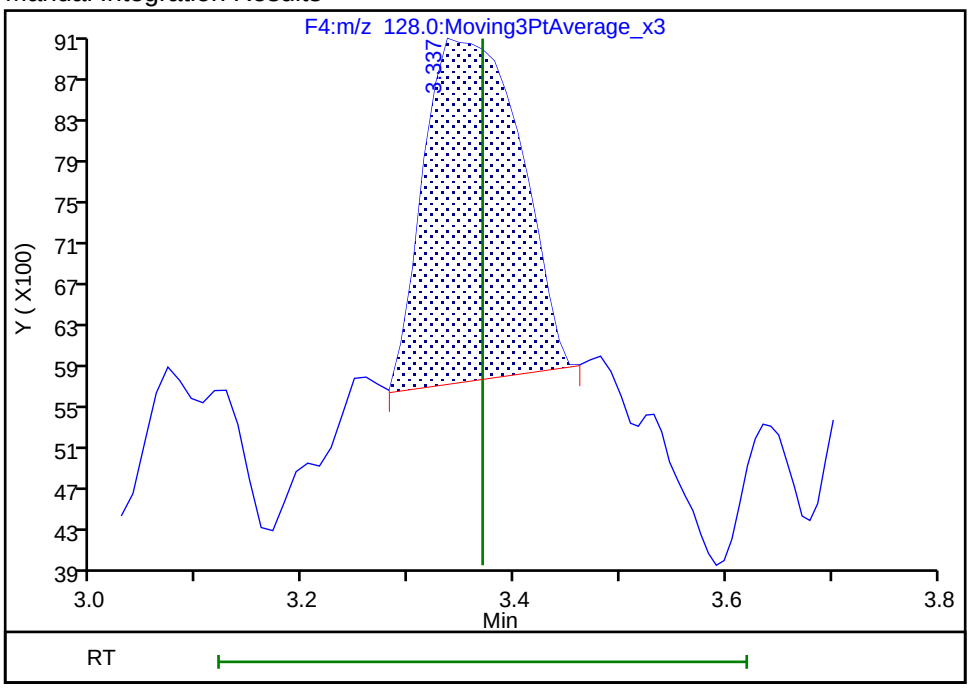
Not Detected
Expected RT: 3.37

Processing Integration Results



Manual Integration Results

RT: 3.34
Area: 20934
Amount: 4.976480
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 12:31:53
Audit Action: Manually Integrated Audit Reason: Assign Peak

Report Date: 08-Apr-2022 07:31:45 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07003.d

Injection Date:	07-Apr-2022 10:39:13	Instrument ID:	LC_LCMS7
Lims ID:	STD001		
Client ID:			
Operator ID:	acm	ALS Bottle#:	2 Worklist Smp#: 3
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F1:SIR

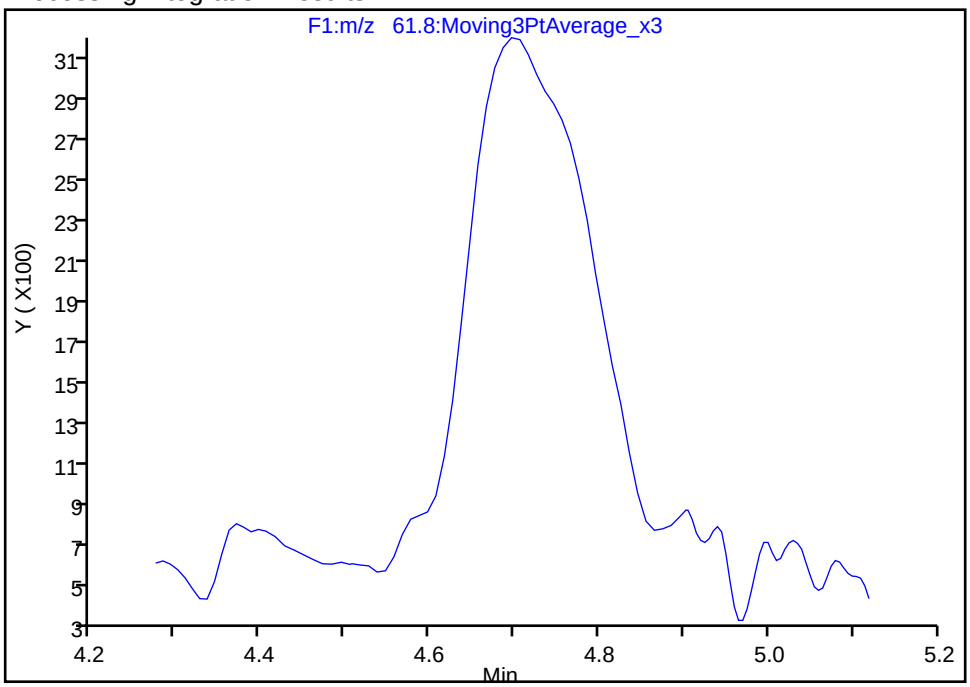
20 PETN, CAS: 78-11-5

Signal: 1

Not Detected

Expected RT: 4.72

Processing Integration Results



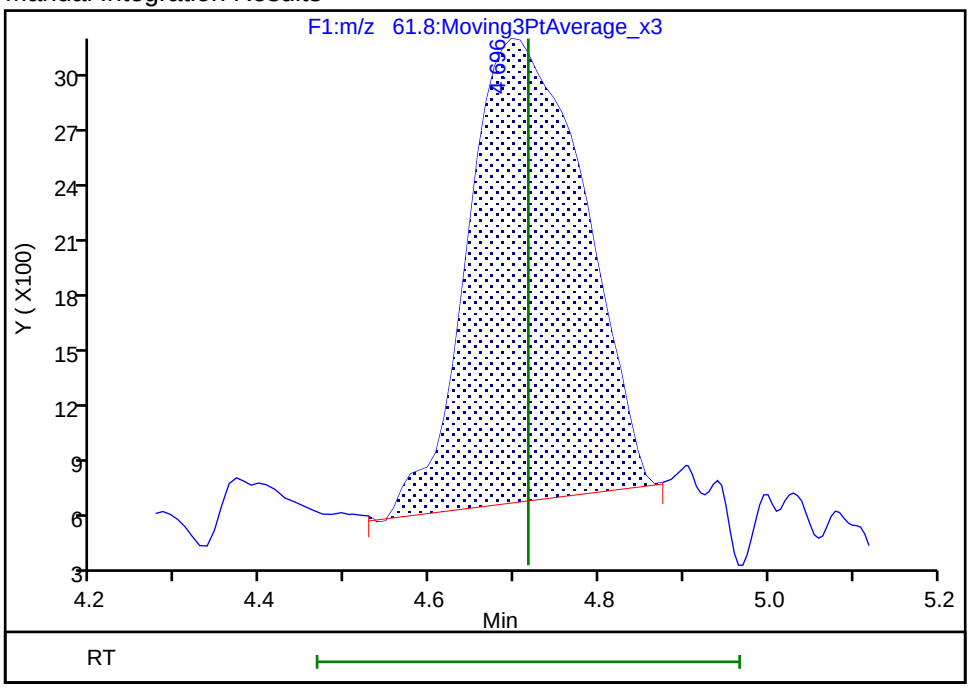
Manual Integration Results

RT: 4.70

Area: 23036

Amount: 5.273387

Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 12:32:06

Audit Action: Manually Integrated Audit Reason: Assign Peak

Report Date: 08-Apr-2022 07:31:45 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07003.d

Injection Date: 07-Apr-2022 10:39:13 Instrument ID: LC_LCMS7

Lims ID: STD001

Client ID:

Operator ID: acm ALS Bottle#: 2 Worklist Smp#: 3

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

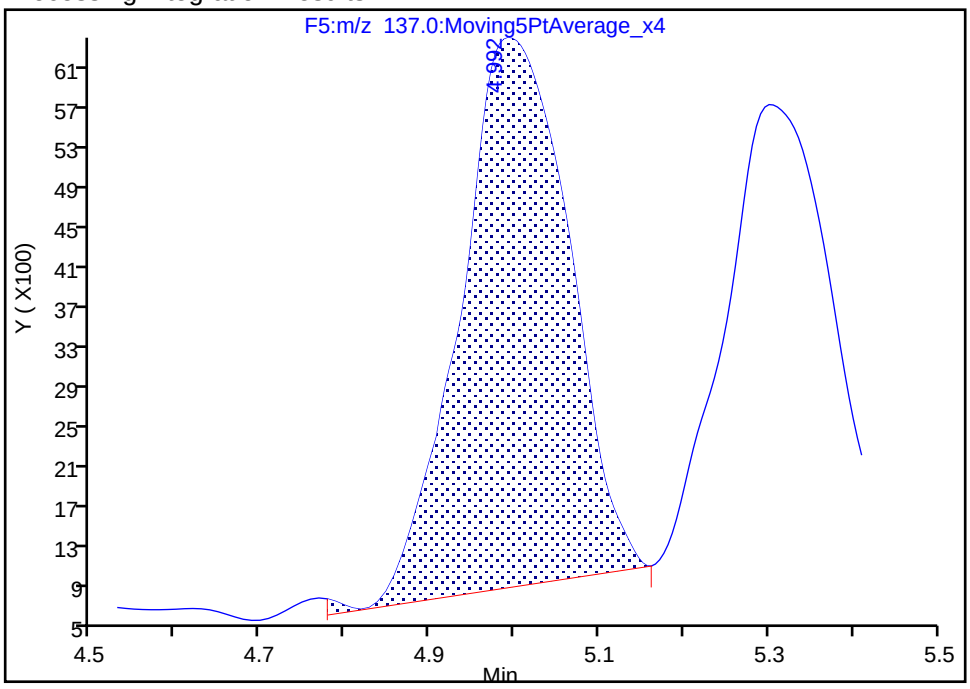
Column: Detector F5:SIR

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

Signal: 1

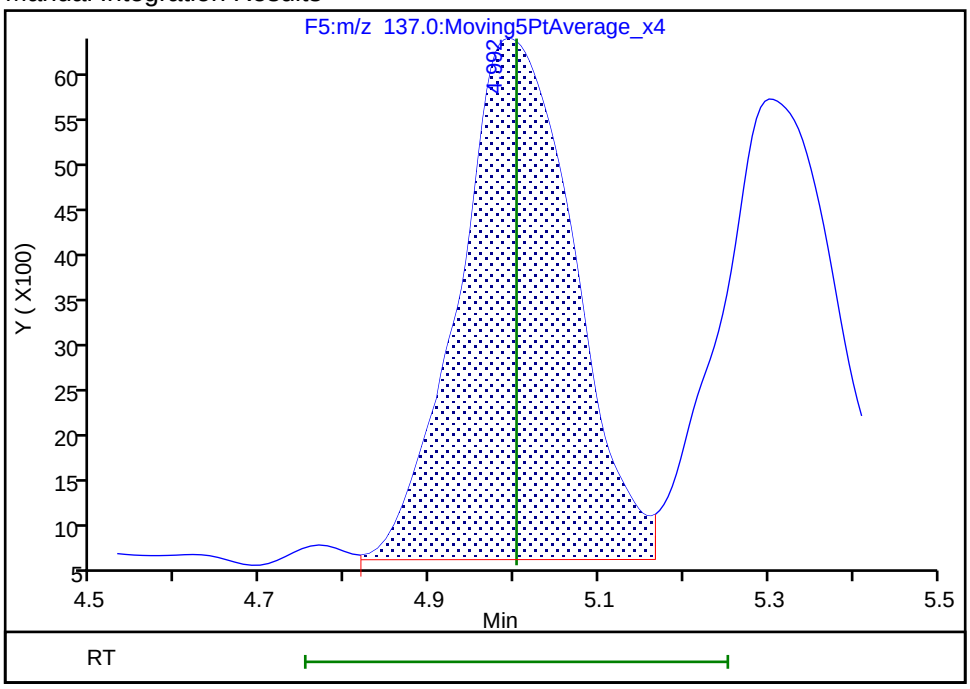
Processing Integration Results

RT: 4.99
Area: 48628
Amount: 4.704215
Amount Units: ug/l



Manual Integration Results

RT: 4.99
Area: 53884
Amount: 4.912149
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 12:32:25

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 08-Apr-2022 07:31:45 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07003.d

Injection Date: 07-Apr-2022 10:39:13 Instrument ID: LC_LCMS7

Lims ID: STD001

Client ID:

Operator ID: acm ALS Bottle#: 2 Worklist Smp#: 3

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

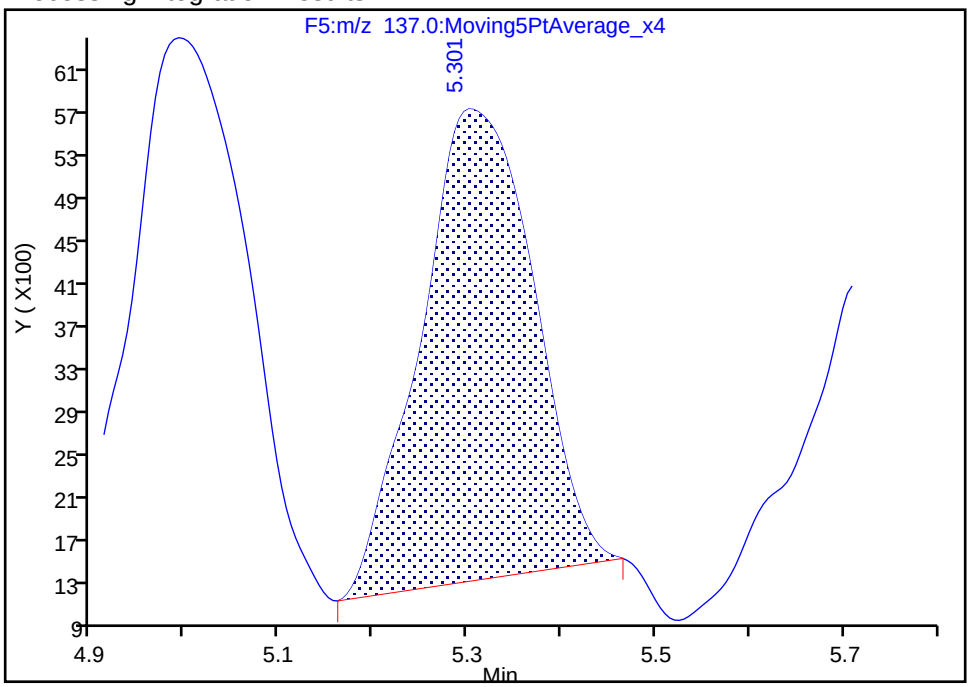
Column: Detector F5:SIR

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

Signal: 1

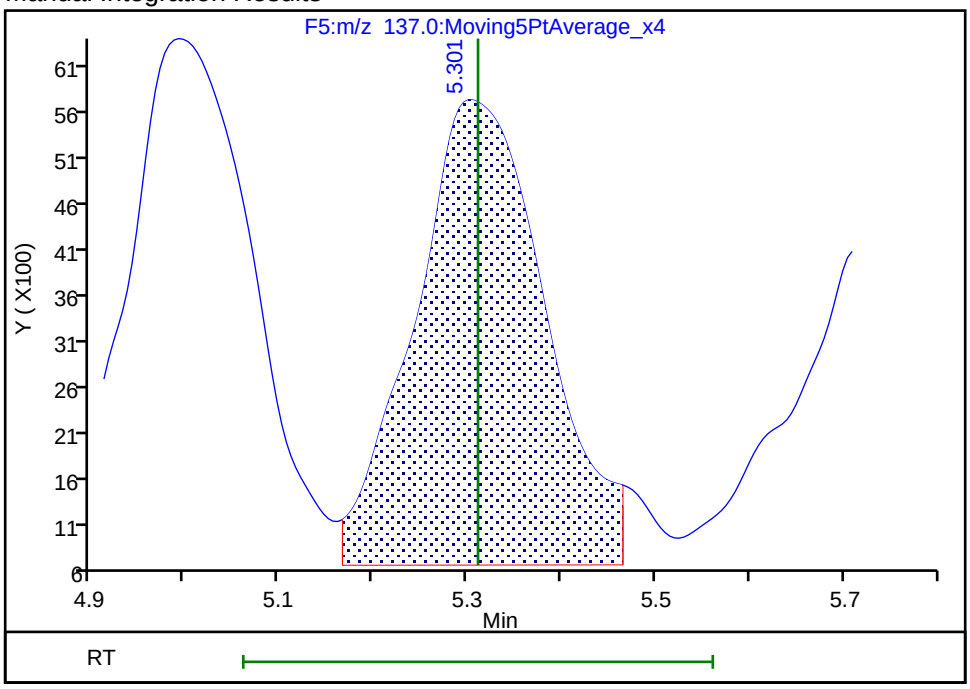
Processing Integration Results

RT: 5.30
Area: 36533
Amount: 4.407608
Amount Units: ug/l



Manual Integration Results

RT: 5.30
Area: 48537
Amount: 4.955455
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 12:32:25

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 08-Apr-2022 07:31:45 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07003.d

Injection Date: 07-Apr-2022 10:39:13 Instrument ID: LC_LCMS7

Lims ID: STD001

Client ID:

Operator ID: acm ALS Bottle#: 2 Worklist Smp#: 3

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

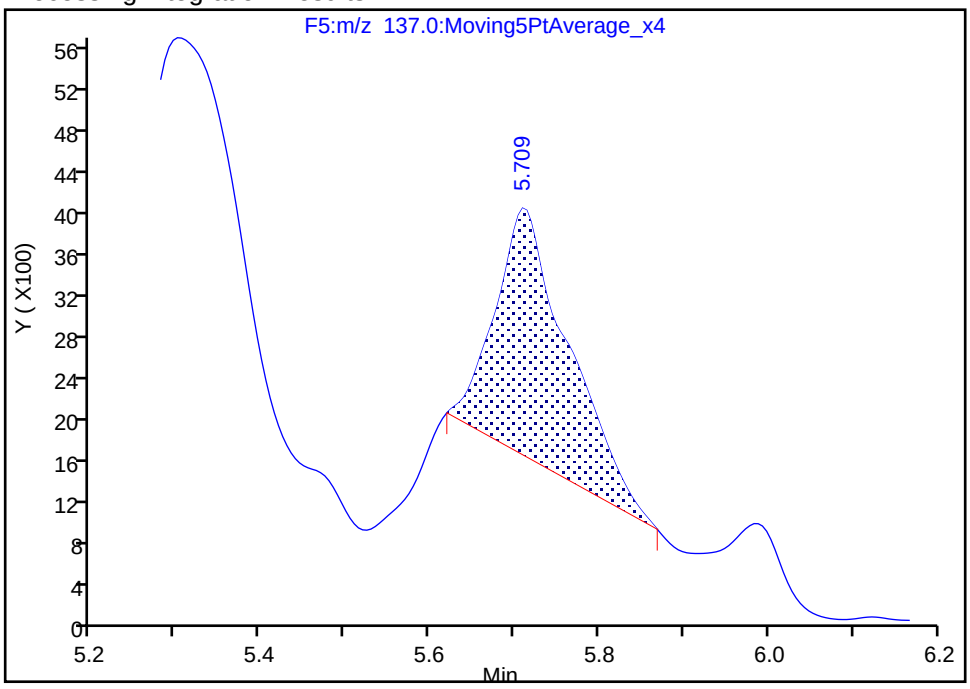
Column: Detector F5:SIR

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

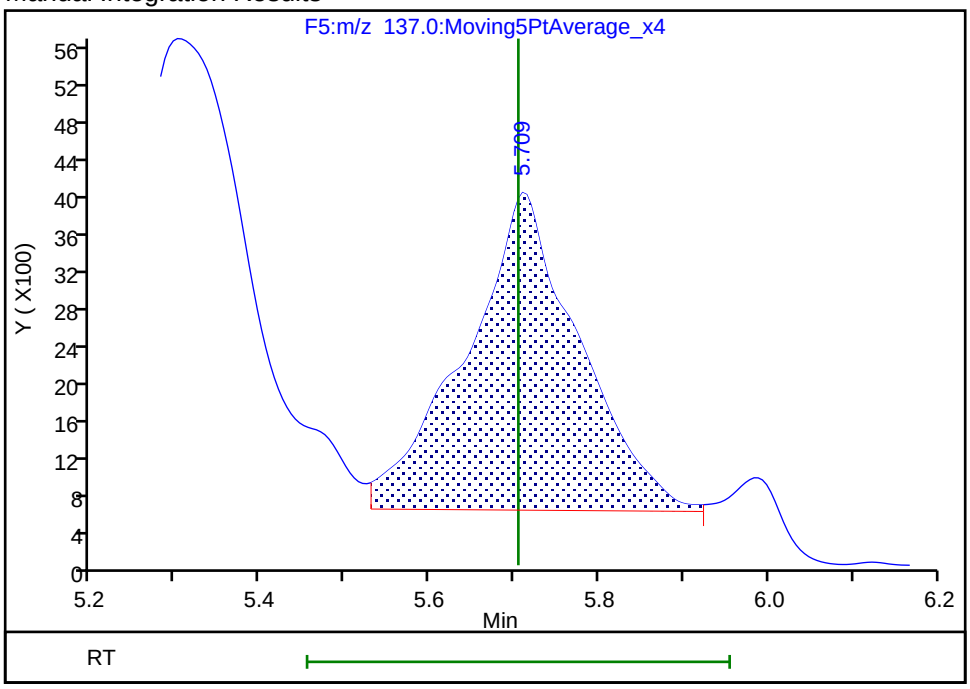
Processing Integration Results

RT: 5.71
Area: 14460
Amount: 4.255986
Amount Units: ug/l



Manual Integration Results

RT: 5.71
Area: 31521
Amount: 5.544110
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 12:32:36

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07004.d
Lims ID: STD002
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 07-Apr-2022 10:45:49 ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: STD L2
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:31:46 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 12:31:23
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								M
355.1	1.257	1.246	0.011	1.007	14682	9.38	3.6	M
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		105117	125.0	108	
36 TNX								
144.0	1.385	1.385	0.0	0.751	477813	9.78	104	
33 DNX								
160.0	1.489	1.489	0.0	0.807	709331	10.1	230	
34 MNX								
160.0	1.670	1.670	0.0	0.906	223832	12.7	68.8	
4 RDX								M
281.2	1.849	1.841	0.008	1.003	24953	11.1	6.3	M
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		372550	125.0	114	
5 1,3,5-Trinitrobenzene								
213.0	2.317	2.317	0.0	0.767	151433	9.60	44.8	
6 Tetryl								
241.1	2.719	2.712	0.007	0.901	203867	10.2	38.9	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.030	-0.011		1311407	129.4	164	
8 1,3-Dinitrobenzene								
168.0	3.062	3.051	0.011	1.014	104491	9.21	27.2	
9 Nitroglycerin								
62.0	3.080	3.080	0.0	1.020	100969	9.38	33.5	
28 3,5-Dinitroaniline								M
183.0	3.230	3.230	0.0	1.070	496186	9.95	36.1	M

Report Date: 08-Apr-2022 07:31:46 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07004.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.321	3.321	0.0	0.765	695420	9.84	63.7	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.774	58222	10.7	7.8	
12 Nitrobenzene								
123.0	3.411	3.431	-0.020	0.786	61006	10.1	18.9	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.645	3.645	0.0	0.840	542949	10.3	26.9	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.988	3.976	0.012	0.919	696379	10.3	30.6	
17 2,6-Dinitrotoluene								
182.0	4.144	4.150	-0.006	0.955	691457	9.85	236	
* 18 2,4-dinitrotoluene-d3								
185.1	4.341	4.341	0.0		4091022	125.0	117	
19 2,4-Dinitrotoluene								
182.0	4.373	4.373	0.0	1.007	365728	10.1	110	
20 PETN								
61.8	4.706	4.716	-0.010	1.084	50271	10.3	11.7	
22 o-Nitrotoluene								
137.0	5.012	5.002	0.010	1.155	113366	10.7	35.5	
23 p-Nitrotoluene								
137.0	5.311	5.311	0.0	1.223	97049	10.4	28.9	
24 m-Nitrotoluene								
137.0	5.709	5.704	0.005	1.315	54224	9.76	15.2	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

8321EXcalprim_00029	Amount Added: 1.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 1.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 08-Apr-2022 07:31:46 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07004.d

Injection Date: 07-Apr-2022 10:45:49 Instrument ID: LC_LCMS7

Lims ID: STD002

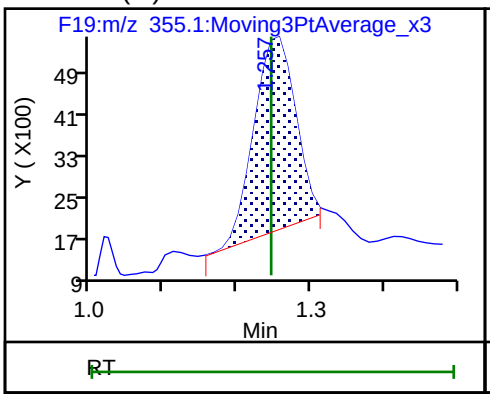
Client ID:

Operator ID: acm ALS Bottle#: 3 Worklist Smp#: 4

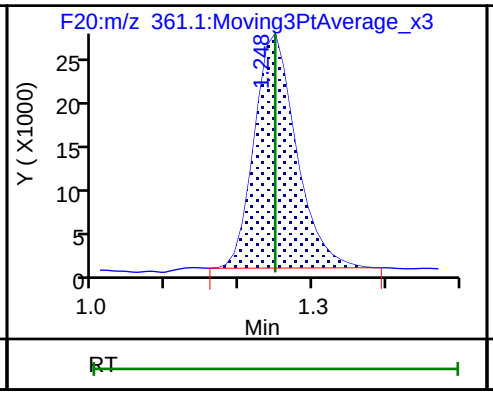
Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

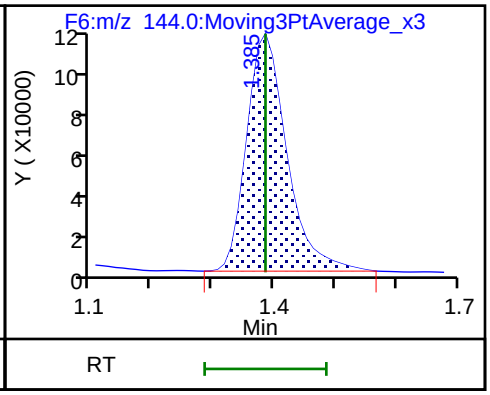
2 HMX (M)



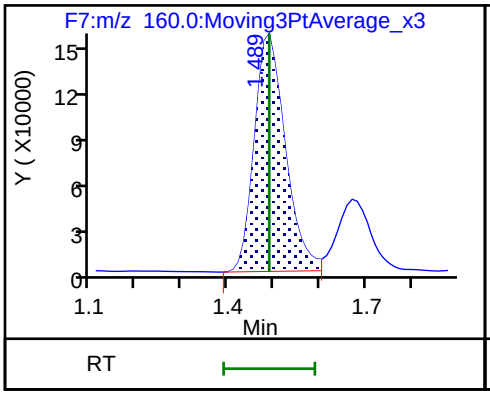
* 1 HMX-13C4



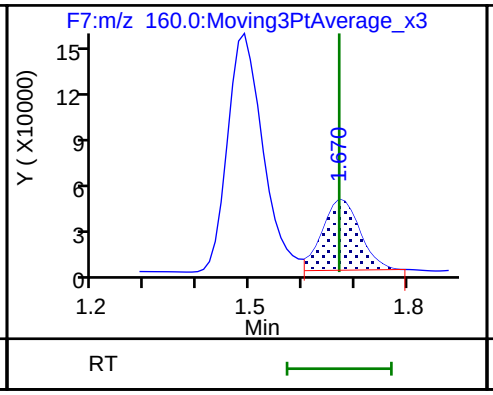
36 TNX



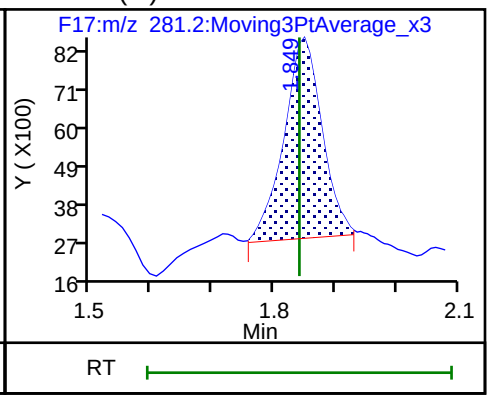
33 DNX



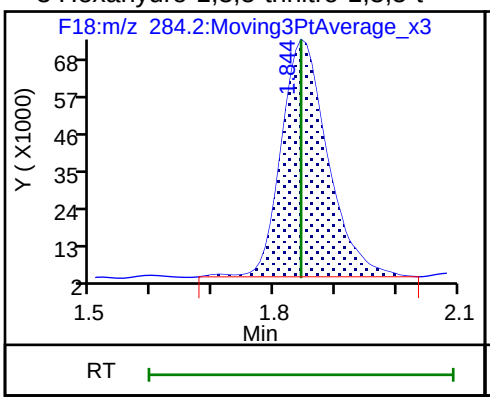
34 MNX



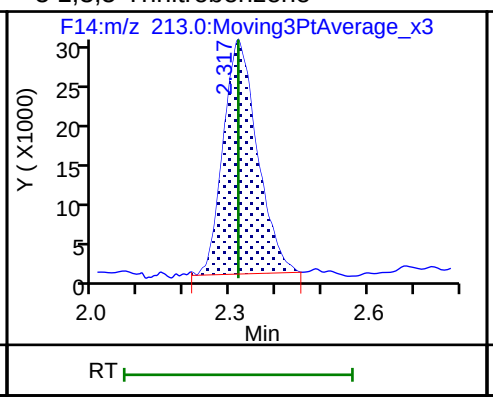
4 RDX (M)



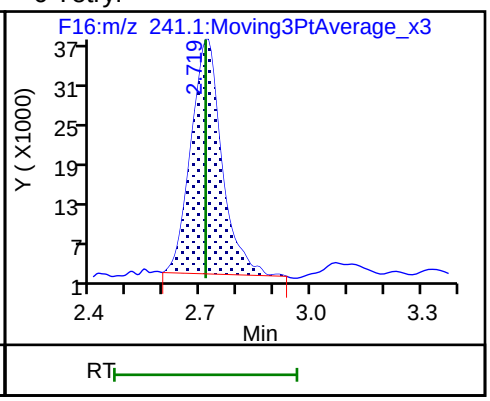
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



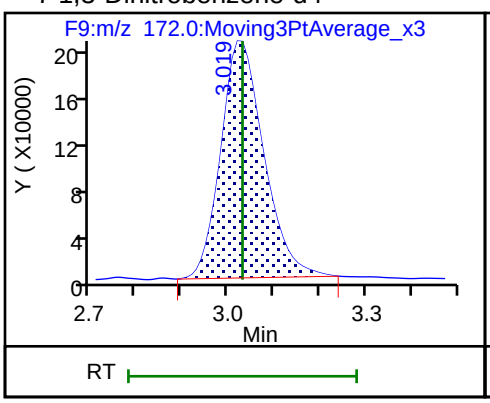
5 1,3,5-Trinitrobenzene



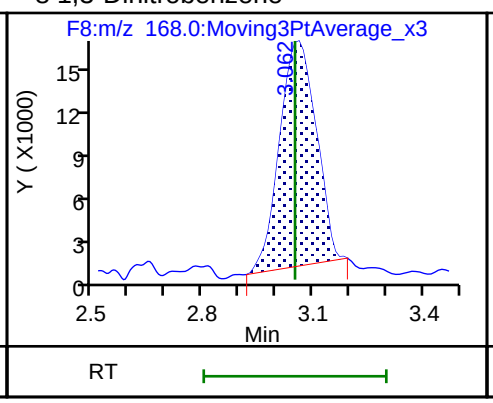
6 Tetryl



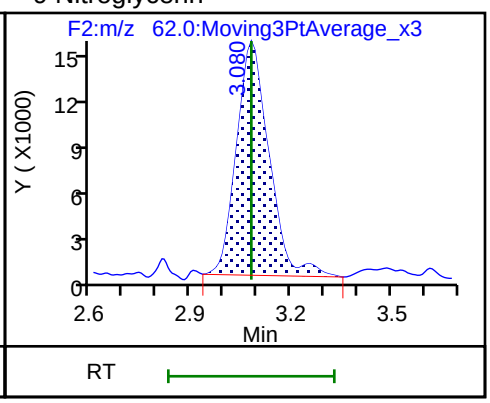
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

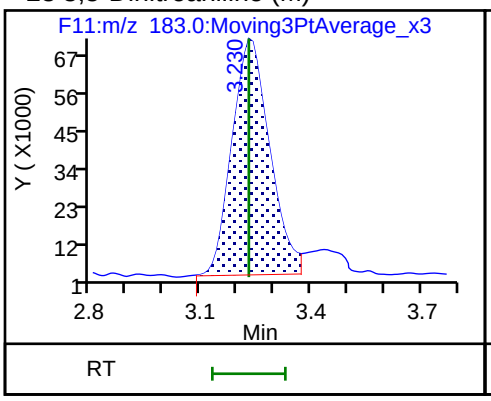


9 Nitroglycerin

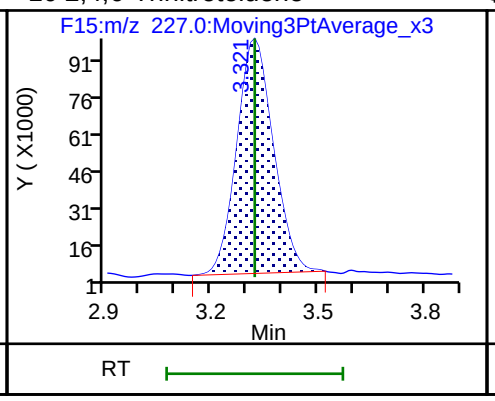


Report Date: 08-Apr-2022 07:31:46 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07004.d

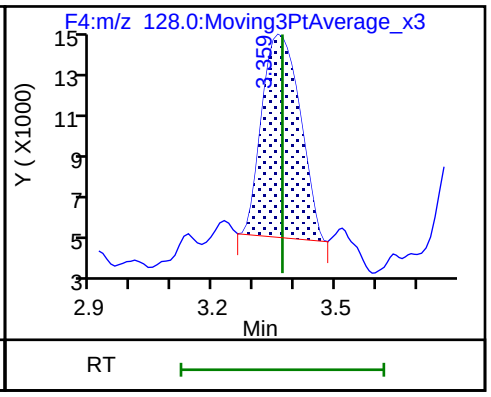
28 3,5-Dinitroaniline (M)



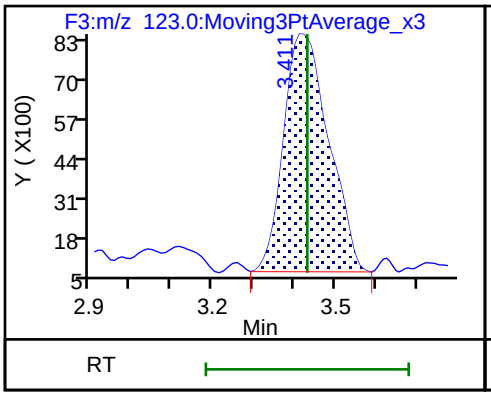
10 2,4,6-Trinitrotoluene



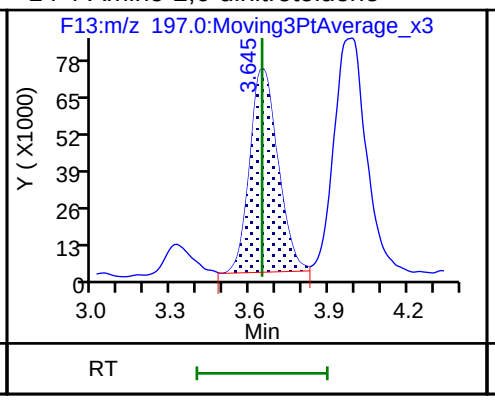
$ 11 Nitrobenzene-d5



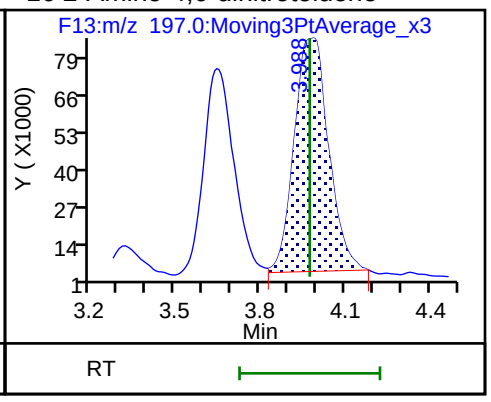
12 Nitrobenzene



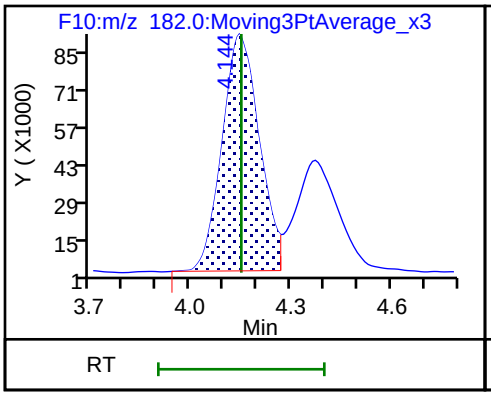
14 4-Amino-2,6-dinitrotoluene



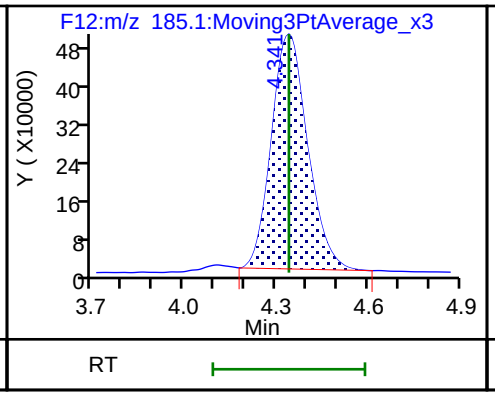
16 2-Amino-4,6-dinitrotoluene



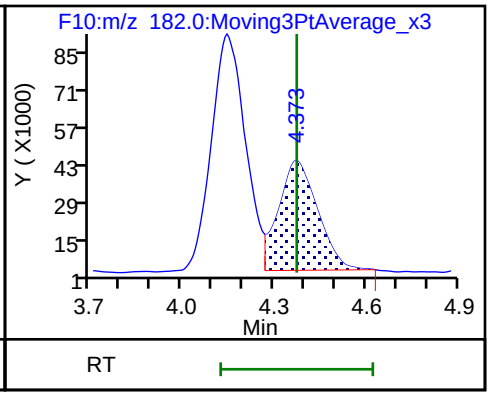
17 2,6-Dinitrotoluene



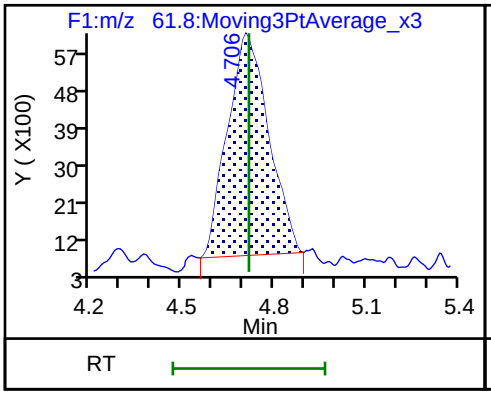
* 18 2,4-dinitrotoluene-d3



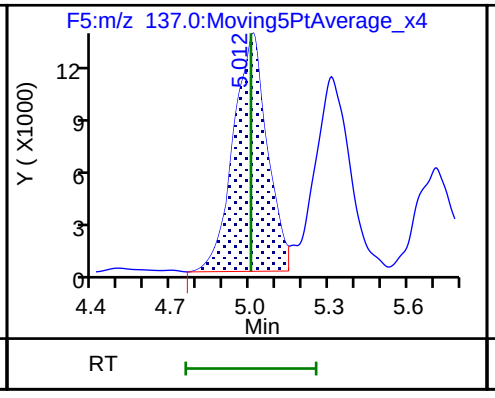
19 2,4-Dinitrotoluene



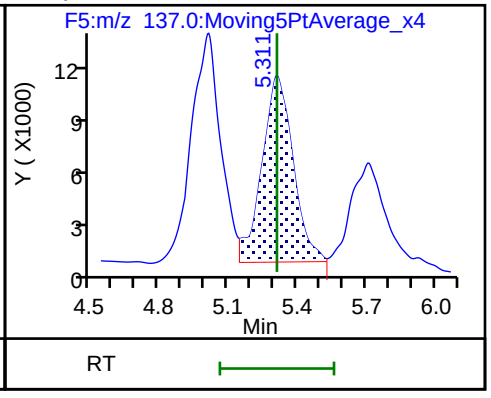
20 PETN



22 o-Nitrotoluene



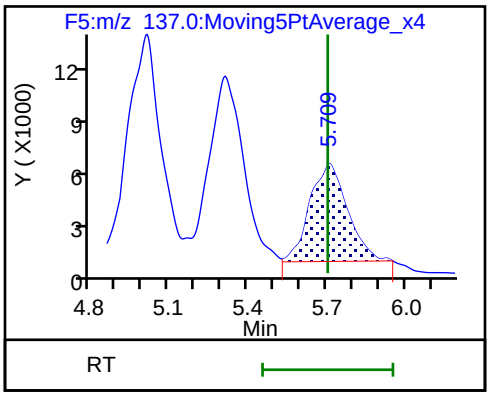
23 p-Nitrotoluene



Report Date: 08-Apr-2022 07:31:46 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07004.d

24 m-Nitrotoluene



Report Date: 08-Apr-2022 07:31:46 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07004.d

Injection Date: 07-Apr-2022 10:45:49 Instrument ID: LC_LCMS7

Lims ID: STD002

Client ID:

Operator ID: acm ALS Bottle#: 3 Worklist Smp#: 4

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

Column: Detector F19:SIR

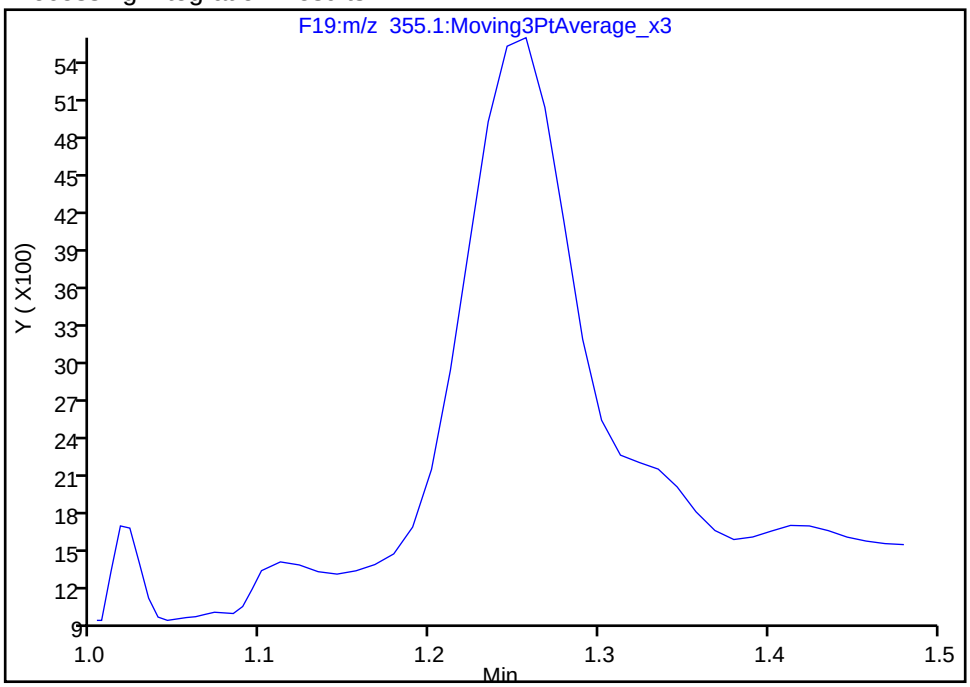
2 HMX, CAS: 2691-41-0

Signal: 1

Not Detected

Expected RT: 1.25

Processing Integration Results



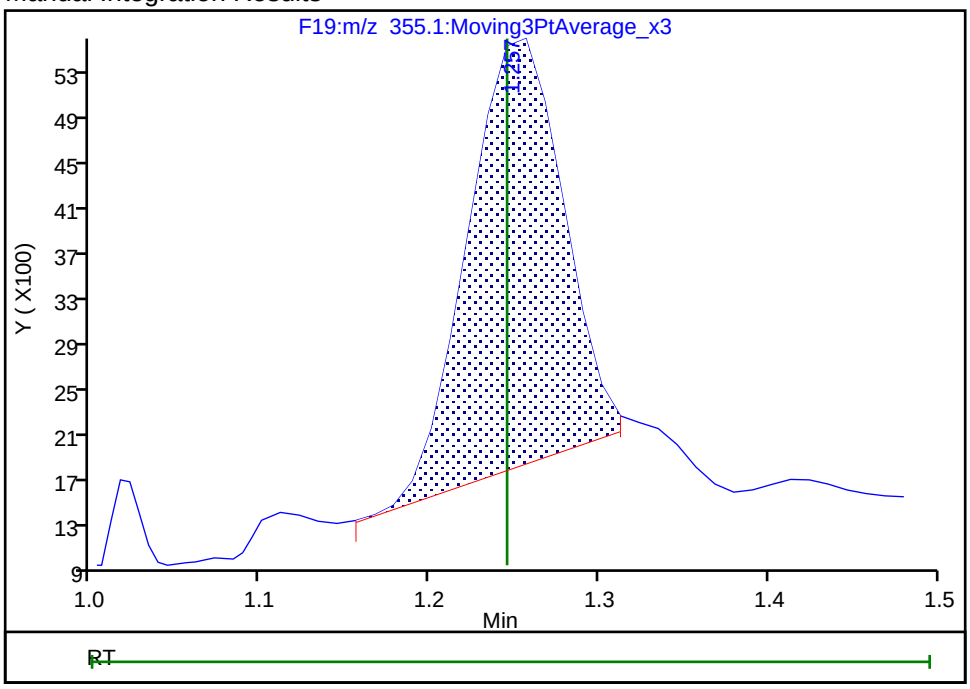
Manual Integration Results

RT: 1.26

Area: 14682

Amount: 9.384395

Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 12:31:20

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 08-Apr-2022 07:31:46 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07004.d

Injection Date: 07-Apr-2022 10:45:49 Instrument ID: LC_LCMS7

Lims ID: STD002

Client ID:

Operator ID: acm ALS Bottle#: 3 Worklist Smp#: 4

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

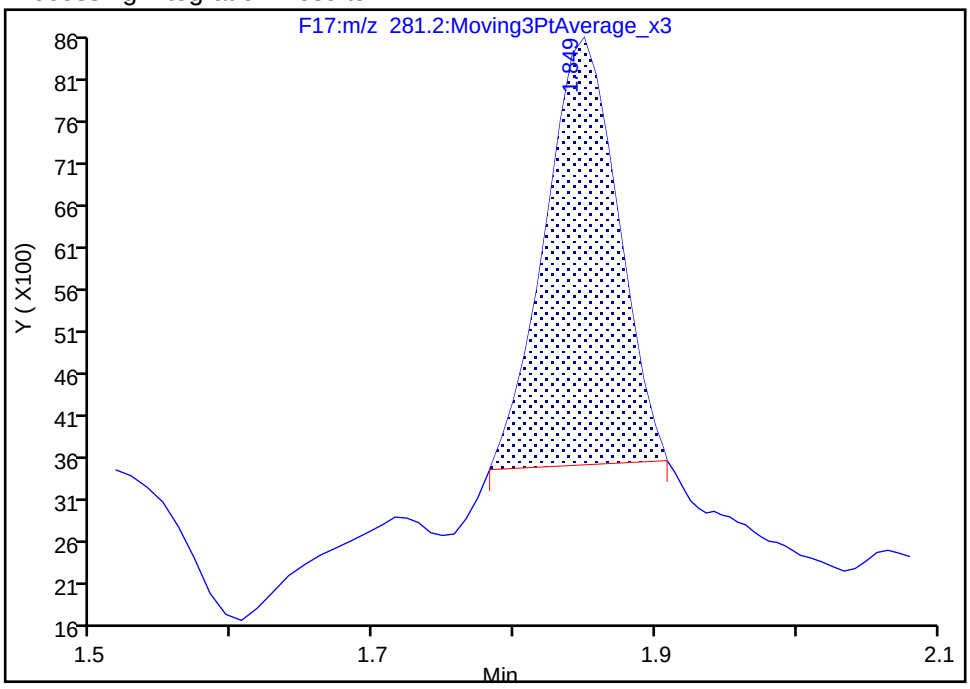
Column: Detector F17:SIR

4 RDX, CAS: 121-82-4

Signal: 1

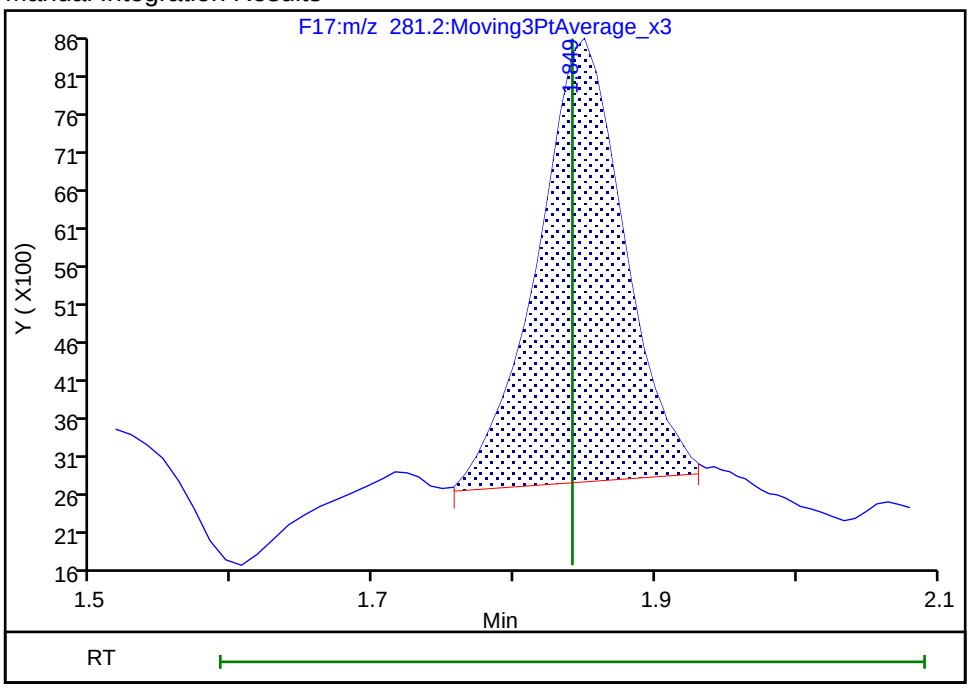
Processing Integration Results

RT: 1.85
Area: 18192
Amount: 9.001968
Amount Units: ug/l



Manual Integration Results

RT: 1.85
Area: 24953
Amount: 11.092384
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 12:31:13

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 08-Apr-2022 07:31:47 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07005.d
Lims ID: STD003
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 07-Apr-2022 10:52:25 ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: STD L3
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:31:47 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 12:30:51
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	39325	22.7	12.5	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		116408	125.0	107	
36 TNX								
144.0	1.385	1.385	0.0	0.751	1158500	26.2	164	
33 DNX								
160.0	1.489	1.489	0.0	0.807	1703493	26.1	310	
34 MNX								
160.0	1.670	1.670	0.0	0.906	516325	30.8	90.5	
4 RDX								
281.2	1.841	1.841	0.0	0.998	49054	22.0	16.5	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								M
284.2	1.844	1.844	0.0		386878	125.0	178	M
5 1,3,5-Trinitrobenzene								
213.0	2.313	2.317	-0.004	0.763	376496	25.2	78.6	
6 Tetryl								
241.1	2.705	2.712	-0.007	0.893	527628	26.2	76.6	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.030	3.030	0.0		1257715	129.4	164	
8 1,3-Dinitrobenzene								M
168.0	3.051	3.051	0.0	1.007	290667	27.4	93.4	M
9 Nitroglycerin								
62.0	3.069	3.080	-0.011	1.013	246565	25.6	130	
28 3,5-Dinitroaniline								M
183.0	3.230	3.230	0.0	1.066	1262648	25.8	44.2	M

Report Date: 08-Apr-2022 07:31:47 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07005.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.321	3.321	0.0	0.765	1696558	25.5	162	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.774	127766	22.3	15.8	
12 Nitrobenzene								
123.0	3.421	3.431	-0.010	0.788	129429	23.7	27.6	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.652	3.645	0.007	0.841	1244642	24.1	28.3	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.982	3.976	0.006	0.917	1615287	24.3	34.6	
17 2,6-Dinitrotoluene								
182.0	4.144	4.150	-0.006	0.955	1718567	25.1	333	
* 18 2,4-dinitrotoluene-d3								
185.1	4.341	4.341	0.0		4101267	125.0	122	
19 2,4-Dinitrotoluene								
182.0	4.373	4.373	0.0	1.007	884226	25.2	165	
20 PETN								
61.8	4.716	4.716	0.0	1.086	125218	24.2	29.3	
22 o-Nitrotoluene								
137.0	5.002	5.002	0.0	1.152	252539	24.2	57.9	
23 p-Nitrotoluene								
137.0	5.306	5.311	-0.005	1.222	221342	24.3	47.3	
24 m-Nitrotoluene								
137.0	5.714	5.704	0.010	1.316	128039	23.5	26.9	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

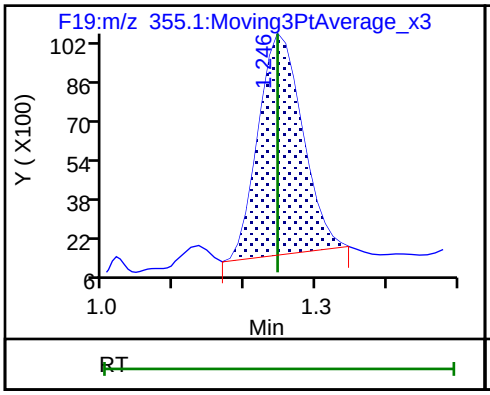
8321EXcalprim_00029	Amount Added: 2.50	Units: uL	
8321NB-D5-cal_00021	Amount Added: 2.50	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 08-Apr-2022 07:31:47 Chrom Revision: 2.3 18-Mar-2022 09:07:22

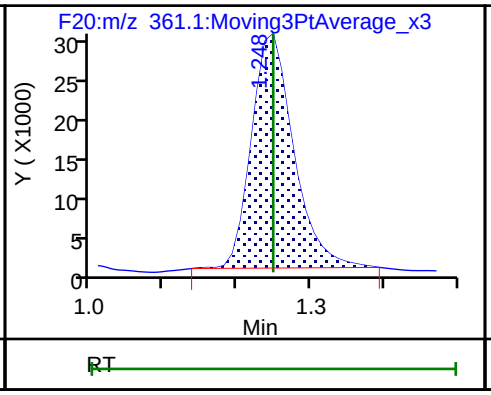
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07005.d
Injection Date: 07-Apr-2022 10:52:25 Instrument ID: LC_LCMS7
Lims ID: STD003
Client ID:
Operator ID: acm ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

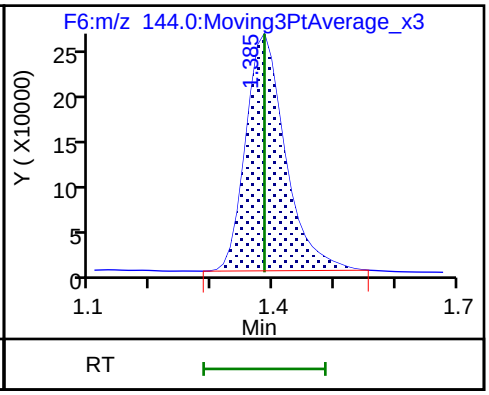
2 HMX



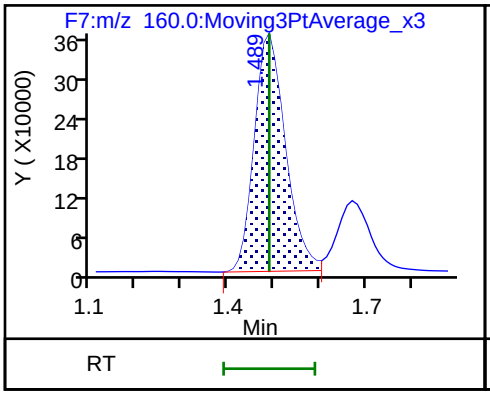
* 1 HMX-13C4



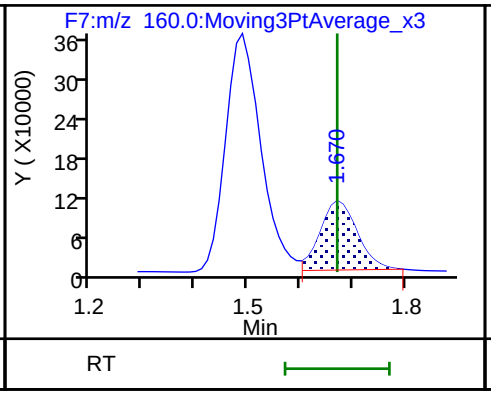
36 TNX



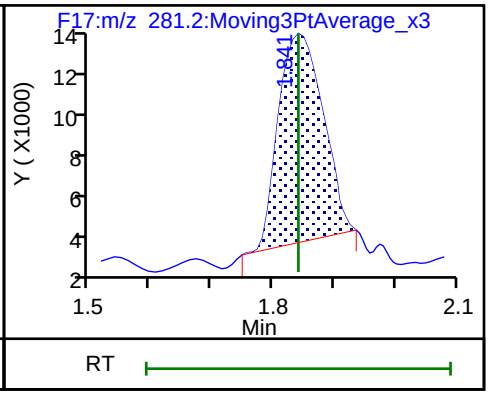
33 DNX



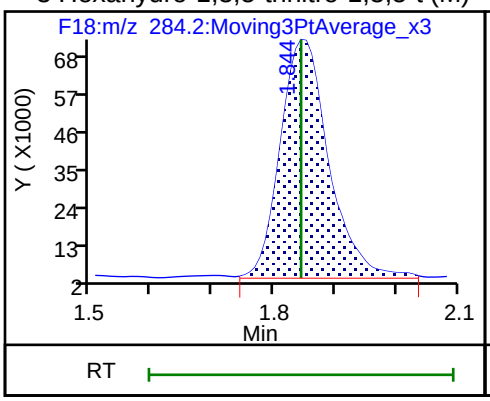
34 MNX



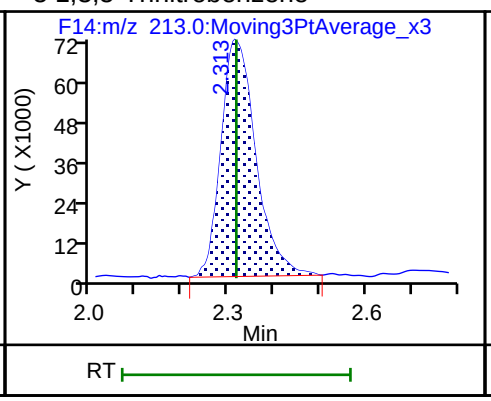
4 RDX



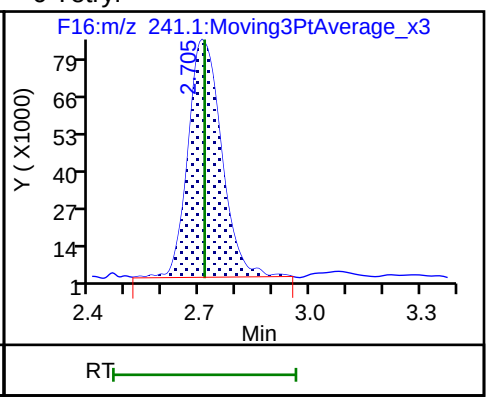
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t (M)



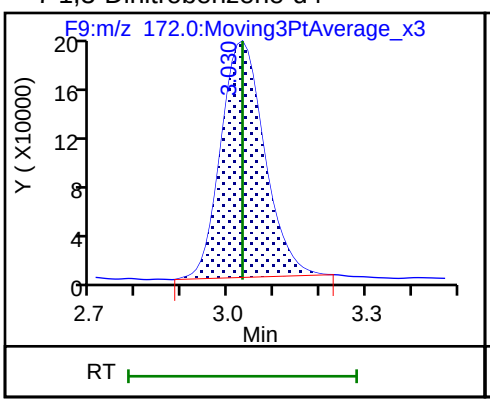
5 1,3,5-Trinitrobenzene



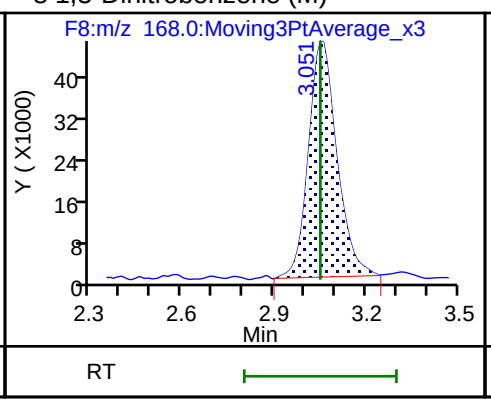
6 Tetryl



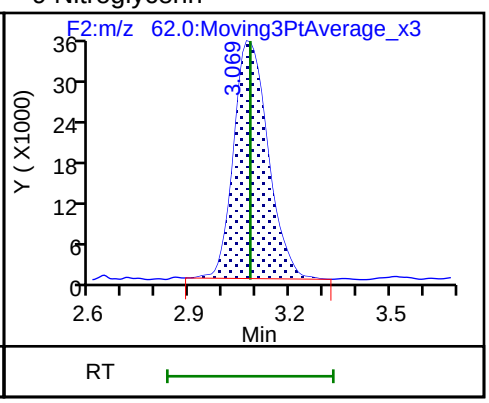
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (M)

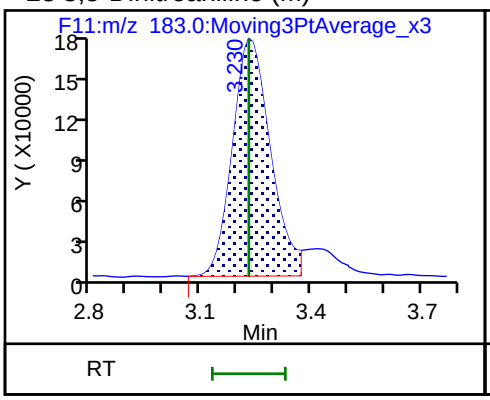


9 Nitroglycerin

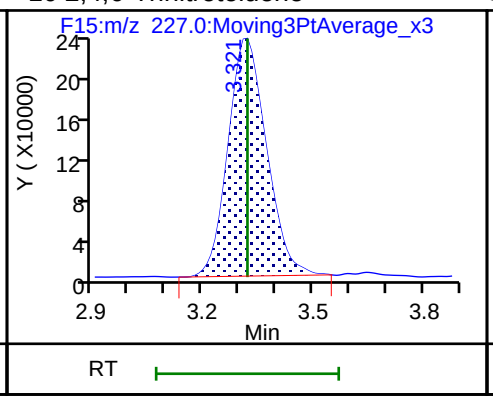


Report Date: 08-Apr-2022 07:31:47 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07005.d

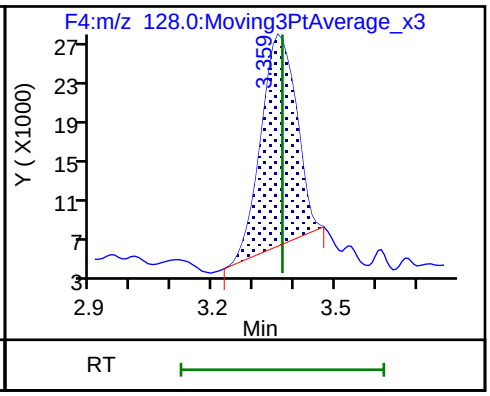
28 3,5-Dinitroaniline (M)



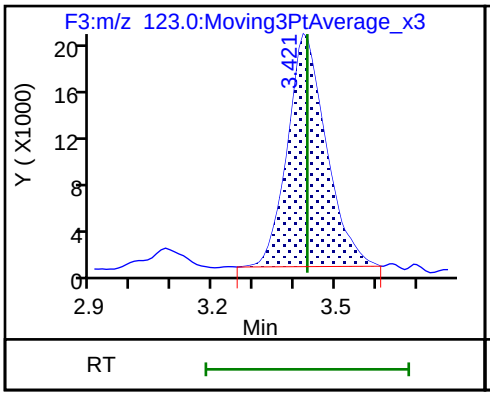
10 2,4,6-Trinitrotoluene



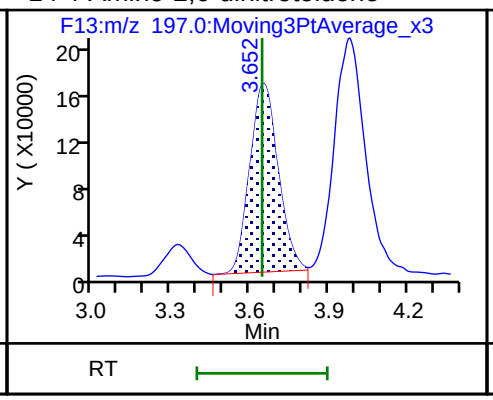
$ 11 Nitrobenzene-d5



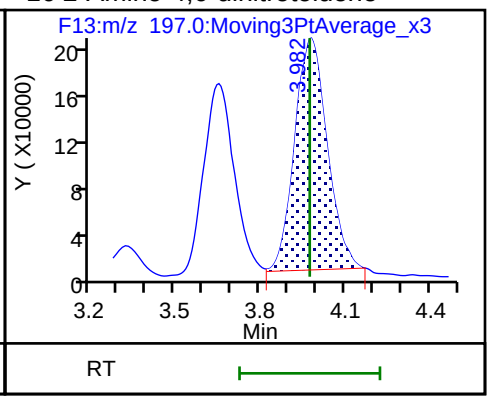
12 Nitrobenzene



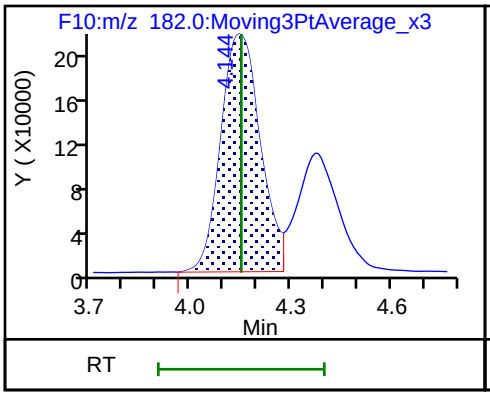
14 4-Amino-2,6-dinitrotoluene



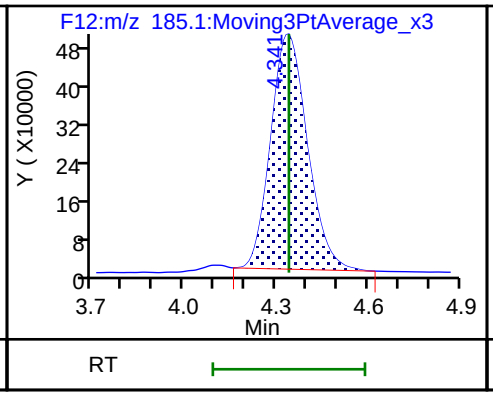
16 2-Amino-4,6-dinitrotoluene



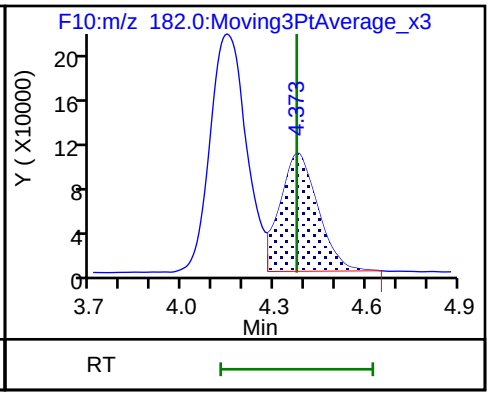
17 2,6-Dinitrotoluene



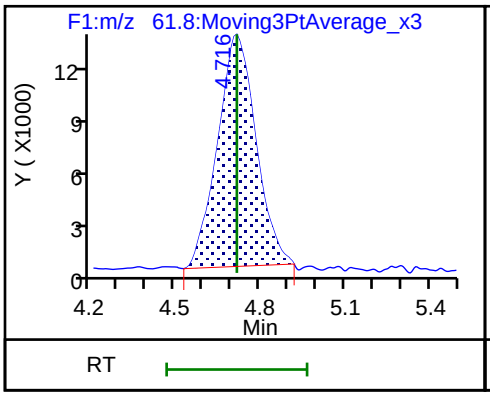
* 18 2,4-dinitrotoluene-d3



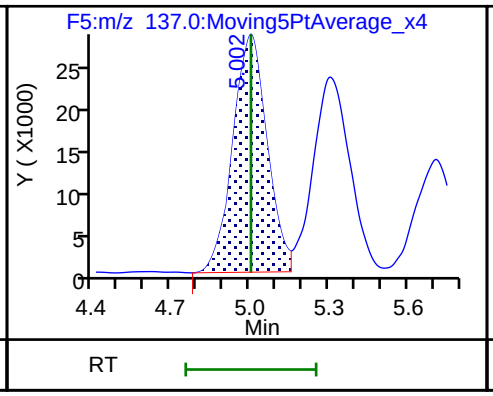
19 2,4-Dinitrotoluene



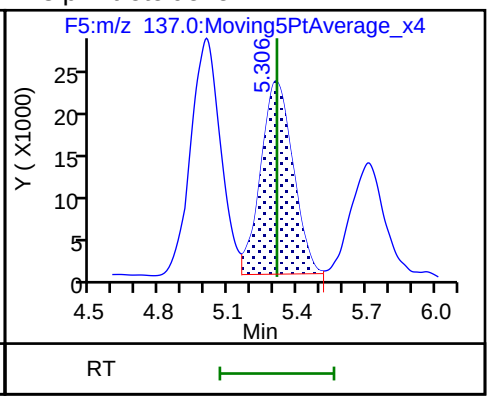
20 PETN



22 o-Nitrotoluene



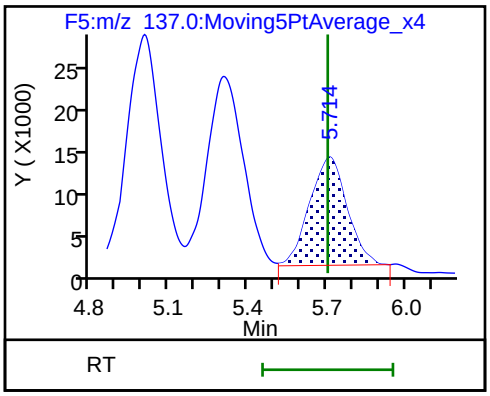
23 p-Nitrotoluene



Report Date: 08-Apr-2022 07:31:47 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07005.d

24 m-Nitrotoluene



Report Date: 08-Apr-2022 07:31:47 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07005.d

Injection Date: 07-Apr-2022 10:52:25 Instrument ID: LC_LCMS7

Lims ID: STD003

Client ID:

Operator ID: acm ALS Bottle#: 4 Worklist Smp#: 5

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

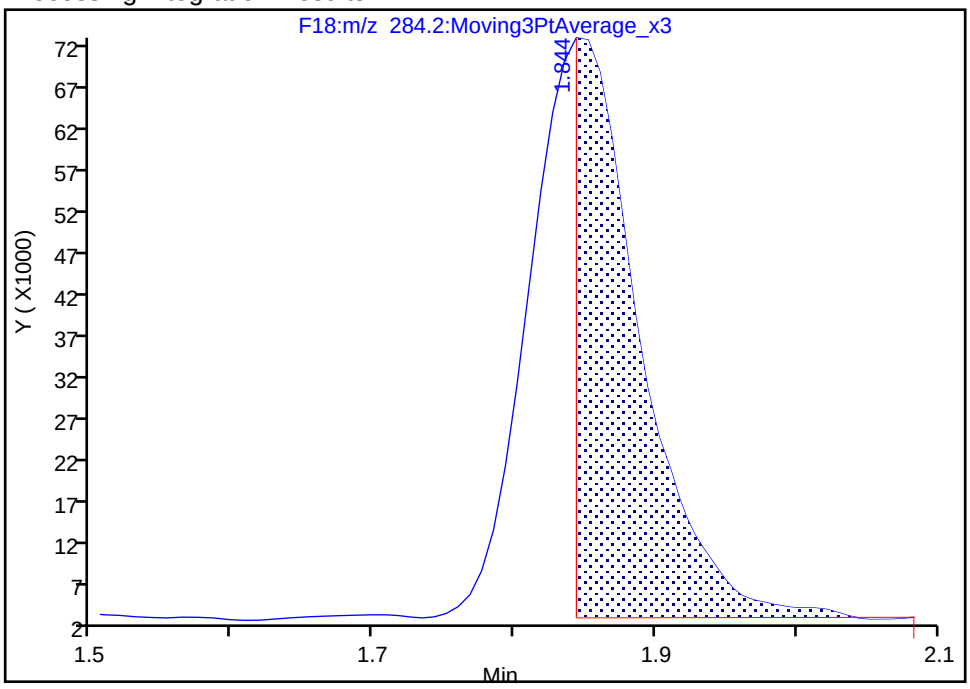
Column: Detector F18:SIR

* 3 Hexahydro-1,3,5-trinitro-1,3,5-t, CAS: STL00205

Signal: 1

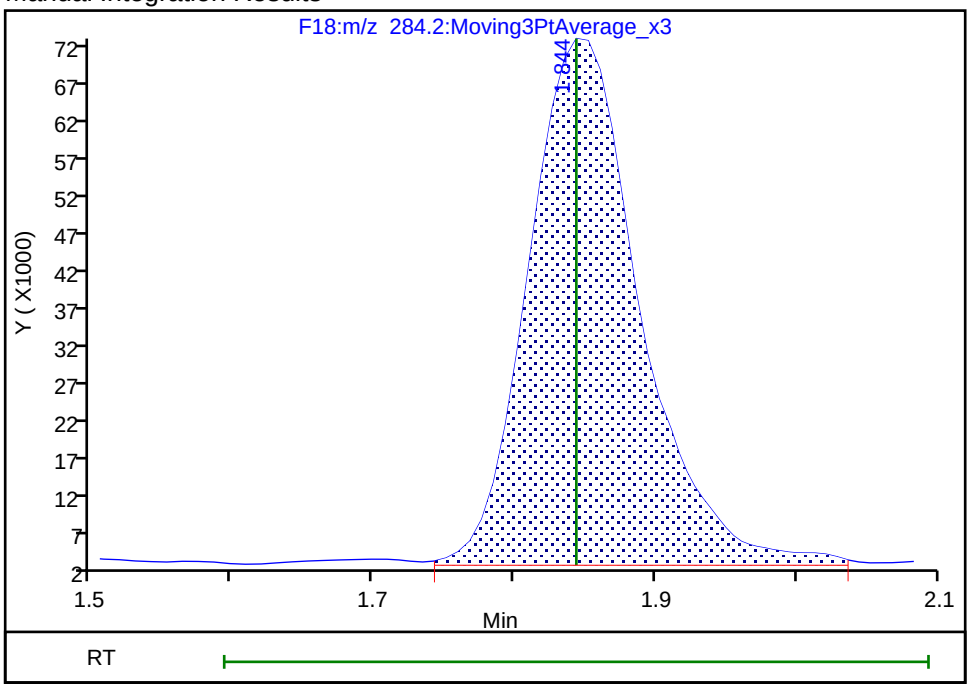
Processing Integration Results

RT: 1.84
Area: 217211
Amount: 125.0000
Amount Units: ug/l



Manual Integration Results

RT: 1.84
Area: 386878
Amount: 125.0000
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 12:30:24

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 08-Apr-2022 07:31:47 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07005.d

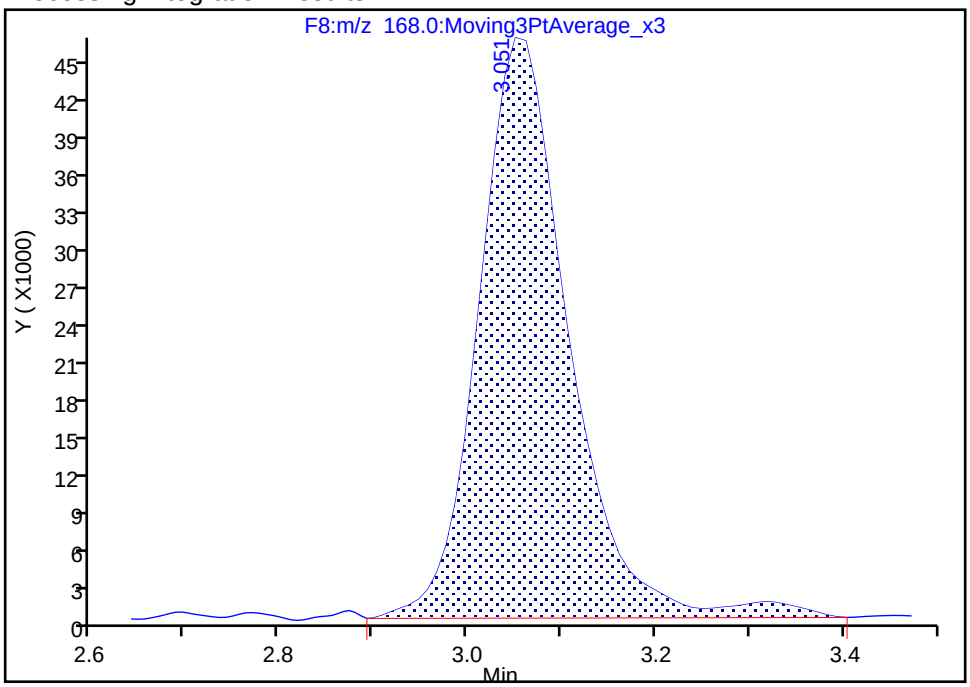
Injection Date:	07-Apr-2022 10:52:25	Instrument ID:	LC_LCMS7		
Lims ID:	STD003				
Client ID:					
Operator ID:	acm	ALS Bottle#:	4	Worklist Smp#:	5
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F8:SIR		

8 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

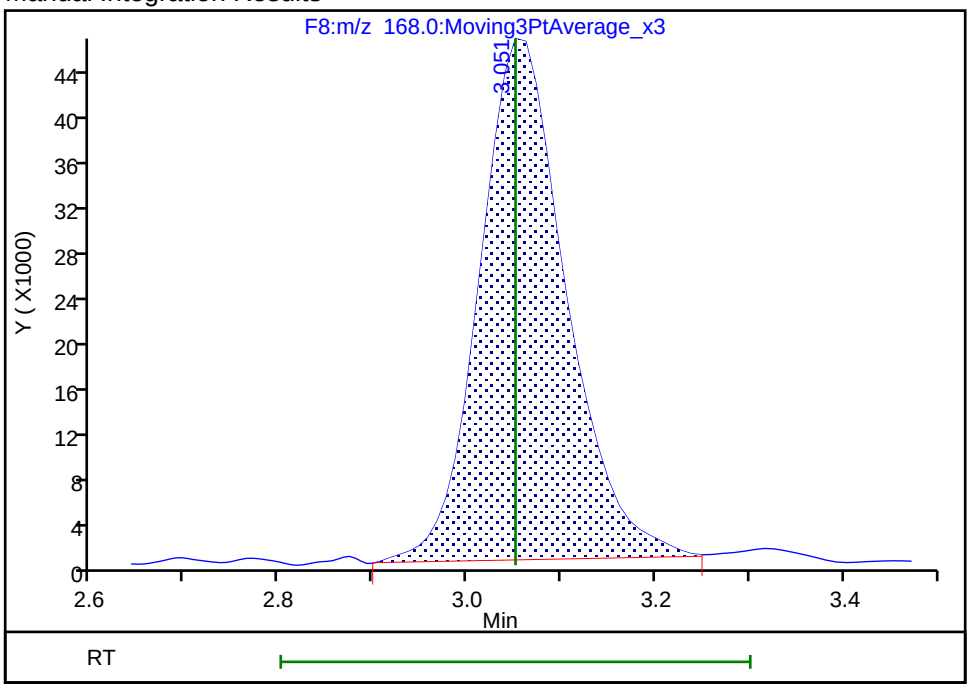
Processing Integration Results

RT: 3.05
Area: 304454
Amount: 28.576717
Amount Units: ug/l



Manual Integration Results

RT: 3.05
Area: 290667
Amount: 27.405022
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 12:30:34

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 08-Apr-2022 07:31:48 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07006.d
Lims ID: STD004
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 07-Apr-2022 10:59:01 ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: STD L4
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:31:48 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 12:30:15
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	87091	54.0	22.8	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		105772	125.0	104	
36 TNX								
144.0	1.385	1.385	0.0	0.751	2269818	50.5	426	
33 DNX								
160.0	1.489	1.489	0.0	0.807	3433937	51.3	496	
34 MNX								
160.0	1.670	1.670	0.0	0.906	1028761	59.3	142	
4 RDX								
281.2	1.841	1.841	0.0	0.998	111850	53.4	22.9	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		374289	125.0	97.3	
5 1,3,5-Trinitrobenzene								
213.0	2.320	2.317	0.003	0.766	735111	47.8	127	
6 Tetryl								
241.1	2.712	2.712	0.0	0.895	994798	47.1	109	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.030	3.030	0.0		1303089	129.4	296	
8 1,3-Dinitrobenzene								
168.0	3.051	3.051	0.0	1.007	531761	48.7	110	
9 Nitroglycerin								
62.0	3.080	3.080	0.0	1.017	503185	51.5	309	
28 3,5-Dinitroaniline								M
183.0	3.230	3.230	0.0	1.066	2386254	49.6	42.6	M

Report Date: 08-Apr-2022 07:31:48 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07006.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.321	3.321	0.0	0.765	3312733	48.3	143	
$ 11 Nitrobenzene-d5								
128.0	3.370	3.370	0.0	0.776	315527	50.7	40.1	
12 Nitrobenzene								
123.0	3.421	3.431	-0.010	0.788	262553	47.5	39.2	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.645	3.645	0.0	0.840	2536530	50.2	31.5	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.970	3.976	-0.006	0.914	3378995	51.8	39.2	
17 2,6-Dinitrotoluene								
182.0	4.144	4.150	-0.006	0.955	3400102	50.7	710	
* 18 2,4-dinitrotoluene-d3								
185.1	4.341	4.341	0.0		4054672	125.0	107	
19 2,4-Dinitrotoluene								
182.0	4.382	4.373	0.009	1.009	1712817	50.0	323	
20 PETN								
61.8	4.716	4.716	0.0	1.086	236129	45.2	48.4	
22 o-Nitrotoluene								
137.0	5.002	5.002	0.0	1.152	504502	49.2	146	
23 p-Nitrotoluene								
137.0	5.311	5.311	0.0	1.223	445418	50.1	123	
24 m-Nitrotoluene								
137.0	5.714	5.704	0.010	1.316	258772	48.4	66.1	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

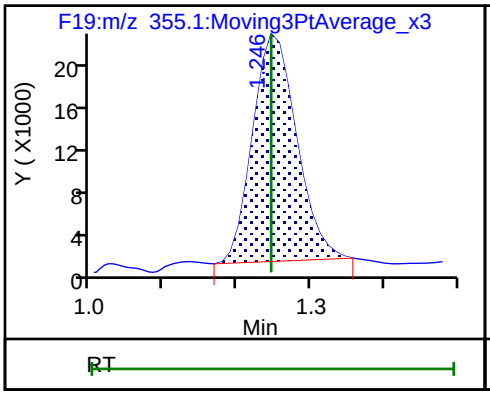
8321EXcalprim_00029	Amount Added: 5.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 5.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 08-Apr-2022 07:31:48 Chrom Revision: 2.3 18-Mar-2022 09:07:22

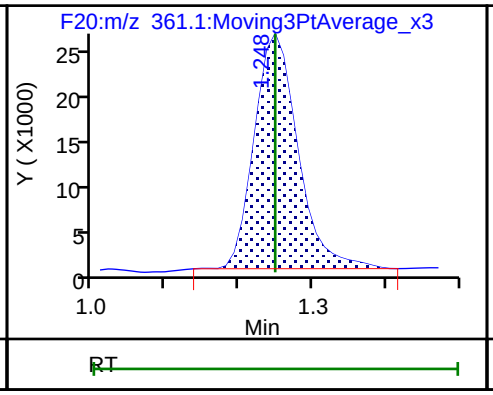
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07006.d
Injection Date: 07-Apr-2022 10:59:01 Instrument ID: LC_LCMS7
Lims ID: STD004
Client ID:
Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

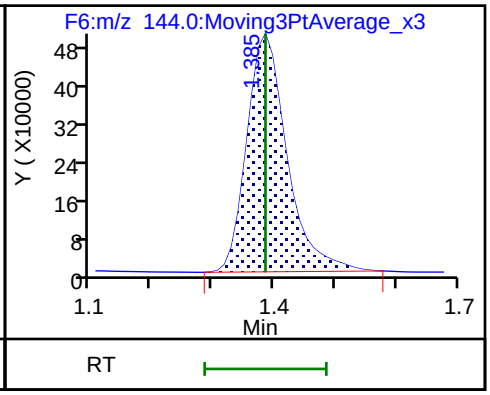
2 HMX



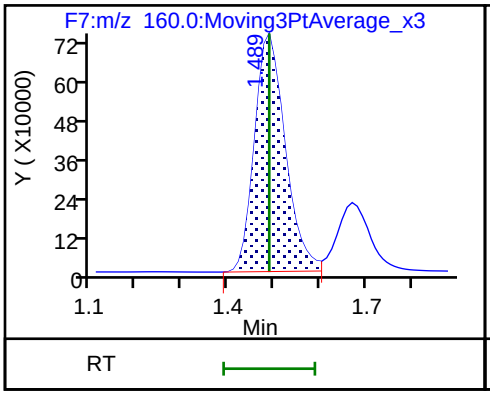
* 1 HMX-13C4



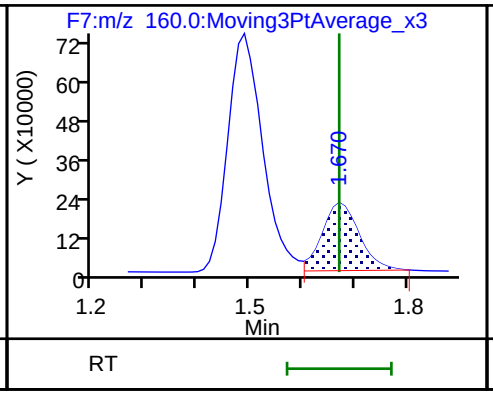
36 TNX



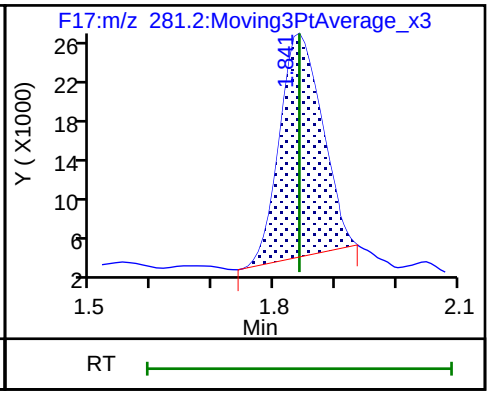
33 DNX



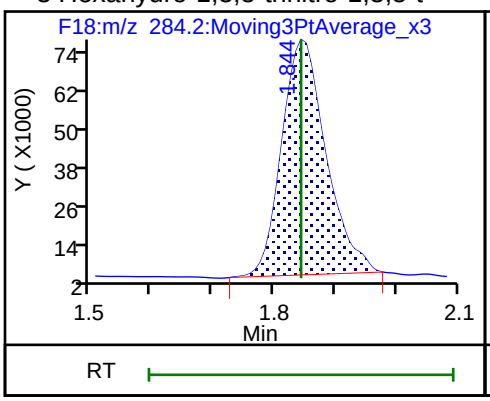
34 MNX



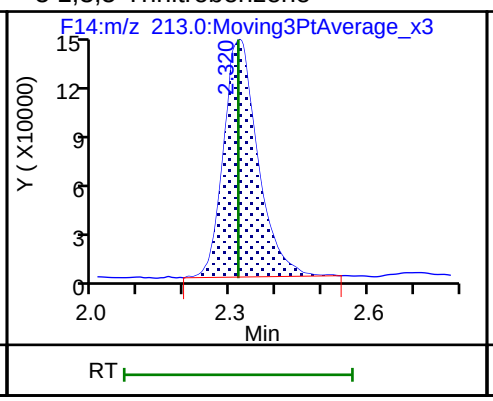
4 RDX



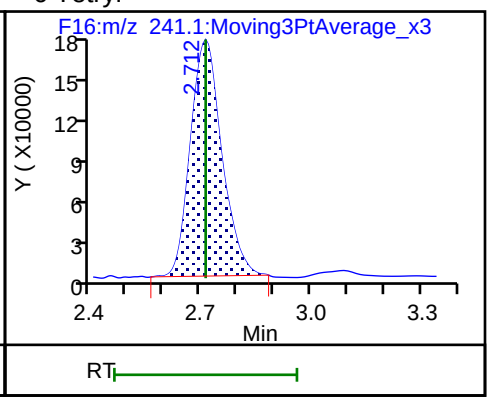
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



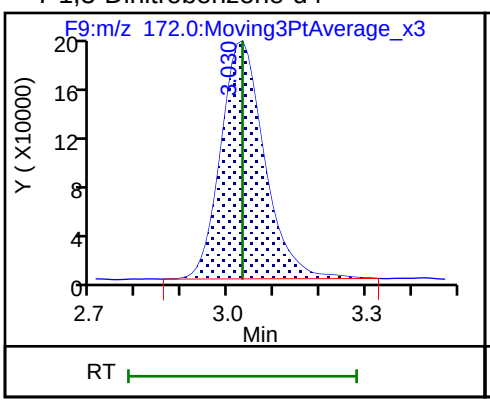
5 1,3,5-Trinitrobenzene



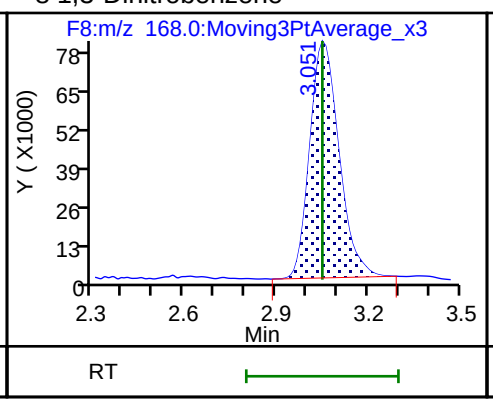
6 Tetryl



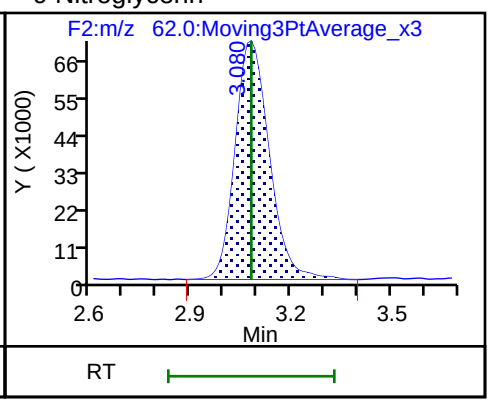
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



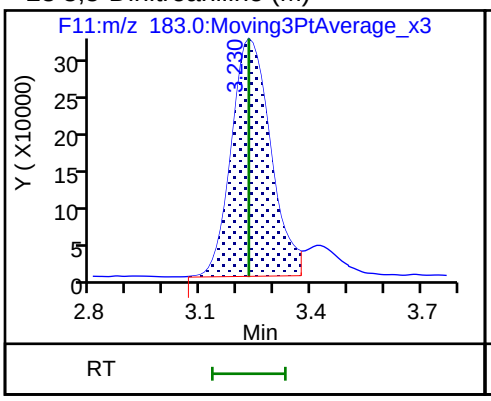
9 Nitroglycerin



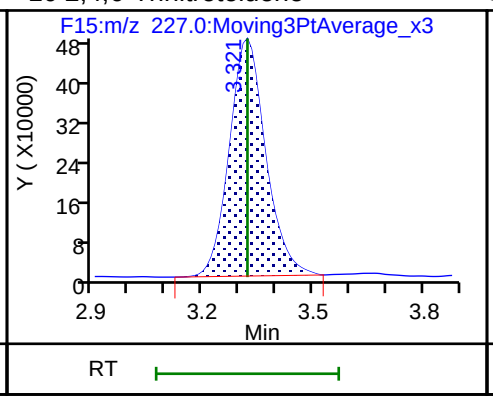
Report Date: 08-Apr-2022 07:31:48 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07006.d

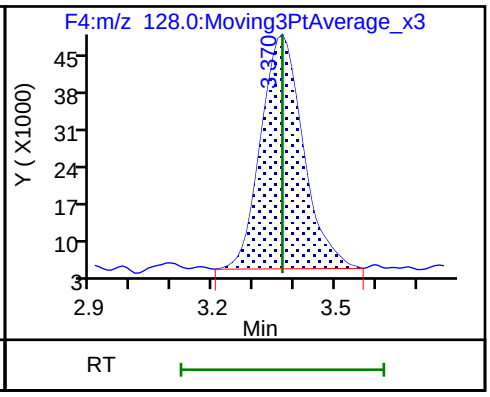
28 3,5-Dinitroaniline (M)



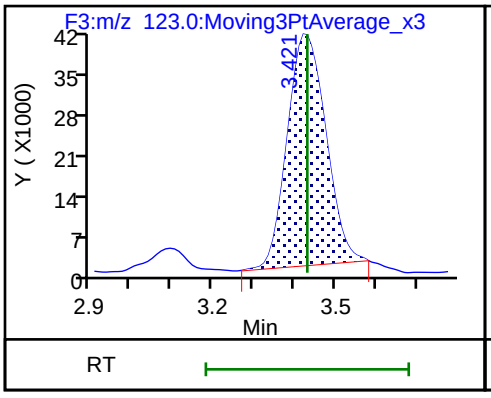
10 2,4,6-Trinitrotoluene



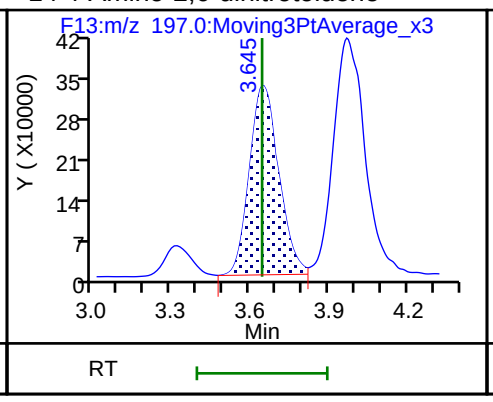
$ 11 Nitrobenzene-d5



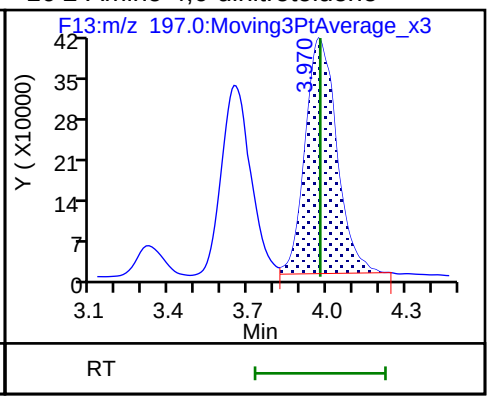
12 Nitrobenzene



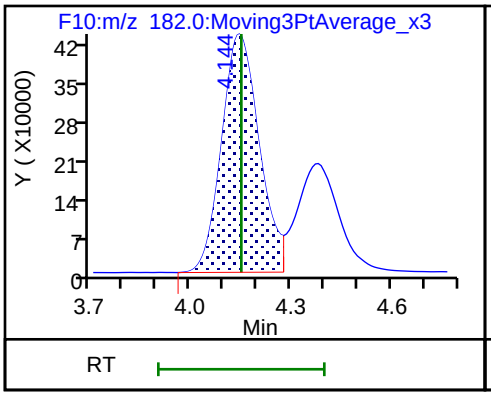
14 4-Amino-2,6-dinitrotoluene



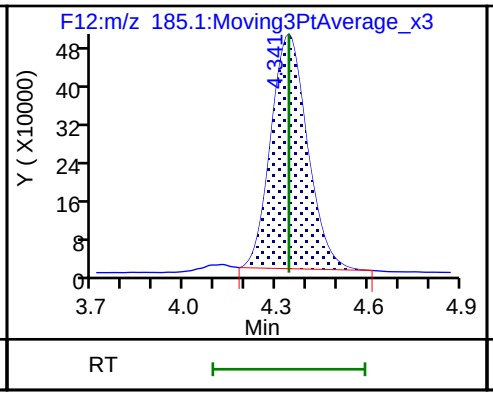
16 2-Amino-4,6-dinitrotoluene



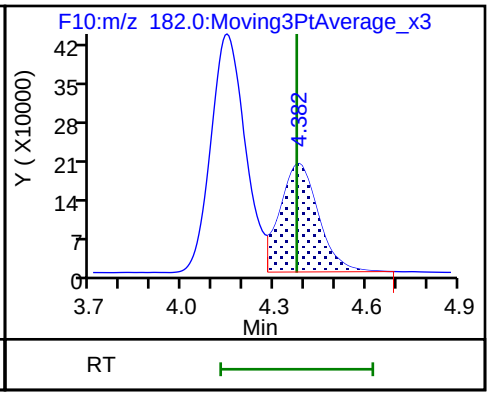
17 2,6-Dinitrotoluene



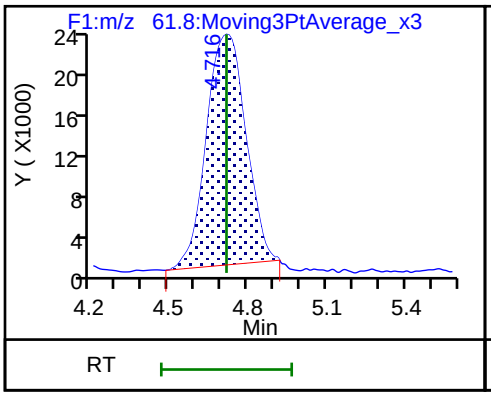
* 18 2,4-dinitrotoluene-d3



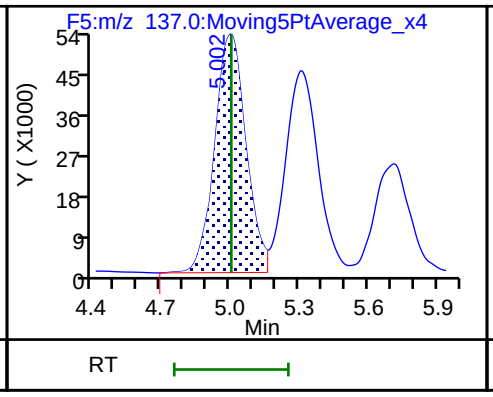
19 2,4-Dinitrotoluene



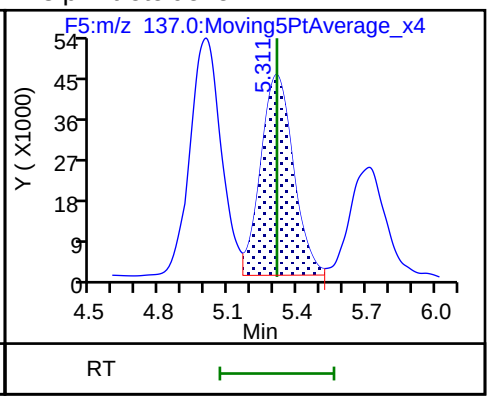
20 PETN



22 o-Nitrotoluene



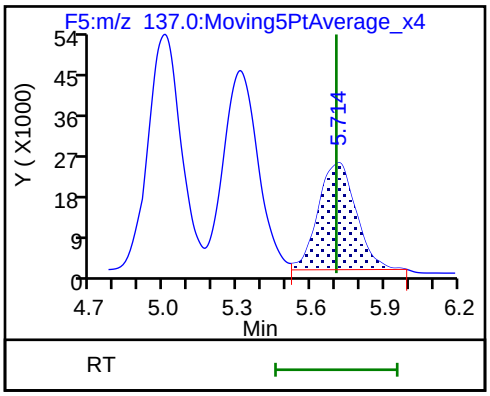
23 p-Nitrotoluene



Report Date: 08-Apr-2022 07:31:48 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07006.d

24 m-Nitrotoluene



Report Date: 08-Apr-2022 07:31:49 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07007.d
Lims ID: STD005
Client ID:
Sample Type: ICISAV Calib Level: 5
Inject. Date: 07-Apr-2022 11:05:36 ALS Bottle#: 6 Worklist Smp#: 7
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: STD L5
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:31:48 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 12:27:47
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	167604	101.4	46.2	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		104003	125.0	105	
36 TNX								
144.0	1.385	1.385	0.0	0.751	4424009	100.5	630	
33 DNX								
160.0	1.489	1.489	0.0	0.807	6561860	99.6	445	
34 MNX								
160.0	1.670	1.670	0.0	0.906	2011086	117.4	127	
4 RDX								
281.2	1.841	1.841	0.0	0.998	207868	96.0	59.6	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								M
284.2	1.844	1.844	0.0		390672	125.0	164	M
5 1,3,5-Trinitrobenzene								
213.0	2.317	2.317	0.0	0.765	1468666	96.7	169	
6 Tetryl								
241.1	2.712	2.712	0.0	0.895	2039998	96.8	126	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.030	3.030	0.0		1288804	129.4	338	
8 1,3-Dinitrobenzene								
168.0	3.051	3.051	0.0	1.007	1083821	100.7	149	
9 Nitroglycerin								
62.0	3.080	3.080	0.0	1.017	955326	100.0	324	
28 3,5-Dinitroaniline								M
183.0	3.230	3.230	0.0	1.066	4773809	100.0	49.5	M

Report Date: 08-Apr-2022 07:31:49 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07007.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.321	3.321	0.0	0.765	6694059	99.0	176	
$ 11 Nitrobenzene-d5								
128.0	3.370	3.370	0.0	0.776	647894	103.4	145	
12 Nitrobenzene								
123.0	3.431	3.431	0.0	0.790	513734	95.1	42.4	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.645	3.645	0.0	0.840	4909196	98.1	34.5	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.976	3.976	0.0	0.916	6483676	100.1	41.9	
17 2,6-Dinitrotoluene								
182.0	4.150	4.150	0.0	0.956	6600341	99.2	605	
* 18 2,4-dinitrotoluene-d3								
185.1	4.341	4.341	0.0		4037907	125.0	123	
19 2,4-Dinitrotoluene								
182.0	4.373	4.373	0.0	1.007	3369570	99.5	283	
20 PETN								
61.8	4.716	4.716	0.0	1.086	523792	99.5	119	
22 o-Nitrotoluene								
137.0	5.002	5.002	0.0	1.152	1007810	99.0	318	
23 p-Nitrotoluene								
137.0	5.311	5.311	0.0	1.223	881055	100.0	259	
24 m-Nitrotoluene								
137.0	5.704	5.704	0.0	1.314	535121	100.8	142	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

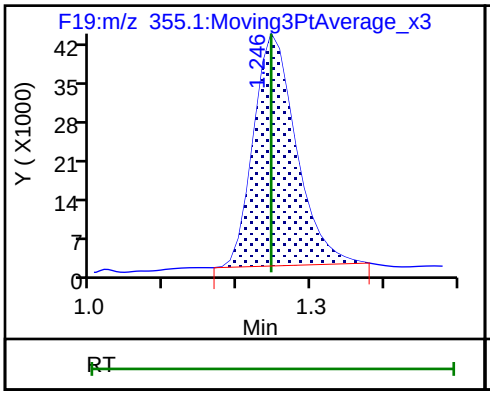
8321EXcalprim_00029	Amount Added: 10.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 10.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 08-Apr-2022 07:31:49 Chrom Revision: 2.3 18-Mar-2022 09:07:22

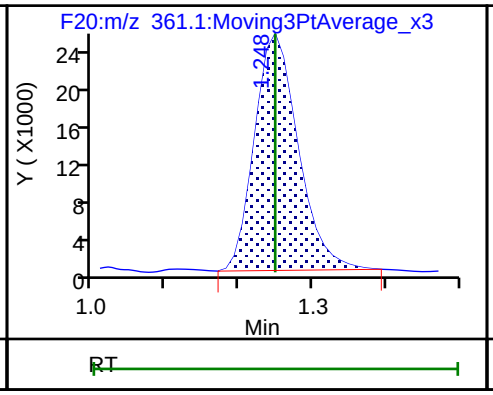
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07007.d
Injection Date: 07-Apr-2022 11:05:36 Instrument ID: LC_LCMS7
Lims ID: STD005
Client ID:
Operator ID: acm ALS Bottle#: 6 Worklist Smp#: 7
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

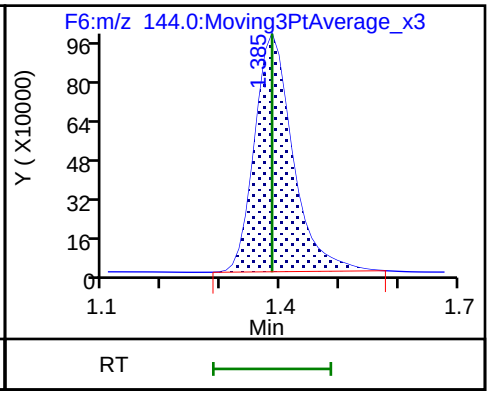
2 HMX



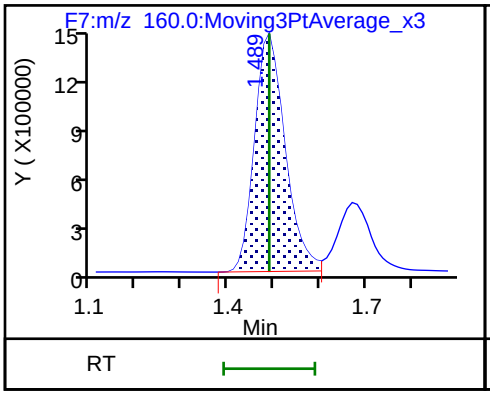
* 1 HMX-13C4



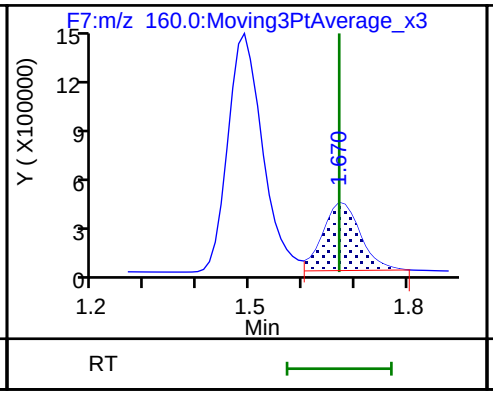
36 TNX



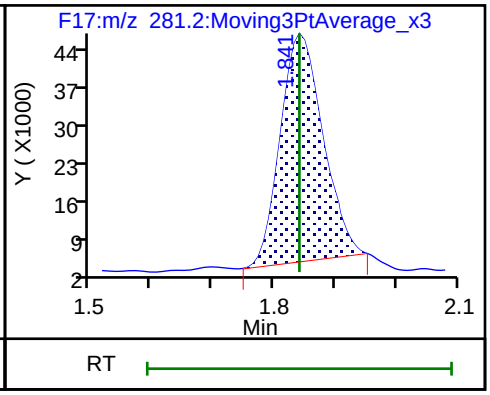
33 DNX



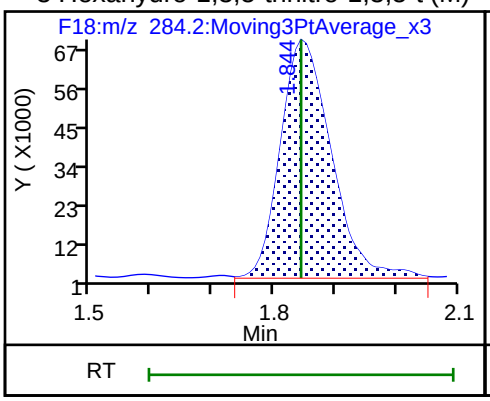
34 MNX



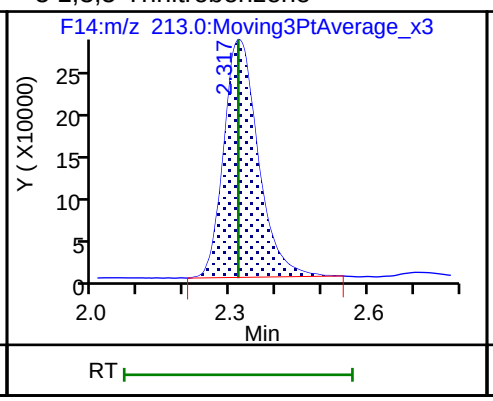
4 RDX



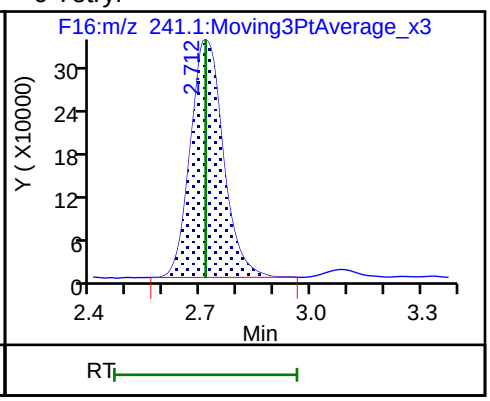
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t (M)



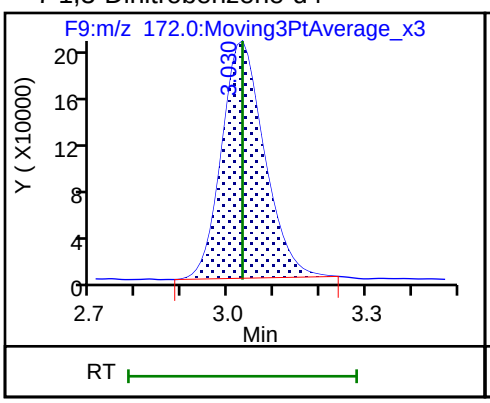
5 1,3,5-Trinitrobenzene



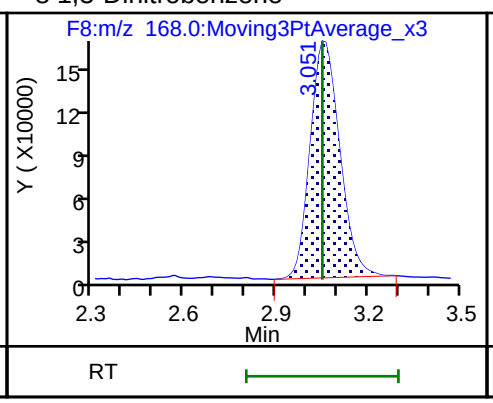
6 Tetryl



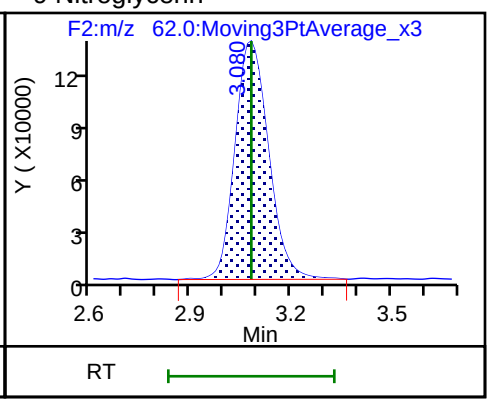
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

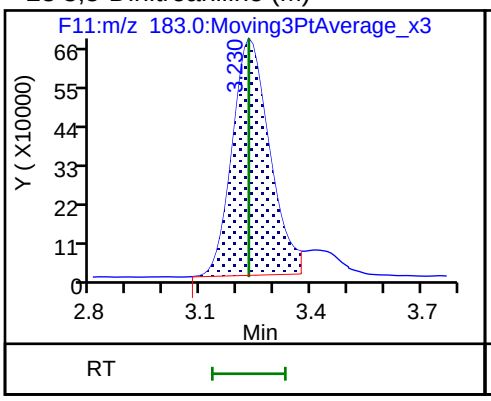


9 Nitroglycerin

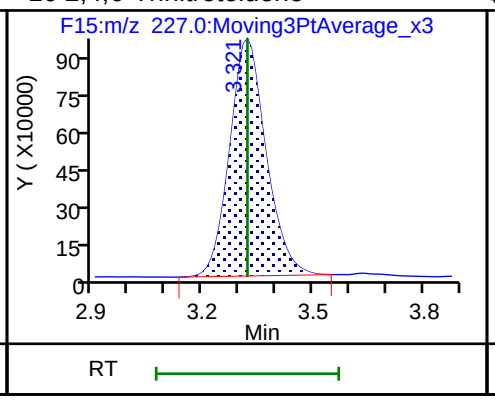


Report Date: 08-Apr-2022 07:31:49 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07007.d

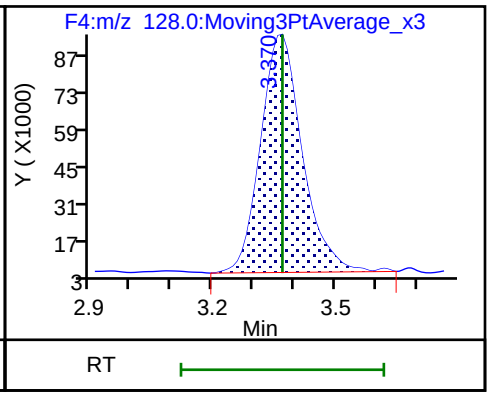
28 3,5-Dinitroaniline (M)



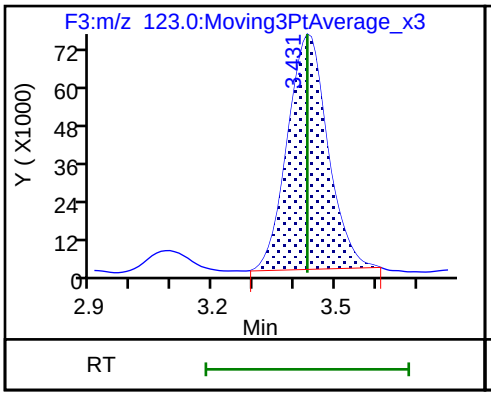
10 2,4,6-Trinitrotoluene



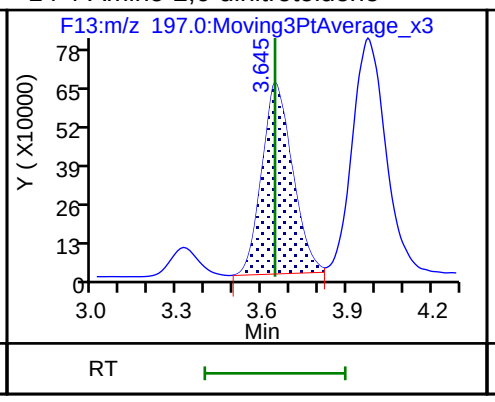
$ 11 Nitrobenzene-d5



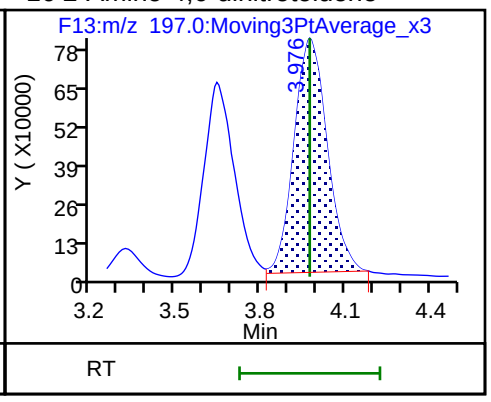
12 Nitrobenzene



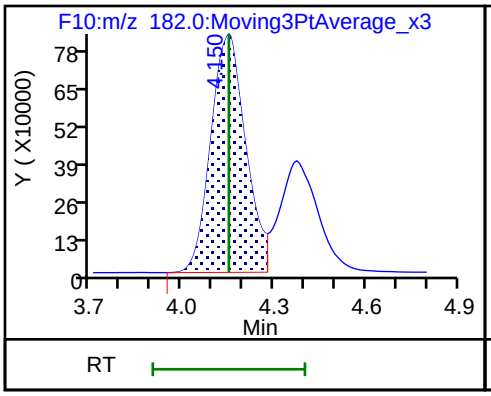
14 4-Amino-2,6-dinitrotoluene



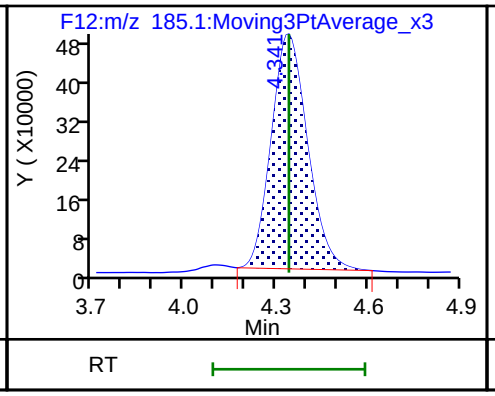
16 2-Amino-4,6-dinitrotoluene



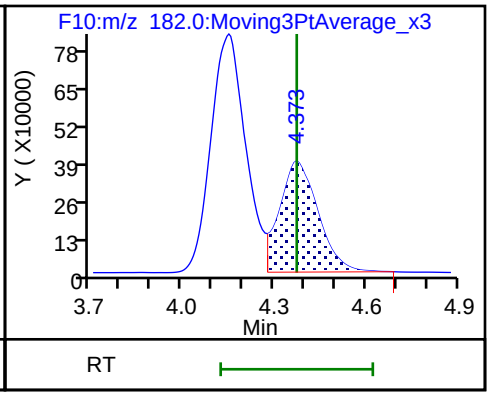
17 2,6-Dinitrotoluene



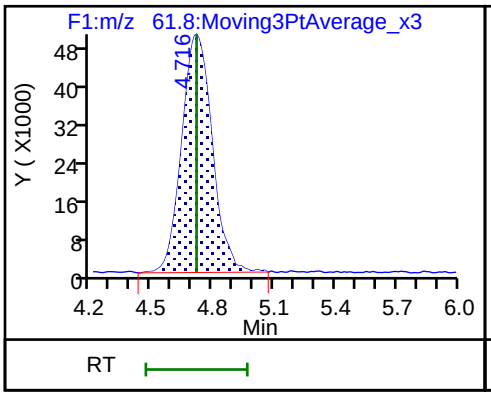
* 18 2,4-dinitrotoluene-d3



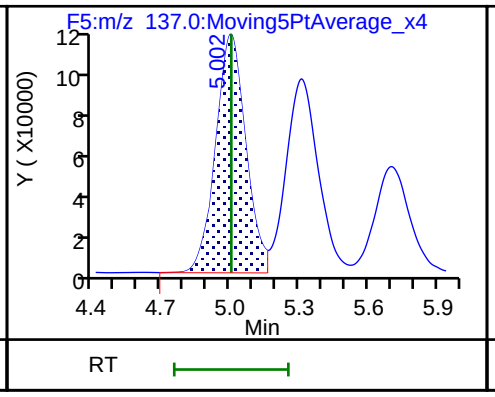
19 2,4-Dinitrotoluene



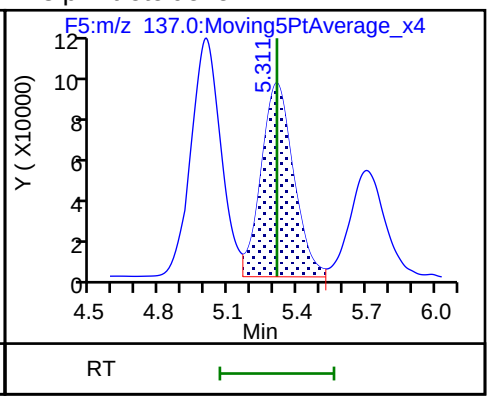
20 PETN



22 o-Nitrotoluene

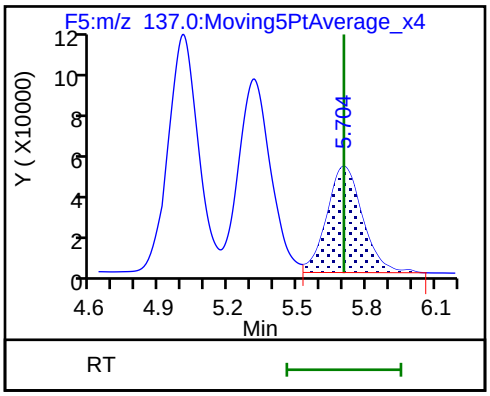


23 p-Nitrotoluene



Report Date: 08-Apr-2022 07:31:49 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07007.d

24 m-Nitrotoluene



Report Date: 08-Apr-2022 07:31:49 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07007.d

Injection Date: 07-Apr-2022 11:05:36 Instrument ID: LC_LCMS7

Lims ID: STD005

Client ID:

Operator ID: acm ALS Bottle#: 6 Worklist Smp#: 7

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

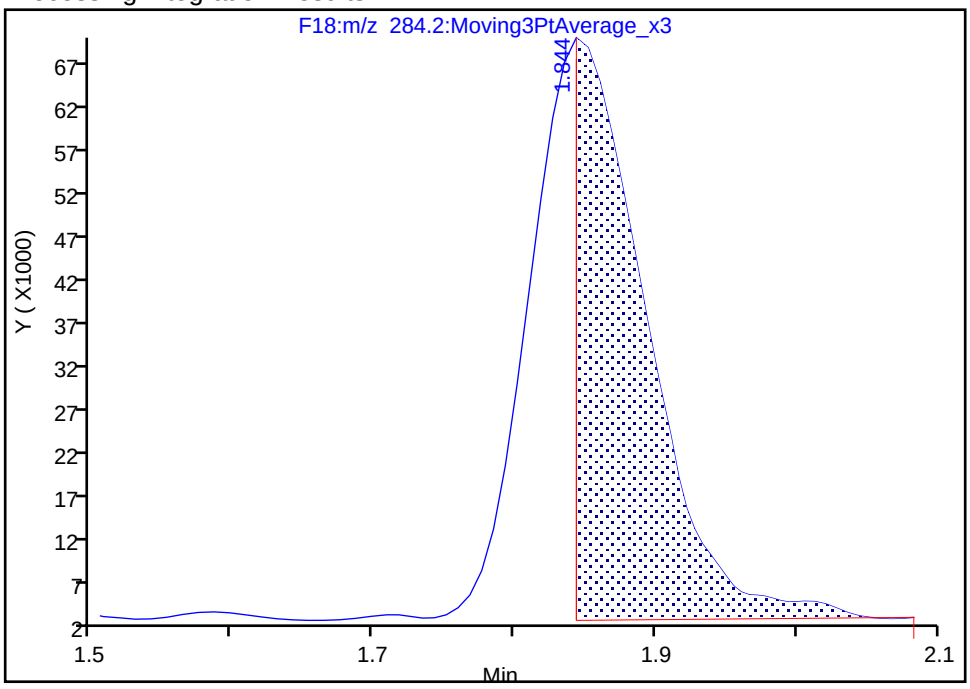
Column: Detector F18:SIR

* 3 Hexahydro-1,3,5-trinitro-1,3,5-t, CAS: STL00205

Signal: 1

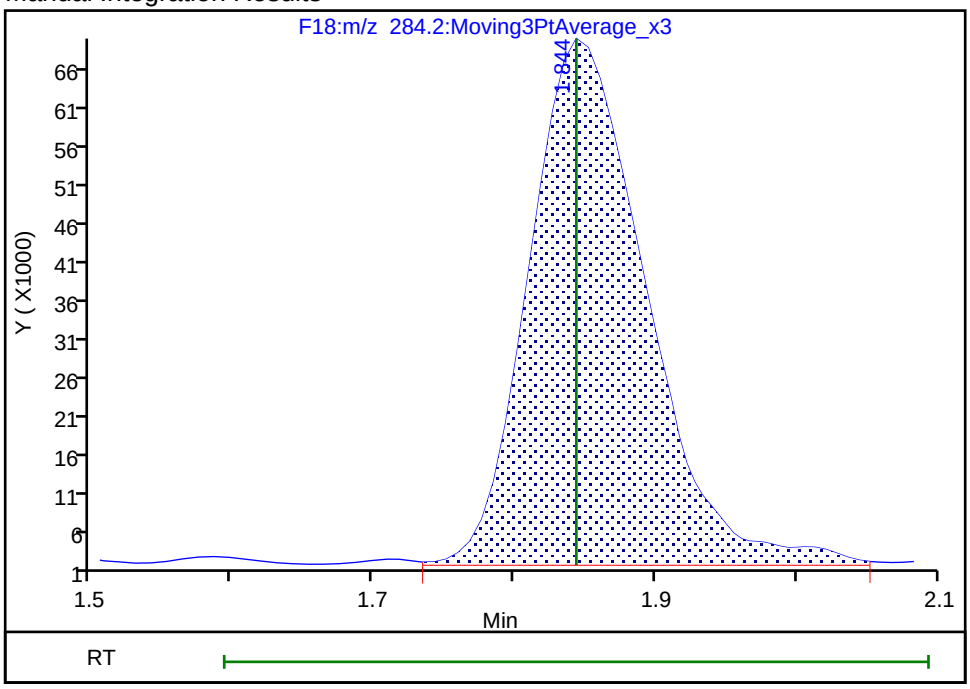
Processing Integration Results

RT: 1.84
Area: 230001
Amount: 125.0000
Amount Units: ug/l



Manual Integration Results

RT: 1.84
Area: 390672
Amount: 125.0000
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 12:28:47

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07008.d
Lims ID: STD006
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 07-Apr-2022 11:12:12 ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: STD L6
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:31:49 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 12:29:07
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	303574	195.0	85.4	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		90362	125.0	100	
36 TNX								
144.0	1.385	1.385	0.0	0.751	8738352	199.2	918	
33 DNX								M
160.0	1.489	1.489	0.0	0.807	13331894	202.6	579	M
34 MNX								M
160.0	1.670	1.670	0.0	0.906	4123947	240.5	164	M
4 RDX								
281.2	1.849	1.841	0.008	1.003	457885	225.7	187	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		368519	125.0	73.9	
5 1,3,5-Trinitrobenzene								
213.0	2.320	2.317	0.003	0.766	3026802	199.3	177	
6 Tetryl								
241.1	2.705	2.712	-0.007	0.893	4286053	202.2	165	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.030	3.030	0.0		1290829	129.4	146	
8 1,3-Dinitrobenzene								
168.0	3.051	3.051	0.0	1.007	2195358	204.0	209	
9 Nitroglycerin								
62.0	3.080	3.080	0.0	1.017	1889719	198.5	739	
28 3,5-Dinitroaniline								M
183.0	3.230	3.230	0.0	1.066	9287075	197.1	47.4	M

Report Date: 08-Apr-2022 07:31:49 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07008.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.321	3.321	0.0	0.766	13518546	200.0	172	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.775	1278659	202.1	218	
12 Nitrobenzene								
123.0	3.421	3.431	-0.010	0.790	1069959	199.0	42.3	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.652	3.645	0.007	0.843	9988757	202.3	35.9	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.982	3.976	0.006	0.919	12863660	201.3	43.3	
17 2,6-Dinitrotoluene								
182.0	4.144	4.150	-0.006	0.957	13285372	202.5	531	
* 18 2,4-dinitrotoluene-d3								
185.1	4.332	4.341	-0.009		3992973	125.0	103	
19 2,4-Dinitrotoluene								
182.0	4.373	4.373	0.0	1.009	6720093	201.2	254	
20 PETN								
61.8	4.716	4.716	0.0	1.089	1079333	206.3	217	
22 o-Nitrotoluene								
137.0	4.992	5.002	-0.010	1.152	2031791	202.2	443	
23 p-Nitrotoluene								
137.0	5.311	5.311	0.0	1.226	1752177	201.7	362	
24 m-Nitrotoluene								
137.0	5.699	5.704	-0.005	1.316	1043429	199.2	198	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

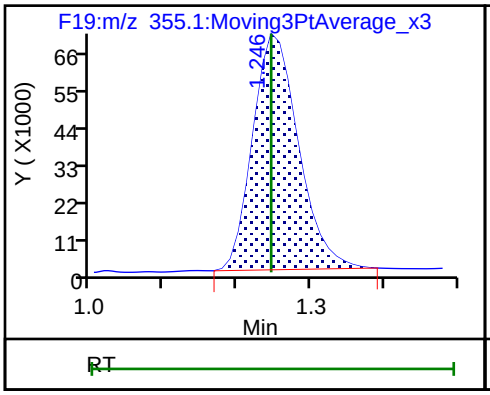
8321EXcalprim_00029	Amount Added: 20.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 20.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 08-Apr-2022 07:31:49 Chrom Revision: 2.3 18-Mar-2022 09:07:22

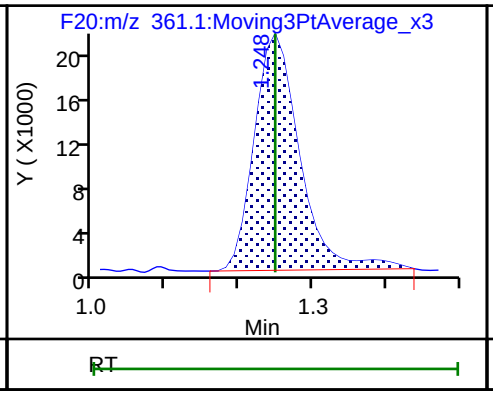
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07008.d
Injection Date: 07-Apr-2022 11:12:12 Instrument ID: LC_LCMS7
Lims ID: STD006
Client ID:
Operator ID: acm ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

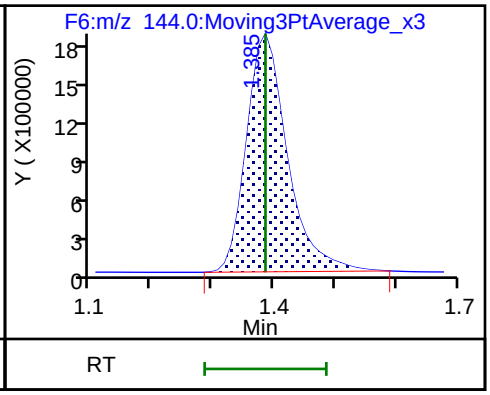
2 HMX



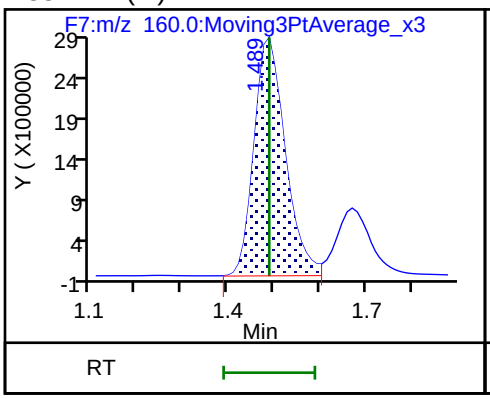
* 1 HMX-13C4



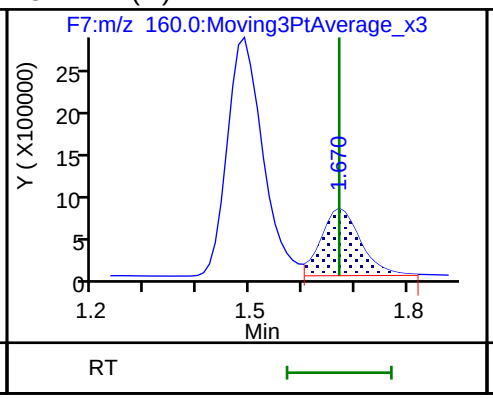
36 TNX



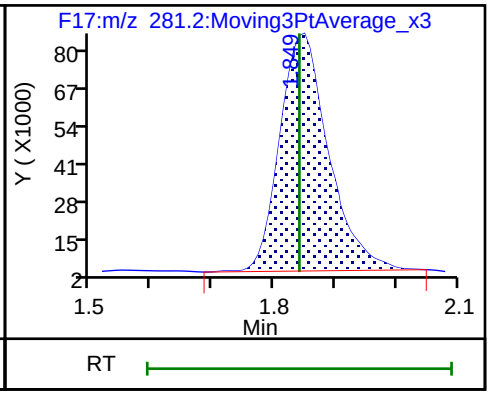
33 DNX (M)



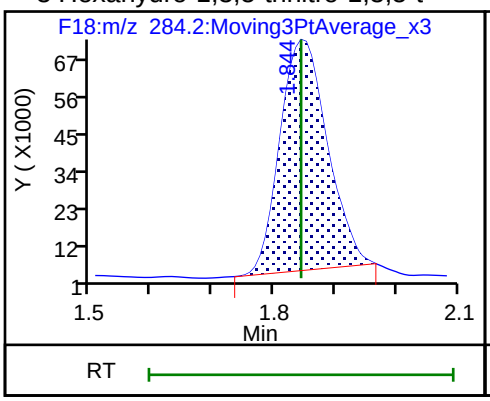
34 MNX (M)



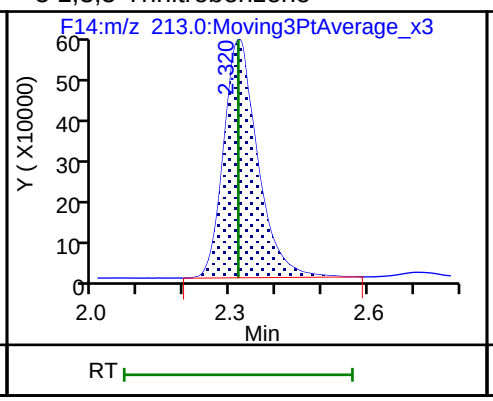
4 RDX



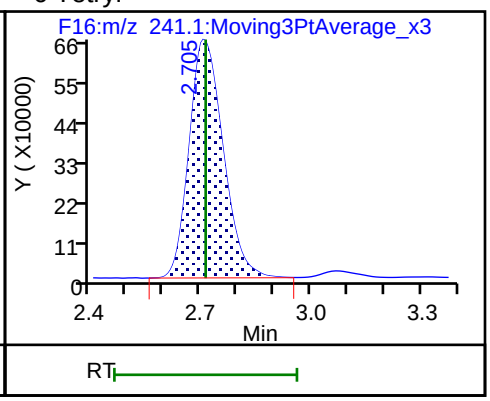
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



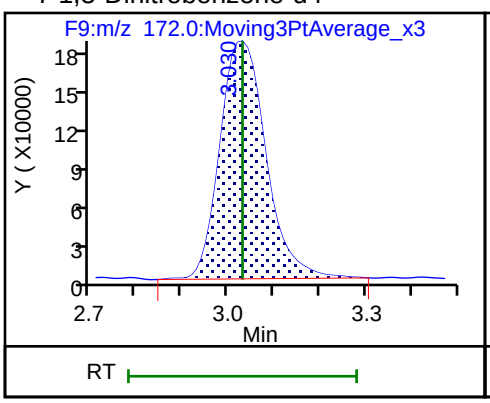
5 1,3,5-Trinitrobenzene



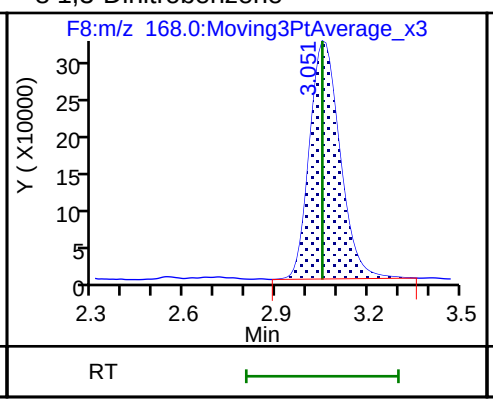
6 Tetryl



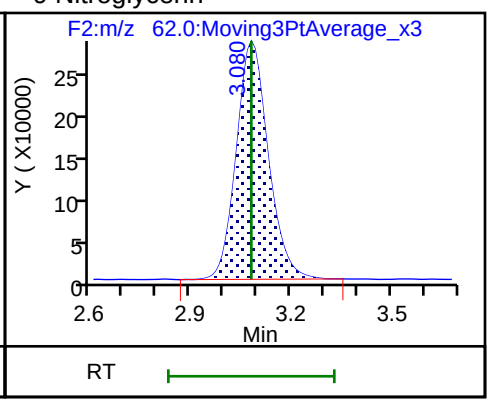
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

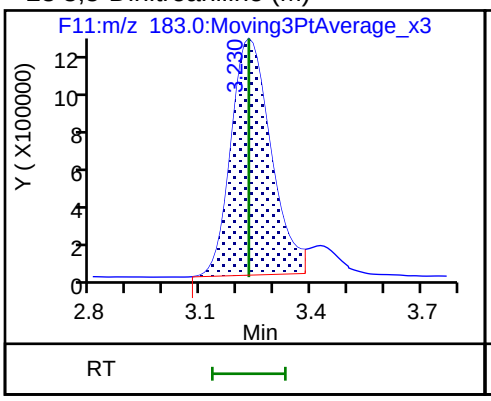


9 Nitroglycerin

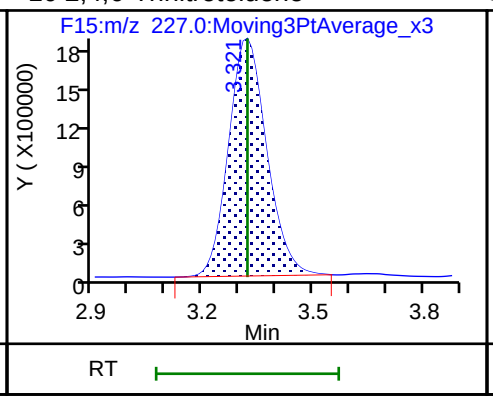


Report Date: 08-Apr-2022 07:31:49 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07008.d

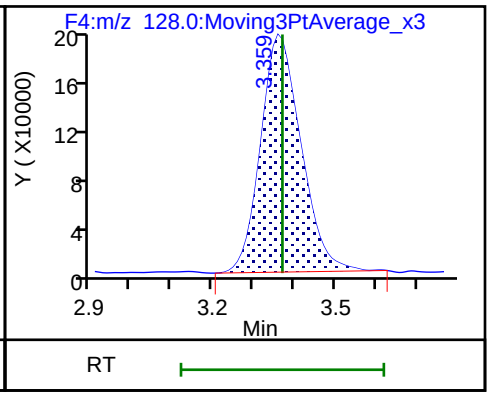
28 3,5-Dinitroaniline (M)



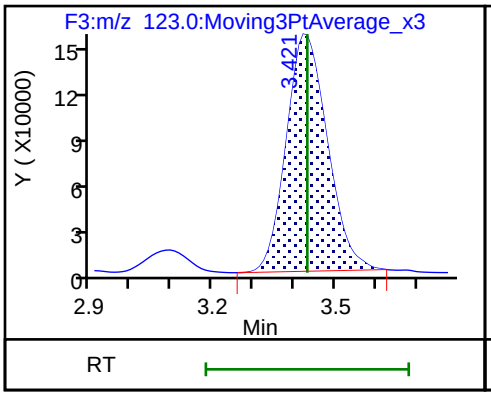
10 2,4,6-Trinitrotoluene



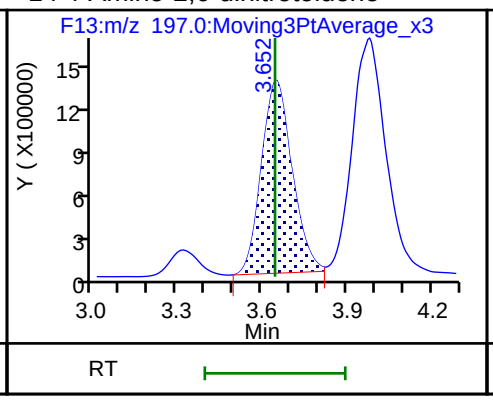
$ 11 Nitrobenzene-d5



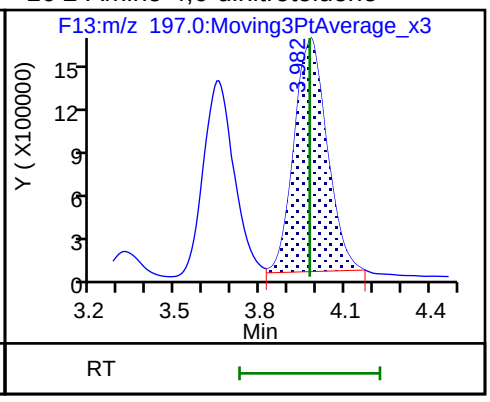
12 Nitrobenzene



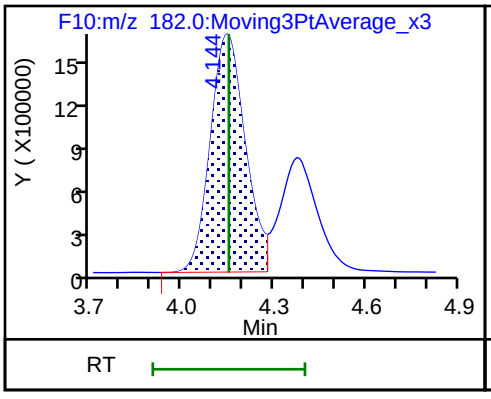
14 4-Amino-2,6-dinitrotoluene



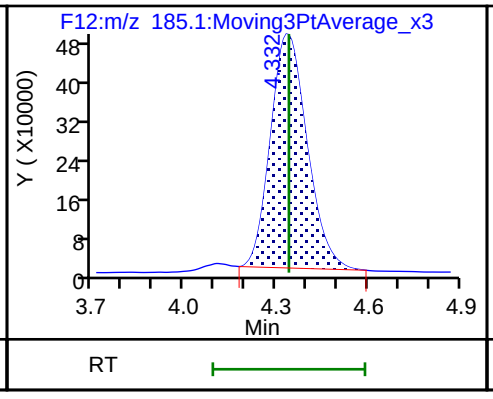
16 2-Amino-4,6-dinitrotoluene



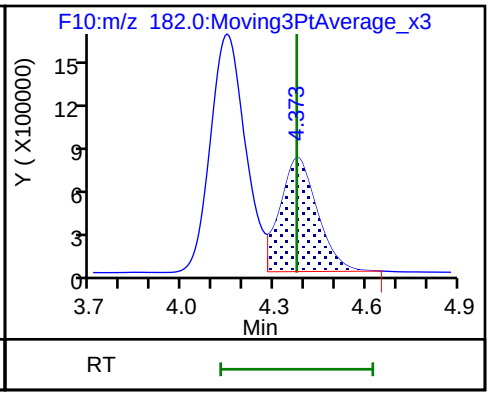
17 2,6-Dinitrotoluene



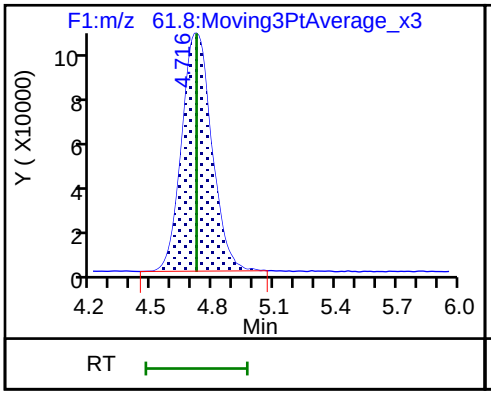
* 18 2,4-dinitrotoluene-d3



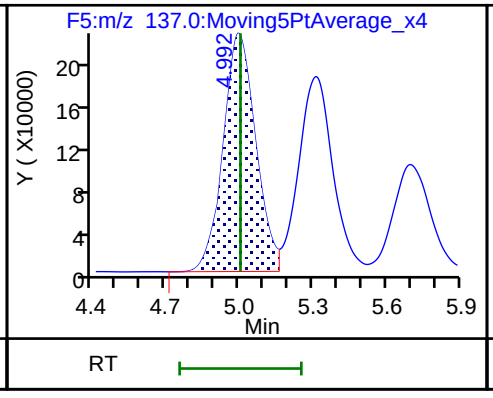
19 2,4-Dinitrotoluene



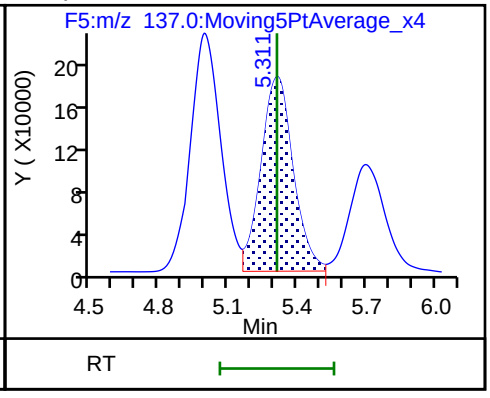
20 PETN



22 o-Nitrotoluene

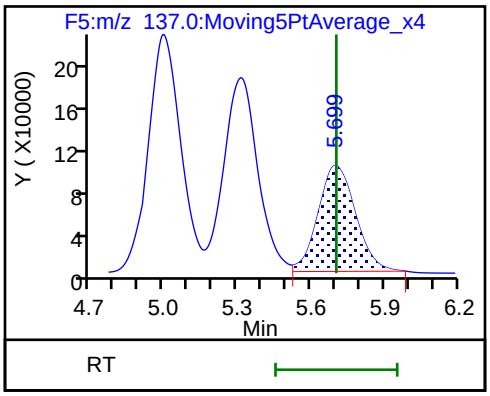


23 p-Nitrotoluene



Report Date: 08-Apr-2022 07:31:49 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07008.d

24 m-Nitrotoluene



Report Date: 08-Apr-2022 07:31:49 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07008.d

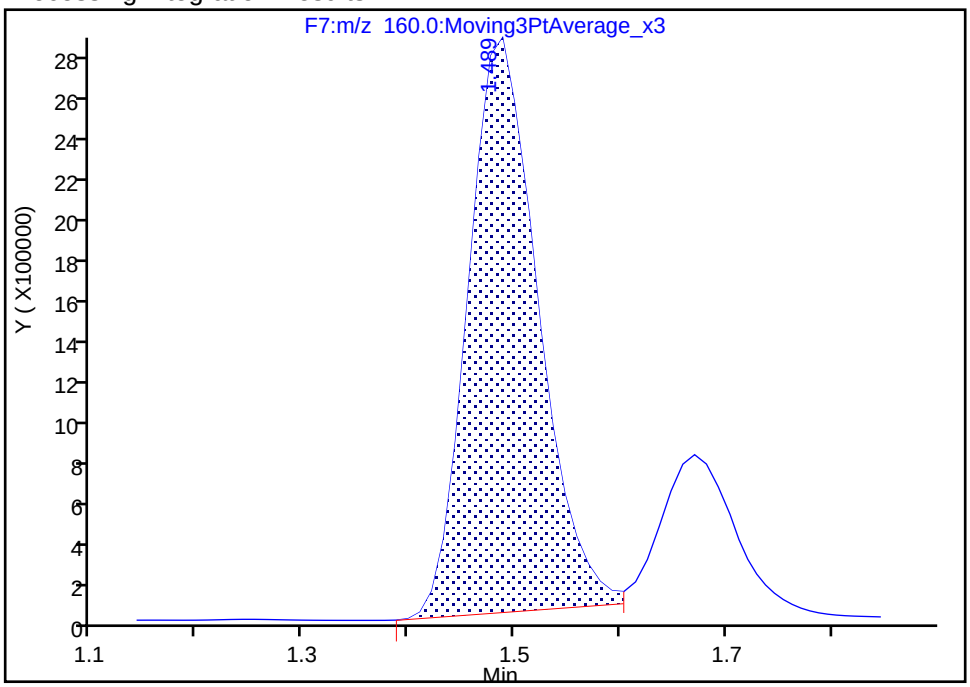
Injection Date:	07-Apr-2022 11:12:12	Instrument ID:	LC_LCMS7
Lims ID:	STD006		
Client ID:			
Operator ID:	acm	ALS Bottle#:	7 Worklist Smp#: 8
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F7:SIR

33 DNX, CAS: 80251-29-2

Signal: 1

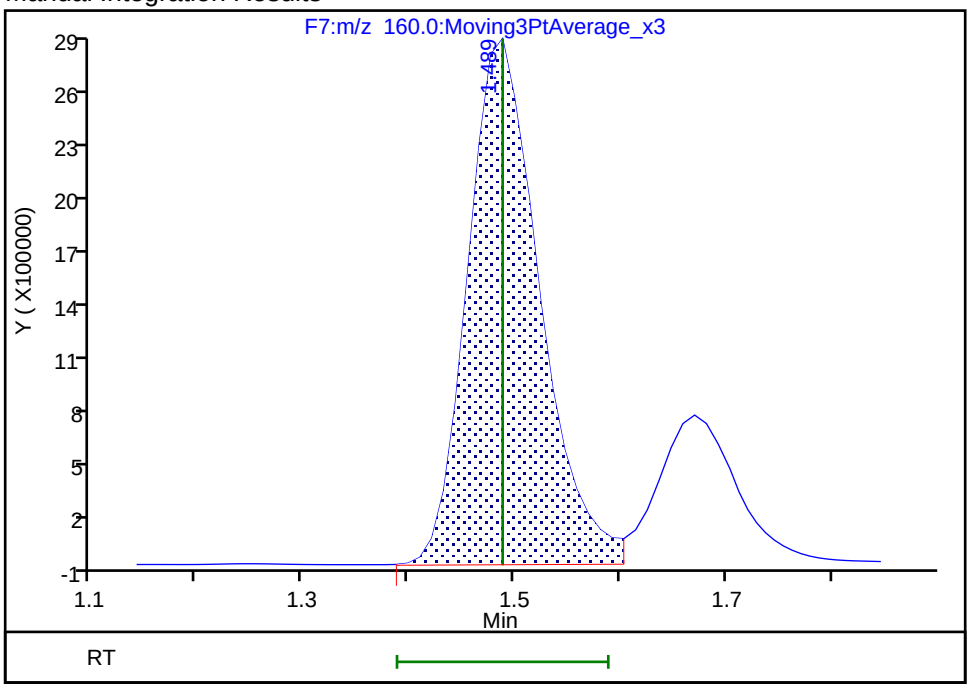
Processing Integration Results

RT: 1.49
Area: 12806913
Amount: 197.0380
Amount Units: ug/l



Manual Integration Results

RT: 1.49
Area: 13331894
Amount: 202.6234
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 12:33:28

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 08-Apr-2022 07:31:49 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07008.d

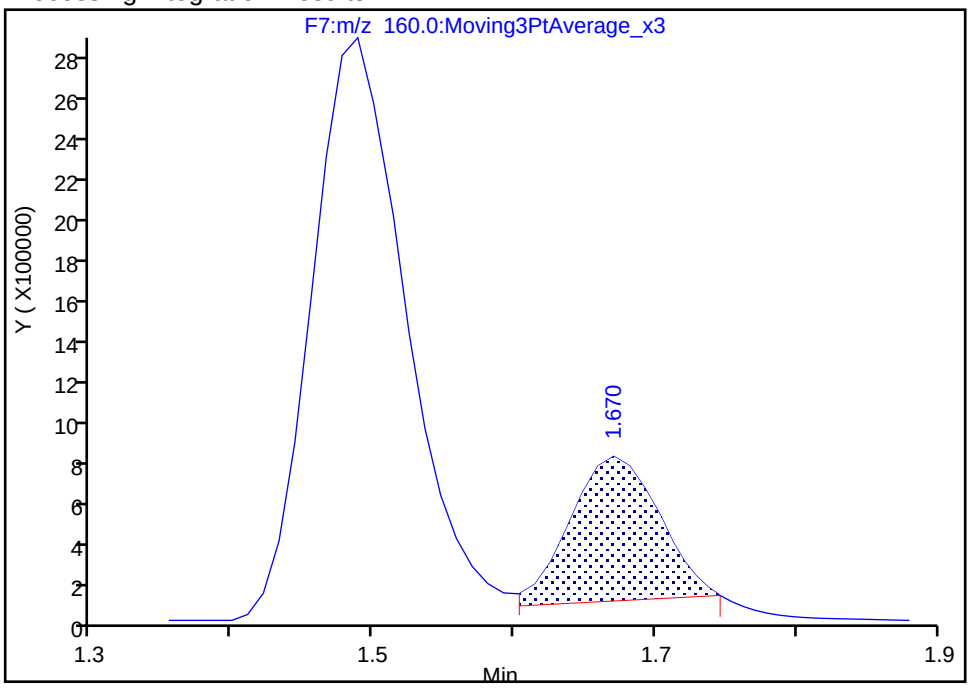
Injection Date:	07-Apr-2022 11:12:12	Instrument ID:	LC_LCMS7
Lims ID:	STD006		
Client ID:			
Operator ID:	acm	ALS Bottle#:	7 Worklist Smp#: 8
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F7:SIR

34 MNX, CAS: 5755-27-1

Signal: 1

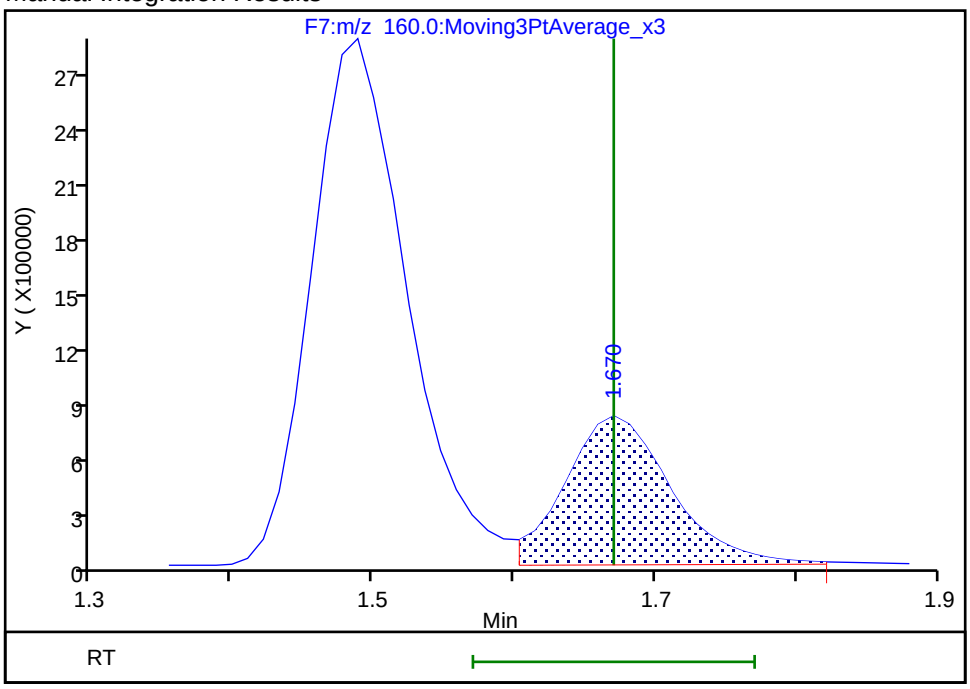
Processing Integration Results

RT: 1.67
Area: 3051048
Amount: 183.9533
Amount Units: ug/l



Manual Integration Results

RT: 1.67
Area: 4123947
Amount: 240.5355
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 12:33:34

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 08-Apr-2022 07:31:50 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d
Lims ID: STD007
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 07-Apr-2022 11:18:48 ALS Bottle#: 8 Worklist Smp#: 9
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: STD L7
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:31:50 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 12:29:27
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	480096	302.3	162	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		84617	125.0	63.3	
36 TNX								
144.0	1.385	1.385	0.0	0.751	13296498	299.6	778	
33 DNX								
160.0	1.489	1.489	0.0	0.807	19738864	296.4	472	
34 MNX								
160.0	1.670	1.670	0.0	0.906	5897261	339.6	135	
4 RDX								
281.2	1.841	1.841	0.0	0.998	643721	277.2	224	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		422217	125.0	95.8	
5 1,3,5-Trinitrobenzene								
213.0	2.313	2.317	-0.004	0.766	4725719	307.2	177	
6 Tetryl								
241.1	2.712	2.712	0.0	0.898	6530605	303.8	174	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.030	-0.011		1307713	129.4	297	
8 1,3-Dinitrobenzene								
168.0	3.051	3.051	0.0	1.011	3229967	296.4	244	
9 Nitroglycerin								
62.0	3.080	3.080	0.0	1.020	2925941	304.0	865	
28 3,5-Dinitroaniline								M
183.0	3.230	3.230	0.0	1.070	14545878	302.7	47.5	M

Report Date: 08-Apr-2022 07:31:50 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.321	3.321	0.0	0.765	20864619	304.8	180	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.774	1901544	295.9	265	
12 Nitrobenzene								
123.0	3.421	3.431	-0.010	0.788	1693860	311.6	42.3	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.645	3.645	0.0	0.840	15128171	300.5	35.4	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.970	3.976	-0.006	0.914	19558982	300.1	43.3	
17 2,6-Dinitrotoluene								
182.0	4.138	4.150	-0.012	0.953	20094289	300.3	518	
* 18 2,4-dinitrotoluene-d3								
185.1	4.341	4.341	0.0		4074060	125.0	99.1	
19 2,4-Dinitrotoluene								
182.0	4.373	4.373	0.0	1.007	10268026	301.7	245	
20 PETN								
61.8	4.726	4.716	0.010	1.089	1584418	296.4	258	
22 o-Nitrotoluene								
137.0	4.997	5.002	-0.005	1.151	3073974	299.9	882	
23 p-Nitrotoluene								
137.0	5.306	5.311	-0.005	1.222	2656361	299.9	712	
24 m-Nitrotoluene								
137.0	5.704	5.704	0.0	1.314	1621114	303.5	408	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

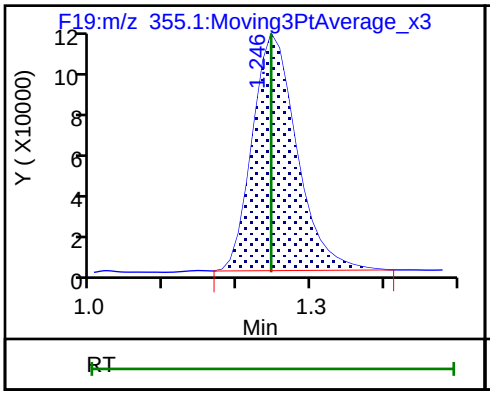
8321EXcalprim_00029	Amount Added: 30.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 30.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 08-Apr-2022 07:31:50 Chrom Revision: 2.3 18-Mar-2022 09:07:22

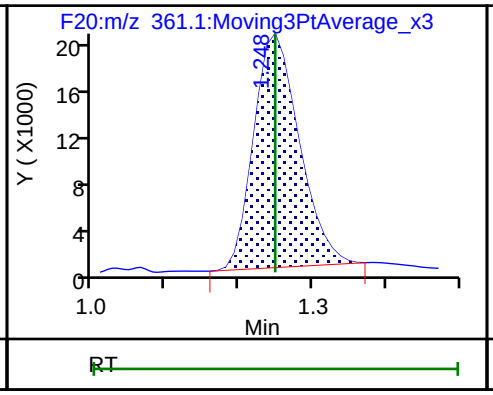
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d
Injection Date: 07-Apr-2022 11:18:48 Instrument ID: LC_LCMS7
Lims ID: STD007
Client ID:
Operator ID: acm ALS Bottle#: 8 Worklist Smp#: 9
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

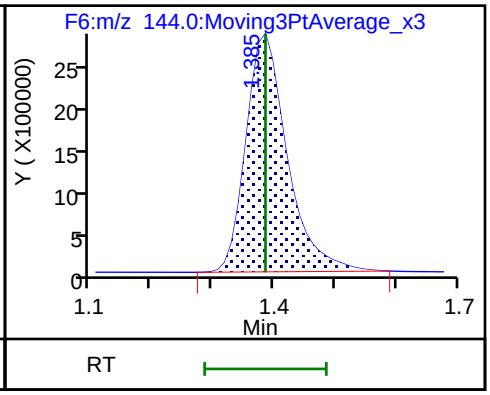
2 HMX



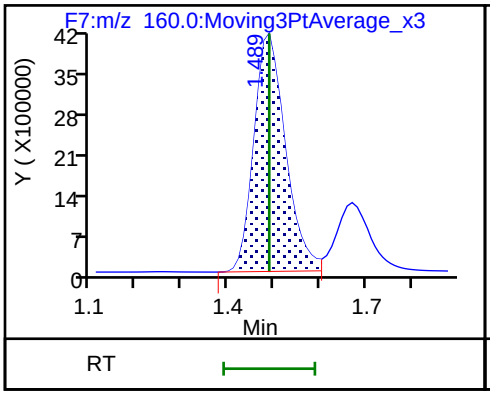
* 1 HMX-13C4



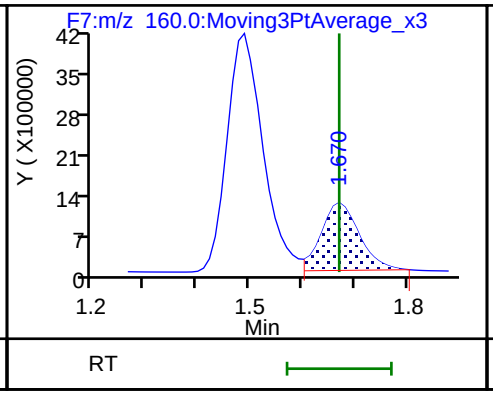
36 TNX



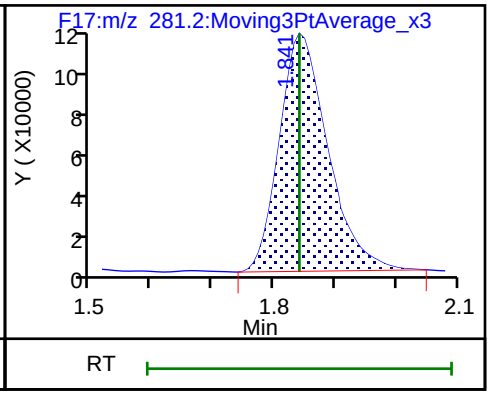
33 DNX



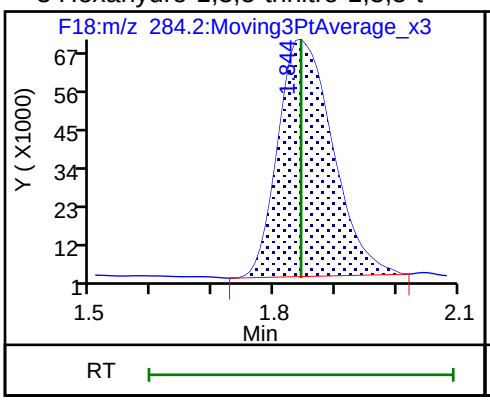
34 MNX



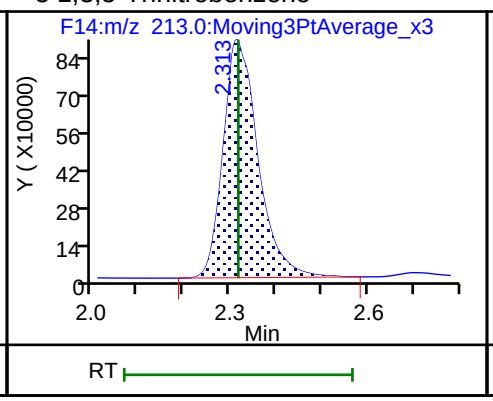
4 RDX



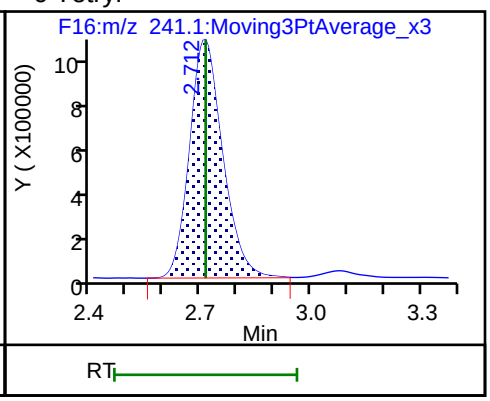
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



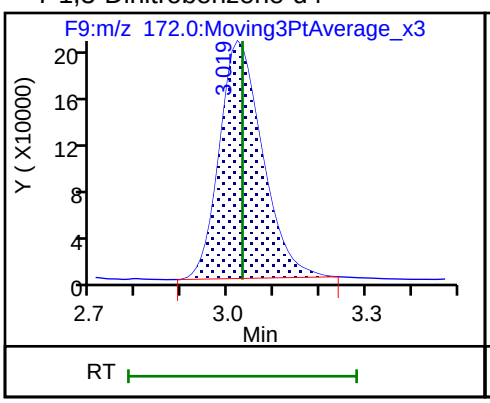
5 1,3,5-Trinitrobenzene



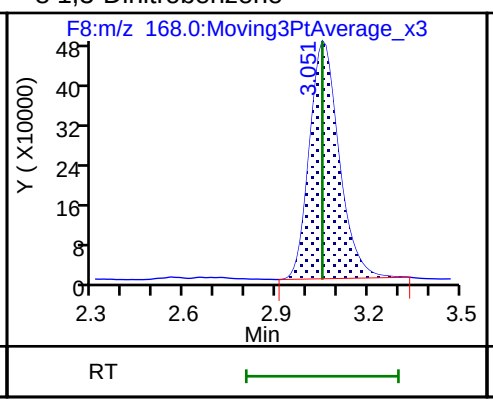
6 Tetryl



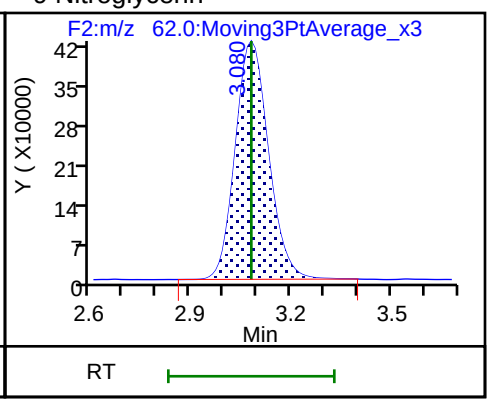
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

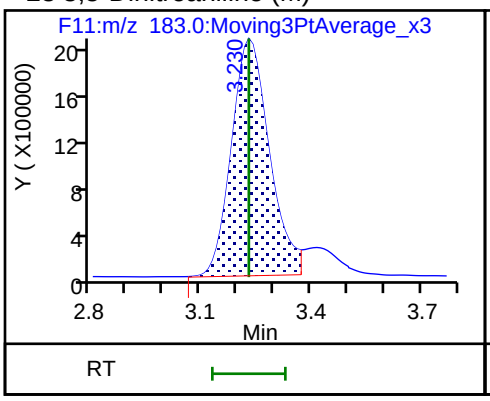


9 Nitroglycerin

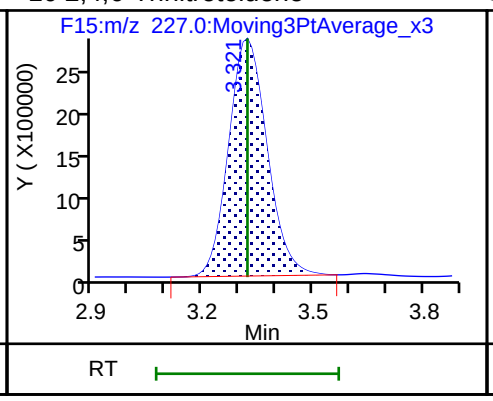


Report Date: 08-Apr-2022 07:31:50 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

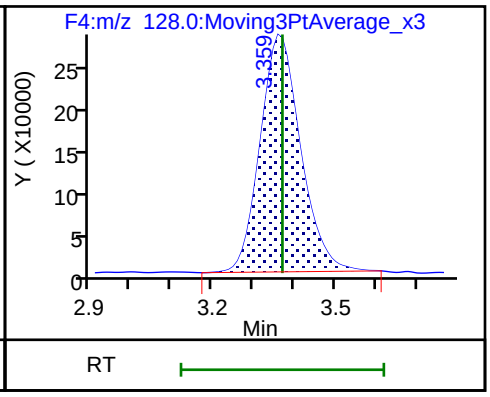
28 3,5-Dinitroaniline (M)



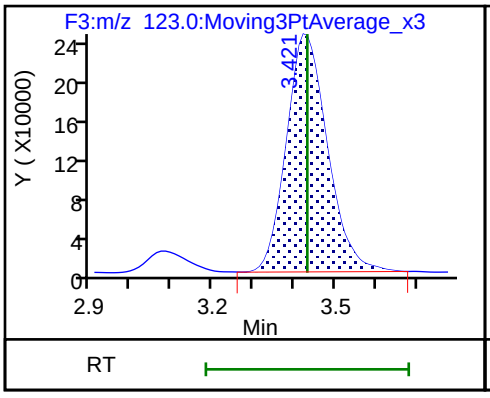
10 2,4,6-Trinitrotoluene



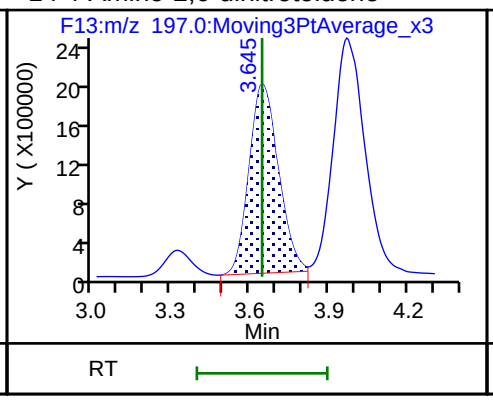
$ 11 Nitrobenzene-d5



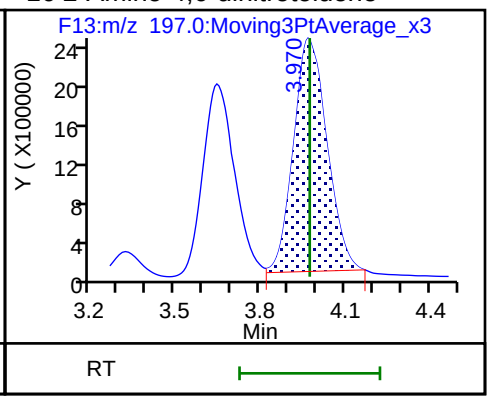
12 Nitrobenzene



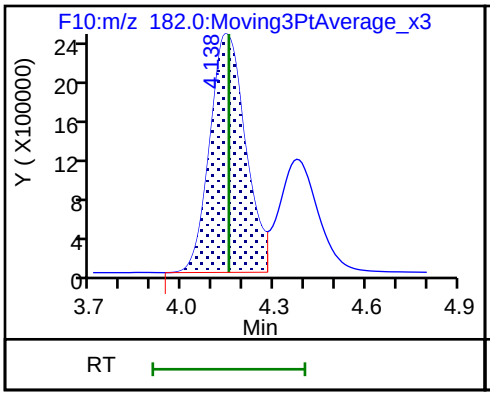
14 4-Amino-2,6-dinitrotoluene



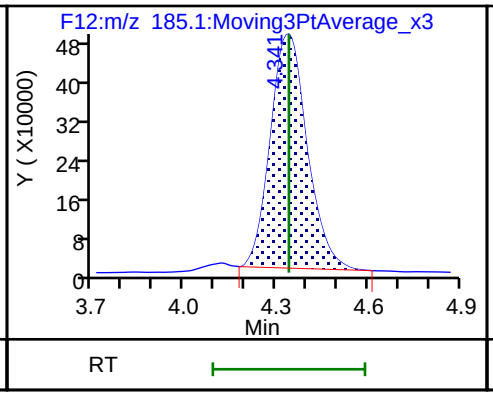
16 2-Amino-4,6-dinitrotoluene



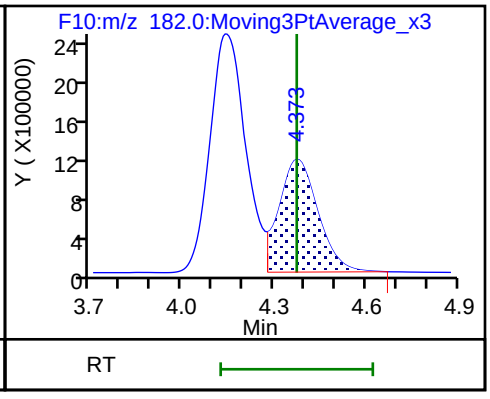
17 2,6-Dinitrotoluene



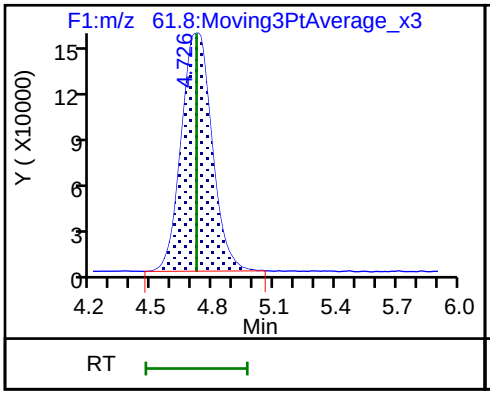
* 18 2,4-dinitrotoluene-d3



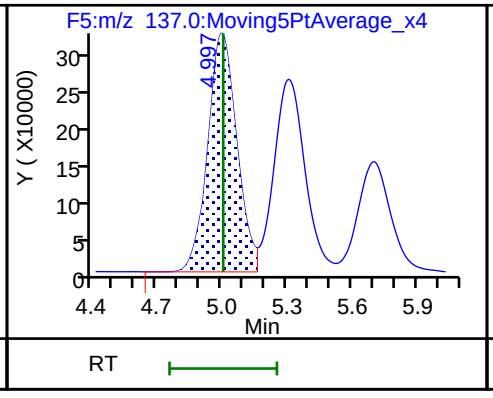
19 2,4-Dinitrotoluene



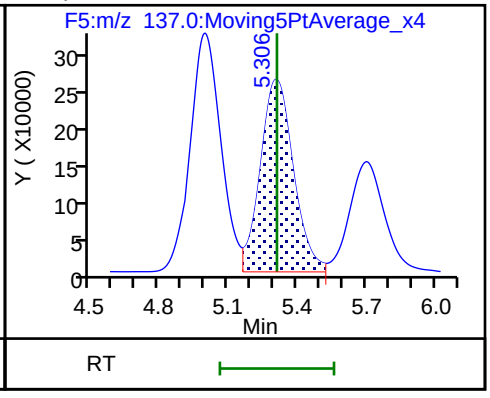
20 PETN



22 o-Nitrotoluene



23 p-Nitrotoluene



Report Date: 08-Apr-2022 07:31:50 Chrom Revision: 2.3 18-Mar-2022 09:07:22
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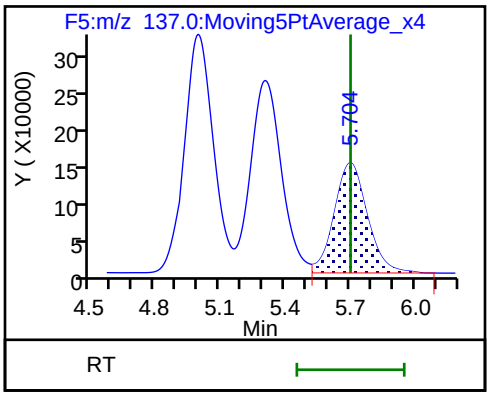
24 m-Nitrotoluene



Calibration / HMX

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

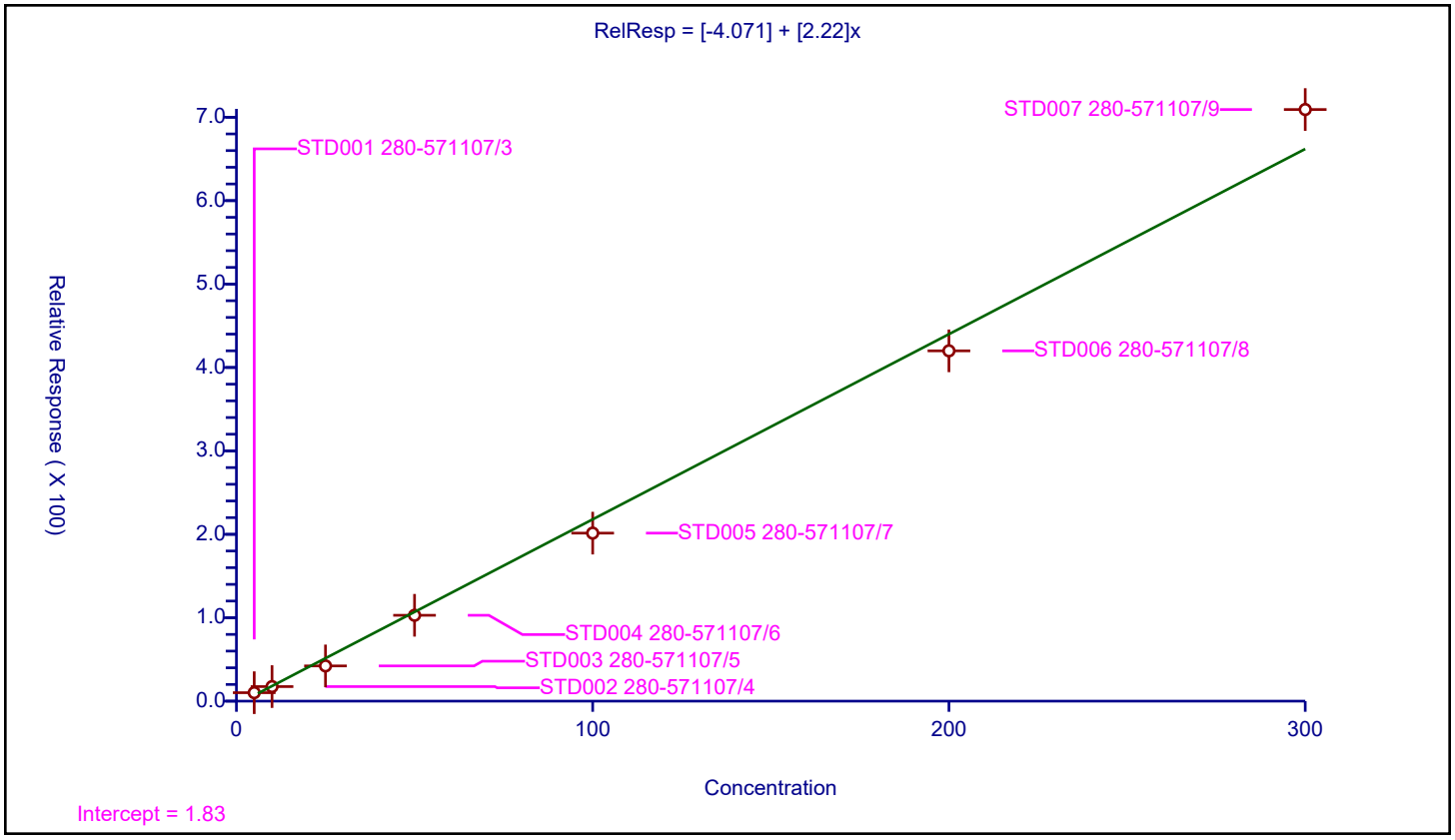
Curve Coefficients

Intercept:	-4.071
Slope:	2.22

Error Coefficients

Standard Error:	268000
Relative Standard Error:	15.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571107/3	5.0	10.142979	125.0	113268.0	2.028596	Y
2	STD002 280-571107/4	10.0	17.459117	125.0	105117.0	1.745912	Y
3	STD003 280-571107/5	25.0	42.227553	125.0	116408.0	1.689102	Y
4	STD004 280-571107/6	50.0	102.923033	125.0	105772.0	2.058461	Y
5	STD005 280-571107/7	100.0	201.441305	125.0	104003.0	2.014413	Y
6	STD006 280-571107/8	200.0	419.941458	125.0	90362.0	2.099707	Y
7	STD007 280-571107/9	300.0	709.219188	125.0	84617.0	2.364064	Y



Calibration / TNX

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

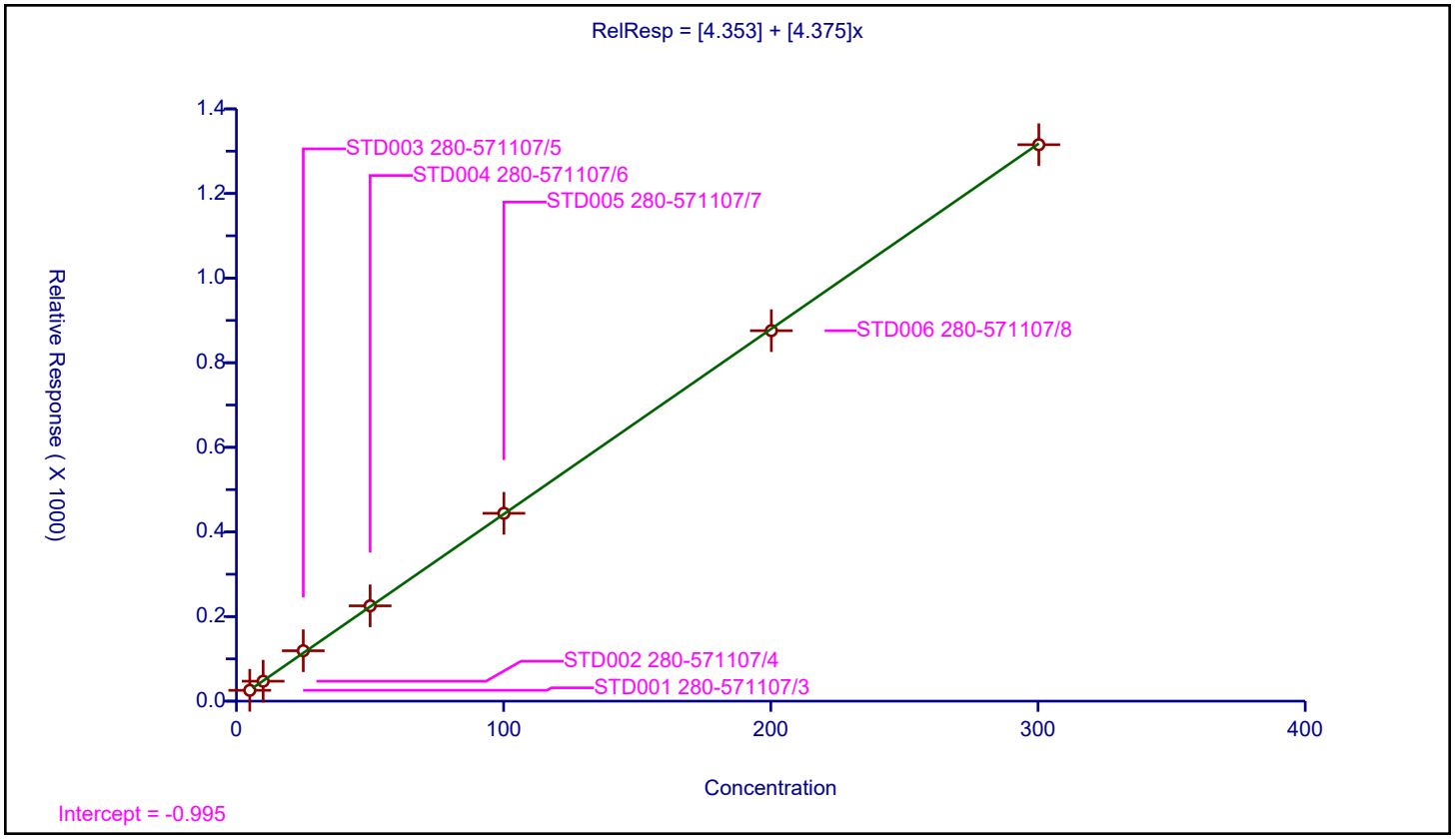
Curve Coefficients

Intercept:	4.353
Slope:	4.375

Error Coefficients

Standard Error:	7480000
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571107/3	5.005	25.566336	129.36	1299083.0	5.108159	Y
2	STD002 280-571107/4	10.01	47.132499	129.36	1311407.0	4.708541	Y
3	STD003 280-571107/5	25.025	119.155421	129.36	1257715.0	4.761455	Y
4	STD004 280-571107/6	50.05	225.328935	129.36	1303089.0	4.502077	Y
5	STD005 280-571107/7	100.1	444.047197	129.36	1288804.0	4.436036	Y
6	STD006 280-571107/8	200.2	875.711047	129.36	1290829.0	4.374181	Y
7	STD007 280-571107/9	300.3	1315.300055	129.36	1307713.0	4.379954	Y



Calibration / DNX

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

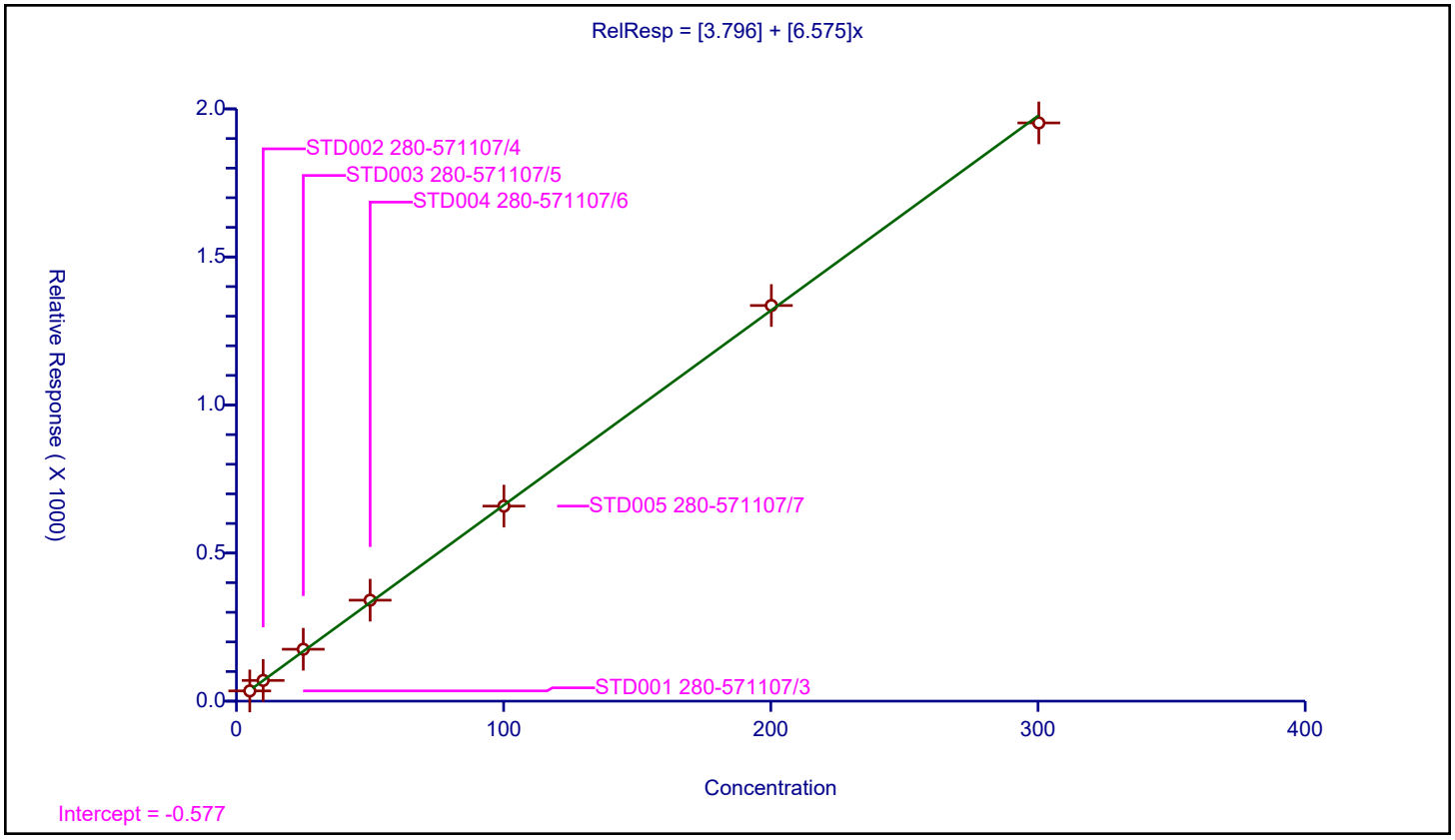
Curve Coefficients

Intercept:	3.796
Slope:	6.575

Error Coefficients

Standard Error:	11200000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571107/3	5.005	34.545676	129.36	1299083.0	6.902233	Y
2	STD002 280-571107/4	10.01	69.969932	129.36	1311407.0	6.990003	Y
3	STD003 280-571107/5	25.025	175.209689	129.36	1257715.0	7.001386	Y
4	STD004 280-571107/6	50.05	340.893132	129.36	1303089.0	6.811052	Y
5	STD005 280-571107/7	100.1	658.627852	129.36	1288804.0	6.579699	Y
6	STD006 280-571107/8	200.2	1336.051334	129.36	1290829.0	6.673583	Y
7	STD007 280-571107/9	300.3	1952.583974	129.36	1307713.0	6.502111	Y



Calibration / MNX

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

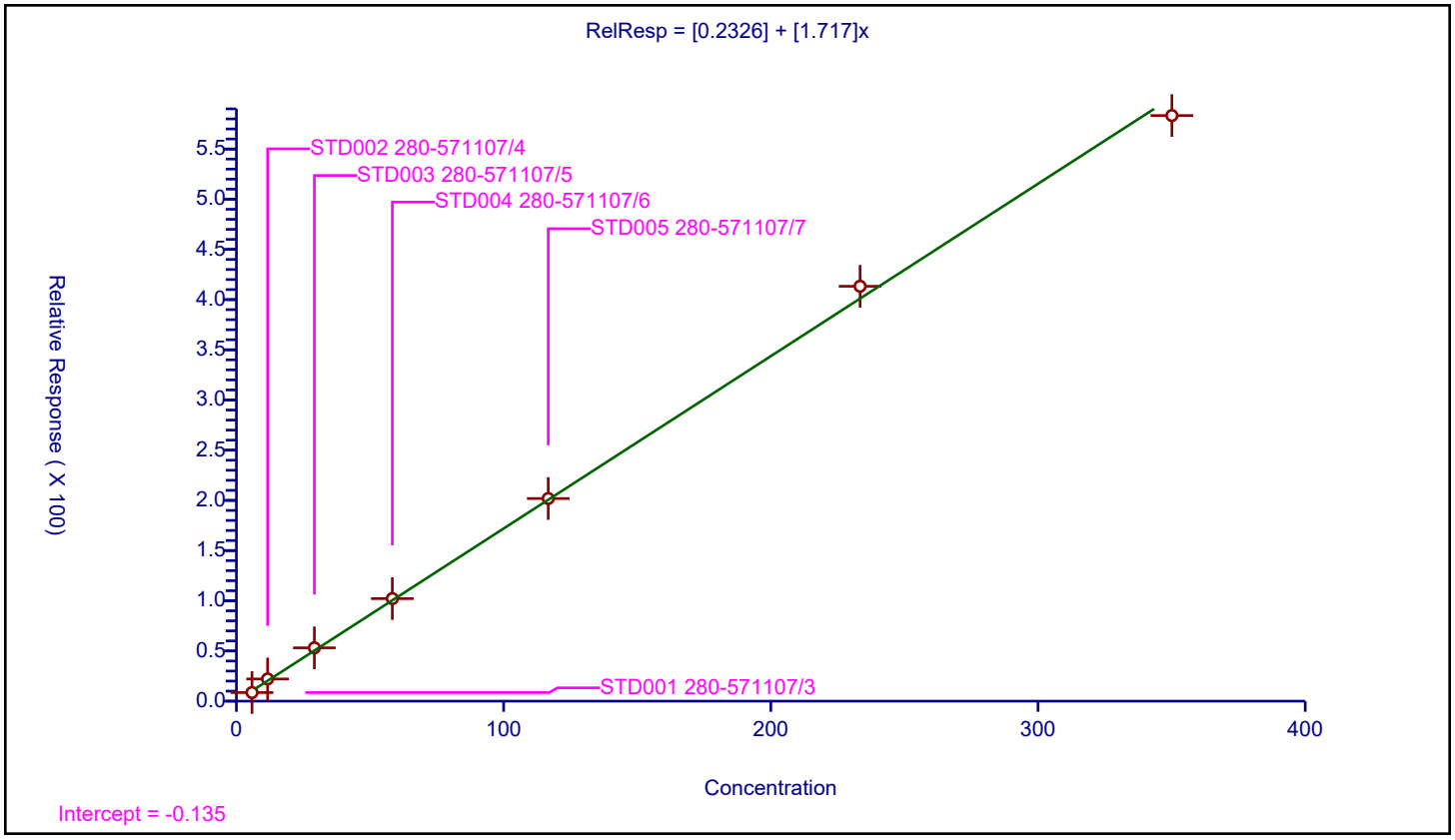
Curve Coefficients

Intercept:	0.2326
Slope:	1.717

Error Coefficients

Standard Error:	3380000
Relative Standard Error:	9.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571107/3	5.835	8.557927	129.36	1299083.0	1.466654	Y
2	STD002 280-571107/4	11.67	22.079269	129.36	1311407.0	1.891968	Y
3	STD003 280-571107/5	29.175	53.105673	129.36	1257715.0	1.820246	Y
4	STD004 280-571107/6	58.35	102.126964	129.36	1303089.0	1.750248	Y
5	STD005 280-571107/7	116.7	201.856981	129.36	1288804.0	1.729708	Y
6	STD006 280-571107/8	233.4	413.27998	129.36	1290829.0	1.770694	Y
7	STD007 280-571107/9	350.1	583.361703	129.36	1307713.0	1.666272	Y



Calibration / RDX

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

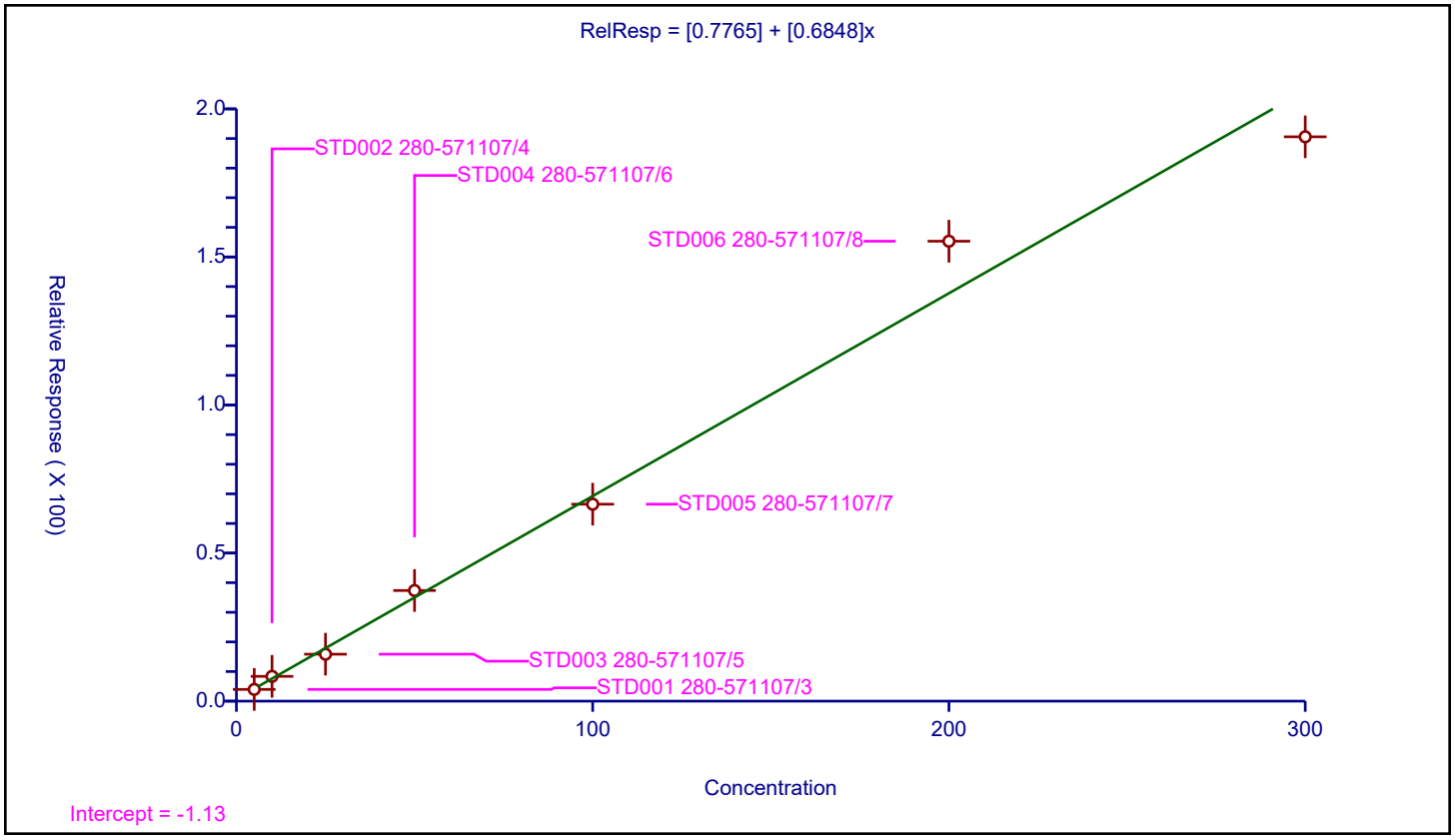
Curve Coefficients

Intercept:	0.7765
Slope:	0.6848

Error Coefficients

Standard Error:	369000
Relative Standard Error:	10.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571107/3	5.0	3.960216	125.0	365826.0	0.792043	Y
2	STD002 280-571107/4	10.0	8.372366	125.0	372550.0	0.837237	Y
3	STD003 280-571107/5	25.0	15.849312	125.0	386878.0	0.633972	Y
4	STD004 280-571107/6	50.0	37.354157	125.0	374289.0	0.747083	Y
5	STD005 280-571107/7	100.0	66.509758	125.0	390672.0	0.665098	Y
6	STD006 280-571107/8	200.0	155.312548	125.0	368519.0	0.776563	Y
7	STD007 280-571107/9	300.0	190.577653	125.0	422217.0	0.635259	Y



Calibration / 1,3,5-Trinitrobenzene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

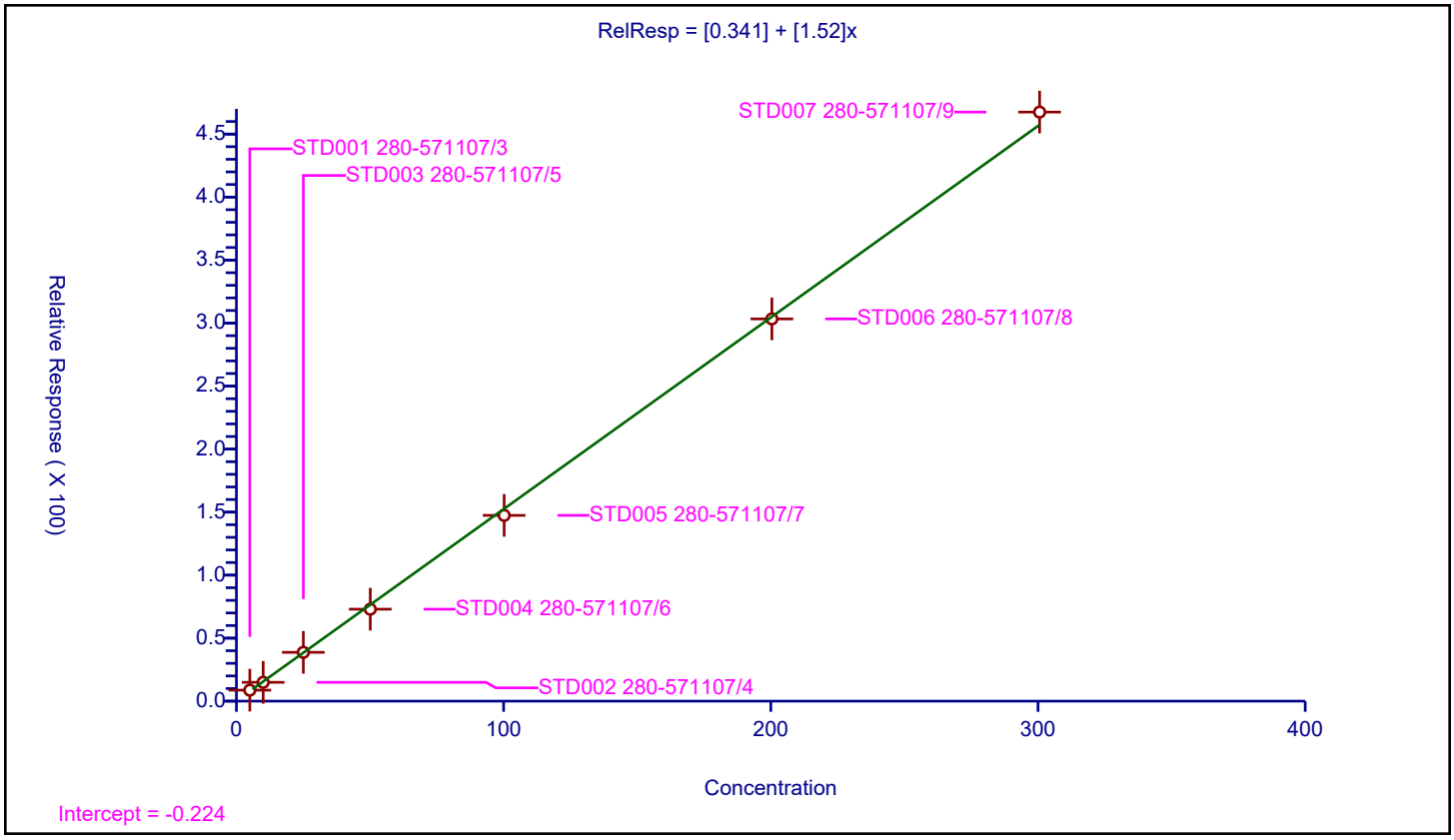
Curve Coefficients

Intercept:	0.341
Slope:	1.52

Error Coefficients

Standard Error:	2620000
Relative Standard Error:	5.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571107/3	5.01	8.709186	129.36	1299083.0	1.73836	Y
2	STD002 280-571107/4	10.02	14.937676	129.36	1311407.0	1.490786	Y
3	STD003 280-571107/5	25.05	38.723815	129.36	1257715.0	1.545861	Y
4	STD004 280-571107/6	50.1	72.975797	129.36	1303089.0	1.456603	Y
5	STD005 280-571107/7	100.2	147.413132	129.36	1288804.0	1.471189	Y
6	STD006 280-571107/8	200.4	303.329958	129.36	1290829.0	1.513623	Y
7	STD007 280-571107/9	300.6	467.471846	129.36	1307713.0	1.555129	Y



Calibration / Tetryl

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

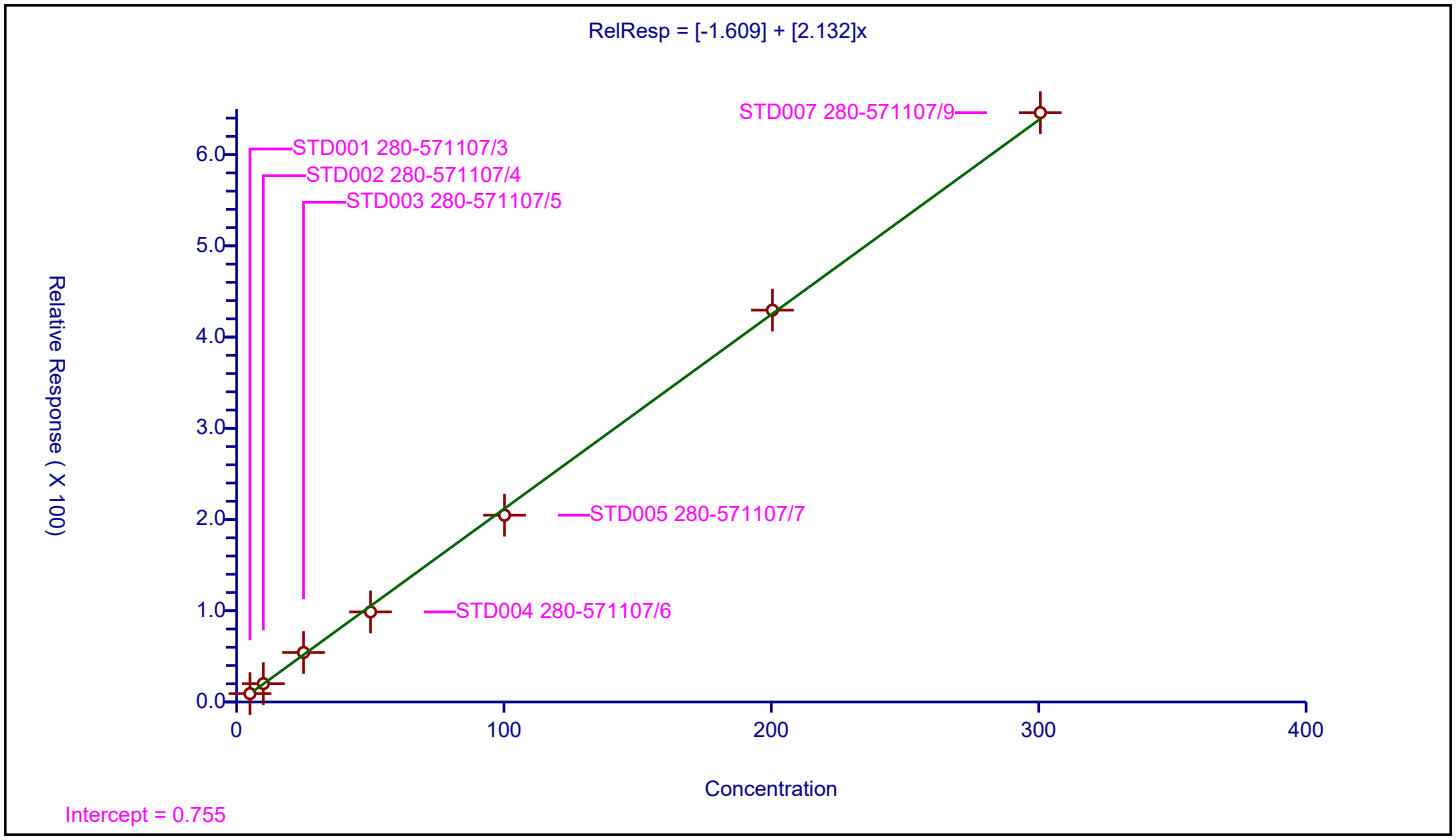
Curve Coefficients

Intercept:	-1.609
Slope:	2.132

Error Coefficients

Standard Error:	3650000
Relative Standard Error:	3.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571107/3	5.01	9.190944	129.36	1299083.0	1.83452	Y
2	STD002 280-571107/4	10.02	20.109878	129.36	1311407.0	2.006974	Y
3	STD003 280-571107/5	25.05	54.268223	129.36	1257715.0	2.166396	Y
4	STD004 280-571107/6	50.1	98.755395	129.36	1303089.0	1.971166	Y
5	STD005 280-571107/7	100.2	204.75894	129.36	1288804.0	2.043502	Y
6	STD006 280-571107/8	200.4	429.525379	129.36	1290829.0	2.14334	Y
7	STD007 280-571107/9	300.6	646.012591	129.36	1307713.0	2.149077	Y



Calibration / 1,3-Dinitrobenzene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

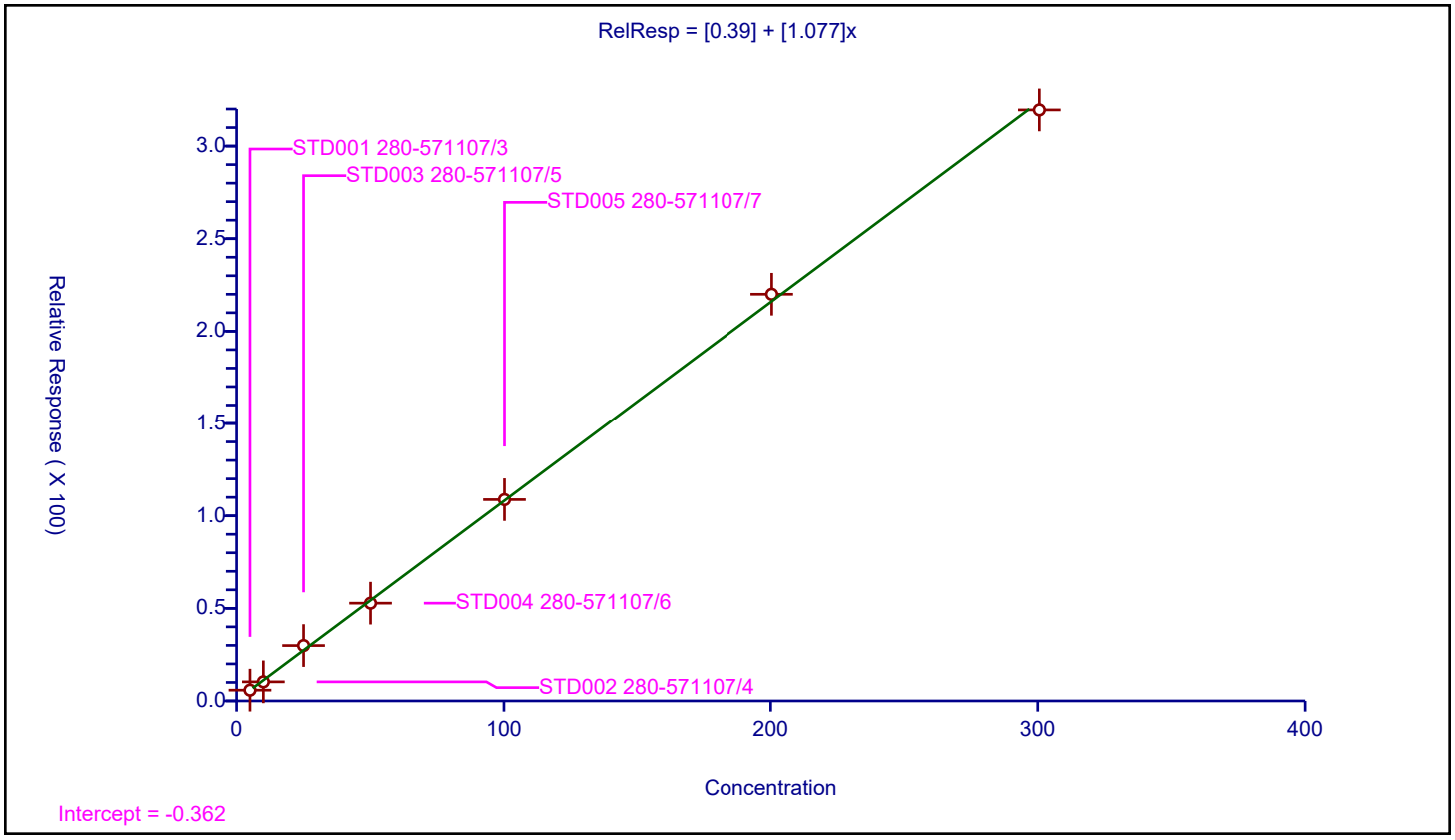
Curve Coefficients

Intercept:	0.39
Slope:	1.077

Error Coefficients

Standard Error:	1830000
Relative Standard Error:	5.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571107/3	5.01	5.820031	129.36	1299083.0	1.161683	Y
2	STD002 280-571107/4	10.02	10.307216	129.36	1311407.0	1.028664	Y
3	STD003 280-571107/5	25.05	29.896028	129.36	1257715.0	1.193454	Y
4	STD004 280-571107/6	50.1	52.788875	129.36	1303089.0	1.05367	Y
5	STD005 280-571107/7	100.2	108.78542	129.36	1288804.0	1.085683	Y
6	STD006 280-571107/8	200.4	220.007074	129.36	1290829.0	1.09784	Y
7	STD007 280-571107/9	300.6	319.51088	129.36	1307713.0	1.06291	Y



Calibration / Nitroglycerin

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

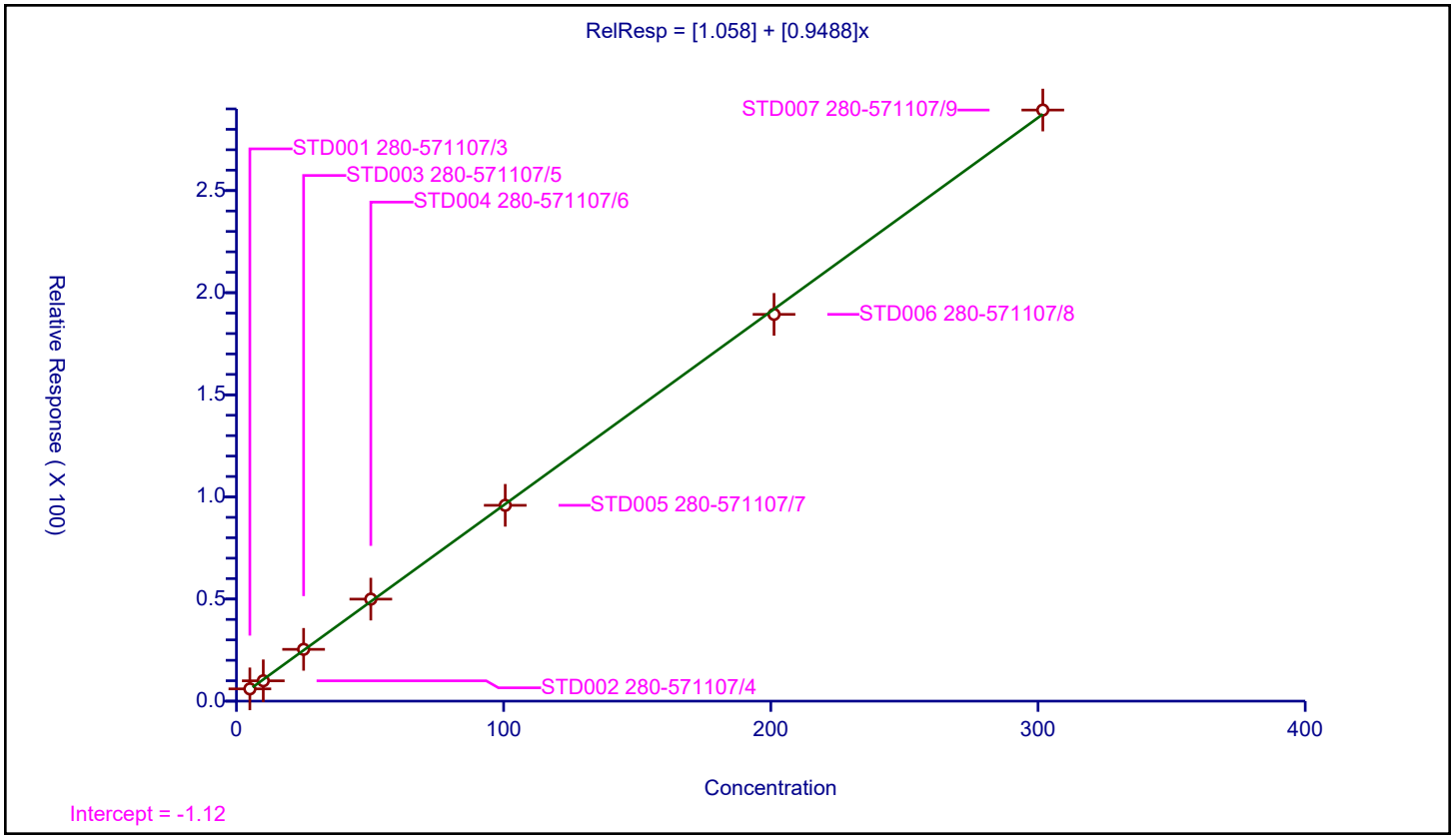
Curve Coefficients

Intercept:	1.058
Slope:	0.9488

Error Coefficients

Standard Error:	1640000
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571107/3	5.03	6.007636	129.36	1299083.0	1.194361	Y
2	STD002 280-571107/4	10.06	9.959799	129.36	1311407.0	0.99004	Y
3	STD003 280-571107/5	25.15	25.359997	129.36	1257715.0	1.00835	Y
4	STD004 280-571107/6	50.3	49.952084	129.36	1303089.0	0.993083	Y
5	STD005 280-571107/7	100.6	95.888104	129.36	1288804.0	0.953162	Y
6	STD006 280-571107/8	201.2	189.377563	129.36	1290829.0	0.94124	Y
7	STD007 280-571107/9	301.8	289.436388	129.36	1307713.0	0.959034	Y



Calibration / 2,4,6-Trinitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

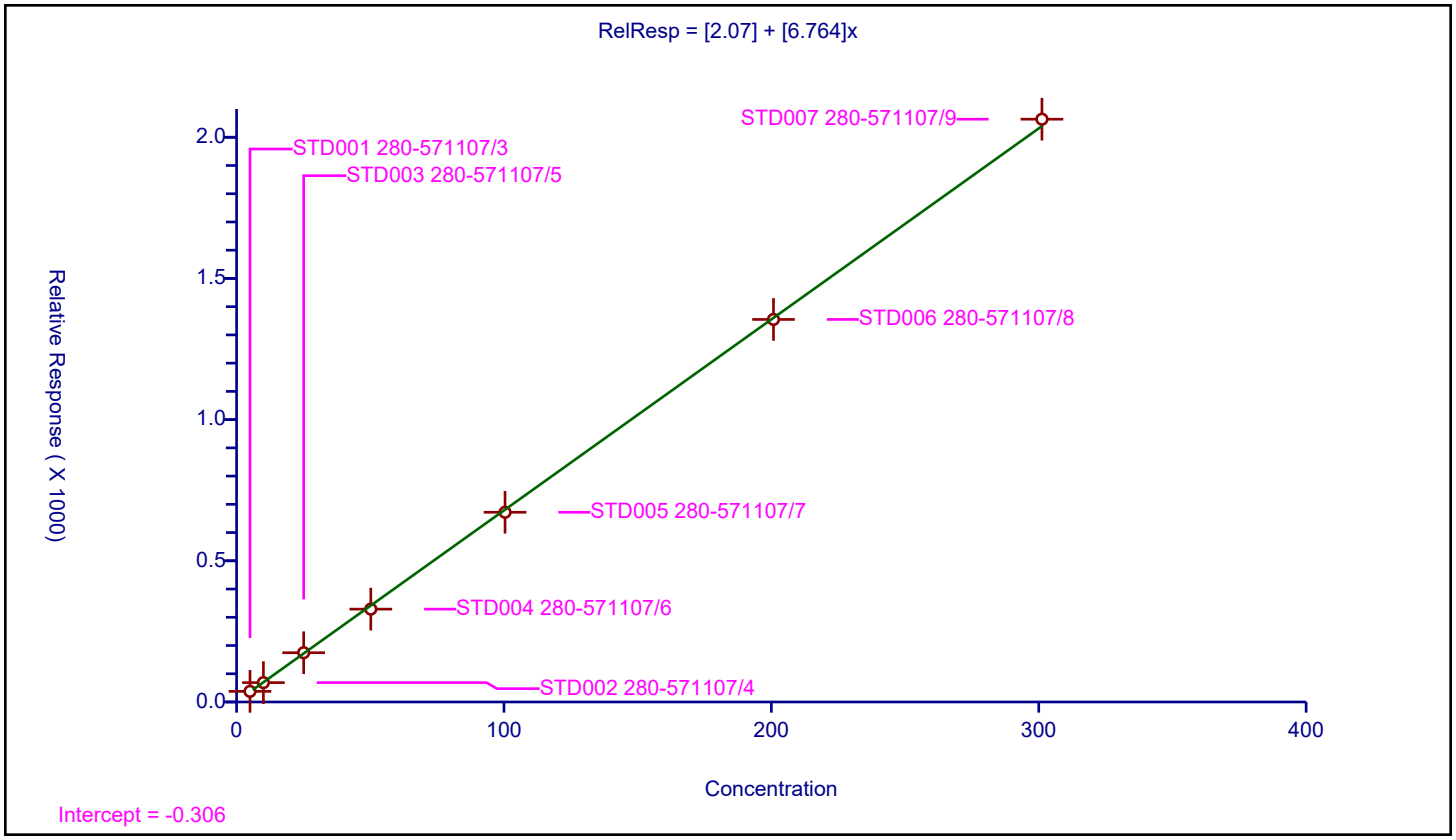
Curve Coefficients

Intercept:	2.07
Slope:	6.764

Error Coefficients

Standard Error:	11600000
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571107/3	5.02	37.650516	129.36	1299083.0	7.500103	Y
2	STD002 280-571107/4	10.04	68.597721	129.36	1311407.0	6.832442	Y
3	STD003 280-571107/5	25.1	174.496403	129.36	1257715.0	6.952048	Y
4	STD004 280-571107/6	50.2	328.860992	129.36	1303089.0	6.551016	Y
5	STD005 280-571107/7	100.4	671.896947	129.36	1288804.0	6.692201	Y
6	STD006 280-571107/8	200.8	1354.756603	129.36	1290829.0	6.746796	Y
7	STD007 280-571107/9	301.2	2063.944546	129.36	1307713.0	6.852406	Y



Calibration / Nitrobenzene-d5

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

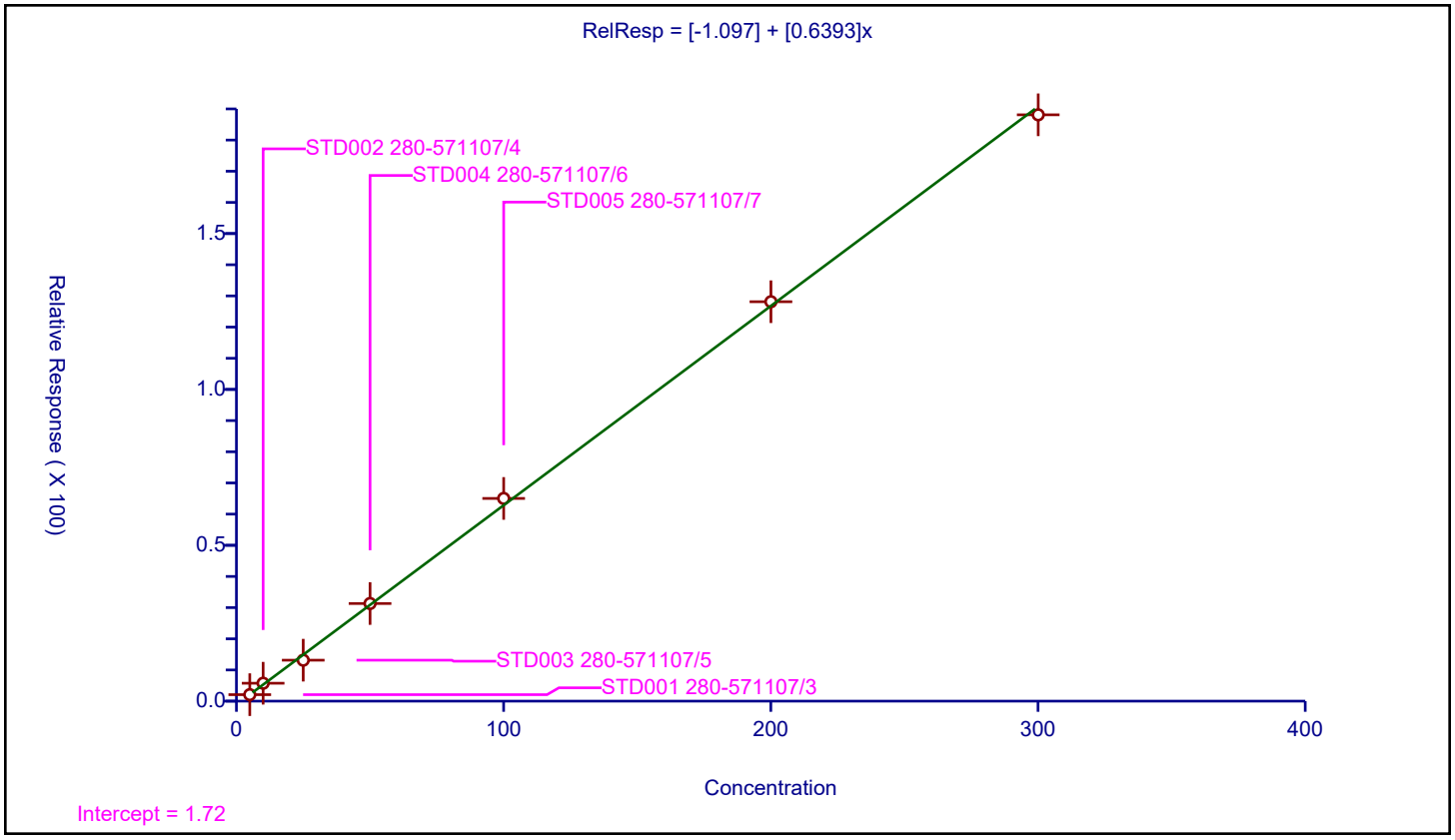
Curve Coefficients

Intercept:	-1.097
Slope:	0.6393

Error Coefficients

Standard Error:	1080000
Relative Standard Error:	6.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571107/3	5.001233	2.084564	129.36	1299083.0	0.41681	Y
2	STD002 280-571107/4	10.002465	5.743143	129.36	1311407.0	0.574173	Y
3	STD003 280-571107/5	25.006163	13.141141	129.36	1257715.0	0.525516	Y
4	STD004 280-571107/6	50.012325	31.322936	129.36	1303089.0	0.626304	Y
5	STD005 280-571107/7	100.02465	65.030499	129.36	1288804.0	0.650145	Y
6	STD006 280-571107/8	200.0493	128.140387	129.36	1290829.0	0.640544	Y
7	STD007 280-571107/9	300.07395	188.10223	129.36	1307713.0	0.626853	Y



Calibration / Nitrobenzene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

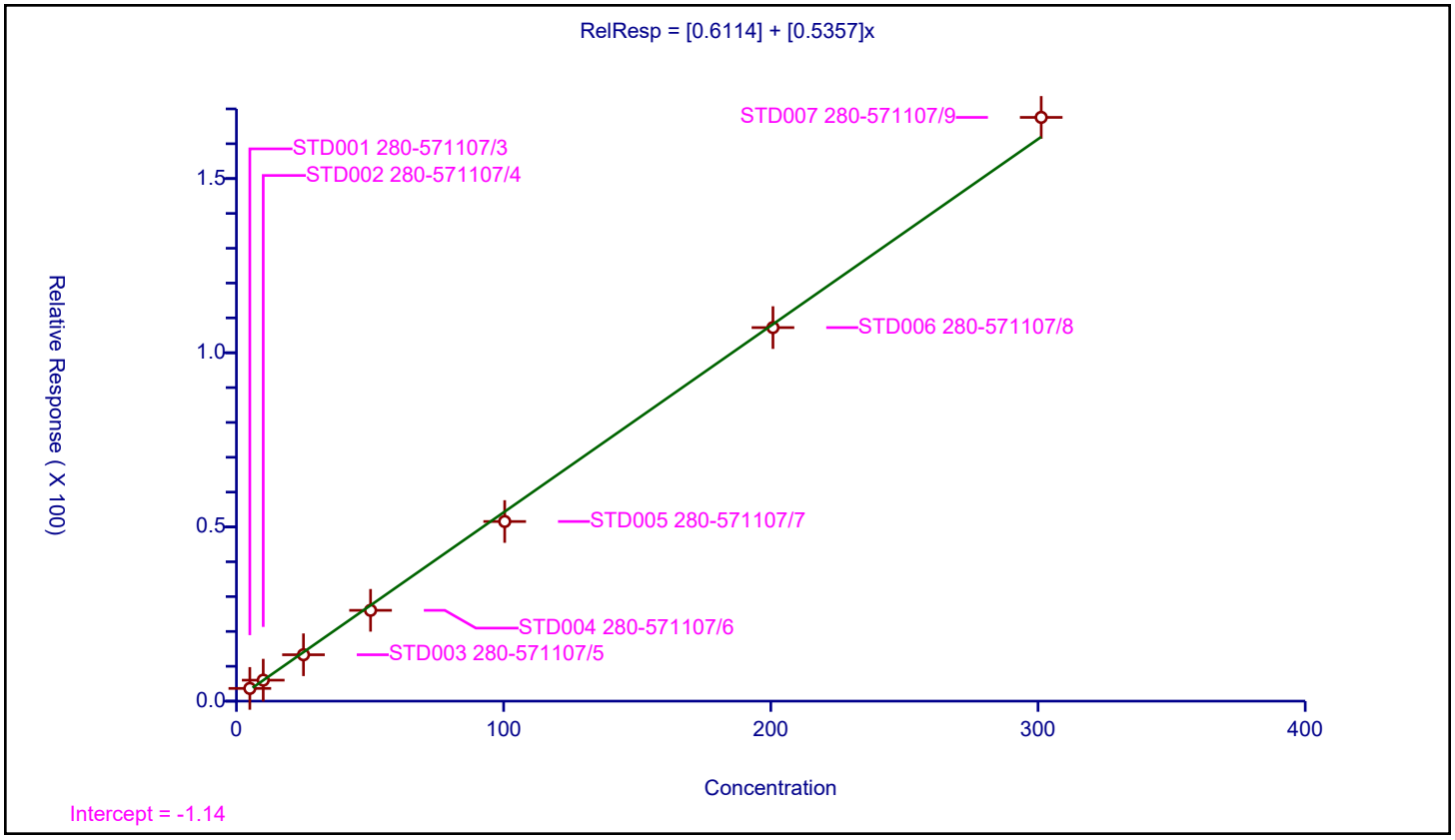
Curve Coefficients

Intercept:	0.6114
Slope:	0.5357

Error Coefficients

Standard Error:	935000
Relative Standard Error:	7.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571107/3	5.02	3.651921	129.36	1299083.0	0.727474	Y
2	STD002 280-571107/4	10.04	6.017763	129.36	1311407.0	0.599379	Y
3	STD003 280-571107/5	25.1	13.312186	129.36	1257715.0	0.530366	Y
4	STD004 280-571107/6	50.2	26.064111	129.36	1303089.0	0.519205	Y
5	STD005 280-571107/7	100.4	51.564575	129.36	1288804.0	0.513591	Y
6	STD006 280-571107/8	200.8	107.225586	129.36	1290829.0	0.533992	Y
7	STD007 280-571107/9	301.2	167.557965	129.36	1307713.0	0.556301	Y



Calibration / 4-Amino-2,6-dinitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

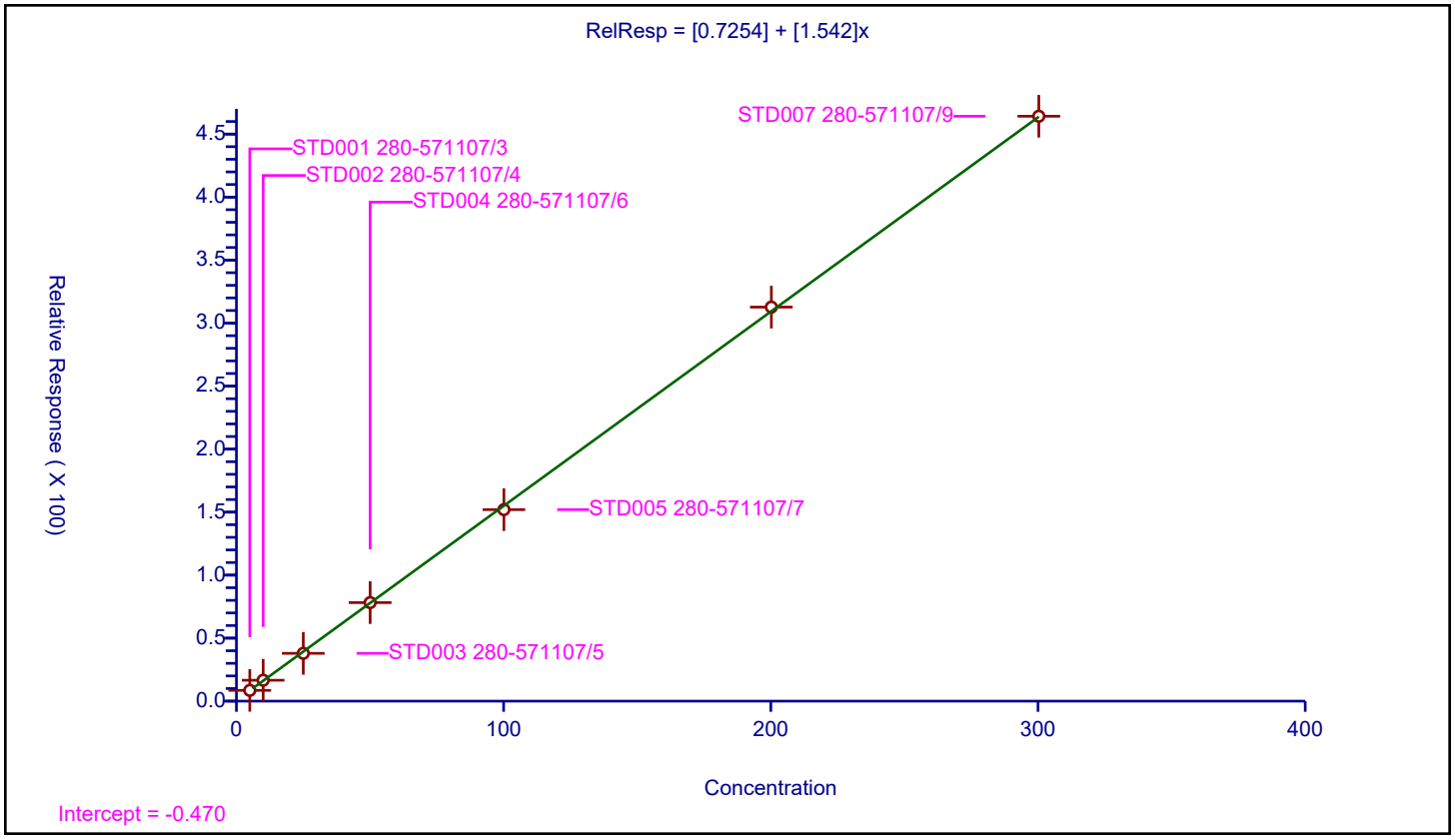
Curve Coefficients

Intercept:	0.7254
Slope:	1.542

Error Coefficients

Standard Error:	8500000
Relative Standard Error:	2.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571107/3	5.005	8.541173	125.0	4073255.0	1.706528	Y
2	STD002 280-571107/4	10.01	16.58965	125.0	4091022.0	1.657308	Y
3	STD003 280-571107/5	25.025	37.93468	125.0	4101267.0	1.515871	Y
4	STD004 280-571107/6	50.05	78.197756	125.0	4054672.0	1.562393	Y
5	STD005 280-571107/7	100.1	151.972173	125.0	4037907.0	1.518204	Y
6	STD006 280-571107/8	200.2	312.697988	125.0	3992973.0	1.561928	Y
7	STD007 280-571107/9	300.3	464.161396	125.0	4074060.0	1.545659	Y



Calibration / 2-Amino-4,6-dinitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

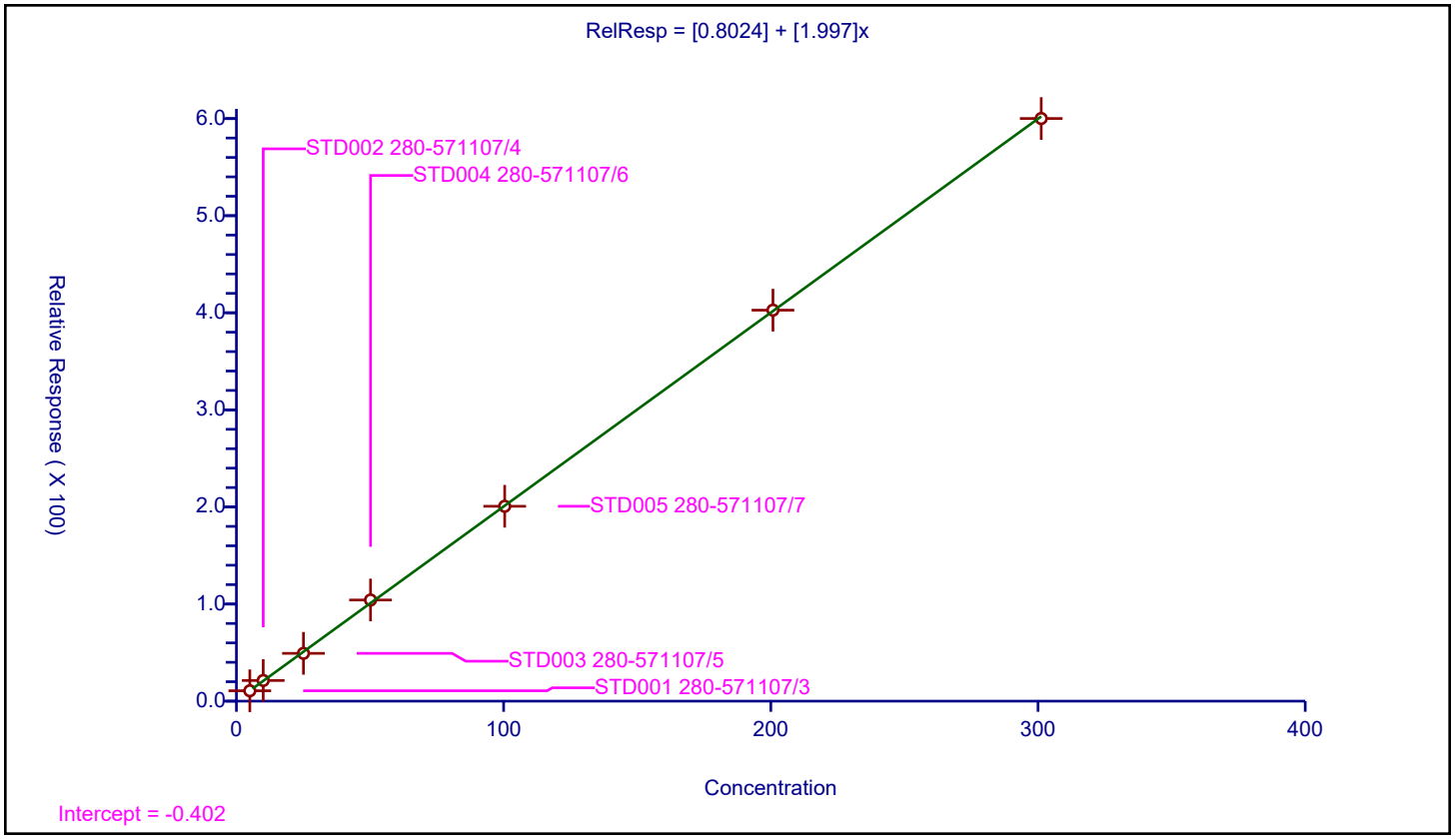
Curve Coefficients

Intercept:	0.8024
Slope:	1.997

Error Coefficients

Standard Error:	11000000
Relative Standard Error:	2.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571107/3	5.02	10.676044	125.0	4073255.0	2.126702	Y
2	STD002 280-571107/4	10.04	21.27766	125.0	4091022.0	2.119289	Y
3	STD003 280-571107/5	25.1	49.231341	125.0	4101267.0	1.961408	Y
4	STD004 280-571107/6	50.2	104.169801	125.0	4054672.0	2.075096	Y
5	STD005 280-571107/7	100.4	200.71277	125.0	4037907.0	1.999131	Y
6	STD006 280-571107/8	200.8	402.696813	125.0	3992973.0	2.005462	Y
7	STD007 280-571107/9	301.2	600.107203	125.0	4074060.0	1.992388	Y



Calibration / 2,6-Dinitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

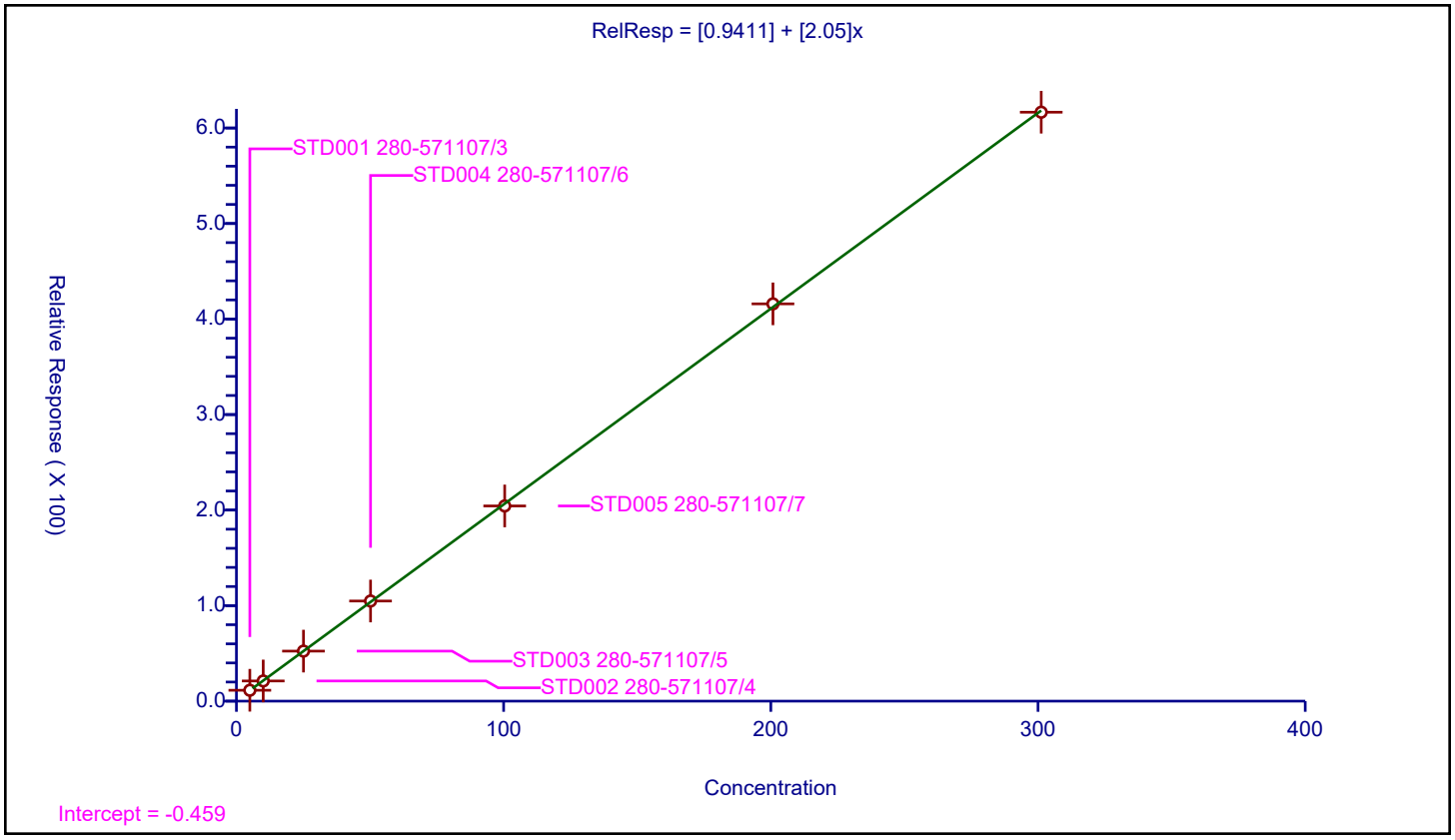
Curve Coefficients

Intercept:	0.9411
Slope:	2.05

Error Coefficients

Standard Error:	11300000
Relative Standard Error:	1.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571107/3	5.02	11.392762	125.0	4073255.0	2.269475	Y
2	STD002 280-571107/4	10.04	21.12727	125.0	4091022.0	2.10431	Y
3	STD003 280-571107/5	25.1	52.379149	125.0	4101267.0	2.086819	Y
4	STD004 280-571107/6	50.2	104.820501	125.0	4054672.0	2.088058	Y
5	STD005 280-571107/7	100.4	204.324326	125.0	4037907.0	2.035103	Y
6	STD006 280-571107/8	200.8	415.898505	125.0	3992973.0	2.071208	Y
7	STD007 280-571107/9	301.2	616.531451	125.0	4074060.0	2.046917	Y



Calibration / 2,4-Dinitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

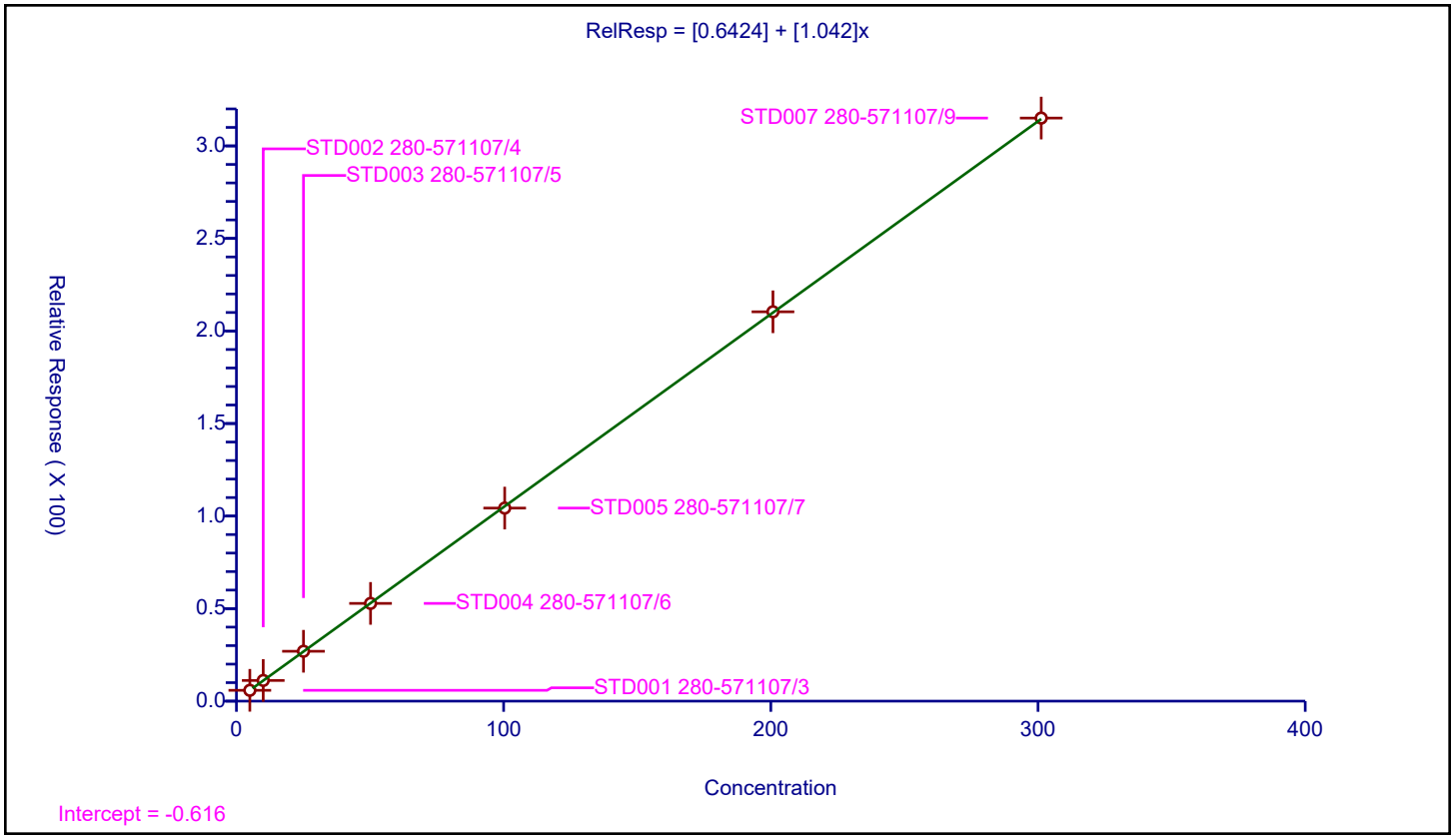
Curve Coefficients

Intercept:	0.6424
Slope:	1.042

Error Coefficients

Standard Error:	5760000
Relative Standard Error:	0.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571107/3	5.02	5.85579	125.0	4073255.0	1.166492	Y
2	STD002 280-571107/4	10.04	11.174714	125.0	4091022.0	1.113019	Y
3	STD003 280-571107/5	25.1	26.949782	125.0	4101267.0	1.073696	Y
4	STD004 280-571107/6	50.2	52.803809	125.0	4054672.0	1.051869	Y
5	STD005 280-571107/7	100.4	104.310538	125.0	4037907.0	1.03895	Y
6	STD006 280-571107/8	200.8	210.372478	125.0	3992973.0	1.047672	Y
7	STD007 280-571107/9	301.2	315.042795	125.0	4074060.0	1.045959	Y



Calibration / PETN

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

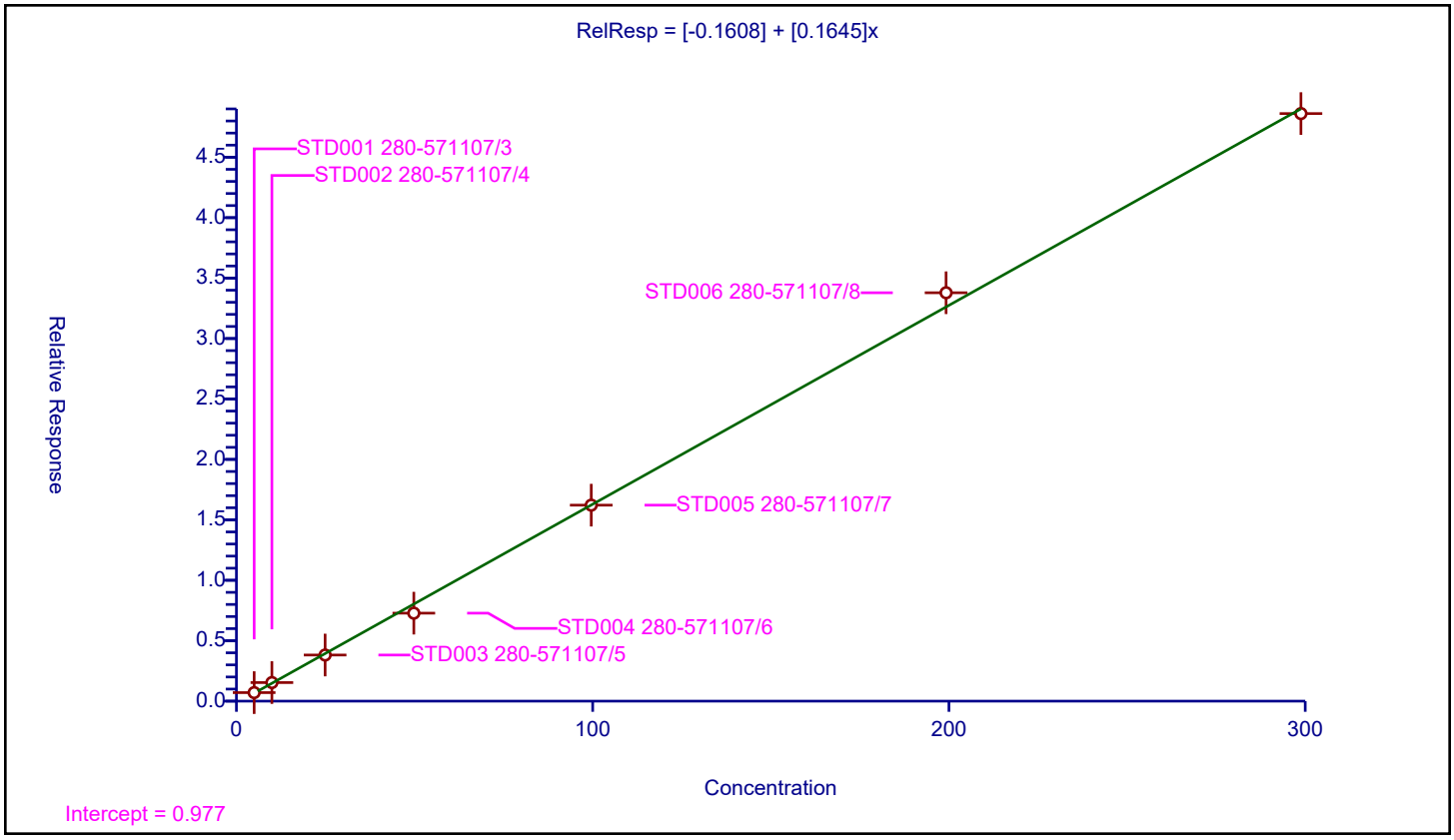
Curve Coefficients

Intercept:	-0.1608
Slope:	0.1645

Error Coefficients

Standard Error:	897000
Relative Standard Error:	5.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571107/3	4.98	0.706928	125.0	4073255.0	0.141954	Y
2	STD002 280-571107/4	9.96	1.536016	125.0	4091022.0	0.154218	Y
3	STD003 280-571107/5	24.9	3.816443	125.0	4101267.0	0.153271	Y
4	STD004 280-571107/6	49.8	7.279535	125.0	4054672.0	0.146175	Y
5	STD005 280-571107/7	99.6	16.214836	125.0	4037907.0	0.1628	Y
6	STD006 280-571107/8	199.2	33.788514	125.0	3992973.0	0.169621	Y
7	STD007 280-571107/9	298.8	48.612993	125.0	4074060.0	0.162694	Y



Calibration / o-Nitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

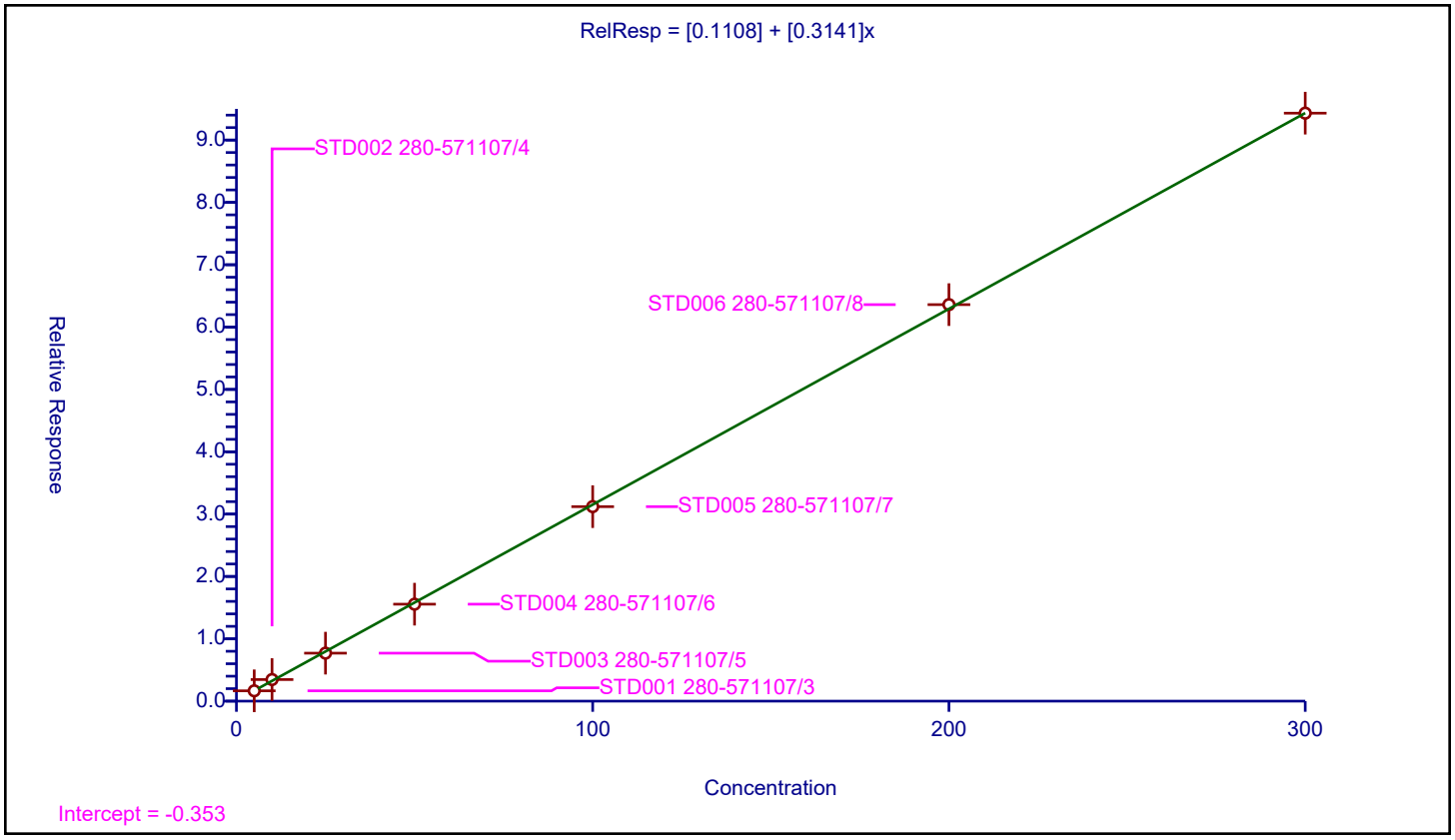
Curve Coefficients

Intercept:	0.1108
Slope:	0.3141

Error Coefficients

Standard Error:	1730000
Relative Standard Error:	3.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571107/3	5.0	1.653592	125.0	4073255.0	0.330718	Y
2	STD002 280-571107/4	10.0	3.463866	125.0	4091022.0	0.346387	Y
3	STD003 280-571107/5	25.0	7.696981	125.0	4101267.0	0.307879	Y
4	STD004 280-571107/6	50.0	15.553108	125.0	4054672.0	0.311062	Y
5	STD005 280-571107/7	100.0	31.198403	125.0	4037907.0	0.311984	Y
6	STD006 280-571107/8	200.0	63.605207	125.0	3992973.0	0.318026	Y
7	STD007 280-571107/9	300.0	94.315437	125.0	4074060.0	0.314385	Y



Calibration / p-Nitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

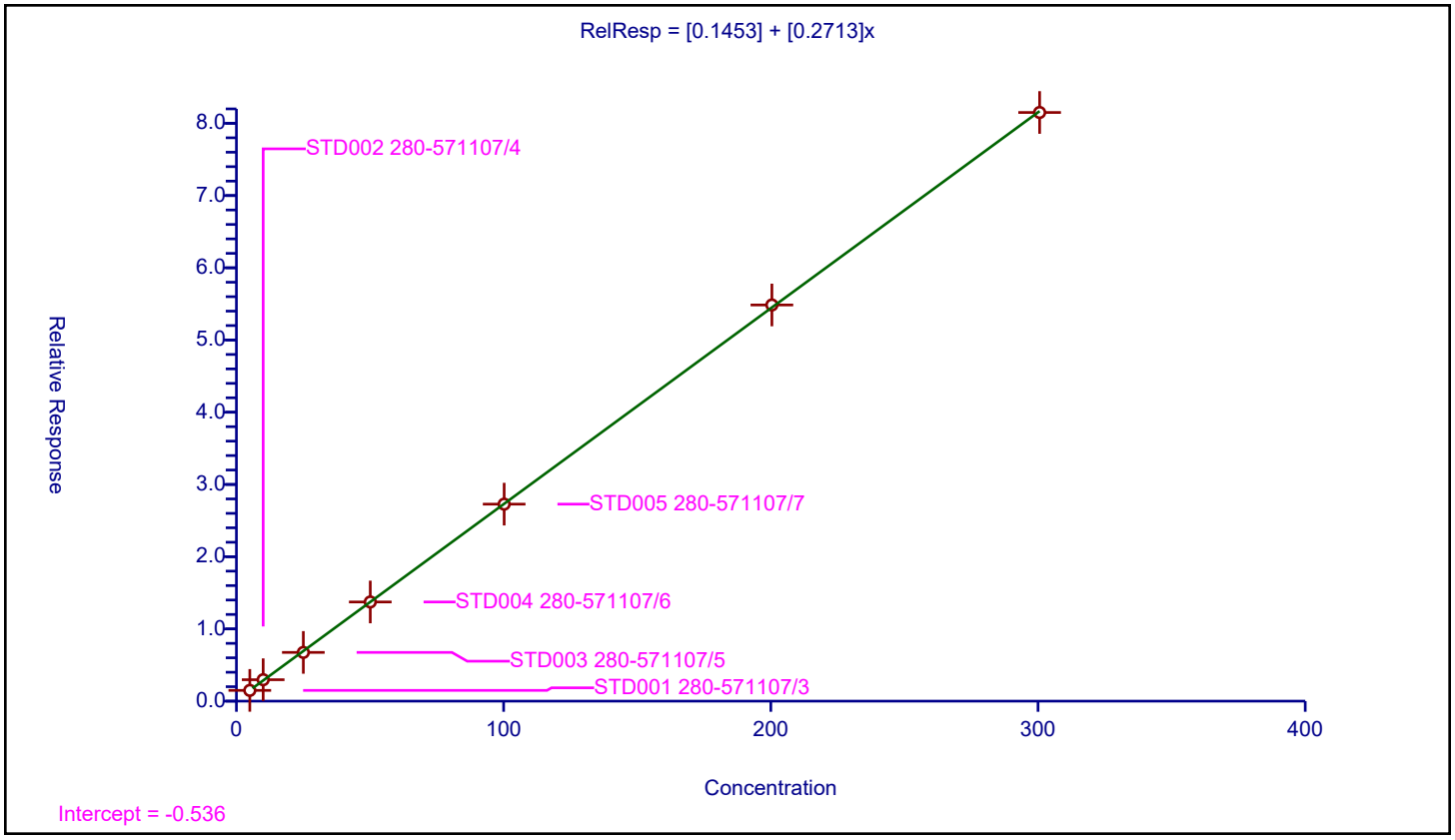
Curve Coefficients

Intercept:	0.1453
Slope:	0.2713

Error Coefficients

Standard Error:	1490000
Relative Standard Error:	2.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571107/3	5.01	1.489503	125.0	4073255.0	0.297306	Y
2	STD002 280-571107/4	10.02	2.965304	125.0	4091022.0	0.295939	Y
3	STD003 280-571107/5	25.05	6.746147	125.0	4101267.0	0.269307	Y
4	STD004 280-571107/6	50.1	13.731629	125.0	4054672.0	0.274084	Y
5	STD005 280-571107/7	100.2	27.274495	125.0	4037907.0	0.272201	Y
6	STD006 280-571107/8	200.4	54.851892	125.0	3992973.0	0.273712	Y
7	STD007 280-571107/9	300.6	81.502267	125.0	4074060.0	0.271132	Y



Calibration / m-Nitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

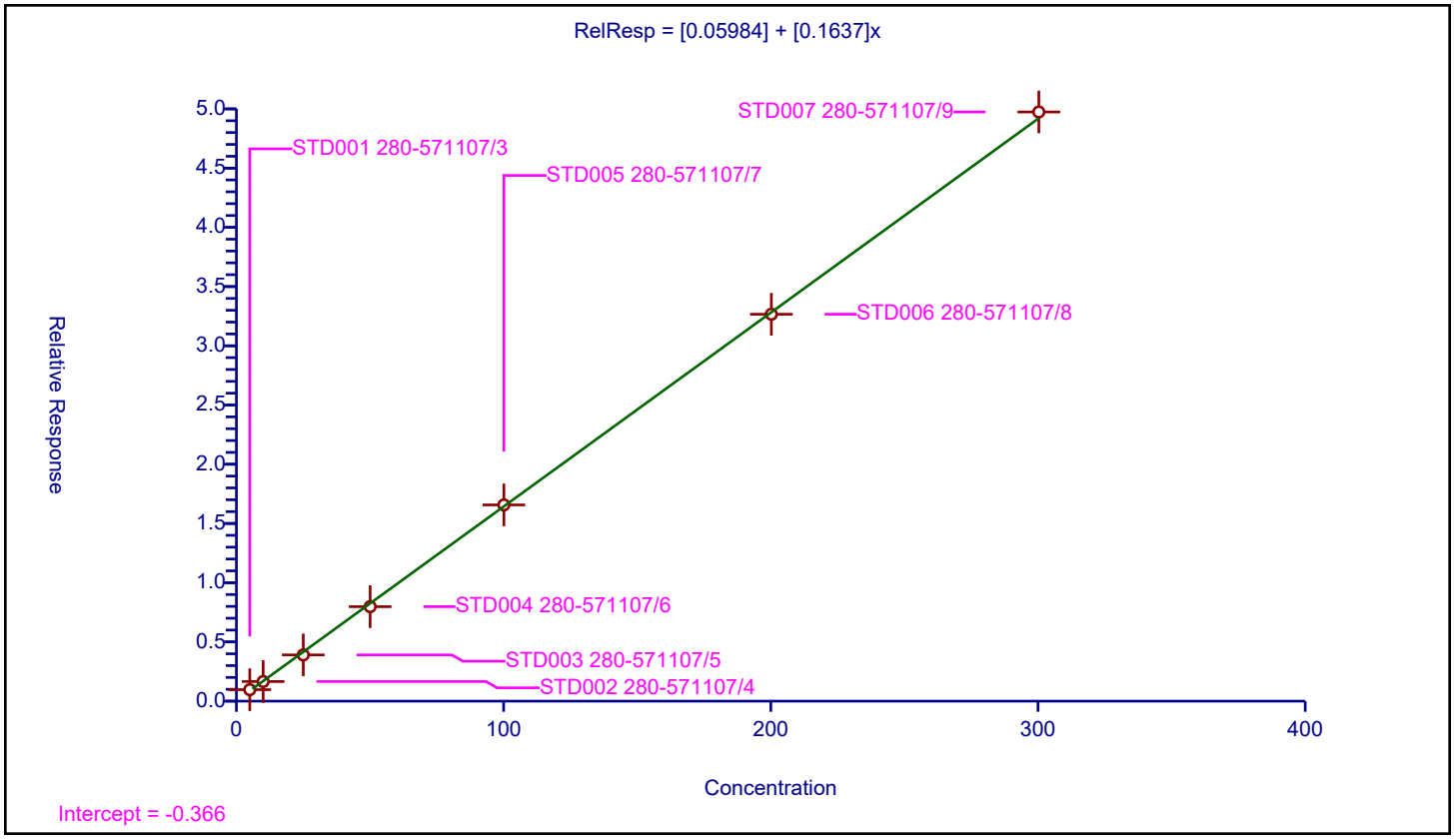
Curve Coefficients

Intercept:	0.05984
Slope:	0.1637

Error Coefficients

Standard Error:	904000
Relative Standard Error:	5.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571107/3	5.005	0.967316	125.0	4073255.0	0.19327	Y
2	STD002 280-571107/4	10.01	1.656799	125.0	4091022.0	0.165514	Y
3	STD003 280-571107/5	25.025	3.902422	125.0	4101267.0	0.155941	Y
4	STD004 280-571107/6	50.05	7.977587	125.0	4054672.0	0.159392	Y
5	STD005 280-571107/7	100.1	16.565544	125.0	4037907.0	0.16549	Y
6	STD006 280-571107/8	200.2	32.66454	125.0	3992973.0	0.16316	Y
7	STD007 280-571107/9	300.3	49.738897	125.0	4074060.0	0.165631	Y



FORM VI
LCMS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-160190-1 Analy Batch No.: 571224

SDG No.:

Instrument ID: LC_LCMS7 GC Column: Synergi Hyd ID: Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2022 09:48 Calibration End Date: 04/08/2022 10:27 Calibration ID: 63915

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD001 280-571224/3	ex722D08003.d
Level 2	STD002 280-571224/4	ex722D08004.d
Level 3	STD003 280-571224/5	ex722D08005.d
Level 4	STD004 280-571224/6	ex722D08006.d
Level 5	STD005 280-571224/7	ex722D08007.d
Level 6	STD006 280-571224/8	ex722D08008.d
Level 7	STD007 280-571224/9	ex722D08009.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
HMX	2.8006 2.2469	2.6717 2.2786	2.1202	2.2055	2.0310	Lin1	2.3777	2.2079							0.9970		0.9900
TNX	4.7431 4.6745	5.0054 4.3850	4.7872	4.7271	4.4982	Lin1	3.4743	4.5011							0.9990		0.9900
DNX	6.8963 6.4865	7.1402 6.2391	6.6776	6.6955	6.4608	Lin1	5.6279	6.3527							0.9990		0.9900
MNX	1.8255 1.5770	1.7114 1.5967	1.6934	1.6550	1.6998	Lin1	1.6701	1.6025							0.9990		0.9900
RDX	1.3044 0.6988	0.9073 0.7005	0.8730	0.7839	0.7646	Lin1	3.0249	0.6983							0.9990		0.9900
1,3,5-Trinitrobenzene	1.7032 1.5742	1.6589 1.5592	1.5498	1.5462	1.5114	Lin1	0.6465	1.5513							1.0000		0.9900
Tetryl	2.0573 2.3550	2.2738 2.3190	2.2157	2.2647	2.2429	Lin1	-1.398	2.3223							1.0000		0.9900
1,3-Dinitrobenzene	0.9916 1.0643	1.2649 1.0812	1.1192	1.1205	1.0889	Lin1	0.4726	1.0789							0.9990		0.9900
Nitroglycerin	0.8720 0.9482	1.1008 0.9165	0.9439	0.9277	0.9867	Lin1	0.3787	0.9362							0.9990		0.9900
2,4,6-Trinitrotoluene	6.6468 6.7071	6.8602 6.7155	6.5196	6.5612	6.4742	Lin1	-0.475	6.6662							1.0000		0.9900
Nitrobenzene	0.5001 0.5202	0.5575 0.5311	0.5147	0.5197	0.4986	Lin1	-0.039	0.5224							0.9990		0.9900
4-Amino-2,6-dinitrotoluene	1.7190 1.5225	1.6318 1.5458	1.5733	1.5378	1.5299	Lin1	0.9202	1.5303							1.0000		0.9900
2-Amino-4,6-dinitrotoluene	2.2182 1.9213	2.0726 2.0012	1.9457	1.9638	1.9602	Lin1	0.9577	1.9603							1.0000		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-160190-1 Analy Batch No.: 571224

SDG No.:

Instrument ID: LC_LCMS7 GC Column: Synergi Hyd ID: Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2022 09:48 Calibration End Date: 04/08/2022 10:27 Calibration ID: 63915

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
2,6-Dinitrotoluene	2.2380 2.0640	2.2275 2.0654	2.1308	2.1058	2.0433	Lin1	1.2418	2.0581							1.0000		0.9900
2,4-Dinitrotoluene	1.1217 1.0561	1.1428 1.0693	1.0415	1.0563	1.0203	Lin1	0.3358	1.0545							1.0000		0.9900
PETN	0.2103 0.1721	0.1841 0.1760	0.1695	0.1635	0.1677	Lin1	0.1069	0.1718							0.9990		0.9900
o-Nitrotoluene	0.3471 0.3188	0.3265 0.3237	0.3289	0.3067	0.3133	Lin1	0.0825	0.3191							1.0000		0.9900
p-Nitrotoluene	0.3230 0.2728	0.2855 0.2834	0.2838	0.2758	0.2713	Lin1	0.1542	0.2768							0.9990		0.9900
m-Nitrotoluene	0.1589 0.1610	0.1569 0.1704	0.1770	0.1621	0.1591	Lin1	-0.040	0.1658							0.9990		0.9900
Nitrobenzene-d5	0.6725 0.6161	0.7128 0.6165	0.5706	0.6297	0.5782	Lin1	0.3679	0.6082							0.9990		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-160190-1 Analy Batch No.: 571224

SDG No.:

Instrument ID: LC_LCMS7 GC Column: Synergi Hyd ID: Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2022 09:48 Calibration End Date: 04/08/2022 10:27 Calibration ID: 63915

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD001 280-571224/3	ex722D08003.d
Level 2	STD002 280-571224/4	ex722D08004.d
Level 3	STD003 280-571224/5	ex722D08005.d
Level 4	STD004 280-571224/6	ex722D08006.d
Level 5	STD005 280-571224/7	ex722D08007.d
Level 6	STD006 280-571224/8	ex722D08008.d
Level 7	STD007 280-571224/9	ex722D08009.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
HMX	HXC4	Lin1	13721 335694	23047 445980	49346	96964	169461	5.00 200	10.0 300	25.0	50.0	100
TNX	DNB4	Lin1	242434 8979152	490852 13060872	1173077	2267041	4412109	5.01 200	10.0 300	25.0	50.1	100
DNX	DNB4	Lin1	352486 12459856	700204 18583446	1636306	3211051	6337223	5.01 200	10.0 300	25.0	50.1	100
MNX	DNB4	Lin1	108779 3531604	195655 5544638	483781	925313	1943722	5.84 233	11.7 350	29.2	58.4	117
RDX	HHTT	Lin1	18116 438206	26589 650773	63854	121556	257673	5.00 200	10.0 300	25.0	50.0	100
1,3,5-Trinitrobenzene	DNB4	Lin1	87143 3026827	162841 4648629	380158	742278	1483942	5.01 200	10.0 301	25.1	50.1	100
Tetryl	DNB4	Lin1	105260 4528158	223204 6914100	543482	1087206	2202225	5.01 200	10.0 301	25.1	50.1	100
1,3-Dinitrobenzene	DNB4	Lin1	50736 2046516	124163 3223708	274531	537926	1069106	5.01 200	10.0 301	25.1	50.1	100
Nitroglycerin	DNB4	Lin1	44795 1830526	108487 2743416	232441	447126	972609	5.03 201	10.1 302	25.2	50.3	101
2,4,6-Trinitrotoluene	DNB4	Lin1	340754 12922151	674759 20062195	1602358	3156079	6369385	5.02 201	10.0 301	25.1	50.2	100
Nitrobenzene	DNB4	Lin1	25637 1002186	54830 1586690	126498	249989	490514	5.02 201	10.0 301	25.1	50.2	100
4-Amino-2,6-dinitrotoluene	DNT3	Lin1	261726 9368121	520248 14545292	1231870	2375380	4716040	5.01 200	10.0 300	25.0	50.1	100
2-Amino-4,6-dinitrotoluene	DNT3	Lin1	338749 11857200	662768 18887297	1528019	3042516	6060587	5.02 201	10.0 301	25.1	50.2	100
2,6-Dinitrotoluene	DNT3	Lin1	341778	712313	1673375	3262541	6317412	5.02	10.0	25.1	50.2	100

FORM VI
LCMS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-160190-1 Analy Batch No.: 571224

SDG No.:

Instrument ID: LC_LCMS7 GC Column: Synergi Hyd ID: Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2022 09:48 Calibration End Date: 04/08/2022 10:27 Calibration ID: 63915

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			12737968	19493029				201	301			
2,4-Dinitrotoluene	DNT3	Lin1	171294 6517877	365431 10092449	817942	1636566	3154650	5.02 201	10.0 301	25.1	50.2	100
PETN	DNT3	Lin1	31860 1053844	58404 1647653	132081	251248	514409	4.98 199	9.96 299	24.9	49.8	99.6
o-Nitrotoluene	DNT3	Lin1	52796 1959566	103992 3043274	257283	473207	964720	5.00 200	10.0 300	25.0	50.0	100
p-Nitrotoluene	DNT3	Lin1	49235 1679988	91126 2669074	222413	426485	837144	5.01 200	10.0 301	25.1	50.1	100
m-Nitrotoluene	DNT3	Lin1	24188 990802	50018 1603102	138553	250461	490433	5.01 200	10.0 300	25.0	50.1	100
Nitrobenzene-d5	DNB4	Lin1	34349 1182610	69852 1834802	139720	301789	566702	5.00 200	10.0 300	25.0	50.0	100

Curve Type Legend
Lin1 = Linear 1/conc ISTD

Report Date: 11-Apr-2022 11:38:35 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08003.d
Lims ID: STD001
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 08-Apr-2022 09:48:02 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: STD L1
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 11-Apr-2022 11:38:35 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1661

First Level Reviewer: meyera Date: 11-Apr-2022 08:38:07
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	13721	5.27	9.0	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		122481	125.0	245	
36 TNX								
144.0	1.385	1.385	0.0	0.751	242434	4.50	66.0	
33 DNX								
160.0	1.489	1.489	0.0	0.807	352486	4.55	238	
34 MNX								
160.0	1.670	1.670	0.0	0.906	108779	5.60	67.3	
4 RDX								M
281.2	1.833	1.841	-0.008	0.994	18116	5.01	6.6	M
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		347220	125.0	125	
5 1,3,5-Trinitrobenzene								
213.0	2.317	2.313	0.004	0.770	87143	5.08	41.3	
6 Tetryl								
241.1	2.712	2.699	0.013	0.901	105260	5.04	30.6	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.008	3.008	0.0		1321063	129.4	277	
8 1,3-Dinitrobenzene								
168.0	3.051	3.040	0.011	1.014	50736	4.17	28.0	
9 Nitroglycerin								
62.0	3.058	3.069	-0.011	1.017	44795	4.28	16.0	
28 3,5-Dinitroaniline								
183.0	3.219	3.219	0.0	1.070	233479	5.50	24.1	

Report Date: 11-Apr-2022 11:38:35 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08003.d

Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.321	3.310	0.011	0.770	340754	5.08	59.9	
$ 11 Nitrobenzene-d5								M
128.0	3.326	3.348	-0.022	0.771	34349	4.93	5.0	M
12 Nitrobenzene								
123.0	3.441	3.411	0.030	0.797	25637	4.88	7.4	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.630	3.645	-0.015	0.841	261726	5.02	29.5	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.963	3.963	0.0	0.919	338749	5.19	34.8	
17 2,6-Dinitrotoluene								
182.0	4.132	4.126	0.006	0.958	341778	4.86	101	
* 18 2,4-dinitrotoluene-d3								
185.1	4.315	4.315	0.0		3802676	125.0	107	
19 2,4-Dinitrotoluene								
182.0	4.373	4.365	0.008	1.014	171294	5.02	45.9	
20 PETN								M
61.8	4.696	4.696	0.0	1.088	31860	5.47	7.6	M
22 o-Nitrotoluene								
137.0	4.982	4.977	0.005	1.155	52796	5.18	15.1	
23 p-Nitrotoluene								
137.0	5.281	5.286	-0.005	1.224	49235	5.29	12.0	
24 m-Nitrotoluene								
137.0	5.704	5.675	0.029	1.322	24188	5.04	6.2	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

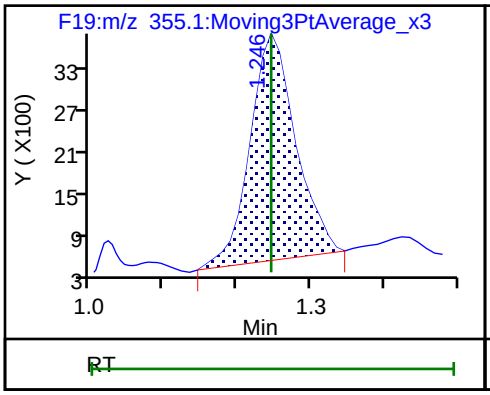
8321EXcalprim_00029	Amount Added: 0.50	Units: uL	
8321NB-D5-cal_00021	Amount Added: 0.50	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 11-Apr-2022 11:38:35 Chrom Revision: 2.3 18-Mar-2022 09:07:22

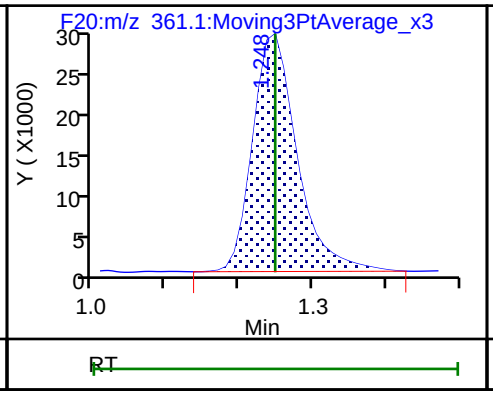
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08003.d
Injection Date: 08-Apr-2022 09:48:02 Instrument ID: LC_LCMS7
Lims ID: STD001
Client ID:
Operator ID: acm ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

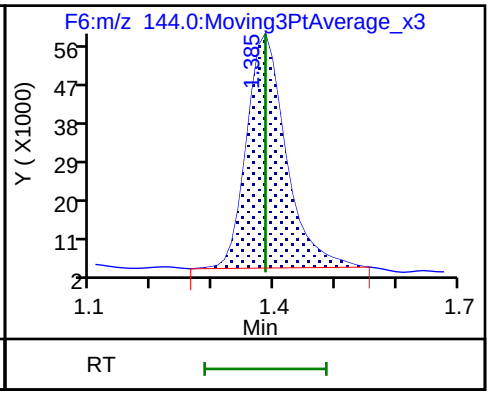
2 HMX



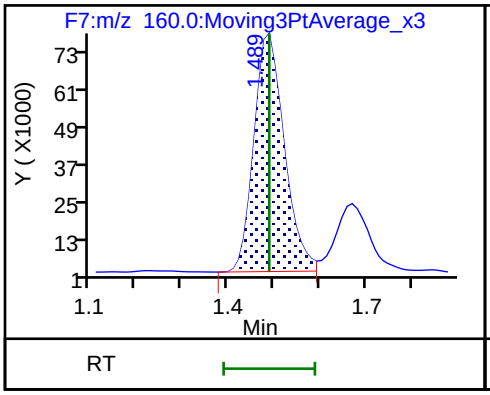
* 1 HMX-13C4



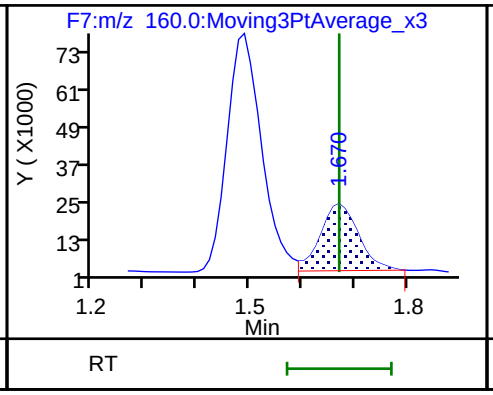
36 TNX



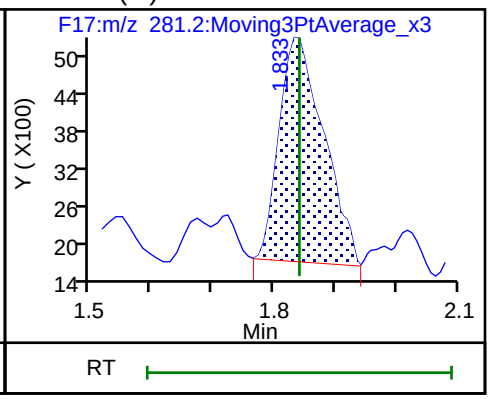
33 DNX



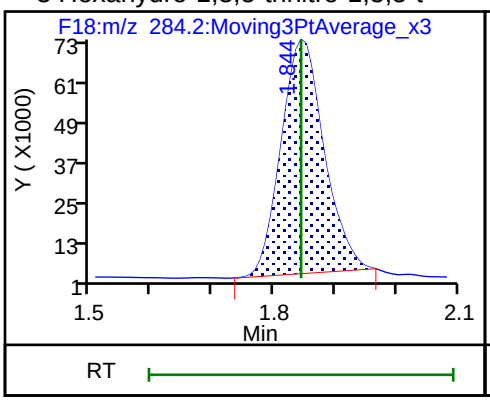
34 MNX



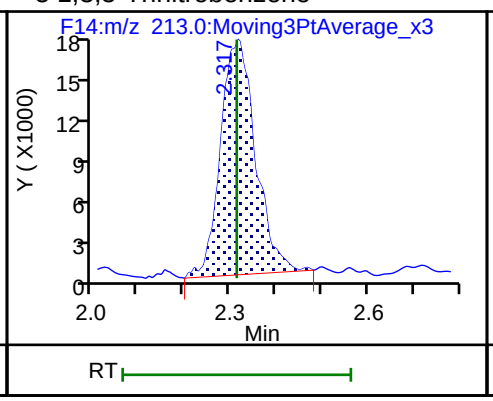
4 RDX (M)



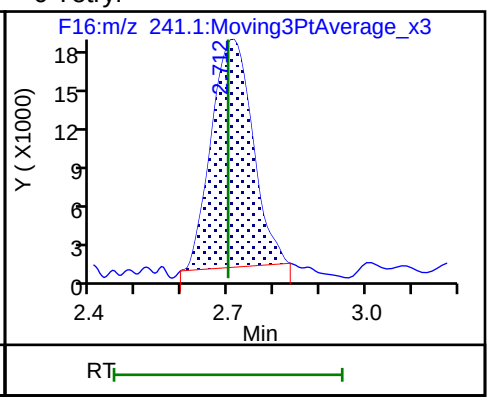
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



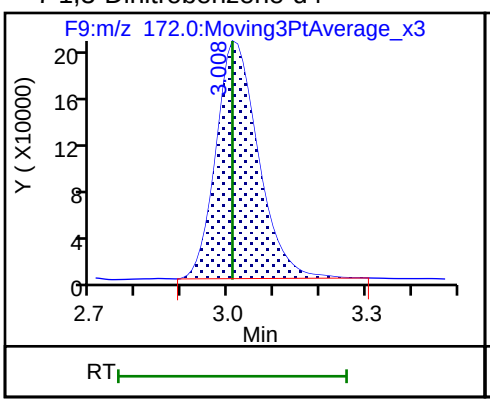
5 1,3,5-Trinitrobenzene



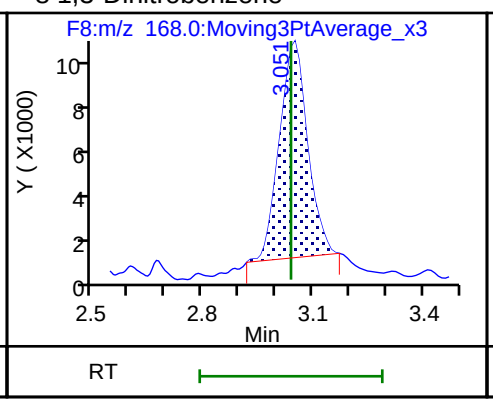
6 Tetryl



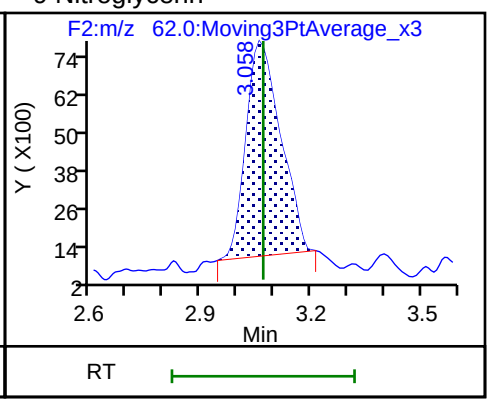
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

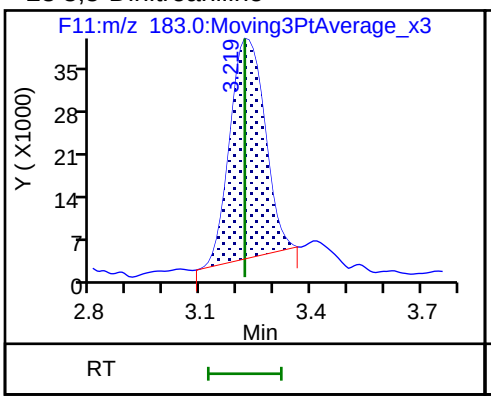


9 Nitroglycerin

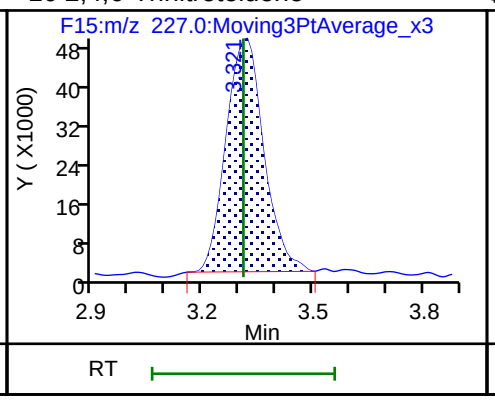


Report Date: 11-Apr-2022 11:38:35 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08003.d

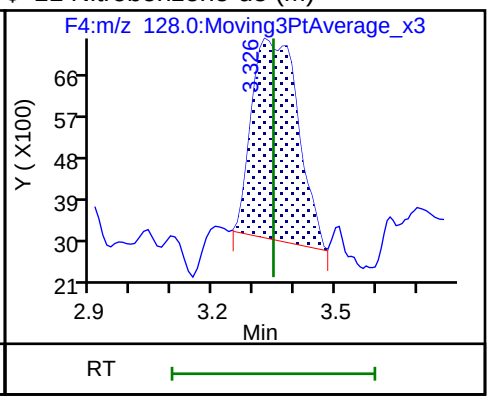
28 3,5-Dinitroaniline



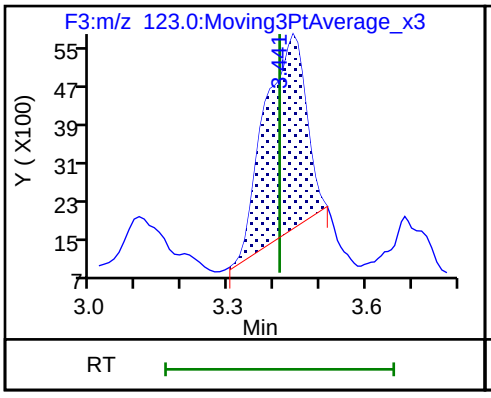
10 2,4,6-Trinitrotoluene



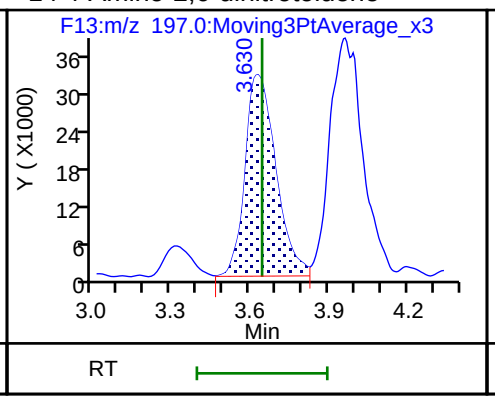
$ 11 Nitrobenzene-d5 (M)



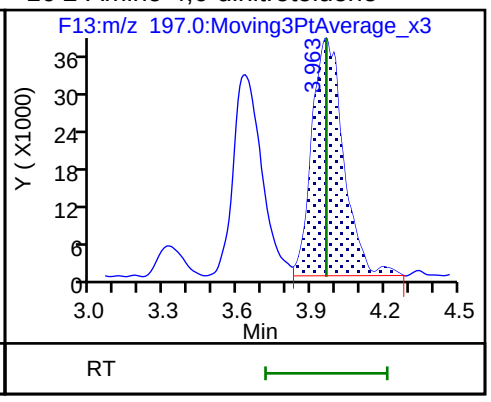
12 Nitrobenzene



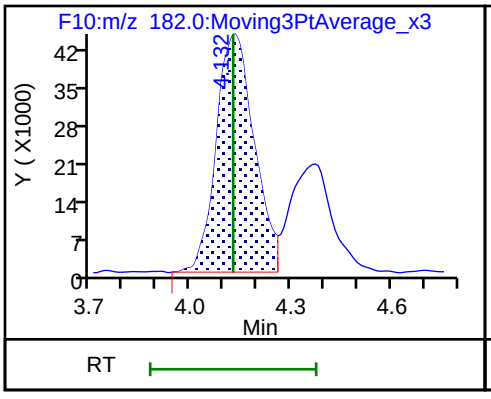
14 4-Amino-2,6-dinitrotoluene



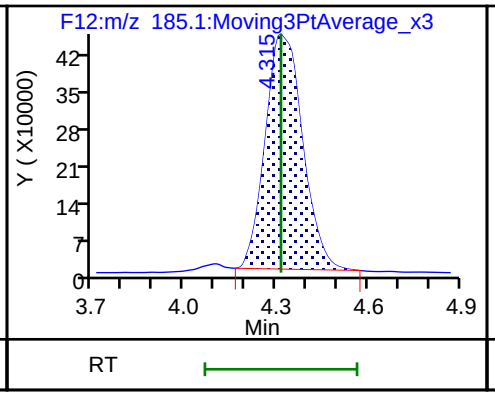
16 2-Amino-4,6-dinitrotoluene



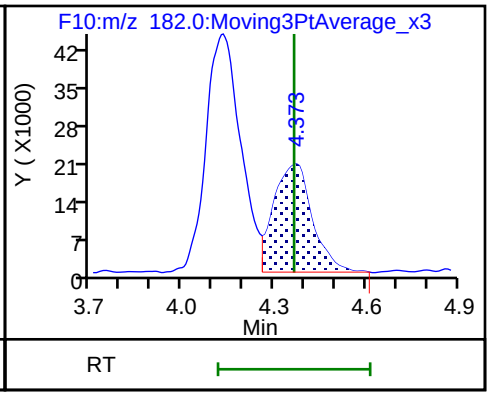
17 2,6-Dinitrotoluene



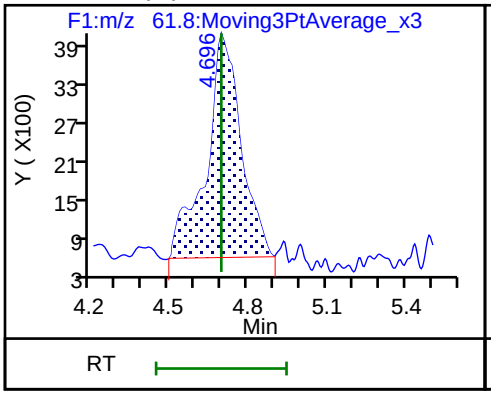
* 18 2,4-dinitrotoluene-d3



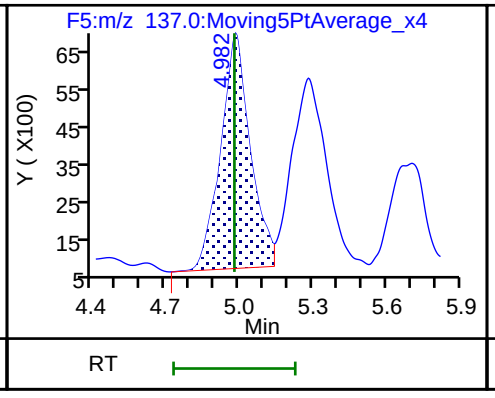
19 2,4-Dinitrotoluene



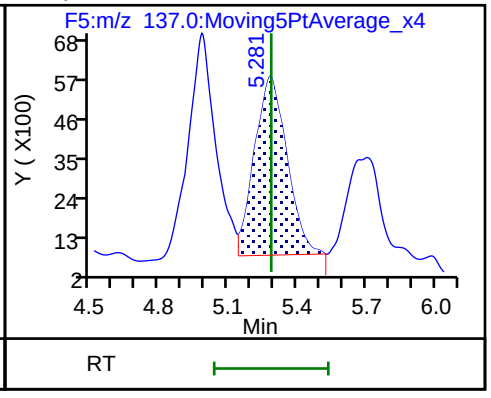
20 PETN (M)



22 o-Nitrotoluene

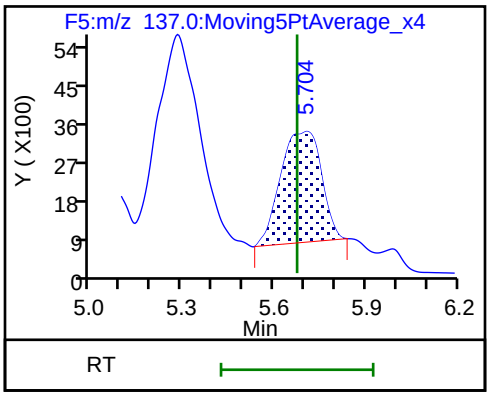


23 p-Nitrotoluene



Report Date: 11-Apr-2022 11:38:35 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08003.d

24 m-Nitrotoluene



Report Date: 11-Apr-2022 11:38:35 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08003.d

Injection Date: 08-Apr-2022 09:48:02 Instrument ID: LC_LCMS7

Lims ID: STD001

Client ID:

Operator ID: acm ALS Bottle#: 2 Worklist Smp#: 3

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

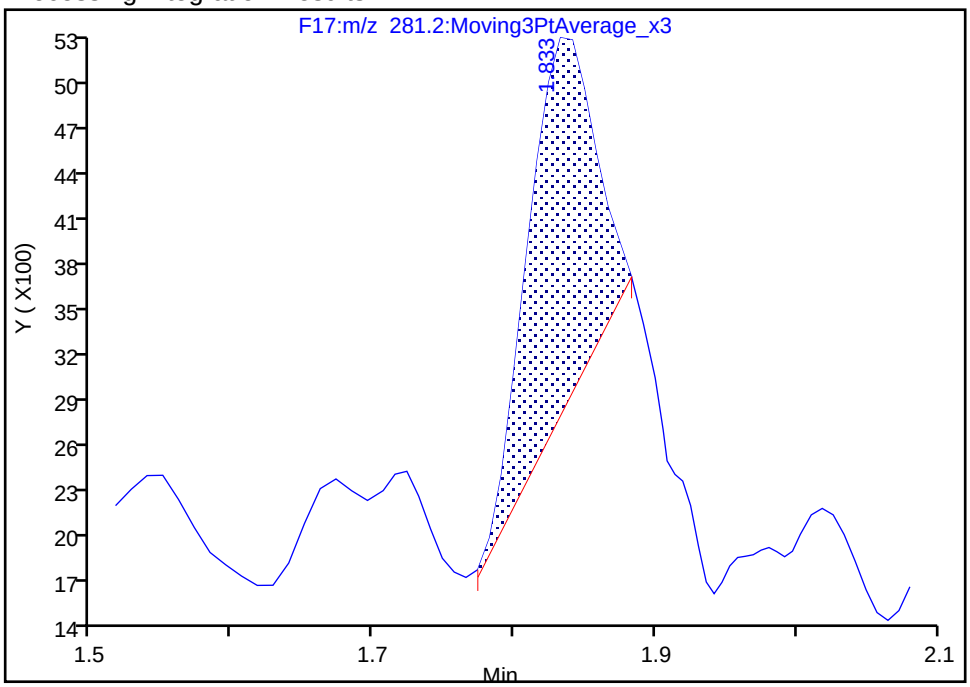
Column: Detector F17:SIR

4 RDX, CAS: 121-82-4

Signal: 1

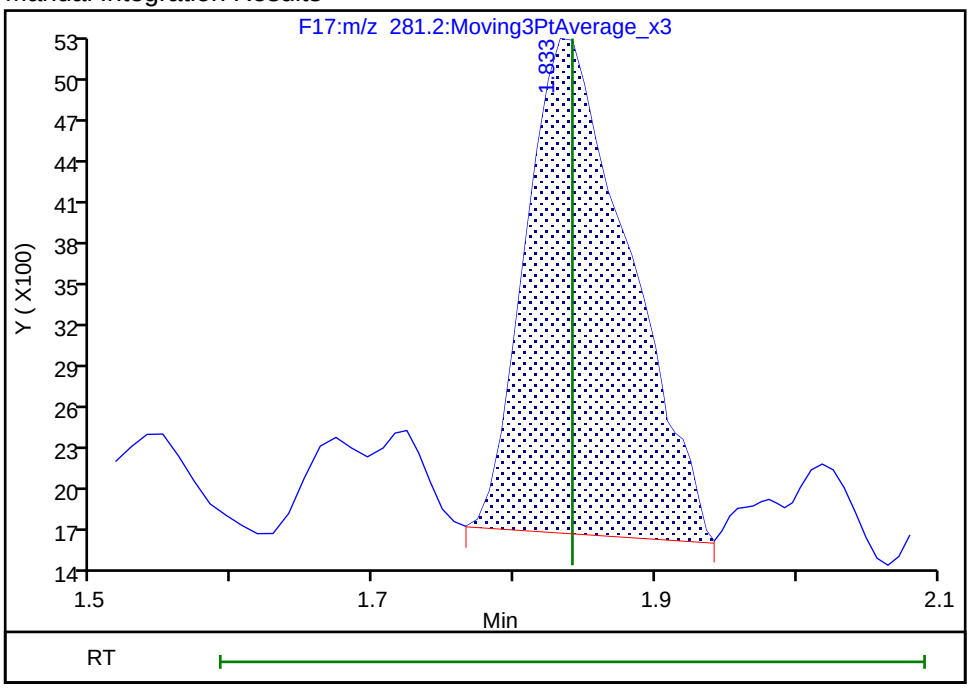
Processing Integration Results

RT: 1.83
Area: 8093
Amount: 2.959025
Amount Units: ug/l



Manual Integration Results

RT: 1.83
Area: 18116
Amount: 5.007756
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 08:38:01

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 11-Apr-2022 11:38:35 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08003.d

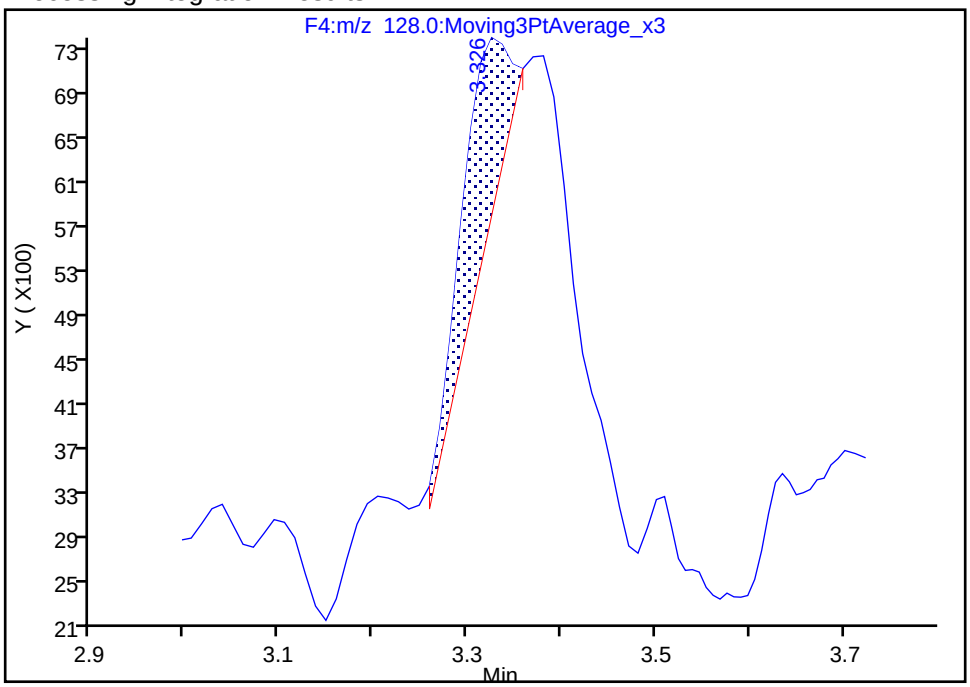
Injection Date:	08-Apr-2022 09:48:02	Instrument ID:	LC_LCMS7
Lims ID:	STD001		
Client ID:			
Operator ID:	acm	ALS Bottle#:	2 Worklist Smp#: 3
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F4:SIR

$ 11 Nitrobenzene-d5, CAS: 4165-60-0

Signal: 1

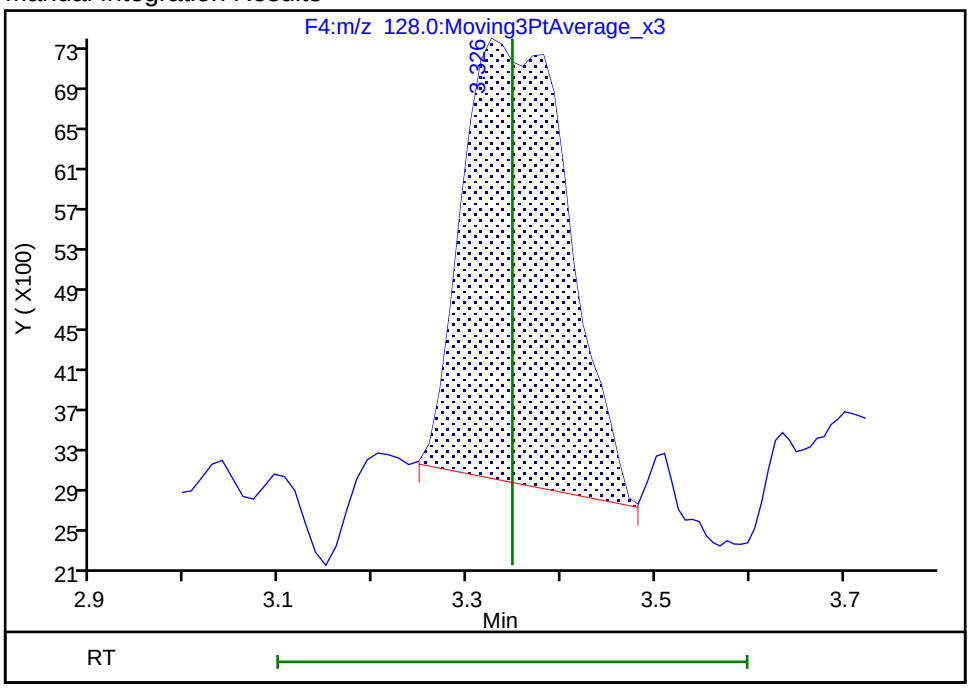
Processing Integration Results

RT: 3.33
Area: 5873
Amount: 3.104449
Amount Units: ug/l



Manual Integration Results

RT: 3.33
Area: 34349
Amount: 4.925381
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 08:37:53

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 11-Apr-2022 11:38:35 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08003.d

Injection Date: 08-Apr-2022 09:48:02 Instrument ID: LC_LCMS7

Lims ID: STD001

Client ID:

Operator ID: acm ALS Bottle#: 2 Worklist Smp#: 3

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

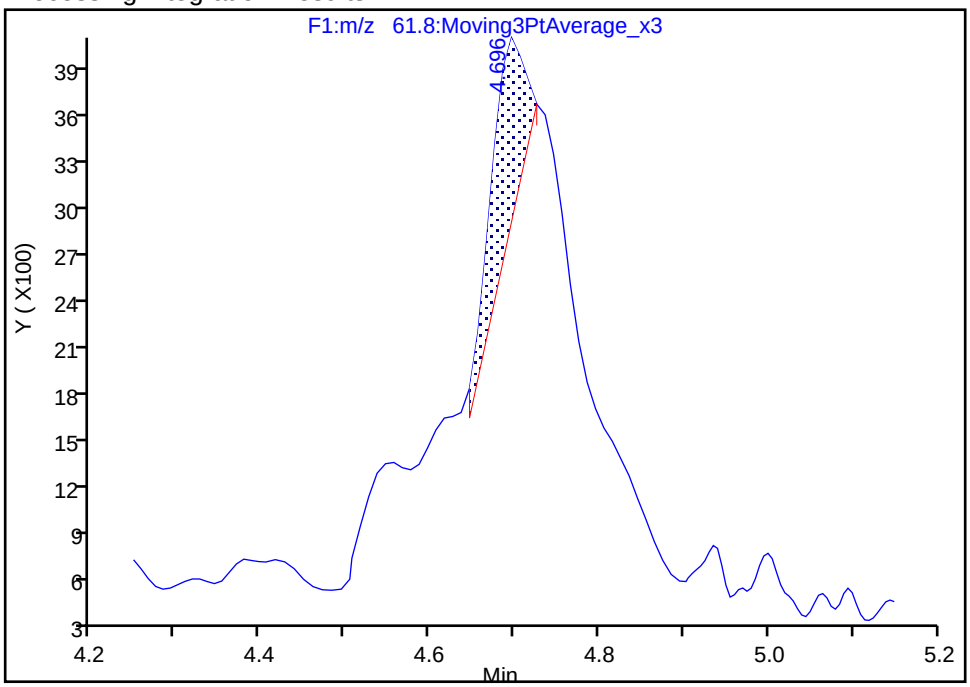
Column: Detector F1:SIR

20 PETN, CAS: 78-11-5

Signal: 1

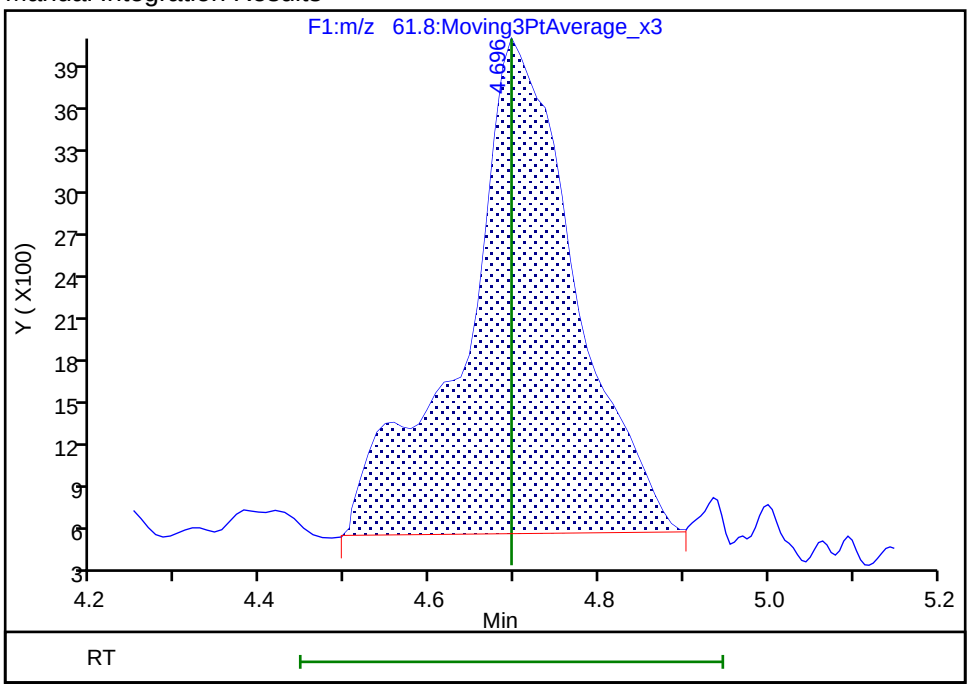
Processing Integration Results

RT: 4.70
Area: 3307
Amount: 3.298185
Amount Units: ug/l



Manual Integration Results

RT: 4.70
Area: 31860
Amount: 5.473473
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 08:37:44

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 11-Apr-2022 11:38:36 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08004.d
Lims ID: STD002
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 08-Apr-2022 09:54:38 ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: STD L2
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 11-Apr-2022 11:38:36 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1661

First Level Reviewer: meyera Date: 11-Apr-2022 08:37:33
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	23047	11.0	16.7	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		107828	125.0	112	
36 TNX								
144.0	1.385	1.385	0.0	0.751	490852	10.4	123	
33 DNX								M
160.0	1.489	1.489	0.0	0.807	700204	10.4	201	M
34 MNX								M
160.0	1.670	1.670	0.0	0.906	195655	11.4	53.7	M
4 RDX								M
281.2	1.833	1.841	-0.008	0.994	26589	8.66	16.3	M
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		366328	125.0	120	
5 1,3,5-Trinitrobenzene								
213.0	2.313	2.313	0.0	0.766	162841	10.3	80.8	
6 Tetryl								
241.1	2.705	2.699	0.006	0.896	223204	10.4	54.2	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.008	0.011		1267296	129.4	299	
8 1,3-Dinitrobenzene								
168.0	3.040	3.040	0.0	1.007	124163	11.3	46.8	
9 Nitroglycerin								
62.0	3.069	3.069	0.0	1.017	108487	11.4	57.0	
28 3,5-Dinitroaniline								M
183.0	3.230	3.219	0.011	1.070	406483	9.58	33.4	M

Report Date: 11-Apr-2022 11:38:36 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08004.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.310	3.310	0.0	0.765	674759	10.4	92.6	
$ 11 Nitrobenzene-d5								
128.0	3.337	3.348	-0.011	0.772	69852	11.1	18.2	
12 Nitrobenzene								
123.0	3.431	3.411	0.020	0.794	54830	10.8	18.8	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.645	3.645	0.0	0.843	520248	10.1	30.6	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.970	3.963	0.007	0.918	662768	10.1	36.1	
17 2,6-Dinitrotoluene								
182.0	4.132	4.126	0.006	0.956	712313	10.3	300	
* 18 2,4-dinitrotoluene-d3								
185.1	4.324	4.315	0.009		3981283	125.0	122	
19 2,4-Dinitrotoluene								
182.0	4.356	4.365	-0.009	1.007	365431	10.6	142	
20 PETN								M
61.8	4.696	4.696	0.0	1.086	58404	10.1	16.5	M
22 o-Nitrotoluene								
137.0	4.982	4.977	0.005	1.152	103992	9.97	39.5	
23 p-Nitrotoluene								
137.0	5.296	5.286	0.010	1.225	91126	9.78	33.9	
24 m-Nitrotoluene								
137.0	5.660	5.675	-0.015	1.309	50018	9.72	19.3	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

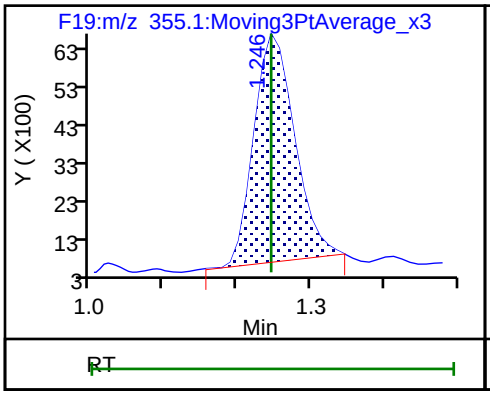
8321EXcalprim_00029	Amount Added: 1.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 1.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 11-Apr-2022 11:38:36 Chrom Revision: 2.3 18-Mar-2022 09:07:22

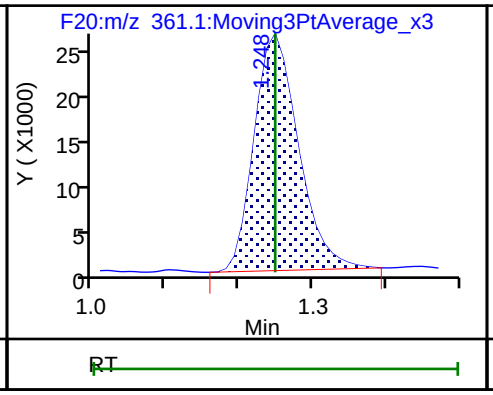
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08004.d
Injection Date: 08-Apr-2022 09:54:38 Instrument ID: LC_LCMS7
Lims ID: STD002
Client ID:
Operator ID: acm ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

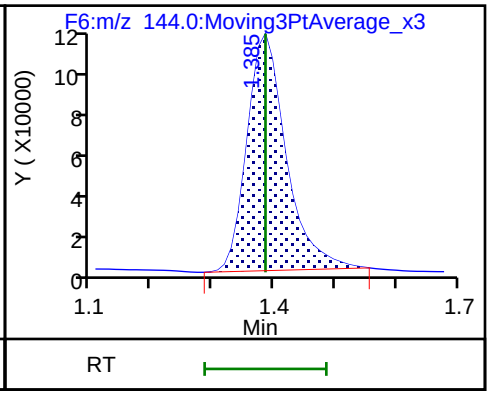
2 HMX



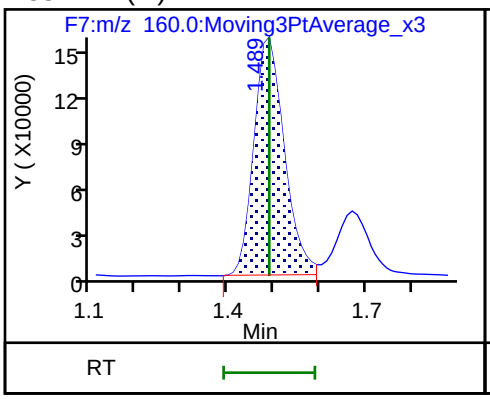
* 1 HMX-13C4



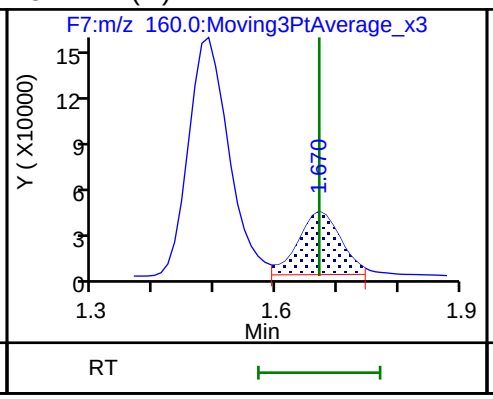
36 TNX



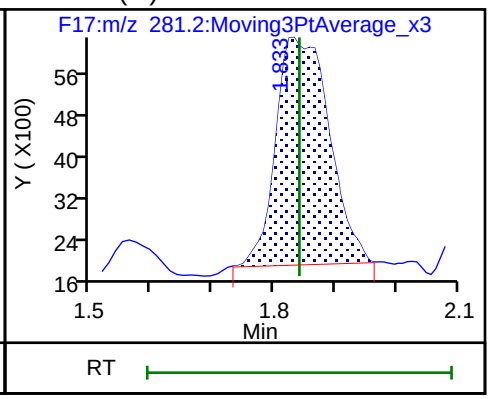
33 DNX (M)



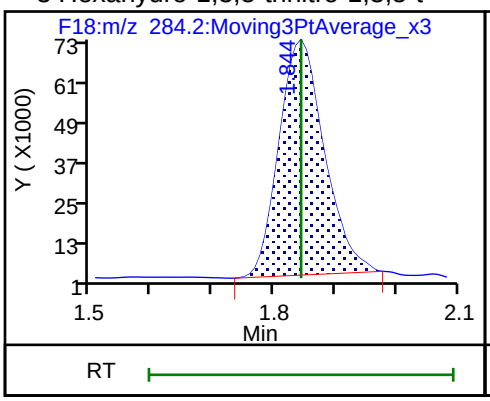
34 MNX (M)



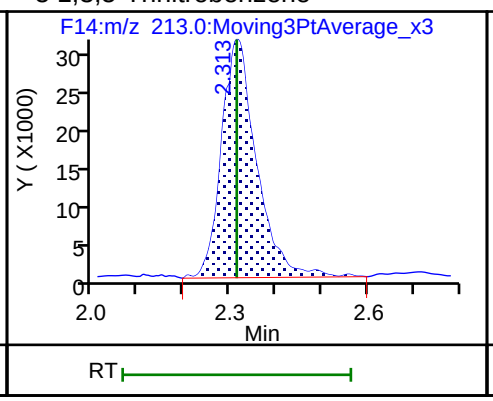
4 RDX (M)



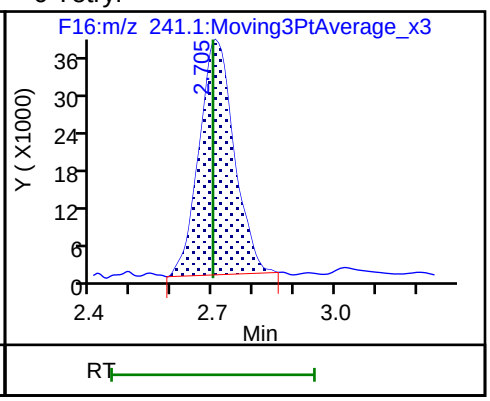
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



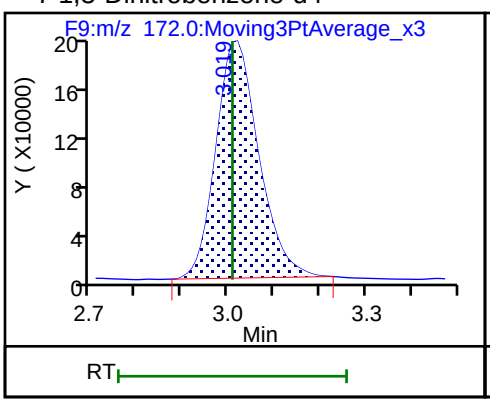
5 1,3,5-Trinitrobenzene



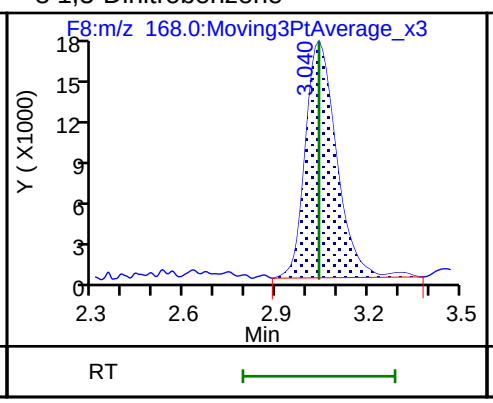
6 Tetryl



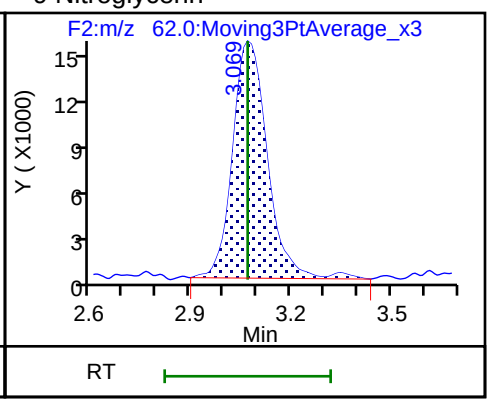
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

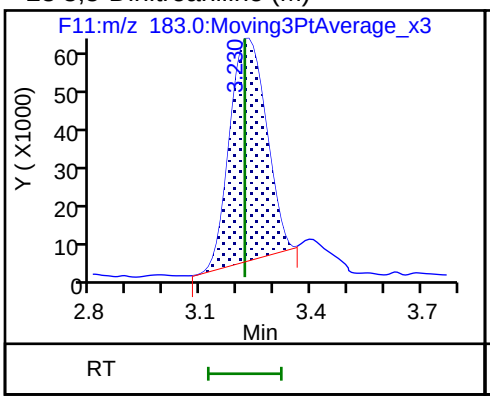


9 Nitroglycerin

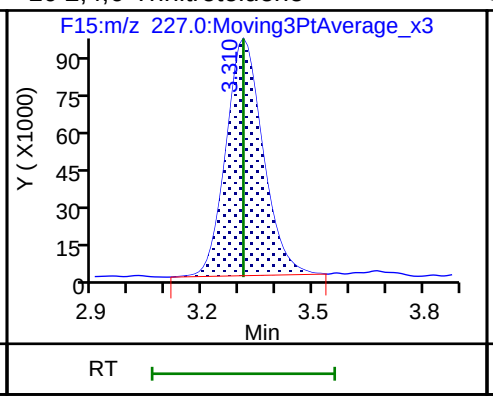


Report Date: 11-Apr-2022 11:38:36 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08004.d

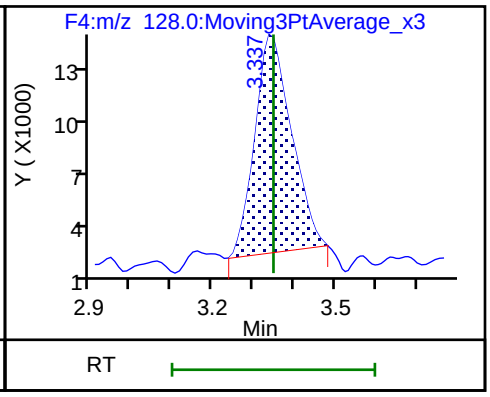
28 3,5-Dinitroaniline (M)



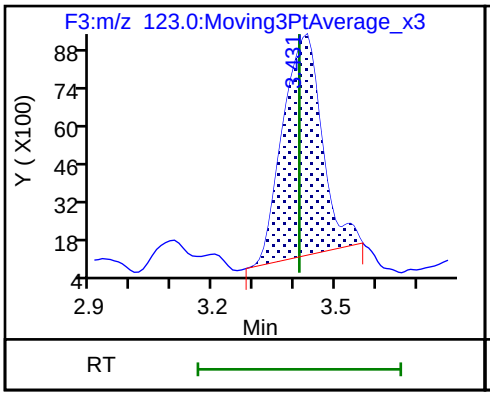
10 2,4,6-Trinitrotoluene



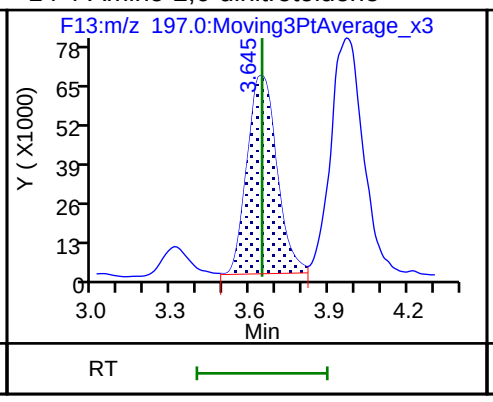
$ 11 Nitrobenzene-d5



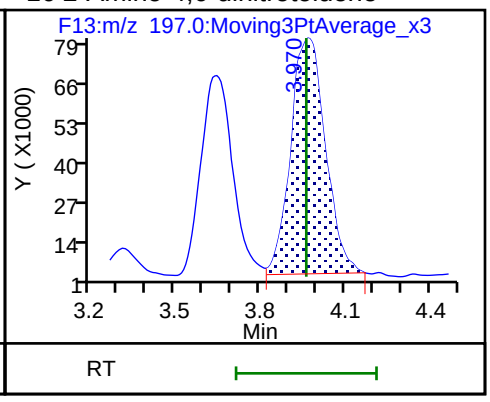
12 Nitrobenzene



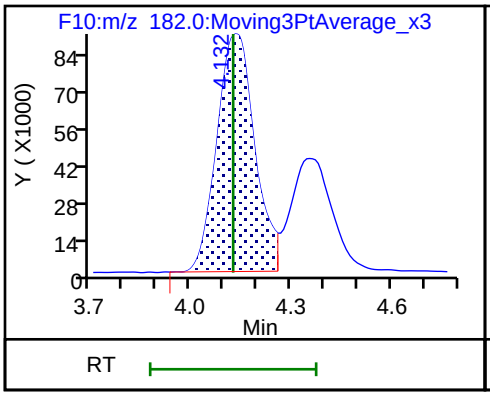
14 4-Amino-2,6-dinitrotoluene



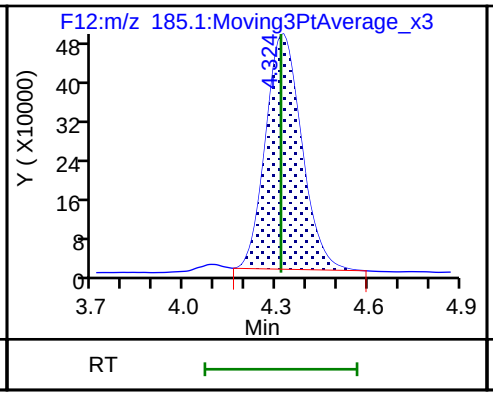
16 2-Amino-4,6-dinitrotoluene



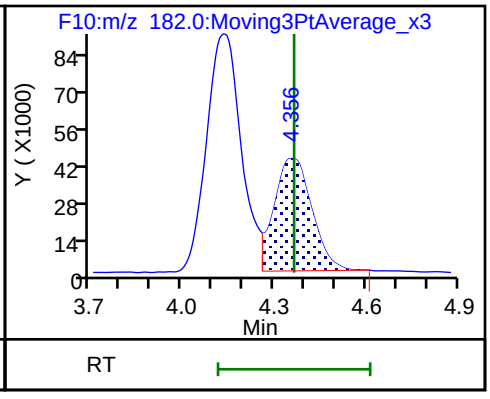
17 2,6-Dinitrotoluene



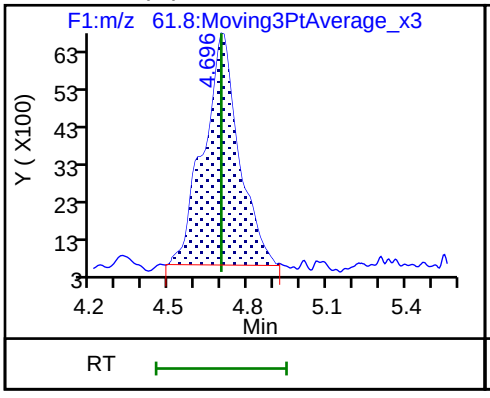
* 18 2,4-dinitrotoluene-d3



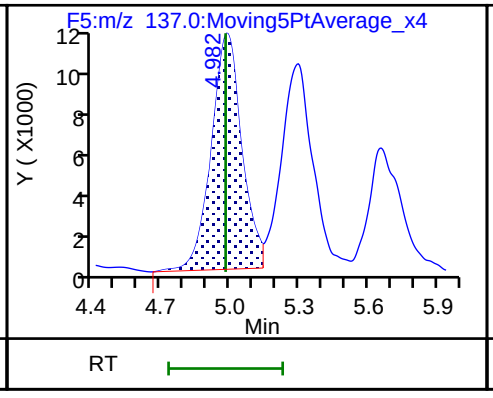
19 2,4-Dinitrotoluene



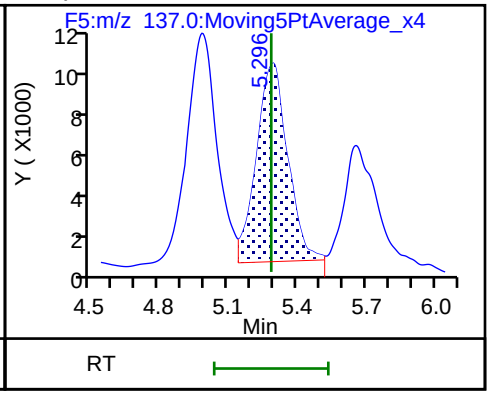
20 PETN (M)



22 o-Nitrotoluene



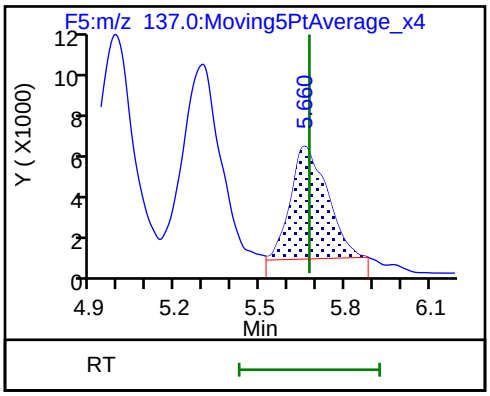
23 p-Nitrotoluene



Report Date: 11-Apr-2022 11:38:36 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08004.d

24 m-Nitrotoluene



Report Date: 11-Apr-2022 11:38:36 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08004.d

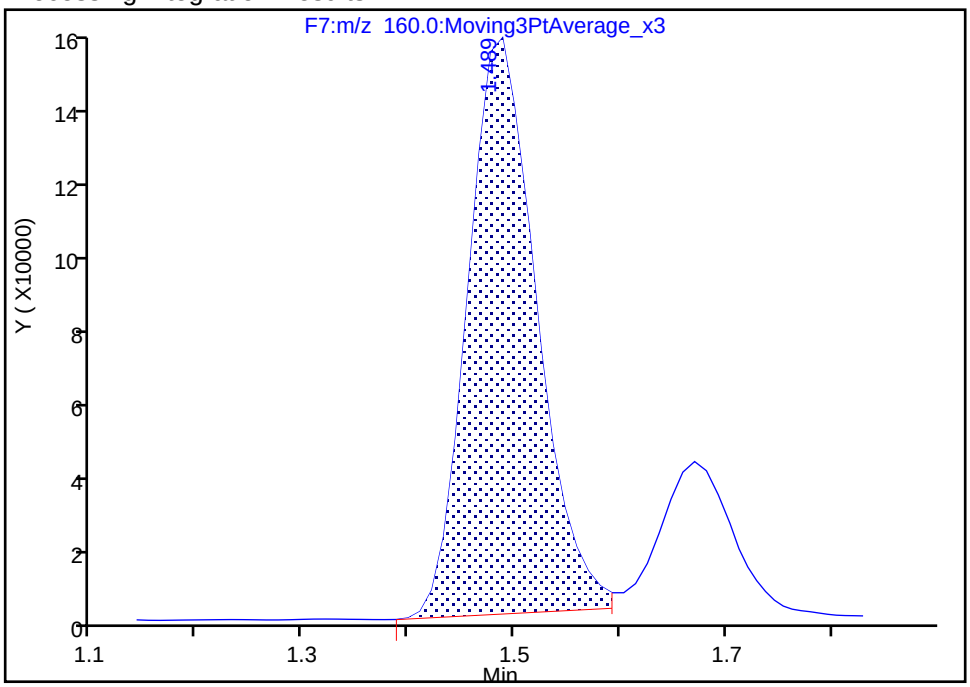
Injection Date:	08-Apr-2022 09:54:38	Instrument ID:	LC_LCMS7
Lims ID:	STD002		
Client ID:			
Operator ID:	acm	ALS Bottle#:	3 Worklist Smp#: 4
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F7:SIR

33 DNX, CAS: 80251-29-2

Signal: 1

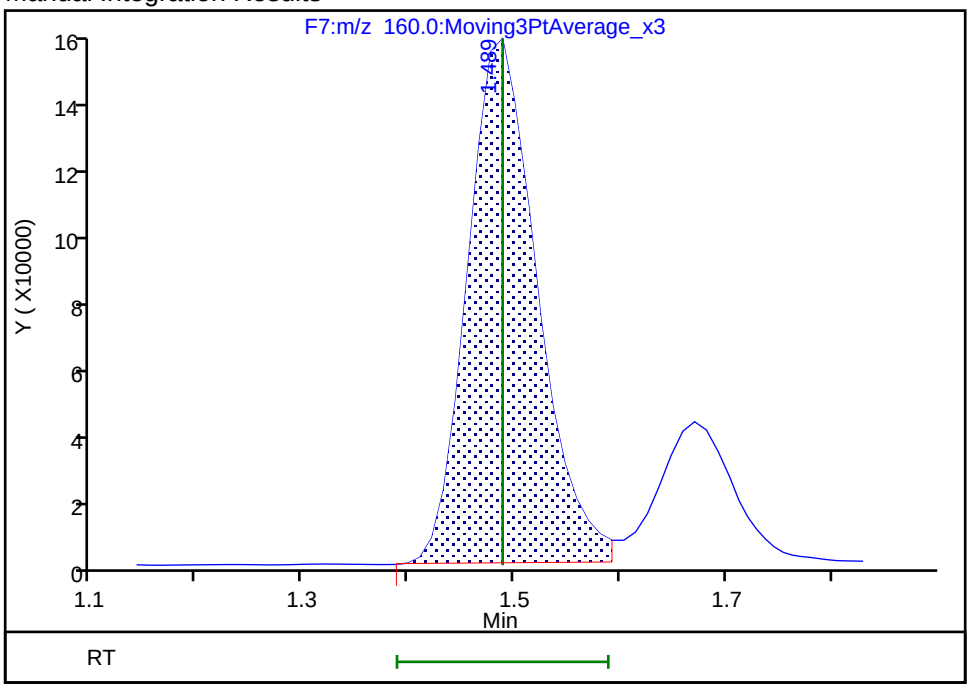
Processing Integration Results

RT: 1.49
Area: 688229
Amount: 10.225850
Amount Units: ug/l



Manual Integration Results

RT: 1.49
Area: 700204
Amount: 10.364988
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 08:39:19

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 11-Apr-2022 11:38:36 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08004.d

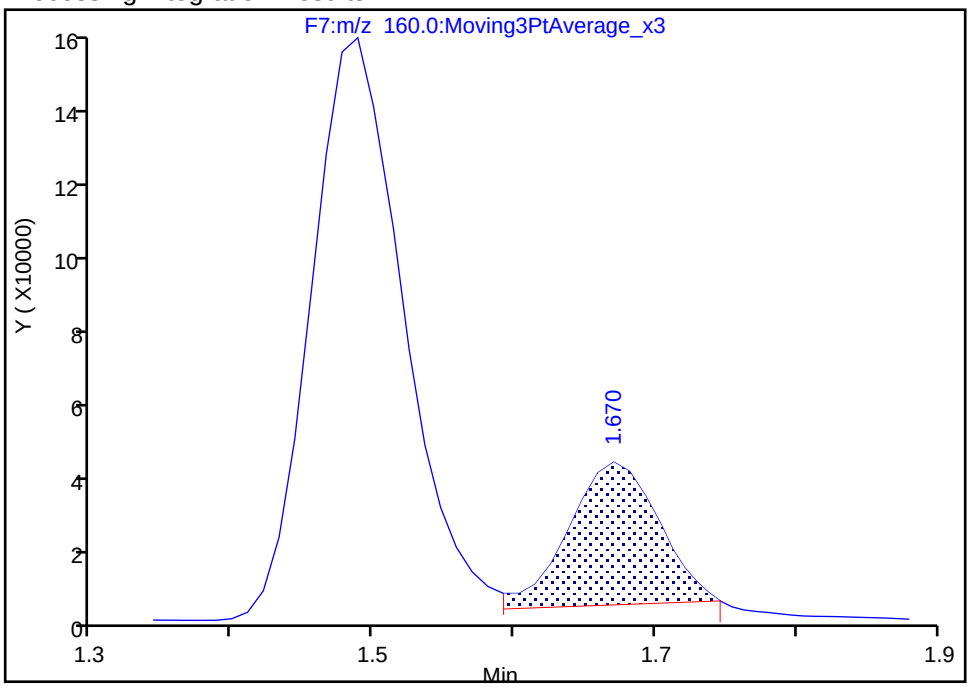
Injection Date:	08-Apr-2022 09:54:38	Instrument ID:	LC_LCMS7
Lims ID:	STD002		
Client ID:			
Operator ID:	acm	ALS Bottle#:	3 Worklist Smp#: 4
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F7:SIR

34 MNX, CAS: 5755-27-1

Signal: 1

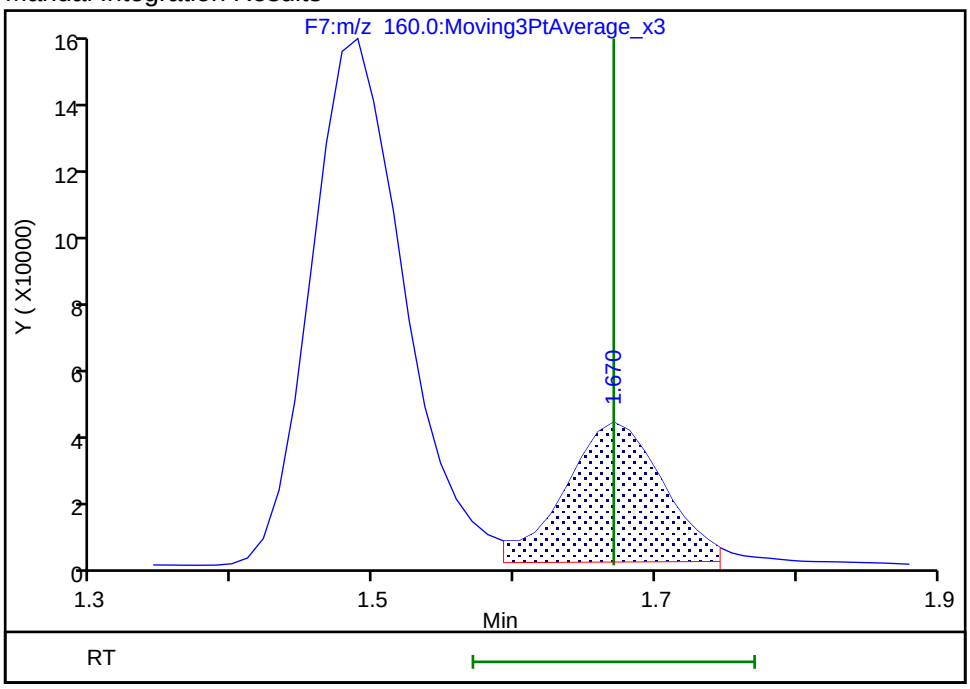
Processing Integration Results

RT: 1.67
Area: 166785
Amount: 10.095341
Amount Units: ug/l



Manual Integration Results

RT: 1.67
Area: 195655
Amount: 11.420766
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 08:39:19

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 11-Apr-2022 11:38:36 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08004.d

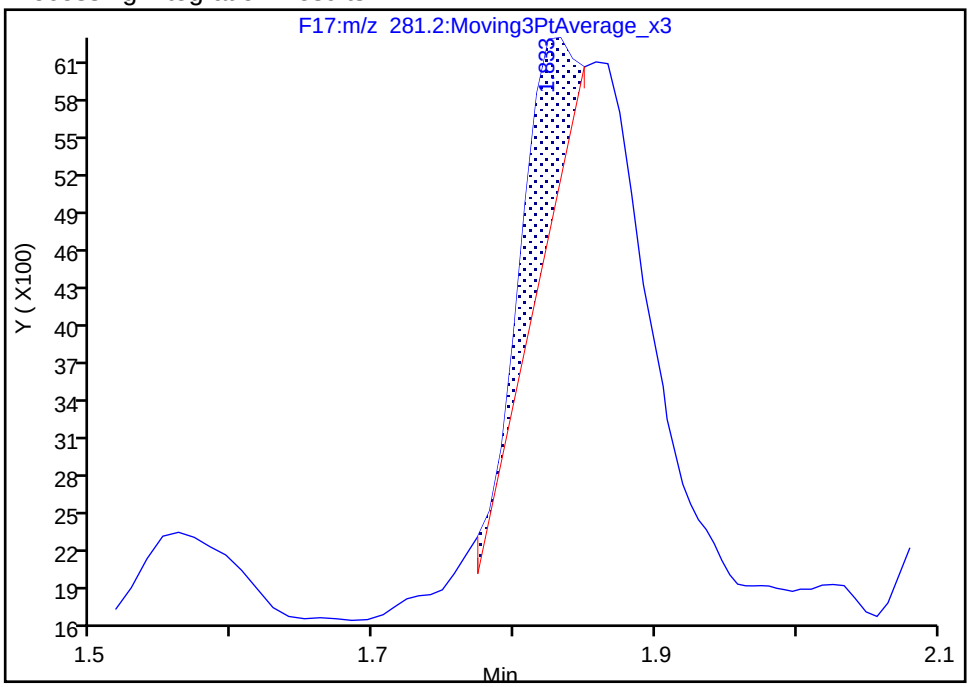
Injection Date:	08-Apr-2022 09:54:38	Instrument ID:	LC_LCMS7
Lims ID:	STD002		
Client ID:			
Operator ID:	acm	ALS Bottle#:	3 Worklist Smp#: 4
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F17:SIR

4 RDX, CAS: 121-82-4

Signal: 1

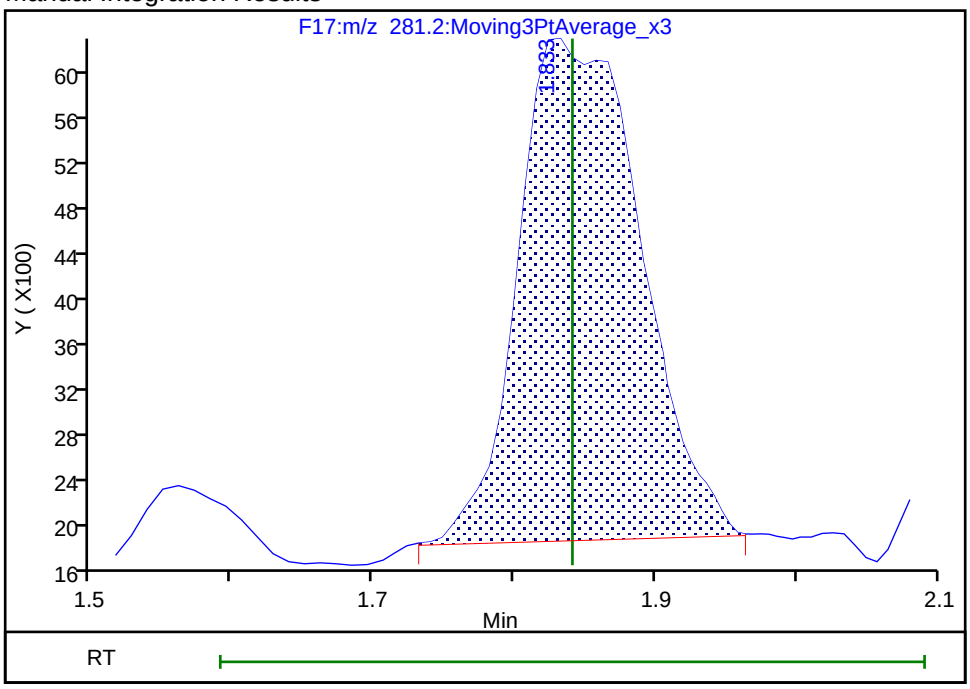
Processing Integration Results

RT: 1.83
Area: 3389
Amount: 3.676374
Amount Units: ug/l



Manual Integration Results

RT: 1.83
Area: 26589
Amount: 8.660970
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 08:37:08

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 11-Apr-2022 11:38:36 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08004.d

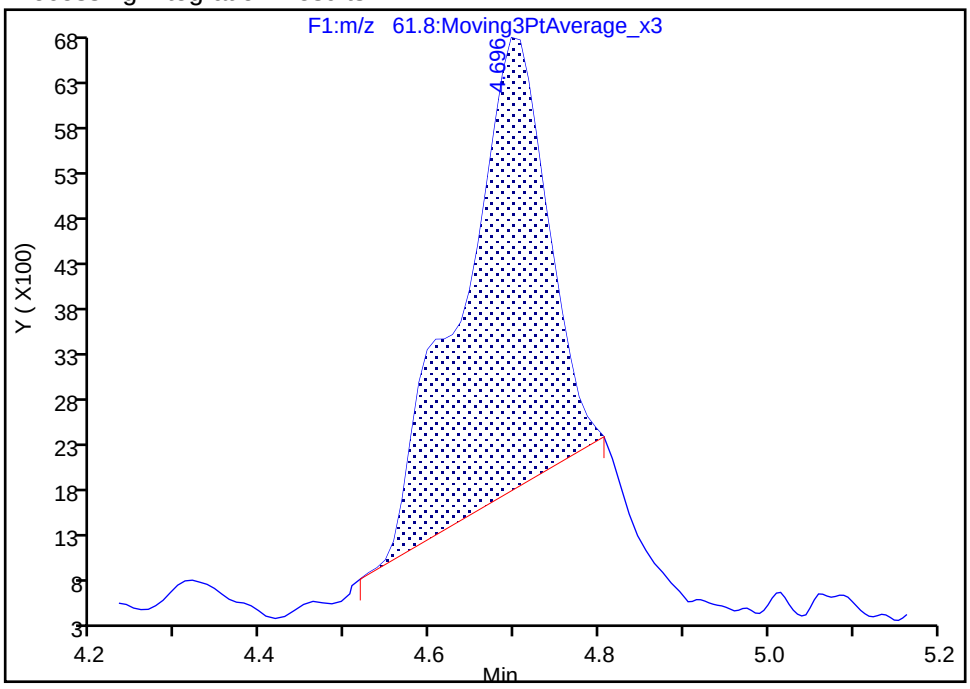
Injection Date:	08-Apr-2022 09:54:38	Instrument ID:	LC_LCMS7
Lims ID:	STD002		
Client ID:			
Operator ID:	acm	ALS Bottle#:	3 Worklist Smp#: 4
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F1:SIR

20 PETN, CAS: 78-11-5

Signal: 1

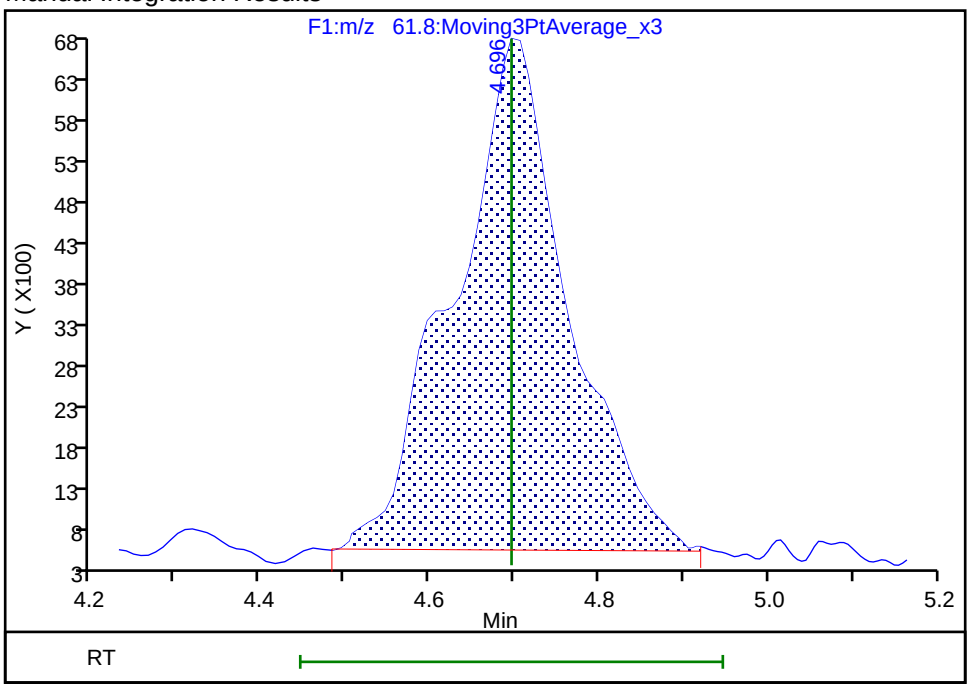
Processing Integration Results

RT: 4.70
Area: 35530
Amount: 10.135543
Amount Units: ug/l



Manual Integration Results

RT: 4.70
Area: 58404
Amount: 10.050905
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 08:37:26

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 11-Apr-2022 11:38:37 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08005.d
Lims ID: STD003
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 08-Apr-2022 10:01:13 ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: STD L3
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 11-Apr-2022 11:38:36 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1661

First Level Reviewer: meyera Date: 11-Apr-2022 08:36:56
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	49346	22.9	45.2	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		116371	125.0	103	
36 TNX								
144.0	1.385	1.385	0.0	0.751	1173077	25.8	445	
33 DNX								
160.0	1.489	1.489	0.0	0.807	1636306	25.4	367	
34 MNX								
160.0	1.670	1.670	0.0	0.906	483781	29.8	106	
4 RDX								
281.2	1.841	1.841	0.0	0.998	63854	26.9	21.6	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		365714	125.0	118	
5 1,3,5-Trinitrobenzene								
213.0	2.313	2.313	0.0	0.766	380158	24.6	135	
6 Tetryl								
241.1	2.699	2.699	0.0	0.894	543482	24.5	110	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.008	0.011		1266682	129.4	202	
8 1,3-Dinitrobenzene								
168.0	3.040	3.040	0.0	1.007	274531	25.5	98.4	
9 Nitroglycerin								
62.0	3.069	3.069	0.0	1.017	232441	25.0	99.8	
28 3,5-Dinitroaniline								M
183.0	3.219	3.219	0.0	1.066	937449	23.3	42.9	M

Report Date: 11-Apr-2022 11:38:37 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08005.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.310	3.310	0.0	0.765	1602358	24.6	108	
$ 11 Nitrobenzene-d5								
128.0	3.348	3.348	0.0	0.774	139720	22.9	20.0	
12 Nitrobenzene								
123.0	3.411	3.411	0.0	0.789	126498	24.8	30.1	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.645	3.645	0.0	0.843	1231870	25.1	34.7	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.970	3.963	0.007	0.918	1528019	24.4	38.3	
17 2,6-Dinitrotoluene								
182.0	4.126	4.126	0.0	0.954	1673375	25.4	420	
* 18 2,4-dinitrotoluene-d3								
185.1	4.324	4.315	0.009		3911012	125.0	122	
19 2,4-Dinitrotoluene								
182.0	4.356	4.365	-0.009	1.007	817942	24.5	185	
20 PETN								
61.8	4.696	4.696	0.0	1.086	132081	23.9	34.8	
22 o-Nitrotoluene								
137.0	4.977	4.977	0.0	1.151	257283	25.5	96.5	
23 p-Nitrotoluene								
137.0	5.281	5.286	-0.005	1.221	222413	25.1	77.7	
24 m-Nitrotoluene								
137.0	5.685	5.675	0.010	1.315	138553	27.0	44.8	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

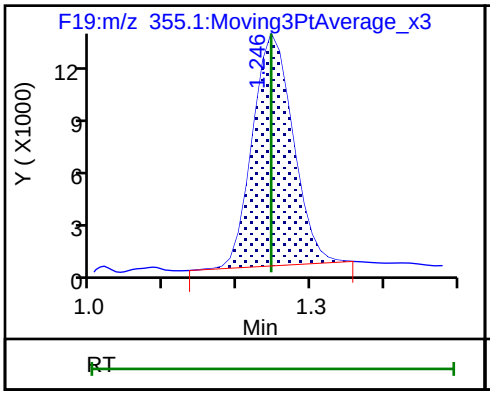
8321EXcalprim_00029	Amount Added: 2.50	Units: uL	
8321NB-D5-cal_00021	Amount Added: 2.50	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 11-Apr-2022 11:38:37 Chrom Revision: 2.3 18-Mar-2022 09:07:22

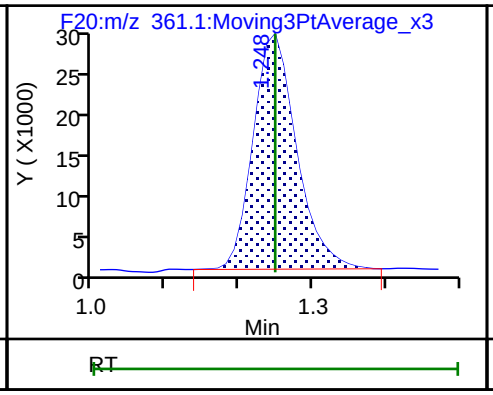
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08005.d
Injection Date: 08-Apr-2022 10:01:13 Instrument ID: LC_LCMS7
Lims ID: STD003
Client ID:
Operator ID: acm ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

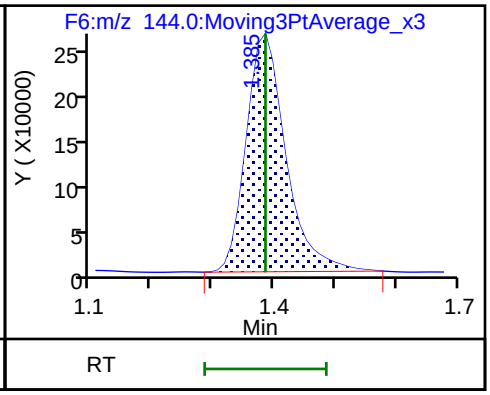
2 HMX



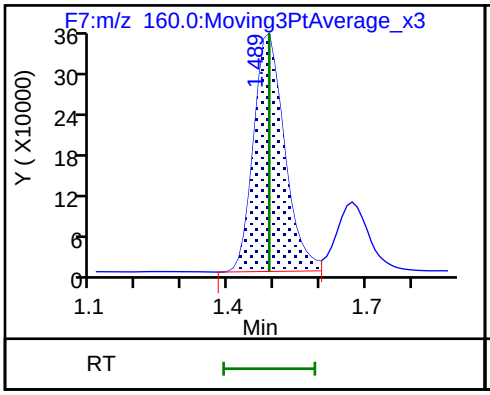
* 1 HMX-13C4



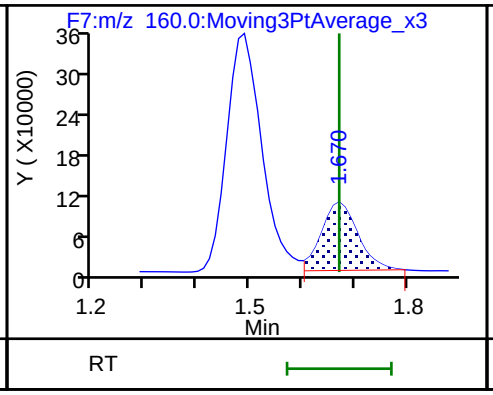
36 TNX



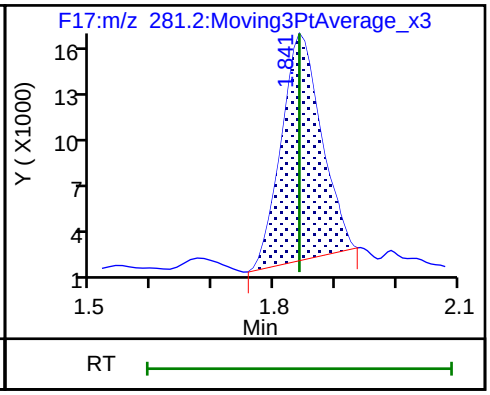
33 DNX



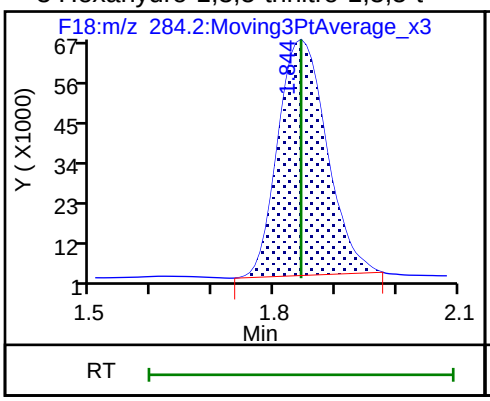
34 MNX



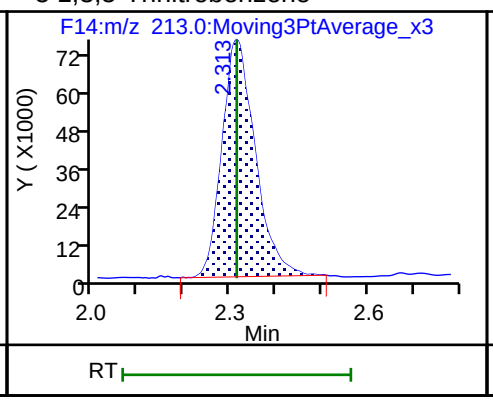
4 RDX



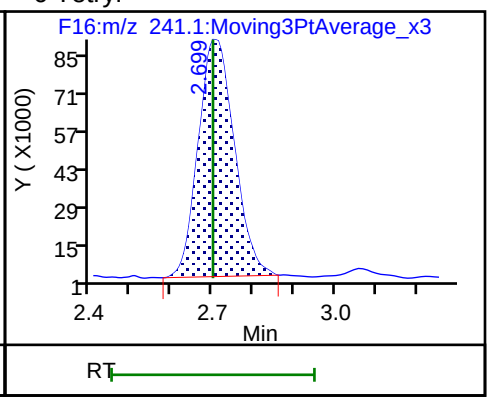
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



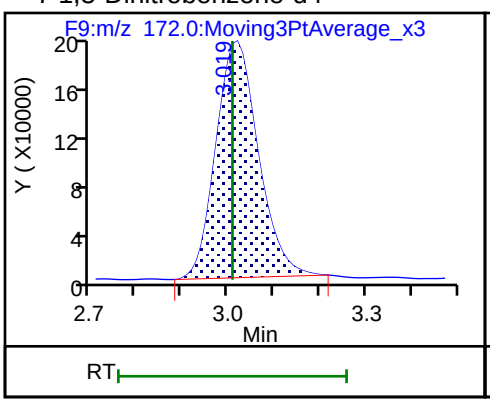
5 1,3,5-Trinitrobenzene



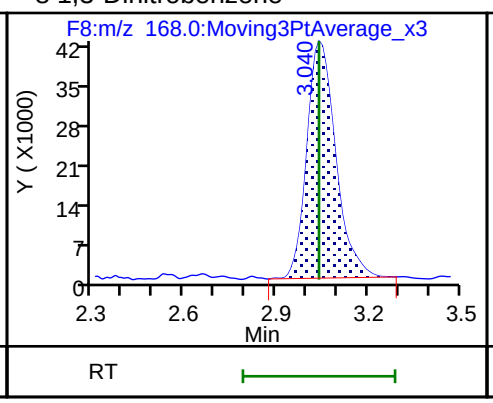
6 Tetryl



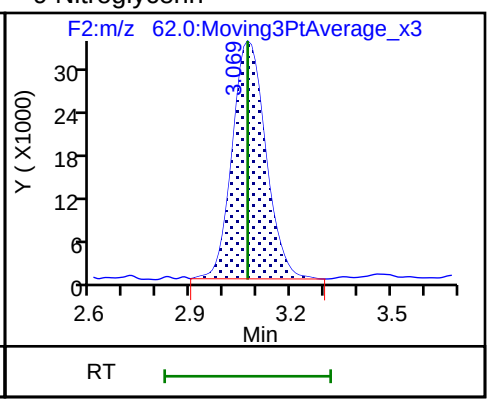
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

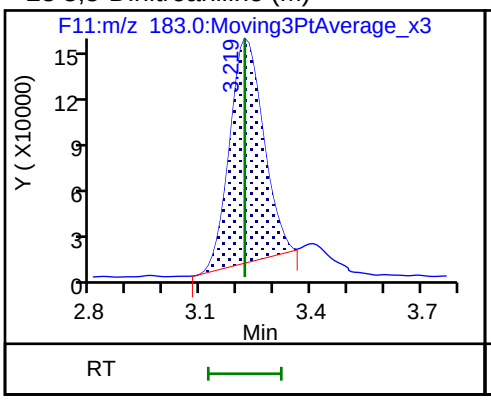


9 Nitroglycerin

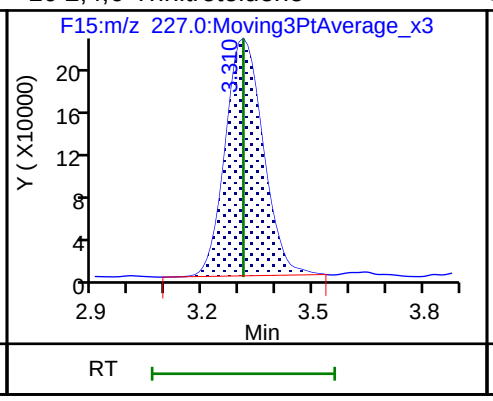


Report Date: 11-Apr-2022 11:38:37 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08005.d

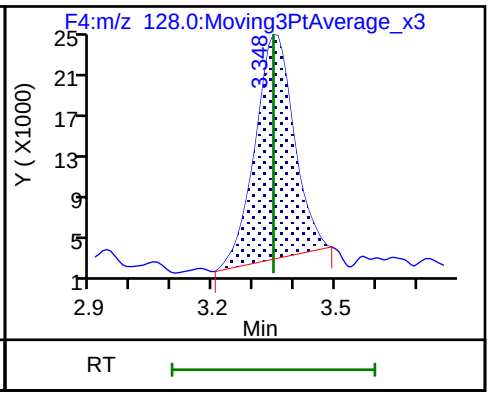
28 3,5-Dinitroaniline (M)



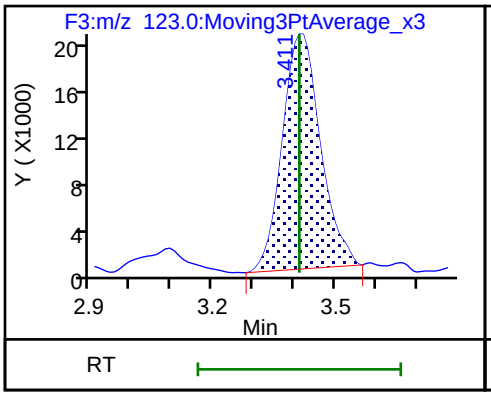
10 2,4,6-Trinitrotoluene



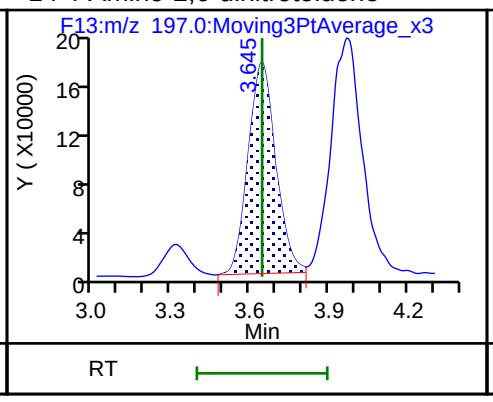
$ 11 Nitrobenzene-d5



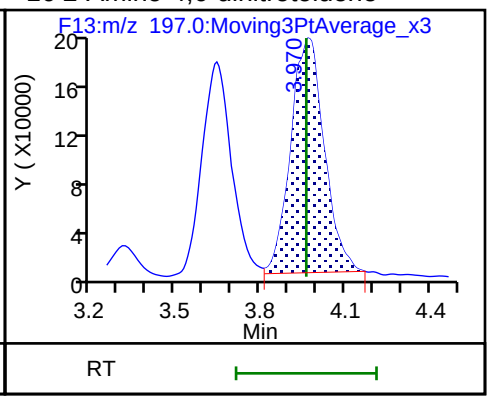
12 Nitrobenzene



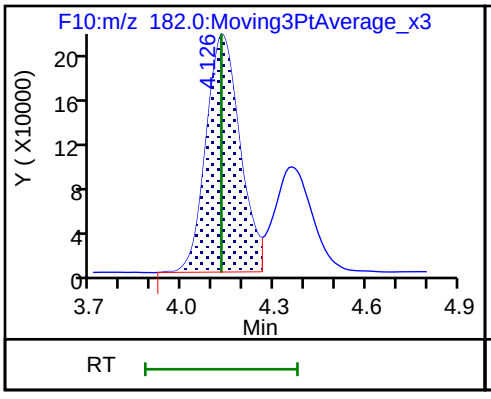
14 4-Amino-2,6-dinitrotoluene



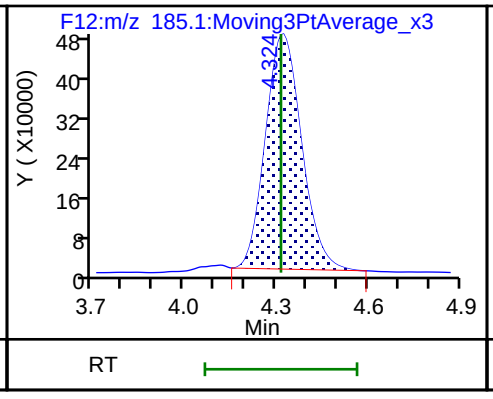
16 2-Amino-4,6-dinitrotoluene



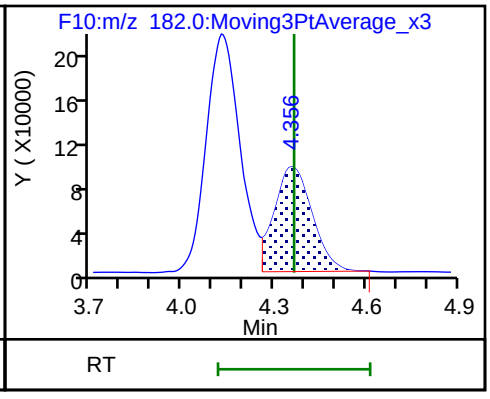
17 2,6-Dinitrotoluene



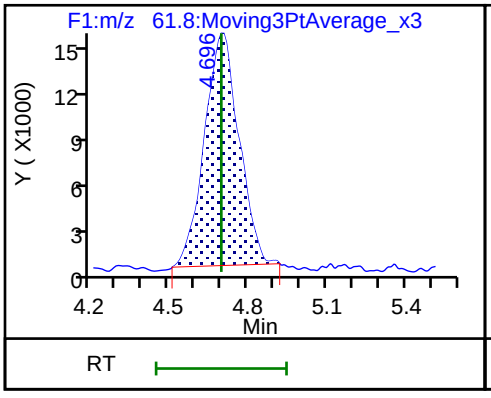
* 18 2,4-dinitrotoluene-d3



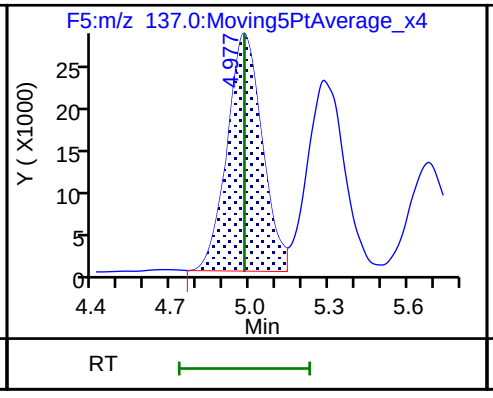
19 2,4-Dinitrotoluene



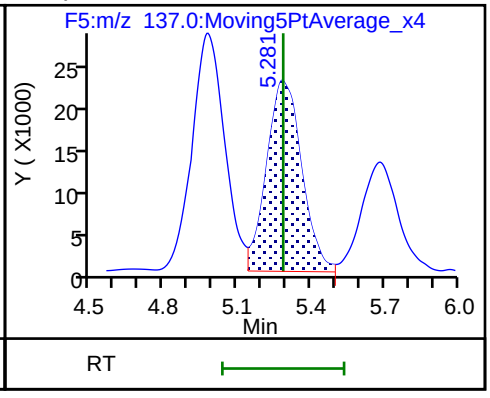
20 PETN



22 o-Nitrotoluene

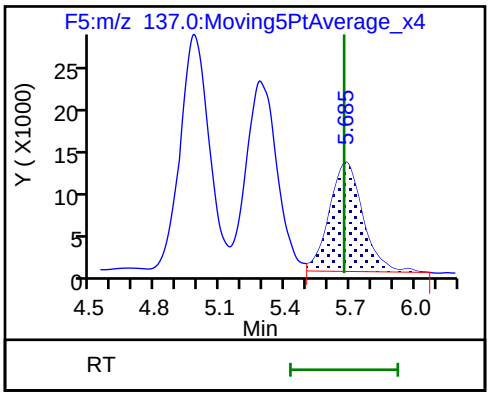


23 p-Nitrotoluene



Report Date: 11-Apr-2022 11:38:37 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08005.d

24 m-Nitrotoluene



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08006.d
Lims ID: STD004
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 08-Apr-2022 10:07:49 ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: STD L4
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 11-Apr-2022 11:38:37 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1661

First Level Reviewer: meyera Date: 11-Apr-2022 08:36:37
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	96964	48.9	81.6	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		109910	125.0	93.6	
36 TNX								
144.0	1.385	1.385	0.0	0.755	2267041	51.8	493	
33 DNX								M
160.0	1.489	1.489	0.0	0.811	3211051	51.9	227	M
34 MNX								M
160.0	1.670	1.670	0.0	0.910	925313	59.2	63.4	M
4 RDX								
281.2	1.833	1.841	-0.008	0.998	121556	51.8	41.9	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		387662	125.0	107	
5 1,3,5-Trinitrobenzene								
213.0	2.313	2.313	0.0	0.769	742278	49.5	144	
6 Tetryl								
241.1	2.699	2.699	0.0	0.897	1087206	49.5	143	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.008	3.008	0.0		1239543	129.4	284	
8 1,3-Dinitrobenzene								
168.0	3.040	3.040	0.0	1.011	537926	51.6	111	
9 Nitroglycerin								
62.0	3.069	3.069	0.0	1.020	447126	49.4	226	
28 3,5-Dinitroaniline								
183.0	3.230	3.219	0.011	1.074	1977342	50.7	43.5	

Report Date: 11-Apr-2022 11:38:37 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08006.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.310	3.310	0.0	0.767	3156079	49.5	133	
$ 11 Nitrobenzene-d5								
128.0	3.348	3.348	0.0	0.776	301789	51.2	78.9	
12 Nitrobenzene								
123.0	3.411	3.411	0.0	0.791	249989	50.0	29.9	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.638	3.645	-0.007	0.843	2375380	49.7	34.7	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.963	3.963	0.0	0.919	3042516	49.8	39.0	
17 2,6-Dinitrotoluene								
182.0	4.126	4.126	0.0	0.956	3262541	50.8	638	
* 18 2,4-dinitrotoluene-d3								
185.1	4.315	4.315	0.0		3857770	125.0	120	
19 2,4-Dinitrotoluene								
182.0	4.356	4.365	-0.009	1.010	1636566	50.0	297	
20 PETN								
61.8	4.686	4.696	-0.010	1.086	251248	46.8	63.3	
22 o-Nitrotoluene								
137.0	4.977	4.977	0.0	1.154	473207	47.8	171	
23 p-Nitrotoluene								
137.0	5.291	5.286	0.005	1.226	426485	49.4	149	
24 m-Nitrotoluene								
137.0	5.685	5.675	0.010	1.317	250461	49.2	85.3	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

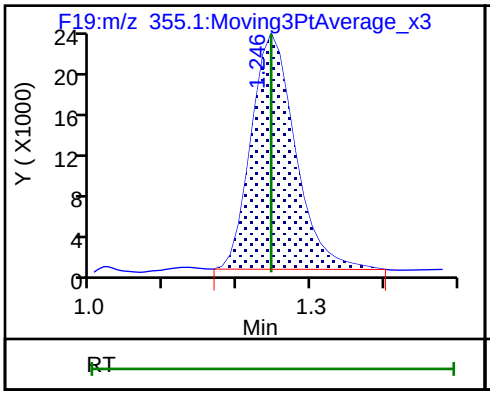
8321EXcalprim_00029	Amount Added: 5.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 5.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 11-Apr-2022 11:38:37 Chrom Revision: 2.3 18-Mar-2022 09:07:22

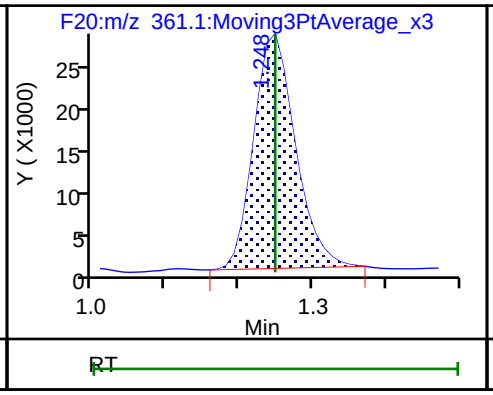
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08006.d
Injection Date: 08-Apr-2022 10:07:49 Instrument ID: LC_LCMS7
Lims ID: STD004
Client ID:
Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

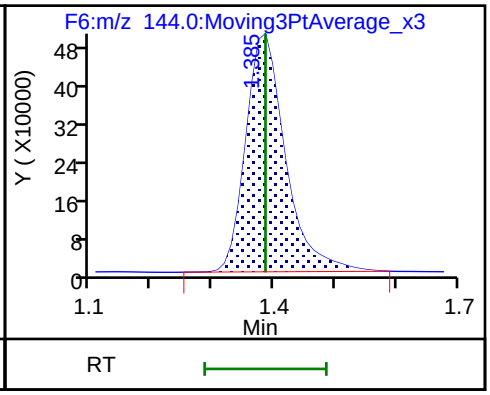
2 HMX



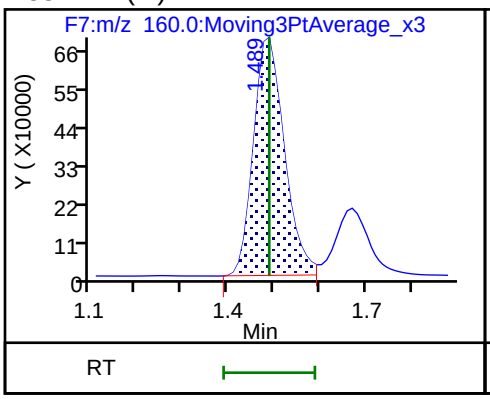
* 1 HMX-13C4



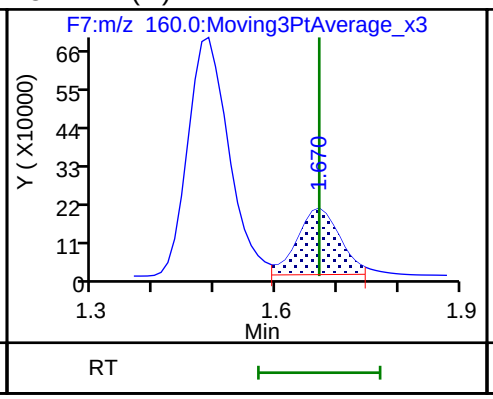
36 TNX



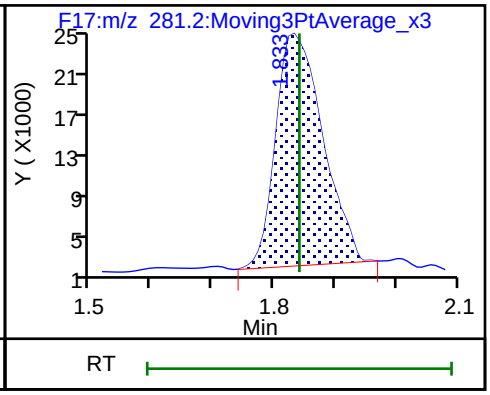
33 DNX (M)



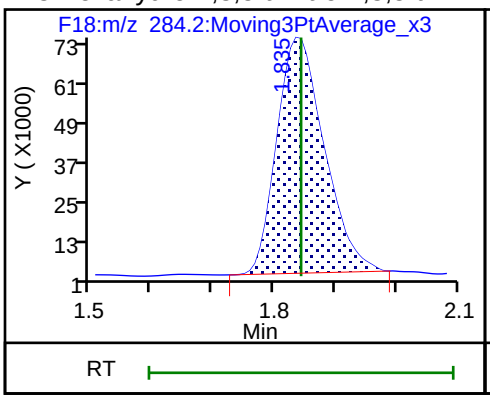
34 MNX (M)



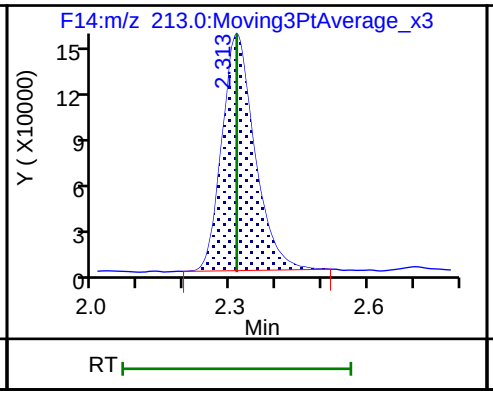
4 RDX



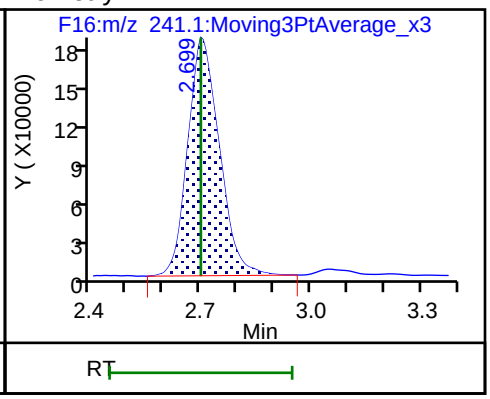
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



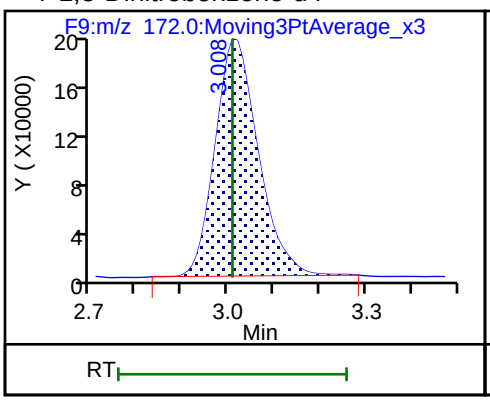
5 1,3,5-Trinitrobenzene



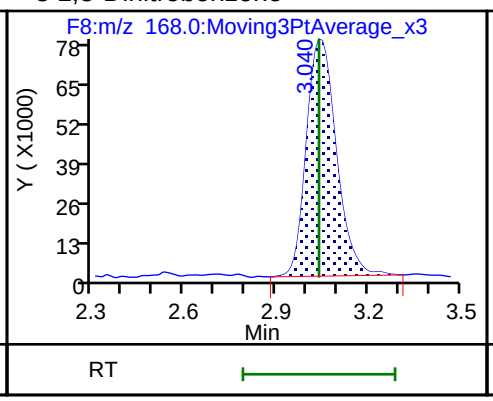
6 Tetryl



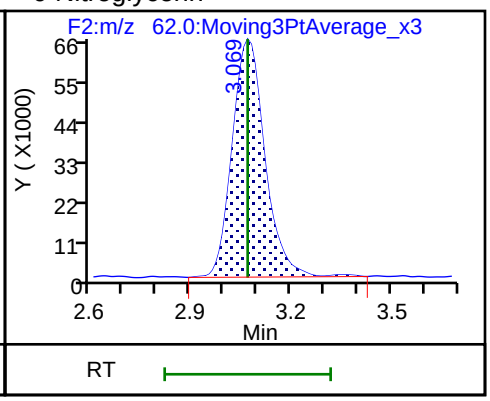
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

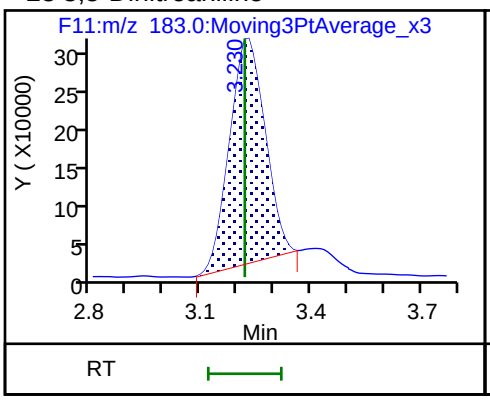


9 Nitroglycerin

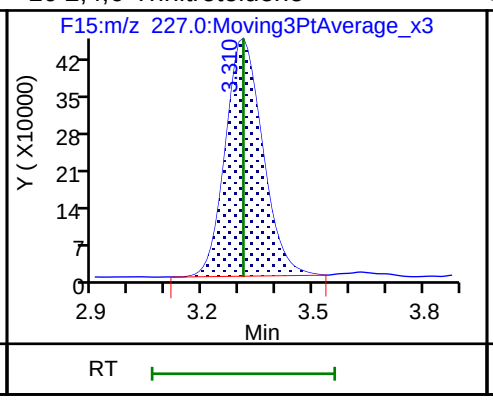


Report Date: 11-Apr-2022 11:38:37 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08006.d

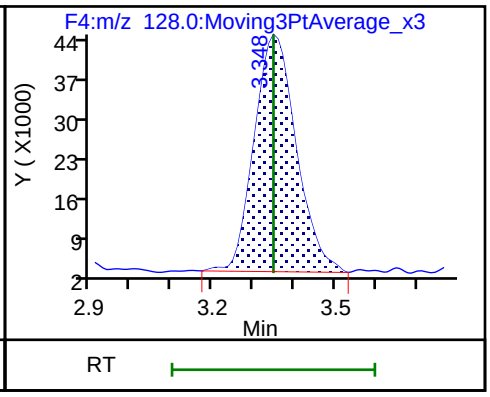
28 3,5-Dinitroaniline



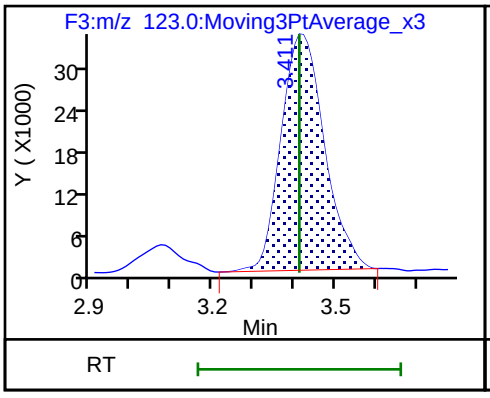
10 2,4,6-Trinitrotoluene



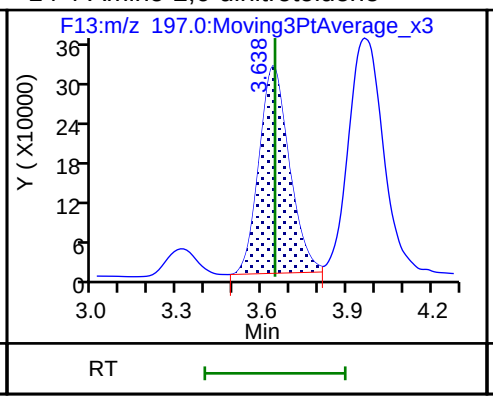
$ 11 Nitrobenzene-d5



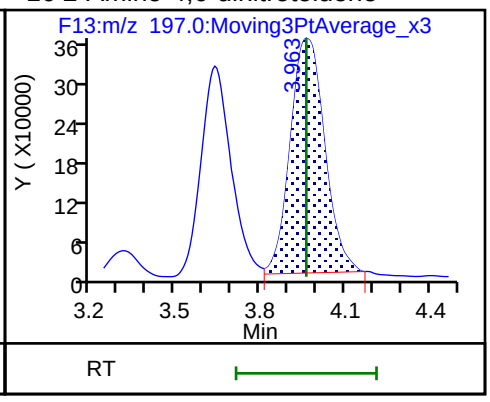
12 Nitrobenzene



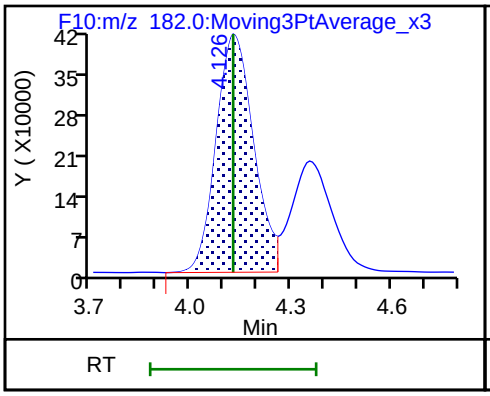
14 4-Amino-2,6-dinitrotoluene



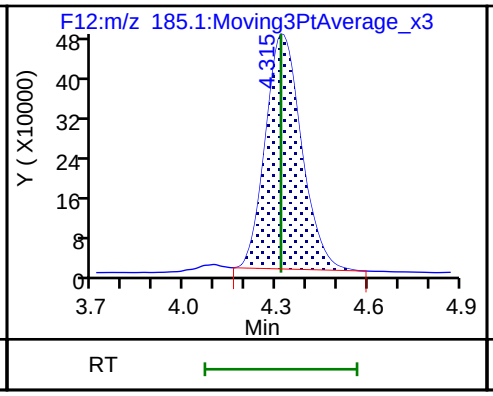
16 2-Amino-4,6-dinitrotoluene



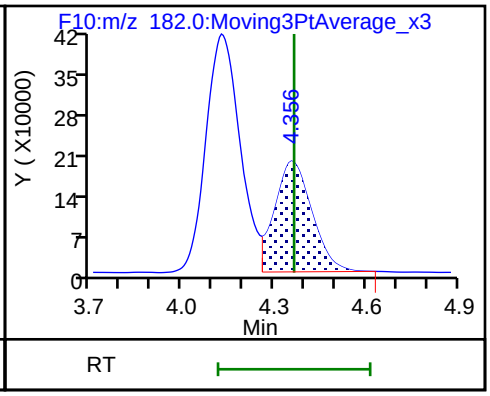
17 2,6-Dinitrotoluene



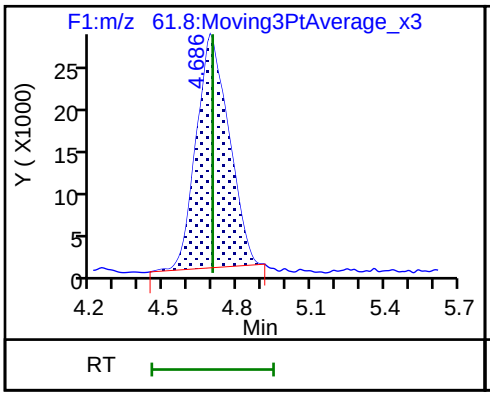
* 18 2,4-dinitrotoluene-d3



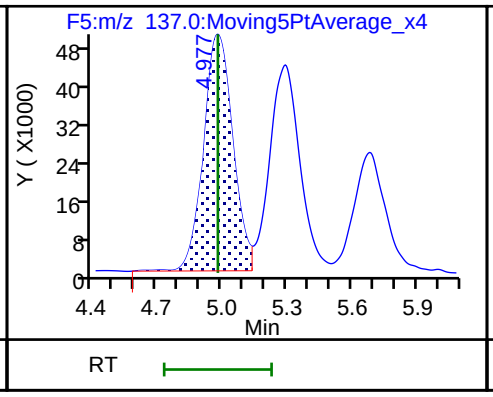
19 2,4-Dinitrotoluene



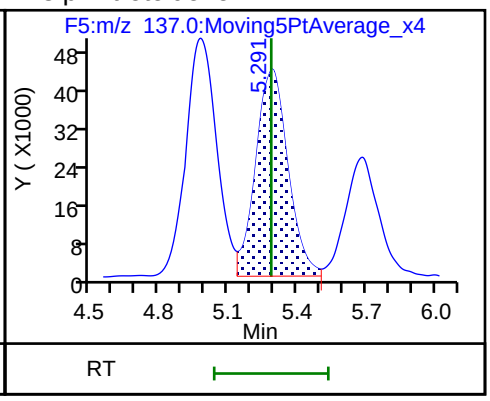
20 PETN



22 o-Nitrotoluene



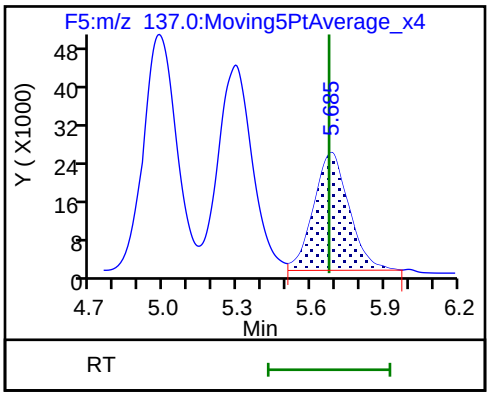
23 p-Nitrotoluene



Report Date: 11-Apr-2022 11:38:37 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08006.d

24 m-Nitrotoluene



Report Date: 11-Apr-2022 11:38:37 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08006.d

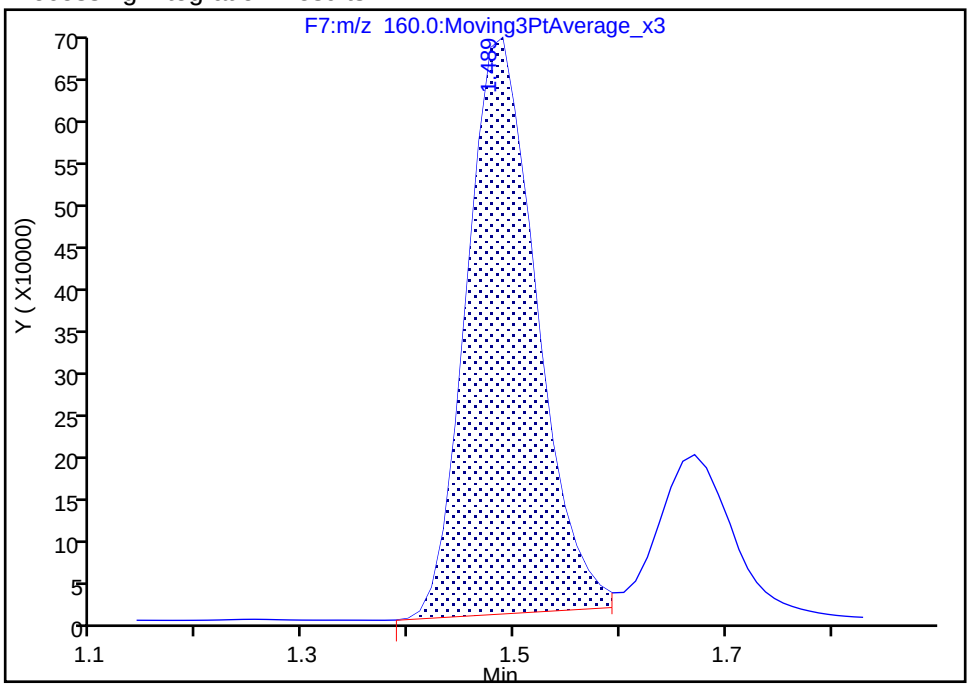
Injection Date:	08-Apr-2022 10:07:49	Instrument ID:	LC_LCMS7		
Lims ID:	STD004				
Client ID:					
Operator ID:	acm	ALS Bottle#:	5	Worklist Smp#:	6
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F7:SIR		

33 DNX, CAS: 80251-29-2

Signal: 1

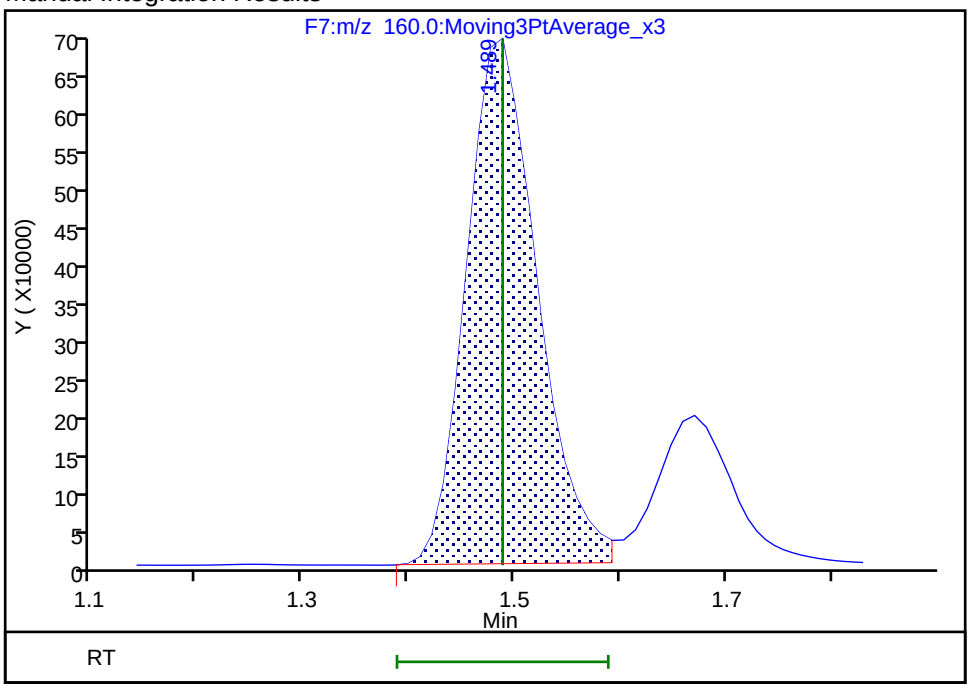
Processing Integration Results

RT: 1.49
Area: 3141640
Amount: 51.248725
Amount Units: ug/l



Manual Integration Results

RT: 1.49
Area: 3211051
Amount: 51.864541
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 08:38:48

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 11-Apr-2022 11:38:37 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08006.d

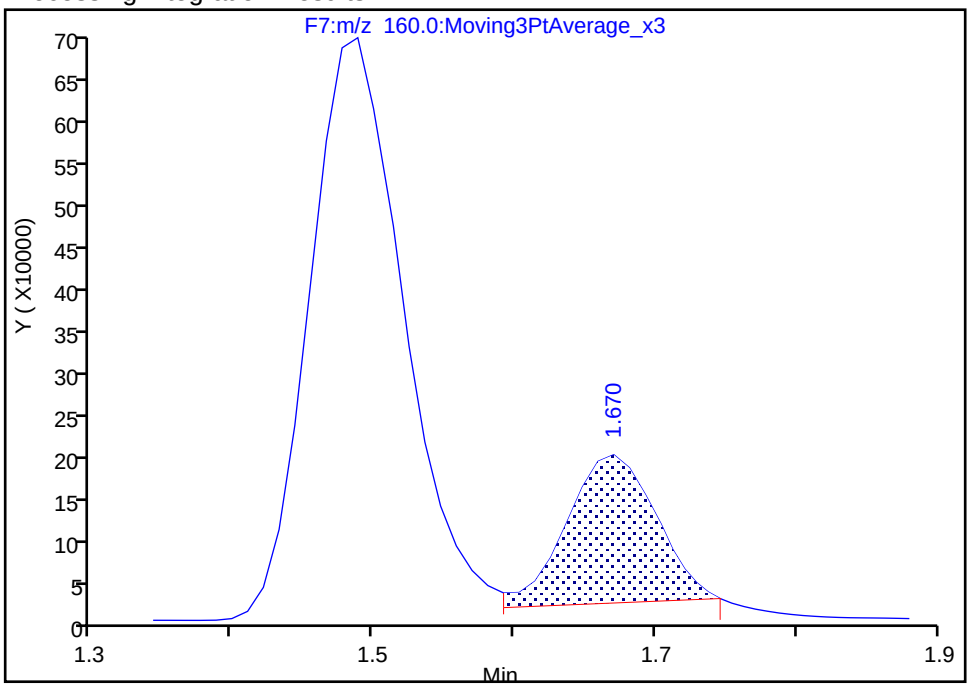
Injection Date:	08-Apr-2022 10:07:49	Instrument ID:	LC_LCMS7
Lims ID:	STD004		
Client ID:			
Operator ID:	acm	ALS Bottle#:	5 Worklist Smp#: 6
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F7:SIR

34 MNX, CAS: 5755-27-1

Signal: 1

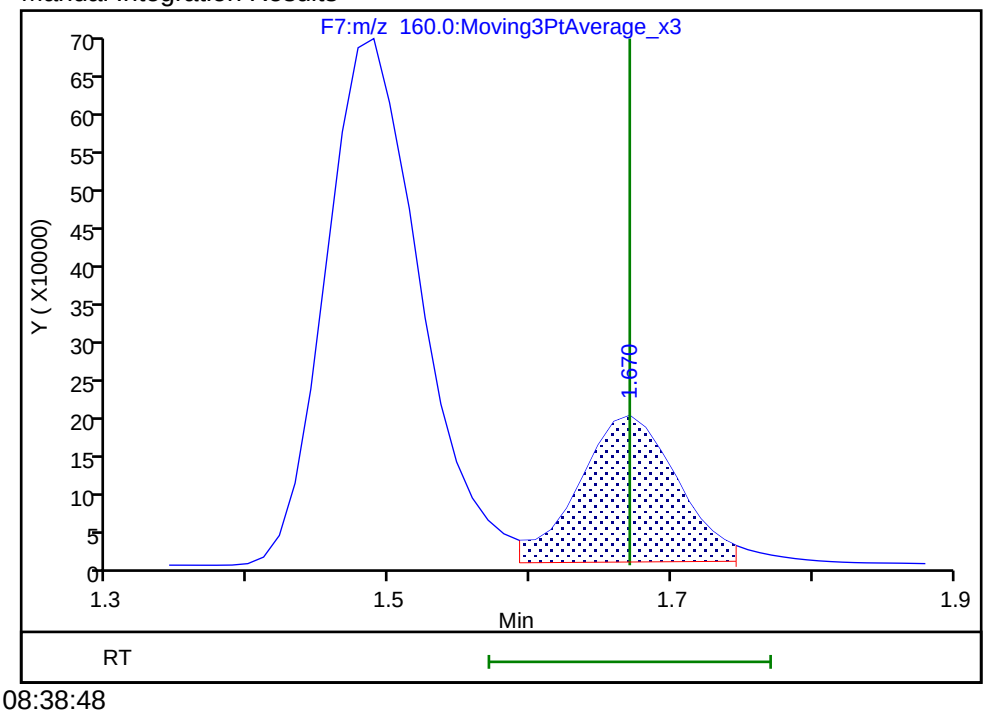
Processing Integration Results

RT: 1.67
Area: 775028
Amount: 51.549518
Amount Units: ug/l



Manual Integration Results

RT: 1.67
Area: 925313
Amount: 59.218716
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 08:38:48

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 11-Apr-2022 11:38:39 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08007.d
Lims ID: STD005
Client ID:
Sample Type: ICISAV Calib Level: 5
Inject. Date: 08-Apr-2022 10:14:25 ALS Bottle#: 6 Worklist Smp#: 7
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: STD L5
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 11-Apr-2022 11:38:38 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1661

First Level Reviewer: meyera Date: 11-Apr-2022 08:35:39
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	169461	90.9	90.2	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		104298	125.0	136	
36 TNX								
144.0	1.385	1.385	0.0	0.751	4412109	99.3	700	
33 DNX								
160.0	1.489	1.489	0.0	0.807	6337223	100.9	453	
34 MNX								
160.0	1.670	1.670	0.0	0.906	1943722	122.7	133	
4 RDX								
281.2	1.841	1.841	0.0	0.998	257673	105.2	79.9	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		421277	125.0	136	
5 1,3,5-Trinitrobenzene								
213.0	2.313	2.313	0.0	0.769	1483942	97.2	185	
6 Tetryl								
241.1	2.699	2.699	0.0	0.897	2202225	97.4	145	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.008	3.008	0.0		1267585	129.4	355	
8 1,3-Dinitrobenzene								
168.0	3.040	3.040	0.0	1.011	1069106	100.7	187	
9 Nitroglycerin								
62.0	3.069	3.069	0.0	1.020	972609	105.6	499	
28 3,5-Dinitroaniline								
183.0	3.219	3.219	0.0	1.070	3829420	98.9	46.9	

Report Date: 11-Apr-2022 11:38:39 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08007.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.310	3.310	0.0	0.767	6369385	97.6	145	
$ 11 Nitrobenzene-d5								
128.0	3.348	3.348	0.0	0.776	566702	94.5	98.9	
12 Nitrobenzene								
123.0	3.411	3.411	0.0	0.791	490514	95.9	41.7	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.645	3.645	0.0	0.845	4716040	99.5	36.0	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.963	3.963	0.0	0.919	6060587	99.9	43.5	
17 2,6-Dinitrotoluene								
182.0	4.126	4.126	0.0	0.956	6317412	99.1	731	
* 18 2,4-dinitrotoluene-d3								
185.1	4.315	4.315	0.0		3849353	125.0	107	
19 2,4-Dinitrotoluene								
182.0	4.365	4.365	0.0	1.012	3154650	96.8	337	
20 PETN								
61.8	4.696	4.696	0.0	1.088	514409	96.6	115	
22 o-Nitrotoluene								
137.0	4.977	4.977	0.0	1.154	964720	97.9	319	
23 p-Nitrotoluene								
137.0	5.286	5.286	0.0	1.225	837144	97.7	262	
24 m-Nitrotoluene								
137.0	5.675	5.675	0.0	1.315	490433	96.3	144	

QC Flag Legend

Processing Flags

Reagents:

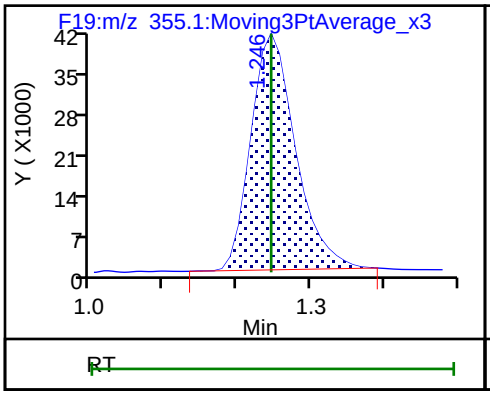
8321EXcalprim_00029	Amount Added: 10.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 10.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 11-Apr-2022 11:38:39 Chrom Revision: 2.3 18-Mar-2022 09:07:22

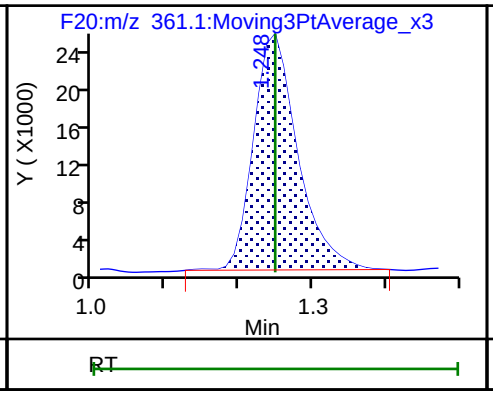
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08007.d
Injection Date: 08-Apr-2022 10:14:25 Instrument ID: LC_LCMS7
Lims ID: STD005
Client ID:
Operator ID: acm ALS Bottle#: 6 Worklist Smp#: 7
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

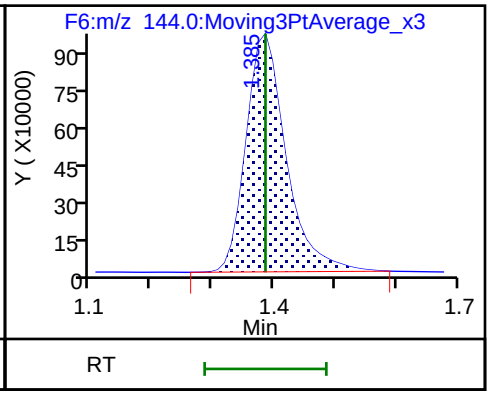
2 HMX



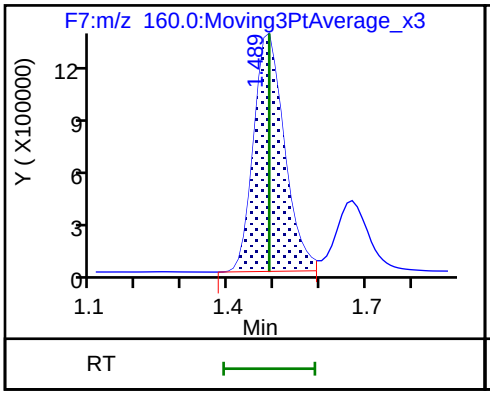
* 1 HMX-13C4



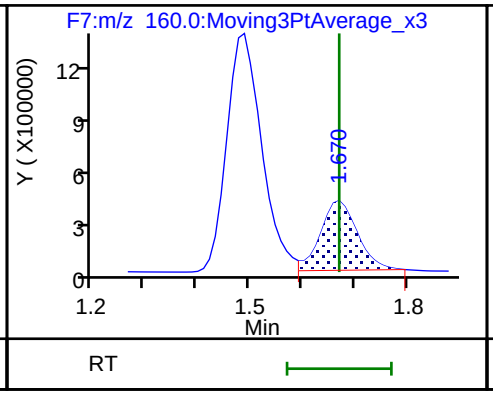
36 TNX



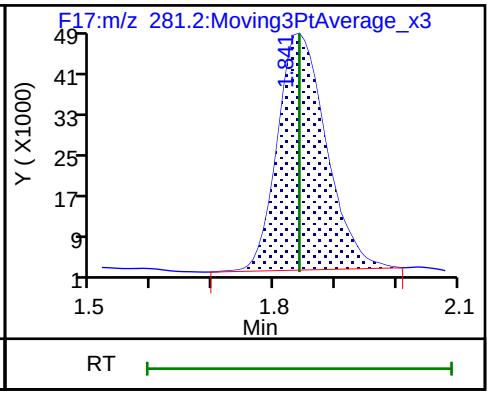
33 DNX



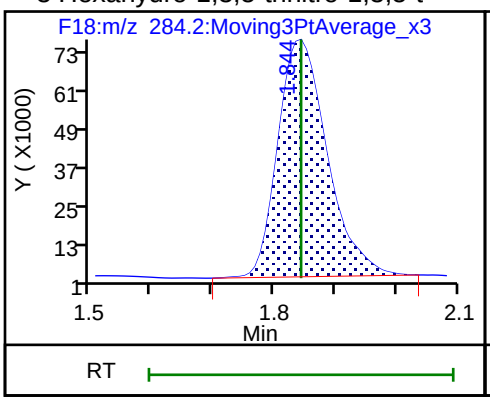
34 MNX



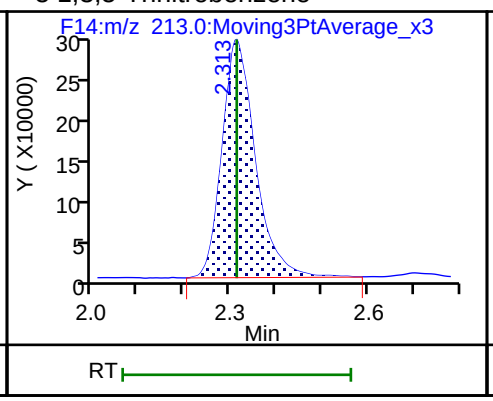
4 RDX



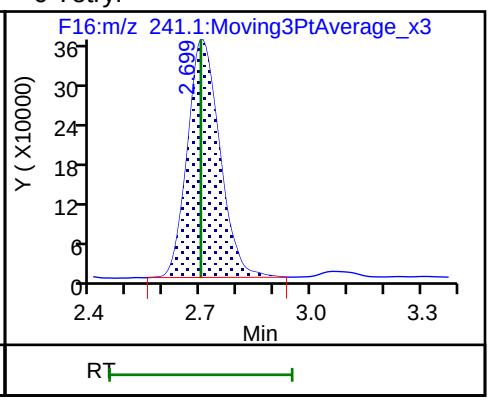
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



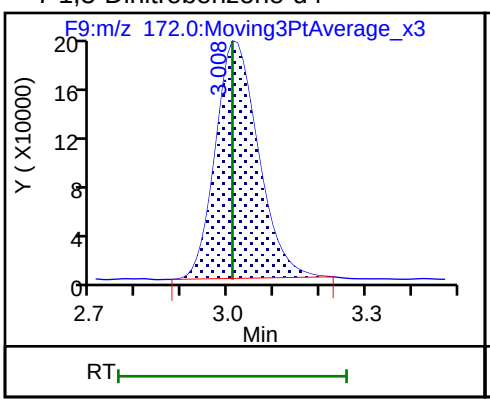
5 1,3,5-Trinitrobenzene



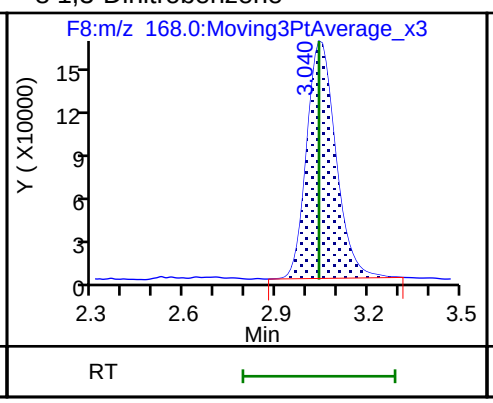
6 Tetryl



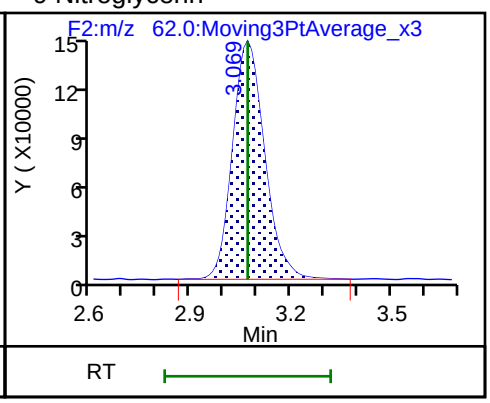
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

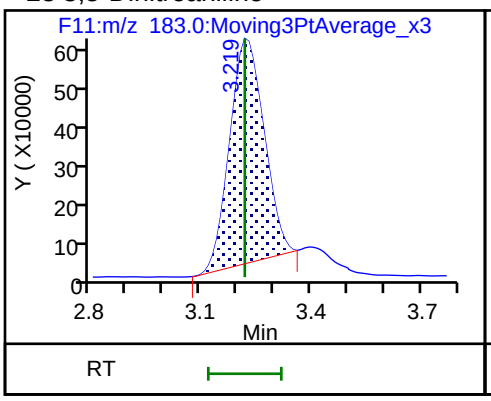


9 Nitroglycerin

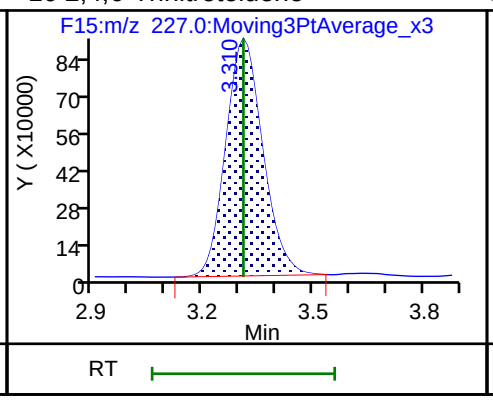


Report Date: 11-Apr-2022 11:38:39 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08007.d

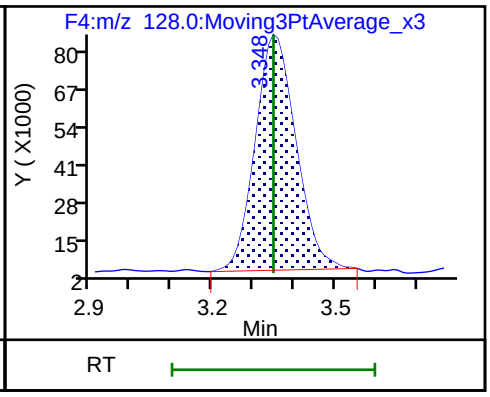
28 3,5-Dinitroaniline



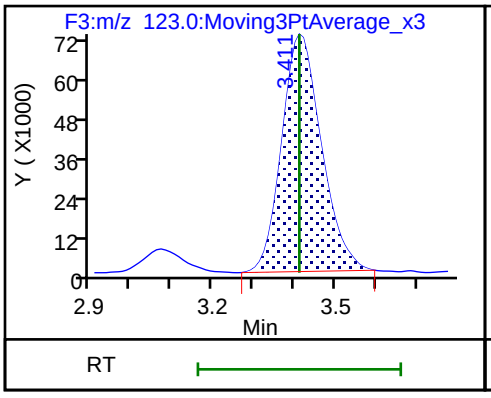
10 2,4,6-Trinitrotoluene



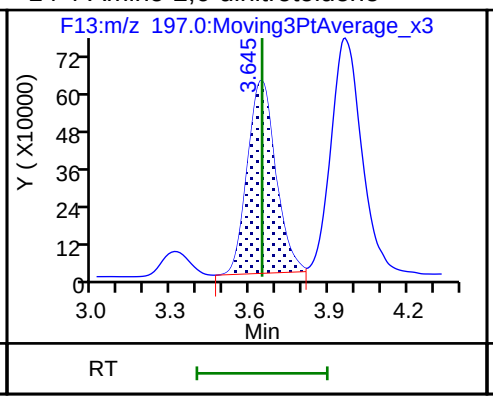
$ 11 Nitrobenzene-d5



12 Nitrobenzene



14 4-Amino-2,6-dinitrotoluene



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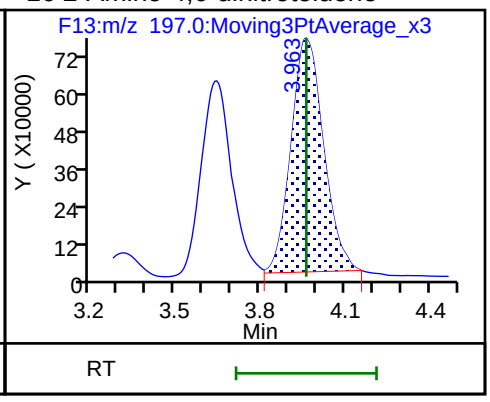
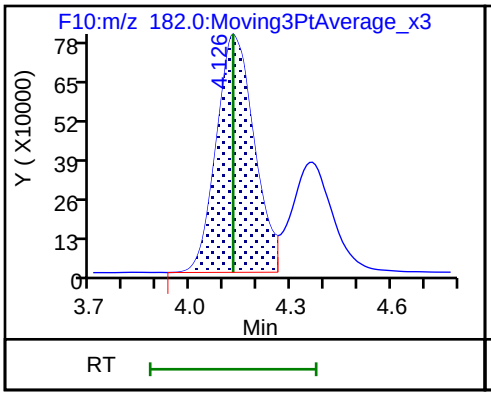
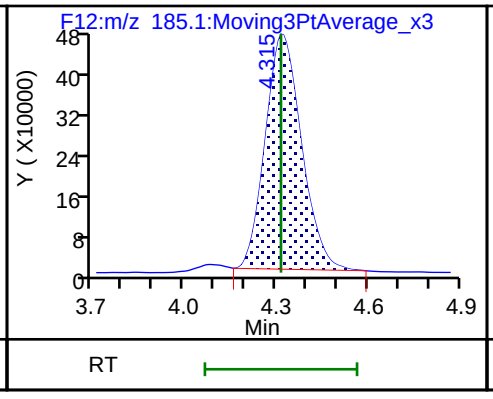


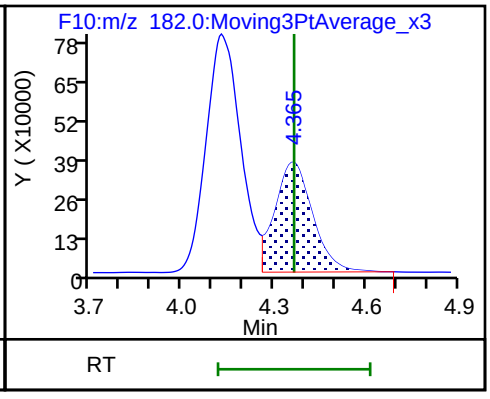
17 2,6-Dinitrotoluene



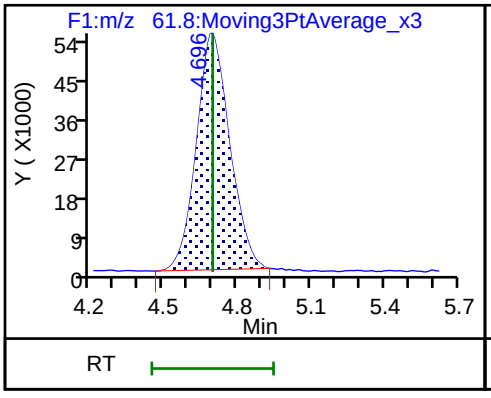
* 18 2,4-dinitrotoluene-d3



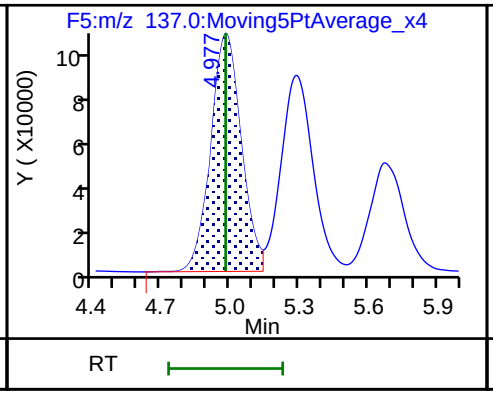
19 2,4-Dinitrotoluene



20 PETN



22 o-Nitrotoluene



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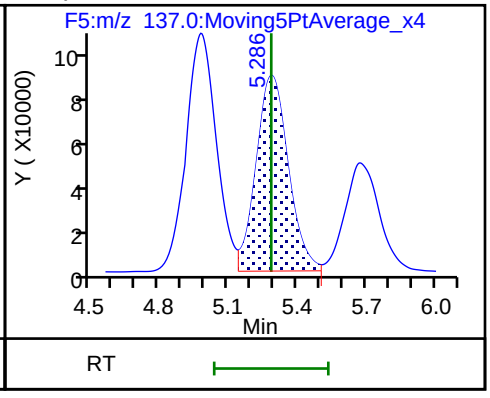
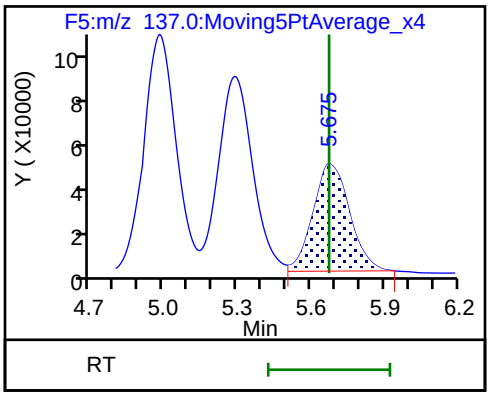


Report Date: 11-Apr-2022 11:38:39 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08007.d

24 m-Nitrotoluene



Report Date: 11-Apr-2022 11:38:39 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08008.d
Lims ID: STD006
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 08-Apr-2022 10:21:01 ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: STD L6
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 11-Apr-2022 11:38:39 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1661

First Level Reviewer: meyera Date: 11-Apr-2022 08:35:51
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	335694	202.5	179	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		93377	125.0	54.0	
36 TNX								
144.0	1.385	1.385	0.0	0.755	8979152	207.1	813	
33 DNX								M
160.0	1.489	1.489	0.0	0.811	12459856	203.5	218	M
34 MNX								M
160.0	1.670	1.670	0.0	0.910	3531604	228.6	61.2	M
4 RDX								
281.2	1.849	1.841	0.008	1.008	438206	195.8	157	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		391904	125.0	83.2	
5 1,3,5-Trinitrobenzene								
213.0	2.313	2.313	0.0	0.766	3026827	202.9	189	
6 Tetryl								
241.1	2.699	2.699	0.0	0.894	4528158	203.8	177	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.008	0.011		1241186	129.4	282	
8 1,3-Dinitrobenzene								
168.0	3.040	3.040	0.0	1.007	2046516	197.3	222	
9 Nitroglycerin								
62.0	3.069	3.069	0.0	1.017	1830526	203.4	740	
28 3,5-Dinitroaniline								
183.0	3.230	3.219	0.011	1.070	7672353	199.2	44.1	

Report Date: 11-Apr-2022 11:38:39 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08008.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.310	3.310	0.0	0.767	12922151	202.1	169	
$ 11 Nitrobenzene-d5								
128.0	3.348	3.348	0.0	0.776	1182610	202.1	146	
12 Nitrobenzene								
123.0	3.411	3.411	0.0	0.791	1002186	200.0	54.3	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.645	3.645	0.0	0.845	9368121	198.6	36.3	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.970	3.963	0.007	0.920	11857200	196.3	42.6	
17 2,6-Dinitrotoluene								
182.0	4.126	4.126	0.0	0.956	12737968	200.8	661	
* 18 2,4-dinitrotoluene-d3								
185.1	4.315	4.315	0.0		3841838	125.0	112	
19 2,4-Dinitrotoluene								
182.0	4.365	4.365	0.0	1.012	6517877	200.8	309	
20 PETN								
61.8	4.706	4.696	0.010	1.091	1053844	199.0	225	
22 o-Nitrotoluene								
137.0	4.977	4.977	0.0	1.154	1959566	199.5	529	
23 p-Nitrotoluene								
137.0	5.296	5.286	0.010	1.227	1679988	196.9	431	
24 m-Nitrotoluene								
137.0	5.680	5.675	0.005	1.316	990802	194.7	244	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

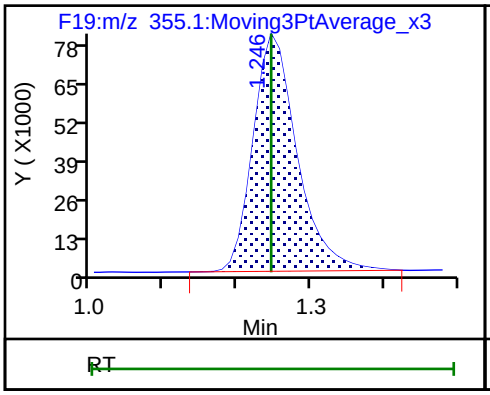
8321EXcalprim_00029	Amount Added: 20.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 20.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 11-Apr-2022 11:38:39 Chrom Revision: 2.3 18-Mar-2022 09:07:22

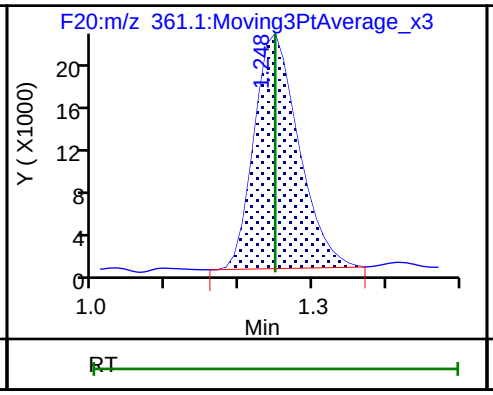
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08008.d
Injection Date: 08-Apr-2022 10:21:01 Instrument ID: LC_LCMS7
Lims ID: STD006
Client ID:
Operator ID: acm ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

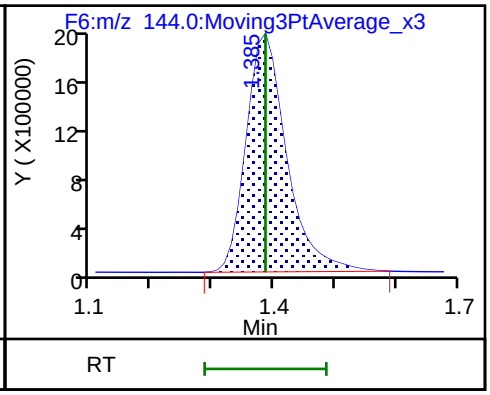
2 HMX



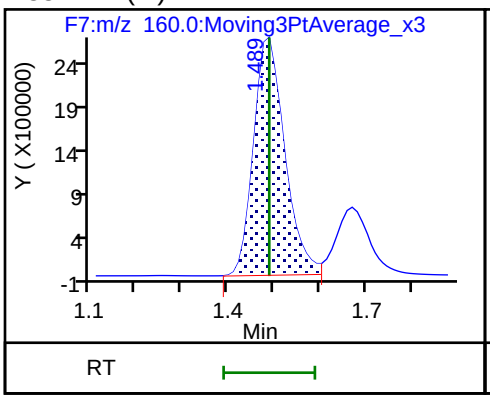
* 1 HMX-13C4



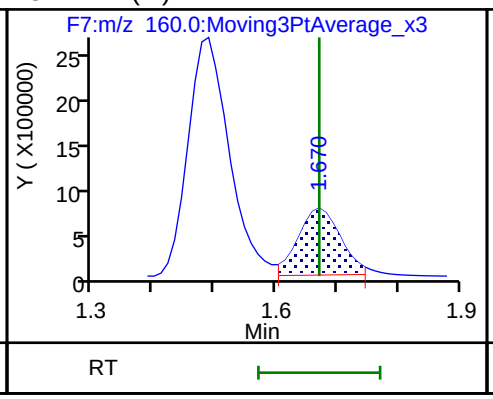
36 TNX



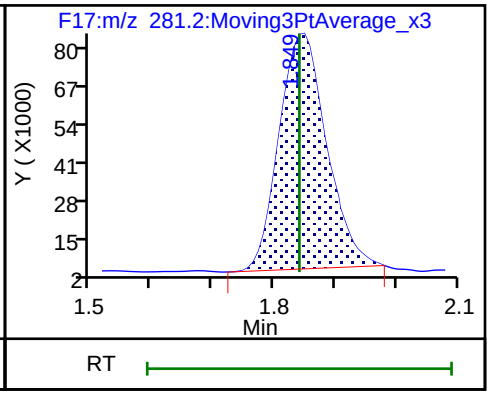
33 DNX (M)



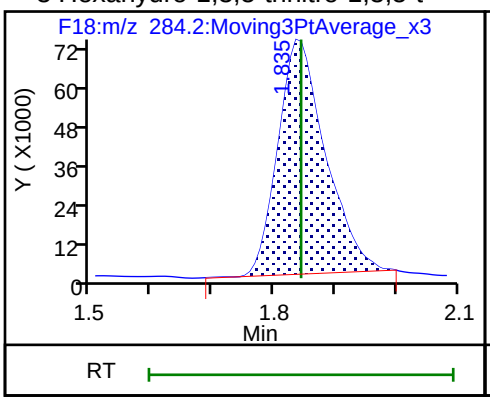
34 MNX (M)



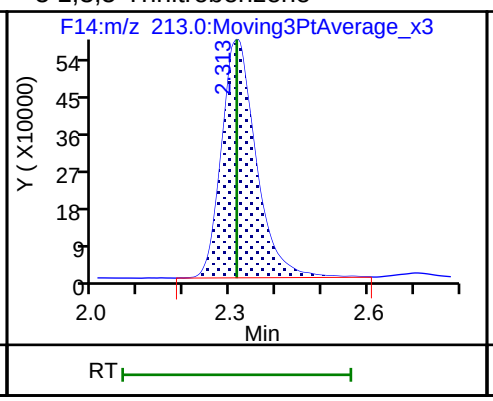
4 RDX



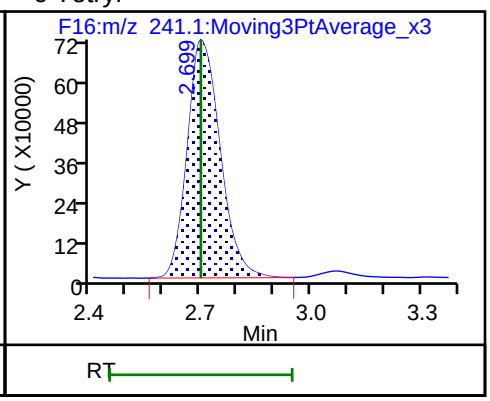
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



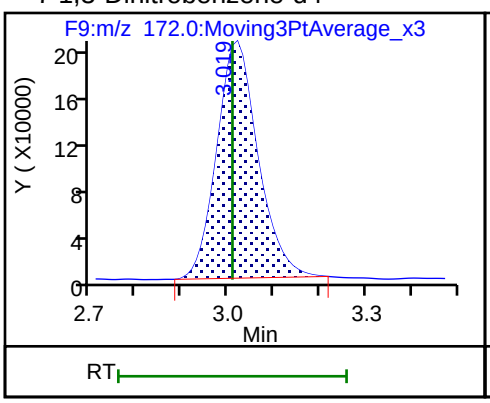
5 1,3,5-Trinitrobenzene



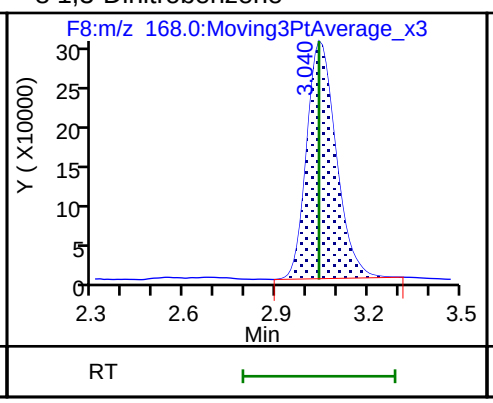
6 Tetryl



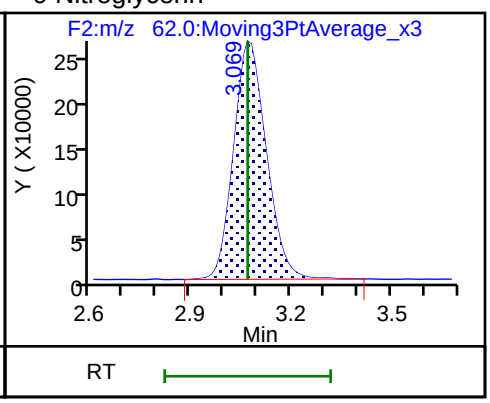
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



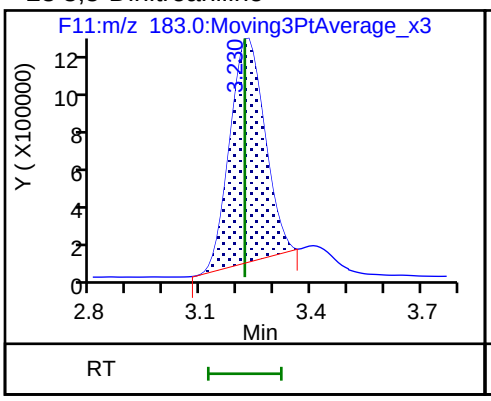
9 Nitroglycerin



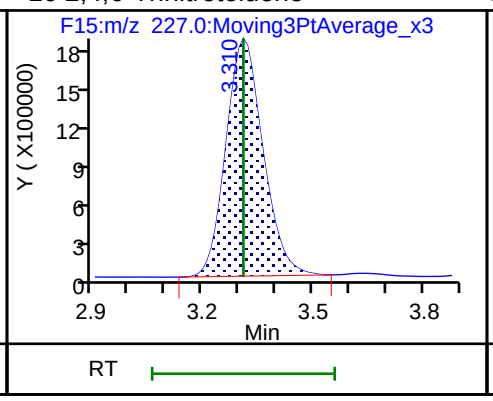
Report Date: 11-Apr-2022 11:38:39 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08008.d

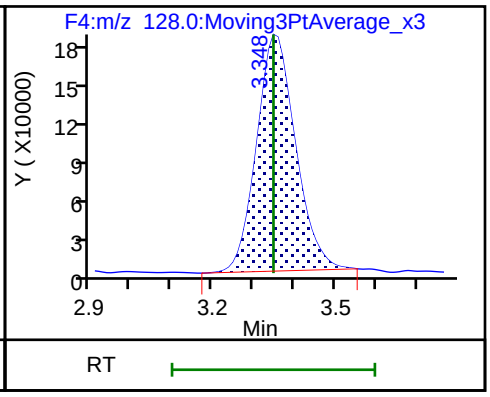
28 3,5-Dinitroaniline



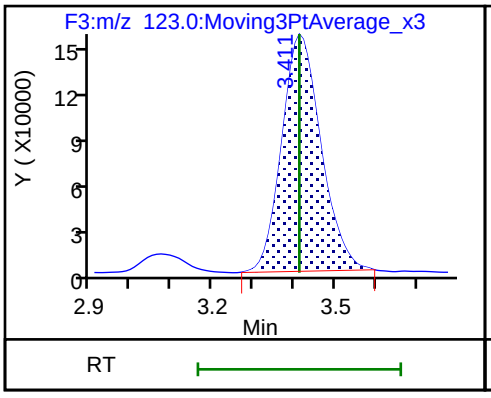
10 2,4,6-Trinitrotoluene



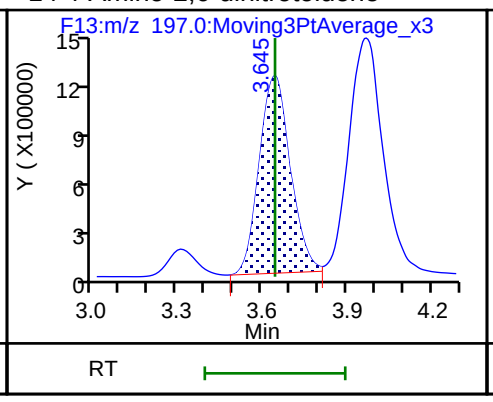
$ 11 Nitrobenzene-d5



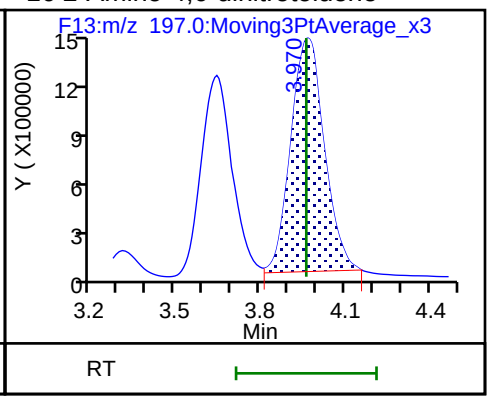
12 Nitrobenzene



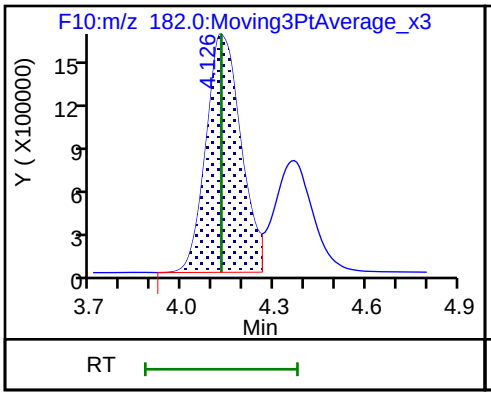
14 4-Amino-2,6-dinitrotoluene



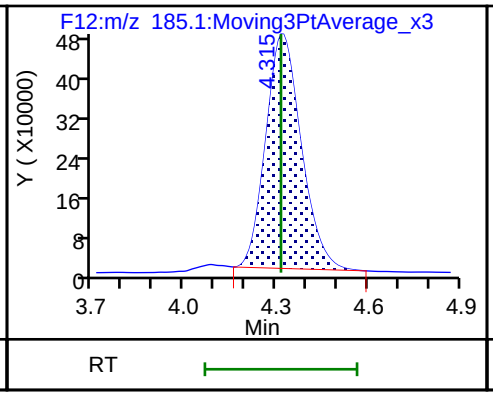
16 2-Amino-4,6-dinitrotoluene



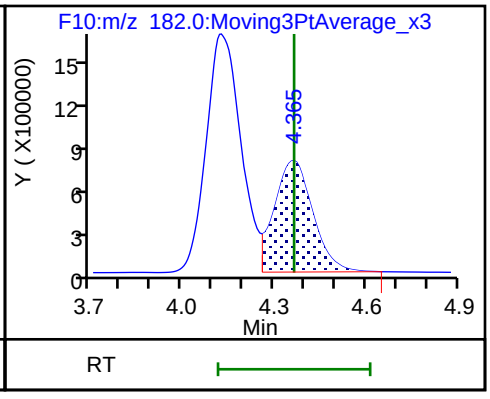
17 2,6-Dinitrotoluene



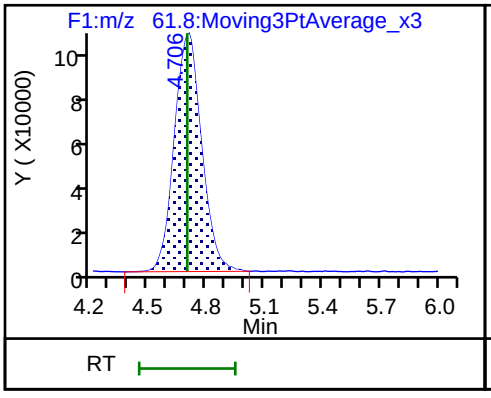
* 18 2,4-dinitrotoluene-d3



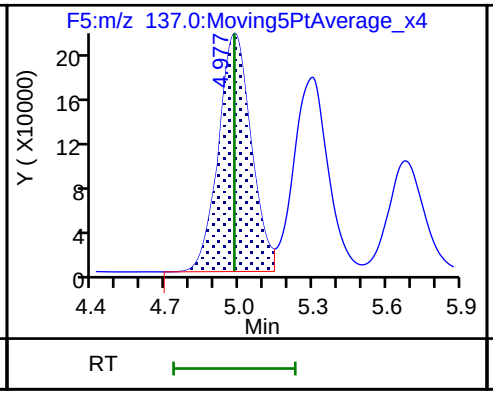
19 2,4-Dinitrotoluene



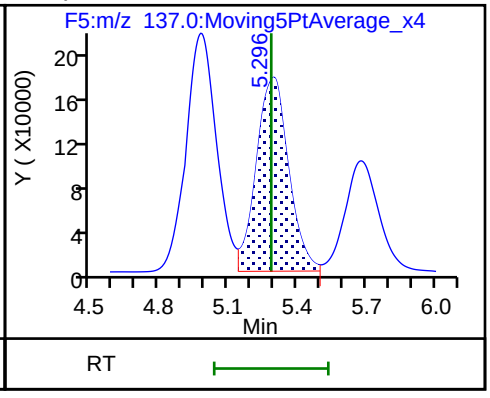
20 PETN



22 o-Nitrotoluene



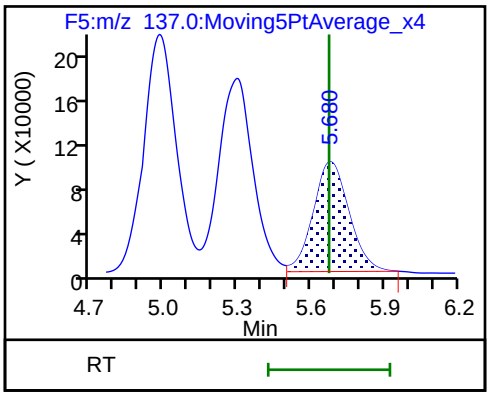
23 p-Nitrotoluene



Report Date: 11-Apr-2022 11:38:39 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08008.d

24 m-Nitrotoluene



Report Date: 11-Apr-2022 11:38:39

Chrom Revision: 2.3 18-Mar-2022 09:07:22
Manual Integration/User Assign Peak Report

Eurofins Denver

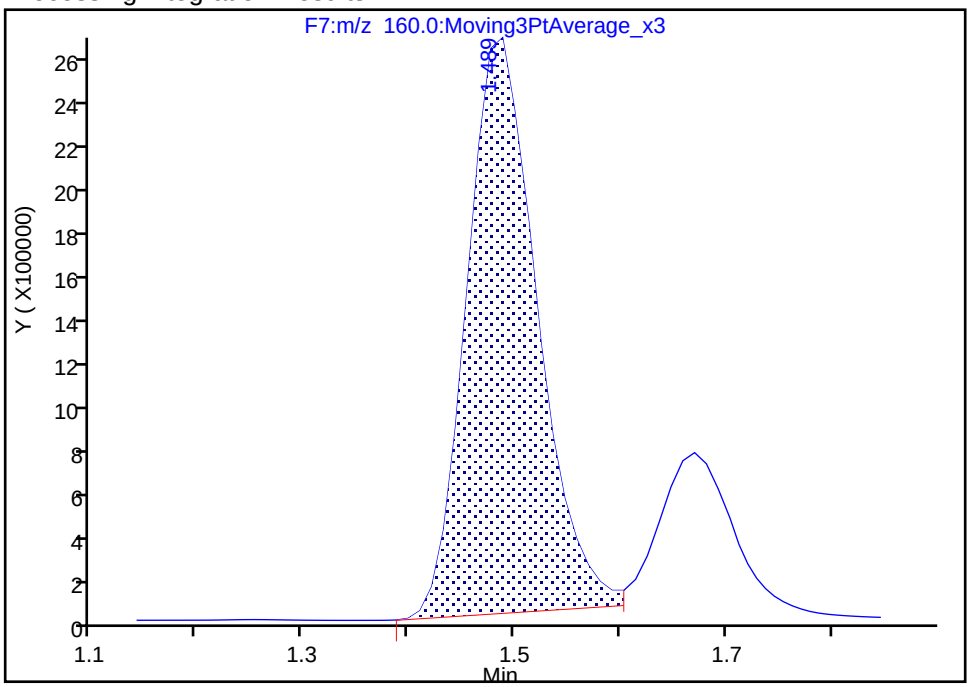
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08008.d
Injection Date: 08-Apr-2022 10:21:01 Instrument ID: LC_LCMS7
Lims ID: STD006
Client ID:
Operator ID: acm ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F7:SIR

33 DNX, CAS: 80251-29-2

Signal: 1

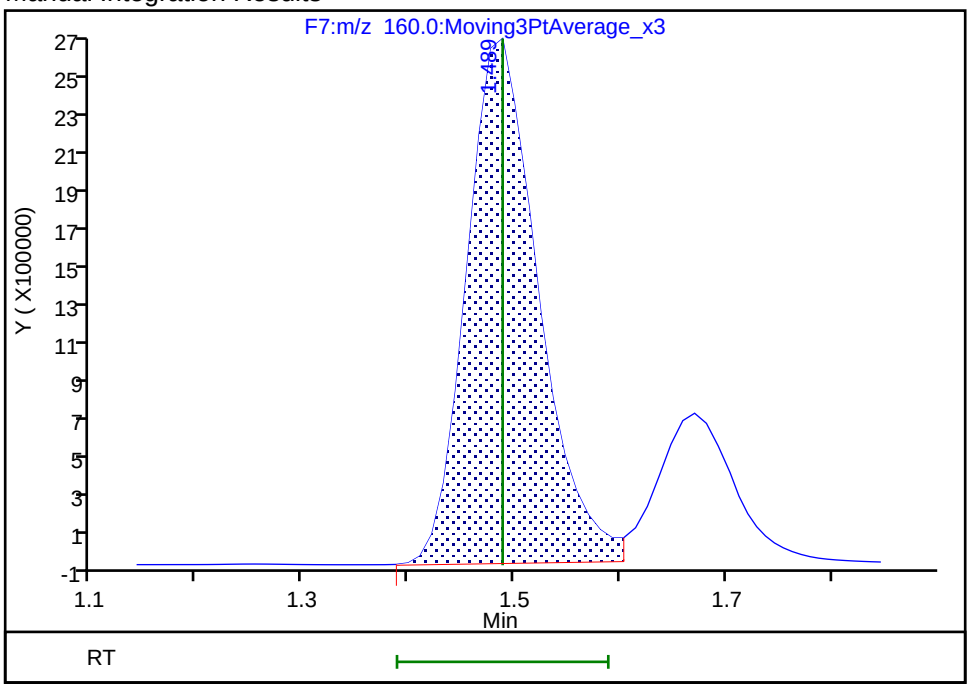
Processing Integration Results

RT: 1.49
Area: 12108846
Amount: 199.5325
Amount Units: ug/l



Manual Integration Results

RT: 1.49
Area: 12459856
Amount: 203.5309
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 08:39:00
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 11-Apr-2022 11:38:39 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08008.d

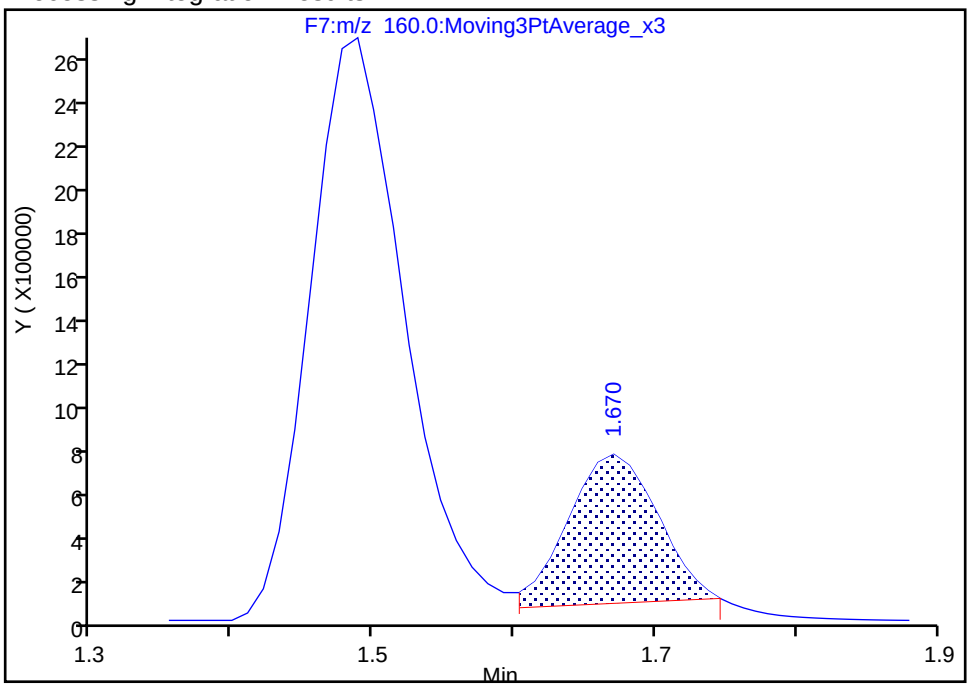
Injection Date:	08-Apr-2022 10:21:01	Instrument ID:	LC_LCMS7
Lims ID:	STD006		
Client ID:			
Operator ID:	acm	ALS Bottle#:	7 Worklist Smp#: 8
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F7:SIR

34 MNX, CAS: 5755-27-1

Signal: 1

Processing Integration Results

RT: 1.67
Area: 2962243
Amount: 192.0667
Amount Units: ug/l



Manual Integration Results

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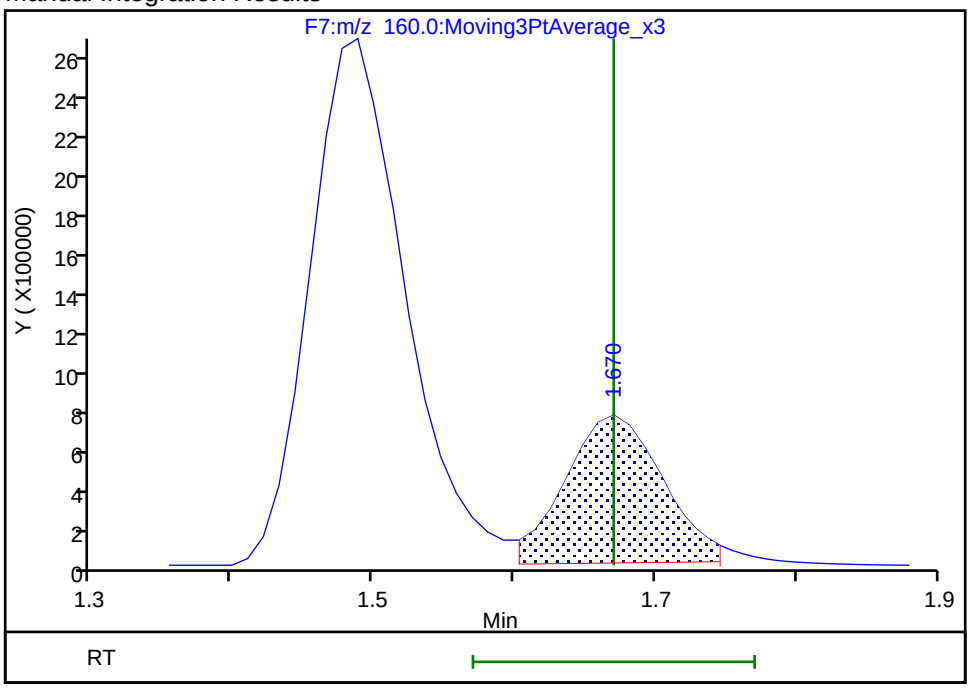
Amount: 228.6487
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 08:39:00

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d
Lims ID: STD007
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 08-Apr-2022 10:27:37 ALS Bottle#: 8 Worklist Smp#: 9
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: STD L7
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 11-Apr-2022 11:38:40 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1661

First Level Reviewer: meyera Date: 11-Apr-2022 08:36:18
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	445980	308.5	195	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		81551	125.0	93.7	
36 TNX								
144.0	1.385	1.385	0.0	0.755	13060872	291.8	689	
33 DNX								M
160.0	1.477	1.489	-0.012	0.805	18583446	294.0	209	M
34 MNX								M
160.0	1.670	1.670	0.0	0.910	5544638	347.8	60.3	M
4 RDX								
281.2	1.841	1.841	0.0	1.003	650773	296.6	156	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		387076	125.0	105	
5 1,3,5-Trinitrobenzene								
213.0	2.313	2.313	0.0	0.766	4648629	301.7	201	
6 Tetryl								
241.1	2.699	2.699	0.0	0.894	6914100	300.8	184	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.008	0.011		1283056	129.4	841	
8 1,3-Dinitrobenzene								
168.0	3.040	3.040	0.0	1.007	3223708	300.8	240	
9 Nitroglycerin								
62.0	3.069	3.069	0.0	1.017	2743416	295.0	1380	
28 3,5-Dinitroaniline								
183.0	3.219	3.219	0.0	1.066	11876851	302.8	48.3	

Report Date: 11-Apr-2022 11:38:40 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.310	3.310	0.0	0.767	20062195	303.5	160	
$ 11 Nitrobenzene-d5								
128.0	3.348	3.348	0.0	0.776	1834802	303.6	373	
12 Nitrobenzene								
123.0	3.411	3.411	0.0	0.791	1586690	306.3	50.1	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.645	3.645	0.0	0.845	14545292	302.7	39.6	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.957	3.963	-0.006	0.917	18887297	307.0	48.9	
17 2,6-Dinitrotoluene								
182.0	4.126	4.126	0.0	0.956	19493029	301.7	638	
* 18 2,4-dinitrotoluene-d3								
185.1	4.315	4.315	0.0		3916853	125.0	112	
19 2,4-Dinitrotoluene								
182.0	4.365	4.365	0.0	1.012	10092449	305.1	301	
20 PETN								
61.8	4.686	4.696	-0.010	1.086	1647653	305.4	296	
22 o-Nitrotoluene								
137.0	4.977	4.977	0.0	1.154	3043274	304.1	938	
23 p-Nitrotoluene								
137.0	5.286	5.286	0.0	1.225	2669074	307.2	784	
24 m-Nitrotoluene								
137.0	5.689	5.675	0.014	1.319	1603102	308.8	429	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

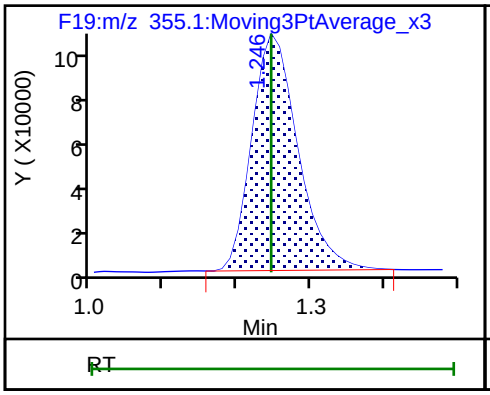
8321EXcalprim_00029	Amount Added: 30.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 30.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 11-Apr-2022 11:38:40 Chrom Revision: 2.3 18-Mar-2022 09:07:22

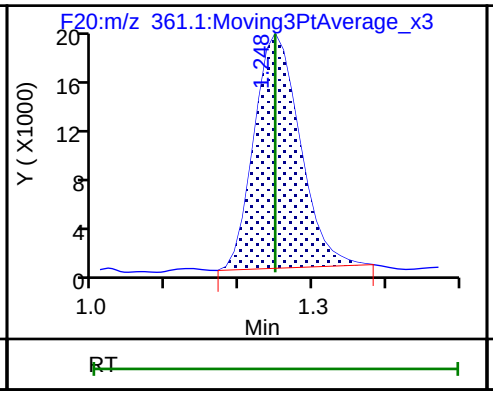
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d
Injection Date: 08-Apr-2022 10:27:37 Instrument ID: LC_LCMS7
Lims ID: STD007
Client ID:
Operator ID: acm ALS Bottle#: 8 Worklist Smp#: 9
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

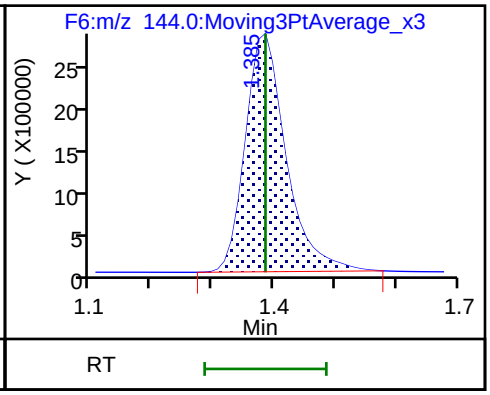
2 HMX



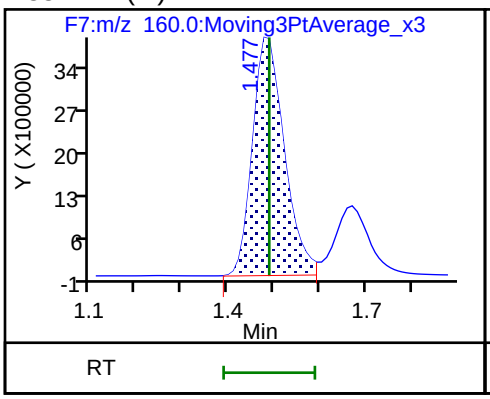
* 1 HMX-13C4



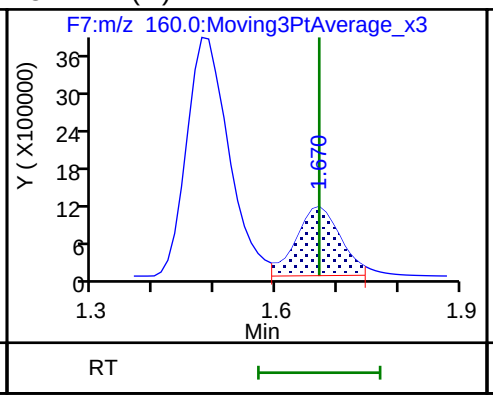
36 TNX



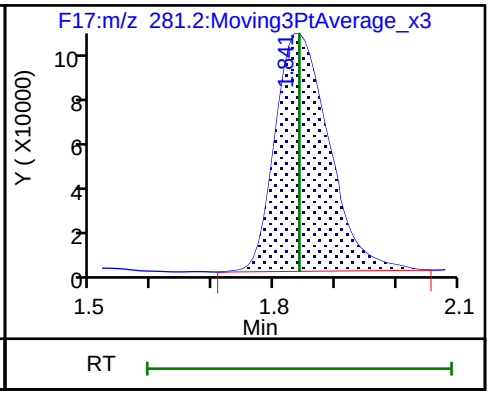
33 DNX (M)



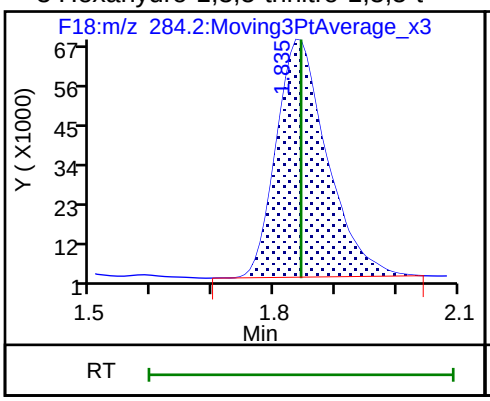
34 MNX (M)



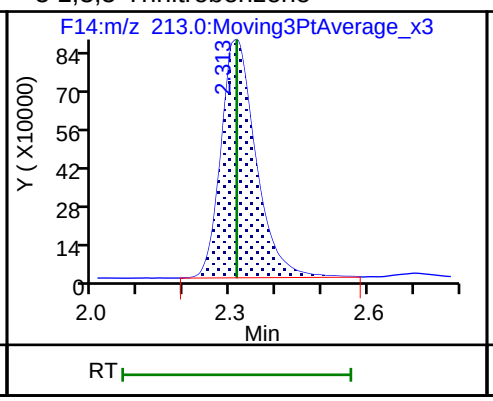
4 RDX



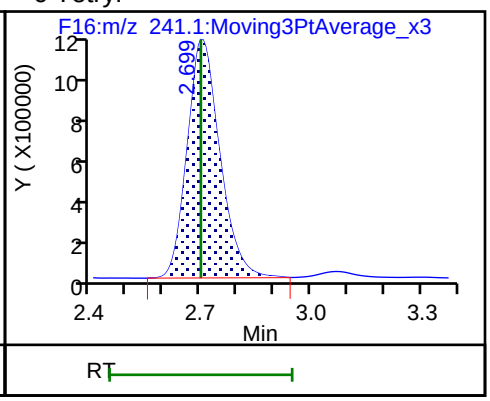
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



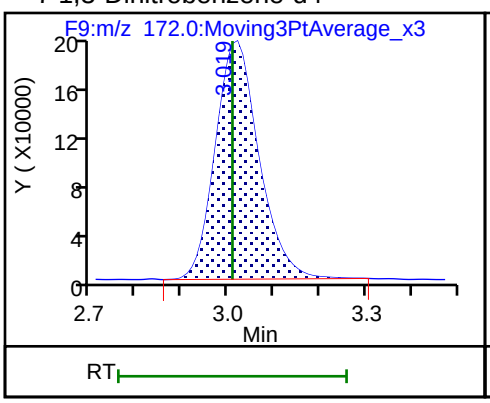
5 1,3,5-Trinitrobenzene



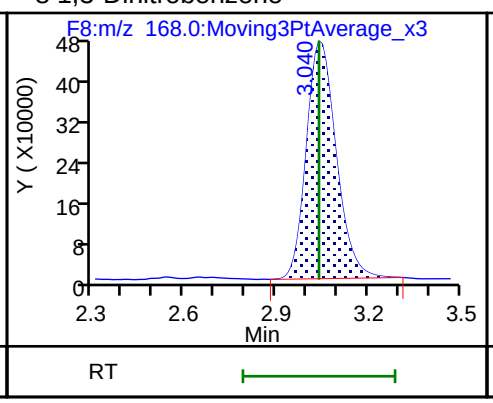
6 Tetryl



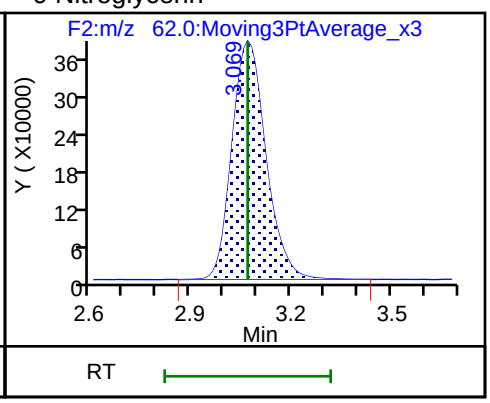
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



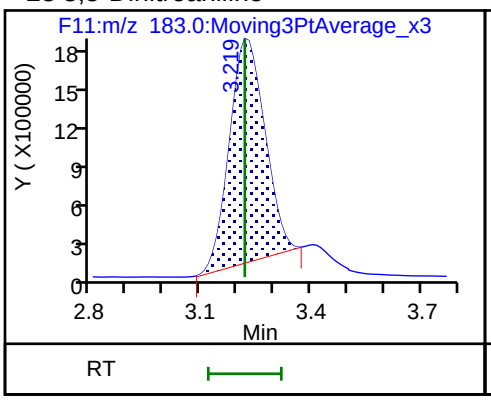
9 Nitroglycerin



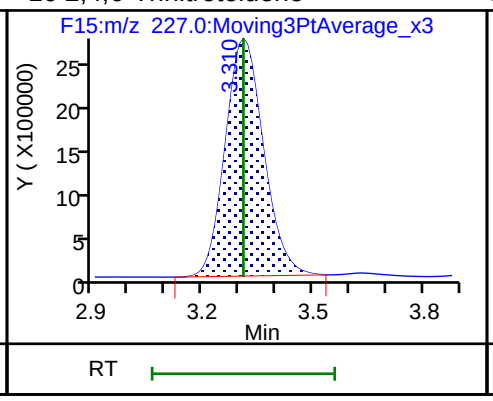
Report Date: 11-Apr-2022 11:38:40 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

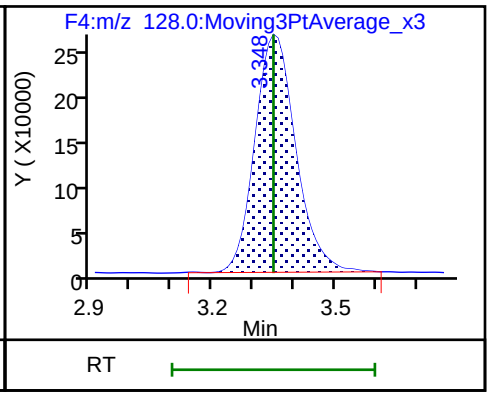
28 3,5-Dinitroaniline



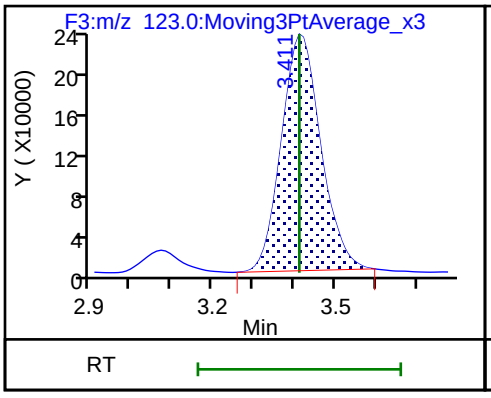
10 2,4,6-Trinitrotoluene



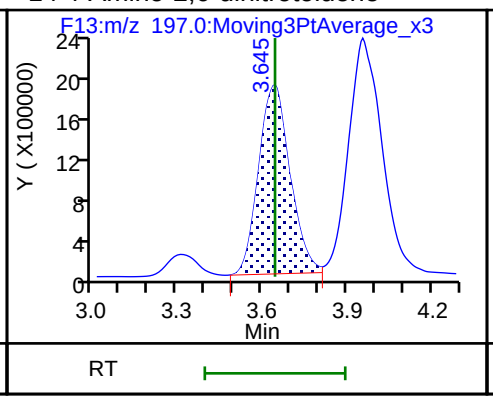
$ 11 Nitrobenzene-d5



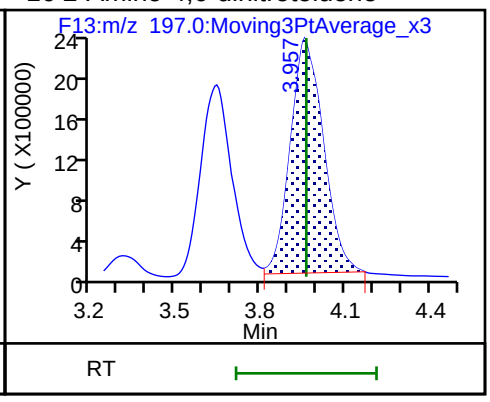
12 Nitrobenzene



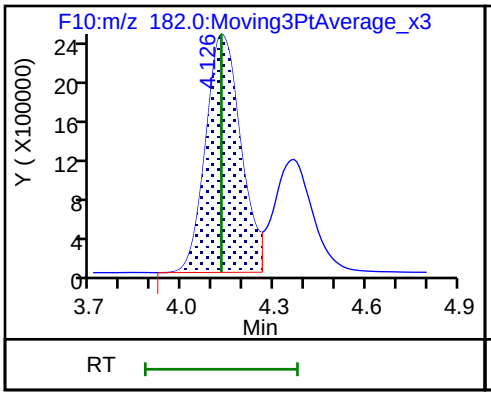
14 4-Amino-2,6-dinitrotoluene



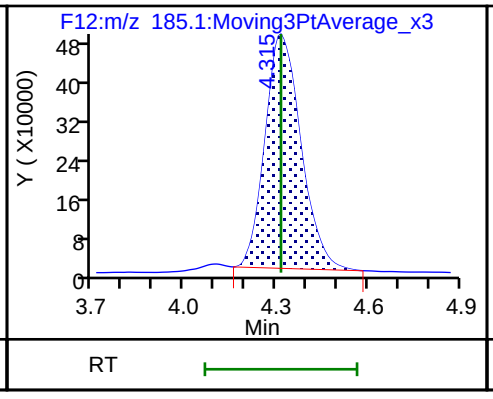
16 2-Amino-4,6-dinitrotoluene



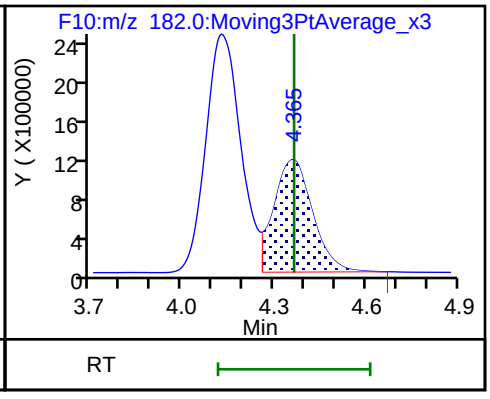
17 2,6-Dinitrotoluene



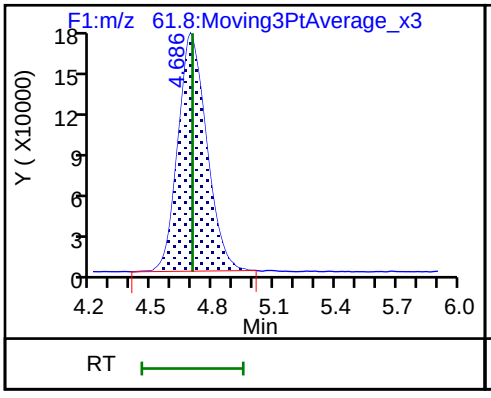
* 18 2,4-dinitrotoluene-d3



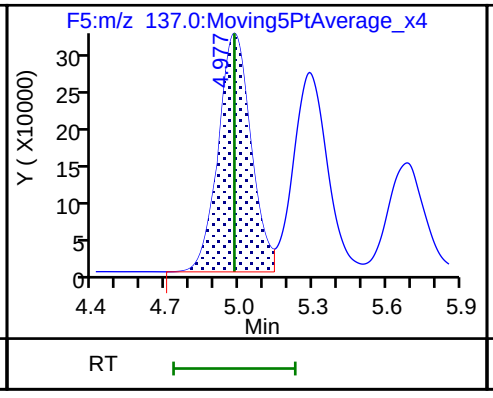
19 2,4-Dinitrotoluene



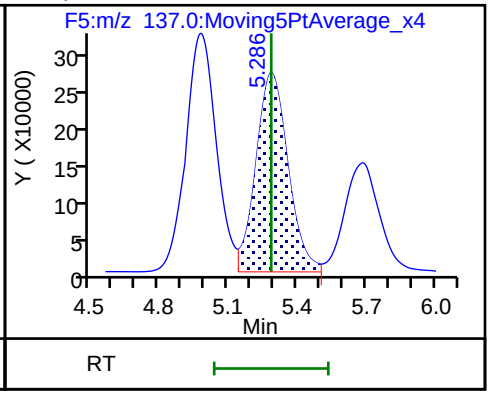
20 PETN



22 o-Nitrotoluene



23 p-Nitrotoluene



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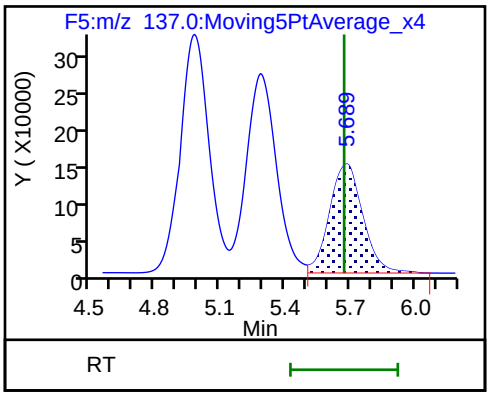
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

24 m-Nitrotoluene



Report Date: 11-Apr-2022 11:38:40 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Injection Date: 08-Apr-2022 10:27:37 Instrument ID: LC_LCMS7

Lims ID: STD007

Client ID:

Operator ID: acm ALS Bottle#: 8 Worklist Smp#: 9

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

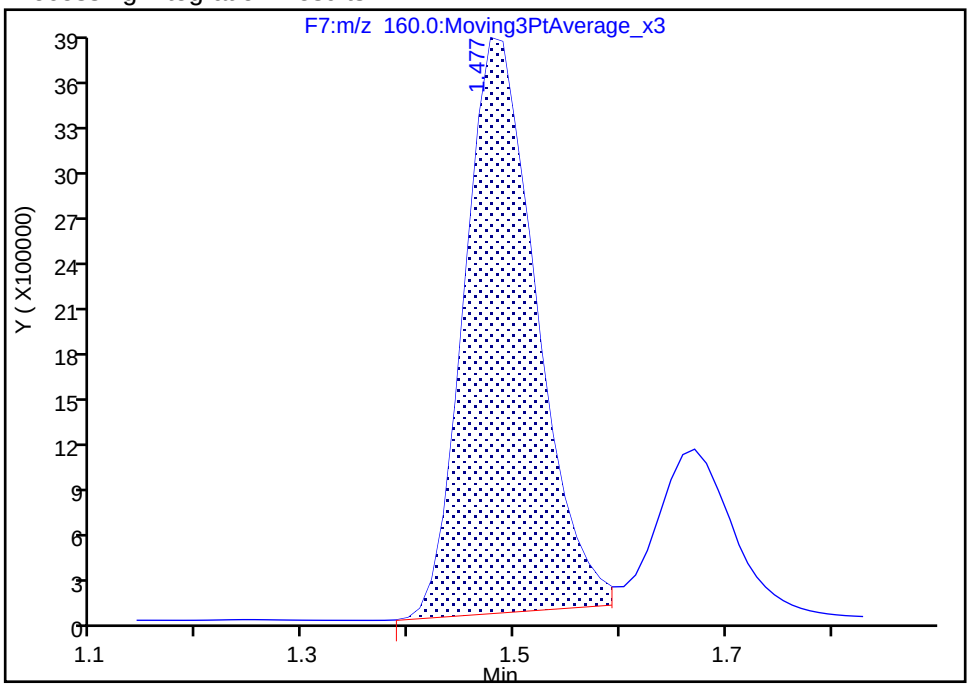
Column: Detector F7:SIR

33 DNX, CAS: 80251-29-2

Signal: 1

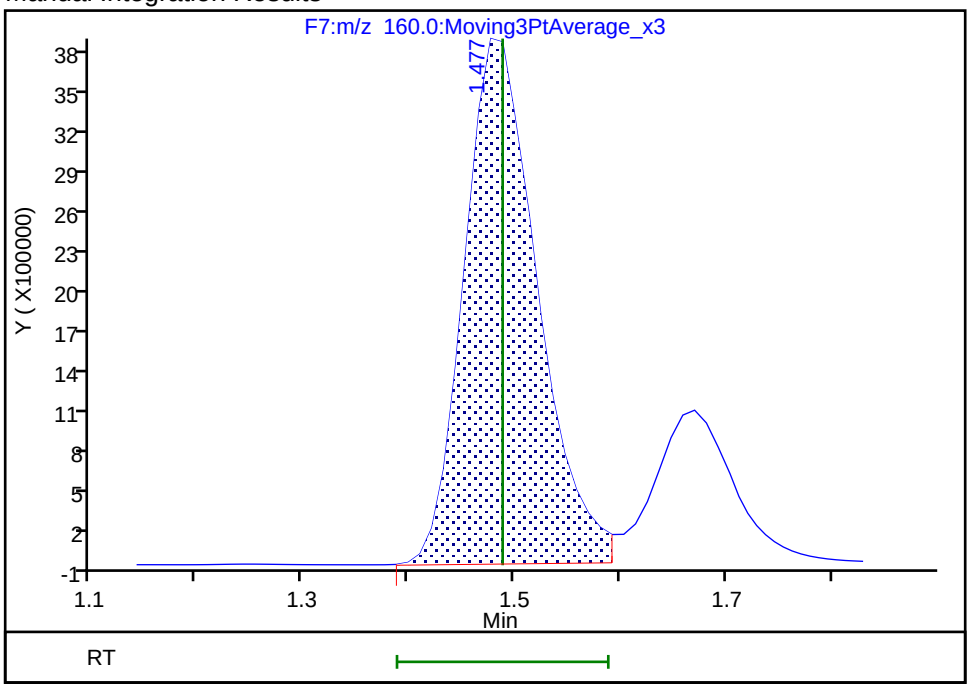
Processing Integration Results

RT: 1.48
Area: 18033561
Amount: 292.4021
Amount Units: ug/l



Manual Integration Results

RT: 1.48
Area: 18583446
Amount: 294.0456
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 08:36:12

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 11-Apr-2022 11:38:40 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

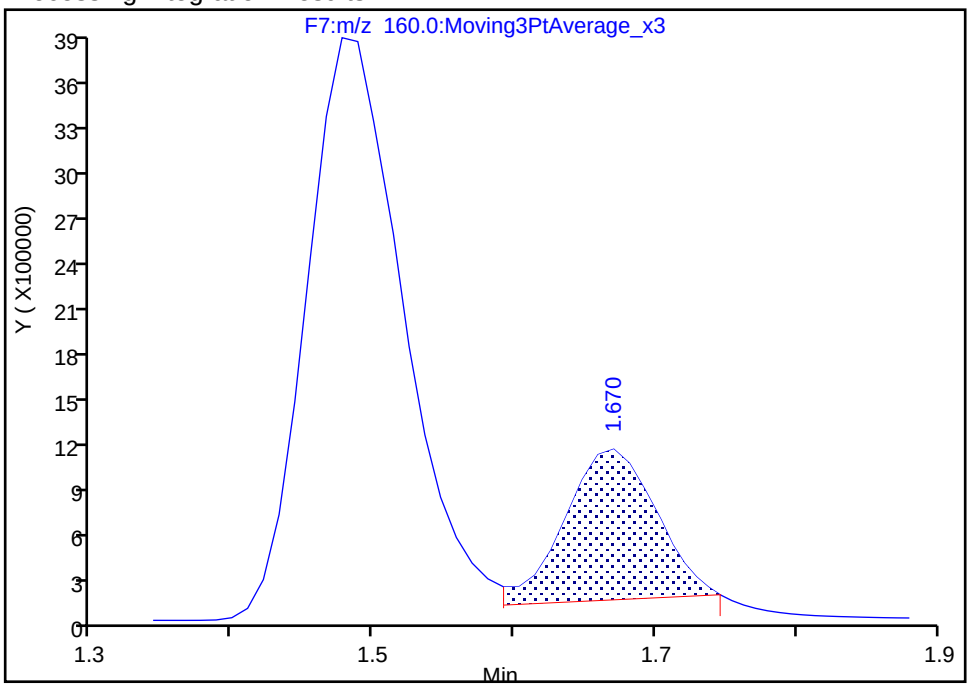
Injection Date:	08-Apr-2022 10:27:37	Instrument ID:	LC_LCMS7
Lims ID:	STD007		
Client ID:			
Operator ID:	acm	ALS Bottle#:	8 Worklist Smp#: 9
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F7:SIR

34 MNX, CAS: 5755-27-1

Signal: 1

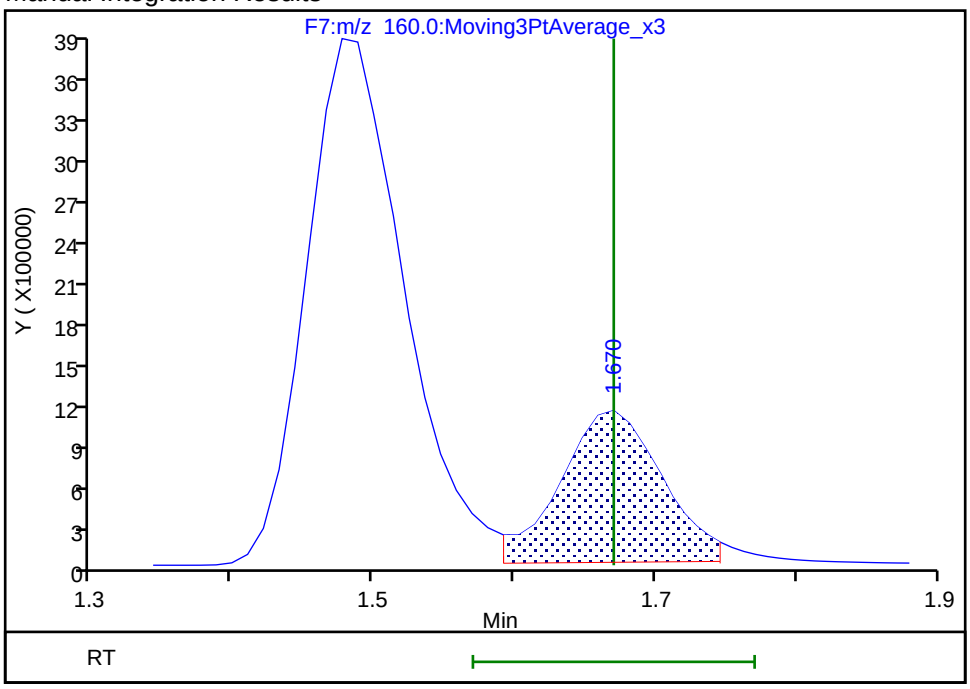
Processing Integration Results

RT: 1.67
Area: 4491743
Amount: 296.8221
Amount Units: ug/l



Manual Integration Results

RT: 1.67
Area: 5544638
Amount: 347.8058
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 08:36:12

Audit Action: Manually Integrated Audit Reason: Baseline

Calibration / HMX

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

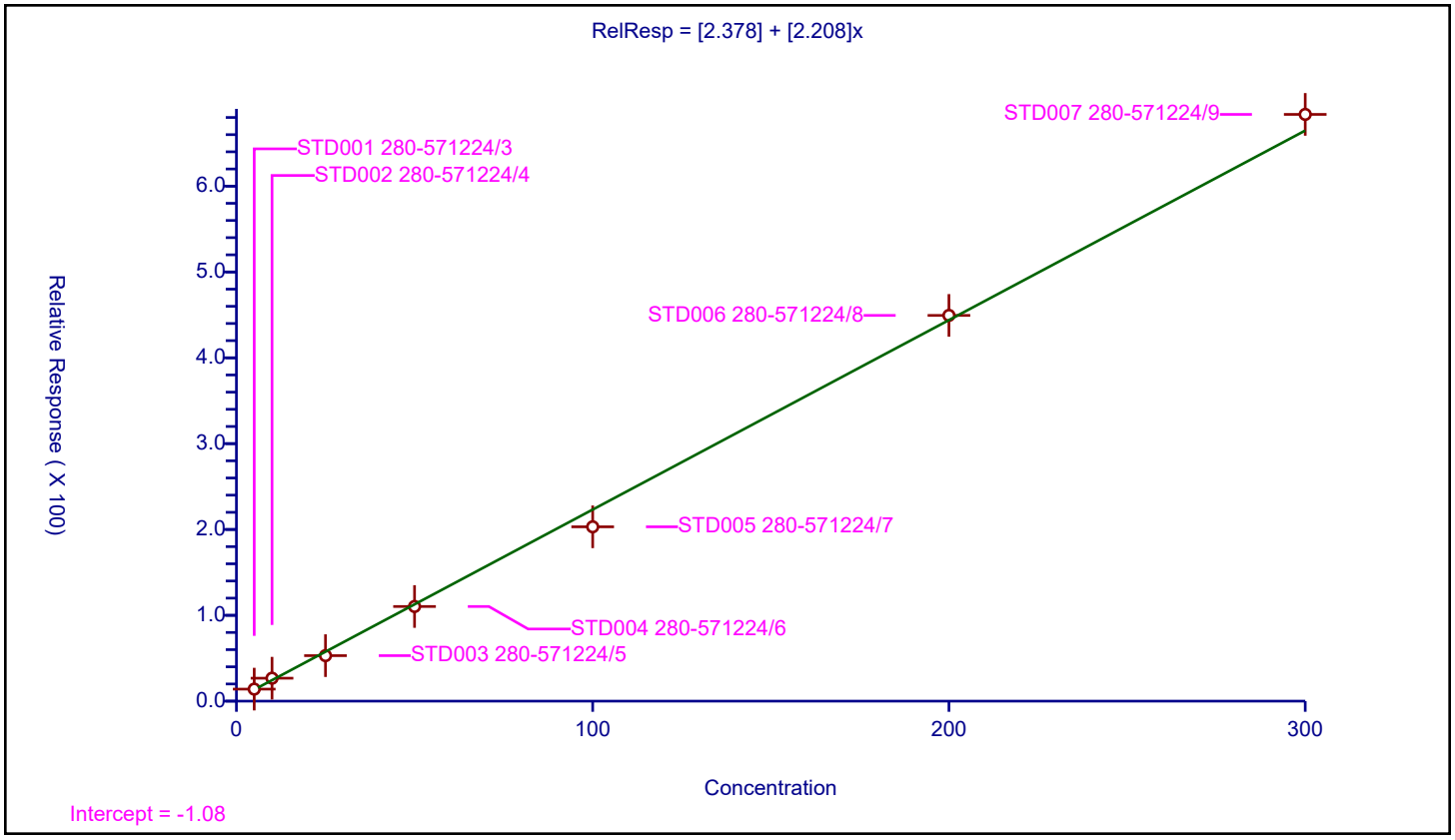
Curve Coefficients

Intercept:	2.378
Slope:	2.208

Error Coefficients

Standard Error:	265000
Relative Standard Error:	7.7
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571224/3	5.0	14.003192	125.0	122481.0	2.800638	Y
2	STD002 280-571224/4	10.0	26.717318	125.0	107828.0	2.671732	Y
3	STD003 280-571224/5	25.0	53.005044	125.0	116371.0	2.120202	Y
4	STD004 280-571224/6	50.0	110.27659	125.0	109910.0	2.205532	Y
5	STD005 280-571224/7	100.0	203.097135	125.0	104298.0	2.030971	Y
6	STD006 280-571224/8	200.0	449.379933	125.0	93377.0	2.2469	Y
7	STD007 280-571224/9	300.0	683.590637	125.0	81551.0	2.278635	Y



Calibration / TNX

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

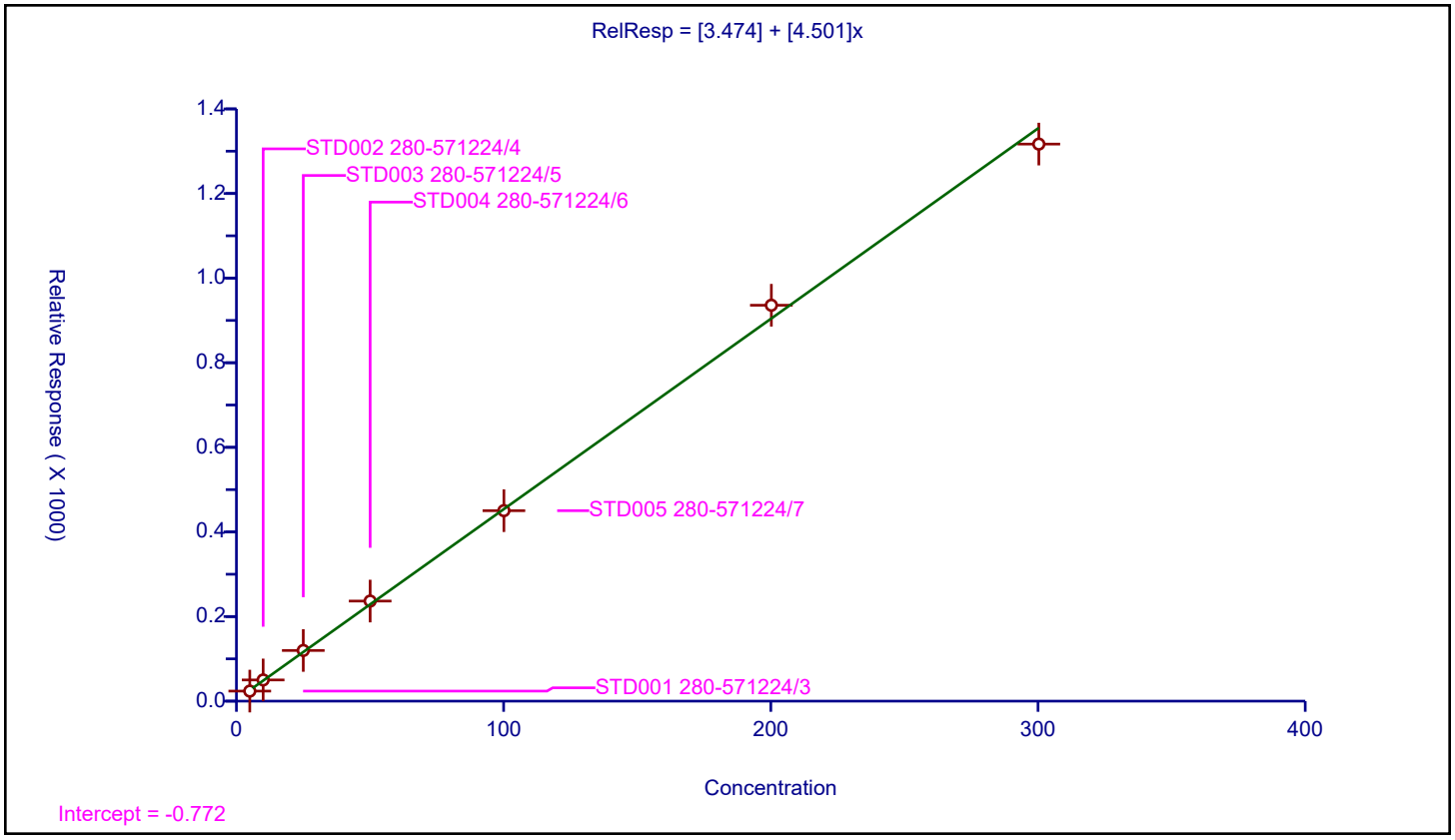
Curve Coefficients

Intercept:	3.474
Slope:	4.501

Error Coefficients

Standard Error:	7450000
Relative Standard Error:	5.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571224/3	5.005	23.739415	129.36	1321063.0	4.74314	Y
2	STD002 280-571224/4	10.01	50.104013	129.36	1267296.0	5.005396	Y
3	STD003 280-571224/5	25.025	119.800582	129.36	1266682.0	4.787236	Y
4	STD004 280-571224/6	50.05	236.590763	129.36	1239543.0	4.727088	Y
5	STD005 280-571224/7	100.1	450.265994	129.36	1267585.0	4.498162	Y
6	STD006 280-571224/8	200.2	935.833229	129.36	1241186.0	4.674492	Y
7	STD007 280-571224/9	300.3	1316.820468	129.36	1283056.0	4.385017	Y



Calibration / DNX

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

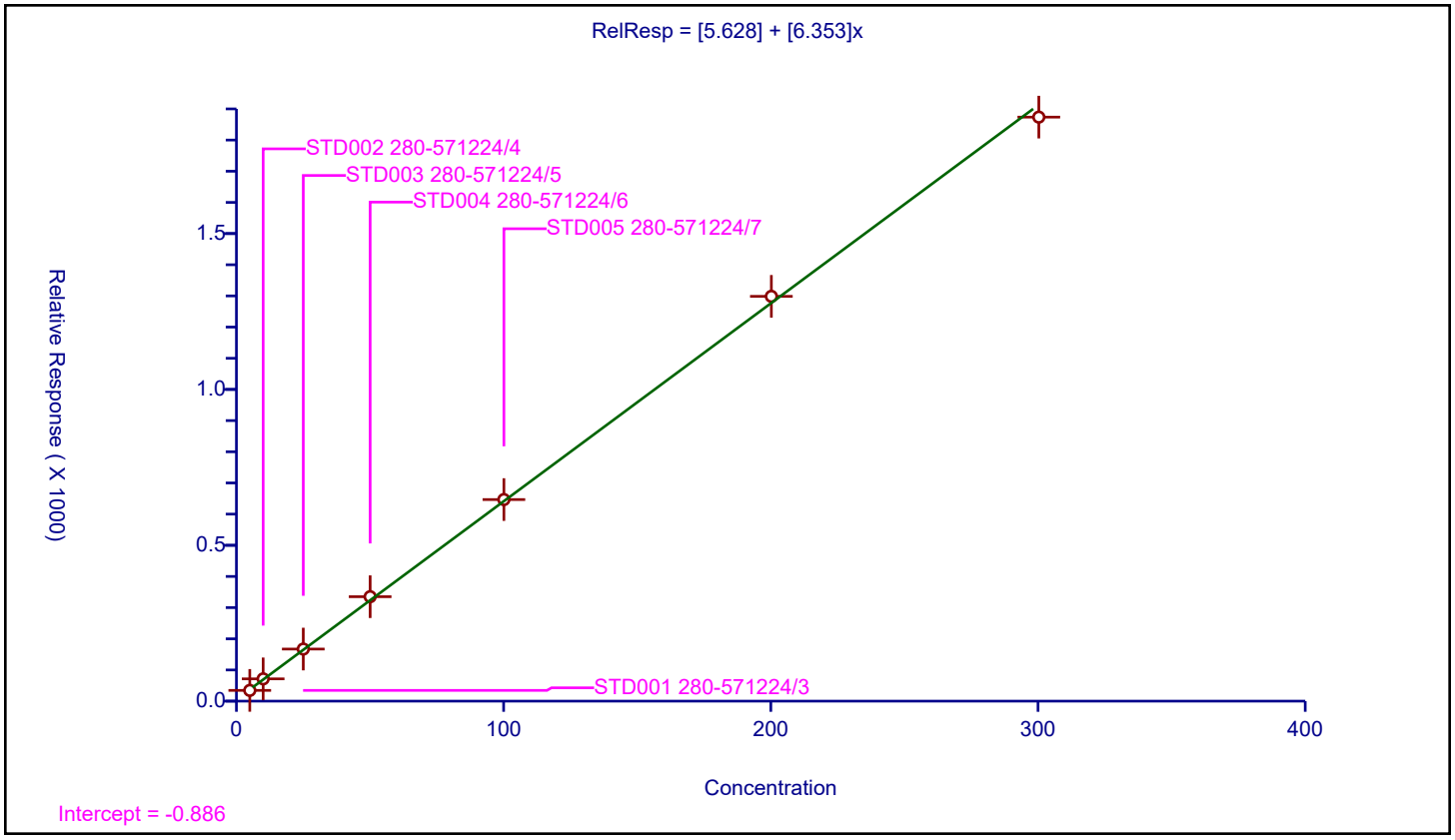
Curve Coefficients

Intercept:	5.628
Slope:	6.353

Error Coefficients

Standard Error:	10500000
Relative Standard Error:	4.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571224/3	5.005	34.515832	129.36	1321063.0	6.89627	Y
2	STD002 280-571224/4	10.01	71.473744	129.36	1267296.0	7.140234	Y
3	STD003 280-571224/5	25.025	167.10788	129.36	1266682.0	6.677638	Y
4	STD004 280-571224/6	50.05	335.108631	129.36	1239543.0	6.695477	Y
5	STD005 280-571224/7	100.1	646.728359	129.36	1267585.0	6.460823	Y
6	STD006 280-571224/8	200.2	1298.602282	129.36	1241186.0	6.486525	Y
7	STD007 280-571224/9	300.3	1873.616253	129.36	1283056.0	6.239148	Y



Calibration / MNX

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

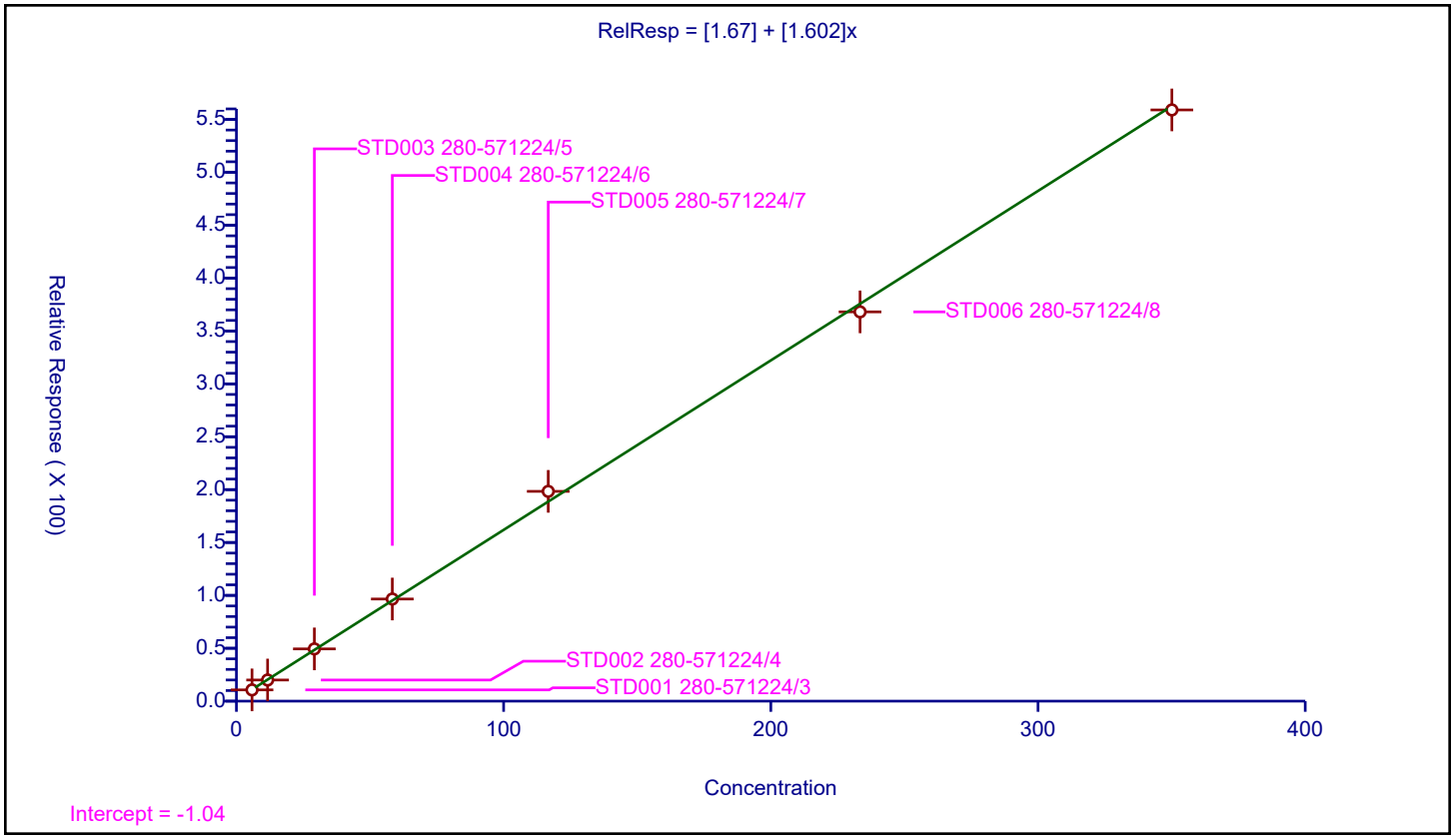
Curve Coefficients

Intercept:	1.67
Slope:	1.602

Error Coefficients

Standard Error:	3100000
Relative Standard Error:	3.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571224/3	5.835	10.651764	129.36	1321063.0	1.825495	Y
2	STD002 280-571224/4	11.67	19.971602	129.36	1267296.0	1.711363	Y
3	STD003 280-571224/5	29.175	49.406173	129.36	1266682.0	1.693442	Y
4	STD004 280-571224/6	58.35	96.56663	129.36	1239543.0	1.654955	Y
5	STD005 280-571224/7	116.7	198.361355	129.36	1267585.0	1.699755	Y
6	STD006 280-571224/8	233.4	368.073998	129.36	1241186.0	1.577009	Y
7	STD007 280-571224/9	350.1	559.020317	129.36	1283056.0	1.596745	Y



Calibration / RDX

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

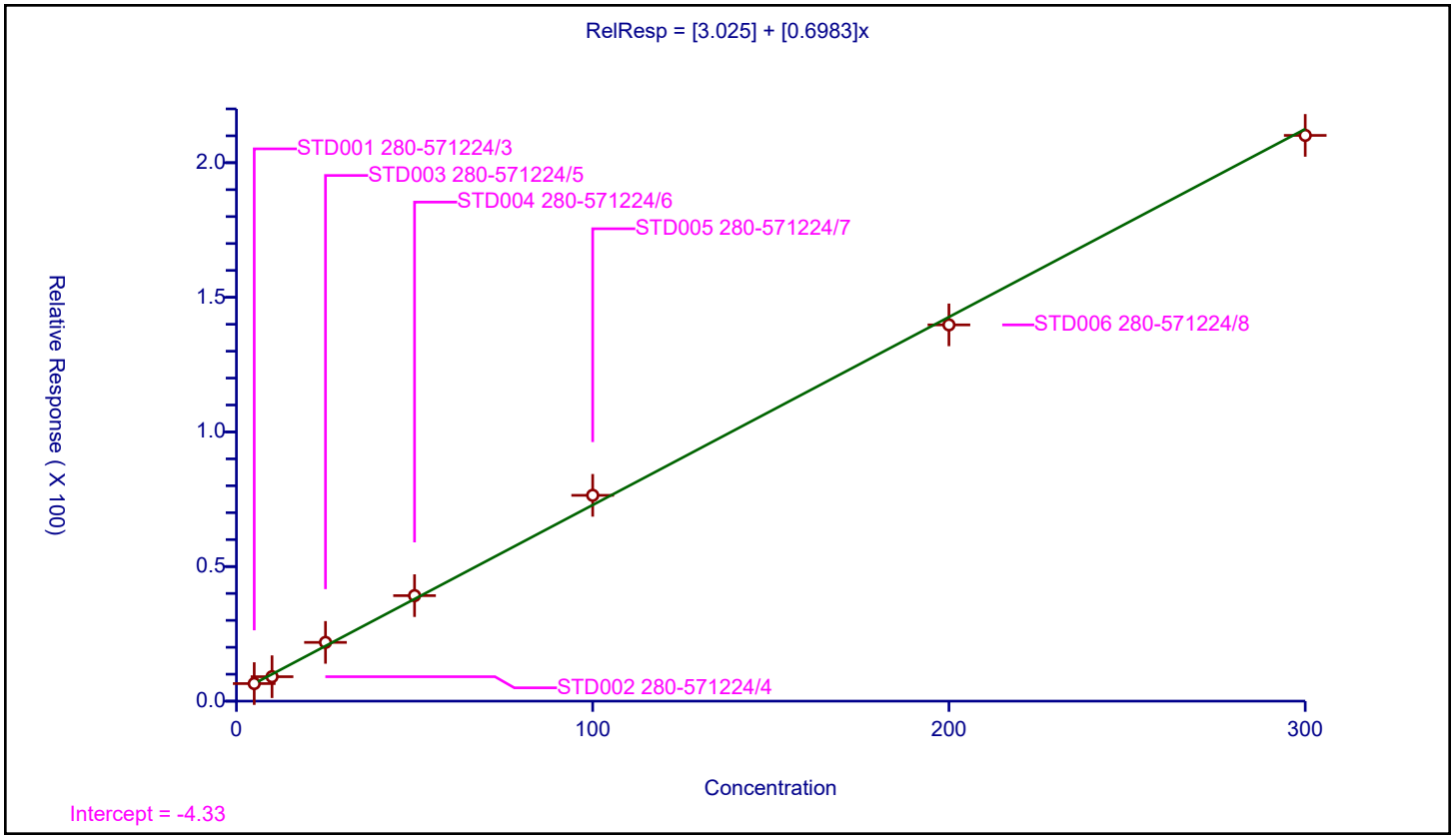
Curve Coefficients

Intercept:	3.025
Slope:	0.6983

Error Coefficients

Standard Error:	375000
Relative Standard Error:	7.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571224/3	5.0	6.521802	125.0	347220.0	1.30436	Y
2	STD002 280-571224/4	10.0	9.072812	125.0	366328.0	0.907281	Y
3	STD003 280-571224/5	25.0	21.825115	125.0	365714.0	0.873005	Y
4	STD004 280-571224/6	50.0	39.195227	125.0	387662.0	0.783905	Y
5	STD005 280-571224/7	100.0	76.45593	125.0	421277.0	0.764559	Y
6	STD006 280-571224/8	200.0	139.768285	125.0	391904.0	0.698841	Y
7	STD007 280-571224/9	300.0	210.156726	125.0	387076.0	0.700522	Y



Calibration / 1,3,5-Trinitrobenzene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

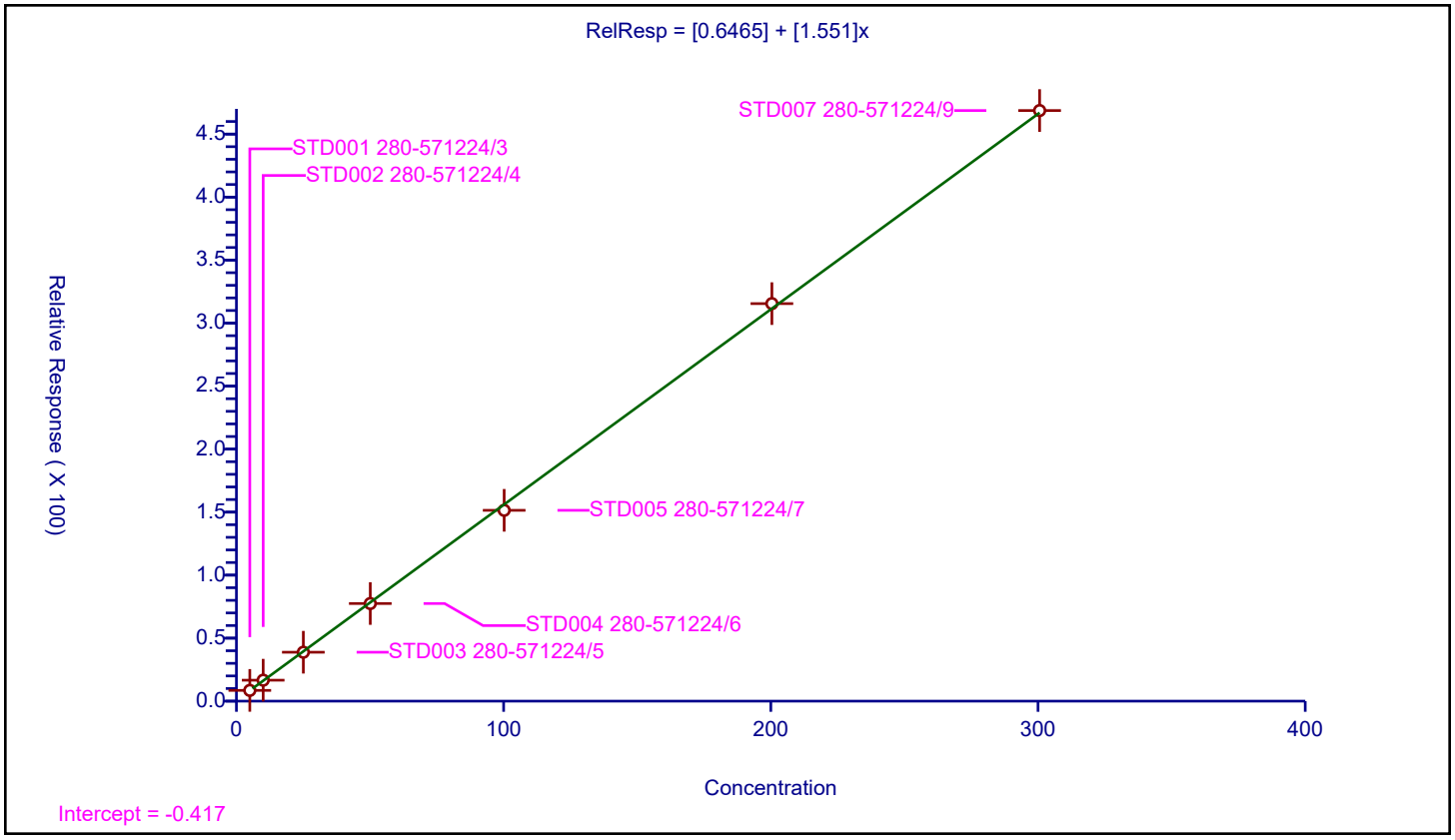
Curve Coefficients

Intercept:	0.6465
Slope:	1.551

Error Coefficients

Standard Error:	2600000
Relative Standard Error:	2.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571224/3	5.01	8.533142	129.36	1321063.0	1.703222	Y
2	STD002 280-571224/4	10.02	16.622093	129.36	1267296.0	1.658892	Y
3	STD003 280-571224/5	25.05	38.823666	129.36	1266682.0	1.549847	Y
4	STD004 280-571224/6	50.1	77.464906	129.36	1239543.0	1.546206	Y
5	STD005 280-571224/7	100.2	151.439735	129.36	1267585.0	1.511375	Y
6	STD006 280-571224/8	200.4	315.464677	129.36	1241186.0	1.574175	Y
7	STD007 280-571224/9	300.6	468.683087	129.36	1283056.0	1.559159	Y



Calibration / Tetryl

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

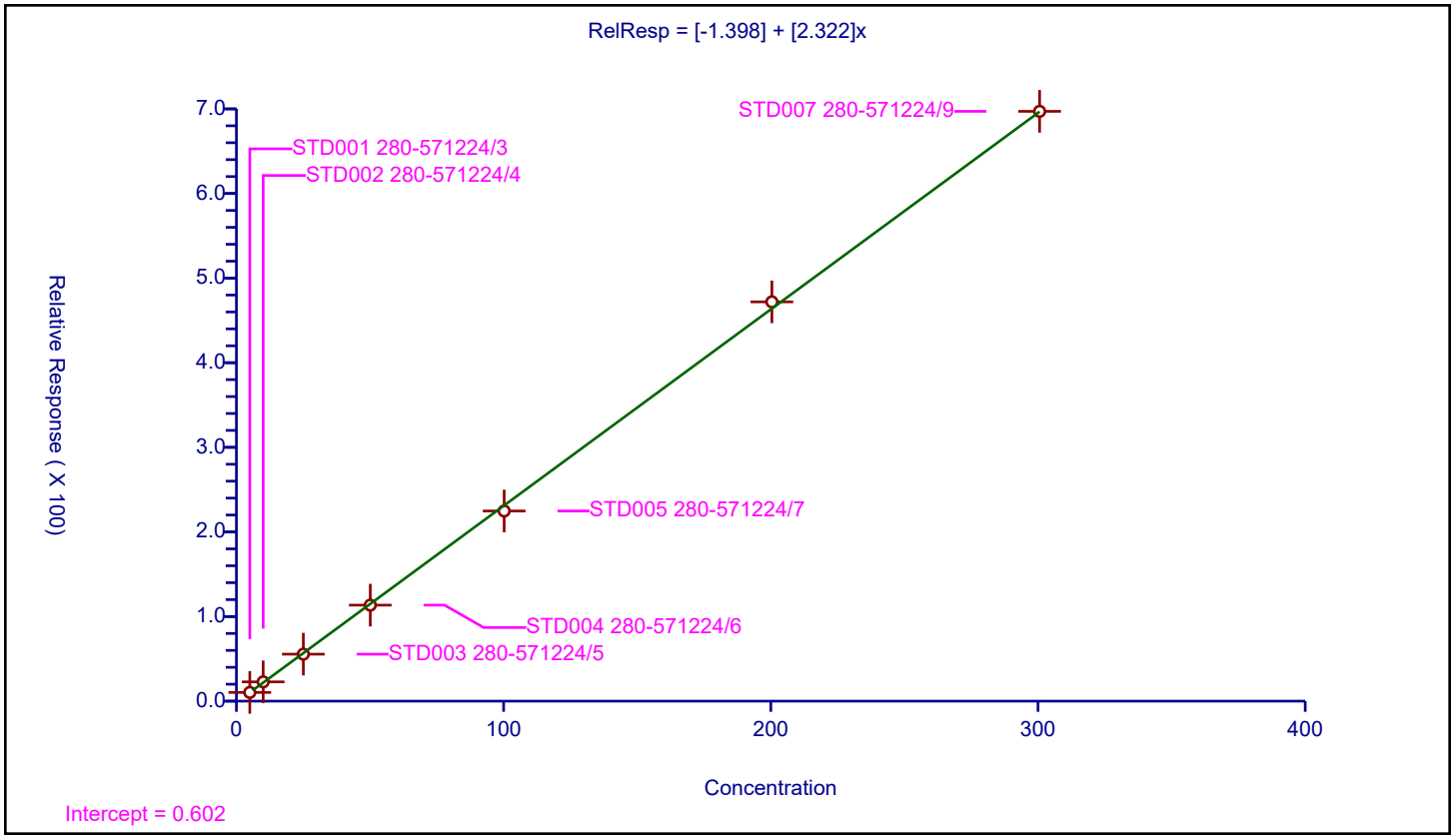
Curve Coefficients

Intercept:	-1.398
Slope:	2.322

Error Coefficients

Standard Error:	3860000
Relative Standard Error:	2.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571224/3	5.01	10.30718	129.36	1321063.0	2.057321	Y
2	STD002 280-571224/4	10.02	22.783682	129.36	1267296.0	2.273821	Y
3	STD003 280-571224/5	25.05	55.503142	129.36	1266682.0	2.215694	Y
4	STD004 280-571224/6	50.1	113.461952	129.36	1239543.0	2.26471	Y
5	STD005 280-571224/7	100.2	224.742188	129.36	1267585.0	2.242936	Y
6	STD006 280-571224/8	200.4	471.937743	129.36	1241186.0	2.354979	Y
7	STD007 280-571224/9	300.6	697.091924	129.36	1283056.0	2.319002	Y



Calibration / 1,3-Dinitrobenzene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

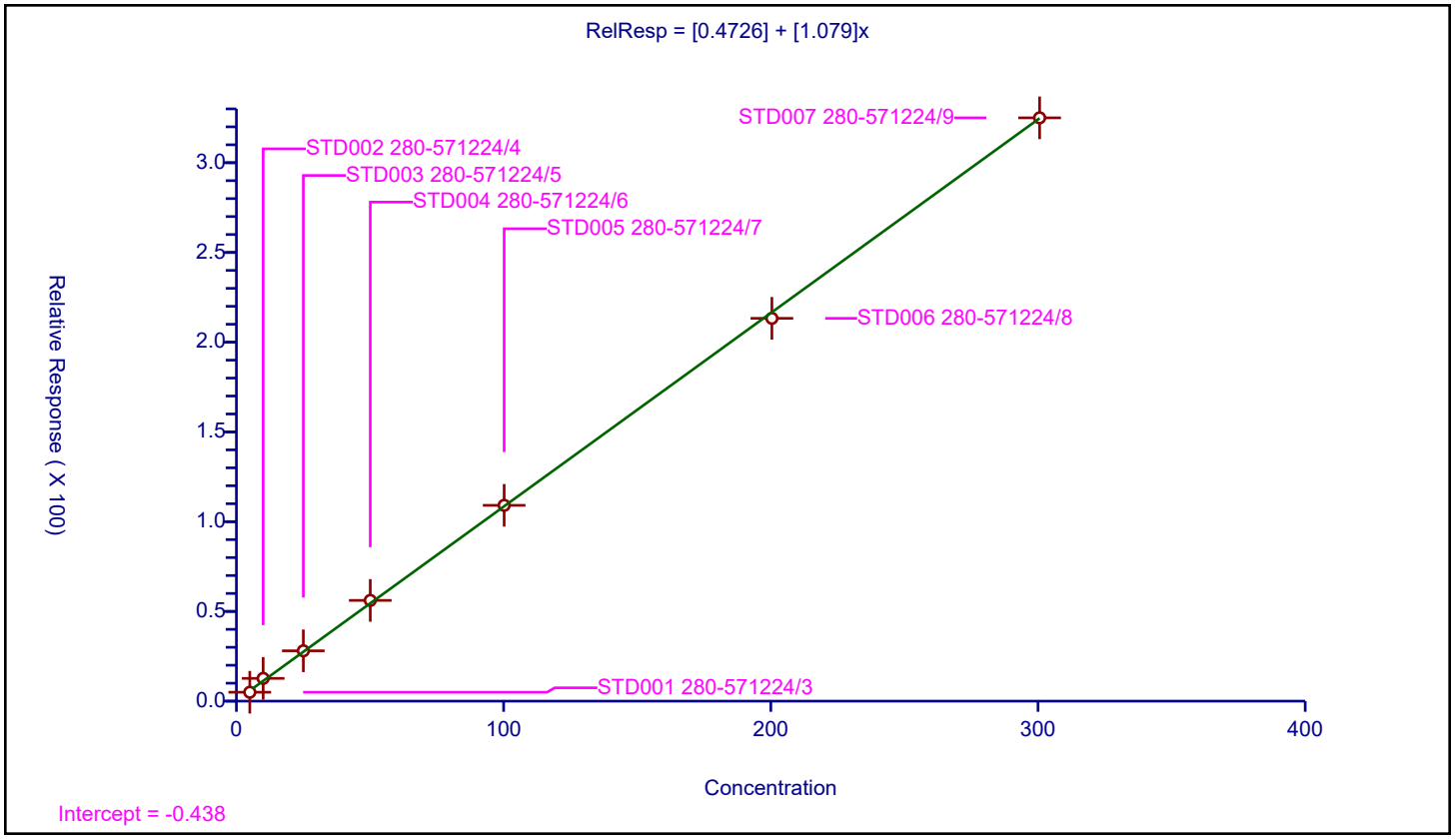
Curve Coefficients

Intercept:	0.4726
Slope:	1.079

Error Coefficients

Standard Error:	1790000
Relative Standard Error:	9.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571224/3	5.01	4.968127	129.36	1321063.0	0.991642	Y
2	STD002 280-571224/4	10.02	12.674013	129.36	1267296.0	1.264872	Y
3	STD003 280-571224/5	25.05	28.0365	129.36	1266682.0	1.119222	Y
4	STD004 280-571224/6	50.1	56.138518	129.36	1239543.0	1.120529	Y
5	STD005 280-571224/7	100.2	109.104756	129.36	1267585.0	1.08887	Y
6	STD006 280-571224/8	200.4	213.293825	129.36	1241186.0	1.06434	Y
7	STD007 280-571224/9	300.6	325.020004	129.36	1283056.0	1.081238	Y



Calibration / Nitroglycerin

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

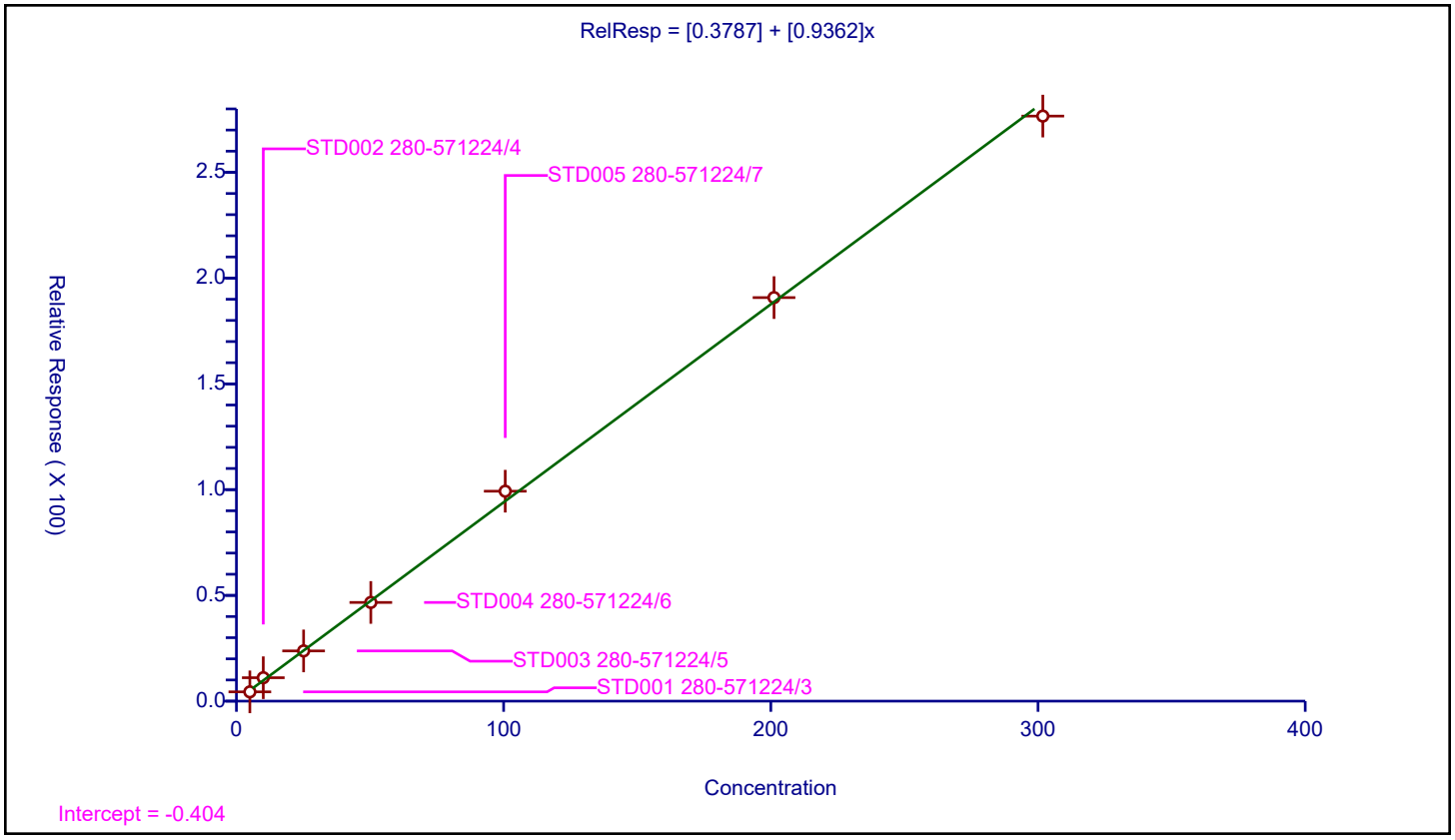
Curve Coefficients

Intercept:	0.3787
Slope:	0.9362

Error Coefficients

Standard Error:	1550000
Relative Standard Error:	9.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571224/3	5.03	4.386378	129.36	1321063.0	0.872043	Y
2	STD002 280-571224/4	10.06	11.073876	129.36	1267296.0	1.100783	Y
3	STD003 280-571224/5	25.15	23.738056	129.36	1266682.0	0.943859	Y
4	STD004 280-571224/6	50.3	46.662536	129.36	1239543.0	0.927685	Y
5	STD005 280-571224/7	100.6	99.257013	129.36	1267585.0	0.98665	Y
6	STD006 280-571224/8	201.2	190.782722	129.36	1241186.0	0.948224	Y
7	STD007 280-571224/9	301.8	276.596106	129.36	1283056.0	0.916488	Y



Calibration / 2,4,6-Trinitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

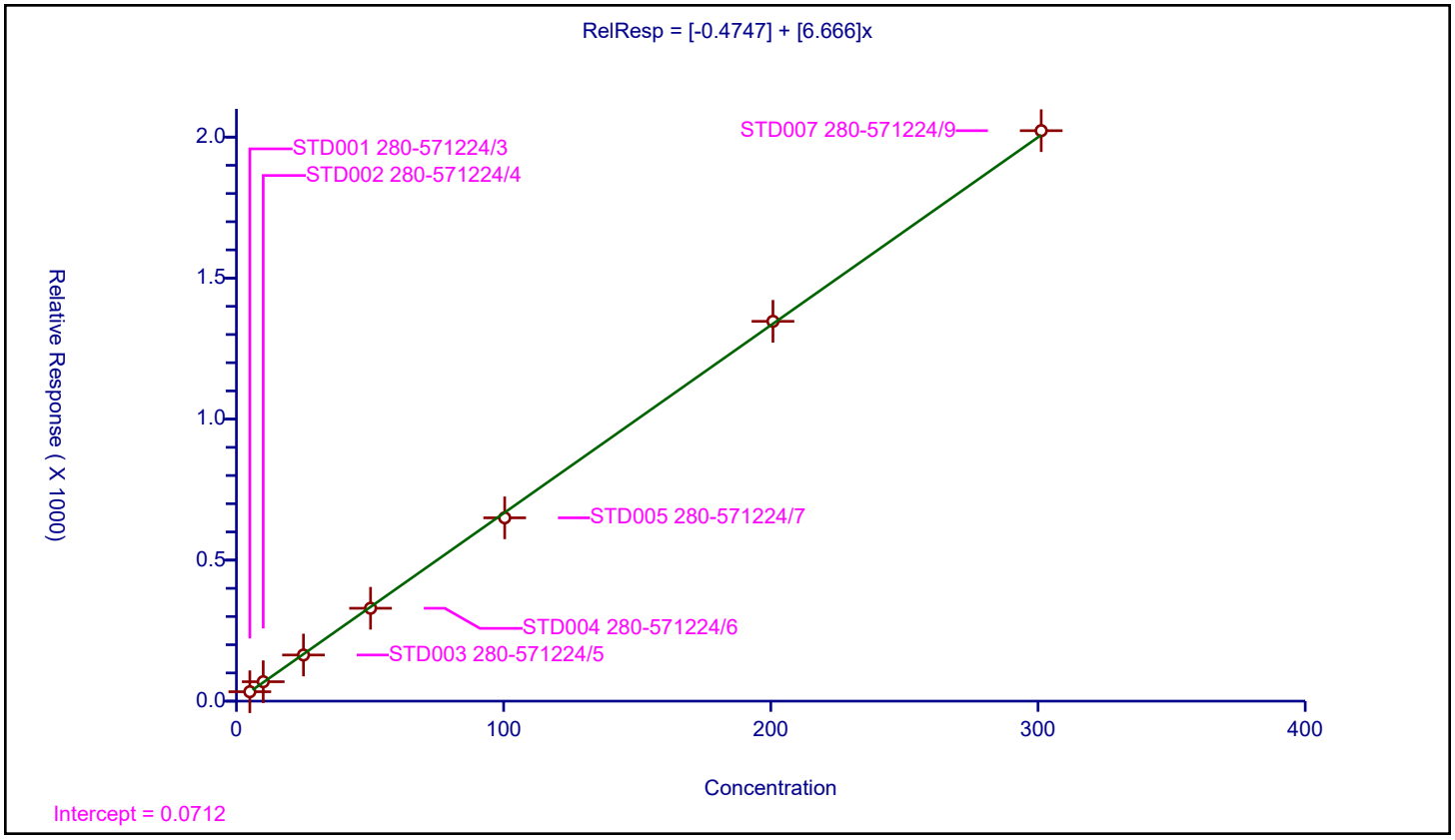
Curve Coefficients

Intercept:	-0.4747
Slope:	6.666

Error Coefficients

Standard Error:	11200000
Relative Standard Error:	2.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571224/3	5.02	33.367021	129.36	1321063.0	6.646817	Y
2	STD002 280-571224/4	10.04	68.87643	129.36	1267296.0	6.860202	Y
3	STD003 280-571224/5	25.1	163.640938	129.36	1266682.0	6.519559	Y
4	STD004 280-571224/6	50.2	329.371695	129.36	1239543.0	6.561189	Y
5	STD005 280-571224/7	100.4	650.010566	129.36	1267585.0	6.474209	Y
6	STD006 280-571224/8	200.8	1346.784006	129.36	1241186.0	6.707092	Y
7	STD007 280-571224/9	301.2	2022.706371	129.36	1283056.0	6.715493	Y



Calibration / Nitrobenzene-d5

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

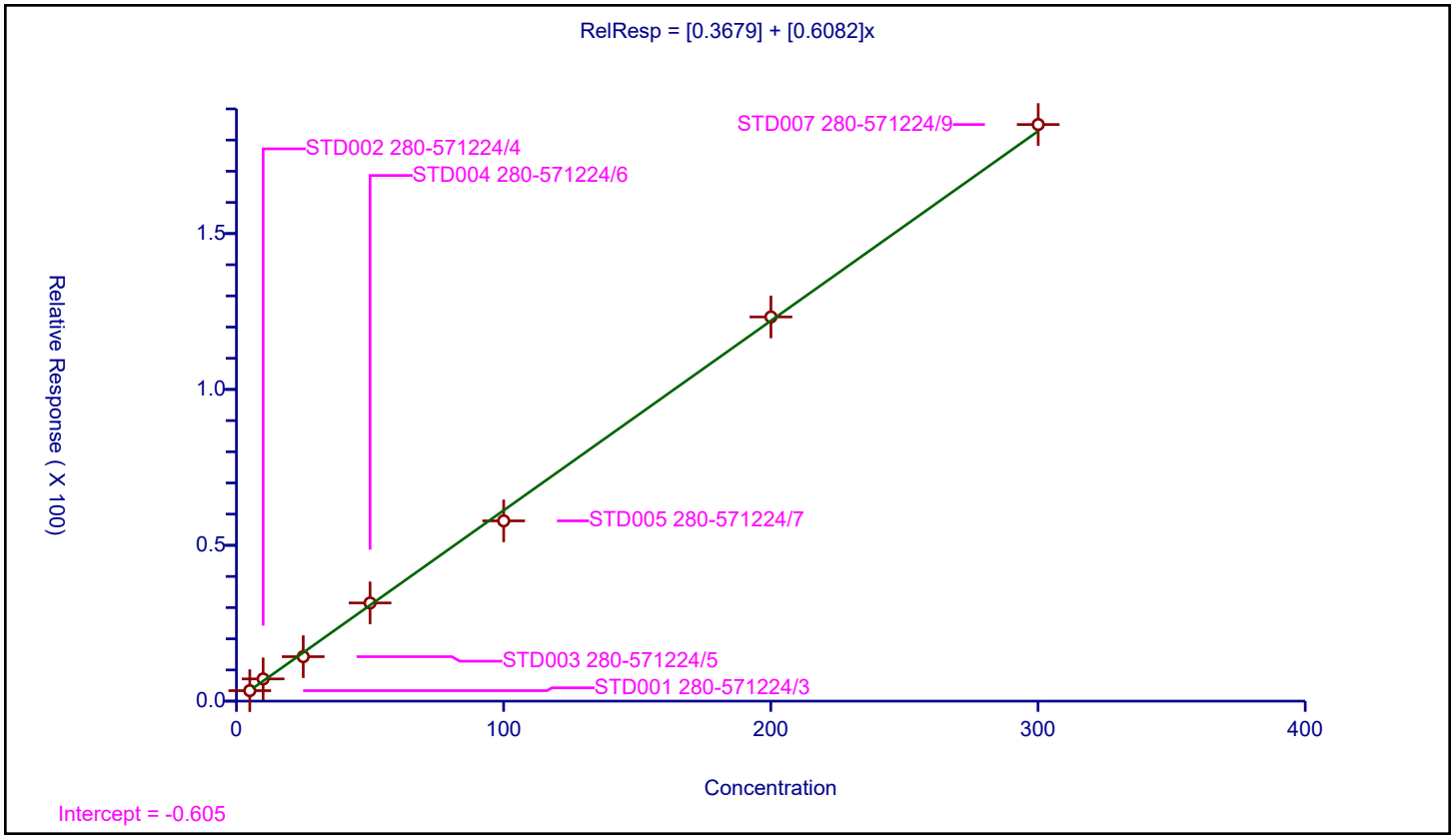
Curve Coefficients

Intercept:	0.3679
Slope:	0.6082

Error Coefficients

Standard Error:	1020000
Relative Standard Error:	6.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571224/3	5.001233	3.363493	129.36	1321063.0	0.672533	Y
2	STD002 280-571224/4	10.002465	7.130185	129.36	1267296.0	0.712843	Y
3	STD003 280-571224/5	25.006163	14.268916	129.36	1266682.0	0.570616	Y
4	STD004 280-571224/6	50.012325	31.495015	129.36	1239543.0	0.629745	Y
5	STD005 280-571224/7	100.02465	57.833258	129.36	1267585.0	0.57819	Y
6	STD006 280-571224/8	200.0493	123.25504	129.36	1241186.0	0.616123	Y
7	STD007 280-571224/9	300.07395	184.988018	129.36	1283056.0	0.616475	Y



Calibration / Nitrobenzene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

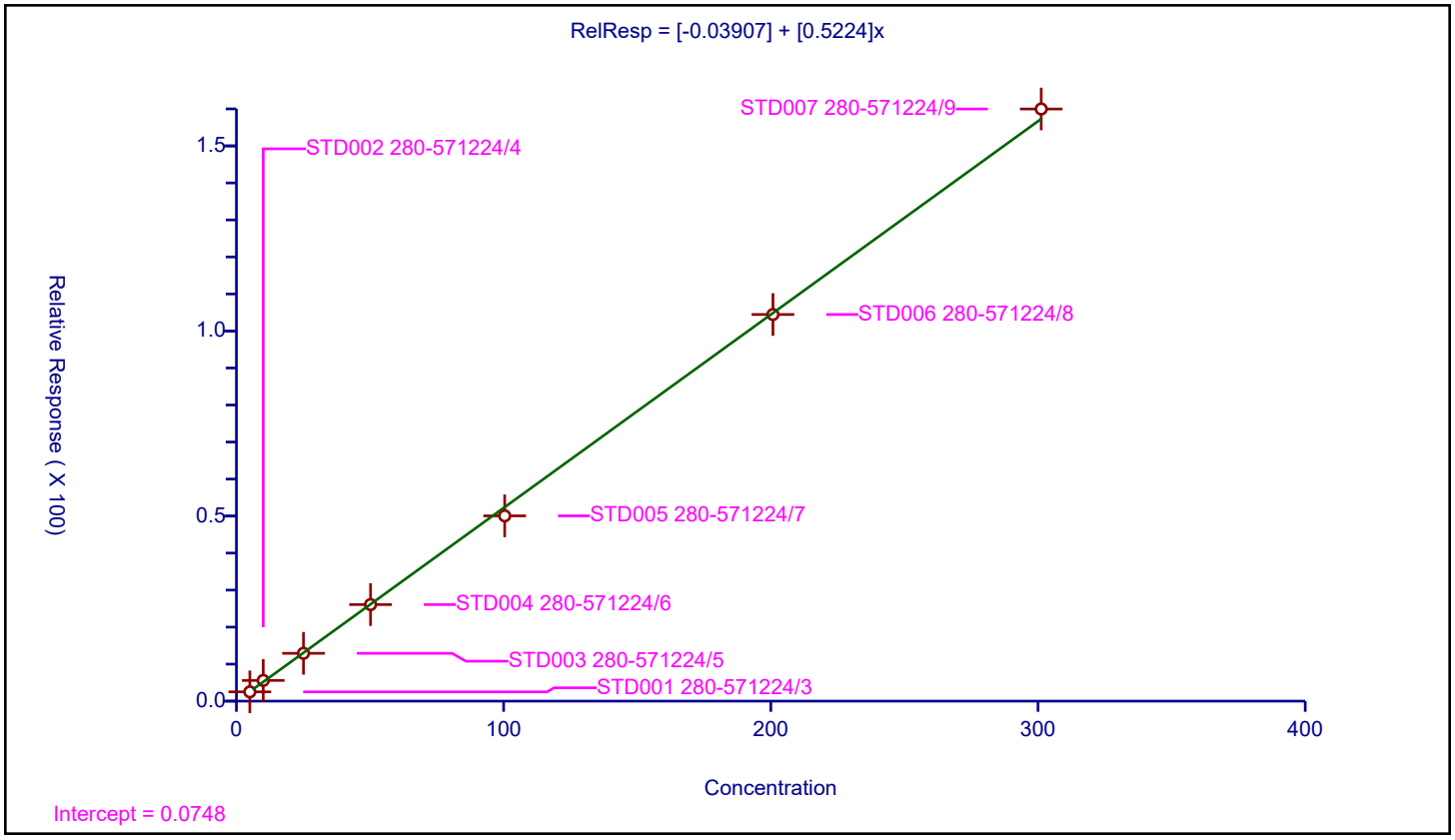
Curve Coefficients

Intercept:	-0.03907
Slope:	0.5224

Error Coefficients

Standard Error:	877000
Relative Standard Error:	4.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571224/3	5.02	2.510404	129.36	1321063.0	0.500081	Y
2	STD002 280-571224/4	10.04	5.596805	129.36	1267296.0	0.557451	Y
3	STD003 280-571224/5	25.1	12.918618	129.36	1266682.0	0.514686	Y
4	STD004 280-571224/6	50.2	26.089113	129.36	1239543.0	0.519703	Y
5	STD005 280-571224/7	100.4	50.058096	129.36	1267585.0	0.498587	Y
6	STD006 280-571224/8	200.8	104.450728	129.36	1241186.0	0.520173	Y
7	STD007 280-571224/9	301.2	159.972923	129.36	1283056.0	0.531119	Y



Calibration / 4-Amino-2,6-dinitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

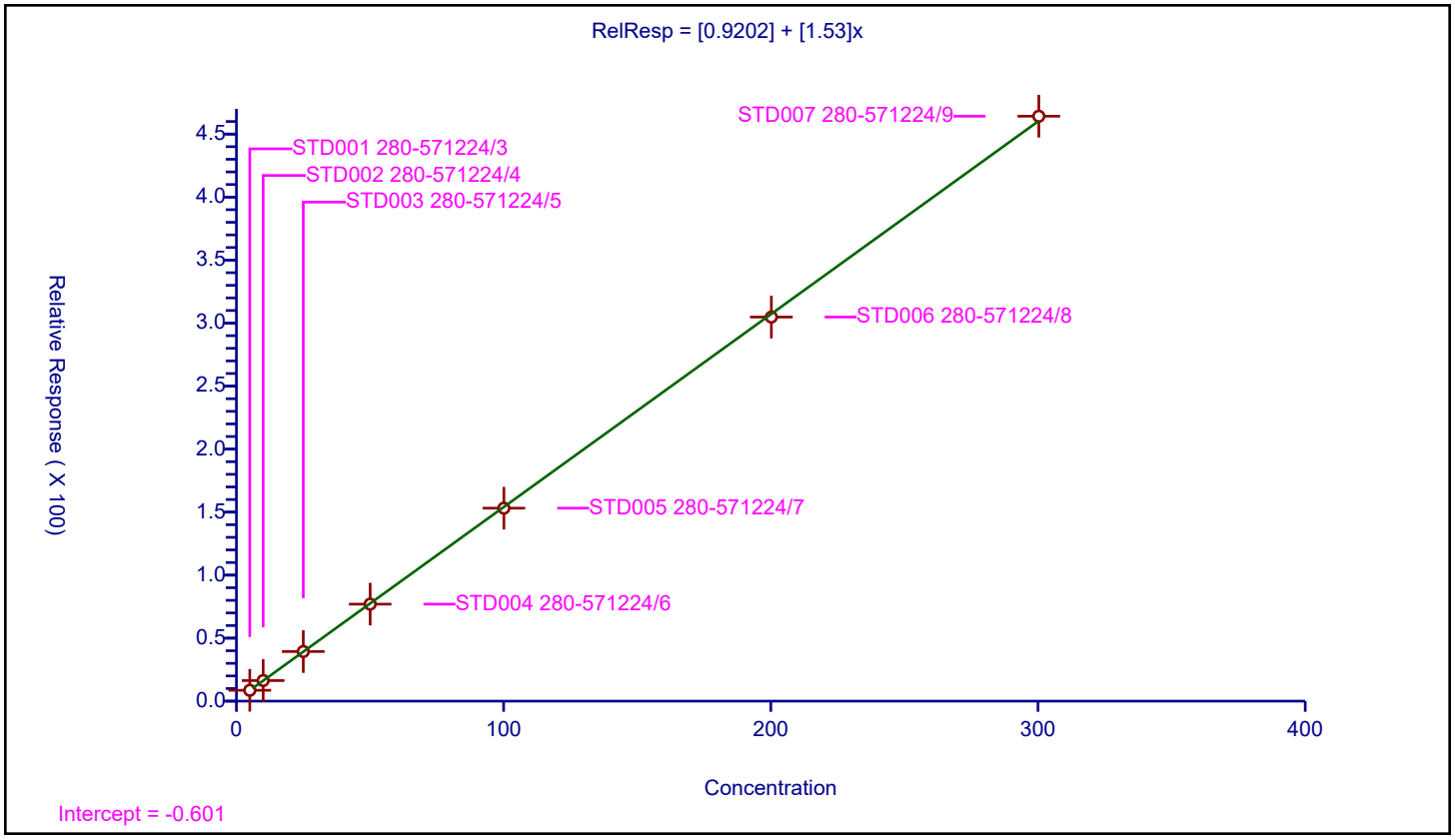
Curve Coefficients

Intercept:	0.9202
Slope:	1.53

Error Coefficients

Standard Error:	8110000
Relative Standard Error:	0.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571224/3	5.005	8.603349	125.0	3802676.0	1.718951	Y
2	STD002 280-571224/4	10.01	16.334182	125.0	3981283.0	1.631786	Y
3	STD003 280-571224/5	25.025	39.371843	125.0	3911012.0	1.5733	Y
4	STD004 280-571224/6	50.05	76.967393	125.0	3857770.0	1.53781	Y
5	STD005 280-571224/7	100.1	153.143918	125.0	3849353.0	1.529909	Y
6	STD006 280-571224/8	200.2	304.805961	125.0	3841838.0	1.522507	Y
7	STD007 280-571224/9	300.3	464.189363	125.0	3916853.0	1.545752	Y



Calibration / 2-Amino-4,6-dinitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

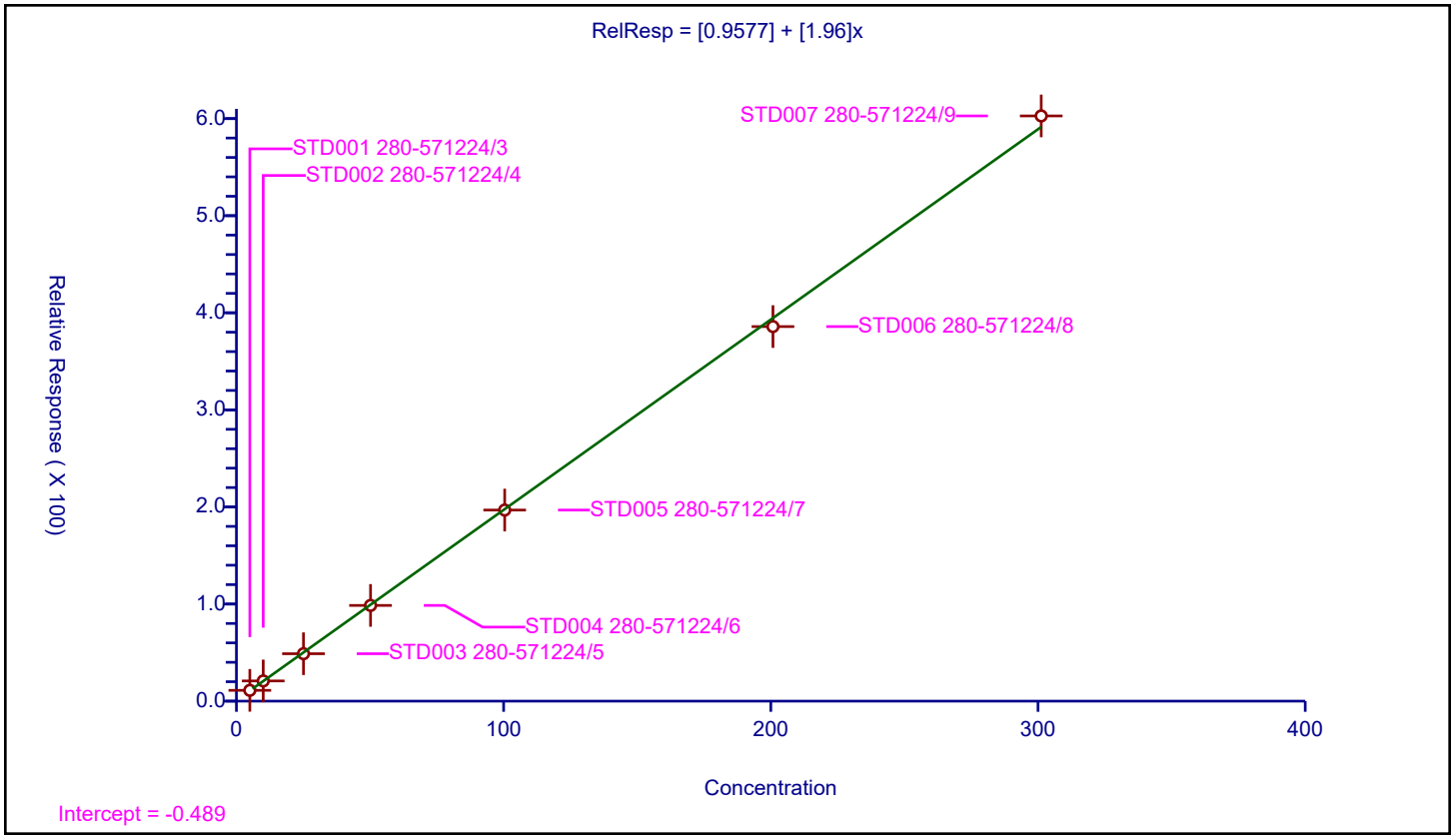
Curve Coefficients

Intercept:	0.9577
Slope:	1.96

Error Coefficients

Standard Error:	10500000
Relative Standard Error:	2.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571224/3	5.02	11.135218	125.0	3802676.0	2.218171	Y
2	STD002 280-571224/4	10.04	20.80887	125.0	3981283.0	2.072597	Y
3	STD003 280-571224/5	25.1	48.837072	125.0	3911012.0	1.9457	Y
4	STD004 280-571224/6	50.2	98.584027	125.0	3857770.0	1.963825	Y
5	STD005 280-571224/7	100.4	196.805379	125.0	3849353.0	1.960213	Y
6	STD006 280-571224/8	200.8	385.791905	125.0	3841838.0	1.921274	Y
7	STD007 280-571224/9	301.2	602.757399	125.0	3916853.0	2.001187	Y



Calibration / 2,6-Dinitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

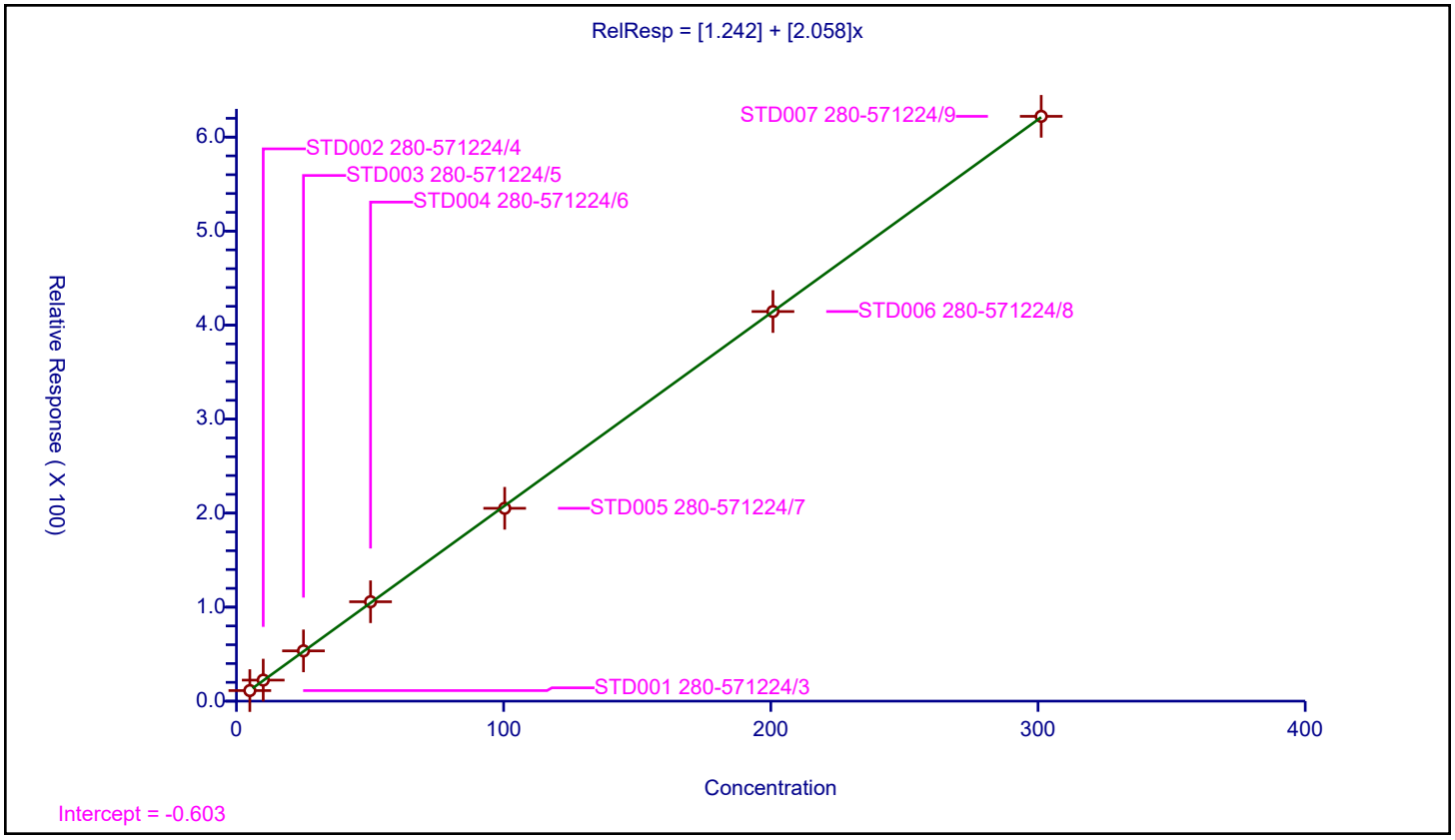
Curve Coefficients

Intercept:	1.242
Slope:	2.058

Error Coefficients

Standard Error:	10900000
Relative Standard Error:	2.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571224/3	5.02	11.234786	125.0	3802676.0	2.238005	Y
2	STD002 280-571224/4	10.04	22.36443	125.0	3981283.0	2.227533	Y
3	STD003 280-571224/5	25.1	53.482801	125.0	3911012.0	2.130789	Y
4	STD004 280-571224/6	50.2	105.713307	125.0	3857770.0	2.105843	Y
5	STD005 280-571224/7	100.4	205.145254	125.0	3849353.0	2.043279	Y
6	STD006 280-571224/8	200.8	414.449022	125.0	3841838.0	2.063989	Y
7	STD007 280-571224/9	301.2	622.088351	125.0	3916853.0	2.065366	Y



Calibration / 2,4-Dinitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

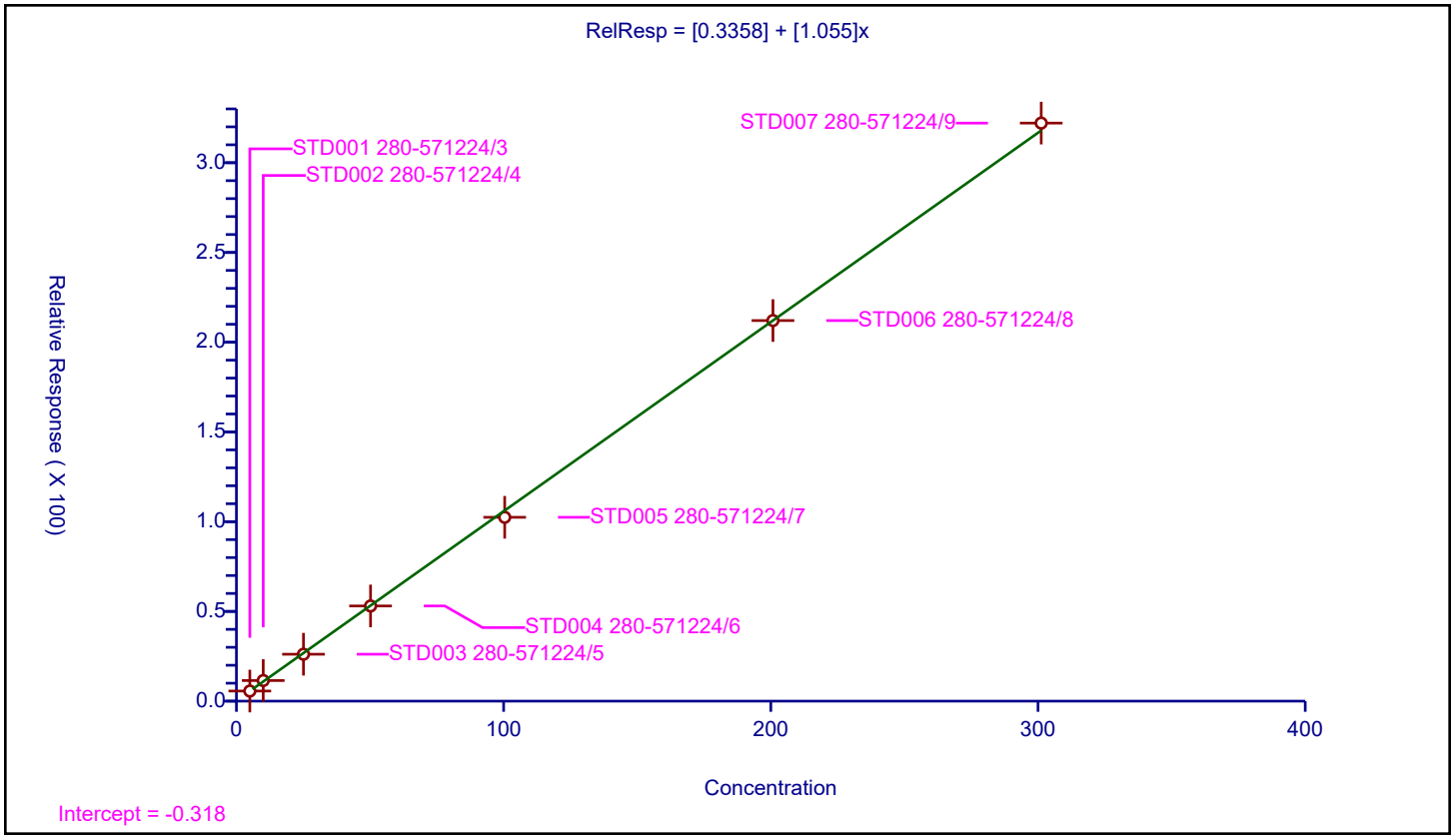
Curve Coefficients

Intercept:	0.3358
Slope:	1.055

Error Coefficients

Standard Error:	5620000
Relative Standard Error:	3.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571224/3	5.02	5.630706	125.0	3802676.0	1.121655	Y
2	STD002 280-571224/4	10.04	11.473406	125.0	3981283.0	1.142769	Y
3	STD003 280-571224/5	25.1	26.142275	125.0	3911012.0	1.041525	Y
4	STD004 280-571224/6	50.2	53.028239	125.0	3857770.0	1.056339	Y
5	STD005 280-571224/7	100.4	102.440917	125.0	3849353.0	1.020328	Y
6	STD006 280-571224/8	200.8	212.068969	125.0	3841838.0	1.05612	Y
7	STD007 280-571224/9	301.2	322.084113	125.0	3916853.0	1.069336	Y



Calibration / PETN

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

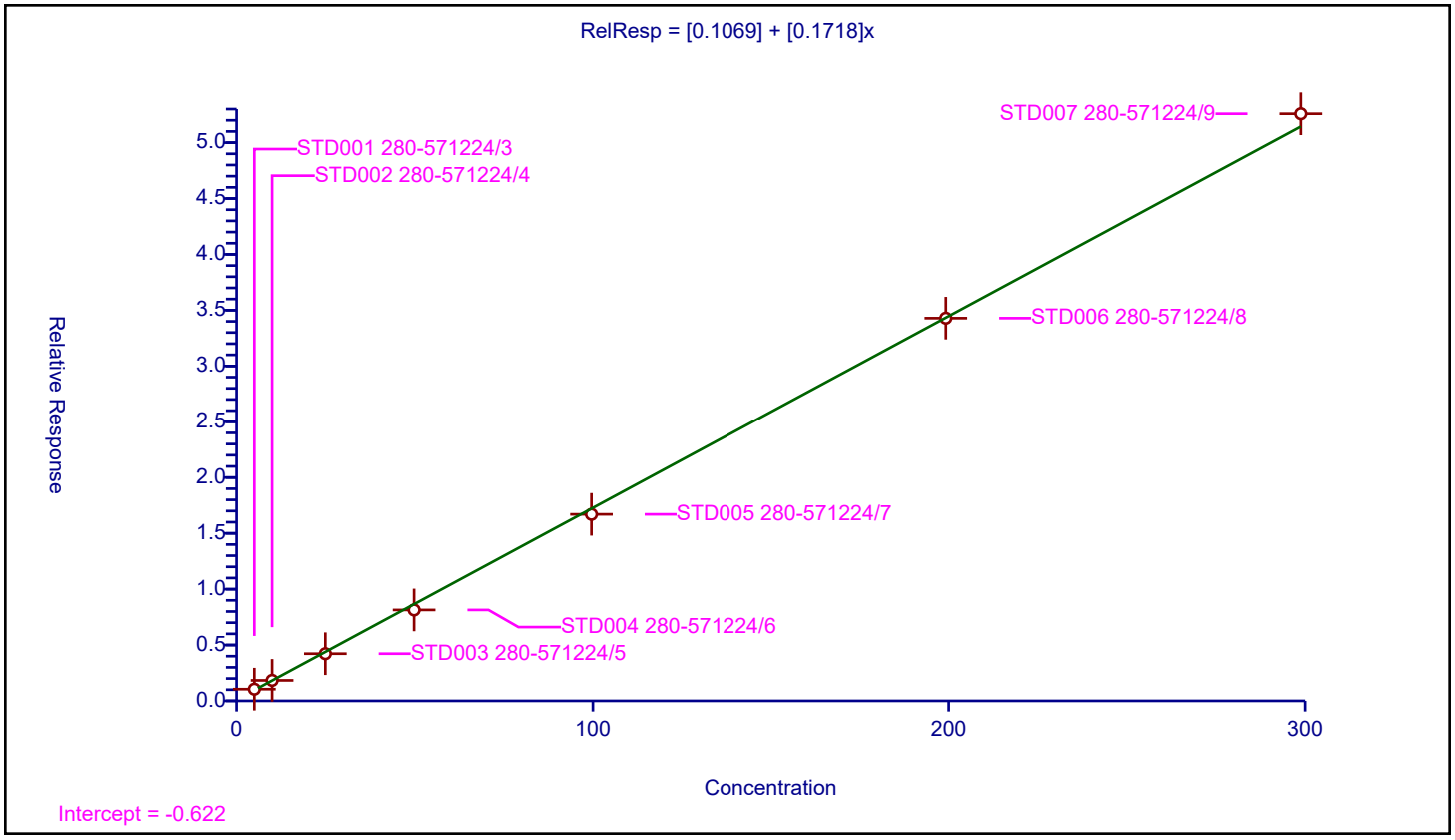
Curve Coefficients

Intercept:	0.1069
Slope:	0.1718

Error Coefficients

Standard Error:	914000
Relative Standard Error:	5.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571224/3	4.98	1.047289	125.0	3802676.0	0.210299	Y
2	STD002 280-571224/4	9.96	1.833705	125.0	3981283.0	0.184107	Y
3	STD003 280-571224/5	24.9	4.221446	125.0	3911012.0	0.169536	Y
4	STD004 280-571224/6	49.8	8.140973	125.0	3857770.0	0.163473	Y
5	STD005 280-571224/7	99.6	16.704398	125.0	3849353.0	0.167715	Y
6	STD006 280-571224/8	199.2	34.288406	125.0	3841838.0	0.172131	Y
7	STD007 280-571224/9	298.8	52.582169	125.0	3916853.0	0.175978	Y



Calibration / o-Nitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

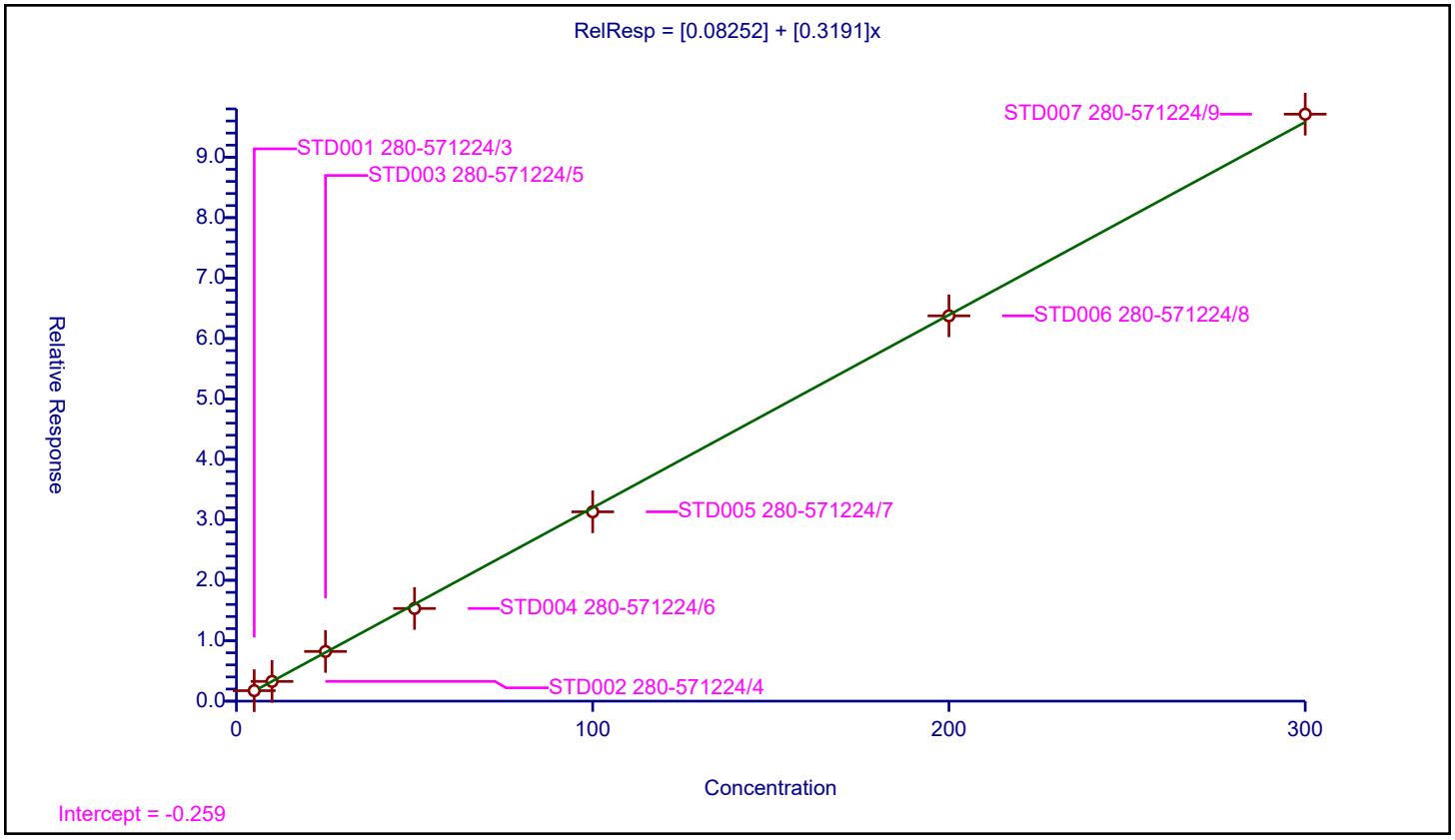
Curve Coefficients

Intercept:	0.08252
Slope:	0.3191

Error Coefficients

Standard Error:	1690000
Relative Standard Error:	2.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571224/3	5.0	1.735488	125.0	3802676.0	0.347098	Y
2	STD002 280-571224/4	10.0	3.265028	125.0	3981283.0	0.326503	Y
3	STD003 280-571224/5	25.0	8.223032	125.0	3911012.0	0.328921	Y
4	STD004 280-571224/6	50.0	15.332919	125.0	3857770.0	0.306658	Y
5	STD005 280-571224/7	100.0	31.327343	125.0	3849353.0	0.313273	Y
6	STD006 280-571224/8	200.0	63.757438	125.0	3841838.0	0.318787	Y
7	STD007 280-571224/9	300.0	97.121145	125.0	3916853.0	0.323737	Y



Calibration / p-Nitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

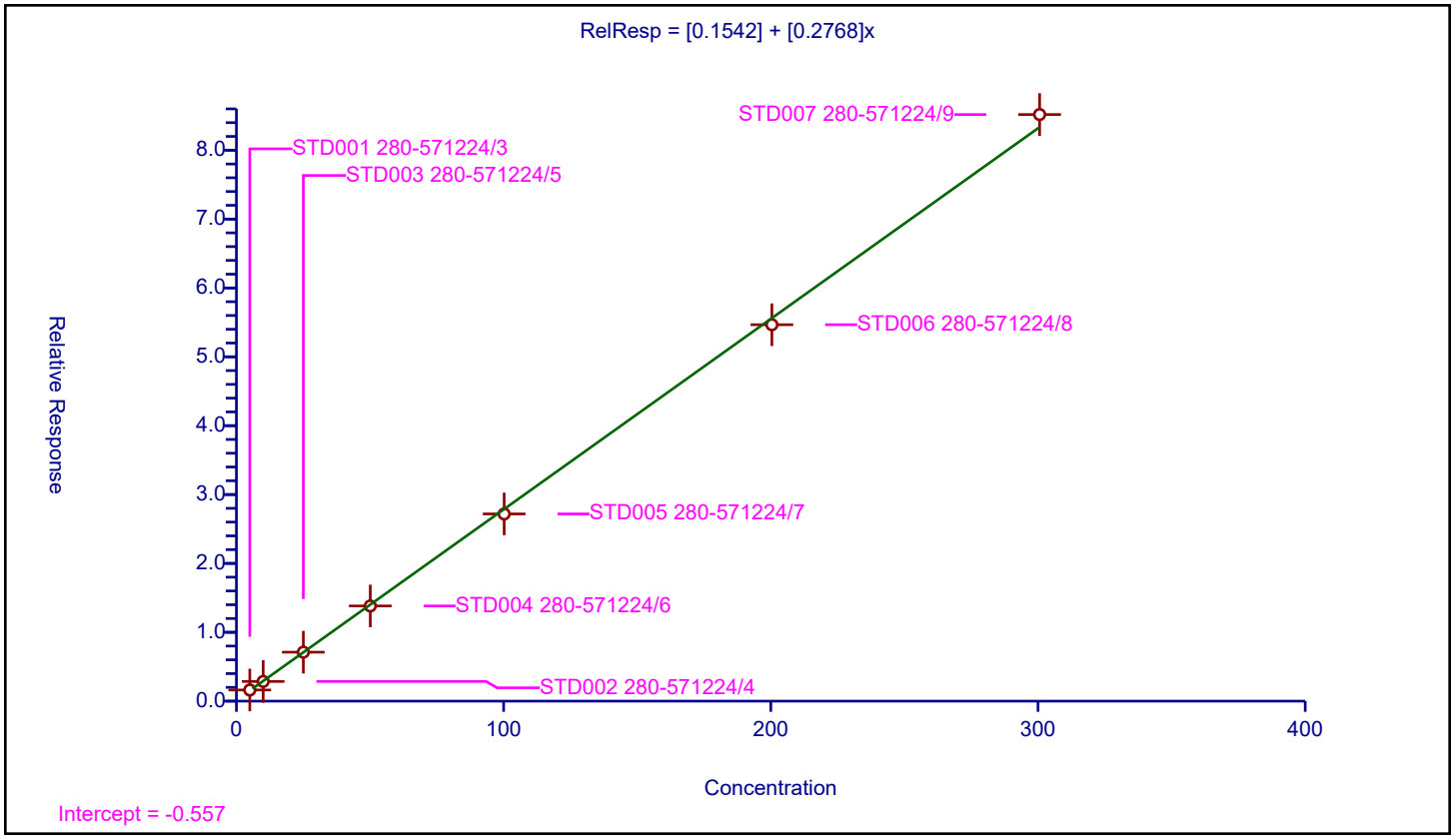
Curve Coefficients

Intercept:	0.1542
Slope:	0.2768

Error Coefficients

Standard Error:	1480000
Relative Standard Error:	3.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571224/3	5.01	1.618433	125.0	3802676.0	0.32304	Y
2	STD002 280-571224/4	10.02	2.861075	125.0	3981283.0	0.285536	Y
3	STD003 280-571224/5	25.05	7.10855	125.0	3911012.0	0.283774	Y
4	STD004 280-571224/6	50.1	13.819026	125.0	3857770.0	0.275829	Y
5	STD005 280-571224/7	100.2	27.184568	125.0	3849353.0	0.271303	Y
6	STD006 280-571224/8	200.4	54.660946	125.0	3841838.0	0.272759	Y
7	STD007 280-571224/9	300.6	85.17916	125.0	3916853.0	0.283364	Y



Calibration / m-Nitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

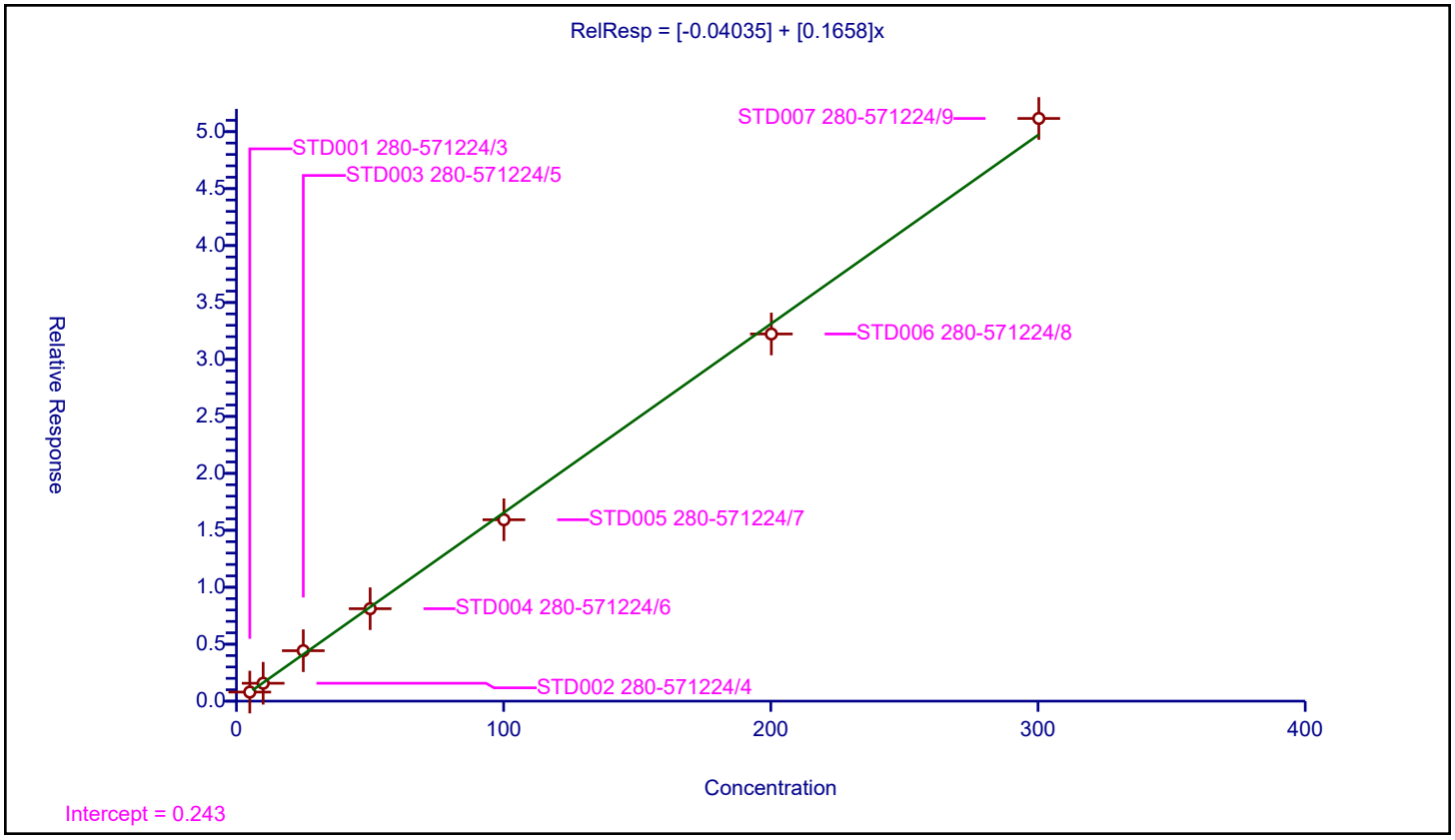
Curve Coefficients

Intercept:	-0.04035
Slope:	0.1658

Error Coefficients

Standard Error:	881000
Relative Standard Error:	4.5
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571224/3	5.005	0.795098	125.0	3802676.0	0.158861	Y
2	STD002 280-571224/4	10.01	1.570411	125.0	3981283.0	0.156884	Y
3	STD003 280-571224/5	25.025	4.428298	125.0	3911012.0	0.176955	Y
4	STD004 280-571224/6	50.05	8.115472	125.0	3857770.0	0.162147	Y
5	STD005 280-571224/7	100.1	15.925826	125.0	3849353.0	0.159099	Y
6	STD006 280-571224/8	200.2	32.237239	125.0	3841838.0	0.161025	Y
7	STD007 280-571224/9	300.3	51.160396	125.0	3916853.0	0.170364	Y



FORM VI
LCMS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-160190-1 Analy Batch No.: 571895

SDG No.:

Instrument ID: LC_LCMS7 GC Column: Synergi Hyd ID: Heated Purge: (Y/N) N

Calibration Start Date: 04/14/2022 12:27 Calibration End Date: 04/14/2022 13:07 Calibration ID: 64206

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD001 280-571895/3	ex722D14003.d
Level 2	STD002 280-571895/4	ex722D14004.d
Level 3	STD003 280-571895/5	ex722D14005.d
Level 4	STD004 280-571895/6	ex722D14006.d
Level 5	STD005 280-571895/7	ex722D14007.d
Level 6	STD006 280-571895/8	ex722D14008.d
Level 7	STD007 280-571895/9	ex722D14009.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
HMX	2.8502 2.0094	2.4941 2.2365	2.0277	2.3166	2.0267	Lin1	3.0406	2.1158							0.9960		0.9900
TNX	5.4483 4.8905	5.7289 4.7192	5.4265	4.8267	4.9644	Lin1	6.5159	4.7917							0.9990		0.9900
DNX	8.4980 6.9460	8.6806 7.0744	7.9914	7.2826	7.5547	Lin1	12.074	7.0663							0.9990		0.9900
MNX	2.0727 1.9301	2.3734 1.8564	2.1301	1.9378	1.9922	Lin1	3.1767	1.8947							0.9990		0.9900
RDX	1.0624 0.4905	0.9353 0.4194	0.7772	0.6959	0.6375	Qua1	2.1005	0.7009	-0.000990						0.9990		0.9900
1,3,5-Trinitrobenzene	1.9737 1.7490	1.8061 1.7882	1.7644	1.7100	1.6602	Lin1	0.5806	1.7475							0.9990		0.9900
Tetryl	2.8216 2.7388	2.7472 2.7127	2.5214	2.5161	2.4971	Lin1	-0.420	2.6733							0.9980		0.9900
1,3-Dinitrobenzene	1.2451 1.1163	1.0923 1.0249	1.1375	1.1459	1.0379	Lin1	1.0404	1.0581							0.9980		0.9900
Nitroglycerin	1.1592 0.9959	1.0140 0.9413	1.0505	1.0024	0.9129	Lin1	1.0736	0.9532							0.9990		0.9900
2,4,6-Trinitrotoluene	2.8164 2.3515	2.5322 2.3640	2.5159	2.5778	2.4082	Lin1	2.6511	2.3667							0.9990		0.9900
Nitrobenzene	0.4867 0.4943	0.5338 0.4746	0.4605	0.4817	0.4631	Lin1	0.1226	0.4784							0.9990		0.9900
4-Amino-2,6-dinitrotoluene	1.8341 1.6698	1.7980 1.5771	1.6329	1.6900	1.5899	Lin1	1.4467	1.6064							0.9990		0.9900
2-Amino-4,6-dinitrotoluene	2.4051 2.2704	2.5244 2.2333	2.1762	2.3091	2.1769	Lin1	1.2480	2.2322							1.0000		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-160190-1 Analy Batch No.: 571895

SDG No.:

Instrument ID: LC_LCMS7 GC Column: Synergi Hyd ID: Heated Purge: (Y/N) N

Calibration Start Date: 04/14/2022 12:27 Calibration End Date: 04/14/2022 13:07 Calibration ID: 64206

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
2,6-Dinitrotoluene	2.1951 2.0477	2.1994 1.9819	2.0536	2.0299	2.0082	Lin1	1.3295	2.0021							1.0000		0.9900
2,4-Dinitrotoluene	1.2902 1.0558	1.1700 1.0673	1.0833	1.0585	1.0378	Lin1	1.0583	1.0520							1.0000		0.9900
PETN	0.2691 0.2071	0.2236 0.1953	0.1785	0.2056	0.1959	Lin1	0.2458	0.1974							0.9980		0.9900
o-Nitrotoluene	0.3489 0.3058	0.2908 0.2932	0.3010	0.2852	0.2777	Lin1	0.1292	0.2934							0.9990		0.9900
p-Nitrotoluene	0.2993 0.2661	0.2720 0.2578	0.2609	0.2630	0.2520	Lin1	0.1585	0.2588							1.0000		0.9900
m-Nitrotoluene	0.1661 0.1581	0.1653 0.1501	0.1529	0.1489	0.1468	Lin1	0.0720	0.1516							0.9990		0.9900
Nitrobenzene-d5	0.7480 0.6010	0.7057 0.5490	0.5675	0.6315	0.5842	Lin1	1.0744	0.5686							0.9970		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-160190-1 Analy Batch No.: 571895

SDG No.:

Instrument ID: LC_LCMS7 GC Column: Synergi Hyd ID: Heated Purge: (Y/N) N

Calibration Start Date: 04/14/2022 12:27 Calibration End Date: 04/14/2022 13:07 Calibration ID: 64206

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD001 280-571895/3	ex722D14003.d
Level 2	STD002 280-571895/4	ex722D14004.d
Level 3	STD003 280-571895/5	ex722D14005.d
Level 4	STD004 280-571895/6	ex722D14006.d
Level 5	STD005 280-571895/7	ex722D14007.d
Level 6	STD006 280-571895/8	ex722D14008.d
Level 7	STD007 280-571895/9	ex722D14009.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
HMX	HXC4	Lin1	13731 361768	26952 534088	55093	118194	217389	5.00 200	10.0 300	25.0	50.0	100
TNX	DNB4	Lin1	282287 9152884	561172 14101547	1337364	2433274	5239091	5.01 200	10.0 300	25.0	50.1	100
DNX	DNB4	Lin1	440297 12999822	850298 21139125	1969478	3671363	7972759	5.01 200	10.0 300	25.0	50.1	100
MNX	DNB4	Lin1	125200 4211252	271034 6466940	612026	1138886	2451053	5.84 233	11.7 350	29.2	58.4	117
RDX	HHTT	Qua1	18333 538962	35922 829459	79269	153827	321622	5.00 200	10.0 300	25.0	50.0	100
1,3,5-Trinitrobenzene	DNB4	Lin1	102362 3276652	177090 5348643	435284	862895	1753794	5.01 200	10.0 301	25.1	50.1	100
Tetryl	DNB4	Lin1	146338 5130862	269372 8113830	622021	1269679	2637936	5.01 200	10.0 301	25.1	50.1	100
1,3-Dinitrobenzene	DNB4	Lin1	64577 2091311	107100 3065484	280607	578282	1096416	5.01 200	10.0 301	25.1	50.1	100
Nitroglycerin	DNB4	Lin1	60360 1873245	99819 2826728	260187	507850	968255	5.03 201	10.1 302	25.2	50.3	101
2,4,6-Trinitrotoluene	DNT3	Lin1	494792 14522604	815773 22576043	1998715	4032290	7946590	5.02 201	10.0 301	25.1	50.2	100
Nitrobenzene	DNB4	Lin1	25295 927889	52444 1422456	113821	243563	490224	5.02 201	10.0 301	25.1	50.2	100
4-Amino-2,6-dinitrotoluene	DNT3	Lin1	321261 10281431	577506 15016282	1293374	2635624	5230680	5.01 200	10.0 300	25.0	50.1	100
2-Amino-4,6-dinitrotoluene	DNT3	Lin1	422528 14021608	813261 21327930	1728898	3612016	7183080	5.02 201	10.0 301	25.1	50.2	100
2,6-Dinitrotoluene	DNT3	Lin1	385643	708550	1631479	3175238	6626543	5.02	10.0	25.1	50.2	100

FORM VI
LCMS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-160190-1 Analy Batch No.: 571895

SDG No.:

Instrument ID: LC_LCMS7 GC Column: Synergi Hyd ID: Heated Purge: (Y/N) N

Calibration Start Date: 04/14/2022 12:27 Calibration End Date: 04/14/2022 13:07 Calibration ID: 64206

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			12646602	18926468				201	301			
2,4-Dinitrotoluene	DNT3	Lin1	226669 6520176	376935 10192226	860644	1655759	3424498	5.02 201	10.0 301	25.1	50.2	100
PETN	DNT3	Lin1	46894 1269048	71447 1849824	140665	319050	641187	4.98 199	9.96 299	24.9	49.8	99.6
o-Nitrotoluene	DNT3	Lin1	61048 1881330	93305 2789165	238155	444373	912662	5.00 200	10.0 300	25.0	50.0	100
p-Nitrotoluene	DNT3	Lin1	52482 1639822	87464 2457291	206847	410501	830030	5.01 200	10.0 301	25.1	50.1	100
m-Nitrotoluene	DNT3	Lin1	29091 973558	53097 1429488	121115	232275	483004	5.01 200	10.0 300	25.0	50.1	100
Nitrobenzene-d5	DNB4	Lin1	38725 1123980	69076 1639324	139756	318134	616016	5.00 200	10.0 300	25.0	50.0	100

Curve Type Legend
Lin1 = Linear 1/conc ISTD
Qua1 = Quadratic 1/conc ISTD

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14003.d
Lims ID: STD001
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 14-Apr-2022 12:27:48 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: STD L1
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:02:06 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 14-Apr-2022 14:23:44
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.234	1.246	-0.012	0.998	13731	5.30	3.2	
* 1 HMX-13C4								
361.1	1.237	1.248	-0.011		120440	125.0	65.1	
36 TNX								
144.0	1.374	1.385	-0.011	0.759	282287	4.33	33.4	
33 DNX								
160.0	1.466	1.489	-0.023	0.810	440297	4.31	140	
34 MNX								
160.0	1.648	1.670	-0.022	0.910	125200	4.71	38.0	
4 RDX								M
281.2	1.824	1.833	-0.009	1.008	18333	4.61	3.1	M
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.810	1.844	-0.034		431406	125.0	111	
5 1,3,5-Trinitrobenzene								
213.0	2.268	2.299	-0.031	0.769	102362	5.33	28.0	
6 Tetryl								M
241.1	2.625	2.679	-0.054	0.889	146338	5.44	22.4	M
* 7 1,3-Dinitrobenzene-d4								
172.0	2.952	2.991	-0.039		1339138	129.4	251	
8 1,3-Dinitrobenzene								M
168.0	2.990	3.022	-0.032	1.013	64577	4.91	13.5	M
9 Nitroglycerin								M
62.0	2.996	3.040	-0.044	1.015	60360	4.99	14.4	M
28 3,5-Dinitroaniline								
183.0	3.156	3.200	-0.044	1.069	271352	4.46	27.6	

Report Date: 15-Apr-2022 08:02:06 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14003.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.232	3.281	-0.049	0.769	494792	4.85	53.9	
$ 11 Nitrobenzene-d5								M
128.0	3.275	3.324	-0.049	0.779	38725	4.69	6.7	M
12 Nitrobenzene								M
123.0	3.343	3.382	-0.039	0.795	25295	4.85	6.3	M
14 4-Amino-2,6-dinitrotoluene								
197.0	3.549	3.611	-0.062	0.844	321261	4.81	45.2	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.875	3.924	-0.049	0.921	422528	4.85	56.1	
17 2,6-Dinitrotoluene								
182.0	4.031	4.093	-0.062	0.958	385643	4.84	126	
* 18 2,4-dinitrotoluene-d3								
185.1	4.206	4.275	-0.069		4374512	125.0	124	
19 2,4-Dinitrotoluene								
182.0	4.247	4.316	-0.069	1.010	226669	5.15	65.7	
20 PETN								M
61.8	4.588	4.638	-0.050	1.091	46894	5.54	8.6	M
22 o-Nitrotoluene								M
137.0	4.869	4.932	-0.063	1.158	61048	5.51	10.7	M
23 p-Nitrotoluene								M
137.0	5.161	5.230	-0.069	1.227	52482	5.18	9.9	M
24 m-Nitrotoluene								M
137.0	5.559	5.614	-0.055	1.322	29091	5.01	5.3	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

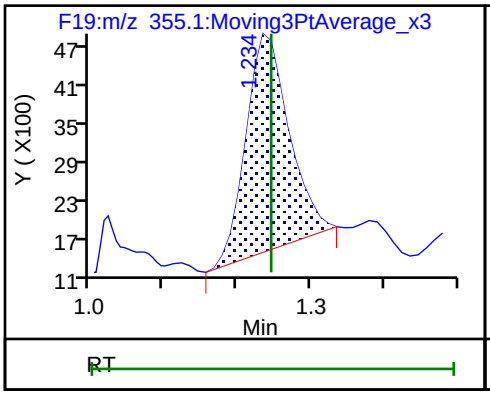
8321EXcalprim_00029	Amount Added: 0.50	Units: uL	
8321NB-D5-cal_00021	Amount Added: 0.50	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 15-Apr-2022 08:02:06 Chrom Revision: 2.3 12-Apr-2022 20:29:44

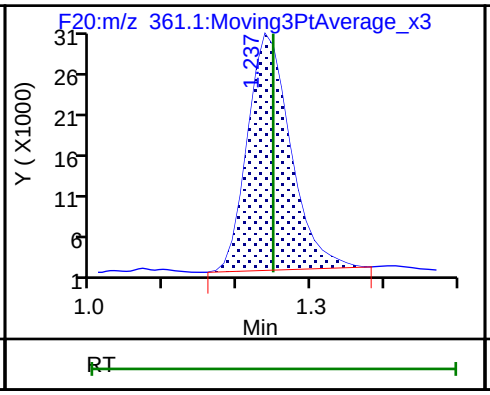
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14003.d
Injection Date: 14-Apr-2022 12:27:48 Instrument ID: LC_LCMS7
Lims ID: STD001
Client ID:
Operator ID: acm ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

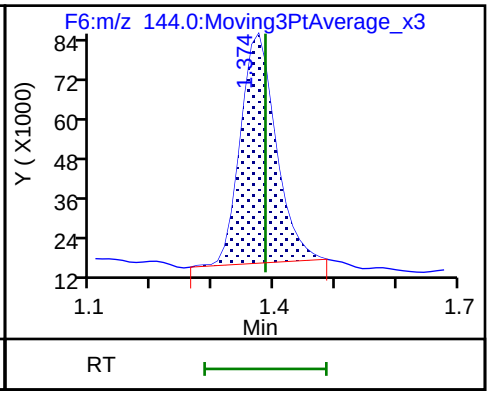
2 HMX



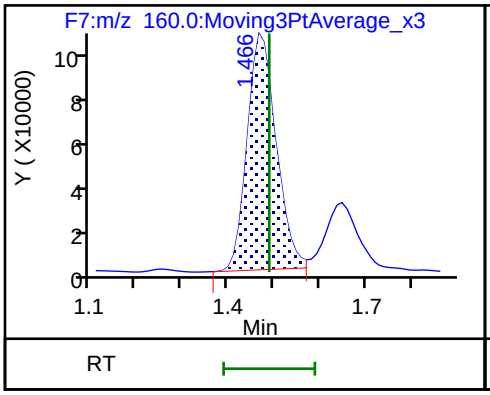
* 1 HMX-13C4



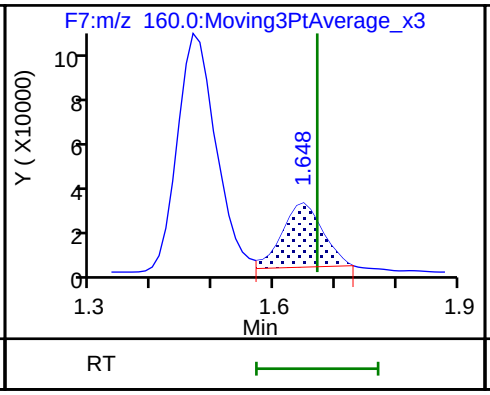
36 TNX



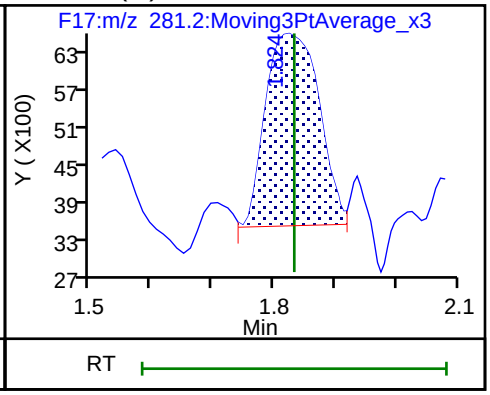
33 DNX



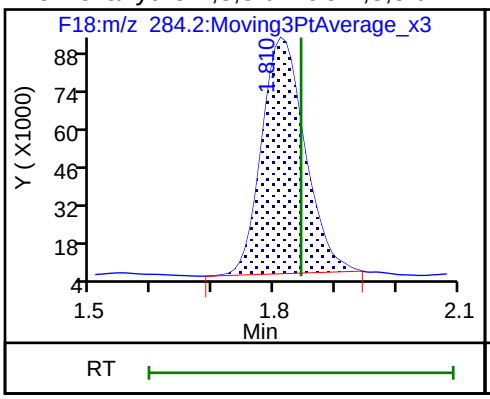
34 MNX



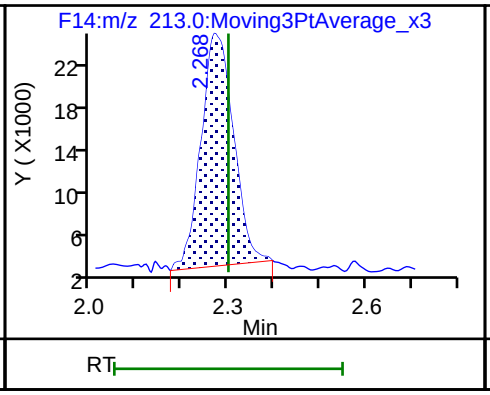
4 RDX (M)



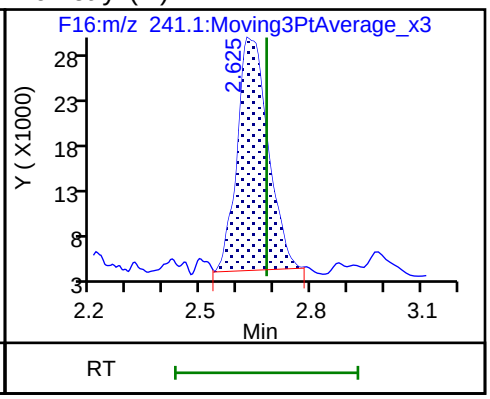
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



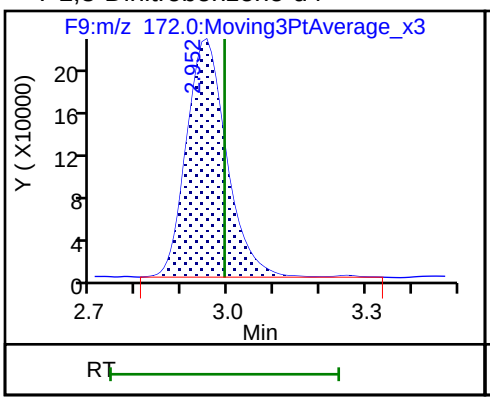
5 1,3,5-Trinitrobenzene



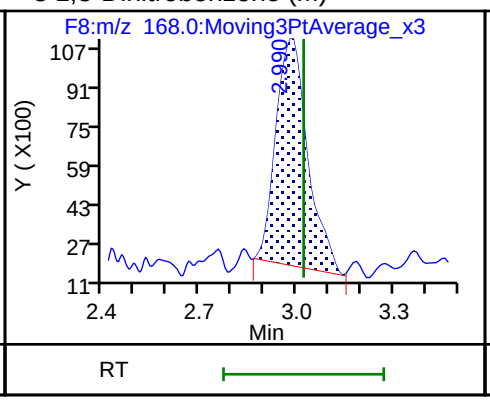
6 Tetryl (M)



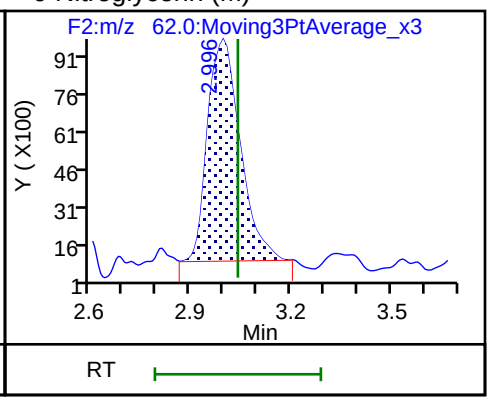
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (M)

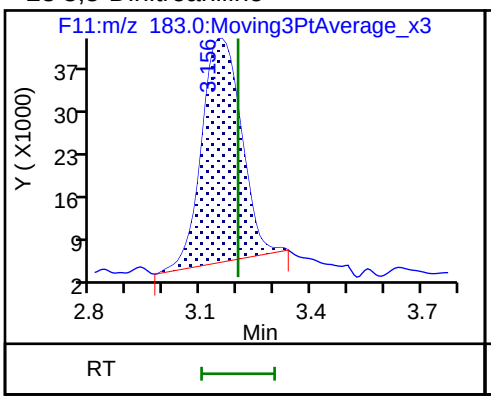


9 Nitroglycerin (M)

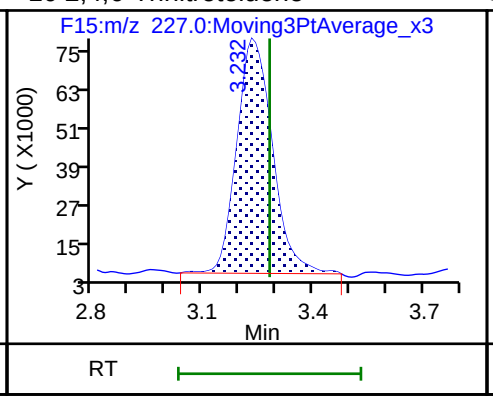


Report Date: 15-Apr-2022 08:02:06 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14003.d

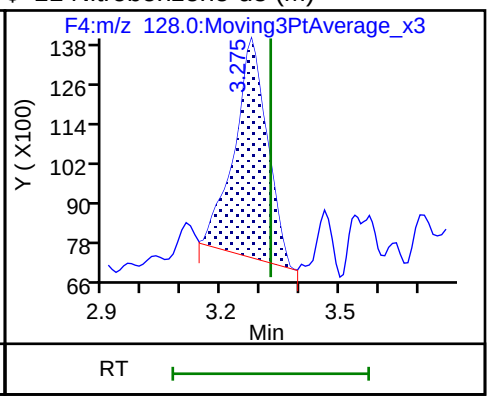
28 3,5-Dinitroaniline



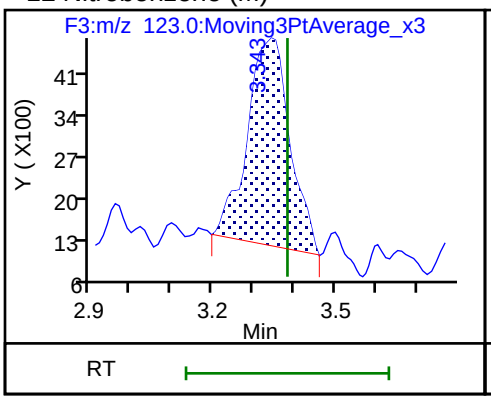
10 2,4,6-Trinitrotoluene



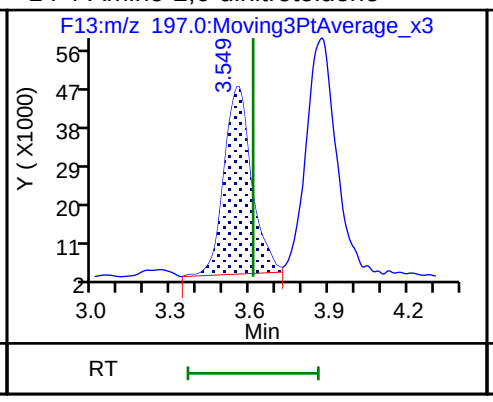
$ 11 Nitrobenzene-d5 (M)



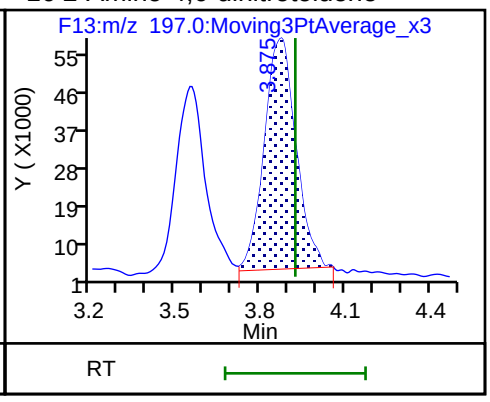
12 Nitrobenzene (M)



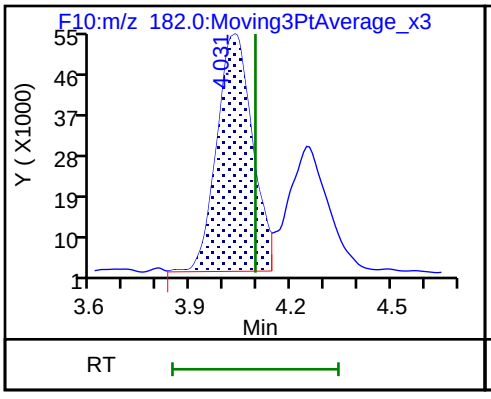
14 4-Amino-2,6-dinitrotoluene



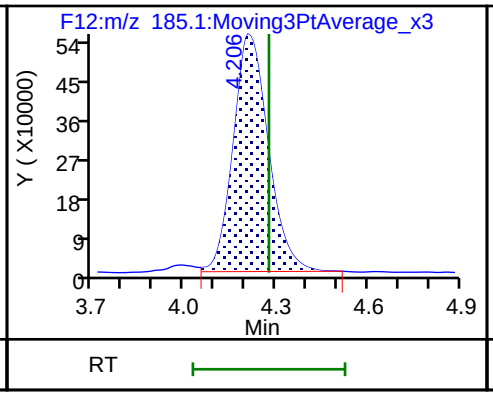
16 2-Amino-4,6-dinitrotoluene



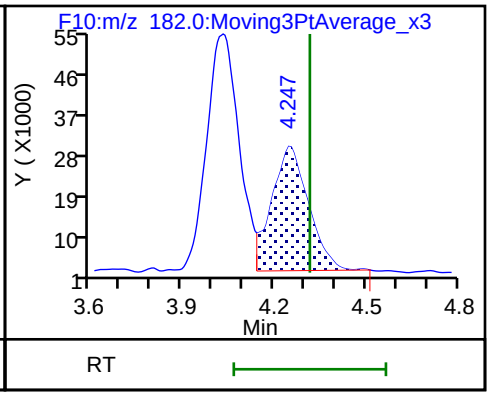
17 2,6-Dinitrotoluene



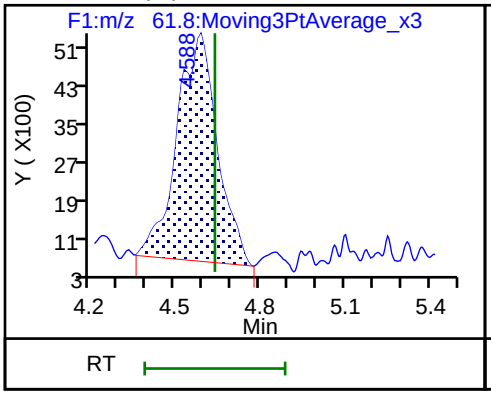
* 18 2,4-dinitrotoluene-d3



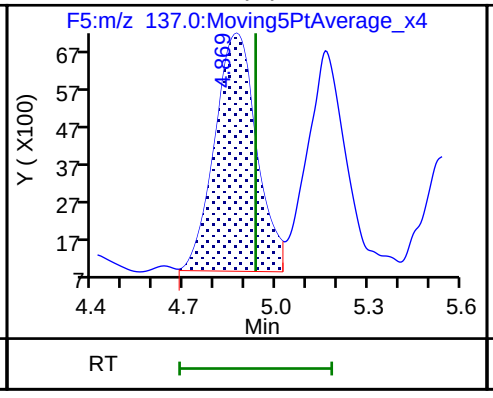
19 2,4-Dinitrotoluene



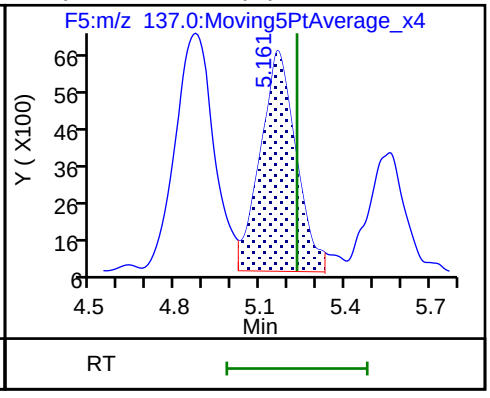
20 PETN (M)



22 o-Nitrotoluene (M)



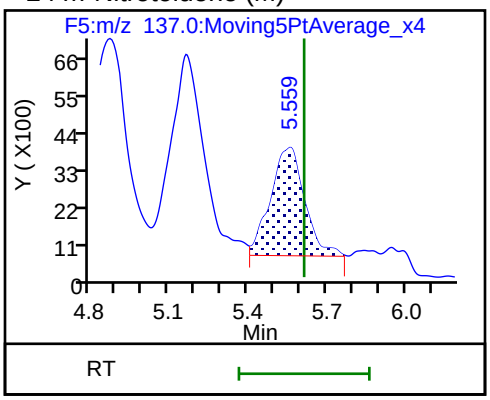
23 p-Nitrotoluene (M)



Report Date: 15-Apr-2022 08:02:06 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14003.d

24 m-Nitrotoluene (M)



Report Date: 15-Apr-2022 08:02:06 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

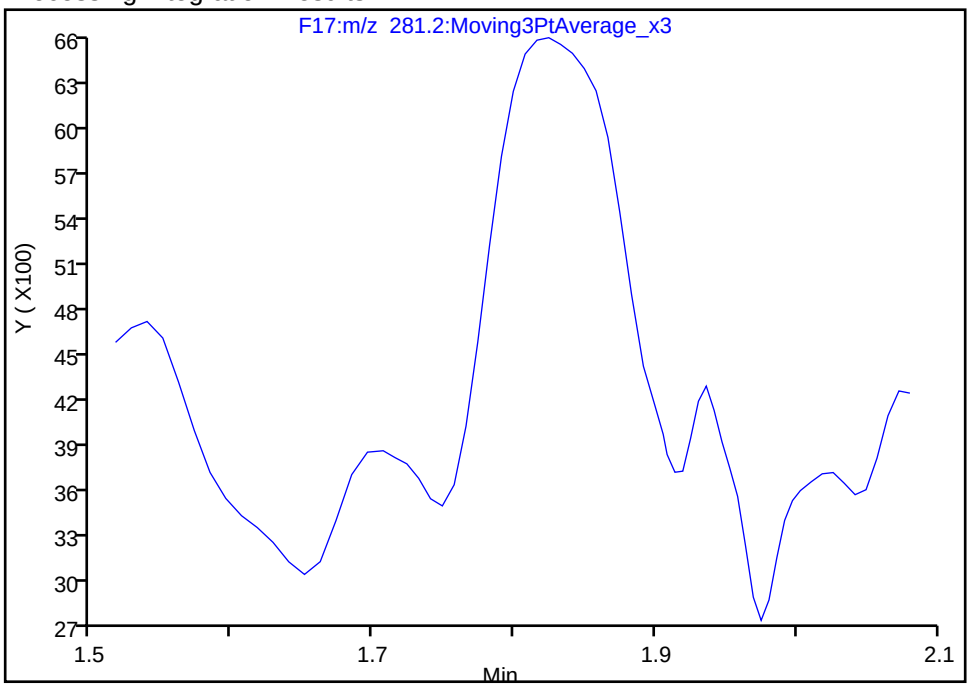
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14003.d
Injection Date: 14-Apr-2022 12:27:48 Instrument ID: LC_LCMS7
Lims ID: STD001
Client ID:
Operator ID: acm ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F17:SIR

4 RDX, CAS: 121-82-4

Signal: 1

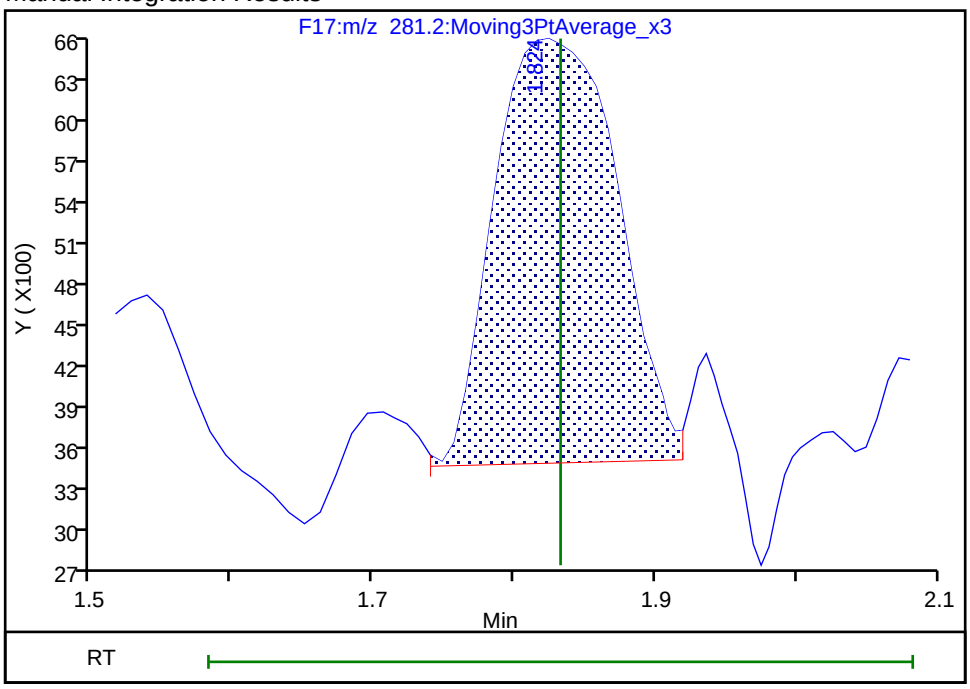
Not Detected
Expected RT: 1.83

Processing Integration Results



Manual Integration Results

RT: 1.82
Area: 18333
Amount: 4.611949
Amount Units: ug/l



Reviewer: meyera, 14-Apr-2022 14:22:59
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:02:06

Chrom Revision: 2.3 12-Apr-2022 20:29:44
Manual Integration/User Assign Peak Report

Eurofins Denver

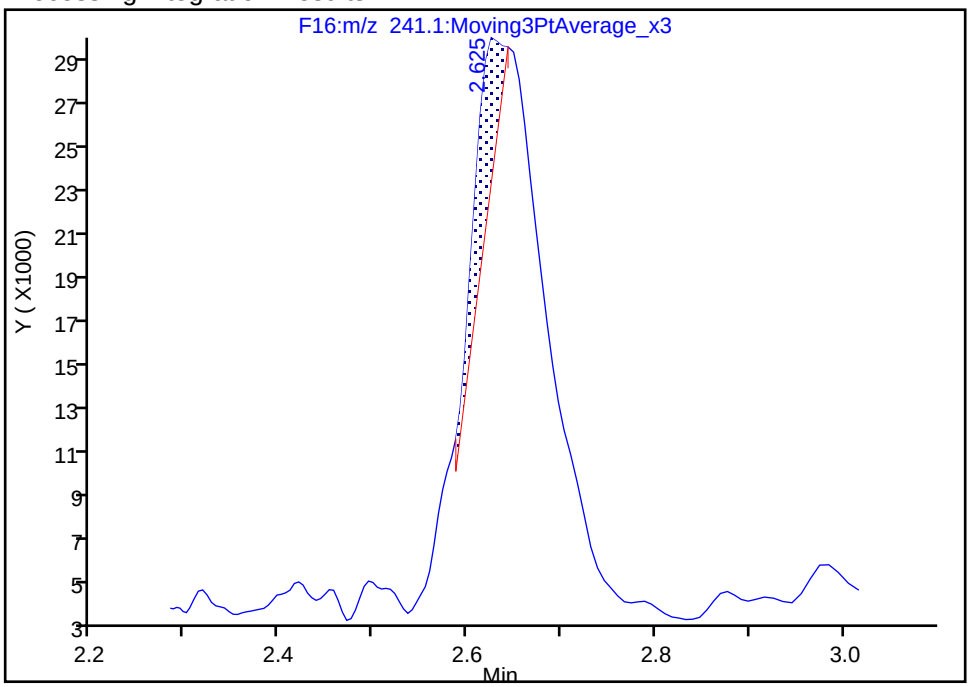
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14003.d
Injection Date: 14-Apr-2022 12:27:48 Instrument ID: LC_LCMS7
Lims ID: STD001
Client ID:
Operator ID: acm ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F16:SIR

6 Tetryl, CAS: 479-45-8

Signal: 1

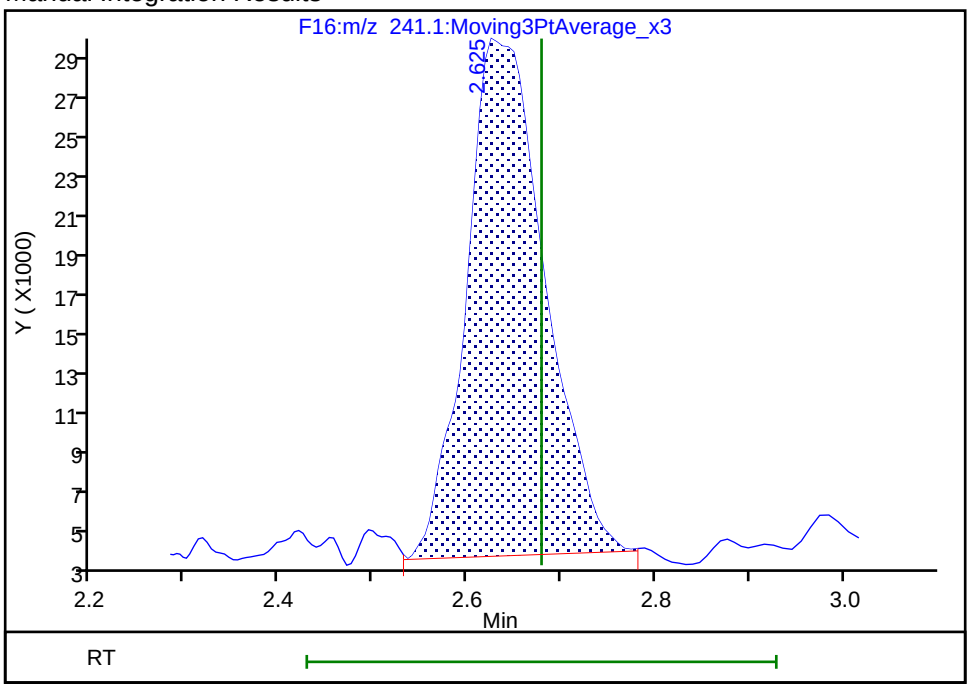
Processing Integration Results

RT: 2.63
Area: 13666
Amount: 3.531221
Amount Units: ug/l



Manual Integration Results

RT: 2.63
Area: 146338
Amount: 5.444990
Amount Units: ug/l



Reviewer: meyera, 14-Apr-2022 14:23:05
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:02:06 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14003.d

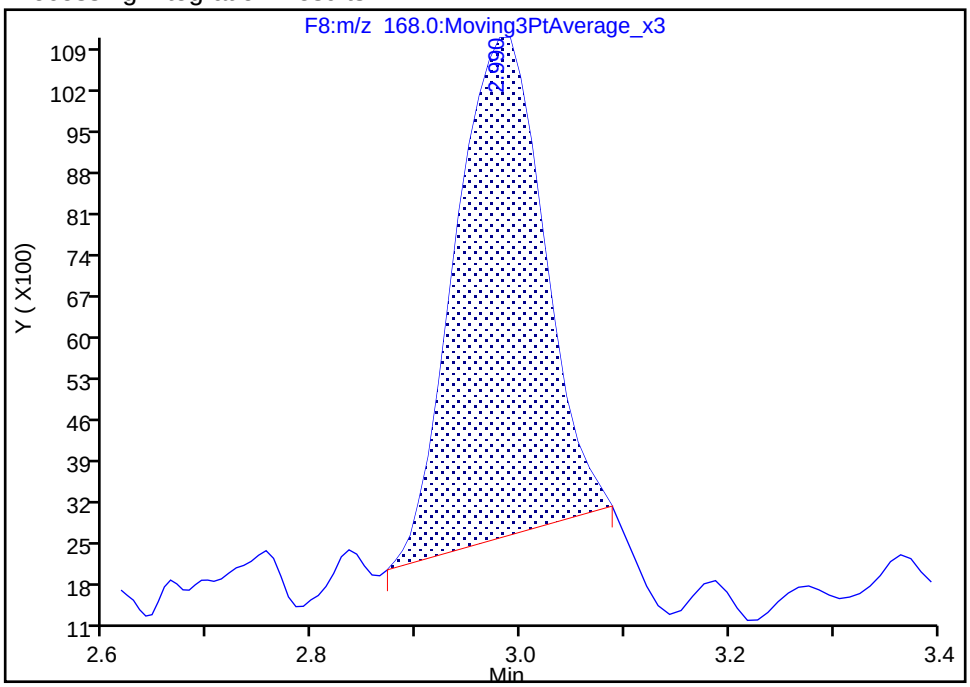
Injection Date:	14-Apr-2022 12:27:48	Instrument ID:	LC_LCMS7
Lims ID:	STD001		
Client ID:			
Operator ID:	acm	ALS Bottle#:	2 Worklist Smp#: 3
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F8:SIR

8 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

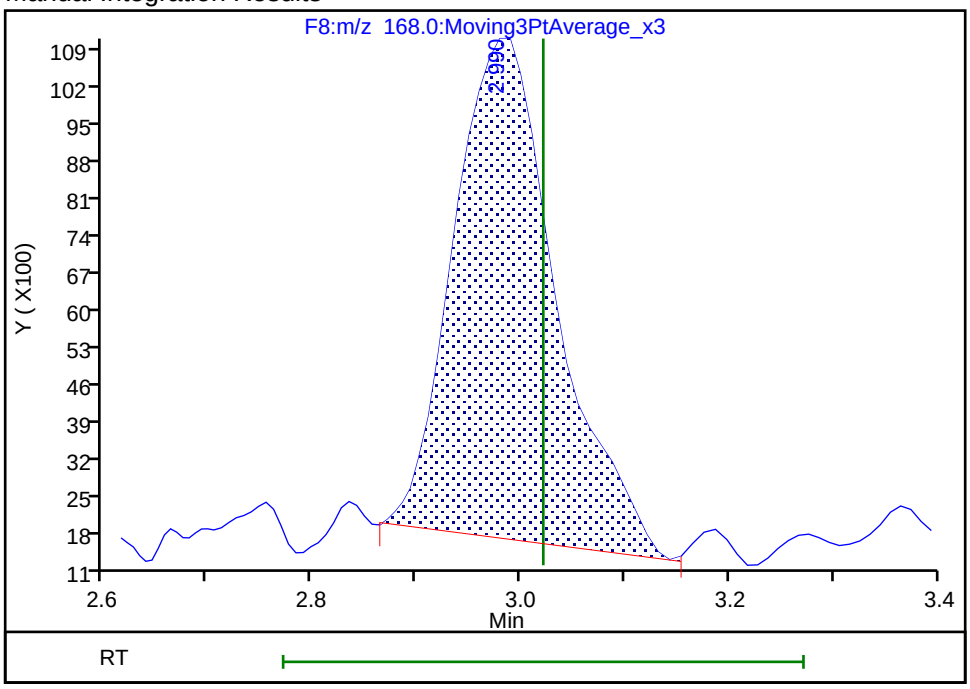
Processing Integration Results

RT: 2.99
Area: 50637
Amount: 4.398771
Amount Units: ug/l



Manual Integration Results

RT: 2.99
Area: 64577
Amount: 4.912101
Amount Units: ug/l



Reviewer: meyera, 14-Apr-2022 14:23:10

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:02:06 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14003.d

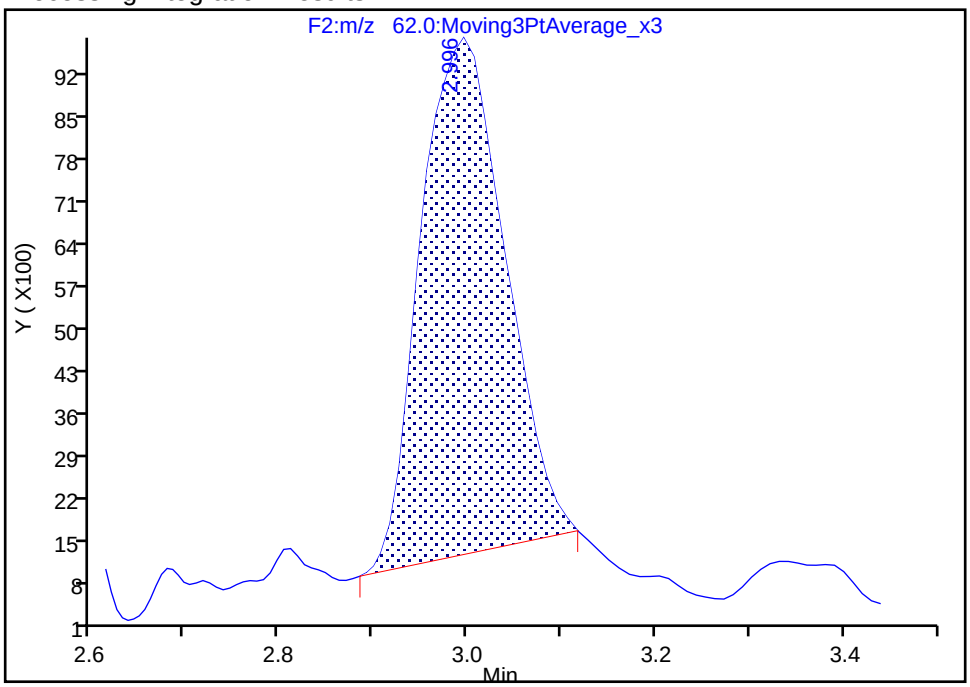
Injection Date:	14-Apr-2022 12:27:48	Instrument ID:	LC_LCMS7
Lims ID:	STD001		
Client ID:			
Operator ID:	acm	ALS Bottle#:	2 Worklist Smp#: 3
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F2:SIR

9 Nitroglycerin, CAS: 55-63-0

Signal: 1

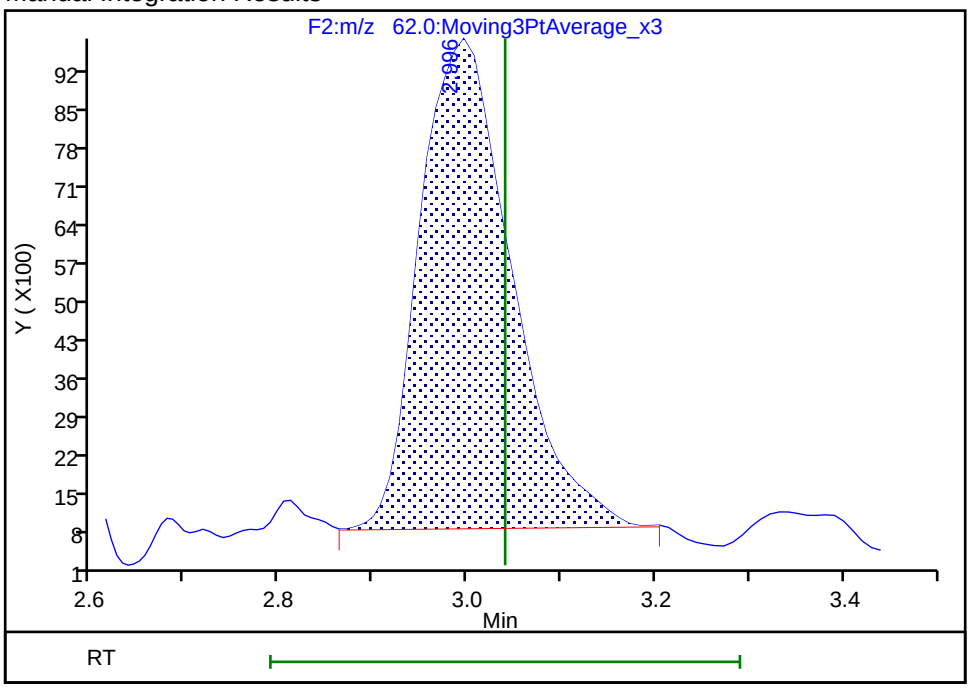
Processing Integration Results

RT: 3.00
Area: 52865
Amount: 4.683368
Amount Units: ug/l



Manual Integration Results

RT: 3.00
Area: 60360
Amount: 4.990724
Amount Units: ug/l



Reviewer: meyera, 14-Apr-2022 14:23:15

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:02:06 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

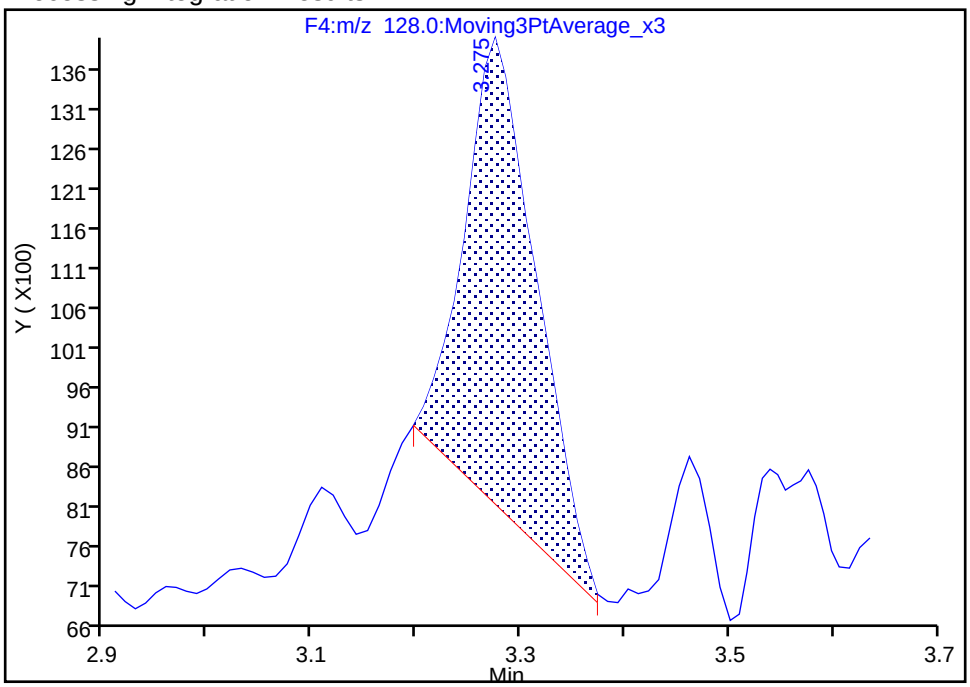
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14003.d
Injection Date: 14-Apr-2022 12:27:48 Instrument ID: LC_LCMS7
Lims ID: STD001
Client ID:
Operator ID: acm ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F4:SIR

$ 11 Nitrobenzene-d5, CAS: 4165-60-0

Signal: 1

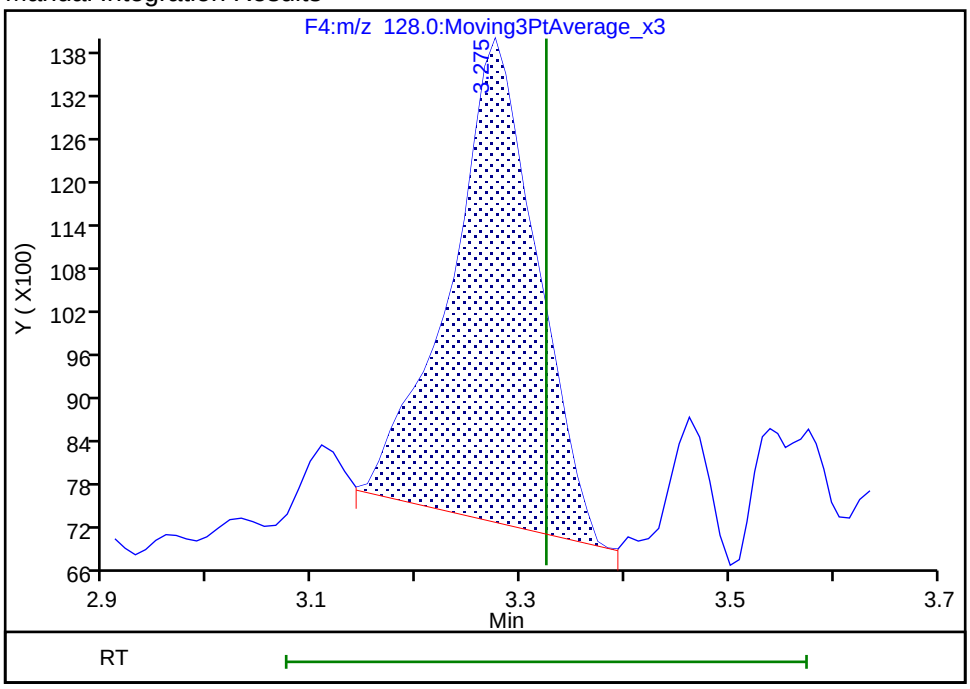
Processing Integration Results

RT: 3.28
Area: 28122
Amount: 5.490290
Amount Units: ug/l



Manual Integration Results

RT: 3.28
Area: 38725
Amount: 4.689048
Amount Units: ug/l



Reviewer: meyera, 14-Apr-2022 14:23:19
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:02:06 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14003.d

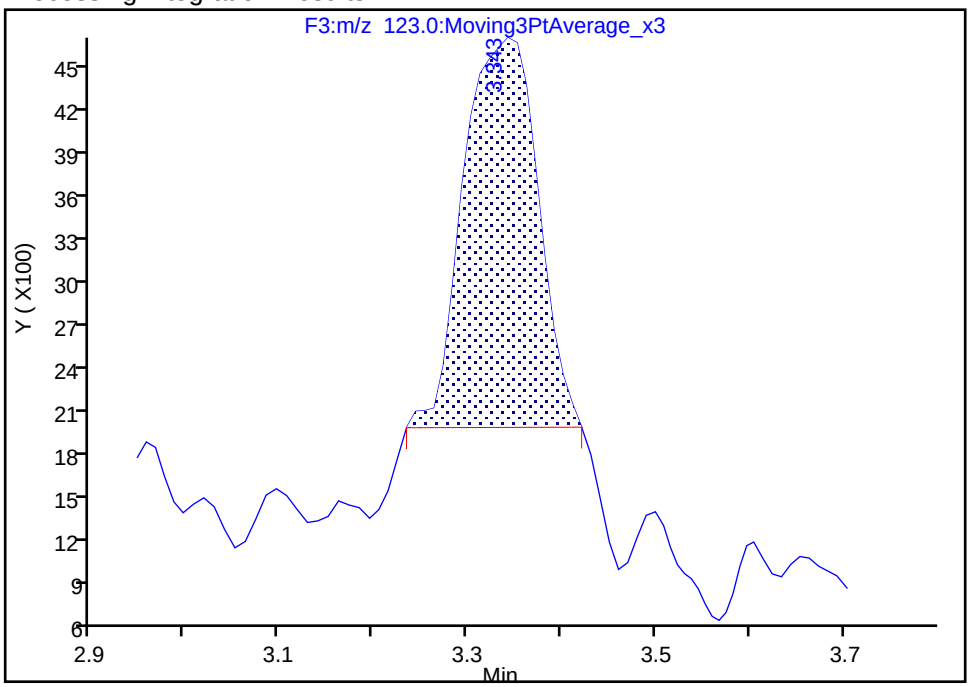
Injection Date:	14-Apr-2022 12:27:48	Instrument ID:	LC_LCMS7
Lims ID:	STD001		
Client ID:			
Operator ID:	acm	ALS Bottle#:	2 Worklist Smp#: 3
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F3:SIR

12 Nitrobenzene, CAS: 98-95-3

Signal: 1

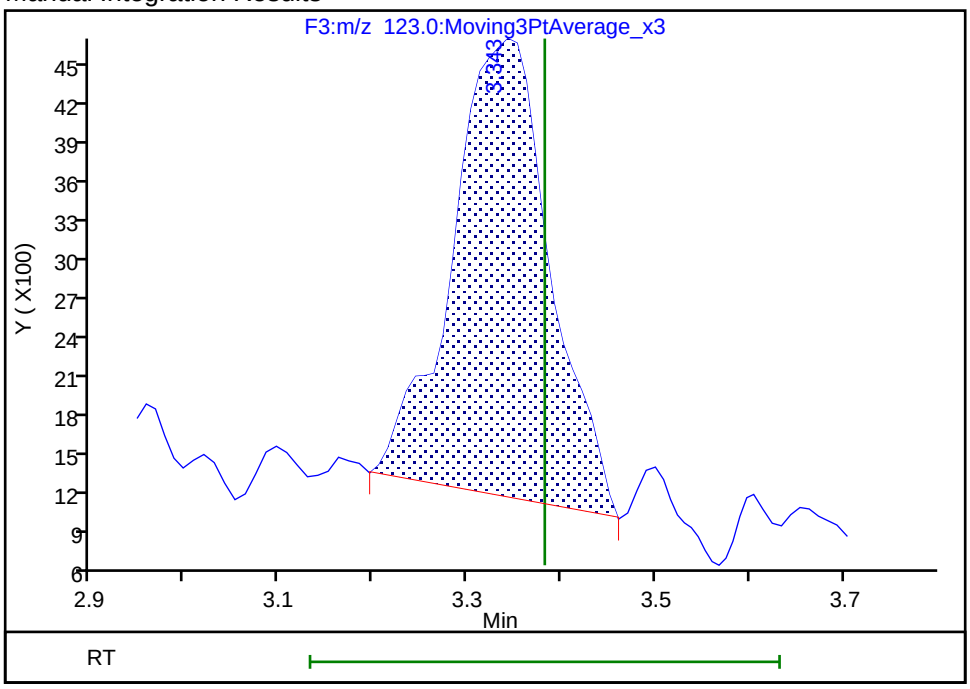
Processing Integration Results

RT: 3.34
Area: 14770
Amount: 3.998568
Amount Units: ug/l



Manual Integration Results

RT: 3.34
Area: 25295
Amount: 4.851720
Amount Units: ug/l



Reviewer: meyera, 14-Apr-2022 14:23:24

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:02:06

Chrom Revision: 2.3 12-Apr-2022 20:29:44
Manual Integration/User Assign Peak Report

Eurofins Denver

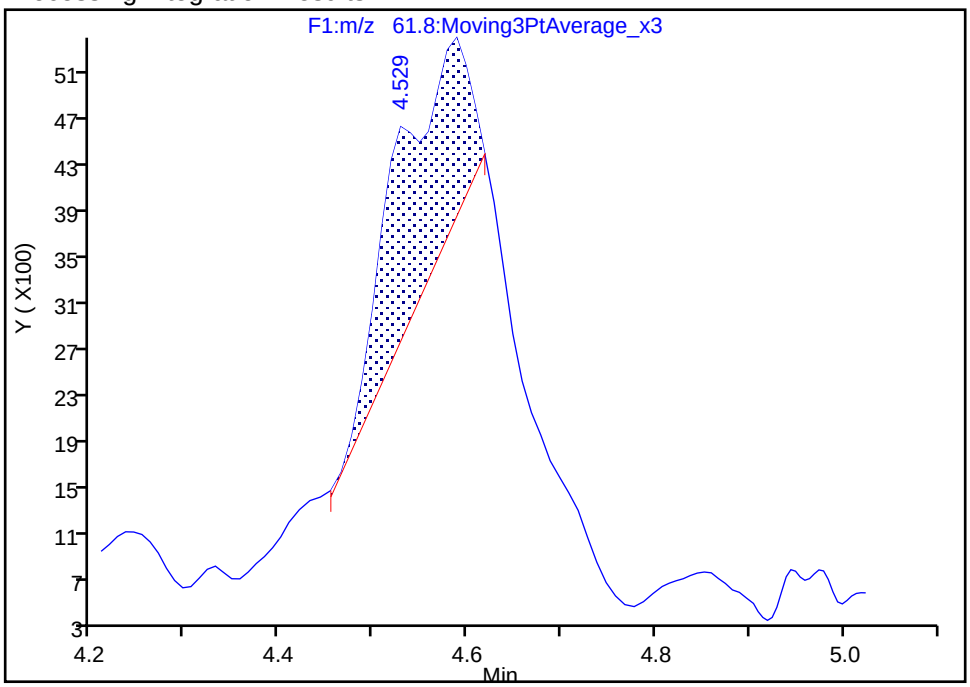
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14003.d
Injection Date: 14-Apr-2022 12:27:48 Instrument ID: LC_LCMS7
Lims ID: STD001
Client ID:
Operator ID: acm ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F1:SIR

20 PETN, CAS: 78-11-5

Signal: 1

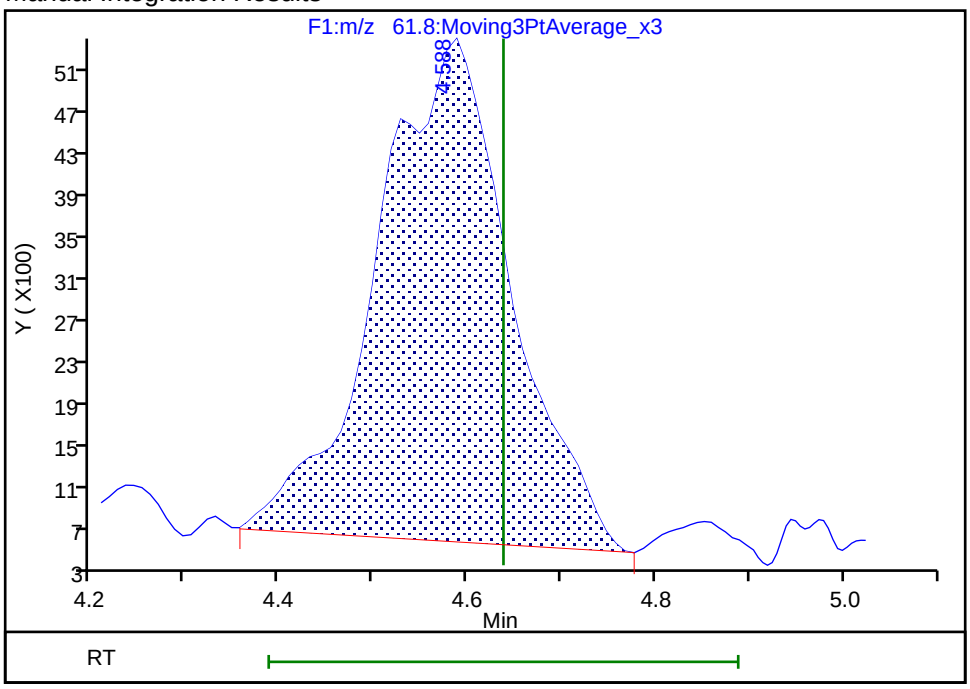
Processing Integration Results

RT: 4.53
Area: 9986
Amount: 3.413105
Amount Units: ug/l



Manual Integration Results

RT: 4.59
Area: 46894
Amount: 5.543657
Amount Units: ug/l



Reviewer: meyera, 14-Apr-2022 14:23:30
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:02:06 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14003.d

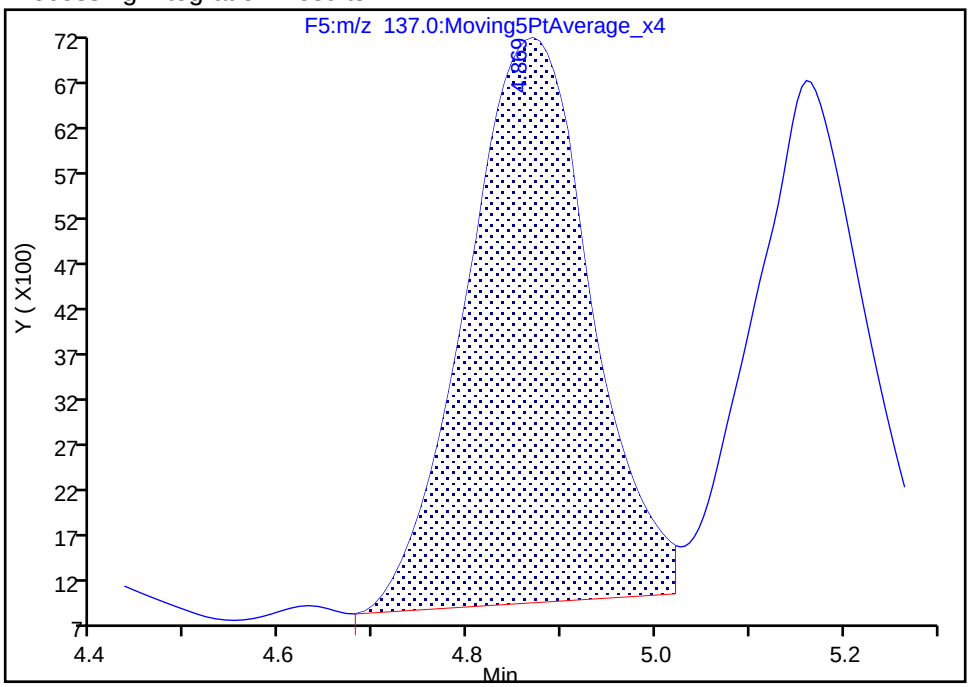
Injection Date:	14-Apr-2022 12:27:48	Instrument ID:	LC_LCMS7
Lims ID:	STD001		
Client ID:			
Operator ID:	acm	ALS Bottle#:	2 Worklist Smp#: 3
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F5:SIR

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

Signal: 1

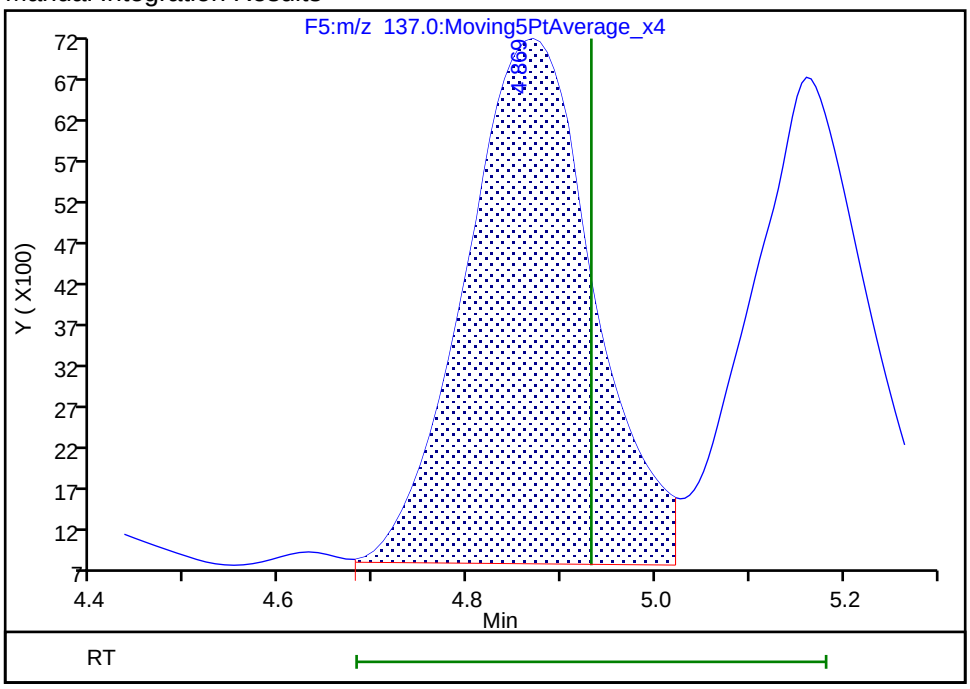
Processing Integration Results

RT: 4.87
Area: 57723
Amount: 5.373168
Amount Units: ug/l



Manual Integration Results

RT: 4.87
Area: 61048
Amount: 5.505328
Amount Units: ug/l



Reviewer: meyera, 14-Apr-2022 14:23:35

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:02:06 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14003.d

Injection Date: 14-Apr-2022 12:27:48 Instrument ID: LC_LCMS7

Lims ID: STD001

Client ID:

Operator ID: acm ALS Bottle#: 2 Worklist Smp#: 3

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

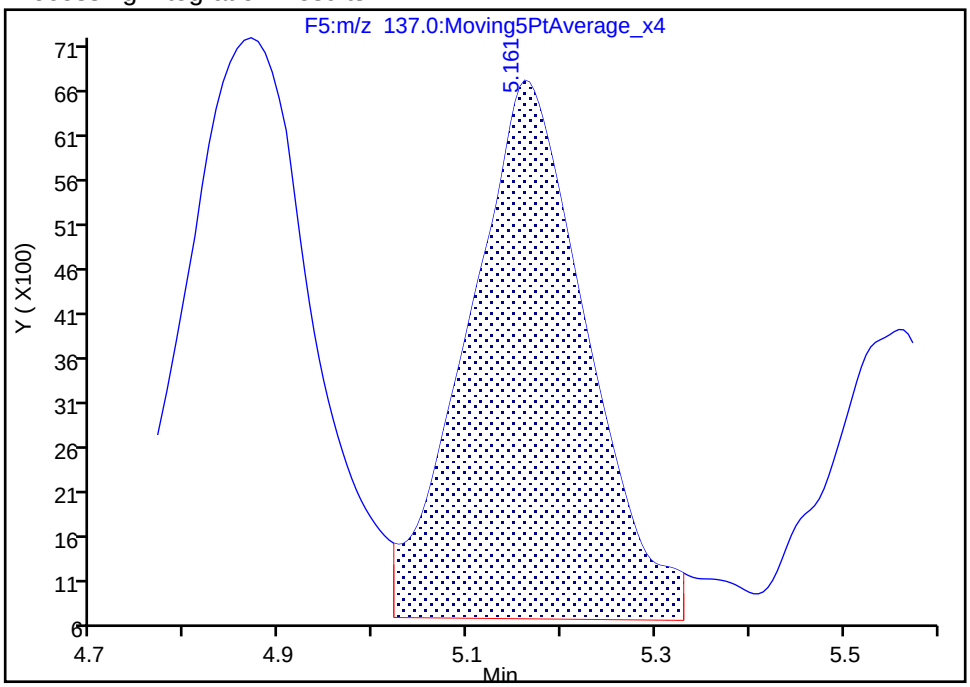
Column: Detector F5:SIR

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

Signal: 1

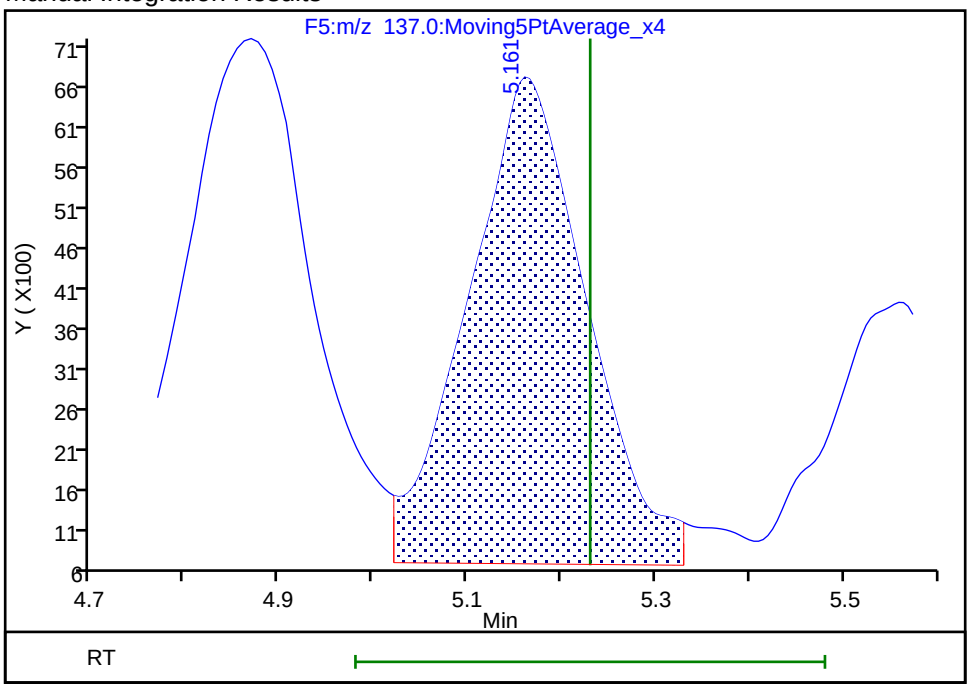
Processing Integration Results

RT: 5.16
Area: 44924
Amount: 4.844771
Amount Units: ug/l



Manual Integration Results

RT: 5.16
Area: 52482
Amount: 5.183227
Amount Units: ug/l



Reviewer: meyera, 14-Apr-2022 14:23:35

Audit Action: Assigned New Baseline Audit Reason: Baseline

Report Date: 15-Apr-2022 08:02:06 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

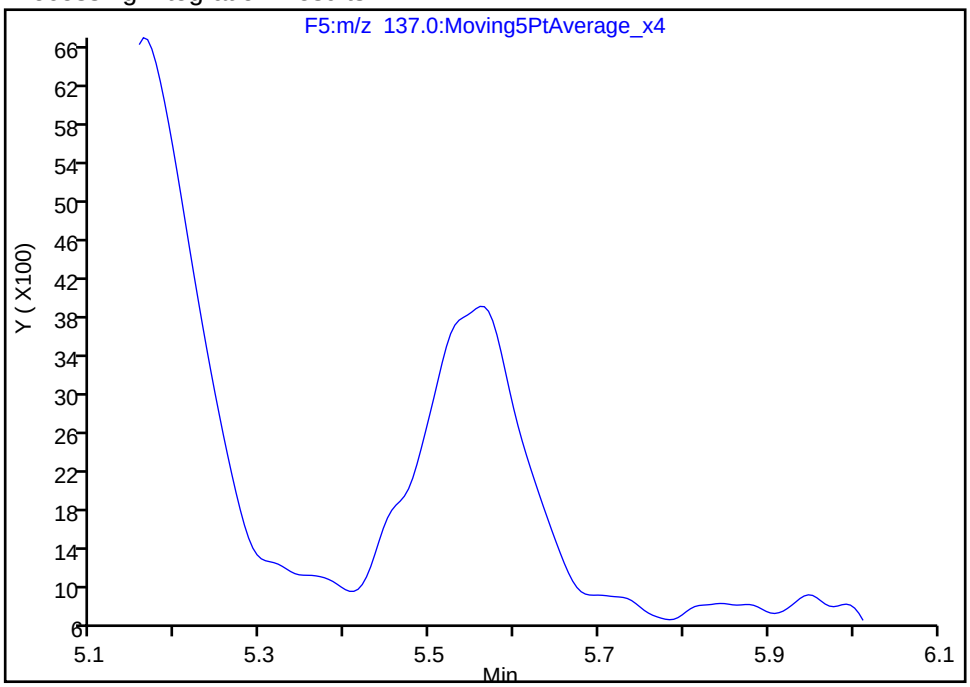
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14003.d
Injection Date: 14-Apr-2022 12:27:48 Instrument ID: LC_LCMS7
Lims ID: STD001
Client ID:
Operator ID: acm ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F5:SIR

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

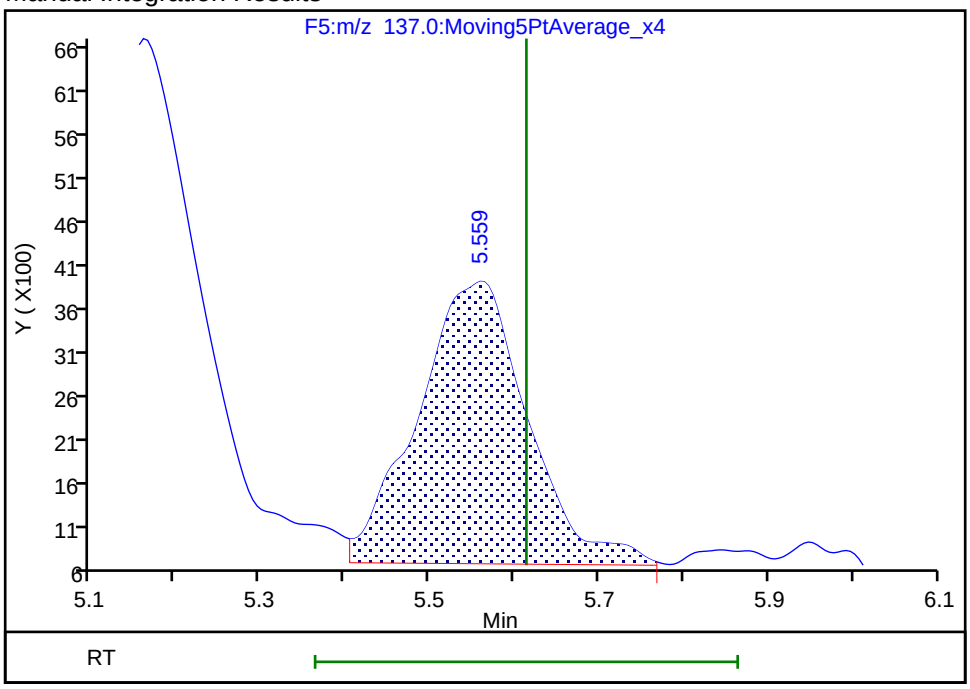
Not Detected
Expected RT: 5.61

Processing Integration Results



Manual Integration Results

RT: 5.56
Area: 29091
Amount: 5.008974
Amount Units: ug/l



Reviewer: meyera, 14-Apr-2022 14:23:42
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:02:07 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14004.d
Lims ID: STD002
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 14-Apr-2022 12:34:24 ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: STD L2
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:02:07 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 14-Apr-2022 14:22:10
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	26952	10.4	8.4	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		135078	125.0	150	
36 TNX								
144.0	1.374	1.385	-0.011	0.749	561172	10.6	104	
33 DNX								
160.0	1.477	1.489	-0.012	0.805	850298	10.6	407	
34 MNX								
160.0	1.659	1.670	-0.011	0.904	271034	12.9	115	
4 RDX								
281.2	1.841	1.833	0.008	1.003	35922	10.5	11.2	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		480098	125.0	158	
5 1,3,5-Trinitrobenzene								M
213.0	2.303	2.299	0.004	0.772	177090	10.0	39.1	M
6 Tetryl								
241.1	2.667	2.679	-0.012	0.895	269372	10.5	43.6	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.981	2.991	-0.010		1265871	129.4	330	
8 1,3-Dinitrobenzene								
168.0	3.022	3.022	0.0	1.014	107100	9.36	30.9	
9 Nitroglycerin								
62.0	3.040	3.040	0.0	1.020	99819	9.58	46.1	
28 3,5-Dinitroaniline								M
183.0	3.189	3.200	-0.011	1.070	557198	11.1	64.9	M

Report Date: 15-Apr-2022 08:02:07 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14004.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.281	3.281	0.0	0.769	815773	9.62	107	
$ 11 Nitrobenzene-d5								M
128.0	3.315	3.324	-0.009	0.777	69076	10.5	7.8	M
12 Nitrobenzene								
123.0	3.362	3.382	-0.020	0.788	52444	10.9	14.8	
14 4-Amino-2,6-dinitrotoluene								M
197.0	3.586	3.611	-0.025	0.840	577506	10.3	40.5	M
16 2-Amino-4,6-dinitrotoluene								M
197.0	3.924	3.924	0.0	0.920	813261	10.8	54.6	M
17 2,6-Dinitrotoluene								
182.0	4.081	4.093	-0.012	0.956	708550	10.4	303	
* 18 2,4-dinitrotoluene-d3								
185.1	4.267	4.275	-0.008		4010896	125.0	126	
19 2,4-Dinitrotoluene								
182.0	4.299	4.316	-0.017	1.008	376935	10.2	138	
20 PETN								M
61.8	4.638	4.638	0.0	1.087	71447	10.0	11.3	M
22 o-Nitrotoluene								
137.0	4.922	4.932	-0.010	1.154	93305	9.47	19.9	
23 p-Nitrotoluene								
137.0	5.235	5.230	0.005	1.227	87464	9.92	17.4	
24 m-Nitrotoluene								
137.0	5.609	5.614	-0.005	1.315	53097	10.4	10.7	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

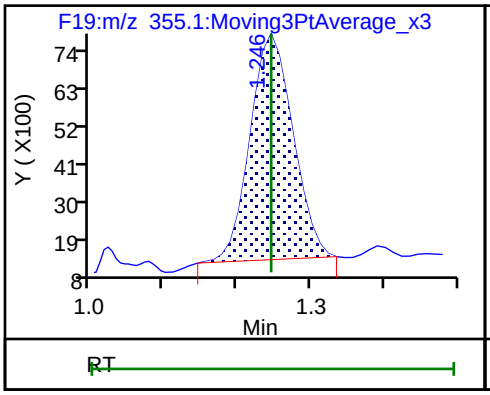
8321EXcalprim_00029	Amount Added: 1.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 1.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 15-Apr-2022 08:02:07 Chrom Revision: 2.3 12-Apr-2022 20:29:44

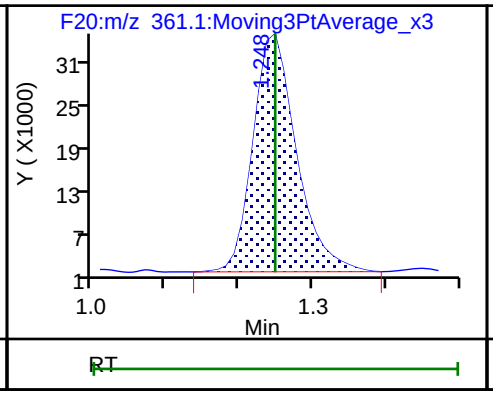
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14004.d
Injection Date: 14-Apr-2022 12:34:24 Instrument ID: LC_LCMS7
Lims ID: STD002
Client ID:
Operator ID: acm ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

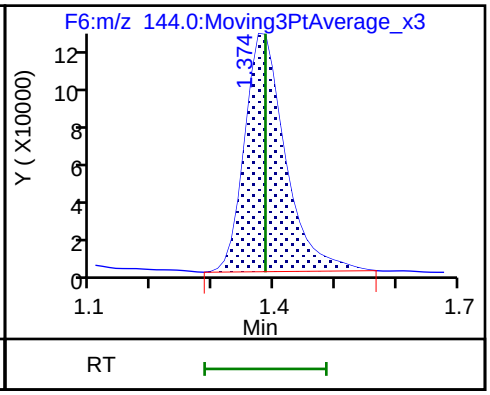
2 HMX



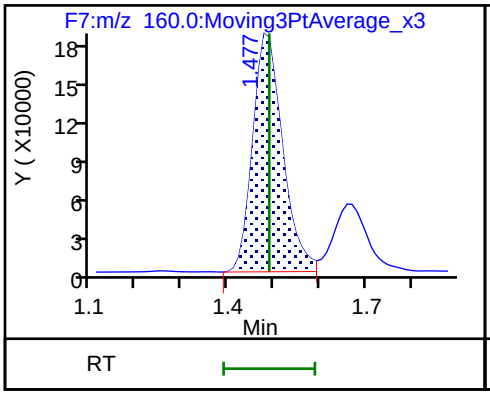
* 1 HMX-13C4



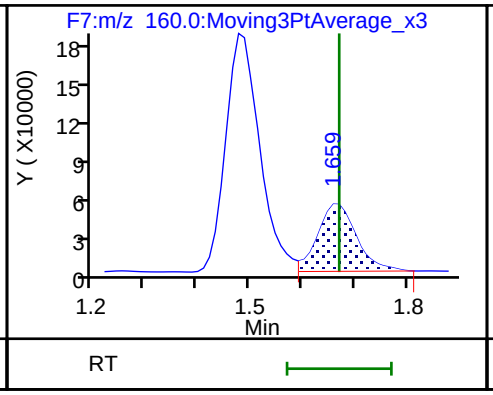
36 TNX



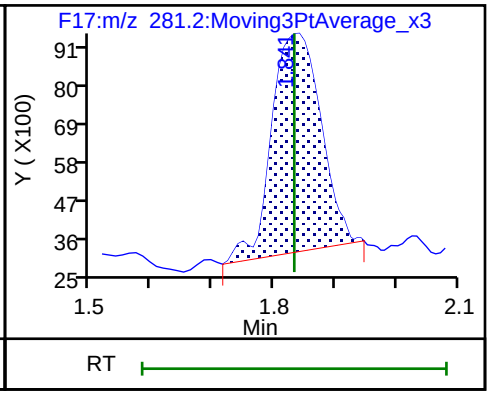
33 DNX



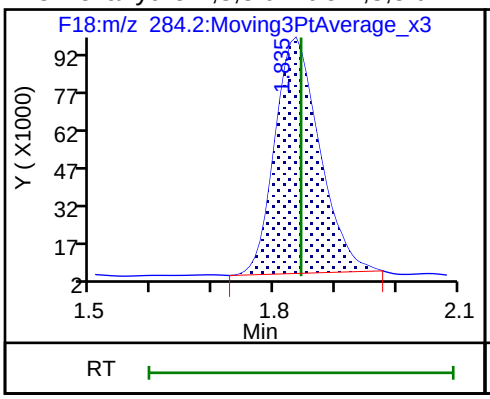
34 MNX



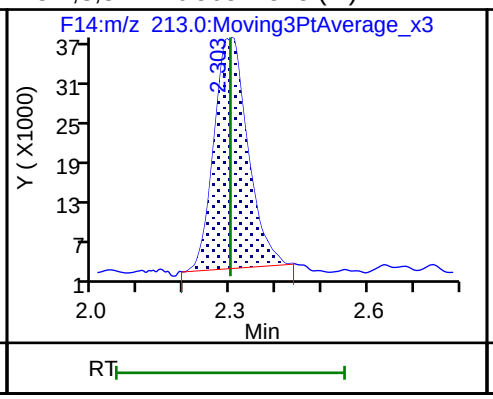
4 RDX



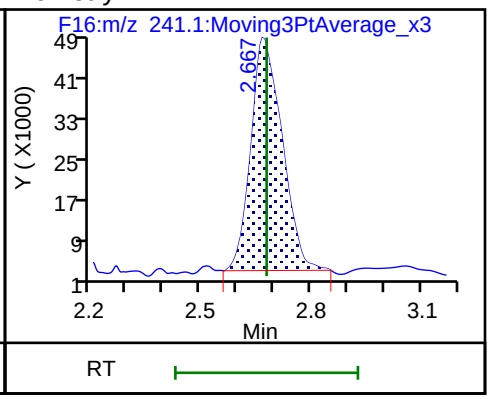
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



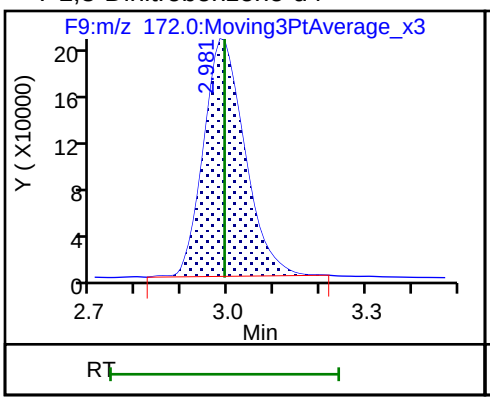
5 1,3,5-Trinitrobenzene (M)



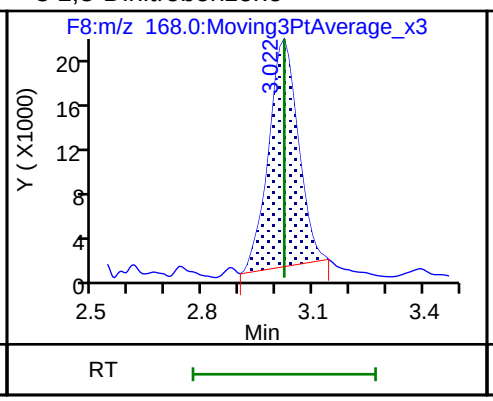
6 Tetryl



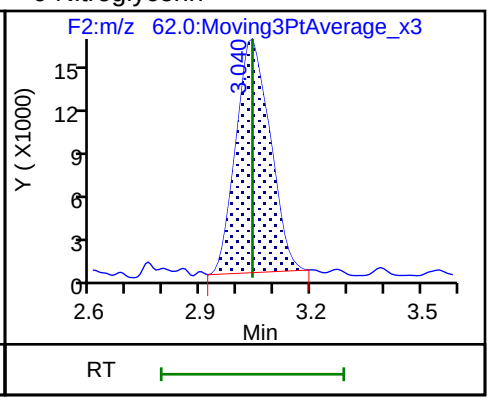
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

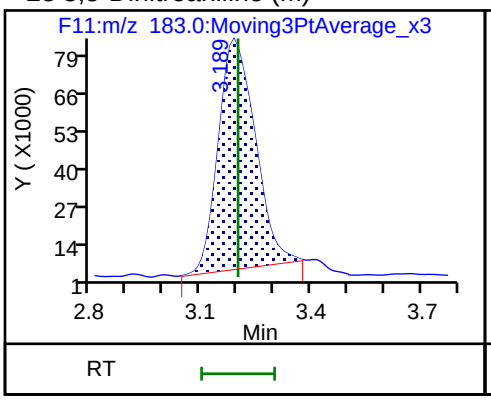


9 Nitroglycerin

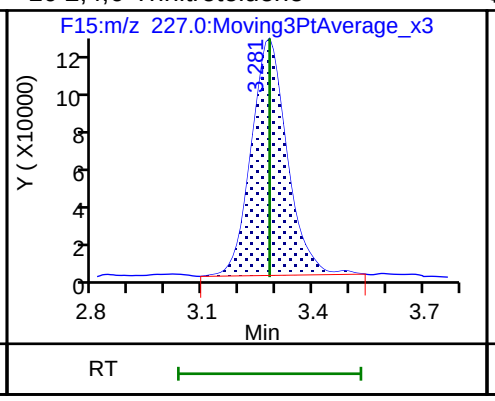


Report Date: 15-Apr-2022 08:02:07 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14004.d

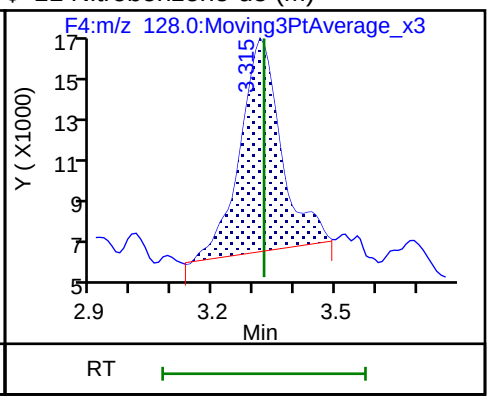
28 3,5-Dinitroaniline (M)



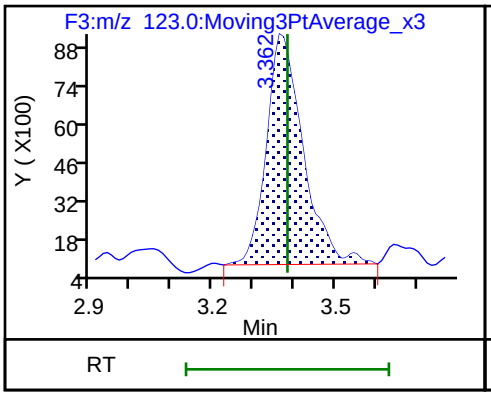
10 2,4,6-Trinitrotoluene



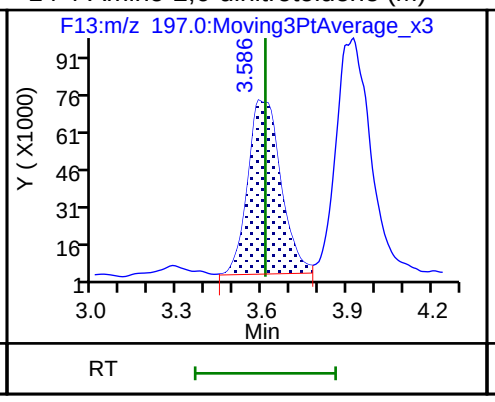
$ 11 Nitrobenzene-d5 (M)



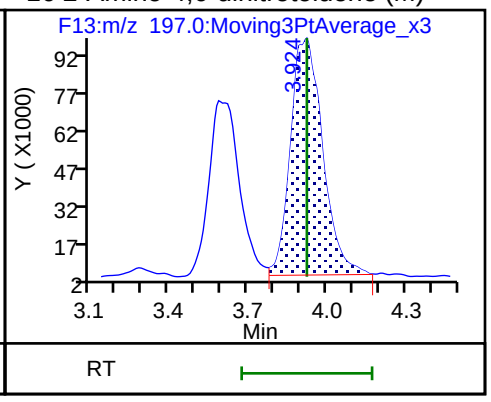
12 Nitrobenzene



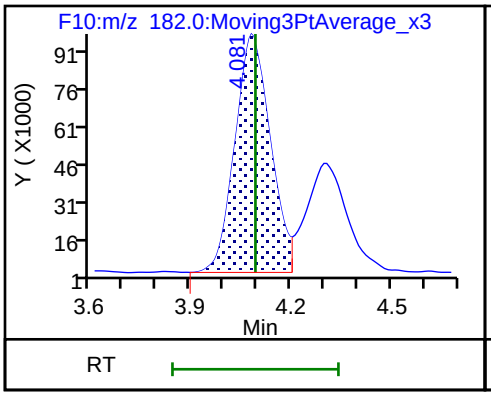
14 4-Amino-2,6-dinitrotoluene (M)



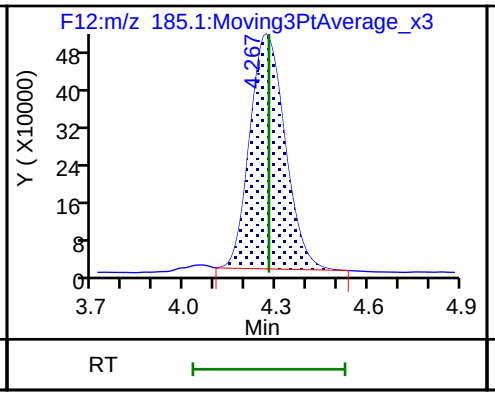
16 2-Amino-4,6-dinitrotoluene (M)



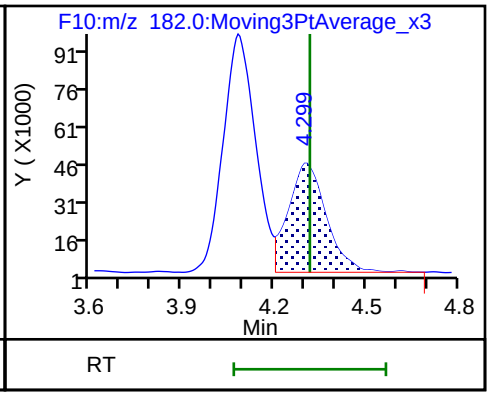
17 2,6-Dinitrotoluene



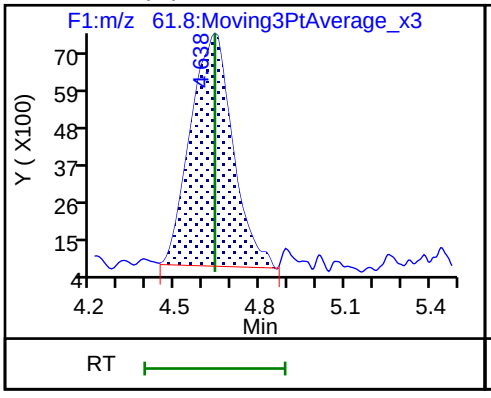
* 18 2,4-dinitrotoluene-d3



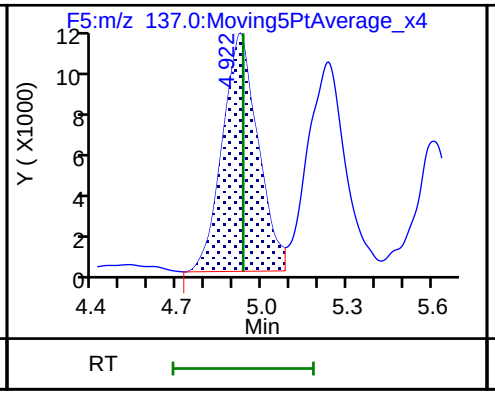
19 2,4-Dinitrotoluene



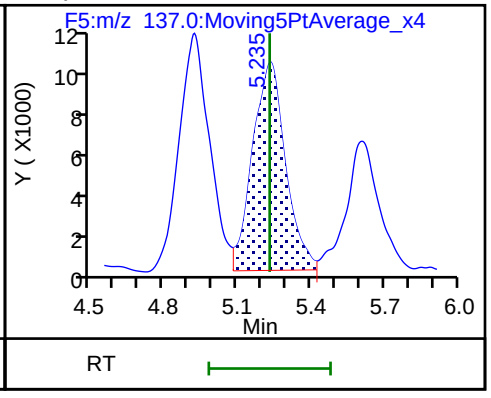
20 PETN (M)



22 o-Nitrotoluene



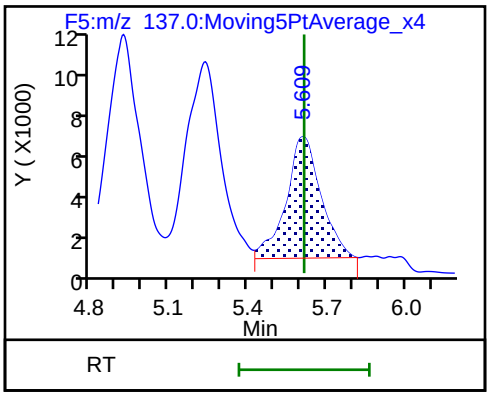
23 p-Nitrotoluene



Report Date: 15-Apr-2022 08:02:07 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14004.d

24 m-Nitrotoluene



Report Date: 15-Apr-2022 08:02:07 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

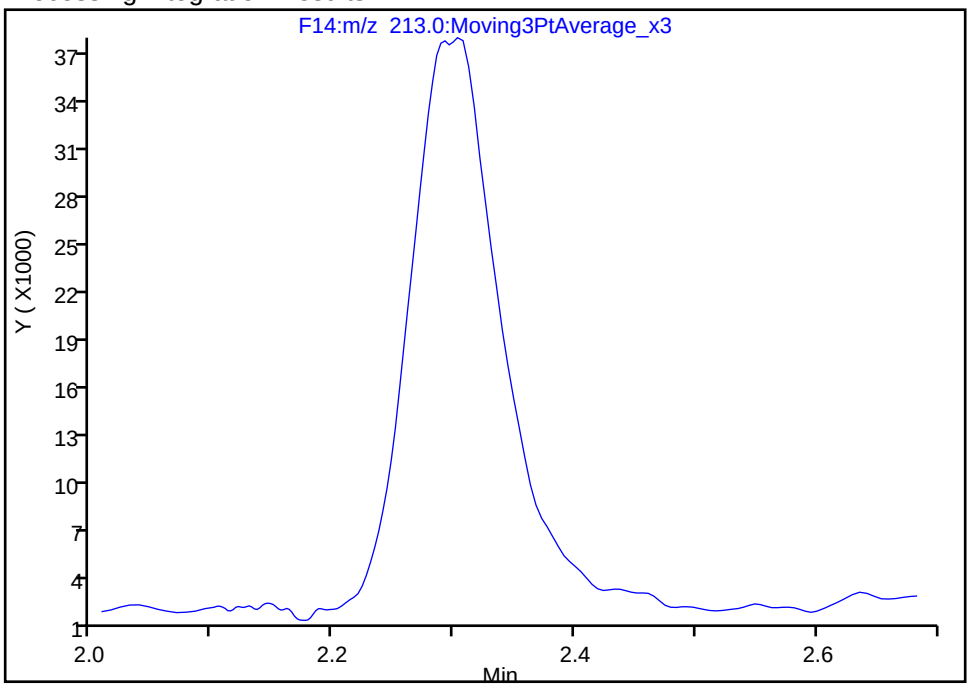
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14004.d
Injection Date: 14-Apr-2022 12:34:24 Instrument ID: LC_LCMS7
Lims ID: STD002
Client ID:
Operator ID: acm ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F14:SIR

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

Signal: 1

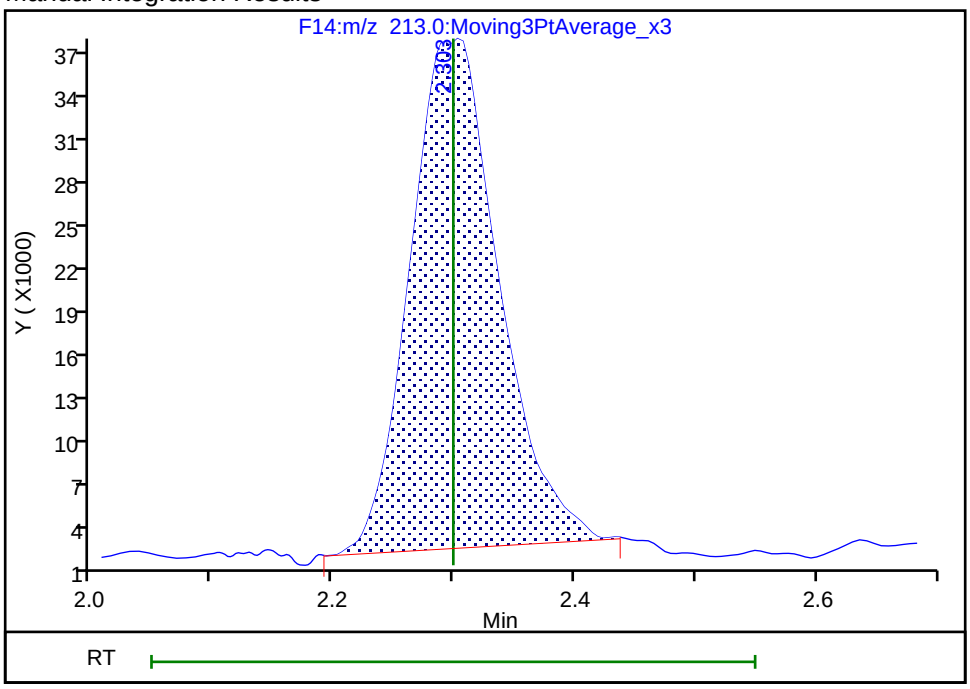
Not Detected
Expected RT: 2.30

Processing Integration Results



Manual Integration Results

RT: 2.30
Area: 177090
Amount: 10.023820
Amount Units: ug/l



Reviewer: meyera, 14-Apr-2022 14:22:03
Audit Action: Manually Integrated Audit Reason: Split Peak

Report Date: 15-Apr-2022 08:02:07

Chrom Revision: 2.3 12-Apr-2022 20:29:44
Manual Integration/User Assign Peak Report

Eurofins Denver

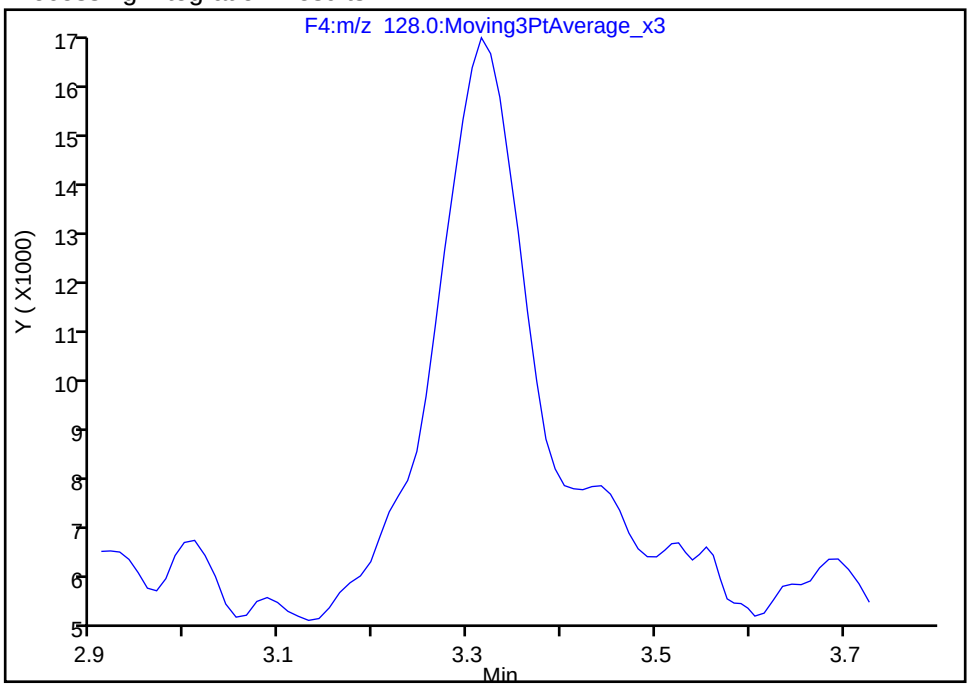
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14004.d
Injection Date: 14-Apr-2022 12:34:24 Instrument ID: LC_LCMS7
Lims ID: STD002
Client ID:
Operator ID: acm ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F4:SIR

$ 11 Nitrobenzene-d5, CAS: 4165-60-0

Signal: 1

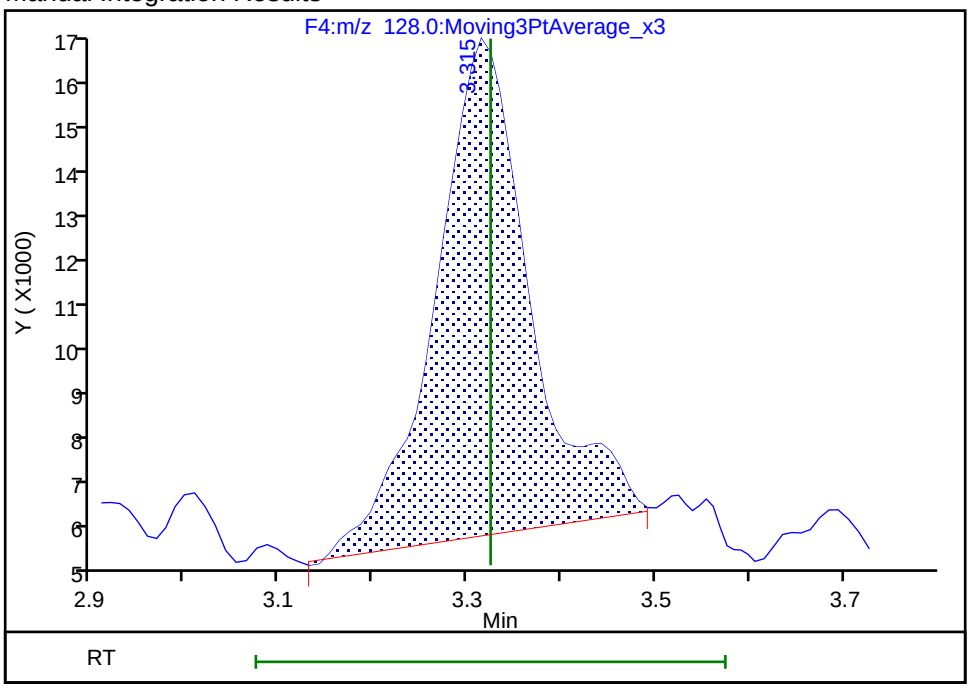
Processing Integration Results

Not Detected
Expected RT: 3.32



Manual Integration Results

RT: 3.31
Area: 69076
Amount: 10.524102
Amount Units: ug/l



Reviewer: meyera, 14-Apr-2022 14:25:30
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:02:07 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14004.d

Injection Date: 14-Apr-2022 12:34:24 Instrument ID: LC_LCMS7

Lims ID: STD002

Client ID:

Operator ID: acm ALS Bottle#: 3 Worklist Smp#: 4

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

Column: Detector F13:SIR

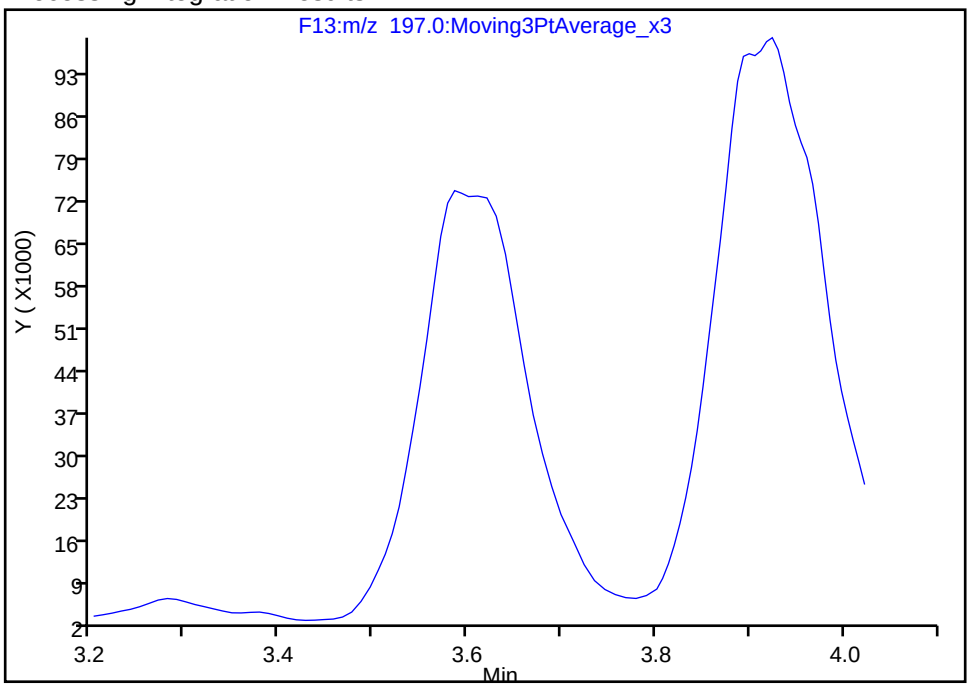
14 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

Not Detected

Expected RT: 3.61

Processing Integration Results



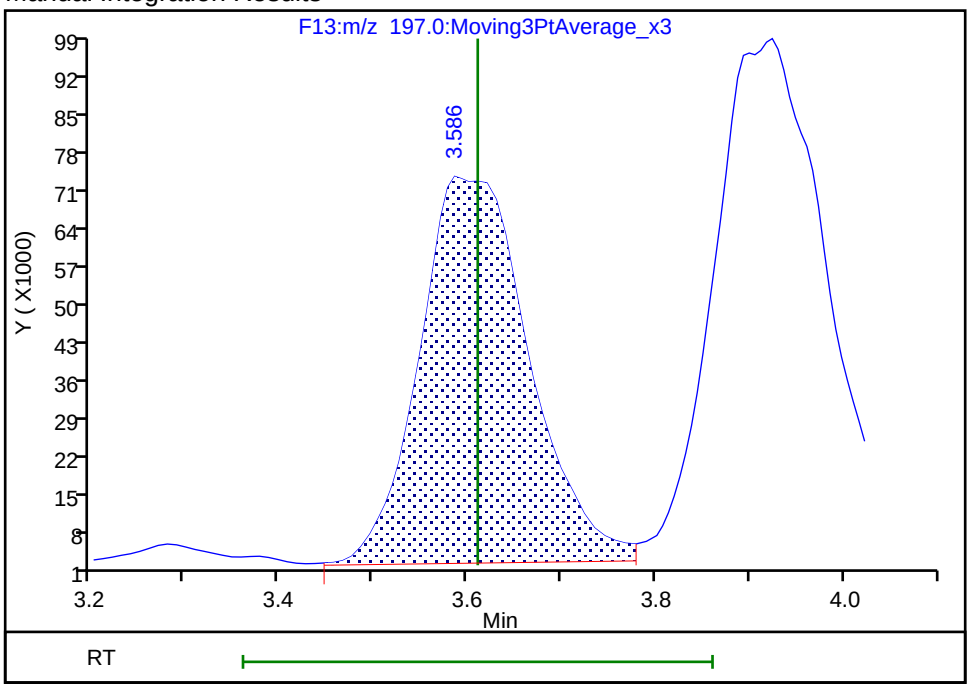
Manual Integration Results

RT: 3.59

Area: 577506

Amount: 10.303123

Amount Units: ug/l



Reviewer: meyera, 14-Apr-2022 14:21:53

Audit Action: Manually Integrated Audit Reason: Split Peak

Report Date: 15-Apr-2022 08:02:07

Chrom Revision: 2.3 12-Apr-2022 20:29:44
Manual Integration/User Assign Peak Report

Eurofins Denver

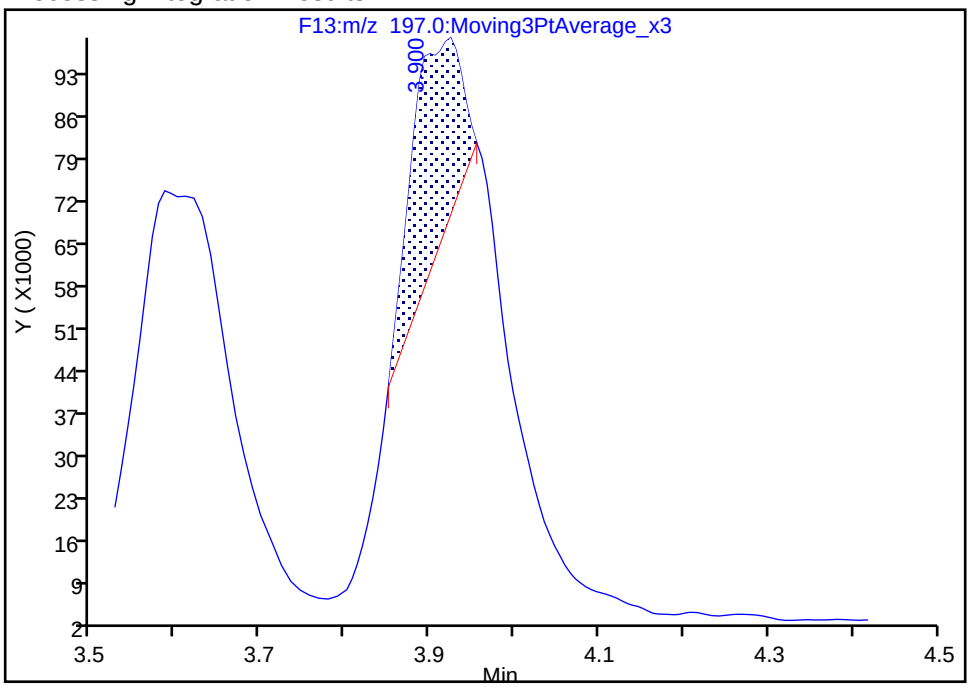
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14004.d
Injection Date: 14-Apr-2022 12:34:24 Instrument ID: LC_LCMS7
Lims ID: STD002
Client ID:
Operator ID: acm ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F13:SIR

16 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

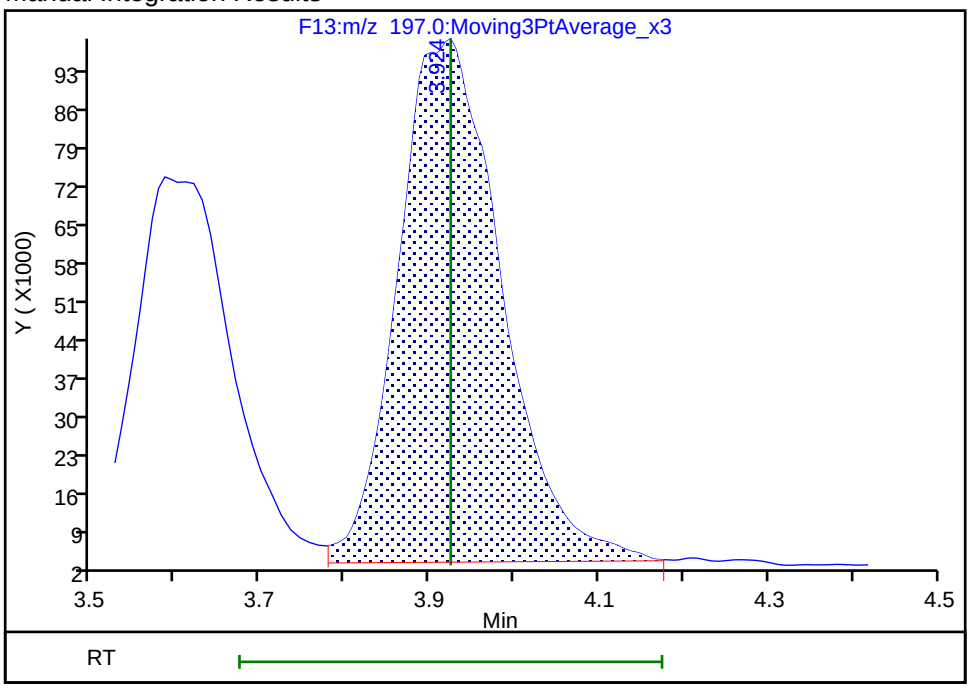
Processing Integration Results

RT: 3.90
Area: 141717
Amount: 4.102774
Amount Units: ug/l



Manual Integration Results

RT: 3.92
Area: 813261
Amount: 10.795481
Amount Units: ug/l



Reviewer: meyera, 14-Apr-2022 14:21:49
Audit Action: Manually Integrated Audit Reason: Split Peak

Report Date: 15-Apr-2022 08:02:07 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14004.d

Injection Date:	14-Apr-2022 12:34:24	Instrument ID:	LC_LCMS7
Lims ID:	STD002		
Client ID:			
Operator ID:	acm	ALS Bottle#:	3 Worklist Smp#: 4
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F1:SIR

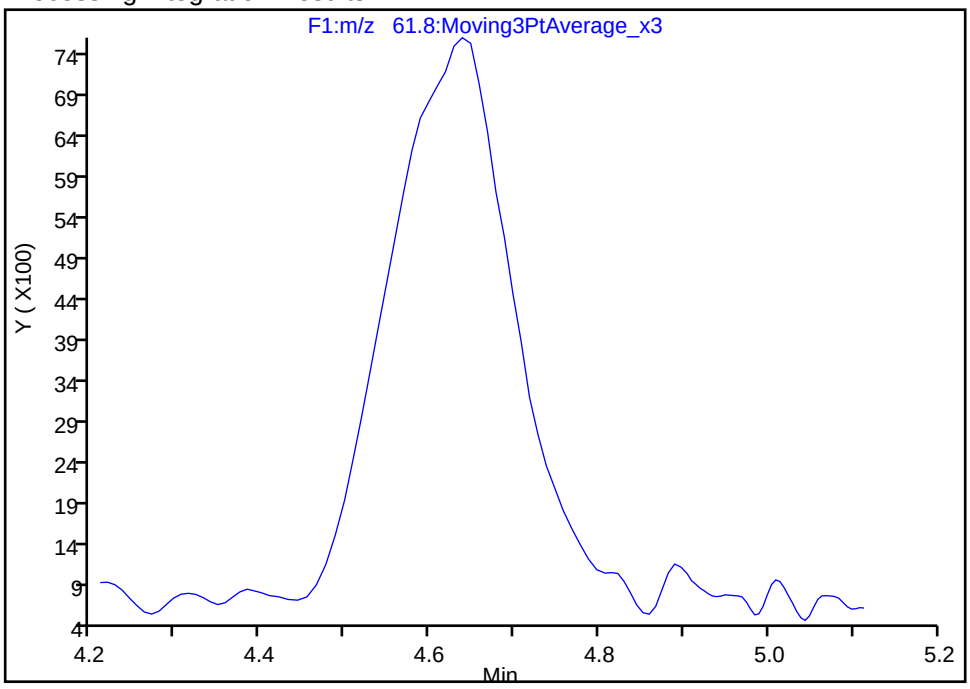
20 PETN, CAS: 78-11-5

Signal: 1

Not Detected

Expected RT: 4.64

Processing Integration Results



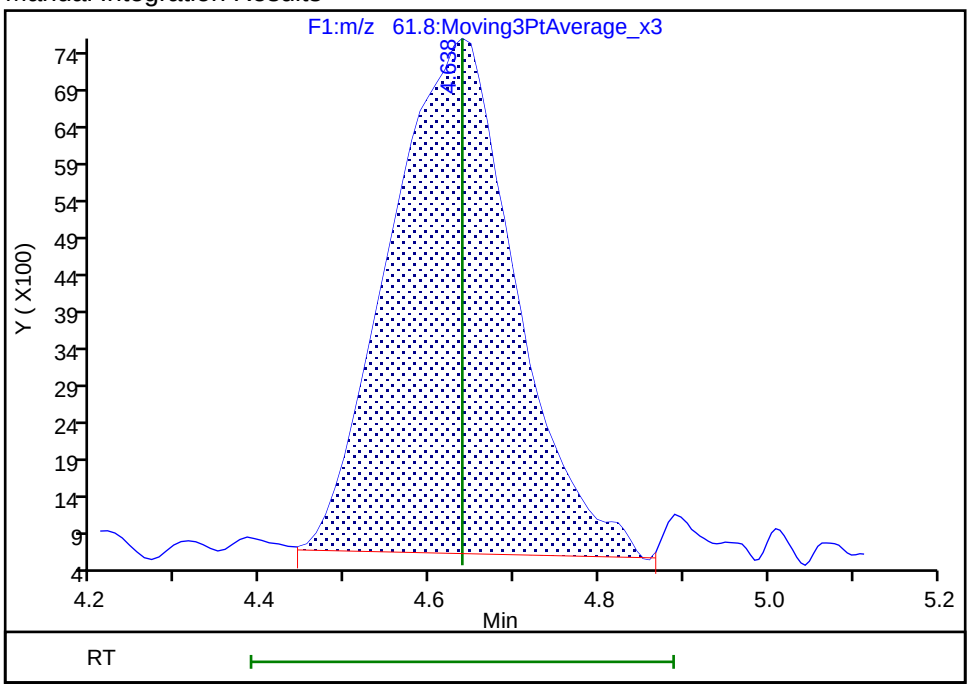
Manual Integration Results

RT: 4.64

Area: 71447

Amount: 10.036022

Amount Units: ug/l



Reviewer: meyera, 14-Apr-2022 14:21:44

Audit Action: Manually Integrated Audit Reason: Split Peak

Report Date: 15-Apr-2022 08:02:08 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14005.d
Lims ID: STD003
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 14-Apr-2022 12:41:00 ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: STD L3
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:02:08 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 14-Apr-2022 14:21:34
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	55093	22.5	20.9	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		135850	125.0	107	
36 TNX								
144.0	1.385	1.385	0.0	0.755	1337364	27.0	186	
33 DNX								
160.0	1.477	1.489	-0.012	0.805	1969478	26.6	404	
34 MNX								
160.0	1.659	1.670	-0.011	0.904	612026	31.1	115	
4 RDX								
281.2	1.833	1.833	0.0	0.998	79269	25.7	30.9	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		509991	125.0	160	
5 1,3,5-Trinitrobenzene								
213.0	2.296	2.299	-0.003	0.768	435284	25.0	143	
6 Tetryl								
241.1	2.679	2.679	0.0	0.896	622021	23.8	76.9	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1273960	129.4	194	
8 1,3-Dinitrobenzene								
168.0	3.022	3.022	0.0	1.010	280607	25.9	71.2	
9 Nitroglycerin								
62.0	3.040	3.040	0.0	1.016	260187	26.6	96.7	
28 3,5-Dinitroaniline								
183.0	3.200	3.200	0.0	1.070	1146426	24.2	47.7	

Report Date: 15-Apr-2022 08:02:08 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14005.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.281	3.281	0.0	0.768	1998715	25.6	188	
$ 11 Nitrobenzene-d5								M
128.0	3.324	3.324	0.0	0.778	139756	23.1	13.5	M
12 Nitrobenzene								
123.0	3.382	3.382	0.0	0.791	113821	23.9	28.6	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.601	3.611	-0.010	0.842	1293374	24.5	50.3	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.931	3.924	0.007	0.919	1728898	23.9	61.3	
17 2,6-Dinitrotoluene								
182.0	4.087	4.093	-0.006	0.956	1631479	25.1	617	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3956418	125.0	128	
19 2,4-Dinitrotoluene								
182.0	4.308	4.316	-0.008	1.008	860644	24.8	297	
20 PETN								
61.8	4.628	4.638	-0.010	1.082	140665	21.3	25.2	
22 o-Nitrotoluene								M
137.0	4.927	4.932	-0.005	1.152	238155	25.2	44.2	M
23 p-Nitrotoluene								M
137.0	5.221	5.230	-0.009	1.221	206847	24.6	36.9	M
24 m-Nitrotoluene								M
137.0	5.609	5.614	-0.005	1.312	121115	24.8	21.1	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

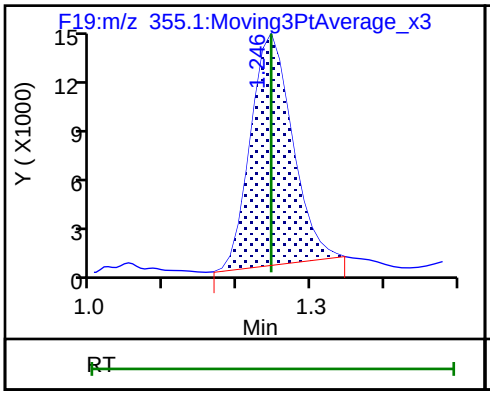
8321EXcalprim_00029	Amount Added: 2.50	Units: uL	
8321NB-D5-cal_00021	Amount Added: 2.50	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 15-Apr-2022 08:02:08 Chrom Revision: 2.3 12-Apr-2022 20:29:44

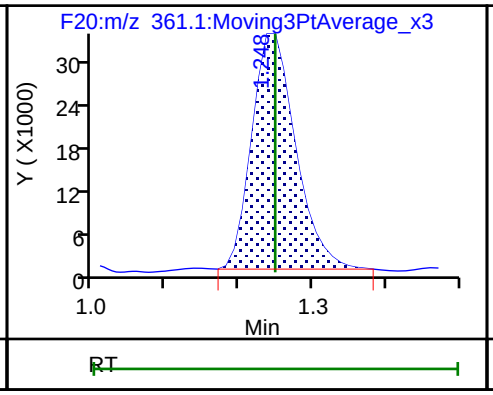
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14005.d
Injection Date: 14-Apr-2022 12:41:00 Instrument ID: LC_LCMS7
Lims ID: STD003
Client ID:
Operator ID: acm ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

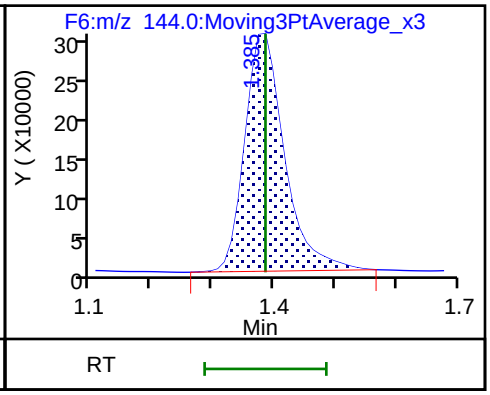
2 HMX



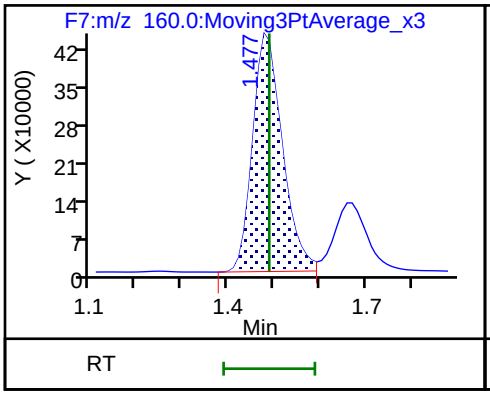
* 1 HMX-13C4



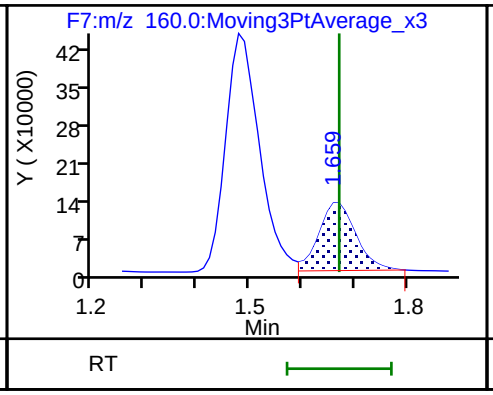
36 TNX



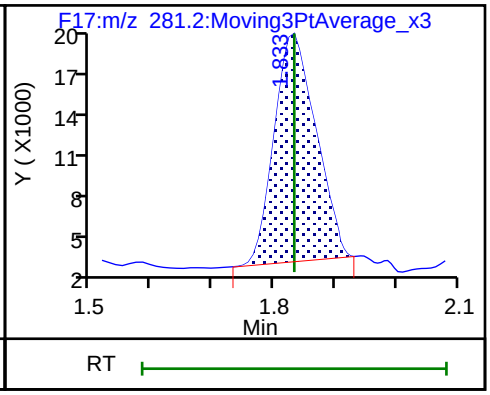
33 DNX



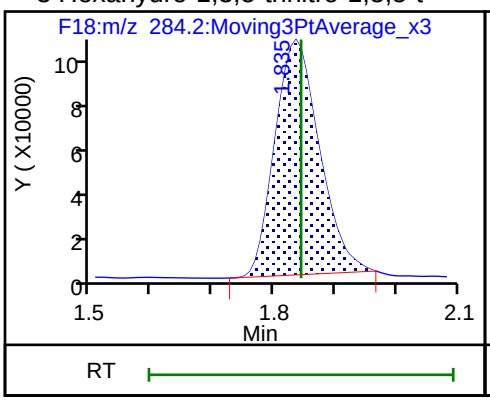
34 MNX



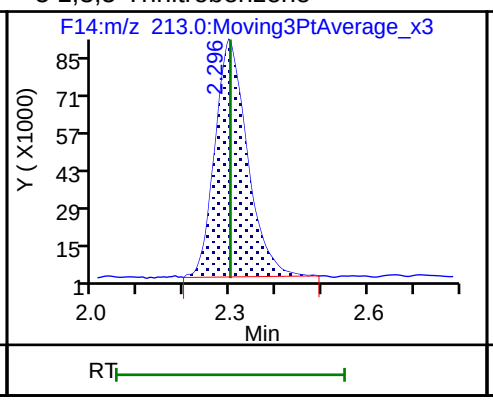
4 RDX



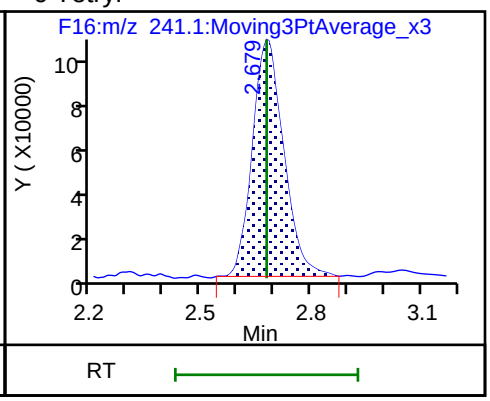
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



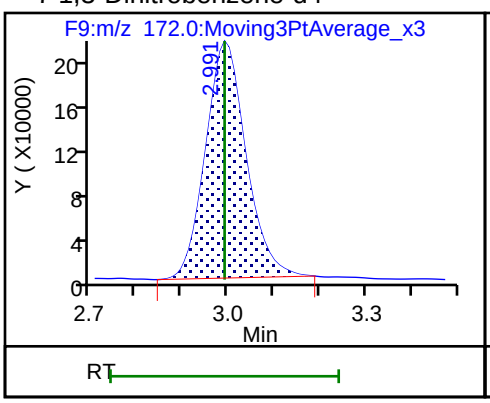
5 1,3,5-Trinitrobenzene



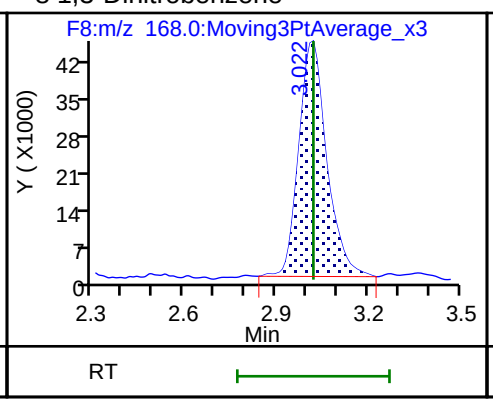
6 Tetryl



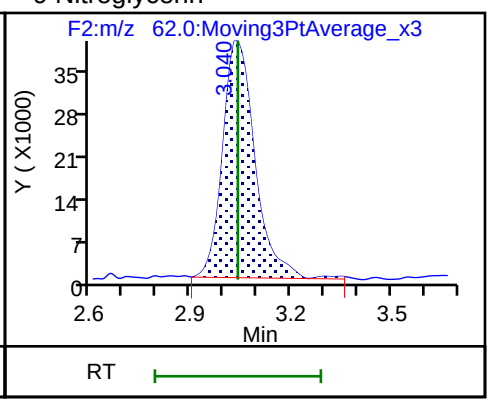
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

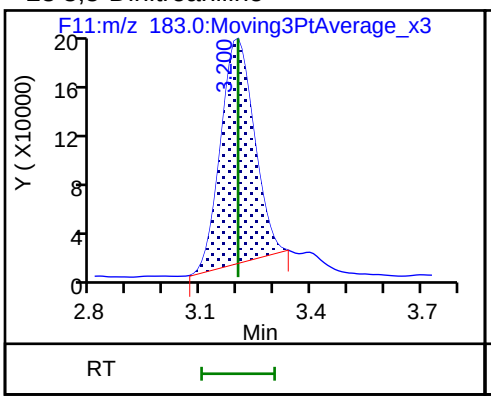


9 Nitroglycerin

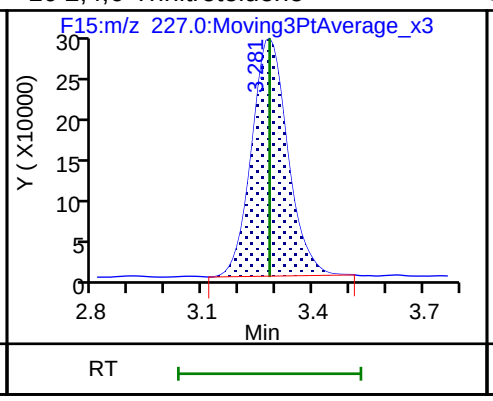


Report Date: 15-Apr-2022 08:02:08 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14005.d

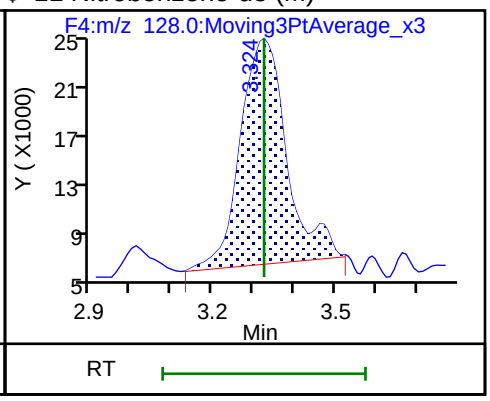
28 3,5-Dinitroaniline



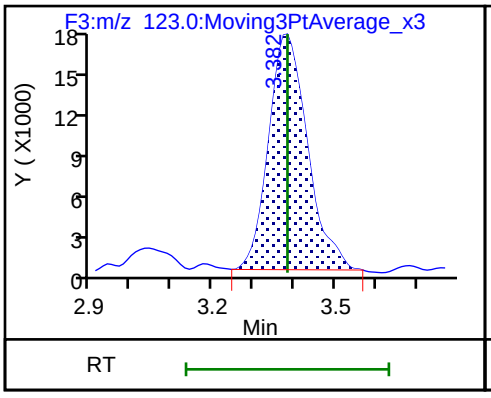
10 2,4,6-Trinitrotoluene



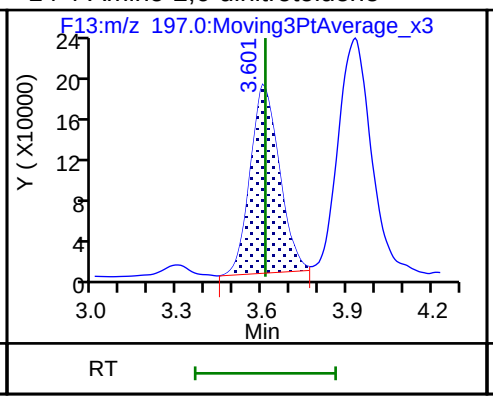
$ 11 Nitrobenzene-d5 (M)



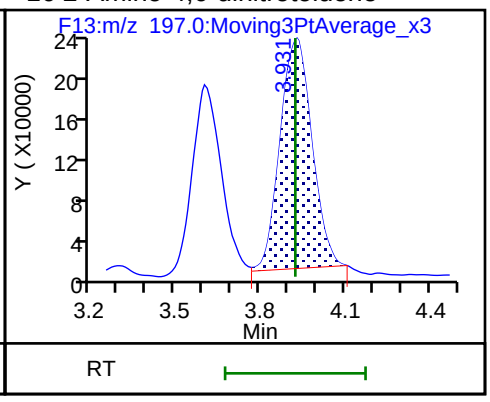
12 Nitrobenzene



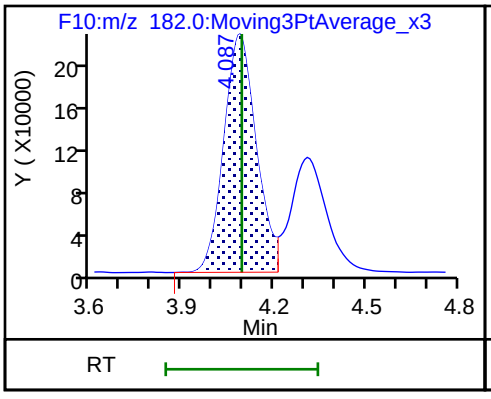
14 4-Amino-2,6-dinitrotoluene



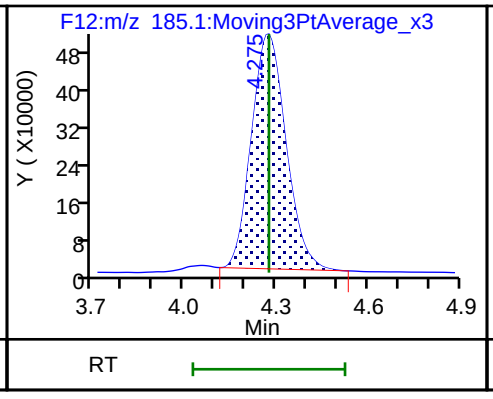
16 2-Amino-4,6-dinitrotoluene



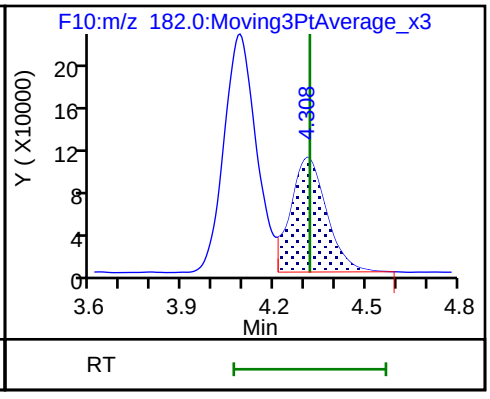
17 2,6-Dinitrotoluene



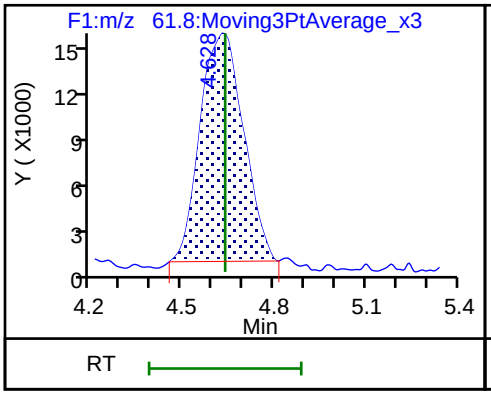
* 18 2,4-dinitrotoluene-d3



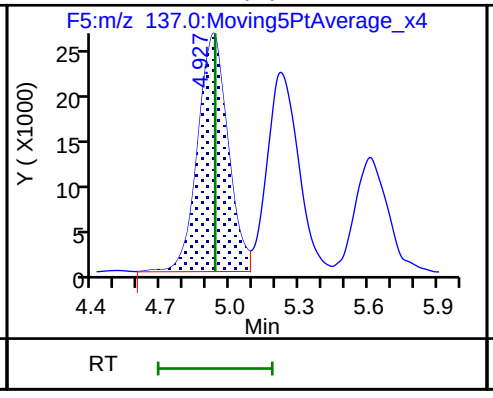
19 2,4-Dinitrotoluene



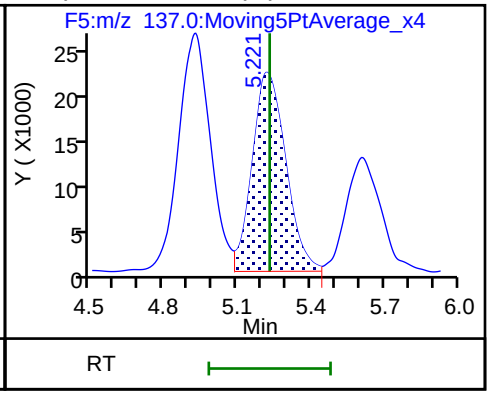
20 PETN



22 o-Nitrotoluene (M)



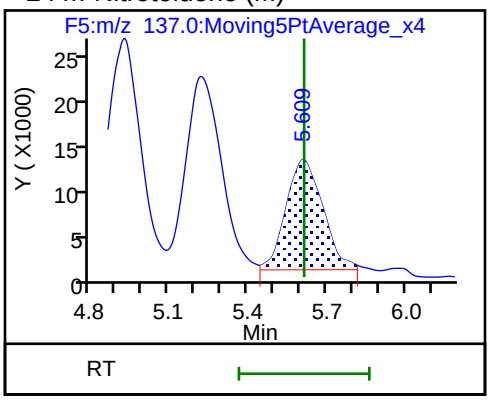
23 p-Nitrotoluene (M)



Report Date: 15-Apr-2022 08:02:08 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14005.d

24 m-Nitrotoluene (M)



Report Date: 15-Apr-2022 08:02:08 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14005.d

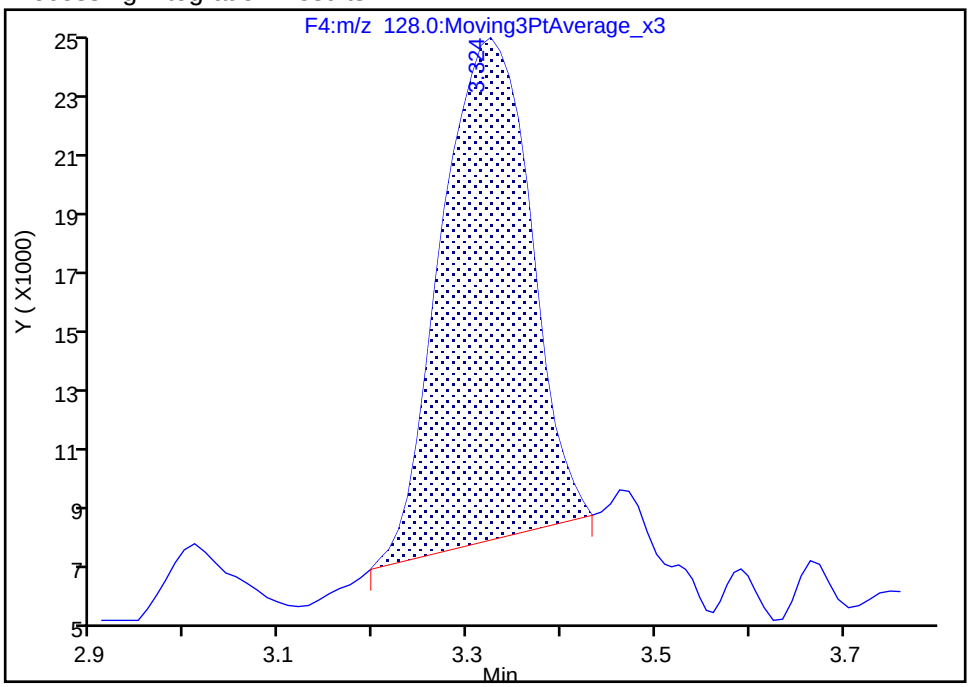
Injection Date:	14-Apr-2022 12:41:00	Instrument ID:	LC_LCMS7
Lims ID:	STD003		
Client ID:			
Operator ID:	acm	ALS Bottle#:	4 Worklist Smp#: 5
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F4:SIR

$ 11 Nitrobenzene-d5, CAS: 4165-60-0

Signal: 1

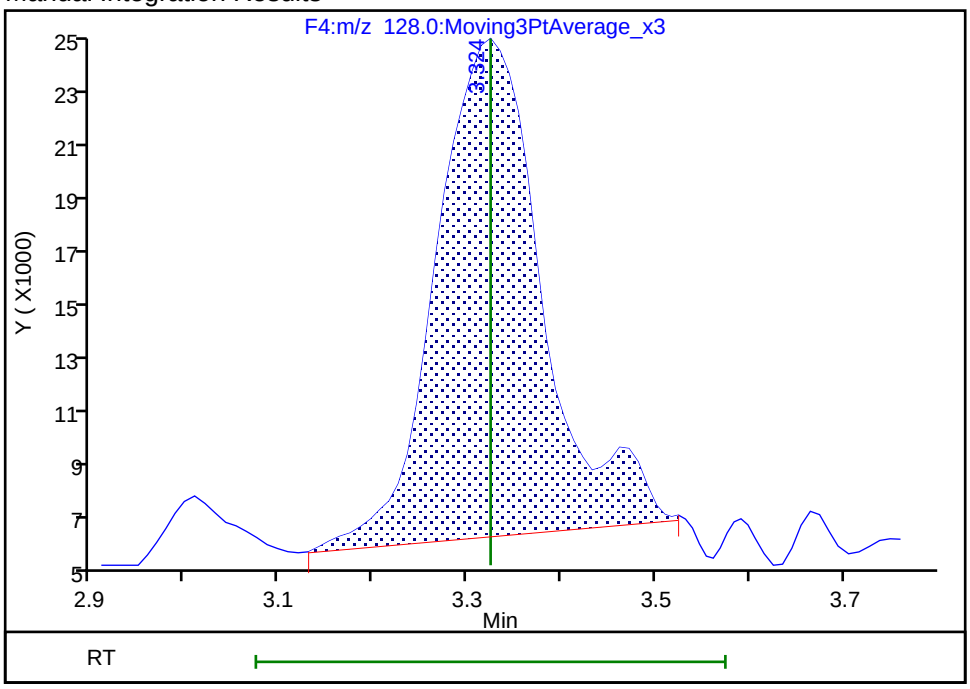
Processing Integration Results

RT: 3.32
Area: 107187
Amount: 18.755906
Amount Units: ug/l



Manual Integration Results

RT: 3.32
Area: 139756
Amount: 23.066359
Amount Units: ug/l



Reviewer: meyera, 14-Apr-2022 14:25:11

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:02:08 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14005.d

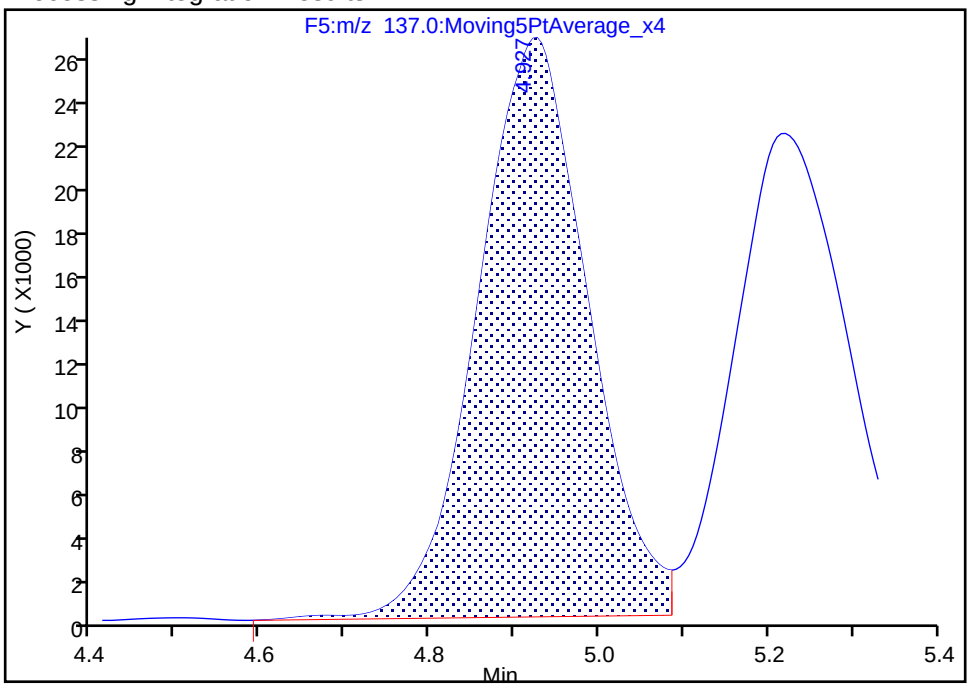
Injection Date:	14-Apr-2022 12:41:00	Instrument ID:	LC_LCMS7		
Lims ID:	STD003				
Client ID:					
Operator ID:	acm	ALS Bottle#:	4	Worklist Smp#:	5
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F5:SIR		

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

Signal: 1

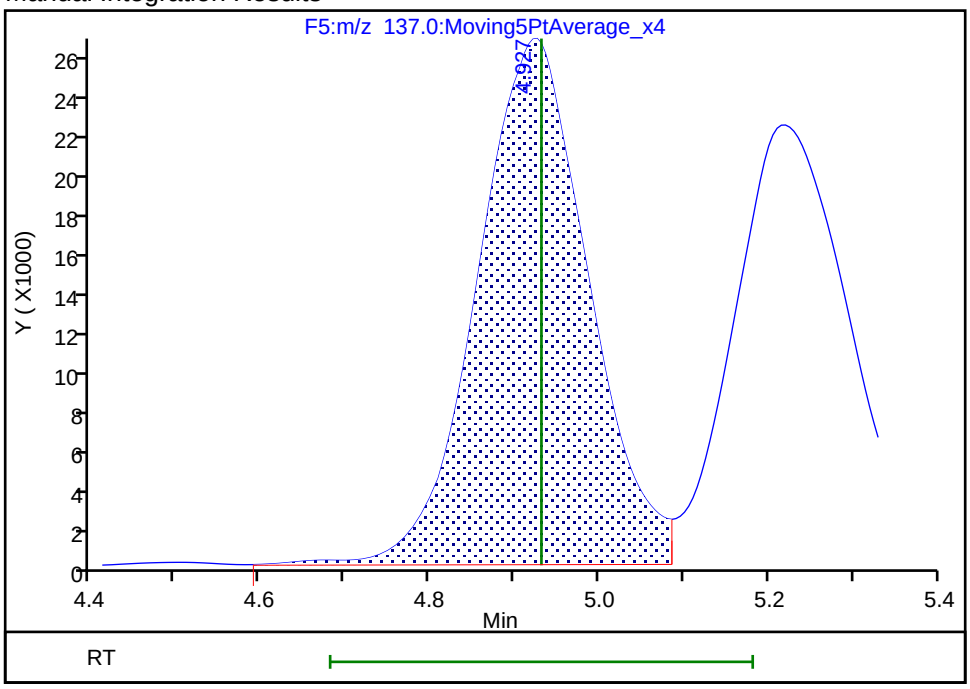
Processing Integration Results

RT: 4.93
Area: 234500
Amount: 25.015734
Amount Units: ug/l



Manual Integration Results

RT: 4.93
Area: 238155
Amount: 25.205496
Amount Units: ug/l



Reviewer: meyera, 14-Apr-2022 14:21:30

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:02:08 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

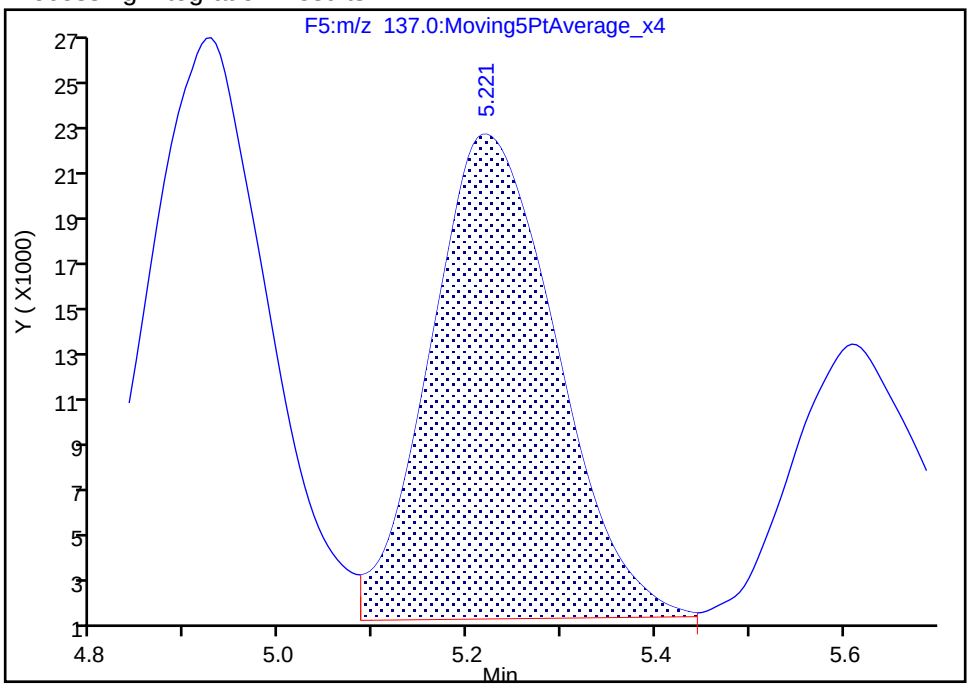
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14005.d
Injection Date: 14-Apr-2022 12:41:00 Instrument ID: LC_LCMS7
Lims ID: STD003
Client ID:
Operator ID: acm ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F5:SIR

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

Signal: 1

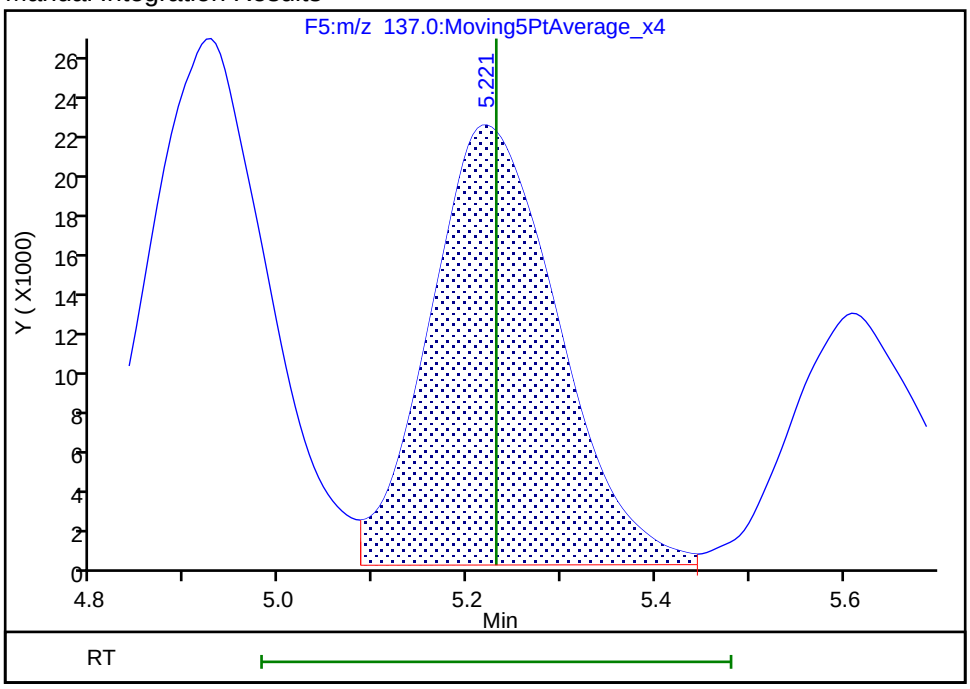
Processing Integration Results

RT: 5.22
Area: 200705
Amount: 24.392697
Amount Units: ug/l



Manual Integration Results

RT: 5.22
Area: 206847
Amount: 24.643591
Amount Units: ug/l



Reviewer: meyera, 14-Apr-2022 14:21:30
Audit Action: Assigned New Baseline Audit Reason: Baseline

Report Date: 15-Apr-2022 08:02:08 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14005.d

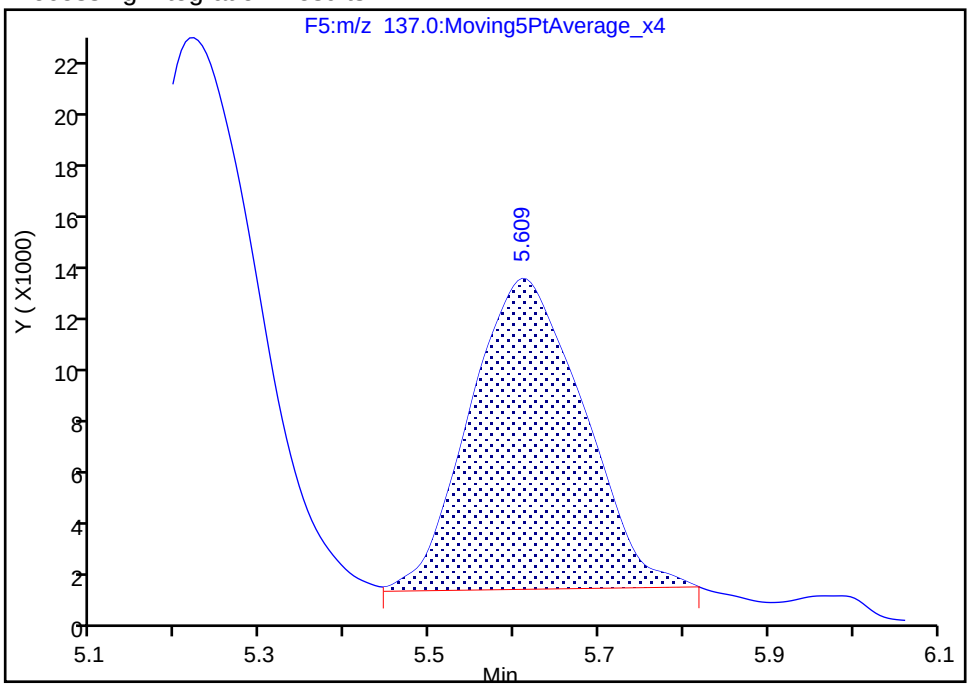
Injection Date:	14-Apr-2022 12:41:00	Instrument ID:	LC_LCMS7		
Lims ID:	STD003				
Client ID:					
Operator ID:	acm	ALS Bottle#:	4	Worklist Smp#:	5
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F5:SIR		

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

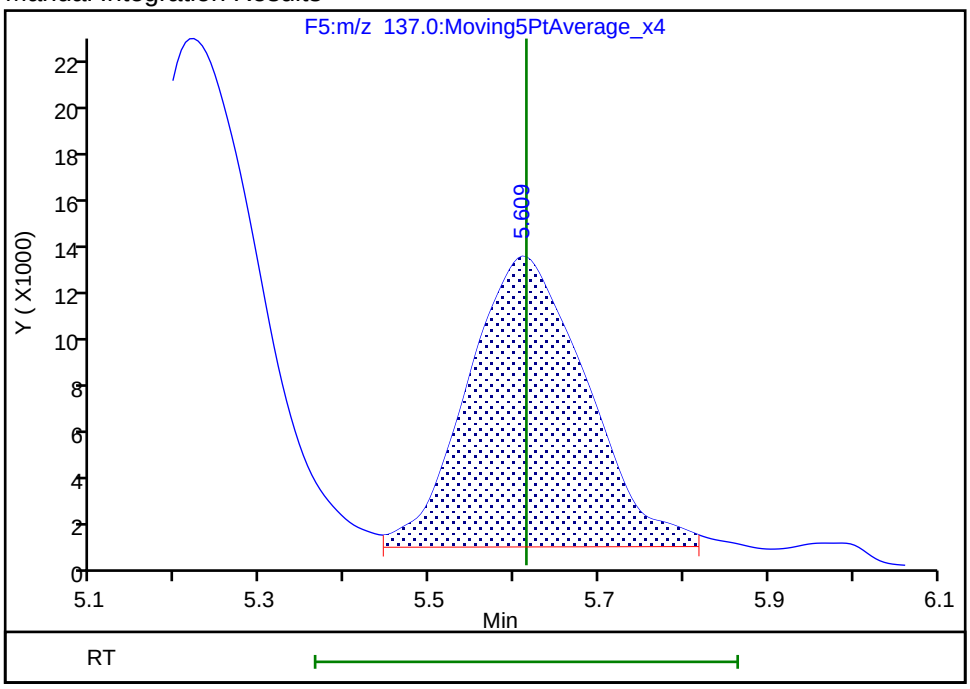
Processing Integration Results

RT: 5.61
Area: 111614
Amount: 23.252127
Amount Units: ug/l



Manual Integration Results

RT: 5.61
Area: 121115
Amount: 24.768489
Amount Units: ug/l



Reviewer: meyera, 14-Apr-2022 14:21:30

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:02:09 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14006.d
Lims ID: STD004
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 14-Apr-2022 12:47:35 ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: STD L4
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:02:09 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 14-Apr-2022 14:21:08
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	118194	53.3	50.0	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		127550	125.0	67.6	
36 TNX								
144.0	1.374	1.385	-0.011	0.749	2433274	49.1	289	
33 DNX								
160.0	1.477	1.489	-0.012	0.805	3671363	49.9	427	
34 MNX								
160.0	1.659	1.670	-0.011	0.904	1138886	58.0	125	
4 RDX								
281.2	1.833	1.833	0.0	0.998	153827	50.2	42.7	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		552609	125.0	180	
5 1,3,5-Trinitrobenzene								
213.0	2.296	2.299	-0.003	0.768	862895	48.7	142	
6 Tetryl								
241.1	2.679	2.679	0.0	0.896	1269679	47.3	116	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1302977	129.4	247	
8 1,3-Dinitrobenzene								
168.0	3.010	3.022	-0.012	1.007	578282	53.3	143	
9 Nitroglycerin								
62.0	3.040	3.040	0.0	1.016	507850	51.8	184	
28 3,5-Dinitroaniline								
183.0	3.200	3.200	0.0	1.070	2350274	51.4	60.9	

Report Date: 15-Apr-2022 08:02:09 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14006.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.281	3.281	0.0	0.768	4032290	53.6	459	
$ 11 Nitrobenzene-d5								
128.0	3.315	3.324	-0.009	0.775	318134	53.7	36.1	
12 Nitrobenzene								M
123.0	3.382	3.382	0.0	0.791	243563	50.3	39.9	M
14 4-Amino-2,6-dinitrotoluene								M
197.0	3.611	3.611	0.0	0.845	2635624	51.8	61.8	M
16 2-Amino-4,6-dinitrotoluene								M
197.0	3.931	3.924	0.007	0.919	3612016	51.4	77.7	M
17 2,6-Dinitrotoluene								
182.0	4.081	4.093	-0.012	0.954	3175238	50.2	773	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3895011	125.0	140	
19 2,4-Dinitrotoluene								
182.0	4.316	4.316	0.0	1.010	1655759	49.5	365	
20 PETN								
61.8	4.618	4.638	-0.020	1.080	319050	50.6	47.9	
22 o-Nitrotoluene								
137.0	4.922	4.932	-0.010	1.151	444373	48.2	82.9	
23 p-Nitrotoluene								
137.0	5.226	5.230	-0.004	1.222	410501	50.3	75.6	
24 m-Nitrotoluene								
137.0	5.619	5.614	0.005	1.314	232275	48.7	41.8	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

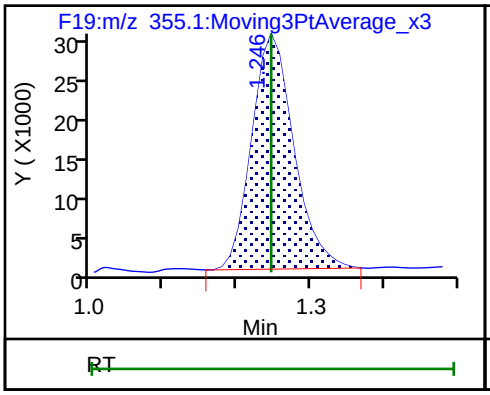
8321EXcalprim_00029	Amount Added: 5.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 5.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 15-Apr-2022 08:02:09 Chrom Revision: 2.3 12-Apr-2022 20:29:44

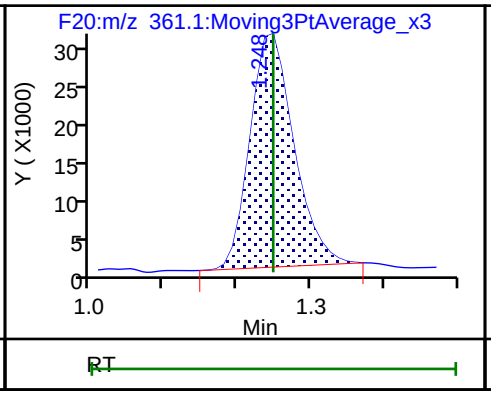
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14006.d
Injection Date: 14-Apr-2022 12:47:35 Instrument ID: LC_LCMS7
Lims ID: STD004
Client ID:
Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

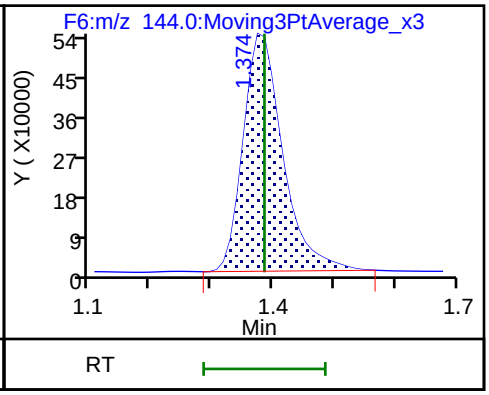
2 HMX



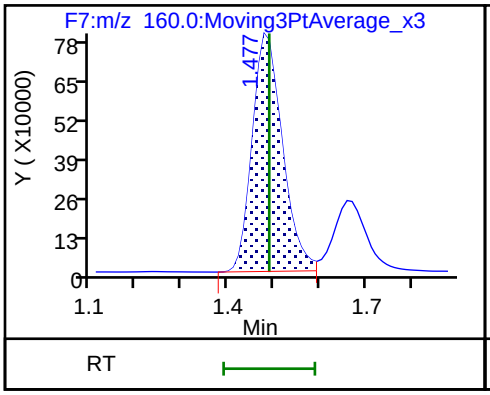
* 1 HMX-13C4



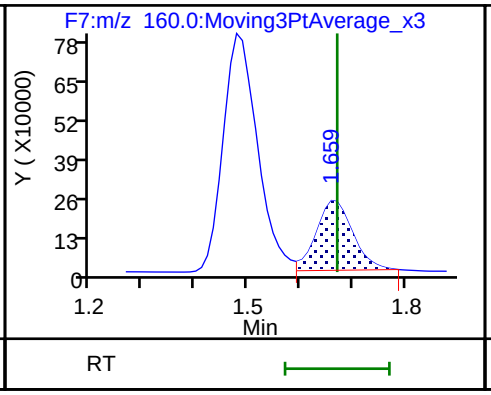
36 TNX



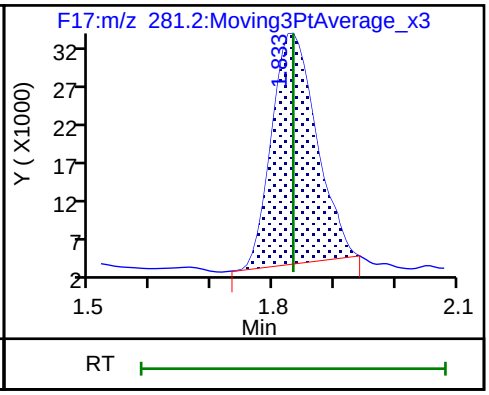
33 DNX



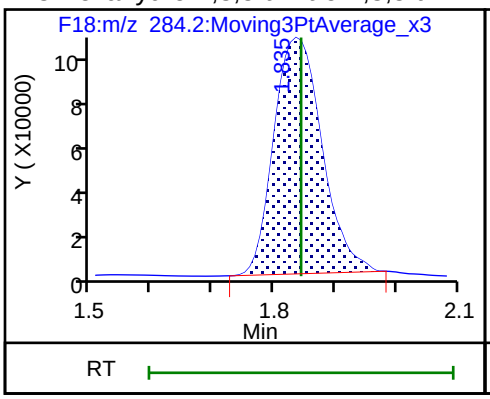
34 MNX



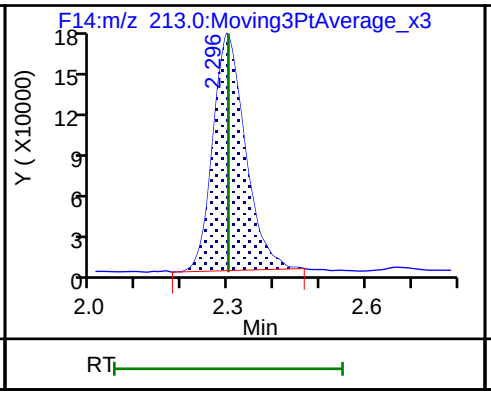
4 RDX



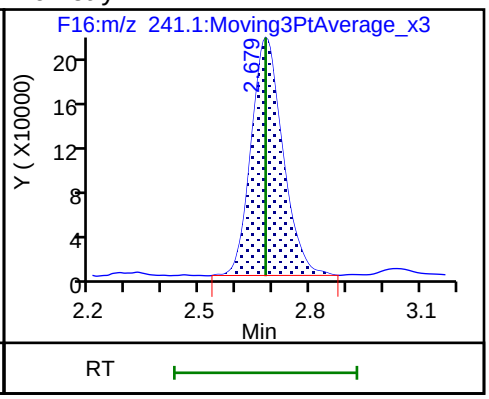
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



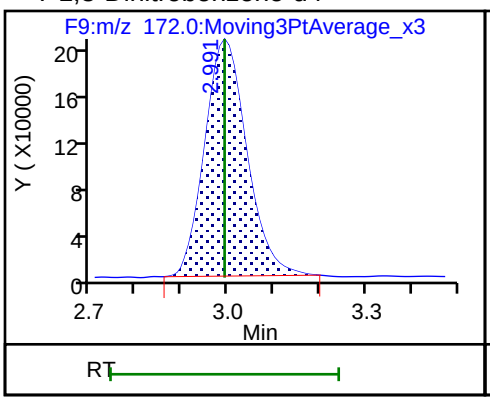
5 1,3,5-Trinitrobenzene



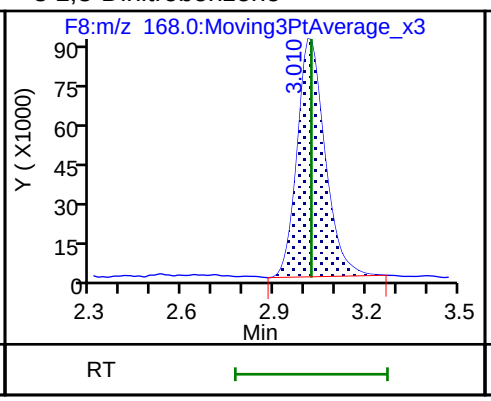
6 Tetryl



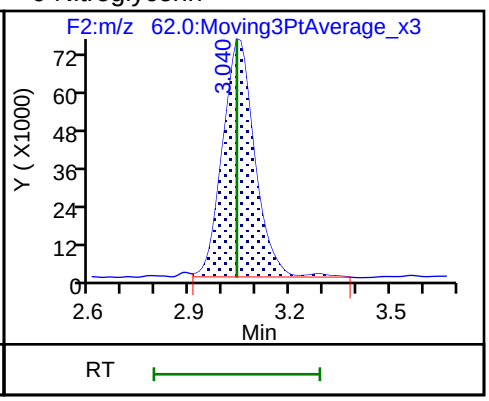
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



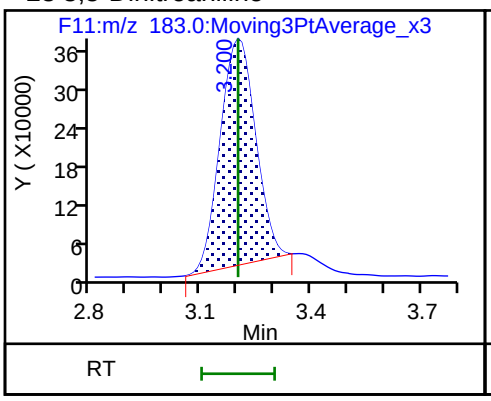
9 Nitroglycerin



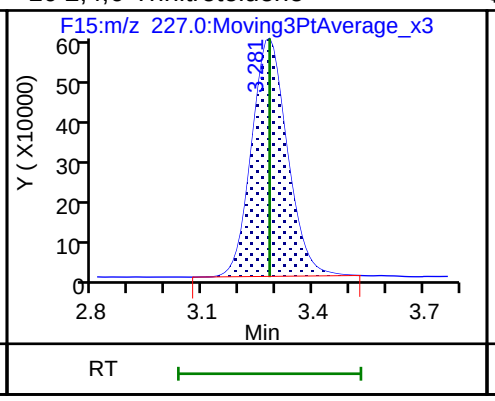
Report Date: 15-Apr-2022 08:02:09 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14006.d

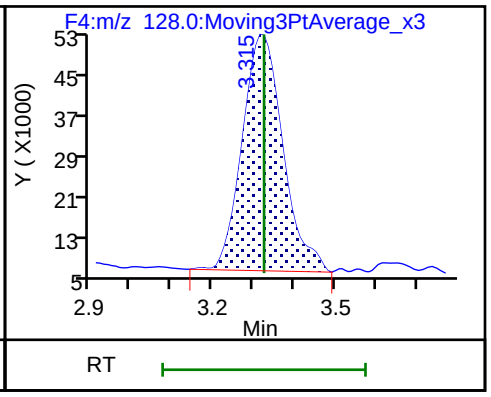
28 3,5-Dinitroaniline



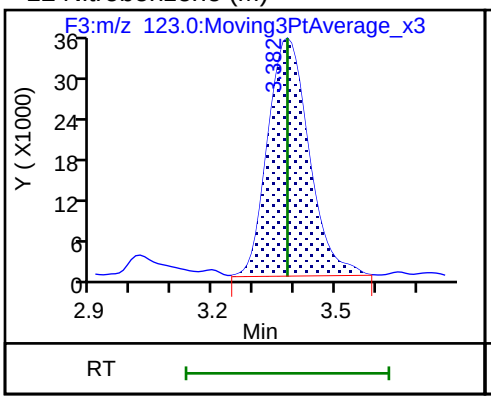
10 2,4,6-Trinitrotoluene



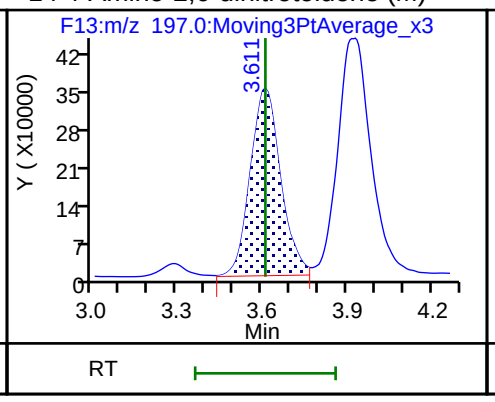
$ 11 Nitrobenzene-d5



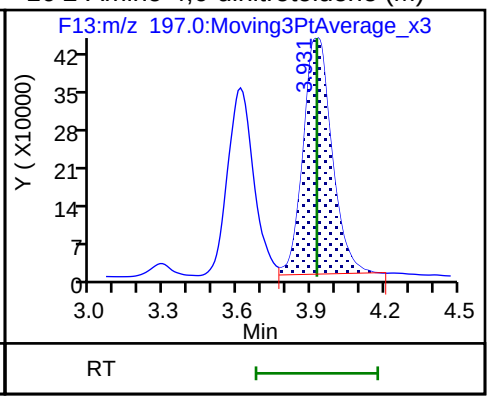
12 Nitrobenzene (M)



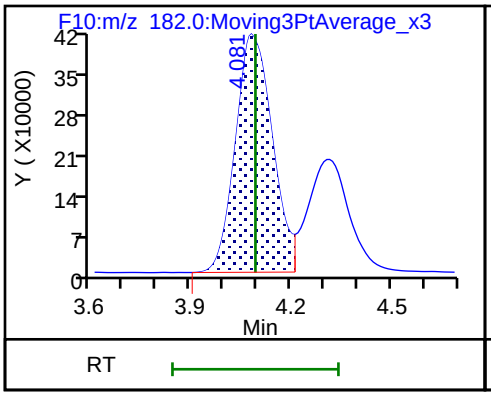
14 4-Amino-2,6-dinitrotoluene (M)



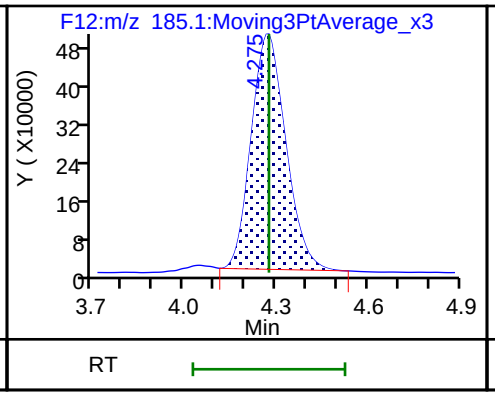
16 2-Amino-4,6-dinitrotoluene (M)



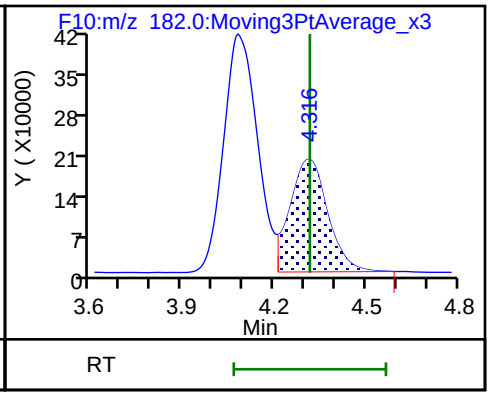
17 2,6-Dinitrotoluene



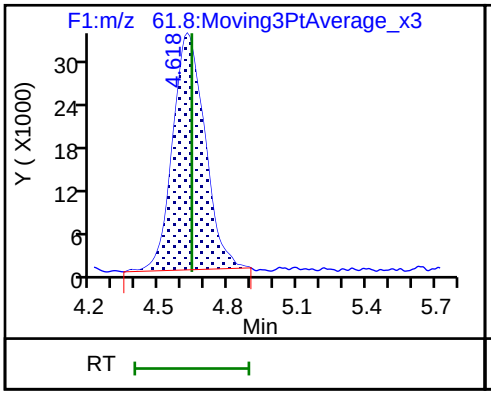
* 18 2,4-dinitrotoluene-d3



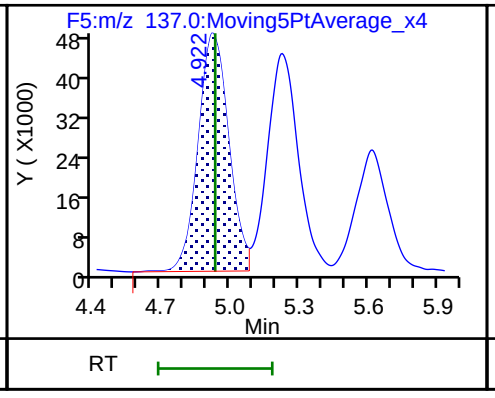
19 2,4-Dinitrotoluene



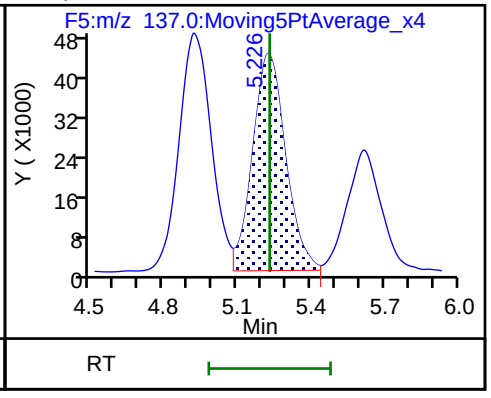
20 PETN



22 o-Nitrotoluene



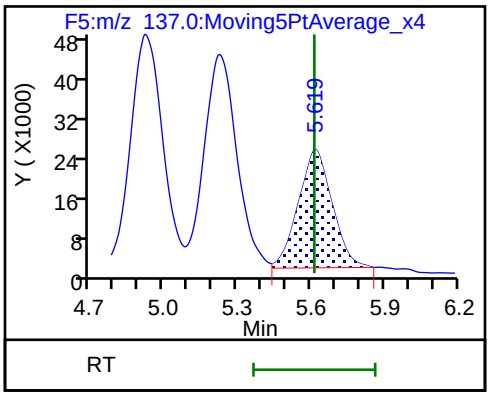
23 p-Nitrotoluene



Report Date: 15-Apr-2022 08:02:09 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14006.d

24 m-Nitrotoluene



Report Date: 15-Apr-2022 08:02:09 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14006.d

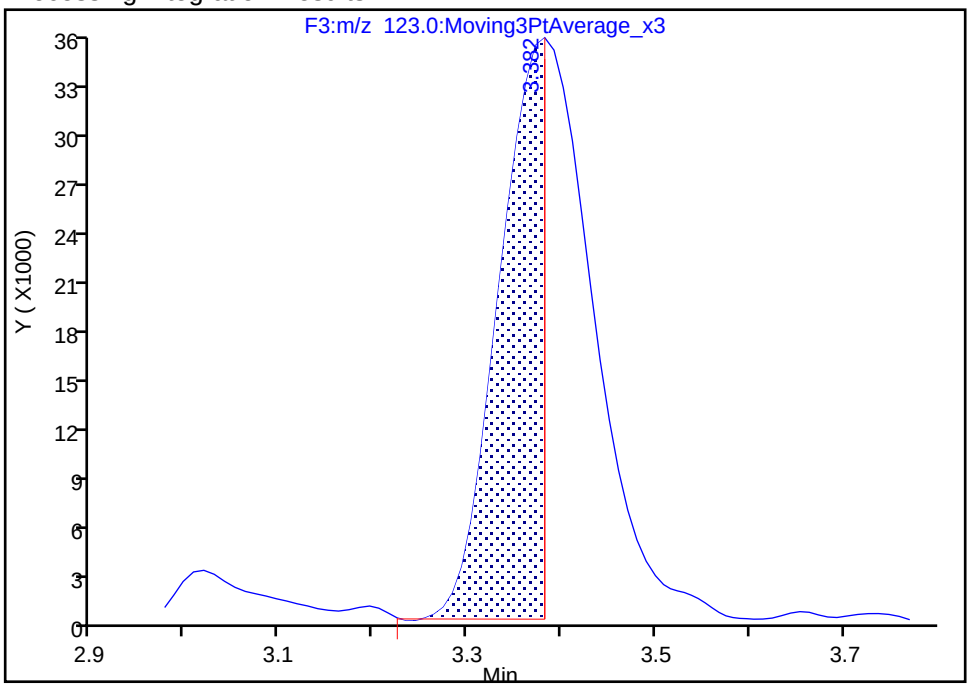
Injection Date:	14-Apr-2022 12:47:35	Instrument ID:	LC_LCMS7
Lims ID:	STD004		
Client ID:			
Operator ID:	acm	ALS Bottle#:	5 Worklist Smp#: 6
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F3:SIR

12 Nitrobenzene, CAS: 98-95-3

Signal: 1

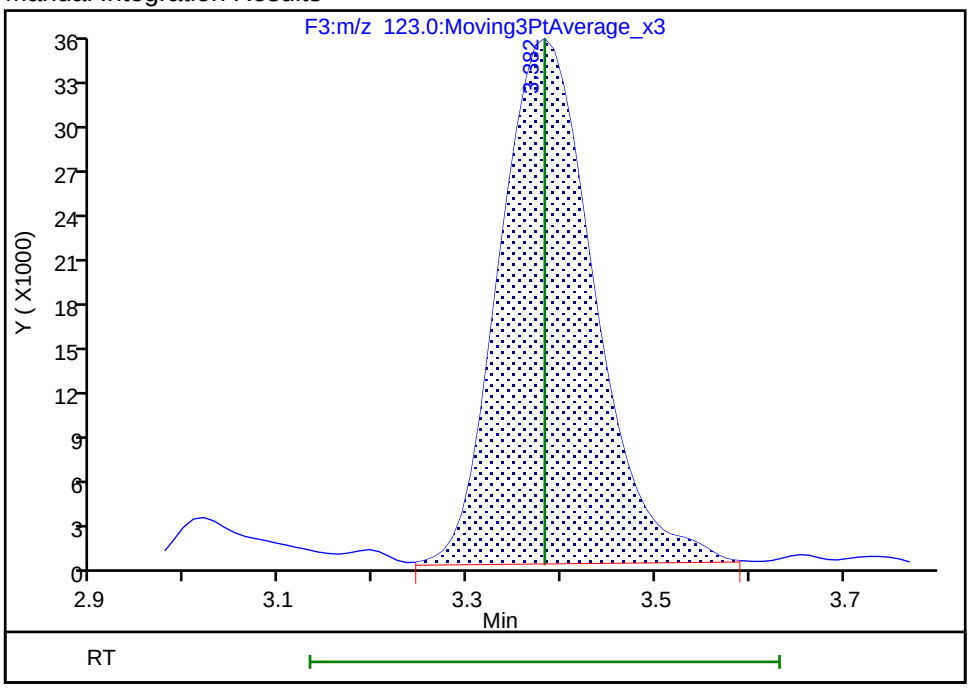
Processing Integration Results

RT: 3.38
Area: 112755
Amount: 25.850647
Amount Units: ug/l



Manual Integration Results

RT: 3.38
Area: 243563
Amount: 50.293161
Amount Units: ug/l



Reviewer: meyera, 14-Apr-2022 14:21:02

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:02:09 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

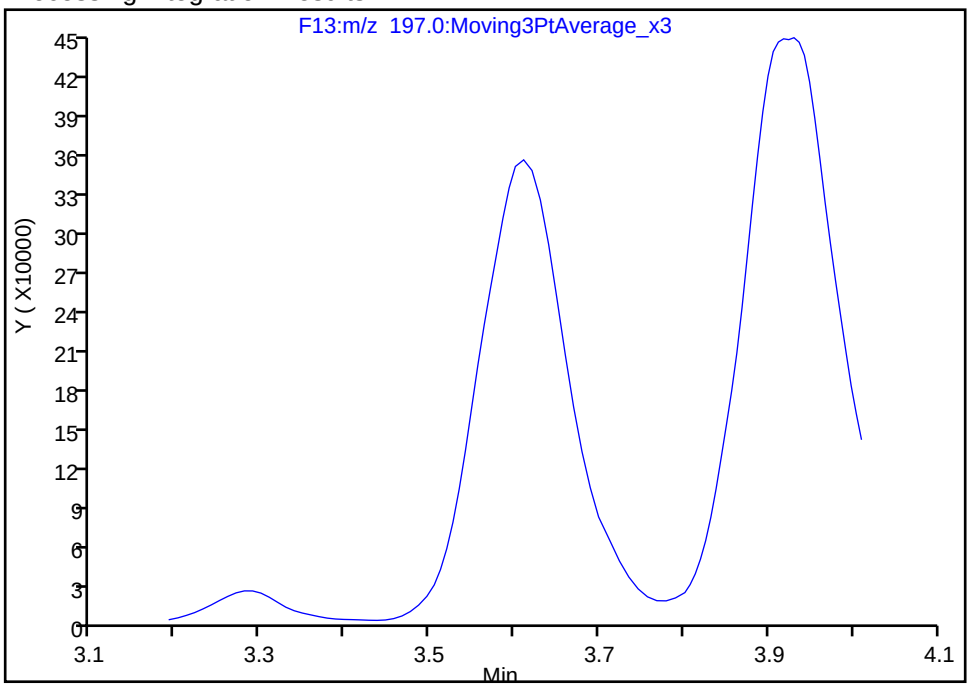
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14006.d
Injection Date: 14-Apr-2022 12:47:35 Instrument ID: LC_LCMS7
Lims ID: STD004
Client ID:
Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F13:SIR

14 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

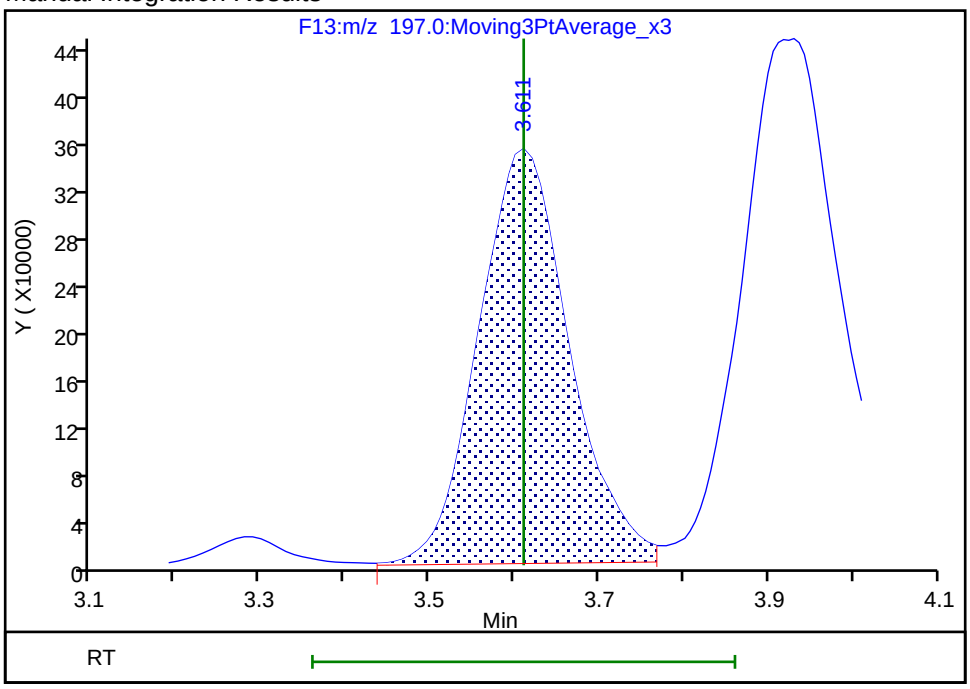
Not Detected
Expected RT: 3.61

Processing Integration Results



Manual Integration Results

RT: 3.61
Area: 2635624
Amount: 51.752202
Amount Units: ug/l



Reviewer: meyera, 14-Apr-2022 14:20:50
Audit Action: Manually Integrated Audit Reason: Assign Peak

Report Date: 15-Apr-2022 08:02:09 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14006.d

Injection Date:	14-Apr-2022 12:47:35	Instrument ID:	LC_LCMS7		
Lims ID:	STD004				
Client ID:					
Operator ID:	acm	ALS Bottle#:	5	Worklist Smp#:	6
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

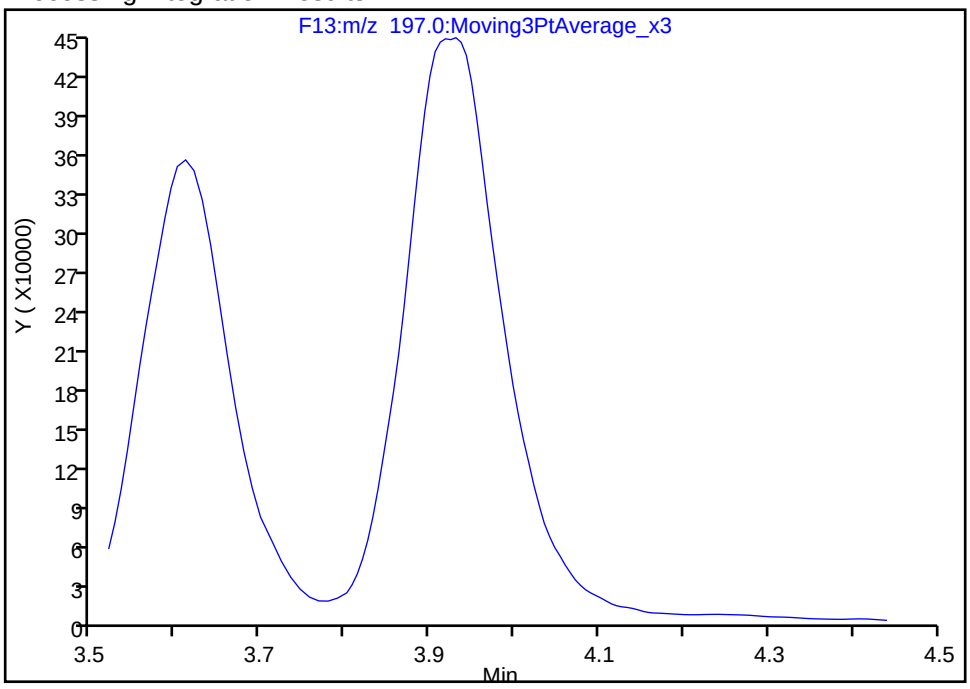
16 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

Not Detected

Expected RT: 3.92

Processing Integration Results



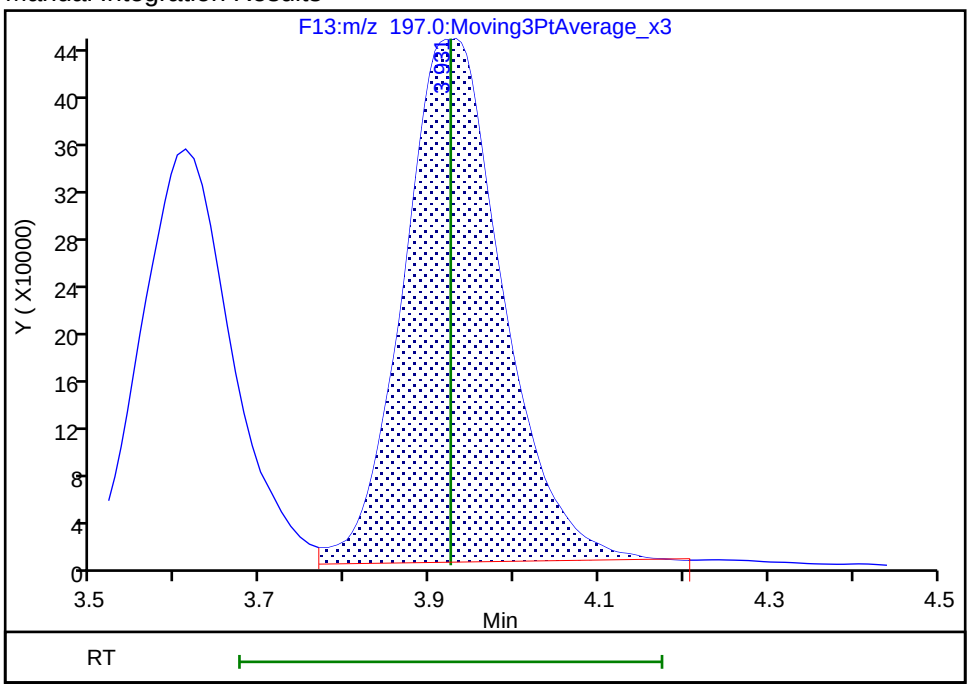
Manual Integration Results

RT: 3.93

Area: 3612016

Amount: 51.371573

Amount Units: ug/l



Reviewer: meyera, 14-Apr-2022 14:20:46

Audit Action: Manually Integrated Audit Reason: Assign Peak

Report Date: 15-Apr-2022 08:02:10 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14007.d
Lims ID: STD005
Client ID:
Sample Type: ICISAV Calib Level: 5
Inject. Date: 14-Apr-2022 12:54:10 ALS Bottle#: 6 Worklist Smp#: 7
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: STD L5
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:02:10 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 14-Apr-2022 14:19:42
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	217389	94.3	76.7	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		134080	125.0	83.8	
36 TNX								
144.0	1.385	1.385	0.0	0.751	5239091	102.3	538	
33 DNX								
160.0	1.489	1.489	0.0	0.807	7972759	105.3	565	
34 MNX								
160.0	1.670	1.670	0.0	0.906	2451053	121.0	163	
4 RDX								
281.2	1.833	1.833	0.0	0.994	321622	102.9	126	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		630638	125.0	184	
5 1,3,5-Trinitrobenzene								
213.0	2.299	2.299	0.0	0.769	1753794	94.9	233	
6 Tetryl								
241.1	2.679	2.679	0.0	0.896	2637936	93.8	132	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1363826	129.4	228	
8 1,3-Dinitrobenzene								
168.0	3.022	3.022	0.0	1.010	1096416	97.3	182	
9 Nitroglycerin								
62.0	3.040	3.040	0.0	1.016	968255	95.2	360	
28 3,5-Dinitroaniline								
183.0	3.200	3.200	0.0	1.070	4863986	101.7	60.5	

Report Date: 15-Apr-2022 08:02:10 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14007.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.281	3.281	0.0	0.768	7946590	101.0	279	
$ 11 Nitrobenzene-d5								
128.0	3.324	3.324	0.0	0.778	616016	100.9	107	
12 Nitrobenzene								
123.0	3.382	3.382	0.0	0.791	490224	96.9	44.7	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.611	3.611	0.0	0.845	5230680	98.2	54.0	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.924	3.924	0.0	0.918	7183080	97.4	74.3	
17 2,6-Dinitrotoluene								
182.0	4.093	4.093	0.0	0.957	6626543	100.0	597	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		4108244	125.0	119	
19 2,4-Dinitrotoluene								
182.0	4.316	4.316	0.0	1.010	3424498	98.0	268	
20 PETN								
61.8	4.638	4.638	0.0	1.085	641187	97.6	107	
22 o-Nitrotoluene								
137.0	4.932	4.932	0.0	1.153	912662	94.2	209	
23 p-Nitrotoluene								
137.0	5.230	5.230	0.0	1.223	830030	97.0	185	
24 m-Nitrotoluene								
137.0	5.614	5.614	0.0	1.313	483004	96.5	103	

QC Flag Legend

Processing Flags

Reagents:

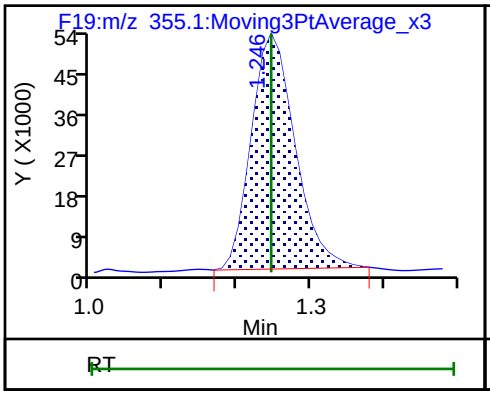
8321EXcalprim_00029	Amount Added: 10.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 10.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 15-Apr-2022 08:02:10 Chrom Revision: 2.3 12-Apr-2022 20:29:44

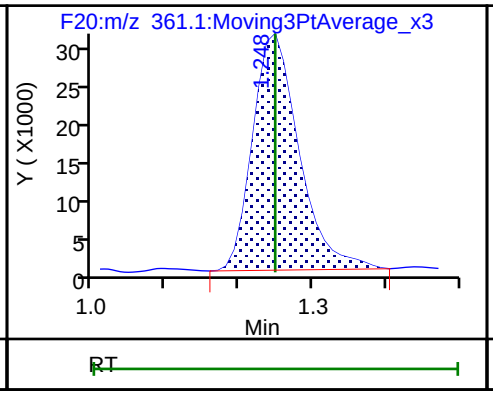
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14007.d
Injection Date: 14-Apr-2022 12:54:10 Instrument ID: LC_LCMS7
Lims ID: STD005
Client ID:
Operator ID: acm ALS Bottle#: 6 Worklist Smp#: 7
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

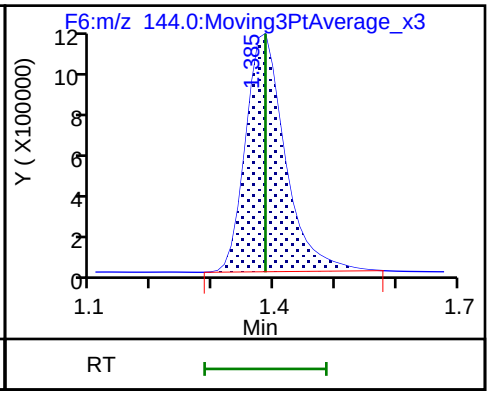
2 HMX



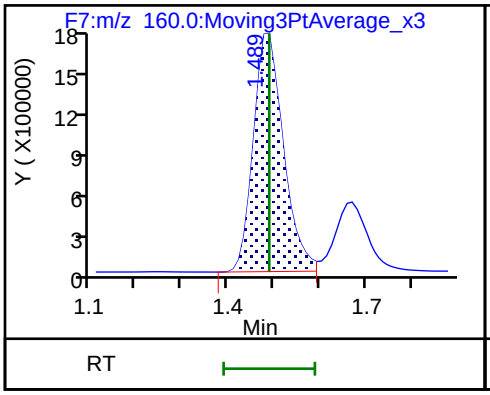
* 1 HMX-13C4



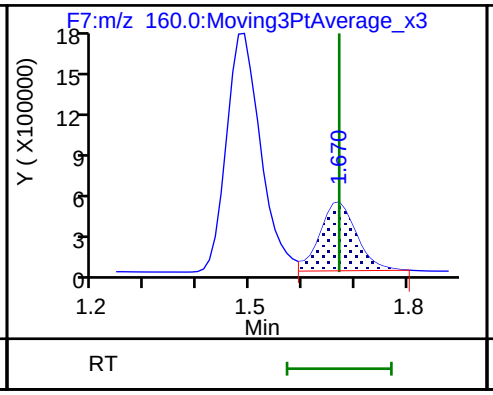
36 TNX



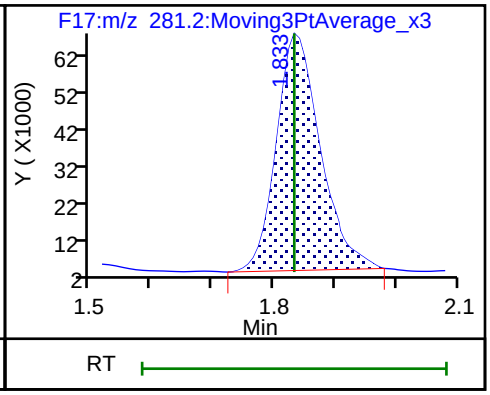
33 DNX



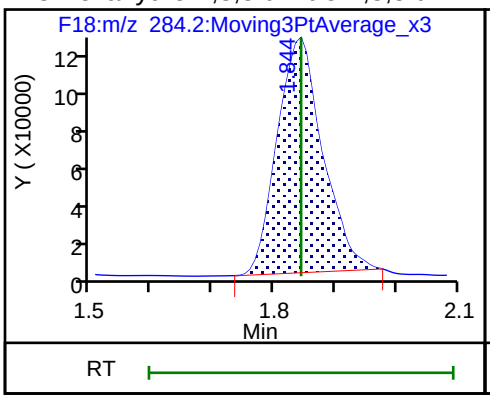
34 MNX



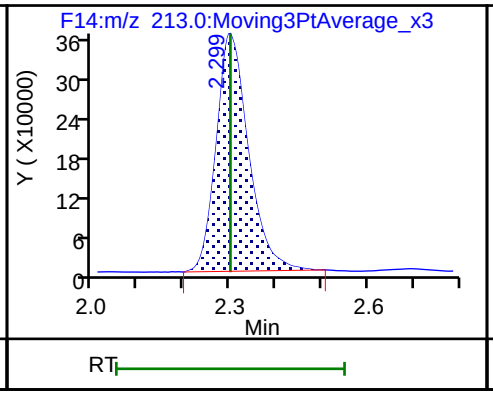
4 RDX



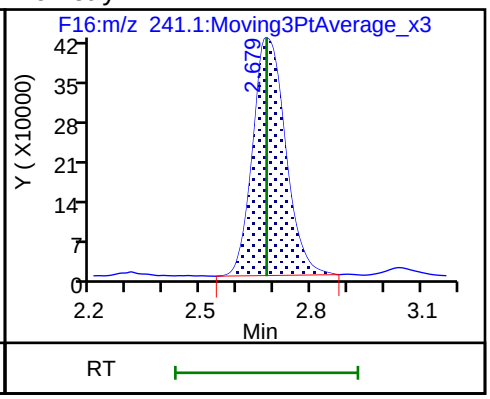
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



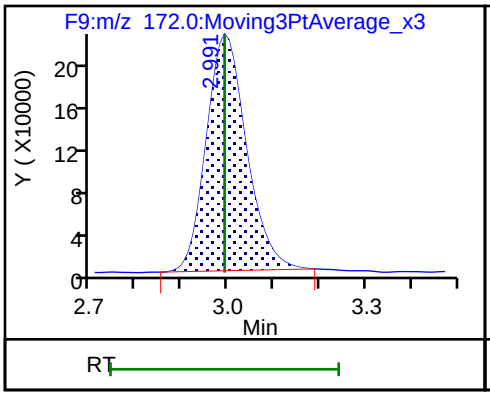
5 1,3,5-Trinitrobenzene



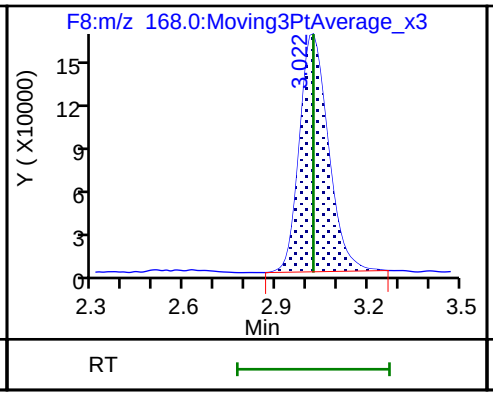
6 Tetryl



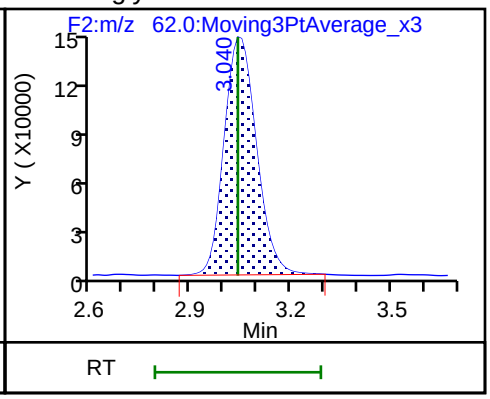
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

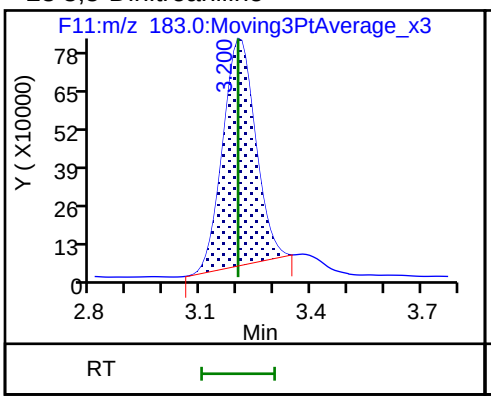


9 Nitroglycerin

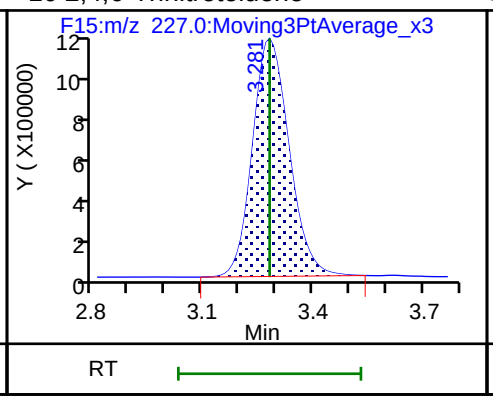


Report Date: 15-Apr-2022 08:02:10 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14007.d

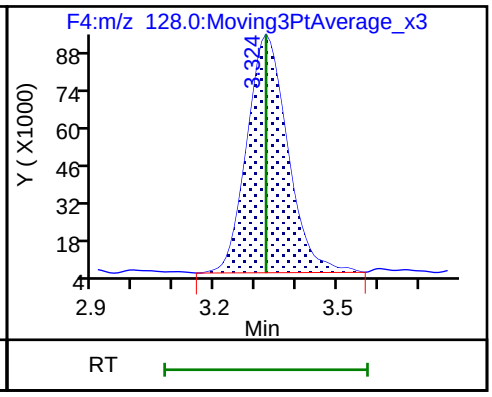
28 3,5-Dinitroaniline



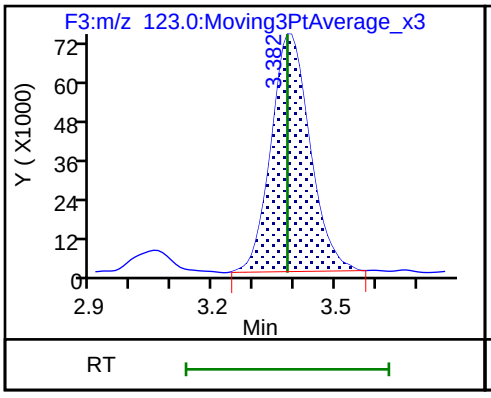
10 2,4,6-Trinitrotoluene



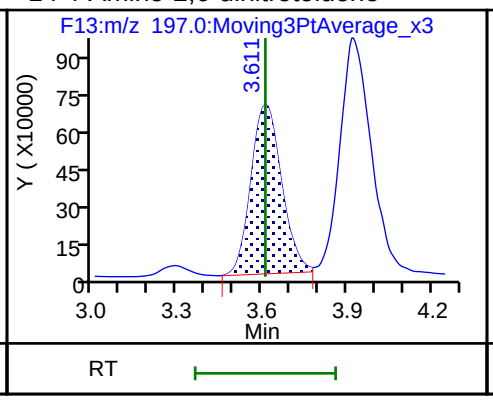
$ 11 Nitrobenzene-d5



12 Nitrobenzene



14 4-Amino-2,6-dinitrotoluene



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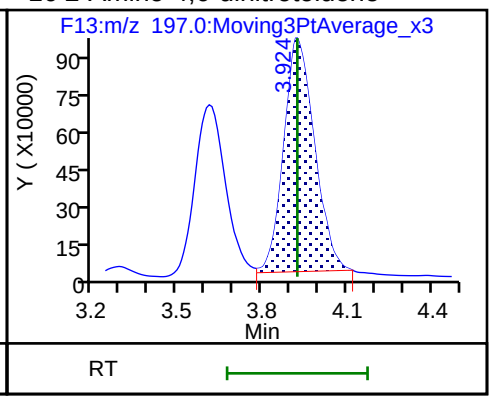
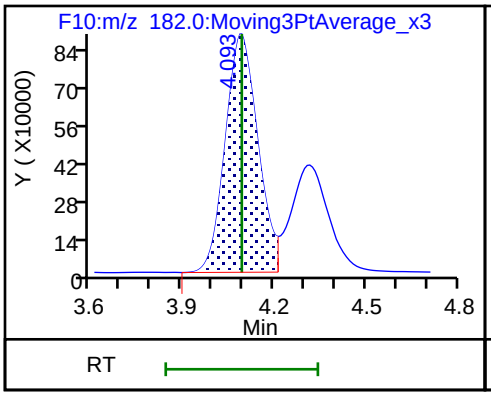
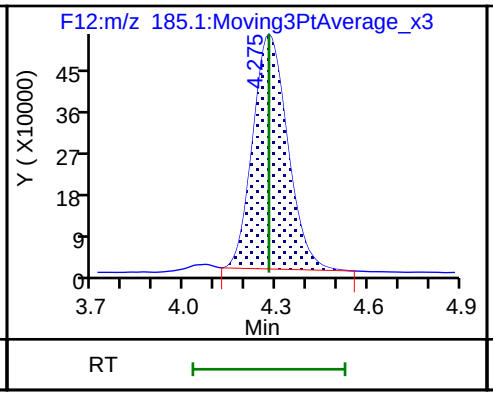


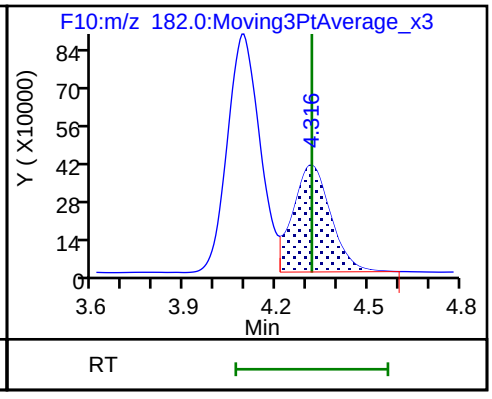
17 2,6-Dinitrotoluene



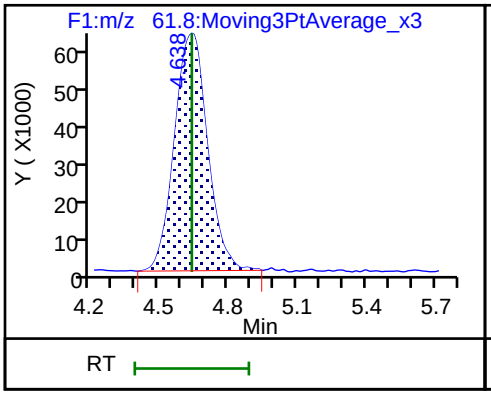
* 18 2,4-dinitrotoluene-d3



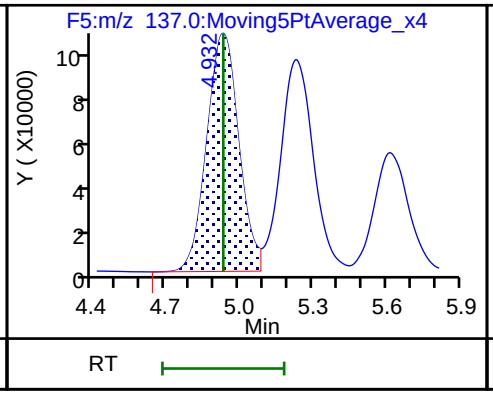
19 2,4-Dinitrotoluene



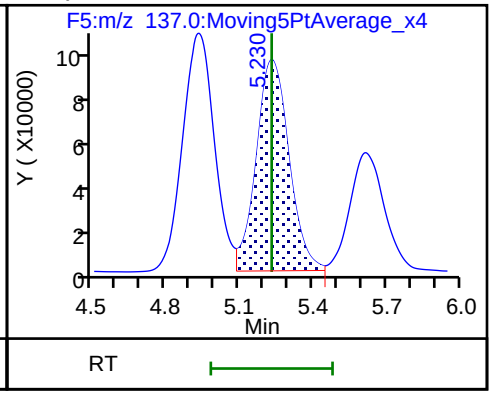
20 PETN



22 o-Nitrotoluene



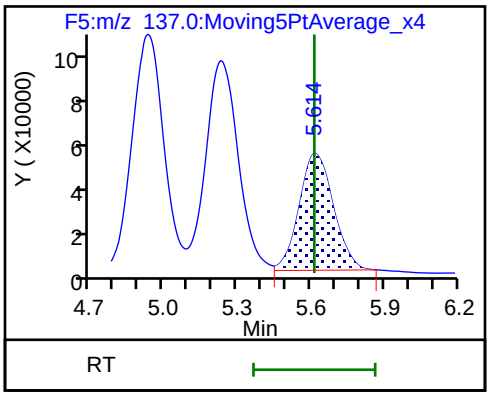
23 p-Nitrotoluene



Report Date: 15-Apr-2022 08:02:10 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14007.d

24 m-Nitrotoluene



Report Date: 15-Apr-2022 08:02:11 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14008.d
Lims ID: STD006
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 14-Apr-2022 13:00:46 ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: STD L6
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:02:10 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 14-Apr-2022 14:20:11
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	361768	188.5	133	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		112524	125.0	116	
36 TNX								
144.0	1.374	1.385	-0.011	0.752	9152884	203.0	785	
33 DNX								
160.0	1.477	1.489	-0.012	0.809	12999822	195.1	446	
34 MNX								
160.0	1.659	1.670	-0.011	0.908	4211252	236.1	136	
4 RDX								
281.2	1.833	1.833	0.0	1.003	538962	185.6	109	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.827	1.844	-0.017		686693	125.0	451	
5 1,3,5-Trinitrobenzene								
213.0	2.296	2.299	-0.003	0.770	3276652	200.2	213	
6 Tetryl								
241.1	2.685	2.679	0.006	0.901	5130862	205.5	159	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.981	2.991	-0.010		1209314	129.4	255	
8 1,3-Dinitrobenzene								
168.0	3.022	3.022	0.0	1.014	2091311	210.4	208	
9 Nitroglycerin								
62.0	3.040	3.040	0.0	1.020	1873245	209.1	671	
28 3,5-Dinitroaniline								
183.0	3.200	3.200	0.0	1.074	8720279	195.7	53.1	

Report Date: 15-Apr-2022 08:02:11 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14008.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.281	3.281	0.0	0.768	14522604	198.4	335	
$ 11 Nitrobenzene-d5								
128.0	3.315	3.324	-0.009	0.775	1123980	209.5	138	
12 Nitrobenzene								
123.0	3.382	3.382	0.0	0.791	927889	207.2	44.3	
14 4-Amino-2,6-dinitrotoluene								M
197.0	3.601	3.611	-0.010	0.842	10281431	207.2	64.8	M
16 2-Amino-4,6-dinitrotoluene								M
197.0	3.918	3.924	-0.006	0.916	14021608	203.7	80.7	M
17 2,6-Dinitrotoluene								
182.0	4.087	4.093	-0.006	0.956	12646602	204.7	673	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3844541	125.0	123	
19 2,4-Dinitrotoluene								
182.0	4.308	4.316	-0.008	1.008	6520176	200.5	313	
20 PETN								
61.8	4.628	4.638	-0.010	1.082	1269048	207.8	195	
22 o-Nitrotoluene								
137.0	4.927	4.932	-0.005	1.152	1881330	208.0	371	
23 p-Nitrotoluene								
137.0	5.231	5.230	0.001	1.223	1639822	205.4	311	
24 m-Nitrotoluene								
137.0	5.619	5.614	0.005	1.314	973558	208.3	170	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

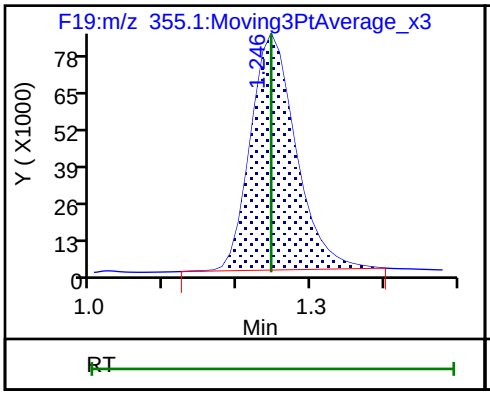
8321EXcalprim_00029	Amount Added: 20.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 20.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 15-Apr-2022 08:02:11 Chrom Revision: 2.3 12-Apr-2022 20:29:44

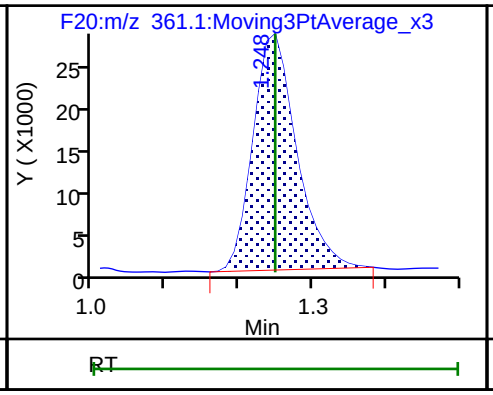
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14008.d
Injection Date: 14-Apr-2022 13:00:46 Instrument ID: LC_LCMS7
Lims ID: STD006
Client ID:
Operator ID: acm ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

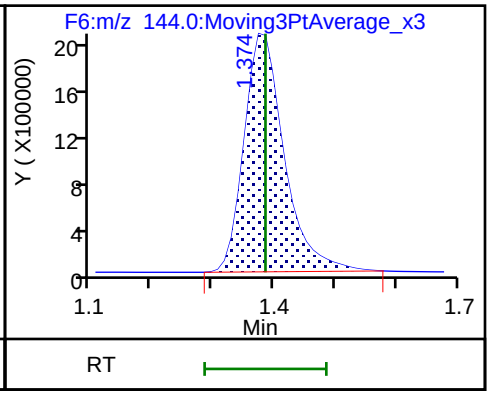
2 HMX



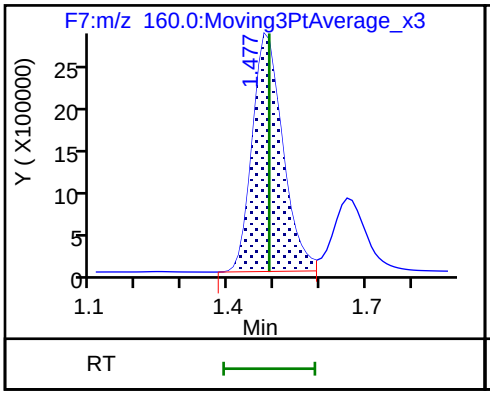
* 1 HMX-13C4



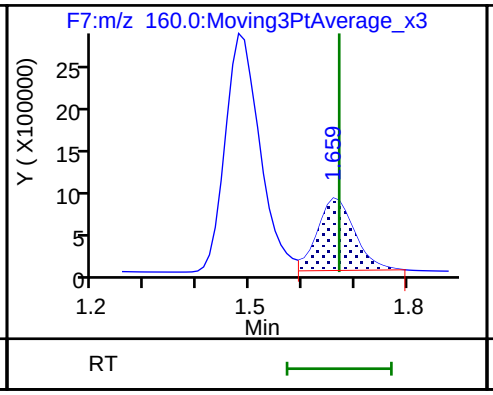
36 TNX



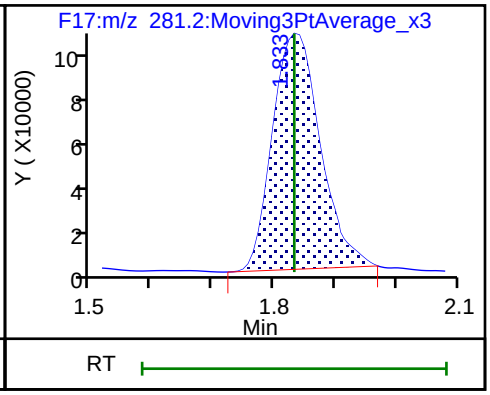
33 DNX



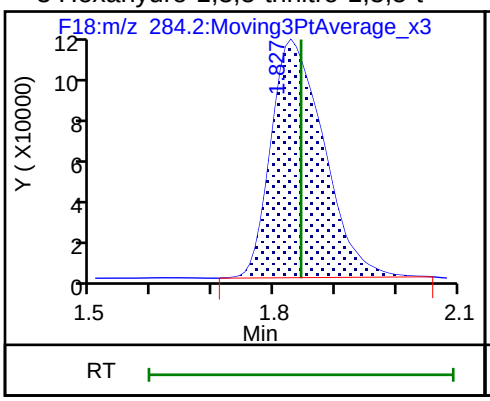
34 MNX



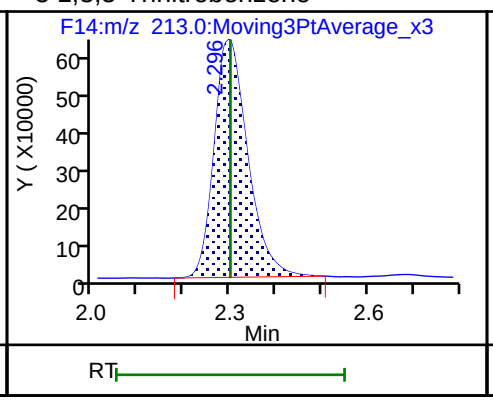
4 RDX



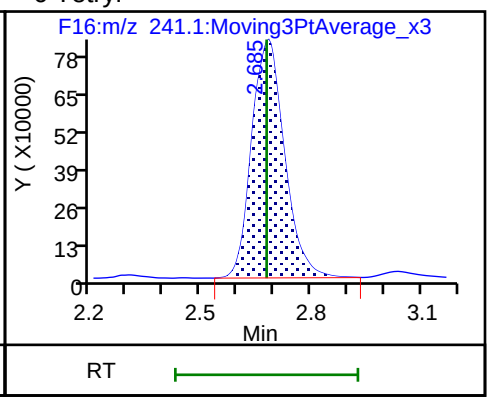
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



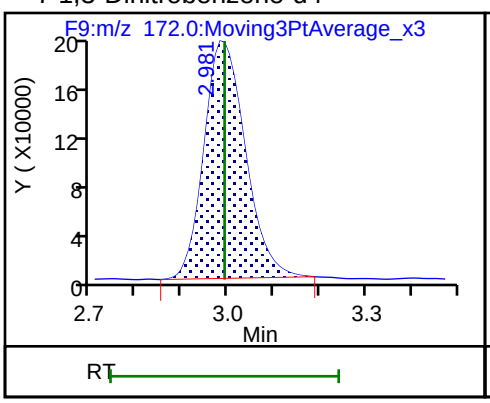
5 1,3,5-Trinitrobenzene



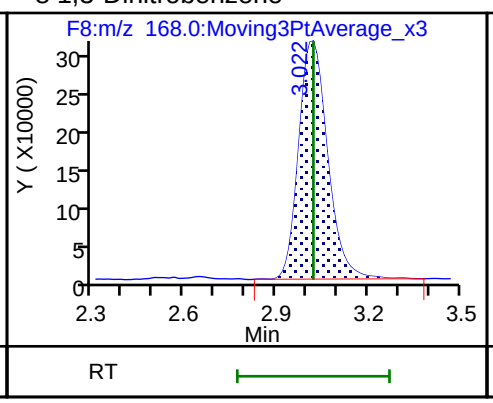
6 Tetryl



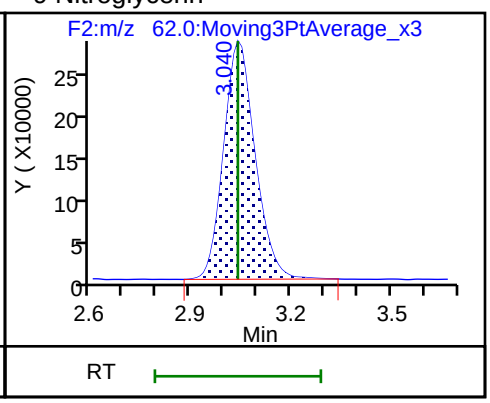
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



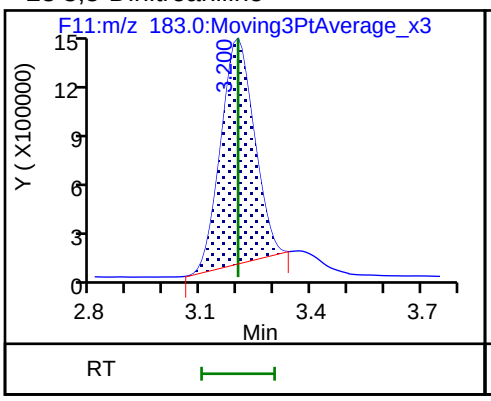
9 Nitroglycerin



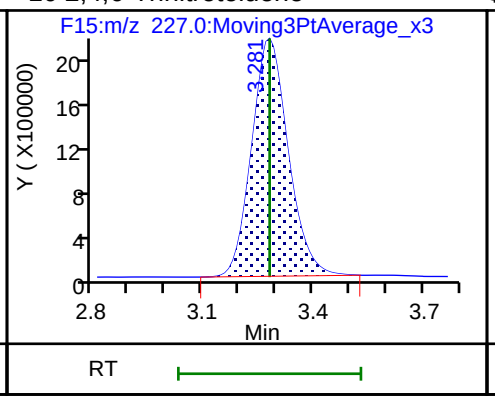
Report Date: 15-Apr-2022 08:02:11 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14008.d

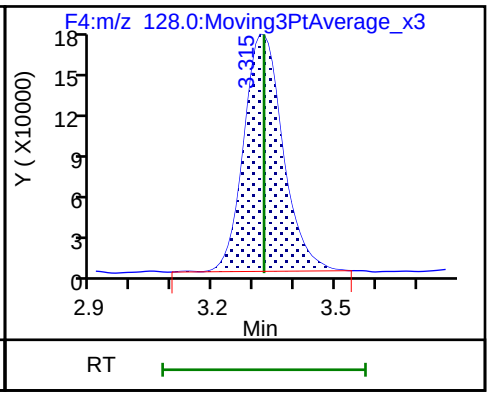
28 3,5-Dinitroaniline



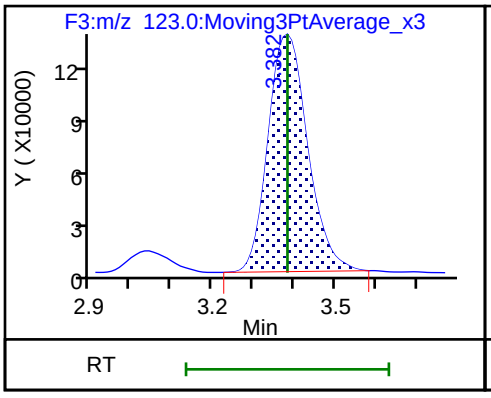
10 2,4,6-Trinitrotoluene



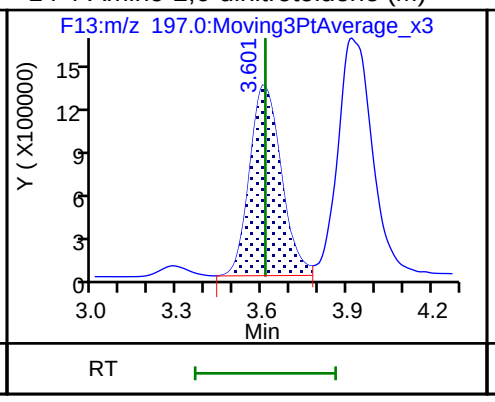
$ 11 Nitrobenzene-d5



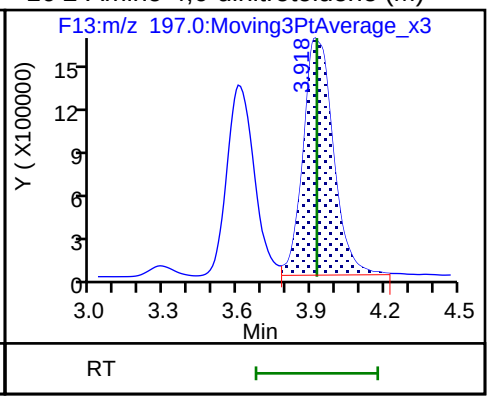
12 Nitrobenzene



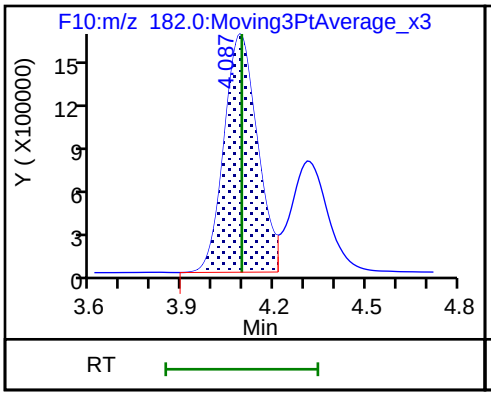
14 4-Amino-2,6-dinitrotoluene (M)



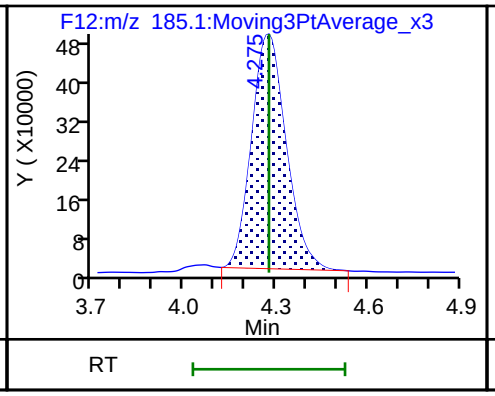
16 2-Amino-4,6-dinitrotoluene (M)



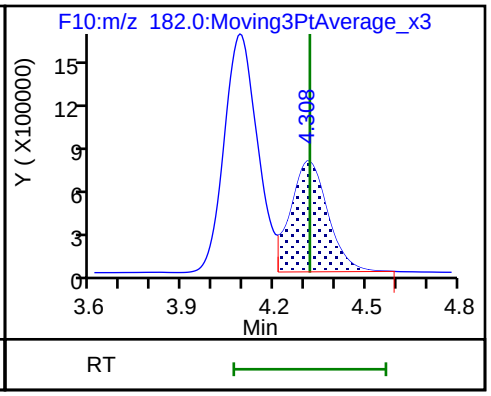
17 2,6-Dinitrotoluene



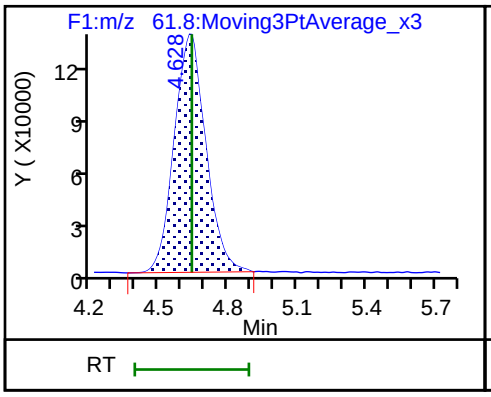
* 18 2,4-dinitrotoluene-d3



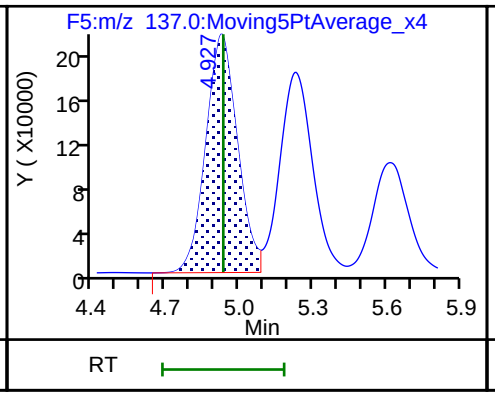
19 2,4-Dinitrotoluene



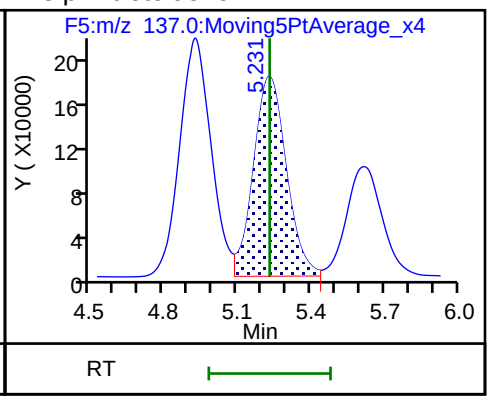
20 PETN



22 o-Nitrotoluene



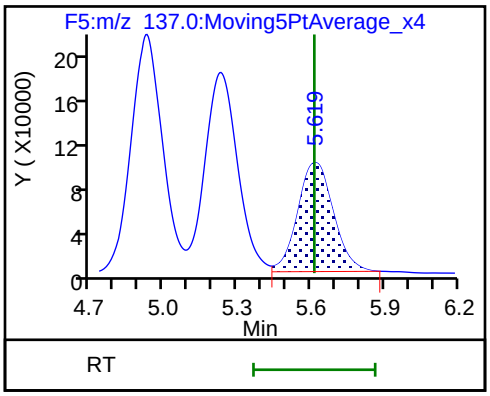
23 p-Nitrotoluene



Report Date: 15-Apr-2022 08:02:11 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14008.d

24 m-Nitrotoluene



Report Date: 15-Apr-2022 08:02:11 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

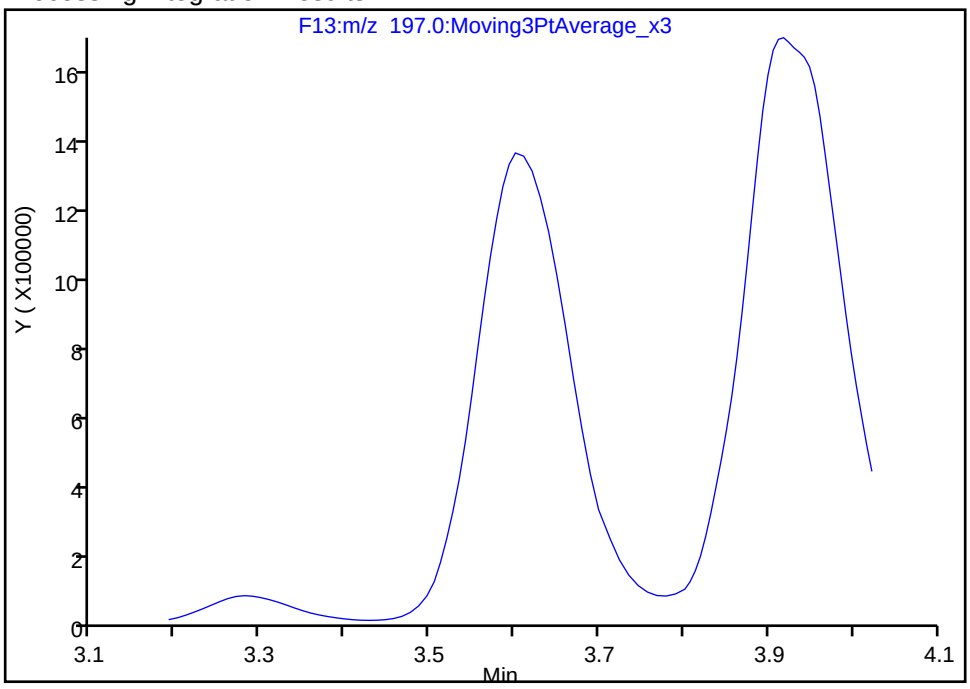
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14008.d
Injection Date: 14-Apr-2022 13:00:46 Instrument ID: LC_LCMS7
Lims ID: STD006
Client ID:
Operator ID: acm ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F13:SIR

14 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

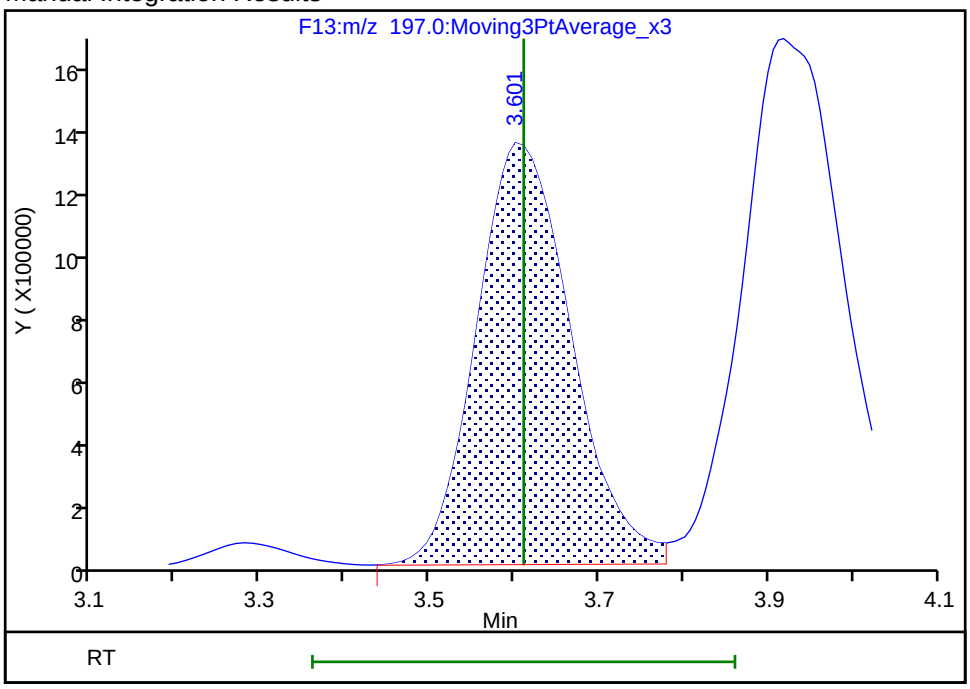
Not Detected
Expected RT: 3.61

Processing Integration Results



Manual Integration Results

RT: 3.60
Area: 10281431
Amount: 207.1915
Amount Units: ug/l



Reviewer: meyera, 14-Apr-2022 14:20:04
Audit Action: Manually Integrated Audit Reason: Assign Peak

Report Date: 15-Apr-2022 08:02:11 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14008.d

Injection Date: 14-Apr-2022 13:00:46 Instrument ID: LC_LCMS7

Lims ID: STD006

Client ID:

Operator ID: acm ALS Bottle#: 7 Worklist Smp#: 8

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

Column: Detector F13:SIR

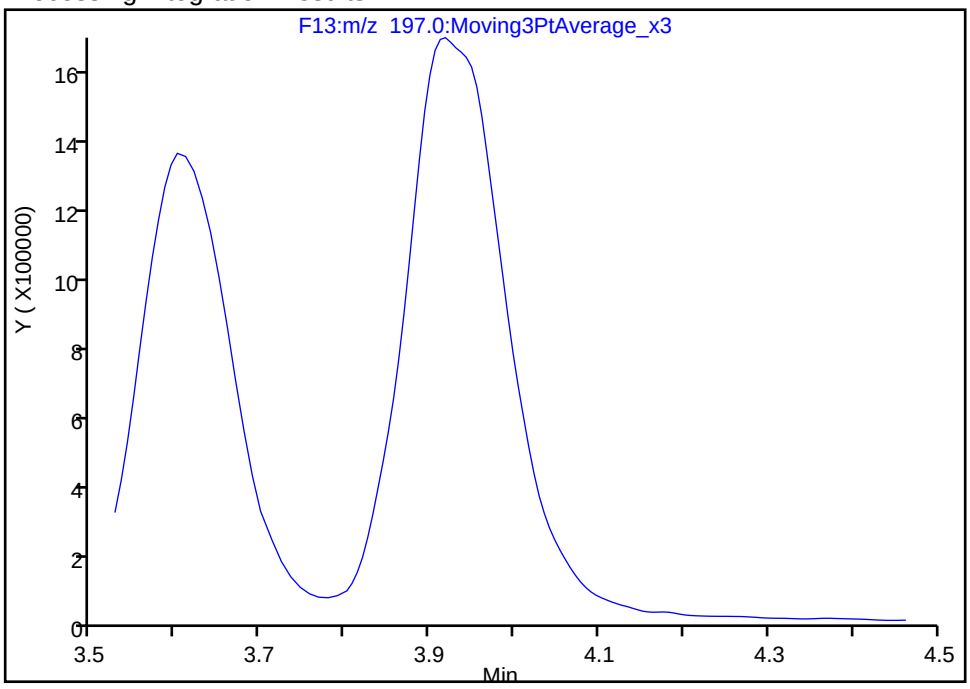
16 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

Not Detected

Expected RT: 3.92

Processing Integration Results



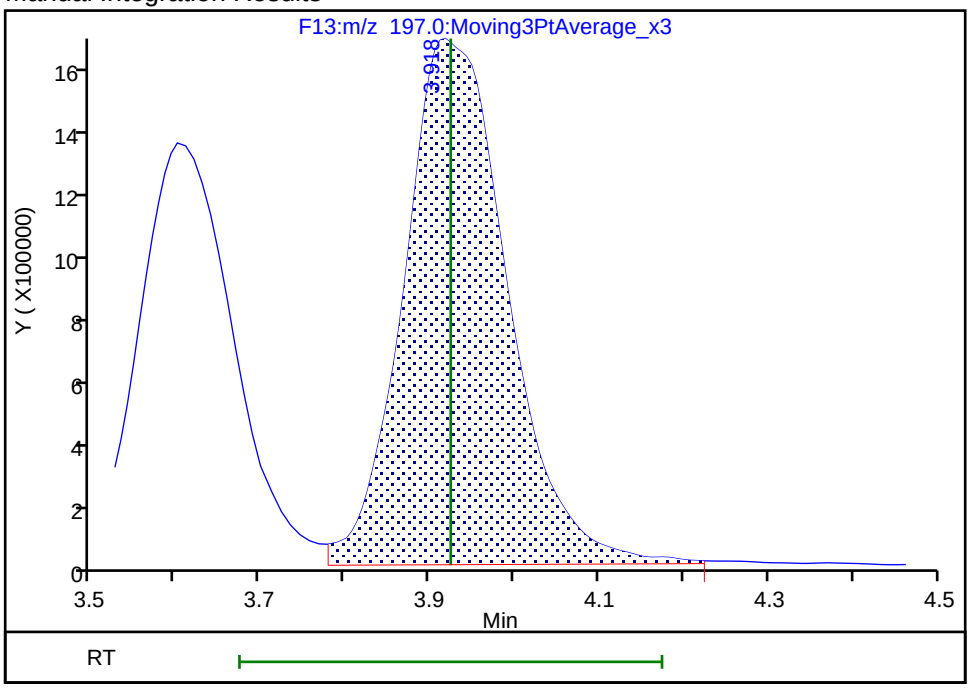
Manual Integration Results

RT: 3.92

Area: 14021608

Amount: 203.6788

Amount Units: ug/l



Reviewer: meyera, 14-Apr-2022 14:20:04

Audit Action: Assigned New Baseline Audit Reason: Assign Peak

Report Date: 15-Apr-2022 08:02:11 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d
Lims ID: STD007
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 14-Apr-2022 13:07:22 ALS Bottle#: 8 Worklist Smp#: 9
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: STD L7
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:02:11 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 14-Apr-2022 14:20:31
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	534088	315.7	186	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		99503	125.0	53.2	
36 TNX								
144.0	1.385	1.385	0.0	0.755	14101547	294.4	736	
33 DNX								
160.0	1.477	1.489	-0.012	0.805	21139125	298.9	467	
34 MNX								
160.0	1.659	1.670	-0.011	0.904	6466940	341.3	135	
4 RDX								
281.2	1.833	1.833	0.0	0.998	829459	334.3	265	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		824074	125.0	199	
5 1,3,5-Trinitrobenzene								
213.0	2.299	2.299	0.0	0.769	5348643	307.3	223	
6 Tetryl								
241.1	2.679	2.679	0.0	0.896	8113830	305.2	159	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1287191	129.4	659	
8 1,3-Dinitrobenzene								
168.0	3.022	3.022	0.0	1.010	3065484	290.2	248	
9 Nitroglycerin								
62.0	3.051	3.040	0.011	1.020	2826728	296.9	827	
28 3,5-Dinitroaniline								M
183.0	3.200	3.200	0.0	1.070	13819957	301.4	53.8	M

Report Date: 15-Apr-2022 08:02:11 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.281	3.281	0.0	0.768	22576043	299.7	351	
$ 11 Nitrobenzene-d5								
128.0	3.324	3.324	0.0	0.778	1639324	287.8	209	
12 Nitrobenzene								
123.0	3.382	3.382	0.0	0.791	1422456	298.6	44.5	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.601	3.611	-0.010	0.842	15016282	293.9	57.8	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.924	3.924	0.0	0.918	21327930	300.8	76.5	
17 2,6-Dinitrotoluene								
182.0	4.087	4.093	-0.006	0.956	18926468	297.5	859	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3963223	125.0	126	
19 2,4-Dinitrotoluene								
182.0	4.316	4.316	0.0	1.010	10192226	304.6	424	
20 PETN								
61.8	4.638	4.638	0.0	1.085	1849824	294.4	268	
22 o-Nitrotoluene								
137.0	4.932	4.932	0.0	1.153	2789165	299.4	521	
23 p-Nitrotoluene								
137.0	5.235	5.230	0.005	1.225	2457291	298.9	444	
24 m-Nitrotoluene								
137.0	5.619	5.614	0.005	1.314	1429488	297.0	244	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

8321EXcalprim_00029	Amount Added: 30.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 30.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 15-Apr-2022 08:02:11 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Injection Date: 14-Apr-2022 13:07:22 Instrument ID: LC_LCMS7

Lims ID: STD007

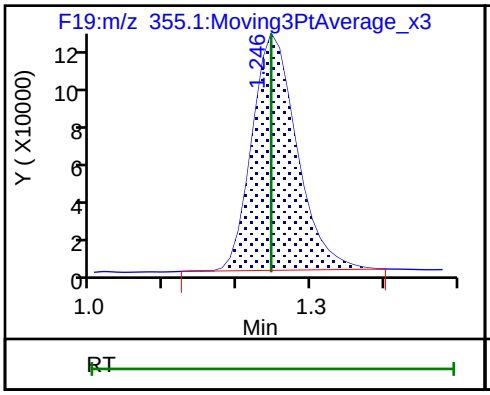
Client ID:

Operator ID: acm ALS Bottle#: 8 Worklist Smp#: 9

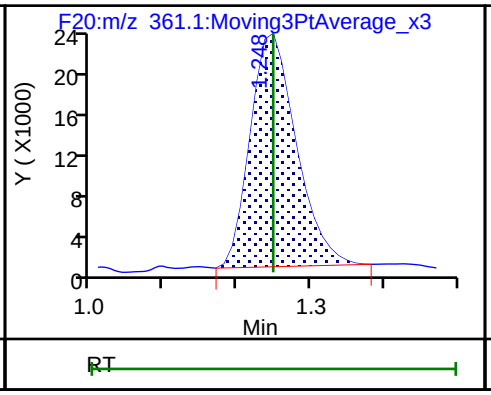
Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

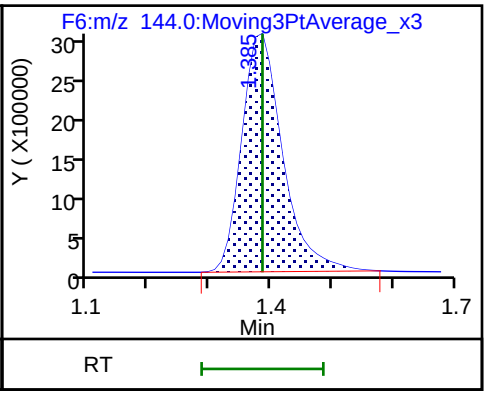
2 HMX



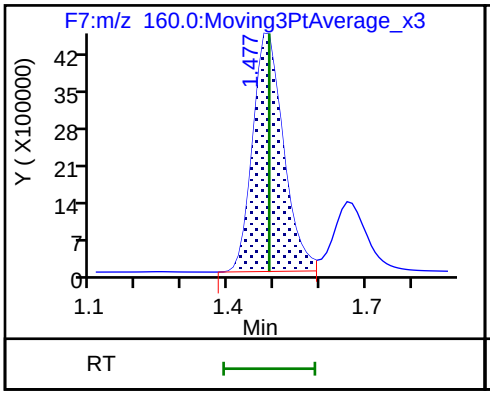
* 1 HMX-13C4



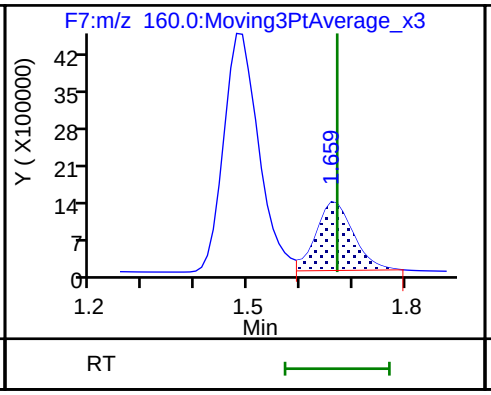
36 TNX



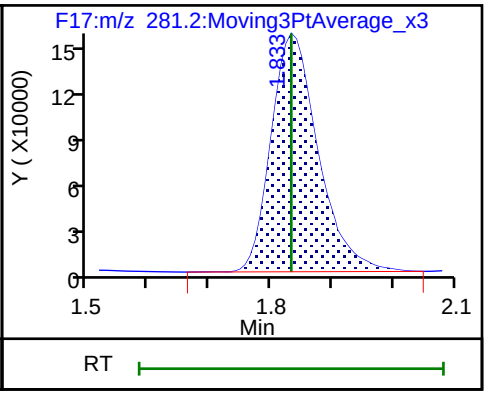
33 DNX



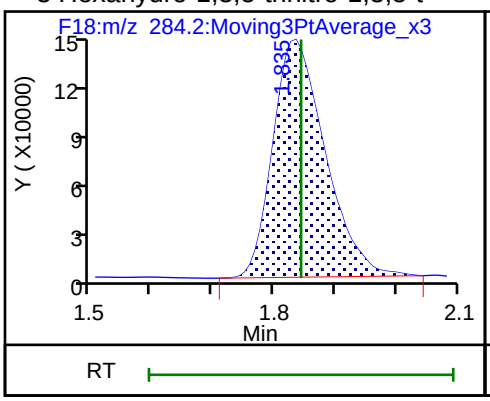
34 MNX



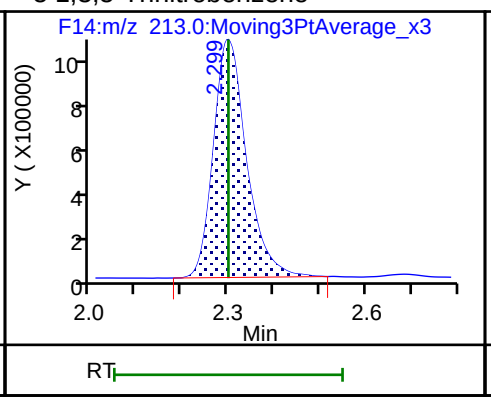
4 RDX



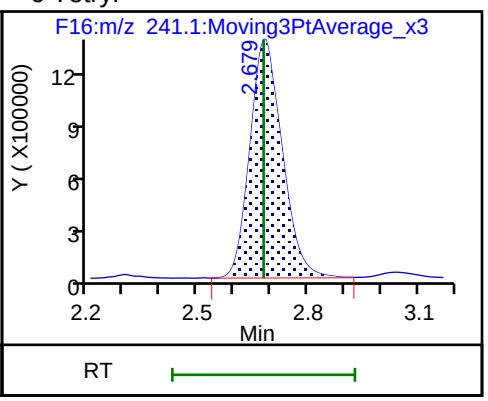
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



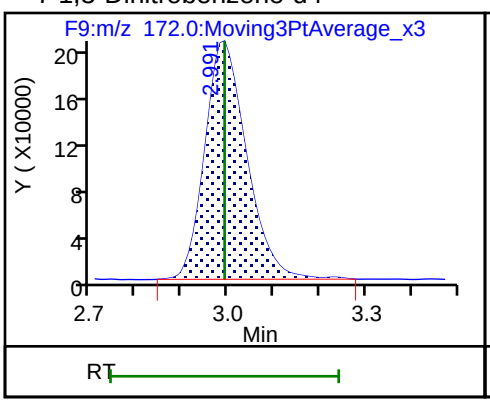
5 1,3,5-Trinitrobenzene



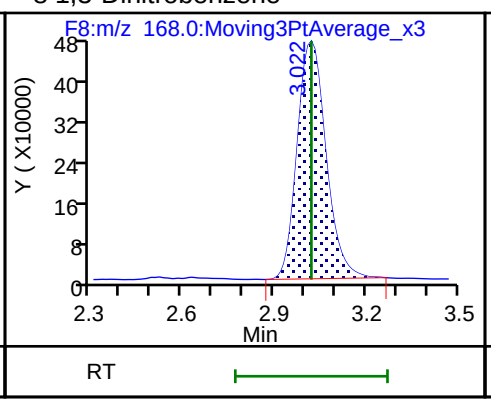
6 Tetryl



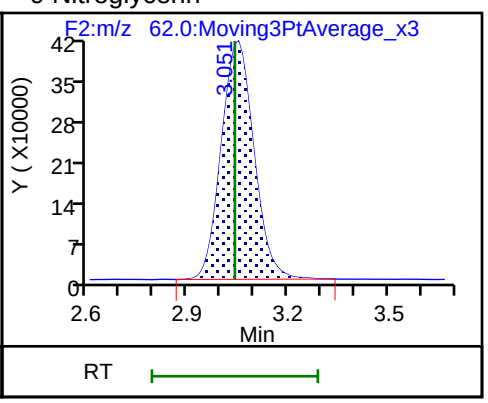
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

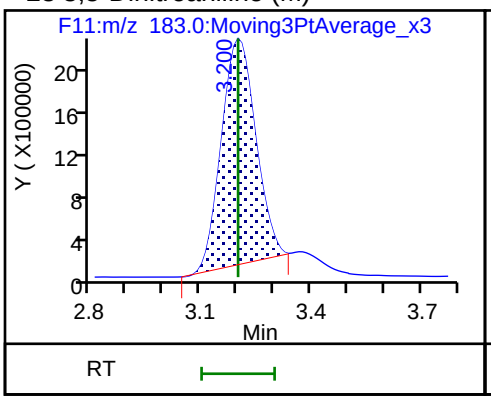


9 Nitroglycerin

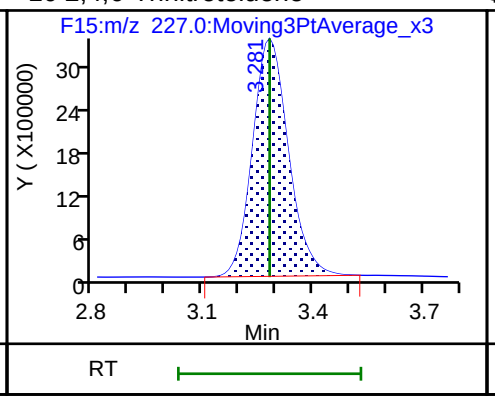


Report Date: 15-Apr-2022 08:02:11 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

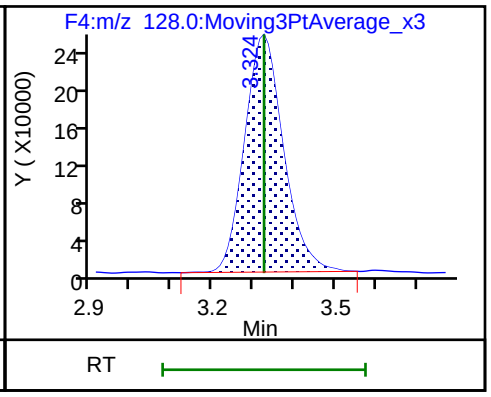
28 3,5-Dinitroaniline (M)



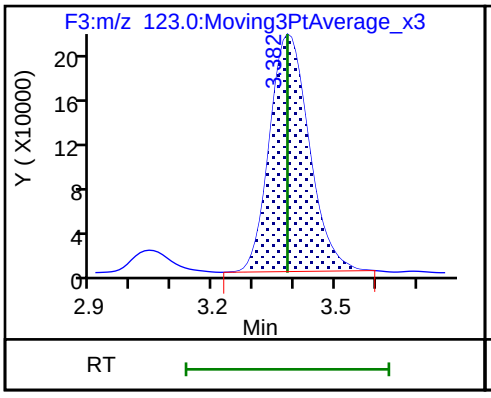
10 2,4,6-Trinitrotoluene



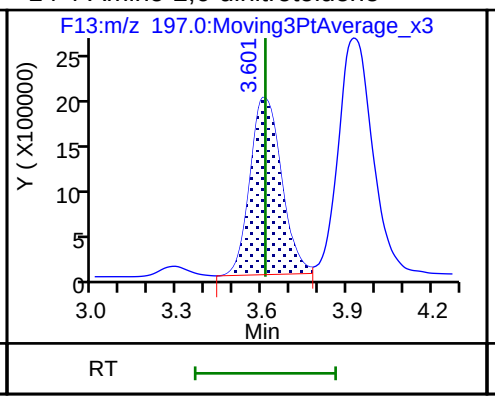
$ 11 Nitrobenzene-d5



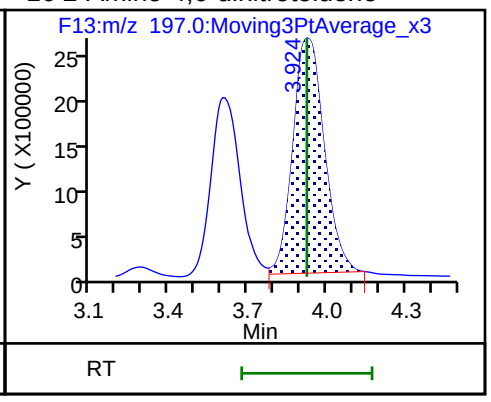
12 Nitrobenzene



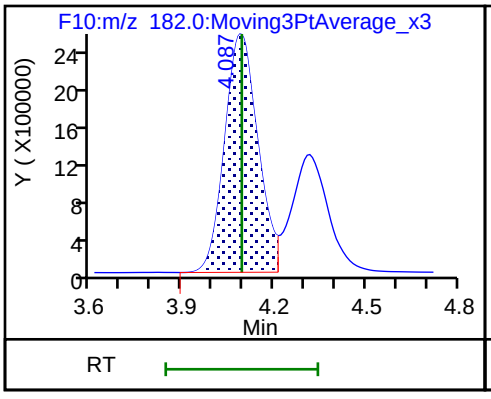
14 4-Amino-2,6-dinitrotoluene



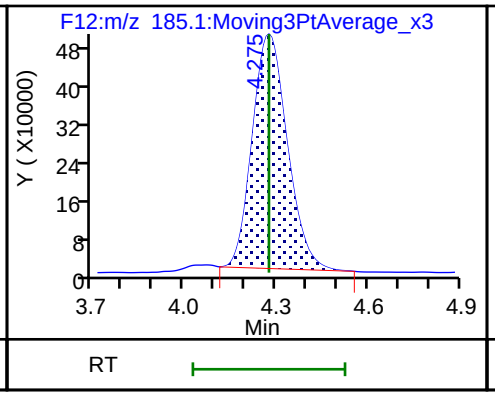
16 2-Amino-4,6-dinitrotoluene



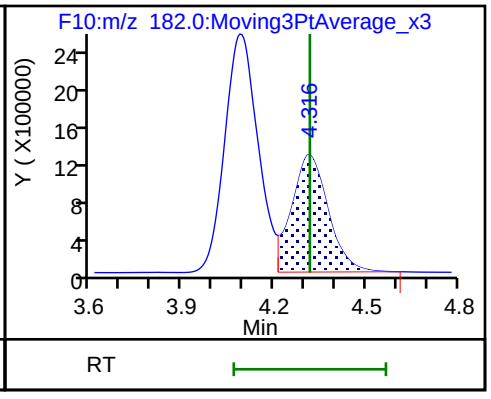
17 2,6-Dinitrotoluene



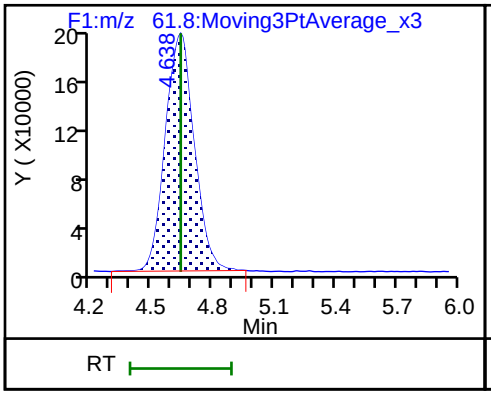
* 18 2,4-dinitrotoluene-d3



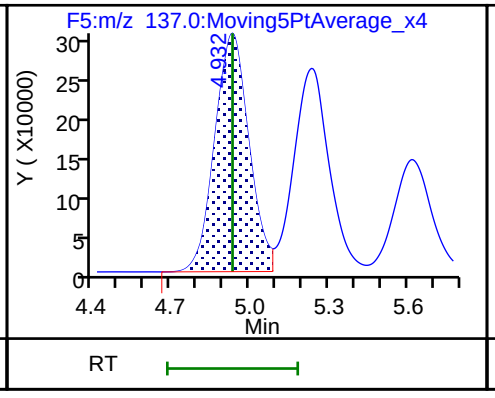
19 2,4-Dinitrotoluene



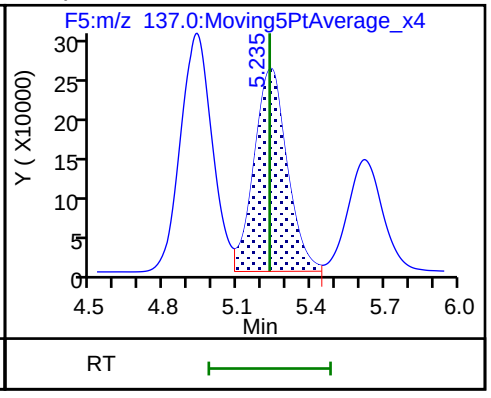
20 PETN



22 o-Nitrotoluene



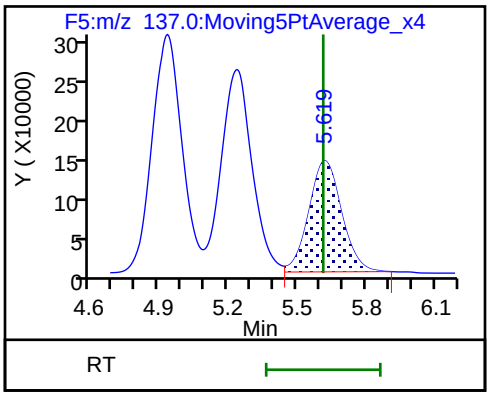
23 p-Nitrotoluene



Report Date: 15-Apr-2022 08:02:11 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

24 m-Nitrotoluene



Calibration / HMX

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

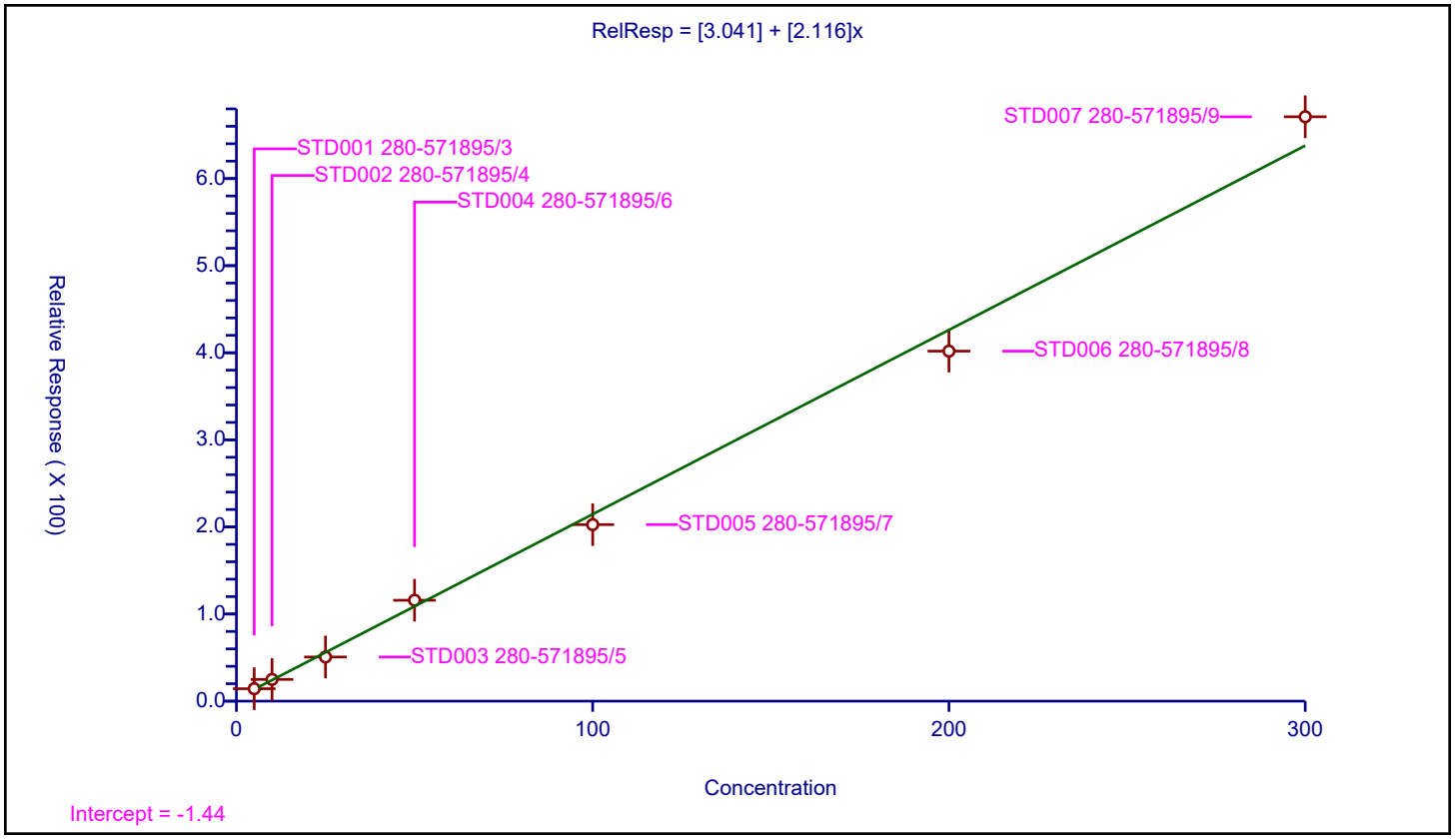
Curve Coefficients

Intercept:	3.041
Slope:	2.116

Error Coefficients

Standard Error:	310000
Relative Standard Error:	7.5
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571895/3	5.0	14.250872	125.0	120440.0	2.850174	Y
2	STD002 280-571895/4	10.0	24.941145	125.0	135078.0	2.494115	Y
3	STD003 280-571895/5	25.0	50.69286	125.0	135850.0	2.027714	Y
4	STD004 280-571895/6	50.0	115.831047	125.0	127550.0	2.316621	Y
5	STD005 280-571895/7	100.0	202.667251	125.0	134080.0	2.026673	Y
6	STD006 280-571895/8	200.0	401.87871	125.0	112524.0	2.009394	Y
7	STD007 280-571895/9	300.0	670.944595	125.0	99503.0	2.236482	Y



Calibration / TNX

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

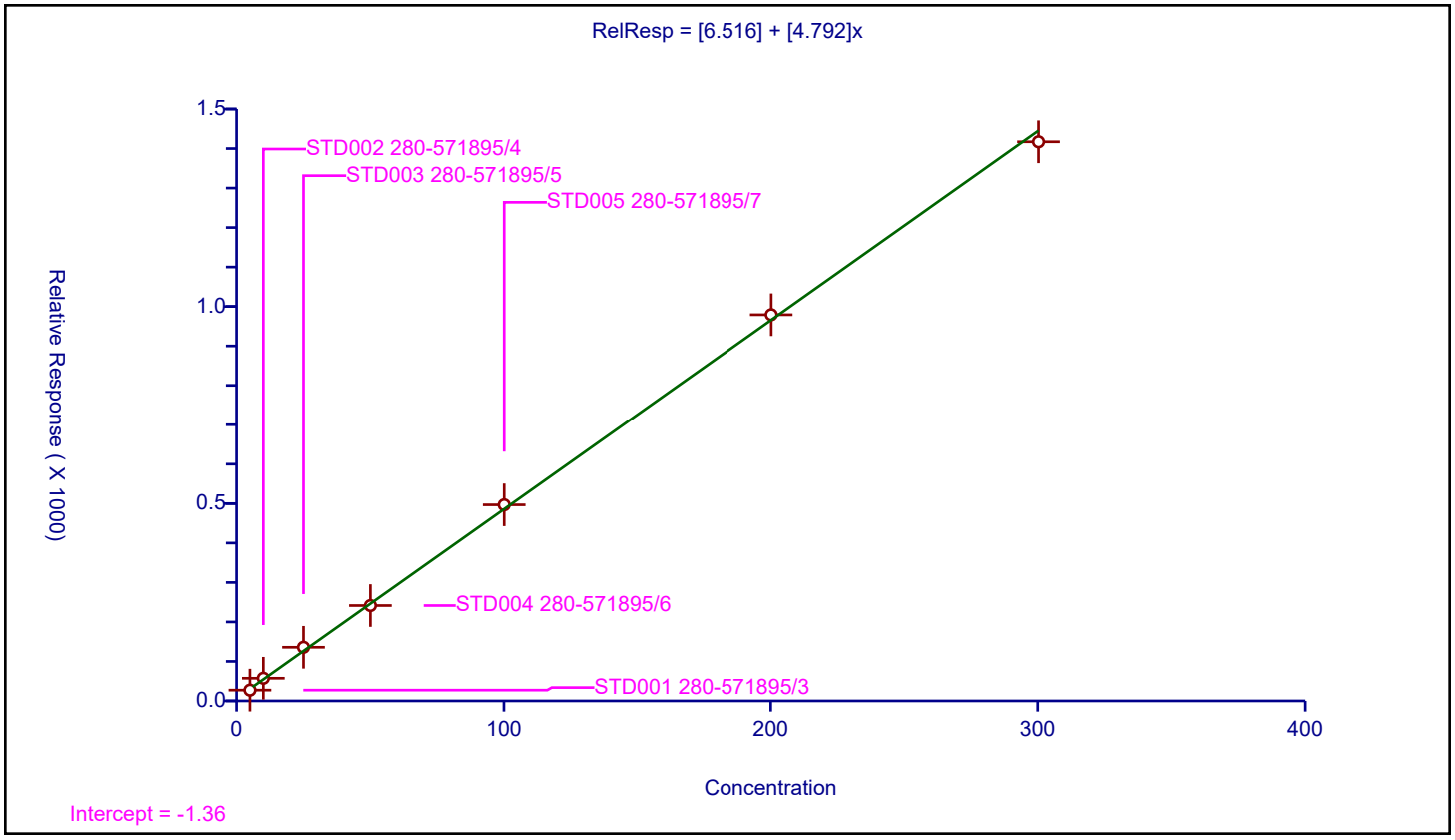
Curve Coefficients

Intercept:	6.516
Slope:	4.792

Error Coefficients

Standard Error:	7980000
Relative Standard Error:	7.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571895/3	5.005	27.26877	129.36	1339138.0	5.448306	Y
2	STD002 280-571895/4	10.01	57.346452	129.36	1265871.0	5.728916	Y
3	STD003 280-571895/5	25.025	135.798147	129.36	1273960.0	5.426499	Y
4	STD004 280-571895/6	50.05	241.576271	129.36	1302977.0	4.826699	Y
5	STD005 280-571895/7	100.1	496.932022	129.36	1363826.0	4.964356	Y
6	STD006 280-571895/8	200.2	979.08159	129.36	1209314.0	4.890517	Y
7	STD007 280-571895/9	300.3	1417.175944	129.36	1287191.0	4.719201	Y



Calibration / DNX

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

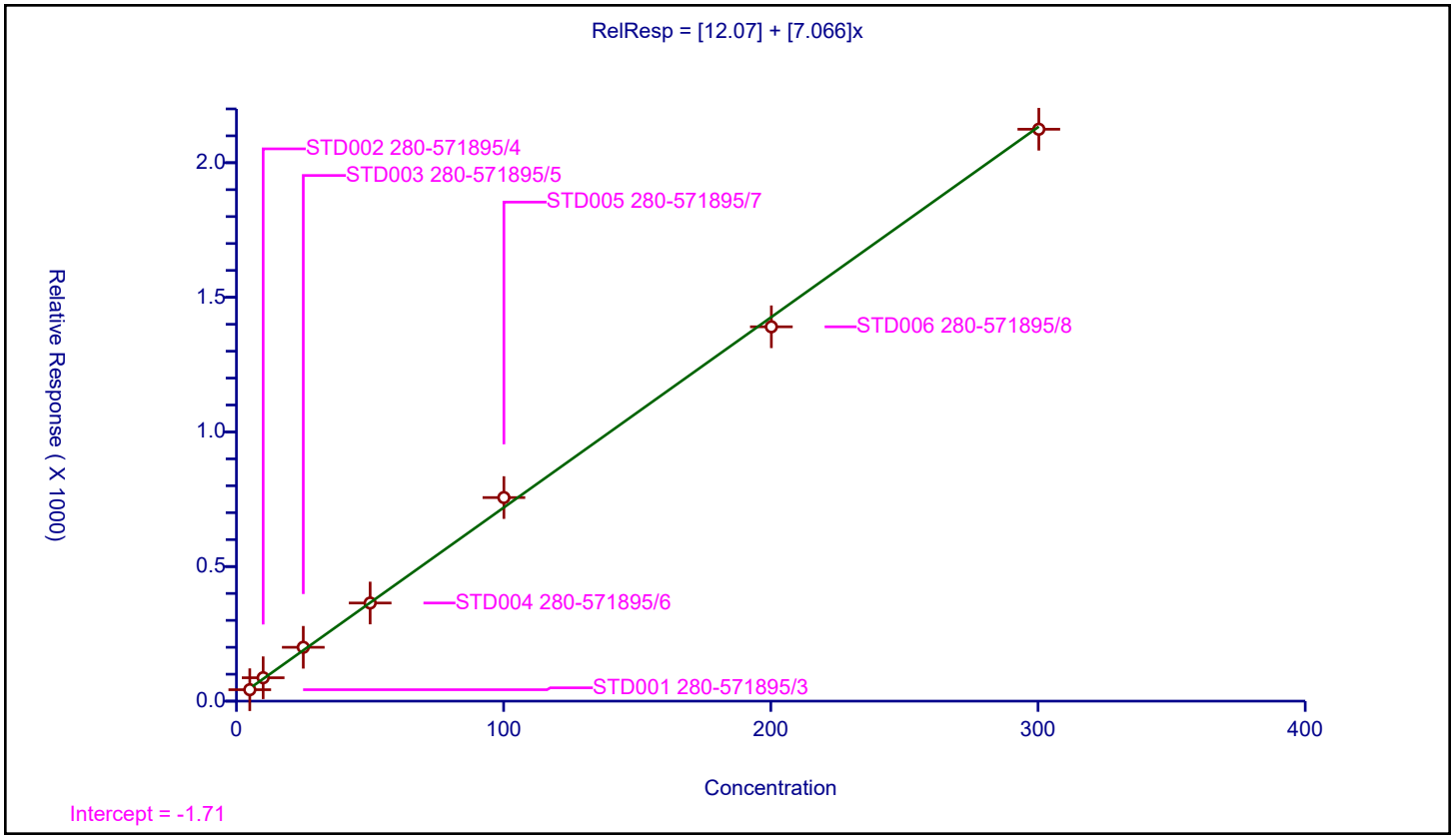
Curve Coefficients

Intercept:	12.07
Slope:	7.066

Error Coefficients

Standard Error:	11800000
Relative Standard Error:	7.7
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571895/3	5.005	42.53245	129.36	1339138.0	8.497992	Y
2	STD002 280-571895/4	10.01	86.892384	129.36	1265871.0	8.680558	Y
3	STD003 280-571895/5	25.025	199.984045	129.36	1273960.0	7.99137	Y
4	STD004 280-571895/6	50.05	364.494168	129.36	1302977.0	7.282601	Y
5	STD005 280-571895/7	100.1	756.222644	129.36	1363826.0	7.554672	Y
6	STD006 280-571895/8	200.2	1390.587535	129.36	1209314.0	6.945992	Y
7	STD007 280-571895/9	300.3	2124.437795	129.36	1287191.0	7.074385	Y



Calibration / MNX

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

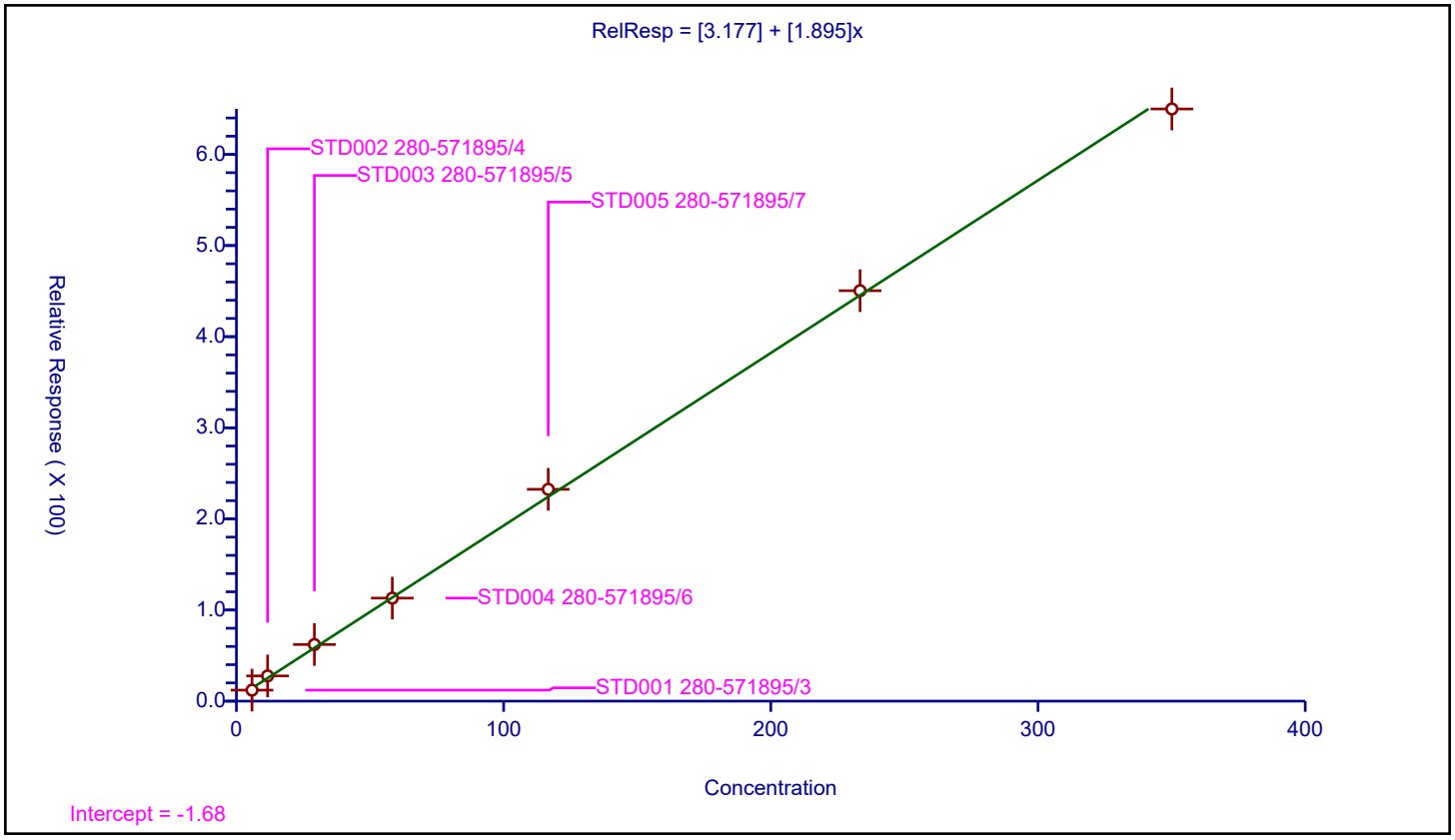
Curve Coefficients

Intercept:	3.177
Slope:	1.895

Error Coefficients

Standard Error:	3670000
Relative Standard Error:	10.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571895/3	5.835	12.094252	129.36	1339138.0	2.072708	Y
2	STD002 280-571895/4	11.67	27.697102	129.36	1265871.0	2.373359	Y
3	STD003 280-571895/5	29.175	62.14613	129.36	1273960.0	2.130116	Y
4	STD004 280-571895/6	58.35	113.06899	129.36	1302977.0	1.937772	Y
5	STD005 280-571895/7	116.7	232.484361	129.36	1363826.0	1.992154	Y
6	STD006 280-571895/8	233.4	450.476517	129.36	1209314.0	1.930062	Y
7	STD007 280-571895/9	350.1	649.913928	129.36	1287191.0	1.856367	Y



Calibration / RDX

Curve Type:	Quadratic
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

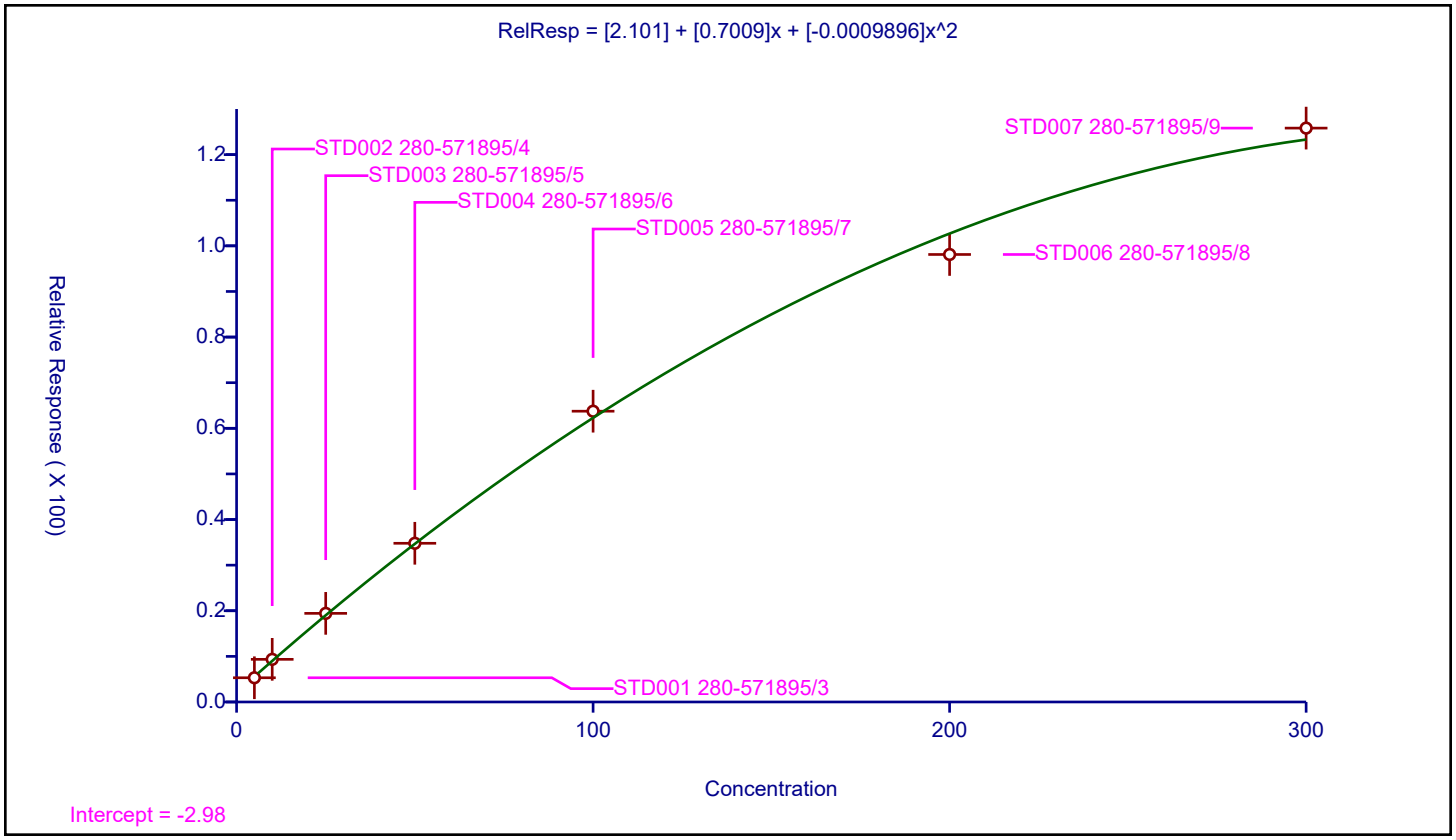
Curve Coefficients

Intercept:	2.101
Slope:	0.7009
Second Order:	-0.0009896

Error Coefficients

Standard Error:	528000
Relative Standard Error:	8.4
Correlation Coefficient:	0.972
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571895/3	5.0	5.311991	125.0	431406.0	1.062398	Y
2	STD002 280-571895/4	10.0	9.352778	125.0	480098.0	0.935278	Y
3	STD003 280-571895/5	25.0	19.429019	125.0	509991.0	0.777161	Y
4	STD004 280-571895/6	50.0	34.795624	125.0	552609.0	0.695912	Y
5	STD005 280-571895/7	100.0	63.74933	125.0	630638.0	0.637493	Y
6	STD006 280-571895/8	200.0	98.108252	125.0	686693.0	0.490541	Y
7	STD007 280-571895/9	300.0	125.816826	125.0	824074.0	0.419389	Y



Calibration / 1,3,5-Trinitrobenzene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

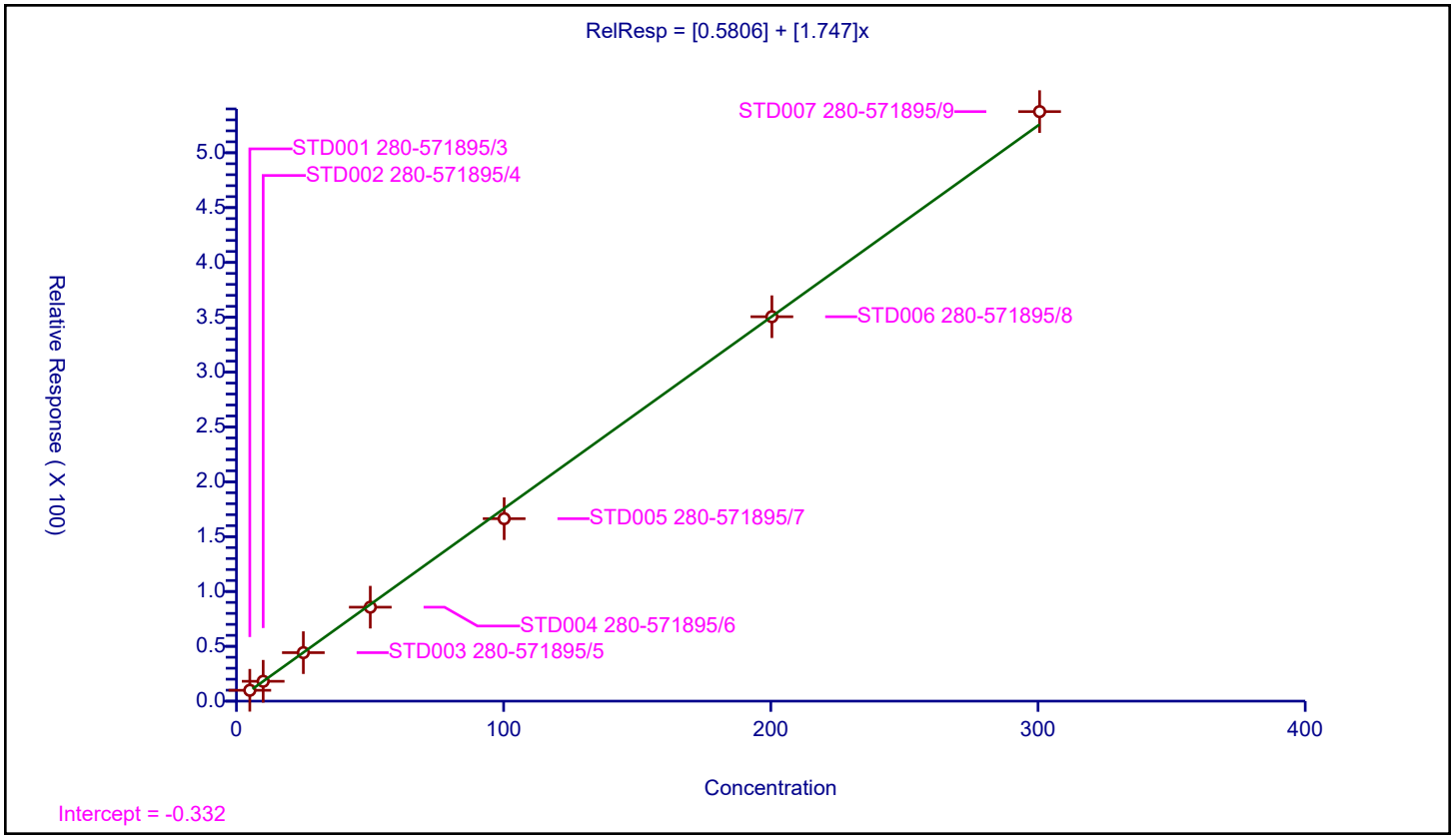
Curve Coefficients

Intercept:	0.5806
Slope:	1.747

Error Coefficients

Standard Error:	2950000
Relative Standard Error:	4.0
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571895/3	5.01	9.888113	129.36	1339138.0	1.973675	Y
2	STD002 280-571895/4	10.02	18.096917	129.36	1265871.0	1.80608	Y
3	STD003 280-571895/5	25.05	44.199455	129.36	1273960.0	1.764449	Y
4	STD004 280-571895/6	50.1	85.668509	129.36	1302977.0	1.70995	Y
5	STD005 280-571895/7	100.2	166.34878	129.36	1363826.0	1.660167	Y
6	STD006 280-571895/8	200.4	350.502601	129.36	1209314.0	1.749015	Y
7	STD007 280-571895/9	300.6	537.527421	129.36	1287191.0	1.788182	Y



Calibration / Tetryl

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

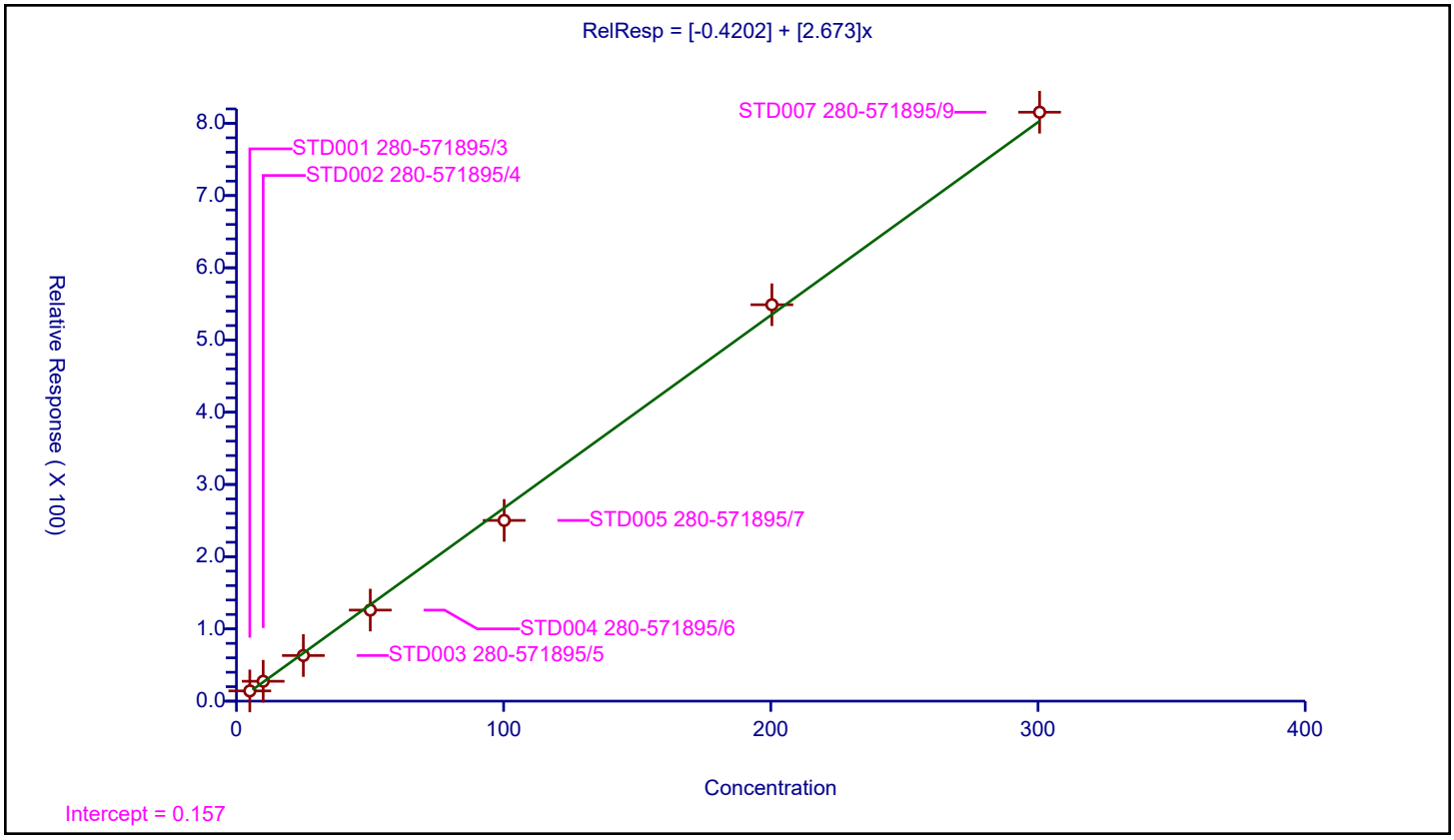
Curve Coefficients

Intercept:	-0.4202
Slope:	2.673

Error Coefficients

Standard Error:	4500000
Relative Standard Error:	6.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571895/3	5.01	14.136171	129.36	1339138.0	2.821591	Y
2	STD002 280-571895/4	10.02	27.527261	129.36	1265871.0	2.747232	Y
3	STD003 280-571895/5	25.05	63.161038	129.36	1273960.0	2.521399	Y
4	STD004 280-571895/6	50.1	126.054163	129.36	1302977.0	2.516051	Y
5	STD005 280-571895/7	100.2	250.210365	129.36	1363826.0	2.497109	Y
6	STD006 280-571895/8	200.4	548.846956	129.36	1209314.0	2.738757	Y
7	STD007 280-571895/9	300.6	815.422924	129.36	1287191.0	2.712651	Y



Calibration / 1,3-Dinitrobenzene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

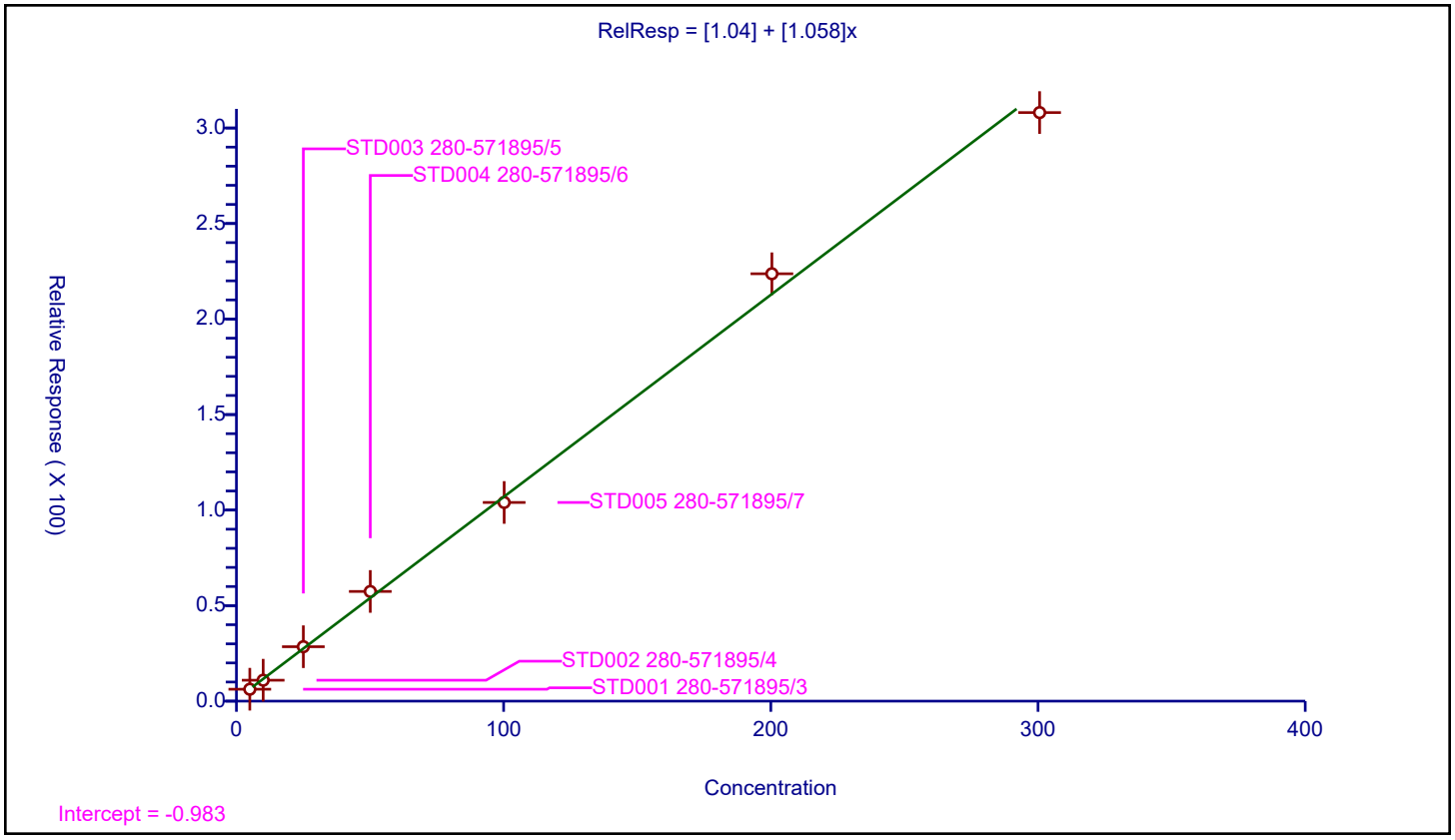
Curve Coefficients

Intercept:	1.04
Slope:	1.058

Error Coefficients

Standard Error:	1750000
Relative Standard Error:	5.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571895/3	5.01	6.238103	129.36	1339138.0	1.24513	Y
2	STD002 280-571895/4	10.02	10.944603	129.36	1265871.0	1.092276	Y
3	STD003 280-571895/5	25.05	28.493298	129.36	1273960.0	1.137457	Y
4	STD004 280-571895/6	50.1	57.412034	129.36	1302977.0	1.145949	Y
5	STD005 280-571895/7	100.2	103.995945	129.36	1363826.0	1.037884	Y
6	STD006 280-571895/8	200.4	223.706987	129.36	1209314.0	1.116302	Y
7	STD007 280-571895/9	300.6	308.074723	129.36	1287191.0	1.024866	Y



Calibration / Nitroglycerin

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

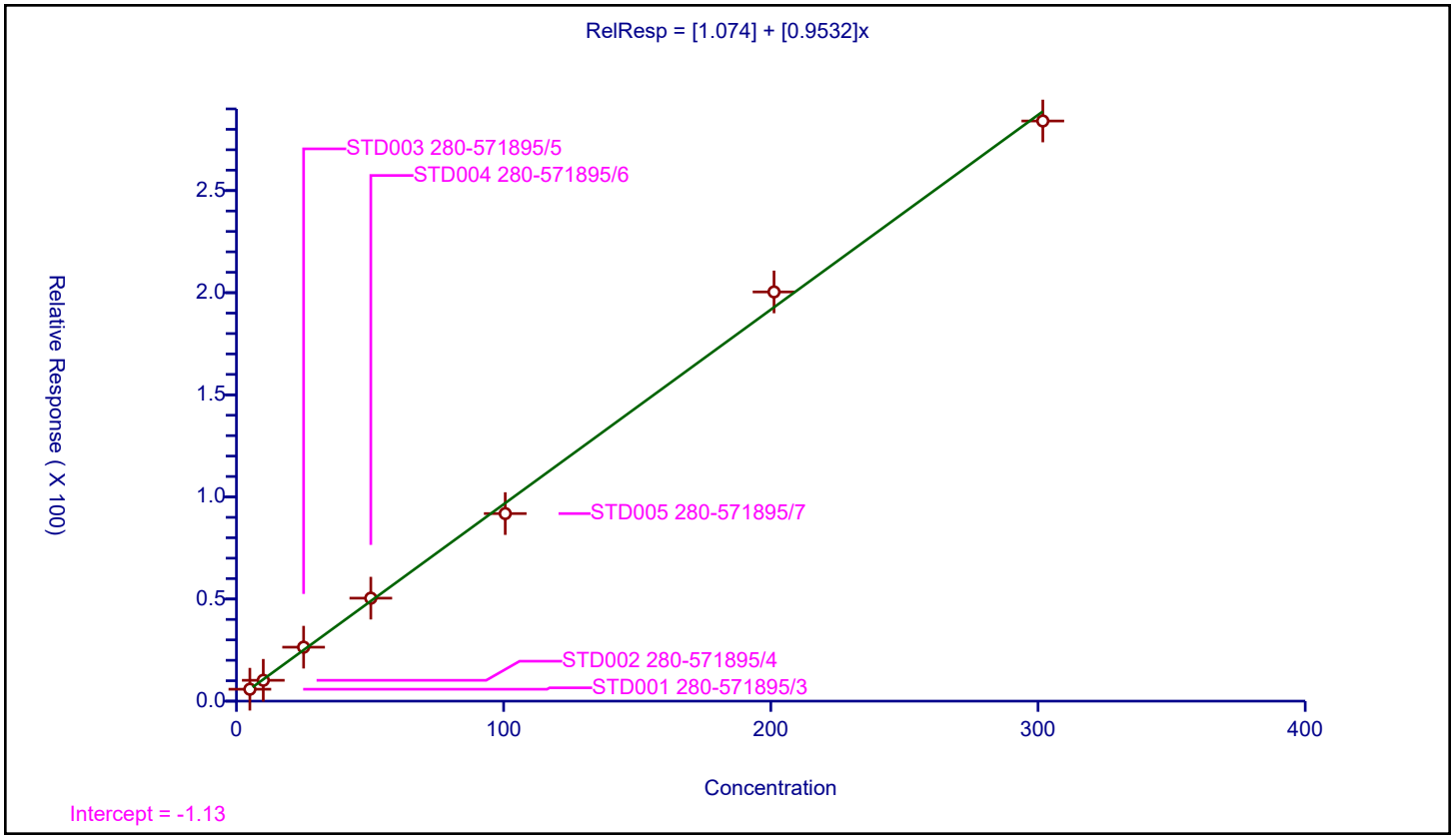
Curve Coefficients

Intercept:	1.074
Slope:	0.9532

Error Coefficients

Standard Error:	1600000
Relative Standard Error:	4.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571895/3	5.03	5.830743	129.36	1339138.0	1.159193	Y
2	STD002 280-571895/4	10.06	10.200554	129.36	1265871.0	1.013972	Y
3	STD003 280-571895/5	25.15	26.419817	129.36	1273960.0	1.05049	Y
4	STD004 280-571895/6	50.3	50.419521	129.36	1302977.0	1.002376	Y
5	STD005 280-571895/7	100.6	91.83977	129.36	1363826.0	0.91292	Y
6	STD006 280-571895/8	201.2	200.380524	129.36	1209314.0	0.995927	Y
7	STD007 280-571895/9	301.8	284.080245	129.36	1287191.0	0.941286	Y



Calibration / 2,4,6-Trinitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

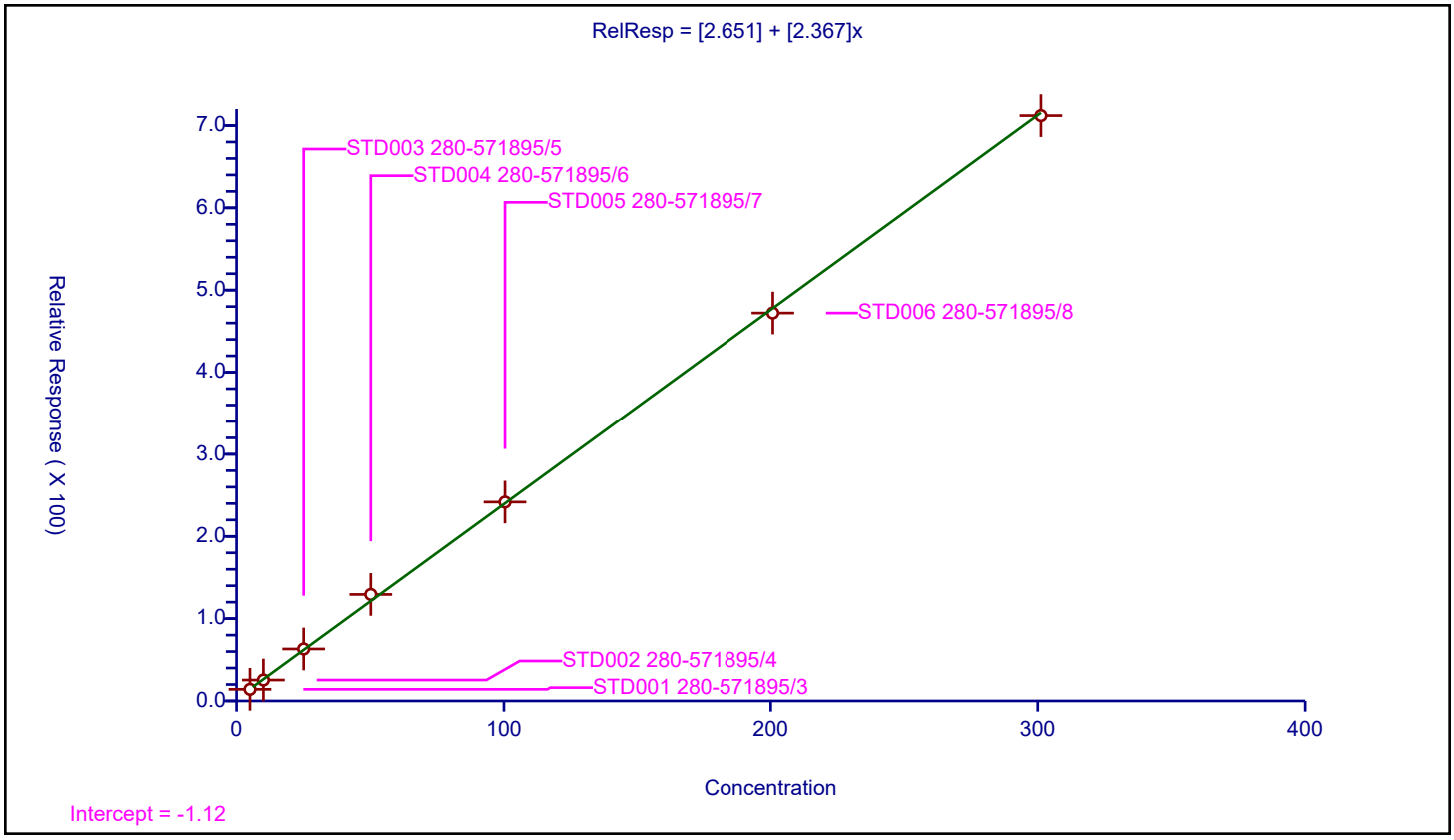
Curve Coefficients

Intercept:	2.651
Slope:	2.367

Error Coefficients

Standard Error:	12700000
Relative Standard Error:	4.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571895/3	5.02	14.138491	125.0	4374512.0	2.816433	Y
2	STD002 280-571895/4	10.04	25.423652	125.0	4010896.0	2.532236	Y
3	STD003 280-571895/5	25.1	63.147871	125.0	3956418.0	2.515851	Y
4	STD004 280-571895/6	50.2	129.405604	125.0	3895011.0	2.577801	Y
5	STD005 280-571895/7	100.4	241.787915	125.0	4108244.0	2.408246	Y
6	STD006 280-571895/8	200.8	472.182635	125.0	3844541.0	2.351507	Y
7	STD007 280-571895/9	301.2	712.048092	125.0	3963223.0	2.364037	Y



Calibration / Nitrobenzene-d5

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

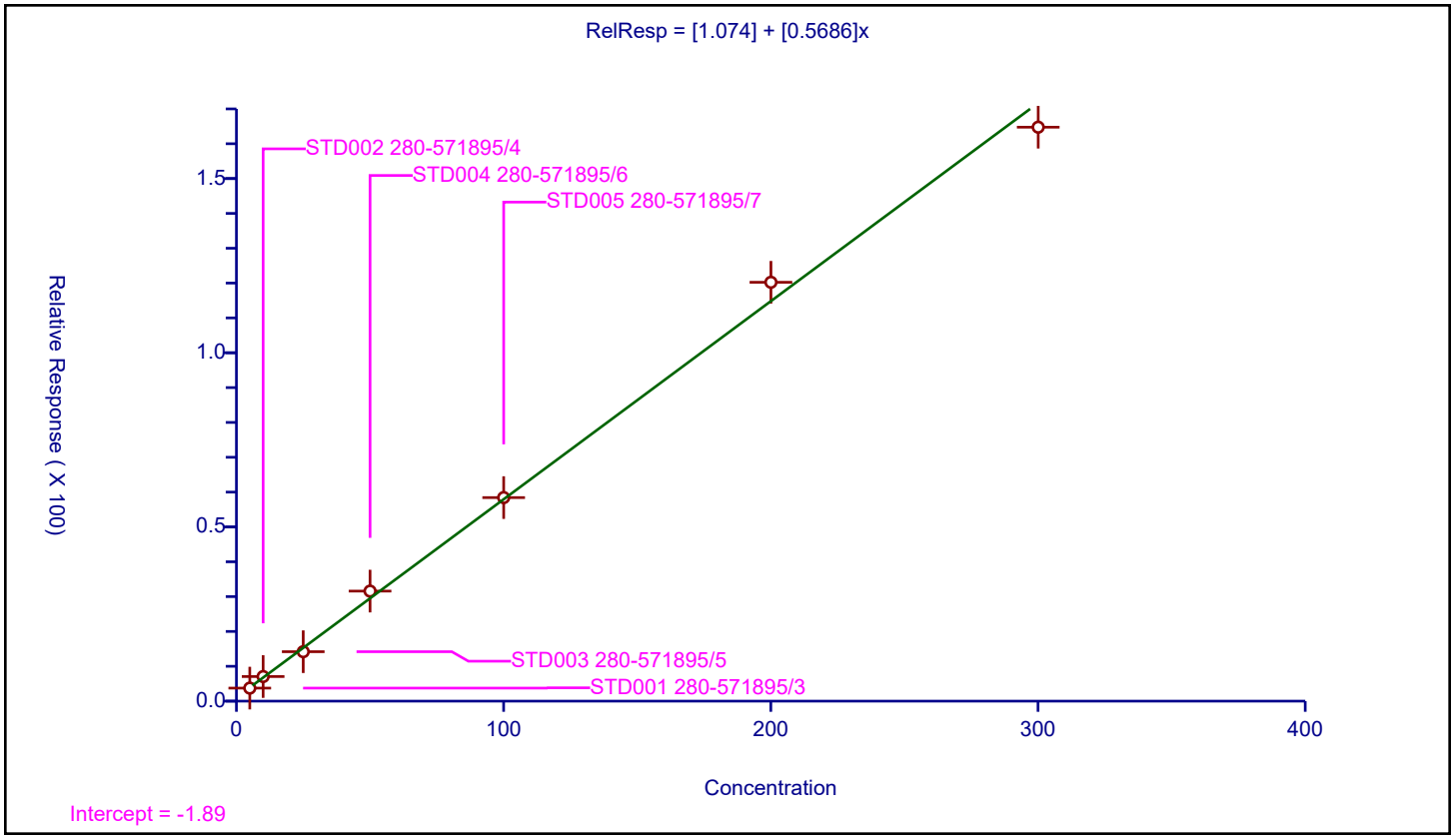
Curve Coefficients

Intercept:	1.074
Slope:	0.5686

Error Coefficients

Standard Error:	944000
Relative Standard Error:	6.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571895/3	5.001233	3.740814	129.36	1339138.0	0.747978	Y
2	STD002 280-571895/4	10.002465	7.058912	129.36	1265871.0	0.705717	Y
3	STD003 280-571895/5	25.006163	14.191055	129.36	1273960.0	0.567502	Y
4	STD004 280-571895/6	50.012325	31.584452	129.36	1302977.0	0.631533	Y
5	STD005 280-571895/7	100.02465	58.429616	129.36	1363826.0	0.584152	Y
6	STD006 280-571895/8	200.0493	120.231845	129.36	1209314.0	0.601011	Y
7	STD007 280-571895/9	300.07395	164.748629	129.36	1287191.0	0.549027	Y



Calibration / Nitrobenzene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

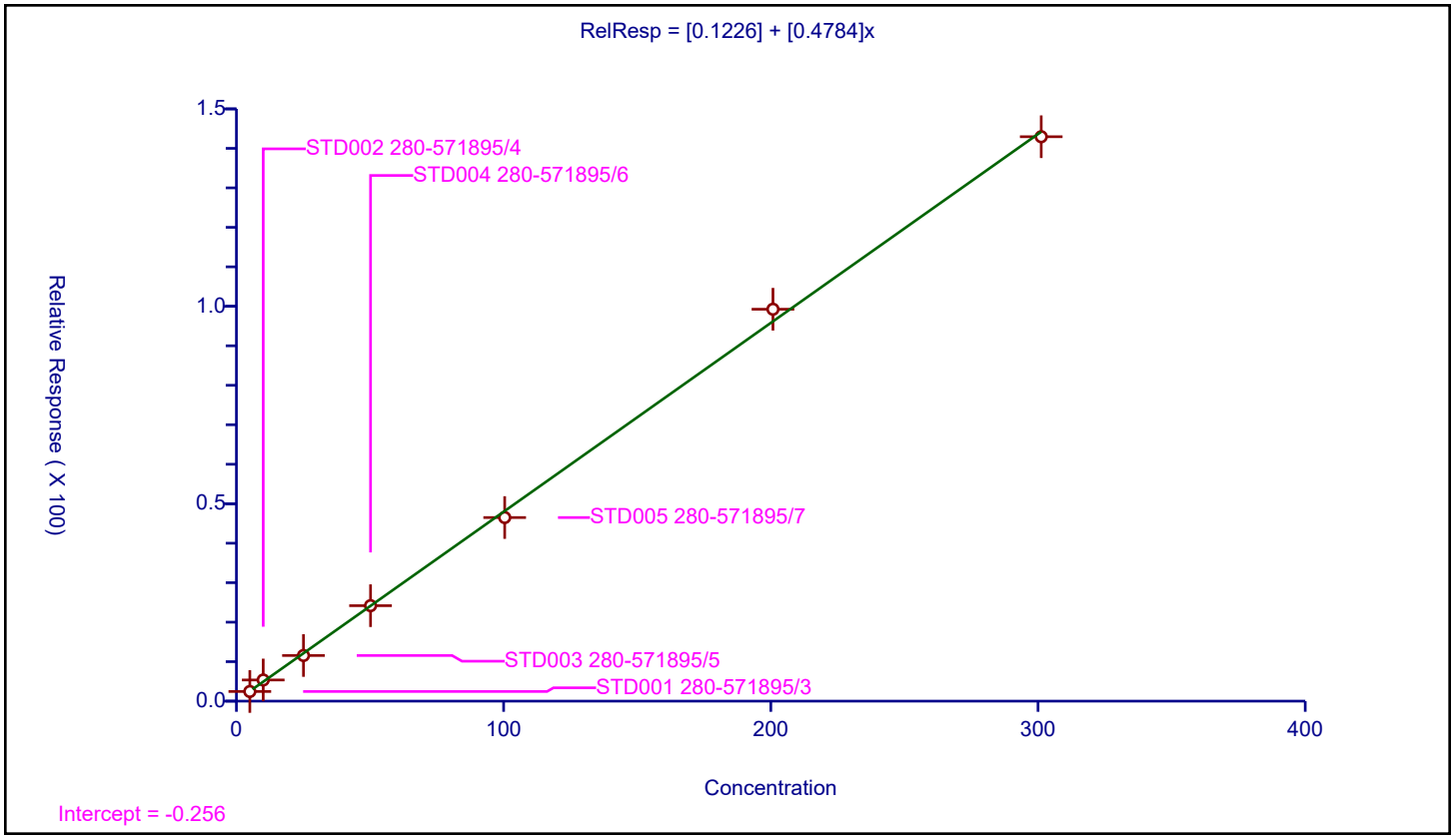
Curve Coefficients

Intercept:	0.1226
Slope:	0.4784

Error Coefficients

Standard Error:	800000
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571895/3	5.02	2.443483	129.36	1339138.0	0.48675	Y
2	STD002 280-571895/4	10.04	5.359279	129.36	1265871.0	0.533793	Y
3	STD003 280-571895/5	25.1	11.557572	129.36	1273960.0	0.460461	Y
4	STD004 280-571895/6	50.2	24.181018	129.36	1302977.0	0.481694	Y
5	STD005 280-571895/7	100.4	46.498143	129.36	1363826.0	0.463129	Y
6	STD006 280-571895/8	200.8	99.256042	129.36	1209314.0	0.494303	Y
7	STD007 280-571895/9	301.2	142.953849	129.36	1287191.0	0.474614	Y



Calibration / 4-Amino-2,6-dinitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

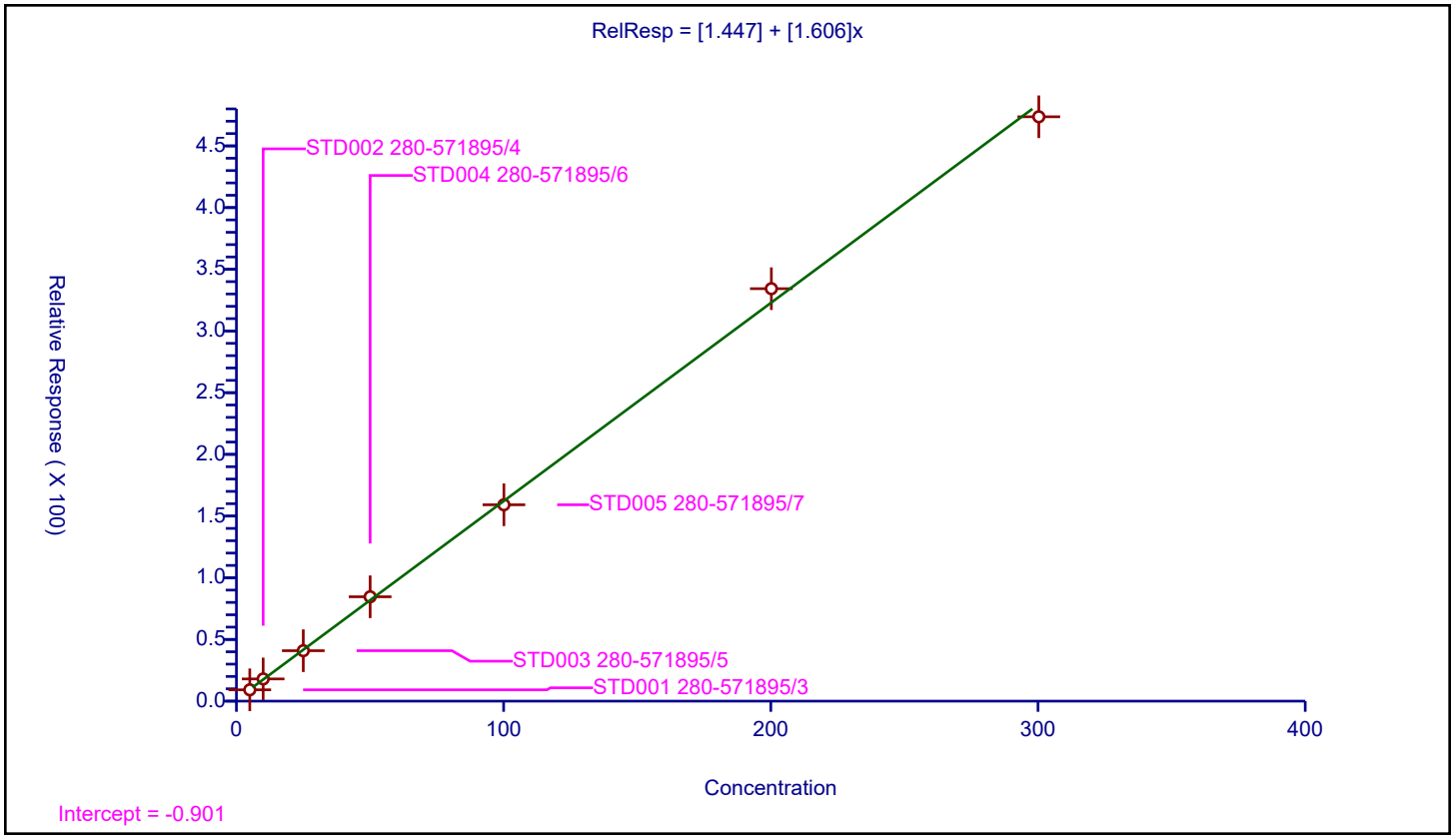
Curve Coefficients

Intercept:	1.447
Slope:	1.606

Error Coefficients

Standard Error:	8570000
Relative Standard Error:	3.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571895/3	5.005	9.17991	125.0	4374512.0	1.834148	Y
2	STD002 280-571895/4	10.01	17.998036	125.0	4010896.0	1.798006	Y
3	STD003 280-571895/5	25.025	40.863162	125.0	3956418.0	1.632894	Y
4	STD004 280-571895/6	50.05	84.58333	125.0	3895011.0	1.689977	Y
5	STD005 280-571895/7	100.1	159.151939	125.0	4108244.0	1.589929	Y
6	STD006 280-571895/8	200.2	334.286687	125.0	3844541.0	1.669764	Y
7	STD007 280-571895/9	300.3	473.613332	125.0	3963223.0	1.577134	Y



Calibration / 2-Amino-4,6-dinitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

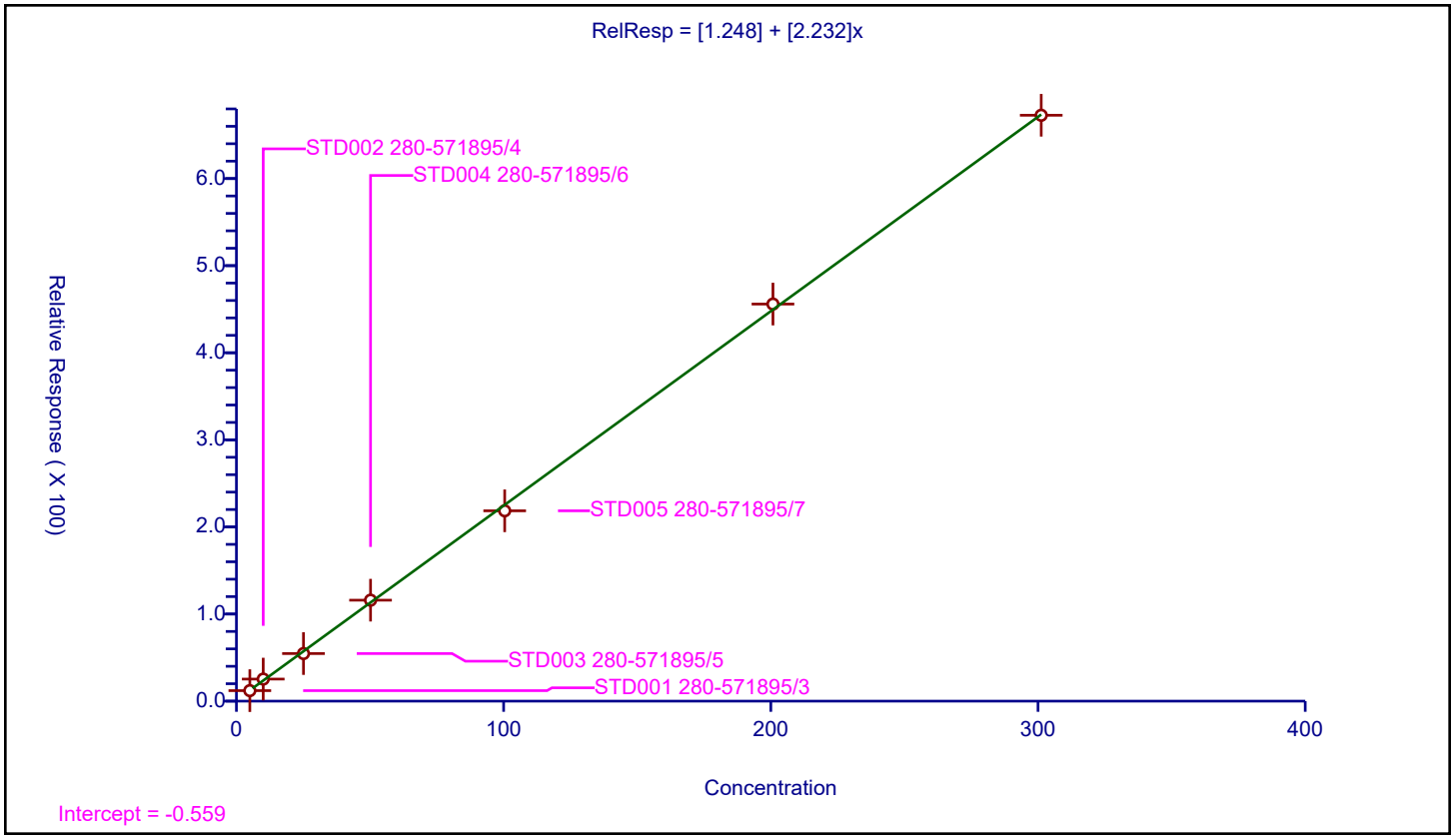
Curve Coefficients

Intercept:	1.248
Slope:	2.232

Error Coefficients

Standard Error:	12000000
Relative Standard Error:	4.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571895/3	5.02	12.073575	125.0	4374512.0	2.405095	Y
2	STD002 280-571895/4	10.04	25.345365	125.0	4010896.0	2.524439	Y
3	STD003 280-571895/5	25.1	54.62321	125.0	3956418.0	2.176223	Y
4	STD004 280-571895/6	50.2	115.918029	125.0	3895011.0	2.309124	Y
5	STD005 280-571895/7	100.4	218.556882	125.0	4108244.0	2.176861	Y
6	STD006 280-571895/8	200.8	455.893434	125.0	3844541.0	2.270386	Y
7	STD007 280-571895/9	301.2	672.682625	125.0	3963223.0	2.233342	Y



Calibration / 2,6-Dinitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

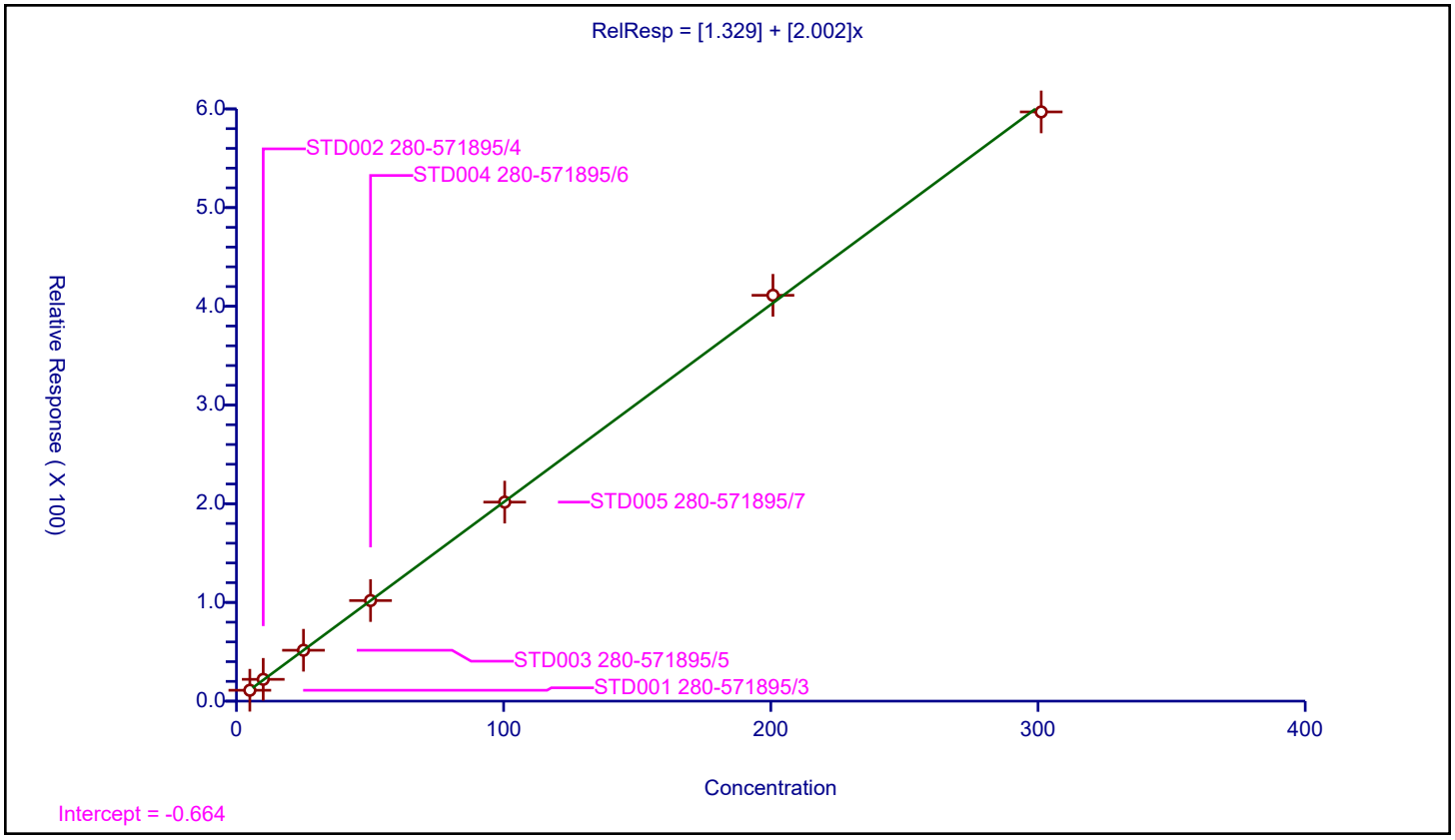
Curve Coefficients

Intercept:	1.329
Slope:	2.002

Error Coefficients

Standard Error:	10700000
Relative Standard Error:	2.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571895/3	5.02	11.019601	125.0	4374512.0	2.19514	Y
2	STD002 280-571895/4	10.04	22.082036	125.0	4010896.0	2.199406	Y
3	STD003 280-571895/5	25.1	51.545331	125.0	3956418.0	2.053599	Y
4	STD004 280-571895/6	50.2	101.900803	125.0	3895011.0	2.029896	Y
5	STD005 280-571895/7	100.4	201.62334	125.0	4108244.0	2.008201	Y
6	STD006 280-571895/8	200.8	411.186992	125.0	3844541.0	2.047744	Y
7	STD007 280-571895/9	301.2	596.940546	125.0	3963223.0	1.981874	Y



Calibration / 2,4-Dinitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

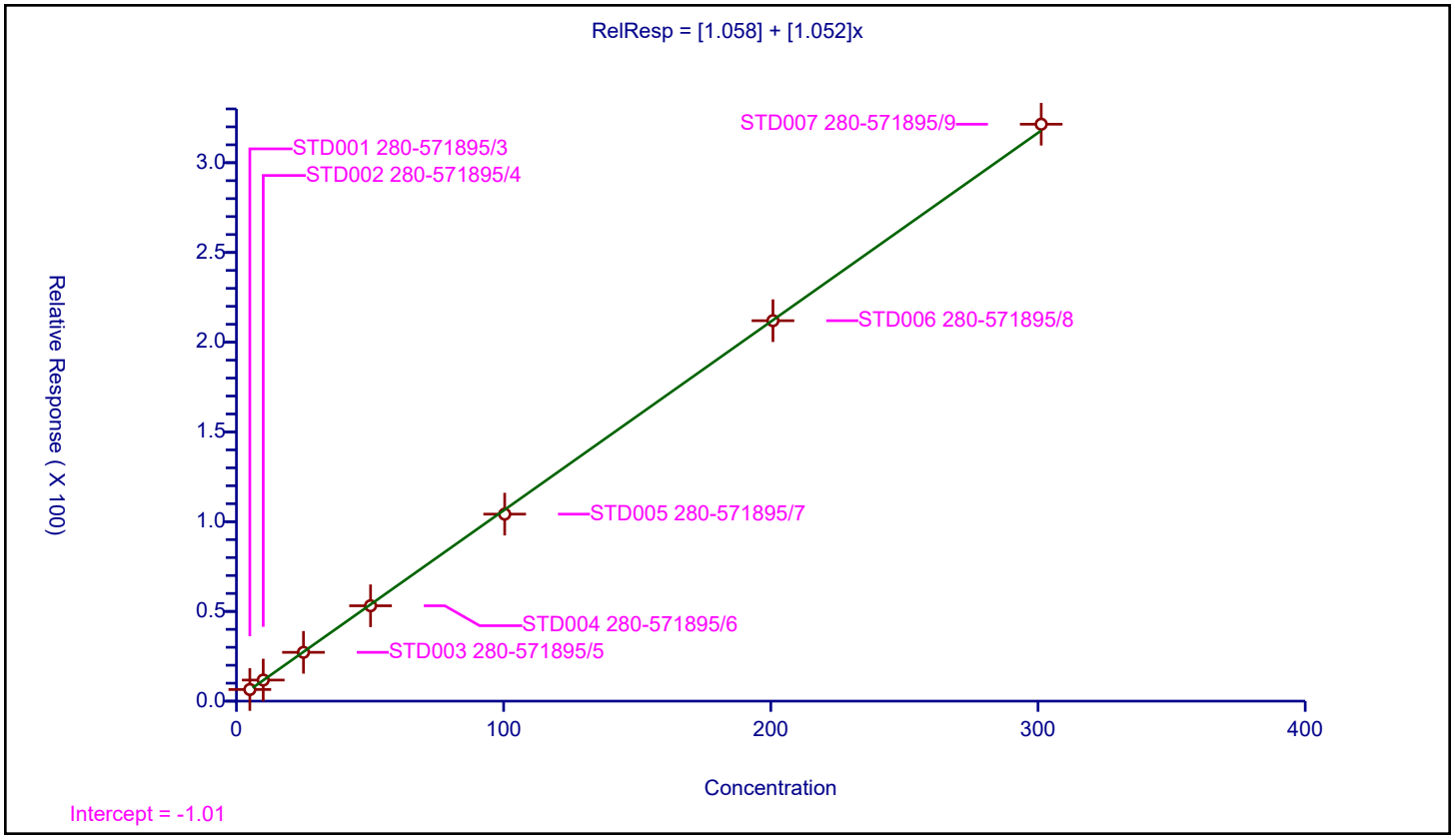
Curve Coefficients

Intercept:	1.058
Slope:	1.052

Error Coefficients

Standard Error:	5690000
Relative Standard Error:	1.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571895/3	5.02	6.47698	125.0	4374512.0	1.290235	Y
2	STD002 280-571895/4	10.04	11.747219	125.0	4010896.0	1.170042	Y
3	STD003 280-571895/5	25.1	27.191389	125.0	3956418.0	1.083322	Y
4	STD004 280-571895/6	50.2	53.137173	125.0	3895011.0	1.058509	Y
5	STD005 280-571895/7	100.4	104.195917	125.0	4108244.0	1.037808	Y
6	STD006 280-571895/8	200.8	211.994618	125.0	3844541.0	1.05575	Y
7	STD007 280-571895/9	301.2	321.462671	125.0	3963223.0	1.067273	Y



Calibration / PETN

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

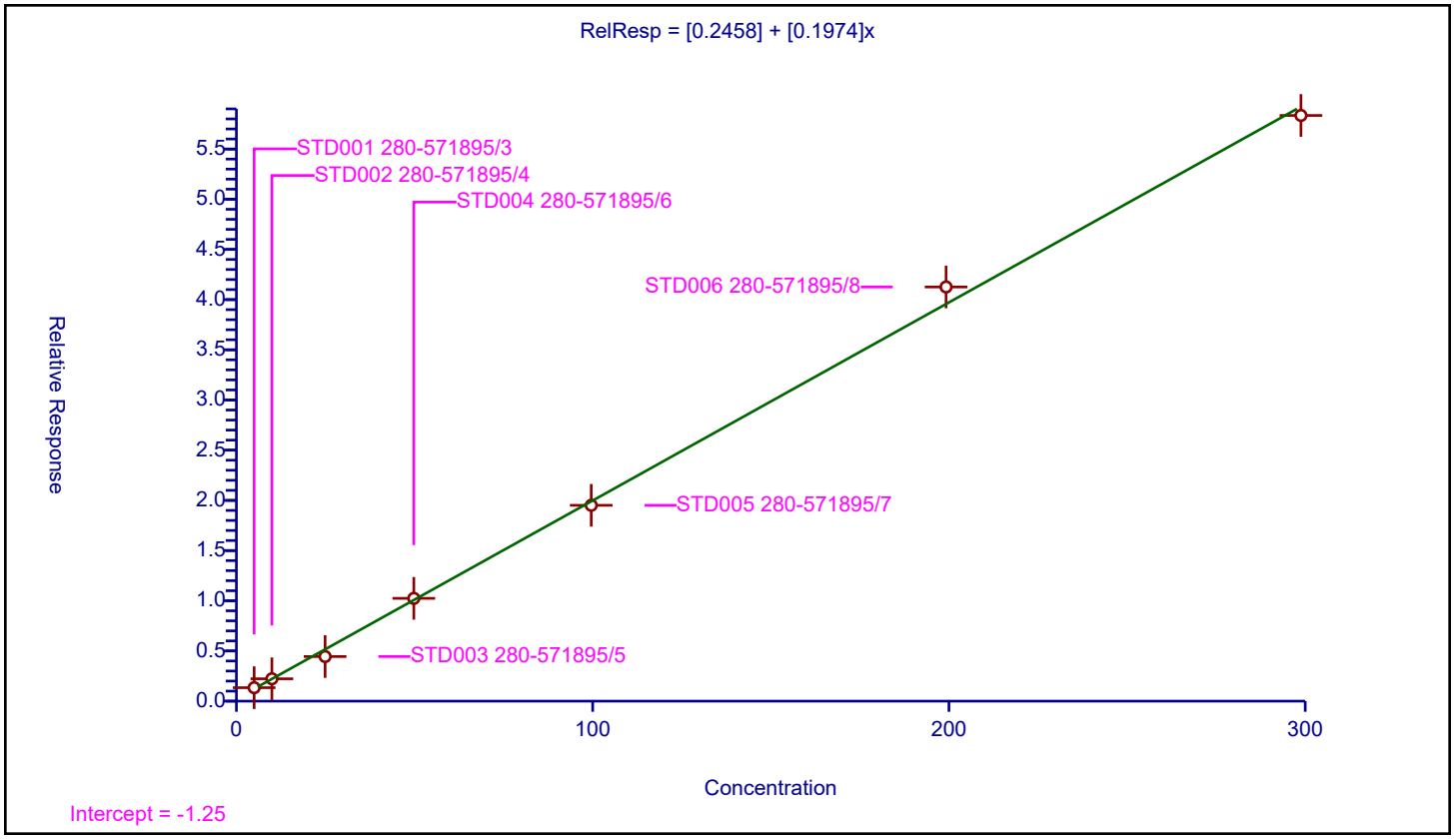
Curve Coefficients

Intercept:	0.2458
Slope:	0.1974

Error Coefficients

Standard Error:	1060000
Relative Standard Error:	8.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571895/3	4.98	1.339978	125.0	4374512.0	0.269072	Y
2	STD002 280-571895/4	9.96	2.226653	125.0	4010896.0	0.22356	Y
3	STD003 280-571895/5	24.9	4.444203	125.0	3956418.0	0.178482	Y
4	STD004 280-571895/6	49.8	10.23906	125.0	3895011.0	0.205604	Y
5	STD005 280-571895/7	99.6	19.509156	125.0	4108244.0	0.195875	Y
6	STD006 280-571895/8	199.2	41.261363	125.0	3844541.0	0.207135	Y
7	STD007 280-571895/9	298.8	58.343424	125.0	3963223.0	0.195259	Y



Calibration / o-Nitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

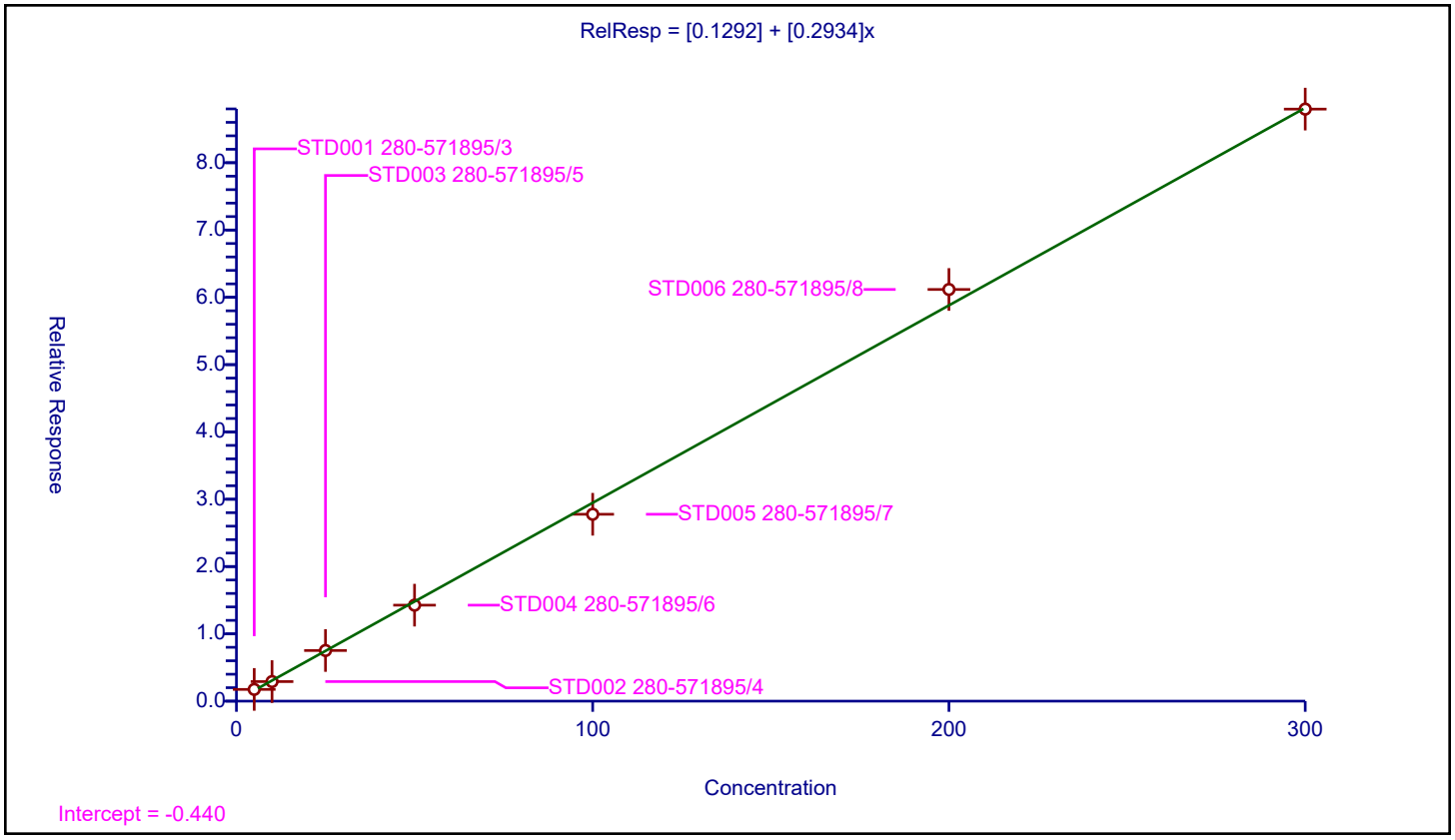
Curve Coefficients

Intercept:	0.1292
Slope:	0.2934

Error Coefficients

Standard Error:	1580000
Relative Standard Error:	6.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571895/3	5.0	1.744423	125.0	4374512.0	0.348885	Y
2	STD002 280-571895/4	10.0	2.90786	125.0	4010896.0	0.290786	Y
3	STD003 280-571895/5	25.0	7.524325	125.0	3956418.0	0.300973	Y
4	STD004 280-571895/6	50.0	14.260967	125.0	3895011.0	0.285219	Y
5	STD005 280-571895/7	100.0	27.769225	125.0	4108244.0	0.277692	Y
6	STD006 280-571895/8	200.0	61.168876	125.0	3844541.0	0.305844	Y
7	STD007 280-571895/9	300.0	87.970227	125.0	3963223.0	0.293234	Y



Calibration / p-Nitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

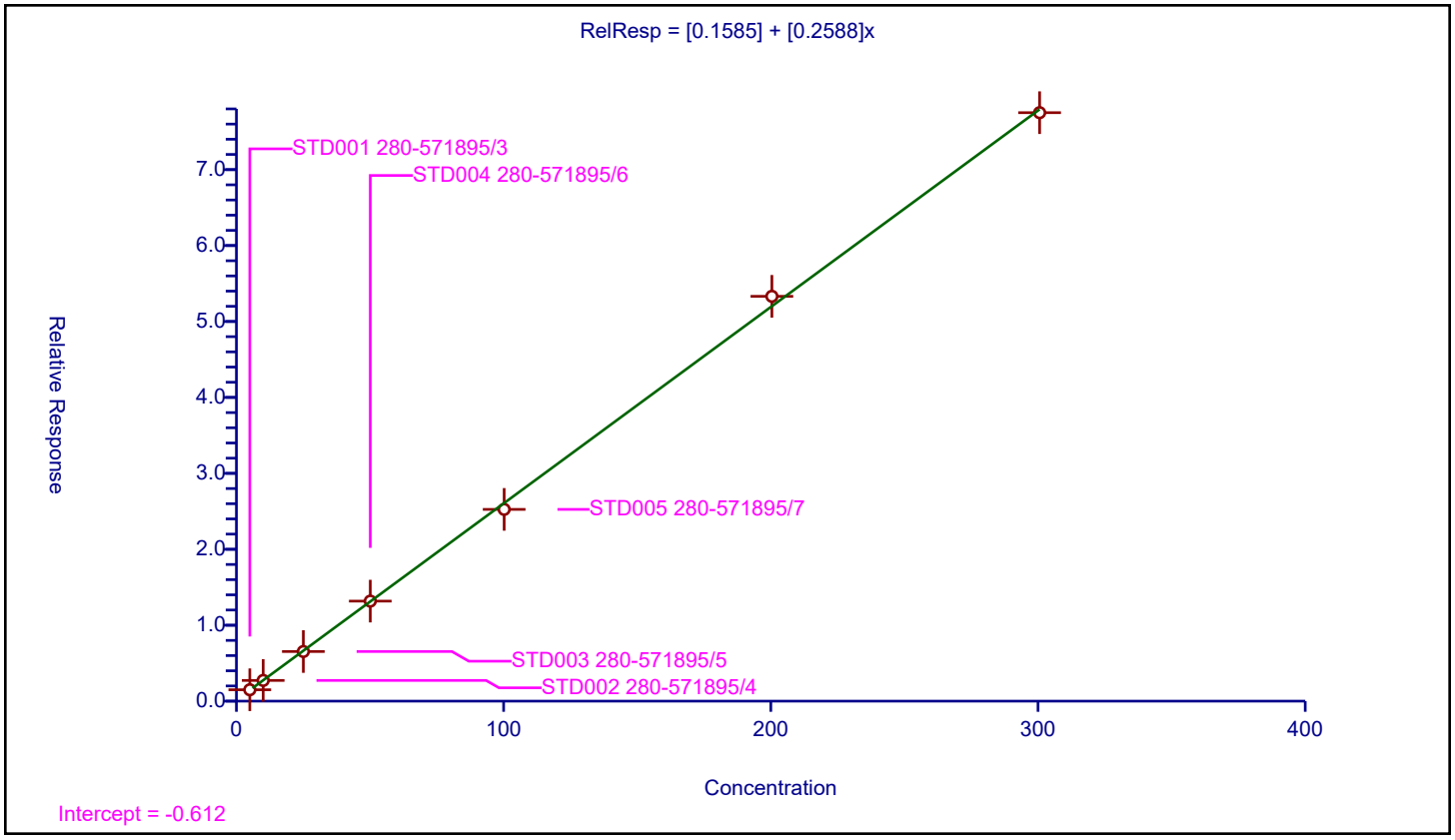
Curve Coefficients

Intercept:	0.1585
Slope:	0.2588

Error Coefficients

Standard Error:	1390000
Relative Standard Error:	2.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571895/3	5.01	1.499653	125.0	4374512.0	0.299332	Y
2	STD002 280-571895/4	10.02	2.725825	125.0	4010896.0	0.272038	Y
3	STD003 280-571895/5	25.05	6.535173	125.0	3956418.0	0.260885	Y
4	STD004 280-571895/6	50.1	13.173936	125.0	3895011.0	0.262953	Y
5	STD005 280-571895/7	100.2	25.255012	125.0	4108244.0	0.252046	Y
6	STD006 280-571895/8	200.4	53.316573	125.0	3844541.0	0.266051	Y
7	STD007 280-571895/9	300.6	77.502925	125.0	3963223.0	0.257827	Y



Calibration / m-Nitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

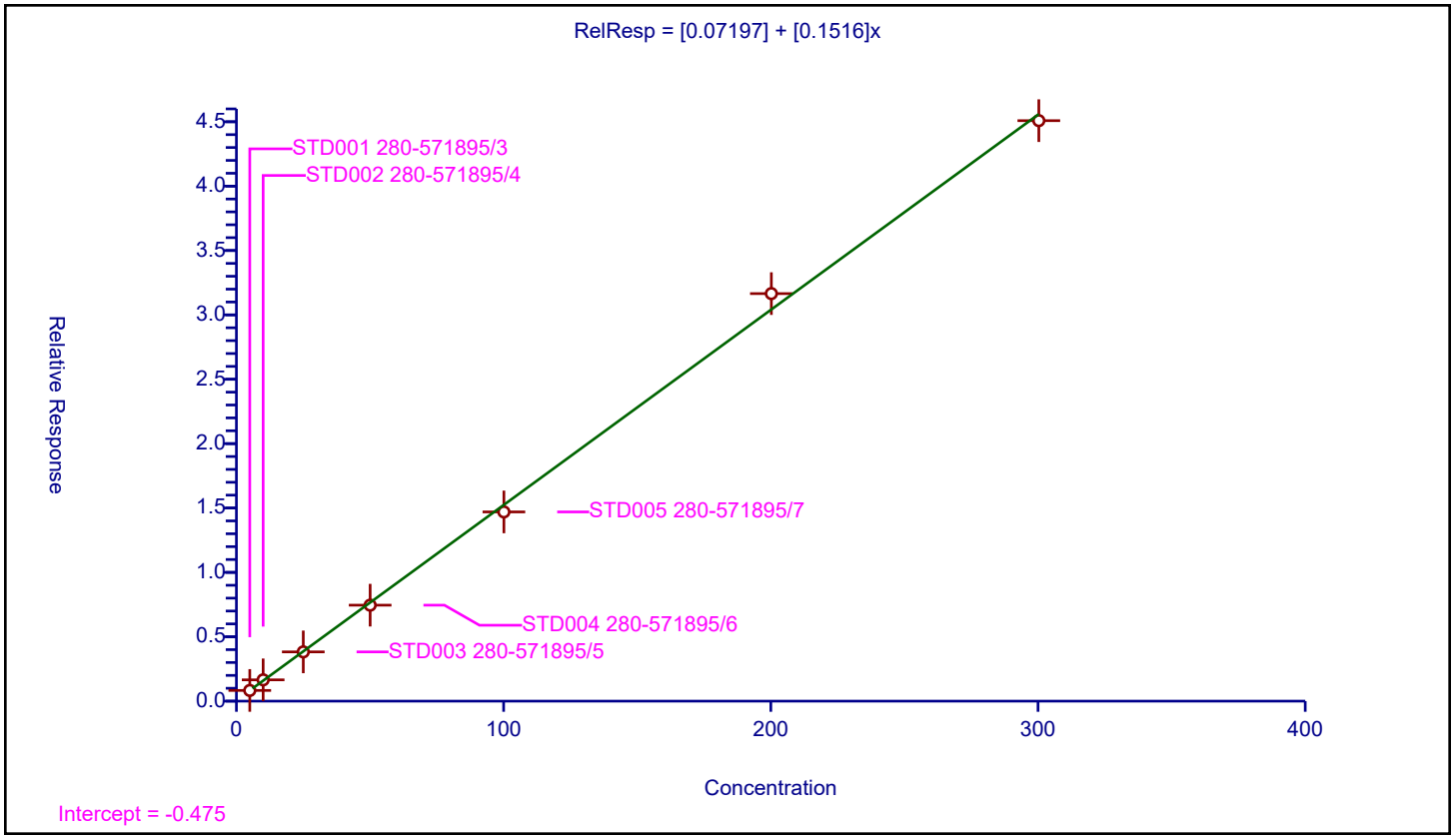
Curve Coefficients

Intercept:	0.07197
Slope:	0.1516

Error Coefficients

Standard Error:	812000
Relative Standard Error:	3.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD001 280-571895/3	5.005	0.831264	125.0	4374512.0	0.166087	Y
2	STD002 280-571895/4	10.01	1.654774	125.0	4010896.0	0.165312	Y
3	STD003 280-571895/5	25.025	3.826536	125.0	3956418.0	0.152909	Y
4	STD004 280-571895/6	50.05	7.454247	125.0	3895011.0	0.148936	Y
5	STD005 280-571895/7	100.1	14.696182	125.0	4108244.0	0.146815	Y
6	STD006 280-571895/8	200.2	31.653909	125.0	3844541.0	0.158111	Y
7	STD007 280-571895/9	300.3	45.086032	125.0	3963223.0	0.150137	Y



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Lab Sample ID: ICV 280-571614/12 Calibration Date: 04/12/2022 10:55

Instrument ID: LC_LCMS4 Calib Start Date: 04/12/2022 09:22

GC Column: IonPac ID: 2.00(mm) Calib End Date: 04/12/2022 10:31

Lab File ID: ex422D12011.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin1		2.029		113	100	12.9	30.0
TNX	Lin1		2.382		119	100	18.9	30.0
DNX	Lin1		2.128		111	100	11.1	30.0
MNX	Lin1		2.211		116	117	-0.5	30.0
RDX	Qua1		0.7976		107	100	6.8	30.0
1,3,5-Trinitrobenzene	Lin1		1.098		103	100	3.1	30.0
Tetryl	Lin1		1.000		107	100	7.2	30.0
1,3-Dinitrobenzene	Lin1		1.053		98.3	100	-1.7	30.0
Nitroglycerin	Lin1		6.935		105	100	5.4	30.0
3,5-Dinitroaniline	Qua1		3.139		95.2	100	-4.8	30.0
2,4,6-Trinitrotoluene	Lin1		3.601		101	100	0.9	30.0
Nitrobenzene	Lin1		0.7049		103	100	2.9	30.0
4-Amino-2,6-dinitrotoluene	Lin1		1.166		101	100	0.9	30.0
2-Amino-4,6-dinitrotoluene	Lin1		1.486		109	100	8.9	30.0
2,6-Dinitrotoluene	Lin1		1.969		100	100	0.2	30.0
2,4-Dinitrotoluene	Ave	1.101	1.162		103	100	5.5	30.0
PETN	Lin1		2.388		102	100	1.9	30.0
o-Nitrotoluene	Lin1		1.346		104	100	3.8	30.0
p-Nitrotoluene	Lin1		1.184		108	100	8.3	30.0
m-Nitrotoluene	Lin1		0.7322		98.0	100	-2.0	30.0
Nitrobenzene-d5	Lin1		0.9061		104	100	3.7	30.0

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12011.d
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 12-Apr-2022 10:55:09 ALS Bottle#: 9 Worklist Smp#: 12
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 04/08/22ICV ICV
Misc. Info.: 04/08/2022 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4
Sublist:

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\8321expDuPont.m
Limit Group: LC - 8321A Expl
Last Update: 13-Apr-2022 13:57:17 Calib Date: 12-Apr-2022 10:31:58
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d

Column 1 : Det: F1:SIR
Process Host: CTX1683

First Level Reviewer: meyera Date: 13-Apr-2022 13:25:28
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.964	1.964	0.0	1.000	197041	112.9	222	
* 1 HMX-13C4								
360.9	1.964	1.964	0.0		121377	125.0	70.6	
3 TNX								
233.1	2.153	2.153	0.0	0.769	231483	119.0	271	
4 DNX								
249.1	2.287	2.287	0.0	0.817	206838	111.2	320	
5 MNX								
265.1	2.529	2.529	0.0	0.904	250593	116.1	273	
6 RDX								
281.1	2.772	2.772	0.0	0.990	219845	106.8	79.7	
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.1	2.799	2.798	0.001		344535	125.0	389	
8 1,3,5-Trinitrobenzene								
213.1	3.458	3.458	0.0	0.775	957560	103.1	795	
11 Tetryl								
241.1	4.003	4.003	0.0	0.897	871997	107.2	512	
* 12 1,3-Dinitrobenzene-d4								
172.1	4.461	4.461	0.0		1128218	129.4	77.1	
13 1,3-Dinitrobenzene								
168.1	4.518	4.518	0.0	1.013	918383	98.3	137	
14 Nitroglycerin								
61.9	4.558	4.558	0.0	1.022	6048084	105.4	432	
33 3,5-Dinitroaniline								
183.1	4.760	4.760	0.0	1.067	2737263	95.2	77.5	

Report Date: 13-Apr-2022 13:57:18 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12011.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
15 2,4,6-Trinitrotoluene								
227.1	4.841	4.841	0.0	0.764	3140731	100.9	717	
$ 16 Nitrobenzene-d5								
128.1	4.962	4.962	0.0	1.112	790454	103.7	374	
17 Nitrobenzene								
123.1	5.043	5.043	0.0	1.131	614787	102.9	505	
19 4-Amino-2,6-dinitrotoluene								
197.2	5.417	5.417	0.0	0.855	2831127	100.9	152	
22 2-Amino-4,6-dinitrotoluene								
197.2	5.861	5.861	0.0	0.925	3605866	108.9	185	
23 2,6-Dinitrotoluene								
182.1	6.063	6.094	-0.031	0.957	4780552	100.2	259	
* 24 2,4-dinitrotoluene-d3								
185.1	6.337	6.336	0.001		3034212	125.0	456	
25 2,4-Dinitrotoluene								
182.1	6.397	6.367	0.030	1.010	2820640	103.1	127	
26 PETN								
61.9	6.812	6.812	0.0	1.075	5796093	101.9	527	
28 o-Nitrotoluene								
137.1	7.389	7.389	0.0	1.166	1173773	103.8	261	
29 p-Nitrotoluene								
137.1	7.845	7.875	-0.030	1.238	1032207	108.3	217	
30 m-Nitrotoluene								
137.1	8.422	8.391	0.031	1.329	638623	98.0	128	

QC Flag Legend

Processing Flags

Reagents:

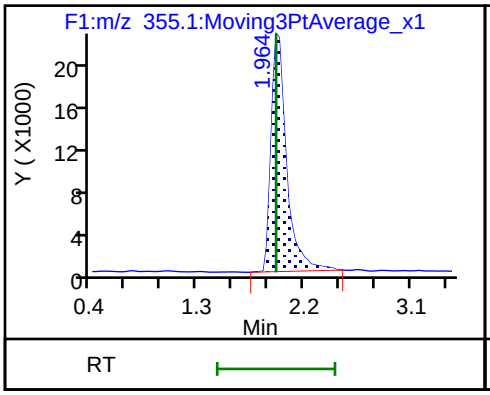
8321NB-D5-cal_00021	Amount Added: 10.00	Units: uL	
8321expICV_00019	Amount Added: 10.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 13-Apr-2022 13:57:18 Chrom Revision: 2.3 18-Mar-2022 09:07:22

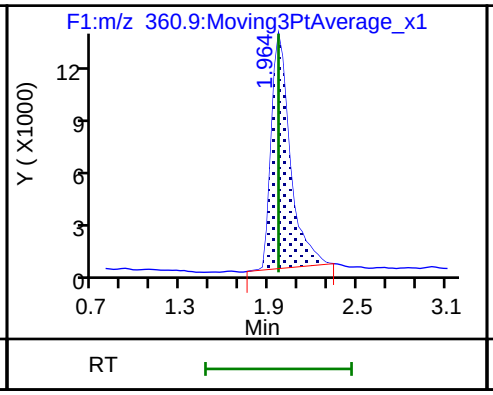
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12011.d
Injection Date: 12-Apr-2022 10:55:09 Instrument ID: LC_LCMS4
Lims ID: ICV
Client ID:
Operator ID: acm ALS Bottle#: 9 Worklist Smp#: 12
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Method: 8321expDuPont Limit Group: LC - 8321A Expl

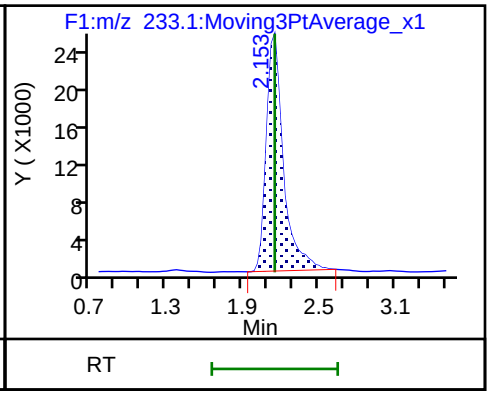
2 HMX



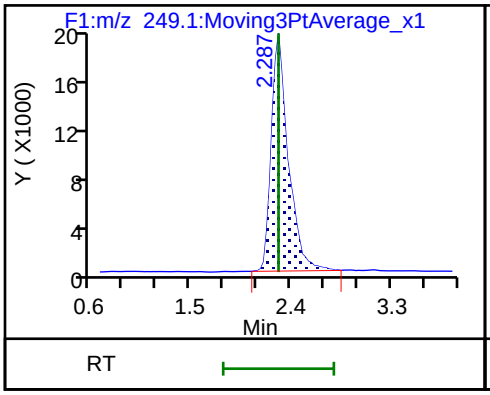
* 1 HMX-13C4



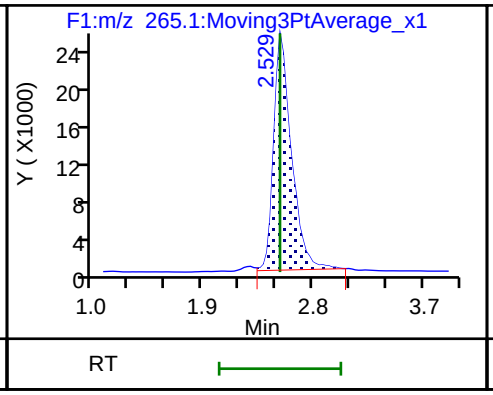
3 TNX



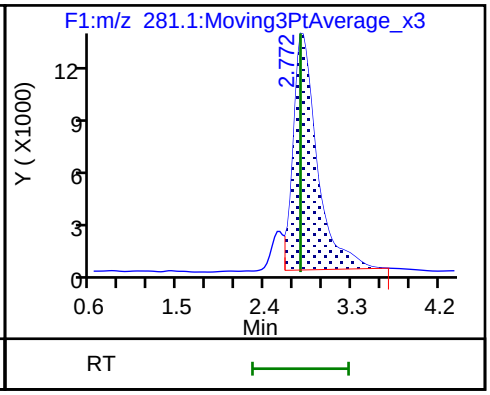
4 DNX



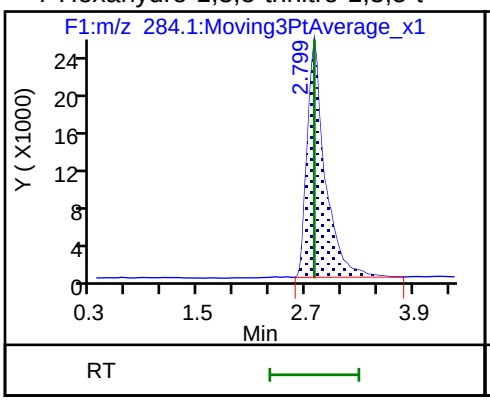
5 MNX



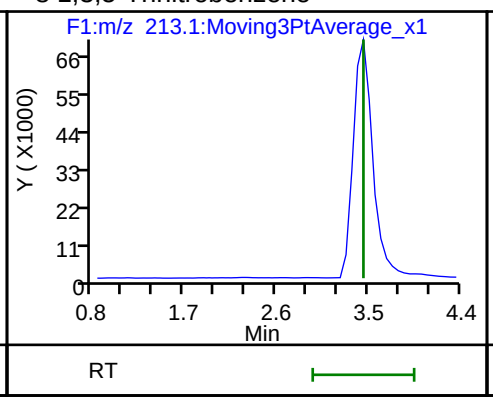
6 RDX



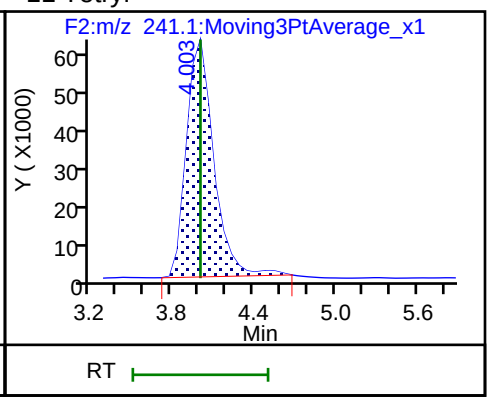
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t



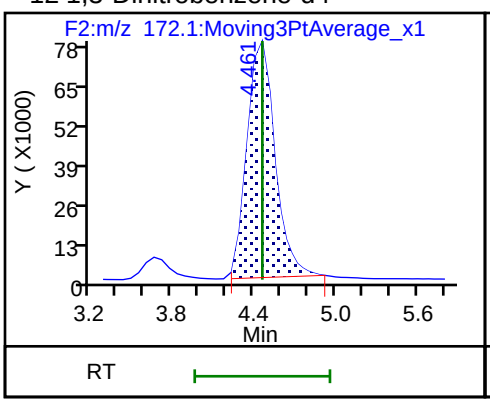
8 1,3,5-Trinitrobenzene



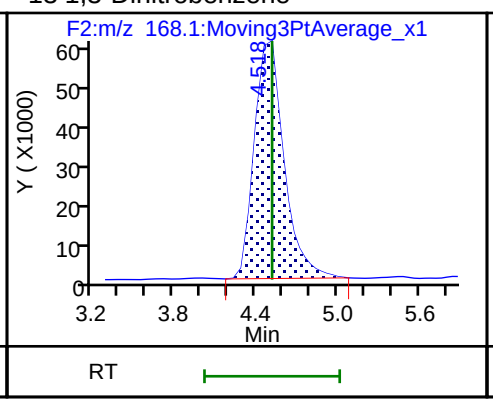
11 Tetryl



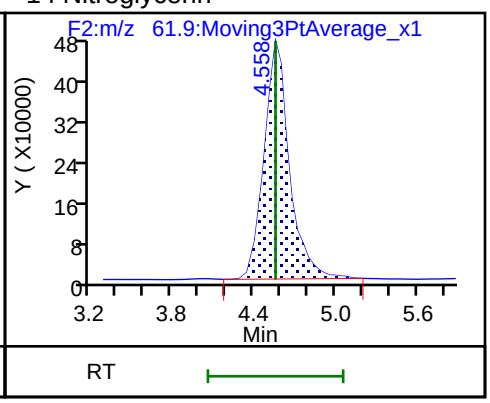
* 12 1,3-Dinitrobenzene-d4



13 1,3-Dinitrobenzene

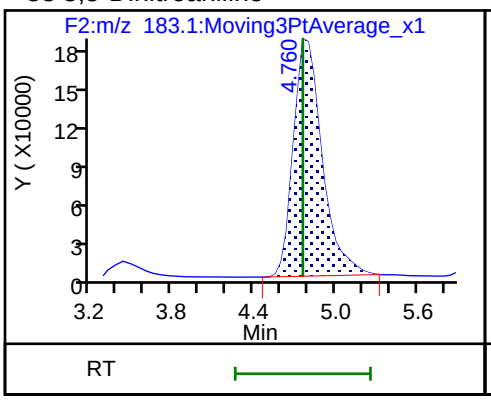


14 Nitroglycerin

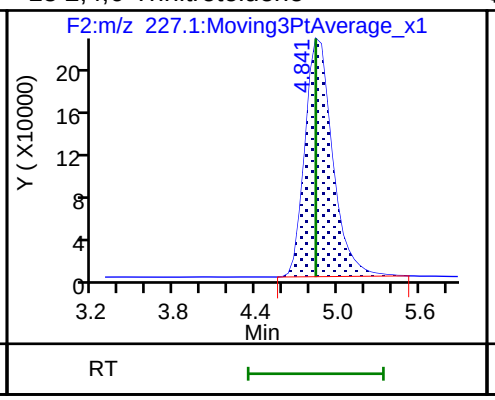


Report Date: 13-Apr-2022 13:57:18 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12011.d

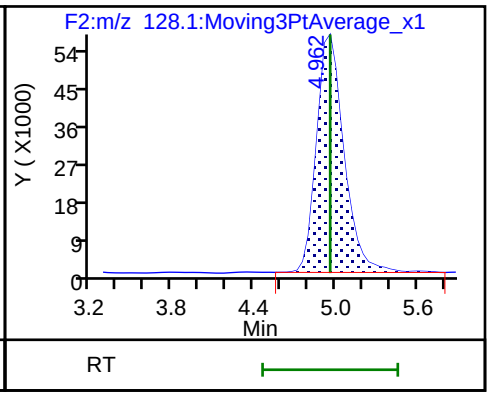
33 3,5-Dinitroaniline



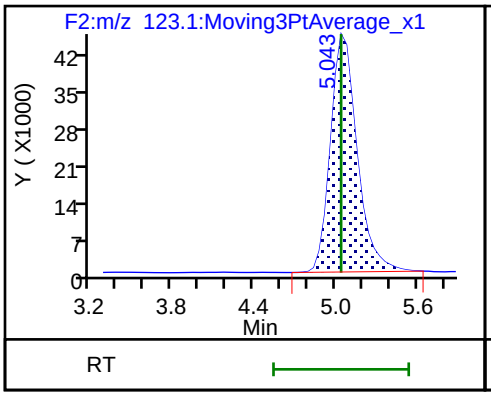
15 2,4,6-Trinitrotoluene



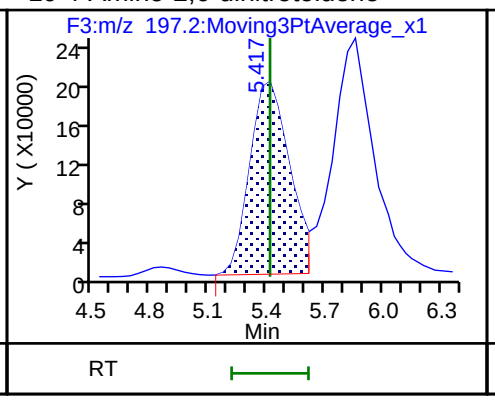
$ 16 Nitrobenzene-d5



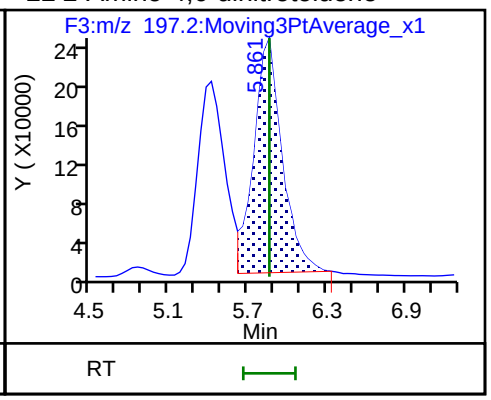
17 Nitrobenzene



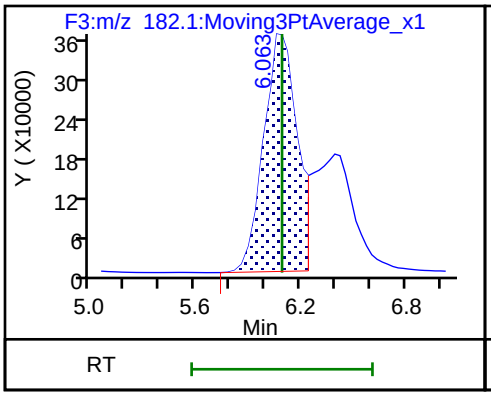
19 4-Amino-2,6-dinitrotoluene



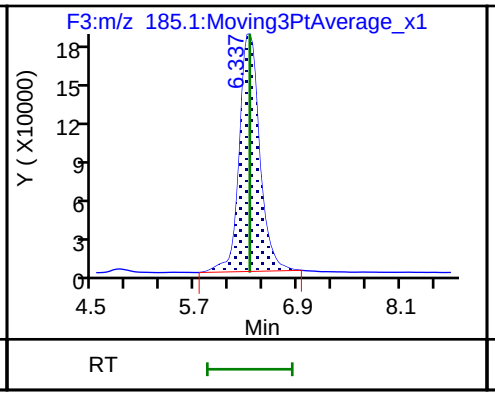
22 2-Amino-4,6-dinitrotoluene



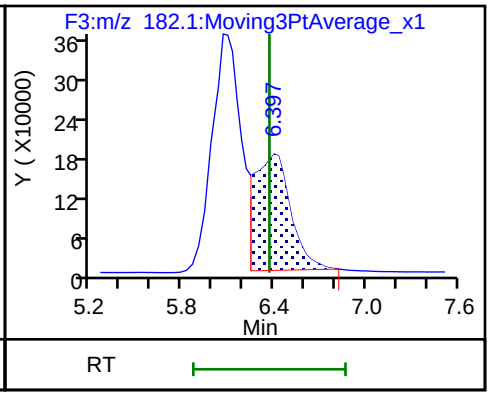
23 2,6-Dinitrotoluene



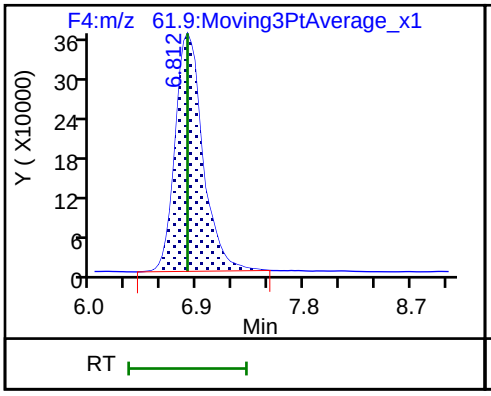
* 24 2,4-dinitrotoluene-d3



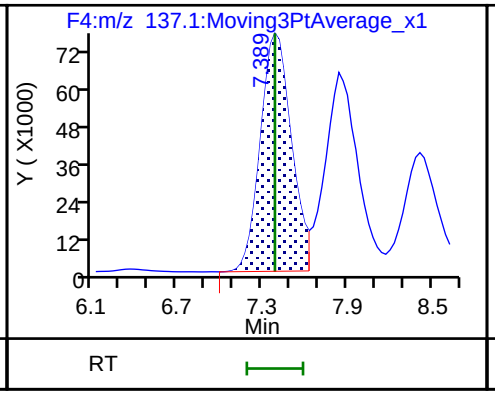
25 2,4-Dinitrotoluene



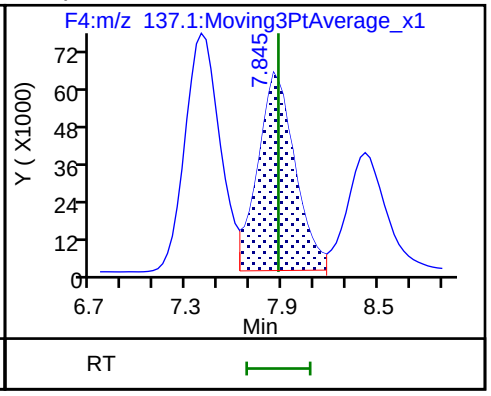
26 PETN



28 o-Nitrotoluene

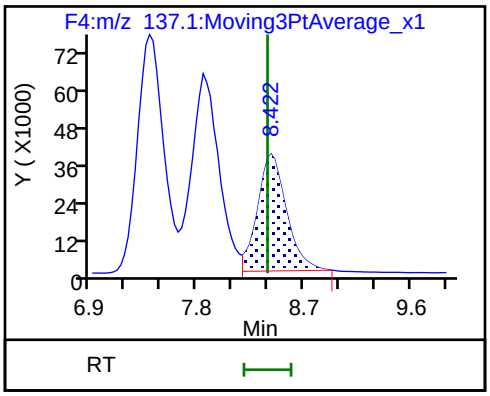


29 p-Nitrotoluene



Report Date: 13-Apr-2022 13:57:18 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12011.d

30 m-Nitrotoluene



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Lab Sample ID: CCV 280-571614/63 Calibration Date: 04/12/2022 20:51

Instrument ID: LC_LCMS4 Calib Start Date: 04/12/2022 09:22

GC Column: IonPac ID: 2.00(mm) Calib End Date: 04/12/2022 10:31

Lab File ID: ex422D12062.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin1		2.104		57.6	50.0	15.2	30.0
TNX	Lin1		1.990		47.9	50.1	-4.4	30.0
DNX	Lin1		2.173		54.0	50.1	8.0	30.0
MNX	Lin1		2.427		61.4	58.4	5.3	30.0
RDX	Qua1		0.7563		46.4	50.0	-7.2	30.0
1,3,5-Trinitrobenzene	Lin1		0.999		47.3	50.1	-5.5	30.0
Tetryl	Lin1		0.8711		46.8	50.1	-6.6	30.0
1,3-Dinitrobenzene	Lin1		1.038		48.5	50.1	-3.2	30.0
Nitroglycerin	Lin1		6.928		52.1	50.3	3.5	30.0
3,5-Dinitroaniline	Qua1		3.004		44.1	50.0	-11.8	30.0
2,4,6-Trinitrotoluene	Lin1		3.565		49.9	50.2	-0.5	30.0
Nitrobenzene	Lin1		0.7166		51.9	50.2	3.5	30.0
4-Amino-2,6-dinitrotoluene	Lin1		1.154		49.5	50.1	-1.1	30.0
2-Amino-4,6-dinitrotoluene	Lin1		1.317		48.1	50.2	-4.1	30.0
2,6-Dinitrotoluene	Lin1		1.864		47.5	50.2	-5.5	30.0
2,4-Dinitrotoluene	Ave	1.101	1.024		45.8	50.2	-7.0	30.0
PETN	Lin1		2.441		51.5	49.8	3.4	30.0
o-Nitrotoluene	Lin1		1.371		52.6	50.0	5.2	30.0
p-Nitrotoluene	Lin1		1.144		52.1	50.1	3.9	30.0
m-Nitrotoluene	Lin1		0.7298		48.6	50.1	-3.0	30.0
Nitrobenzene-d5	Lin1		0.8727		49.3	50.0	-1.5	30.0

Report Date: 13-Apr-2022 13:58:36 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12062.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 12-Apr-2022 20:51:18 ALS Bottle#: 5 Worklist Smp#: 63
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 04/08/22EX4 CCV 50 ug/L
Misc. Info.: 04/08/2022 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4
Sublist: chrom-8321expDuPont*sub15

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\8321expDuPont.m
Limit Group: LC - 8321A Expl
Last Update: 13-Apr-2022 13:58:36 Calib Date: 12-Apr-2022 10:31:58
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d

Column 1 : Det: F1:SIR
Process Host: CTX1683

First Level Reviewer: meyera Date: 13-Apr-2022 13:45:09
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.965	1.964	0.001	1.000	117320	57.6	178	
* 1 HMX-13C4								
360.9	1.965	1.964	0.001		139400	125.0	74.1	
3 TNX								
233.1	2.153	2.153	0.0	0.777	111056	47.9	136	
4 DNX								
249.1	2.315	2.287	0.028	0.835	121302	54.0	248	
5 MNX								
265.1	2.530	2.529	0.001	0.913	157922	61.4	169	
6 RDX								
281.1	2.799	2.772	0.027	1.010	106270	46.4	53.3	
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.1	2.772	2.798	-0.026		351280	125.0	442	
8 1,3,5-Trinitrobenzene								
213.1	3.459	3.458	0.001	0.775	427779	47.3	566	
11 Tetryl								
241.1	4.004	4.003	0.001	0.897	373161	46.8	268	
* 12 1,3-Dinitrobenzene-d4								
172.1	4.462	4.461	0.001		1106141	129.4	83.3	
13 1,3-Dinitrobenzene								
168.1	4.519	4.518	0.001	1.013	444604	48.5	174	
14 Nitroglycerin								
61.9	4.559	4.558	0.001	1.022	2979847	52.1	214	
33 3,5-Dinitroaniline								
183.1	4.761	4.760	0.001	1.067	1284553	44.1	72.2	

Report Date: 13-Apr-2022 13:58:36 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12062.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
15 2,4,6-Trinitrotoluene								
227.1	4.842	4.841	0.001	0.764	1530301	49.9	630	
$ 16 Nitrobenzene-d5								
128.1	4.923	4.962	-0.039	1.103	373188	49.3	60.4	
17 Nitrobenzene								
123.1	5.044	5.043	0.001	1.131	307596	51.9	295	
19 4-Amino-2,6-dinitrotoluene								
197.2	5.418	5.417	0.001	0.855	1377288	49.5	144	
22 2-Amino-4,6-dinitrotoluene								
197.2	5.822	5.861	-0.039	0.919	1577438	48.1	142	
23 2,6-Dinitrotoluene								
182.1	6.061	6.094	-0.033	0.957	2232173	47.5	216	
* 24 2,4-dinitrotoluene-d3								
185.1	6.334	6.336	-0.002		2981485	125.0	520	
25 2,4-Dinitrotoluene								
182.1	6.365	6.367	-0.002	1.005	1226669	45.8	111	
26 PETN								
61.9	6.810	6.812	-0.002	1.075	2899690	51.5	263	
28 o-Nitrotoluene								
137.1	7.387	7.389	-0.002	1.166	586314	52.6	215	
29 p-Nitrotoluene								
137.1	7.873	7.875	-0.002	1.243	489923	52.1	161	
30 m-Nitrotoluene								
137.1	8.419	8.391	0.028	1.329	312349	48.6	97.9	

QC Flag Legend

Processing Flags

Reagents:

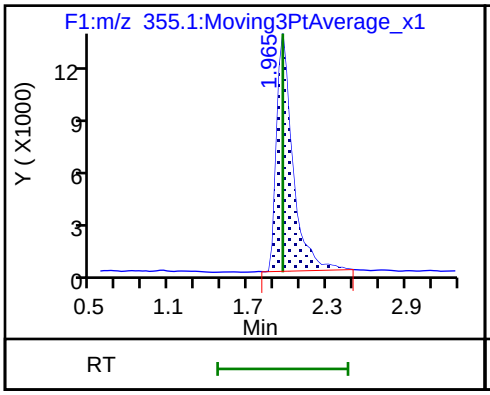
8321NB-D5-cal_00021	Amount Added: 5.00	Units: uL	
8321EXcalprim_00029	Amount Added: 5.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 13-Apr-2022 13:58:36 Chrom Revision: 2.3 18-Mar-2022 09:07:22

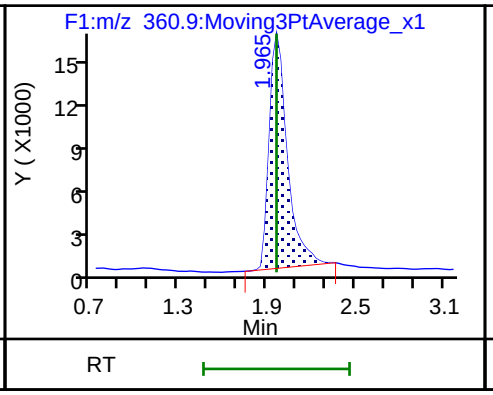
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12062.d
Injection Date: 12-Apr-2022 20:51:18 Instrument ID: LC_LCMS4
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 63
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Method: 8321expDuPont Limit Group: LC - 8321A Expl

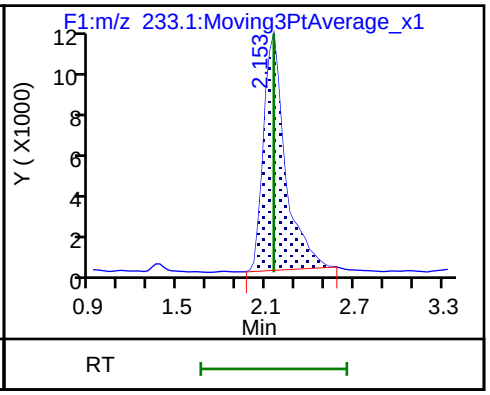
2 HMX



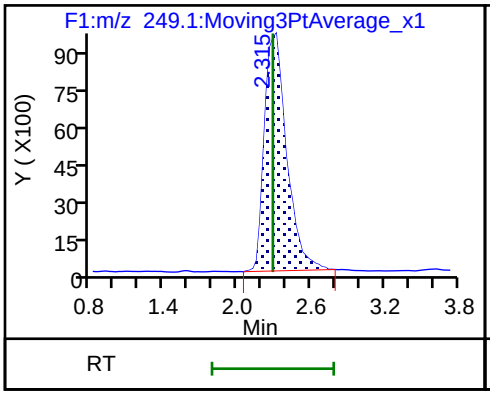
* 1 HMX-13C4



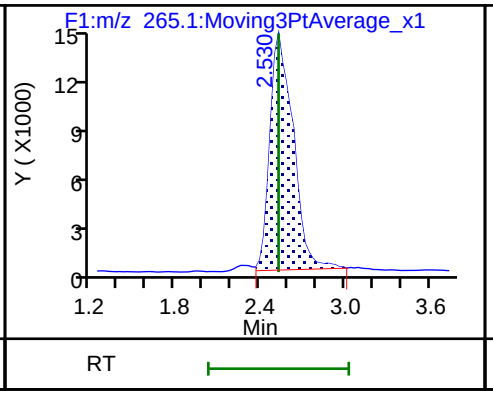
3 TNX



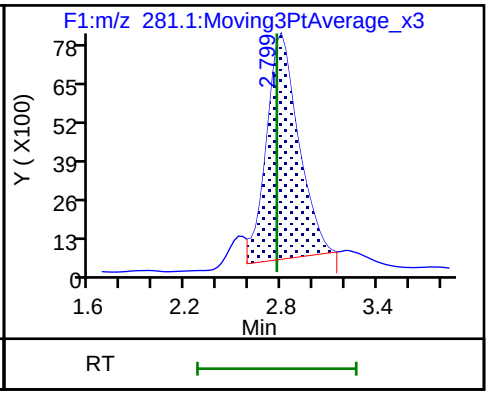
4 DNX



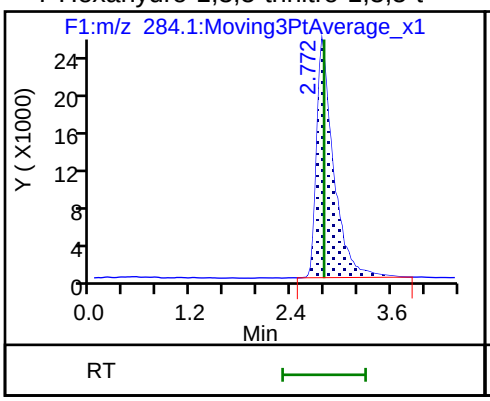
5 MNX



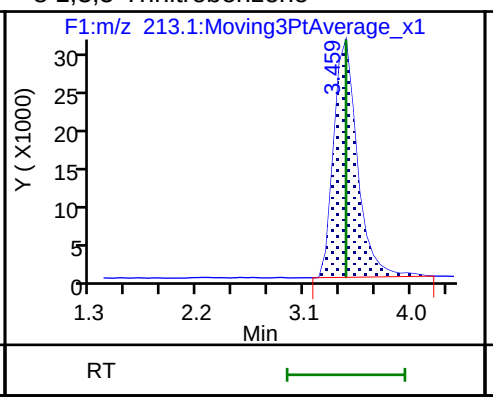
6 RDX



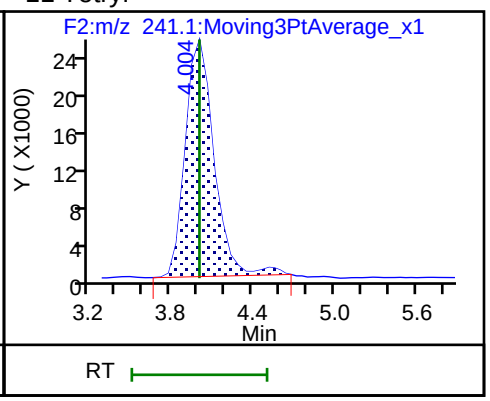
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t



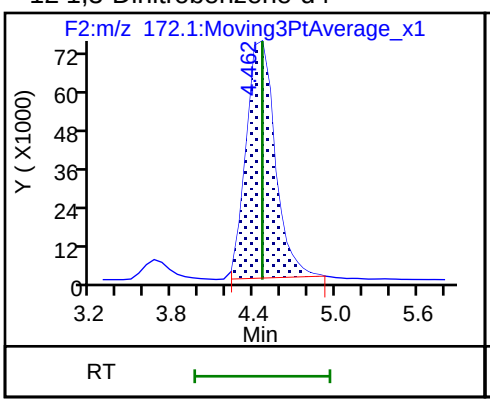
8 1,3,5-Trinitrobenzene



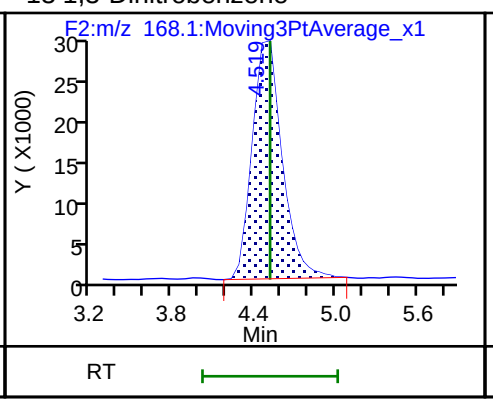
11 Tetryl



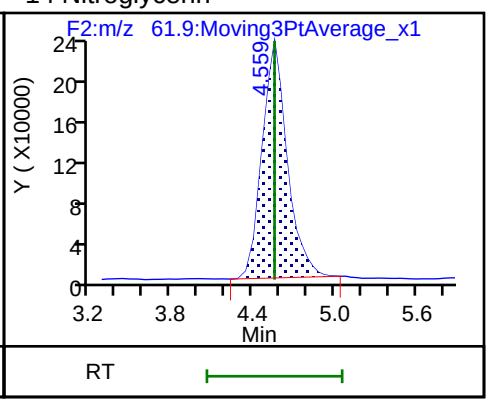
* 12 1,3-Dinitrobenzene-d4



13 1,3-Dinitrobenzene

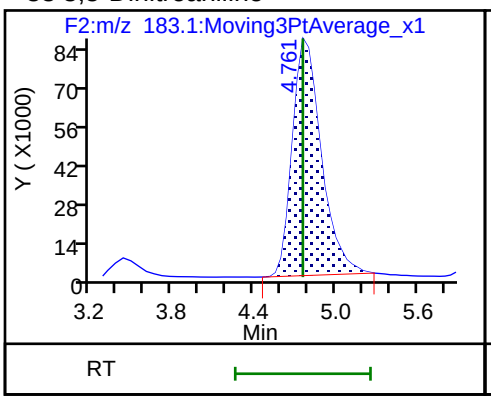


14 Nitroglycerin

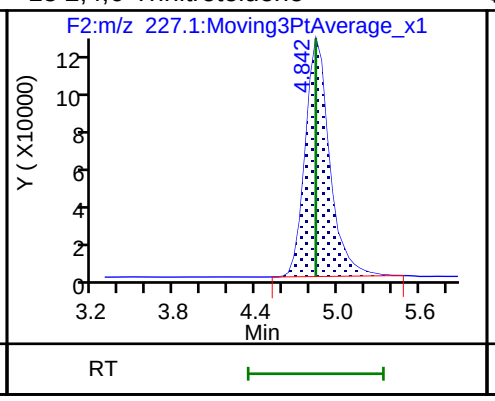


Report Date: 13-Apr-2022 13:58:36 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12062.d

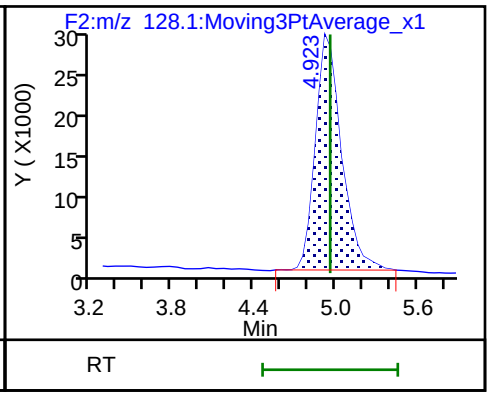
33 3,5-Dinitroaniline



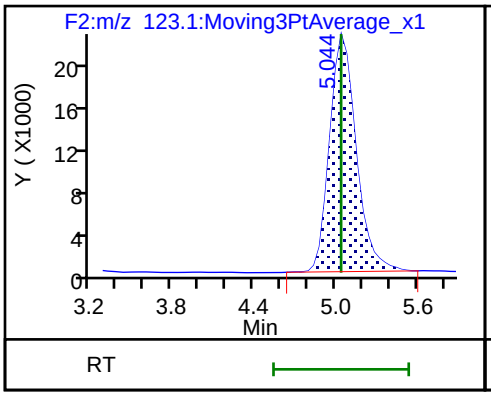
15 2,4,6-Trinitrotoluene



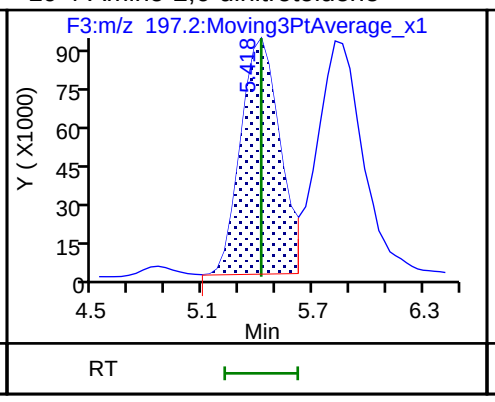
$ 16 Nitrobenzene-d5



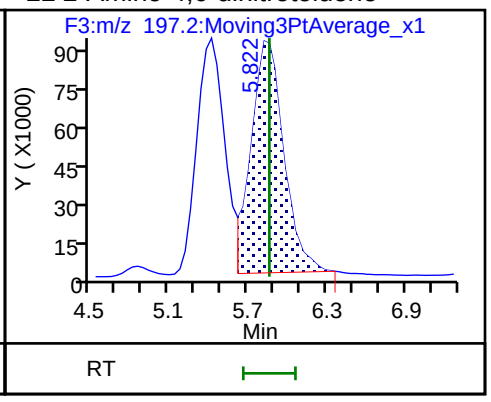
17 Nitrobenzene



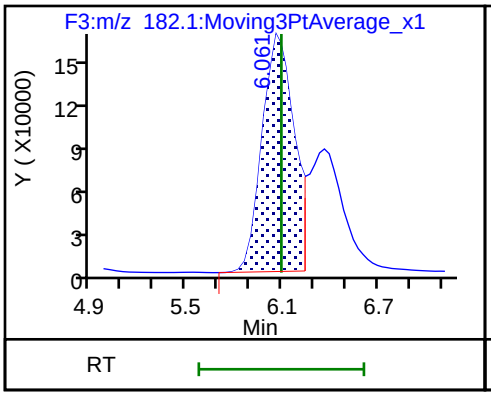
19 4-Amino-2,6-dinitrotoluene



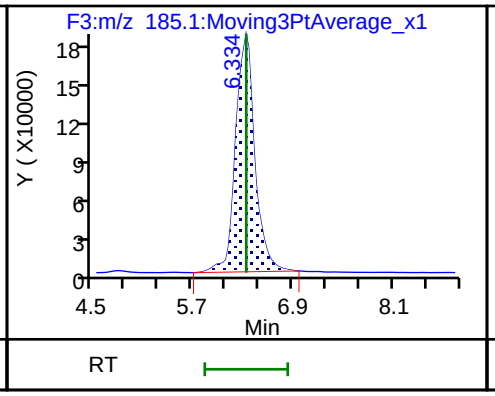
22 2-Amino-4,6-dinitrotoluene



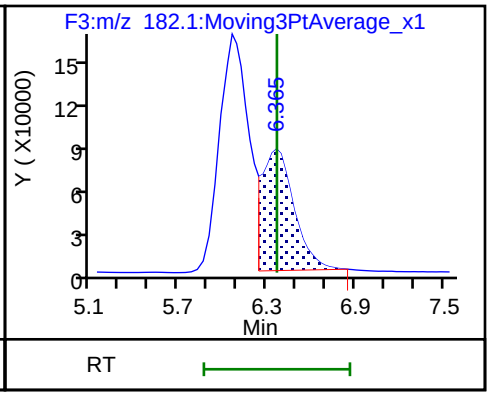
23 2,6-Dinitrotoluene



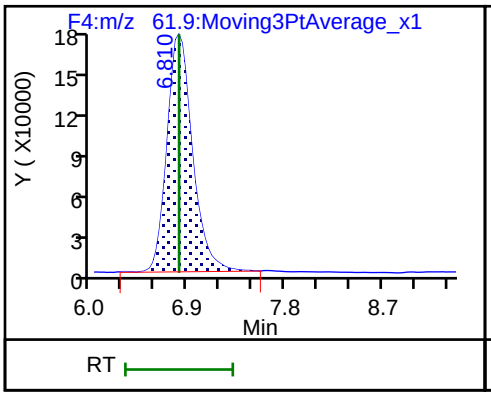
* 24 2,4-dinitrotoluene-d3



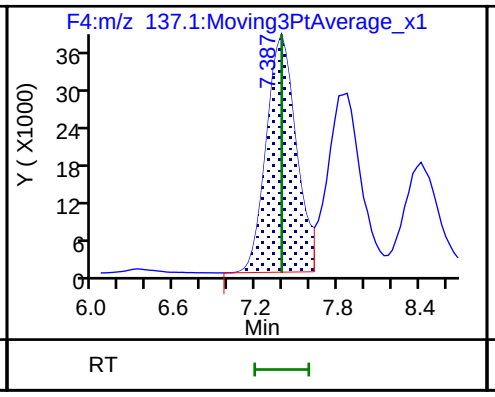
25 2,4-Dinitrotoluene



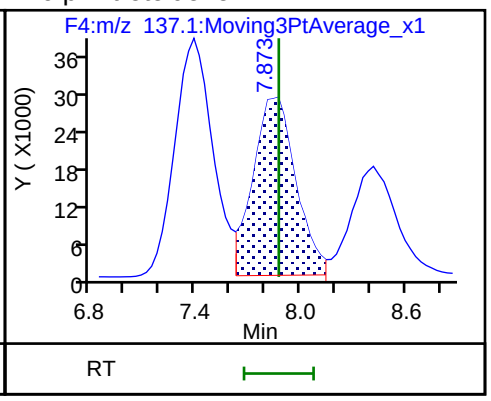
26 PETN



28 o-Nitrotoluene



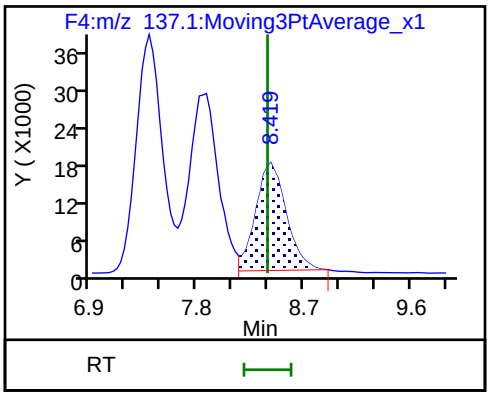
29 p-Nitrotoluene



Report Date: 13-Apr-2022 13:58:36 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12062.d

30 m-Nitrotoluene



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Lab Sample ID: CCV 280-571614/74 Calibration Date: 04/12/2022 22:58

Instrument ID: LC_LCMS4 Calib Start Date: 04/12/2022 09:22

GC Column: IonPac ID: 2.00(mm) Calib End Date: 04/12/2022 10:31

Lab File ID: ex422D12073.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin1		1.720		95.4	100	-4.6	30.0
TNX	Lin1		1.885		93.5	100	-6.5	30.0
DNX	Lin1		1.954		102	100	1.6	30.0
MNX	Lin1		2.097		110	117	-5.9	30.0
RDX	Qua1		0.8854		121	100	20.9	30.0
1,3,5-Trinitrobenzene	Lin1		1.041		98.0	100	-2.2	30.0
Tetryl	Lin1		0.9690		104	100	3.9	30.0
1,3-Dinitrobenzene	Lin1		1.001		93.6	100	-6.6	30.0
Nitroglycerin	Lin1		6.898		105	101	4.8	30.0
3,5-Dinitroaniline	Qua1		2.274		67.6	100	-32.4*	30.0
2,4,6-Trinitrotoluene	Lin1		2.818		79.2	100	-21.1	30.0
Nitrobenzene	Lin1		0.6182		90.4	100	-9.9	30.0
4-Amino-2,6-dinitrotoluene	Lin1		1.186		103	100	2.6	30.0
2-Amino-4,6-dinitrotoluene	Lin1		1.417		104	100	3.8	30.0
2,6-Dinitrotoluene	Lin1		1.962		100	100	-0.1	30.0
2,4-Dinitrotoluene	Ave	1.101	1.033		92.1	100	-6.2	30.0
PETN	Lin1		2.556		109	99.6	9.2	30.0
o-Nitrotoluene	Lin1		1.155		89.0	100	-11.0	30.0
p-Nitrotoluene	Lin1		0.9507		87.1	100	-13.1	30.0
m-Nitrotoluene	Lin1		0.7133		95.6	100	-4.5	30.0
Nitrobenzene-d5	Lin1		0.7715		88.1	100	-11.9	30.0

Report Date: 13-Apr-2022 13:58:55 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12073.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 12-Apr-2022 22:58:38 ALS Bottle#: 6 Worklist Smp#: 74
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 04/08/22EX5 CCV 100 ug/L
Misc. Info.: 04/08/2022 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4
Sublist: chrom-8321expDuPont*sub15

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\8321expDuPont.m
Limit Group: LC - 8321A Expl
Last Update: 13-Apr-2022 13:58:55 Calib Date: 12-Apr-2022 10:31:58
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d

Column 1 : Det: F1:SIR
Process Host: CTX1683

First Level Reviewer: meyera Date: 13-Apr-2022 08:23:31
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.965	1.964	0.001	1.000	195303	95.4	210	
* 1 HMX-13C4								
360.9	1.965	1.964	0.001		141941	125.0	67.1	
3 TNX								
233.1	2.153	2.153	0.0	0.777	214286	93.5	302	
4 DNX								
249.1	2.288	2.287	0.001	0.825	222097	101.7	398	
5 MNX								
265.1	2.530	2.529	0.001	0.913	277848	109.8	176	
6 RDX								
281.1	2.799	2.772	0.027	1.010	219047	120.9	77.6	
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.1	2.772	2.798	-0.026		309242	125.0	147	
8 1,3,5-Trinitrobenzene								M
213.1	3.459	3.458	0.001	0.775	1002478	98.0	907	M
11 Tetryl								
241.1	4.004	4.003	0.001	0.897	933094	104.1	575	
* 12 1,3-Dinitrobenzene-d4								
172.1	4.462	4.461	0.001		1243158	129.4	92.7	
13 1,3-Dinitrobenzene								
168.1	4.519	4.518	0.001	1.013	963599	93.6	160	
14 Nitroglycerin								
61.9	4.559	4.558	0.001	1.022	6668652	105.4	605	
33 3,5-Dinitroaniline								
183.1	4.761	4.760	0.001	1.067	2185121	67.6	62.0	

Report Date: 13-Apr-2022 13:58:55 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12073.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
15 2,4,6-Trinitrotoluene								
227.1	4.842	4.841	0.001	0.768	2718533	79.2	600	
$ 16 Nitrobenzene-d5								
128.1	4.963	4.962	0.001	1.112	741590	88.1	356	
17 Nitrobenzene								
123.1	5.044	5.043	0.001	1.131	596503	90.4	492	
19 4-Amino-2,6-dinitrotoluene								
197.2	5.418	5.417	0.001	0.859	2555287	102.7	152	
22 2-Amino-4,6-dinitrotoluene								
197.2	5.862	5.861	0.001	0.930	3061589	104.3	157	
23 2,6-Dinitrotoluene								
182.1	6.061	6.094	-0.033	0.961	4240436	100.3	216	
* 24 2,4-dinitrotoluene-d3								
185.1	6.304	6.336	-0.032		2690510	125.0	368	
25 2,4-Dinitrotoluene								
182.1	6.365	6.367	-0.002	1.010	2232347	92.1	114	
26 PETN								
61.9	6.810	6.812	-0.002	1.080	5480122	108.7	455	
28 o-Nitrotoluene								
137.1	7.387	7.389	-0.002	1.172	1110165	89.0	274	
29 p-Nitrotoluene								
137.1	7.842	7.875	-0.033	1.244	915482	87.1	198	
30 m-Nitrotoluene								
137.1	8.450	8.391	0.059	1.340	686179	95.6	148	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

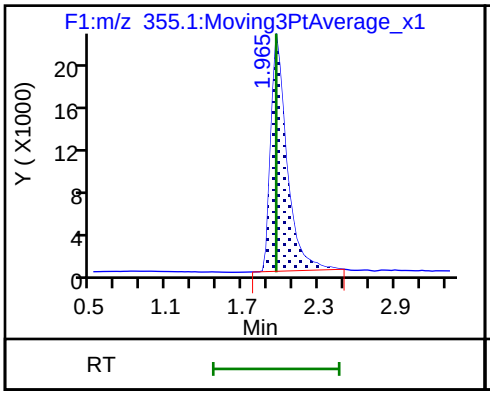
8321NB-D5-cal_00021	Amount Added: 10.00	Units: uL	
8321EXcalprim_00029	Amount Added: 10.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 13-Apr-2022 13:58:55 Chrom Revision: 2.3 18-Mar-2022 09:07:22

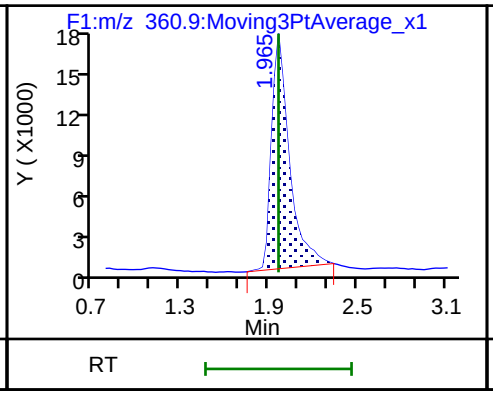
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12073.d
Injection Date: 12-Apr-2022 22:58:38 Instrument ID: LC_LCMS4
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 6 Worklist Smp#: 74
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Method: 8321expDuPont Limit Group: LC - 8321A Expl

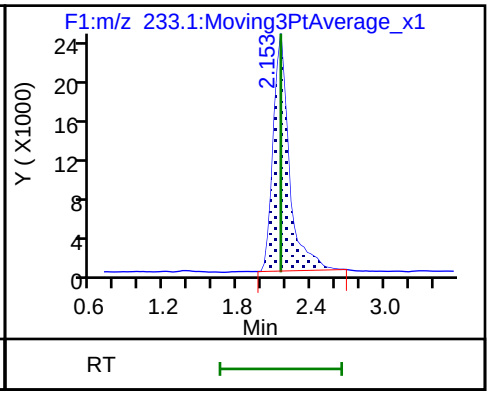
2 HMX



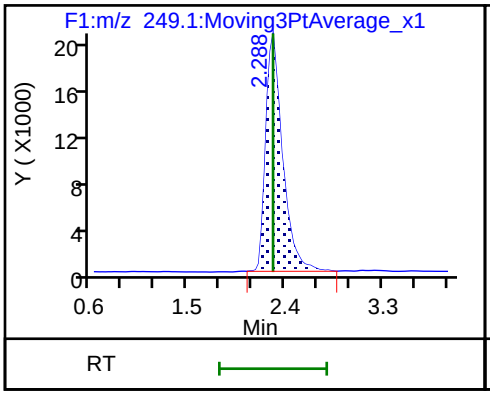
* 1 HMX-13C4



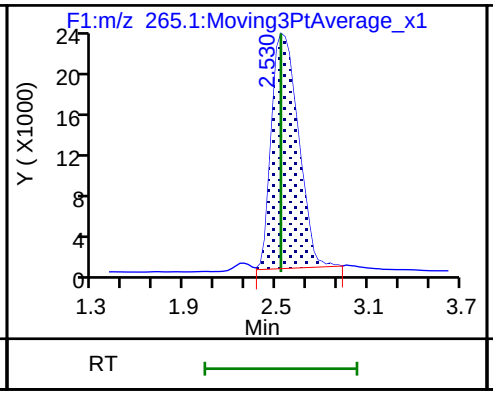
3 TNX



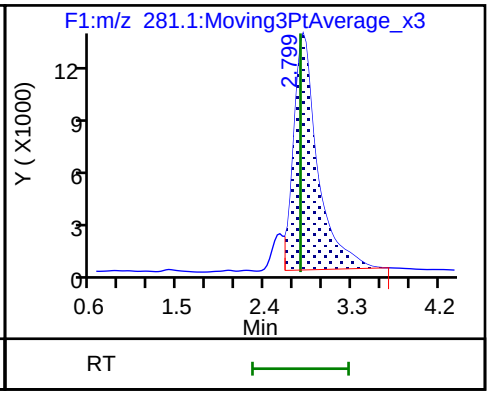
4 DNX



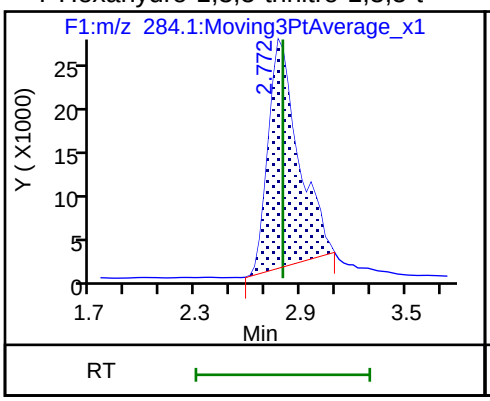
5 MNX



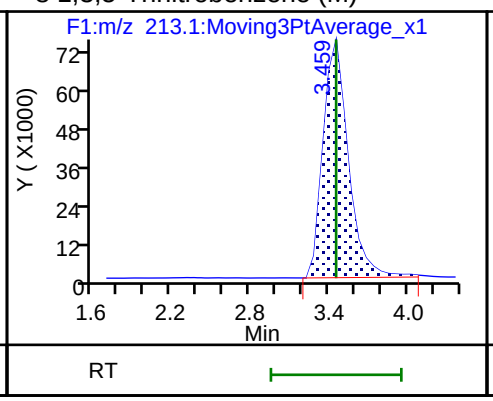
6 RDX



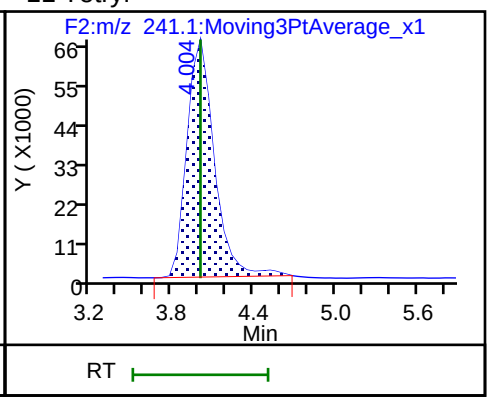
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t



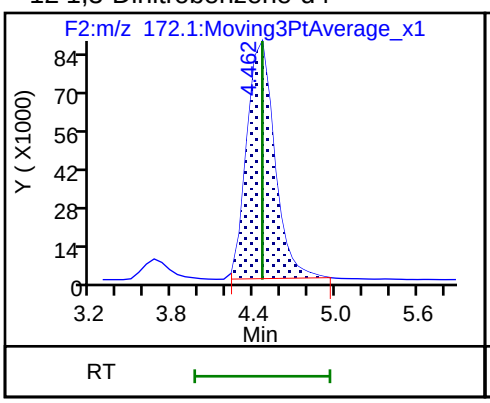
8 1,3,5-Trinitrobenzene (M)



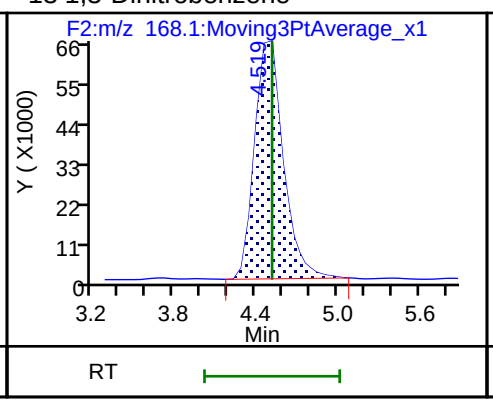
11 Tetryl



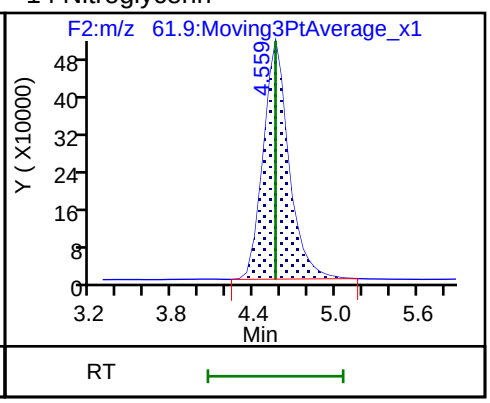
* 12 1,3-Dinitrobenzene-d4



13 1,3-Dinitrobenzene



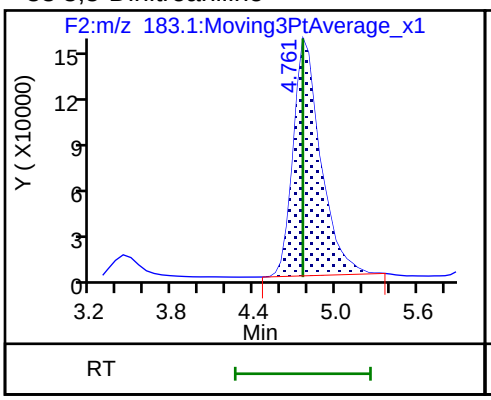
14 Nitroglycerin



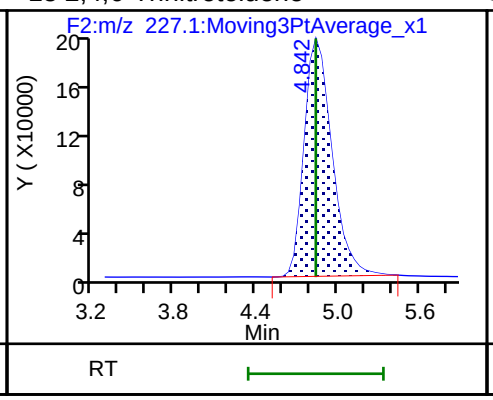
Report Date: 13-Apr-2022 13:58:55 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12073.d

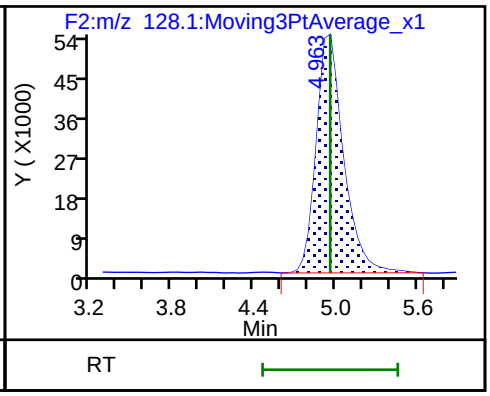
33 3,5-Dinitroaniline



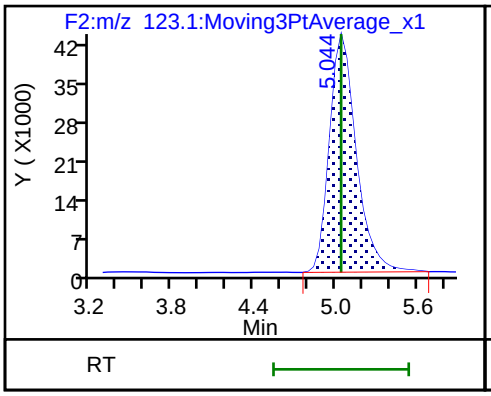
15 2,4,6-Trinitrotoluene



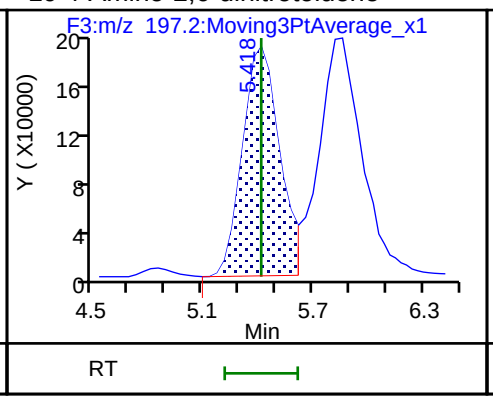
$ 16 Nitrobenzene-d5



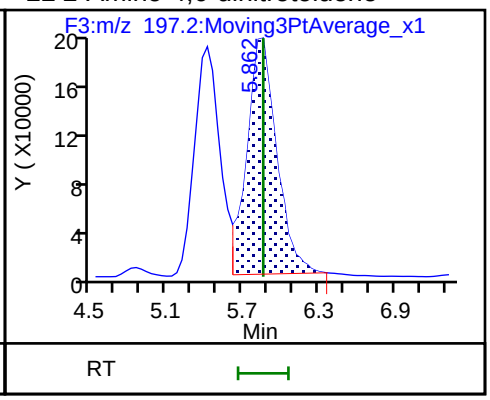
17 Nitrobenzene



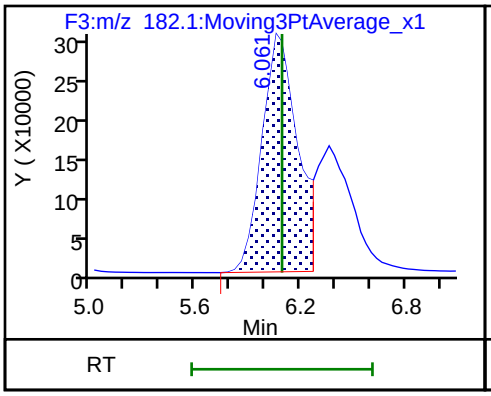
19 4-Amino-2,6-dinitrotoluene



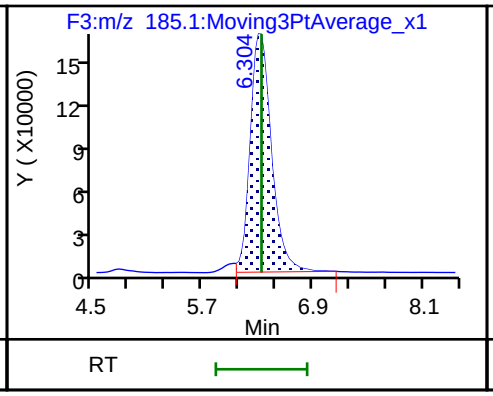
22 2-Amino-4,6-dinitrotoluene



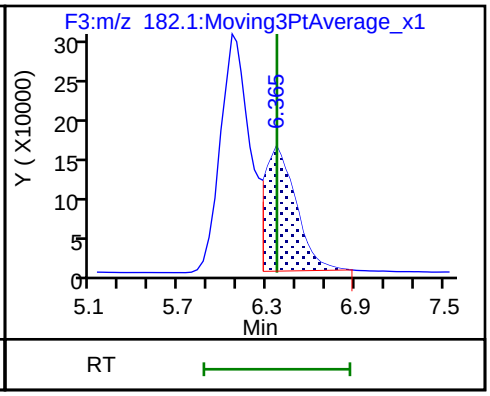
23 2,6-Dinitrotoluene



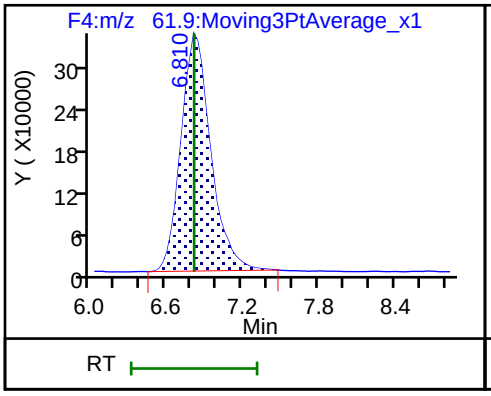
* 24 2,4-dinitrotoluene-d3



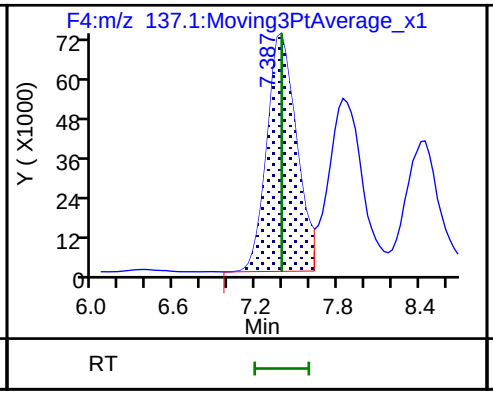
25 2,4-Dinitrotoluene



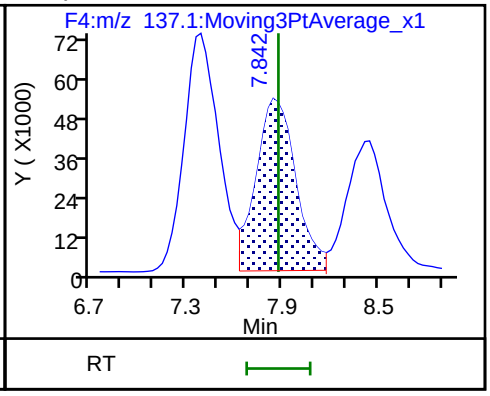
26 PETN



28 o-Nitrotoluene

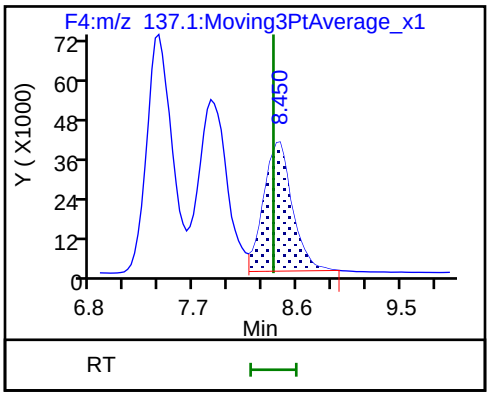


29 p-Nitrotoluene



Report Date: 13-Apr-2022 13:58:55 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12073.d

30 m-Nitrotoluene



Report Date: 13-Apr-2022 13:58:55 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12073.d

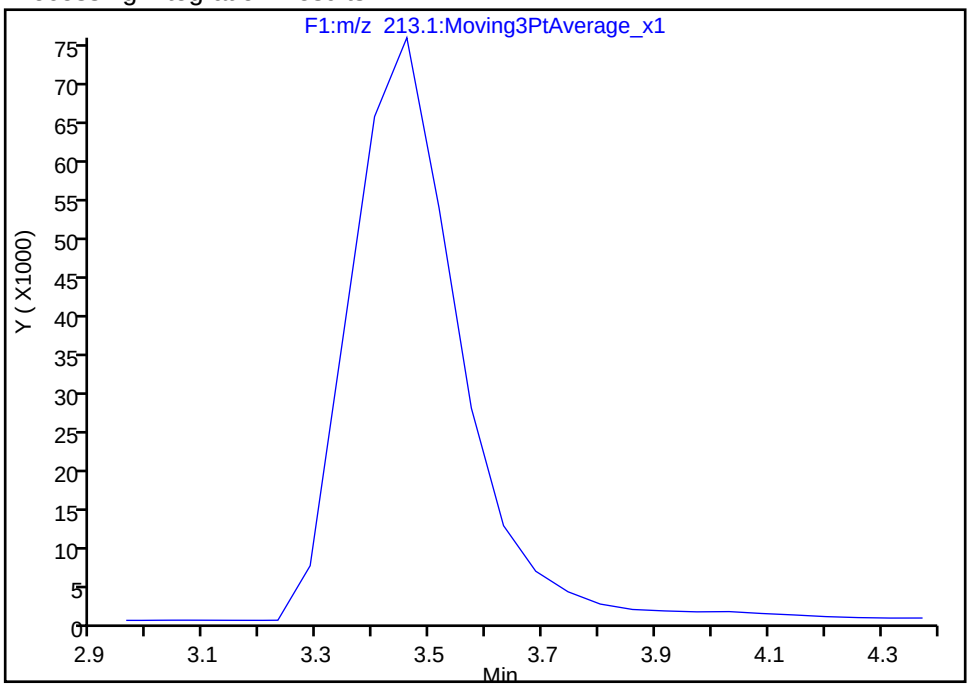
Injection Date:	12-Apr-2022 22:58:38	Instrument ID:	LC_LCMS4
Lims ID:	CCV		
Client ID:			
Operator ID:	acm	ALS Bottle#:	6 Worklist Smp#: 74
Injection Vol:	40.0 ul	Dil. Factor:	1.0000
Method:	8321expDuPont	Limit Group:	LC - 8321A Expl
Column:		Detector	F1:SIR

8 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

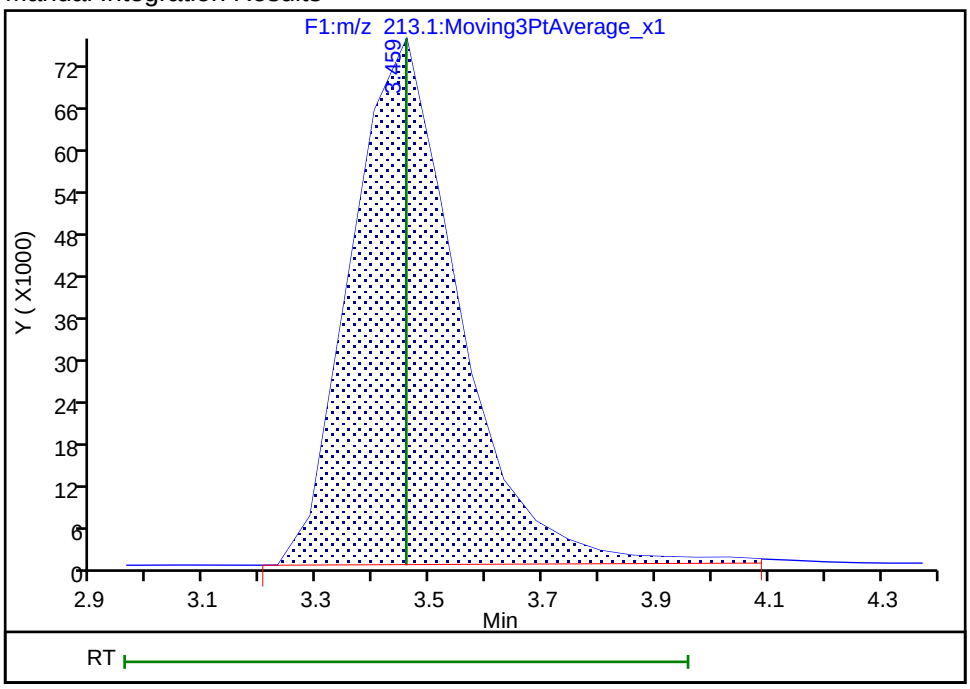
Processing Integration Results

RT: 3.46
Area: 508171
Amount: 49.987244
Amount Units: ug/l



Manual Integration Results

RT: 3.46
Area: 1002478
Amount: 97.967822
Amount Units: ug/l



Reviewer: meyera, 13-Apr-2022 13:54:19

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Lab Sample ID: ICV 280-570784/11 Calibration Date: 04/05/2022 11:11

Instrument ID: LC_LCMS7 Calib Start Date: 04/05/2022 10:20

GC Column: Synergi Hydro ID: Calib End Date: 04/05/2022 10:58

Lab File ID: ex722D05011.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin1		2.136		97.1	100	-2.9	30.0
TNX	Lin1		5.270		101	100	1.1	30.0
DNX	Lin1		8.122		102	100	2.0	30.0
MNX	Lin1		2.351		137	117	17.6	30.0
RDX	Lin1		0.8393		109	100	8.6	30.0
1,3,5-Trinitrobenzene	Lin1		1.739		99.5	100	-0.5	30.0
Tetryl	Lin1		2.874		101	100	1.1	30.0
Nitroglycerin	Lin1		1.112		106	100	6.0	30.0
1,3-Dinitrobenzene	Lin1		1.151		106	100	5.6	30.0
3,5-Dinitroaniline	Lin1		1.445		99.0	100	-1.0	30.0
2,4,6-Trinitrotoluene	Lin1		7.939		100	100	0.4	30.0
Nitrobenzene	Lin1		0.5629		105	100	4.9	30.0
4-Amino-2,6-dinitrotoluene	Lin1		1.573		95.4	100	-4.6	30.0
2-Amino-4,6-dinitrotoluene	Lin1		2.256		99.2	100	-0.8	30.0
2,6-Dinitrotoluene	Lin1		1.995		99.4	100	-0.6	30.0
2,4-Dinitrotoluene	Lin1		1.020		96.8	100	-3.2	30.0
PETN	Lin1		0.2265		97.9	100	-2.1	30.0
o-Nitrotoluene	Lin1		0.2963		95.6	100	-4.4	30.0
p-Nitrotoluene	Lin1		0.2672		99.2	100	-0.8	30.0
m-Nitrotoluene	Lin1		0.1543		96.1	100	-3.9	30.0
Nitrobenzene-d5	Lin1		0.6388		101	100	1.3	30.0

Report Date: 06-Apr-2022 06:44:08 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05011.d
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 05-Apr-2022 11:11:38 ALS Bottle#: 9 Worklist Smp#: 11
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7
Sublist:

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 06:44:08 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 11:44:25
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.223	1.223	0.0	0.998	378370	97.1	70.0	
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		221453	125.0	78.8	
36 TNX								
144.0	1.352	1.352	0.0	0.761	7318185	101.2	539	
33 DNX								
160.0	1.444	1.444	0.0	0.813	11278717	102.1	407	
34 MNX								
160.0	1.615	1.615	0.0	0.909	3805367	137.2	126	
4 RDX								
281.2	1.782	1.774	0.008	1.003	549405	108.6	99.2	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		818238	125.0	202	
5 1,3,5-Trinitrobenzene								
213.0	2.202	2.199	0.003	0.773	2412496	99.5	202	
6 Tetryl								
241.1	2.540	2.540	0.0	0.891	3987099	101.1	135	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.850	2.850	0.0		1794479	129.4	237	
8 1,3-Dinitrobenzene								
168.0	2.882	2.871	0.011	1.011	1596198	105.6	240	
9 Nitroglycerin								
62.0	2.878	2.878	0.0	1.010	1542399	106.0	686	
28 3,5-Dinitroaniline								
183.0	3.039	3.027	0.012	1.066	6725739	99.0	50.5	

Report Date: 06-Apr-2022 06:44:08 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05011.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.107	3.107	0.0	0.771	11012515	100.4	395	
$ 11 Nitrobenzene-d5								
128.0	3.150	3.150	0.0	0.782	886332	101.3	105	
12 Nitrobenzene								
123.0	3.208	3.208	0.0	0.796	780870	104.9	33.9	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.398	3.391	0.007	0.844	7321253	95.4	64.6	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.708	3.708	0.0	0.921	10503314	99.2	86.0	
17 2,6-Dinitrotoluene								
182.0	3.852	3.852	0.0	0.956	9285582	99.4	898	
* 18 2,4-dinitrotoluene-d3								
185.1	4.028	4.028	0.0		5819137	125.0	120	
19 2,4-Dinitrotoluene								
182.0	4.061	4.052	0.009	1.008	4750606	96.8	418	
20 PETN								
61.8	4.315	4.305	0.010	1.071	1054444	97.9	395	
22 o-Nitrotoluene								
137.0	4.631	4.631	0.0	1.150	1379372	95.6	430	
23 p-Nitrotoluene								
137.0	4.915	4.910	0.005	1.220	1243862	99.2	378	
24 m-Nitrotoluene								
137.0	5.273	5.268	0.005	1.309	718208	96.1	205	

QC Flag Legend

Processing Flags

Reagents:

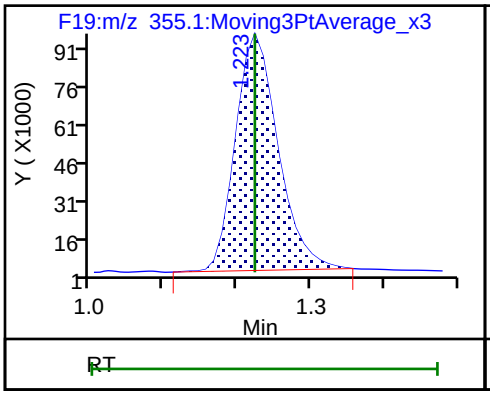
8321NB-D5-cal_00021	Amount Added: 10.00	Units: uL	
8321expICV_00019	Amount Added: 10.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 06-Apr-2022 06:44:08 Chrom Revision: 2.3 18-Mar-2022 09:07:22

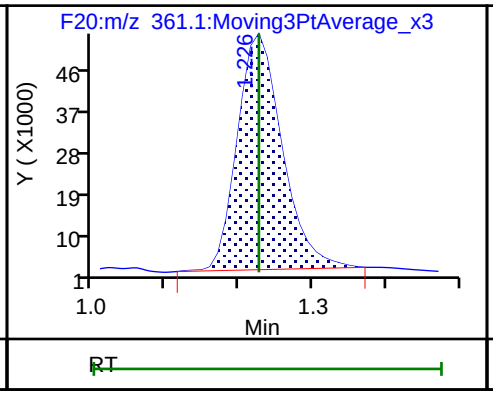
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05011.d
Injection Date: 05-Apr-2022 11:11:38 Instrument ID: LC_LCMS7
Lims ID: ICV
Client ID:
Operator ID: acm ALS Bottle#: 9 Worklist Smp#: 11
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

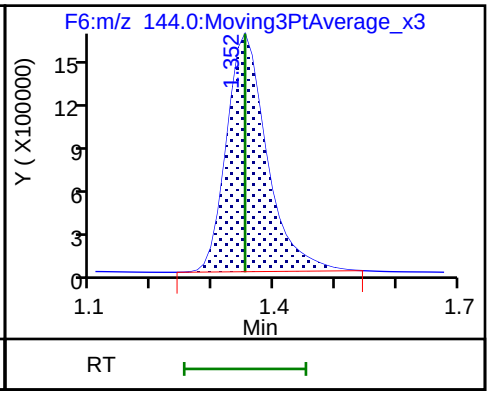
2 HMX



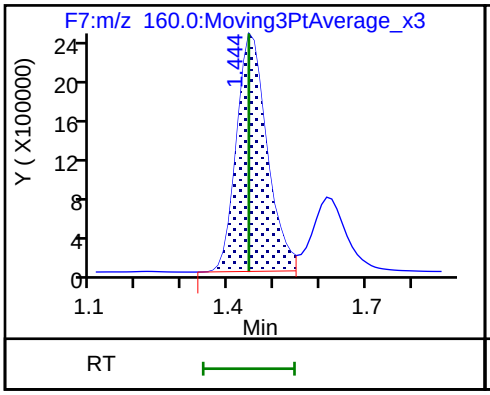
* 1 HMX-13C4



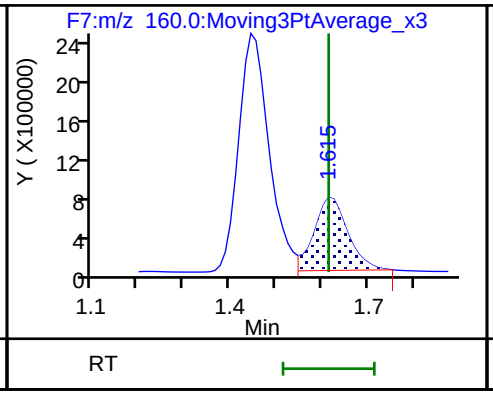
36 TNX



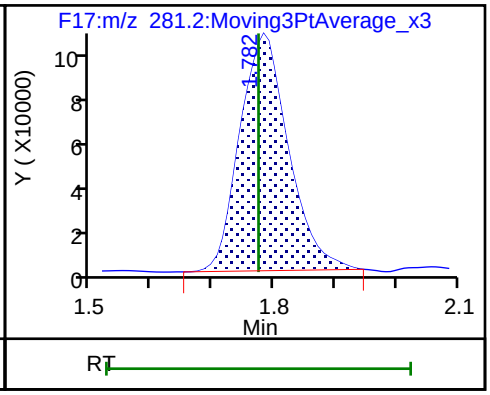
33 DNX



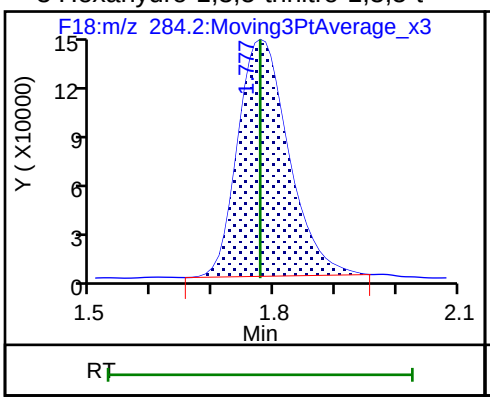
34 MNX



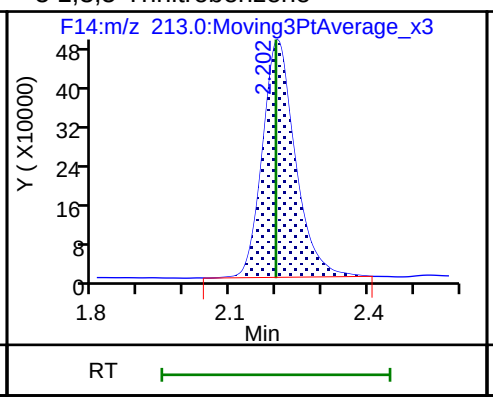
4 RDX



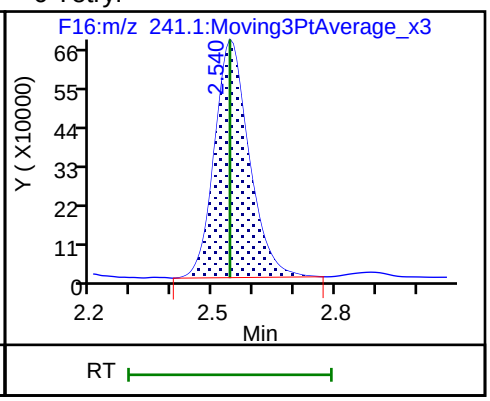
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



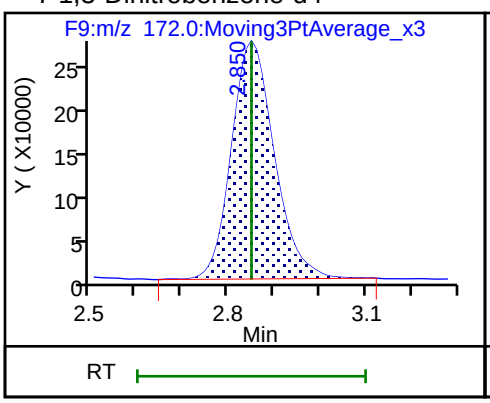
5 1,3,5-Trinitrobenzene



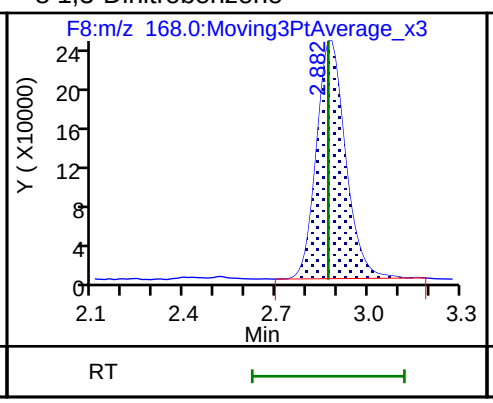
6 Tetryl



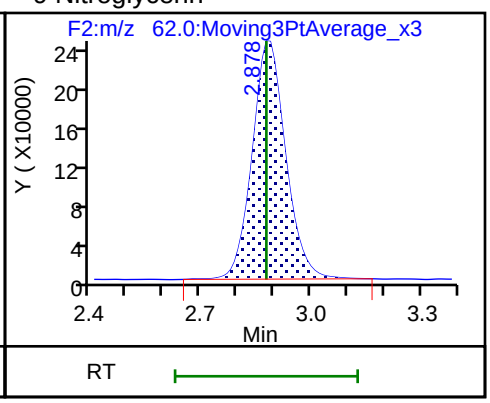
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

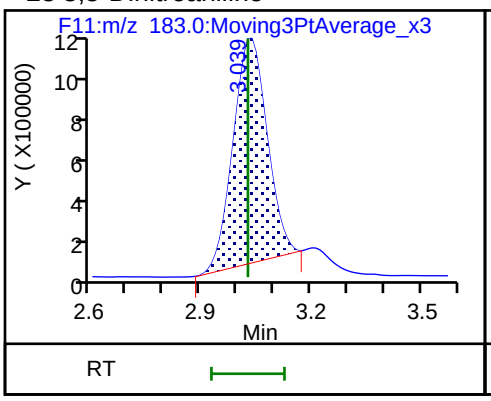


9 Nitroglycerin

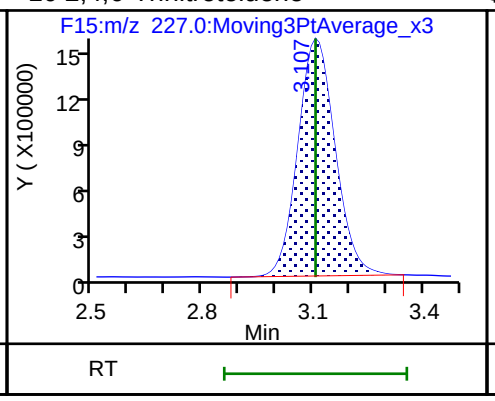


Report Date: 06-Apr-2022 06:44:08 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05011.d

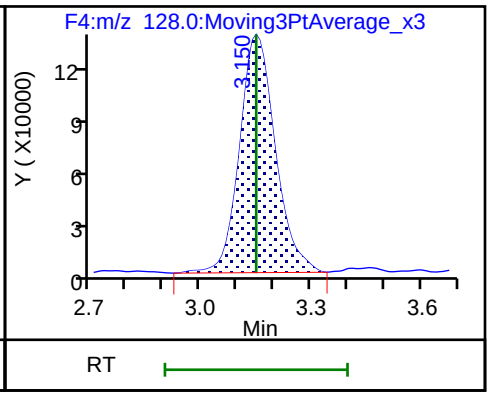
28 3,5-Dinitroaniline



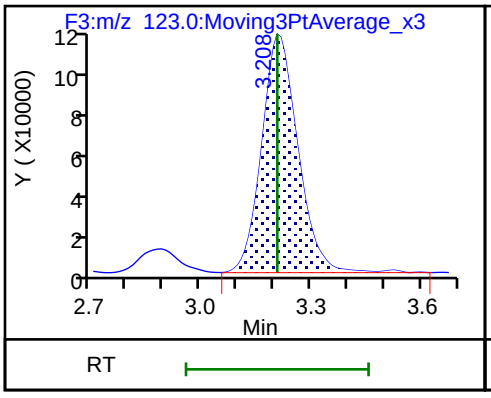
10 2,4,6-Trinitrotoluene



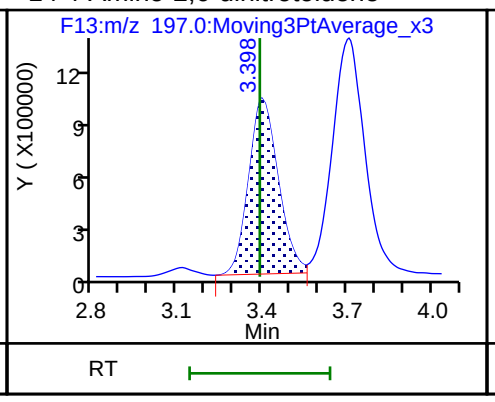
$ 11 Nitrobenzene-d5



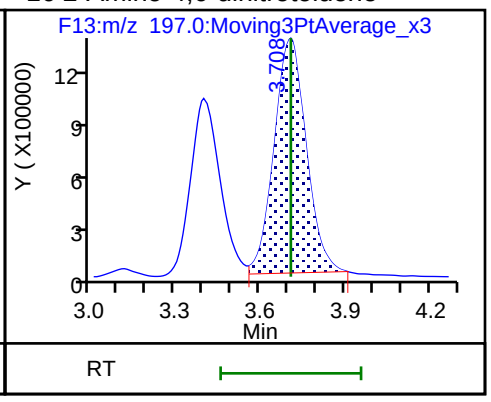
12 Nitrobenzene



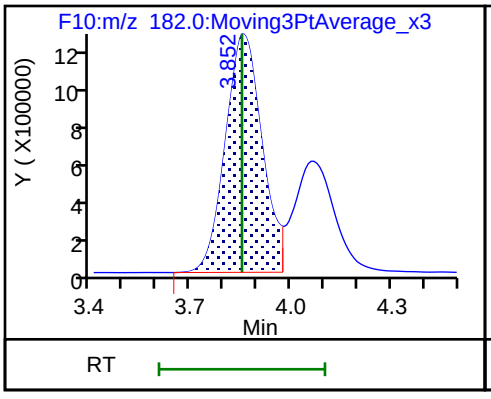
14 4-Amino-2,6-dinitrotoluene



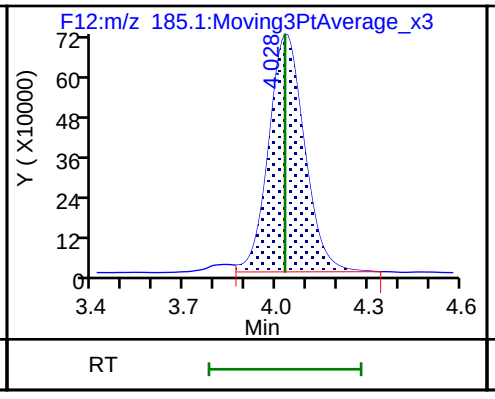
16 2-Amino-4,6-dinitrotoluene



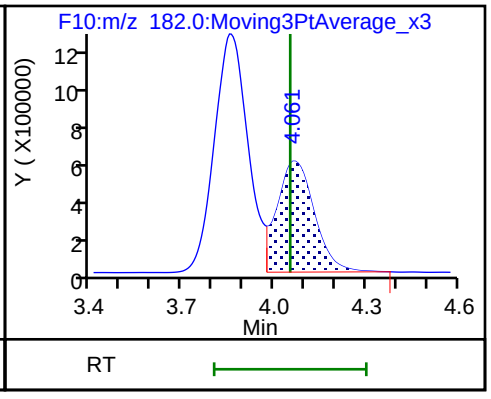
17 2,6-Dinitrotoluene



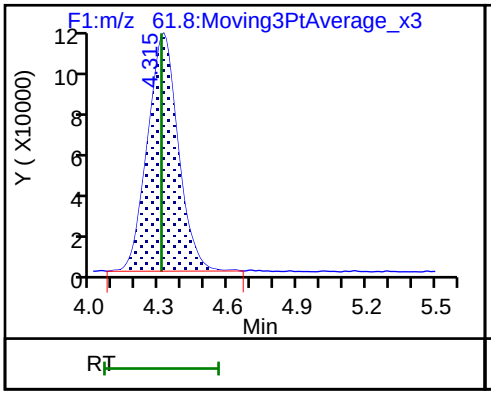
* 18 2,4-dinitrotoluene-d3



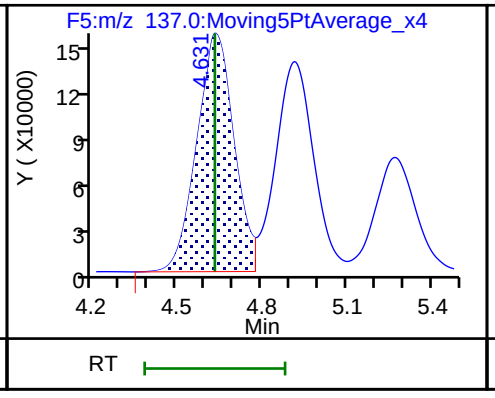
19 2,4-Dinitrotoluene



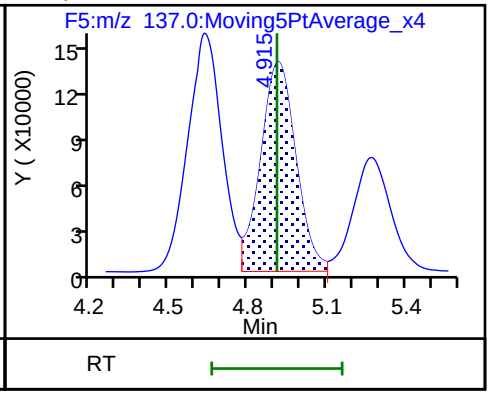
20 PETN



22 o-Nitrotoluene



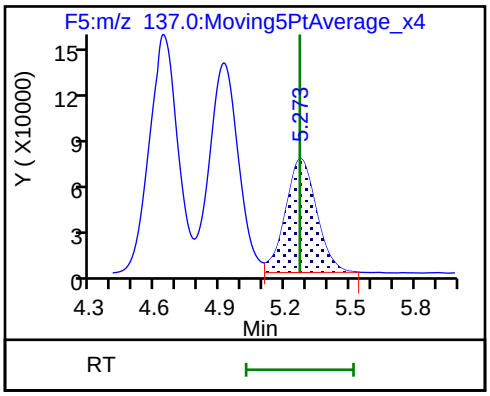
23 p-Nitrotoluene



Report Date: 06-Apr-2022 06:44:08 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05011.d

24 m-Nitrotoluene



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Lab Sample ID: CCV 280-570784/18 Calibration Date: 04/05/2022 11:56

Instrument ID: LC_LCMS7 Calib Start Date: 04/05/2022 10:20

GC Column: Synergi Hydro ID: Calib End Date: 04/05/2022 10:58

Lab File ID: ex722D05021.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin1		2.252		50.9	50.0	1.8	30.0
TNX	Lin1		5.227		50.2	50.1	0.3	30.0
DNX	Lin1		8.334		51.9	50.1	3.7	30.0
MNX	Lin1		2.179		62.3	58.4	6.8	30.0
RDX	Lin1		0.8901		56.6	50.0	13.3	30.0
1,3,5-Trinitrobenzene	Lin1		1.738		49.7	50.1	-0.7	30.0
Tetryl	Lin1		2.906		51.5	50.1	2.7	30.0
1,3-Dinitrobenzene	Lin1		1.175		54.1	50.1	8.0	30.0
Nitroglycerin	Lin1		1.082		51.8	50.3	2.9	30.0
3,5-Dinitroaniline	Lin1		1.484		50.5	50.0	1.0	30.0
2,4,6-Trinitrotoluene	Lin1		7.873		49.8	50.2	-0.7	30.0
Nitrobenzene	Lin1		0.4897		46.4	50.2	-7.6	30.0
4-Amino-2,6-dinitrotoluene	Lin1		1.662		50.5	50.1	0.8	30.0
2-Amino-4,6-dinitrotoluene	Lin1		2.275		50.2	50.2	-0.0	30.0
2,6-Dinitrotoluene	Lin1		2.046		51.0	50.2	1.5	30.0
2,4-Dinitrotoluene	Lin1		1.086		51.4	50.2	2.3	30.0
PETN	Lin1		0.2371		51.3	49.8	3.1	30.0
o-Nitrotoluene	Lin1		0.3105		50.2	50.0	0.4	30.0
p-Nitrotoluene	Lin1		0.2720		50.5	50.1	0.7	30.0
m-Nitrotoluene	Lin1		0.1592		49.7	50.1	-0.8	30.0
Nitrobenzene-d5	Lin1		0.5957		46.7	50.0	-6.6	30.0

Report Date: 06-Apr-2022 06:44:13 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05021.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 05-Apr-2022 11:56:26 ALS Bottle#: 5 Worklist Smp#: 18
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 06:44:13 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 12:48:34
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.223	1.223	0.0	0.998	203409	50.9	60.6	
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		225789	125.0	111	
36 TNX								
144.0	1.352	1.352	0.0	0.757	3527470	50.2	591	
33 DNX								
160.0	1.455	1.444	0.011	0.815	5624622	51.9	258	
34 MNX								
160.0	1.626	1.615	0.011	0.911	1714842	62.3	76.2	
4 RDX								
281.2	1.782	1.774	0.008	0.998	307825	56.6	58.9	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.785	1.777	0.008		864556	125.0	216	
5 1,3,5-Trinitrobenzene								
213.0	2.206	2.199	0.007	0.771	1173799	49.7	214	
6 Tetryl								
241.1	2.548	2.540	0.008	0.891	1963111	51.5	118	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1744336	129.4	210	
8 1,3-Dinitrobenzene								
168.0	2.882	2.871	0.011	1.007	794044	54.1	127	
9 Nitroglycerin								
62.0	2.889	2.878	0.011	1.010	733698	51.8	272	
28 3,5-Dinitroaniline								M
183.0	3.039	3.027	0.012	1.062	3237606	50.5	48.2	M

Report Date: 06-Apr-2022 06:44:13 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05021.d

Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.117	3.107	0.010	0.770	5329097	49.8	405	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.150	0.010	0.781	401706	46.7	67.2	
12 Nitrobenzene								
123.0	3.218	3.208	0.010	0.795	331516	46.4	30.7	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.411	3.391	0.020	0.843	3628763	50.5	60.5	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.715	3.708	0.007	0.918	4982219	50.2	75.3	
17 2,6-Dinitrotoluene								
182.0	3.865	3.852	0.013	0.955	4481552	51.0	1763	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		5453702	125.0	119	
19 2,4-Dinitrotoluene								
182.0	4.078	4.052	0.026	1.008	2378134	51.4	829	
20 PETN								
61.8	4.315	4.305	0.010	1.067	515175	51.3	175	
22 o-Nitrotoluene								
137.0	4.646	4.631	0.015	1.148	677457	50.2	254	
23 p-Nitrotoluene								
137.0	4.925	4.910	0.015	1.217	594550	50.5	211	
24 m-Nitrotoluene								
137.0	5.283	5.268	0.015	1.306	347544	49.7	120	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

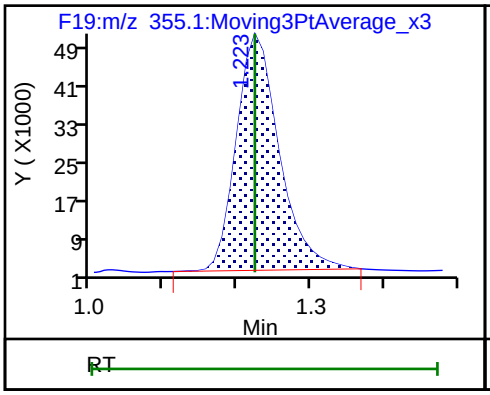
8321EXcalprim_00029	Amount Added: 5.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 5.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 06-Apr-2022 06:44:13 Chrom Revision: 2.3 18-Mar-2022 09:07:22

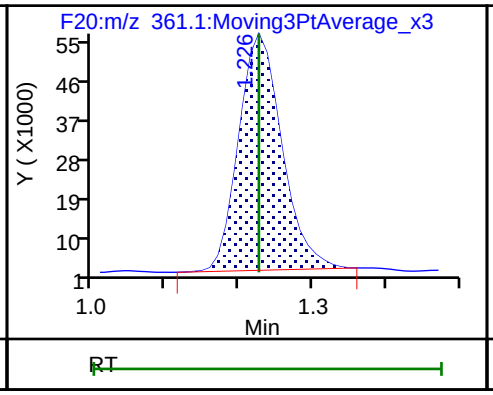
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05021.d
Injection Date: 05-Apr-2022 11:56:26 Instrument ID: LC_LCMS7
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 18
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

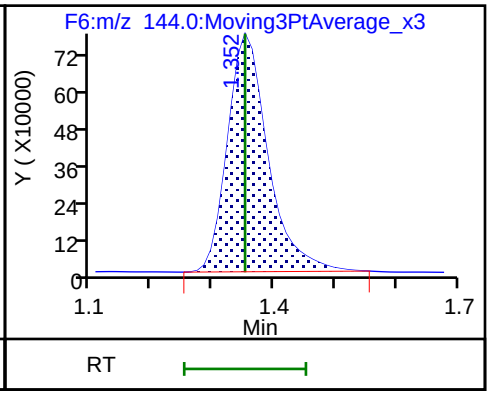
2 HMX



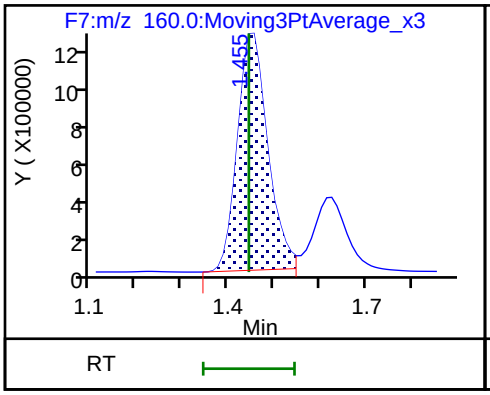
* 1 HMX-13C4



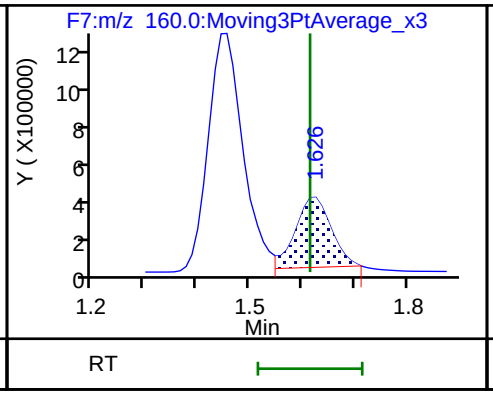
36 TNX



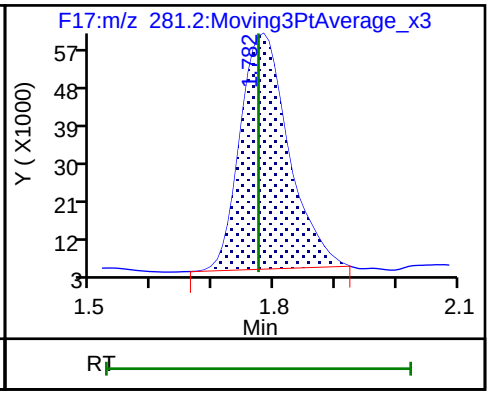
33 DNX



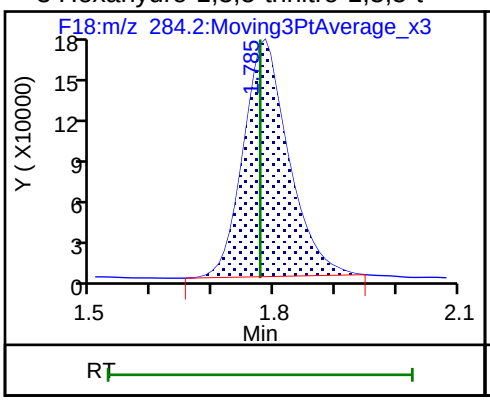
34 MNX



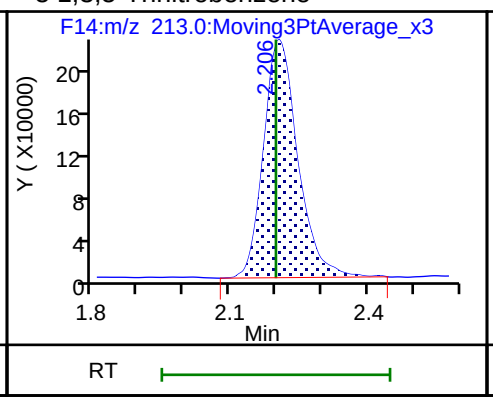
4 RDX



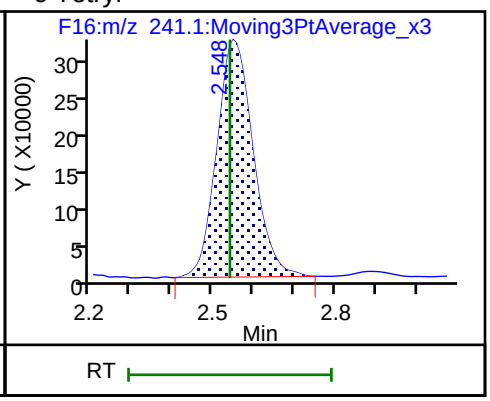
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



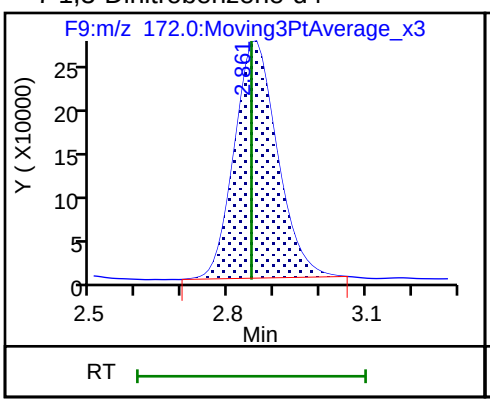
5 1,3,5-Trinitrobenzene



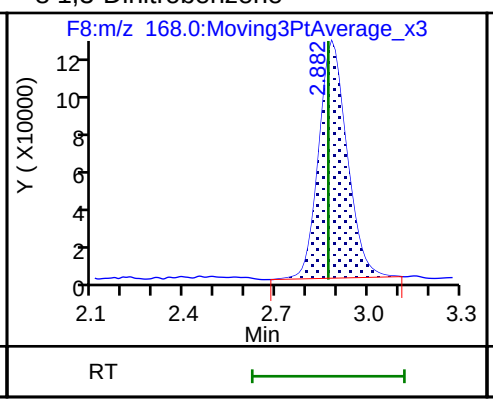
6 Tetryl



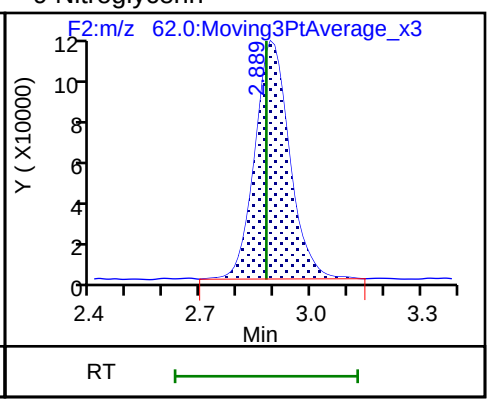
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

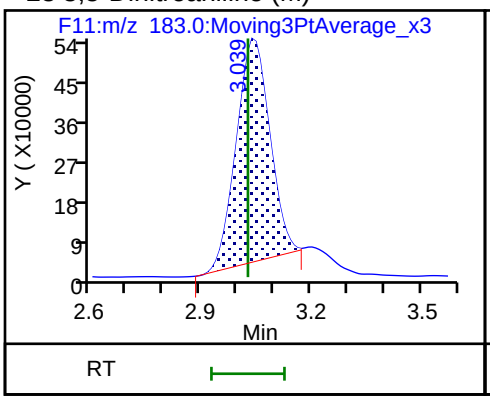


9 Nitroglycerin

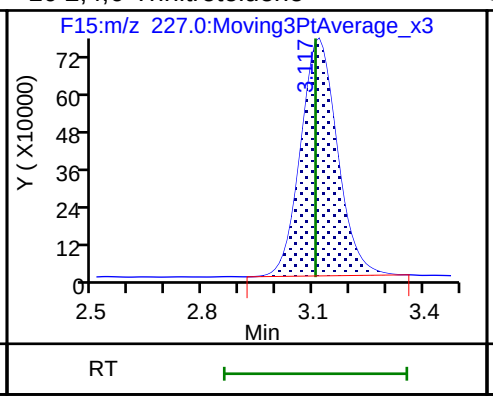


Report Date: 06-Apr-2022 06:44:13 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05021.d

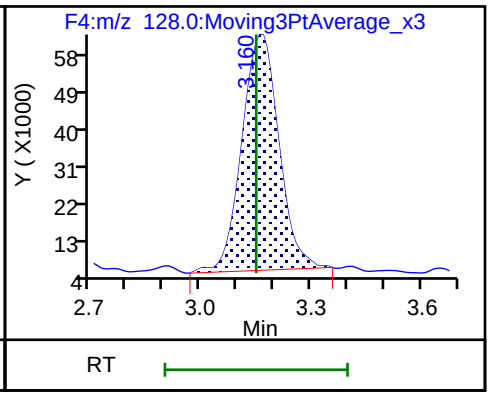
28 3,5-Dinitroaniline (M)



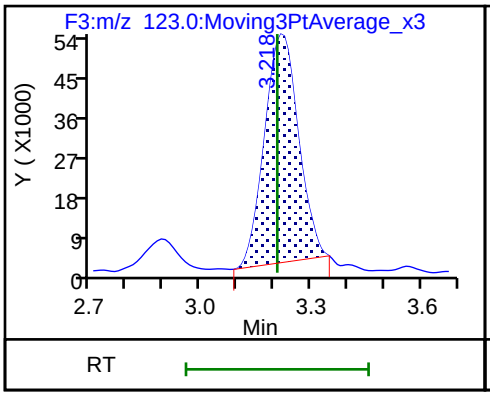
10 2,4,6-Trinitrotoluene



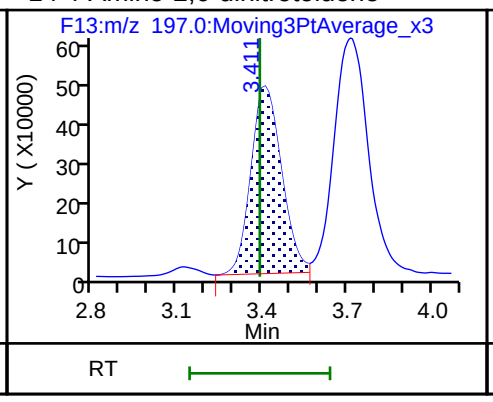
$ 11 Nitrobenzene-d5



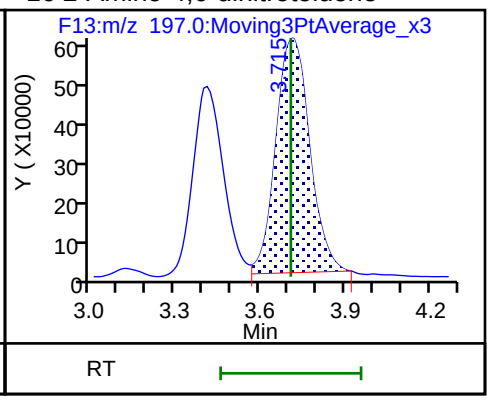
12 Nitrobenzene



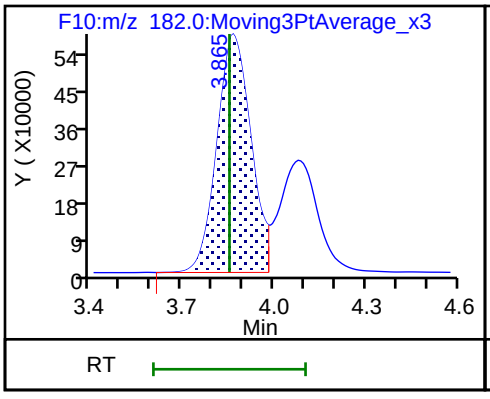
14 4-Amino-2,6-dinitrotoluene



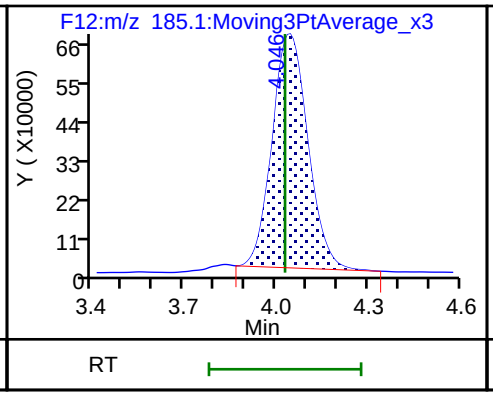
16 2-Amino-4,6-dinitrotoluene



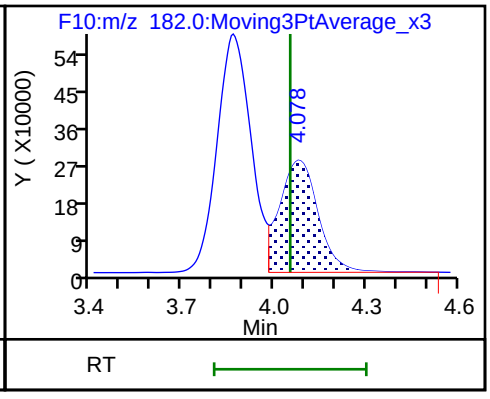
17 2,6-Dinitrotoluene



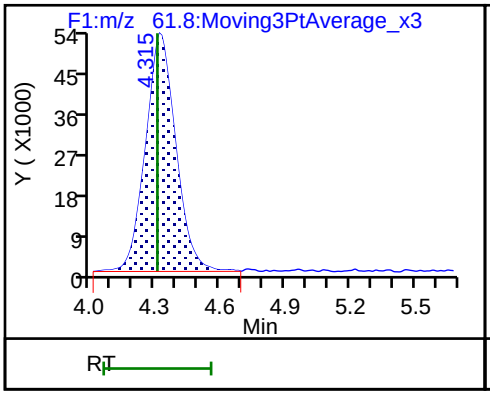
* 18 2,4-dinitrotoluene-d3



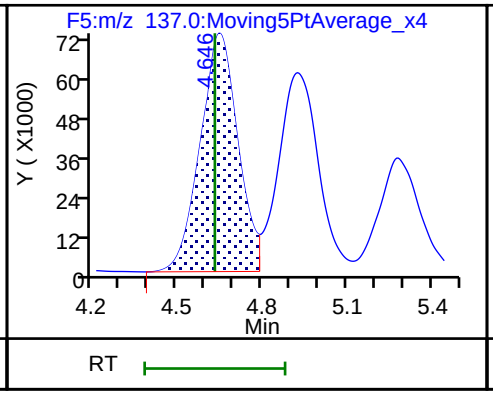
19 2,4-Dinitrotoluene



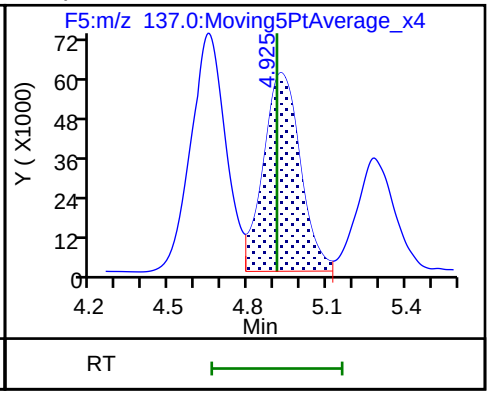
20 PETN



22 o-Nitrotoluene



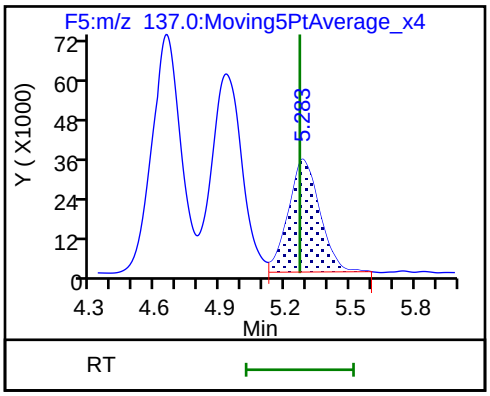
23 p-Nitrotoluene



Report Date: 06-Apr-2022 06:44:13 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05021.d

24 m-Nitrotoluene



Report Date: 06-Apr-2022 06:44:13

Chrom Revision: 2.3 18-Mar-2022 09:07:22
Manual Integration/User Assign Peak Report

Eurofins Denver

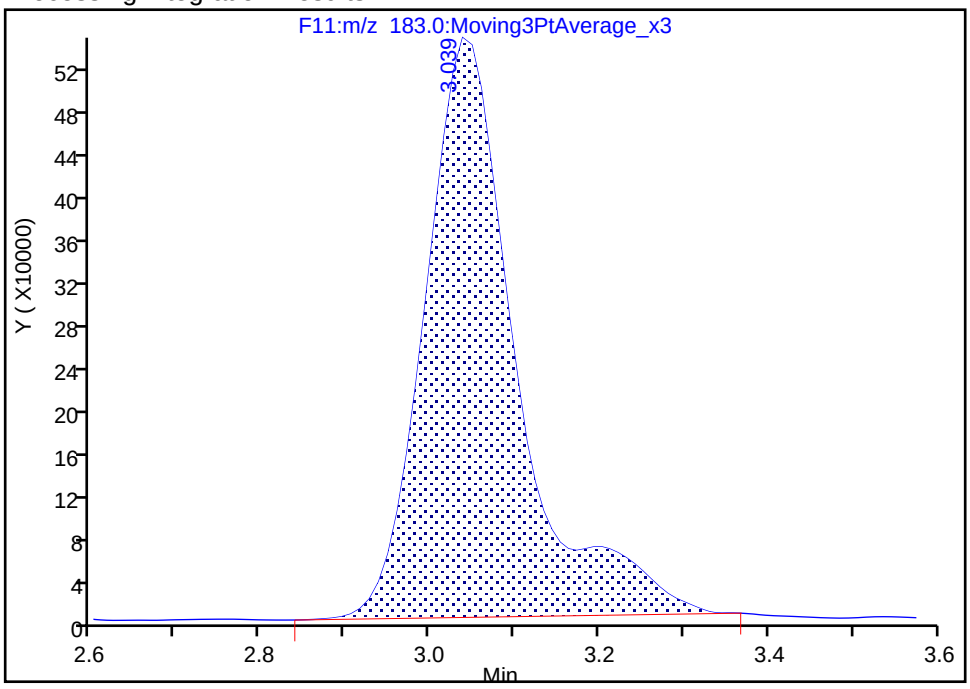
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05021.d
Injection Date: 05-Apr-2022 11:56:26 Instrument ID: LC_LCMS7
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 18
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F11:SIR

28 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

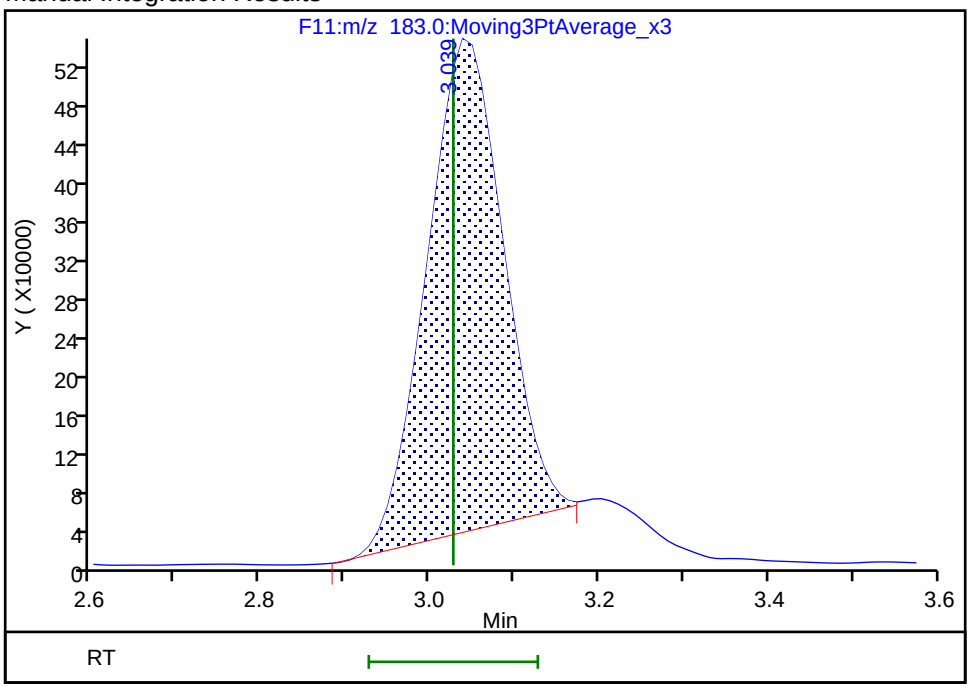
Processing Integration Results

RT: 3.04
Area: 4105082
Amount: 64.243198
Amount Units: ug/l



Manual Integration Results

RT: 3.04
Area: 3237606
Amount: 50.520245
Amount Units: ug/l



Reviewer: meyera, 05-Apr-2022 12:48:24
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Lab Sample ID: ICV 280-571107/11 Calibration Date: 04/07/2022 11:32

Instrument ID: LC_LCMS7 Calib Start Date: 04/07/2022 10:39

GC Column: Synergi Hydro ID: Calib End Date: 04/07/2022 11:18

Lab File ID: ex722D07011.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Qua1		2.138		107	100	7.1	30.0
TNX	Lin1		4.403		99.7	100	-0.4	30.0
DNX	Lin1		6.541		99.0	100	-1.1	30.0
MNX	Lin1		1.721		117	117	0.0	30.0
RDX	Lin1		0.8052		116	100	16.5	30.0
1,3,5-Trinitrobenzene	Lin1		1.469		96.4	100	-3.6	30.0
Tetryl	Lin1		2.023		95.7	100	-4.3	30.0
1,3-Dinitrobenzene	Lin1		1.105		102	100	2.3	30.0
Nitroglycerin	Lin1		0.9315		97.1	100	-2.9	30.0
3,5-Dinitroaniline	Lin1		1.499		101	100	1.4	30.0
2,4,6-Trinitrotoluene	Lin1		6.666		98.3	100	-1.7	30.0
Nitrobenzene	Lin1		0.4901		90.3	100	-9.7	30.0
4-Amino-2,6-dinitrotoluene	Lin1		1.584		102	100	2.2	30.0
2-Amino-4,6-dinitrotoluene	Lin1		1.992		99.3	100	-0.7	30.0
2,6-Dinitrotoluene	Lin1		2.103		102	100	2.1	30.0
2,4-Dinitrotoluene	Lin1		1.074		102	100	2.5	30.0
PETN	Lin1		0.1663		102	100	2.1	30.0
o-Nitrotoluene	Lin1		0.3201		102	100	1.6	30.0
p-Nitrotoluene	Lin1		0.2745		101	100	0.7	30.0
m-Nitrotoluene	Lin1		0.1640		99.8	100	-0.2	30.0
Nitrobenzene-d5	Lin1		0.5970		95.1	100	-4.9	30.0

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07011.d
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 07-Apr-2022 11:32:00 ALS Bottle#: 9 Worklist Smp#: 11
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7
Sublist:

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:21 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 12:34:24
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	185604	107.1	57.8	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		108491	125.0	257	
36 TNX								
144.0	1.385	1.385	0.0	0.751	4613118	99.7	709	
33 DNX								
160.0	1.489	1.489	0.0	0.807	6852623	99.0	446	
34 MNX								
160.0	1.670	1.670	0.0	0.906	2101786	116.8	131	
4 RDX								
281.2	1.841	1.841	0.0	0.998	239781	116.5	70.0	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		372231	125.0	182	
5 1,3,5-Trinitrobenzene								
213.0	2.317	2.317	0.0	0.767	1537170	96.4	155	
6 Tetryl								
241.1	2.712	2.712	0.0	0.898	2117668	95.7	124	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.030	-0.011		1353932	129.4	342	
8 1,3-Dinitrobenzene								
168.0	3.051	3.051	0.0	1.011	1156915	102.3	171	
9 Nitroglycerin								
62.0	3.080	3.080	0.0	1.020	974981	97.1	300	
28 3,5-Dinitroaniline								M
183.0	3.230	3.230	0.0	1.070	4869332	101.4	49.2	M

Report Date: 08-Apr-2022 07:32:21 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07011.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.321	3.321	0.0	0.766	6977340	98.3	156	
$ 11 Nitrobenzene-d5								
128.0	3.370	3.370	0.0	0.778	624988	95.1	80.0	
12 Nitrobenzene								
123.0	3.421	3.431	-0.010	0.790	512934	90.3	36.0	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.652	3.645	0.007	0.843	5143279	102.2	33.4	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.976	3.976	0.0	0.918	6469154	99.3	39.1	
17 2,6-Dinitrotoluene								
182.0	4.144	4.150	-0.006	0.957	6830238	102.1	633	
* 18 2,4-dinitrotoluene-d3								
185.1	4.332	4.341	-0.009		4059996	125.0	108	
19 2,4-Dinitrotoluene								
182.0	4.382	4.373	0.009	1.011	3489320	102.5	292	
20 PETN								
61.8	4.706	4.716	-0.010	1.086	540209	102.1	125	
22 o-Nitrotoluene								
137.0	4.997	5.002	-0.005	1.153	1039603	101.6	247	
23 p-Nitrotoluene								
137.0	5.306	5.311	-0.005	1.225	891709	100.7	202	
24 m-Nitrotoluene								
137.0	5.689	5.704	-0.015	1.313	532674	99.8	119	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

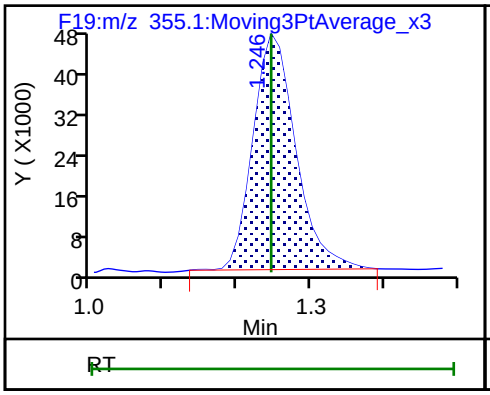
8321NB-D5-cal_00021	Amount Added: 10.00	Units: uL	
8321expICV_00019	Amount Added: 10.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 08-Apr-2022 07:32:21 Chrom Revision: 2.3 18-Mar-2022 09:07:22

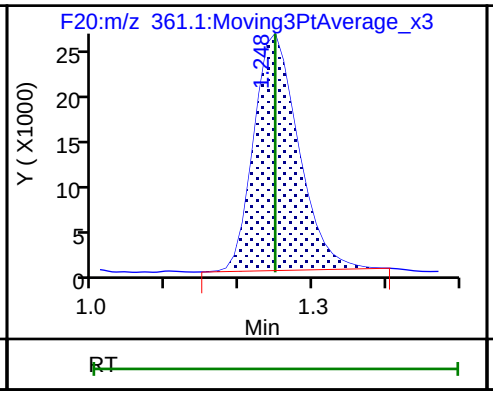
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07011.d
Injection Date: 07-Apr-2022 11:32:00 Instrument ID: LC_LCMS7
Lims ID: ICV
Client ID:
Operator ID: acm ALS Bottle#: 9 Worklist Smp#: 11
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

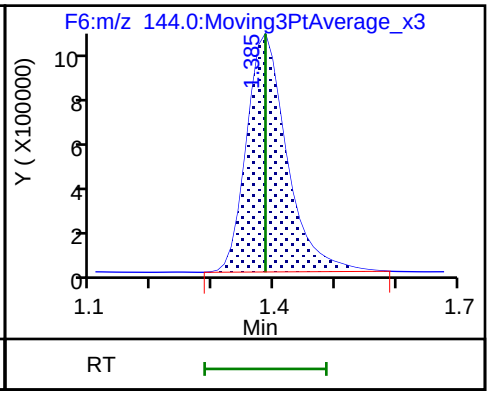
2 HMX



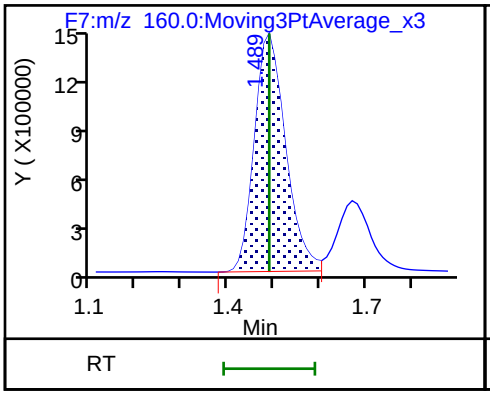
* 1 HMX-13C4



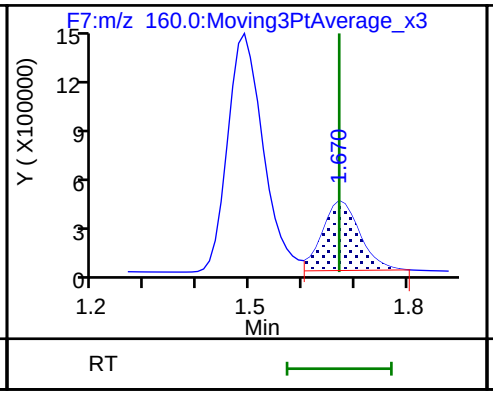
36 TNX



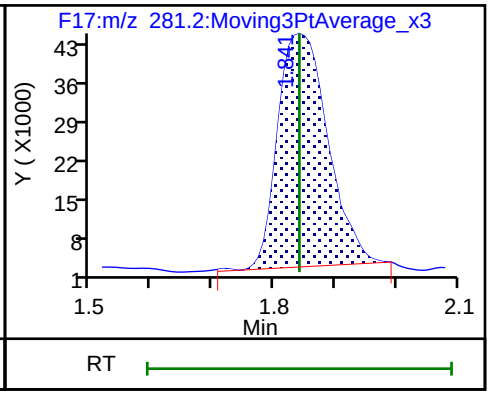
33 DNX



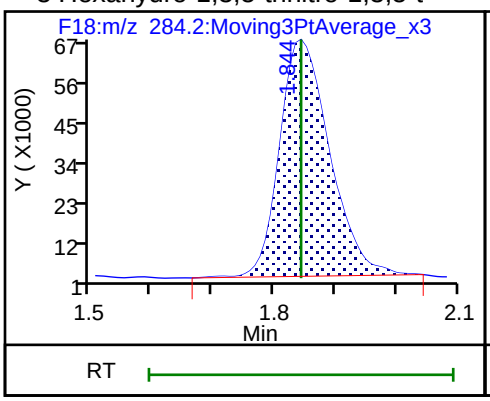
34 MNX



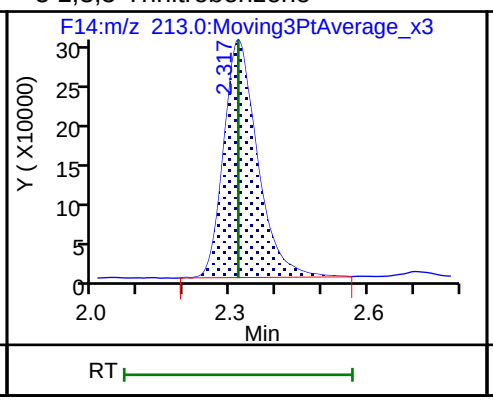
4 RDX



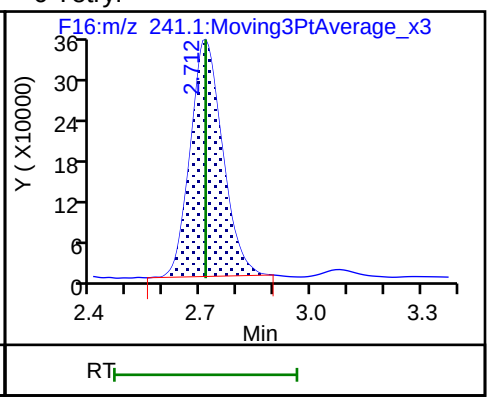
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



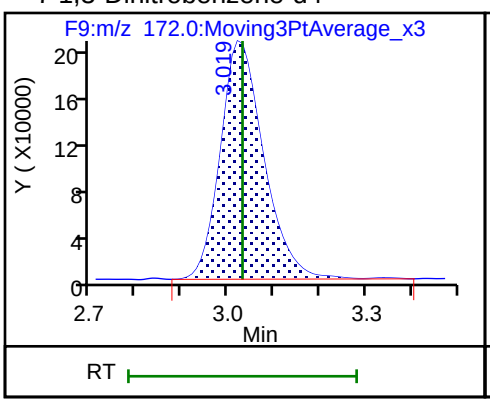
5 1,3,5-Trinitrobenzene



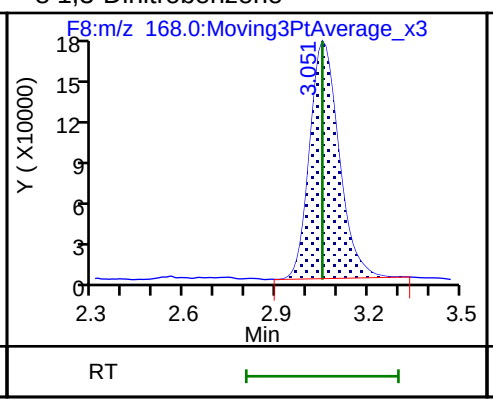
6 Tetryl



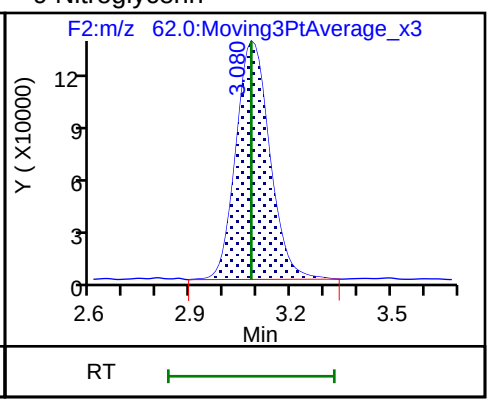
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



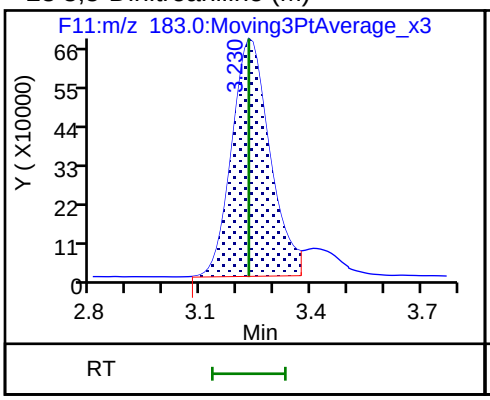
9 Nitroglycerin



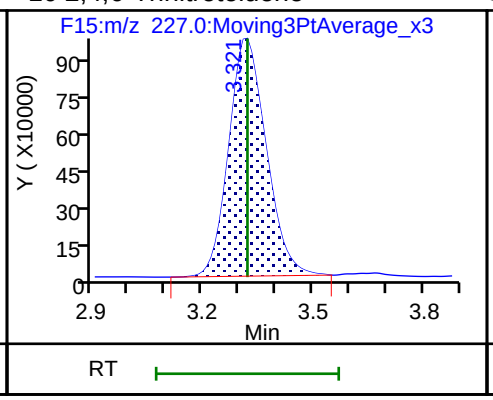
Report Date: 08-Apr-2022 07:32:21 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07011.d

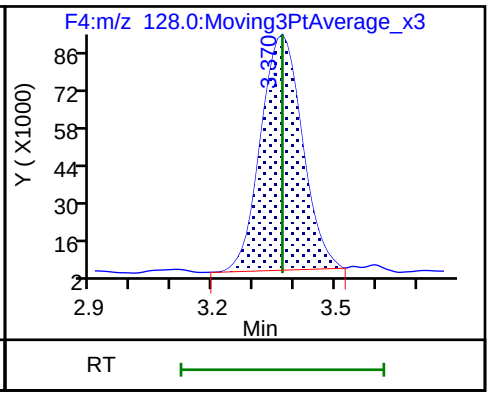
28 3,5-Dinitroaniline (M)



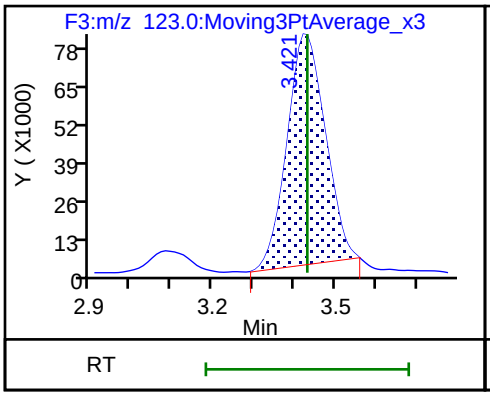
10 2,4,6-Trinitrotoluene



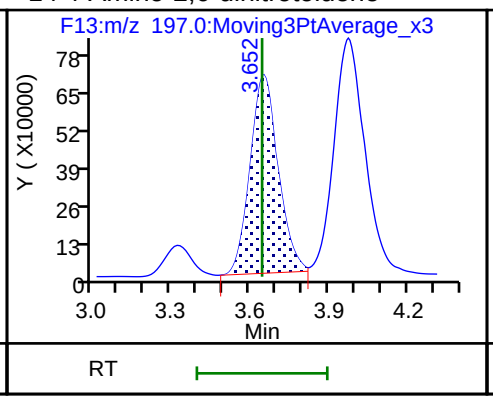
$ 11 Nitrobenzene-d5



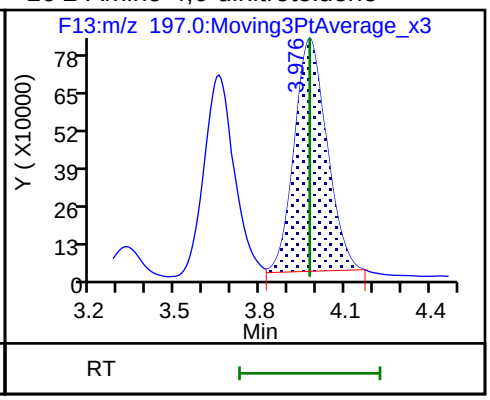
12 Nitrobenzene



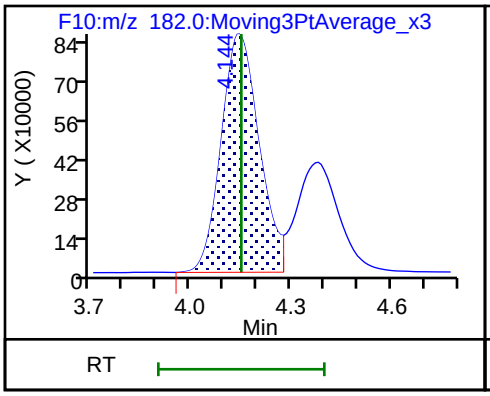
14 4-Amino-2,6-dinitrotoluene



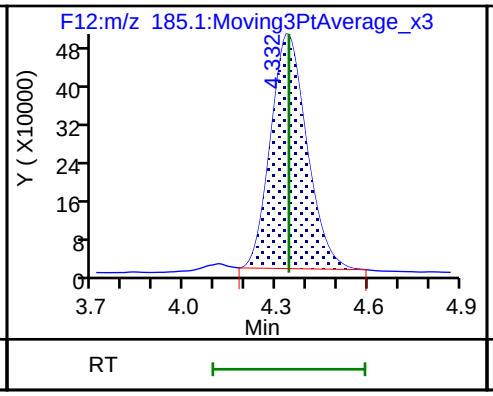
16 2-Amino-4,6-dinitrotoluene



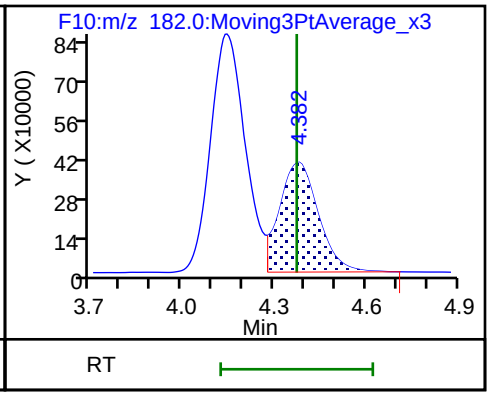
17 2,6-Dinitrotoluene



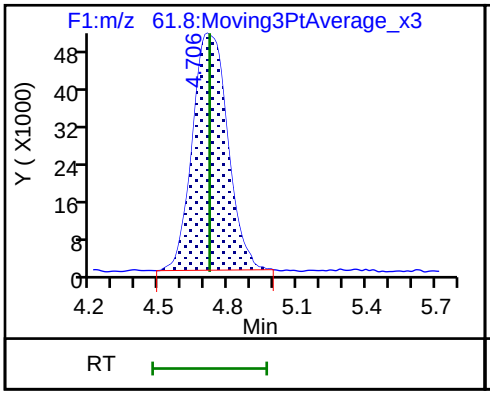
* 18 2,4-dinitrotoluene-d3



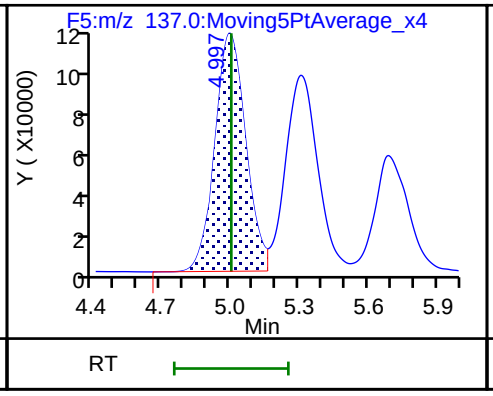
19 2,4-Dinitrotoluene



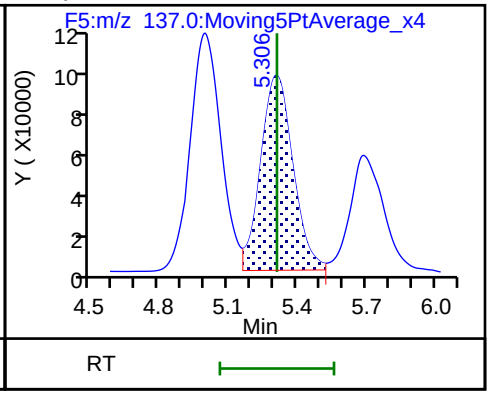
20 PETN



22 o-Nitrotoluene

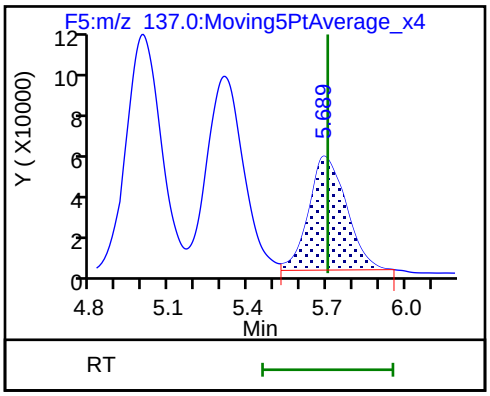


23 p-Nitrotoluene



Report Date: 08-Apr-2022 07:32:21 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07011.d

24 m-Nitrotoluene



Report Date: 08-Apr-2022 07:32:21 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07011.d

Injection Date: 07-Apr-2022 11:32:00 Instrument ID: LC_LCMS7

Lims ID: ICV

Client ID:

Operator ID: acm ALS Bottle#: 9 Worklist Smp#: 11

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

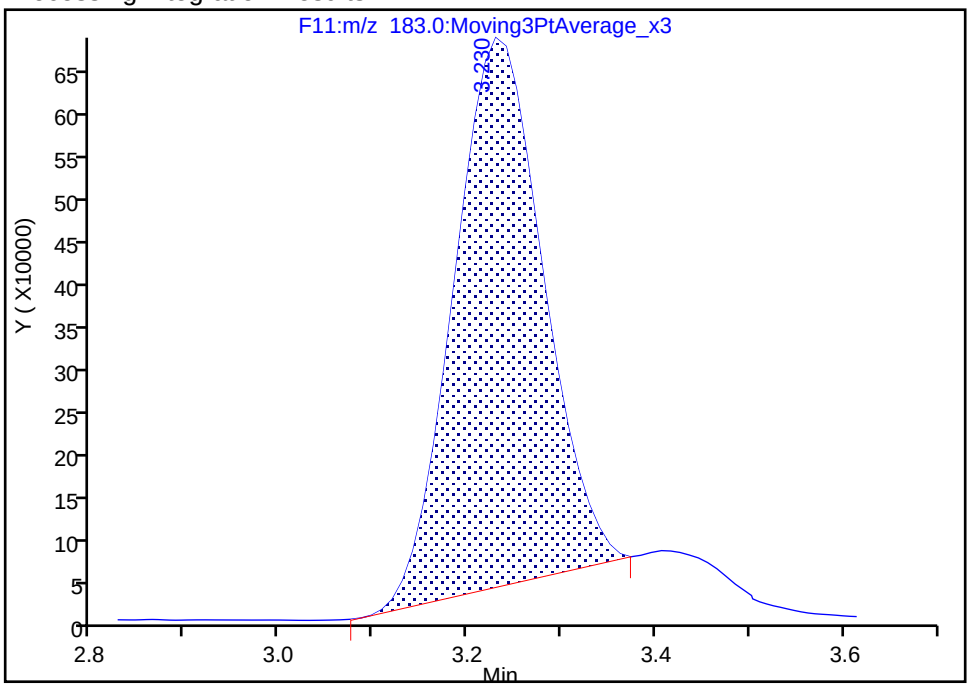
Column: Detector F11:SIR

28 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

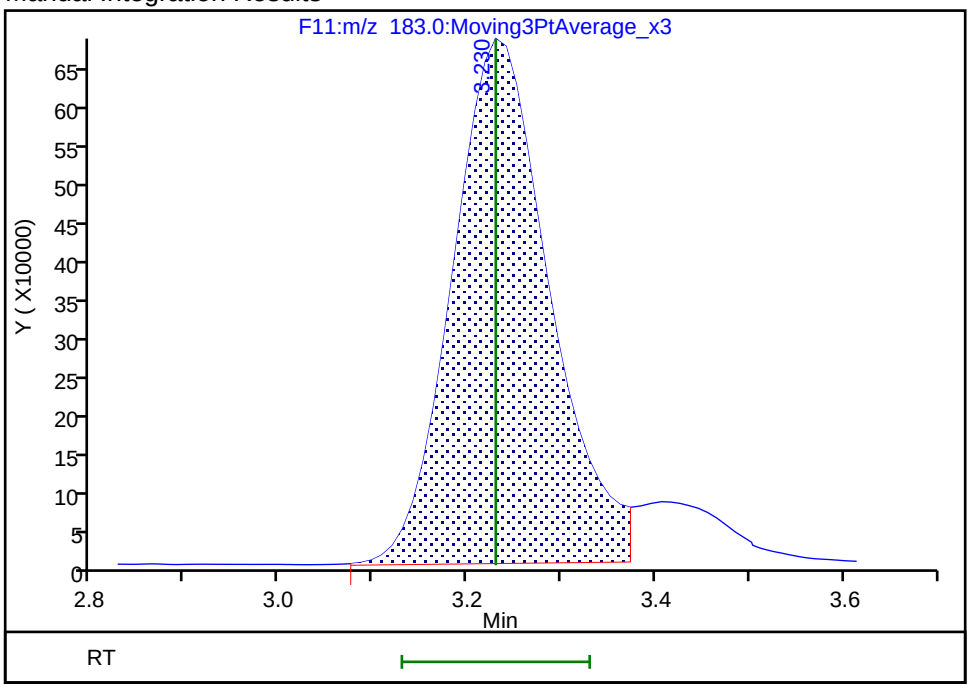
Processing Integration Results

RT: 3.23
Area: 4233098
Amount: 88.145289
Amount Units: ug/l



Manual Integration Results

RT: 3.23
Area: 4869332
Amount: 101.4453
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 12:34:13

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Lab Sample ID: CCV 280-571108/21 Calibration Date: 04/07/2022 12:38

Instrument ID: LC_LCMS7 Calib Start Date: 04/07/2022 10:39

GC Column: Synergi Hydro ID: Calib End Date: 04/07/2022 11:18

Lab File ID: ex722D07021.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Qua1		2.051		53.8	50.0	7.7	30.0
TNX	Lin1		4.505		50.5	50.1	1.0	30.0
DNX	Lin1		6.445		48.5	50.1	-3.1	30.0
MNX	Lin1		1.697		57.5	58.4	-1.4	30.0
RDX	Lin1		0.8319		59.6	50.0	19.2	30.0
1,3,5-Trinitrobenzene	Lin1		1.499		49.2	50.1	-1.8	30.0
Tetryl	Lin1		2.040		48.7	50.1	-2.8	30.0
1,3-Dinitrobenzene	Lin1		1.121		51.8	50.1	3.4	30.0
Nitroglycerin	Lin1		0.9688		50.2	50.3	-0.1	30.0
3,5-Dinitroaniline	Lin1		1.519		51.2	50.0	2.4	30.0
2,4,6-Trinitrotoluene	Lin1		6.622		48.8	50.2	-2.7	30.0
Nitrobenzene	Lin1		0.5677		52.1	50.2	3.7	30.0
4-Amino-2,6-dinitrotoluene	Lin1		1.520		48.9	50.1	-2.4	30.0
2-Amino-4,6-dinitrotoluene	Lin1		2.010		50.1	50.2	-0.1	30.0
2,6-Dinitrotoluene	Lin1		2.101		51.0	50.2	1.6	30.0
2,4-Dinitrotoluene	Lin1		1.039		49.4	50.2	-1.5	30.0
PETN	Lin1		0.1529		47.3	49.8	-5.1	30.0
o-Nitrotoluene	Lin1		0.3261		51.6	50.0	3.1	30.0
p-Nitrotoluene	Lin1		0.2964		54.2	50.1	8.2	30.0
m-Nitrotoluene	Lin1		0.1716		52.1	50.1	4.1	30.0
Nitrobenzene-d5	Lin1		0.6566		53.1	50.0	6.1	30.0

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07021.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 07-Apr-2022 12:38:00 ALS Bottle#: 5 Worklist Smp#: 21
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:27 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 13:11:31
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	95477	53.8	48.0	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		116352	125.0	128	
36 TNX								
144.0	1.385	1.385	0.0	0.751	2376135	50.5	599	
33 DNX								
160.0	1.489	1.489	0.0	0.807	3399735	48.5	383	
34 MNX								
160.0	1.670	1.670	0.0	0.906	1043310	57.5	114	
4 RDX								
281.2	1.849	1.841	0.008	1.003	126380	59.6	64.7	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								M
284.2	1.844	1.844	0.0		379799	125.0	142	M
5 1,3,5-Trinitrobenzene								
213.0	2.317	2.317	0.0	0.765	791544	49.2	136	
6 Tetryl								
241.1	2.719	2.712	0.007	0.897	1076914	48.7	125	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.030	3.030	0.0		1363291	129.4	218	
8 1,3-Dinitrobenzene								
168.0	3.051	3.051	0.0	1.007	591711	51.8	129	
9 Nitroglycerin								
62.0	3.069	3.080	-0.011	1.013	513538	50.2	277	
28 3,5-Dinitroaniline								M
183.0	3.230	3.230	0.0	1.066	2559035	51.2	46.5	M

Report Date: 08-Apr-2022 07:32:28 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07021.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.321	3.321	0.0	0.765	3503507	48.8	146	
$ 11 Nitrobenzene-d5								
128.0	3.370	3.370	0.0	0.776	346067	53.1	32.2	
12 Nitrobenzene								
123.0	3.431	3.431	0.0	0.790	300353	52.1	34.2	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.652	3.645	0.007	0.841	2563529	48.9	33.6	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.976	3.976	0.0	0.916	3400873	50.1	39.4	
17 2,6-Dinitrotoluene								
182.0	4.138	4.150	-0.012	0.953	3554093	51.0	586	
* 18 2,4-dinitrotoluene-d3								
185.1	4.341	4.341	0.0		4212185	125.0	115	
19 2,4-Dinitrotoluene								
182.0	4.382	4.373	0.009	1.009	1757600	49.4	262	
20 PETN								
61.8	4.716	4.716	0.0	1.086	256578	47.3	43.3	
22 o-Nitrotoluene								
137.0	4.992	5.002	-0.010	1.150	549455	51.6	180	
23 p-Nitrotoluene								
137.0	5.306	5.311	-0.005	1.222	500471	54.2	162	
24 m-Nitrotoluene								
137.0	5.704	5.704	0.0	1.314	289332	52.1	82.4	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

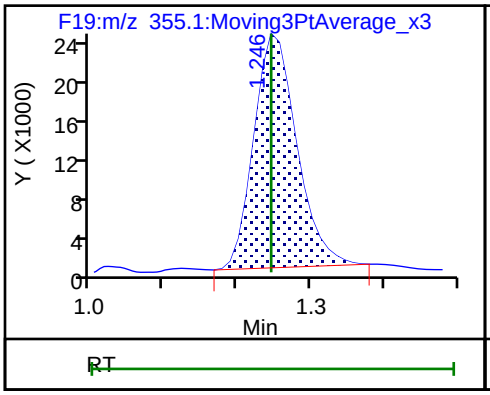
8321EXcalprim_00029	Amount Added: 5.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 5.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 08-Apr-2022 07:32:28 Chrom Revision: 2.3 18-Mar-2022 09:07:22

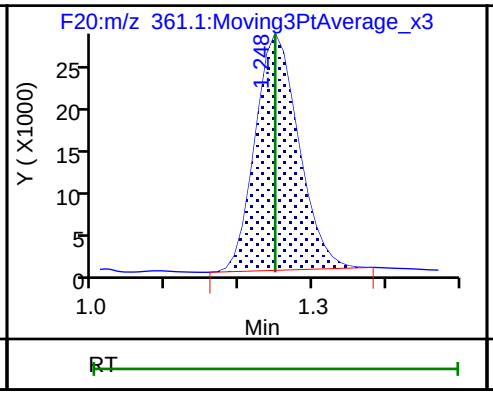
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07021.d
Injection Date: 07-Apr-2022 12:38:00 Instrument ID: LC_LCMS7
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 21
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

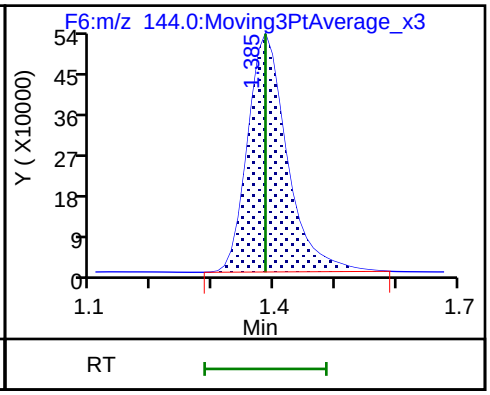
2 HMX



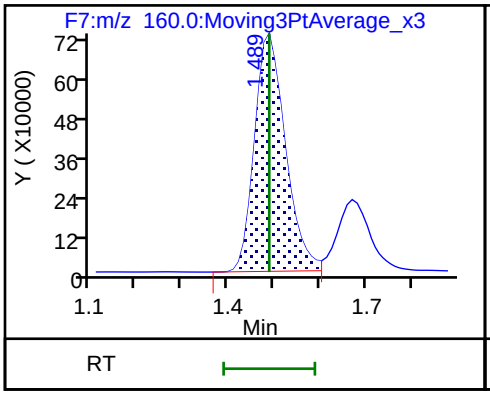
* 1 HMX-13C4



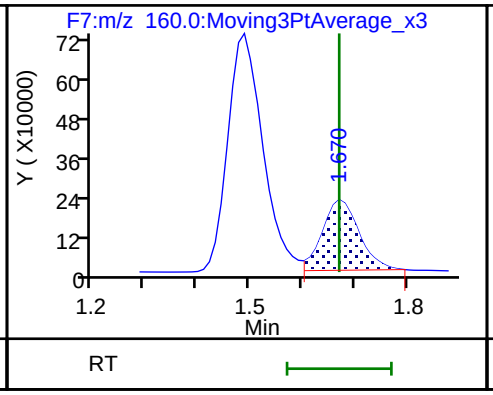
36 TNX



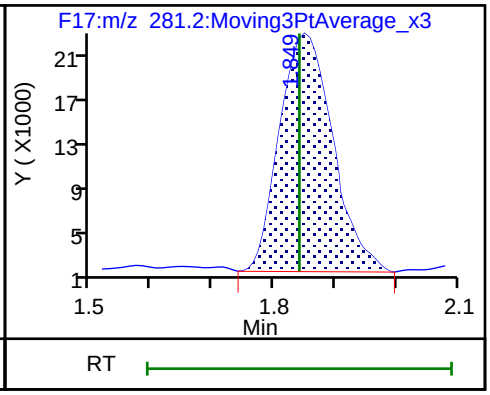
33 DNX



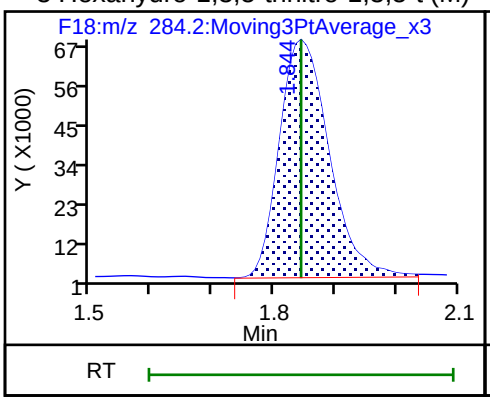
34 MNX



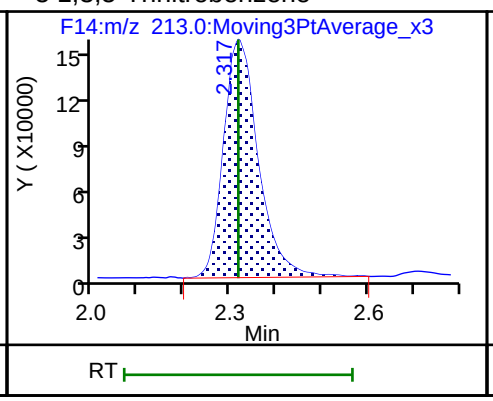
4 RDX



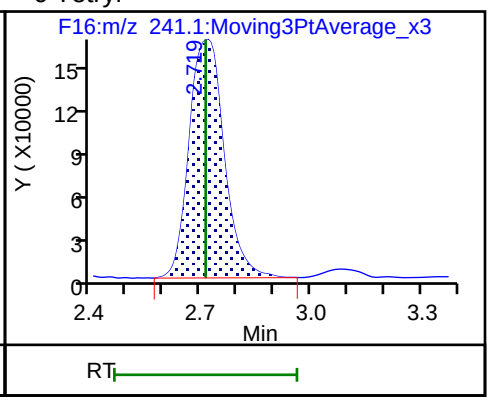
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t (M)



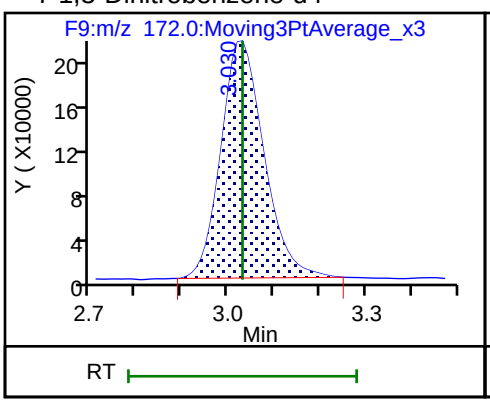
5 1,3,5-Trinitrobenzene



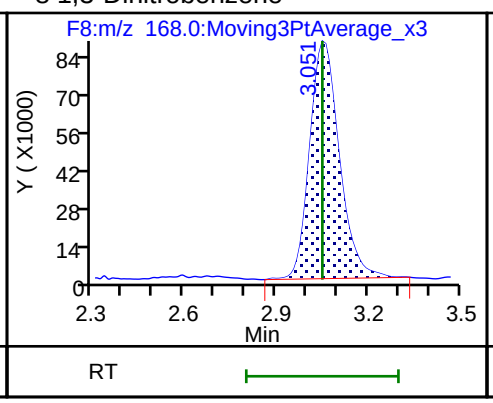
6 Tetryl



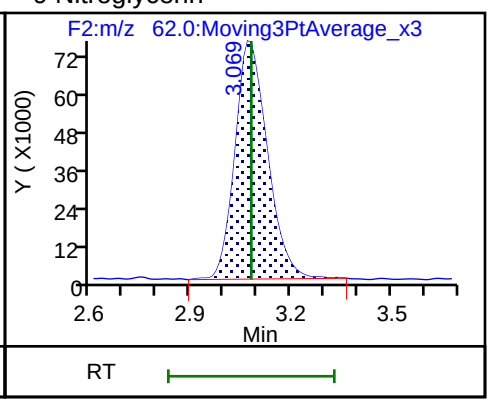
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

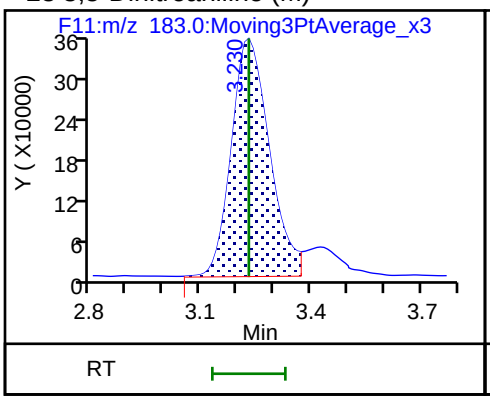


9 Nitroglycerin

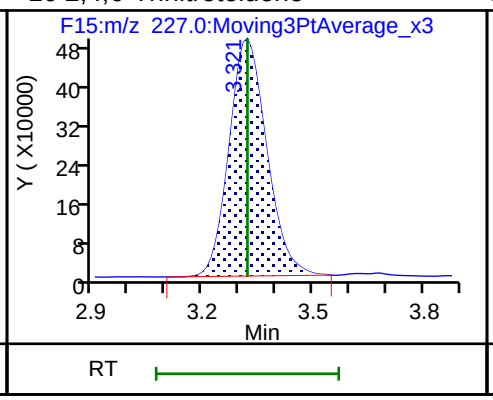


Report Date: 08-Apr-2022 07:32:28 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07021.d

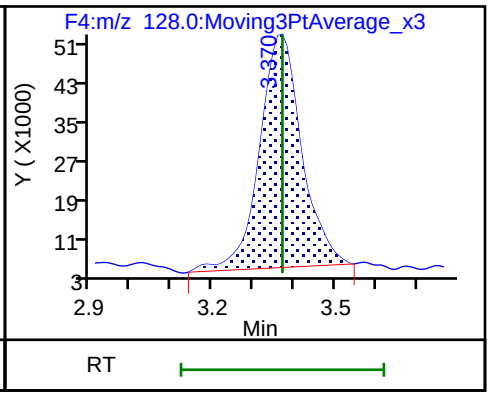
28 3,5-Dinitroaniline (M)



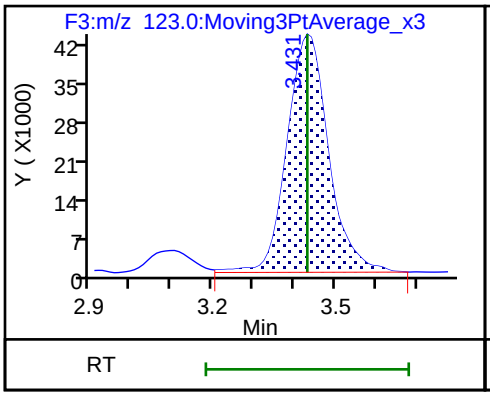
10 2,4,6-Trinitrotoluene



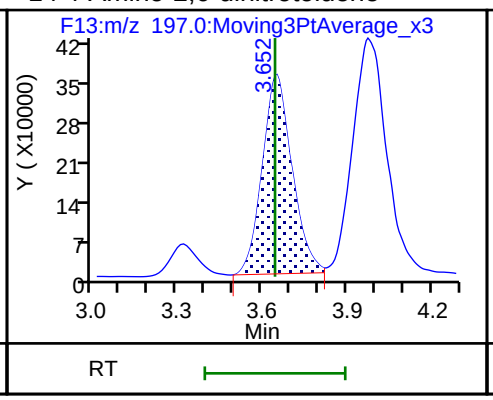
$ 11 Nitrobenzene-d5



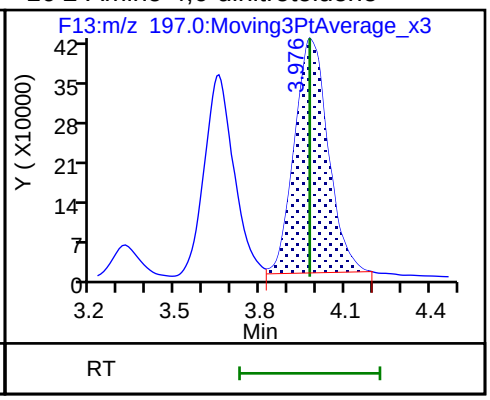
12 Nitrobenzene



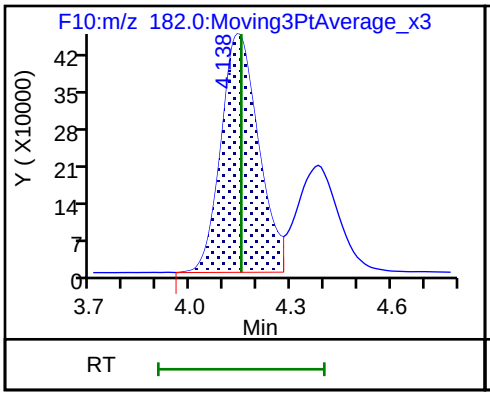
14 4-Amino-2,6-dinitrotoluene



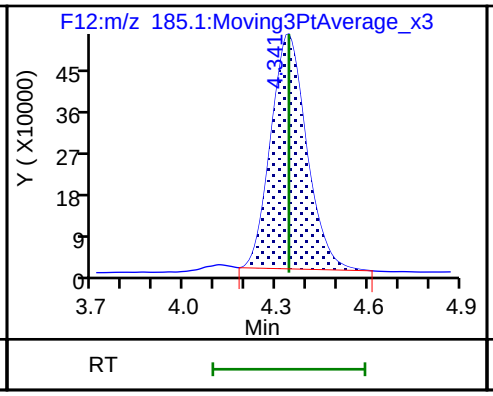
16 2-Amino-4,6-dinitrotoluene



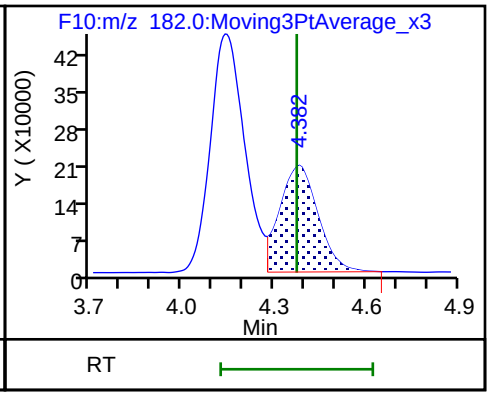
17 2,6-Dinitrotoluene



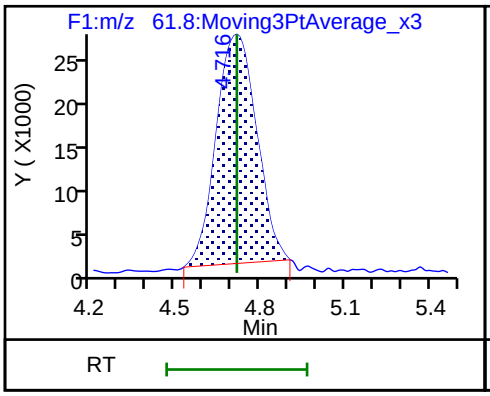
* 18 2,4-dinitrotoluene-d3



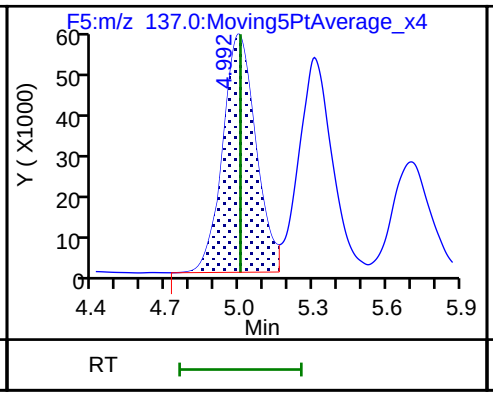
19 2,4-Dinitrotoluene



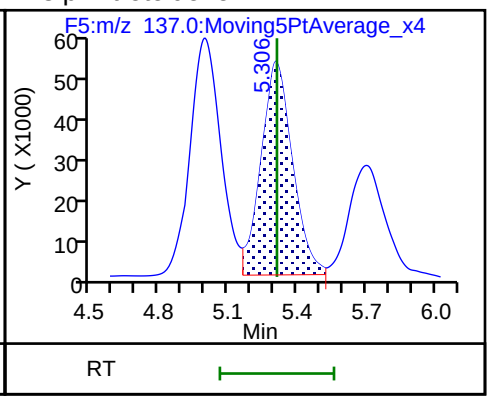
20 PETN



22 o-Nitrotoluene



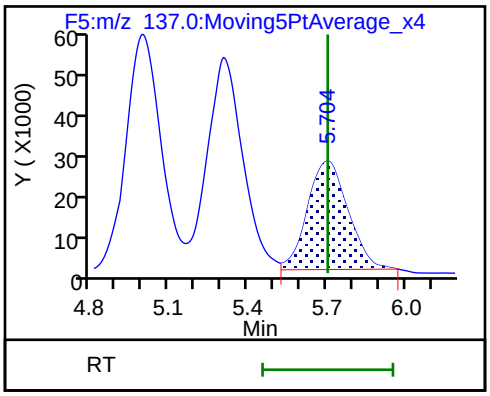
23 p-Nitrotoluene



Report Date: 08-Apr-2022 07:32:28 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07021.d

24 m-Nitrotoluene



Report Date: 08-Apr-2022 07:32:28 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Manual Integration/User Assign Peak Report

Eurofins Denver

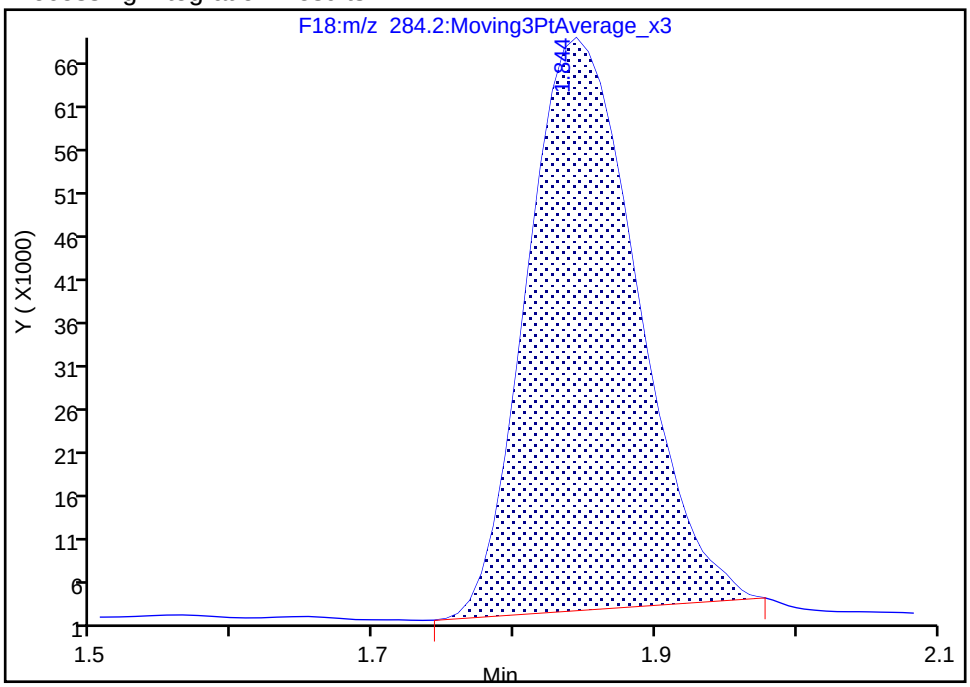
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07021.d
Injection Date: 07-Apr-2022 12:38:00 Instrument ID: LC_LCMS7
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 21
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F18:SIR

* 3 Hexahydro-1,3,5-trinitro-1,3,5-t, CAS: STL00205

Signal: 1

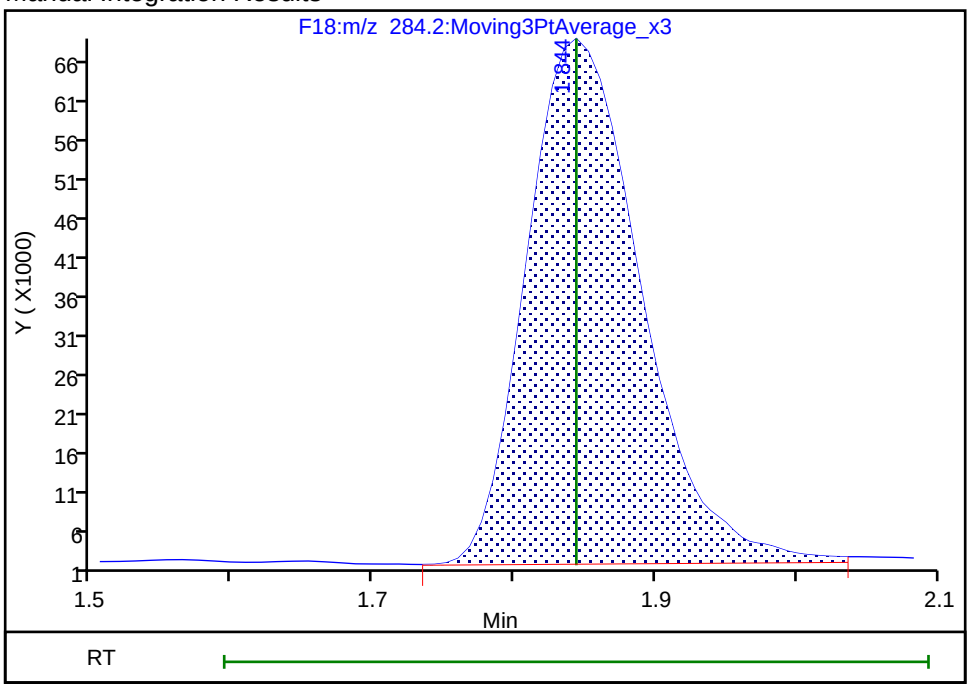
Processing Integration Results

RT: 1.84
Area: 358078
Amount: 125.0000
Amount Units: ug/l



Manual Integration Results

RT: 1.84
Area: 379799
Amount: 125.0000
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 13:11:02
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 08-Apr-2022 07:32:28 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07021.d

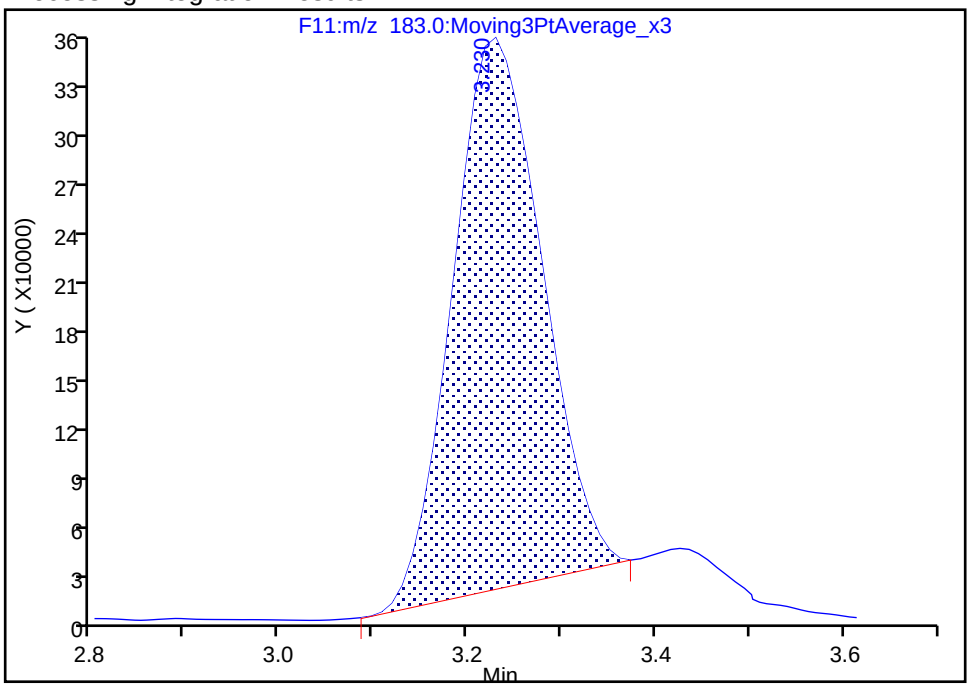
Injection Date:	07-Apr-2022 12:38:00	Instrument ID:	LC_LCMS7
Lims ID:	CCV		
Client ID:			
Operator ID:	acm	ALS Bottle#:	5 Worklist Smp#: 21
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F11:SIR

28 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

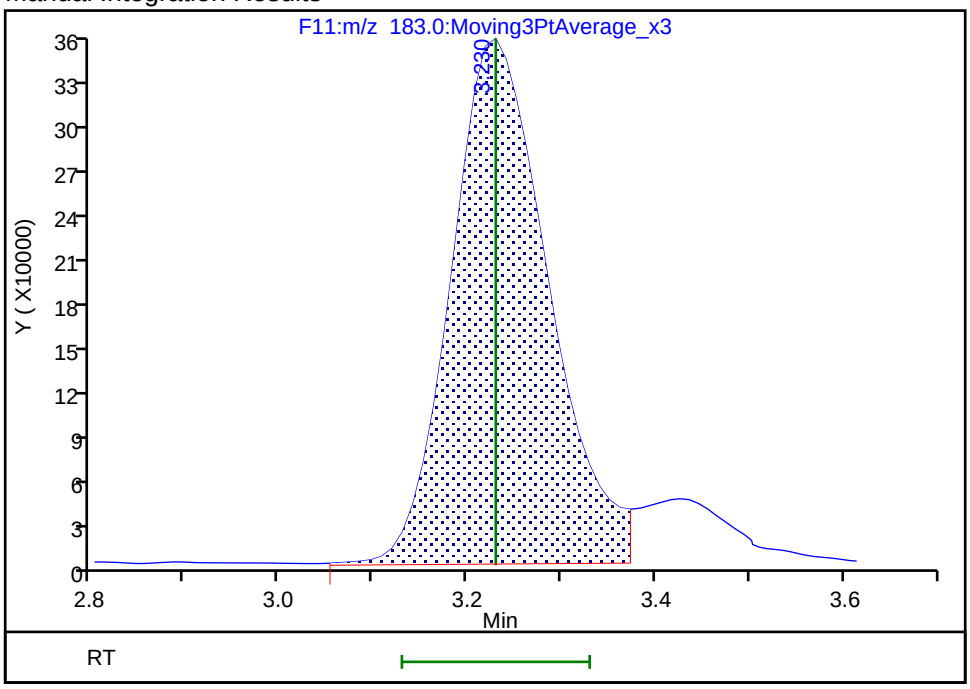
Processing Integration Results

RT: 3.23
Area: 2225063
Amount: 44.488196
Amount Units: ug/l



Manual Integration Results

RT: 3.23
Area: 2559035
Amount: 51.217398
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 13:10:34

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Lab Sample ID: CCV 280-571108/32 Calibration Date: 04/07/2022 13:50

Instrument ID: LC_LCMS7 Calib Start Date: 04/07/2022 10:39

GC Column: Synergi Hydro ID: Calib End Date: 04/07/2022 11:18

Lab File ID: ex722D07032.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Qua1		1.897		95.9	100	-4.1	30.0
TNX	Lin1		4.407		99.8	100	-0.3	30.0
DNX	Lin1		6.515		98.6	100	-1.5	30.0
MNX	Lin1		1.659		113	117	-3.5	30.0
RDX	Lin1		0.7319		106	100	5.8	30.0
1,3,5-Trinitrobenzene	Lin1		1.488		97.9	100	-2.3	30.0
Tetryl	Lin1		2.154		102	100	1.8	30.0
1,3-Dinitrobenzene	Lin1		1.031		95.5	100	-4.6	30.0
Nitroglycerin	Lin1		0.9251		97.0	101	-3.6	30.0
3,5-Dinitroaniline	Lin1		1.406		95.1	100	-4.9	30.0
2,4,6-Trinitrotoluene	Lin1		6.322		93.5	100	-6.8	30.0
Nitrobenzene	Lin1		0.5147		95.3	100	-5.1	30.0
4-Amino-2,6-dinitrotoluene	Lin1		1.490		96.3	100	-3.8	30.0
2-Amino-4,6-dinitrotoluene	Lin1		1.901		95.2	100	-5.2	30.0
2,6-Dinitrotoluene	Lin1		2.011		98.0	100	-2.4	30.0
2,4-Dinitrotoluene	Lin1		1.027		98.3	100	-2.1	30.0
PETN	Lin1		0.1673		102	99.6	2.6	30.0
o-Nitrotoluene	Lin1		0.3069		97.4	100	-2.6	30.0
p-Nitrotoluene	Lin1		0.2640		97.0	100	-3.2	30.0
m-Nitrotoluene	Lin1		0.1537		93.6	100	-6.4	30.0
Nitrobenzene-d5	Lin1		0.6083		96.9	100	-3.1	30.0

Report Date: 08-Apr-2022 07:32:35 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07032.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 07-Apr-2022 13:50:34 ALS Bottle#: 6 Worklist Smp#: 32
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:34 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 14:40:56
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	167191	95.9	106	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		110145	125.0	103	
36 TNX								
144.0	1.385	1.385	0.0	0.751	4561969	99.8	660	
33 DNX								
160.0	1.489	1.489	0.0	0.807	6744511	98.6	485	
34 MNX								
160.0	1.670	1.670	0.0	0.906	2002793	112.6	137	
4 RDX								M
281.2	1.841	1.841	0.0	0.998	221340	105.8	71.4	M
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		378008	125.0	79.6	
5 1,3,5-Trinitrobenzene								
213.0	2.320	2.317	0.003	0.768	1542300	97.9	170	
6 Tetryl								
241.1	2.705	2.712	-0.007	0.896	2231892	102.0	159	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.030	-0.011		1337884	129.4	291	
8 1,3-Dinitrobenzene								
168.0	3.051	3.051	0.0	1.011	1067993	95.5	177	
9 Nitroglycerin								
62.0	3.080	3.080	0.0	1.020	962556	97.0	458	
28 3,5-Dinitroaniline								M
183.0	3.230	3.230	0.0	1.070	4602237	95.1	46.0	M

Report Date: 08-Apr-2022 07:32:35 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07032.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.321	3.321	0.0	0.766	6564540	93.5	168	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.775	629263	96.9	117	
12 Nitrobenzene								
123.0	3.431	3.431	0.0	0.792	534449	95.3	38.1	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.652	3.645	0.007	0.843	4884170	96.3	33.8	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.982	3.976	0.006	0.919	6248611	95.2	40.9	
17 2,6-Dinitrotoluene								
182.0	4.144	4.150	-0.006	0.957	6610465	98.0	559	
* 18 2,4-dinitrotoluene-d3								
185.1	4.332	4.341	-0.009		4093045	125.0	107	
19 2,4-Dinitrotoluene								
182.0	4.382	4.373	0.009	1.011	3375052	98.3	266	
20 PETN								
61.8	4.696	4.716	-0.020	1.084	545483	102.2	118	
22 o-Nitrotoluene								
137.0	4.992	5.002	-0.010	1.152	1004835	97.4	284	
23 p-Nitrotoluene								
137.0	5.306	5.311	-0.005	1.225	866044	97.0	234	
24 m-Nitrotoluene								
137.0	5.704	5.704	0.0	1.317	503882	93.6	130	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

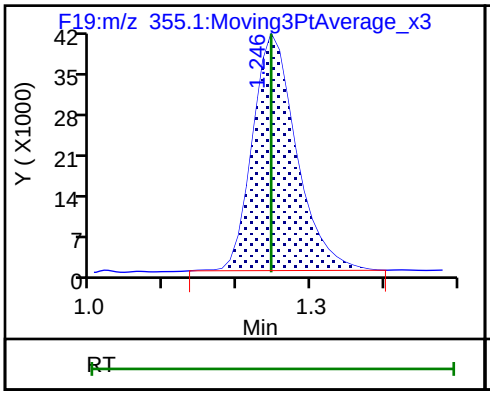
8321EXcalprim_00029	Amount Added: 10.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 10.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 08-Apr-2022 07:32:35 Chrom Revision: 2.3 18-Mar-2022 09:07:22

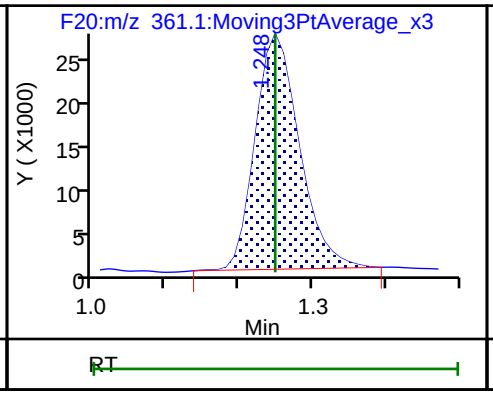
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07032.d
Injection Date: 07-Apr-2022 13:50:34 Instrument ID: LC_LCMS7
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 6 Worklist Smp#: 32
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

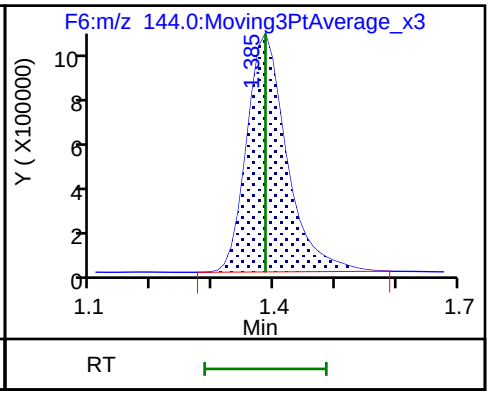
2 HMX



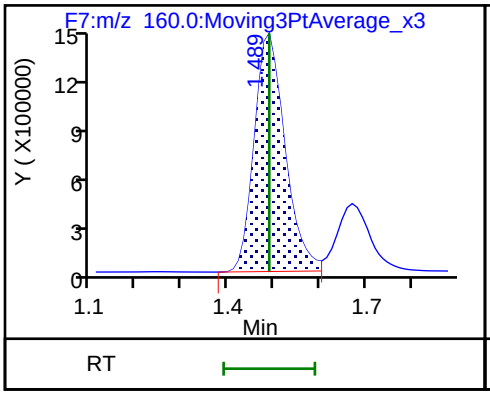
* 1 HMX-13C4



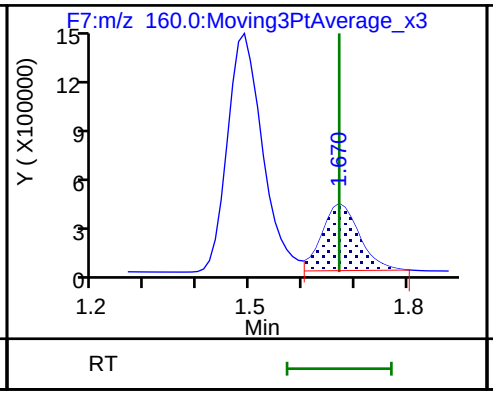
36 TNX



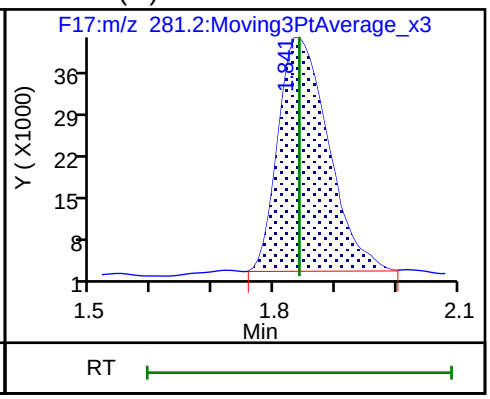
33 DNX



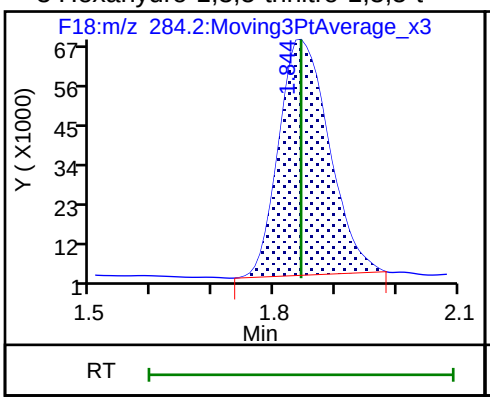
34 MNX



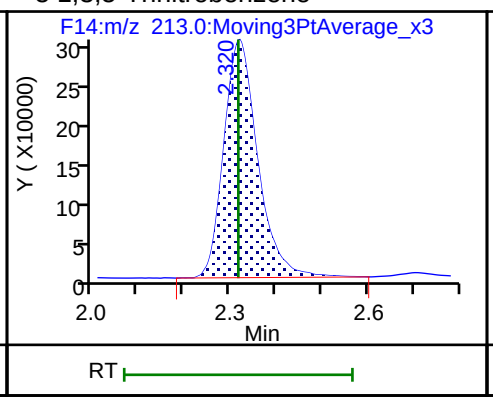
4 RDX (M)



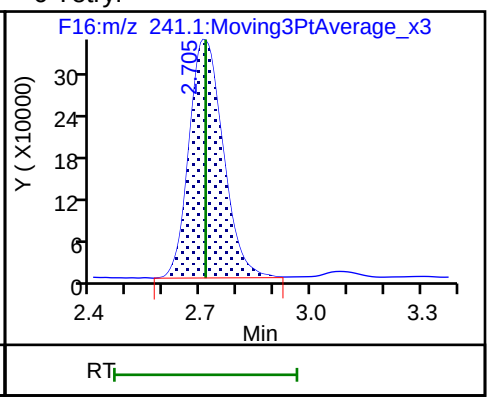
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



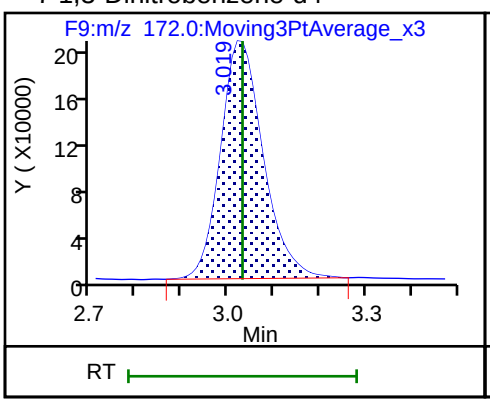
5 1,3,5-Trinitrobenzene



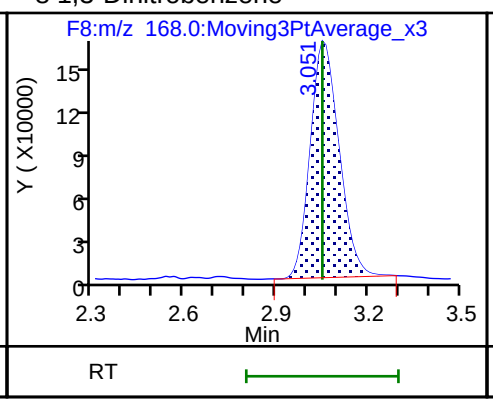
6 Tetryl



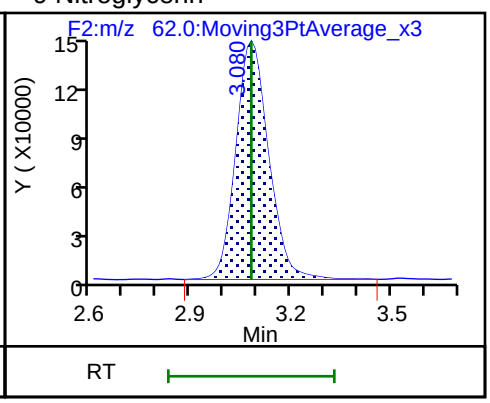
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

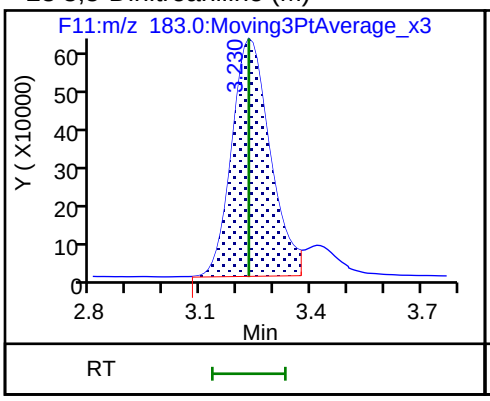


9 Nitroglycerin

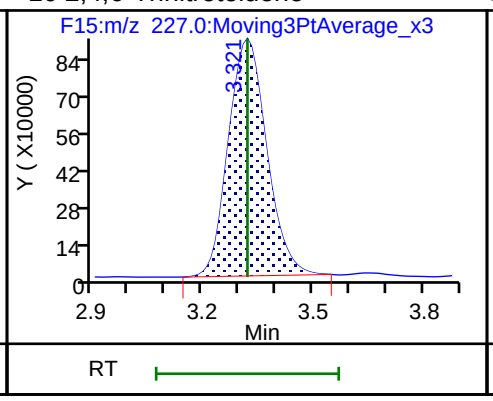


Report Date: 08-Apr-2022 07:32:35 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07032.d

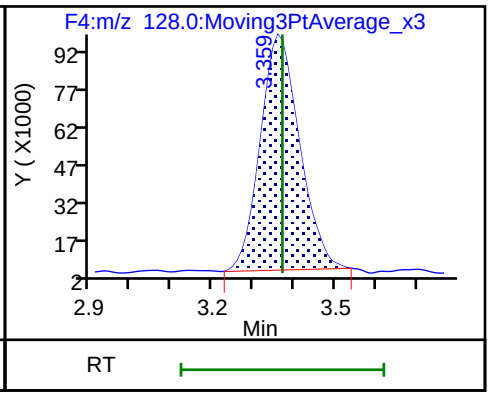
28 3,5-Dinitroaniline (M)



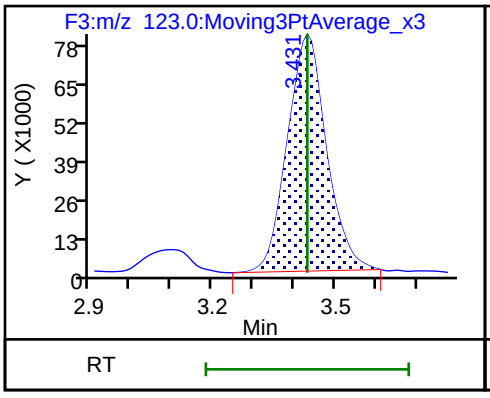
10 2,4,6-Trinitrotoluene



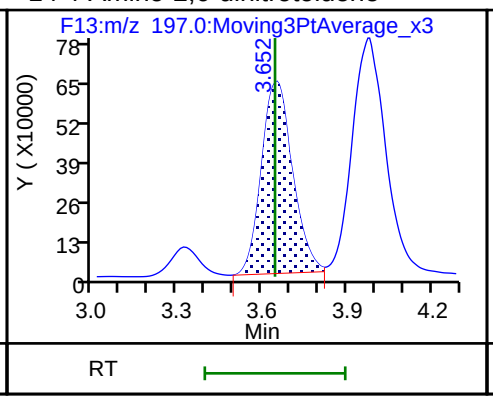
$ 11 Nitrobenzene-d5



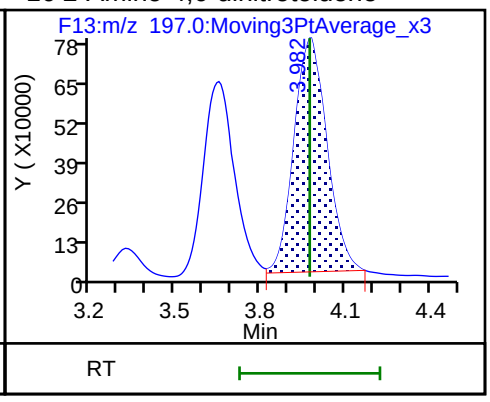
12 Nitrobenzene



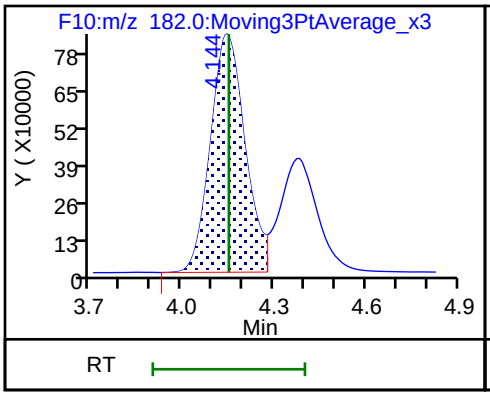
14 4-Amino-2,6-dinitrotoluene



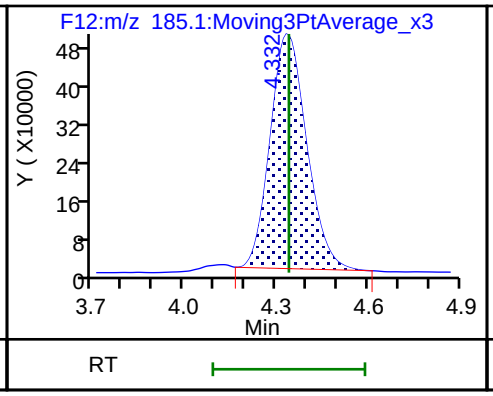
16 2-Amino-4,6-dinitrotoluene



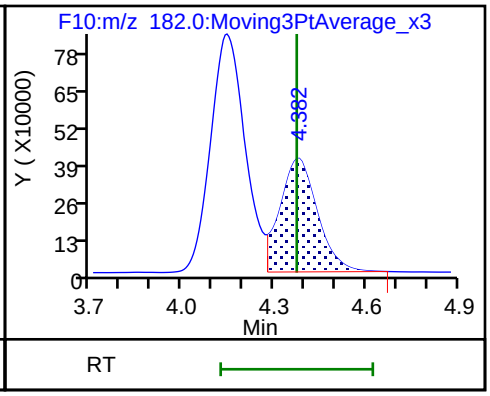
17 2,6-Dinitrotoluene



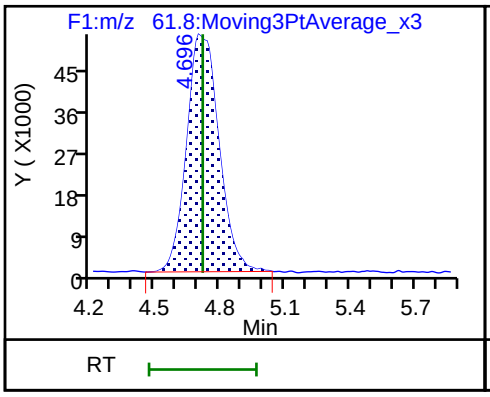
* 18 2,4-dinitrotoluene-d3



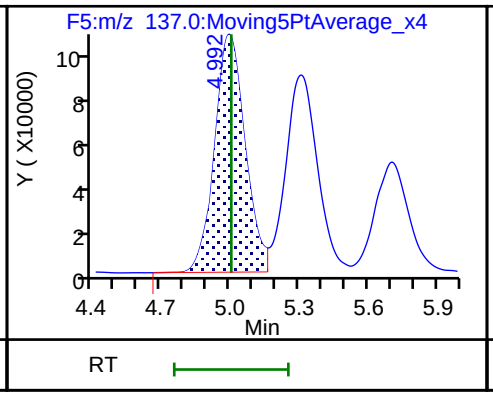
19 2,4-Dinitrotoluene



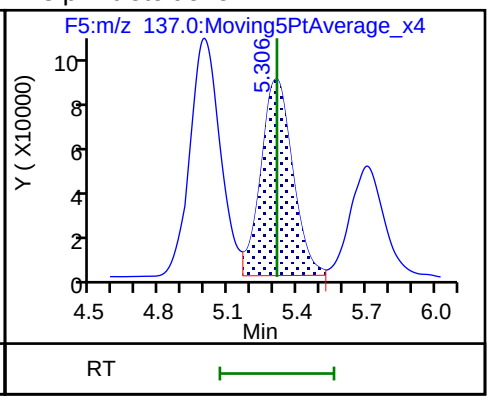
20 PETN



22 o-Nitrotoluene



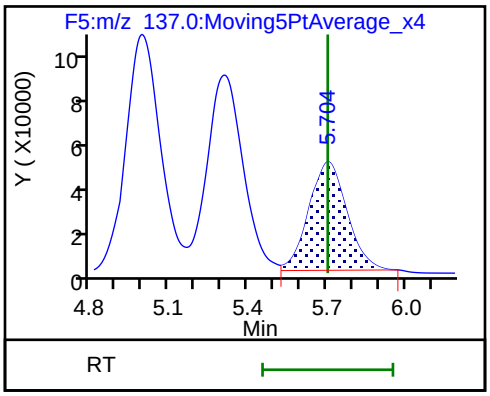
23 p-Nitrotoluene



Report Date: 08-Apr-2022 07:32:35 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07032.d

24 m-Nitrotoluene



Report Date: 08-Apr-2022 07:32:35 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07032.d

Injection Date: 07-Apr-2022 13:50:34 Instrument ID: LC_LCMS7

Lims ID: CCV

Client ID:

Operator ID: acm ALS Bottle#: 6 Worklist Smp#: 32

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

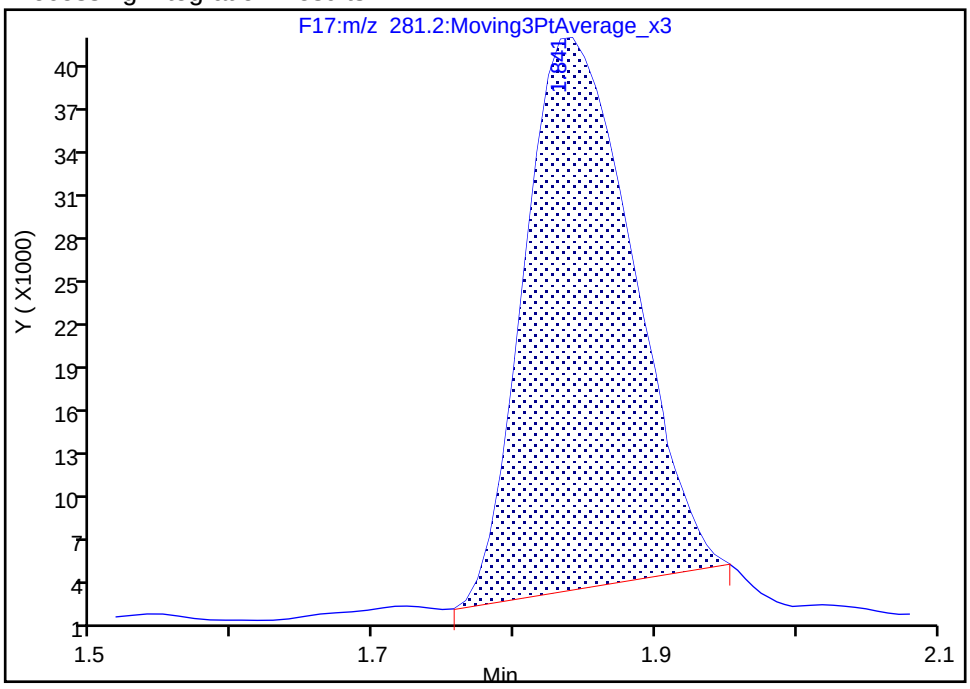
Column: Detector F17:SIR

4 RDX, CAS: 121-82-4

Signal: 1

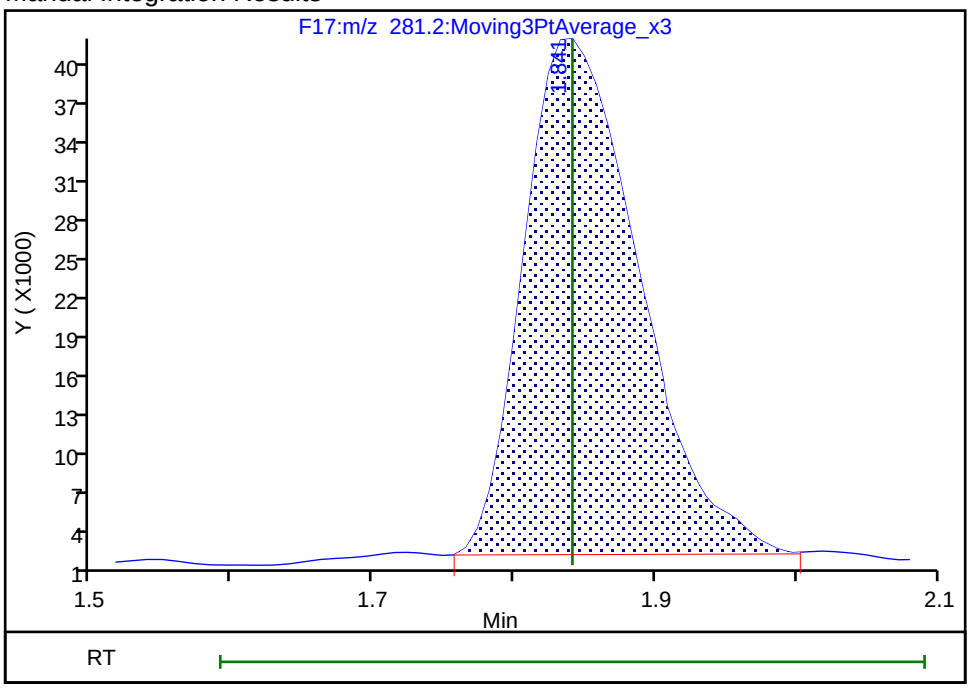
Processing Integration Results

RT: 1.84
Area: 200656
Amount: 95.762541
Amount Units: ug/l



Manual Integration Results

RT: 1.84
Area: 221340
Amount: 105.7508
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 14:40:53

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 08-Apr-2022 07:32:35 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07032.d

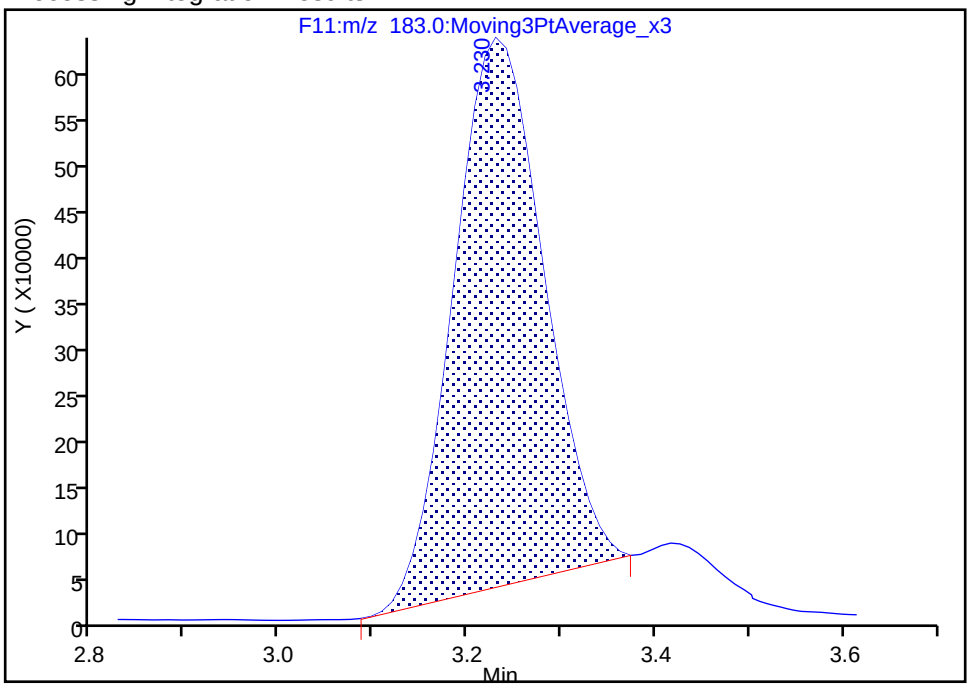
Injection Date:	07-Apr-2022 13:50:34	Instrument ID:	LC_LCMS7
Lims ID:	CCV		
Client ID:			
Operator ID:	acm	ALS Bottle#:	6 Worklist Smp#: 32
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F11:SIR

28 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

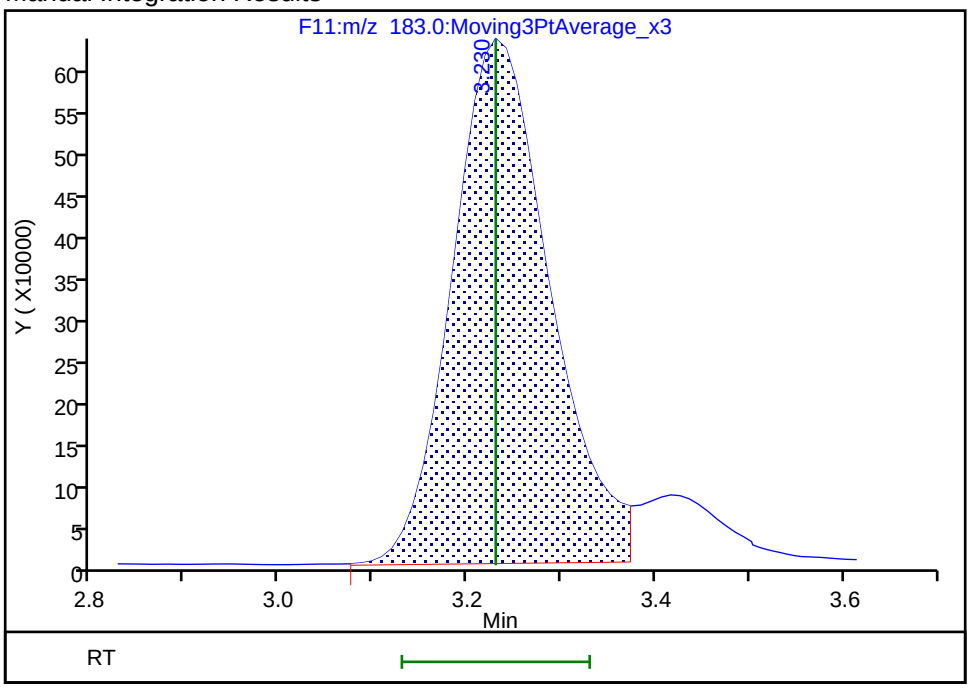
Processing Integration Results

RT: 3.23
Area: 4004629
Amount: 82.693366
Amount Units: ug/l



Manual Integration Results

RT: 3.23
Area: 4602237
Amount: 95.085063
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 14:40:42

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Lab Sample ID: CCV 280-571108/43 Calibration Date: 04/07/2022 15:03

Instrument ID: LC_LCMS7 Calib Start Date: 04/07/2022 10:39

GC Column: Synergi Hydro ID: Calib End Date: 04/07/2022 11:18

Lab File ID: ex722D07043.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Qua1		2.210		57.8	50.0	15.6	30.0
TNX	Lin1		4.523		50.7	50.1	1.4	30.0
DNX	Lin1		6.719		50.6	50.1	1.0	30.0
MNX	Lin1		1.703		57.7	58.4	-1.1	30.0
RDX	Lin1		0.8254		59.1	50.0	18.3	30.0
1,3,5-Trinitrobenzene	Lin1		1.498		49.1	50.1	-1.9	30.0
Tetryl	Lin1		2.219		52.9	50.1	5.6	30.0
1,3-Dinitrobenzene	Lin1		1.111		51.4	50.1	2.5	30.0
Nitroglycerin	Lin1		0.9814		50.9	50.3	1.2	30.0
3,5-Dinitroaniline	Lin1		1.490		50.3	50.0	0.5	30.0
2,4,6-Trinitrotoluene	Lin1		6.708		49.5	50.2	-1.4	30.0
Nitrobenzene	Lin1		0.4935		45.1	50.2	-10.1	30.0
4-Amino-2,6-dinitrotoluene	Lin1		1.589		51.1	50.1	2.1	30.0
2-Amino-4,6-dinitrotoluene	Lin1		2.054		51.2	50.2	2.1	30.0
2,6-Dinitrotoluene	Lin1		2.106		51.1	50.2	1.8	30.0
2,4-Dinitrotoluene	Lin1		1.046		49.8	50.2	-0.9	30.0
PETN	Lin1		0.1666		51.4	49.8	3.2	30.0
o-Nitrotoluene	Lin1		0.3410		53.9	50.0	7.9	30.0
p-Nitrotoluene	Lin1		0.2936		53.7	50.1	7.2	30.0
m-Nitrotoluene	Lin1		0.1765		53.6	50.1	7.1	30.0
Nitrobenzene-d5	Lin1		0.6677		53.9	50.0	7.9	30.0

Report Date: 08-Apr-2022 07:32:42 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07043.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 07-Apr-2022 15:03:10 ALS Bottle#: 5 Worklist Smp#: 43
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:42 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 08-Apr-2022 07:20:02
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	89875	57.8	51.5	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		101680	125.0	97.8	
36 TNX								
144.0	1.385	1.385	0.0	0.751	2294647	50.7	628	
33 DNX								
160.0	1.489	1.489	0.0	0.807	3408401	50.6	429	
34 MNX								
160.0	1.670	1.670	0.0	0.906	1006935	57.7	120	
4 RDX								
281.2	1.849	1.841	0.008	1.003	118672	59.1	58.8	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		359456	125.0	128	
5 1,3,5-Trinitrobenzene								
213.0	2.320	2.317	0.003	0.766	760613	49.1	148	
6 Tetryl								
241.1	2.712	2.712	0.0	0.895	1126977	52.9	135	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.030	3.030	0.0		1311201	129.4	294	
8 1,3-Dinitrobenzene								
168.0	3.051	3.051	0.0	1.007	564385	51.4	121	
9 Nitroglycerin								
62.0	3.080	3.080	0.0	1.017	500368	50.9	212	
28 3,5-Dinitroaniline								M
183.0	3.230	3.230	0.0	1.066	2383001	50.3	46.6	M

Report Date: 08-Apr-2022 07:32:42 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07043.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.321	3.321	0.0	0.765	3413373	49.5	168	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.774	338483	53.9	29.5	
12 Nitrobenzene								
123.0	3.421	3.431	-0.010	0.788	251120	45.1	36.3	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.652	3.645	0.007	0.841	2542473	51.1	35.5	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.982	3.976	0.006	0.917	3296988	51.2	43.4	
17 2,6-Dinitrotoluene								
182.0	4.144	4.150	-0.006	0.955	3380440	51.1	599	
* 18 2,4-dinitrotoluene-d3								
185.1	4.341	4.341	0.0		3997245	125.0	120	
19 2,4-Dinitrotoluene								
182.0	4.373	4.373	0.0	1.007	1678979	49.8	265	
20 PETN								
61.8	4.716	4.716	0.0	1.086	265365	51.4	62.1	
22 o-Nitrotoluene								
137.0	4.992	5.002	-0.010	1.150	545208	53.9	150	
23 p-Nitrotoluene								
137.0	5.306	5.311	-0.005	1.222	470413	53.7	122	
24 m-Nitrotoluene								
137.0	5.709	5.704	0.005	1.315	282487	53.6	69.7	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

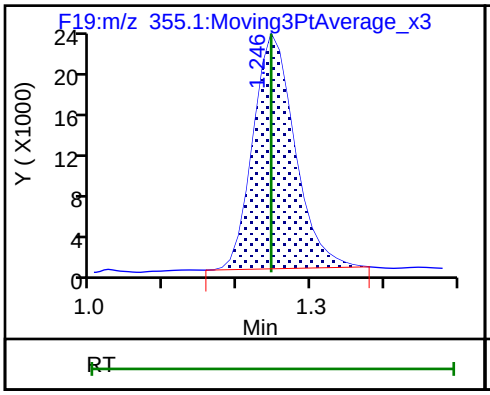
8321EXcalprim_00029	Amount Added: 5.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 5.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 08-Apr-2022 07:32:42 Chrom Revision: 2.3 18-Mar-2022 09:07:22

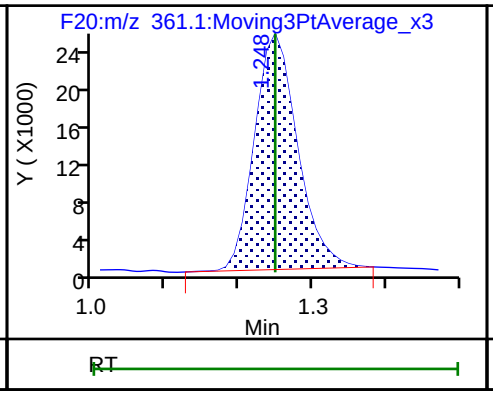
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07043.d
Injection Date: 07-Apr-2022 15:03:10 Instrument ID: LC_LCMS7
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 43
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

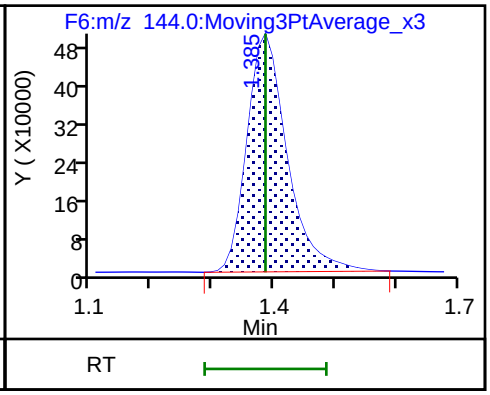
2 HMX



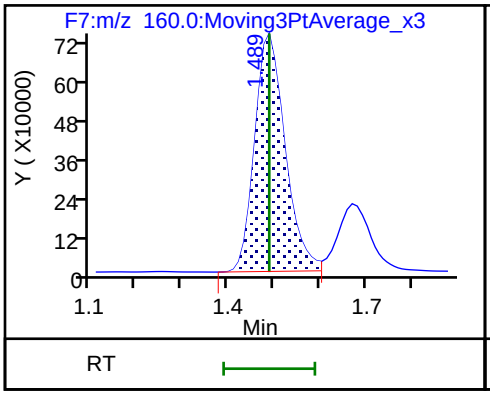
* 1 HMX-13C4



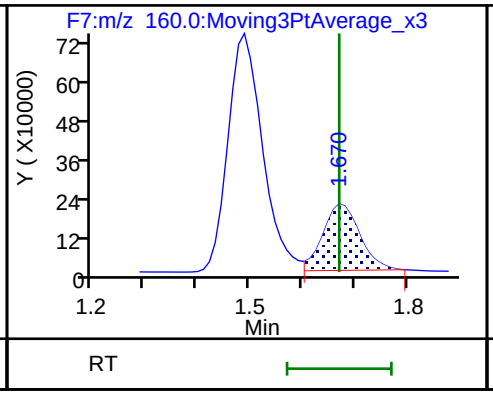
36 TNX



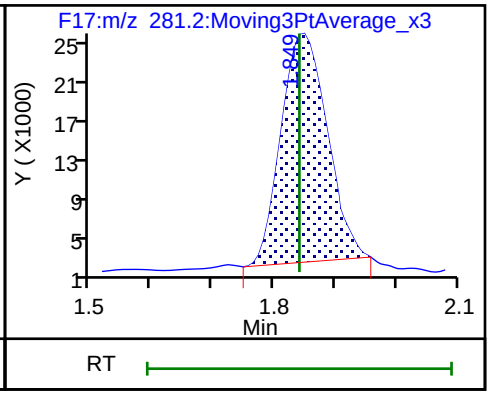
33 DNX



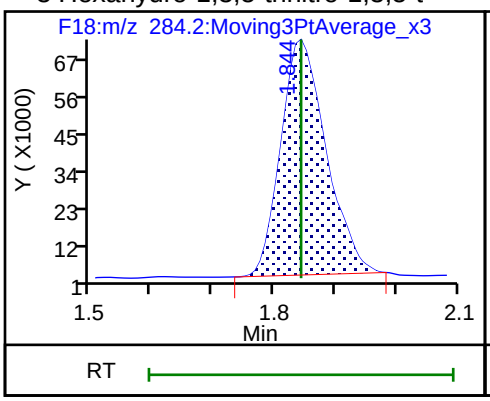
34 MNX



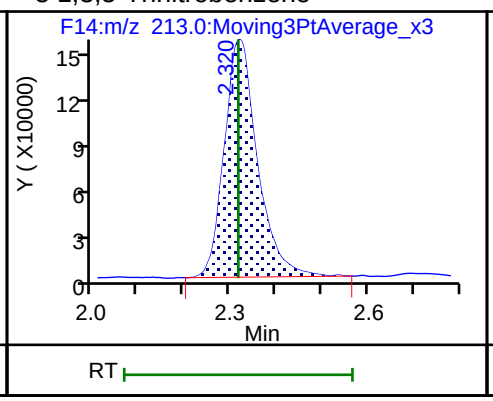
4 RDX



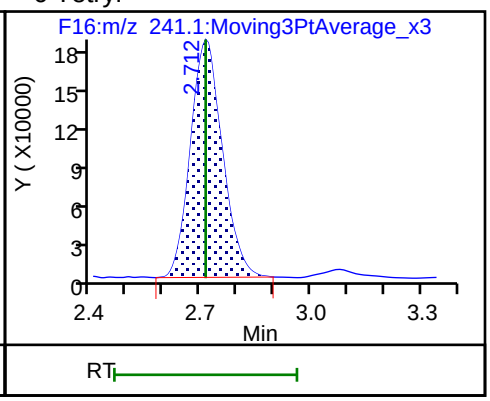
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



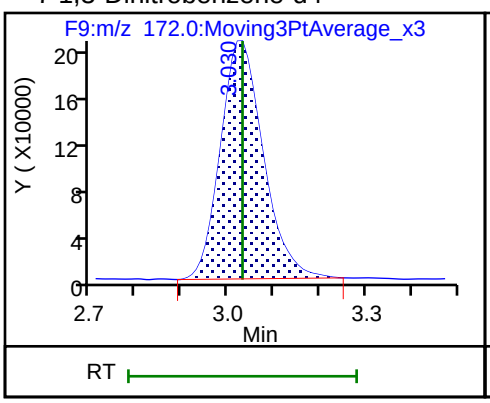
5 1,3,5-Trinitrobenzene



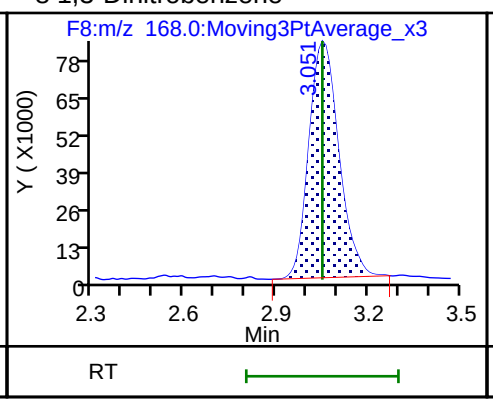
6 Tetryl



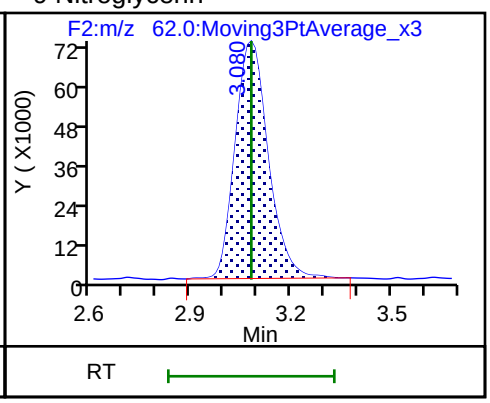
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



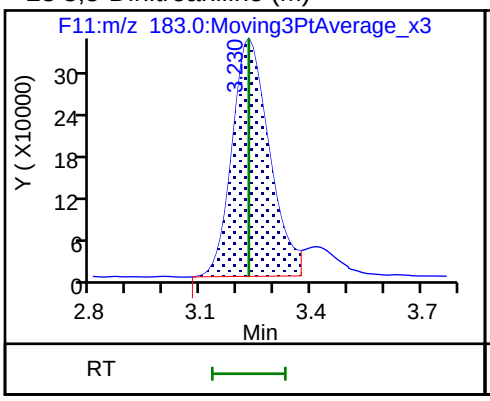
9 Nitroglycerin



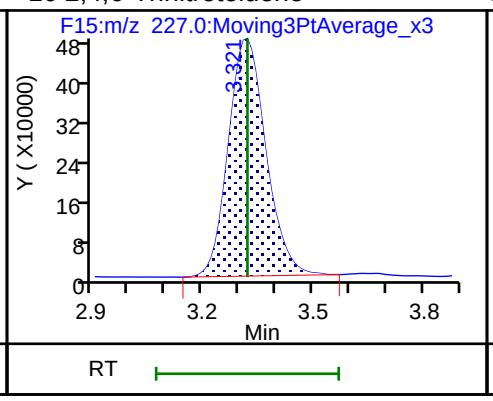
Report Date: 08-Apr-2022 07:32:42 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07043.d

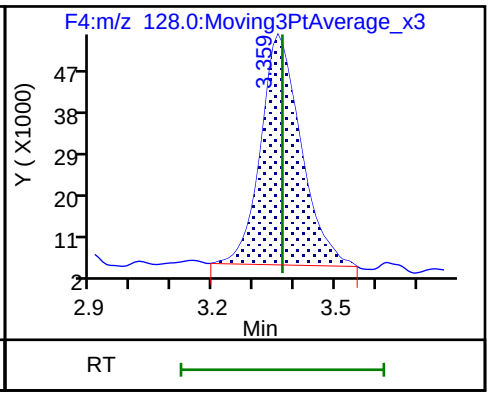
28 3,5-Dinitroaniline (M)



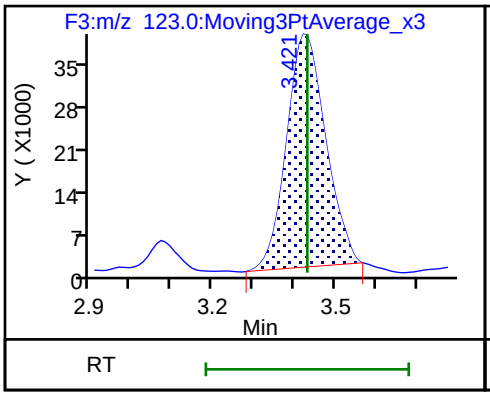
10 2,4,6-Trinitrotoluene



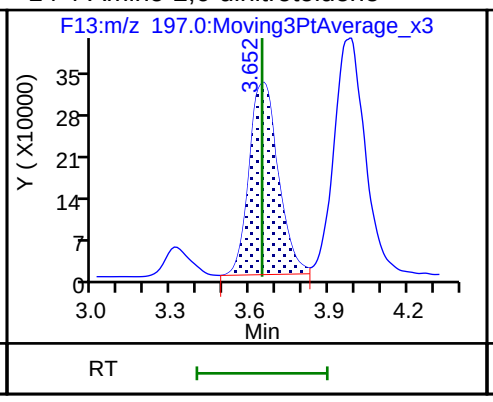
$ 11 Nitrobenzene-d5



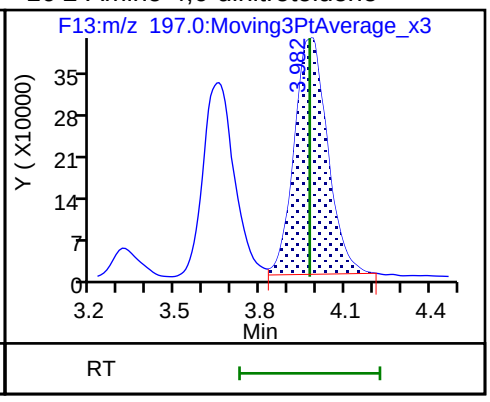
12 Nitrobenzene



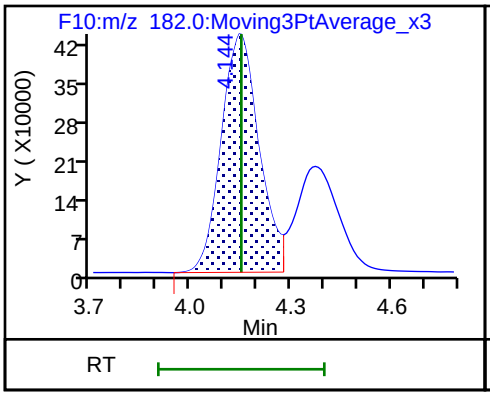
14 4-Amino-2,6-dinitrotoluene



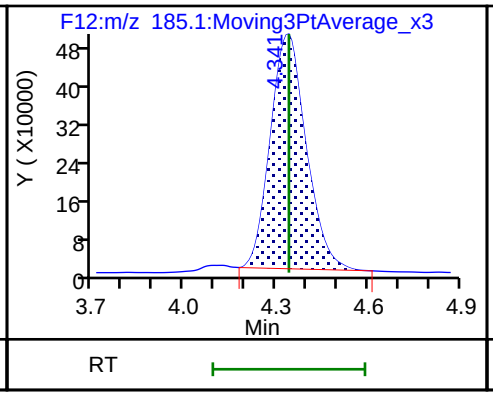
16 2-Amino-4,6-dinitrotoluene



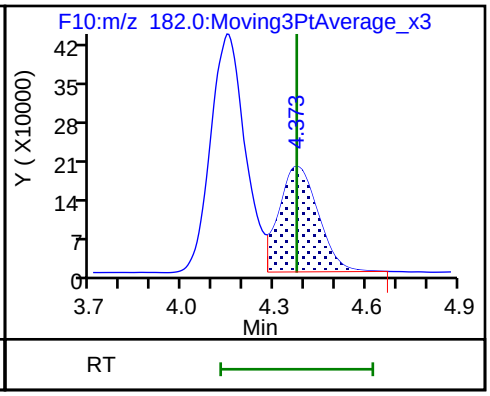
17 2,6-Dinitrotoluene



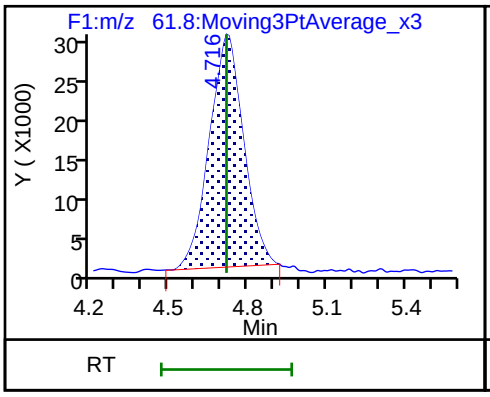
* 18 2,4-dinitrotoluene-d3



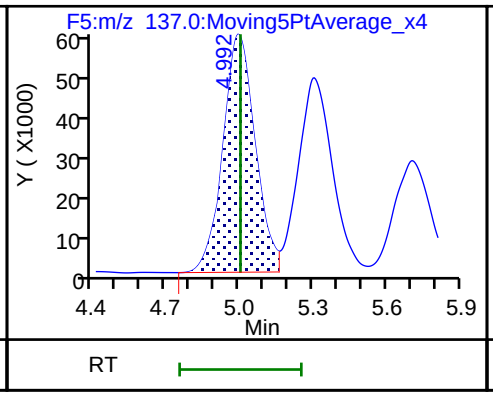
19 2,4-Dinitrotoluene



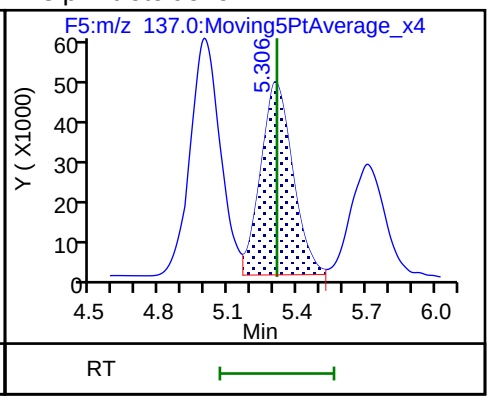
20 PETN



22 o-Nitrotoluene



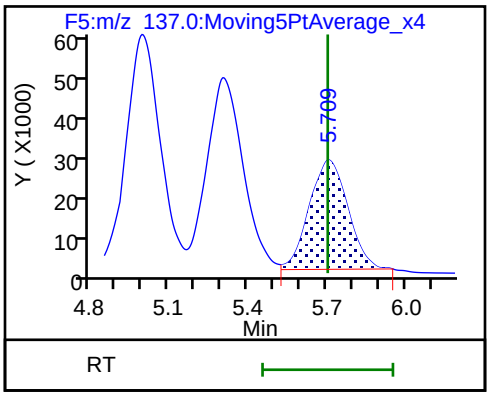
23 p-Nitrotoluene



Report Date: 08-Apr-2022 07:32:42 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07043.d

24 m-Nitrotoluene



Report Date: 08-Apr-2022 07:32:42 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07043.d

Injection Date: 07-Apr-2022 15:03:10 Instrument ID: LC_LCMS7

Lims ID: CCV

Client ID:

Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 43

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

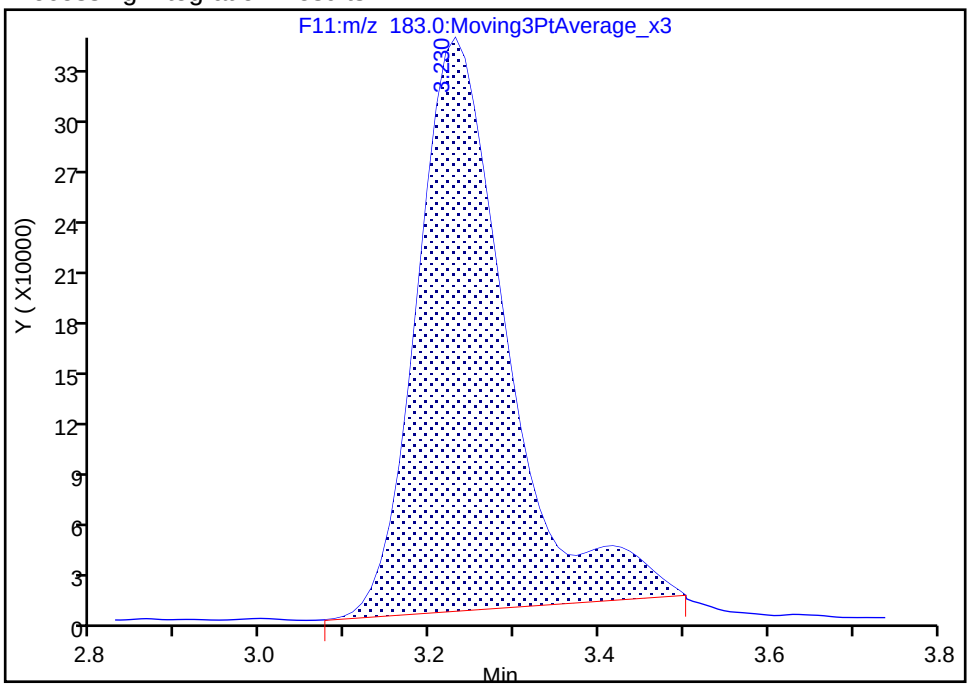
Column: Detector F11:SIR

28 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

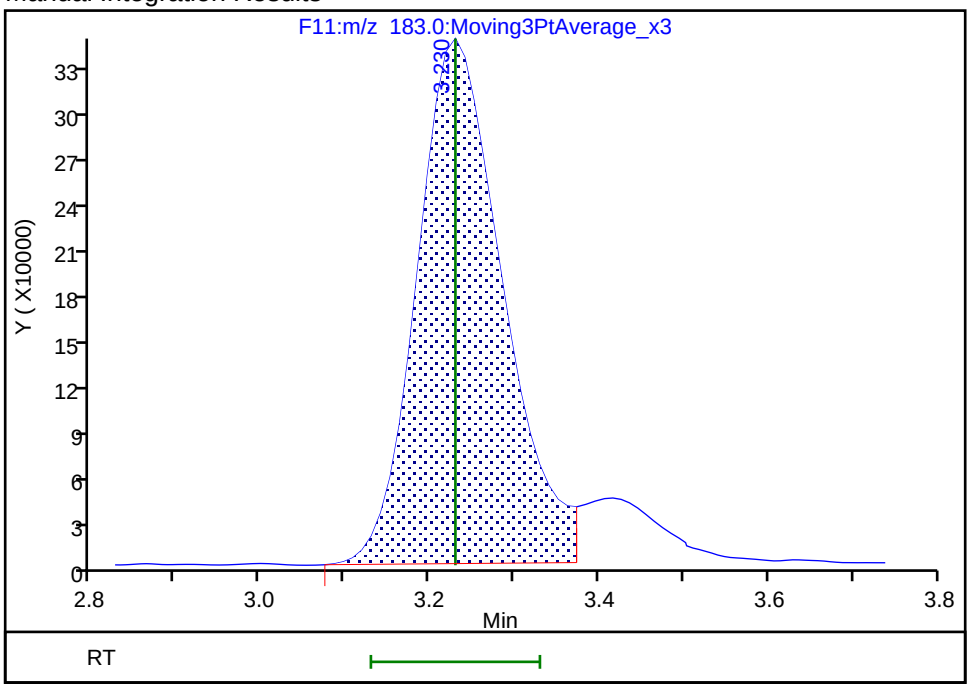
Processing Integration Results

RT: 3.23
Area: 2477846
Amount: 52.266149
Amount Units: ug/l



Manual Integration Results

RT: 3.23
Area: 2383001
Amount: 50.252358
Amount Units: ug/l



Reviewer: meyera, 08-Apr-2022 07:19:55

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Lab Sample ID: CCV 280-571108/46 Calibration Date: 04/07/2022 15:24

Instrument ID: LC_LCMS7 Calib Start Date: 04/07/2022 10:39

GC Column: Synergi Hydro ID: Calib End Date: 04/07/2022 11:18

Lab File ID: ex722D07046.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Qua1		2.029		102	100	2.0	30.0
TNX	Lin1		4.476		101	100	1.3	30.0
DNX	Lin1		6.274		94.9	100	-5.2	30.0
MNX	Lin1		1.679		114	117	-2.4	30.0
RDX	Lin1		0.7126		103	100	2.9	30.0
1,3,5-Trinitrobenzene	Lin1		1.484		97.5	100	-2.6	30.0
Tetryl	Lin1		2.237		106	100	5.7	30.0
1,3-Dinitrobenzene	Lin1		1.114		103	100	3.1	30.0
Nitroglycerin	Lin1		0.9640		101	101	0.5	30.0
3,5-Dinitroaniline	Lin1		1.381		93.4	100	-6.6	30.0
2,4,6-Trinitrotoluene	Lin1		6.421		95.0	100	-5.4	30.0
Nitrobenzene	Lin1		0.5151		95.4	100	-5.0	30.0
4-Amino-2,6-dinitrotoluene	Lin1		1.503		97.1	100	-3.0	30.0
2-Amino-4,6-dinitrotoluene	Lin1		1.978		99.0	100	-1.4	30.0
2,6-Dinitrotoluene	Lin1		1.987		96.9	100	-3.5	30.0
2,4-Dinitrotoluene	Lin1		1.040		99.6	100	-0.8	30.0
PETN	Lin1		0.1630		99.6	99.6	0.0	30.0
o-Nitrotoluene	Lin1		0.3179		101	100	0.9	30.0
p-Nitrotoluene	Lin1		0.2687		98.7	100	-1.5	30.0
m-Nitrotoluene	Lin1		0.1601		97.5	100	-2.6	30.0
Nitrobenzene-d5	Lin1		0.5961		95.0	100	-5.0	30.0

Report Date: 08-Apr-2022 07:32:44 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07046.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 07-Apr-2022 15:24:32 ALS Bottle#: 6 Worklist Smp#: 46
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:44 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 08-Apr-2022 07:22:02
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	164048	102.0	64.7	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		101088	125.0	122	
36 TNX								
144.0	1.385	1.385	0.0	0.751	4601116	101.4	603	
33 DNX								
160.0	1.489	1.489	0.0	0.807	6449493	94.9	439	
34 MNX								
160.0	1.670	1.670	0.0	0.906	2011676	113.9	132	
4 RDX								
281.2	1.841	1.841	0.0	0.998	236356	102.9	68.2	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		414590	125.0	196	
5 1,3,5-Trinitrobenzene								
213.0	2.320	2.317	0.003	0.768	1526568	97.5	160	
6 Tetryl								
241.1	2.705	2.712	-0.007	0.896	2301433	105.9	165	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.030	-0.011		1328454	129.4	437	
8 1,3-Dinitrobenzene								
168.0	3.062	3.051	0.011	1.014	1146053	103.3	197	
9 Nitroglycerin								
62.0	3.080	3.080	0.0	1.020	995956	101.1	459	
28 3,5-Dinitroaniline								M
183.0	3.230	3.230	0.0	1.070	4570971	93.4	47.8	M

Report Date: 08-Apr-2022 07:32:44 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07046.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.321	3.321	0.0	0.766	6620272	95.0	146	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.775	612311	95.0	124	
12 Nitrobenzene								
123.0	3.421	3.431	-0.010	0.790	531094	95.4	47.7	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.652	3.645	0.007	0.843	4980081	97.1	35.5	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.976	3.976	0.0	0.918	6571202	99.0	43.0	
17 2,6-Dinitrotoluene								
182.0	4.150	4.150	0.0	0.958	6603462	96.9	628	
* 18 2,4-dinitrotoluene-d3								
185.1	4.332	4.341	-0.009		4137136	125.0	123	
19 2,4-Dinitrotoluene								
182.0	4.373	4.373	0.0	1.009	3456353	99.6	293	
20 PETN								
61.8	4.726	4.716	0.010	1.091	537352	99.6	131	
22 o-Nitrotoluene								
137.0	4.992	5.002	-0.010	1.152	1052134	100.9	340	
23 p-Nitrotoluene								
137.0	5.301	5.311	-0.010	1.224	891250	98.7	277	
24 m-Nitrotoluene								
137.0	5.699	5.704	-0.005	1.316	530367	97.5	155	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

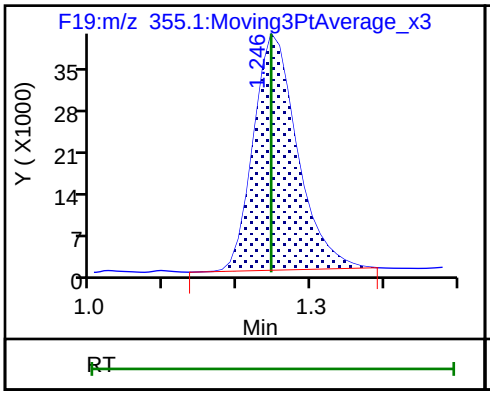
8321EXcalprim_00029	Amount Added: 10.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 10.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 08-Apr-2022 07:32:44 Chrom Revision: 2.3 18-Mar-2022 09:07:22

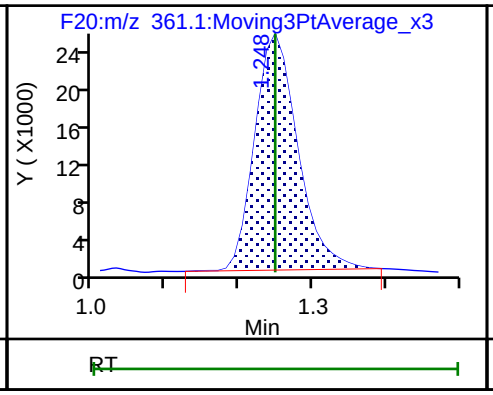
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07046.d
Injection Date: 07-Apr-2022 15:24:32 Instrument ID: LC_LCMS7
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 6 Worklist Smp#: 46
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

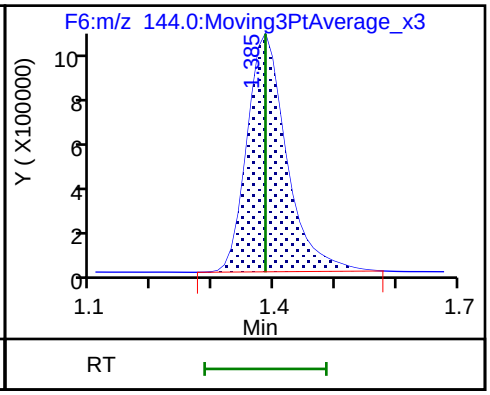
2 HMX



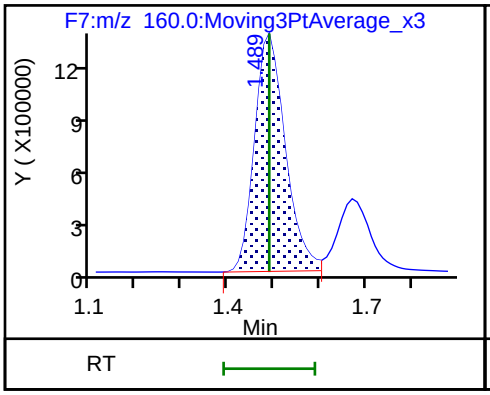
* 1 HMX-13C4



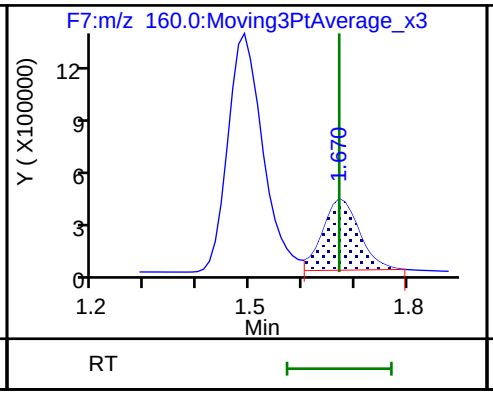
36 TNX



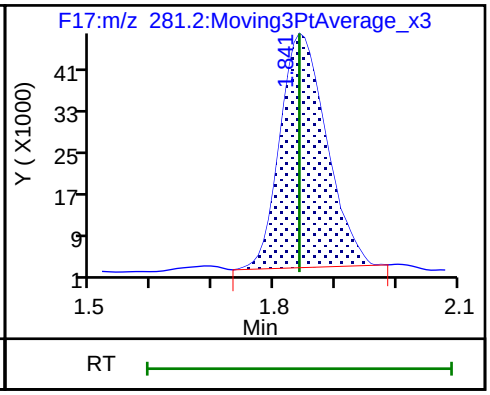
33 DNX



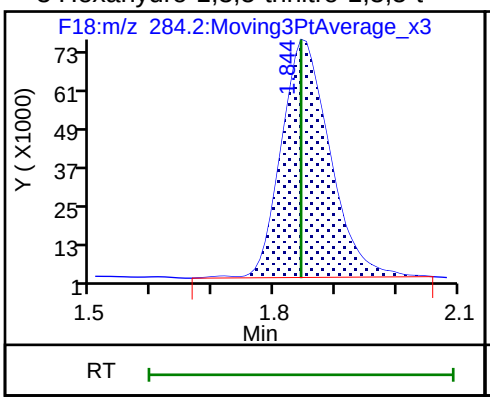
34 MNX



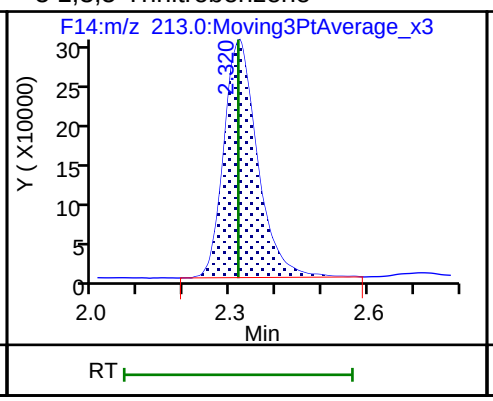
4 RDX



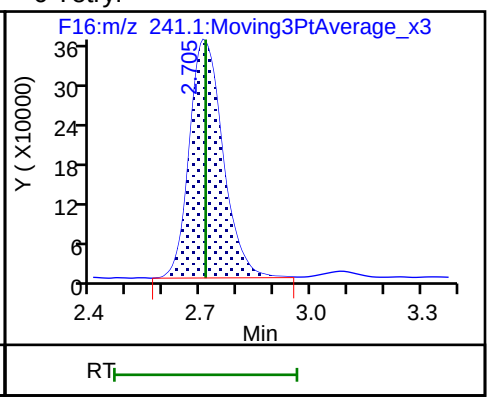
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



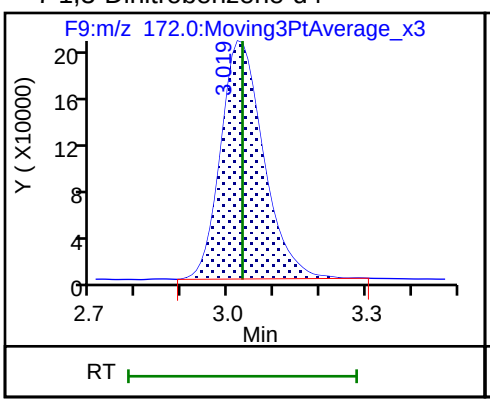
5 1,3,5-Trinitrobenzene



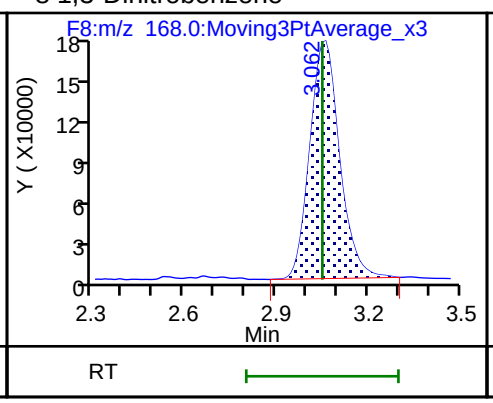
6 Tetryl



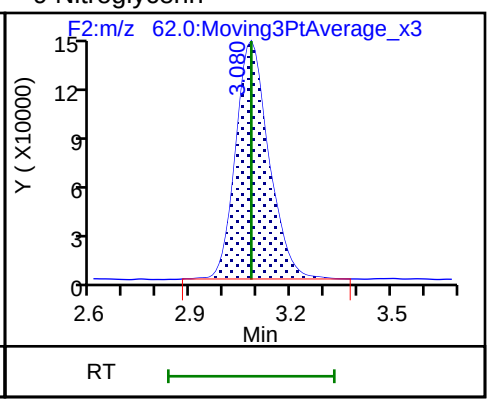
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

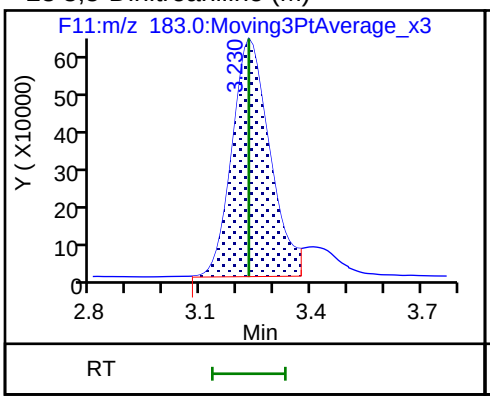


9 Nitroglycerin

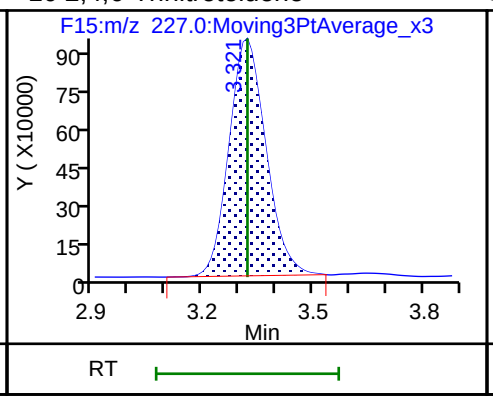


Report Date: 08-Apr-2022 07:32:44 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07046.d

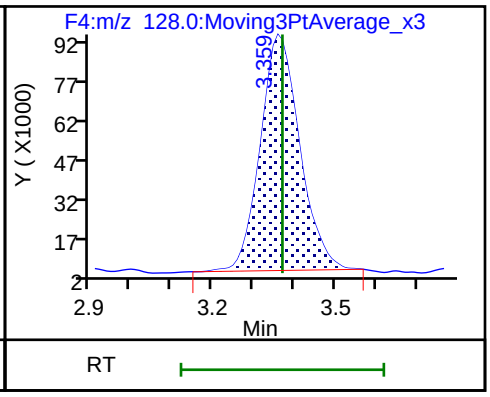
28 3,5-Dinitroaniline (M)



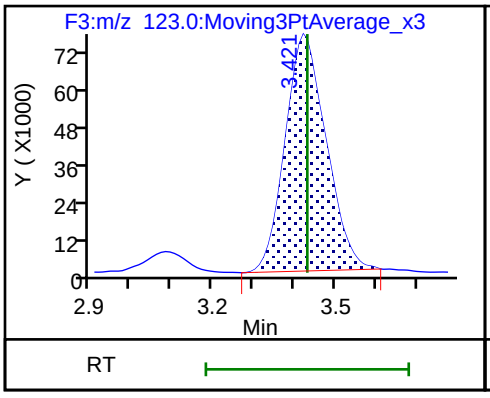
10 2,4,6-Trinitrotoluene



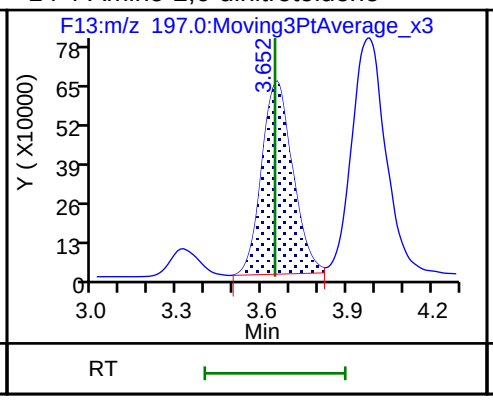
$ 11 Nitrobenzene-d5



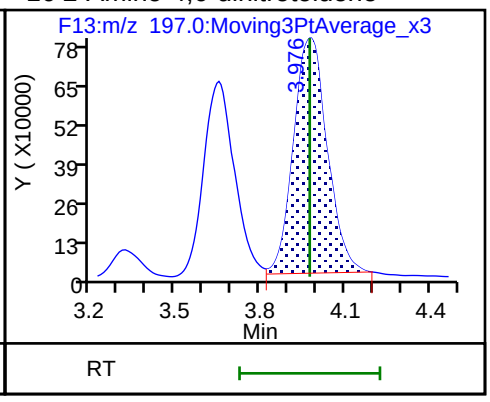
12 Nitrobenzene



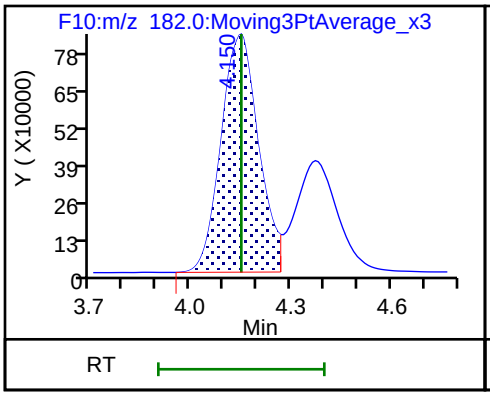
14 4-Amino-2,6-dinitrotoluene



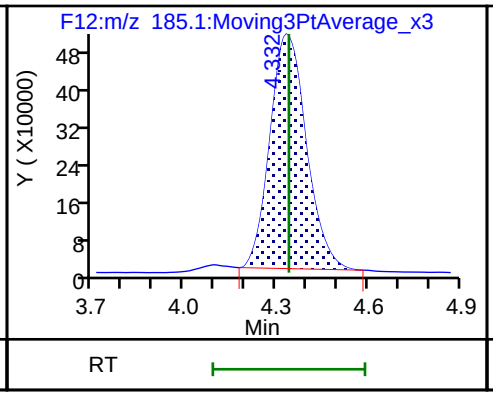
16 2-Amino-4,6-dinitrotoluene



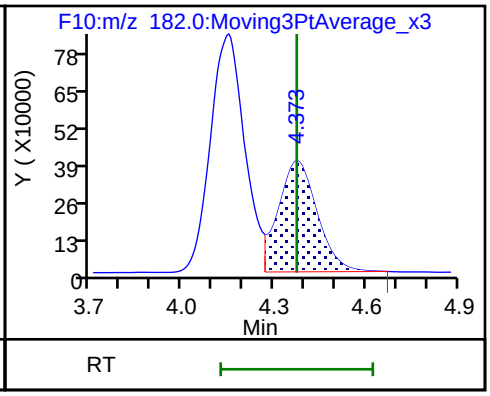
17 2,6-Dinitrotoluene



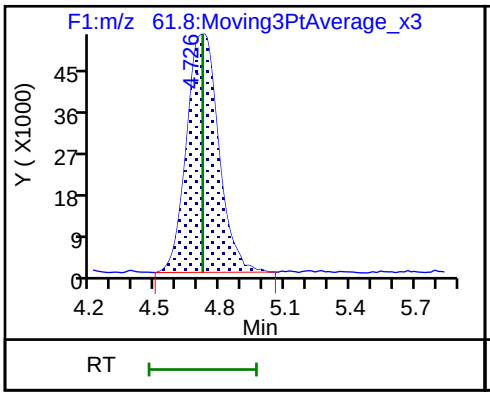
* 18 2,4-dinitrotoluene-d3



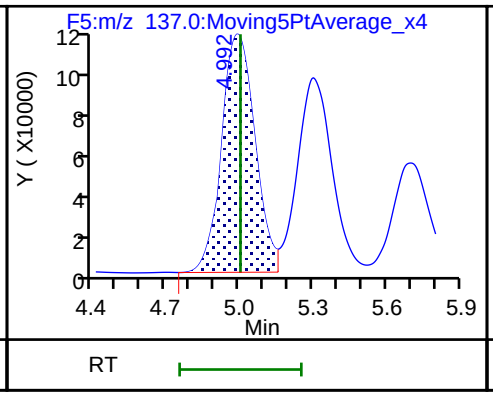
19 2,4-Dinitrotoluene



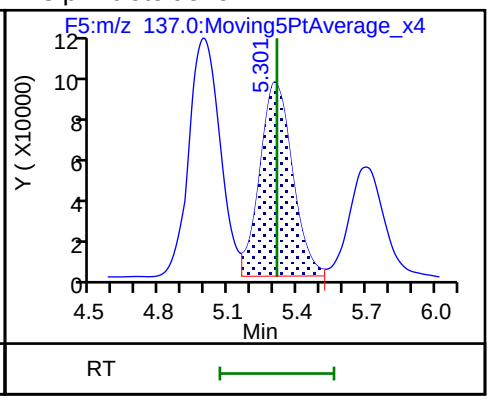
20 PETN



22 o-Nitrotoluene



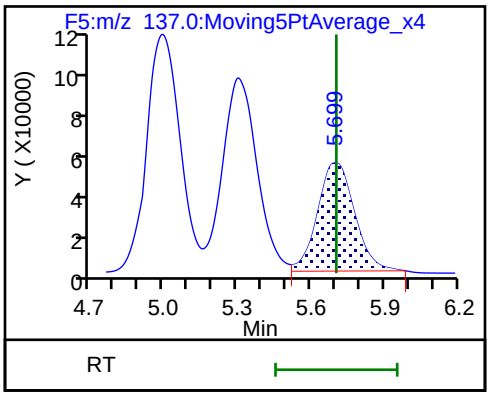
23 p-Nitrotoluene



Report Date: 08-Apr-2022 07:32:44 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07046.d

24 m-Nitrotoluene



Report Date: 08-Apr-2022 07:32:45 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07046.d

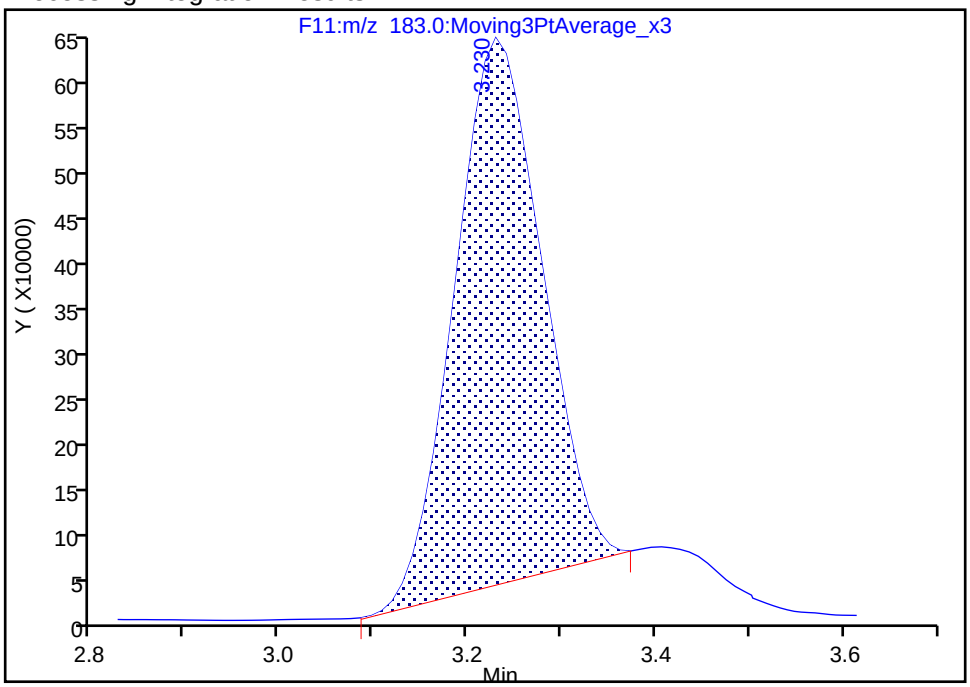
Injection Date:	07-Apr-2022 15:24:32	Instrument ID:	LC_LCMS7
Lims ID:	CCV		
Client ID:			
Operator ID:	acm	ALS Bottle#:	6 Worklist Smp#: 46
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F11:SIR

28 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

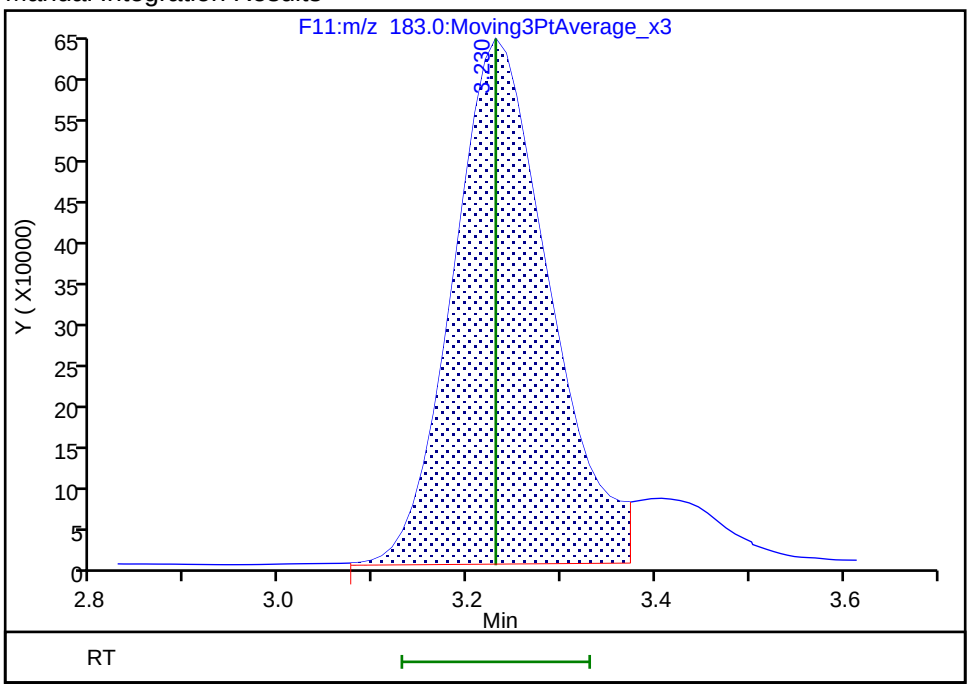
Processing Integration Results

RT: 3.23
Area: 3913265
Amount: 79.934112
Amount Units: ug/l



Manual Integration Results

RT: 3.23
Area: 4570971
Amount: 93.426627
Amount Units: ug/l



Reviewer: meyera, 08-Apr-2022 07:21:53

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Lab Sample ID: ICV 280-571224/11 Calibration Date: 04/08/2022 10:40

Instrument ID: LC_LCMS7 Calib Start Date: 04/08/2022 09:48

GC Column: Synergi Hydro ID: Calib End Date: 04/08/2022 10:27

Lab File ID: ex722D08011.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin1		2.345		105	100	5.1	30.0
TNX	Lin1		4.461		98.4	100	-1.7	30.0
DNX	Lin1		6.499		102	100	1.4	30.0
MNX	Lin1		1.605		116	117	-0.8	30.0
RDX	Lin1		0.7427		102	100	2.0	30.0
1,3,5-Trinitrobenzene	Lin1		1.508		96.8	100	-3.2	30.0
Tetryl	Lin1		2.210		95.8	100	-4.2	30.0
1,3-Dinitrobenzene	Lin1		1.063		98.1	100	-1.9	30.0
Nitroglycerin	Lin1		0.8950		95.2	100	-4.8	30.0
3,5-Dinitroaniline	Lin1		1.203		95.6	100	-4.4	30.0
2,4,6-Trinitrotoluene	Lin1		6.546		98.3	100	-1.7	30.0
Nitrobenzene	Lin1		0.5223		100	100	0.0	30.0
4-Amino-2,6-dinitrotoluene	Lin1		1.532		99.5	100	-0.5	30.0
2-Amino-4,6-dinitrotoluene	Lin1		1.887		95.8	100	-4.2	30.0
2,6-Dinitrotoluene	Lin1		2.076		100	100	0.3	30.0
2,4-Dinitrotoluene	Lin1		1.067		101	100	0.9	30.0
PETN	Lin1		0.1639		94.8	100	-5.2	30.0
o-Nitrotoluene	Lin1		0.3224		101	100	0.8	30.0
p-Nitrotoluene	Lin1		0.2861		103	100	2.8	30.0
m-Nitrotoluene	Lin1		0.1672		101	100	1.1	30.0
Nitrobenzene-d5	Lin1		0.6226		102	100	1.8	30.0

Report Date: 14-Apr-2022 10:06:44 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08011.d
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 08-Apr-2022 10:40:49 ALS Bottle#: 9 Worklist Smp#: 11
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7
Sublist:

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:44 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 08:40:24
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	173862	105.1	131	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		92669	125.0	73.0	
36 TNX								
144.0	1.385	1.379	0.0	0.755	4505682	98.4	925	
33 DNX								
160.0	1.489	1.489	0.0	0.811	6563730	101.5	461	
34 MNX								
160.0	1.670	1.670	0.0	0.910	1889415	115.8	131	
4 RDX								
281.2	1.841	1.833	0.0	1.003	221703	102.0	78.6	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		373133	125.0	115	
5 1,3,5-Trinitrobenzene								
213.0	2.310	2.322	-0.003	0.765	1521604	96.8	196	
6 Tetryl								
241.1	2.705	2.708	0.006	0.896	2230231	95.8	146	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.008	0.011		1305265	129.4	461	
8 1,3-Dinitrobenzene								
168.0	3.051	3.051	0.011	1.011	1073068	98.1	203	
9 Nitroglycerin								
62.0	3.069	3.081	0.0	1.017	903061	95.2	431	
28 3,5-Dinitroaniline								
183.0	3.230	3.231	0.011	1.070	3786774	95.6	46.8	

Report Date: 14-Apr-2022 10:06:44 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08011.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.310	3.316	0.0	0.765	6604539	98.3	152	
$ 11 Nitrobenzene-d5								
128.0	3.348	3.354	0.0	0.774	628364	101.8	213	
12 Nitrobenzene								
123.0	3.421	3.418	0.010	0.791	526978	100.1	47.6	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.638	3.652	-0.007	0.841	4824154	99.5	36.3	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.982	3.971	0.019	0.921	5943107	95.8	39.6	
17 2,6-Dinitrotoluene								
182.0	4.132	4.138	0.006	0.956	6537675	100.3	628	
* 18 2,4-dinitrotoluene-d3								
185.1	4.324	4.315	0.009		3936260	125.0	120	
19 2,4-Dinitrotoluene								
182.0	4.365	4.373	0.0	1.009	3361487	100.9	289	
20 PETN								
61.8	4.696	4.706	0.0	1.086	516089	94.8	123	
22 o-Nitrotoluene								
137.0	4.982	4.987	0.005	1.152	1015115	100.8	381	
23 p-Nitrotoluene								
137.0	5.291	5.297	0.005	1.224	901010	102.8	331	
24 m-Nitrotoluene								
137.0	5.689	5.686	0.014	1.316	526391	101.1	179	

QC Flag Legend

Processing Flags

Reagents:

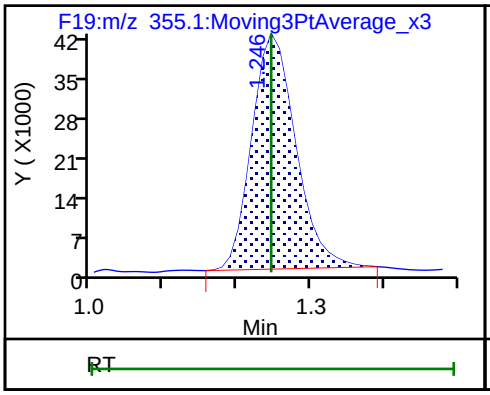
8321NB-D5-cal_00021	Amount Added: 10.00	Units: uL	
8321expICV_00019	Amount Added: 10.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 14-Apr-2022 10:06:44 Chrom Revision: 2.3 12-Apr-2022 20:29:44

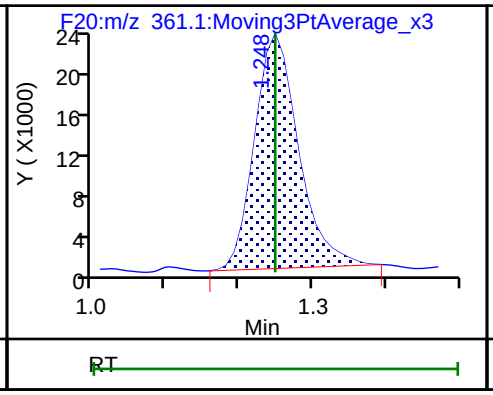
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08011.d
Injection Date: 08-Apr-2022 10:40:49 Instrument ID: LC_LCMS7
Lims ID: ICV
Client ID:
Operator ID: acm ALS Bottle#: 9 Worklist Smp#: 11
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

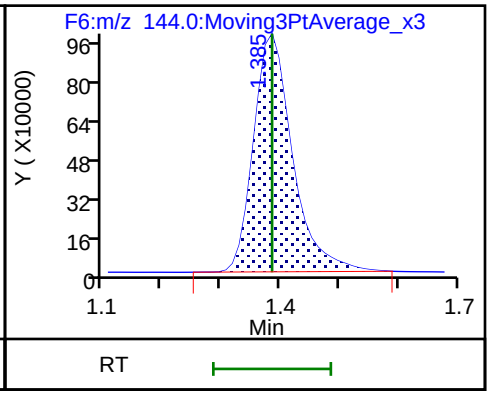
2 HMX



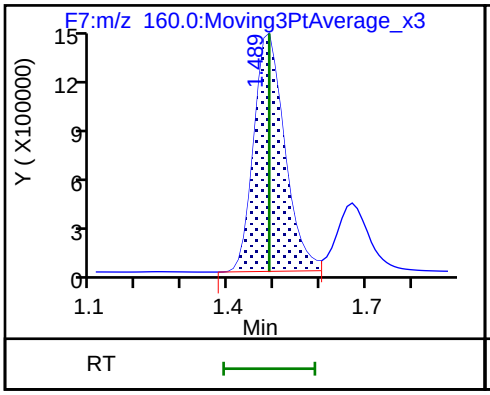
* 1 HMX-13C4



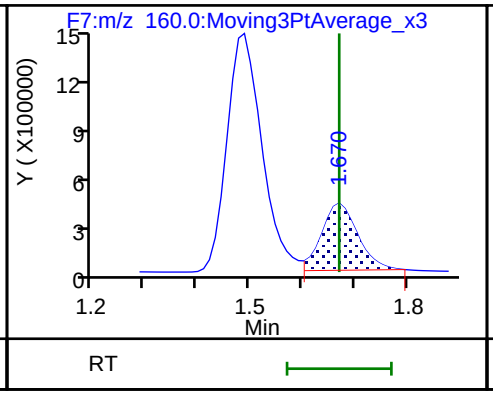
36 TNX



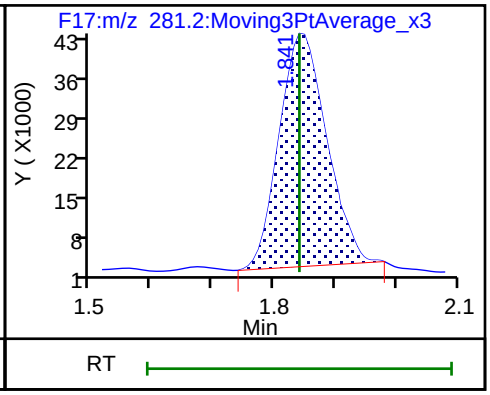
33 DNX



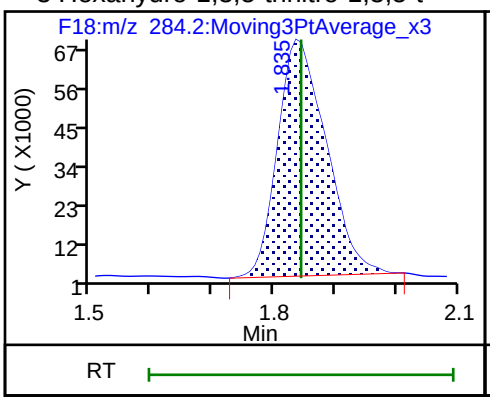
34 MNX



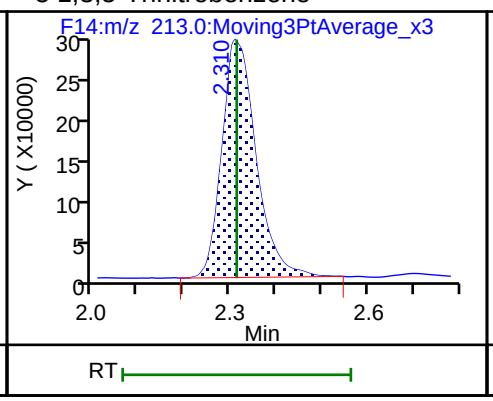
4 RDX



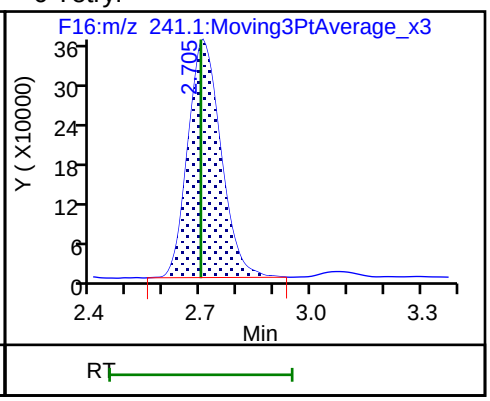
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



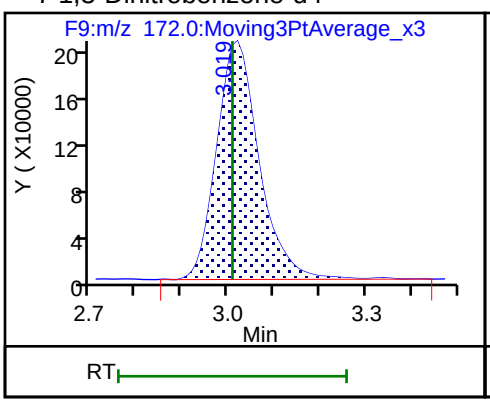
5 1,3,5-Trinitrobenzene



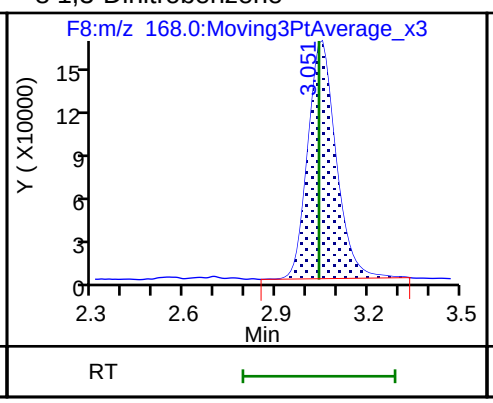
6 Tetryl



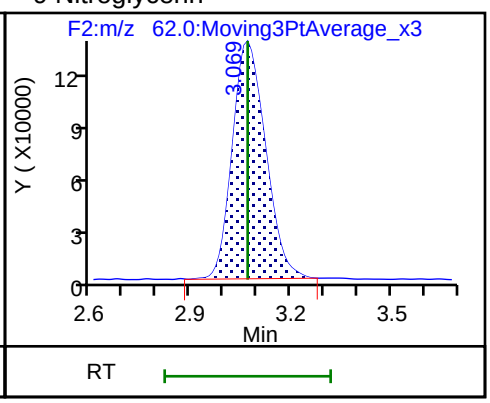
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

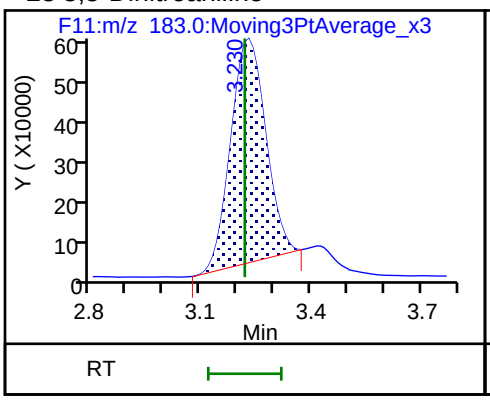


9 Nitroglycerin

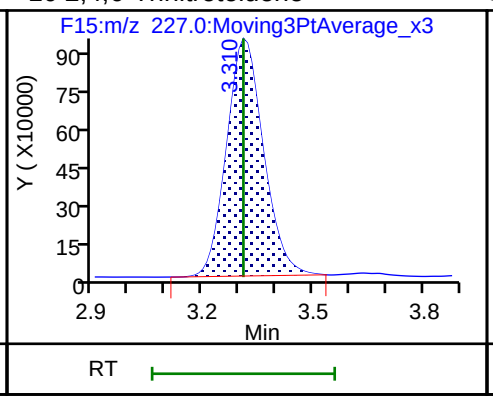


Report Date: 14-Apr-2022 10:06:44 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08011.d

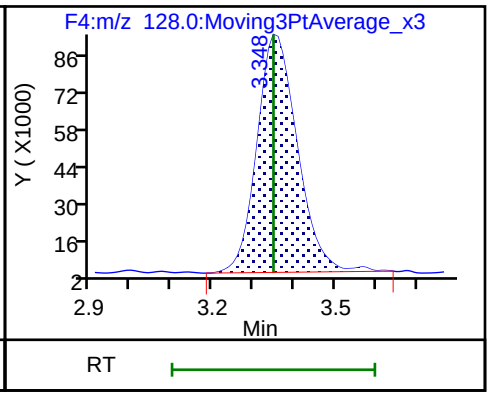
28 3,5-Dinitroaniline



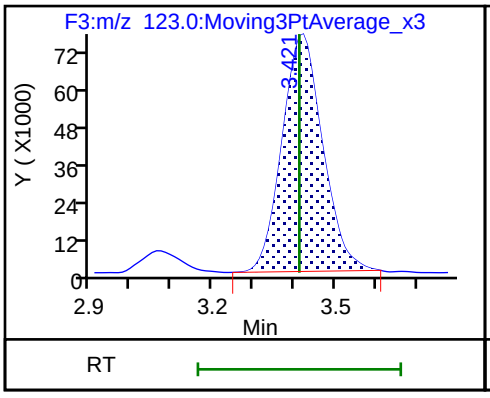
10 2,4,6-Trinitrotoluene



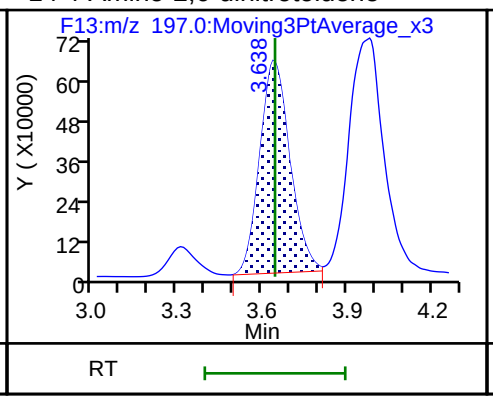
$ 11 Nitrobenzene-d5



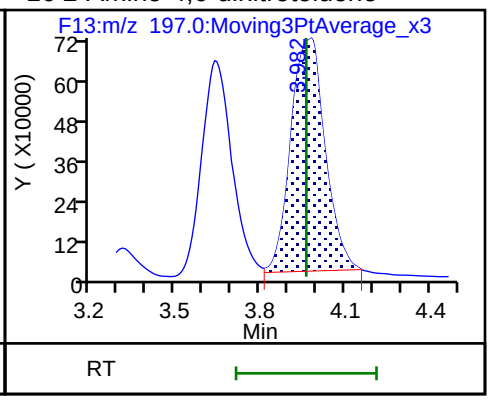
12 Nitrobenzene



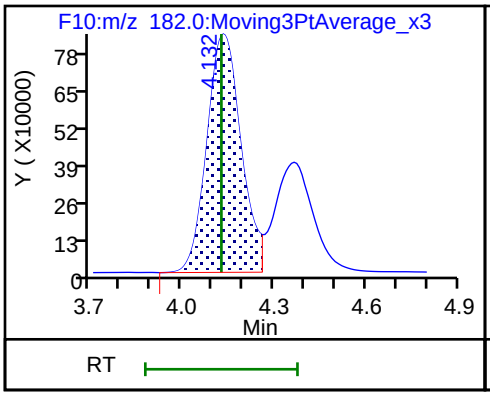
14 4-Amino-2,6-dinitrotoluene



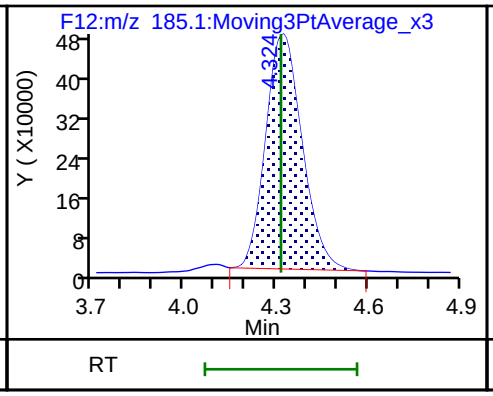
16 2-Amino-4,6-dinitrotoluene



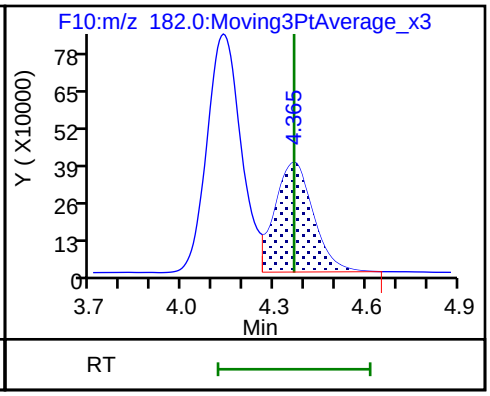
17 2,6-Dinitrotoluene



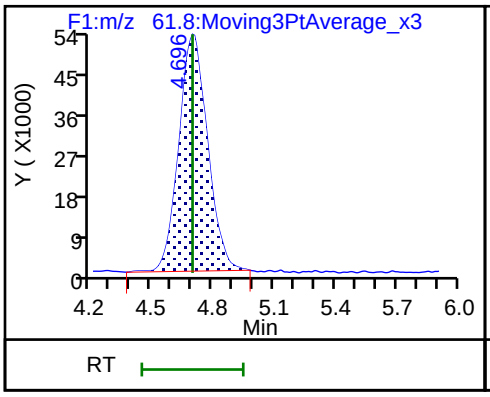
* 18 2,4-dinitrotoluene-d3



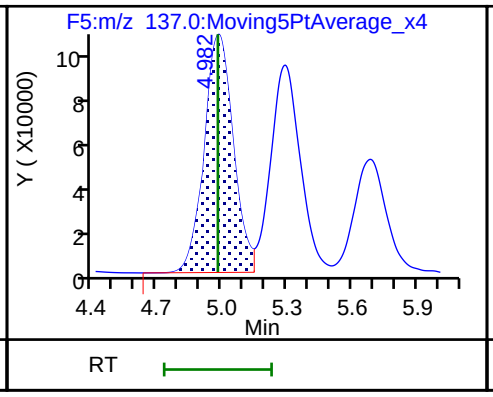
19 2,4-Dinitrotoluene



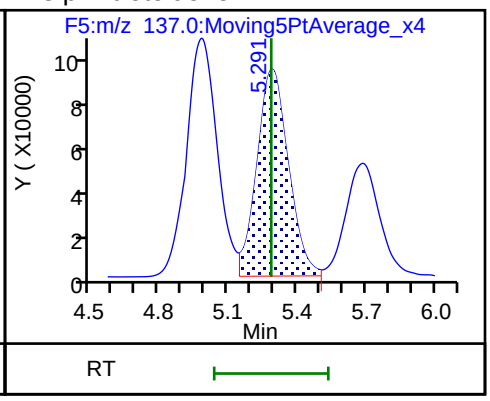
20 PETN



22 o-Nitrotoluene



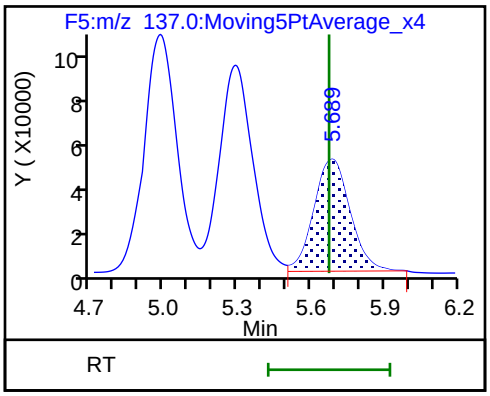
23 p-Nitrotoluene



Report Date: 14-Apr-2022 10:06:44 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08011.d

24 m-Nitrotoluene



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Lab Sample ID: CCV 280-571224/22 Calibration Date: 04/08/2022 11:53

Instrument ID: LC_LCMS7 Calib Start Date: 04/08/2022 09:48

GC Column: Synergi Hydro ID: Calib End Date: 04/08/2022 10:27

Lab File ID: ex722D08022.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin1		2.206		98.8	100	-1.2	30.0
TNX	Lin1		4.481		98.9	100	-1.2	30.0
DNX	Lin1		6.249		97.6	100	-2.5	30.0
MNX	Lin1		1.602		116	117	-0.9	30.0
RDX	Lin1		0.7562		104	100	4.0	30.0
1,3,5-Trinitrobenzene	Lin1		1.469		94.5	100	-5.7	30.0
Tetryl	Lin1		2.240		97.3	100	-2.9	30.0
1,3-Dinitrobenzene	Lin1		1.103		102	100	1.8	30.0
Nitroglycerin	Lin1		0.8870		94.9	101	-5.7	30.0
3,5-Dinitroaniline	Lin1		1.181		93.9	100	-6.1	30.0
2,4,6-Trinitrotoluene	Lin1		6.217		93.7	100	-6.7	30.0
Nitrobenzene	Lin1		0.5329		103	100	2.1	30.0
4-Amino-2,6-dinitrotoluene	Lin1		1.492		97.0	100	-3.1	30.0
2-Amino-4,6-dinitrotoluene	Lin1		1.849		94.2	100	-6.1	30.0
2,6-Dinitrotoluene	Lin1		2.036		98.7	100	-1.7	30.0
2,4-Dinitrotoluene	Lin1		1.035		98.3	100	-2.1	30.0
PETN	Lin1		0.1694		97.6	99.6	-2.0	30.0
o-Nitrotoluene	Lin1		0.3189		99.7	100	-0.3	30.0
p-Nitrotoluene	Lin1		0.2680		96.5	100	-3.7	30.0
m-Nitrotoluene	Lin1		0.1518		91.9	100	-8.2	30.0
Nitrobenzene-d5	Lin1		0.5889		96.2	100	-3.8	30.0

Report Date: 14-Apr-2022 10:06:53 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08022.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 08-Apr-2022 11:53:22 ALS Bottle#: 6 Worklist Smp#: 22
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:52 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:42:27
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	171631	98.8	96.5	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		97260	125.0	176	
36 TNX								
144.0	1.385	1.379	0.0	0.751	4368804	98.9	651	
33 DNX								
160.0	1.489	1.489	0.0	0.807	6092764	97.6	540	
34 MNX								
160.0	1.670	1.670	0.0	0.906	1820853	115.6	155	
4 RDX								
281.2	1.849	1.833	0.008	1.003	221008	104.0	41.4	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		365315	125.0	139	
5 1,3,5-Trinitrobenzene								
213.0	2.313	2.322	0.0	0.766	1433934	94.5	190	
6 Tetryl								
241.1	2.705	2.708	0.006	0.896	2186240	97.3	160	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.008	0.011		1260014	129.4	253	
8 1,3-Dinitrobenzene								
168.0	3.040	3.051	0.0	1.007	1076063	102.0	208	
9 Nitroglycerin								
62.0	3.069	3.081	0.0	1.017	869165	94.9	364	
28 3,5-Dinitroaniline								M
183.0	3.219	3.231	0.0	1.066	3731444	93.9	44.7	M

Report Date: 14-Apr-2022 10:06:53 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08022.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.310	3.316	0.0	0.765	6080207	93.7	145	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.354	0.011	0.777	573729	96.2	101	
12 Nitrobenzene								
123.0	3.421	3.418	0.010	0.791	521173	102.5	44.3	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.645	3.652	0.0	0.843	4717025	97.0	36.9	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.970	3.971	0.007	0.918	5866044	94.2	43.6	
17 2,6-Dinitrotoluene								
182.0	4.132	4.138	0.006	0.956	6457353	98.7	876	
* 18 2,4-dinitrotoluene-d3								
185.1	4.324	4.315	0.009		3948823	125.0	117	
19 2,4-Dinitrotoluene								
182.0	4.365	4.373	0.0	1.009	3283575	98.3	417	
20 PETN								
61.8	4.706	4.706	0.010	1.089	533010	97.6	114	
22 o-Nitrotoluene								
137.0	4.982	4.987	0.005	1.152	1007337	99.7	216	
23 p-Nitrotoluene								
137.0	5.291	5.297	0.005	1.224	848475	96.5	177	
24 m-Nitrotoluene								
137.0	5.685	5.686	0.010	1.315	480007	91.9	92.7	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

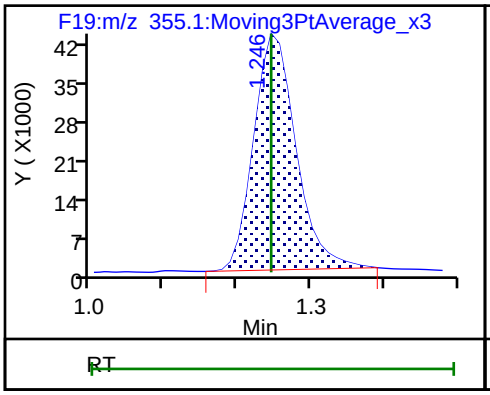
8321EXcalprim_00029	Amount Added: 10.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 10.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 14-Apr-2022 10:06:53 Chrom Revision: 2.3 12-Apr-2022 20:29:44

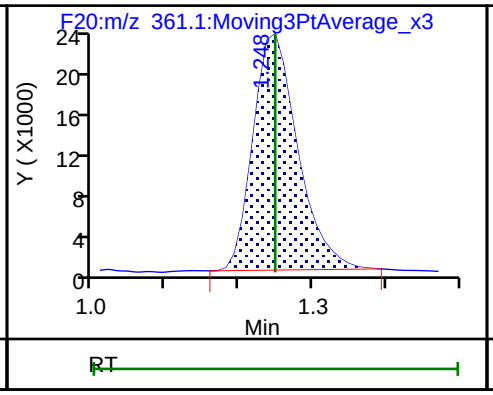
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08022.d
Injection Date: 08-Apr-2022 11:53:22 Instrument ID: LC_LCMS7
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 6 Worklist Smp#: 22
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

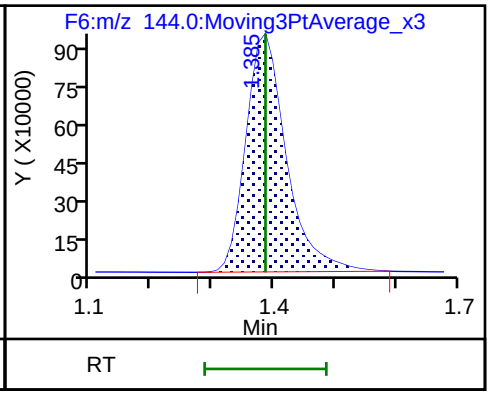
2 HMX



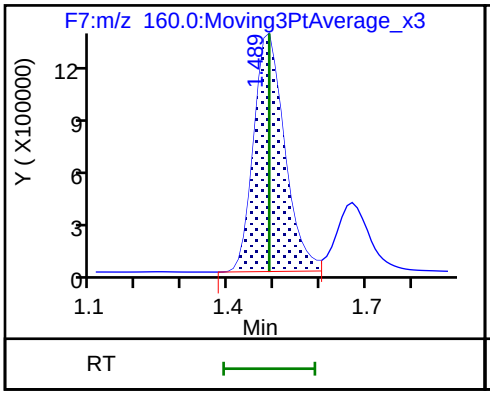
* 1 HMX-13C4



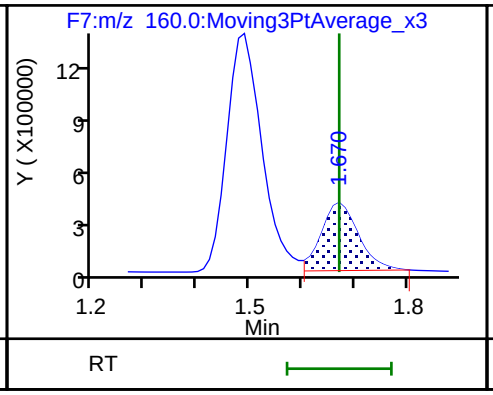
36 TNX



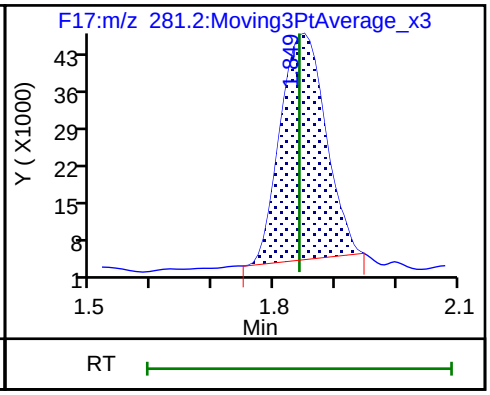
33 DNX



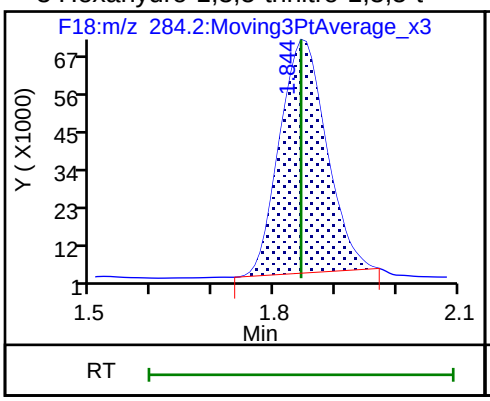
34 MNX



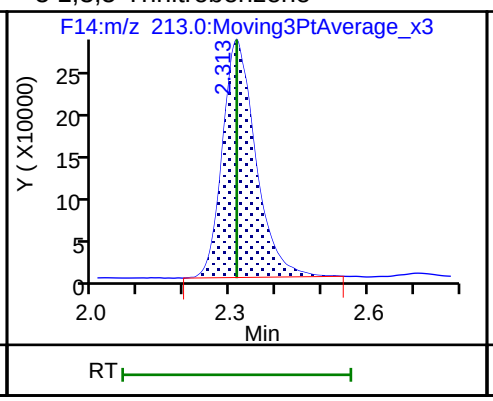
4 RDX



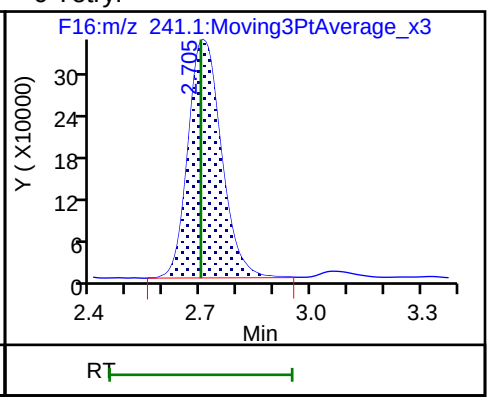
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



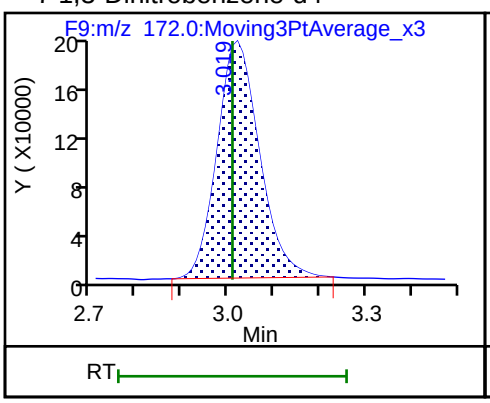
5 1,3,5-Trinitrobenzene



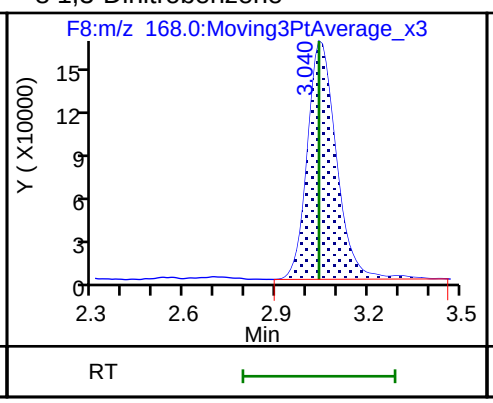
6 Tetryl



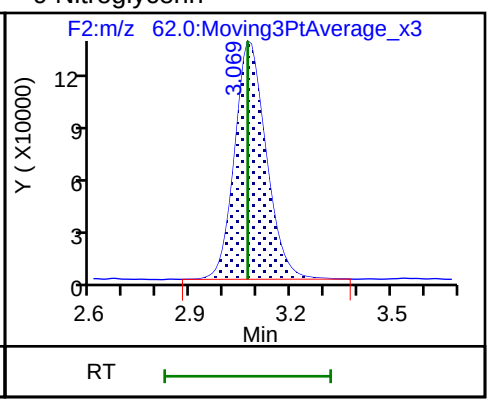
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

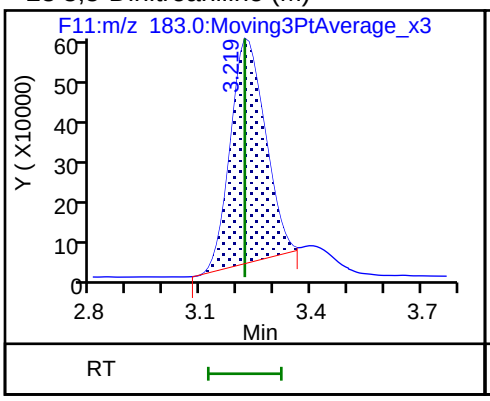


9 Nitroglycerin

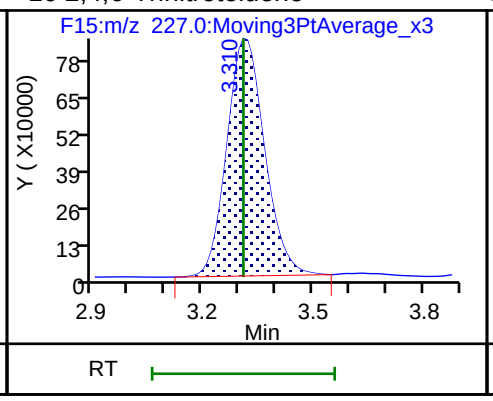


Report Date: 14-Apr-2022 10:06:53 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08022.d

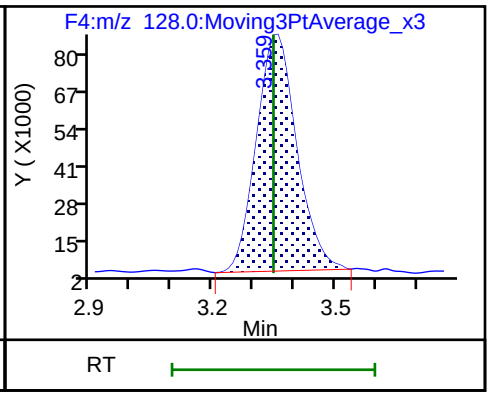
28 3,5-Dinitroaniline (M)



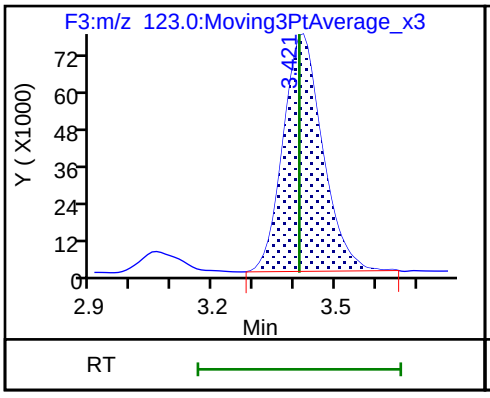
10 2,4,6-Trinitrotoluene



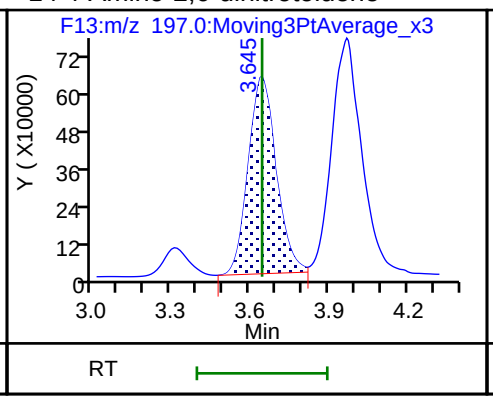
$ 11 Nitrobenzene-d5



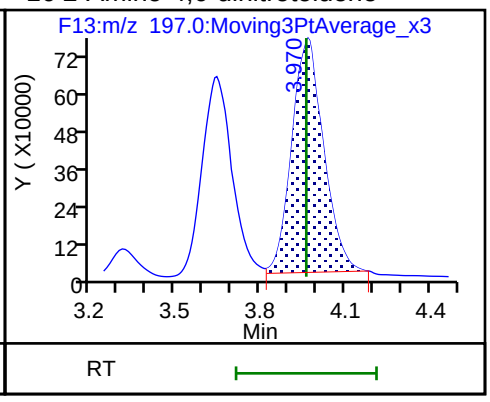
12 Nitrobenzene



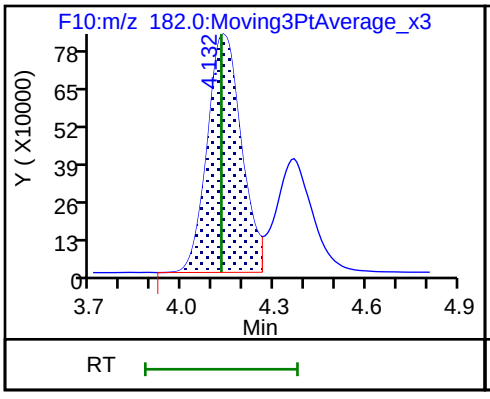
14 4-Amino-2,6-dinitrotoluene



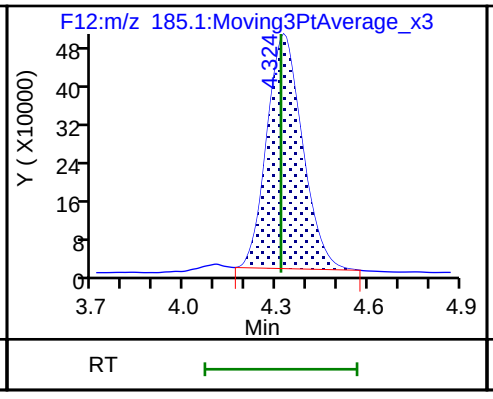
16 2-Amino-4,6-dinitrotoluene



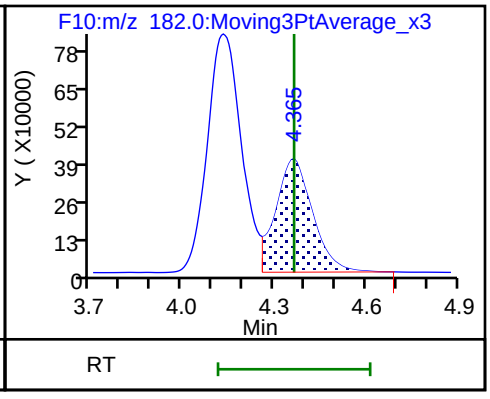
17 2,6-Dinitrotoluene



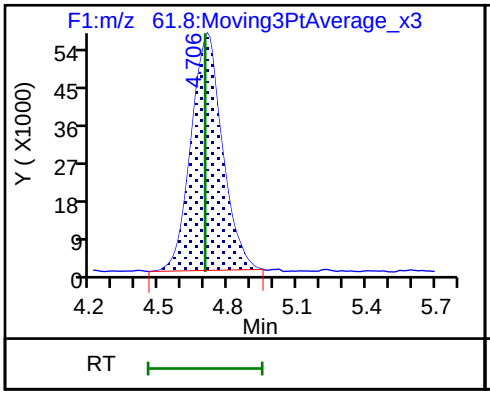
* 18 2,4-dinitrotoluene-d3



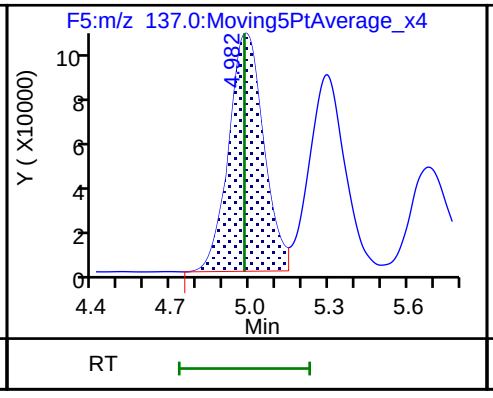
19 2,4-Dinitrotoluene



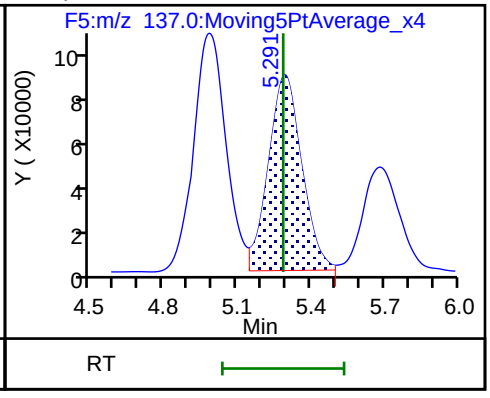
20 PETN



22 o-Nitrotoluene

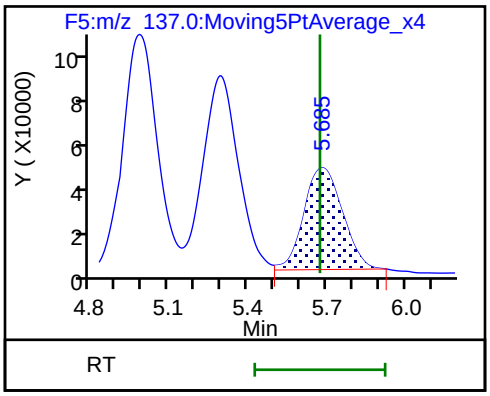


23 p-Nitrotoluene



Report Date: 14-Apr-2022 10:06:53 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08022.d

24 m-Nitrotoluene



Report Date: 14-Apr-2022 10:06:53 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

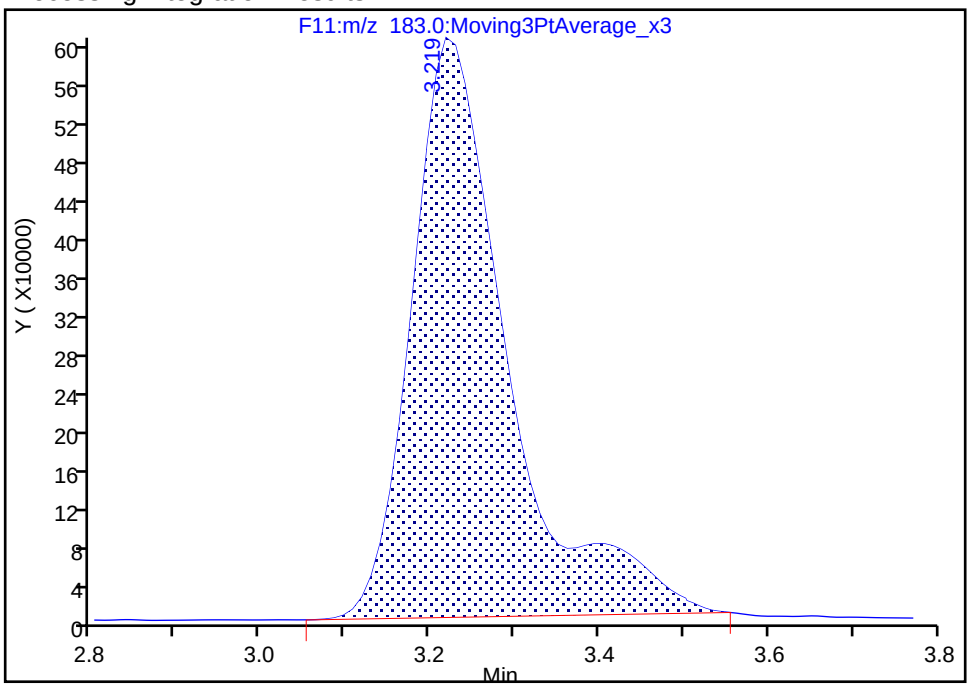
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08022.d
Injection Date: 08-Apr-2022 11:53:22 Instrument ID: LC_LCMS7
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 6 Worklist Smp#: 22
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F11:SIR

28 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

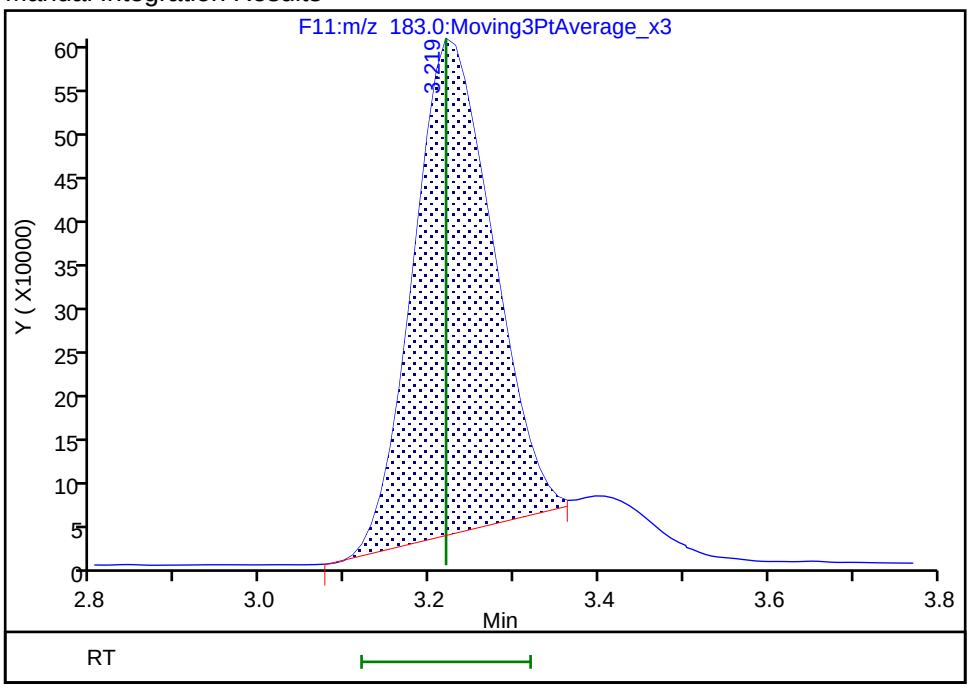
Processing Integration Results

RT: 3.22
Area: 4741613
Amount: 119.5219
Amount Units: ug/l



Manual Integration Results

RT: 3.22
Area: 3731444
Amount: 93.922223
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:42:20
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Lab Sample ID: CCV 280-571224/32 Calibration Date: 04/08/2022 12:59

Instrument ID: LC_LCMS7 Calib Start Date: 04/08/2022 09:48

GC Column: Synergi Hydro ID: Calib End Date: 04/08/2022 10:27

Lab File ID: ex722D08032.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin1		2.290		50.8	50.0	1.5	30.0
TNX	Lin1		4.730		51.8	50.1	3.6	30.0
DNX	Lin1		6.759		52.4	50.1	4.6	30.0
MNX	Lin1		1.742		62.4	58.4	6.9	30.0
RDX	Lin1		0.8705		58.0	50.0	16.0	30.0
1,3,5-Trinitrobenzene	Lin1		1.603		51.4	50.1	2.5	30.0
Tetryl	Lin1		2.354		51.4	50.1	2.6	30.0
1,3-Dinitrobenzene	Lin1		1.098		50.5	50.1	0.9	30.0
Nitroglycerin	Lin1		0.9943		53.0	50.3	5.4	30.0
3,5-Dinitroaniline	Lin1		1.219		48.2	50.0	-3.7	30.0
2,4,6-Trinitrotoluene	Lin1		6.850		51.7	50.2	2.9	30.0
Nitrobenzene	Lin1		0.5354		51.5	50.2	2.7	30.0
4-Amino-2,6-dinitrotoluene	Lin1		1.562		50.5	50.1	0.9	30.0
2-Amino-4,6-dinitrotoluene	Lin1		1.934		49.0	50.2	-2.3	30.0
2,6-Dinitrotoluene	Lin1		2.056		49.6	50.2	-1.3	30.0
2,4-Dinitrotoluene	Lin1		1.112		52.6	50.2	4.8	30.0
PETN	Lin1		0.1693		48.5	49.8	-2.7	30.0
o-Nitrotoluene	Lin1		0.3200		49.9	50.0	-0.2	30.0
p-Nitrotoluene	Lin1		0.2810		50.3	50.1	0.4	30.0
m-Nitrotoluene	Lin1		0.1629		49.4	50.1	-1.3	30.0
Nitrobenzene-d5	Lin1		0.7304		59.5	50.0	18.9	30.0

Report Date: 14-Apr-2022 10:07:02 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08032.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 08-Apr-2022 12:59:23 ALS Bottle#: 5 Worklist Smp#: 32
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:07:02 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 08:42:12
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	95607	50.8	55.6	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		104392	125.0	47.2	
36 TNX								
144.0	1.385	1.379	0.0	0.751	2250464	51.8	395	
33 DNX								
160.0	1.489	1.489	0.0	0.807	3215472	52.4	553	
34 MNX								
160.0	1.670	1.670	0.0	0.906	966236	62.4	160	
4 RDX								M
281.2	1.841	1.833	0.0	0.998	129015	58.0	42.9	M
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								M
284.2	1.844	1.844	0.0		370531	125.0	303	M
5 1,3,5-Trinitrobenzene								
213.0	2.313	2.322	0.0	0.766	763443	51.4	153	
6 Tetryl								
241.1	2.705	2.708	0.006	0.896	1121207	51.4	146	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.008	0.011		1229641	129.4	324	
8 1,3-Dinitrobenzene								
168.0	3.051	3.051	0.011	1.011	522730	50.5	123	
9 Nitroglycerin								
62.0	3.080	3.081	0.011	1.020	475407	53.0	177	
28 3,5-Dinitroaniline								
183.0	3.230	3.231	0.011	1.070	1927477	48.2	46.6	

Report Date: 14-Apr-2022 10:07:02 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08032.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.310	3.316	0.0	0.765	3268547	51.7	126	
$ 11 Nitrobenzene-d5								
128.0	3.348	3.354	0.0	0.774	347224	59.5	86.6	
12 Nitrobenzene								
123.0	3.421	3.418	0.010	0.791	255498	51.5	56.0	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.638	3.652	-0.007	0.841	2471986	50.5	35.8	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.976	3.971	0.013	0.920	3068959	49.0	44.3	
17 2,6-Dinitrotoluene								
182.0	4.132	4.138	0.006	0.956	3263846	49.6	699	
* 18 2,4-dinitrotoluene-d3								
185.1	4.324	4.315	0.009		3952295	125.0	125	
19 2,4-Dinitrotoluene								
182.0	4.365	4.373	0.0	1.009	1765524	52.6	337	
20 PETN								
61.8	4.696	4.706	0.0	1.086	266637	48.5	64.9	
22 o-Nitrotoluene								
137.0	4.987	4.987	0.010	1.154	505936	49.9	131	
23 p-Nitrotoluene								
137.0	5.291	5.297	0.005	1.224	445129	50.3	117	
24 m-Nitrotoluene								
137.0	5.694	5.686	0.019	1.317	257795	49.4	62.0	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

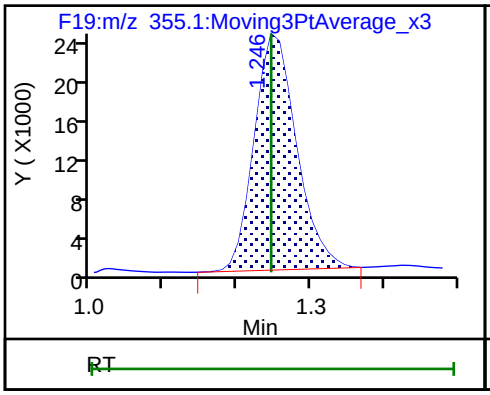
8321EXcalprim_00029	Amount Added: 5.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 5.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 14-Apr-2022 10:07:02 Chrom Revision: 2.3 12-Apr-2022 20:29:44

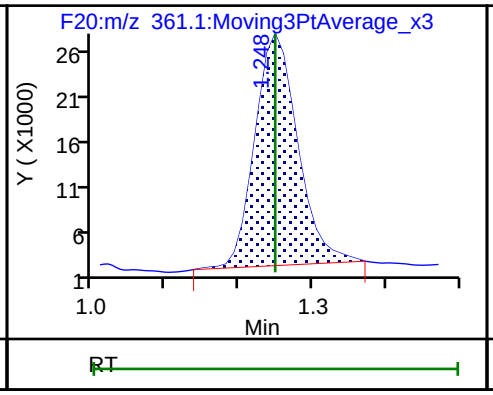
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08032.d
Injection Date: 08-Apr-2022 12:59:23 Instrument ID: LC_LCMS7
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 32
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

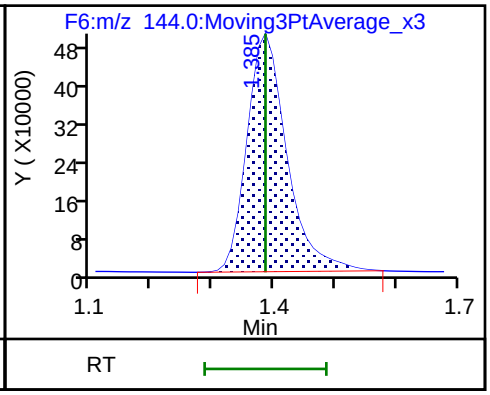
2 HMX



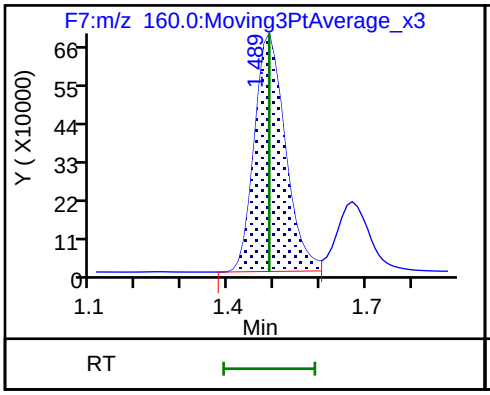
* 1 HMX-13C4



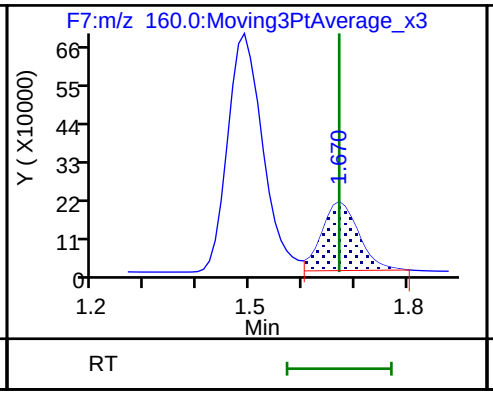
36 TNX



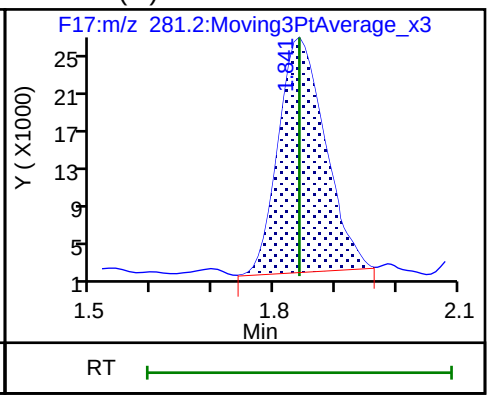
33 DNX



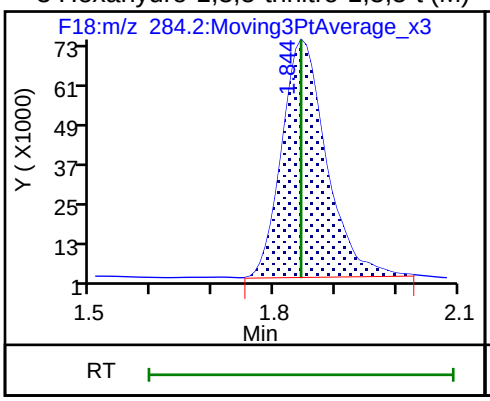
34 MNX



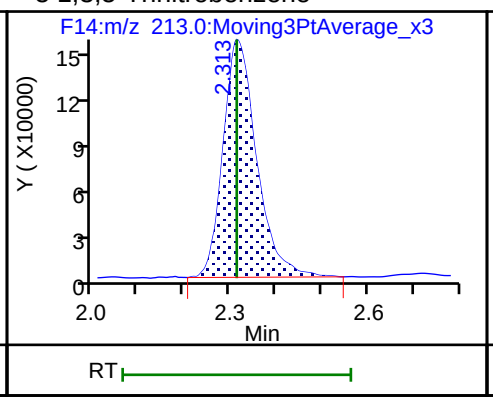
4 RDX (M)



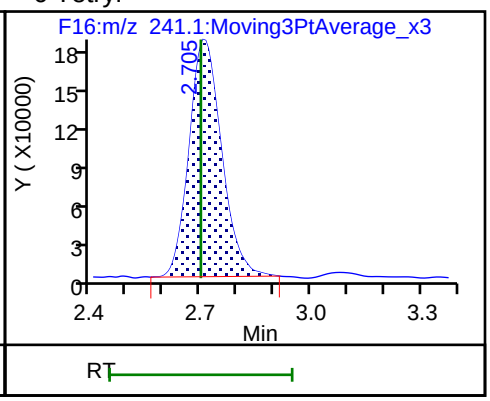
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t (M)



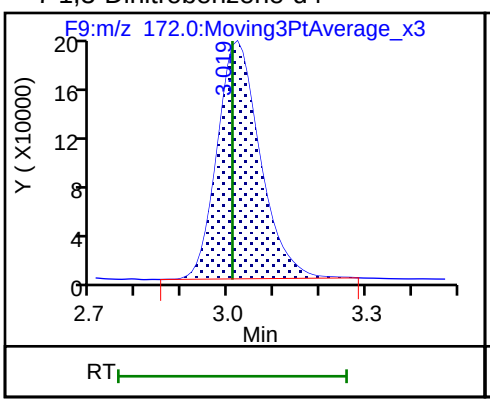
5 1,3,5-Trinitrobenzene



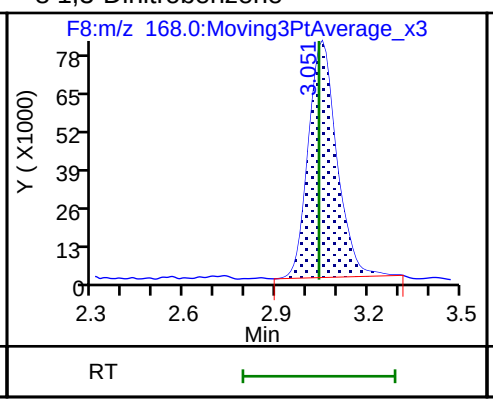
6 Tetryl



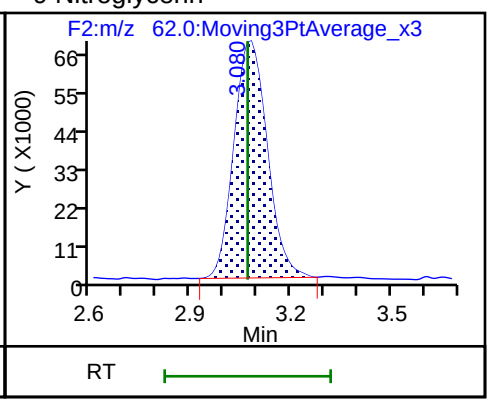
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

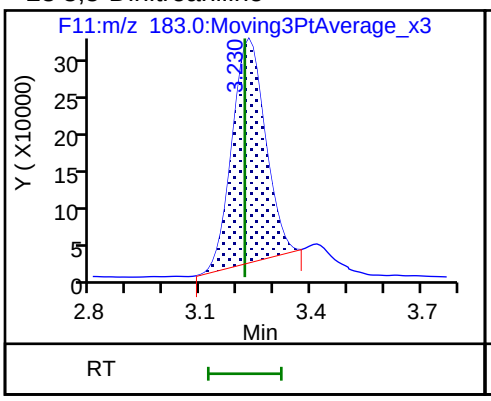


9 Nitroglycerin

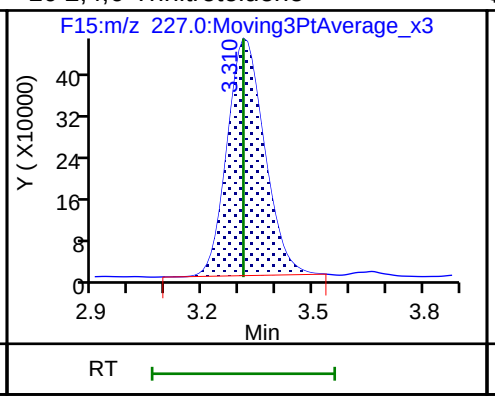


Report Date: 14-Apr-2022 10:07:02 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08032.d

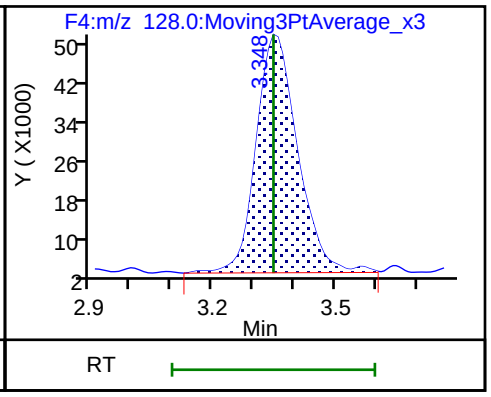
28 3,5-Dinitroaniline



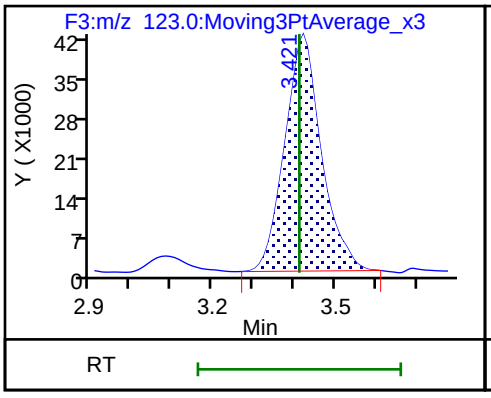
10 2,4,6-Trinitrotoluene



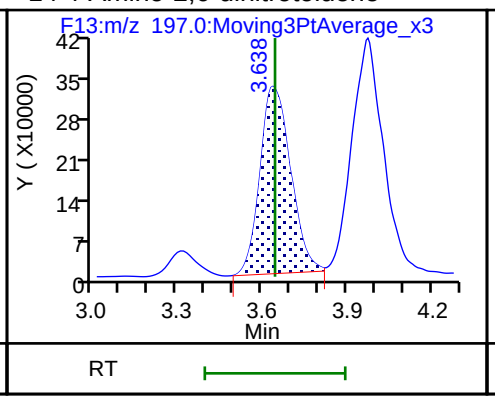
$ 11 Nitrobenzene-d5



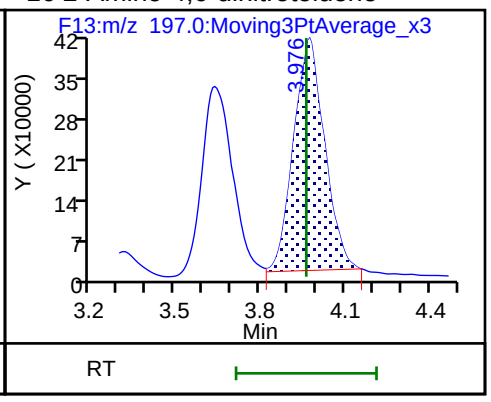
12 Nitrobenzene



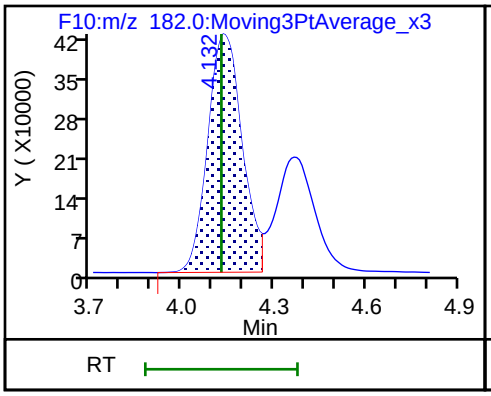
14 4-Amino-2,6-dinitrotoluene



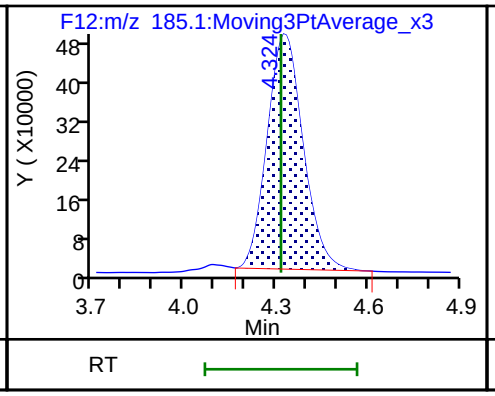
16 2-Amino-4,6-dinitrotoluene



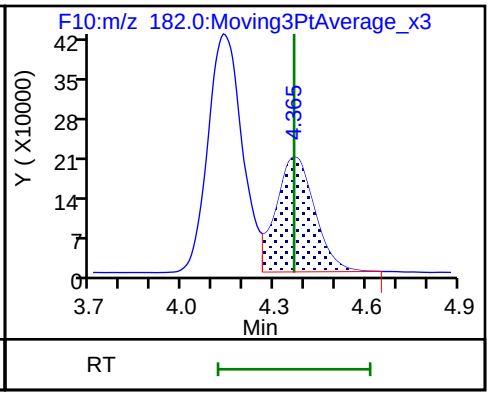
17 2,6-Dinitrotoluene



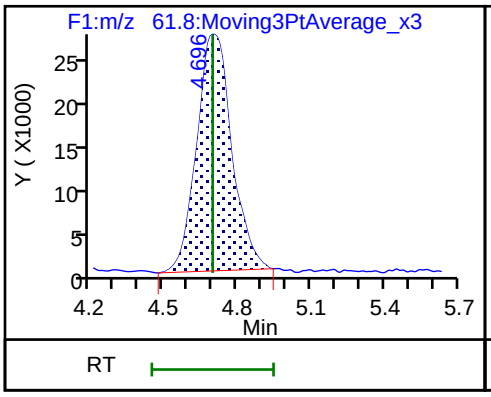
* 18 2,4-dinitrotoluene-d3



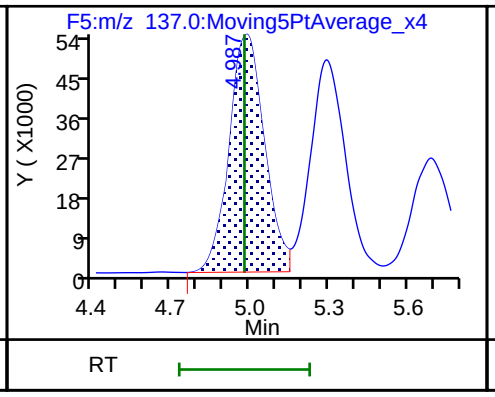
19 2,4-Dinitrotoluene



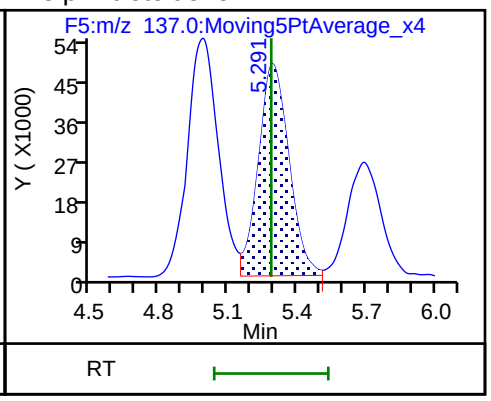
20 PETN



22 o-Nitrotoluene



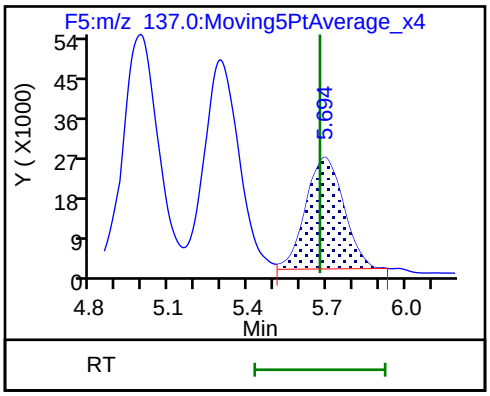
23 p-Nitrotoluene



Report Date: 14-Apr-2022 10:07:02 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08032.d

24 m-Nitrotoluene



Report Date: 14-Apr-2022 10:07:02

Chrom Revision: 2.3 12-Apr-2022 20:29:44
Manual Integration/User Assign Peak Report

Eurofins Denver

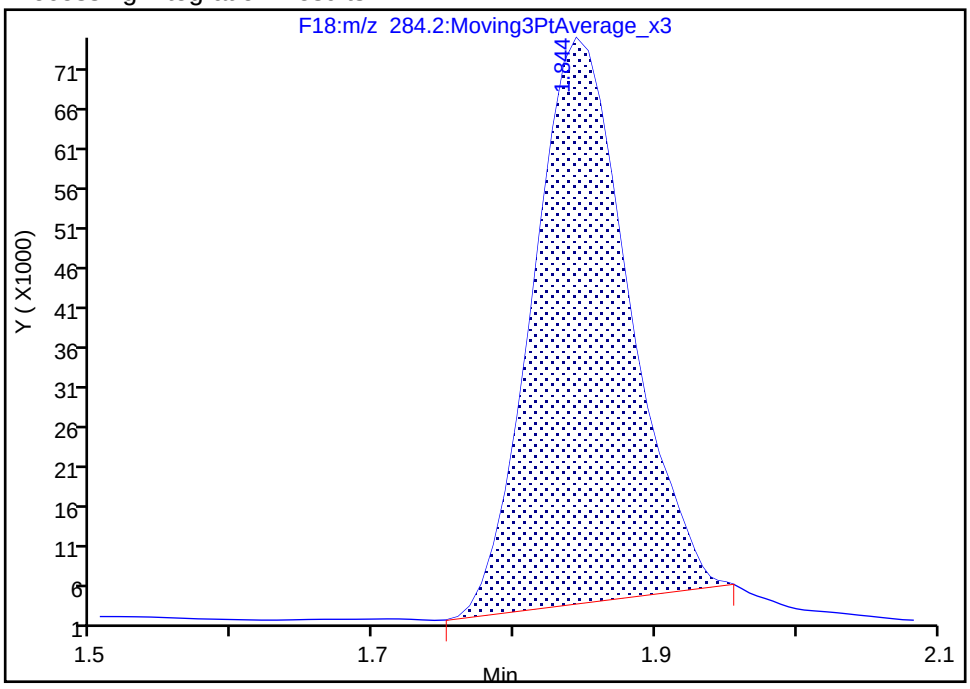
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08032.d
Injection Date: 08-Apr-2022 12:59:23 Instrument ID: LC_LCMS7
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 32
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F18:SIR

* 3 Hexahydro-1,3,5-trinitro-1,3,5-t, CAS: STL00205

Signal: 1

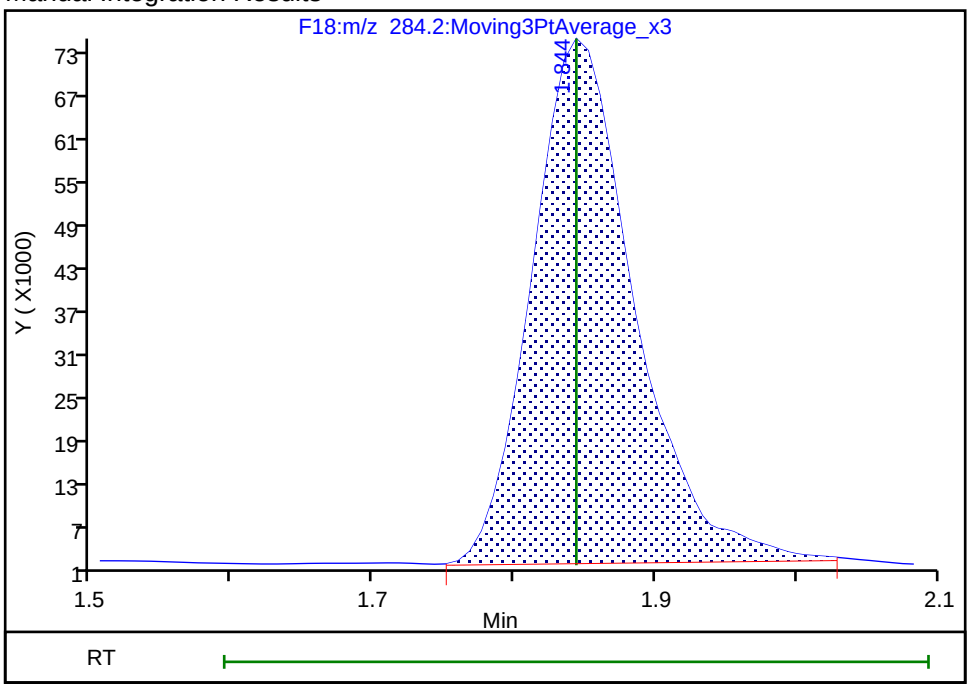
Processing Integration Results

RT: 1.84
Area: 336394
Amount: 125.0000
Amount Units: ug/l



Manual Integration Results

RT: 1.84
Area: 370531
Amount: 125.0000
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 08:42:08
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:07:02 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08032.d

Injection Date:	08-Apr-2022 12:59:23	Instrument ID:	LC_LCMS7
Lims ID:	CCV		
Client ID:			
Operator ID:	acm	ALS Bottle#:	5 Worklist Smp#: 32
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F17:SIR

4 RDX, CAS: 121-82-4

Signal: 1

Processing Integration Results

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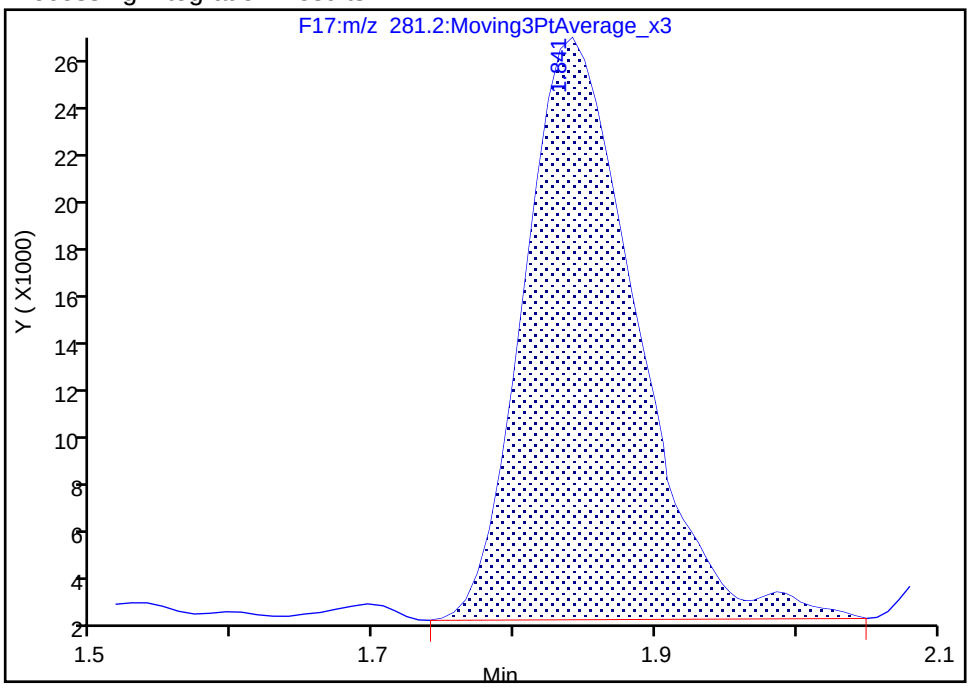
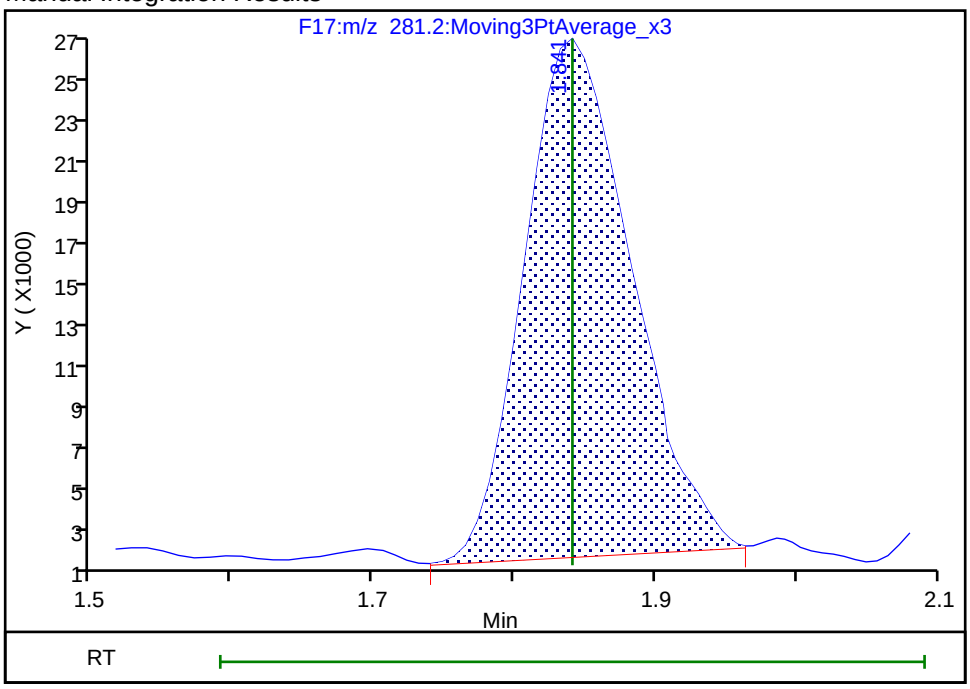
Amount Units: ug/l



Manual Integration Results

RT: 1.84
Area: 129015
Amount: 57.996892
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 08:42:00

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Lab Sample ID: CCV 280-571224/43 Calibration Date: 04/08/2022 14:11

Instrument ID: LC_LCMS7 Calib Start Date: 04/08/2022 09:48

GC Column: Synergi Hydro ID: Calib End Date: 04/08/2022 10:27

Lab File ID: ex722D08043.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin1		2.020		90.4	100	-9.6	30.0
TNX	Lin1		4.688		103	100	3.4	30.0
DNX	Lin1		6.395		99.9	100	-0.2	30.0
MNX	Lin1		1.319		95.0	117	-18.6	30.0
RDX	Lin1		0.7620		105	100	4.8	30.0
1,3,5-Trinitrobenzene	Lin1		1.542		99.2	100	-1.0	30.0
Tetryl	Lin1		2.286		99.2	100	-1.0	30.0
1,3-Dinitrobenzene	Lin1		1.089		101	100	0.5	30.0
Nitroglycerin	Lin1		0.9573		102	101	1.9	30.0
3,5-Dinitroaniline	Lin1		1.193		94.9	100	-5.1	30.0
2,4,6-Trinitrotoluene	Lin1		6.215		93.7	100	-6.7	30.0
Nitrobenzene	Lin1		0.4929		94.8	100	-5.6	30.0
4-Amino-2,6-dinitrotoluene	Lin1		1.474		95.8	100	-4.3	30.0
2-Amino-4,6-dinitrotoluene	Lin1		1.890		96.3	100	-4.1	30.0
2,6-Dinitrotoluene	Lin1		2.050		99.4	100	-1.0	30.0
2,4-Dinitrotoluene	Lin1		1.054		100	100	-0.4	30.0
PETN	Lin1		0.1813		104	99.6	4.9	30.0
o-Nitrotoluene	Lin1		0.3163		98.9	100	-1.1	30.0
p-Nitrotoluene	Lin1		0.2720		97.9	100	-2.3	30.0
m-Nitrotoluene	Lin1		0.1556		94.2	100	-5.9	30.0
Nitrobenzene-d5	Lin1		0.6327		103	100	3.4	30.0

Report Date: 14-Apr-2022 10:09:44 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08043.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 08-Apr-2022 14:11:58 ALS Bottle#: 6 Worklist Smp#: 43
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:09:43 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:57:24
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	158920	90.4	127	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		98354	125.0	36.3	
36 TNX								
144.0	1.385	1.379	0.0	0.751	4573626	103.5	723	
33 DNX								
160.0	1.489	1.489	0.0	0.807	6238853	99.9	215	
34 MNX								
160.0	1.670	1.670	0.0	0.906	1500431	95.0	54.6	
4 RDX								
281.2	1.841	1.833	0.0	0.998	214160	104.8	46.8	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		351302	125.0	141	
5 1,3,5-Trinitrobenzene								
213.0	2.317	2.322	0.004	0.767	1505630	99.2	174	
6 Tetryl								
241.1	2.699	2.708	0.0	0.894	2232173	99.2	167	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.008	0.011		1260749	129.4	270	
8 1,3-Dinitrobenzene								
168.0	3.040	3.051	0.0	1.007	1063433	100.7	223	
9 Nitroglycerin								
62.0	3.069	3.081	0.0	1.017	938634	102.5	656	
28 3,5-Dinitroaniline								
183.0	3.230	3.231	0.011	1.070	3751532	94.9	43.5	

Report Date: 14-Apr-2022 10:09:44 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08043.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.310	3.316	0.0	0.767	6081496	93.7	124	
$ 11 Nitrobenzene-d5								
128.0	3.348	3.354	0.0	0.776	616786	103.4	65.1	
12 Nitrobenzene								
123.0	3.411	3.418	0.0	0.791	482299	94.8	41.6	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.645	3.652	0.0	0.845	4640184	95.8	36.4	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.957	3.971	-0.006	0.917	5968363	96.3	44.2	
17 2,6-Dinitrotoluene								
182.0	4.132	4.138	0.006	0.958	6474704	99.4	704	
* 18 2,4-dinitrotoluene-d3								
185.1	4.315	4.315	0.0		3931494	125.0	104	
19 2,4-Dinitrotoluene								
182.0	4.356	4.373	-0.009	1.010	3327684	100.0	336	
20 PETN								
61.8	4.696	4.706	0.0	1.088	567788	104.5	124	
22 o-Nitrotoluene								
137.0	4.977	4.987	0.0	1.154	994720	98.9	257	
23 p-Nitrotoluene								
137.0	5.291	5.297	0.005	1.226	857157	97.9	208	
24 m-Nitrotoluene								
137.0	5.675	5.686	0.0	1.315	489936	94.2	112	

QC Flag Legend

Processing Flags

Reagents:

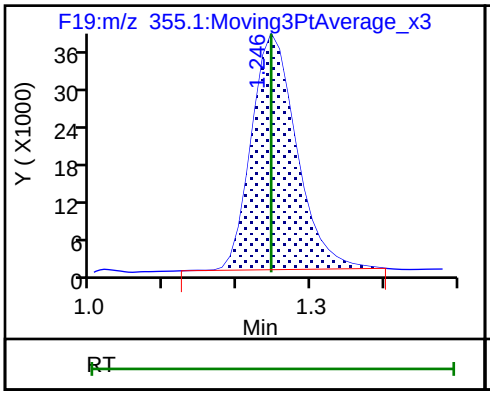
8321EXcalprim_00029	Amount Added: 10.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 10.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 14-Apr-2022 10:09:44 Chrom Revision: 2.3 12-Apr-2022 20:29:44

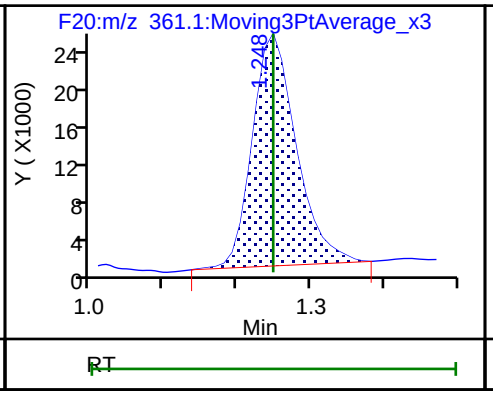
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08043.d
Injection Date: 08-Apr-2022 14:11:58 Instrument ID: LC_LCMS7
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 6 Worklist Smp#: 43
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

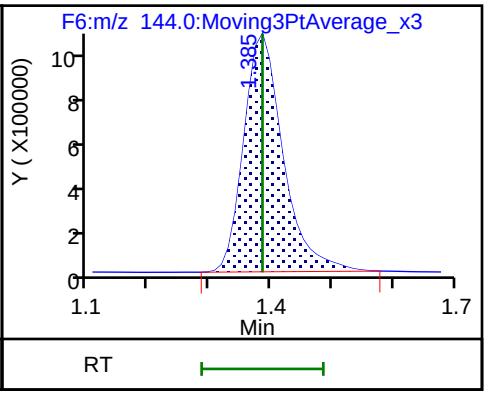
2 HMX



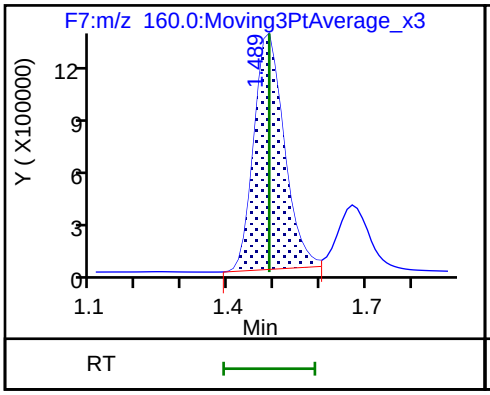
* 1 HMX-13C4



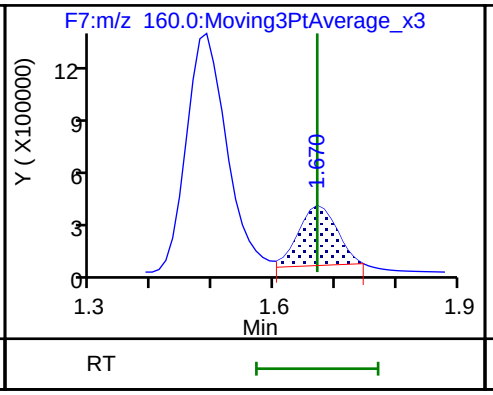
36 TNX



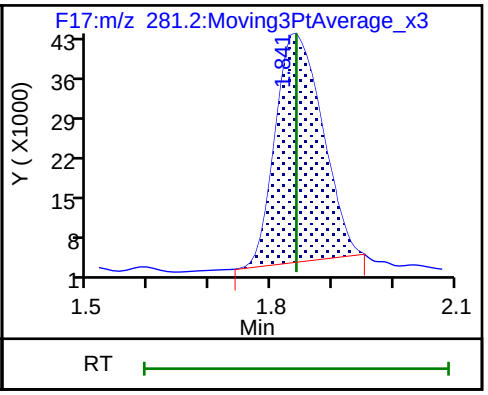
33 DNX



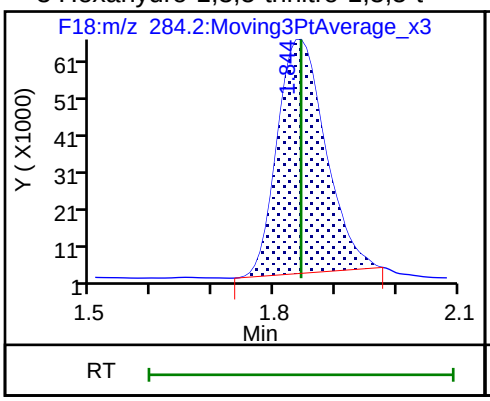
34 MNX



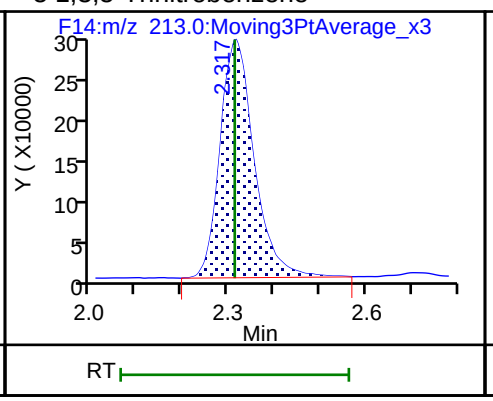
4 RDX



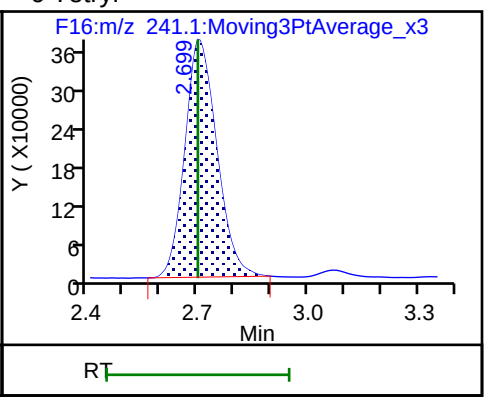
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



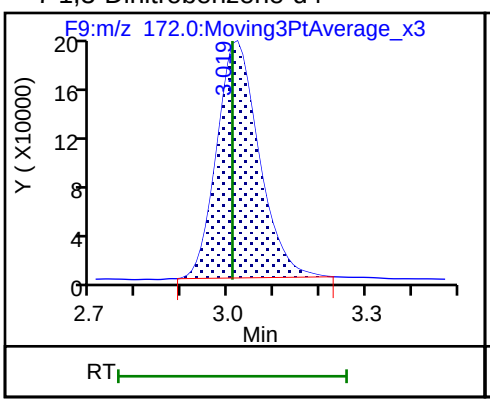
5 1,3,5-Trinitrobenzene



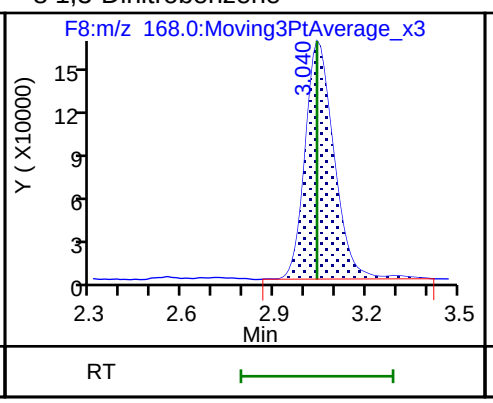
6 Tetryl



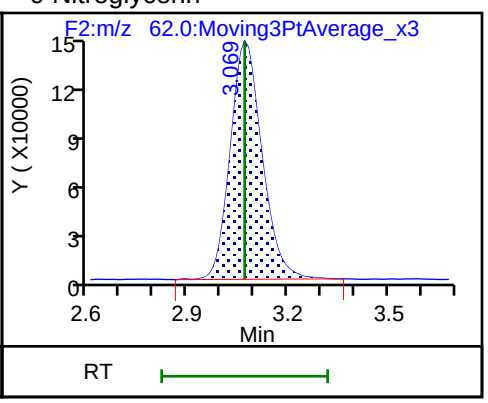
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



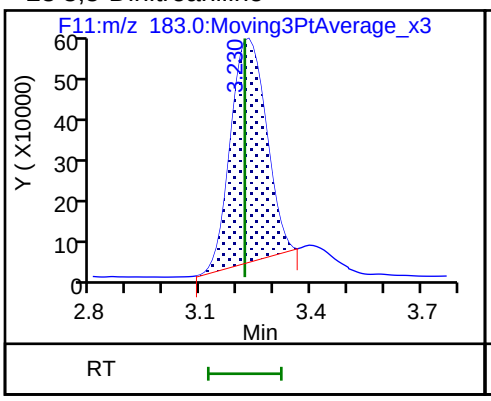
9 Nitroglycerin



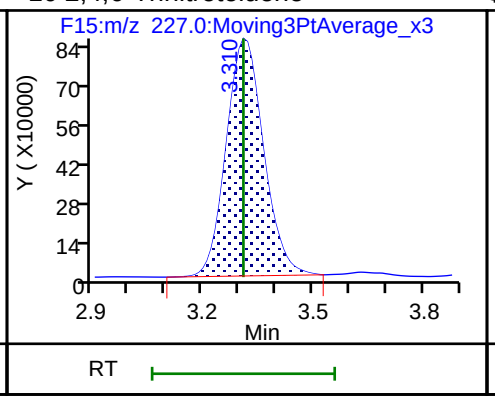
Report Date: 14-Apr-2022 10:09:44 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08043.d

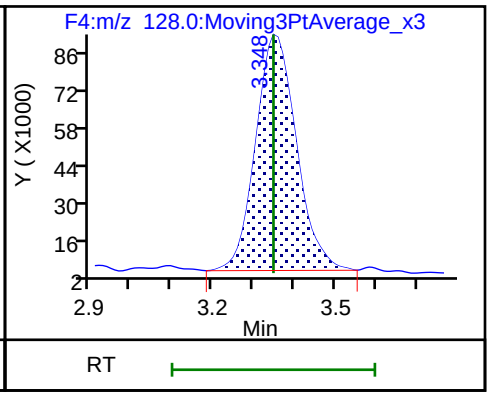
28 3,5-Dinitroaniline



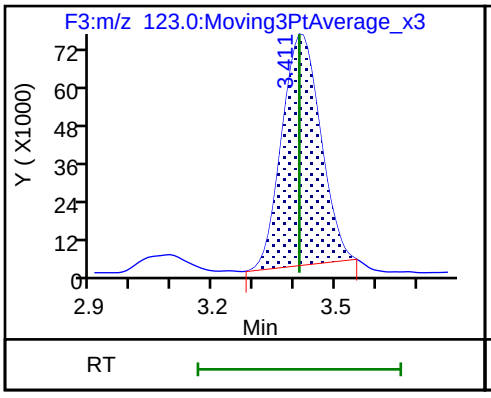
10 2,4,6-Trinitrotoluene



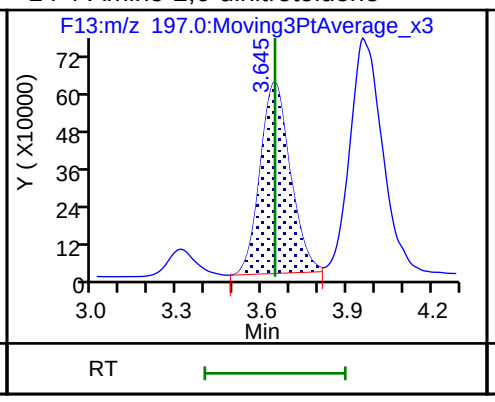
$ 11 Nitrobenzene-d5



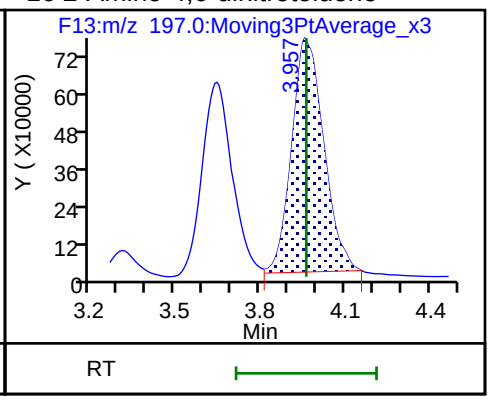
12 Nitrobenzene



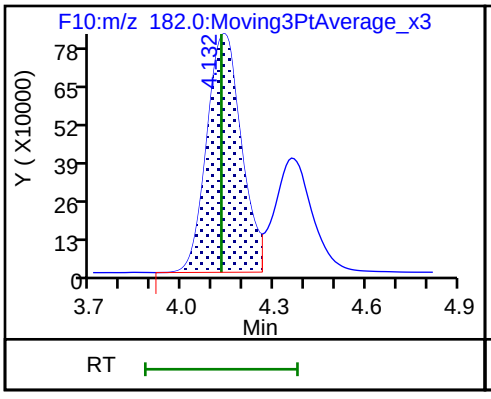
14 4-Amino-2,6-dinitrotoluene



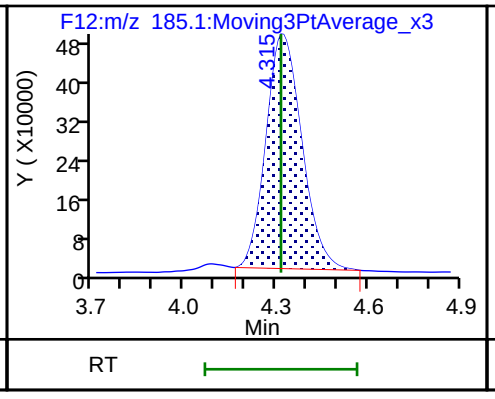
16 2-Amino-4,6-dinitrotoluene



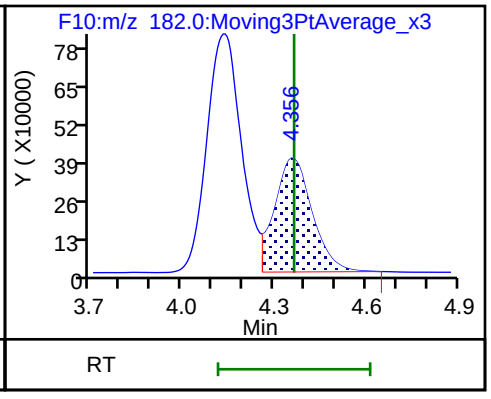
17 2,6-Dinitrotoluene



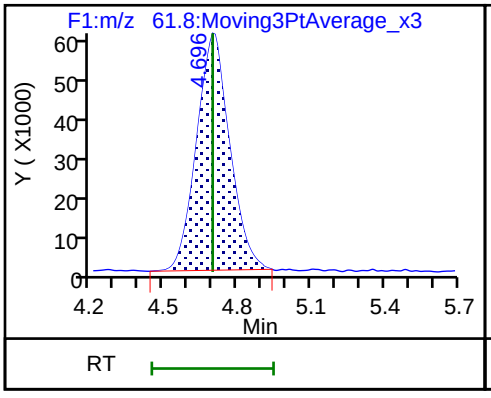
* 18 2,4-dinitrotoluene-d3



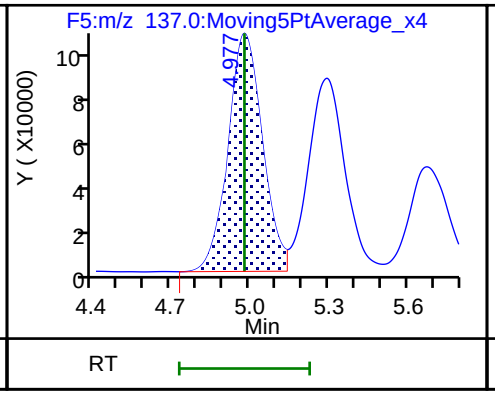
19 2,4-Dinitrotoluene



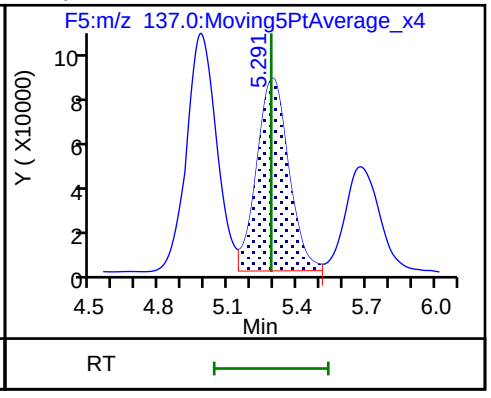
20 PETN



22 o-Nitrotoluene



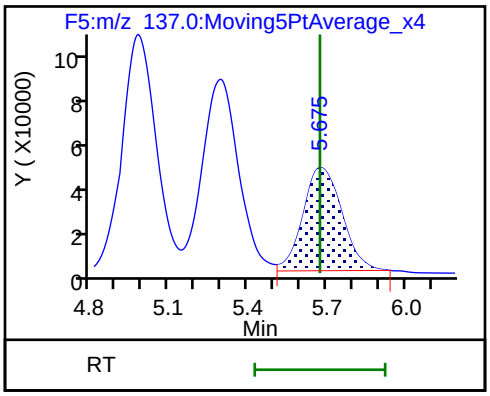
23 p-Nitrotoluene



Report Date: 14-Apr-2022 10:09:44 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08043.d

24 m-Nitrotoluene



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Lab Sample ID: ICV 280-571895/11 Calibration Date: 04/14/2022 13:20

Instrument ID: LC_LCMS7 Calib Start Date: 04/14/2022 12:27

GC Column: Synergi Hydro ID: Calib End Date: 04/14/2022 13:07

Lab File ID: ex722D14011.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin1		2.137		99.5	100	-0.5	30.0
TNX	Lin1		5.225		108	100	7.7	30.0
DNX	Lin1		7.451		104	100	3.7	30.0
MNX	Lin1		2.016		122	117	4.9	30.0
RDX	Qua1		0.6542		106	100	6.3	30.0
1,3,5-Trinitrobenzene	Lin1		1.784		102	100	1.8	30.0
Tetryl	Lin1		2.767		104	100	3.6	30.0
1,3-Dinitrobenzene	Lin1		1.164		109	100	9.0	30.0
Nitroglycerin	Lin1		1.020		106	100	5.8	30.0
3,5-Dinitroaniline	Lin1		1.501		103	100	3.2	30.0
2,4,6-Trinitrotoluene	Lin1		2.430		102	100	1.6	30.0
Nitrobenzene	Lin1		0.5129		107	100	7.0	30.0
4-Amino-2,6-dinitrotoluene	Lin1		1.600		98.7	100	-1.3	30.0
2-Amino-4,6-dinitrotoluene	Lin1		2.228		99.3	100	-0.7	30.0
2,6-Dinitrotoluene	Lin1		2.033		101	100	0.9	30.0
2,4-Dinitrotoluene	Lin1		1.079		102	100	1.5	30.0
PETN	Lin1		0.1921		96.1	100	-3.9	30.0
o-Nitrotoluene	Lin1		0.2906		98.6	100	-1.4	30.0
p-Nitrotoluene	Lin1		0.2579		99.1	100	-0.9	30.0
m-Nitrotoluene	Lin1		0.1482		97.3	100	-2.7	30.0
Nitrobenzene-d5	Lin1		0.5911		102	100	2.1	30.0

Report Date: 15-Apr-2022 08:03:00 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14011.d
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 14-Apr-2022 13:20:35 ALS Bottle#: 9 Worklist Smp#: 11
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7
Sublist:

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:00 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 14-Apr-2022 14:27:14
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	212780	99.5	104	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		124479	125.0	167	
36 TNX								
144.0	1.385	1.385	0.0	0.755	4903792	107.8	565	
33 DNX								
160.0	1.477	1.489	-0.012	0.805	6992909	103.8	485	
34 MNX								
160.0	1.670	1.670	0.0	0.910	2205204	122.5	145	
4 RDX								
281.2	1.833	1.833	0.0	0.998	317358	106.3	76.7	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		606372	125.0	292	
5 1,3,5-Trinitrobenzene								
213.0	2.299	2.299	0.0	0.769	1673057	101.8	203	
6 Tetryl								
241.1	2.685	2.679	0.006	0.898	2593931	103.6	139	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1212816	129.4	297	
8 1,3-Dinitrobenzene								
168.0	3.022	3.022	0.0	1.010	1091239	109.0	214	
9 Nitroglycerin								
62.0	3.040	3.040	0.0	1.016	955875	105.8	265	
28 3,5-Dinitroaniline								M
183.0	3.200	3.200	0.0	1.070	4642814	103.2	58.1	M

Report Date: 15-Apr-2022 08:03:00 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14011.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.281	3.281	0.0	0.768	7515444	101.6	319	
$ 11 Nitrobenzene-d5								
128.0	3.324	3.324	0.0	0.778	554351	102.1	75.4	
12 Nitrobenzene								
123.0	3.382	3.382	0.0	0.791	480915	107.0	39.2	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.611	3.611	0.0	0.845	4949056	98.7	50.6	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.937	3.924	0.013	0.921	6890125	99.3	68.0	
17 2,6-Dinitrotoluene								
182.0	4.087	4.093	-0.006	0.956	6287632	100.9	745	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3865364	125.0	123	
19 2,4-Dinitrotoluene								
182.0	4.316	4.316	0.0	1.010	3335771	101.5	349	
20 PETN								
61.8	4.618	4.638	-0.020	1.080	594089	96.1	94.4	
22 o-Nitrotoluene								
137.0	4.932	4.932	0.0	1.153	898707	98.6	280	
23 p-Nitrotoluene								
137.0	5.235	5.230	0.005	1.225	797465	99.1	241	
24 m-Nitrotoluene								
137.0	5.619	5.614	0.005	1.314	458266	97.3	125	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

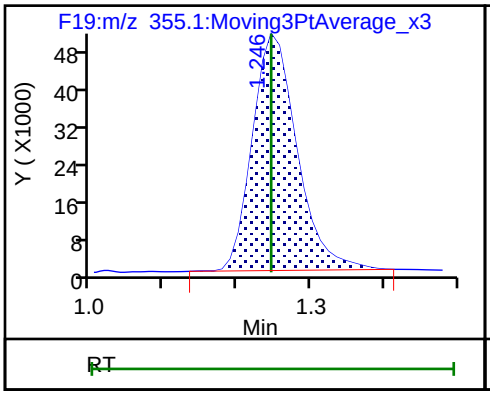
8321NB-D5-cal_00021	Amount Added: 10.00	Units: uL	
8321expICV_00019	Amount Added: 10.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 15-Apr-2022 08:03:00 Chrom Revision: 2.3 12-Apr-2022 20:29:44

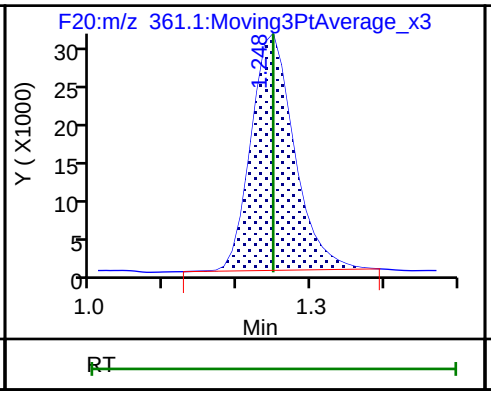
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14011.d
Injection Date: 14-Apr-2022 13:20:35 Instrument ID: LC_LCMS7
Lims ID: ICV
Client ID:
Operator ID: acm ALS Bottle#: 9 Worklist Smp#: 11
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

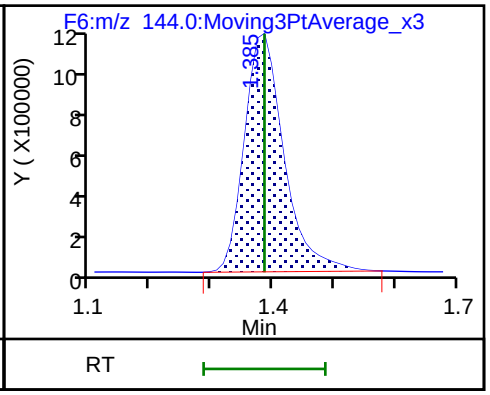
2 HMX



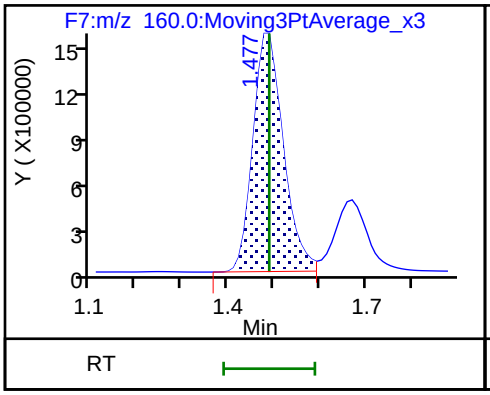
* 1 HMX-13C4



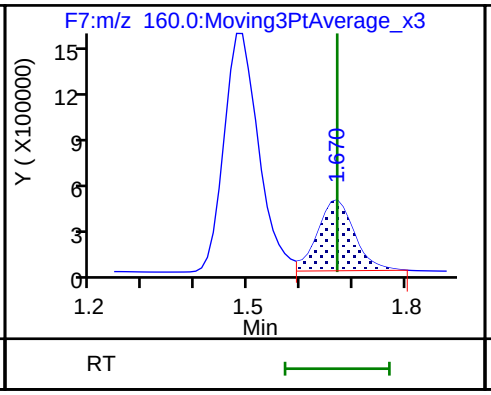
36 TNX



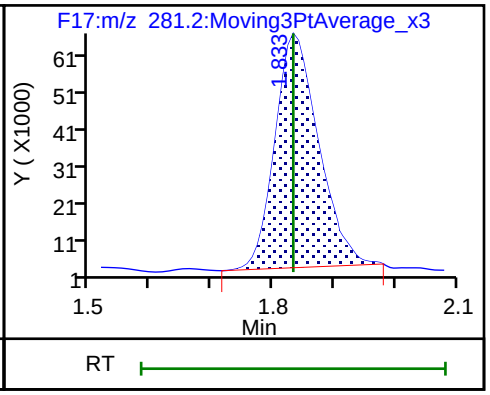
33 DNX



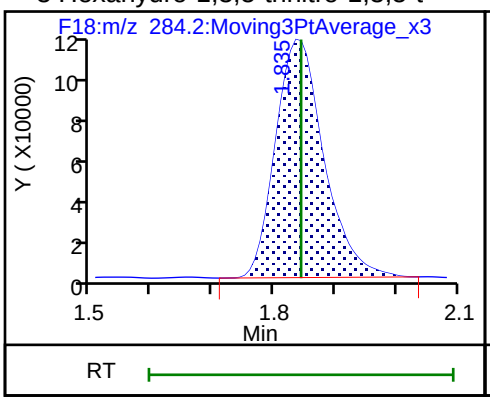
34 MNX



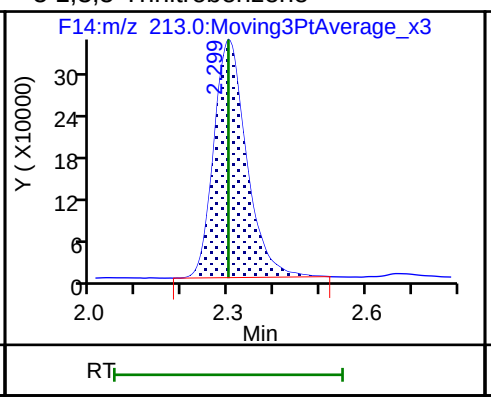
4 RDX



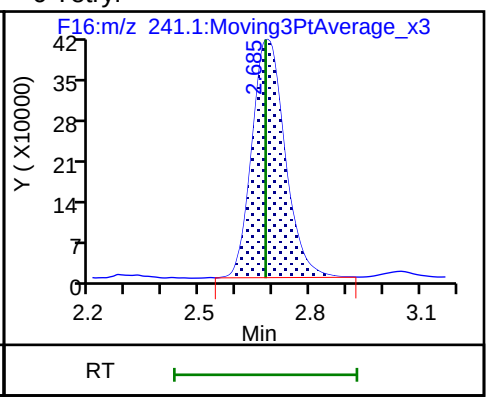
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



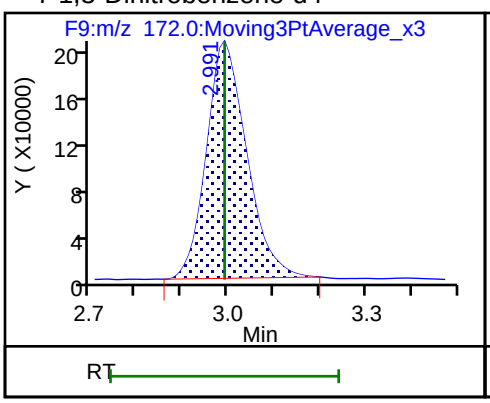
5 1,3,5-Trinitrobenzene



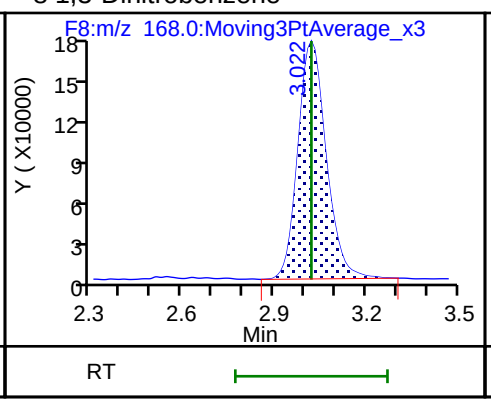
6 Tetryl



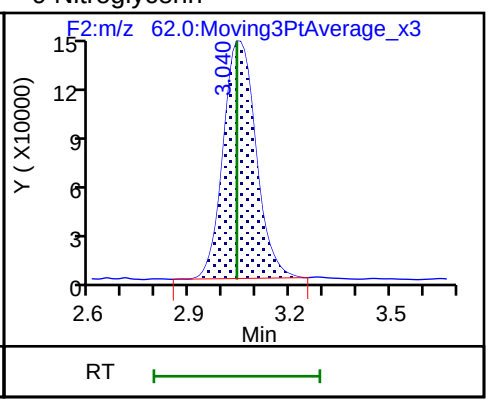
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



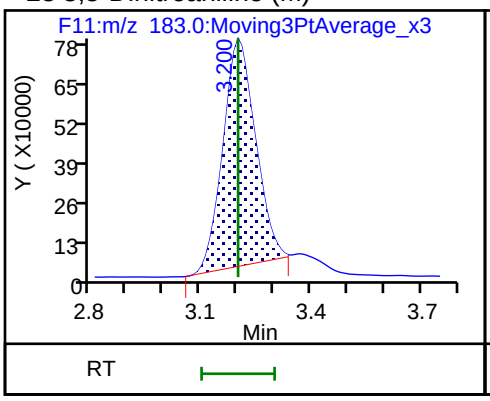
9 Nitroglycerin



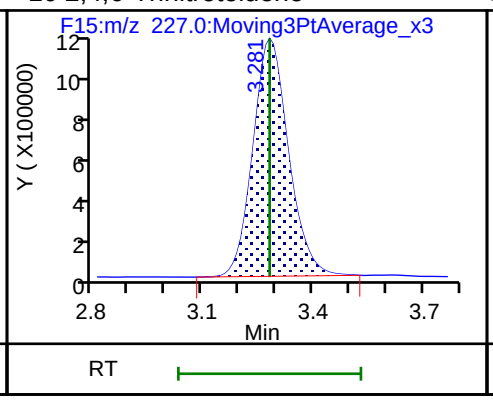
Report Date: 15-Apr-2022 08:03:00 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14011.d

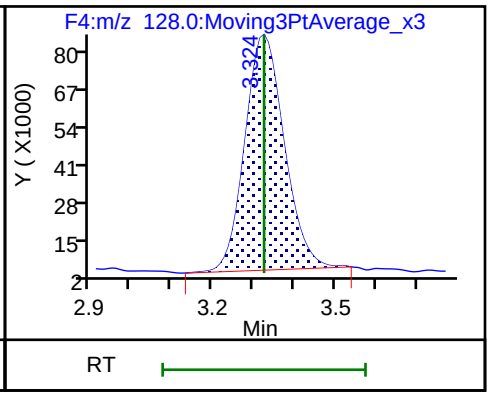
28 3,5-Dinitroaniline (M)



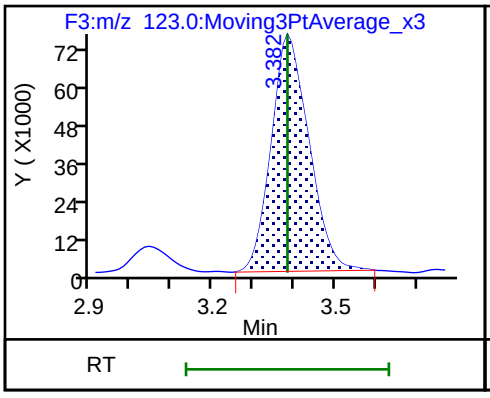
10 2,4,6-Trinitrotoluene



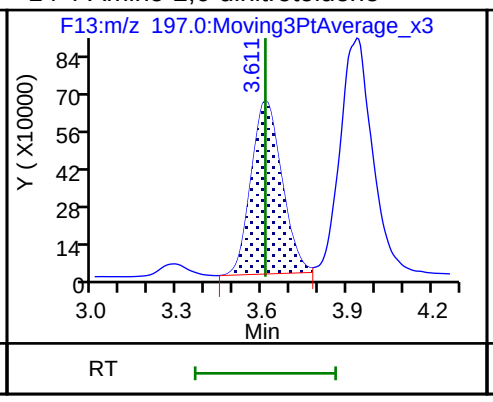
$ 11 Nitrobenzene-d5



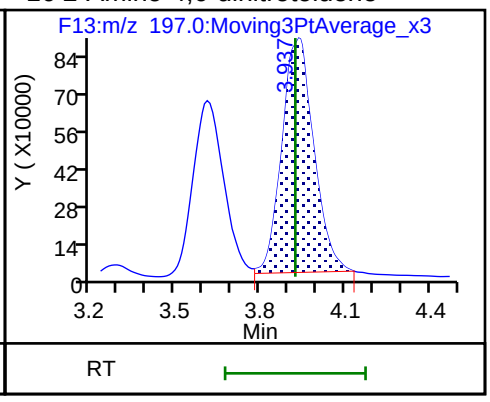
12 Nitrobenzene



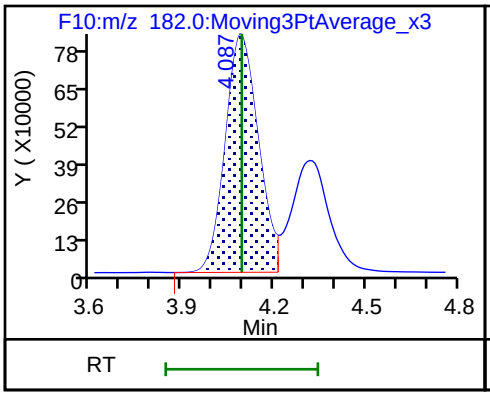
14 4-Amino-2,6-dinitrotoluene



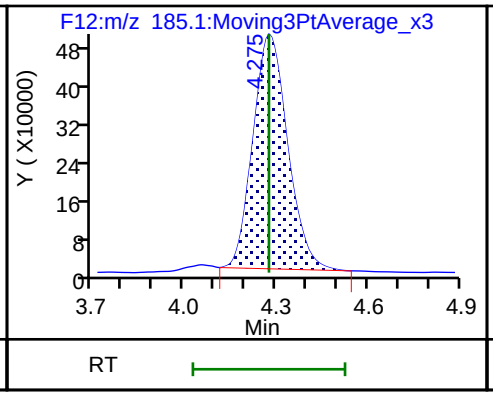
16 2-Amino-4,6-dinitrotoluene



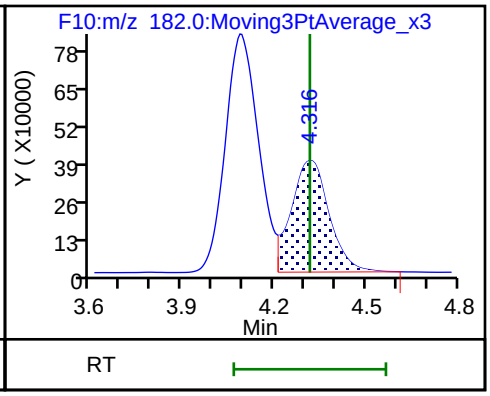
17 2,6-Dinitrotoluene



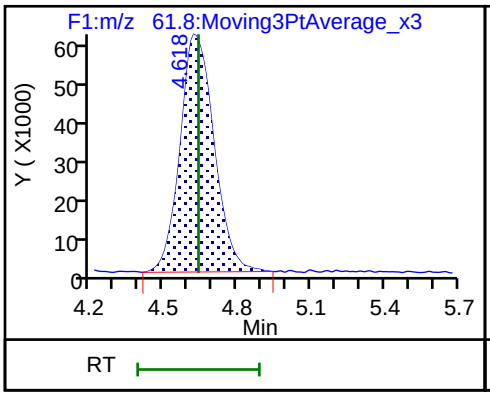
* 18 2,4-dinitrotoluene-d3



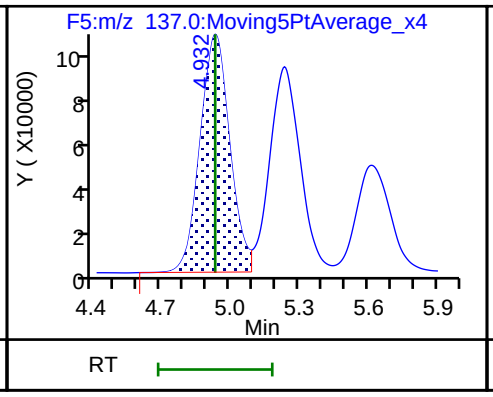
19 2,4-Dinitrotoluene



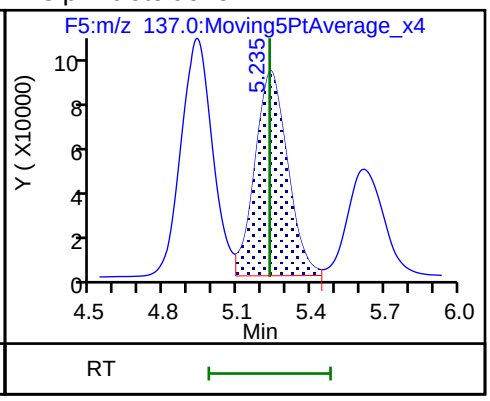
20 PETN



22 o-Nitrotoluene



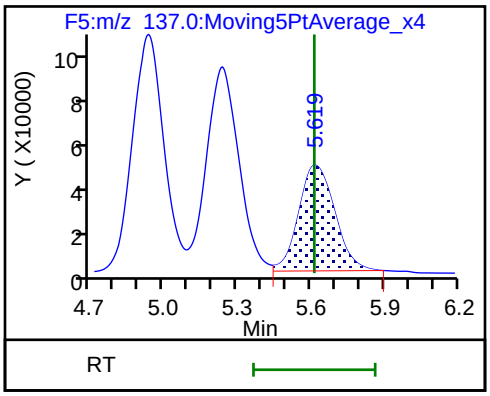
23 p-Nitrotoluene



Report Date: 15-Apr-2022 08:03:00 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14011.d

24 m-Nitrotoluene



Report Date: 15-Apr-2022 08:03:00 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14011.d

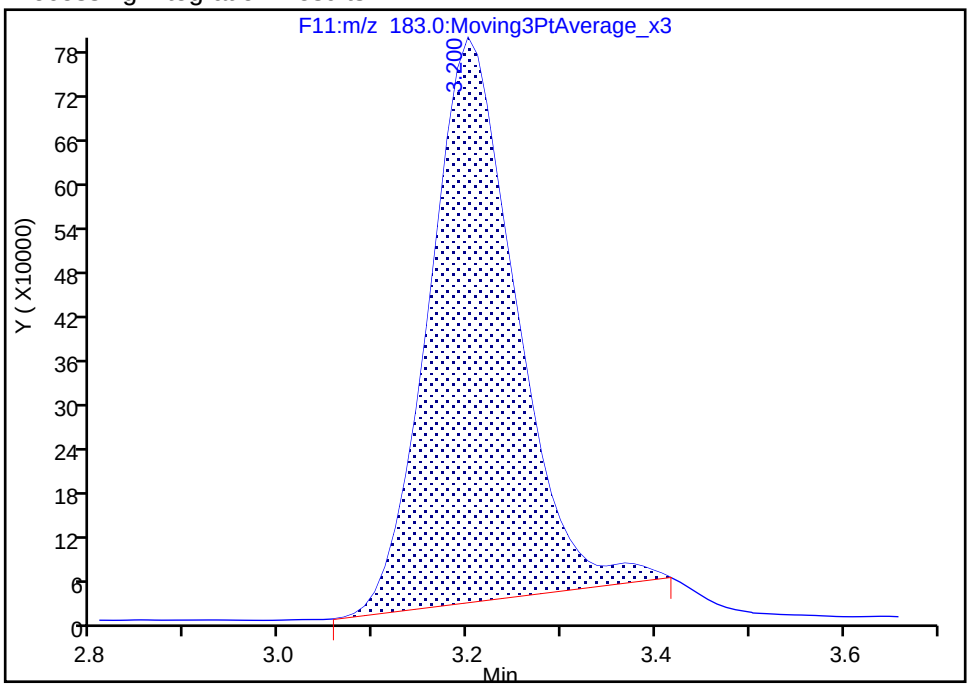
Injection Date:	14-Apr-2022 13:20:35	Instrument ID:	LC_LCMS7
Lims ID:	ICV		
Client ID:			
Operator ID:	acm	ALS Bottle#:	9 Worklist Smp#: 11
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F11:SIR

28 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

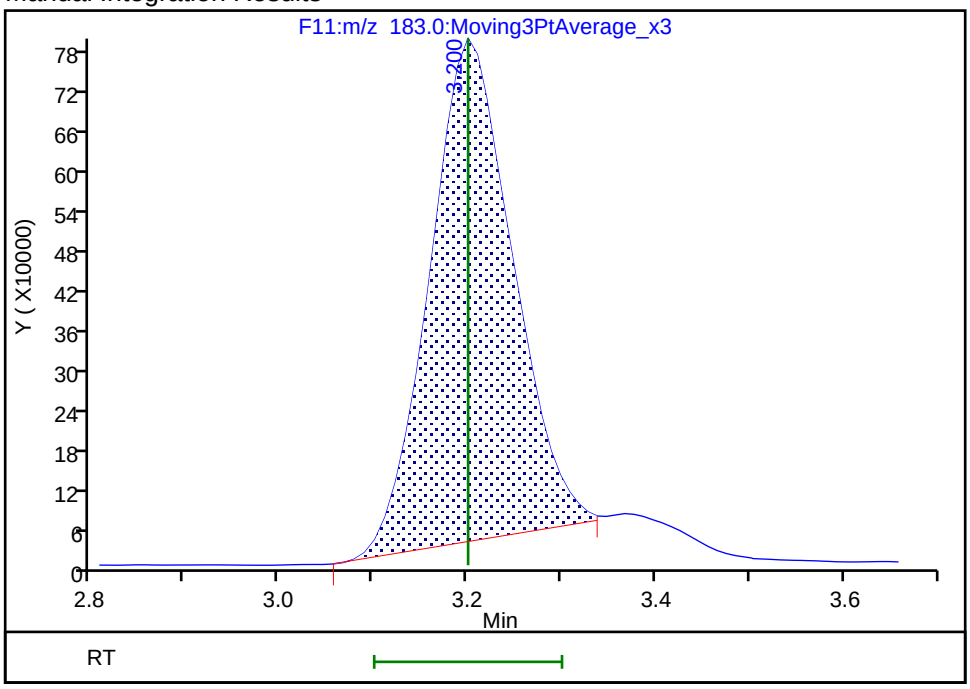
Processing Integration Results

RT: 3.20
Area: 4929727
Amount: 109.6455
Amount Units: ug/l



Manual Integration Results

RT: 3.20
Area: 4642814
Amount: 103.2105
Amount Units: ug/l



Reviewer: meyera, 14-Apr-2022 14:27:08

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Lab Sample ID: CCV 280-571896/21 Calibration Date: 04/14/2022 14:26

Instrument ID: LC_LCMS7 Calib Start Date: 04/14/2022 12:27

GC Column: Synergi Hydro ID: Calib End Date: 04/14/2022 13:07

Lab File ID: ex722D14021.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin1		2.138		49.1	50.0	-1.8	30.0
TNX	Lin1		5.347		54.5	50.1	8.9	30.0
DNX	Lin1		7.676		52.7	50.1	5.2	30.0
MNX	Lin1		2.023		60.6	58.4	3.9	30.0
RDX	Qua1		0.7052		51.0	50.0	2.0	30.0
1,3,5-Trinitrobenzene	Lin1		1.785		50.9	50.1	1.5	30.0
Tetryl	Lin1		2.838		53.3	50.1	6.5	30.0
1,3-Dinitrobenzene	Lin1		1.103		51.2	50.1	2.3	30.0
Nitroglycerin	Lin1		0.9528		49.2	50.3	-2.3	30.0
3,5-Dinitroaniline	Lin1		1.445		49.2	50.0	-1.6	30.0
2,4,6-Trinitrotoluene	Lin1		2.369		49.1	50.2	-2.1	30.0
Nitrobenzene	Lin1		0.4938		51.6	50.2	2.7	30.0
4-Amino-2,6-dinitrotoluene	Lin1		1.647		50.4	50.1	0.7	30.0
2-Amino-4,6-dinitrotoluene	Lin1		2.187		48.6	50.2	-3.1	30.0
2,6-Dinitrotoluene	Lin1		2.035		50.4	50.2	0.3	30.0
2,4-Dinitrotoluene	Lin1		1.068		50.0	50.2	-0.5	30.0
PETN	Lin1		0.1837		45.1	49.8	-9.4	30.0
o-Nitrotoluene	Lin1		0.2933		49.5	50.0	-0.9	30.0
p-Nitrotoluene	Lin1		0.2602		49.8	50.1	-0.7	30.0
m-Nitrotoluene	Lin1		0.1568		51.3	50.1	2.5	30.0
Nitrobenzene-d5	Lin1		0.5749		48.7	50.0	-2.7	30.0

Report Date: 15-Apr-2022 08:03:06 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14021.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 14-Apr-2022 14:26:28 ALS Bottle#: 5 Worklist Smp#: 21
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:06 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:27:25
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	107487	49.1	52.0	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		125708	125.0	89.5	
36 TNX								
144.0	1.385	1.385	0.0	0.755	2294814	54.5	412	
33 DNX								
160.0	1.477	1.489	-0.012	0.805	3293977	52.7	537	
34 MNX								
160.0	1.670	1.670	0.0	0.910	1012296	60.6	153	
4 RDX								
281.2	1.833	1.833	0.0	0.998	149439	51.0	42.9	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		529775	125.0	185	
5 1,3,5-Trinitrobenzene								
213.0	2.303	2.299	0.004	0.770	766917	50.9	178	
6 Tetryl								
241.1	2.685	2.679	0.006	0.898	1219228	53.3	127	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1109197	129.4	321	
8 1,3-Dinitrobenzene								
168.0	3.022	3.022	0.0	1.010	473788	51.2	143	
9 Nitroglycerin								
62.0	3.040	3.040	0.0	1.016	410949	49.2	186	
28 3,5-Dinitroaniline								M
183.0	3.210	3.200	0.010	1.073	1973108	49.2	50.0	M

Report Date: 15-Apr-2022 08:03:06 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14021.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.281	3.281	0.0	0.766	3248192	49.1	252	
$ 11 Nitrobenzene-d5								
128.0	3.315	3.324	-0.009	0.774	246523	48.7	72.8	
12 Nitrobenzene								
123.0	3.392	3.382	0.010	0.792	212554	51.6	21.4	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.611	3.611	0.0	0.843	2251707	50.4	46.7	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.937	3.924	0.013	0.919	2998996	48.6	60.6	
17 2,6-Dinitrotoluene								
182.0	4.093	4.093	0.0	0.955	2789859	50.4	543	
* 18 2,4-dinitrotoluene-d3								
185.1	4.284	4.275	0.009		3413933	125.0	132	
19 2,4-Dinitrotoluene								
182.0	4.316	4.316	0.0	1.008	1464594	50.0	261	
20 PETN								
61.8	4.648	4.638	0.010	1.085	249803	45.1	44.5	
22 o-Nitrotoluene								
137.0	4.932	4.932	0.0	1.151	400544	49.5	236	
23 p-Nitrotoluene								
137.0	5.240	5.230	0.010	1.223	356023	49.8	201	
24 m-Nitrotoluene								
137.0	5.624	5.614	0.010	1.313	214313	51.3	113	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

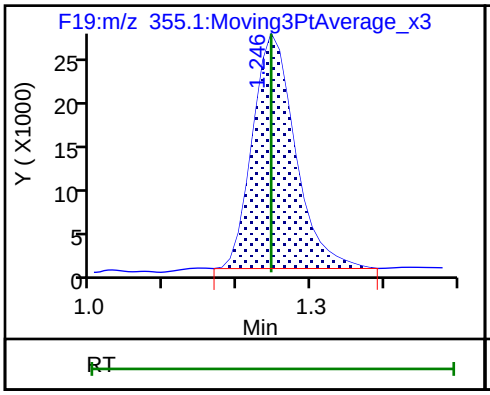
8321EXcalprim_00029	Amount Added: 5.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 5.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 15-Apr-2022 08:03:07 Chrom Revision: 2.3 12-Apr-2022 20:29:44

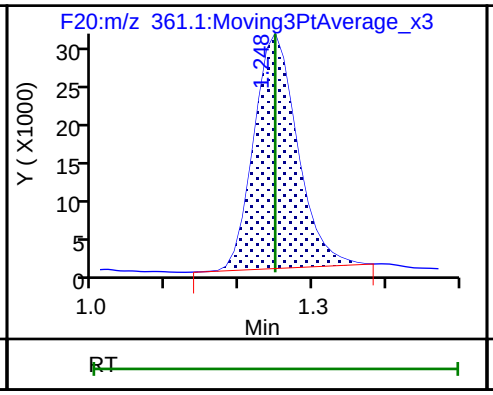
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14021.d
Injection Date: 14-Apr-2022 14:26:28 Instrument ID: LC_LCMS7
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 21
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

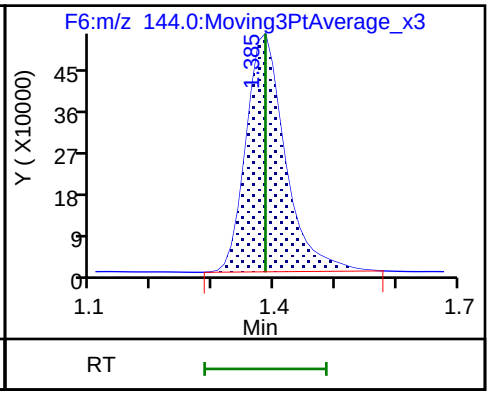
2 HMX



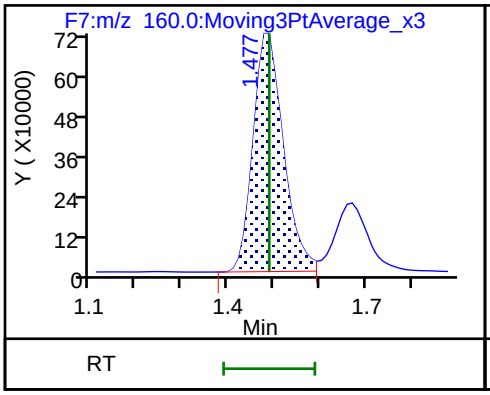
* 1 HMX-13C4



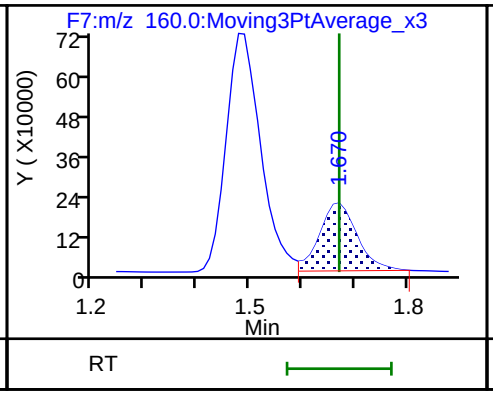
36 TNX



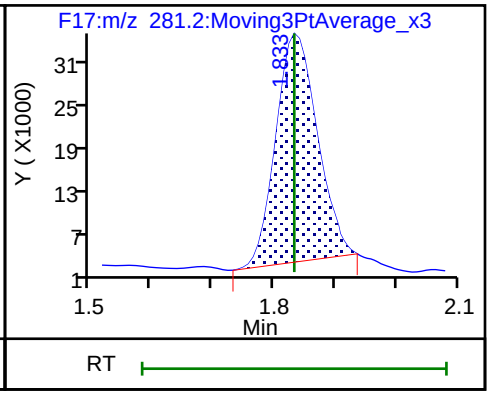
33 DNX



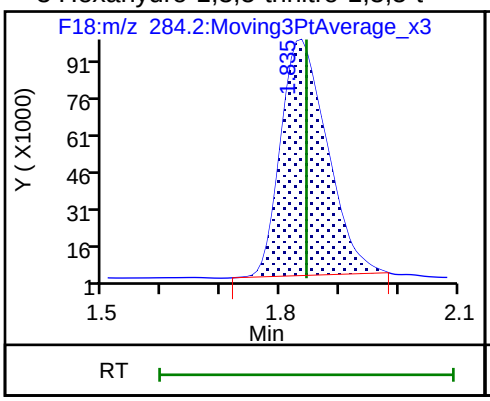
34 MNX



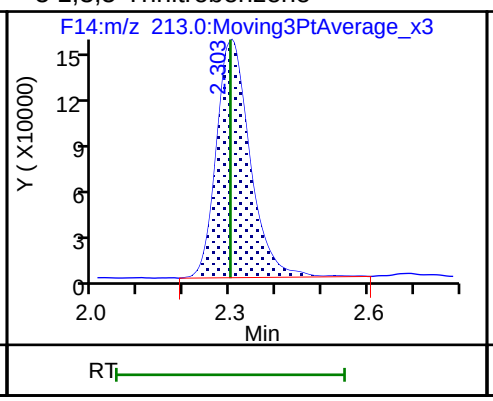
4 RDX



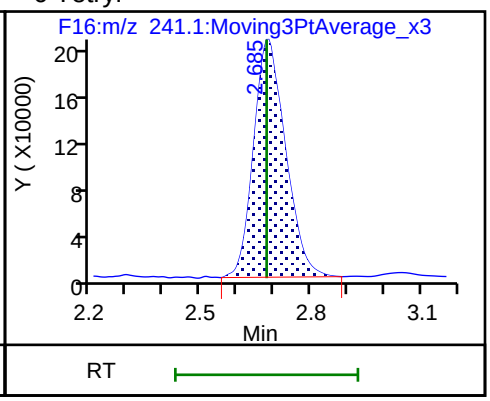
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



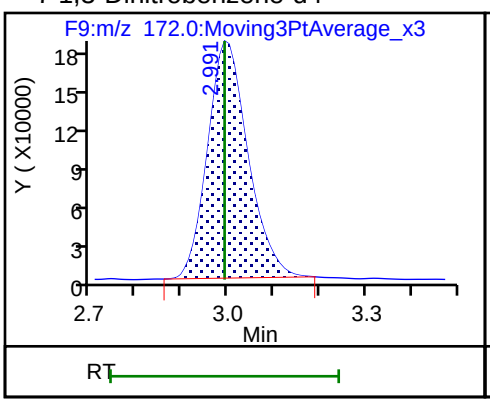
5 1,3,5-Trinitrobenzene



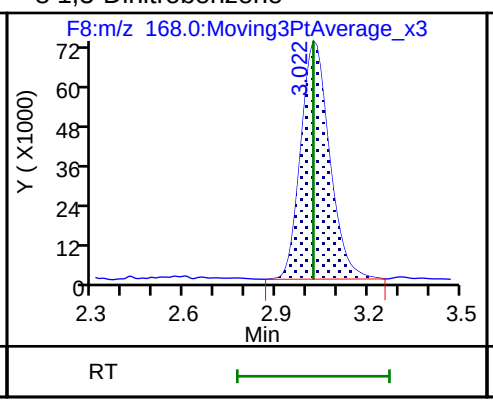
6 Tetryl



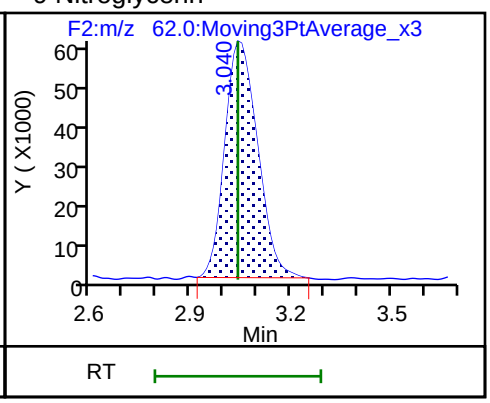
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



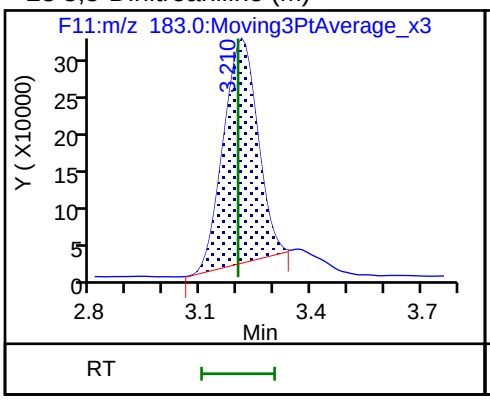
9 Nitroglycerin



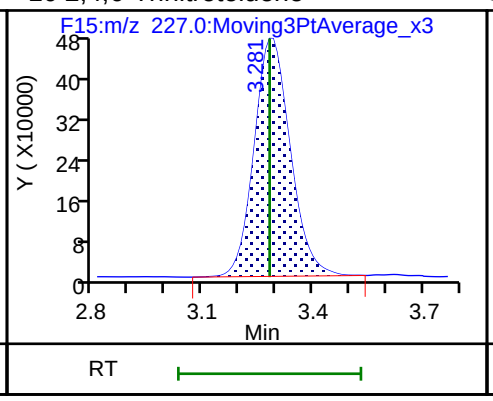
Report Date: 15-Apr-2022 08:03:07 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14021.d

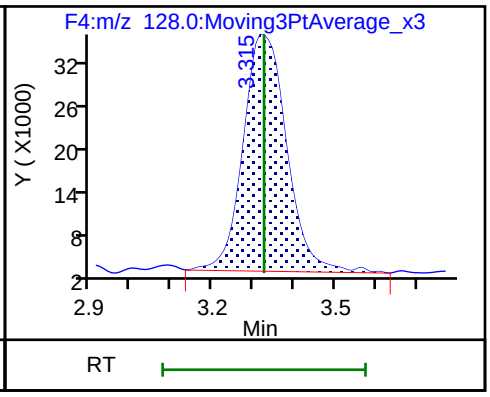
28 3,5-Dinitroaniline (M)



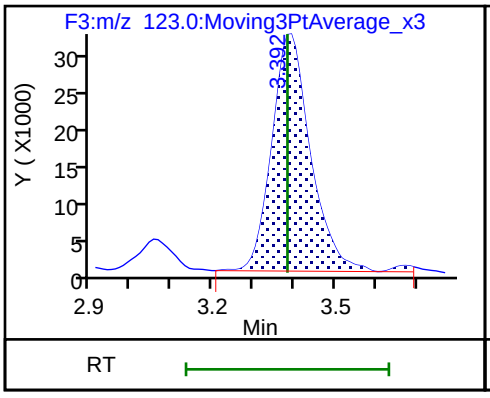
10 2,4,6-Trinitrotoluene



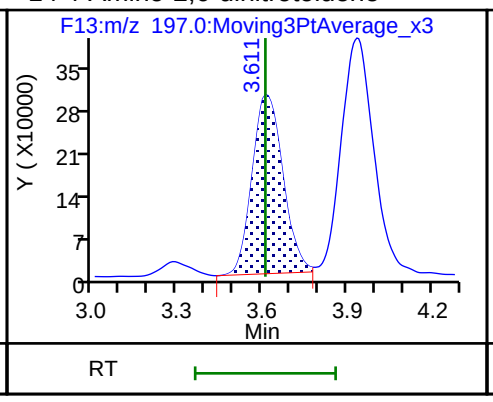
$ 11 Nitrobenzene-d5



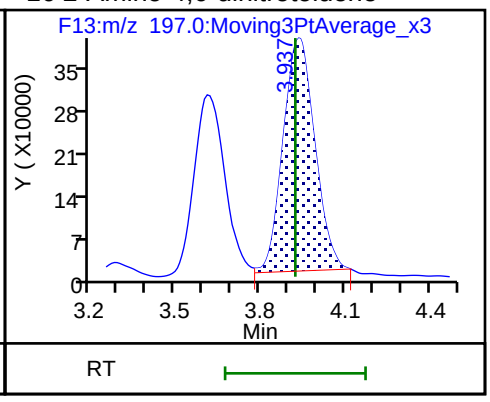
12 Nitrobenzene



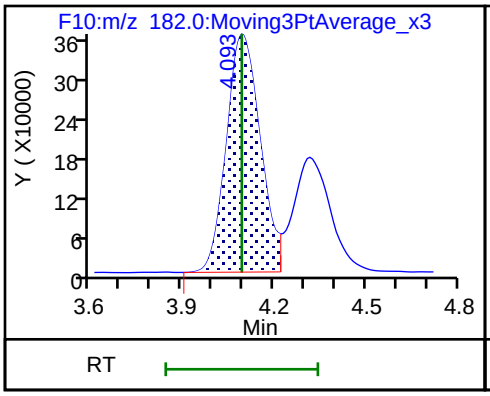
14 4-Amino-2,6-dinitrotoluene



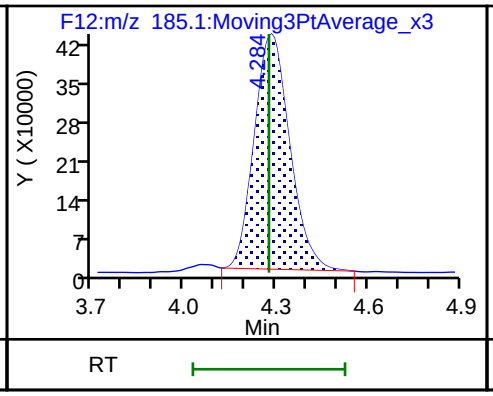
16 2-Amino-4,6-dinitrotoluene



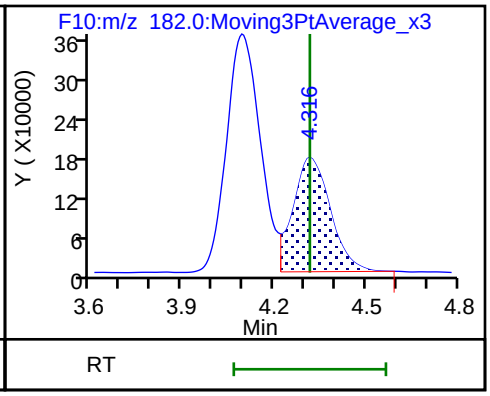
17 2,6-Dinitrotoluene



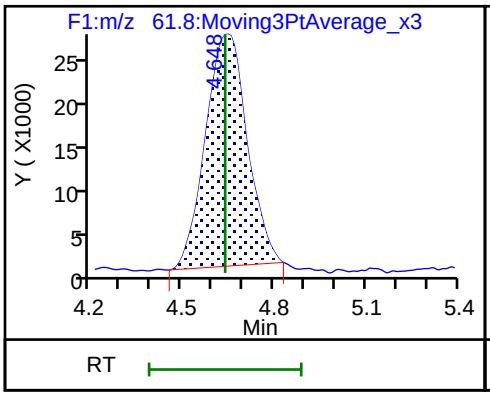
* 18 2,4-dinitrotoluene-d3



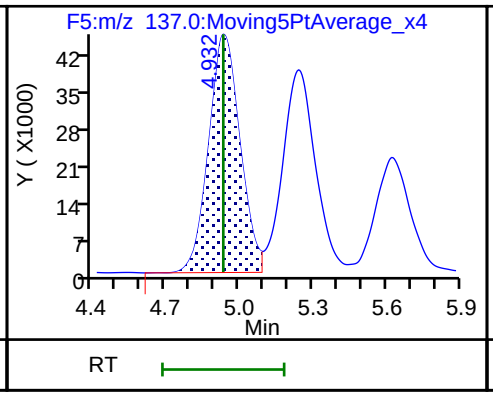
19 2,4-Dinitrotoluene



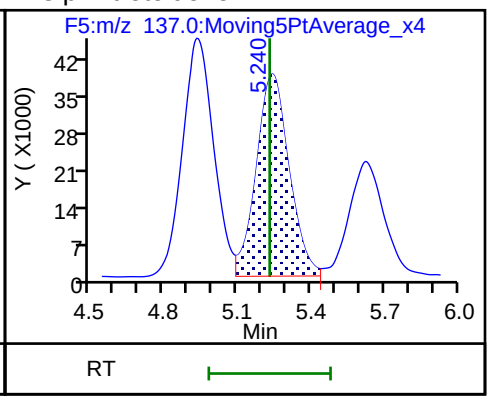
20 PETN



22 o-Nitrotoluene



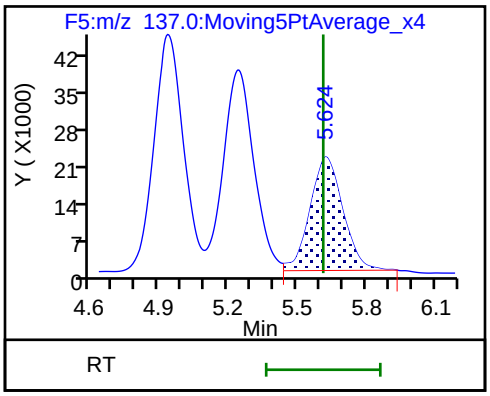
23 p-Nitrotoluene



Report Date: 15-Apr-2022 08:03:07 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14021.d

24 m-Nitrotoluene



Report Date: 15-Apr-2022 08:03:07 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

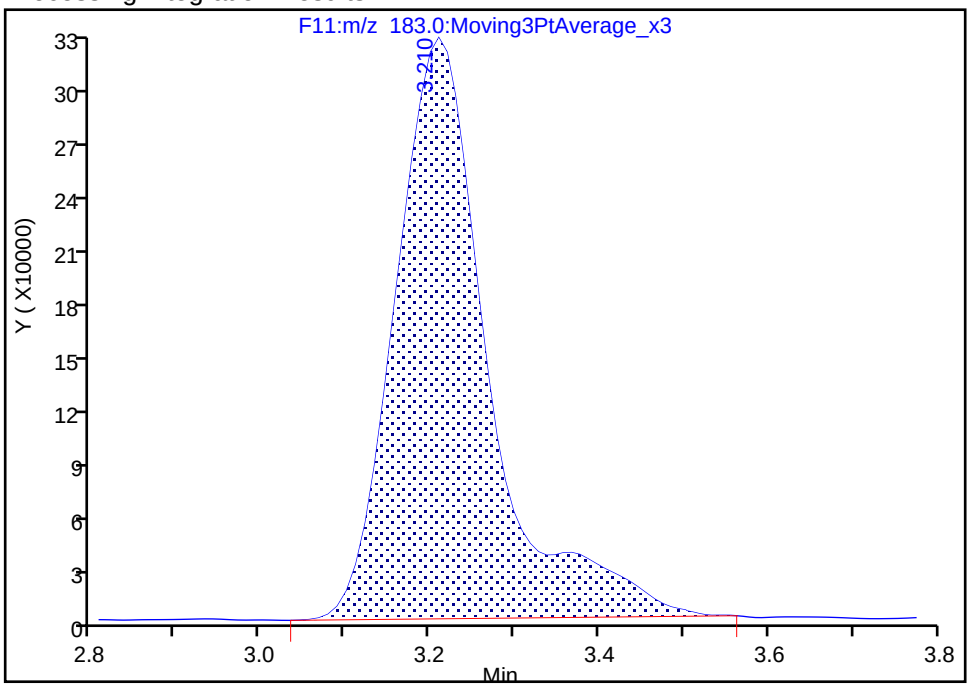
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14021.d
Injection Date: 14-Apr-2022 14:26:28 Instrument ID: LC_LCMS7
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 21
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F11:SIR

28 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

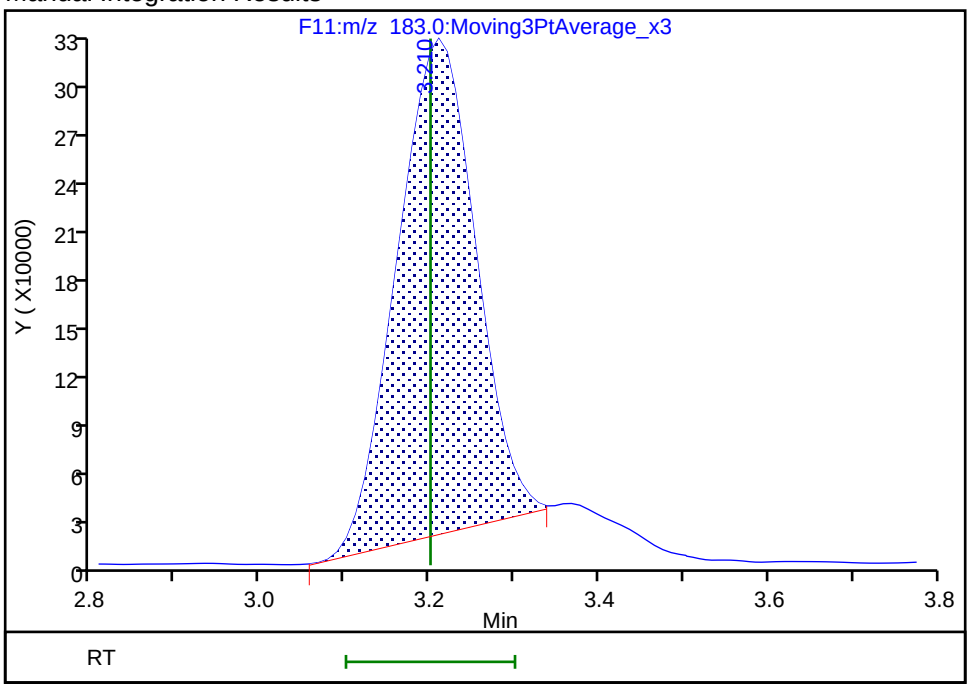
Processing Integration Results

RT: 3.21
Area: 2466038
Amount: 61.702476
Amount Units: ug/l



Manual Integration Results

RT: 3.21
Area: 1973108
Amount: 49.184920
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:40:44
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Lab Sample ID: CCV 280-571896/32 Calibration Date: 04/14/2022 15:39

Instrument ID: LC_LCMS7 Calib Start Date: 04/14/2022 12:27

GC Column: Synergi Hydro ID: Calib End Date: 04/14/2022 13:07

Lab File ID: ex722D14032.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin1		2.157		101	100	0.5	30.0
TNX	Lin1		5.107		105	100	5.2	30.0
DNX	Lin1		7.321		102	100	1.9	30.0
MNX	Lin1		1.947		118	117	1.3	30.0
RDX	Qua1		0.6124		97.9	100	-2.1	30.0
1,3,5-Trinitrobenzene	Lin1		1.698		97.0	100	-3.2	30.0
Tetryl	Lin1		2.803		105	100	5.0	30.0
1,3-Dinitrobenzene	Lin1		1.067		100	100	-0.1	30.0
Nitroglycerin	Lin1		0.9585		100	101	-0.6	30.0
3,5-Dinitroaniline	Lin1		1.290		88.5	100	-11.5	30.0
2,4,6-Trinitrotoluene	Lin1		2.286		95.9	100	-4.5	30.0
Nitrobenzene	Lin1		0.4995		105	100	4.2	30.0
4-Amino-2,6-dinitrotoluene	Lin1		1.562		96.4	100	-3.7	30.0
2-Amino-4,6-dinitrotoluene	Lin1		2.182		97.6	100	-2.8	30.0
2,6-Dinitrotoluene	Lin1		2.047		102	100	1.6	30.0
2,4-Dinitrotoluene	Lin1		1.043		98.5	100	-1.9	30.0
PETN	Lin1		0.1900		94.6	99.6	-5.0	30.0
o-Nitrotoluene	Lin1		0.2904		98.5	100	-1.5	30.0
p-Nitrotoluene	Lin1		0.2586		99.5	100	-0.7	30.0
m-Nitrotoluene	Lin1		0.1515		99.6	100	-0.5	30.0
Nitrobenzene-d5	Lin1		0.5641		97.3	100	-2.7	30.0

Report Date: 15-Apr-2022 08:03:13 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14032.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 14-Apr-2022 15:39:01 ALS Bottle#: 6 Worklist Smp#: 32
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:13 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:32:31
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	228589	100.5	146	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		132472	125.0	115	
36 TNX								
144.0	1.385	1.385	0.0	0.751	4639245	105.3	682	
33 DNX								
160.0	1.489	1.489	0.0	0.807	6650528	102.0	582	
34 MNX								
160.0	1.670	1.670	0.0	0.906	2062038	118.3	169	
4 RDX								
281.2	1.841	1.833	0.008	0.998	318635	97.9	194	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		650341	125.0	238	
5 1,3,5-Trinitrobenzene								
213.0	2.299	2.299	0.0	0.769	1543711	97.0	222	
6 Tetryl								
241.1	2.685	2.679	0.006	0.898	2548980	105.2	157	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1173893	129.4	325	
8 1,3-Dinitrobenzene								
168.0	3.022	3.022	0.0	1.010	970393	100.1	169	
9 Nitroglycerin								
62.0	3.051	3.040	0.011	1.020	874994	100.0	416	
28 3,5-Dinitroaniline								
183.0	3.210	3.200	0.010	1.073	3828500	88.5	51.0	

Report Date: 15-Apr-2022 08:03:13 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14032.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.281	3.281	0.0	0.766	6814195	95.9	292	
$ 11 Nitrobenzene-d5								
128.0	3.324	3.324	0.0	0.776	511995	97.3	46.2	
12 Nitrobenzene								
123.0	3.392	3.382	0.010	0.792	455119	104.6	40.1	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.611	3.611	0.0	0.843	4640612	96.4	54.9	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.943	3.924	0.019	0.920	6504132	97.6	74.7	
17 2,6-Dinitrotoluene								
182.0	4.093	4.093	0.0	0.955	6099720	102.0	893	
* 18 2,4-dinitrotoluene-d3								
185.1	4.284	4.275	0.009		3710541	125.0	120	
19 2,4-Dinitrotoluene								
182.0	4.316	4.316	0.0	1.008	3107064	98.5	419	
20 PETN								
61.8	4.628	4.638	-0.010	1.080	561798	94.6	90.9	
22 o-Nitrotoluene								
137.0	4.927	4.932	-0.005	1.150	861997	98.5	365	
23 p-Nitrotoluene								
137.0	5.235	5.230	0.005	1.222	769227	99.5	324	
24 m-Nitrotoluene								
137.0	5.629	5.614	0.015	1.314	450218	99.6	178	

QC Flag Legend

Processing Flags

Reagents:

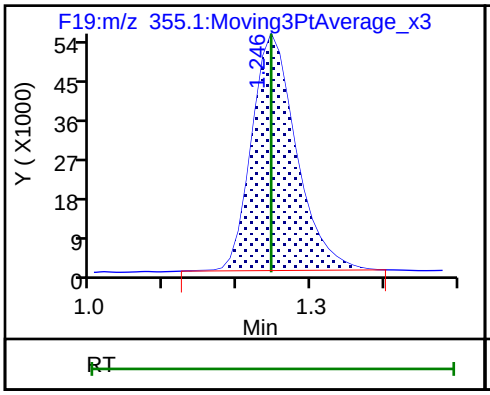
8321EXcalprim_00029	Amount Added: 10.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 10.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 15-Apr-2022 08:03:13 Chrom Revision: 2.3 12-Apr-2022 20:29:44

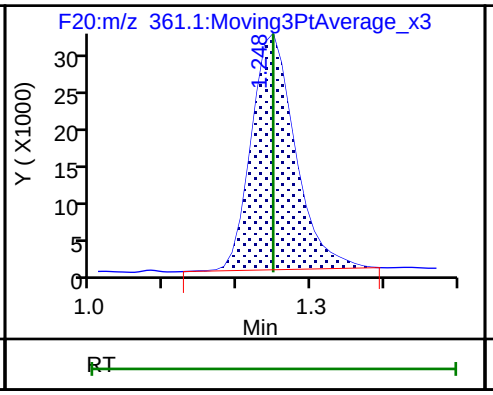
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14032.d
Injection Date: 14-Apr-2022 15:39:01 Instrument ID: LC_LCMS7
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 6 Worklist Smp#: 32
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

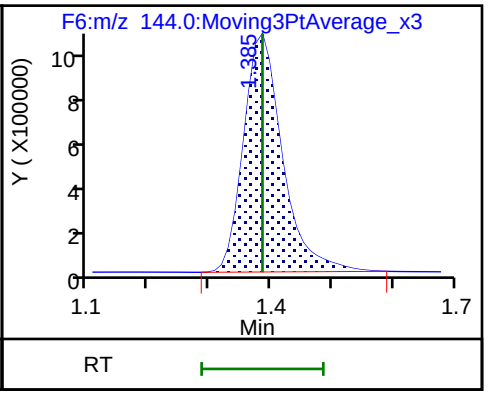
2 HMX



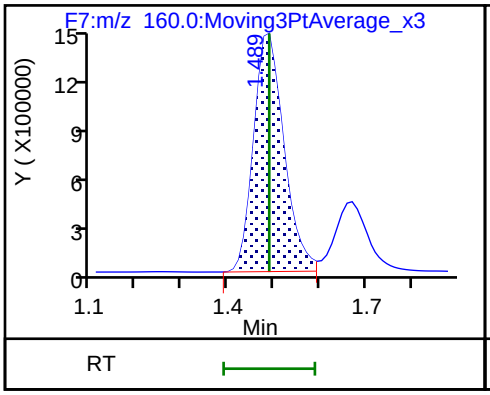
* 1 HMX-13C4



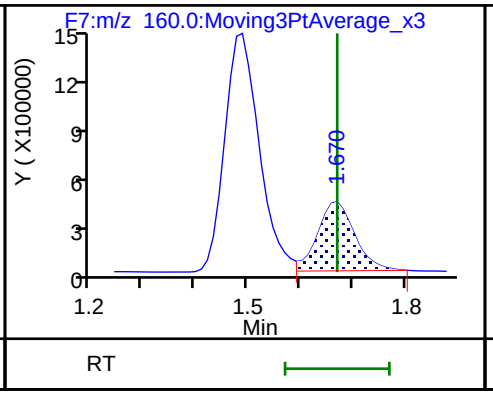
36 TNX



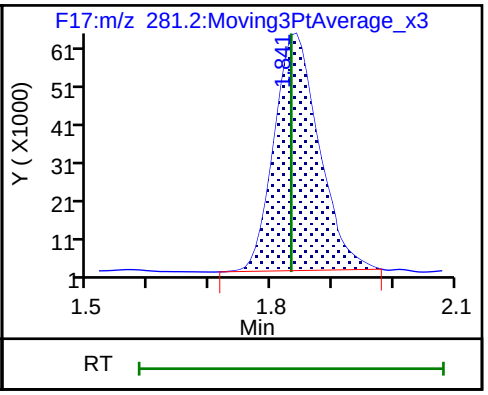
33 DNX



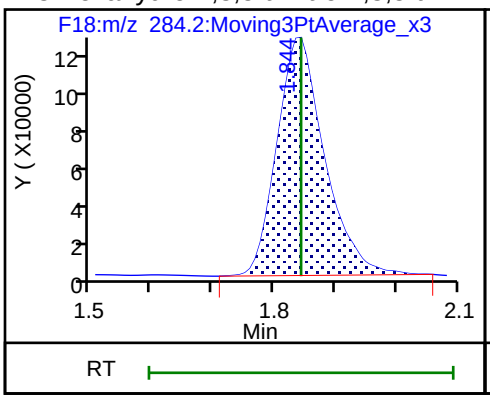
34 MNX



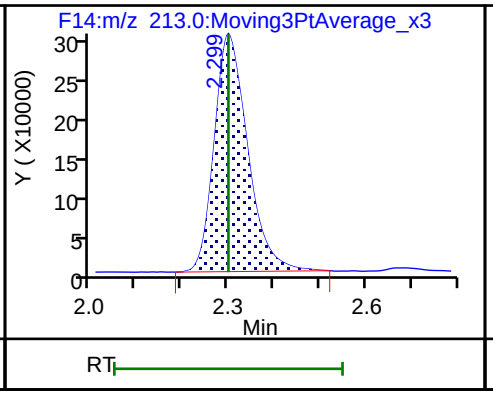
4 RDX



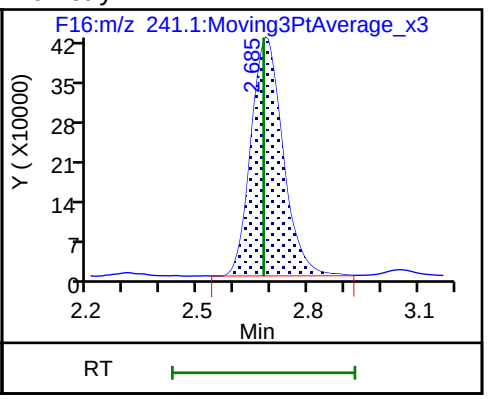
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



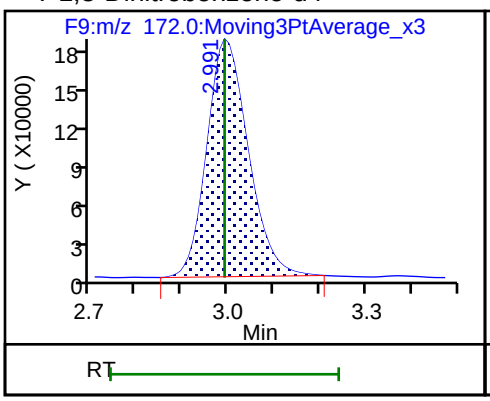
5 1,3,5-Trinitrobenzene



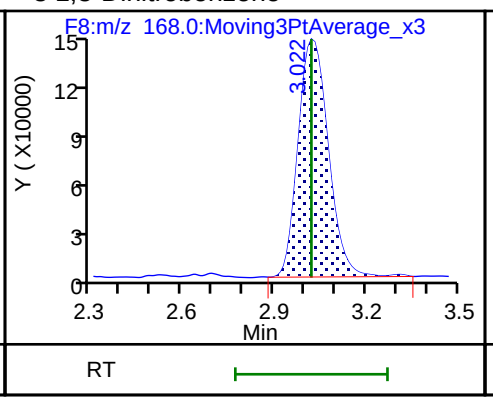
6 Tetryl



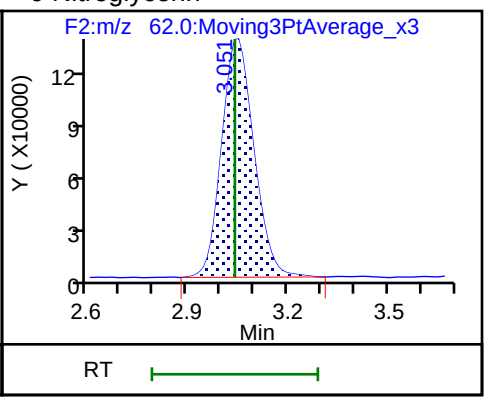
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

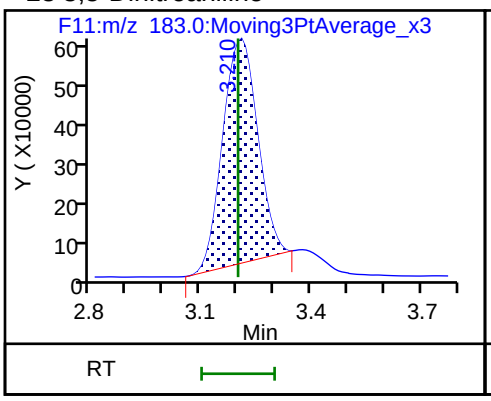


9 Nitroglycerin

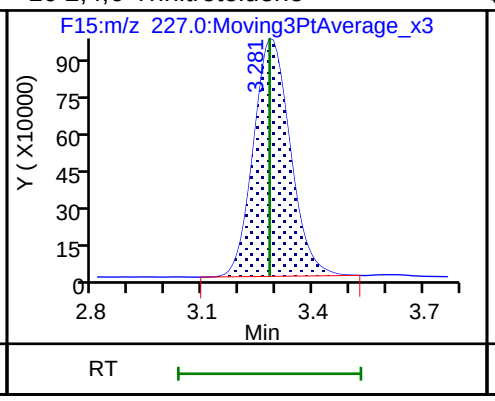


Report Date: 15-Apr-2022 08:03:13 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14032.d

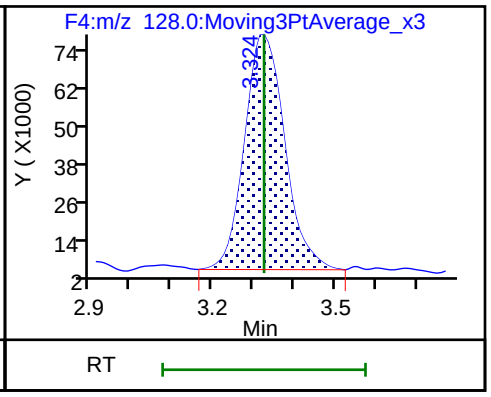
28 3,5-Dinitroaniline



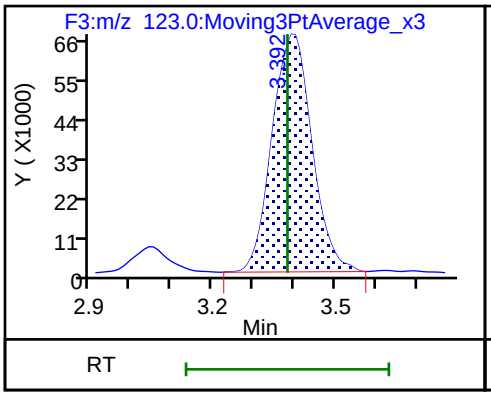
10 2,4,6-Trinitrotoluene



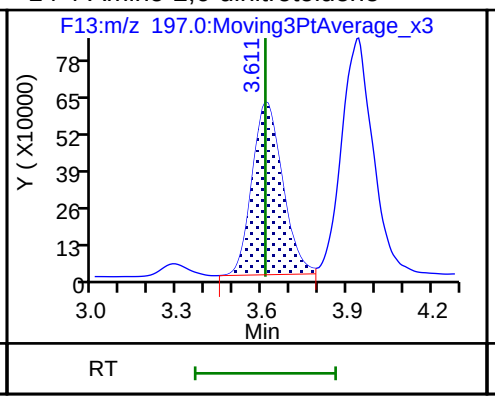
$ 11 Nitrobenzene-d5



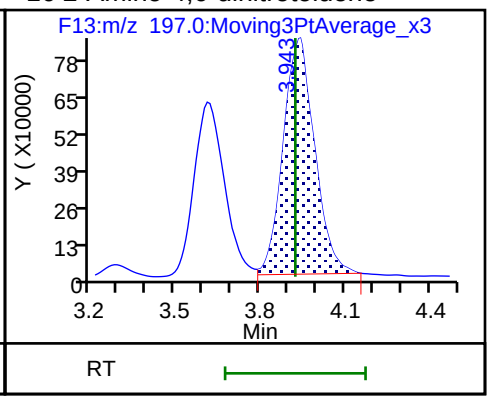
12 Nitrobenzene



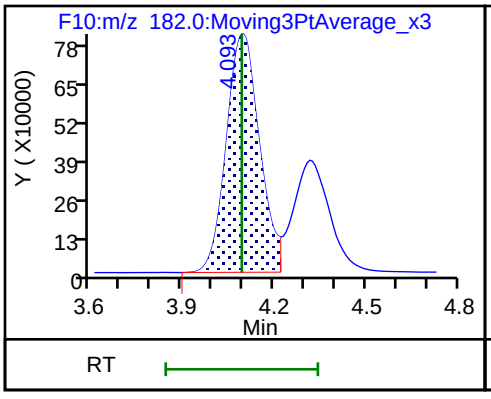
14 4-Amino-2,6-dinitrotoluene



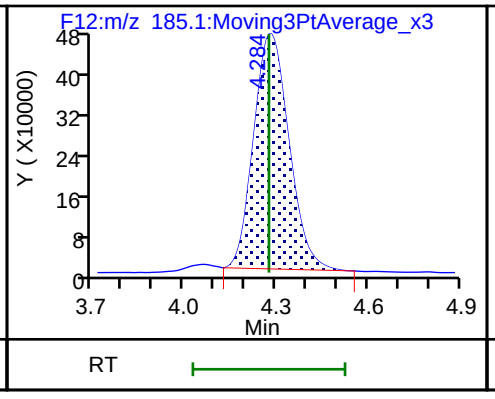
16 2-Amino-4,6-dinitrotoluene



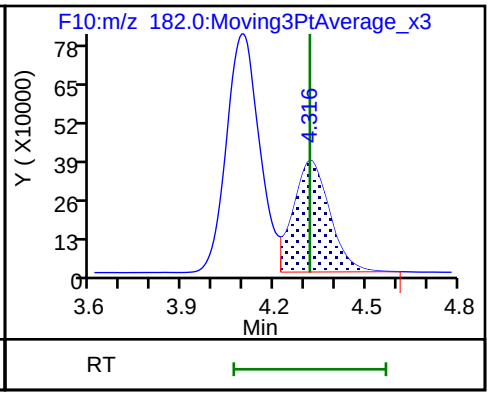
17 2,6-Dinitrotoluene



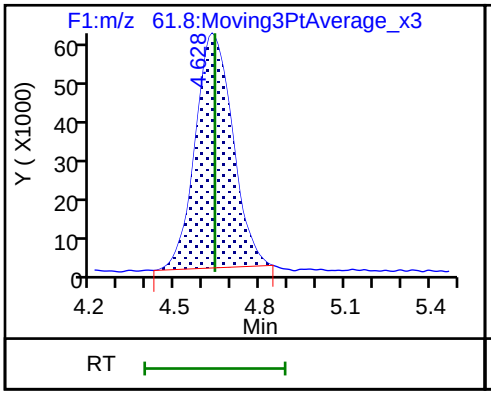
* 18 2,4-dinitrotoluene-d3



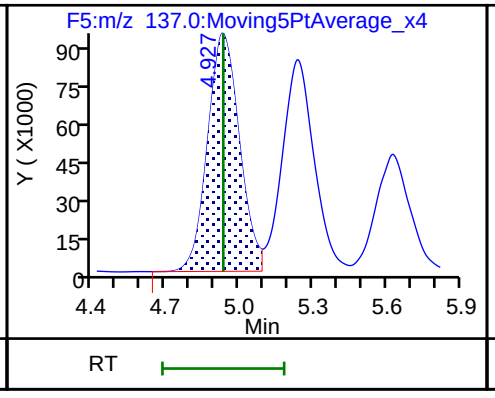
19 2,4-Dinitrotoluene



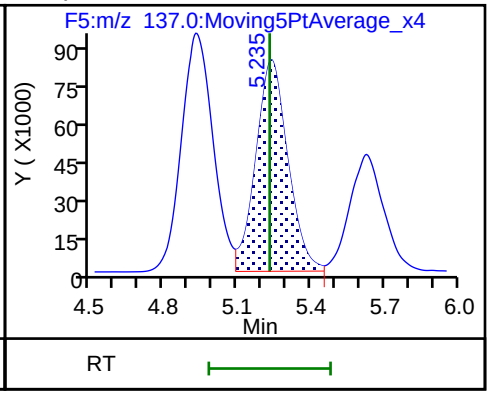
20 PETN



22 o-Nitrotoluene



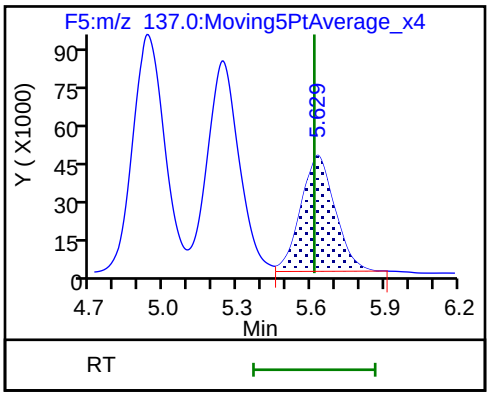
23 p-Nitrotoluene



Report Date: 15-Apr-2022 08:03:13 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14032.d

24 m-Nitrotoluene



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Lab Sample ID: CCV 280-571896/43 Calibration Date: 04/14/2022 16:51

Instrument ID: LC_LCMS7 Calib Start Date: 04/14/2022 12:27

GC Column: Synergi Hydro ID: Calib End Date: 04/14/2022 13:07

Lab File ID: ex722D14043.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin1		2.126		48.8	50.0	-2.4	30.0
TNX	Lin1		5.297		54.0	50.1	7.8	30.0
DNX	Lin1		7.822		53.7	50.1	7.3	30.0
MNX	Lin1		2.057		61.7	58.4	5.7	30.0
RDX	Qua1		0.6475		46.2	50.0	-7.6	30.0
1,3,5-Trinitrobenzene	Lin1		1.792		51.0	50.1	1.9	30.0
Tetryl	Lin1		2.890		54.3	50.1	8.4	30.0
1,3-Dinitrobenzene	Lin1		1.155		53.7	50.1	7.2	30.0
Nitroglycerin	Lin1		1.052		54.4	50.3	8.1	30.0
3,5-Dinitroaniline	Lin1		1.433		48.8	50.0	-2.4	30.0
2,4,6-Trinitrotoluene	Lin1		2.313		47.9	50.2	-4.5	30.0
Nitrobenzene	Lin1		0.5092		53.2	50.2	5.9	30.0
4-Amino-2,6-dinitrotoluene	Lin1		1.608		49.2	50.1	-1.7	30.0
2-Amino-4,6-dinitrotoluene	Lin1		2.179		48.4	50.2	-3.5	30.0
2,6-Dinitrotoluene	Lin1		1.998		49.4	50.2	-1.5	30.0
2,4-Dinitrotoluene	Lin1		1.090		51.0	50.2	1.6	30.0
PETN	Lin1		0.2100		51.7	49.8	3.9	30.0
o-Nitrotoluene	Lin1		0.2968		50.1	50.0	0.3	30.0
p-Nitrotoluene	Lin1		0.2611		49.9	50.1	-0.3	30.0
m-Nitrotoluene	Lin1		0.1458		47.7	50.1	-4.8	30.0
Nitrobenzene-d5	Lin1		0.6495		55.2	50.0	10.4	30.0

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Lab Sample ID: CCV 280-571897/43 Calibration Date: 04/14/2022 16:51

Instrument ID: LC_LCMS7 Calib Start Date: 04/14/2022 12:27

GC Column: Synergi Hydro ID: Calib End Date: 04/14/2022 13:07

Lab File ID: ex722D14043.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin1		2.126		48.8	50.0	-2.4	30.0
TNX	Lin1		5.297		54.0	50.1	7.8	30.0
DNX	Lin1		7.822		53.7	50.1	7.3	30.0
MNX	Lin1		2.057		61.7	58.4	5.7	30.0
RDX	Qua1		0.6475		46.2	50.0	-7.6	30.0
1,3,5-Trinitrobenzene	Lin1		1.792		51.0	50.1	1.9	30.0
Tetryl	Lin1		2.890		54.3	50.1	8.4	30.0
1,3-Dinitrobenzene	Lin1		1.155		53.7	50.1	7.2	30.0
Nitroglycerin	Lin1		1.052		54.4	50.3	8.1	30.0
3,5-Dinitroaniline	Lin1		1.433		48.8	50.0	-2.4	30.0
2,4,6-Trinitrotoluene	Lin1		2.313		47.9	50.2	-4.5	30.0
Nitrobenzene	Lin1		0.5092		53.2	50.2	5.9	30.0
4-Amino-2,6-dinitrotoluene	Lin1		1.608		49.2	50.1	-1.7	30.0
2-Amino-4,6-dinitrotoluene	Lin1		2.179		48.4	50.2	-3.5	30.0
2,6-Dinitrotoluene	Lin1		1.998		49.4	50.2	-1.5	30.0
2,4-Dinitrotoluene	Lin1		1.090		51.0	50.2	1.6	30.0
PETN	Lin1		0.2100		51.7	49.8	3.9	30.0
o-Nitrotoluene	Lin1		0.2968		50.1	50.0	0.3	30.0
p-Nitrotoluene	Lin1		0.2611		49.9	50.1	-0.3	30.0
m-Nitrotoluene	Lin1		0.1458		47.7	50.1	-4.8	30.0
Nitrobenzene-d5	Lin1		0.6495		55.2	50.0	10.4	30.0

Report Date: 15-Apr-2022 08:03:20 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14043.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 14-Apr-2022 16:51:37 ALS Bottle#: 5 Worklist Smp#: 43
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:20 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:35:30
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	111331	48.8	76.3	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		130901	125.0	102	
36 TNX								
144.0	1.385	1.385	0.0	0.755	2025721	54.0	581	
33 DNX								
160.0	1.477	1.489	-0.012	0.805	2991571	53.7	448	
34 MNX								
160.0	1.670	1.670	0.0	0.910	917064	61.7	127	
4 RDX								
281.2	1.833	1.833	0.0	0.998	136529	46.2	88.8	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		527171	125.0	138	
5 1,3,5-Trinitrobenzene								
213.0	2.299	2.299	0.0	0.769	686016	51.0	186	
6 Tetryl								
241.1	2.673	2.679	-0.006	0.894	1106319	54.3	106	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		988450	129.4	223	
8 1,3-Dinitrobenzene								
168.0	3.010	3.022	-0.012	1.007	442170	53.7	183	
9 Nitroglycerin								
62.0	3.040	3.040	0.0	1.016	404165	54.4	133	
28 3,5-Dinitroaniline								
183.0	3.210	3.200	0.010	1.073	1827033	48.8	50.0	

Report Date: 15-Apr-2022 08:03:20 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14043.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.281	3.281	0.0	0.768	2960495	47.9	311	
$ 11 Nitrobenzene-d5								
128.0	3.315	3.324	-0.009	0.775	248207	55.2	52.0	
12 Nitrobenzene								
123.0	3.382	3.382	0.0	0.791	195316	53.2	42.5	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.611	3.611	0.0	0.845	2051480	49.2	54.1	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.937	3.924	0.013	0.921	2788154	48.4	68.8	
17 2,6-Dinitrotoluene								M
182.0	4.081	4.093	-0.012	0.954	2556819	49.4	502	M
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3186598	125.0	135	
19 2,4-Dinitrotoluene								M
182.0	4.308	4.316	-0.008	1.008	1395166	51.0	251	M
20 PETN								
61.8	4.608	4.638	-0.030	1.078	266583	51.7	43.1	
22 o-Nitrotoluene								
137.0	4.927	4.932	-0.005	1.152	378291	50.1	194	
23 p-Nitrotoluene								
137.0	5.231	5.230	0.001	1.223	333498	49.9	176	
24 m-Nitrotoluene								
137.0	5.619	5.614	0.005	1.314	186025	47.7	85.2	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

8321EXcalprim_00029	Amount Added: 5.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 5.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14043.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 14-Apr-2022 16:51:37 ALS Bottle#: 5 Worklist Smp#: 43
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:20 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:35:30
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	111331	48.8	76.3	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		130901	125.0	102	
36 TNX								
144.0	1.385	1.385	0.0	0.755	2025721	54.0	581	
33 DNX								
160.0	1.477	1.489	-0.012	0.805	2991571	53.7	448	
34 MNX								
160.0	1.670	1.670	0.0	0.910	917064	61.7	127	
4 RDX								
281.2	1.833	1.833	0.0	0.998	136529	46.2	88.8	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		527171	125.0	138	
5 1,3,5-Trinitrobenzene								
213.0	2.299	2.299	0.0	0.769	686016	51.0	186	
6 Tetryl								
241.1	2.673	2.679	-0.006	0.894	1106319	54.3	106	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		988450	129.4	223	
8 1,3-Dinitrobenzene								
168.0	3.010	3.022	-0.012	1.007	442170	53.7	183	
9 Nitroglycerin								
62.0	3.040	3.040	0.0	1.016	404165	54.4	133	
28 3,5-Dinitroaniline								
183.0	3.210	3.200	0.010	1.073	1827033	48.8	50.0	

Report Date: 15-Apr-2022 08:03:20 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14043.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.281	3.281	0.0	0.768	2960495	47.9	311	
$ 11 Nitrobenzene-d5								
128.0	3.315	3.324	-0.009	0.775	248207	55.2	52.0	
12 Nitrobenzene								
123.0	3.382	3.382	0.0	0.791	195316	53.2	42.5	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.611	3.611	0.0	0.845	2051480	49.2	54.1	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.937	3.924	0.013	0.921	2788154	48.4	68.8	
17 2,6-Dinitrotoluene								M
182.0	4.081	4.093	-0.012	0.954	2556819	49.4	502	M
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3186598	125.0	135	
19 2,4-Dinitrotoluene								M
182.0	4.308	4.316	-0.008	1.008	1395166	51.0	251	M
20 PETN								
61.8	4.608	4.638	-0.030	1.078	266583	51.7	43.1	
22 o-Nitrotoluene								
137.0	4.927	4.932	-0.005	1.152	378291	50.1	194	
23 p-Nitrotoluene								
137.0	5.231	5.230	0.001	1.223	333498	49.9	176	
24 m-Nitrotoluene								
137.0	5.619	5.614	0.005	1.314	186025	47.7	85.2	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

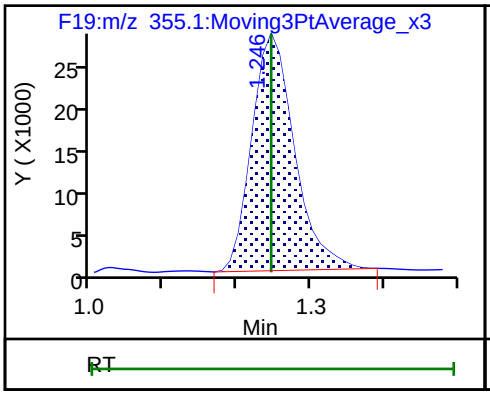
8321EXcalprim_00029	Amount Added: 5.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 5.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 15-Apr-2022 08:03:20 Chrom Revision: 2.3 12-Apr-2022 20:29:44

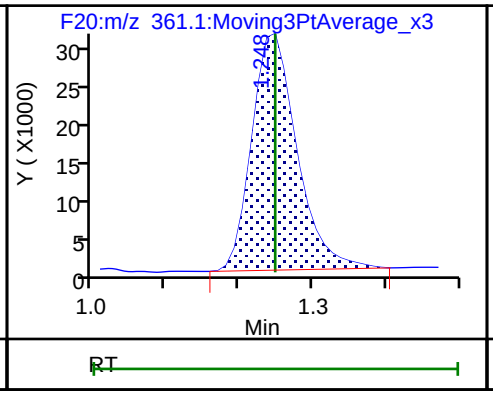
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14043.d
Injection Date: 14-Apr-2022 16:51:37 Instrument ID: LC_LCMS7
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 43
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

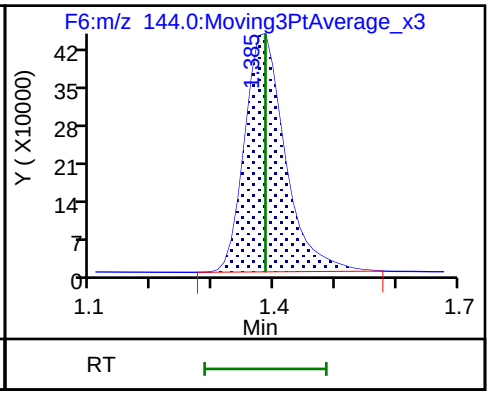
2 HMX



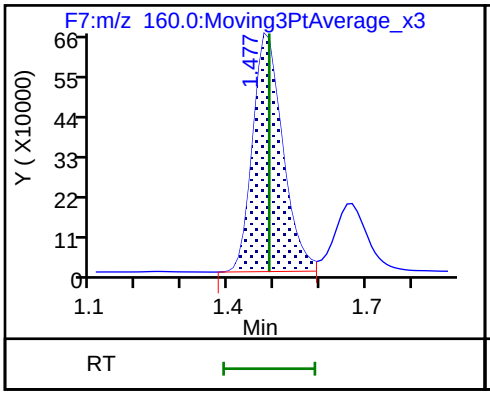
* 1 HMX-13C4



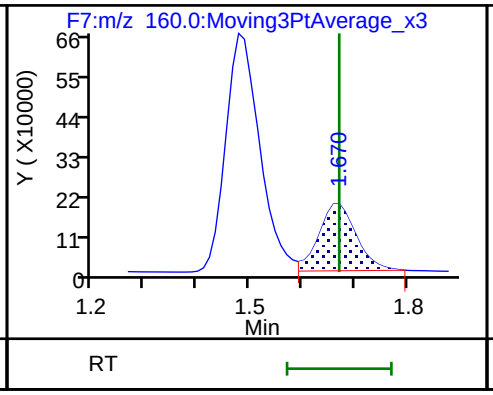
36 TNX



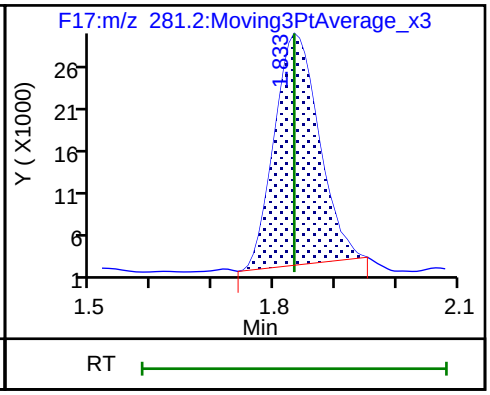
33 DNX



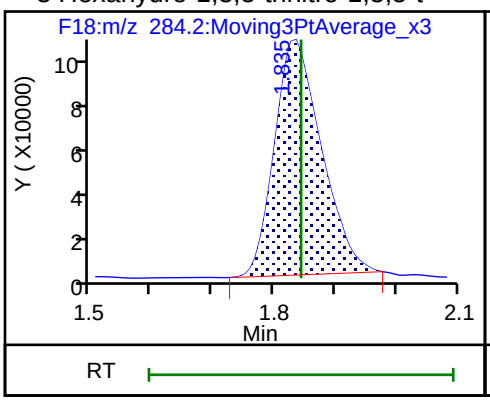
34 MNX



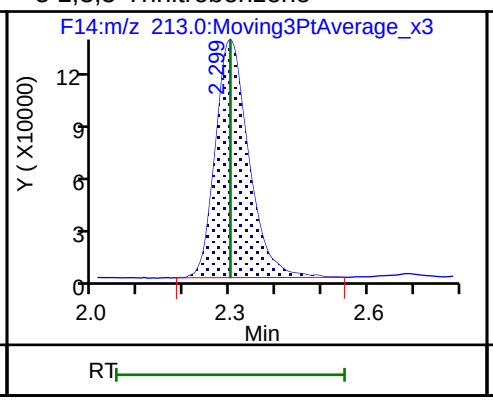
4 RDX



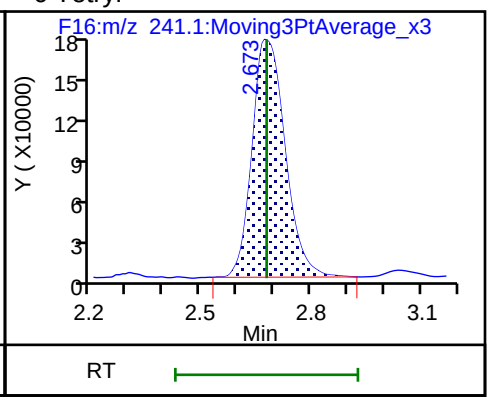
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



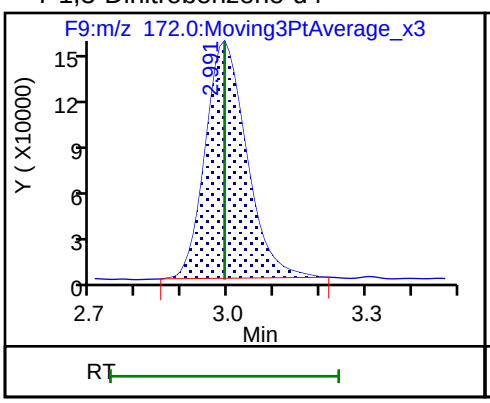
5 1,3,5-Trinitrobenzene



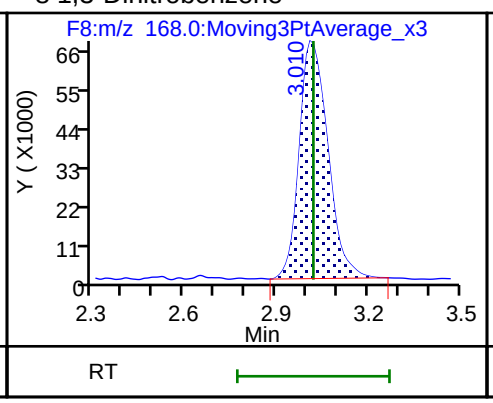
6 Tetryl



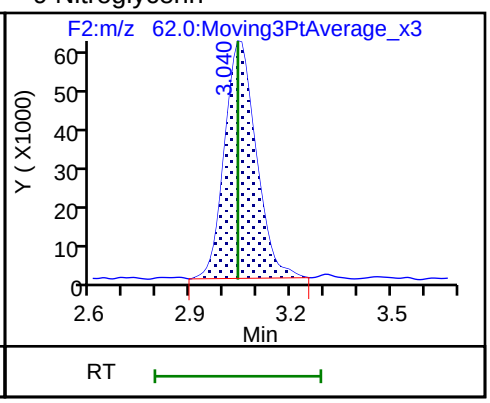
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

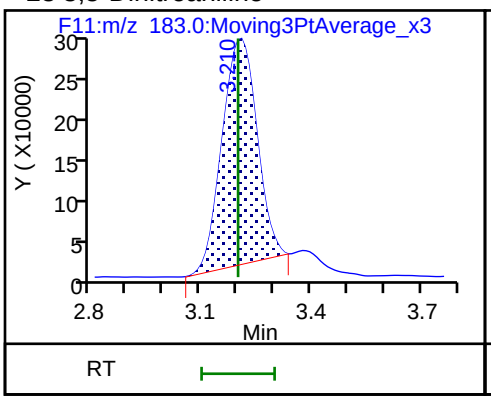


9 Nitroglycerin

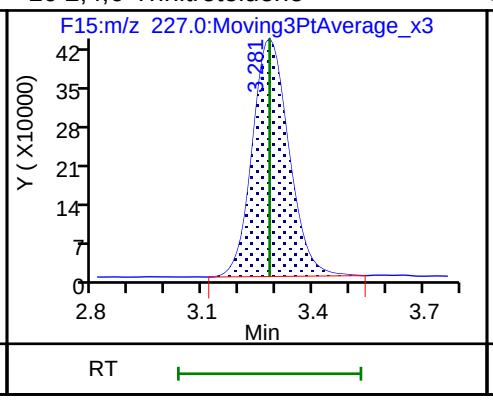


Report Date: 15-Apr-2022 08:03:20 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14043.d

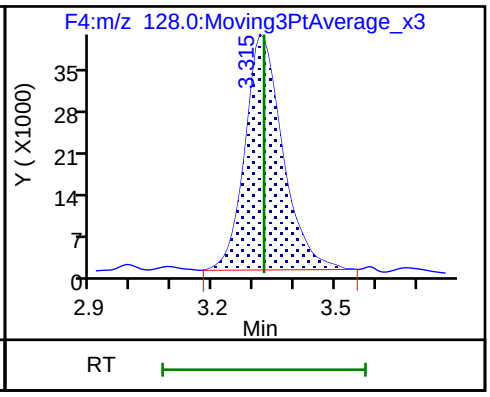
28 3,5-Dinitroaniline



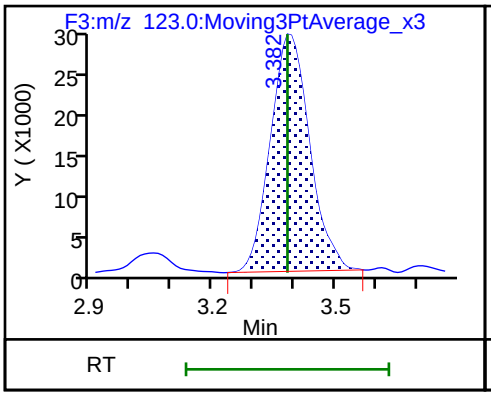
10 2,4,6-Trinitrotoluene



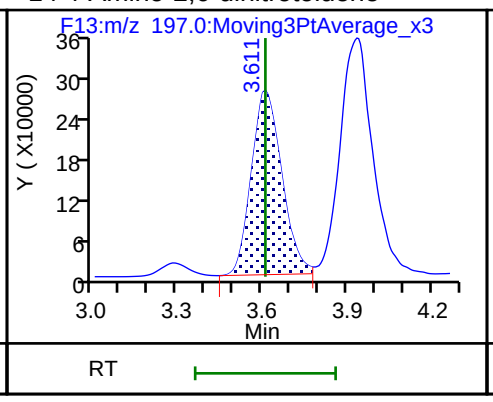
$ 11 Nitrobenzene-d5



12 Nitrobenzene



14 4-Amino-2,6-dinitrotoluene



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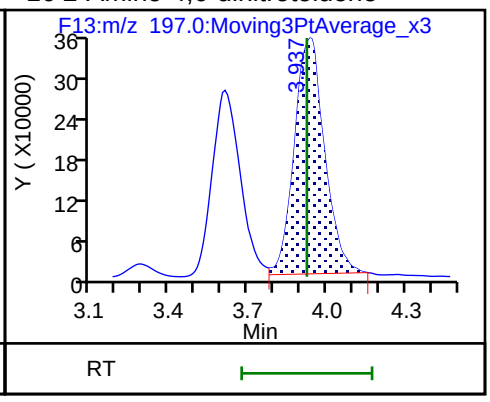
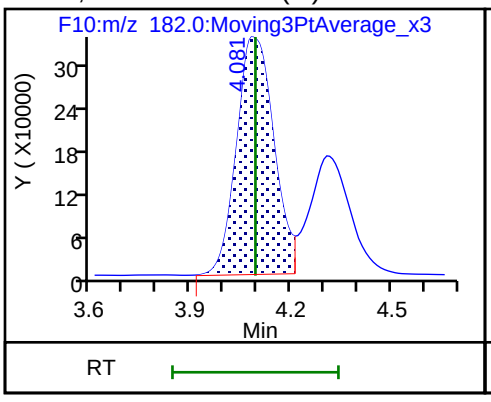
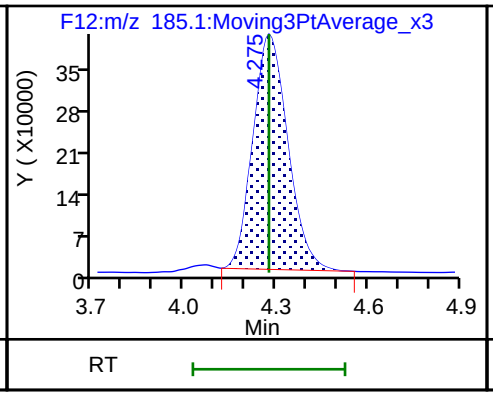


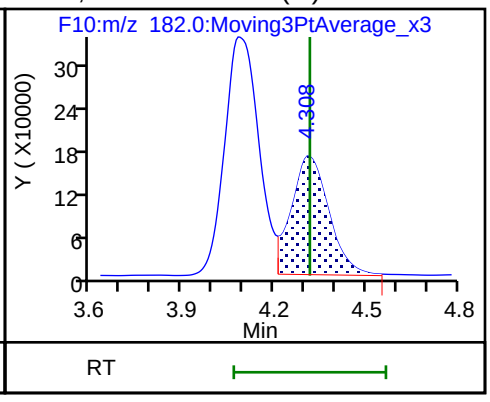
17 2,6-Dinitrotoluene (M)



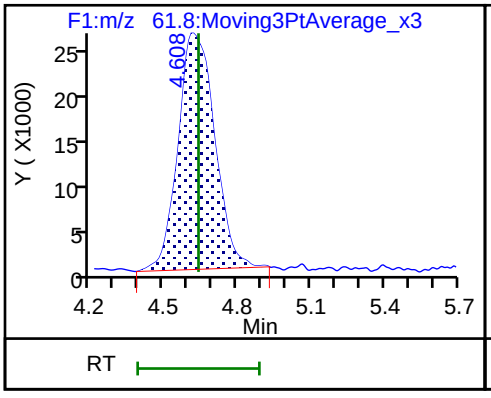
* 18 2,4-dinitrotoluene-d3



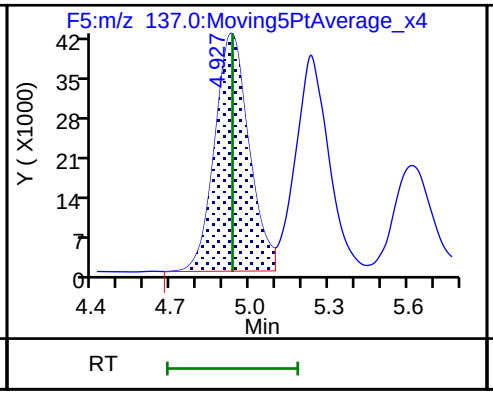
19 2,4-Dinitrotoluene (M)



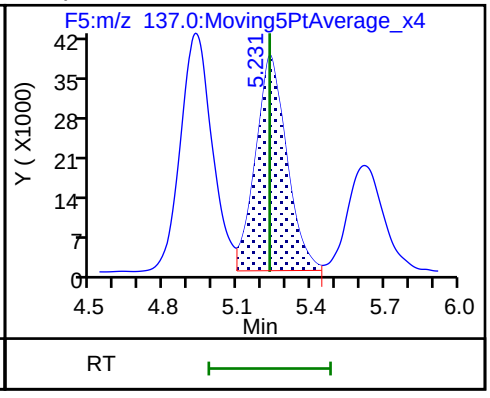
20 PETN



22 o-Nitrotoluene



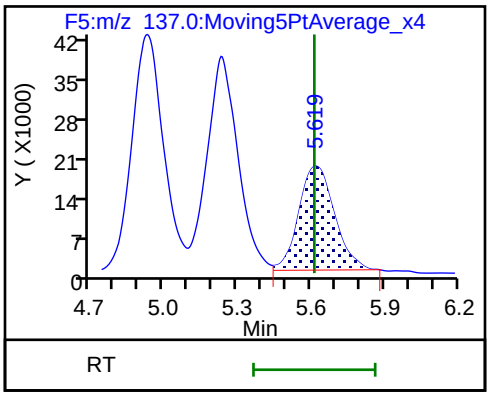
23 p-Nitrotoluene



Report Date: 15-Apr-2022 08:03:20 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14043.d

24 m-Nitrotoluene

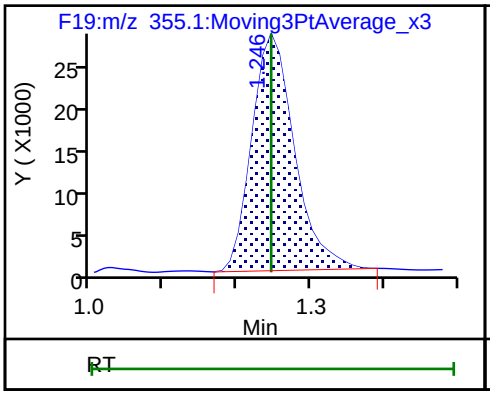


Report Date: 15-Apr-2022 08:03:20 Chrom Revision: 2.3 12-Apr-2022 20:29:44

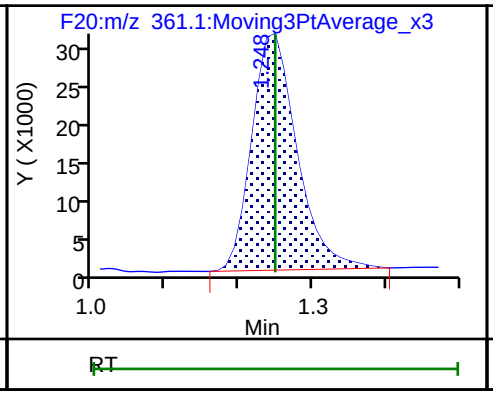
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14043.d
Injection Date: 14-Apr-2022 16:51:37 Instrument ID: LC_LCMS7
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 43
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

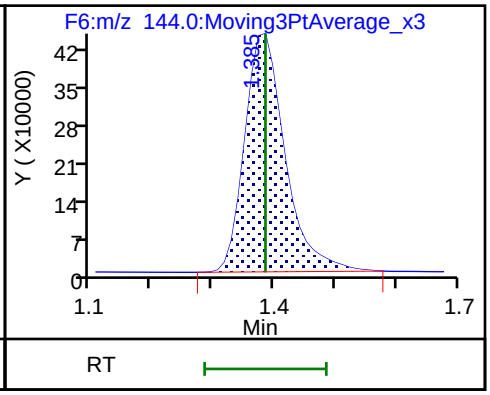
2 HMX



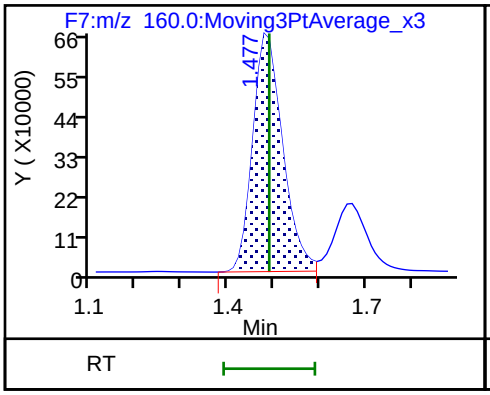
* 1 HMX-13C4



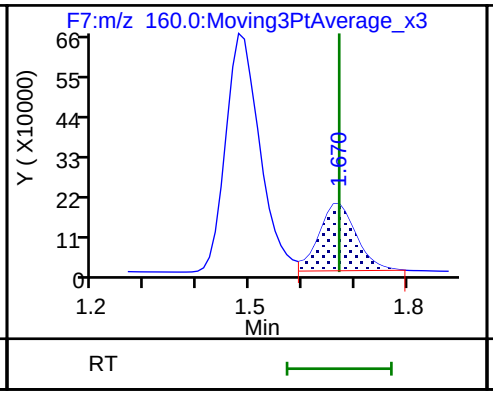
36 TNX



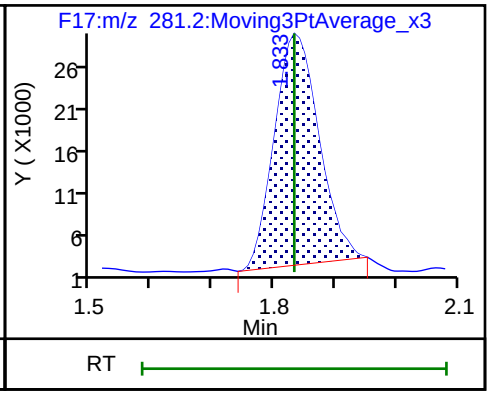
33 DNX



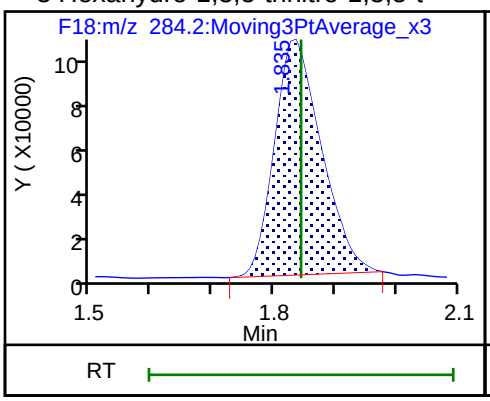
34 MNX



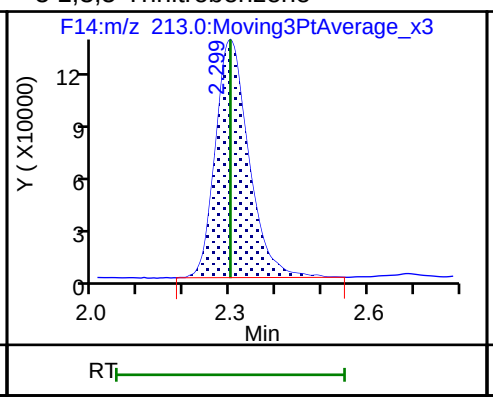
4 RDX



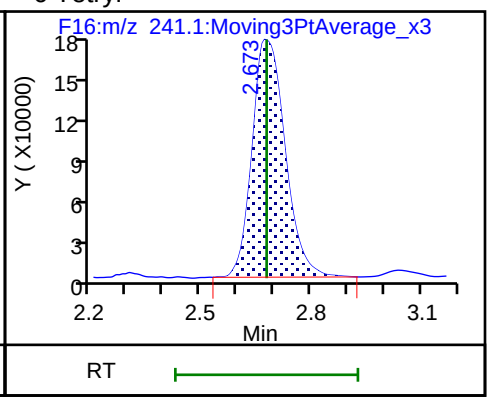
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



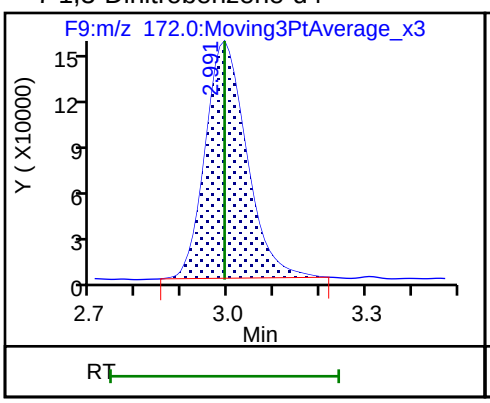
5 1,3,5-Trinitrobenzene



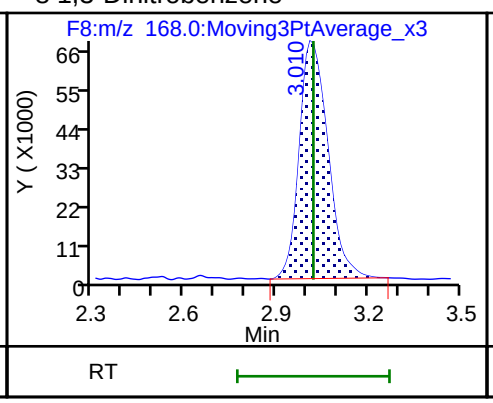
6 Tetryl



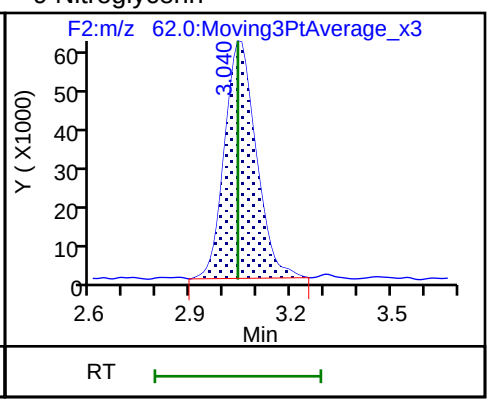
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



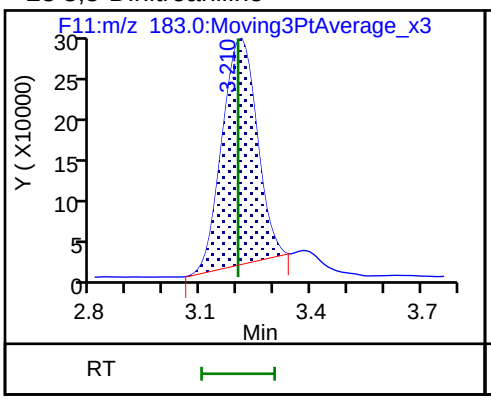
9 Nitroglycerin



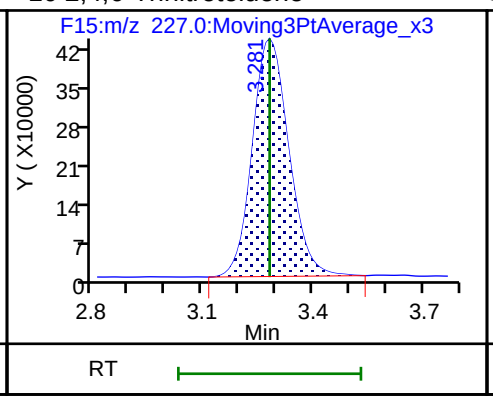
Report Date: 15-Apr-2022 08:03:20 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14043.d

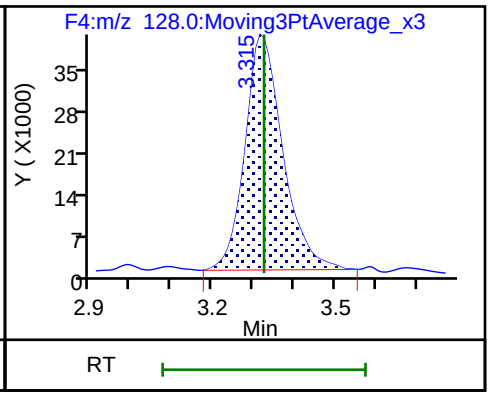
28 3,5-Dinitroaniline



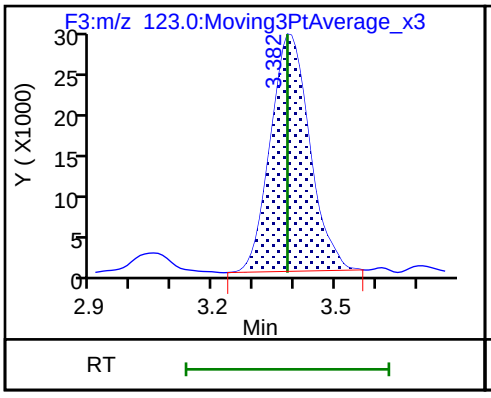
10 2,4,6-Trinitrotoluene



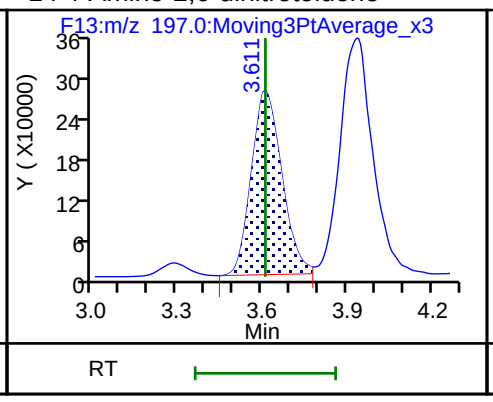
$ 11 Nitrobenzene-d5



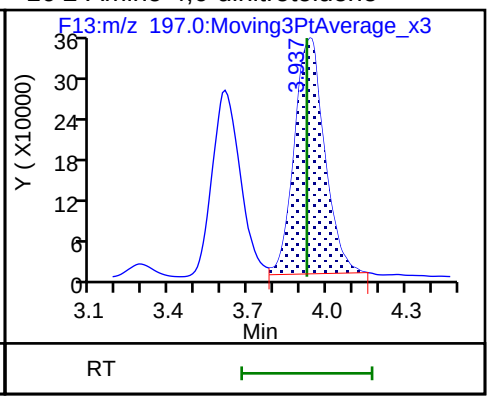
12 Nitrobenzene



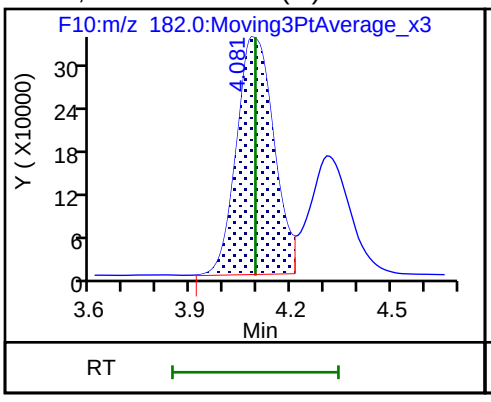
14 4-Amino-2,6-dinitrotoluene



16 2-Amino-4,6-dinitrotoluene



17 2,6-Dinitrotoluene (M)



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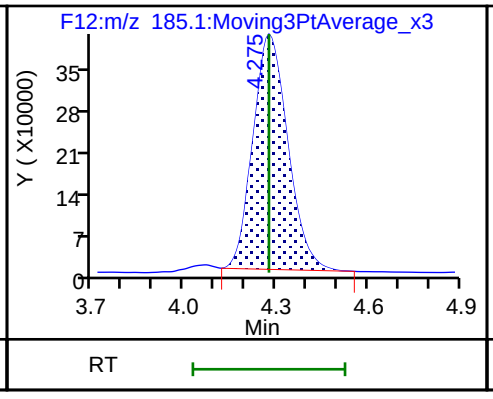
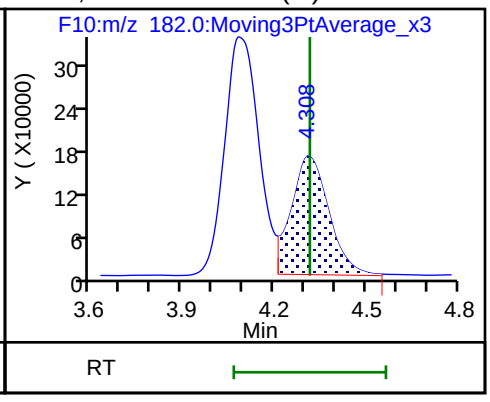
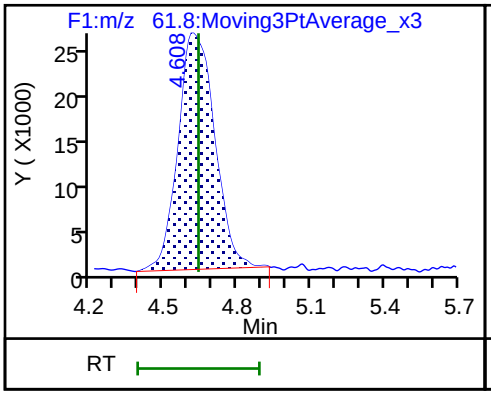


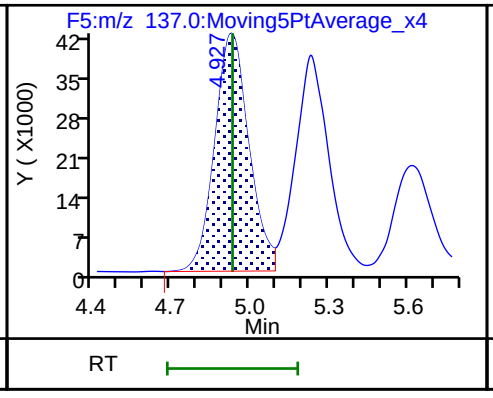
19 2,4-Dinitrotoluene (M)



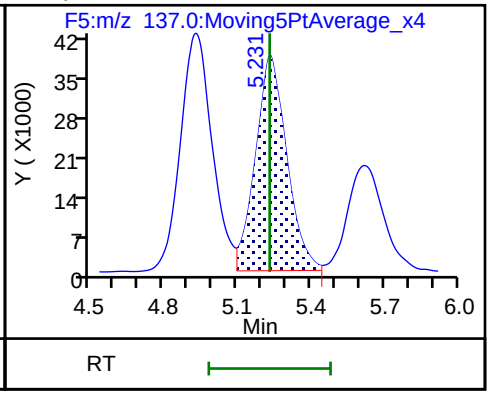
20 PETN



22 o-Nitrotoluene



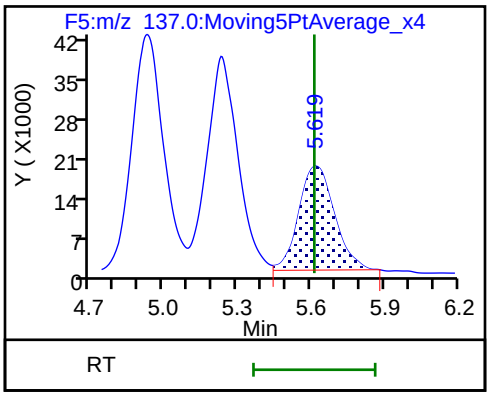
23 p-Nitrotoluene



Report Date: 15-Apr-2022 08:03:20 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14043.d

24 m-Nitrotoluene



Report Date: 15-Apr-2022 08:03:20

Chrom Revision: 2.3 12-Apr-2022 20:29:44
Manual Integration/User Assign Peak Report

Eurofins Denver

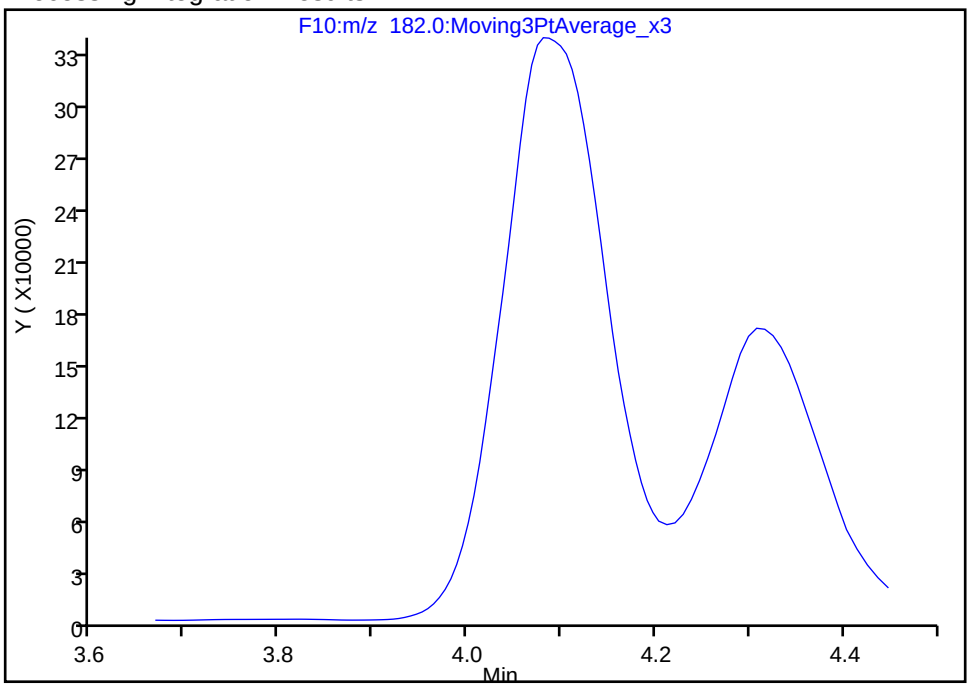
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14043.d
Injection Date: 14-Apr-2022 16:51:37 Instrument ID: LC_LCMS7
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 43
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F10:SIR

17 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

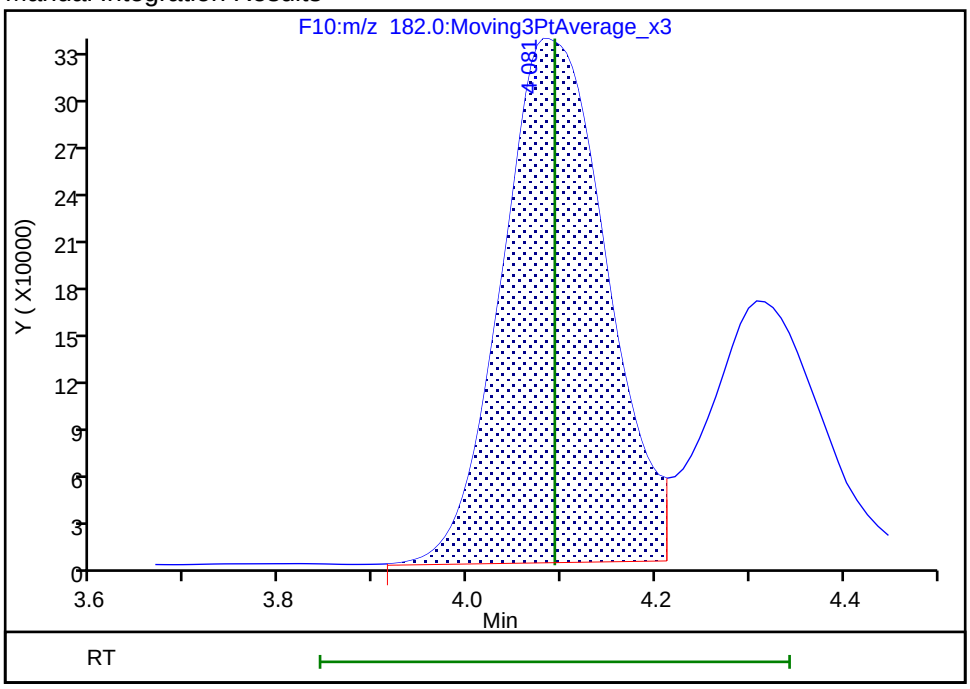
Not Detected
Expected RT: 4.09

Processing Integration Results



Manual Integration Results

RT: 4.08
Area: 2556819
Amount: 49.430630
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:35:15
Audit Action: Manually Integrated Audit Reason: Assign Peak

Report Date: 15-Apr-2022 08:03:20 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14043.d

Injection Date:	14-Apr-2022 16:51:37	Instrument ID:	LC_LCMS7
Lims ID:	CCV		
Client ID:			
Operator ID:	acm	ALS Bottle#:	5 Worklist Smp#: 43
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F10:SIR

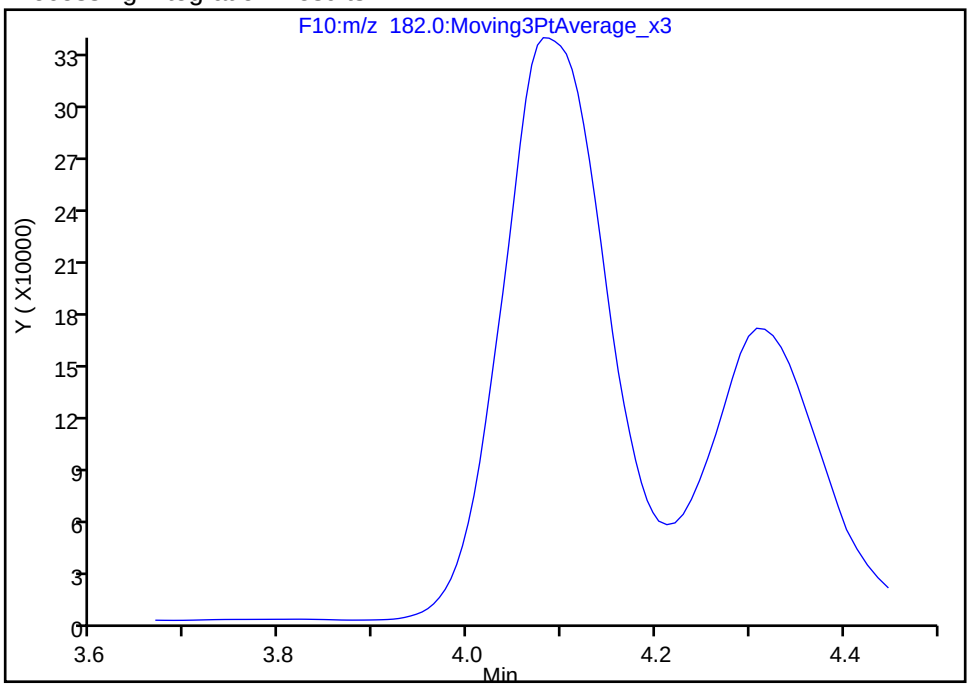
17 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

Processing Integration Results

Not Detected

Expected RT: 4.09



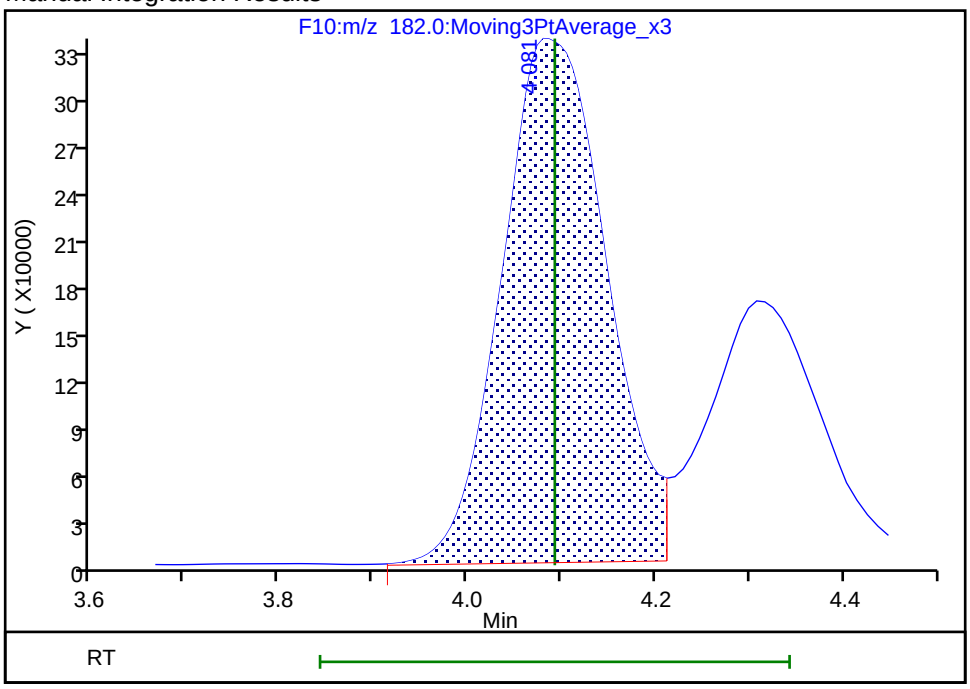
Manual Integration Results

RT: 4.08

Area: 2556819

Amount: 49.430630

Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:35:15

Audit Action: Manually Integrated Audit Reason: Assign Peak

Report Date: 15-Apr-2022 08:03:20 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14043.d

Injection Date: 14-Apr-2022 16:51:37 Instrument ID: LC_LCMS7

Lims ID: CCV

Client ID:

Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 43

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

Column: Detector F10:SIR

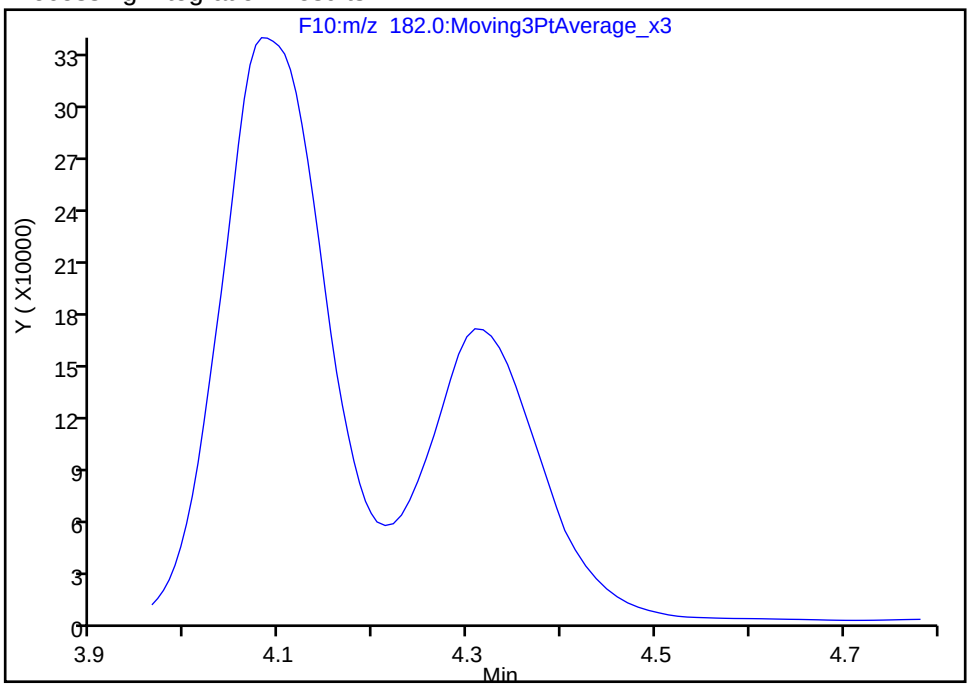
19 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

Not Detected

Expected RT: 4.32

Processing Integration Results



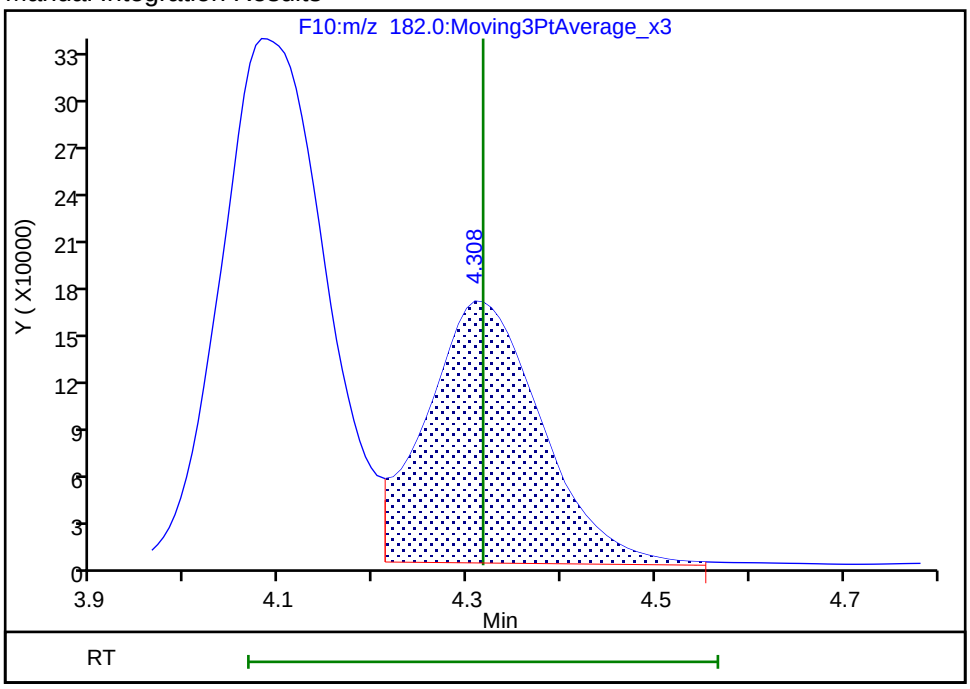
Manual Integration Results

RT: 4.31

Area: 1395166

Amount: 51.015706

Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:35:20

Audit Action: Manually Integrated Audit Reason: Assign Peak

Report Date: 15-Apr-2022 08:03:20 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14043.d

Injection Date:	14-Apr-2022 16:51:37	Instrument ID:	LC_LCMS7
Lims ID:	CCV		
Client ID:			
Operator ID:	acm	ALS Bottle#:	5 Worklist Smp#: 43
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F10:SIR

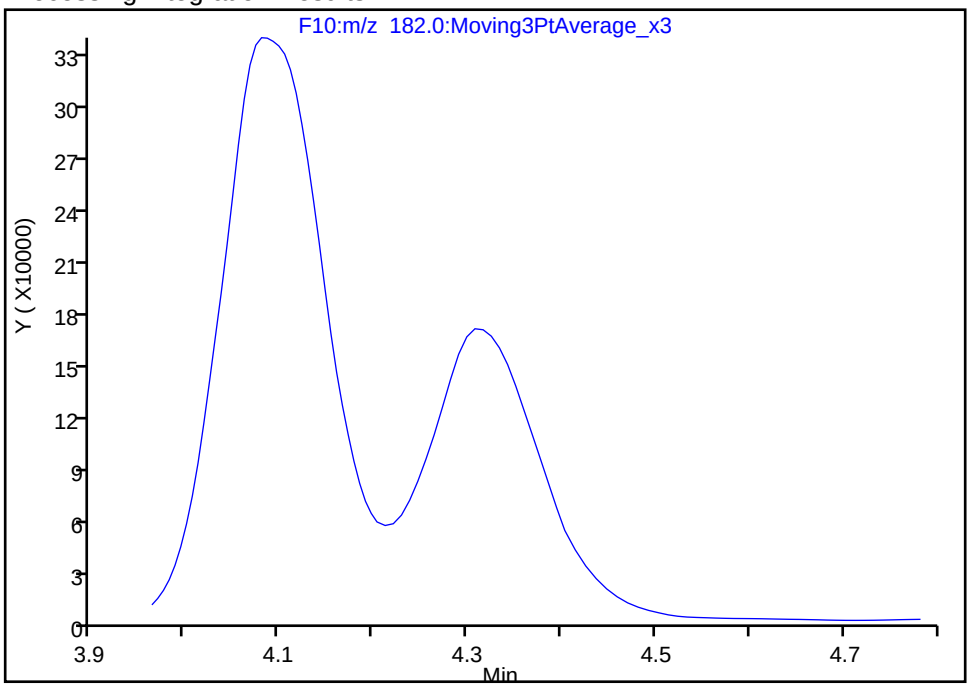
19 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

Not Detected

Expected RT: 4.32

Processing Integration Results



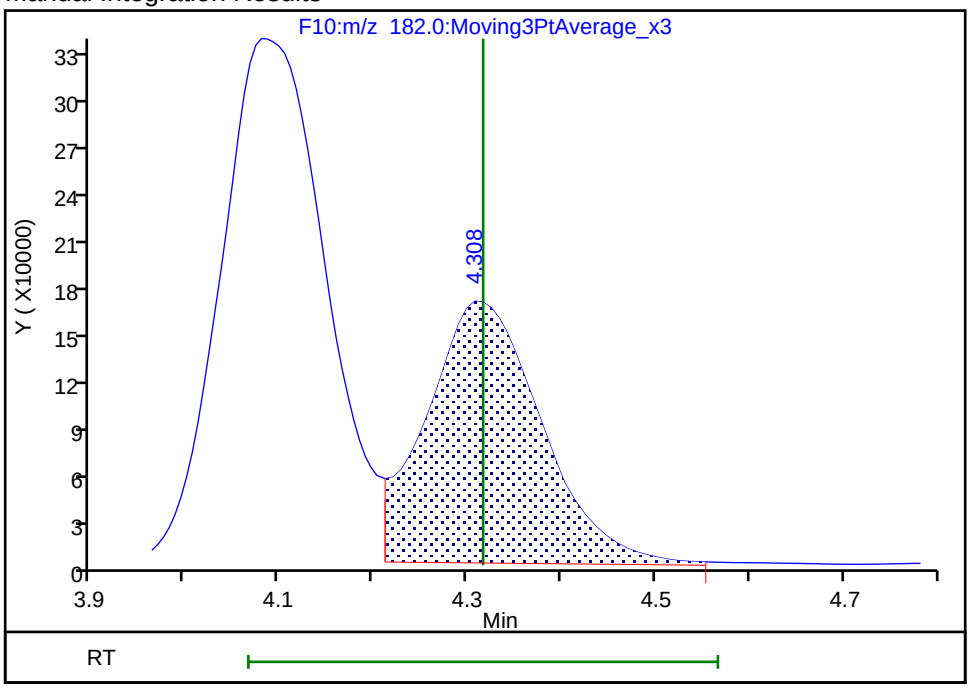
Manual Integration Results

RT: 4.31

Area: 1395166

Amount: 51.015706

Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:35:20

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Lab Sample ID: CCV 280-571897/53 Calibration Date: 04/14/2022 17:57

Instrument ID: LC_LCMS7 Calib Start Date: 04/14/2022 12:27

GC Column: Synergi Hydro ID: Calib End Date: 04/14/2022 13:07

Lab File ID: ex722D14053.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin1		2.409		112	100	12.4	30.0
TNX	Lin1		4.784		98.6	100	-1.5	30.0
DNX	Lin1		6.678		92.9	100	-7.2	30.0
MNX	Lin1		1.828		111	117	-4.9	30.0
RDX	Qua1		0.5908		93.7	100	-6.3	30.0
1,3,5-Trinitrobenzene	Lin1		1.596		91.2	100	-9.0	30.0
Tetryl	Lin1		2.772		104	100	3.9	30.0
1,3-Dinitrobenzene	Lin1		1.068		100	100	-0.0	30.0
Nitroglycerin	Lin1		0.9906		103	101	2.8	30.0
3,5-Dinitroaniline	Lin1		1.364		93.7	100	-6.3	30.0
2,4,6-Trinitrotoluene	Lin1		2.329		97.7	100	-2.7	30.0
Nitrobenzene	Lin1		0.4596		96.2	100	-4.2	30.0
4-Amino-2,6-dinitrotoluene	Lin1		1.573		97.1	100	-3.0	30.0
2-Amino-4,6-dinitrotoluene	Lin1		2.129		95.2	100	-5.2	30.0
2,6-Dinitrotoluene	Lin1		1.990		99.1	100	-1.3	30.0
2,4-Dinitrotoluene	Lin1		1.031		97.3	100	-3.0	30.0
PETN	Lin1		0.1990		99.2	99.6	-0.4	30.0
o-Nitrotoluene	Lin1		0.2857		96.9	100	-3.1	30.0
p-Nitrotoluene	Lin1		0.2613		101	100	0.4	30.0
m-Nitrotoluene	Lin1		0.1577		104	100	3.6	30.0
Nitrobenzene-d5	Lin1		0.5608		96.8	100	-3.3	30.0

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14053.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 14-Apr-2022 17:57:36 ALS Bottle#: 6 Worklist Smp#: 53
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:26 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:37:38
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	213481	112.4	102	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		110780	125.0	3.7	
36 TNX								
144.0	1.385	1.385	0.0	0.755	4626552	98.6	809	
33 DNX								
160.0	1.489	1.489	0.0	0.811	6457611	92.9	467	
34 MNX								
160.0	1.670	1.670	0.0	0.910	2061361	110.9	140	
4 RDX								
281.2	1.833	1.833	0.0	0.998	298933	93.7	113	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		632466	125.0	174	
5 1,3,5-Trinitrobenzene								
213.0	2.296	2.299	-0.003	0.768	1544504	91.2	198	
6 Tetryl								
241.1	2.679	2.679	0.0	0.896	2683765	104.1	154	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1249730	129.4	376	
8 1,3-Dinitrobenzene								
168.0	3.022	3.022	0.0	1.010	1033659	100.1	178	
9 Nitroglycerin								
62.0	3.040	3.040	0.0	1.016	962733	103.4	492	
28 3,5-Dinitroaniline								M
183.0	3.210	3.200	0.010	1.073	4074044	93.7	55.8	M

Report Date: 15-Apr-2022 08:03:26 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14053.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.281	3.281	0.0	0.768	6985484	97.7	291	
$ 11 Nitrobenzene-d5								
128.0	3.315	3.324	-0.009	0.775	541890	96.8	110	
12 Nitrobenzene								
123.0	3.382	3.382	0.0	0.791	445812	96.2	42.5	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.601	3.611	-0.010	0.842	4702077	97.1	55.2	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.924	3.924	0.0	0.918	6384169	95.2	75.6	
17 2,6-Dinitrotoluene								
182.0	4.087	4.093	-0.006	0.956	5967004	99.1	749	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3733601	125.0	137	
19 2,4-Dinitrotoluene								
182.0	4.316	4.316	0.0	1.010	3090327	97.3	339	
20 PETN								
61.8	4.628	4.638	-0.010	1.082	592105	99.2	80.1	
22 o-Nitrotoluene								
137.0	4.927	4.932	-0.005	1.152	853369	96.9	505	
23 p-Nitrotoluene								
137.0	5.231	5.230	0.001	1.223	782021	100.6	449	
24 m-Nitrotoluene								
137.0	5.614	5.614	0.0	1.313	471628	103.7	251	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

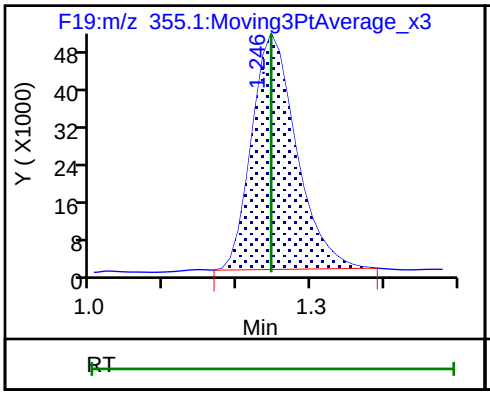
8321EXcalprim_00029	Amount Added: 10.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 10.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 15-Apr-2022 08:03:26 Chrom Revision: 2.3 12-Apr-2022 20:29:44

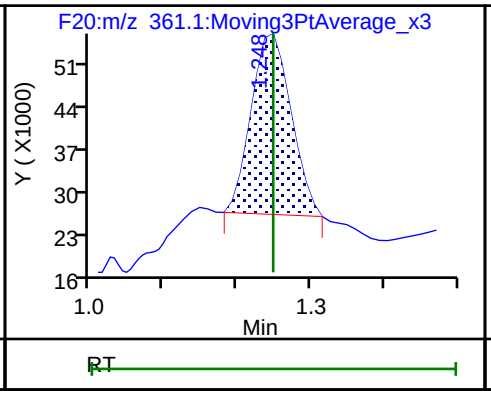
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14053.d
Injection Date: 14-Apr-2022 17:57:36 Instrument ID: LC_LCMS7
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 6 Worklist Smp#: 53
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

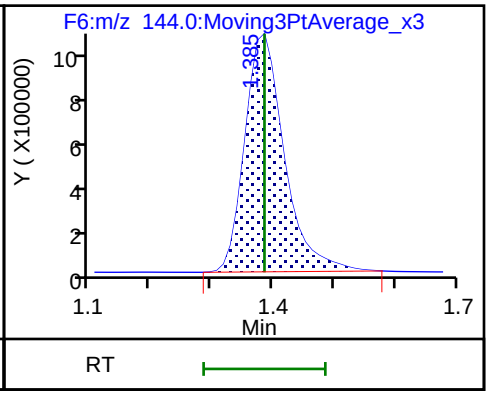
2 HMX



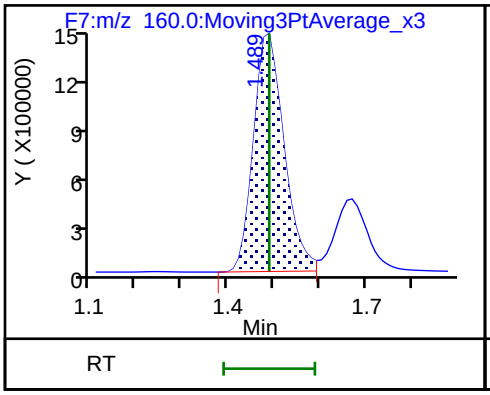
* 1 HMX-13C4



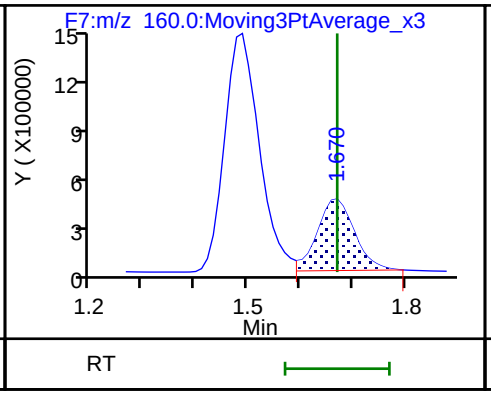
36 TNX



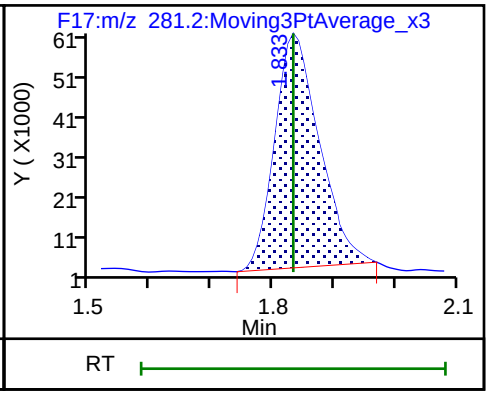
33 DNX



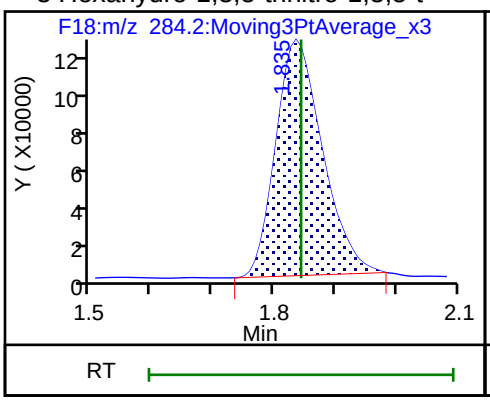
34 MNX



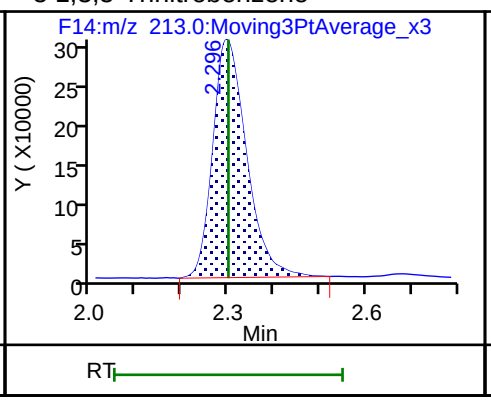
4 RDX



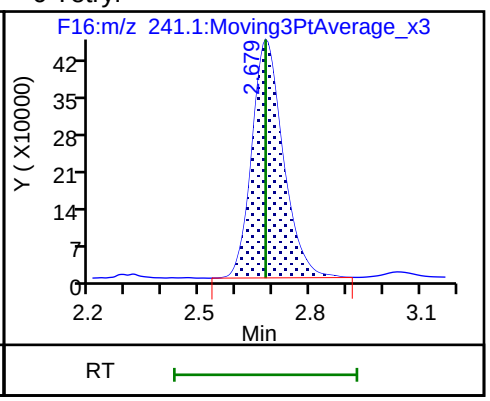
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



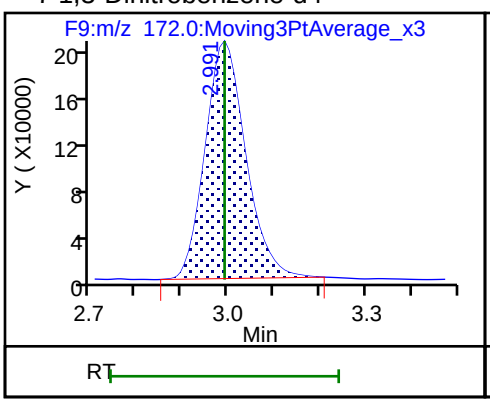
5 1,3,5-Trinitrobenzene



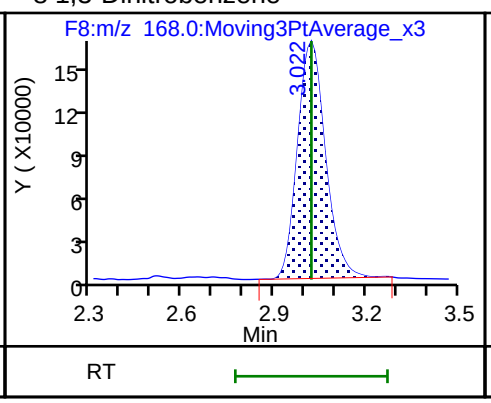
6 Tetryl



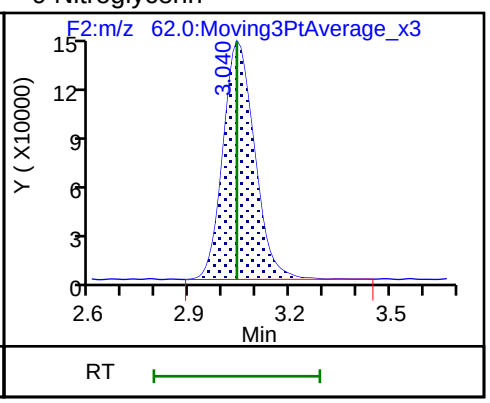
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



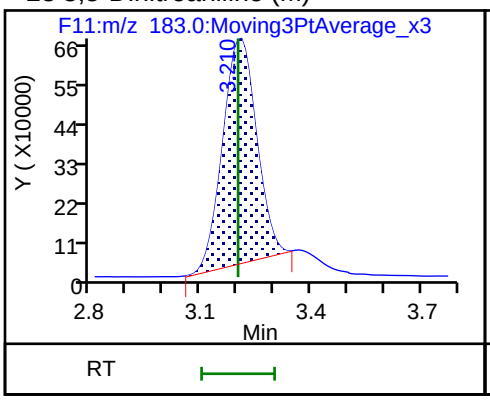
9 Nitroglycerin



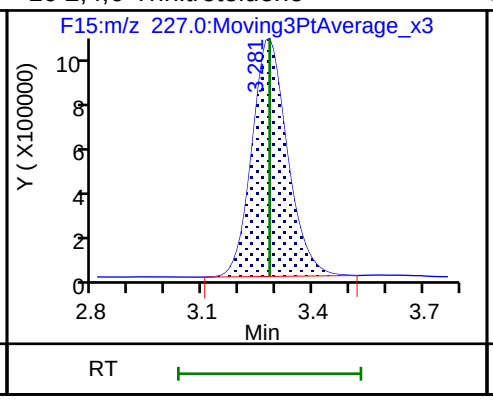
Report Date: 15-Apr-2022 08:03:27 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14053.d

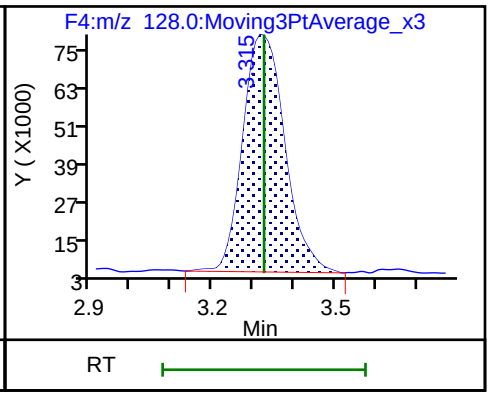
28 3,5-Dinitroaniline (M)



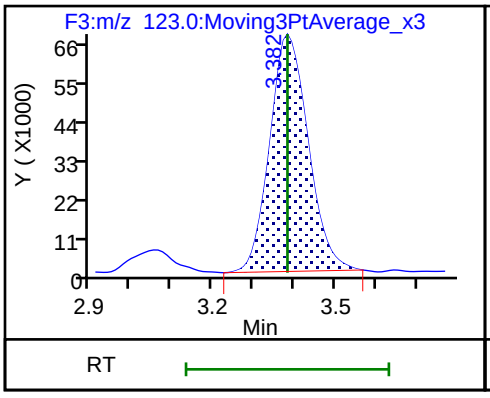
10 2,4,6-Trinitrotoluene



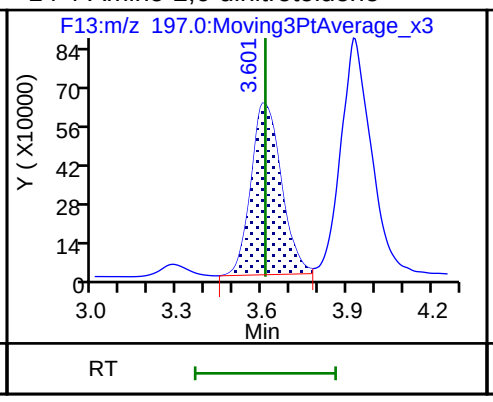
$ 11 Nitrobenzene-d5



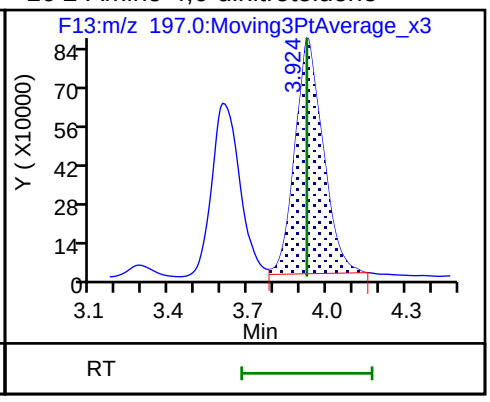
12 Nitrobenzene



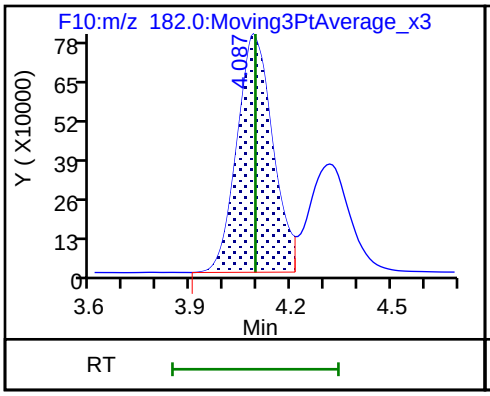
14 4-Amino-2,6-dinitrotoluene



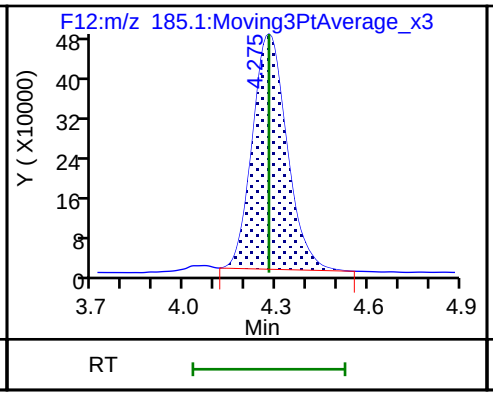
16 2-Amino-4,6-dinitrotoluene



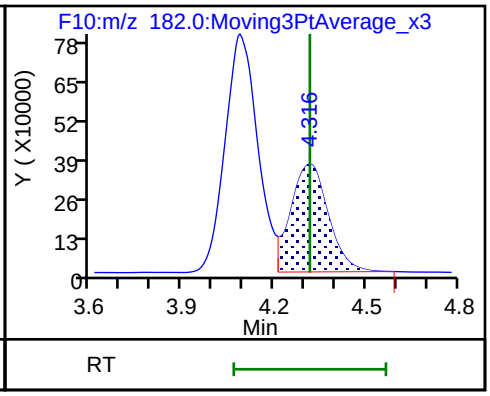
17 2,6-Dinitrotoluene



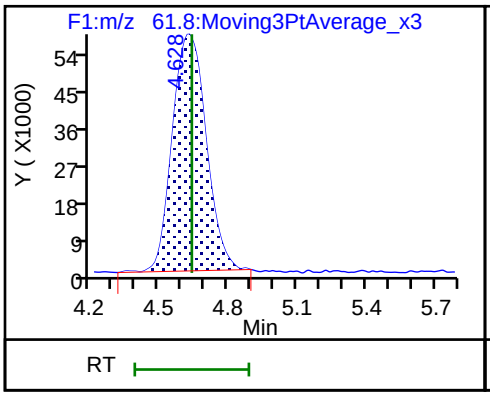
* 18 2,4-dinitrotoluene-d3



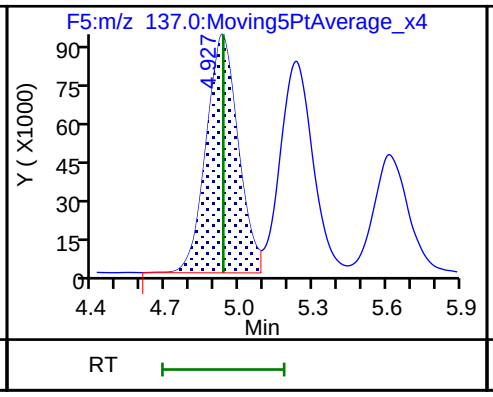
19 2,4-Dinitrotoluene



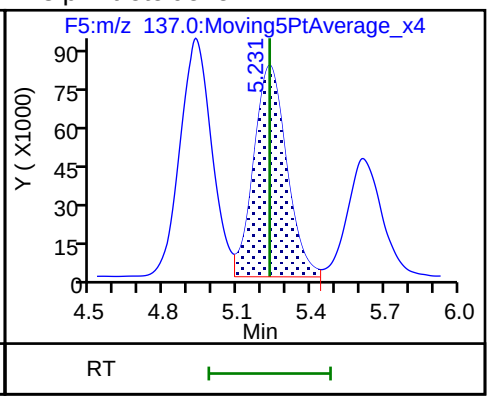
20 PETN



22 o-Nitrotoluene



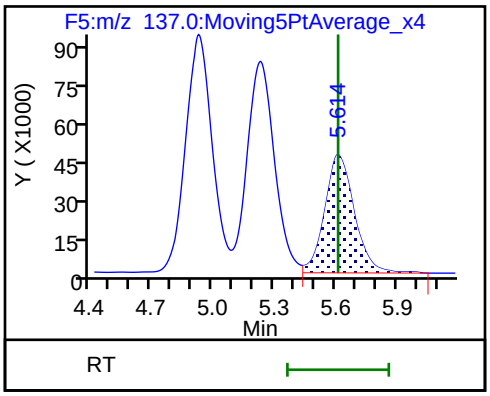
23 p-Nitrotoluene



Report Date: 15-Apr-2022 08:03:27 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14053.d

24 m-Nitrotoluene



Report Date: 15-Apr-2022 08:03:27

Chrom Revision: 2.3 12-Apr-2022 20:29:44
Manual Integration/User Assign Peak Report

Eurofins Denver

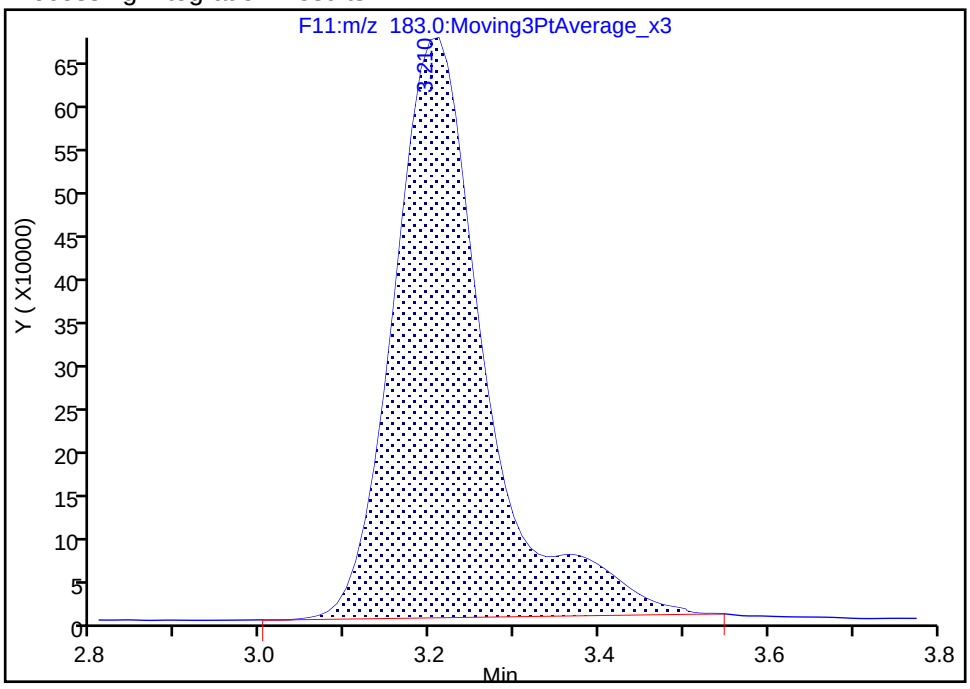
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14053.d
Injection Date: 14-Apr-2022 17:57:36 Instrument ID: LC_LCMS7
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 6 Worklist Smp#: 53
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F11:SIR

28 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

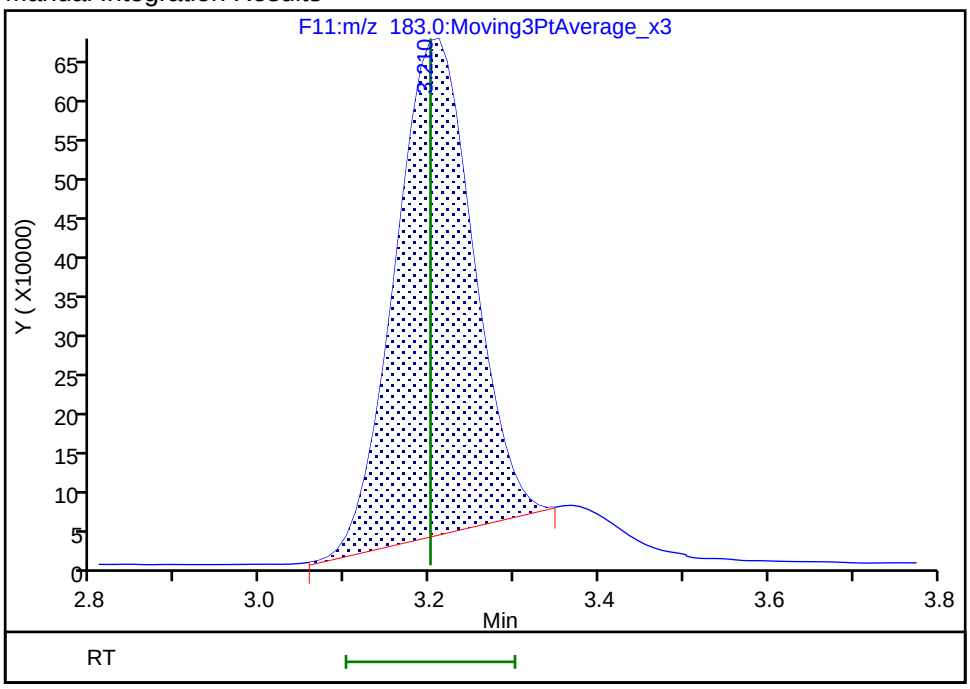
Processing Integration Results

RT: 3.21
Area: 5020831
Amount: 115.6629
Amount Units: ug/l



Manual Integration Results

RT: 3.21
Area: 4074044
Amount: 93.678571
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:37:33
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Lab Sample ID: CCV 280-571897/62 Calibration Date: 04/14/2022 18:56

Instrument ID: LC_LCMS7 Calib Start Date: 04/14/2022 12:27

GC Column: Synergi Hydro ID: Calib End Date: 04/14/2022 13:07

Lab File ID: ex722D14062.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin1		2.007		46.0	50.0	-8.0	30.0
TNX	Lin1		5.145		52.4	50.1	4.7	30.0
DNX	Lin1		7.707		52.9	50.1	5.7	30.0
MNX	Lin1		1.989		59.6	58.4	2.1	30.0
RDX	Qua1		0.6947		50.1	50.0	0.2	30.0
1,3,5-Trinitrobenzene	Lin1		1.711		48.7	50.1	-2.7	30.0
Tetryl	Lin1		2.846		53.5	50.1	6.8	30.0
1,3-Dinitrobenzene	Lin1		1.116		51.9	50.1	3.5	30.0
Nitroglycerin	Lin1		1.004		51.9	50.3	3.1	30.0
3,5-Dinitroaniline	Lin1		1.412		48.0	50.0	-3.9	30.0
2,4,6-Trinitrotoluene	Lin1		2.379		49.3	50.2	-1.7	30.0
Nitrobenzene	Lin1		0.4869		50.8	50.2	1.3	30.0
4-Amino-2,6-dinitrotoluene	Lin1		1.661		50.9	50.1	1.6	30.0
2-Amino-4,6-dinitrotoluene	Lin1		2.174		48.3	50.2	-3.7	30.0
2,6-Dinitrotoluene	Lin1		2.058		50.9	50.2	1.5	30.0
2,4-Dinitrotoluene	Lin1		1.078		50.4	50.2	0.4	30.0
PETN	Lin1		0.2059		50.7	49.8	1.8	30.0
o-Nitrotoluene	Lin1		0.2988		50.5	50.0	1.0	30.0
p-Nitrotoluene	Lin1		0.2630		50.3	50.1	0.4	30.0
m-Nitrotoluene	Lin1		0.1540		50.4	50.1	0.6	30.0
Nitrobenzene-d5	Lin1		0.5652		47.8	50.0	-4.4	30.0

Report Date: 15-Apr-2022 08:03:32 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14062.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 14-Apr-2022 18:56:57 ALS Bottle#: 5 Worklist Smp#: 62
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7
Sublist: chrom-8330_SIR*sub4

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:32 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:40:09
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	1.007	103144	46.0	78.8	
* 1 HMX-13C4								
361.1	1.237	1.248	-0.011		128465	125.0	94.6	
36 TNX								
144.0	1.374	1.385	-0.011	0.749	2142931	52.4	851	
33 DNX								
160.0	1.477	1.489	-0.012	0.805	3209990	52.9	458	
34 MNX								
160.0	1.659	1.670	-0.011	0.904	965688	59.6	130	
4 RDX								
281.2	1.833	1.833	0.0	0.998	158626	50.1	45.8	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		570877	125.0	160	
5 1,3,5-Trinitrobenzene								
213.0	2.296	2.299	-0.003	0.768	713398	48.7	178	
6 Tetryl								
241.1	2.679	2.679	0.0	0.896	1186658	53.5	148	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1076448	129.4	323	
8 1,3-Dinitrobenzene								
168.0	3.010	3.022	-0.012	1.007	465251	51.9	127	
9 Nitroglycerin								
62.0	3.040	3.040	0.0	1.016	420404	51.9	288	
28 3,5-Dinitroaniline								M
183.0	3.200	3.200	0.0	1.070	1890259	48.0	54.3	M

Report Date: 15-Apr-2022 08:03:32 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14062.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
10 2,4,6-Trinitrotoluene								
227.0	3.272	3.281	-0.009	0.767	3198509	49.3	310	
$ 11 Nitrobenzene-d5								
128.0	3.305	3.324	-0.019	0.775	235234	47.8	39.4	
12 Nitrobenzene								
123.0	3.382	3.382	0.0	0.793	203407	50.8	36.3	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.601	3.611	-0.010	0.844	2226957	50.9	61.5	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.924	3.924	0.0	0.920	2922943	48.3	77.8	
17 2,6-Dinitrotoluene								
182.0	4.081	4.093	-0.012	0.956	2766479	50.9	559	
* 18 2,4-dinitrotoluene-d3								
185.1	4.267	4.275	-0.008		3347535	125.0	138	
19 2,4-Dinitrotoluene								
182.0	4.308	4.316	-0.008	1.010	1448911	50.4	253	
20 PETN								
61.8	4.628	4.638	-0.010	1.085	274614	50.7	45.8	
22 o-Nitrotoluene								
137.0	4.922	4.932	-0.010	1.154	400160	50.5	199	
23 p-Nitrotoluene								
137.0	5.221	5.230	-0.009	1.224	352869	50.3	179	
24 m-Nitrotoluene								
137.0	5.614	5.614	0.0	1.316	206365	50.4	95.4	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

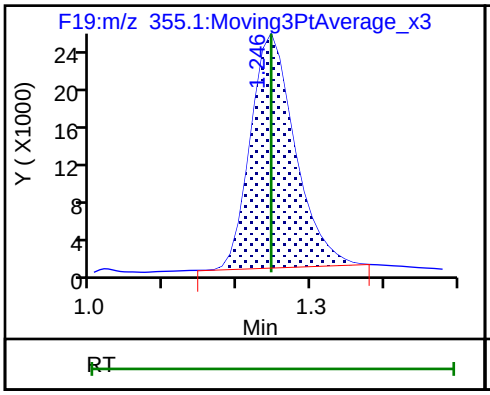
8321EXcalprim_00029	Amount Added: 5.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 5.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 15-Apr-2022 08:03:32 Chrom Revision: 2.3 12-Apr-2022 20:29:44

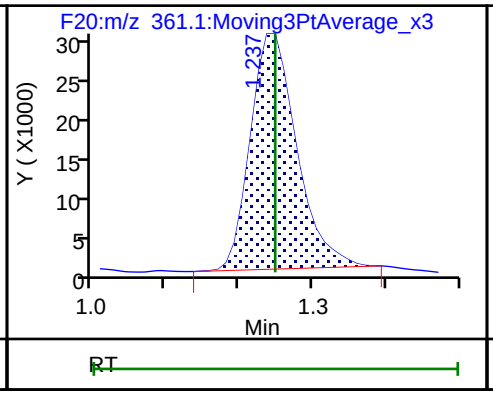
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14062.d
Injection Date: 14-Apr-2022 18:56:57 Instrument ID: LC_LCMS7
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 62
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

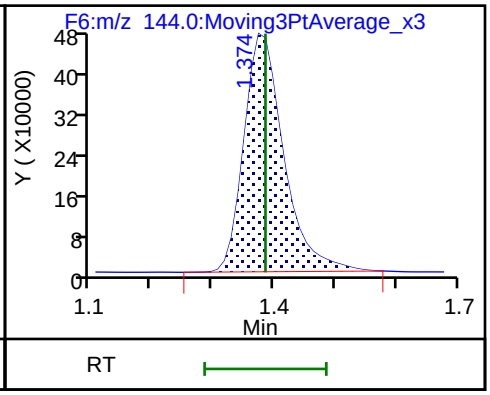
2 HMX



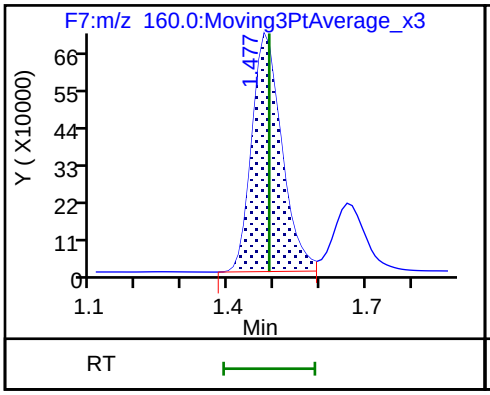
* 1 HMX-13C4



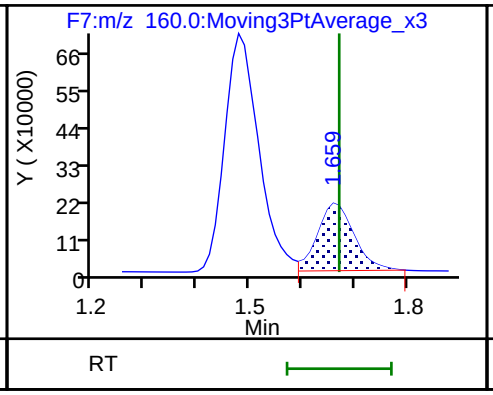
36 TNX



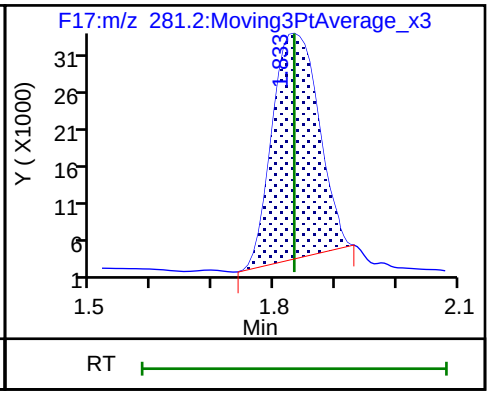
33 DNX



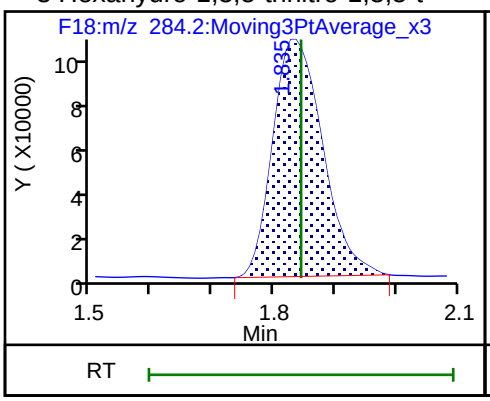
34 MNX



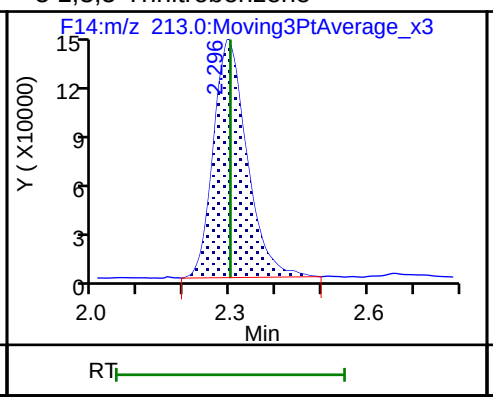
4 RDX



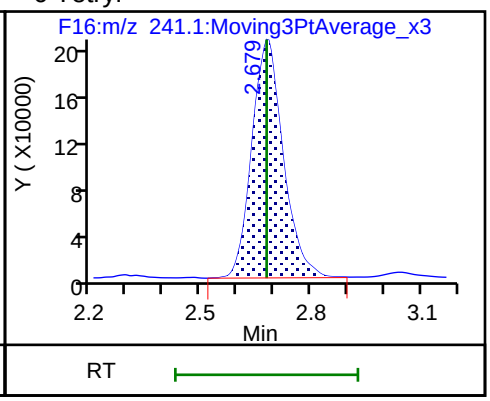
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



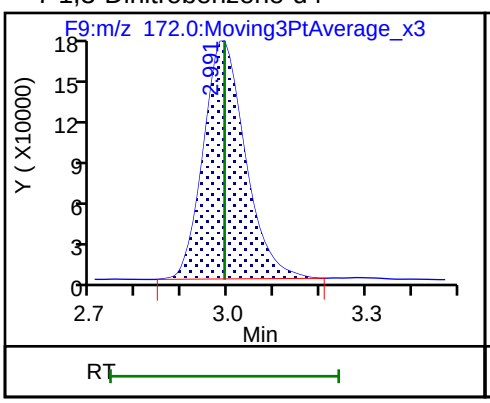
5 1,3,5-Trinitrobenzene



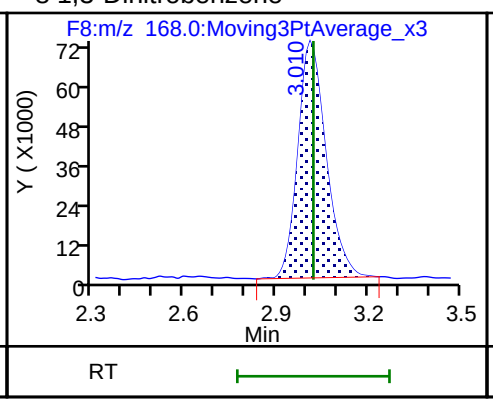
6 Tetryl



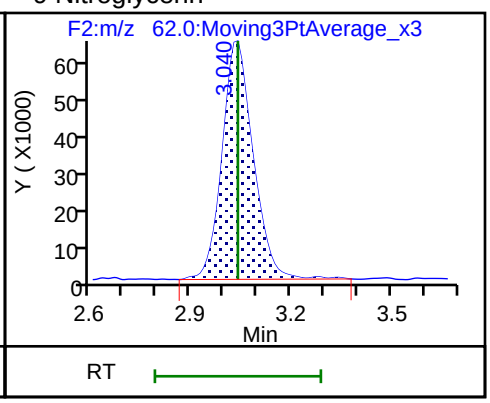
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



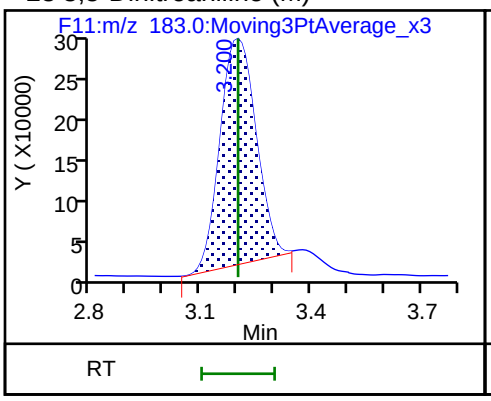
9 Nitroglycerin



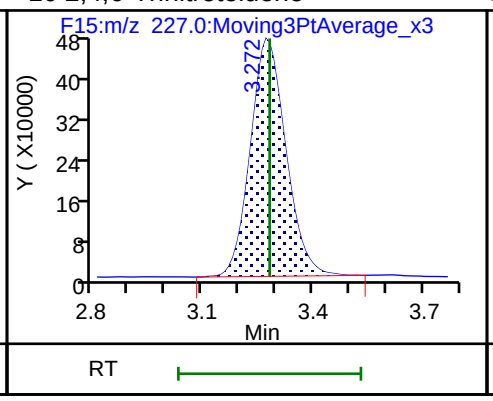
Report Date: 15-Apr-2022 08:03:32 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14062.d

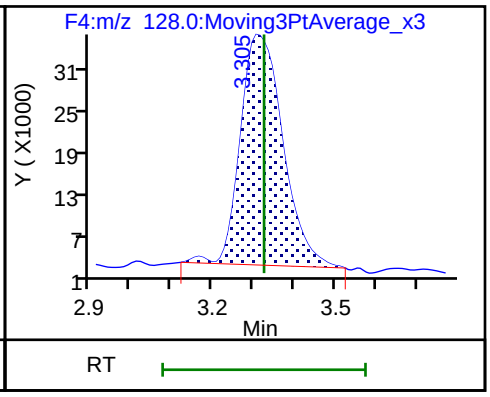
28 3,5-Dinitroaniline (M)



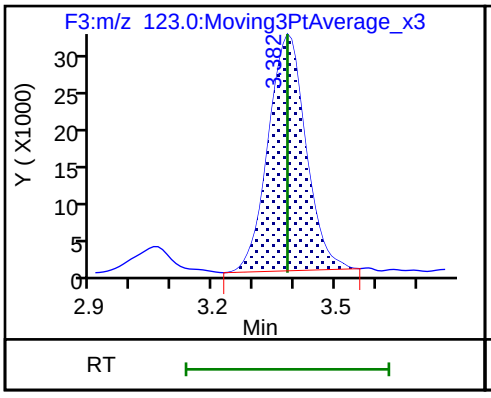
10 2,4,6-Trinitrotoluene



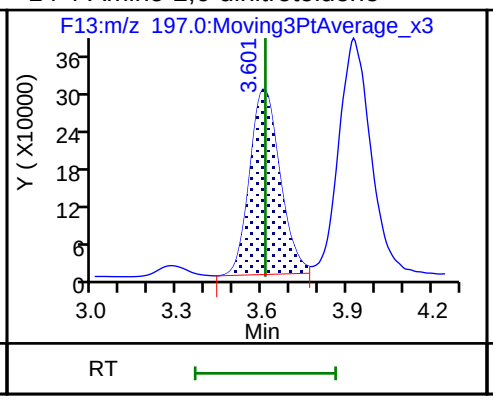
$ 11 Nitrobenzene-d5



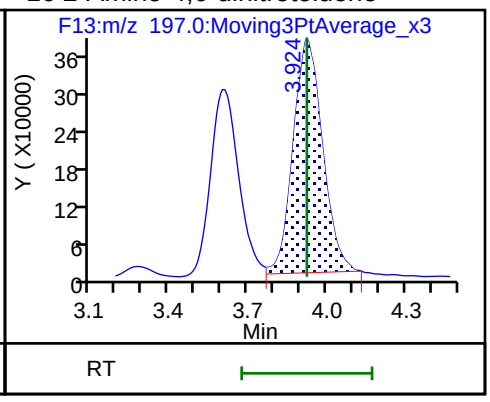
12 Nitrobenzene



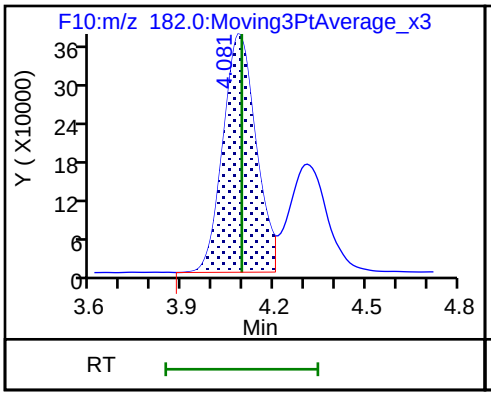
14 4-Amino-2,6-dinitrotoluene



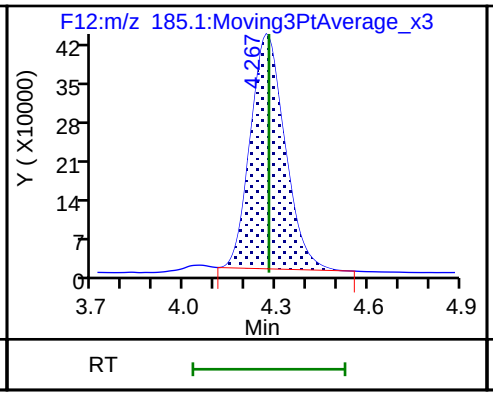
16 2-Amino-4,6-dinitrotoluene



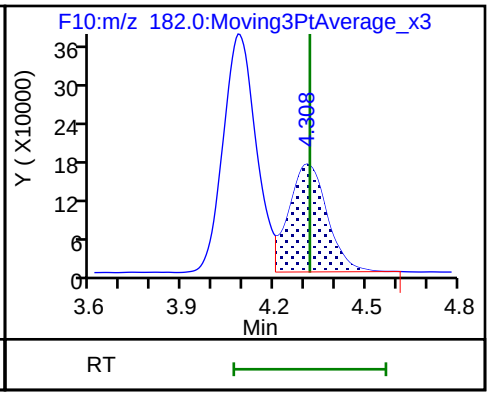
17 2,6-Dinitrotoluene



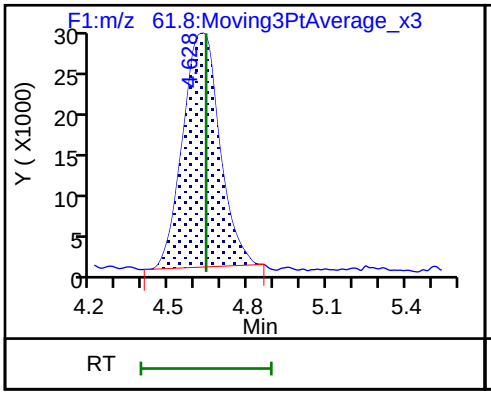
* 18 2,4-dinitrotoluene-d3



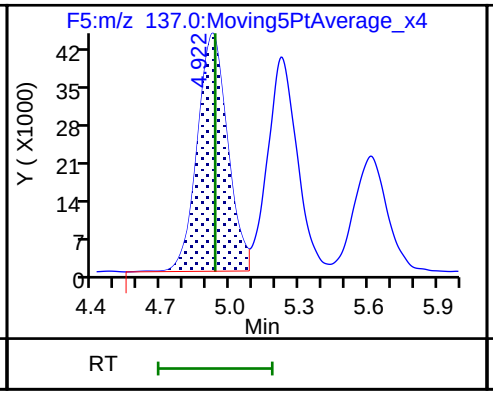
19 2,4-Dinitrotoluene



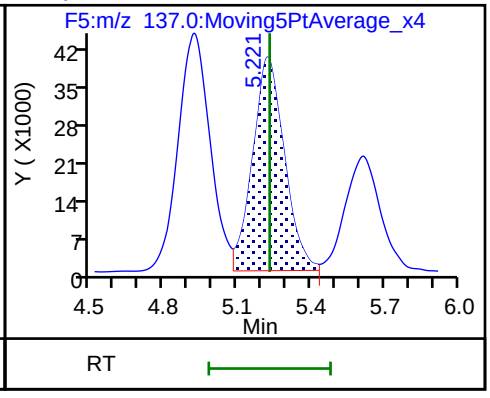
20 PETN



22 o-Nitrotoluene



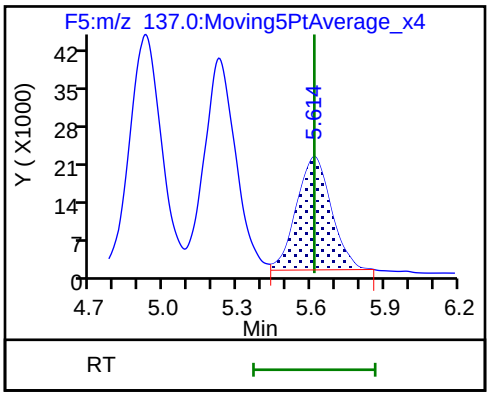
23 p-Nitrotoluene



Report Date: 15-Apr-2022 08:03:32 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14062.d

24 m-Nitrotoluene



Report Date: 15-Apr-2022 08:03:32 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14062.d

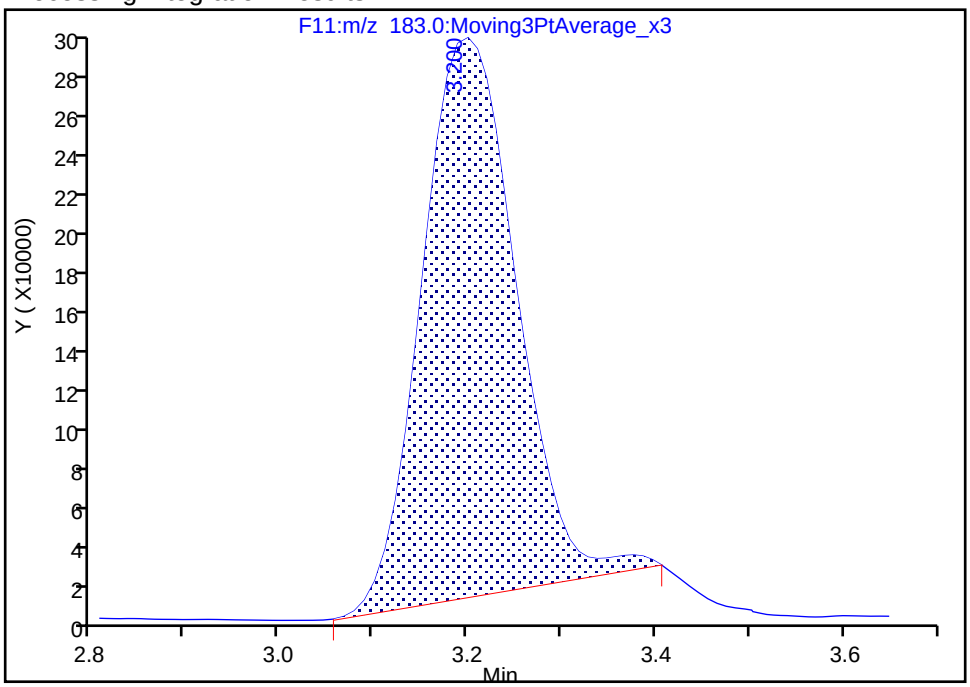
Injection Date:	14-Apr-2022 18:56:57	Instrument ID:	LC_LCMS7
Lims ID:	CCV		
Client ID:			
Operator ID:	acm	ALS Bottle#:	5 Worklist Smp#: 62
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F11:SIR

28 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

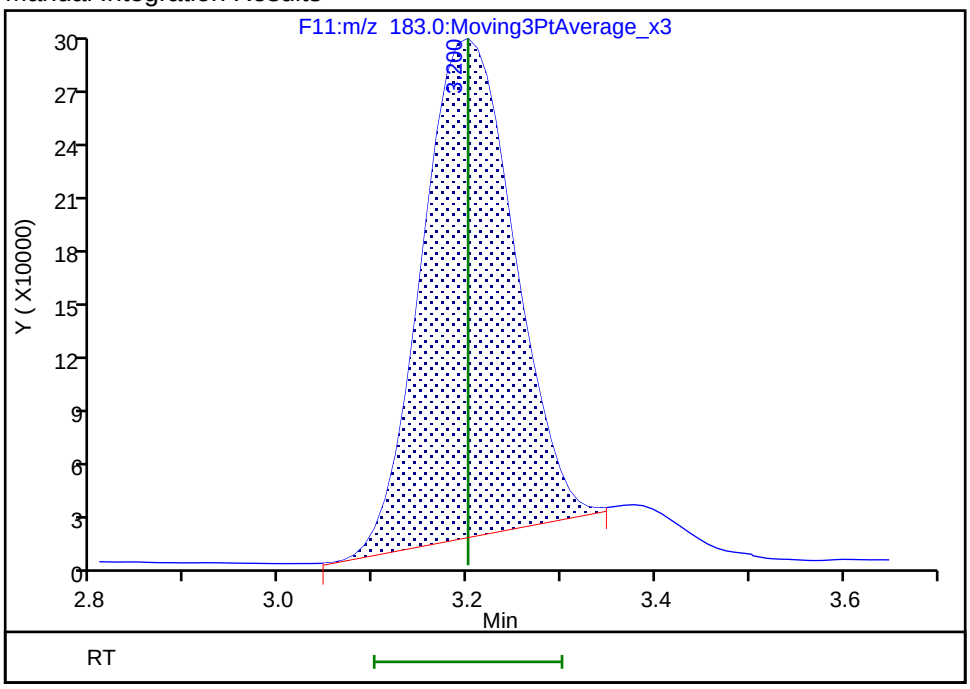
Processing Integration Results

RT: 3.20
Area: 1964932
Amount: 49.967015
Amount Units: ug/l



Manual Integration Results

RT: 3.20
Area: 1890259
Amount: 48.033143
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:40:07

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: | Lab Sample ID: MB 280-570053/1-A
Matrix: Water | Lab File ID: ex722D05012.d
Analysis Method: 8321A | Date Collected:
Extraction Method: 3535 | Date Extracted: 03/29/2022 13:01
Sample wt/vol: 1000(mL) | Date Analyzed: 04/05/2022 11:18
Con. Extract Vol.: 5(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 570784 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.060	U	0.10	0.060	0.023
99-65-0	1,3-Dinitrobenzene	0.060	U	0.10	0.060	0.022
118-96-7	2,4,6-Trinitrotoluene	0.060	U	0.10	0.060	0.030
121-14-2	2,4-Dinitrotoluene	0.060	U	0.10	0.060	0.027
606-20-2	2,6-Dinitrotoluene	0.060	U	0.10	0.060	0.025
35572-78-2	2-Amino-4,6-dinitrotoluene	0.060	U	0.10	0.060	0.030
19406-51-0	4-Amino-2,6-dinitrotoluene	0.060	U	0.10	0.060	0.039
2691-41-0	HMX	0.060	U M	0.10	0.060	0.033
99-08-1	m-Nitrotoluene	0.060	U	0.10	0.060	0.028
98-95-3	Nitrobenzene	0.060	U	0.15	0.060	0.028
55-63-0	Nitroglycerin	0.060	U	0.15	0.060	0.029
88-72-2	o-Nitrotoluene	0.060	U	0.10	0.060	0.032
78-11-5	PETN	0.060	U	0.10	0.060	0.035
99-99-0	p-Nitrotoluene	0.060	U	0.10	0.060	0.029
121-82-4	RDX	0.060	U	0.10	0.060	0.027
479-45-8	Tetryl	0.060	U	0.10	0.060	0.028

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	89		48-130

Report Date: 06-Apr-2022 06:44:09 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05012.d
Lims ID: MB 280-570053/1-A
Client ID:
Sample Type: MB
Inject. Date: 05-Apr-2022 11:18:02 ALS Bottle#: 10 Worklist Smp#: 12
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-570053/1-A
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 06:44:08 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 12:47:06
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		243274	125.0	212	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.785	1.777	0.008		858885	125.0	103	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1840007	129.4	176	
$ 11 Nitrobenzene-d5								
128.0	3.170	3.150	0.020	0.782	802039	89.3	89.6	
* 18 2,4-dinitrotoluene-d3								
185.1	4.054	4.028	0.026		5602028	125.0	112	

QC Flag Legend

Processing Flags

Reagents:

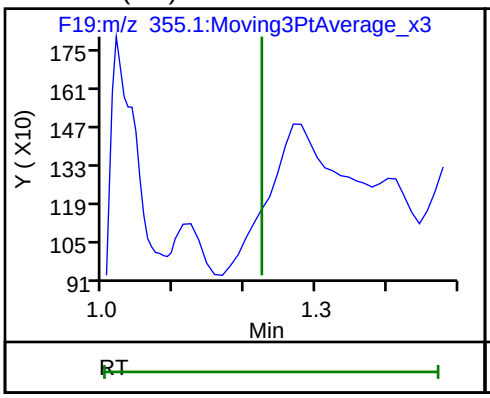
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 06:44:09 Chrom Revision: 2.3 18-Mar-2022 09:07:22

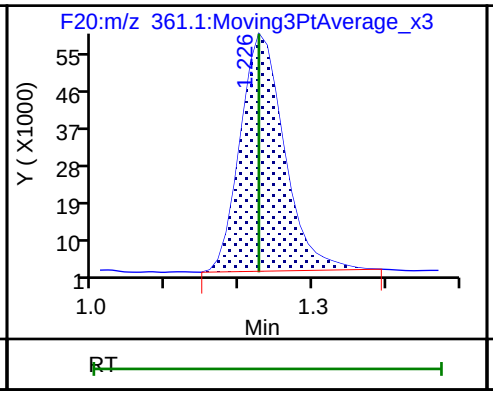
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05012.d
Injection Date: 05-Apr-2022 11:18:02 Instrument ID: LC_LCMS7
Lims ID: MB 280-570053/1-A
Client ID:
Operator ID: acm ALS Bottle#: 10 Worklist Smp#: 12
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

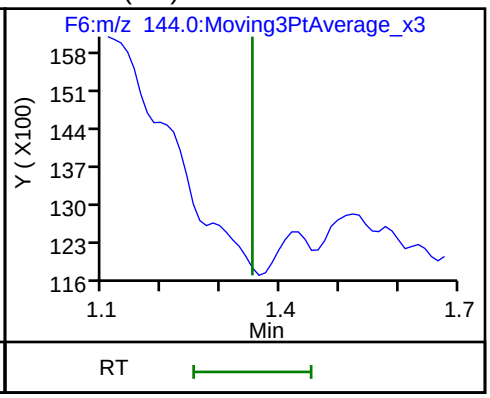
2 HMX (ND)



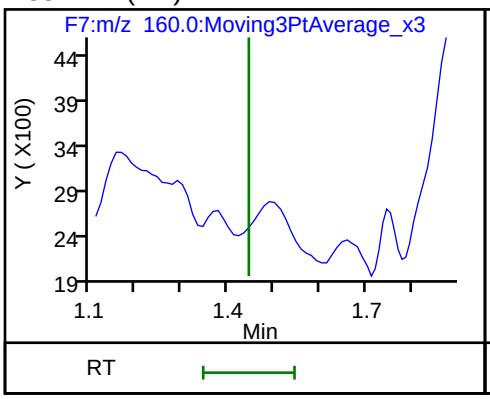
* 1 HMX-13C4



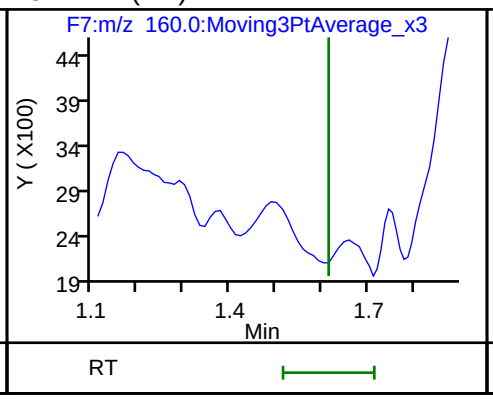
36 TNX (ND)



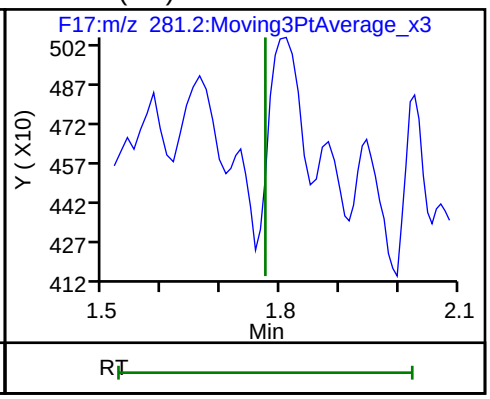
33 DNX (ND)



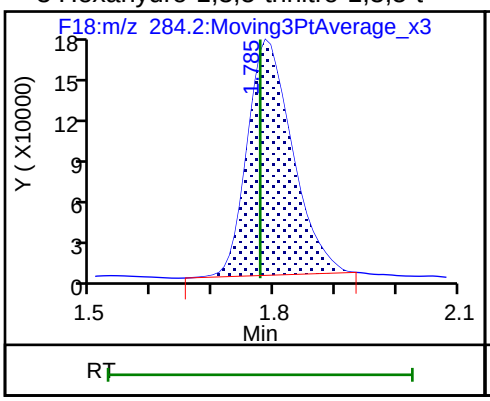
34 MNX (ND)



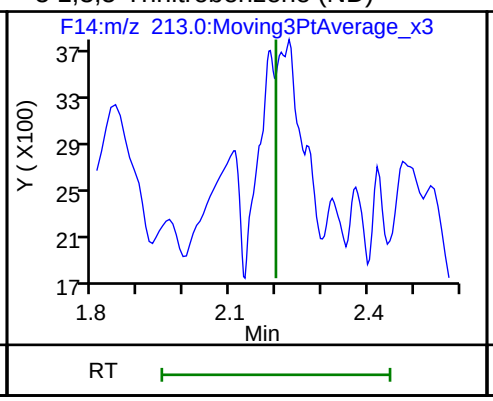
4 RDX (ND)



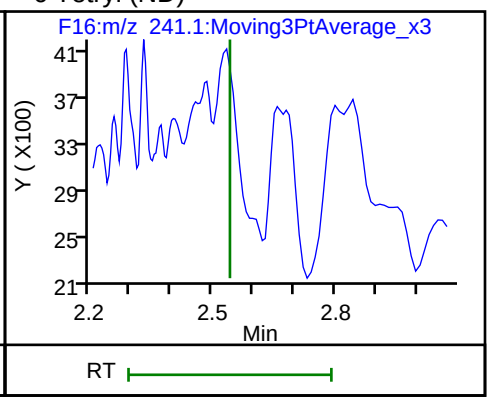
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



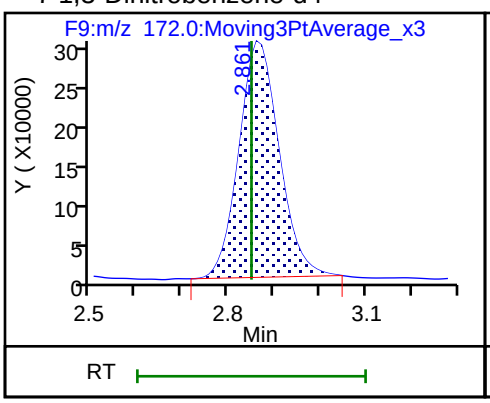
5 1,3,5-Trinitrobenzene (ND)



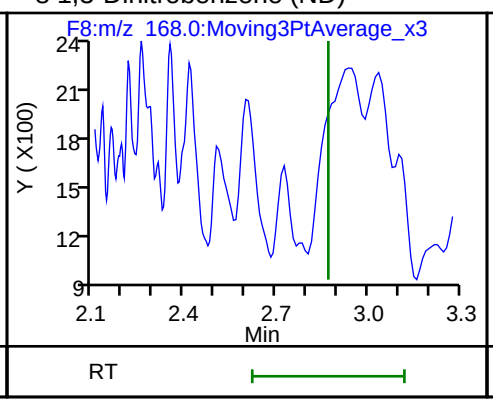
6 Tetryl (ND)



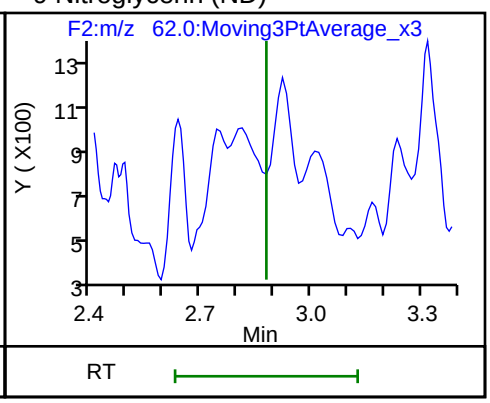
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

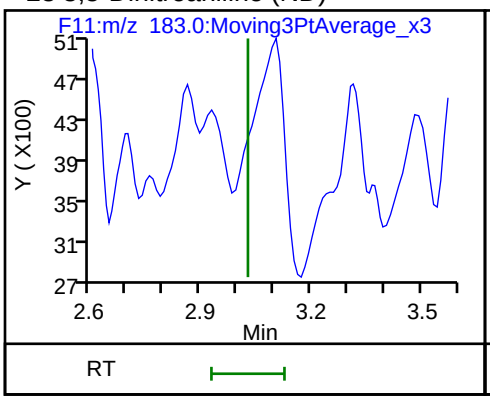


9 Nitroglycerin (ND)

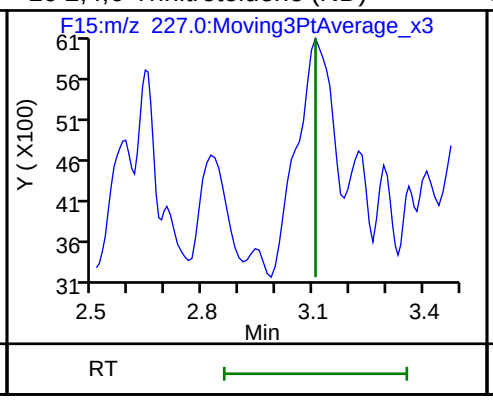


Report Date: 06-Apr-2022 06:44:09 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05012.d

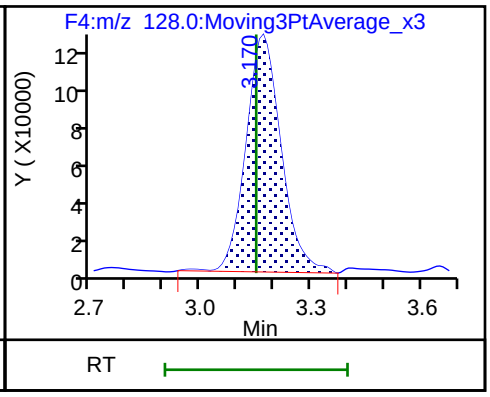
28 3,5-Dinitroaniline (ND)



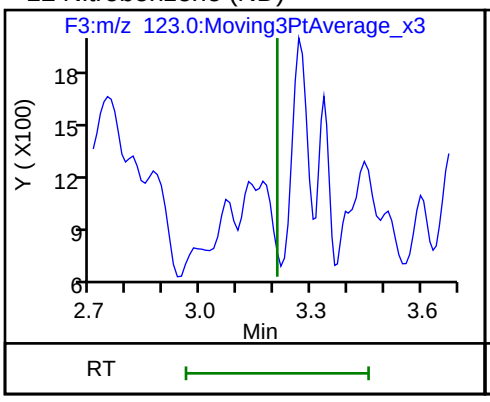
10 2,4,6-Trinitrotoluene (ND)



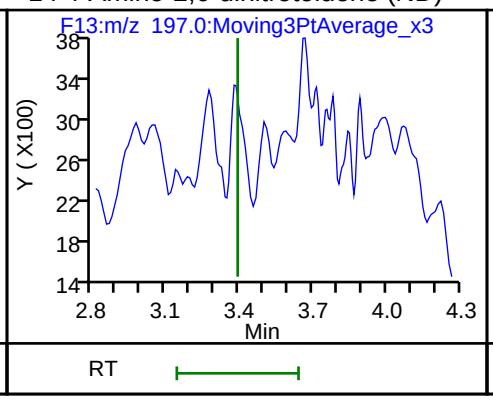
$ 11 Nitrobenzene-d5



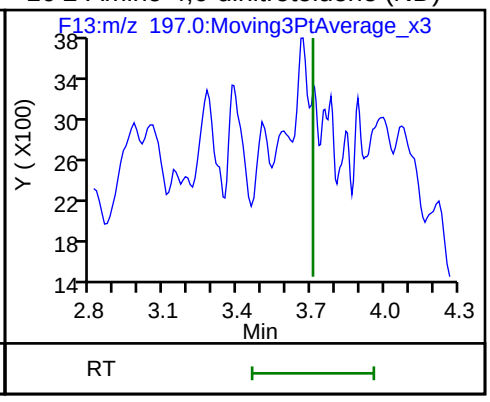
12 Nitrobenzene (ND)



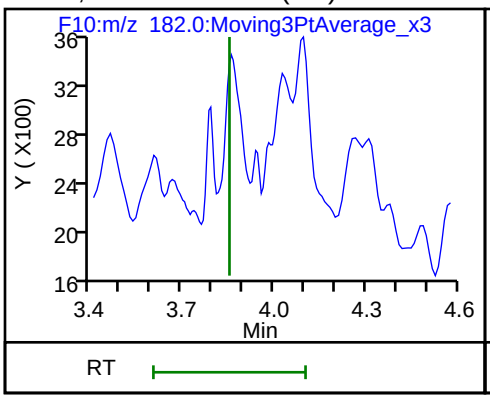
14 4-Amino-2,6-dinitrotoluene (ND)



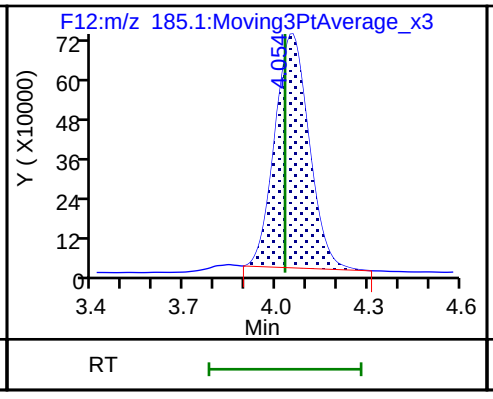
16 2-Amino-4,6-dinitrotoluene (ND)



17 2,6-Dinitrotoluene (ND)



* 18 2,4-dinitrotoluene-d3



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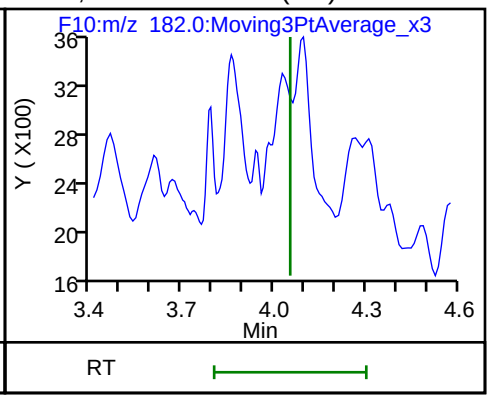
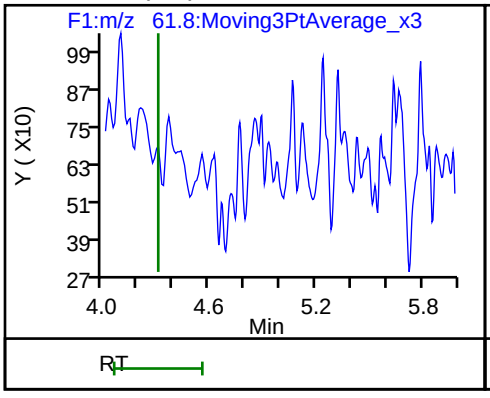
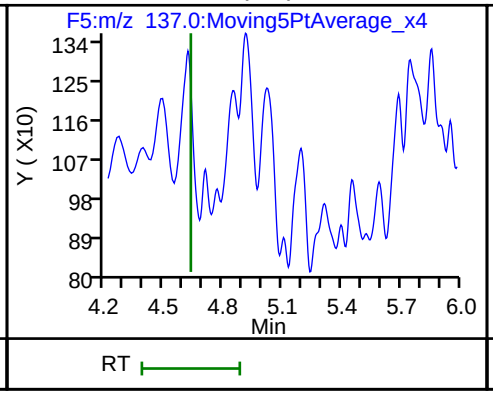


20 PETN (ND)



22 o-Nitrotoluene (ND)



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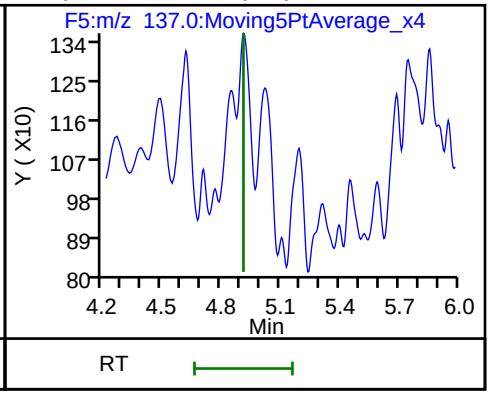
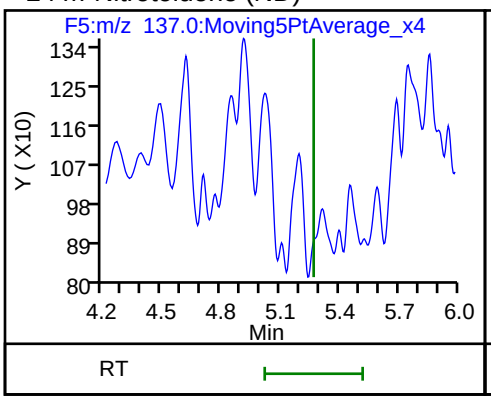


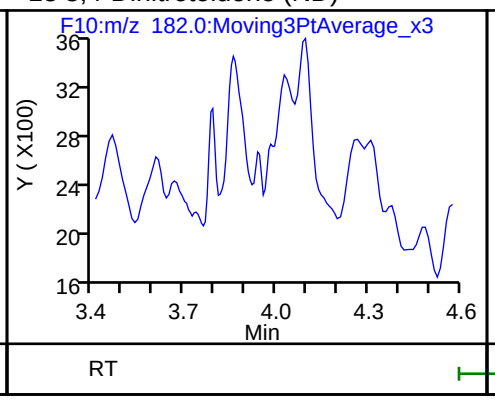
Report Date: 06-Apr-2022 06:44:09 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05012.d

24 m-Nitrotoluene (ND)



13 3,4-Dinitrotoluene (ND)



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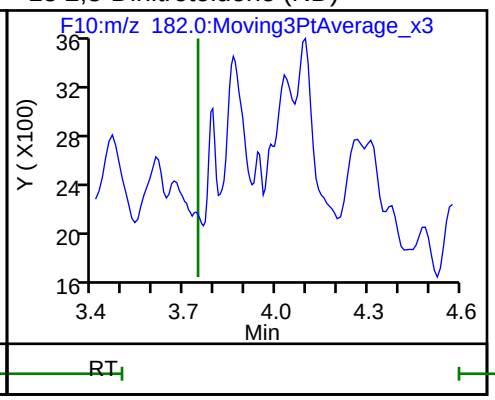
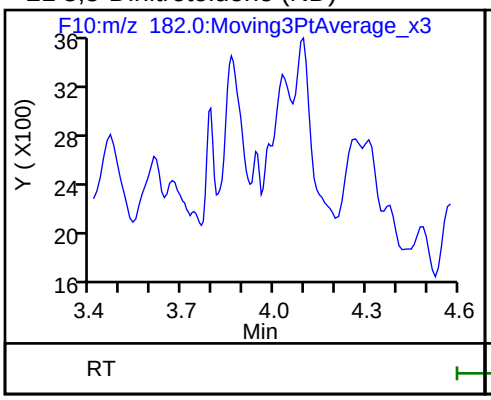
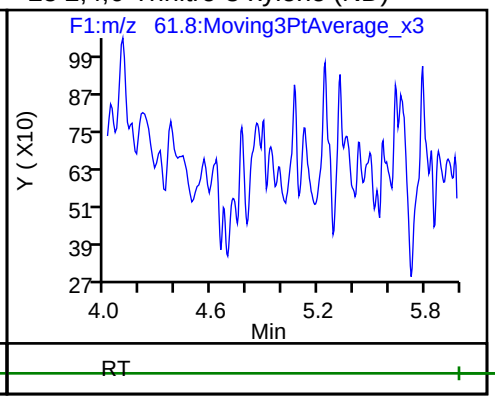


21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 06-Apr-2022 06:44:09 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05012.d
Lims ID: MB 280-570053/1-A
Client ID:
Sample Type: MB
Inject. Date: 05-Apr-2022 11:18:02 ALS Bottle#: 10 Worklist Smp#: 12
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-570053/1-A
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 06:44:08 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 12:47:06

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	89.3	89.03

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: | Lab Sample ID: MB 280-570718/1-A
Matrix: Solid | Lab File ID: ex722D07012.d
Analysis Method: 8321A | Date Collected:
Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57
Sample wt/vol: 10(g) | Date Analyzed: 04/07/2022 11:38
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571108 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.050	U	0.10	0.050	0.045
99-65-0	1,3-Dinitrobenzene	0.050	U	0.10	0.050	0.045
118-96-7	2,4,6-Trinitrotoluene	0.050	U	0.10	0.050	0.037
121-14-2	2,4-Dinitrotoluene	0.050	U	0.10	0.050	0.047
606-20-2	2,6-Dinitrotoluene	0.050	U	0.10	0.050	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.050	U	0.10	0.050	0.050
19406-51-0	4-Amino-2,6-dinitrotoluene	0.050	U	0.10	0.050	0.031
2691-41-0	HMX	0.050	U M	0.10	0.050	0.046
99-08-1	m-Nitrotoluene	0.050	U	0.10	0.050	0.043
98-95-3	Nitrobenzene	0.050	U M	0.11	0.050	0.038
55-63-0	Nitroglycerin	0.050	U	0.10	0.050	0.029
88-72-2	o-Nitrotoluene	0.050	U	0.10	0.050	0.043
78-11-5	PETN	0.050	U	0.10	0.050	0.034
99-99-0	p-Nitrotoluene	0.050	U	0.10	0.050	0.049
121-82-4	RDX	0.050	U	0.12	0.050	0.043
479-45-8	Tetryl	0.050	U M	0.10	0.050	0.039

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	98		68-140

Report Date: 08-Apr-2022 07:32:22 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07012.d
Lims ID: MB 280-570718/1-A
Client ID:
Sample Type: MB
Inject. Date: 07-Apr-2022 11:38:36 ALS Bottle#: 10 Worklist Smp#: 12
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-570718/1-A
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:21 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 12:34:38
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		132705	125.0	129	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		371603	125.0	98.6	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.030	3.030	0.0		1290098	129.4	239	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.774	616031	98.3	102	
* 18 2,4-dinitrotoluene-d3								
185.1	4.341	4.341	0.0		4070990	125.0	110	

QC Flag Legend
Processing Flags

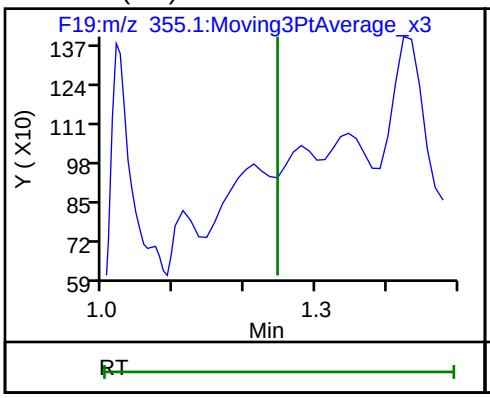
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 08-Apr-2022 07:32:22 Chrom Revision: 2.3 18-Mar-2022 09:07:22

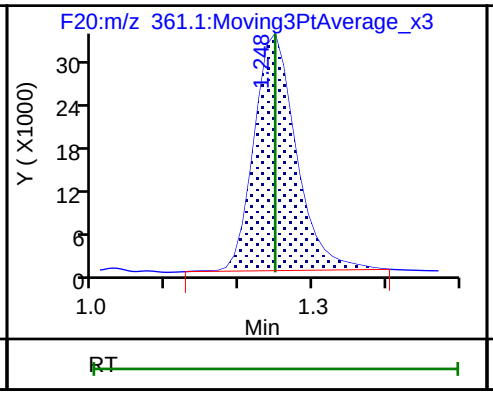
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07012.d
Injection Date: 07-Apr-2022 11:38:36 Instrument ID: LC_LCMS7
Lims ID: MB 280-570718/1-A
Client ID:
Operator ID: acm ALS Bottle#: 10 Worklist Smp#: 12
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

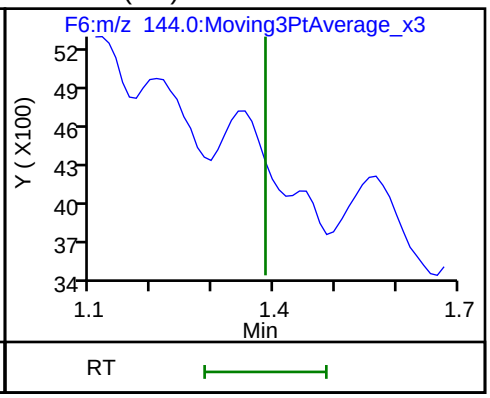
2 HMX (ND)



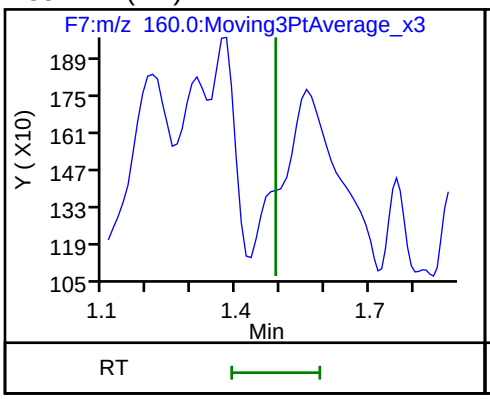
* 1 HMX-13C4



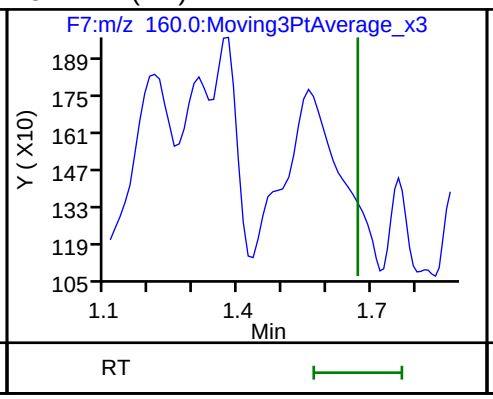
36 TNX (ND)



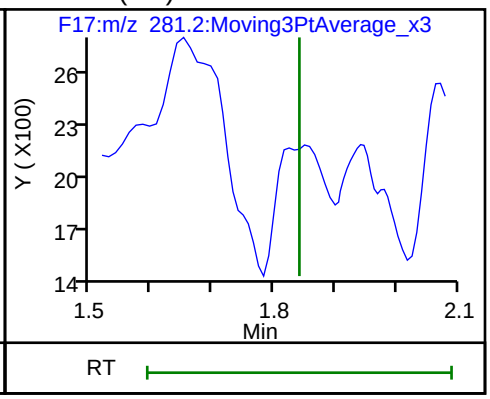
33 DNX (ND)



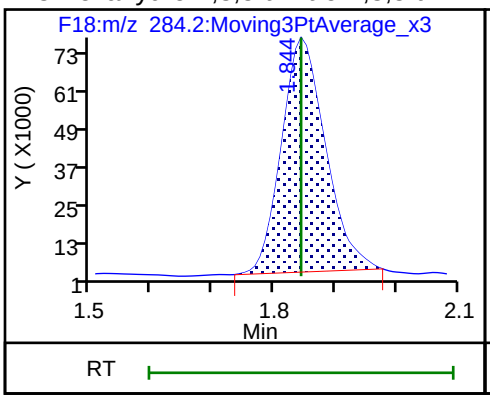
34 MNX (ND)



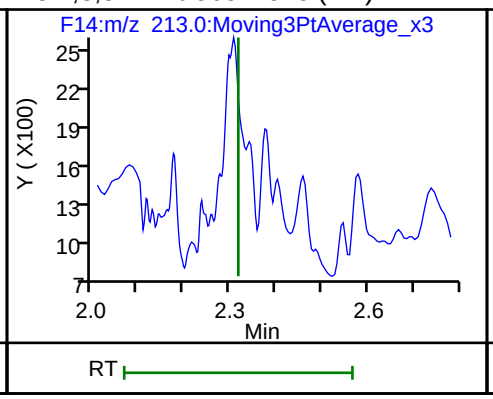
4 RDX (ND)



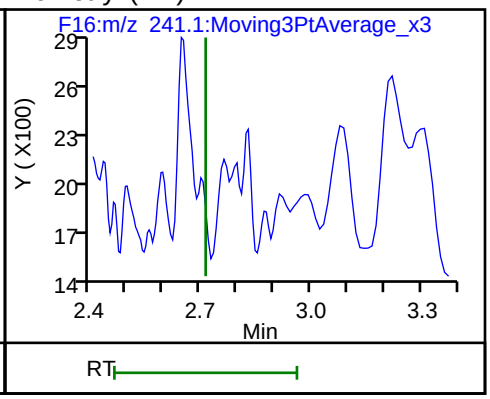
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



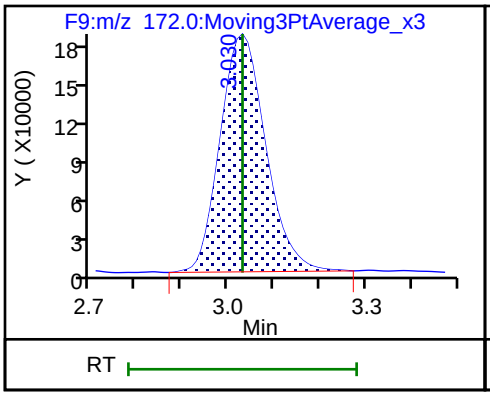
5 1,3,5-Trinitrobenzene (ND)



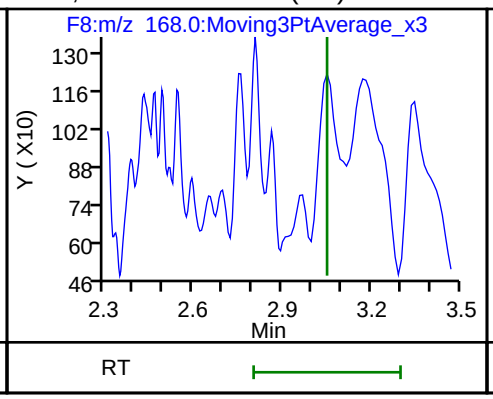
6 Tetryl (ND)



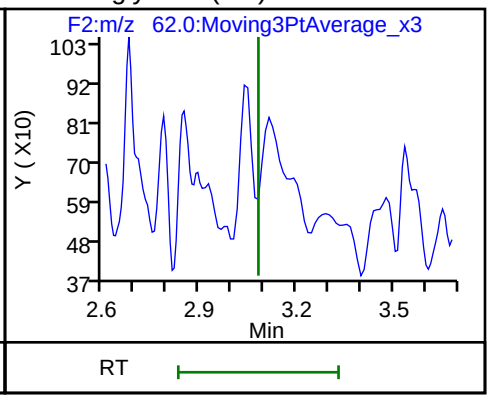
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

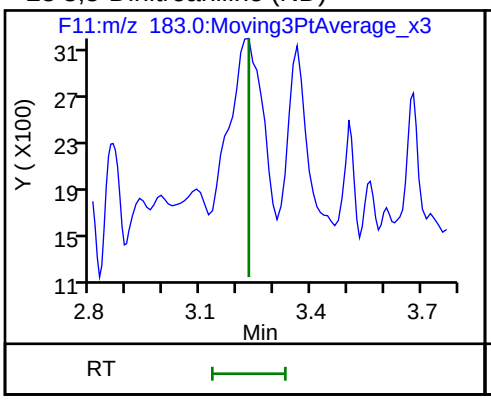


9 Nitroglycerin (ND)

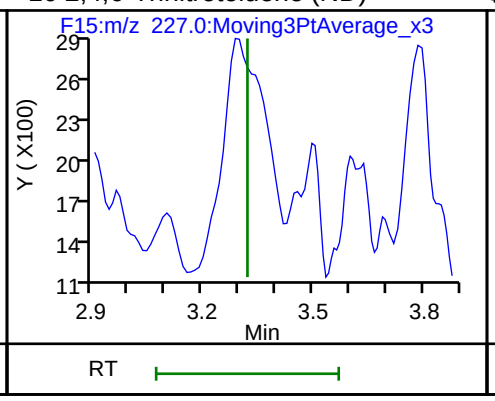


Report Date: 08-Apr-2022 07:32:22 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07012.d

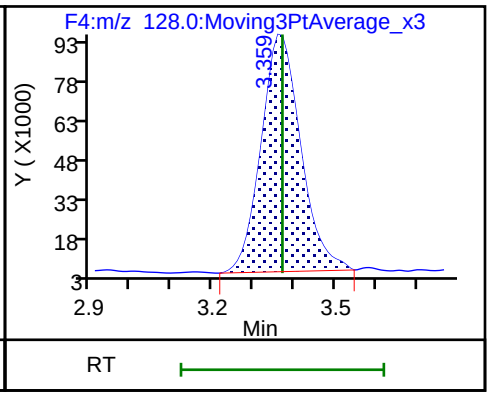
28 3,5-Dinitroaniline (ND)



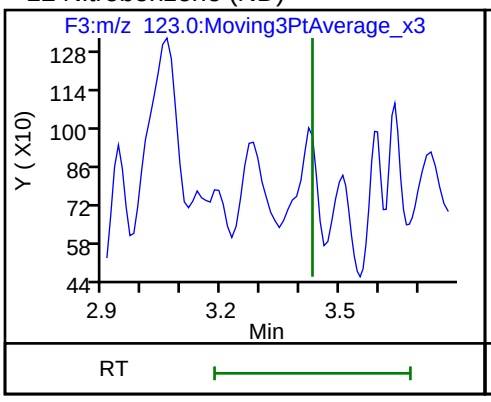
10 2,4,6-Trinitrotoluene (ND)



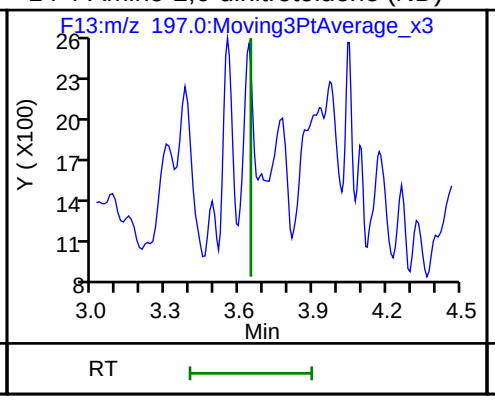
$ 11 Nitrobenzene-d5



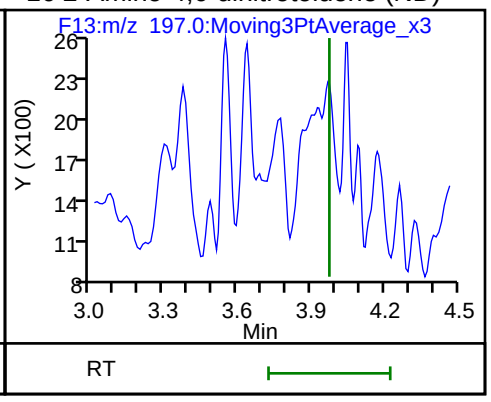
12 Nitrobenzene (ND)



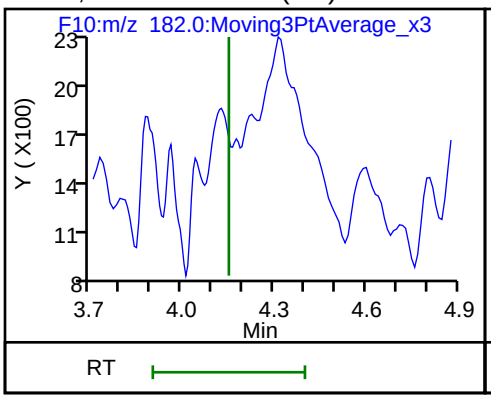
14 4-Amino-2,6-dinitrotoluene (ND)



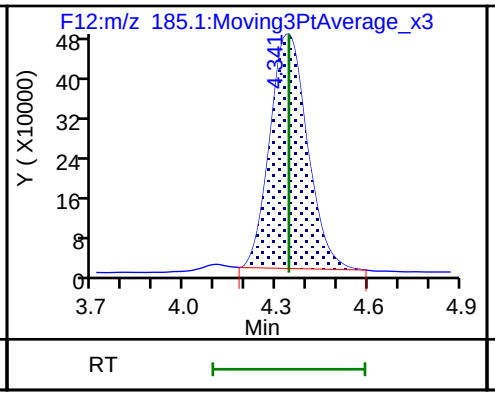
16 2-Amino-4,6-dinitrotoluene (ND)



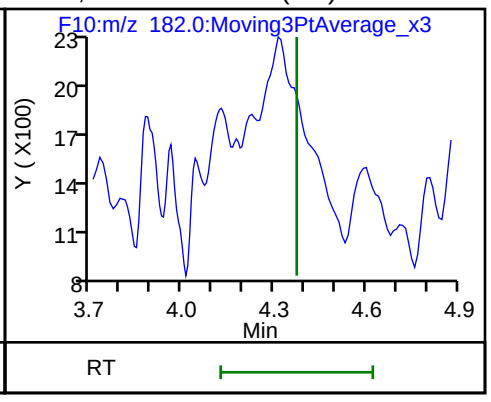
17 2,6-Dinitrotoluene (ND)



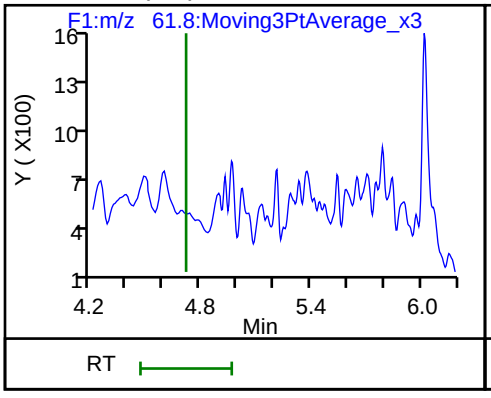
* 18 2,4-dinitrotoluene-d3



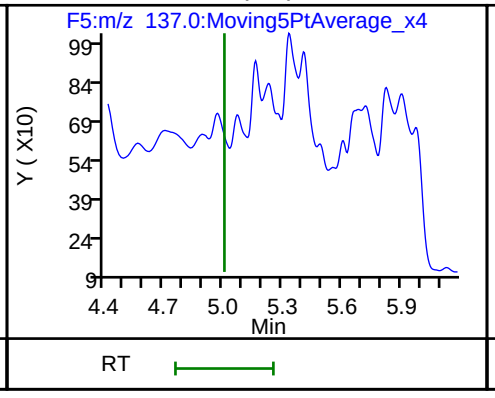
19 2,4-Dinitrotoluene (ND)



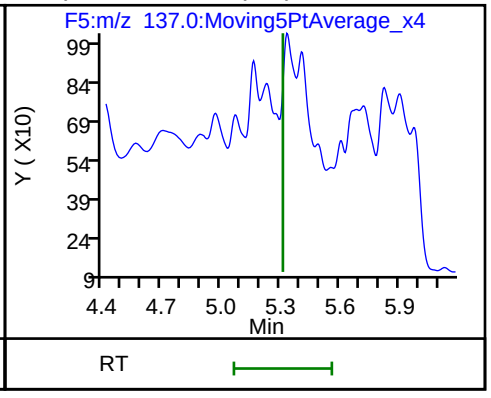
20 PETN (ND)



22 o-Nitrotoluene (ND)



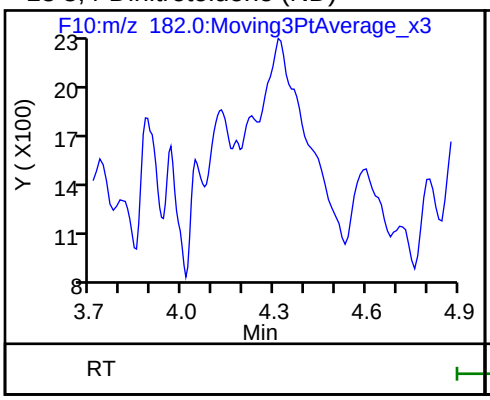
23 p-Nitrotoluene (ND)



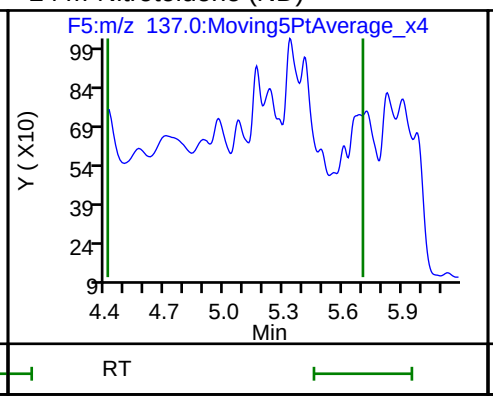
Report Date: 08-Apr-2022 07:32:22 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07012.d

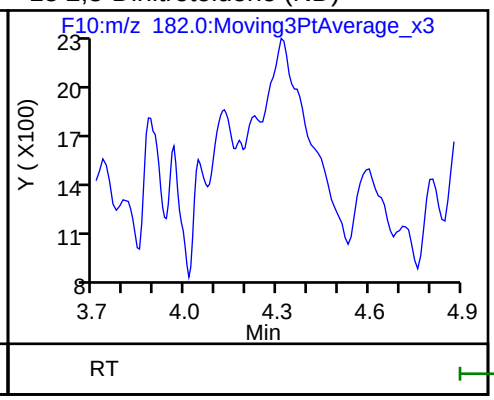
13 3,4-Dinitrotoluene (ND)



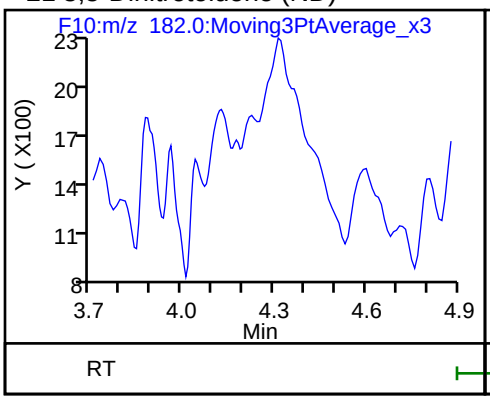
24 m-Nitrotoluene (ND)



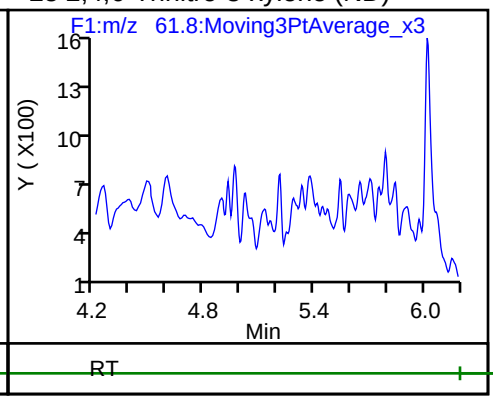
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 08-Apr-2022 07:32:22 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07012.d
Lims ID: MB 280-570718/1-A
Client ID:
Sample Type: MB
Inject. Date: 07-Apr-2022 11:38:36 ALS Bottle#: 10 Worklist Smp#: 12
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-570718/1-A
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:21 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 12:34:38

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	98.3	98.02

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: | Lab Sample ID: MB 280-571022/1-A
Matrix: Solid | Lab File ID: ex722D14012.d
Analysis Method: 8321A | Date Collected:
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:23
Sample wt/vol: 10(g) | Date Analyzed: 04/14/2022 13:27
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571896 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.050	U	0.10	0.050	0.045
99-65-0	1,3-Dinitrobenzene	0.050	U	0.10	0.050	0.045
118-96-7	2,4,6-Trinitrotoluene	0.050	U M	0.10	0.050	0.037
121-14-2	2,4-Dinitrotoluene	0.050	U	0.10	0.050	0.047
606-20-2	2,6-Dinitrotoluene	0.050	U	0.10	0.050	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.050	U	0.10	0.050	0.050
19406-51-0	4-Amino-2,6-dinitrotoluene	0.050	U	0.10	0.050	0.031
2691-41-0	HMX	0.050	U M	0.10	0.050	0.046
99-08-1	m-Nitrotoluene	0.050	U	0.10	0.050	0.043
98-95-3	Nitrobenzene	0.050	U	0.11	0.050	0.038
55-63-0	Nitroglycerin	0.050	U	0.10	0.050	0.029
88-72-2	o-Nitrotoluene	0.050	U	0.10	0.050	0.043
78-11-5	PETN	0.050	U	0.10	0.050	0.034
99-99-0	p-Nitrotoluene	0.050	U	0.10	0.050	0.049
121-82-4	RDX	0.050	U	0.12	0.050	0.043
479-45-8	Tetryl	0.050	U	0.10	0.050	0.039

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	90		68-140

Report Date: 15-Apr-2022 08:03:01 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14012.d
Lims ID: MB 280-571022/1-A
Client ID:
Sample Type: MB
Inject. Date: 14-Apr-2022 13:27:10 ALS Bottle#: 10 Worklist Smp#: 12
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-571022/1-A
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:00 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 14-Apr-2022 14:27:26
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		138539	125.0	77.1	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		483150	125.0	195	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1230552	129.4	305	
$ 11 Nitrobenzene-d5								
128.0	3.324	3.324	0.0	0.778	501242	90.8	102	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3810608	125.0	140	

QC Flag Legend
Processing Flags

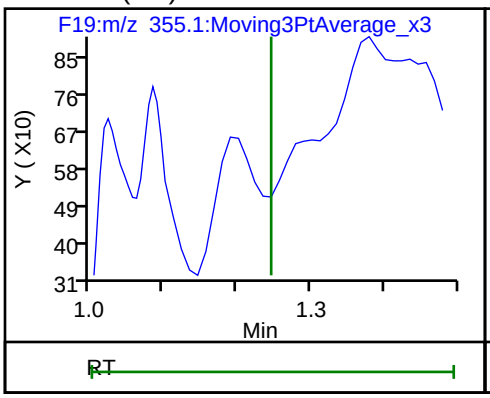
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:01 Chrom Revision: 2.3 12-Apr-2022 20:29:44

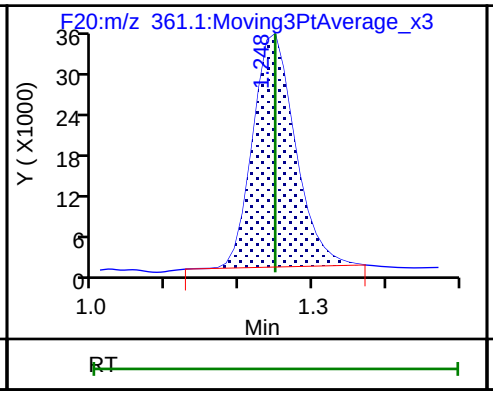
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14012.d
Injection Date: 14-Apr-2022 13:27:10 Instrument ID: LC_LCMS7
Lims ID: MB 280-571022/1-A
Client ID:
Operator ID: acm ALS Bottle#: 10 Worklist Smp#: 12
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

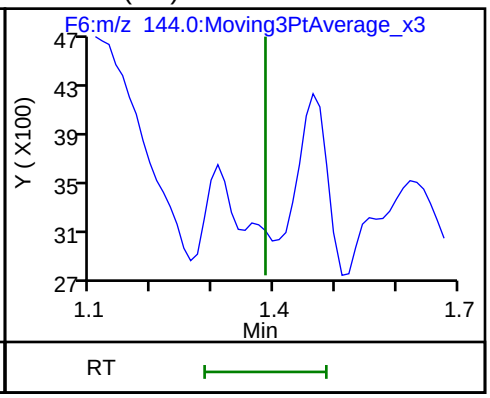
2 HMX (ND)



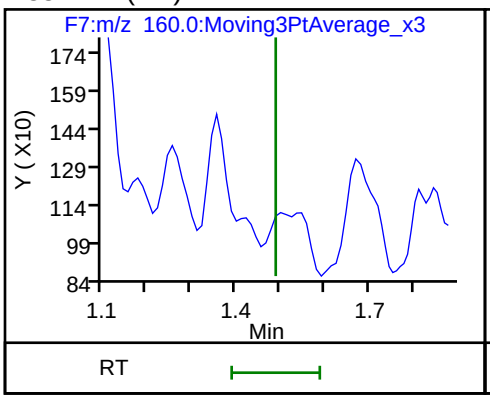
* 1 HMX-13C4



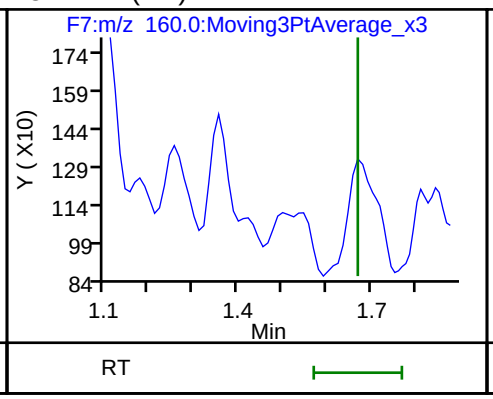
36 TNX (ND)



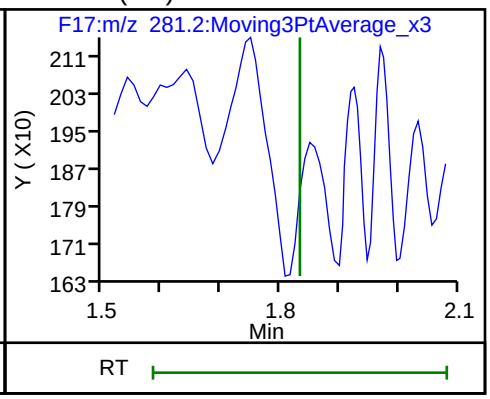
33 DNX (ND)



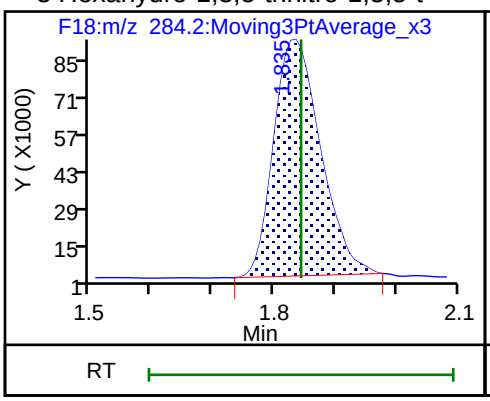
34 MNX (ND)



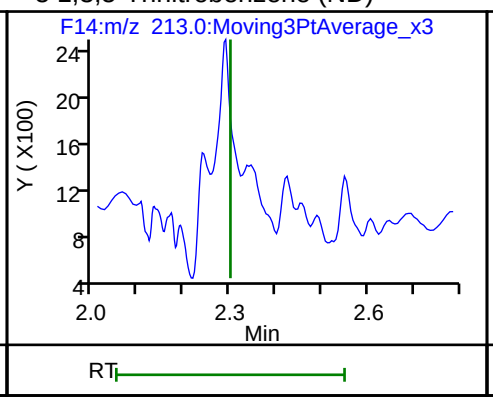
4 RDX (ND)



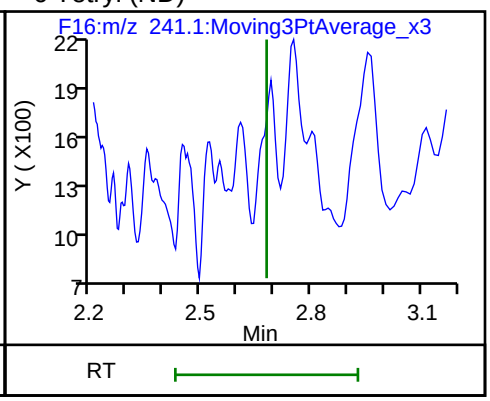
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



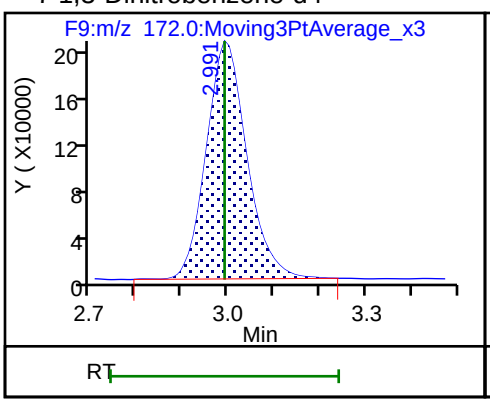
5 1,3,5-Trinitrobenzene (ND)



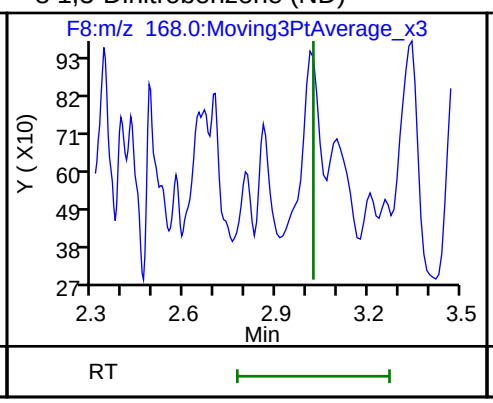
6 Tetryl (ND)



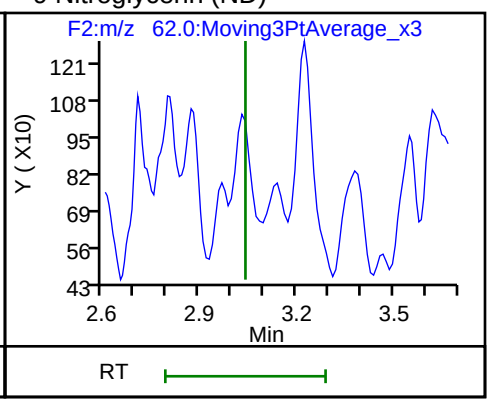
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

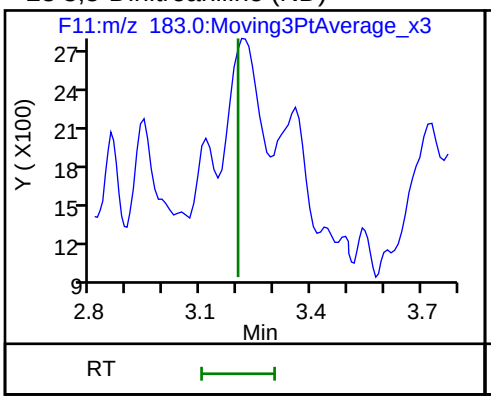


9 Nitroglycerin (ND)

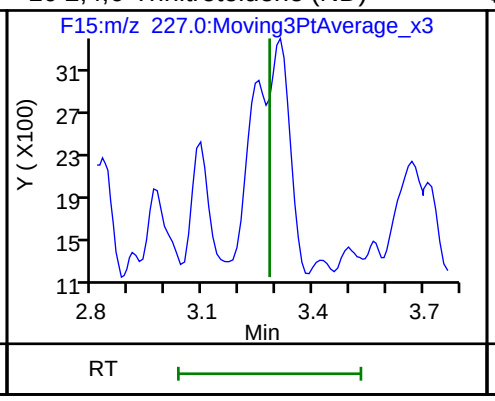


Report Date: 15-Apr-2022 08:03:01 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14012.d

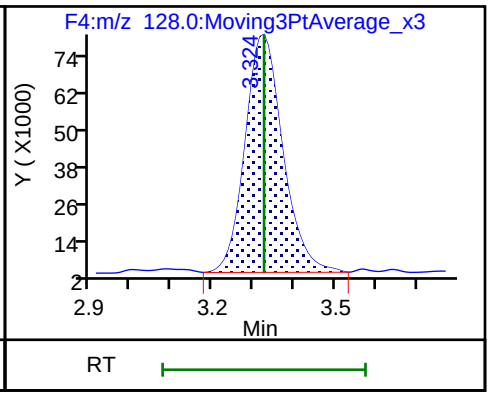
28 3,5-Dinitroaniline (ND)



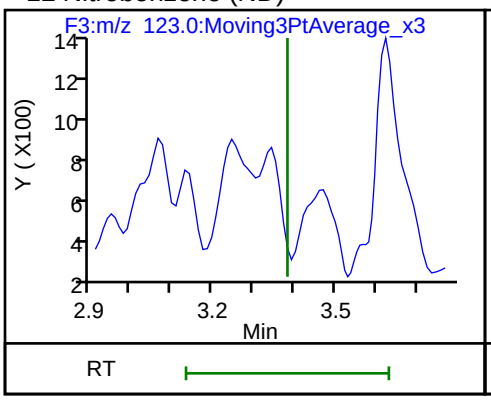
10 2,4,6-Trinitrotoluene (ND)



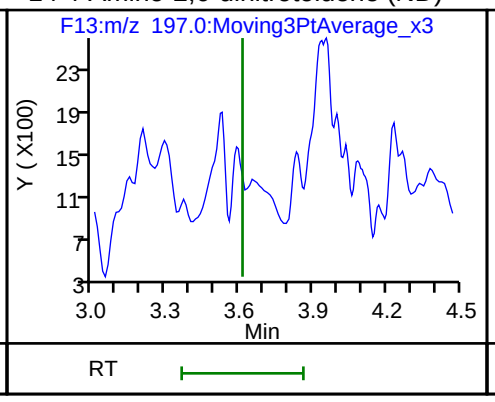
$ 11 Nitrobenzene-d5



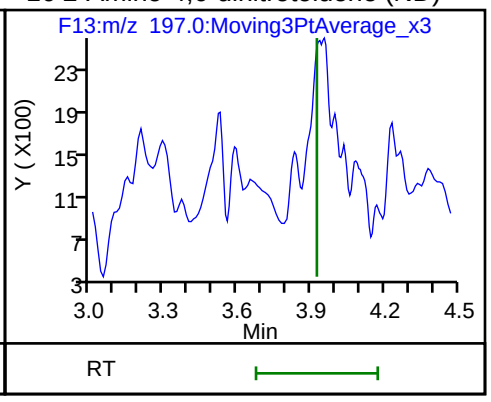
12 Nitrobenzene (ND)



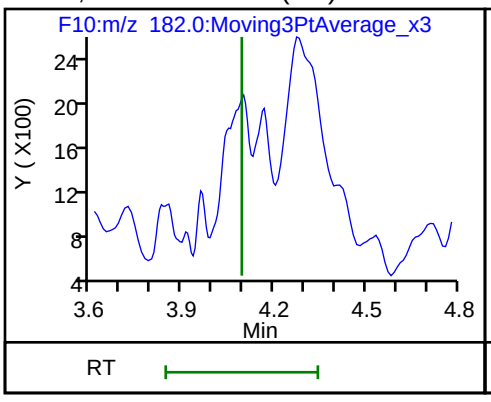
14 4-Amino-2,6-dinitrotoluene (ND)



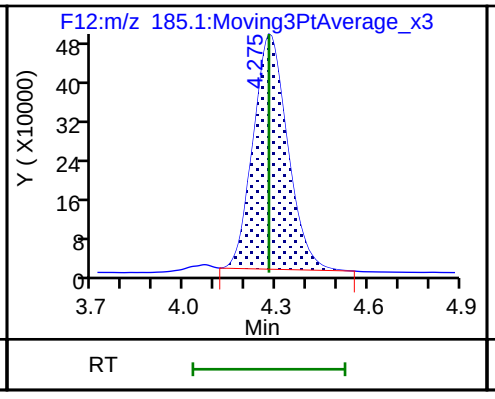
16 2-Amino-4,6-dinitrotoluene (ND)



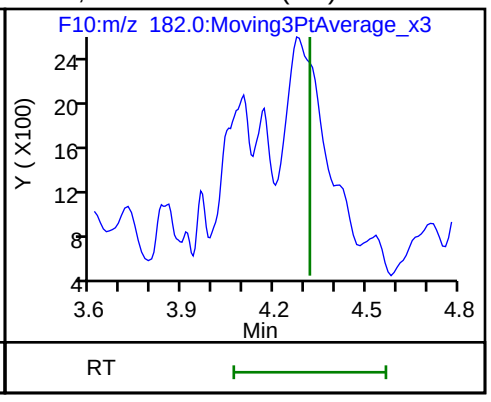
17 2,6-Dinitrotoluene (ND)



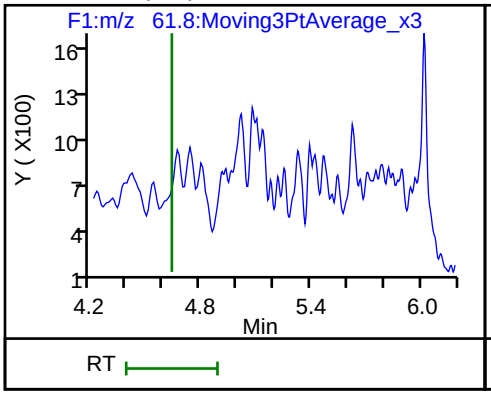
* 18 2,4-dinitrotoluene-d3



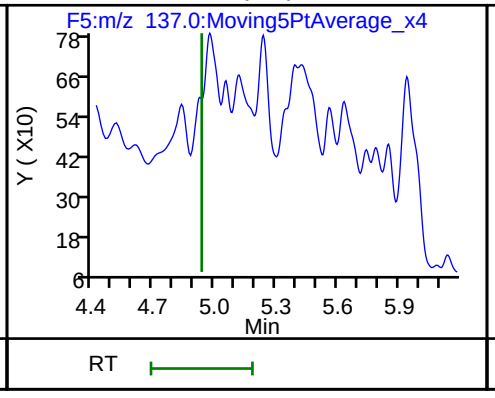
19 2,4-Dinitrotoluene (ND)



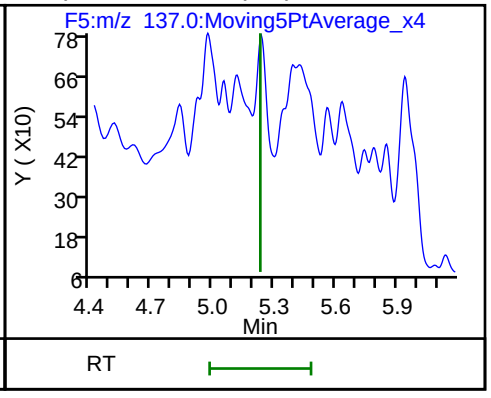
20 PETN (ND)



22 o-Nitrotoluene (ND)



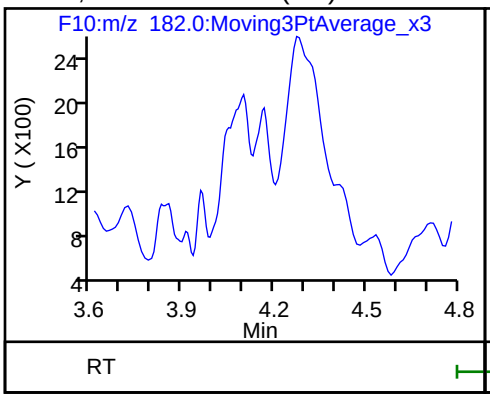
23 p-Nitrotoluene (ND)



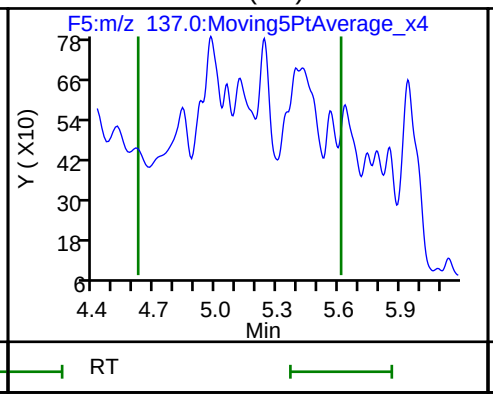
Report Date: 15-Apr-2022 08:03:01 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14012.d

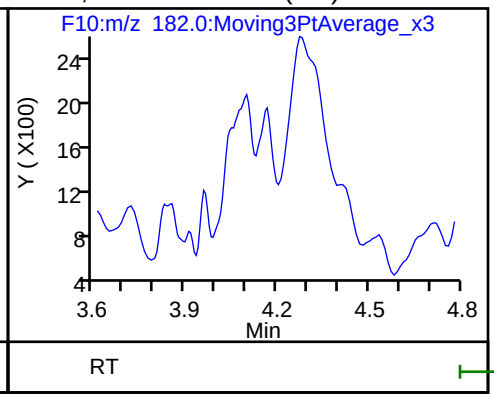
13 3,4-Dinitrotoluene (ND)



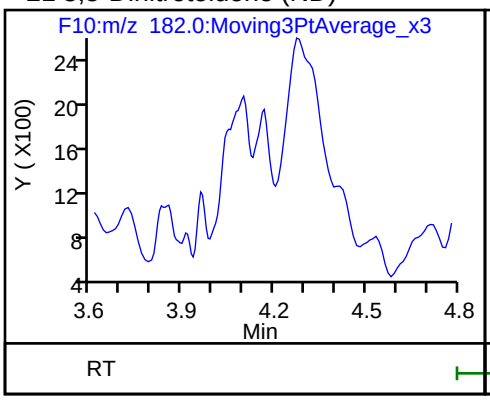
24 m-Nitrotoluene (ND)



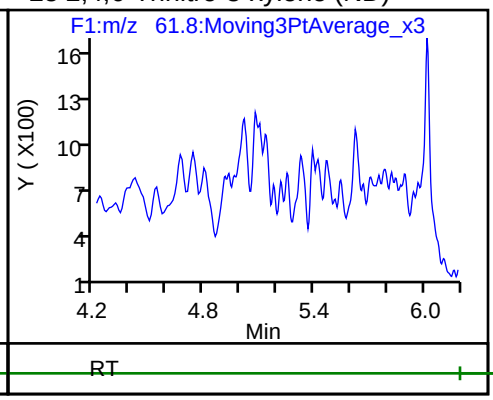
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:01 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14012.d
Lims ID: MB 280-571022/1-A
Client ID:
Sample Type: MB
Inject. Date: 14-Apr-2022 13:27:10 ALS Bottle#: 10 Worklist Smp#: 12
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-571022/1-A
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:00 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 14-Apr-2022 14:27:26

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	90.8	90.48

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: | Lab Sample ID: MB 280-571024/1-A
Matrix: Solid | Lab File ID: ex722D08012.d
Analysis Method: 8321A | Date Collected:
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20
Sample wt/vol: 10(g) | Date Analyzed: 04/08/2022 10:47
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571224 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.050	U	0.10	0.050	0.045
99-65-0	1,3-Dinitrobenzene	0.050	U	0.10	0.050	0.045
118-96-7	2,4,6-Trinitrotoluene	0.050	U	0.10	0.050	0.037
121-14-2	2,4-Dinitrotoluene	0.050	U	0.10	0.050	0.047
606-20-2	2,6-Dinitrotoluene	0.050	U	0.10	0.050	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.050	U	0.10	0.050	0.050
19406-51-0	4-Amino-2,6-dinitrotoluene	0.050	U	0.10	0.050	0.031
2691-41-0	HMX	0.050	U M	0.10	0.050	0.046
99-08-1	m-Nitrotoluene	0.050	U	0.10	0.050	0.043
98-95-3	Nitrobenzene	0.050	U	0.11	0.050	0.038
55-63-0	Nitroglycerin	0.050	U	0.10	0.050	0.029
88-72-2	o-Nitrotoluene	0.050	U	0.10	0.050	0.043
78-11-5	PETN	0.050	U	0.10	0.050	0.034
99-99-0	p-Nitrotoluene	0.050	U	0.10	0.050	0.049
121-82-4	RDX	0.050	U	0.12	0.050	0.043
479-45-8	Tetryl	0.050	U	0.10	0.050	0.039

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	92		68-140

Report Date: 14-Apr-2022 10:06:45 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08012.d
Lims ID: MB 280-571024/1-A
Client ID:
Sample Type: MB
Inject. Date: 08-Apr-2022 10:47:25 ALS Bottle#: 10 Worklist Smp#: 12
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-571024/1-A
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:44 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 08:40:31
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		127610	125.0	216	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		376097	125.0	125	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.008	0.011		1318274	129.4	321	
$ 11 Nitrobenzene-d5								
128.0	3.348	3.354	0.0	0.774	573295	91.9	108	
* 18 2,4-dinitrotoluene-d3								
185.1	4.324	4.315	0.009		4108224	125.0	114	

QC Flag Legend
Processing Flags

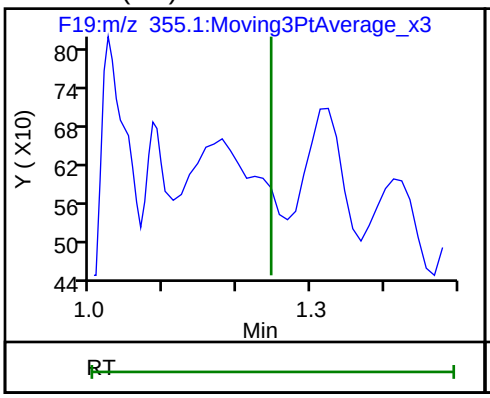
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 14-Apr-2022 10:06:45 Chrom Revision: 2.3 12-Apr-2022 20:29:44

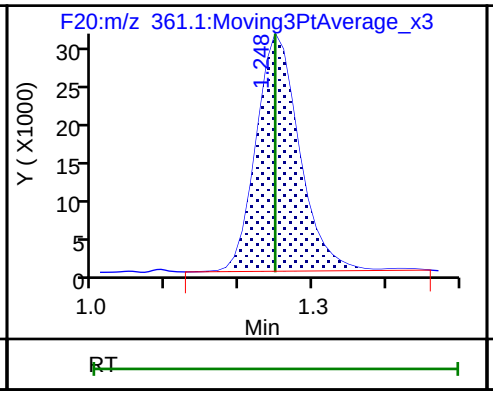
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08012.d
Injection Date: 08-Apr-2022 10:47:25 Instrument ID: LC_LCMS7
Lims ID: MB 280-571024/1-A
Client ID:
Operator ID: acm ALS Bottle#: 10 Worklist Smp#: 12
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

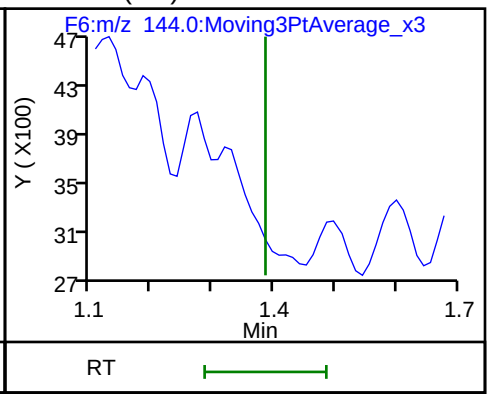
2 HMX (ND)



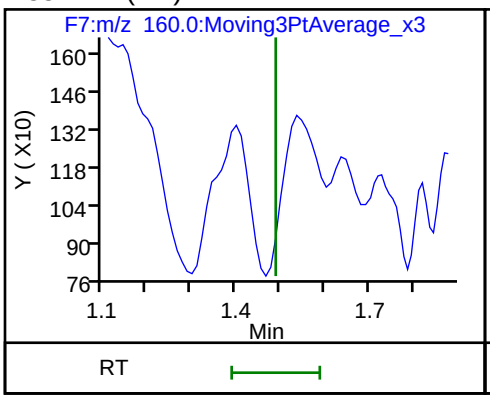
* 1 HMX-13C4



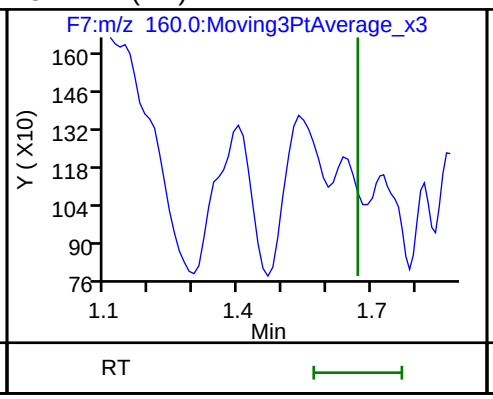
36 TNX (ND)



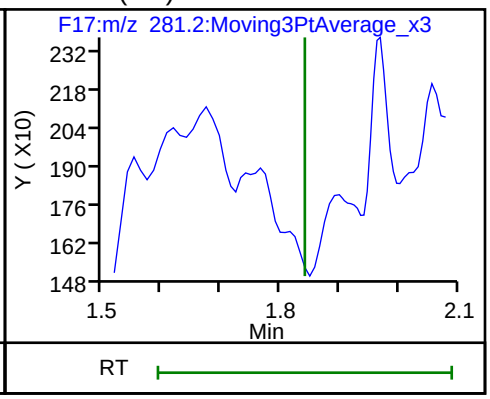
33 DNX (ND)



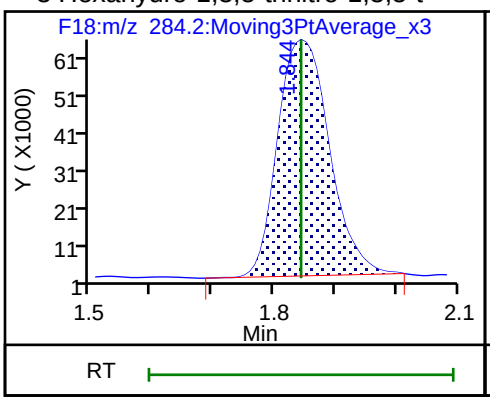
34 MNX (ND)



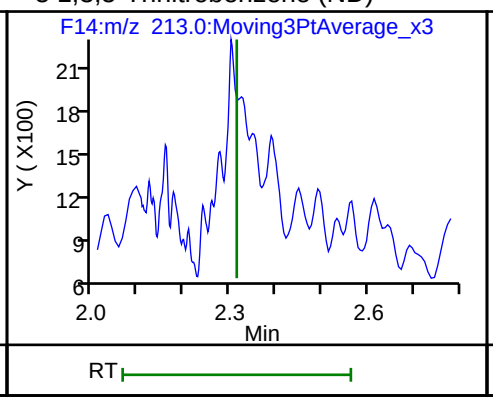
4 RDX (ND)



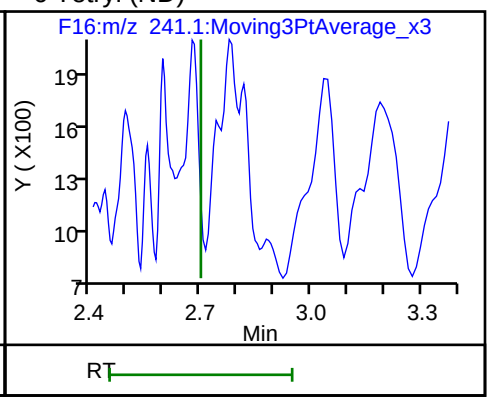
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



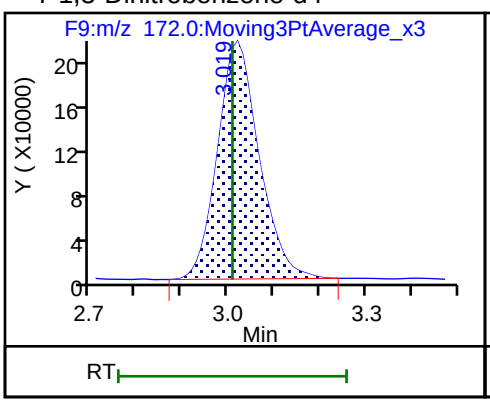
5 1,3,5-Trinitrobenzene (ND)



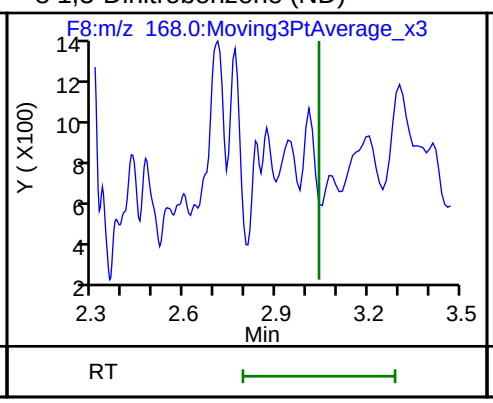
6 Tetryl (ND)



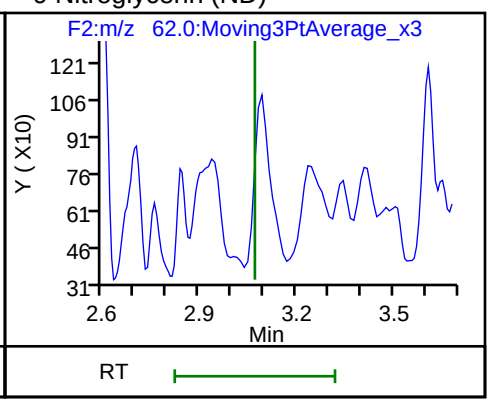
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

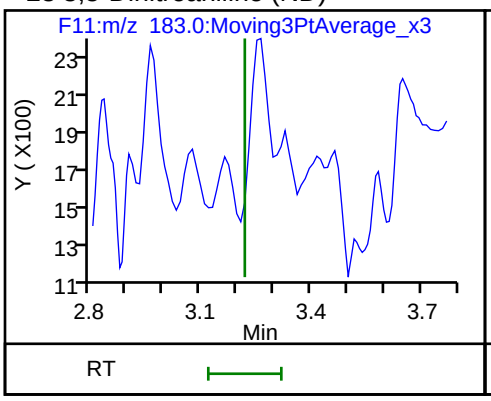


9 Nitroglycerin (ND)

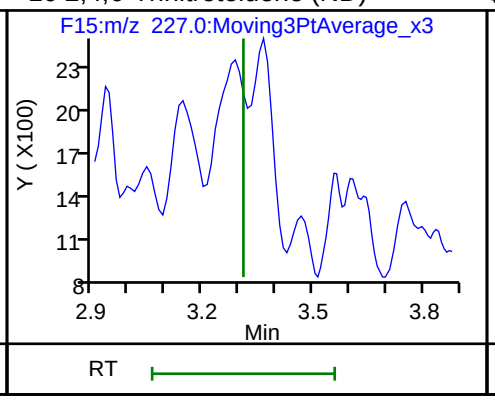


Report Date: 14-Apr-2022 10:06:45 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08012.d

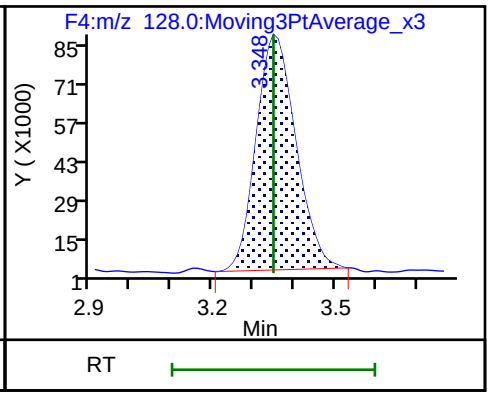
28 3,5-Dinitroaniline (ND)



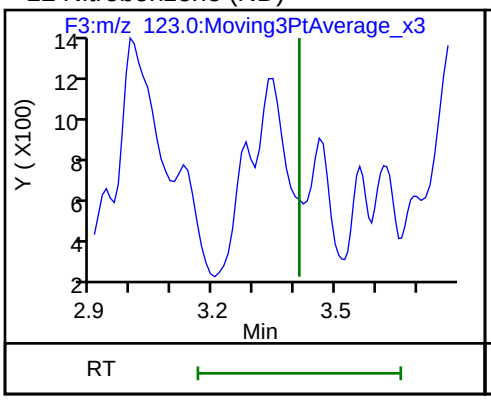
10 2,4,6-Trinitrotoluene (ND)



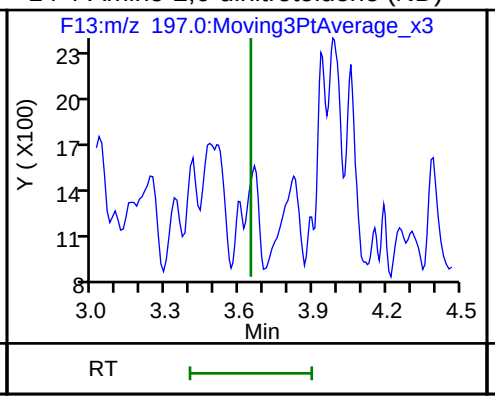
$ 11 Nitrobenzene-d5



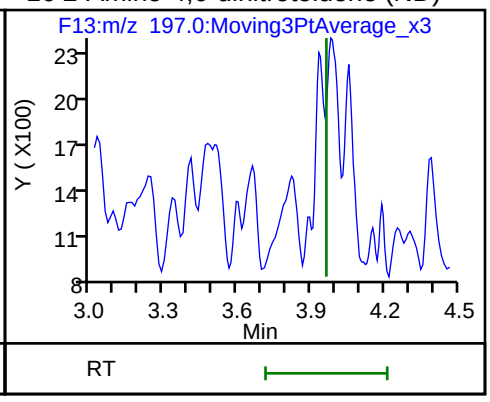
12 Nitrobenzene (ND)



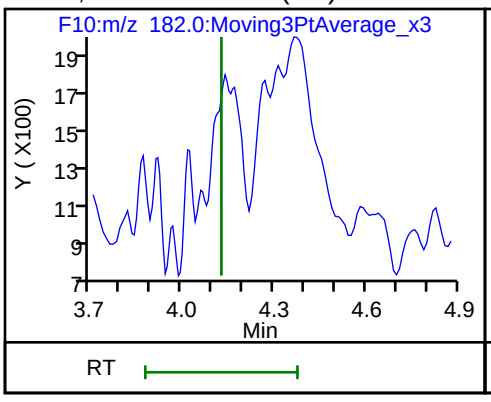
14 4-Amino-2,6-dinitrotoluene (ND)



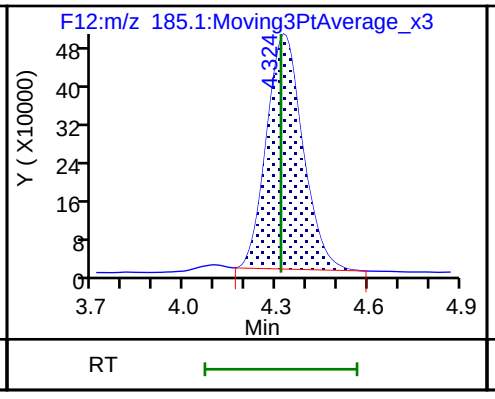
16 2-Amino-4,6-dinitrotoluene (ND)



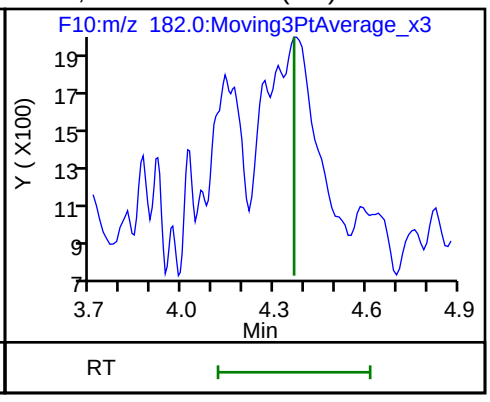
17 2,6-Dinitrotoluene (ND)



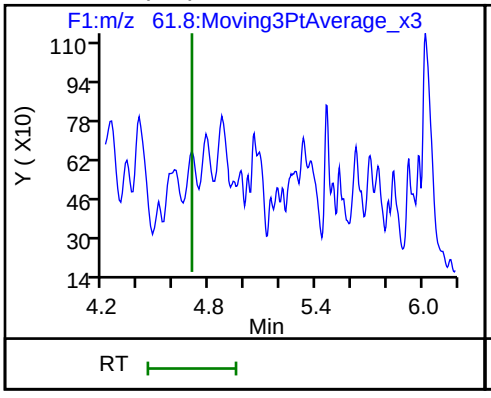
* 18 2,4-dinitrotoluene-d3



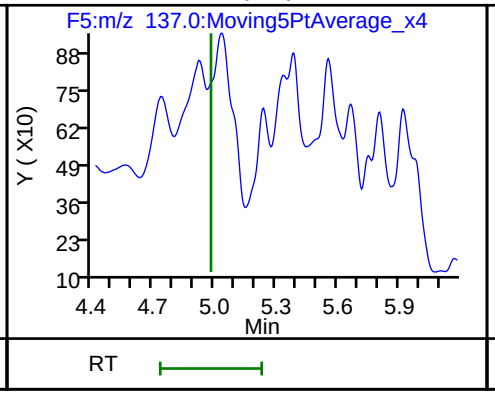
19 2,4-Dinitrotoluene (ND)



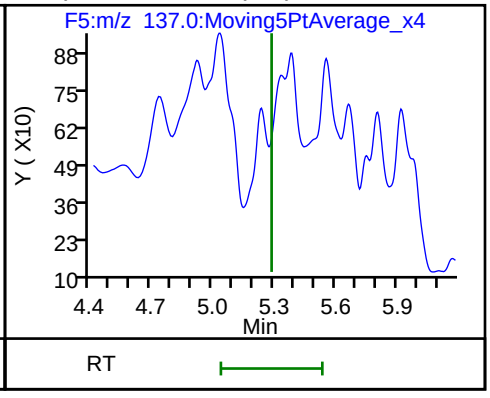
20 PETN (ND)



22 o-Nitrotoluene (ND)



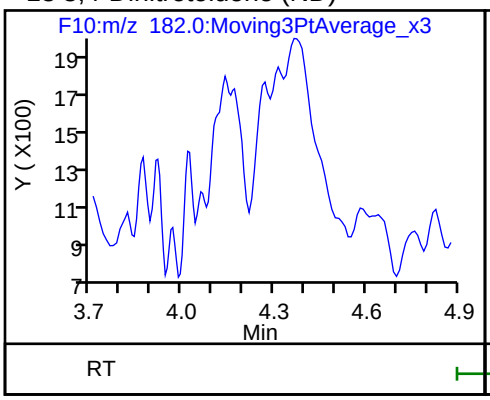
23 p-Nitrotoluene (ND)



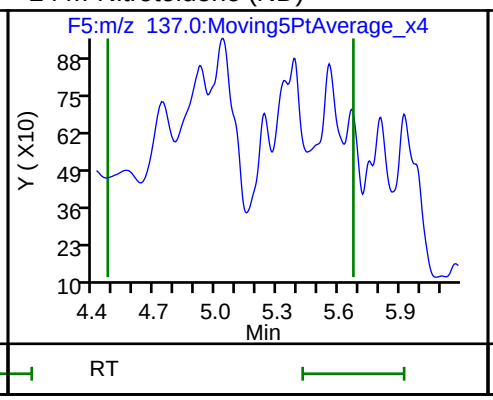
Report Date: 14-Apr-2022 10:06:45 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08012.d

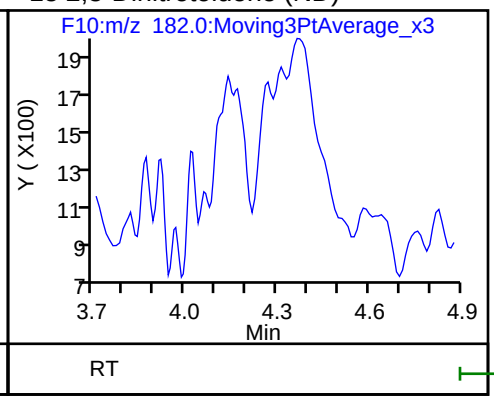
13 3,4-Dinitrotoluene (ND)



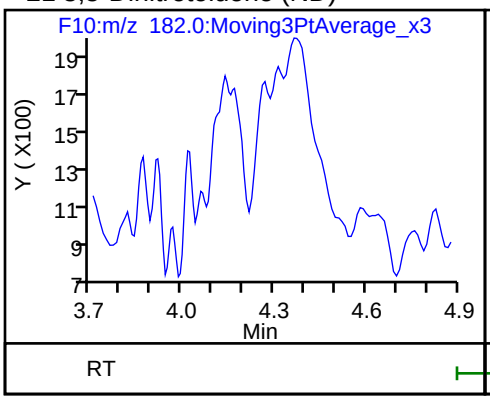
24 m-Nitrotoluene (ND)



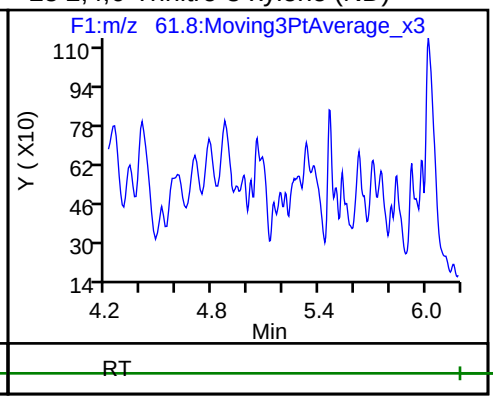
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 14-Apr-2022 10:06:45 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08012.d
Lims ID: MB 280-571024/1-A
Client ID:
Sample Type: MB
Inject. Date: 08-Apr-2022 10:47:25 ALS Bottle#: 10 Worklist Smp#: 12
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-571024/1-A
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:44 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 08:40:31

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	91.9	91.60

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: | Lab Sample ID: MB 280-571025/1-A
Matrix: Solid | Lab File ID: ex722D14044.d
Analysis Method: 8321A | Date Collected:
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:17
Sample wt/vol: 10(g) | Date Analyzed: 04/14/2022 16:58
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571897 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.050	U	0.10	0.050	0.045
99-65-0	1,3-Dinitrobenzene	0.050	U	0.10	0.050	0.045
118-96-7	2,4,6-Trinitrotoluene	0.050	U	0.10	0.050	0.037
121-14-2	2,4-Dinitrotoluene	0.050	U	0.10	0.050	0.047
606-20-2	2,6-Dinitrotoluene	0.050	U	0.10	0.050	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.050	U	0.10	0.050	0.050
19406-51-0	4-Amino-2,6-dinitrotoluene	0.050	U	0.10	0.050	0.031
2691-41-0	HMX	0.050	U M	0.10	0.050	0.046
99-08-1	m-Nitrotoluene	0.050	U	0.10	0.050	0.043
98-95-3	Nitrobenzene	0.050	U	0.11	0.050	0.038
55-63-0	Nitroglycerin	0.050	U	0.10	0.050	0.029
88-72-2	o-Nitrotoluene	0.050	U	0.10	0.050	0.043
78-11-5	PETN	0.050	U	0.10	0.050	0.034
99-99-0	p-Nitrotoluene	0.050	U	0.10	0.050	0.049
121-82-4	RDX	0.050	U	0.12	0.050	0.043
479-45-8	Tetryl	0.050	U M	0.10	0.050	0.039

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	94		68-140

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14044.d
Lims ID: MB 280-571025/1-A
Client ID:
Sample Type: MB
Inject. Date: 14-Apr-2022 16:58:12 ALS Bottle#: 39 Worklist Smp#: 44
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-571025/1-A
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:20 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:35:42
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		156078	125.0	119	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		468901	125.0	171	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1140028	129.4	292	
$ 11 Nitrobenzene-d5								
128.0	3.324	3.324	0.0	0.778	482847	94.5	71.0	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3401201	125.0	131	

QC Flag Legend
Processing Flags

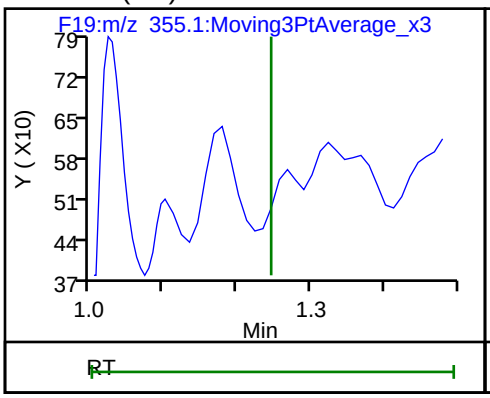
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:21 Chrom Revision: 2.3 12-Apr-2022 20:29:44

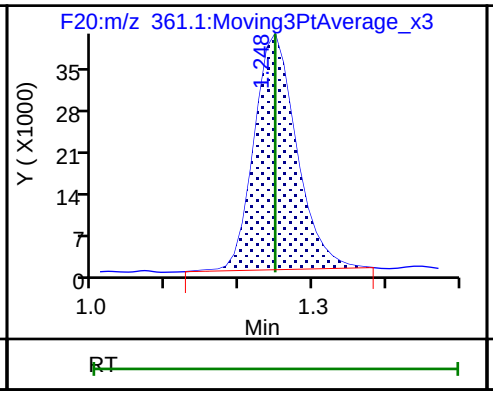
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14044.d
Injection Date: 14-Apr-2022 16:58:12 Instrument ID: LC_LCMS7
Lims ID: MB 280-571025/1-A
Client ID:
Operator ID: acm ALS Bottle#: 39 Worklist Smp#: 44
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

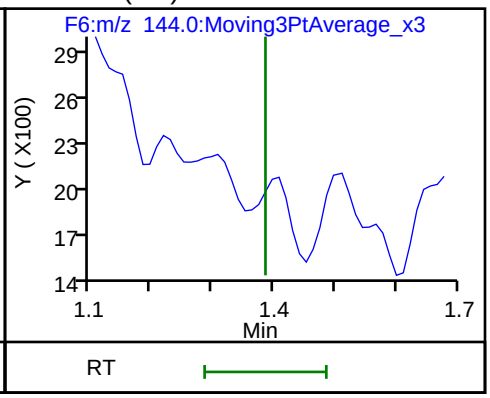
2 HMX (ND)



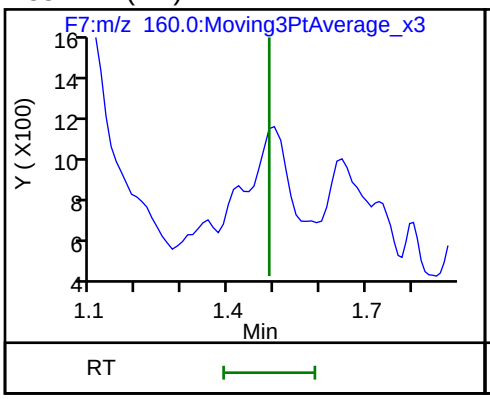
* 1 HMX-13C4



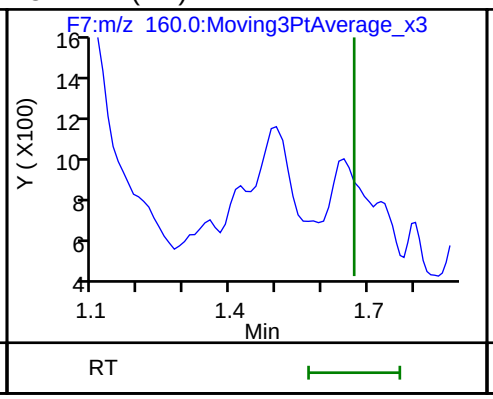
36 TNX (ND)



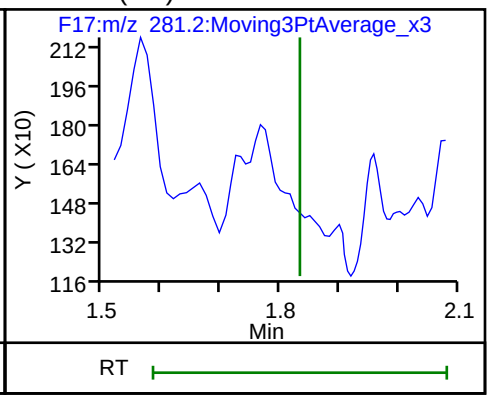
33 DNX (ND)



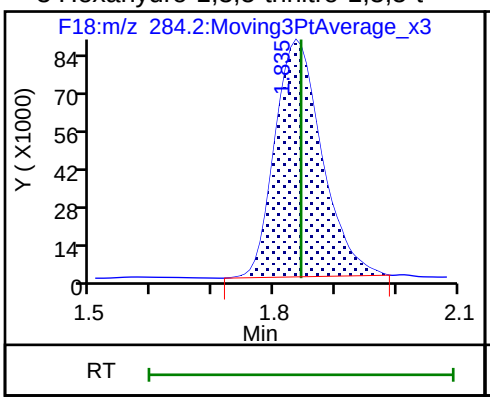
34 MNX (ND)



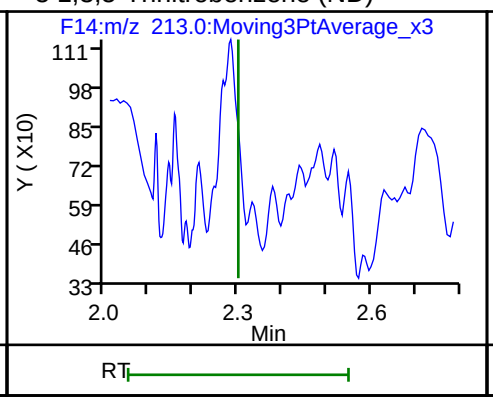
4 RDX (ND)



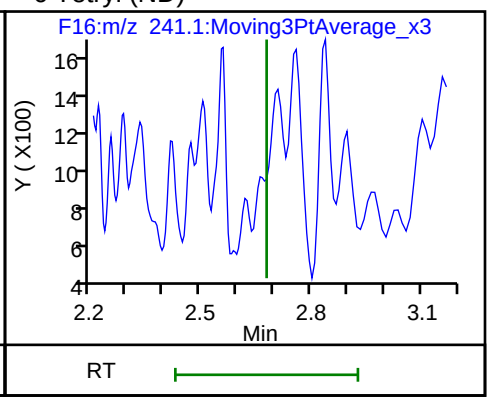
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



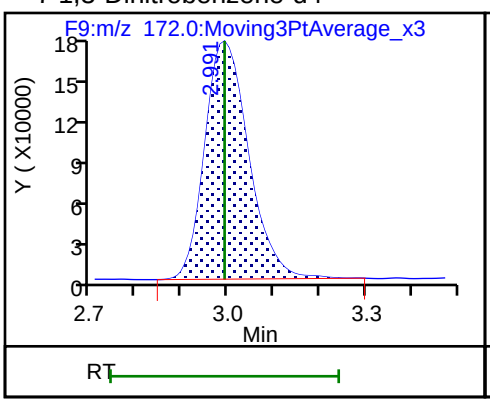
5 1,3,5-Trinitrobenzene (ND)



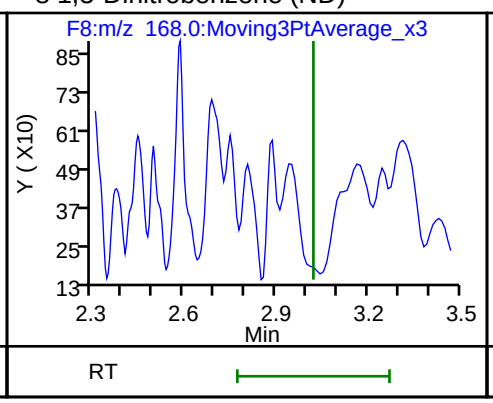
6 Tetryl (ND)



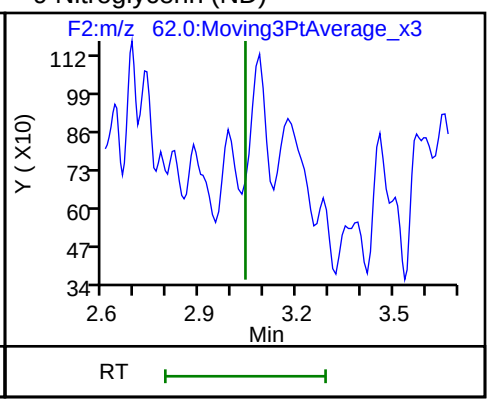
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

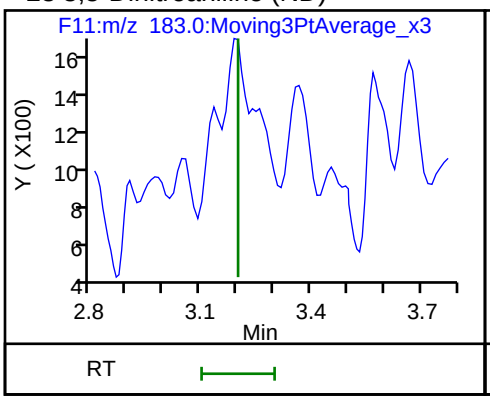


9 Nitroglycerin (ND)

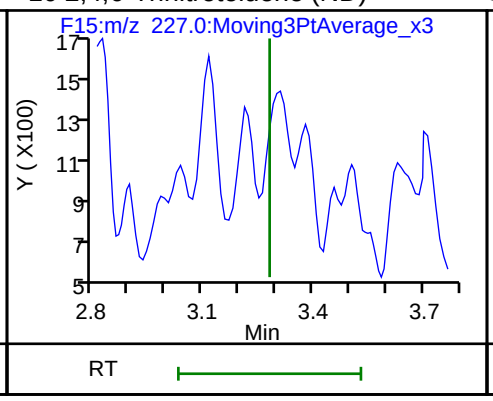


Report Date: 15-Apr-2022 08:03:21 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14044.d

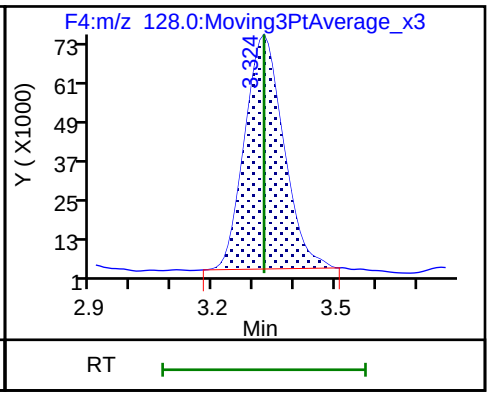
28 3,5-Dinitroaniline (ND)



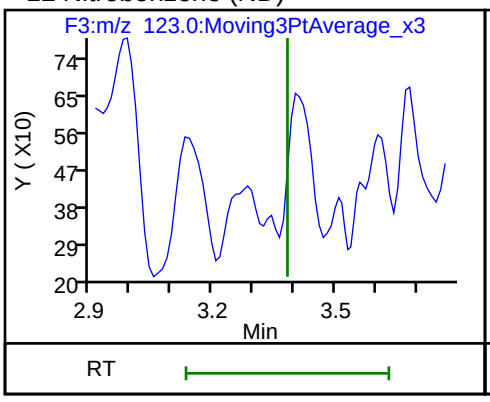
10 2,4,6-Trinitrotoluene (ND)



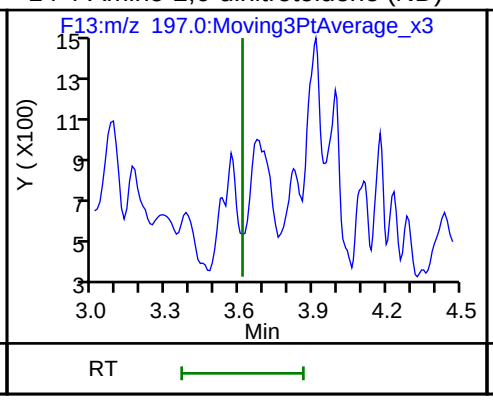
$ 11 Nitrobenzene-d5



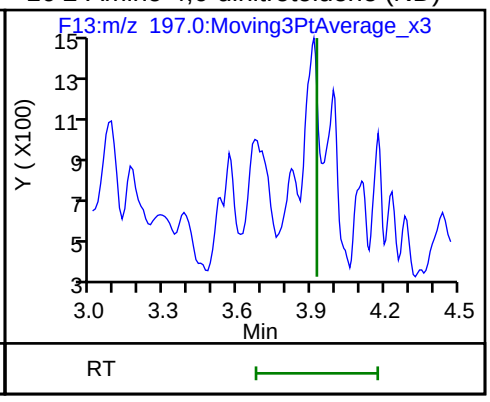
12 Nitrobenzene (ND)



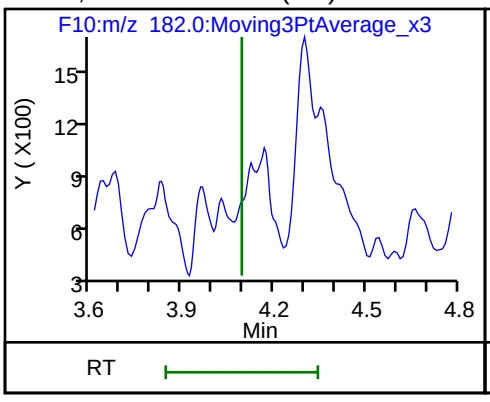
14 4-Amino-2,6-dinitrotoluene (ND)



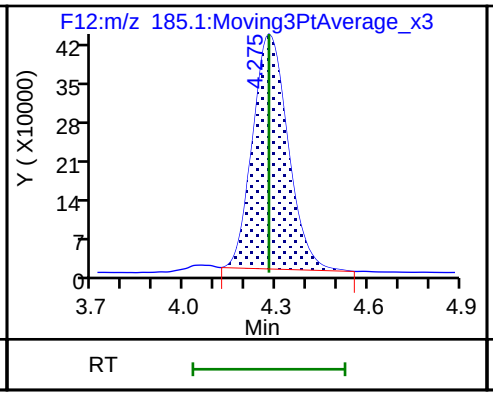
16 2-Amino-4,6-dinitrotoluene (ND)



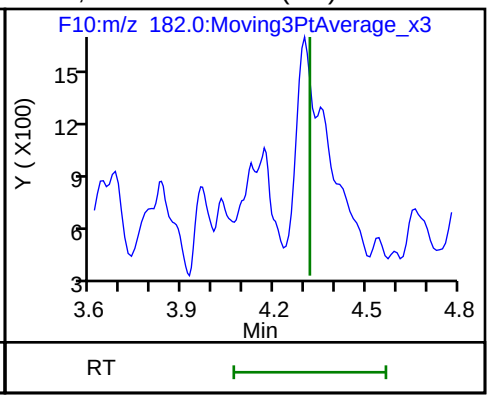
17 2,6-Dinitrotoluene (ND)



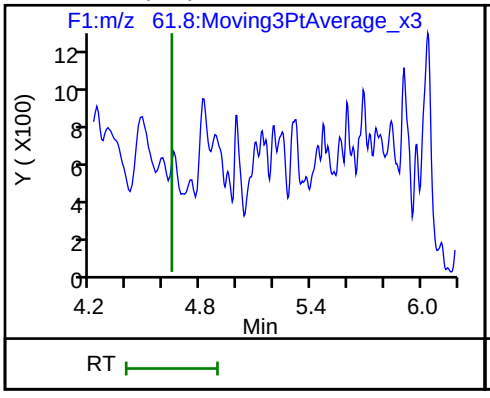
* 18 2,4-dinitrotoluene-d3



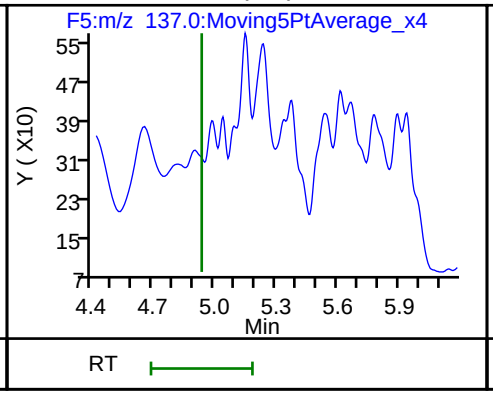
19 2,4-Dinitrotoluene (ND)



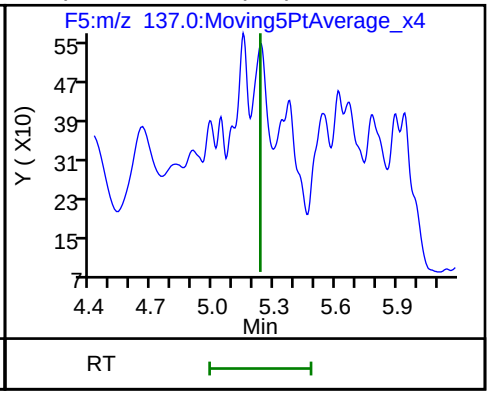
20 PETN (ND)



22 o-Nitrotoluene (ND)



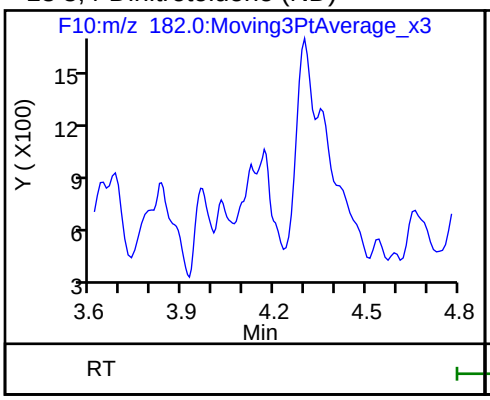
23 p-Nitrotoluene (ND)



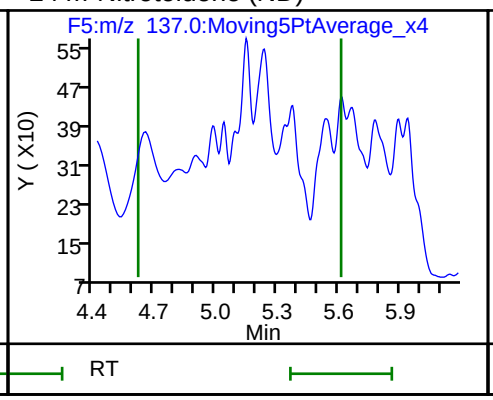
Report Date: 15-Apr-2022 08:03:21 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14044.d

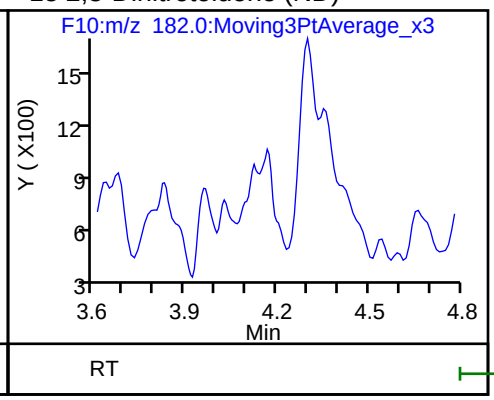
13 3,4-Dinitrotoluene (ND)



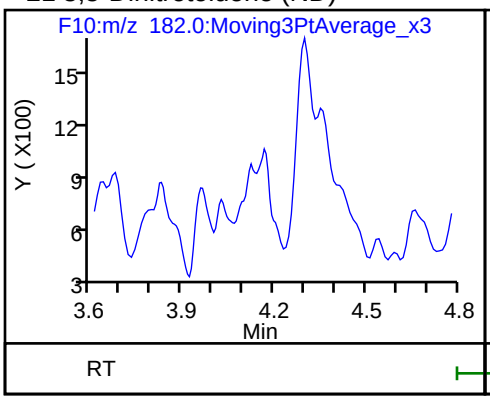
24 m-Nitrotoluene (ND)



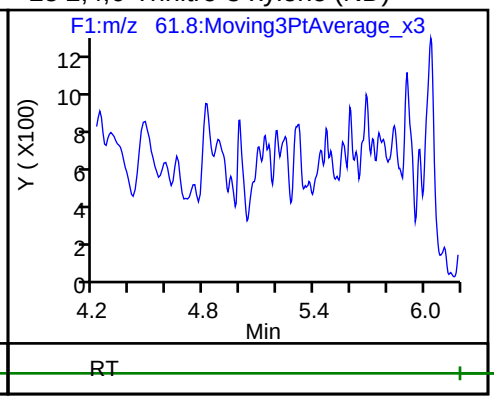
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14044.d				
Lims ID:	MB 280-571025/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	14-Apr-2022 16:58:12	ALS Bottle#:	39	Worklist Smp#:	44
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	MB 280-571025/1-A				
Misc. Info.:	ex722D14				
Operator ID:	acm	Instrument ID:	LC_LCMS7		
Method:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m				
Limit Group:	LC - 8321A Expl				
Last Update:	15-Apr-2022 08:03:20	Calib Date:	14-Apr-2022 13:07:22		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1652				
First Level Reviewer: meyera		Date:	15-Apr-2022 07:35:42		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	94.5	94.15

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: | Lab Sample ID: GB 280-570105/1-B
Matrix: Solid | Lab File ID: ex722D07015.d
Analysis Method: 8321A | Date Collected:
Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57
Sample wt/vol: 10.29(g) | Date Analyzed: 04/07/2022 11:58
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571108 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.049	U	0.097	0.049	0.044
99-65-0	1,3-Dinitrobenzene	0.049	U	0.097	0.049	0.043
118-96-7	2,4,6-Trinitrotoluene	0.049	U	0.097	0.049	0.036
121-14-2	2,4-Dinitrotoluene	0.049	U	0.097	0.049	0.045
606-20-2	2,6-Dinitrotoluene	0.049	U M	0.097	0.049	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.049	U	0.097	0.049	0.048
19406-51-0	4-Amino-2,6-dinitrotoluene	0.049	U	0.097	0.049	0.030
2691-41-0	HMX	0.049	U M	0.097	0.049	0.045
99-08-1	m-Nitrotoluene	0.049	U	0.097	0.049	0.042
98-95-3	Nitrobenzene	0.049	U	0.11	0.049	0.037
55-63-0	Nitroglycerin	0.049	U	0.097	0.049	0.028
88-72-2	o-Nitrotoluene	0.049	U	0.097	0.049	0.042
78-11-5	PETN	0.049	U	0.097	0.049	0.033
99-99-0	p-Nitrotoluene	0.049	U	0.097	0.049	0.048
121-82-4	RDX	0.049	U	0.12	0.049	0.042
479-45-8	Tetryl	0.049	U	0.097	0.049	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	95		68-140

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07015.d
Lims ID: GB 280-570105/1-B
Client ID:
Sample Type: GB
Inject. Date: 07-Apr-2022 11:58:24 ALS Bottle#: 13 Worklist Smp#: 15
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: GB 280-570105/1-B
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:21 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 12:35:13
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		107593	125.0	110	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		386530	125.0	134	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.030	-0.011		1335869	129.4	216	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.775	616070	95.0	158	
* 18 2,4-dinitrotoluene-d3								
185.1	4.332	4.341	-0.009		4222723	125.0	118	

QC Flag Legend
Processing Flags

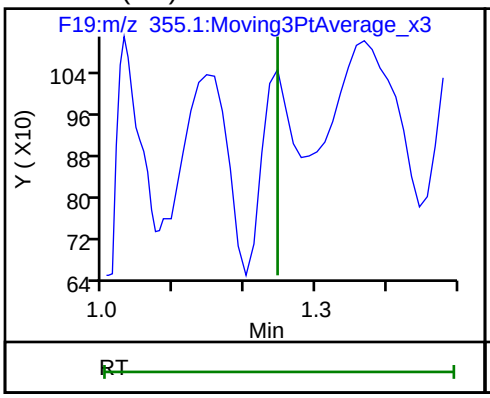
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 08-Apr-2022 07:32:24 Chrom Revision: 2.3 18-Mar-2022 09:07:22

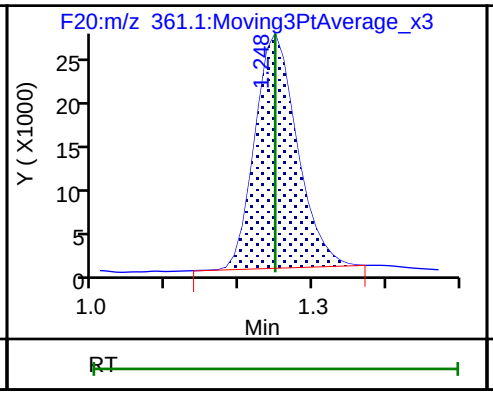
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07015.d
Injection Date: 07-Apr-2022 11:58:24 Instrument ID: LC_LCMS7
Lims ID: GB 280-570105/1-B
Client ID:
Operator ID: acm ALS Bottle#: 13 Worklist Smp#: 15
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

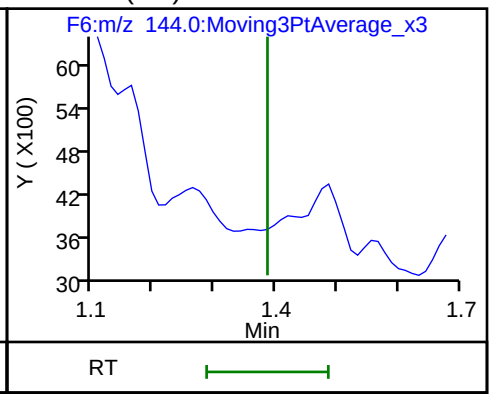
2 HMX (ND)



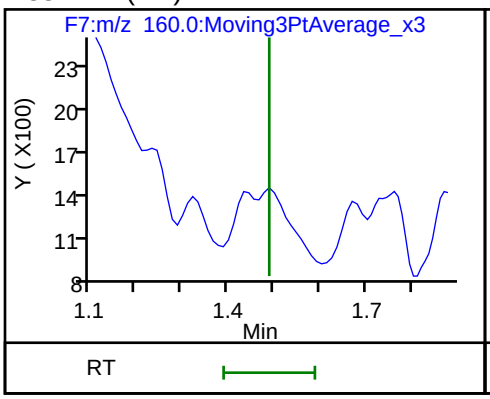
* 1 HMX-13C4



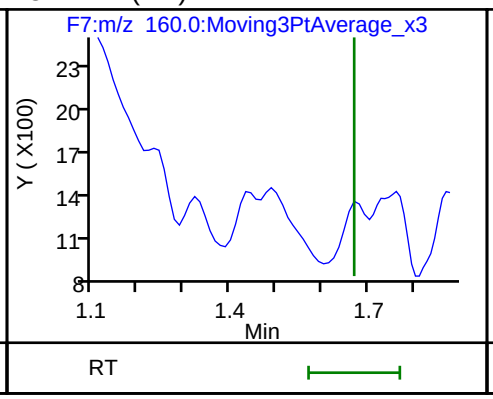
36 TNX (ND)



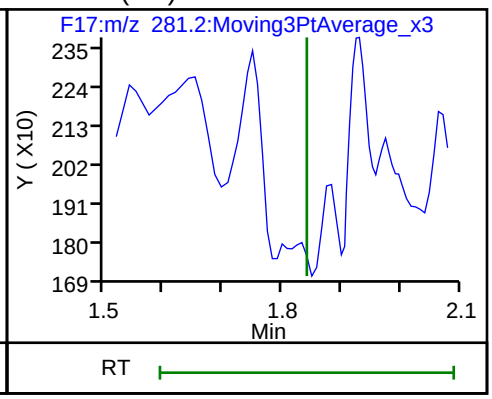
33 DNX (ND)



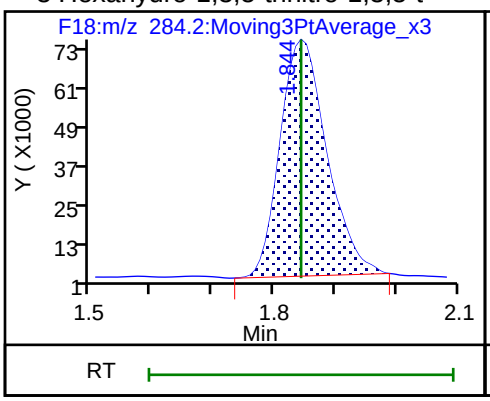
34 MNX (ND)



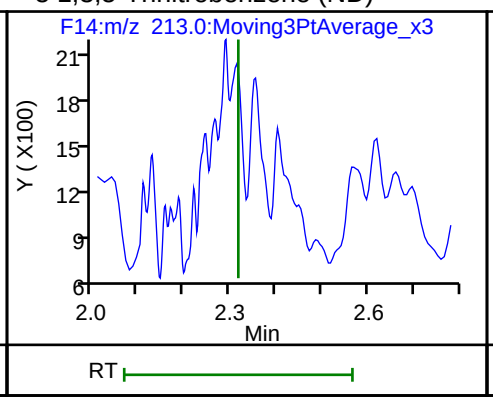
4 RDX (ND)



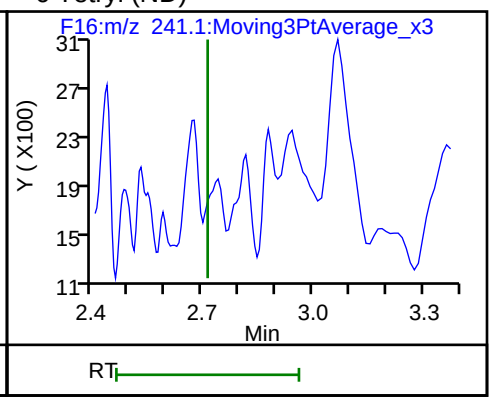
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



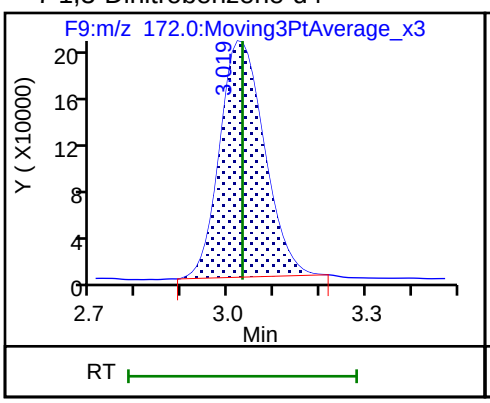
5 1,3,5-Trinitrobenzene (ND)



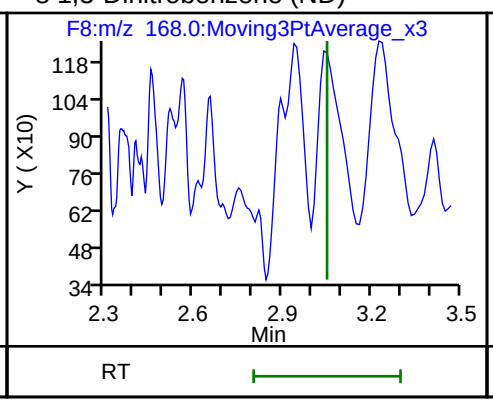
6 Tetryl (ND)



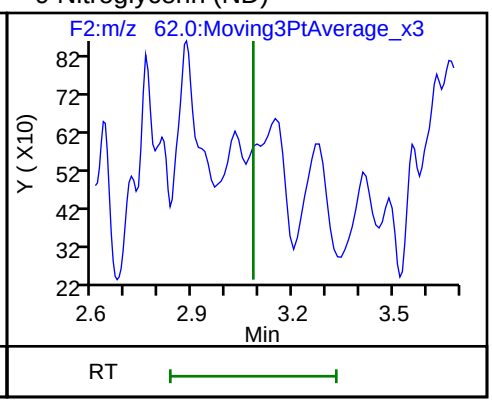
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

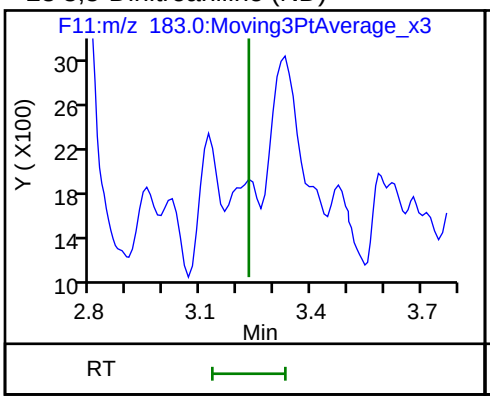


9 Nitroglycerin (ND)

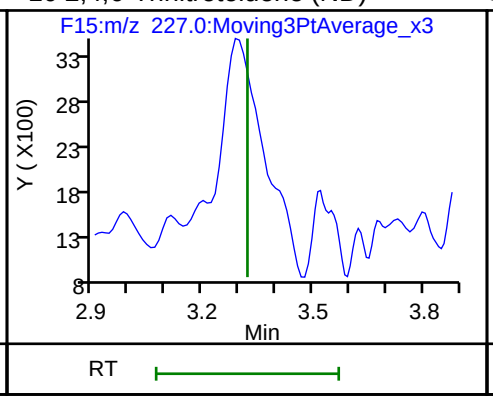


Report Date: 08-Apr-2022 07:32:24 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07015.d

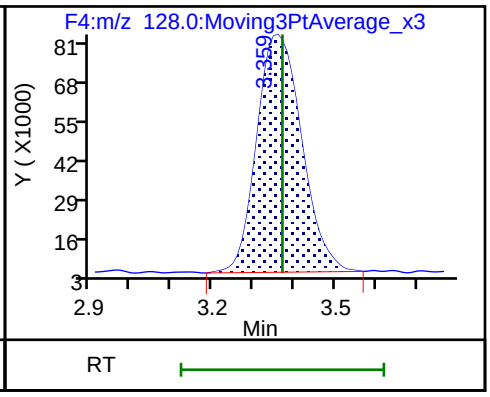
28 3,5-Dinitroaniline (ND)



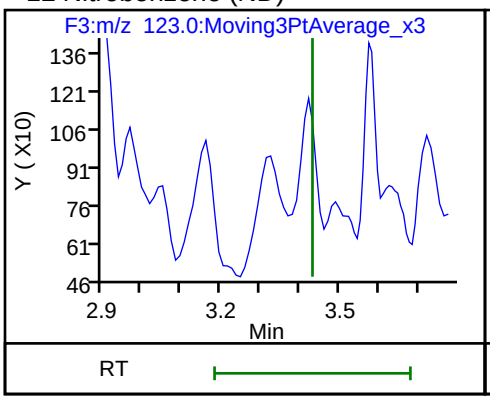
10 2,4,6-Trinitrotoluene (ND)



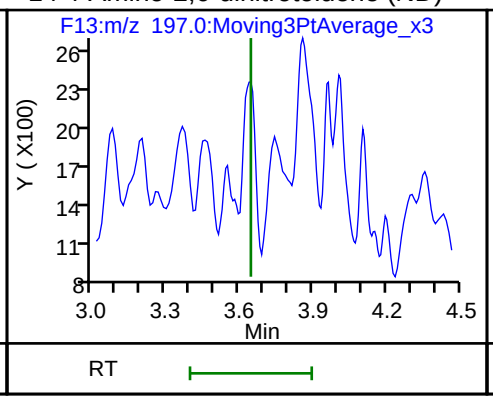
$ 11 Nitrobenzene-d5



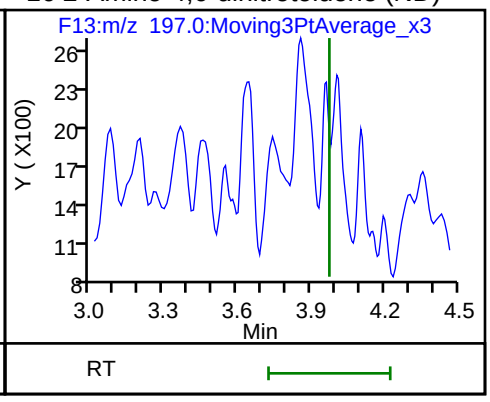
12 Nitrobenzene (ND)



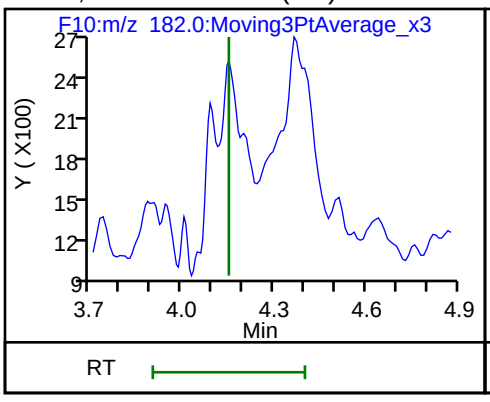
14 4-Amino-2,6-dinitrotoluene (ND)



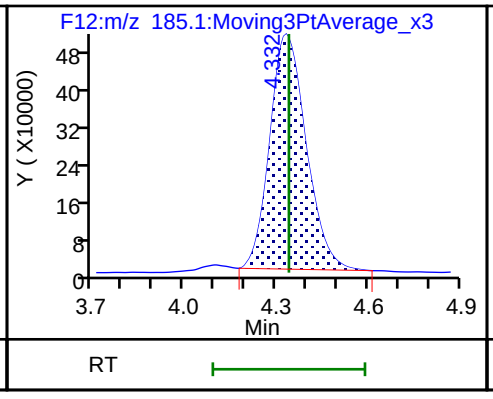
16 2-Amino-4,6-dinitrotoluene (ND)



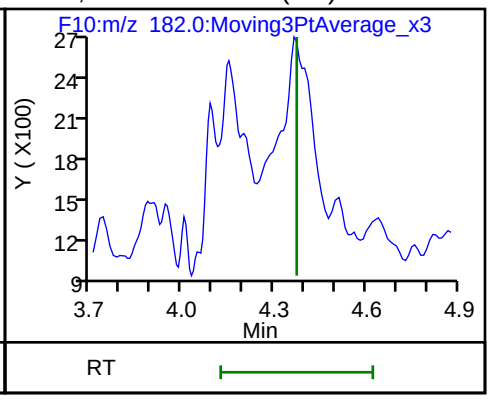
17 2,6-Dinitrotoluene (ND)



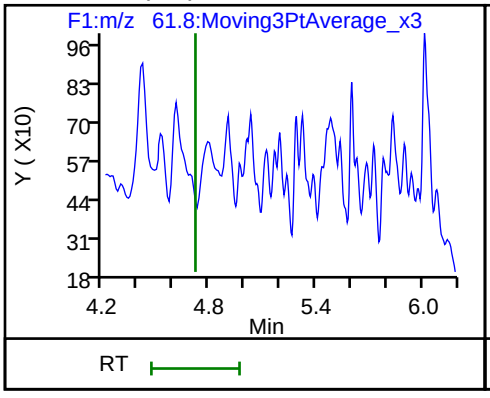
* 18 2,4-dinitrotoluene-d3



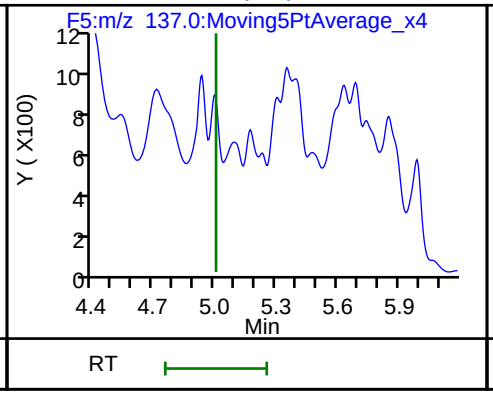
19 2,4-Dinitrotoluene (ND)



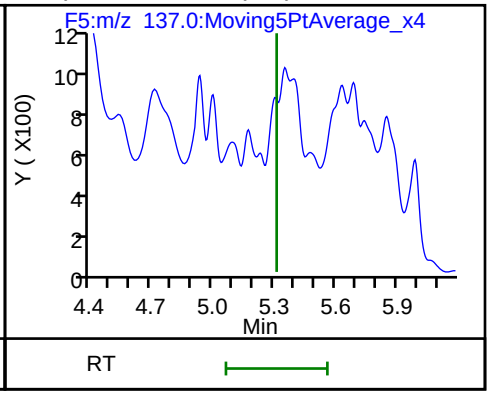
20 PETN (ND)



22 o-Nitrotoluene (ND)



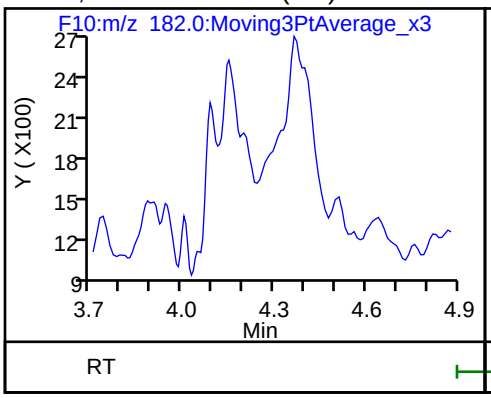
23 p-Nitrotoluene (ND)



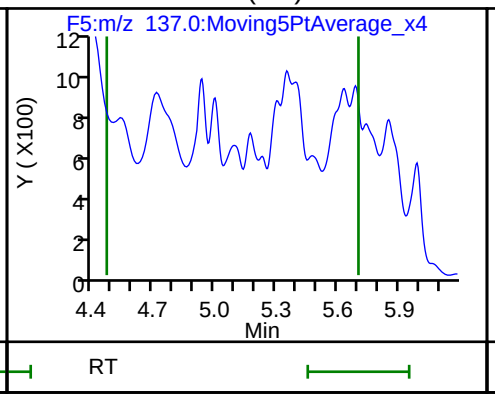
Report Date: 08-Apr-2022 07:32:24 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07015.d

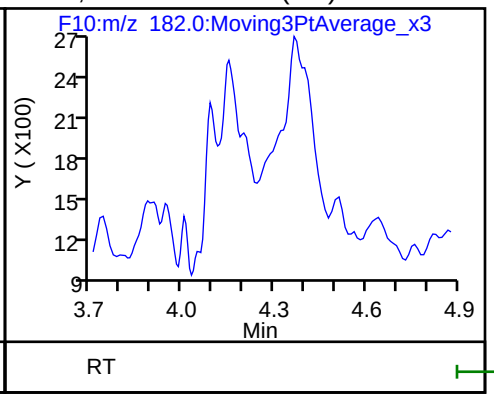
13 3,4-Dinitrotoluene (ND)



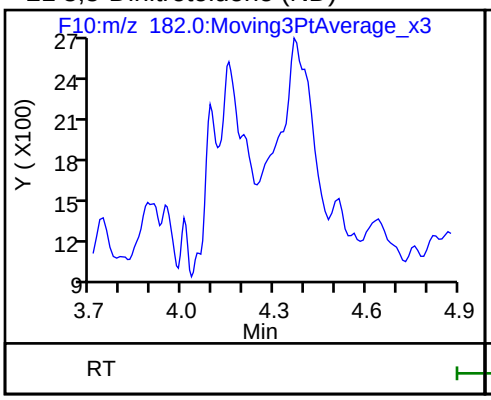
24 m-Nitrotoluene (ND)



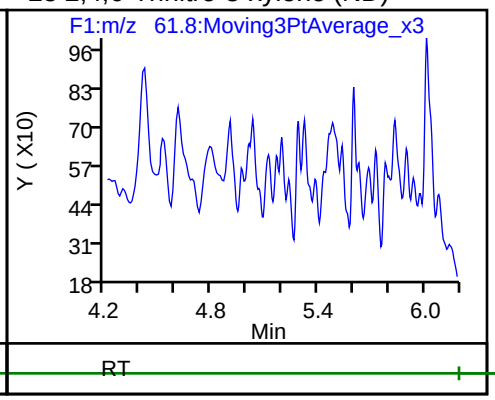
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 08-Apr-2022 07:32:24 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07015.d
Lims ID: GB 280-570105/1-B
Client ID:
Sample Type: GB
Inject. Date: 07-Apr-2022 11:58:24 ALS Bottle#: 13 Worklist Smp#: 15
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: GB 280-570105/1-B
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:21 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 12:35:13

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	95.0	94.72

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: | Lab Sample ID: GB 280-570112/1-B
Matrix: Solid | Lab File ID: ex722D14015.d
Analysis Method: 8321A | Date Collected:
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:23
Sample wt/vol: 10.82(g) | Date Analyzed: 04/14/2022 13:46
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571896 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.046	U	0.092	0.046	0.041
99-65-0	1,3-Dinitrobenzene	0.046	U	0.092	0.046	0.041
118-96-7	2,4,6-Trinitrotoluene	0.046	U	0.092	0.046	0.034
121-14-2	2,4-Dinitrotoluene	0.046	U	0.092	0.046	0.043
606-20-2	2,6-Dinitrotoluene	0.046	U	0.092	0.046	0.037
35572-78-2	2-Amino-4,6-dinitrotoluene	0.046	U	0.092	0.046	0.046
19406-51-0	4-Amino-2,6-dinitrotoluene	0.046	U	0.092	0.046	0.029
2691-41-0	HMX	0.046	U M	0.092	0.046	0.043
99-08-1	m-Nitrotoluene	0.046	U	0.092	0.046	0.040
98-95-3	Nitrobenzene	0.046	U	0.10	0.046	0.035
55-63-0	Nitroglycerin	0.046	U	0.092	0.046	0.027
88-72-2	o-Nitrotoluene	0.046	U	0.092	0.046	0.040
78-11-5	PETN	0.046	U	0.092	0.046	0.031
99-99-0	p-Nitrotoluene	0.046	U	0.092	0.046	0.046
121-82-4	RDX	0.046	U	0.11	0.046	0.040
479-45-8	Tetryl	0.046	U	0.092	0.046	0.036

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	94		68-140

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14015.d
Lims ID: GB 280-570112/1-B
Client ID:
Sample Type: GB
Inject. Date: 14-Apr-2022 13:46:57 ALS Bottle#: 13 Worklist Smp#: 15
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: GB 280-570112/1-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:00 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 14-Apr-2022 14:28:09
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		149323	125.0	132	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		489615	125.0	398	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1217465	129.4	301	
10 2,4,6-Trinitrotoluene								
227.0	3.272	3.281	-0.009	0.765	11655	-0.9581	5.2	
$ 11 Nitrobenzene-d5								
128.0	3.315	3.324	-0.009	0.775	513639	94.1	118	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3799172	125.0	127	

QC Flag Legend
Processing Flags

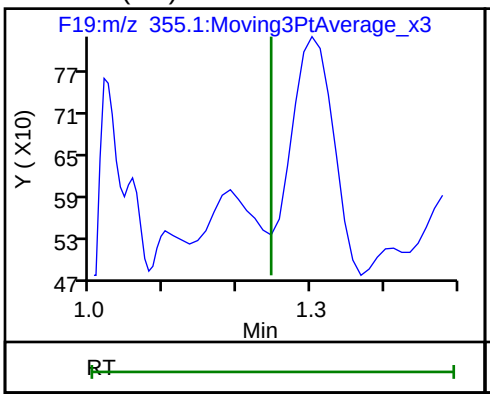
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:03 Chrom Revision: 2.3 12-Apr-2022 20:29:44

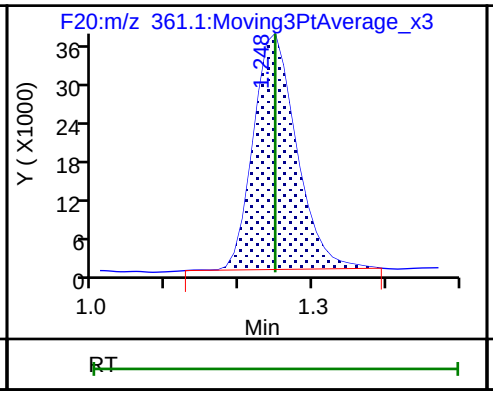
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14015.d
Injection Date: 14-Apr-2022 13:46:57 Instrument ID: LC_LCMS7
Lims ID: GB 280-570112/1-B
Client ID:
Operator ID: acm ALS Bottle#: 13 Worklist Smp#: 15
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

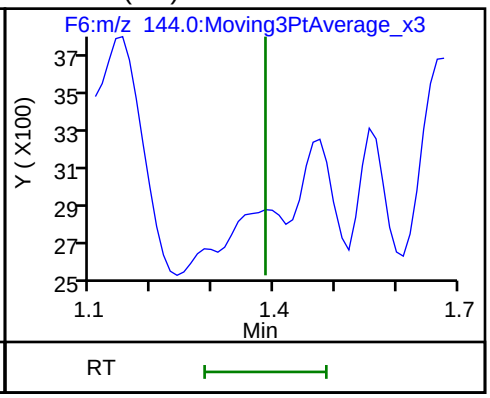
2 HMX (ND)



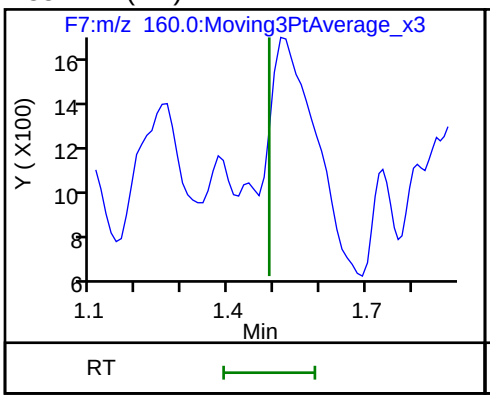
* 1 HMX-13C4



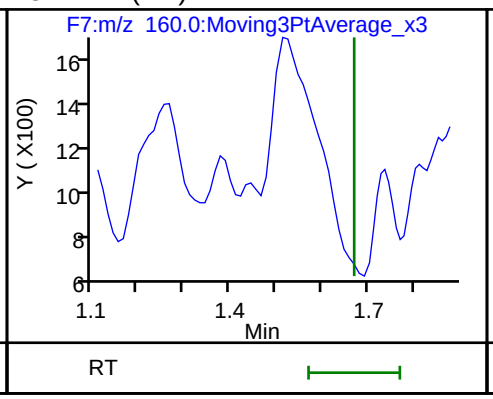
36 TNX (ND)



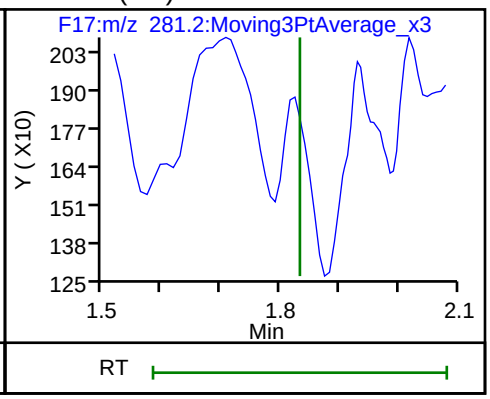
33 DNX (ND)



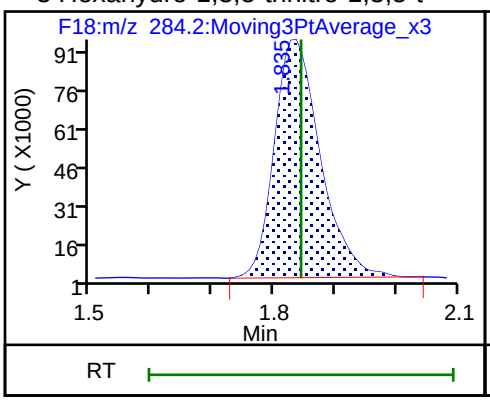
34 MNX (ND)



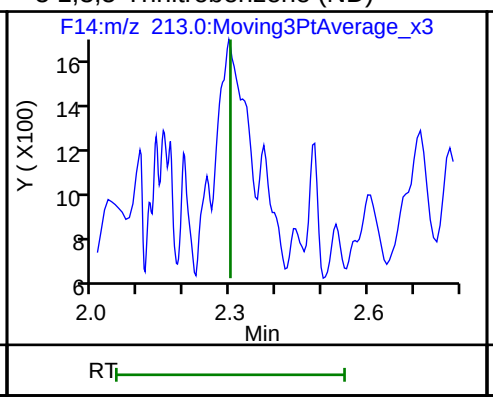
4 RDX (ND)



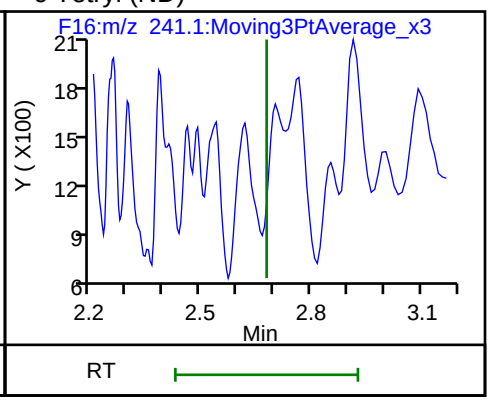
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



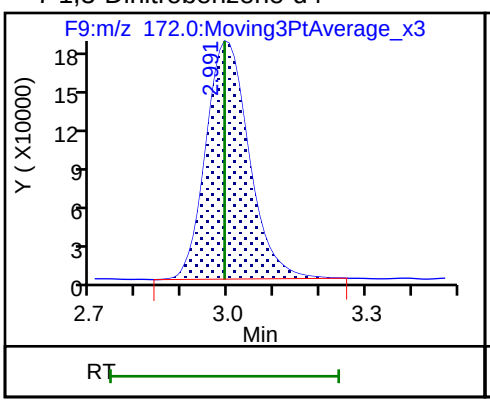
5 1,3,5-Trinitrobenzene (ND)



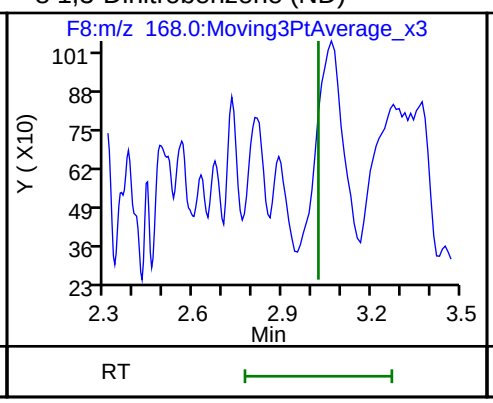
6 Tetryl (ND)



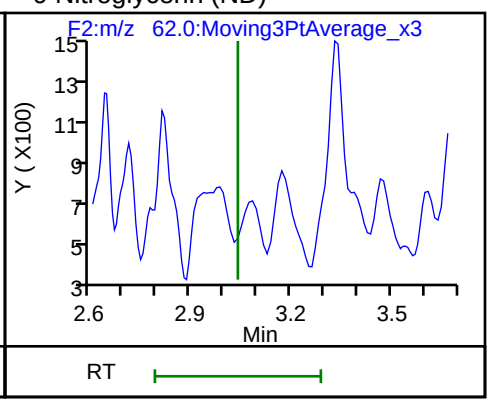
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



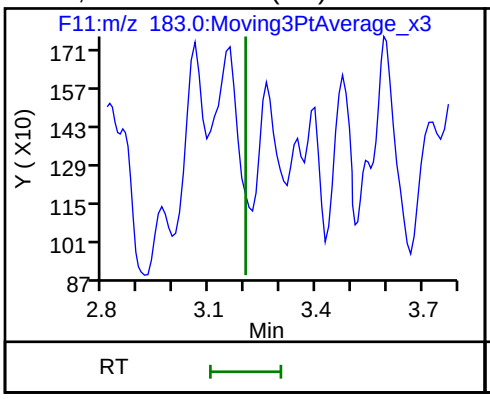
9 Nitroglycerin (ND)



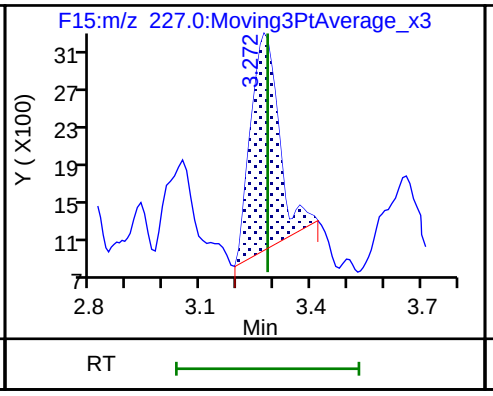
Report Date: 15-Apr-2022 08:03:03 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14015.d

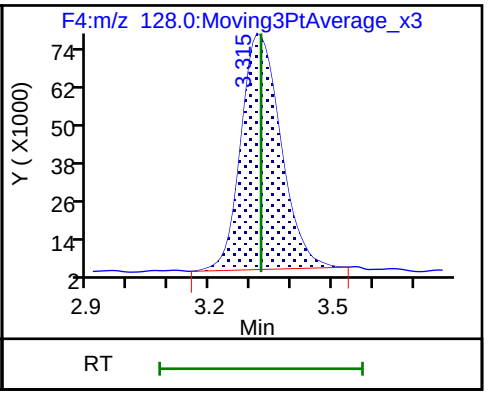
28 3,5-Dinitroaniline (ND)



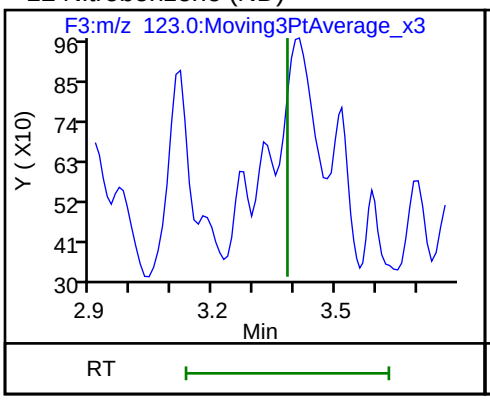
10 2,4,6-Trinitrotoluene



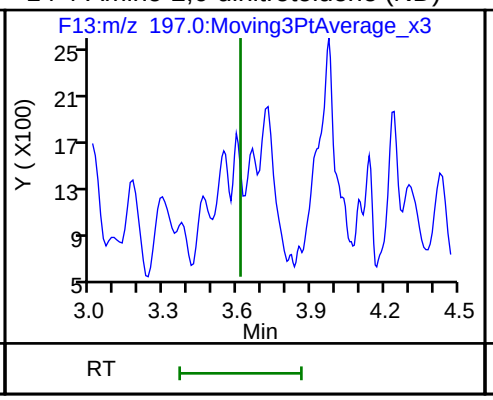
$ 11 Nitrobenzene-d5



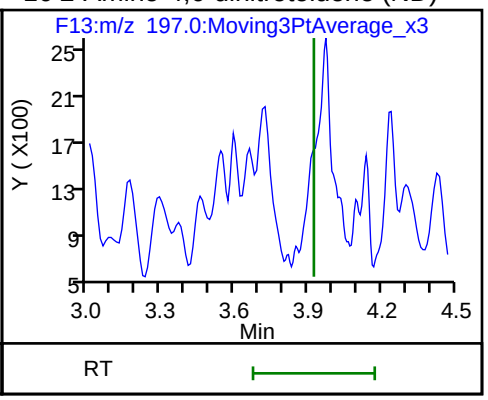
12 Nitrobenzene (ND)



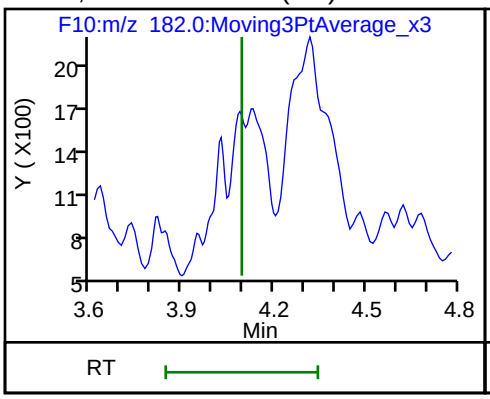
14 4-Amino-2,6-dinitrotoluene (ND)



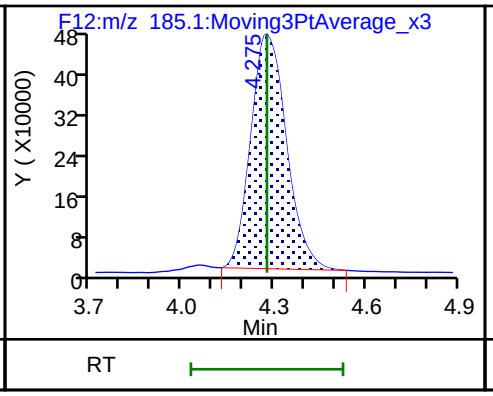
16 2-Amino-4,6-dinitrotoluene (ND)



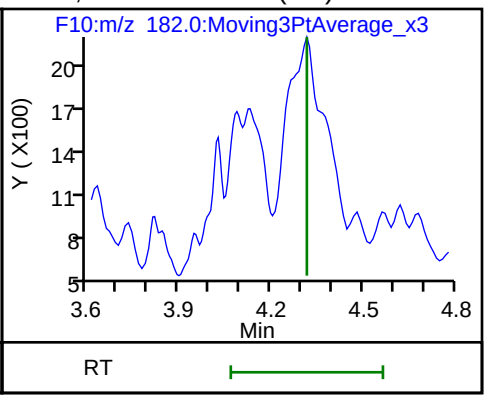
17 2,6-Dinitrotoluene (ND)



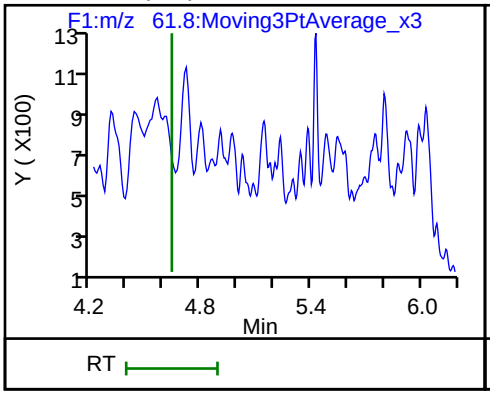
* 18 2,4-dinitrotoluene-d3



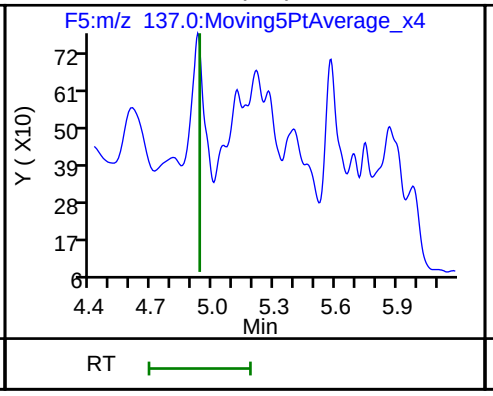
19 2,4-Dinitrotoluene (ND)



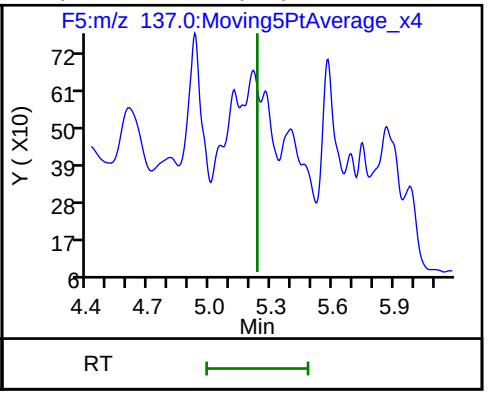
20 PETN (ND)



22 o-Nitrotoluene (ND)



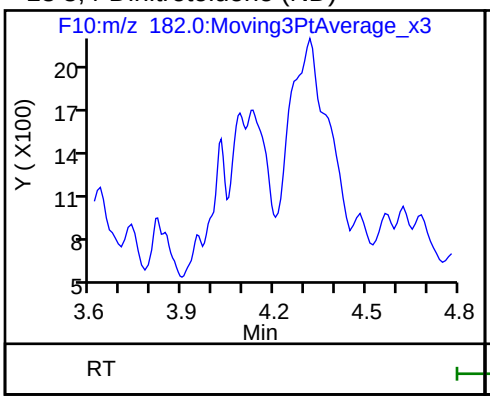
23 p-Nitrotoluene (ND)



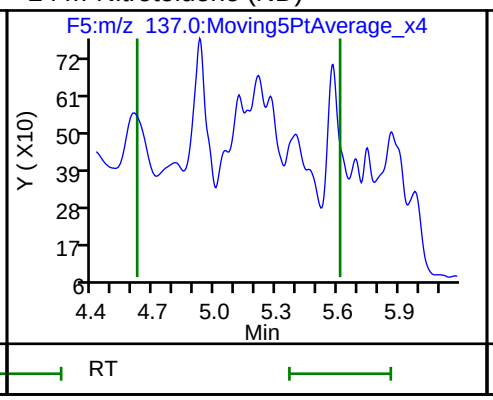
Report Date: 15-Apr-2022 08:03:03 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14015.d

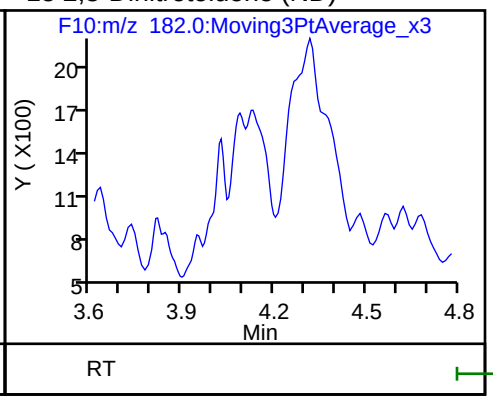
13 3,4-Dinitrotoluene (ND)



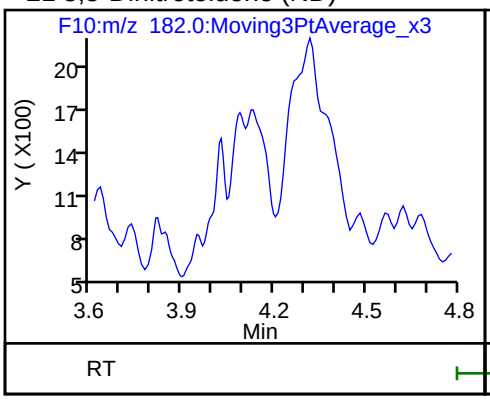
24 m-Nitrotoluene (ND)



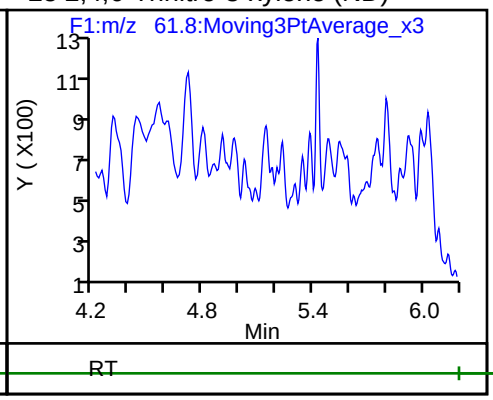
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14015.d
Lims ID: GB 280-570112/1-B
Client ID:
Sample Type: GB
Inject. Date: 14-Apr-2022 13:46:57 ALS Bottle#: 13 Worklist Smp#: 15
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: GB 280-570112/1-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:00 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 14-Apr-2022 14:28:09

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	94.1	93.78

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: | Lab Sample ID: GB 280-570111/1-B
Matrix: Solid | Lab File ID: ex722D08015.d
Analysis Method: 8321A | Date Collected:
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20
Sample wt/vol: 10.4(g) | Date Analyzed: 04/08/2022 11:07
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571224 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.048	U	0.096	0.048	0.043
99-65-0	1,3-Dinitrobenzene	0.048	U	0.096	0.048	0.043
118-96-7	2,4,6-Trinitrotoluene	0.048	U	0.096	0.048	0.035
121-14-2	2,4-Dinitrotoluene	0.048	U	0.096	0.048	0.045
606-20-2	2,6-Dinitrotoluene	0.048	U	0.096	0.048	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.048	U	0.096	0.048	0.048
19406-51-0	4-Amino-2,6-dinitrotoluene	0.048	U	0.096	0.048	0.030
2691-41-0	HMX	0.048	U	0.096	0.048	0.044
99-08-1	m-Nitrotoluene	0.048	U	0.096	0.048	0.042
98-95-3	Nitrobenzene	0.048	U	0.11	0.048	0.037
55-63-0	Nitroglycerin	0.048	U	0.096	0.048	0.028
88-72-2	o-Nitrotoluene	0.048	U	0.096	0.048	0.041
78-11-5	PETN	0.048	U	0.096	0.048	0.033
99-99-0	p-Nitrotoluene	0.048	U	0.096	0.048	0.048
121-82-4	RDX	0.048	U	0.12	0.048	0.041
479-45-8	Tetryl	0.048	U	0.096	0.048	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	101		68-140

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08015.d
Lims ID: GB 280-570111/1-B
Client ID:
Sample Type: GB
Inject. Date: 08-Apr-2022 11:07:11 ALS Bottle#: 13 Worklist Smp#: 15
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: GB 280-570111/1-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:44 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:40:12
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		166874	125.0	134	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		609310	125.0	156	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.008	3.008	0.0		2005023	129.4	404	
$ 11 Nitrobenzene-d5								
128.0	3.348	3.354	0.0	0.776	963292	101.6	141	
* 18 2,4-dinitrotoluene-d3								
185.1	4.315	4.315	0.0		5810759	125.0	115	

QC Flag Legend
Processing Flags

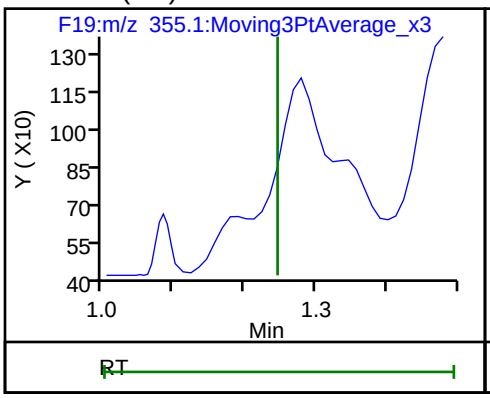
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 14-Apr-2022 10:06:47 Chrom Revision: 2.3 12-Apr-2022 20:29:44

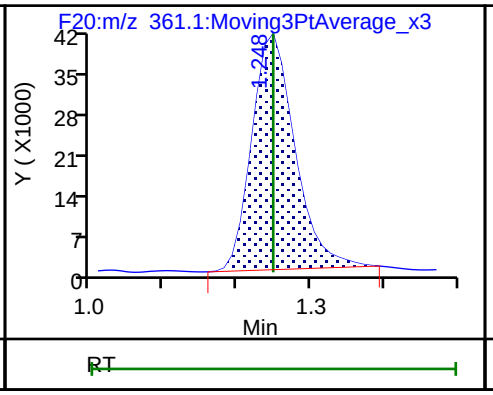
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08015.d
Injection Date: 08-Apr-2022 11:07:11 Instrument ID: LC_LCMS7
Lims ID: GB 280-570111/1-B
Client ID:
Operator ID: acm ALS Bottle#: 13 Worklist Smp#: 15
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

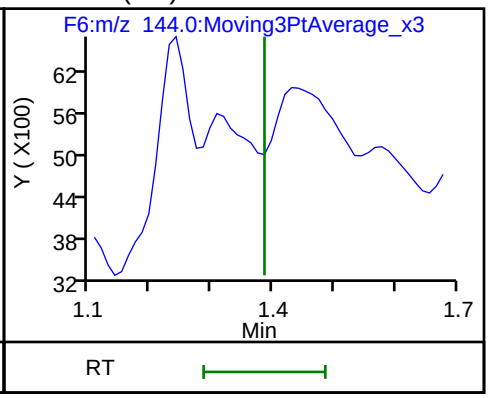
2 HMX (ND)



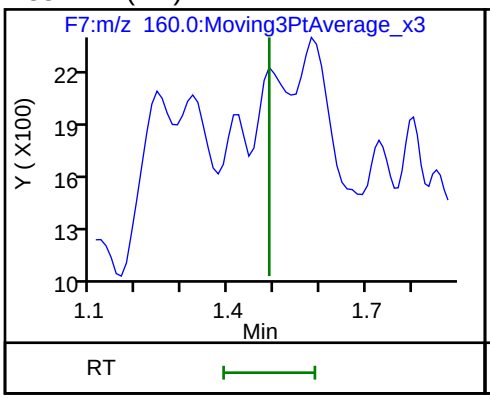
* 1 HMX-13C4



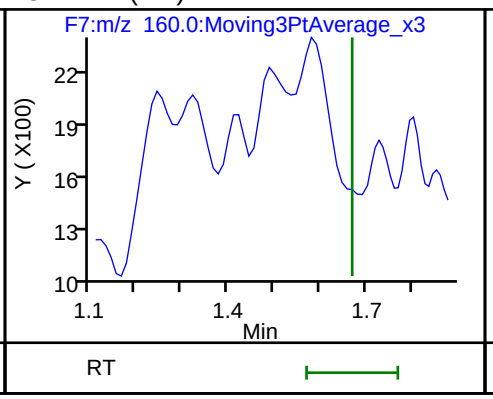
36 TNX (ND)



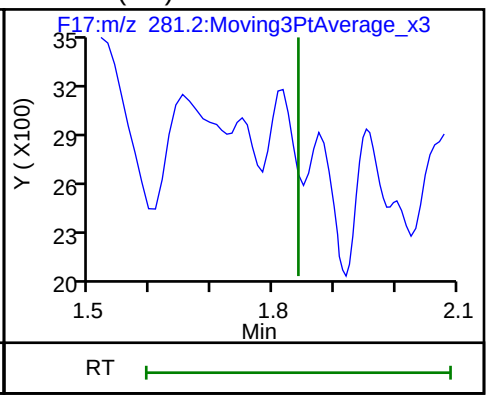
33 DNX (ND)



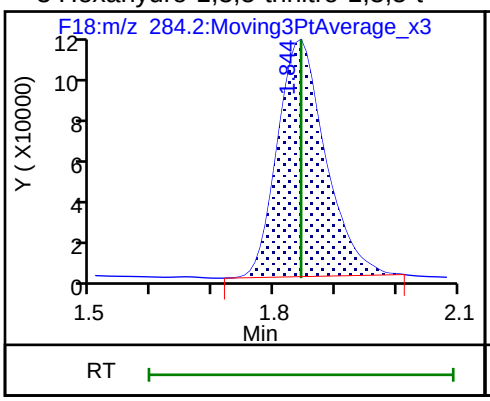
34 MNX (ND)



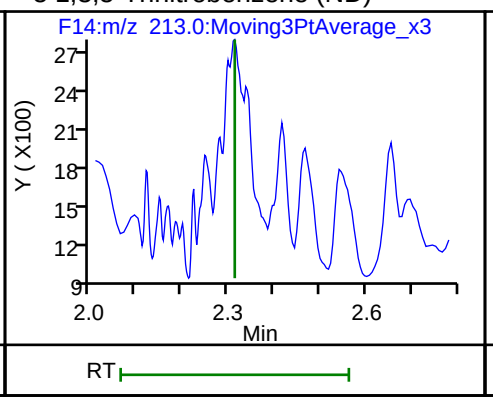
4 RDX (ND)



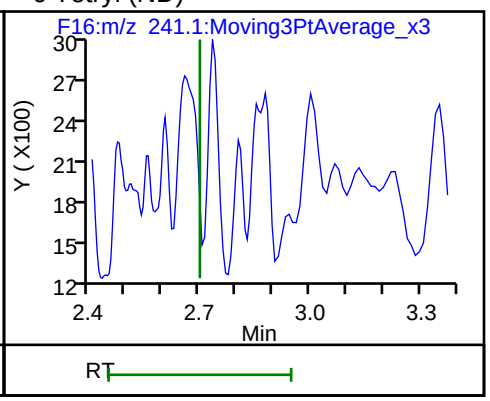
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



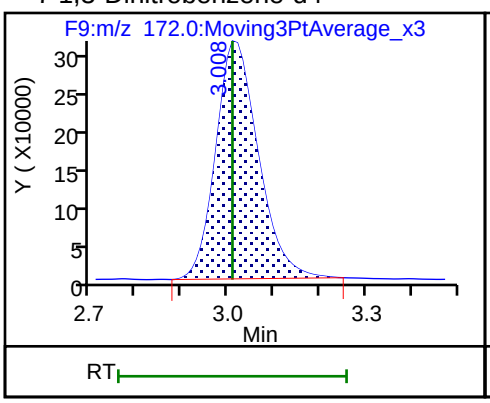
5 1,3,5-Trinitrobenzene (ND)



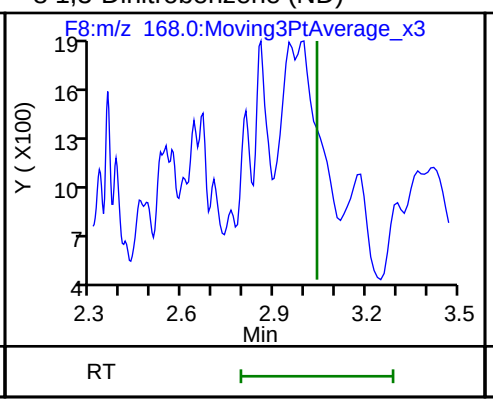
6 Tetryl (ND)



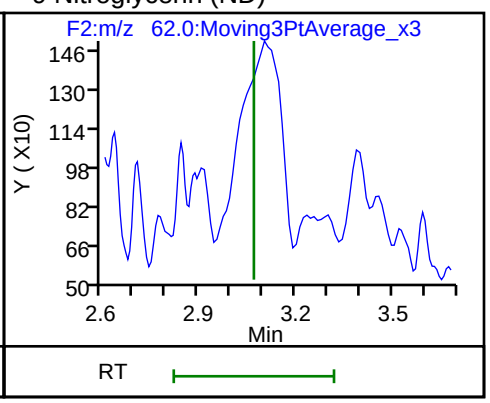
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

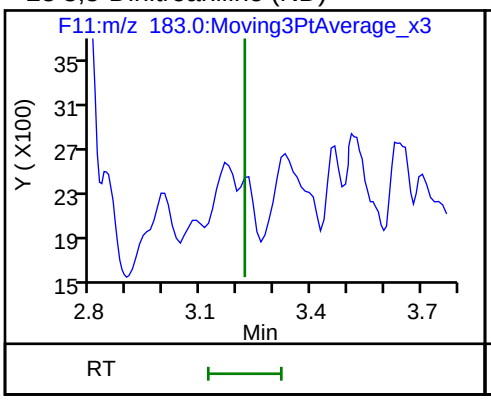


9 Nitroglycerin (ND)

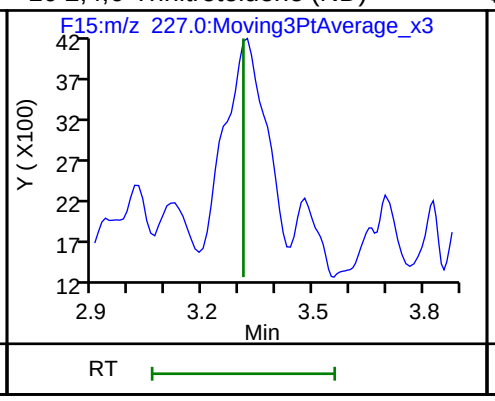


Report Date: 14-Apr-2022 10:06:47 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08015.d

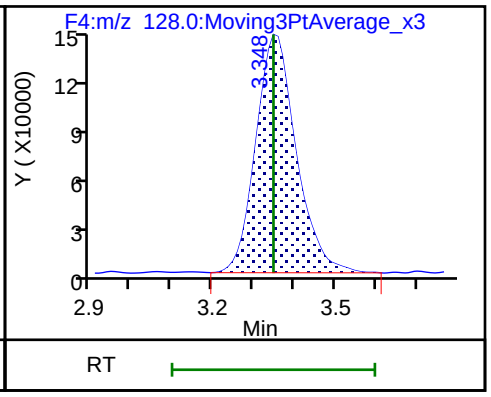
28 3,5-Dinitroaniline (ND)



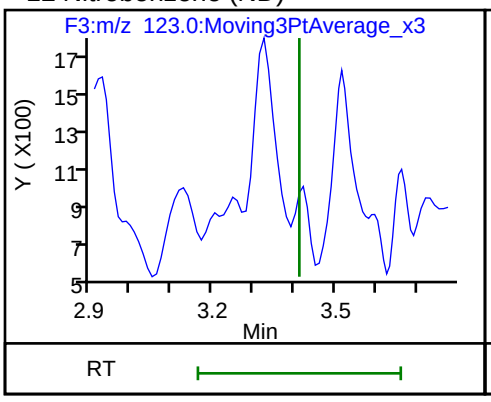
10 2,4,6-Trinitrotoluene (ND)



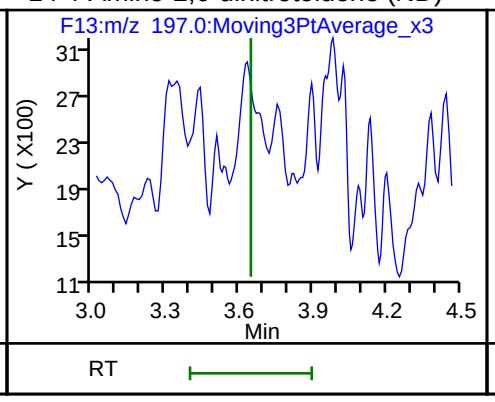
$ 11 Nitrobenzene-d5



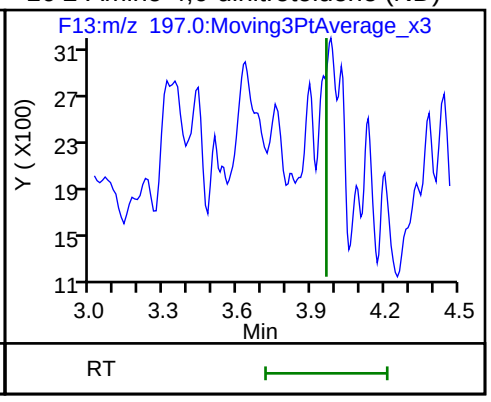
12 Nitrobenzene (ND)



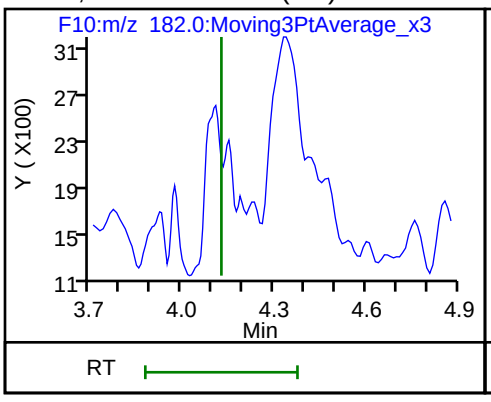
14 4-Amino-2,6-dinitrotoluene (ND)



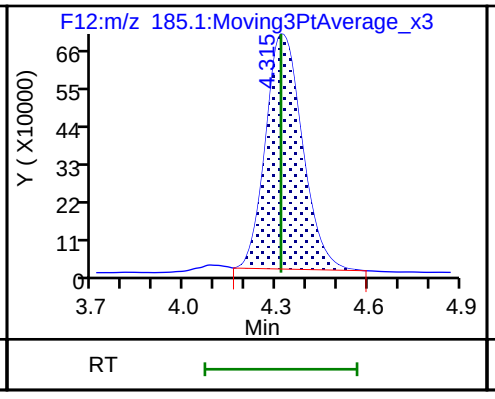
16 2-Amino-4,6-dinitrotoluene (ND)



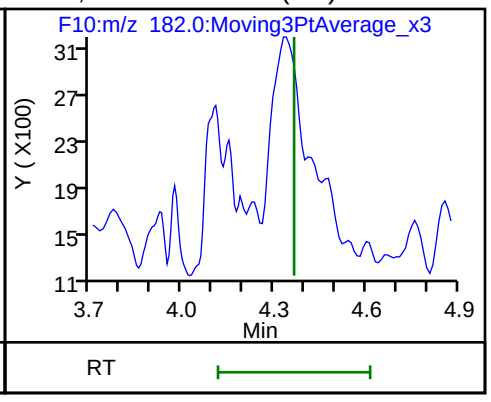
17 2,6-Dinitrotoluene (ND)



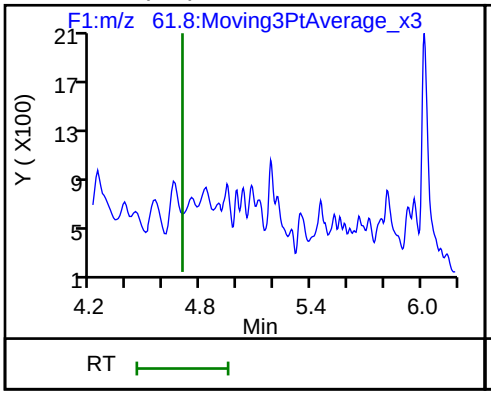
* 18 2,4-dinitrotoluene-d3



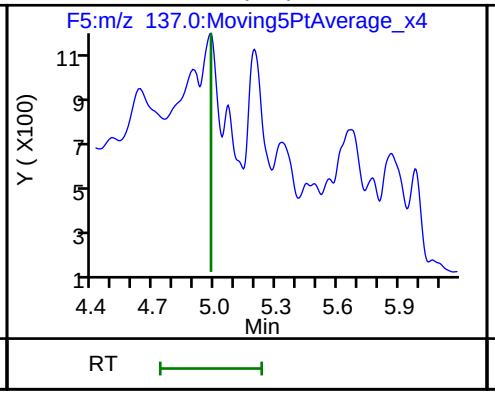
19 2,4-Dinitrotoluene (ND)



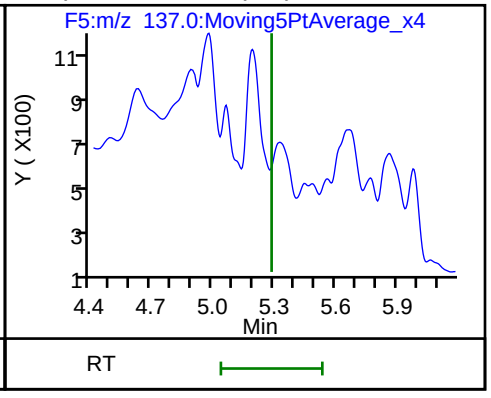
20 PETN (ND)



22 o-Nitrotoluene (ND)

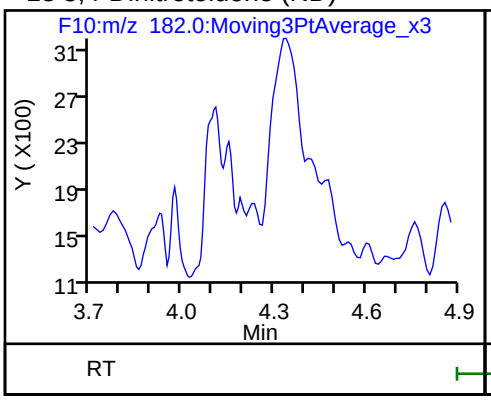


23 p-Nitrotoluene (ND)

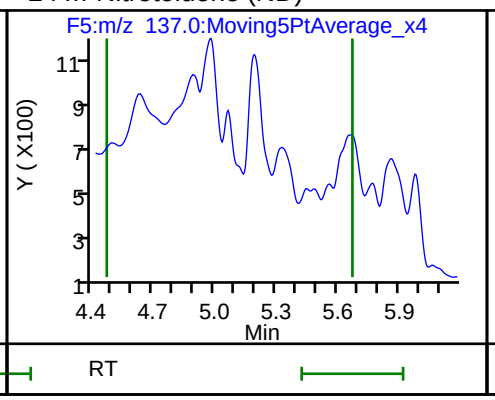


Report Date: 14-Apr-2022 10:06:47 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08015.d

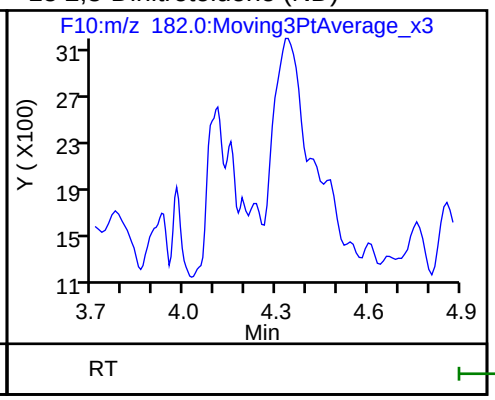
13 3,4-Dinitrotoluene (ND)



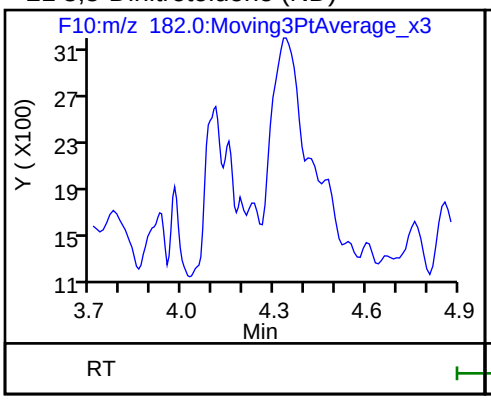
24 m-Nitrotoluene (ND)



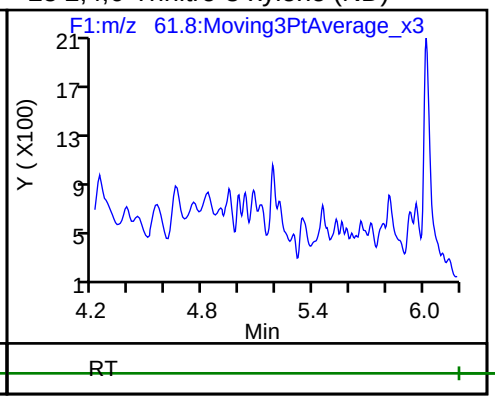
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 14-Apr-2022 10:06:47 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08015.d
Lims ID: GB 280-570111/1-B
Client ID:
Sample Type: GB
Inject. Date: 08-Apr-2022 11:07:11 ALS Bottle#: 13 Worklist Smp#: 15
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: GB 280-570111/1-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:44 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:40:12

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	101.6	101.25

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1

SDG No.:

Client Sample ID: | Lab Sample ID: GB 280-570115/1-B

Matrix: Solid | Lab File ID: ex722D14047.d

Analysis Method: 8321A | Date Collected:

Extraction Method: 8330B | Date Extracted: 04/06/2022 18:17

Sample wt/vol: 10.6(g) | Date Analyzed: 04/14/2022 17:18

Con. Extract Vol.: 40(mL) | Dilution Factor: 1

Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:

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

Analysis Batch No.: 571897 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.047	U	0.094	0.047	0.042
99-65-0	1,3-Dinitrobenzene	0.047	U	0.094	0.047	0.042
118-96-7	2,4,6-Trinitrotoluene	0.047	U	0.094	0.047	0.035
121-14-2	2,4-Dinitrotoluene	0.047	U	0.094	0.047	0.044
606-20-2	2,6-Dinitrotoluene	0.047	U	0.094	0.047	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.047	U	0.094	0.047	0.047
19406-51-0	4-Amino-2,6-dinitrotoluene	0.047	U	0.094	0.047	0.029
2691-41-0	HMX	0.047	U M	0.094	0.047	0.043
99-08-1	m-Nitrotoluene	0.047	U	0.094	0.047	0.041
98-95-3	Nitrobenzene	0.047	U	0.10	0.047	0.036
55-63-0	Nitroglycerin	0.047	U	0.094	0.047	0.027
88-72-2	o-Nitrotoluene	0.047	U	0.094	0.047	0.040
78-11-5	PETN	0.047	U	0.094	0.047	0.032
99-99-0	p-Nitrotoluene	0.047	U	0.094	0.047	0.047
121-82-4	RDX	0.047	U	0.11	0.047	0.041
479-45-8	Tetryl	0.047	U	0.094	0.047	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	102		68-140

Report Date: 15-Apr-2022 08:03:23 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14047.d
Lims ID: GB 280-570115/1-B
Client ID:
Sample Type: GB
Inject. Date: 14-Apr-2022 17:18:00 ALS Bottle#: 42 Worklist Smp#: 47
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: GB 280-570115/1-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:20 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:36:13
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		159225	125.0	166	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		486396	125.0	175	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1132437	129.4	222	
$ 11 Nitrobenzene-d5								
128.0	3.324	3.324	0.0	0.778	517570	102.1	28.3	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3471356	125.0	121	

QC Flag Legend

Processing Flags

Reagents:

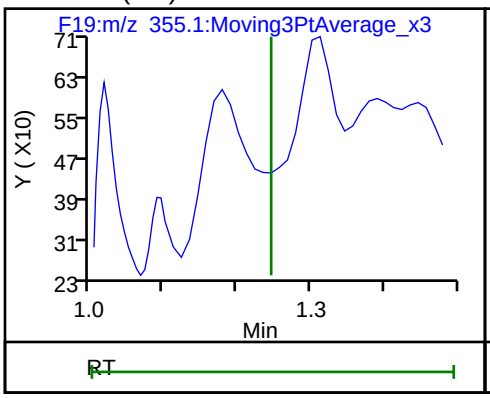
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:23 Chrom Revision: 2.3 12-Apr-2022 20:29:44

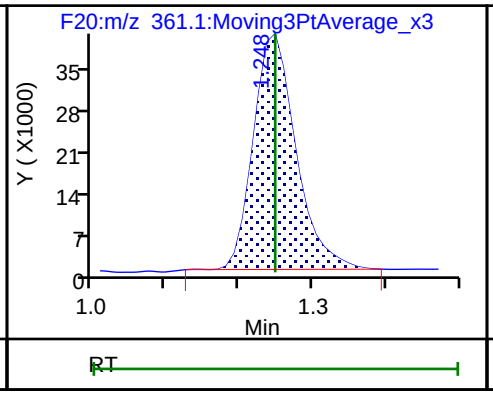
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14047.d
Injection Date: 14-Apr-2022 17:18:00 Instrument ID: LC_LCMS7
Lims ID: GB 280-570115/1-B
Client ID:
Operator ID: acm ALS Bottle#: 42 Worklist Smp#: 47
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

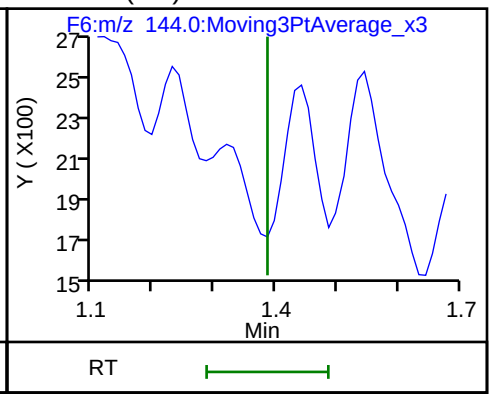
2 HMX (ND)



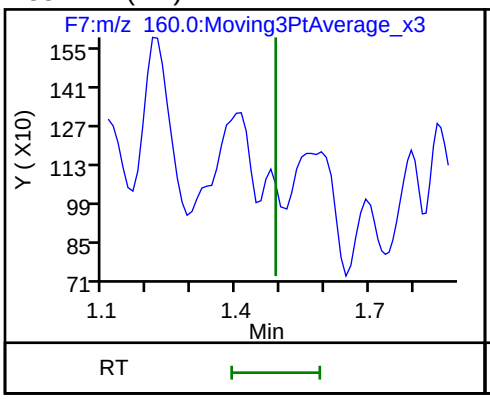
* 1 HMX-13C4



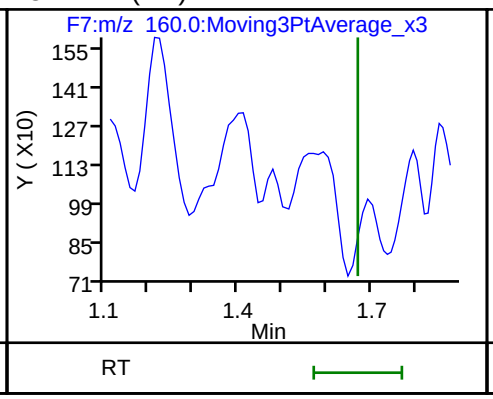
36 TNX (ND)



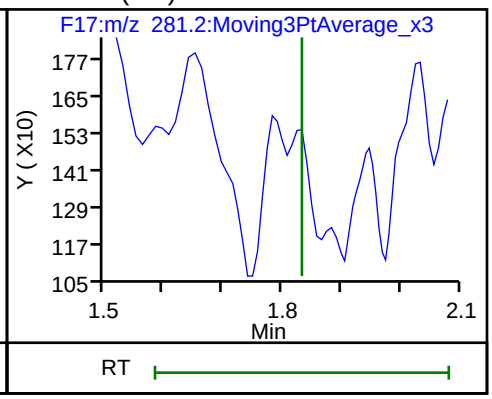
33 DNX (ND)



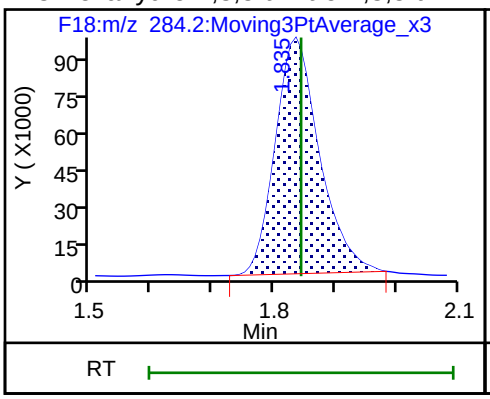
34 MNX (ND)



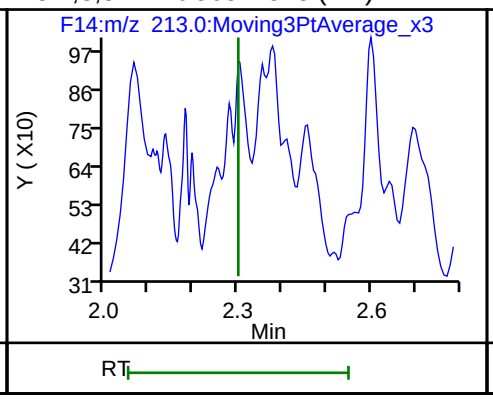
4 RDX (ND)



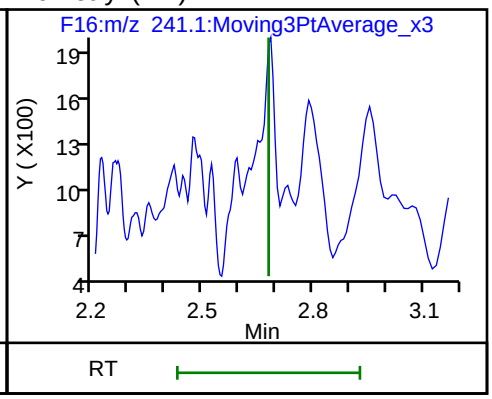
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



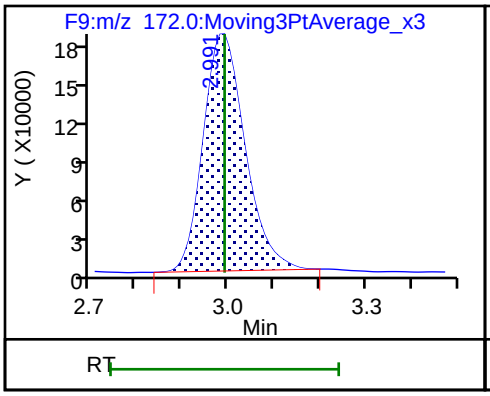
5 1,3,5-Trinitrobenzene (ND)



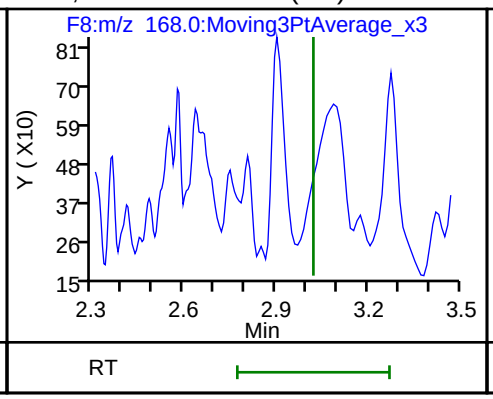
6 Tetryl (ND)



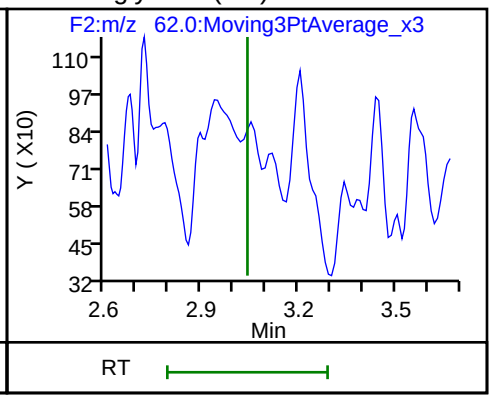
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

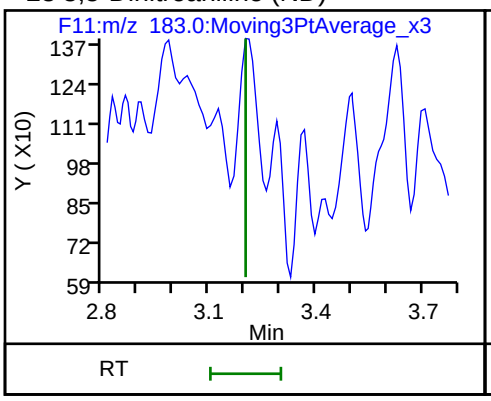


9 Nitroglycerin (ND)

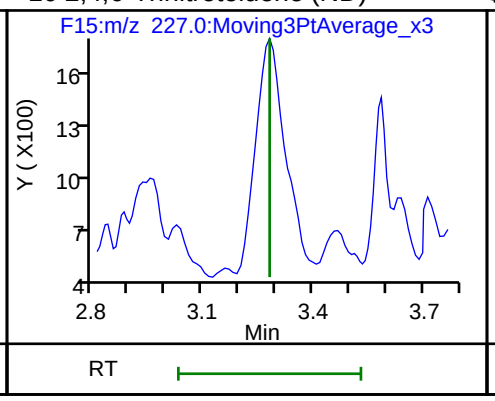


Report Date: 15-Apr-2022 08:03:23 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14047.d

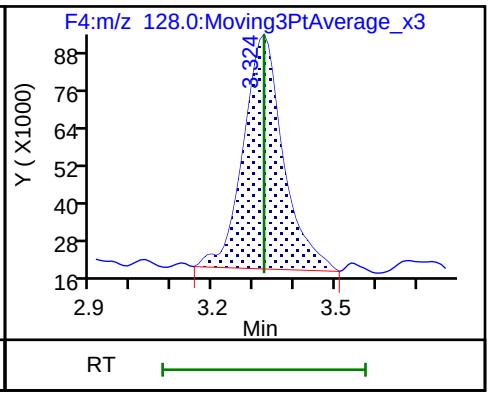
28 3,5-Dinitroaniline (ND)



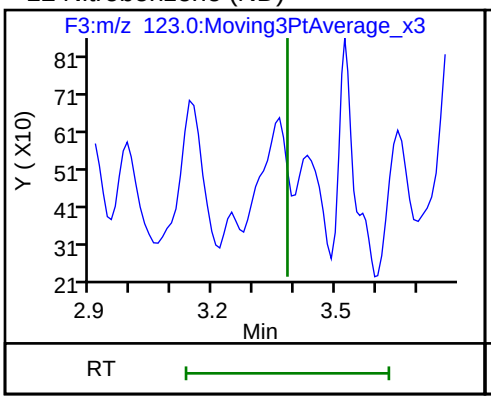
10 2,4,6-Trinitrotoluene (ND)



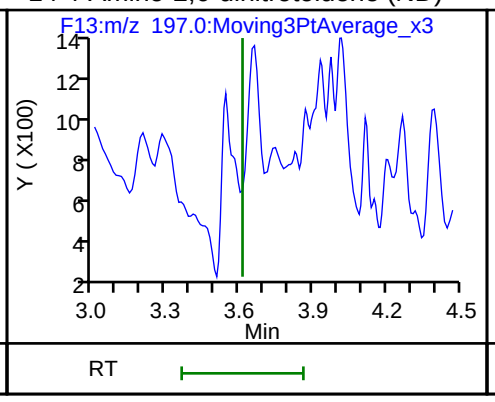
$ 11 Nitrobenzene-d5



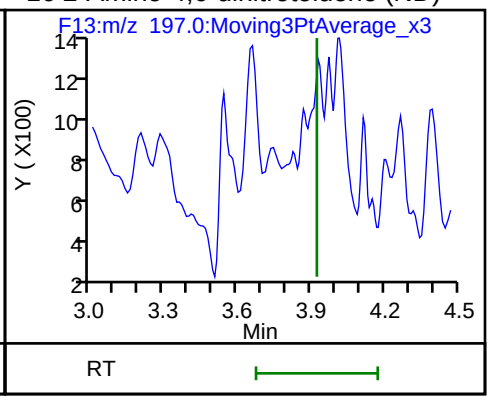
12 Nitrobenzene (ND)



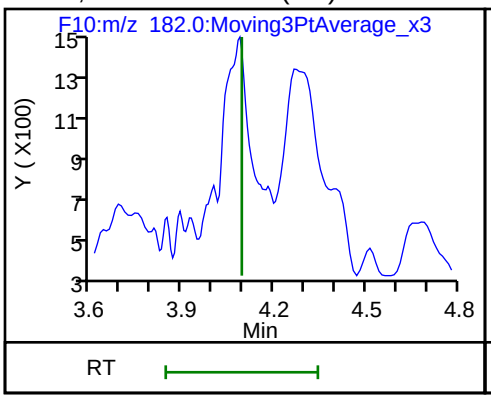
14 4-Amino-2,6-dinitrotoluene (ND)



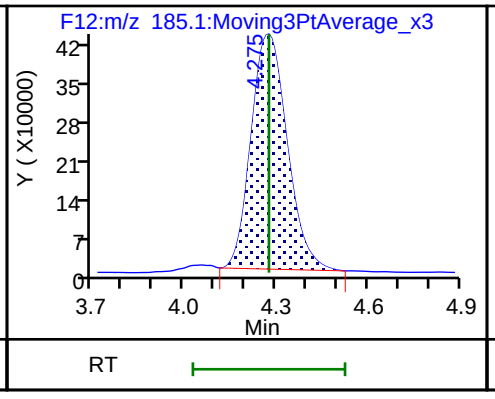
16 2-Amino-4,6-dinitrotoluene (ND)



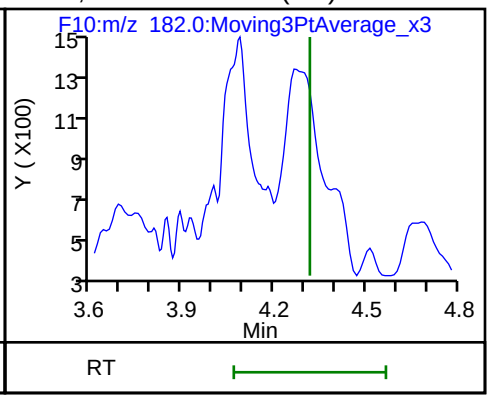
17 2,6-Dinitrotoluene (ND)



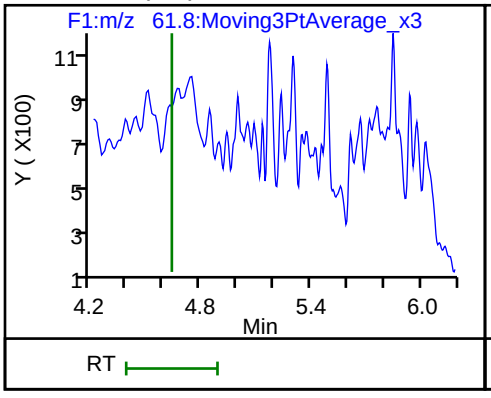
* 18 2,4-dinitrotoluene-d3



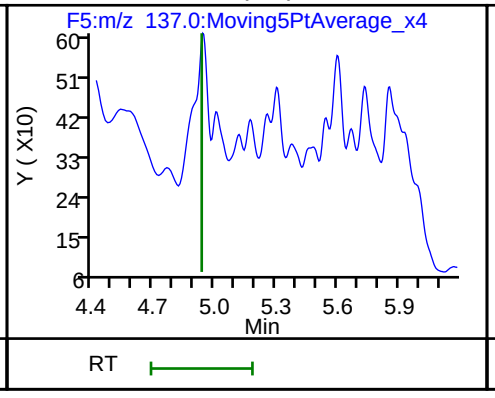
19 2,4-Dinitrotoluene (ND)



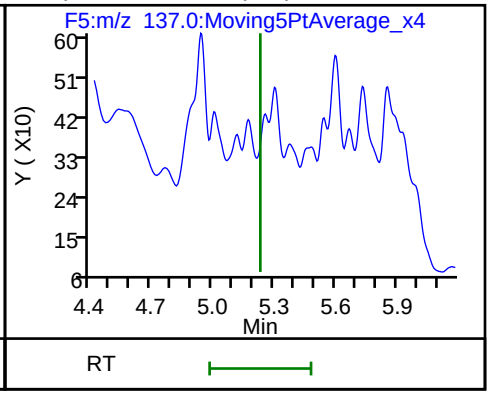
20 PETN (ND)



22 o-Nitrotoluene (ND)



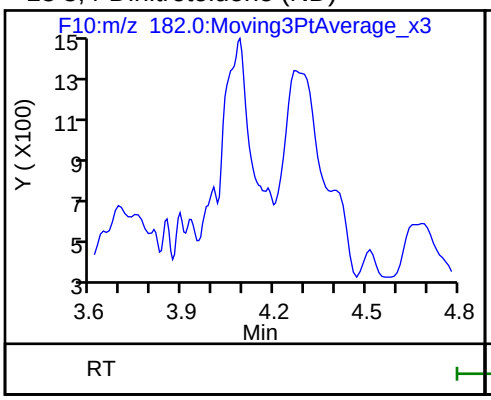
23 p-Nitrotoluene (ND)



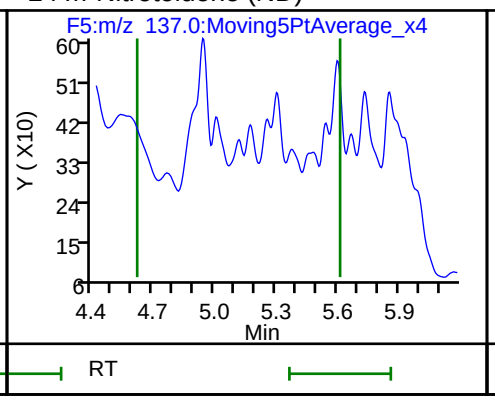
Report Date: 15-Apr-2022 08:03:23 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14047.d

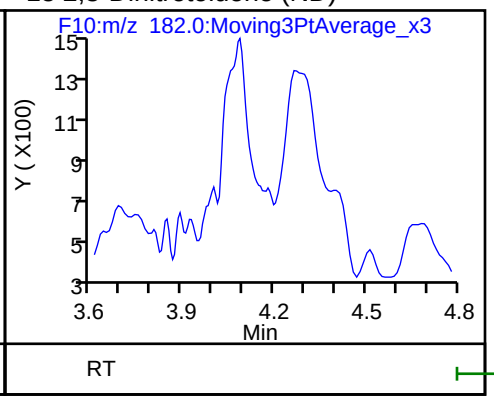
13 3,4-Dinitrotoluene (ND)



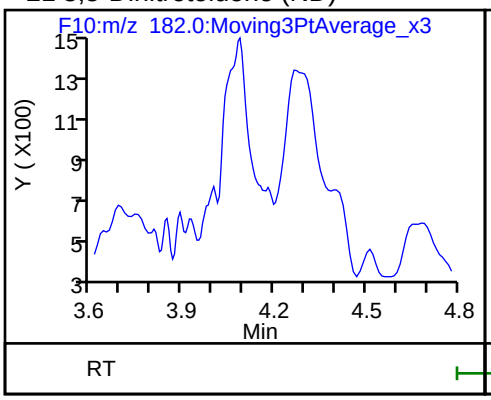
24 m-Nitrotoluene (ND)



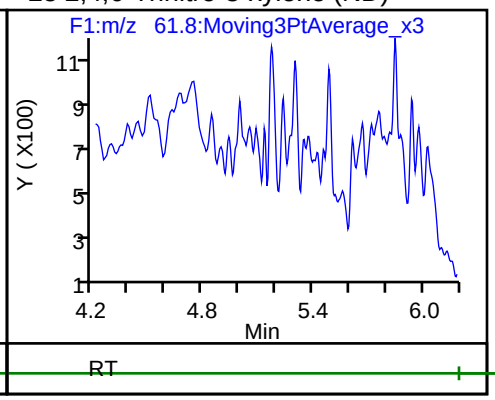
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:23 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14047.d
Lims ID: GB 280-570115/1-B
Client ID:
Sample Type: GB
Inject. Date: 14-Apr-2022 17:18:00 ALS Bottle#: 42 Worklist Smp#: 47
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: GB 280-570115/1-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:20 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:36:13

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	102.1	101.75

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: | Lab Sample ID: ICB 280-570784/10
Matrix: Water | Lab File ID: ex722D05010.d
Analysis Method: 8321A | Date Collected:
Extraction Method: | Date Extracted:
Sample wt/vol: 0(mL) | Date Analyzed: 04/05/2022 11:05
Con. Extract Vol.: | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 570784 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	12	U	20	12	4.6
99-65-0	1,3-Dinitrobenzene	12	U	20	12	4.4
118-96-7	2,4,6-Trinitrotoluene	12	U	20	12	6.0
121-14-2	2,4-Dinitrotoluene	12	U	20	12	3.4
606-20-2	2,6-Dinitrotoluene	12	U	20	12	5.0
35572-78-2	2-Amino-4,6-dinitrotoluene	12	U	20	12	6.0
19406-51-0	4-Amino-2,6-dinitrotoluene	12	U	20	12	7.8
2691-41-0	HMX	12	U M	20	12	6.6
99-08-1	m-Nitrotoluene	12	U	20	12	5.6
98-95-3	Nitrobenzene	12	U	20	12	5.6
55-63-0	Nitroglycerin	12	U	28	12	5.8
88-72-2	o-Nitrotoluene	12	U	20	12	6.4
78-11-5	PETN	12	U	20	12	7.0
99-99-0	p-Nitrotoluene	12	U	20	12	5.8
121-82-4	RDX	12	U	20	12	5.4
479-45-8	Tetryl	12	U M	20	12	5.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	115		48-130

Report Date: 06-Apr-2022 06:44:07 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05010.d
Lims ID: ICB
Client ID:
Sample Type: ICB
Inject. Date: 05-Apr-2022 11:05:14 ALS Bottle#: 1 Worklist Smp#: 10
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: ICB
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 05-Apr-2022 14:54:04 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 11:44:12
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		244466	125.0	89.6	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		848727	125.0	117	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.850	2.850	0.0		1739742	129.4	205	
$ 11 Nitrobenzene-d5								
128.0	3.150	3.150	0.0	0.780	490244	57.4	82.0	
* 18 2,4-dinitrotoluene-d3								
185.1	4.037	4.028	0.009		5452943	125.0	112	

QC Flag Legend
Processing Flags

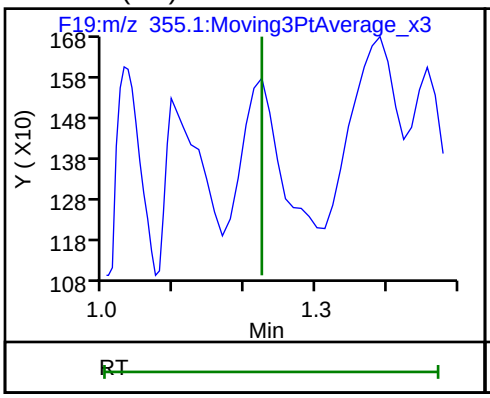
Reagents:
8321NB-D5-cal_00021 Amount Added: 5.00 Units: uL
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 06:44:07 Chrom Revision: 2.3 18-Mar-2022 09:07:22

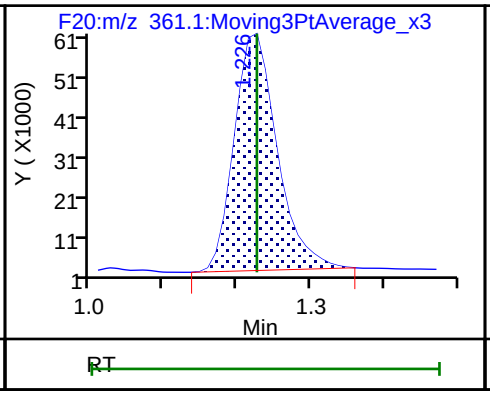
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05010.d
Injection Date: 05-Apr-2022 11:05:14 Instrument ID: LC_LCMS7
Lims ID: ICB
Client ID:
Operator ID: acm ALS Bottle#: 1 Worklist Smp#: 10
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

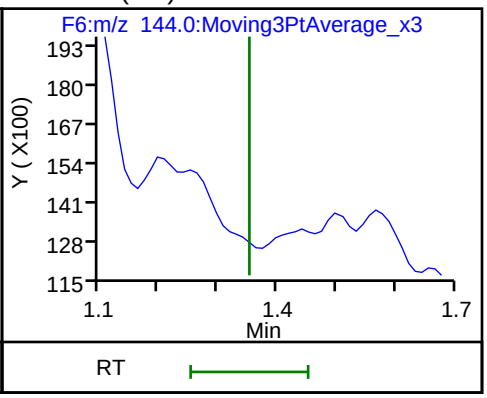
2 HMX (ND)



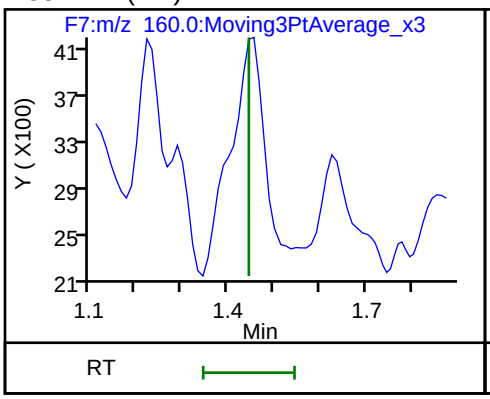
* 1 HMX-13C4



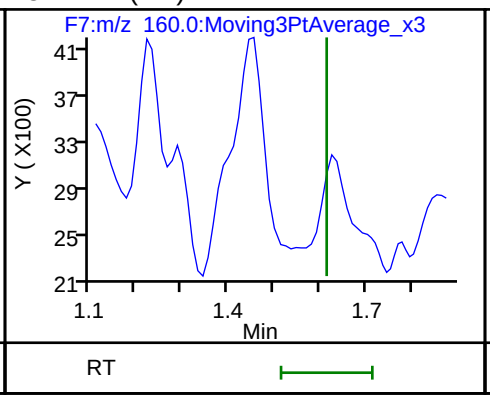
36 TNX (ND)



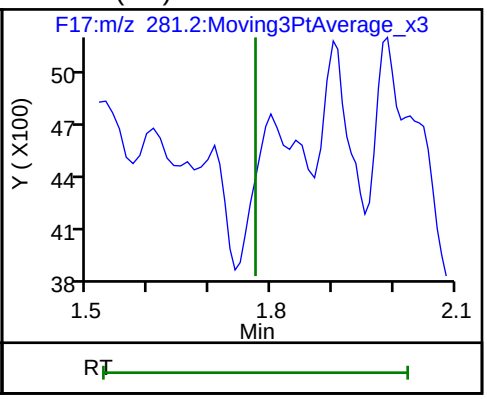
33 DNX (ND)



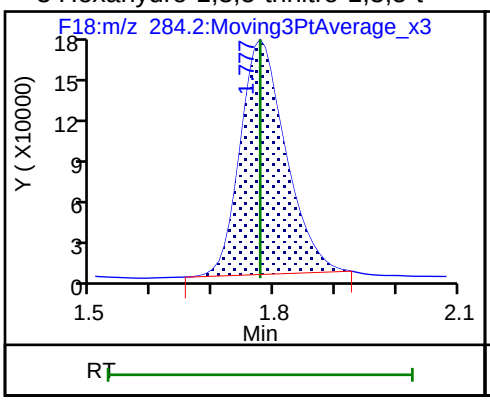
34 MNX (ND)



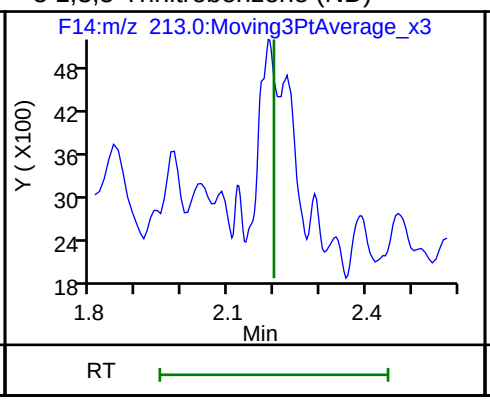
4 RDX (ND)



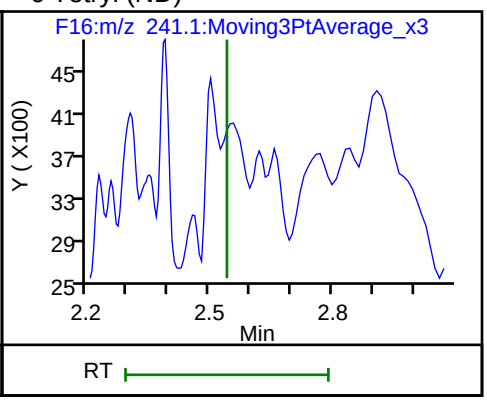
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



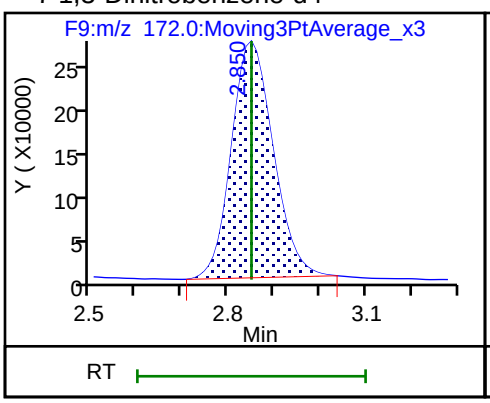
5 1,3,5-Trinitrobenzene (ND)



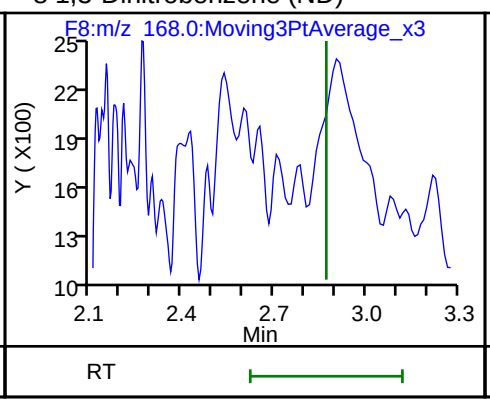
6 Tetryl (ND)



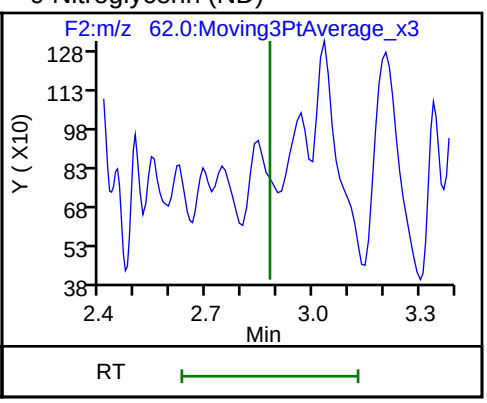
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

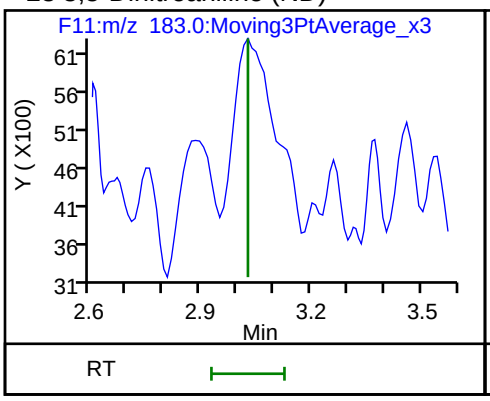


9 Nitroglycerin (ND)

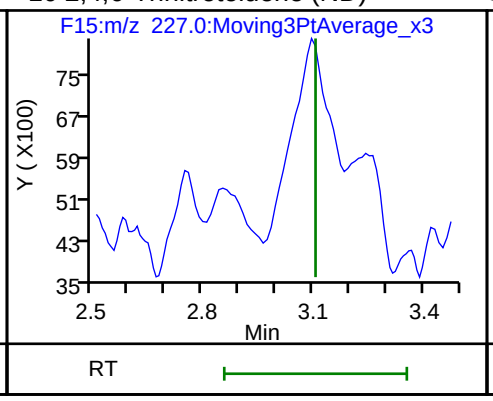


Report Date: 06-Apr-2022 06:44:07 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05010.d

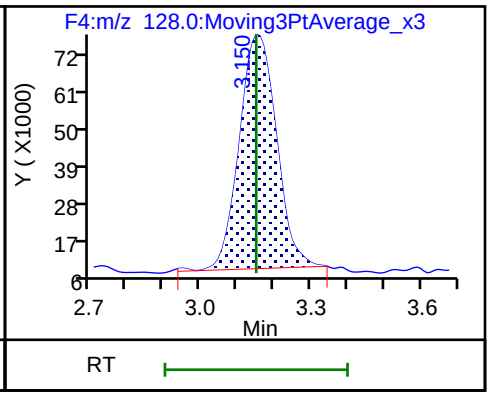
28 3,5-Dinitroaniline (ND)



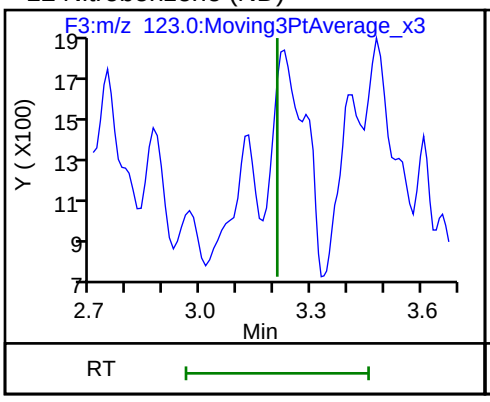
10 2,4,6-Trinitrotoluene (ND)



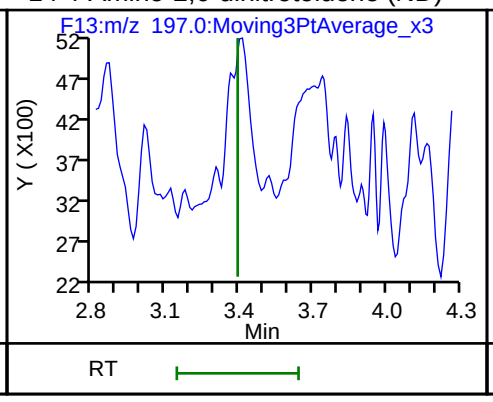
$ 11 Nitrobenzene-d5



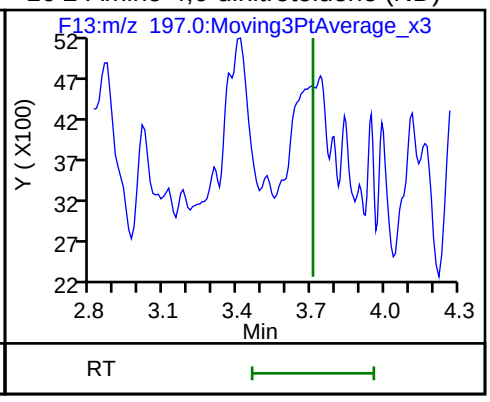
12 Nitrobenzene (ND)



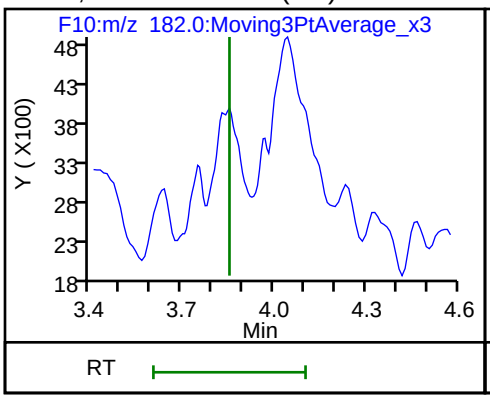
14 4-Amino-2,6-dinitrotoluene (ND)



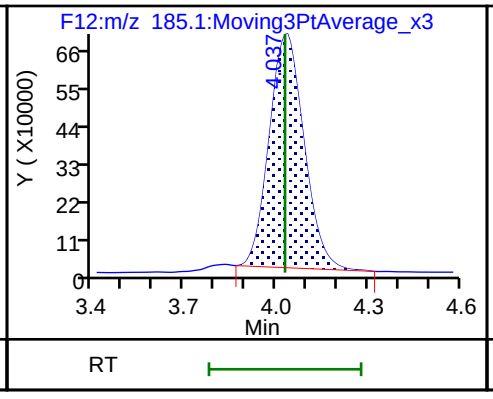
16 2-Amino-4,6-dinitrotoluene (ND)



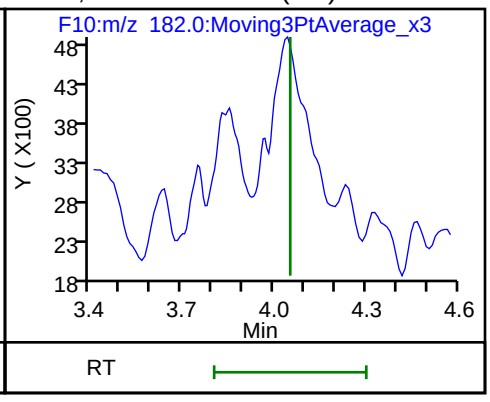
17 2,6-Dinitrotoluene (ND)



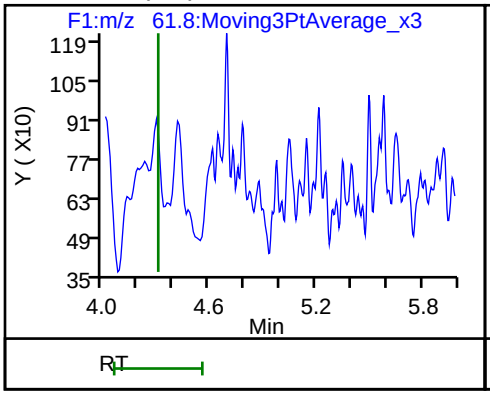
* 18 2,4-dinitrotoluene-d3



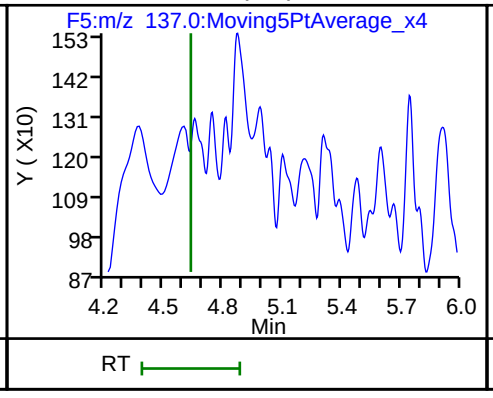
19 2,4-Dinitrotoluene (ND)



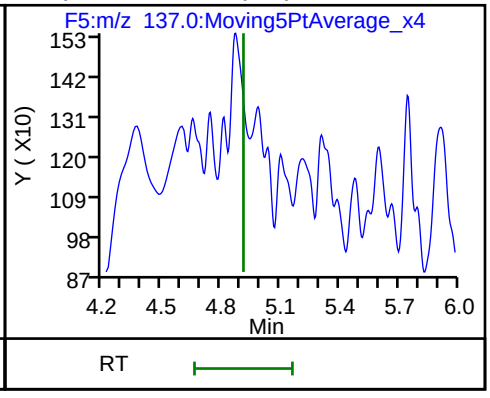
20 PETN (ND)



22 o-Nitrotoluene (ND)



23 p-Nitrotoluene (ND)

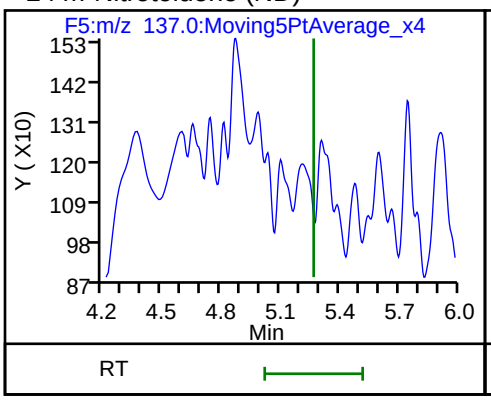


Report Date: 06-Apr-2022 06:44:07

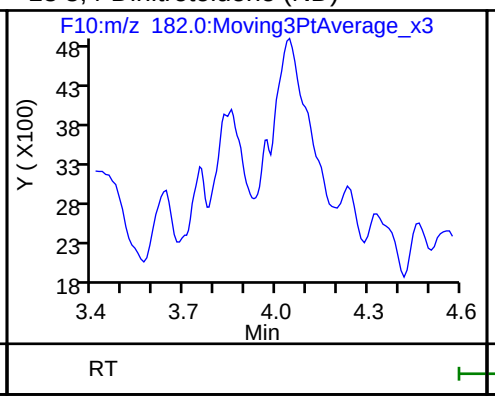
Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05010.d

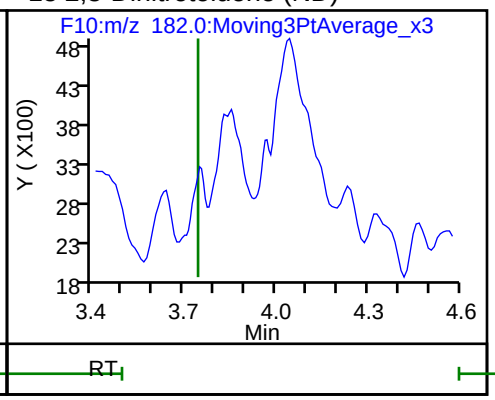
24 m-Nitrotoluene (ND)



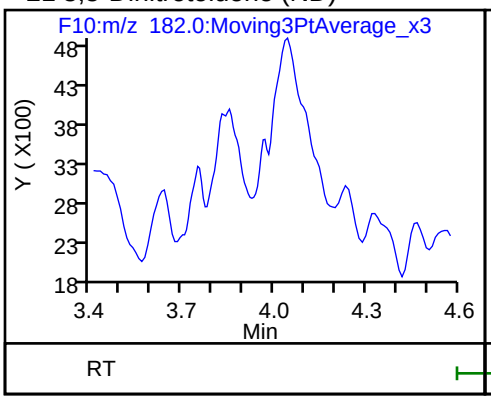
13 3,4-Dinitrotoluene (ND)



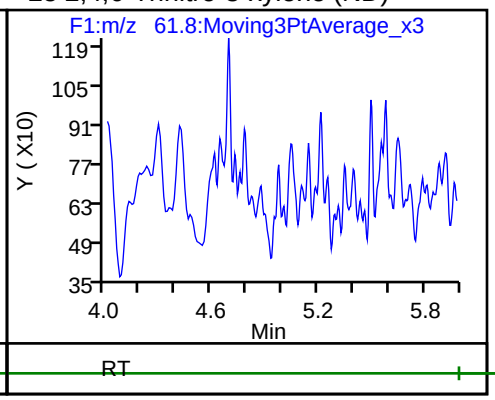
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 06-Apr-2022 06:44:07 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05010.d
Lims ID: ICB
Client ID:
Sample Type: ICB
Inject. Date: 05-Apr-2022 11:05:14 ALS Bottle#: 1 Worklist Smp#: 10
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: ICB
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 05-Apr-2022 14:54:04 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 11:44:12

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	50.0	57.4	114.75

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: | Lab Sample ID: ICB 280-571107/10
Matrix: Solid | Lab File ID: ex722D07010.d
Analysis Method: 8321A | Date Collected:
Extraction Method: | Date Extracted:
Sample wt/vol: 0(mL) | Date Analyzed: 04/07/2022 11:25
Con. Extract Vol.: | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571107 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	12	U	20	12	4.6
99-65-0	1,3-Dinitrobenzene	12	U	20	12	4.4
118-96-7	2,4,6-Trinitrotoluene	12	U	20	12	6.0
121-14-2	2,4-Dinitrotoluene	12	U	20	12	3.4
606-20-2	2,6-Dinitrotoluene	12	U	20	12	5.0
35572-78-2	2-Amino-4,6-dinitrotoluene	12	U	20	12	6.0
19406-51-0	4-Amino-2,6-dinitrotoluene	12	U	20	12	7.8
2691-41-0	HMX	12	U M	20	12	6.6
99-08-1	m-Nitrotoluene	12	U	20	12	5.6
98-95-3	Nitrobenzene	12	U	20	12	5.6
55-63-0	Nitroglycerin	12	U	28	12	5.8
88-72-2	o-Nitrotoluene	12	U	20	12	6.4
78-11-5	PETN	12	U	20	12	7.0
99-99-0	p-Nitrotoluene	12	U	20	12	5.8
121-82-4	RDX	12	U	20	12	5.4
479-45-8	Tetryl	12	U	20	12	5.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	110		68-140

Report Date: 08-Apr-2022 07:32:20 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07010.d
Lims ID: ICB
Client ID:
Sample Type: ICB
Inject. Date: 07-Apr-2022 11:25:24 ALS Bottle#: 1 Worklist Smp#: 10
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: ICB
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:31:50 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 12:34:00
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		110048	125.0	102	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		376855	125.0	168	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.030	3.030	0.0		1387389	129.4	453	
10 2,4,6-Trinitrotoluene								
227.0	3.332	3.321	0.011	0.767	19864	-0.0323	4.4	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.774	364749	54.9	45.5	
17 2,6-Dinitrotoluene								
182.0	4.126	4.150	-0.024	0.950	4105	-0.3981	2.8	
* 18 2,4-dinitrotoluene-d3								
185.1	4.341	4.341	0.0		4099845	125.0	114	
19 2,4-Dinitrotoluene								
182.0	4.373	4.373	0.0	1.007	5368	-0.4593	2.1	

QC Flag Legend

Processing Flags

Reagents:

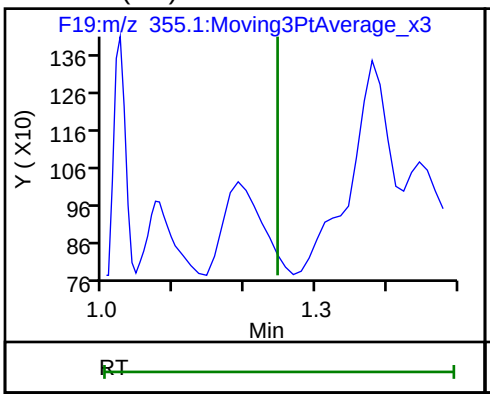
8321NB-D5-cal_00021	Amount Added: 5.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 08-Apr-2022 07:32:20 Chrom Revision: 2.3 18-Mar-2022 09:07:22

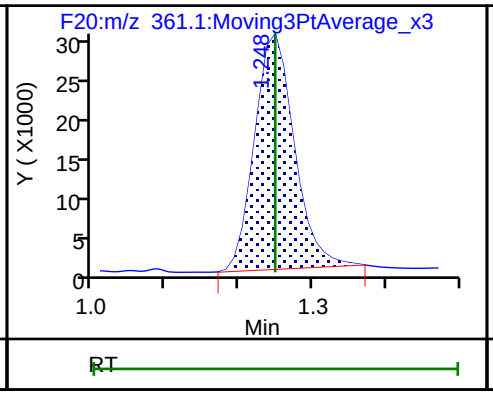
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07010.d
Injection Date: 07-Apr-2022 11:25:24 Instrument ID: LC_LCMS7
Lims ID: ICB
Client ID:
Operator ID: acm ALS Bottle#: 1 Worklist Smp#: 10
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

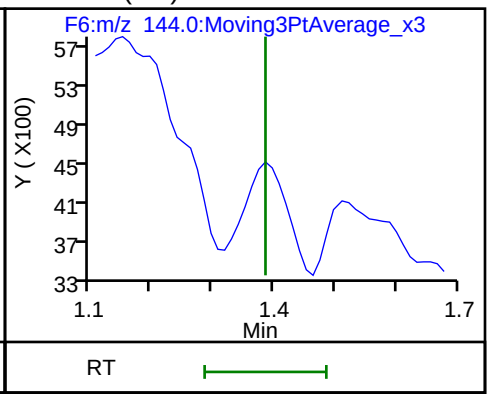
2 HMX (ND)



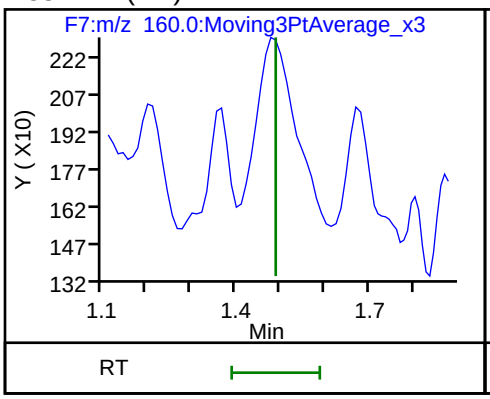
* 1 HMX-13C4



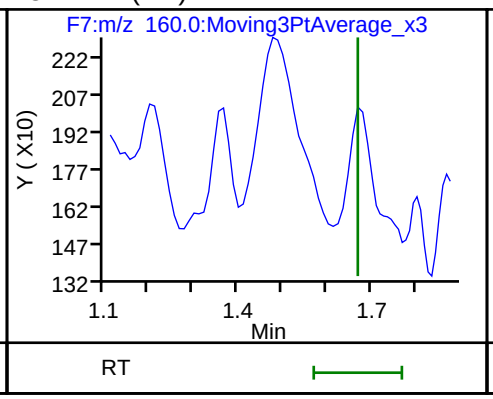
36 TNX (ND)



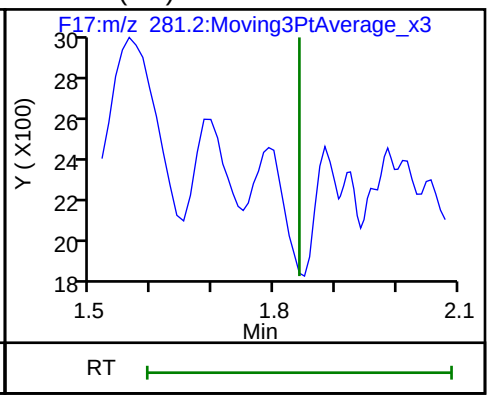
33 DNX (ND)



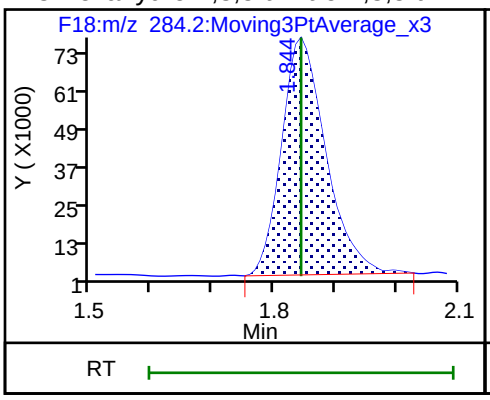
34 MNX (ND)



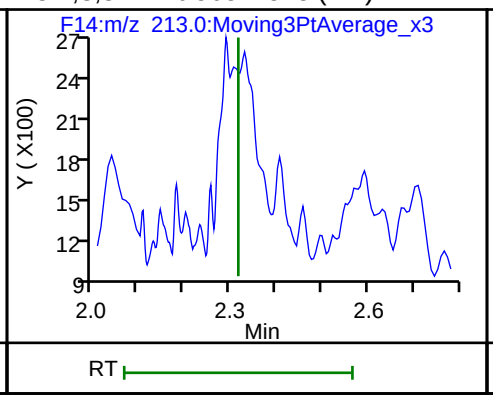
4 RDX (ND)



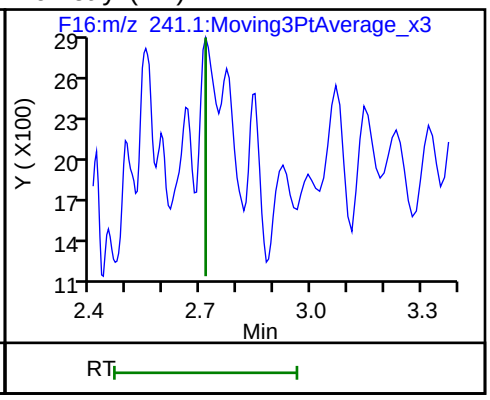
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



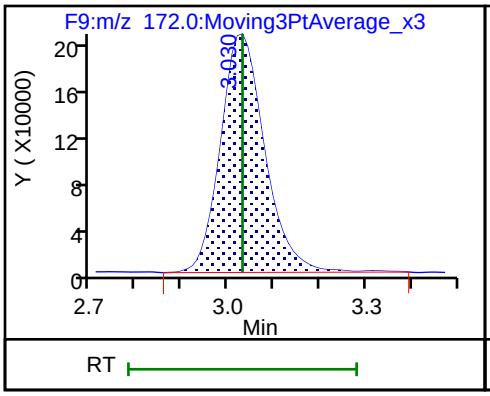
5 1,3,5-Trinitrobenzene (ND)



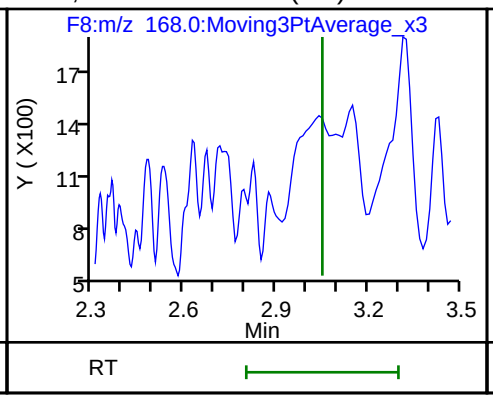
6 Tetryl (ND)



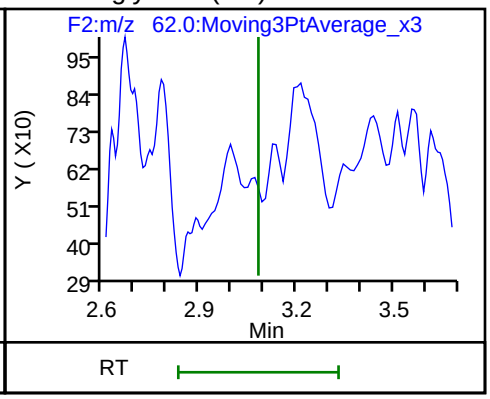
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



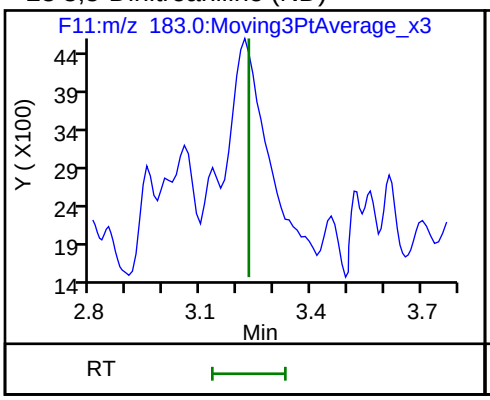
9 Nitroglycerin (ND)



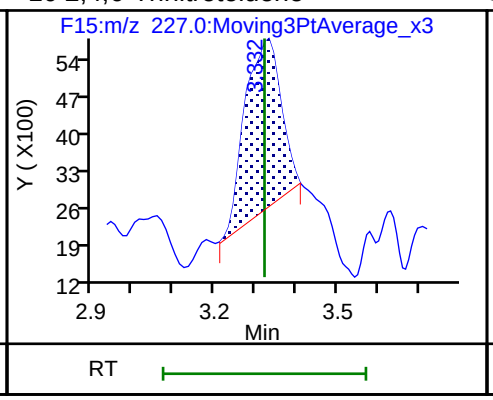
Report Date: 08-Apr-2022 07:32:20 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07010.d

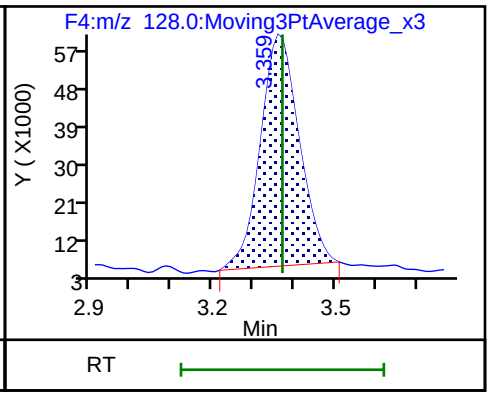
28 3,5-Dinitroaniline (ND)



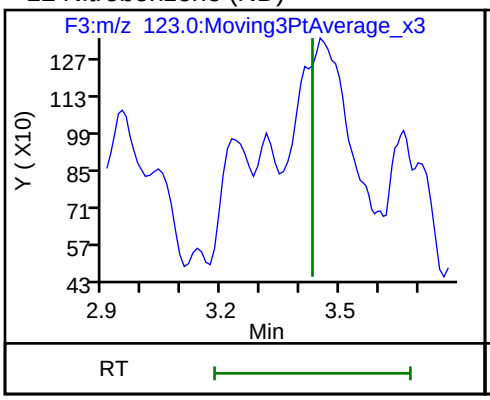
10 2,4,6-Trinitrotoluene



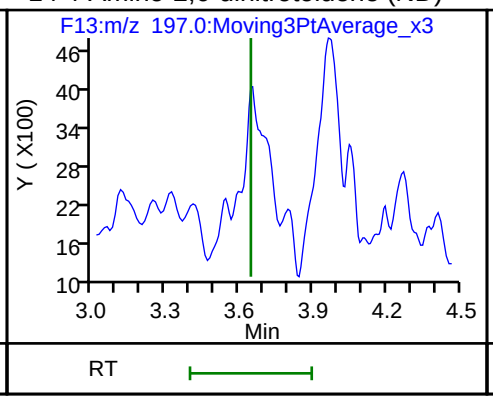
$ 11 Nitrobenzene-d5



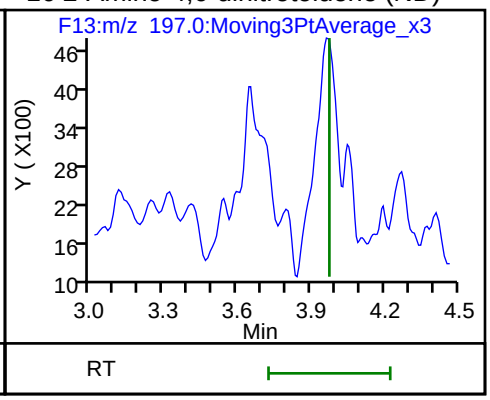
12 Nitrobenzene (ND)



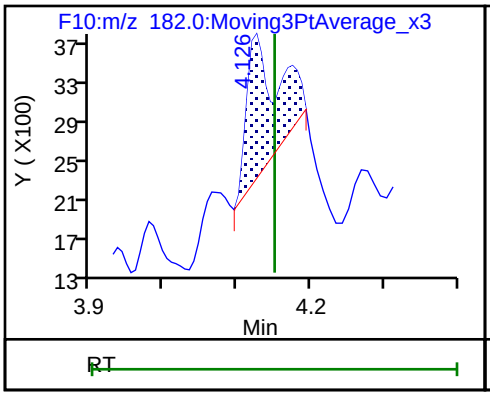
14 4-Amino-2,6-dinitrotoluene (ND)



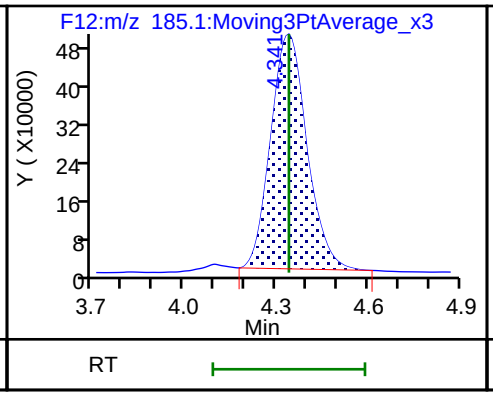
16 2-Amino-4,6-dinitrotoluene (ND)



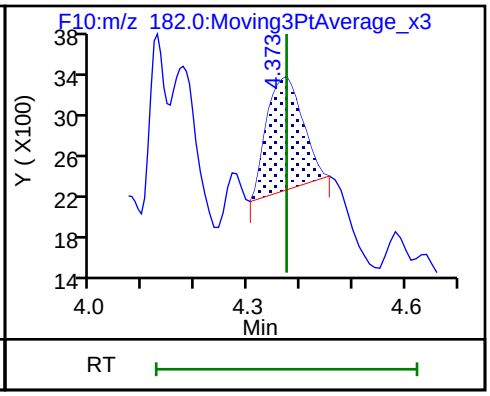
17 2,6-Dinitrotoluene



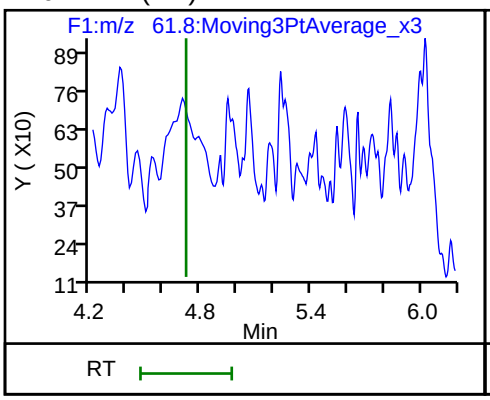
* 18 2,4-dinitrotoluene-d3



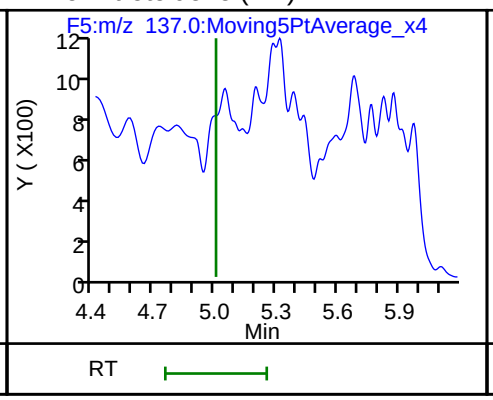
19 2,4-Dinitrotoluene



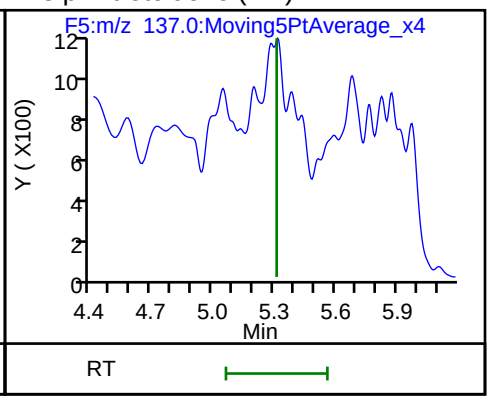
20 PETN (ND)



22 o-Nitrotoluene (ND)



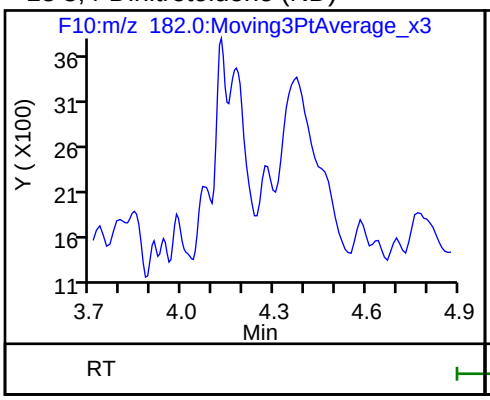
23 p-Nitrotoluene (ND)



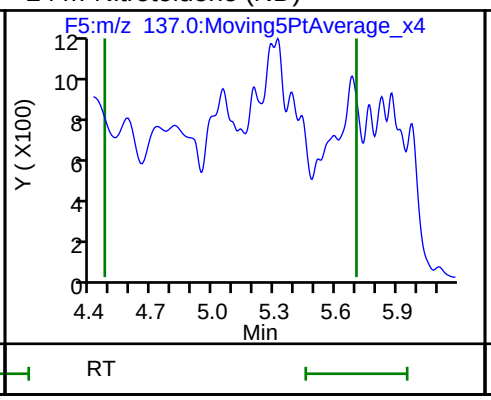
Report Date: 08-Apr-2022 07:32:20 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07010.d

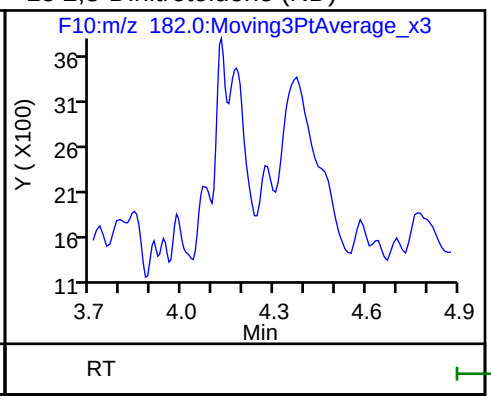
13 3,4-Dinitrotoluene (ND)



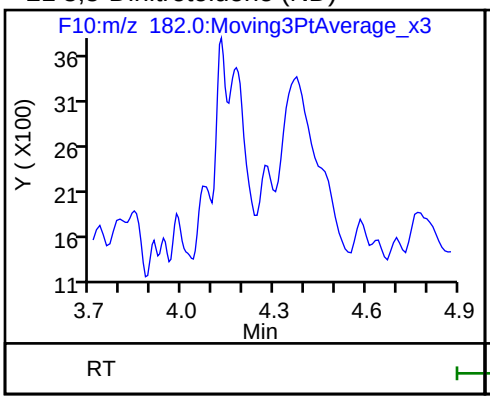
24 m-Nitrotoluene (ND)



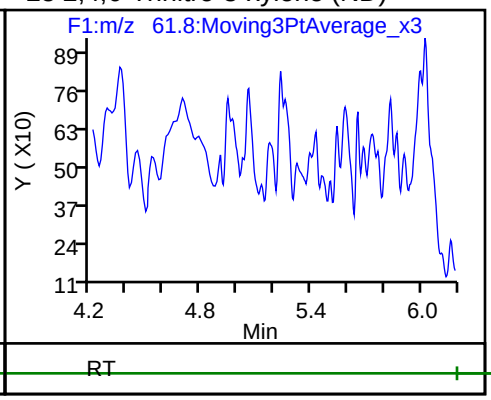
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 08-Apr-2022 07:32:20 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07010.d
Lims ID: ICB
Client ID:
Sample Type: ICB
Inject. Date: 07-Apr-2022 11:25:24 ALS Bottle#: 1 Worklist Smp#: 10
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: ICB
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:31:50 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 12:34:00

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	50.0	54.9	109.80

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: | Lab Sample ID: ICB 280-571224/10
Matrix: Solid | Lab File ID: ex722D08010.d
Analysis Method: 8321A | Date Collected:
Extraction Method: | Date Extracted:
Sample wt/vol: 0(mL) | Date Analyzed: 04/08/2022 10:34
Con. Extract Vol.: | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571224 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	12	U	20	12	4.6
99-65-0	1,3-Dinitrobenzene	12	U	20	12	4.4
118-96-7	2,4,6-Trinitrotoluene	12	U	20	12	6.0
121-14-2	2,4-Dinitrotoluene	12	U	20	12	3.4
606-20-2	2,6-Dinitrotoluene	12	U	20	12	5.0
35572-78-2	2-Amino-4,6-dinitrotoluene	12	U	20	12	6.0
19406-51-0	4-Amino-2,6-dinitrotoluene	12	U	20	12	7.8
2691-41-0	HMX	12	U M	20	12	6.6
99-08-1	m-Nitrotoluene	12	U	20	12	5.6
98-95-3	Nitrobenzene	12	U	20	12	5.6
55-63-0	Nitroglycerin	12	U	28	12	5.8
88-72-2	o-Nitrotoluene	12	U	20	12	6.4
78-11-5	PETN	12	U	20	12	7.0
99-99-0	p-Nitrotoluene	12	U	20	12	5.8
121-82-4	RDX	12	U	20	12	5.4
479-45-8	Tetryl	12	U	20	12	5.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	108		68-140

Report Date: 14-Apr-2022 10:06:42 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08010.d
Lims ID: ICB
Client ID:
Sample Type: ICB
Inject. Date: 08-Apr-2022 10:34:13 ALS Bottle#: 1 Worklist Smp#: 10
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: ICB
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 11-Apr-2022 11:57:24 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 08:40:14
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		111193	125.0	182	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		369477	125.0	185	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.008	0.011		1298609	129.4	278	
10 2,4,6-Trinitrotoluene								
227.0	3.321	3.316	0.011	0.768	24673	0.4399	7.1	
$ 11 Nitrobenzene-d5								
128.0	3.348	3.354	0.0	0.774	334790	54.2	40.2	
* 18 2,4-dinitrotoluene-d3								
185.1	4.324	4.315	0.009		3904089	125.0	117	

QC Flag Legend

Processing Flags

Reagents:

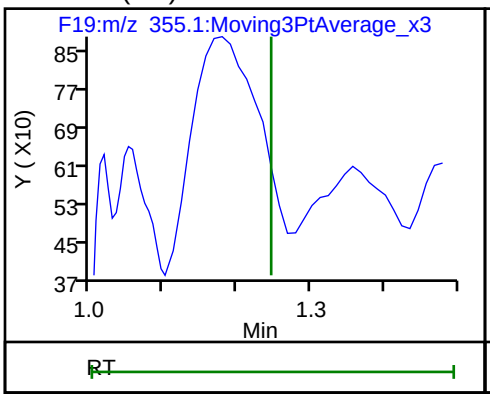
8321NB-D5-cal_00021 Amount Added: 5.00 Units: uL
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 14-Apr-2022 10:06:43 Chrom Revision: 2.3 12-Apr-2022 20:29:44

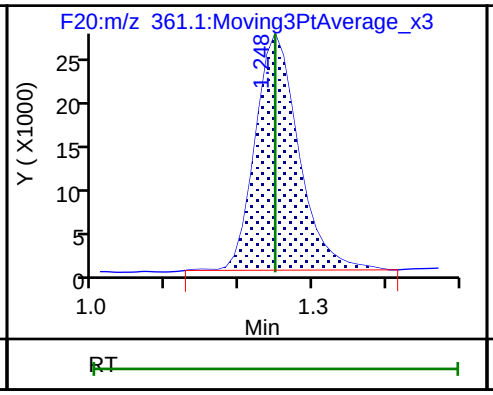
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08010.d
Injection Date: 08-Apr-2022 10:34:13 Instrument ID: LC_LCMS7
Lims ID: ICB
Client ID:
Operator ID: acm ALS Bottle#: 1 Worklist Smp#: 10
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

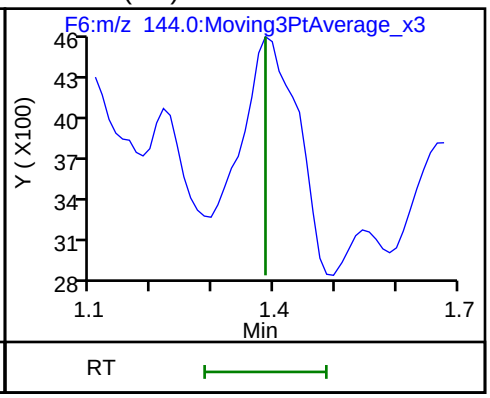
2 HMX (ND)



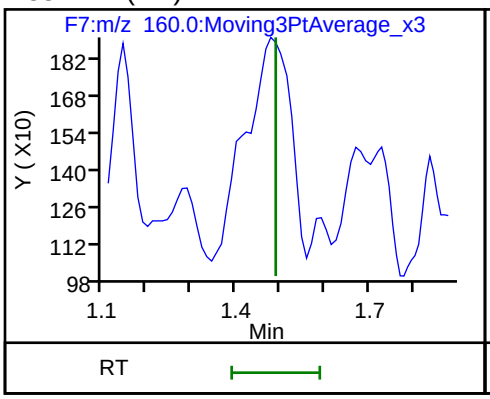
* 1 HMX-13C4



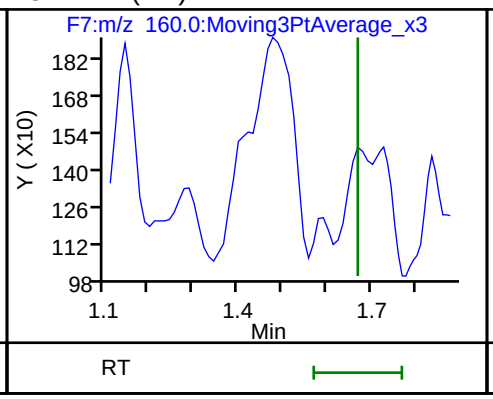
36 TNX (ND)



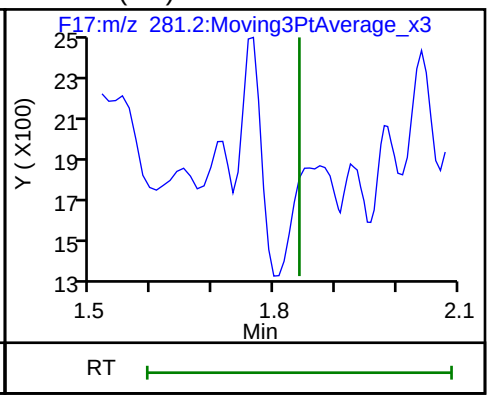
33 DNX (ND)



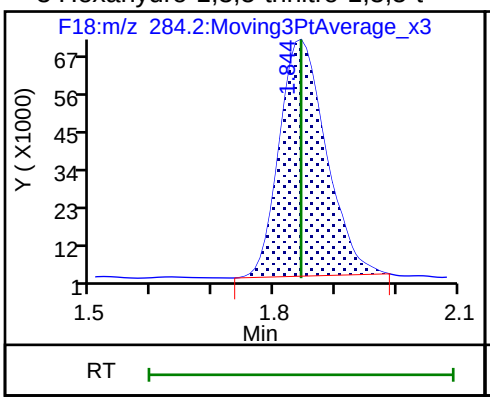
34 MNX (ND)



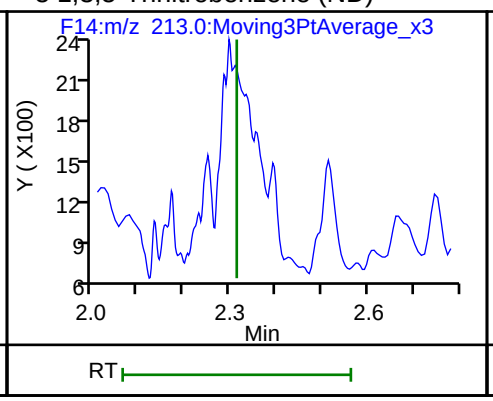
4 RDX (ND)



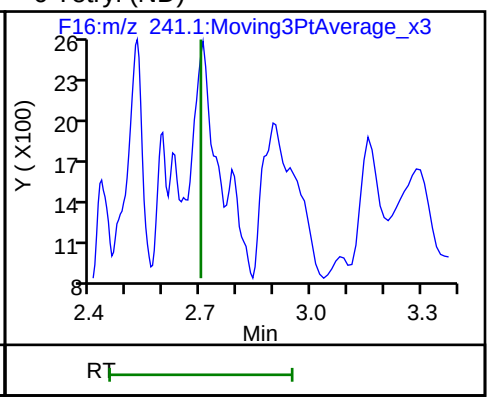
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



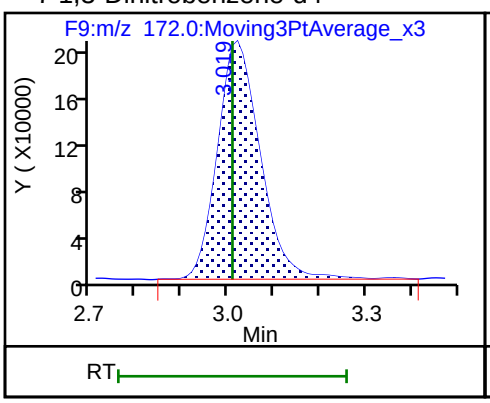
5 1,3,5-Trinitrobenzene (ND)



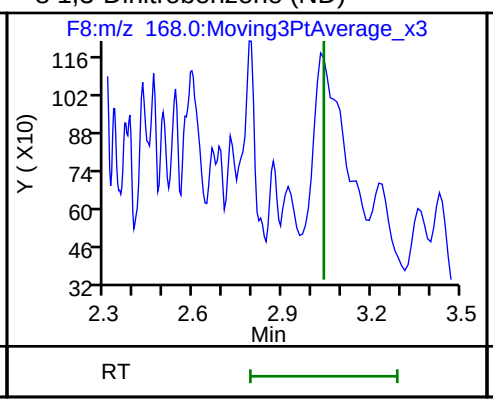
6 Tetryl (ND)



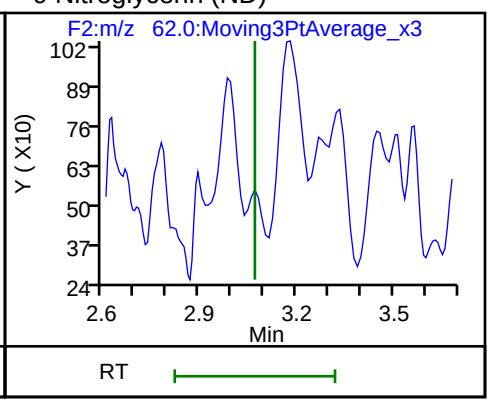
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

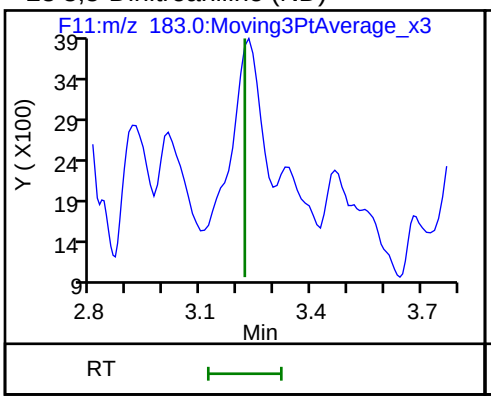


9 Nitroglycerin (ND)

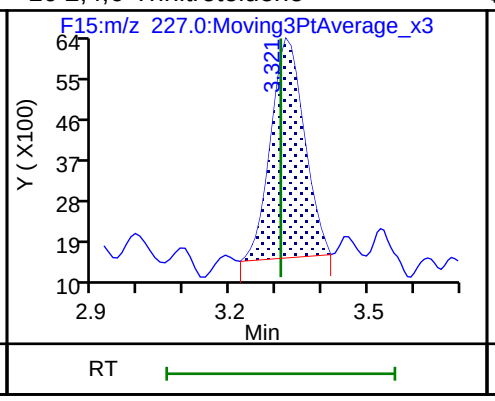


Report Date: 14-Apr-2022 10:06:43 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08010.d

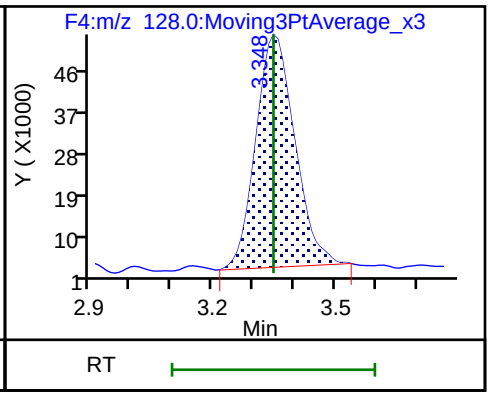
28 3,5-Dinitroaniline (ND)



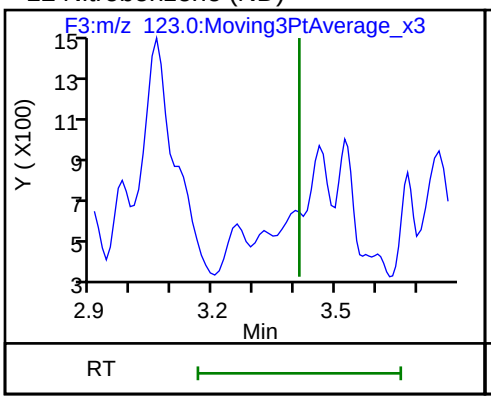
10 2,4,6-Trinitrotoluene



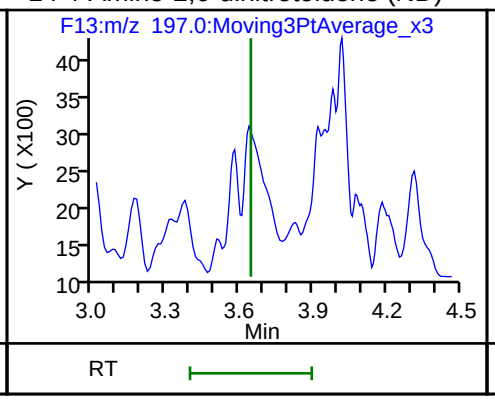
$ 11 Nitrobenzene-d5



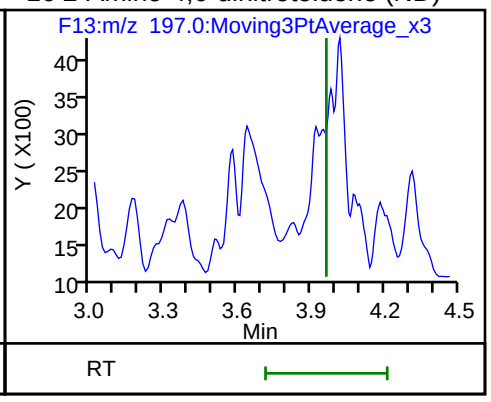
12 Nitrobenzene (ND)



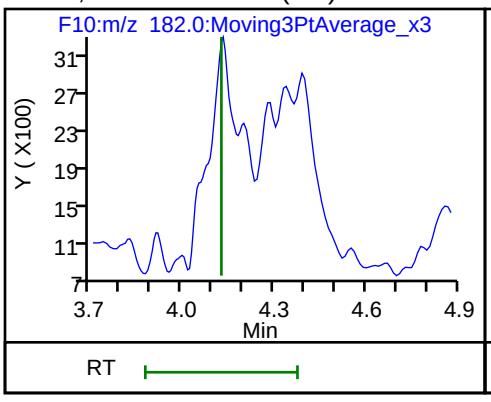
14 4-Amino-2,6-dinitrotoluene (ND)



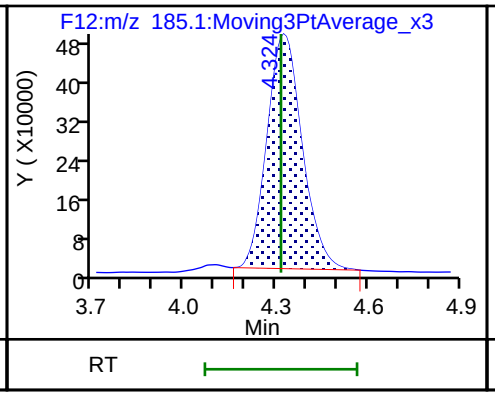
16 2-Amino-4,6-dinitrotoluene (ND)



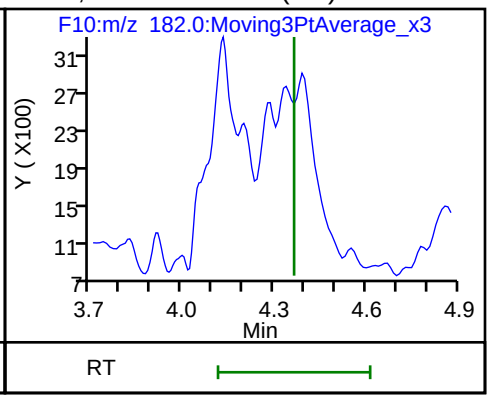
17 2,6-Dinitrotoluene (ND)



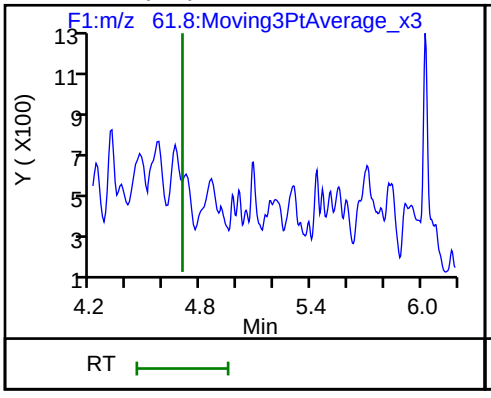
* 18 2,4-dinitrotoluene-d3



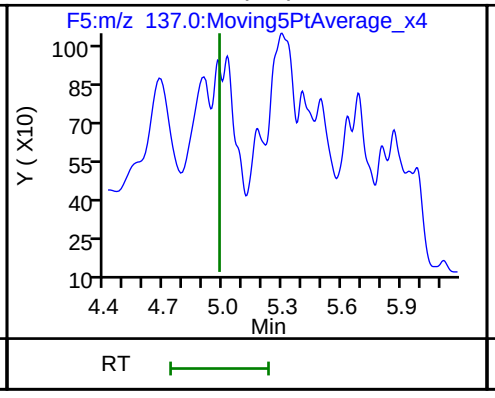
19 2,4-Dinitrotoluene (ND)



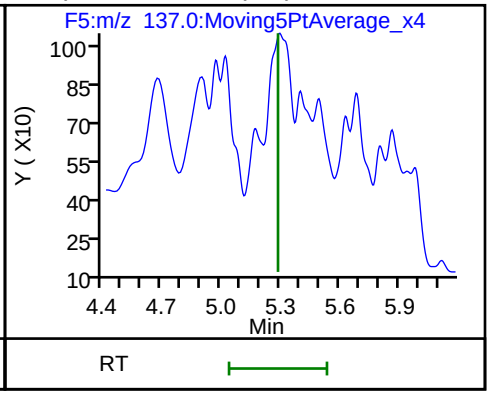
20 PETN (ND)



22 o-Nitrotoluene (ND)



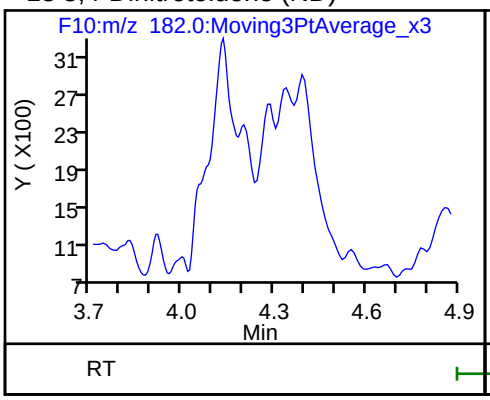
23 p-Nitrotoluene (ND)



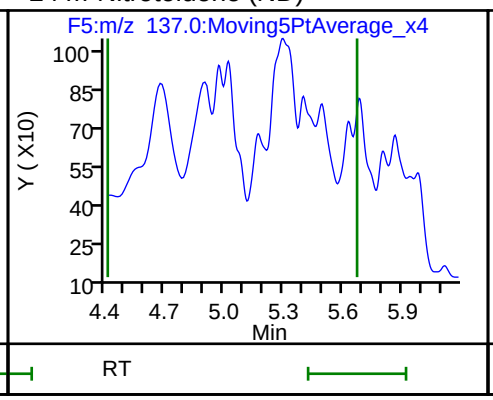
Report Date: 14-Apr-2022 10:06:43 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08010.d

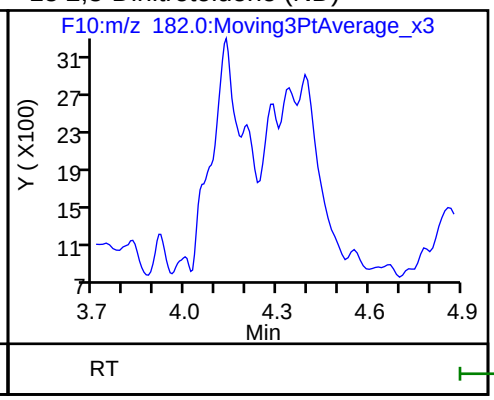
13 3,4-Dinitrotoluene (ND)



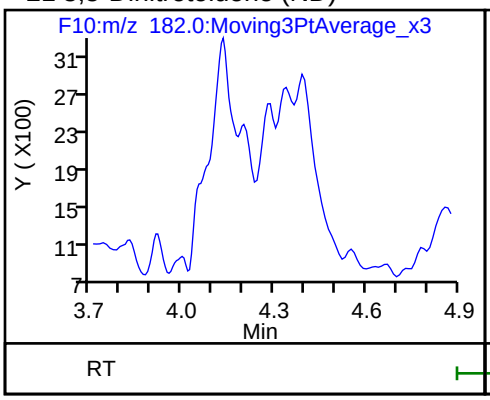
24 m-Nitrotoluene (ND)



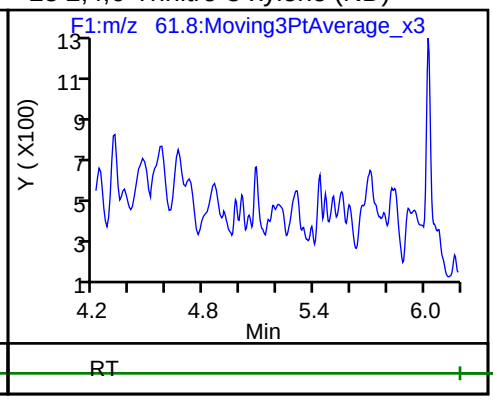
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 14-Apr-2022 10:06:43 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08010.d
Lims ID: ICB
Client ID:
Sample Type: ICB
Inject. Date: 08-Apr-2022 10:34:13 ALS Bottle#: 1 Worklist Smp#: 10
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: ICB
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 11-Apr-2022 11:57:24 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 08:40:14

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	50.0	54.2	108.43

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: | Lab Sample ID: ICB 280-571614/11
Matrix: Solid | Lab File ID: ex422D12010.d
Analysis Method: 8321A | Date Collected:
Extraction Method: | Date Extracted:
Sample wt/vol: 1(mL) | Date Analyzed: 04/12/2022 10:43
Con. Extract Vol.: | Dilution Factor: 1
Injection Volume: 40(uL) | GC Column: IonPac ID: 2(mm)
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571614 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	12	U	20	12	4.6
99-65-0	1,3-Dinitrobenzene	12	U	20	12	4.4
118-96-7	2,4,6-Trinitrotoluene	12	U	20	12	6.0
121-14-2	2,4-Dinitrotoluene	12	U	20	12	3.4
606-20-2	2,6-Dinitrotoluene	12	U	20	12	5.0
35572-78-2	2-Amino-4,6-dinitrotoluene	12	U	20	12	6.0
19406-51-0	4-Amino-2,6-dinitrotoluene	12	U	20	12	7.8
2691-41-0	HMX	12	U	20	12	6.6
99-08-1	m-Nitrotoluene	12	U M	20	12	5.6
98-95-3	Nitrobenzene	12	U	20	12	5.6
55-63-0	Nitroglycerin	12	U M	28	12	5.8
88-72-2	o-Nitrotoluene	12	U	20	12	6.4
78-11-5	PETN	12	U	20	12	7.0
99-99-0	p-Nitrotoluene	12	U	20	12	5.8
121-82-4	RDX	12	U	20	12	5.4
479-45-8	Tetryl	12	U	20	12	5.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	118		68-140

Report Date: 13-Apr-2022 13:57:14 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12010.d
Lims ID: ICB
Client ID:
Sample Type: ICB
Inject. Date: 12-Apr-2022 10:43:30 ALS Bottle#: 1 Worklist Smp#: 11
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 04/08/22ICB ICB
Misc. Info.: 04/08/2022 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\8321expDuPont.m
Limit Group: LC - 8321A Expl
Last Update: 13-Apr-2022 13:54:59 Calib Date: 12-Apr-2022 10:31:58
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d

Column 1 : Det: F1:SIR
Process Host: CTX1683

First Level Reviewer: meyera Date: 13-Apr-2022 13:25:17
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
360.9	1.965	1.964	0.001		145190	125.0	68.9	
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.1	2.799	2.798	0.001		333299	125.0	397	
8 1,3,5-Trinitrobenzene								
213.1	3.459	3.458	0.001	0.775	4455	1.18	6.0	
11 Tetryl								
241.1	3.546	4.003	-0.457	0.795	4196	0.5563	2.0	
* 12 1,3-Dinitrobenzene-d4								
172.1	4.461	4.461	0.0		1031329	129.4	76.5	
33 3,5-Dinitroaniline								
183.1	4.761	4.760	0.001	1.067	3903	1.18	3.7	
15 2,4,6-Trinitrotoluene								
227.1	4.882	4.841	0.041	0.771	4375	-0.2559	6.5	
$ 16 Nitrobenzene-d5								
128.1	4.963	4.962	0.001	1.112	415913	59.2	169	
19 4-Amino-2,6-dinitrotoluene								
197.2	5.458	5.417	0.041	0.862	5235	-0.6730	3.5	
22 2-Amino-4,6-dinitrotoluene								
197.2	5.862	5.861	0.001	0.926	5675	-0.4543	4.4	
* 24 2,4-dinitrotoluene-d3								
185.1	6.334	6.336	-0.002		3212584	125.0	613	
26 PETN								
61.9	6.780	6.812	-0.032	1.070	50637	0.0175	8.8	

Report Date: 13-Apr-2022 13:57:14 Chrom Revision: 2.3 18-Mar-2022 09:07:22

QC Flag Legend

Processing Flags

Reagents:

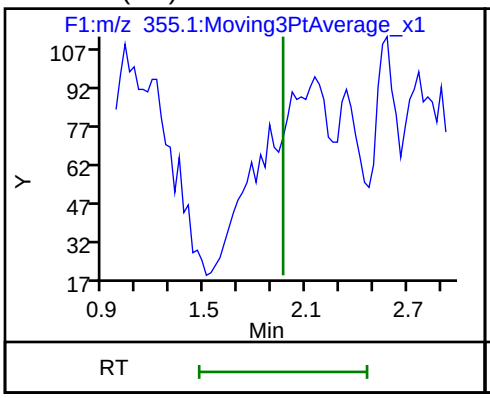
8321NB-D5-cal_00021	Amount Added: 5.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 13-Apr-2022 13:57:15 Chrom Revision: 2.3 18-Mar-2022 09:07:22

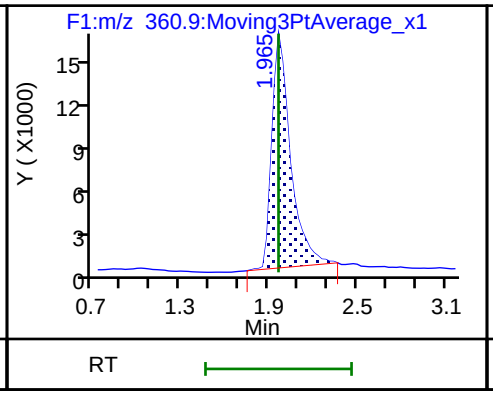
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12010.d
Injection Date: 12-Apr-2022 10:43:30 Instrument ID: LC_LCMS4
Lims ID: ICB
Client ID:
Operator ID: acm ALS Bottle#: 1 Worklist Smp#: 11
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Method: 8321expDuPont Limit Group: LC - 8321A Expl

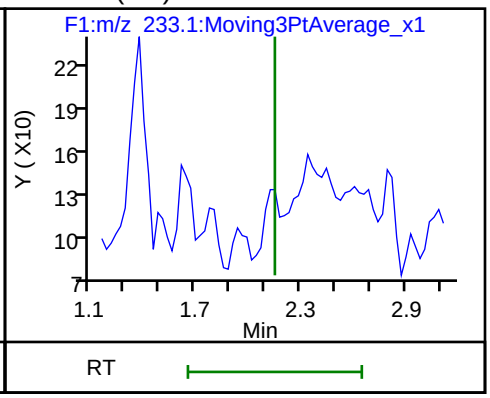
2 HMX (ND)



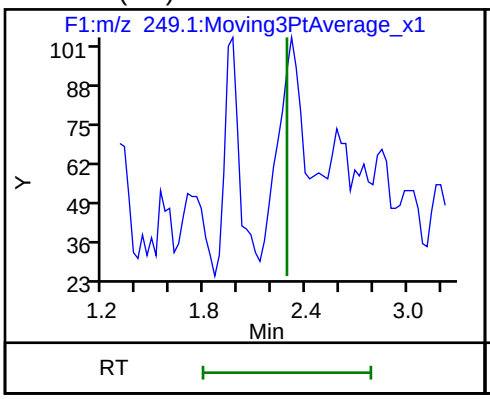
* 1 HMX-13C4



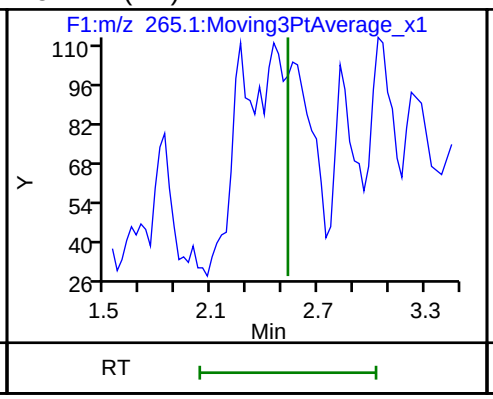
3 TNX (ND)



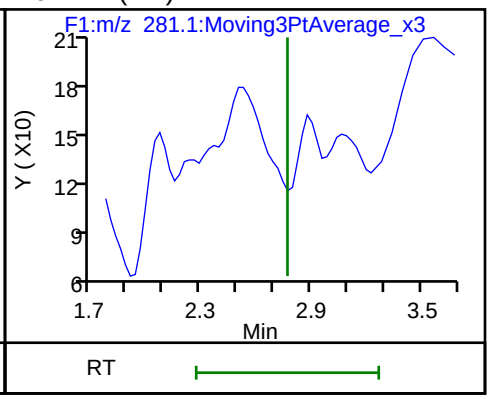
4 DNX (ND)



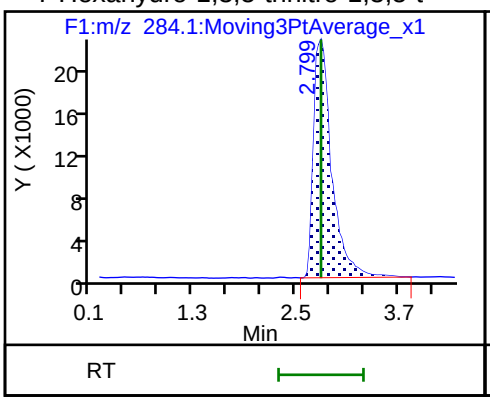
5 MNX (ND)



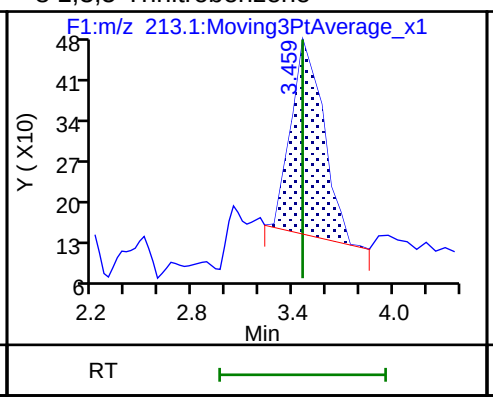
6 RDX (ND)



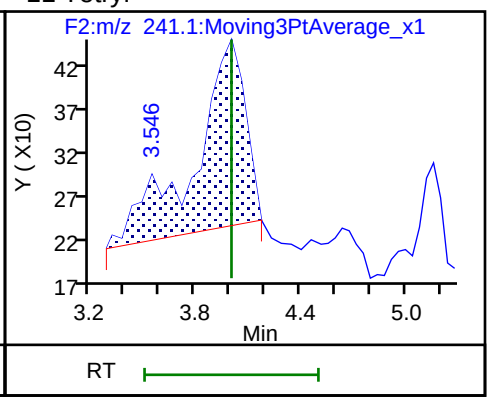
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t



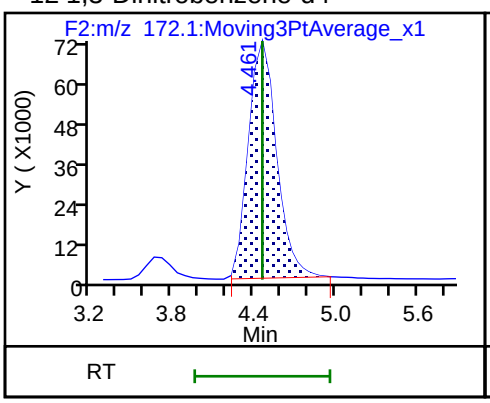
8 1,3,5-Trinitrobenzene



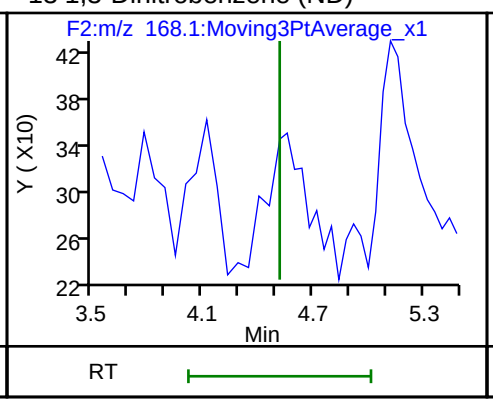
11 Tetryl



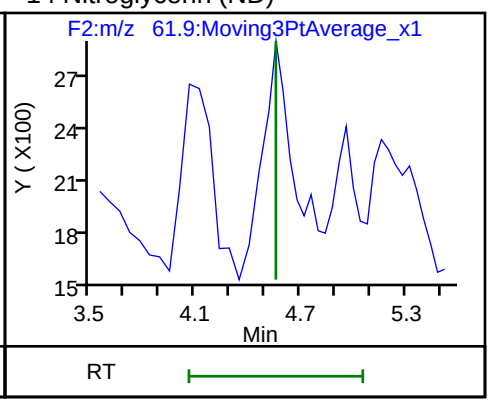
* 12 1,3-Dinitrobenzene-d4



13 1,3-Dinitrobenzene (ND)

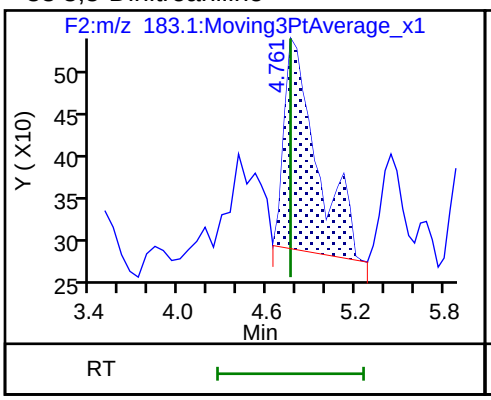


14 Nitroglycerin (ND)

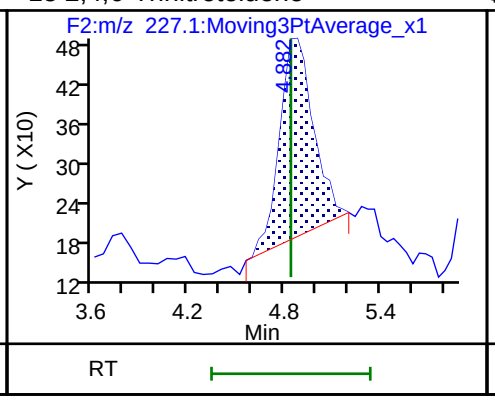


Report Date: 13-Apr-2022 13:57:15 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12010.d

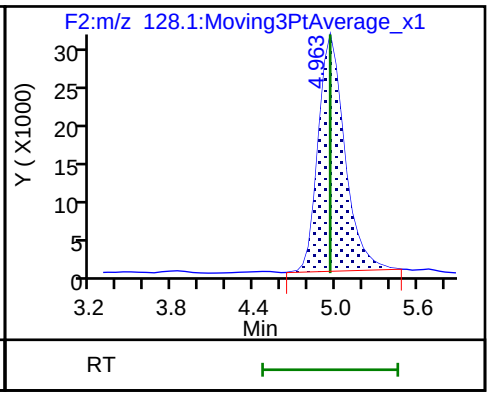
33 3,5-Dinitroaniline



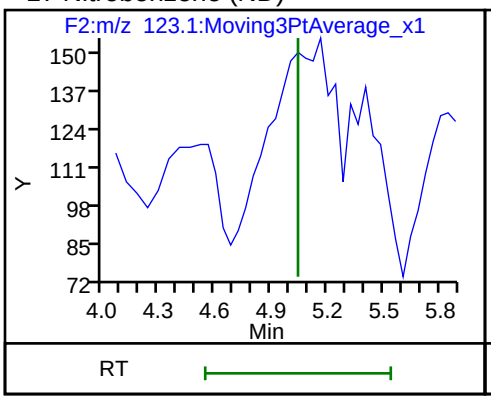
15 2,4,6-Trinitrotoluene



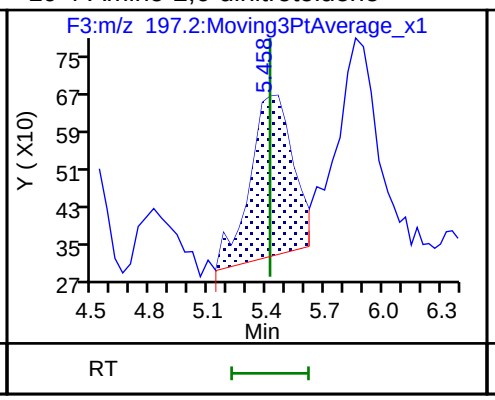
$ 16 Nitrobenzene-d5



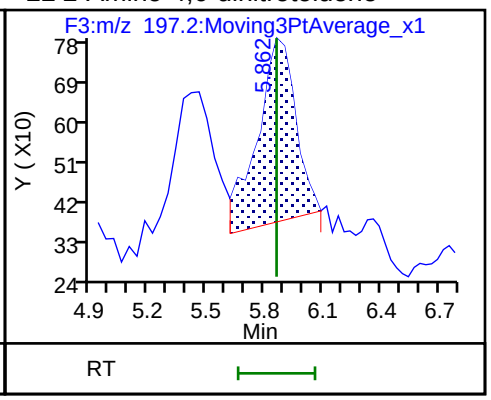
17 Nitrobenzene (ND)



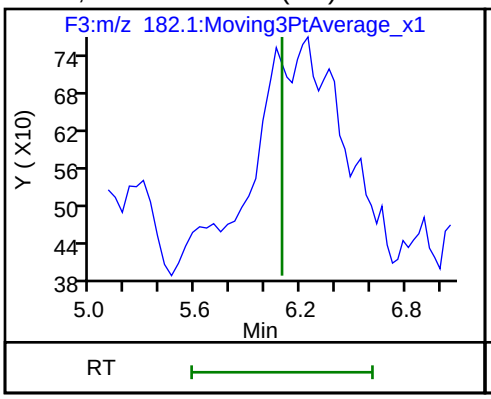
19 4-Amino-2,6-dinitrotoluene



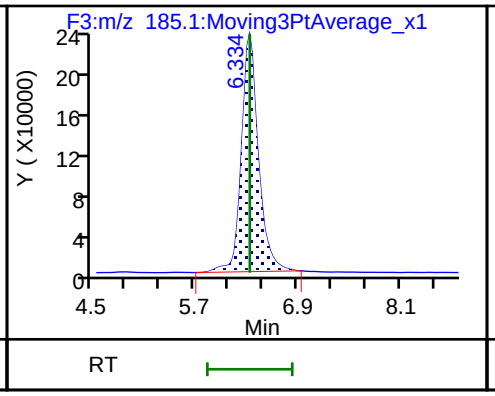
22 2-Amino-4,6-dinitrotoluene



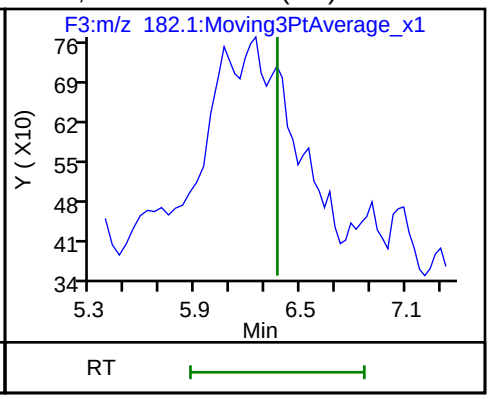
23 2,6-Dinitrotoluene (ND)



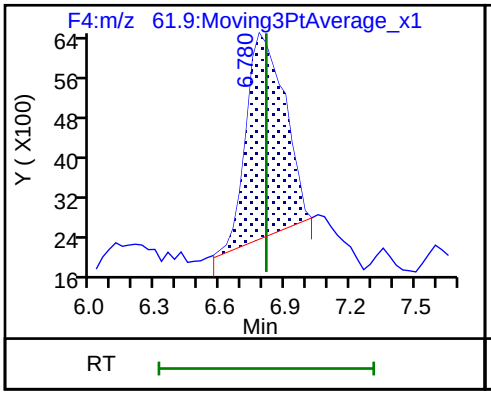
* 24 2,4-dinitrotoluene-d3



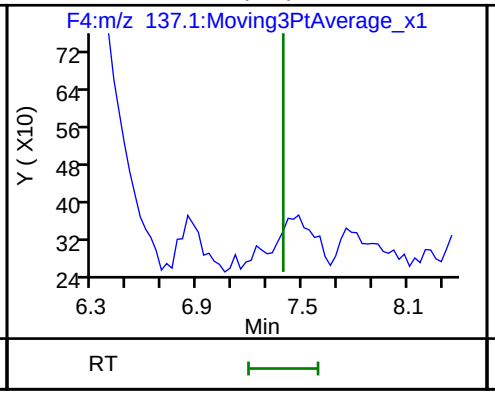
25 2,4-Dinitrotoluene (ND)



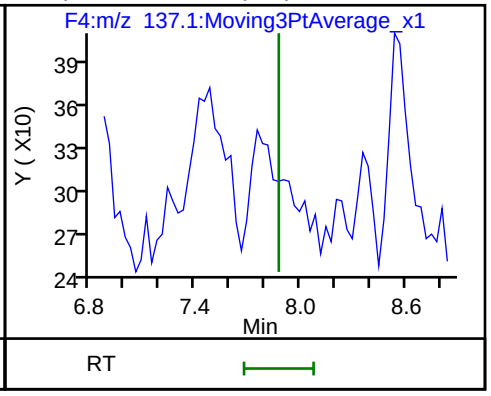
26 PETN



28 o-Nitrotoluene (ND)



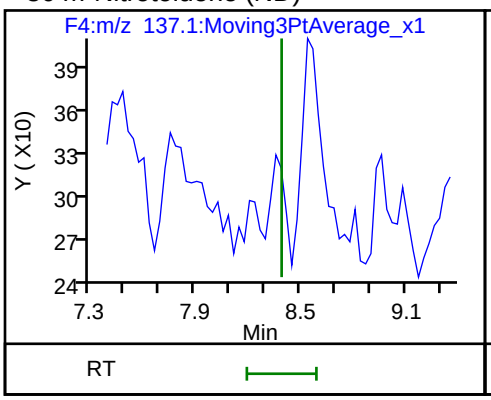
29 p-Nitrotoluene (ND)



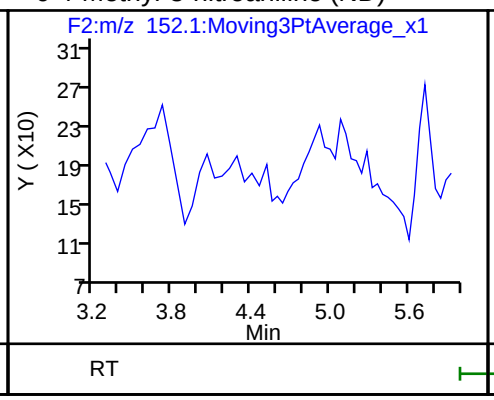
Report Date: 13-Apr-2022 13:57:15 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12010.d

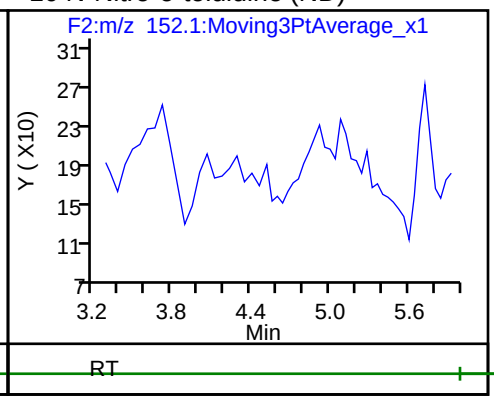
30 m-Nitrotoluene (ND)



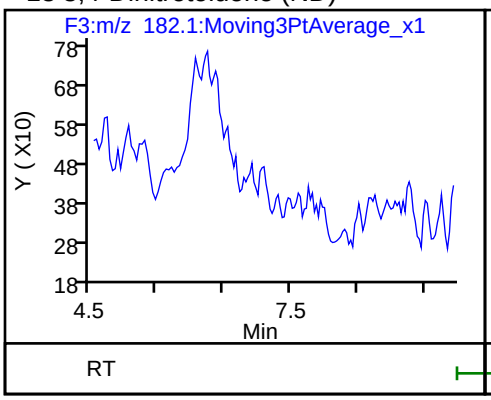
9 4-Methyl-3-nitroaniline (ND)



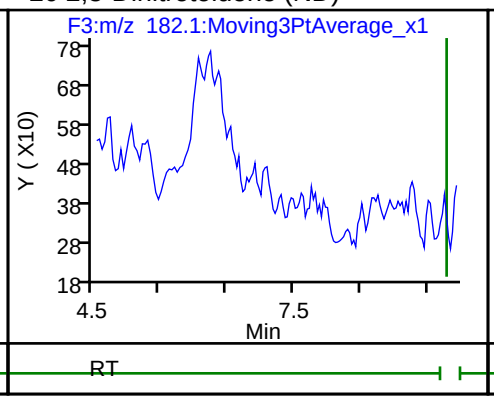
10 N-Nitro-o-toluidine (ND)



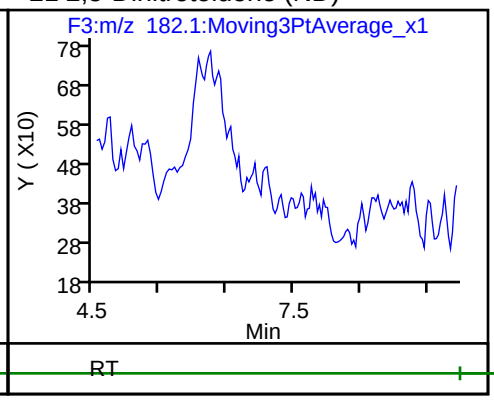
18 3,4-Dinitrotoluene (ND)



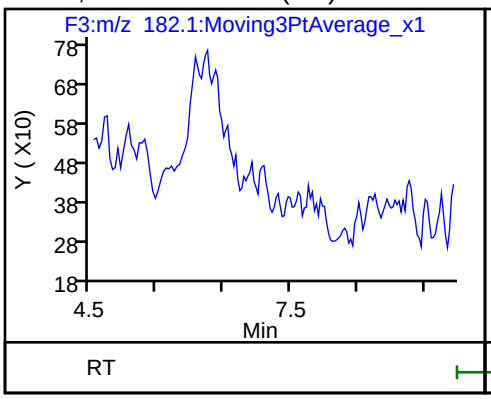
20 2,3-Dinitrotoluene (ND)



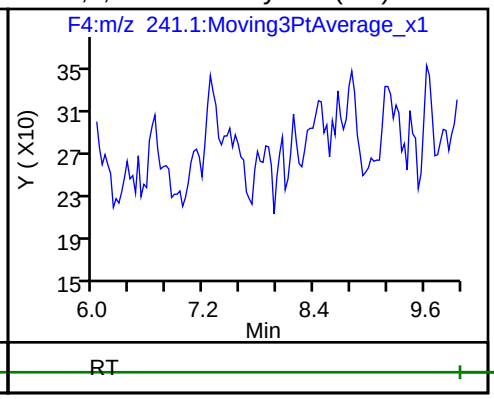
21 2,5-Dinitrotoluene (ND)



27 3,5-Dinitrotoluene (ND)



31 2,4,6-Trinitro-3-xylene (ND)



Report Date: 13-Apr-2022 13:57:15 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12010.d
Lims ID: ICB
Client ID:
Sample Type: ICB
Inject. Date: 12-Apr-2022 10:43:30 ALS Bottle#: 1 Worklist Smp#: 11
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 04/08/22ICB ICB
Misc. Info.: 04/08/2022 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\8321expDuPont.m
Limit Group: LC - 8321A Expl
Last Update: 13-Apr-2022 13:54:59 Calib Date: 12-Apr-2022 10:31:58
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d

Column 1 : Det: F1:SIR
Process Host: CTX1683

First Level Reviewer: meyera Date: 13-Apr-2022 13:25:17

Compound	Amount Added	Amount Recovered	% Rec.
$ 16 Nitrobenzene-d5	50.0	59.2	118.28

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: | Lab Sample ID: ICB 280-571895/10
Matrix: Solid | Lab File ID: ex722D14010.d
Analysis Method: 8321A | Date Collected:
Extraction Method: | Date Extracted:
Sample wt/vol: 0(mL) | Date Analyzed: 04/14/2022 13:13
Con. Extract Vol.: | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571895 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	12	U	20	12	4.6
99-65-0	1,3-Dinitrobenzene	12	U M	20	12	4.4
118-96-7	2,4,6-Trinitrotoluene	12	U	20	12	6.0
121-14-2	2,4-Dinitrotoluene	12	U	20	12	3.4
606-20-2	2,6-Dinitrotoluene	12	U	20	12	5.0
35572-78-2	2-Amino-4,6-dinitrotoluene	12	U	20	12	6.0
19406-51-0	4-Amino-2,6-dinitrotoluene	12	U	20	12	7.8
2691-41-0	HMX	12	U	20	12	6.6
99-08-1	m-Nitrotoluene	12	U	20	12	5.6
98-95-3	Nitrobenzene	12	U	20	12	5.6
55-63-0	Nitroglycerin	12	U	28	12	5.8
88-72-2	o-Nitrotoluene	12	U	20	12	6.4
78-11-5	PETN	12	U	20	12	7.0
99-99-0	p-Nitrotoluene	12	U	20	12	5.8
121-82-4	RDX	12	U	20	12	5.4
479-45-8	Tetryl	12	U	20	12	5.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	107		68-140

Report Date: 15-Apr-2022 08:02:59 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14010.d
Lims ID: ICB
Client ID:
Sample Type: ICB
Inject. Date: 14-Apr-2022 13:13:58 ALS Bottle#: 1 Worklist Smp#: 10
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: ICB
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:02:11 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 14-Apr-2022 14:26:57
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		151106	125.0	106	
33 DNX								
160.0	1.477	1.489	-0.012	0.801	2327	-1.68	2.5	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		437870	125.0	126	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1292680	129.4	244	
10 2,4,6-Trinitrotoluene								
227.0	3.281	3.281	0.0	0.766	37303	-0.6115	11.5	
$ 11 Nitrobenzene-d5								
128.0	3.324	3.324	0.0	0.776	315797	53.7	61.6	
* 18 2,4-dinitrotoluene-d3								
185.1	4.284	4.275	0.009		3873791	125.0	128	

QC Flag Legend
Processing Flags

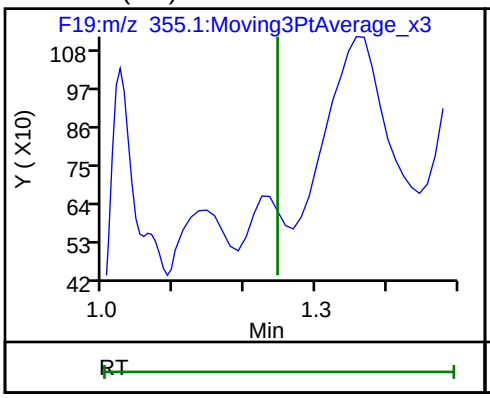
Reagents:
8321NB-D5-cal_00021 Amount Added: 5.00 Units: uL
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:02:59 Chrom Revision: 2.3 12-Apr-2022 20:29:44

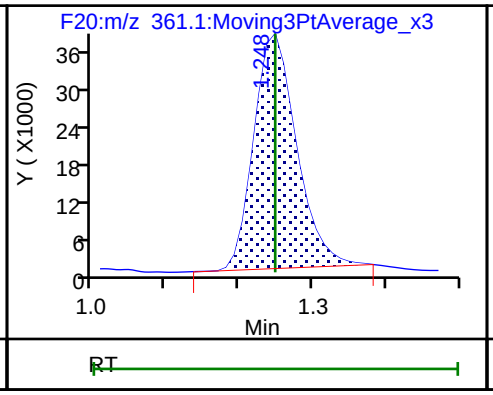
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14010.d
Injection Date: 14-Apr-2022 13:13:58 Instrument ID: LC_LCMS7
Lims ID: ICB
Client ID:
Operator ID: acm ALS Bottle#: 1 Worklist Smp#: 10
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

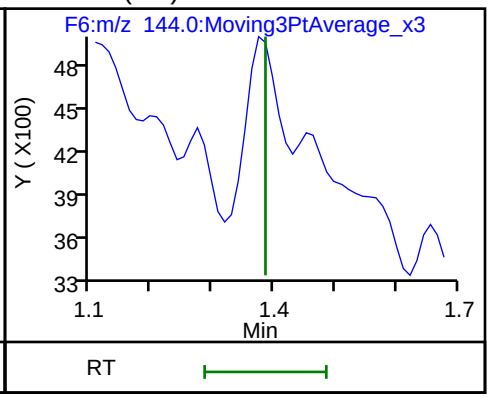
2 HMX (ND)



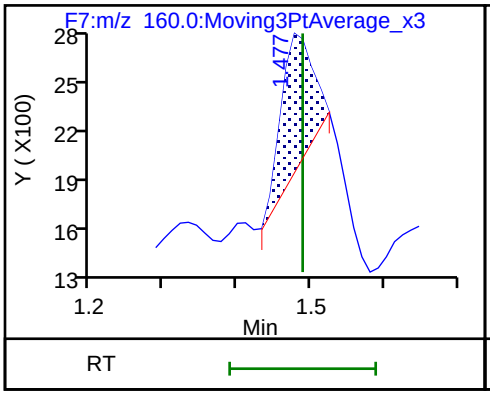
* 1 HMX-13C4



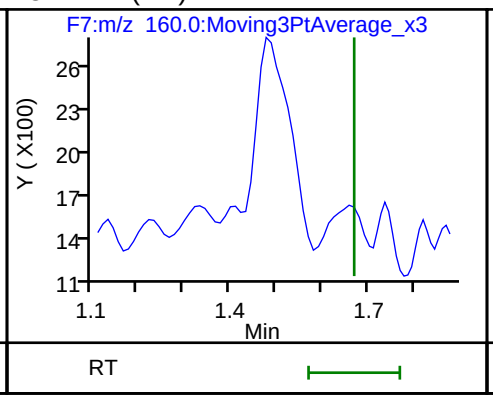
36 TNX (ND)



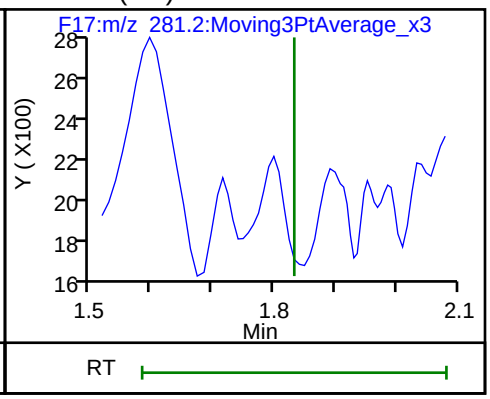
33 DNX



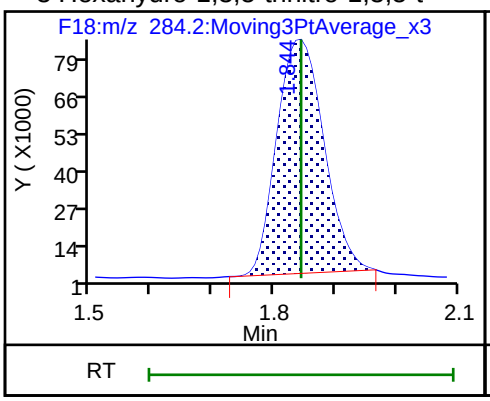
34 MNX (ND)



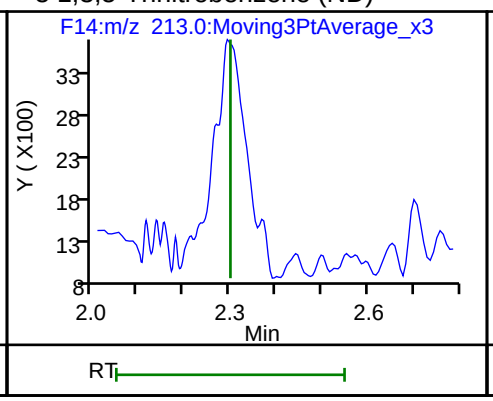
4 RDX (ND)



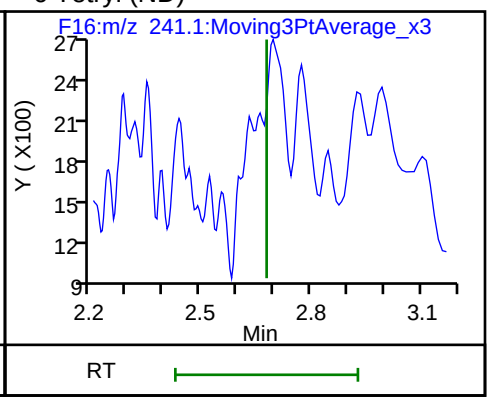
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



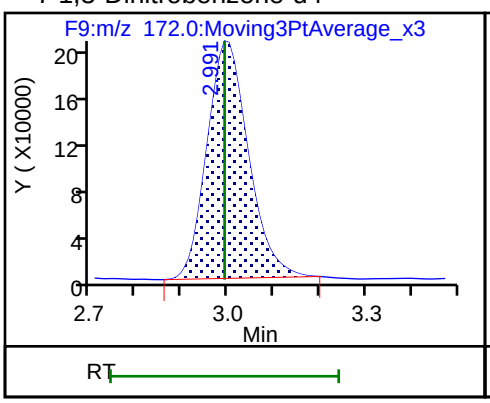
5 1,3,5-Trinitrobenzene (ND)



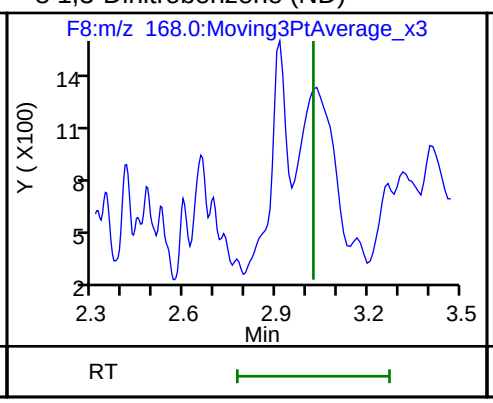
6 Tetryl (ND)



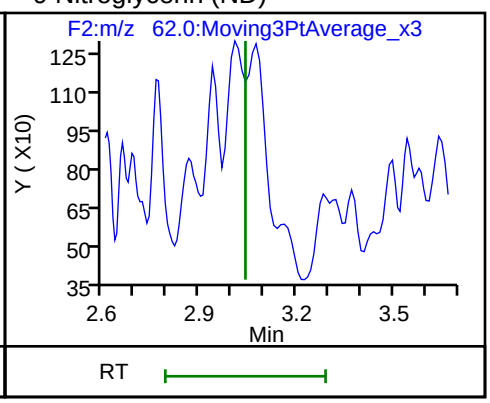
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

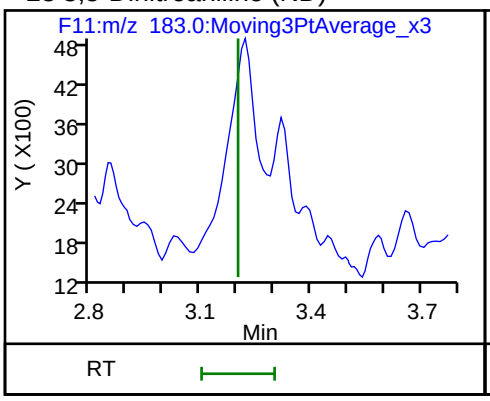


9 Nitroglycerin (ND)

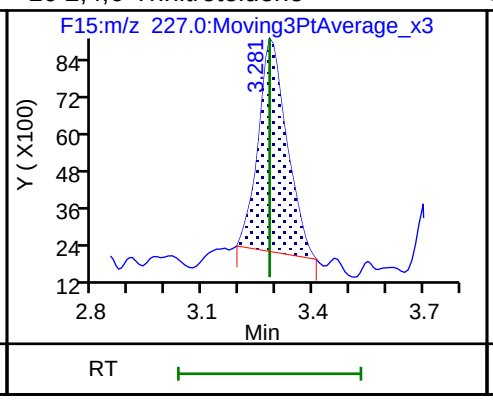


Report Date: 15-Apr-2022 08:02:59 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14010.d

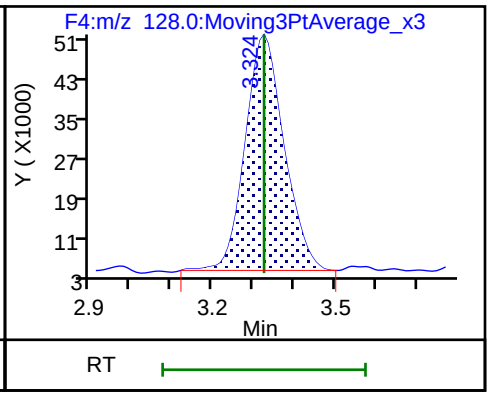
28 3,5-Dinitroaniline (ND)



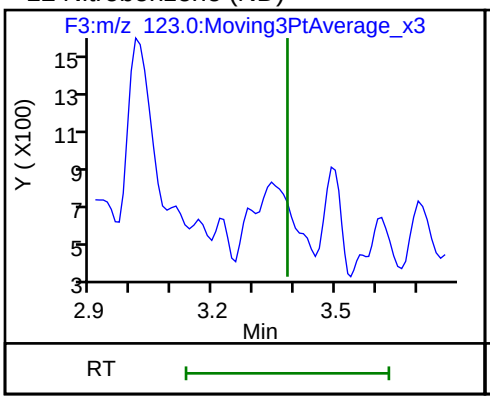
10 2,4,6-Trinitrotoluene



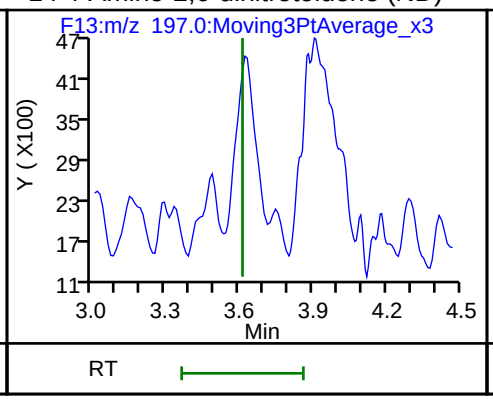
$ 11 Nitrobenzene-d5



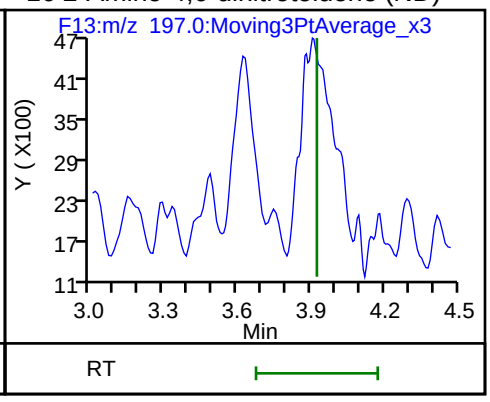
12 Nitrobenzene (ND)



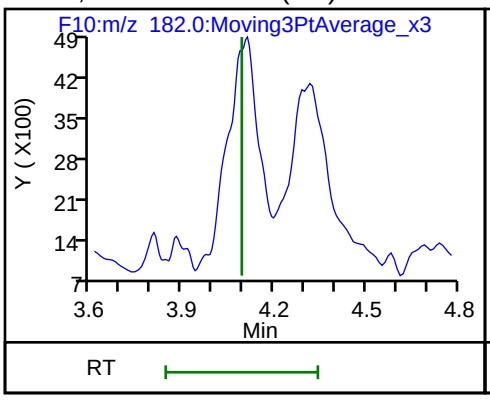
14 4-Amino-2,6-dinitrotoluene (ND)



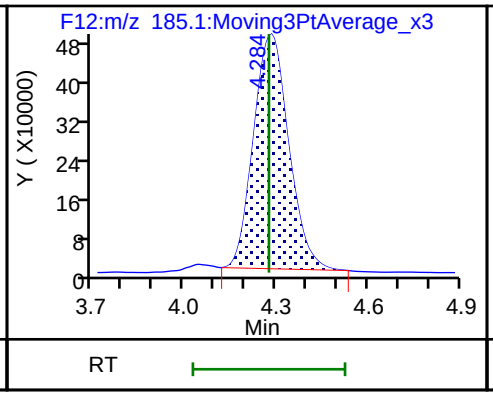
16 2-Amino-4,6-dinitrotoluene (ND)



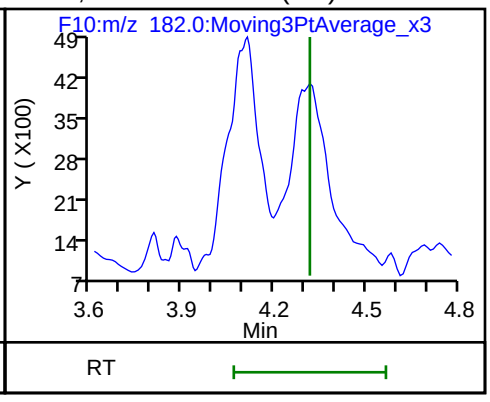
17 2,6-Dinitrotoluene (ND)



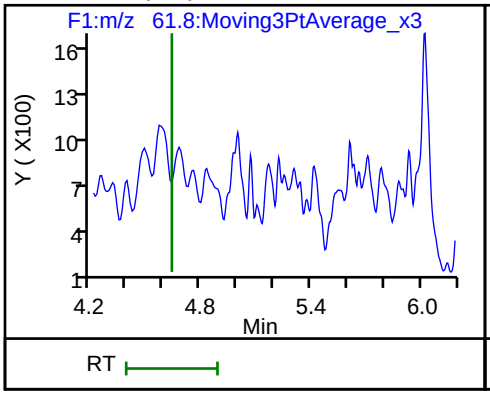
* 18 2,4-dinitrotoluene-d3



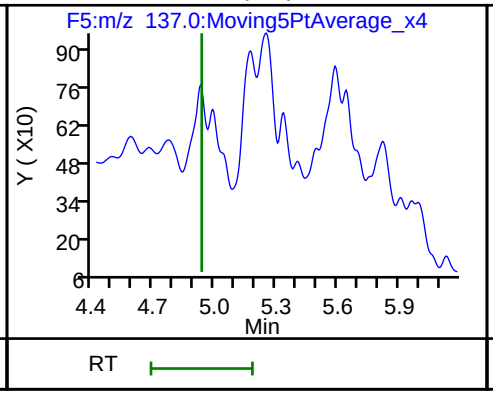
19 2,4-Dinitrotoluene (ND)



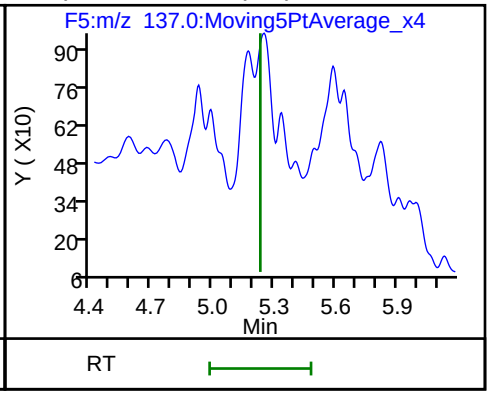
20 PETN (ND)



22 o-Nitrotoluene (ND)



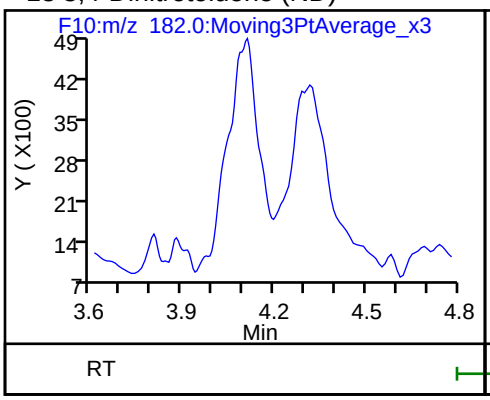
23 p-Nitrotoluene (ND)



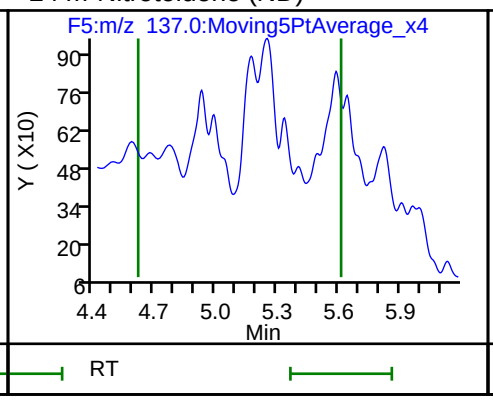
Report Date: 15-Apr-2022 08:02:59 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14010.d

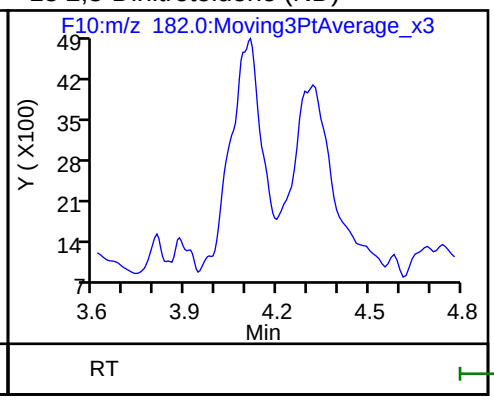
13 3,4-Dinitrotoluene (ND)



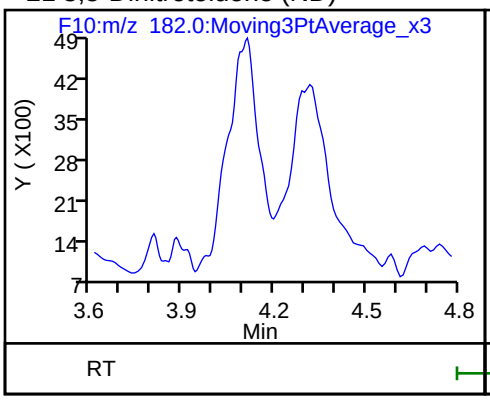
24 m-Nitrotoluene (ND)



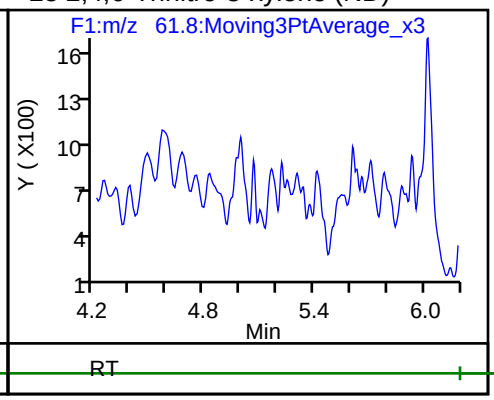
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:02:59 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14010.d
Lims ID: ICB
Client ID:
Sample Type: ICB
Inject. Date: 14-Apr-2022 13:13:58 ALS Bottle#: 1 Worklist Smp#: 10
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: ICB
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:02:11 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 14-Apr-2022 14:26:57

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	50.0	53.7	107.34

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCS 280-570053/2-A
Matrix: Water | Lab File ID: ex722D05013.d
Analysis Method: 8321A | Date Collected:
Extraction Method: 3535 | Date Extracted: 03/29/2022 13:01
Sample wt/vol: 1000(mL) | Date Analyzed: 04/05/2022 11:24
Con. Extract Vol.: 5(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 570784 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.434		0.10	0.060	0.023
99-65-0	1,3-Dinitrobenzene	0.446		0.10	0.060	0.022
118-96-7	2,4,6-Trinitrotoluene	0.470		0.10	0.060	0.030
121-14-2	2,4-Dinitrotoluene	0.431		0.10	0.060	0.027
606-20-2	2,6-Dinitrotoluene	0.463		0.10	0.060	0.025
35572-78-2	2-Amino-4,6-dinitrotoluene	0.468		0.10	0.060	0.030
19406-51-0	4-Amino-2,6-dinitrotoluene	0.455		0.10	0.060	0.039
2691-41-0	HMX	0.420		0.10	0.060	0.033
99-08-1	m-Nitrotoluene	0.423		0.10	0.060	0.028
98-95-3	Nitrobenzene	0.414		0.15	0.060	0.028
55-63-0	Nitroglycerin	0.498		0.15	0.060	0.029
88-72-2	o-Nitrotoluene	0.425		0.10	0.060	0.032
78-11-5	PETN	0.505		0.10	0.060	0.035
99-99-0	p-Nitrotoluene	0.435		0.10	0.060	0.029
121-82-4	RDX	0.483		0.10	0.060	0.027
479-45-8	Tetryl	0.680		0.10	0.060	0.028

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	90		48-130

Report Date: 06-Apr-2022 06:44:10 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05013.d
Lims ID: LCS 280-570053/2-A
Client ID:
Sample Type: LCS
Inject. Date: 05-Apr-2022 11:24:26 ALS Bottle#: 11 Worklist Smp#: 13
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-570053/2-A
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 06:44:08 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 12:47:15
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.223	1.223	0.0	0.998	334501	84.0	95.4	
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		225882	125.0	108	
4 RDX								
281.2	1.791	1.774	0.017	0.998	494199	96.6	112	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.793	1.777	0.016		825906	125.0	157	
5 1,3,5-Trinitrobenzene								
213.0	2.215	2.199	0.016	0.774	2119024	86.9	145	
6 Tetryl								
241.1	2.556	2.540	0.016	0.894	5401111	136.0	204	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1805318	129.4	244	
8 1,3-Dinitrobenzene								
168.0	2.893	2.871	0.022	1.011	1356930	89.3	126	
9 Nitroglycerin								
62.0	2.900	2.878	0.022	1.014	1456589	99.5	606	
10 2,4,6-Trinitrotoluene								
227.0	3.127	3.107	0.020	0.771	10383660	94.1	435	
$ 11 Nitrobenzene-d5								
128.0	3.170	3.150	0.020	0.782	791675	89.9	127	
12 Nitrobenzene								
123.0	3.227	3.208	0.019	0.796	617817	82.7	39.1	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.422	3.391	0.031	0.844	6668676	91.0	64.4	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.721	3.708	0.013	0.918	9466903	93.7	87.2	

Report Date: 06-Apr-2022 06:44:10 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05013.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
17 2,6-Dinitrotoluene								
182.0	3.877	3.852	0.025	0.956	8273149	92.7	494	
* 18 2,4-dinitrotoluene-d3								
185.1	4.054	4.028	0.026		5555557	125.0	116	
19 2,4-Dinitrotoluene								
182.0	4.087	4.052	0.035	1.008	4039062	86.1	222	
20 PETN								
61.8	4.325	4.305	0.020	1.067	1038604	101.0	341	
22 o-Nitrotoluene								
137.0	4.661	4.631	0.030	1.150	1171377	85.0	353	
23 p-Nitrotoluene								
137.0	4.935	4.910	0.025	1.217	1041219	86.9	303	
24 m-Nitrotoluene								
137.0	5.293	5.268	0.025	1.306	603004	84.5	163	

QC Flag Legend

Processing Flags

Reagents:

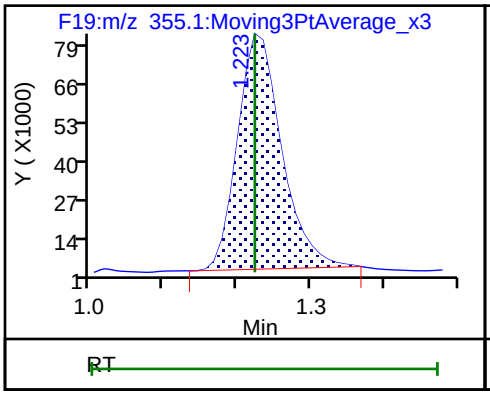
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 06:44:10 Chrom Revision: 2.3 18-Mar-2022 09:07:22

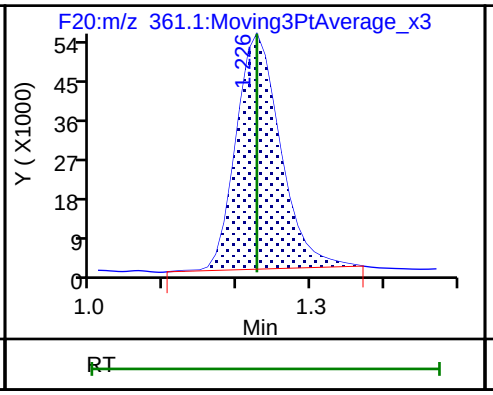
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05013.d
Injection Date: 05-Apr-2022 11:24:26 Instrument ID: LC_LCMS7
Lims ID: LCS 280-570053/2-A
Client ID:
Operator ID: acm ALS Bottle#: 11 Worklist Smp#: 13
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

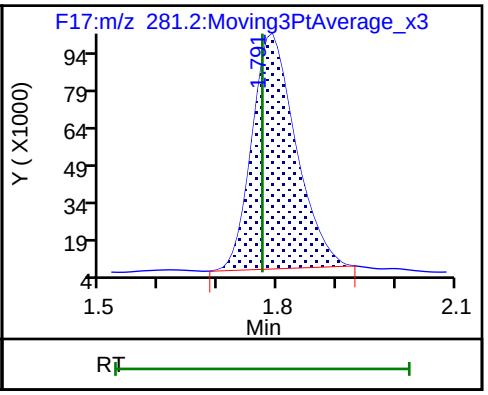
2 HMX



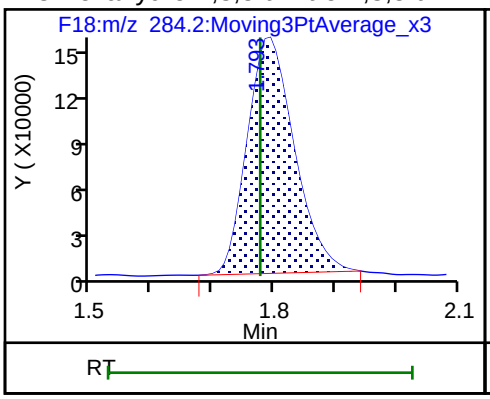
* 1 HMX-13C4



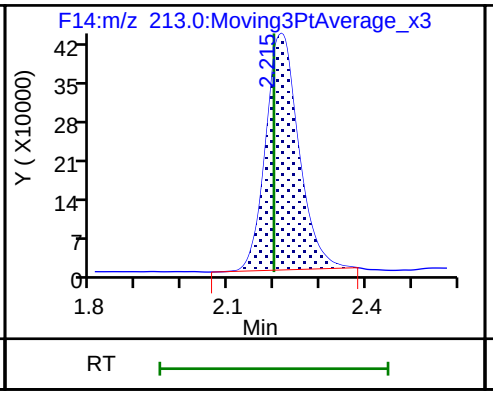
4 RDX



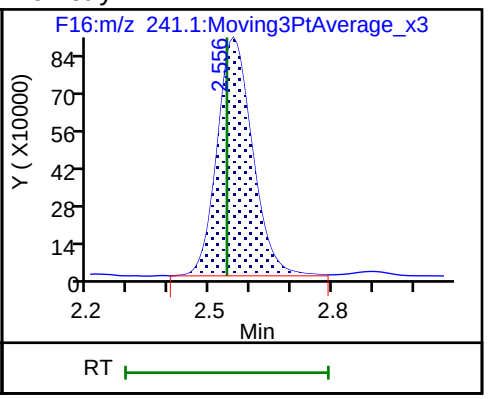
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



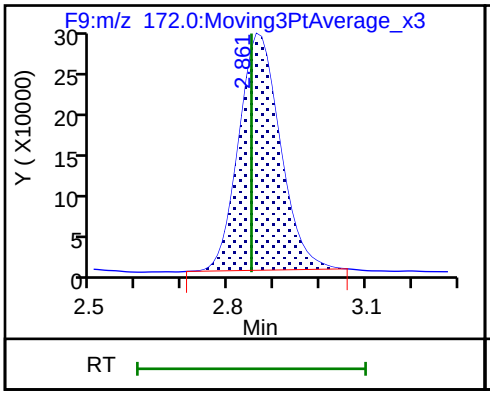
5 1,3,5-Trinitrobenzene



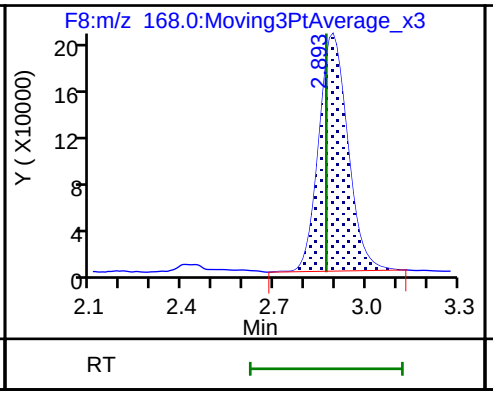
6 Tetryl



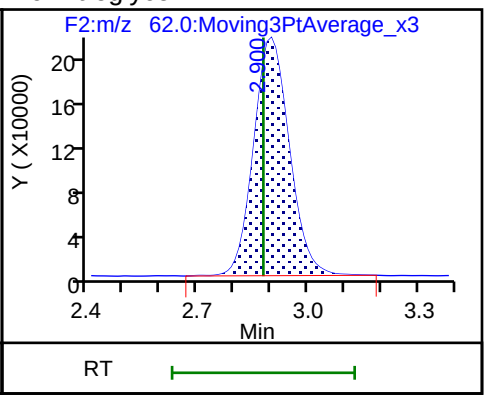
* 7 1,3-Dinitrobenzene-d4



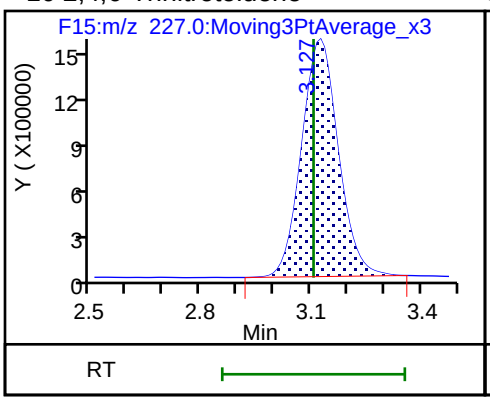
8 1,3-Dinitrobenzene



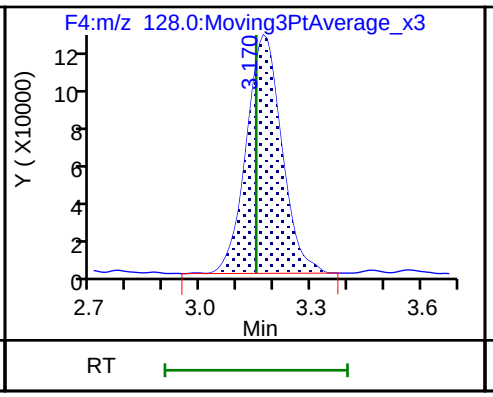
9 Nitroglycerin



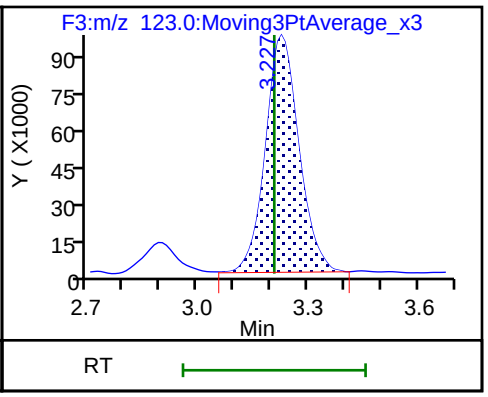
10 2,4,6-Trinitrotoluene



$ 11 Nitrobenzene-d5

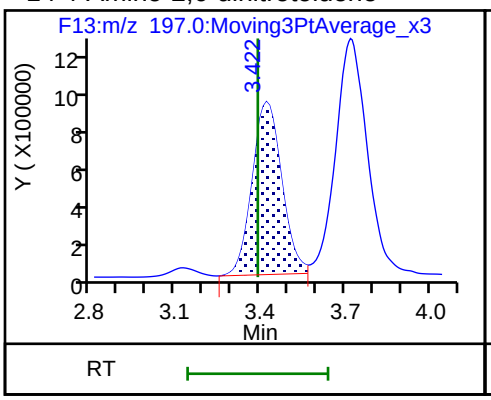


12 Nitrobenzene

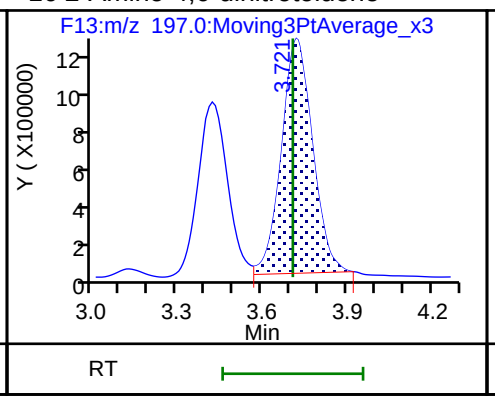


Report Date: 06-Apr-2022 06:44:10 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05013.d

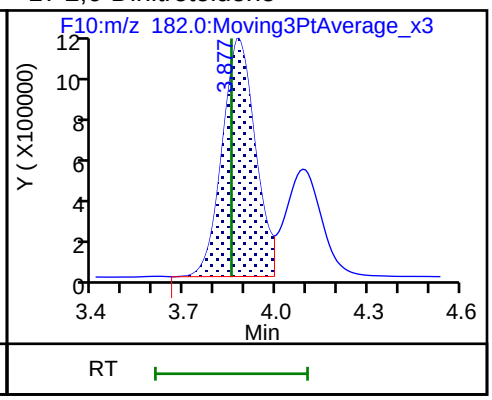
14 4-Amino-2,6-dinitrotoluene



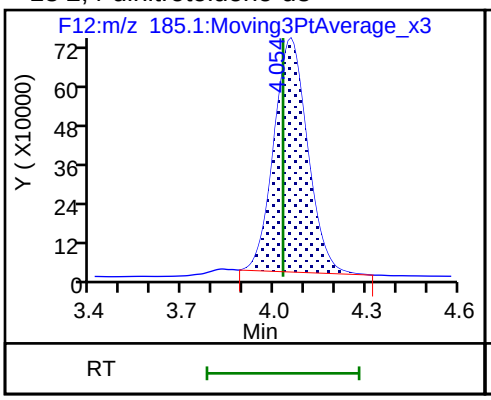
16 2-Amino-4,6-dinitrotoluene



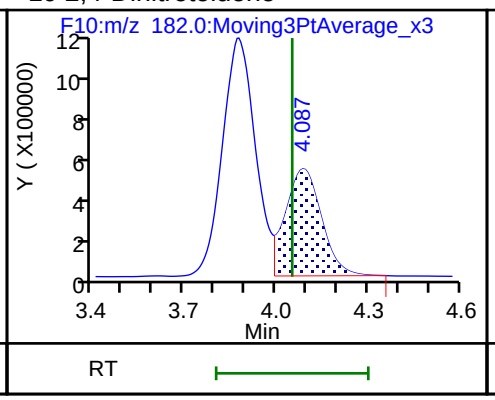
17 2,6-Dinitrotoluene



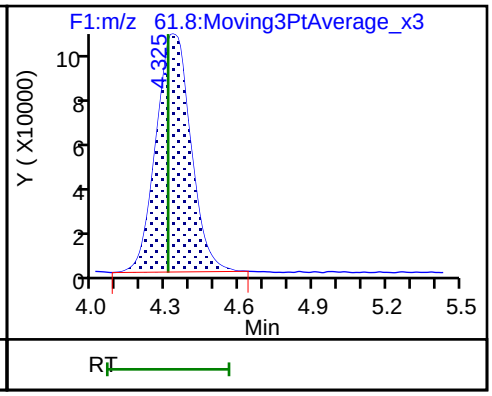
* 18 2,4-dinitrotoluene-d3



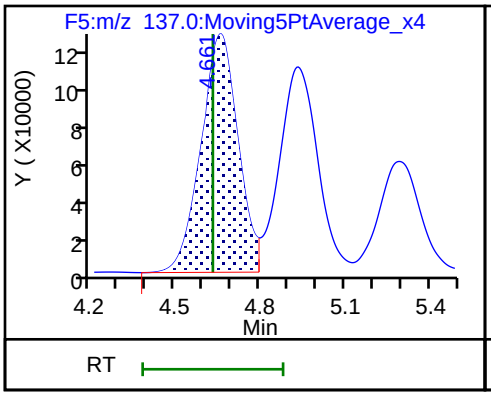
19 2,4-Dinitrotoluene



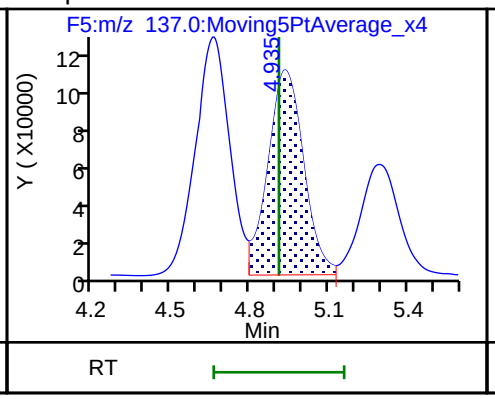
20 PETN



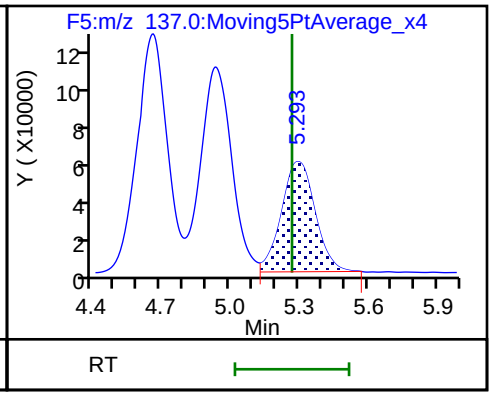
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



Report Date: 06-Apr-2022 06:44:10 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05013.d
Lims ID: LCS 280-570053/2-A
Client ID:
Sample Type: LCS
Inject. Date: 05-Apr-2022 11:24:26 ALS Bottle#: 11 Worklist Smp#: 13
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-570053/2-A
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 06:44:08 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 12:47:15

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	89.9	89.57

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCS 280-570718/2-A
Matrix: Solid | Lab File ID: ex722D07013.d
Analysis Method: 8321A | Date Collected:
Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57
Sample wt/vol: 10(g) | Date Analyzed: 04/07/2022 11:45
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571108 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.384		0.10	0.050	0.045
99-65-0	1,3-Dinitrobenzene	0.384		0.10	0.050	0.045
118-96-7	2,4,6-Trinitrotoluene	0.415		0.10	0.050	0.037
121-14-2	2,4-Dinitrotoluene	0.388		0.10	0.050	0.047
606-20-2	2,6-Dinitrotoluene	0.403		0.10	0.050	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.412		0.10	0.050	0.050
19406-51-0	4-Amino-2,6-dinitrotoluene	0.399		0.10	0.050	0.031
2691-41-0	HMX	0.397		0.10	0.050	0.046
99-08-1	m-Nitrotoluene	0.380		0.10	0.050	0.043
98-95-3	Nitrobenzene	0.385		0.11	0.050	0.038
55-63-0	Nitroglycerin	0.431		0.10	0.050	0.029
88-72-2	o-Nitrotoluene	0.406		0.10	0.050	0.043
78-11-5	PETN	0.442		0.10	0.050	0.034
99-99-0	p-Nitrotoluene	0.407		0.10	0.050	0.049
121-82-4	RDX	0.401		0.12	0.050	0.043
479-45-8	Tetryl	0.578	Q	0.10	0.050	0.039

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	98		68-140

Report Date: 08-Apr-2022 07:32:22 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07013.d
Lims ID: LCS 280-570718/2-A
Client ID:
Sample Type: LCS
Inject. Date: 07-Apr-2022 11:45:12 ALS Bottle#: 11 Worklist Smp#: 13
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-570718/2-A
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:21 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 12:34:48
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	165306	99.2	63.6	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		105009	125.0	126	
4 RDX								
281.2	1.849	1.841	0.008	1.008	225775	100.3	70.3	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		406169	125.0	160	
5 1,3,5-Trinitrobenzene								
213.0	2.320	2.317	0.003	0.766	1562000	95.9	126	
6 Tetryl								
241.1	2.705	2.712	-0.007	0.893	3276681	144.6	189	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.030	3.030	0.0		1382250	129.4	388	
8 1,3-Dinitrobenzene								
168.0	3.051	3.051	0.0	1.007	1107815	95.9	127	
9 Nitroglycerin								
62.0	3.080	3.080	0.0	1.017	1104830	107.9	550	
10 2,4,6-Trinitrotoluene								
227.0	3.321	3.321	0.0	0.766	7526363	103.8	165	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.775	661970	98.6	85.2	
12 Nitrobenzene								
123.0	3.421	3.431	-0.010	0.790	557331	96.2	33.8	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.645	3.645	0.0	0.841	5191485	99.8	30.8	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.970	3.976	-0.006	0.916	6929784	103.0	39.9	

Report Date: 08-Apr-2022 07:32:22 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07013.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
17 2,6-Dinitrotoluene								
182.0	4.144	4.150	-0.006	0.957	6959702	100.7	674	
* 18 2,4-dinitrotoluene-d3								
185.1	4.332	4.341	-0.009		4195665	125.0	107	
19 2,4-Dinitrotoluene								
182.0	4.373	4.373	0.0	1.009	3418990	97.1	297	
20 PETN								
61.8	4.706	4.716	-0.010	1.086	604402	110.4	126	
22 o-Nitrotoluene								
137.0	4.997	5.002	-0.005	1.153	1074491	101.6	266	
23 p-Nitrotoluene								
137.0	5.311	5.311	0.0	1.226	931698	101.8	220	
24 m-Nitrotoluene								
137.0	5.704	5.704	0.0	1.317	523982	95.0	120	

QC Flag Legend

Processing Flags

Reagents:

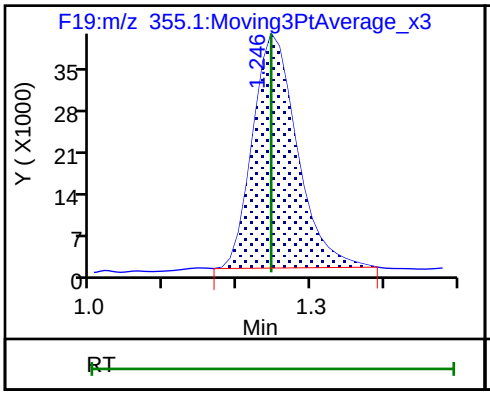
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 08-Apr-2022 07:32:22 Chrom Revision: 2.3 18-Mar-2022 09:07:22

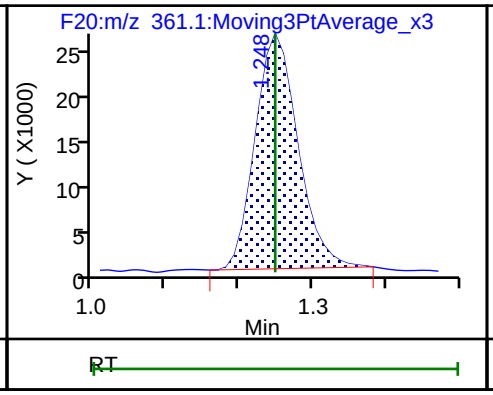
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07013.d
Injection Date: 07-Apr-2022 11:45:12 Instrument ID: LC_LCMS7
Lims ID: LCS 280-570718/2-A
Client ID:
Operator ID: acm ALS Bottle#: 11 Worklist Smp#: 13
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

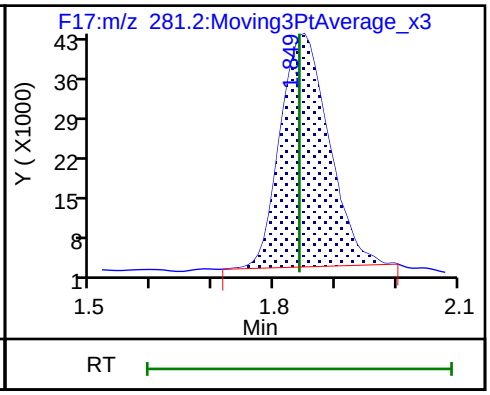
2 HMX



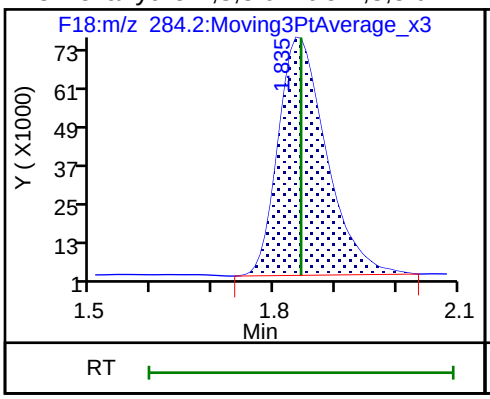
* 1 HMX-13C4



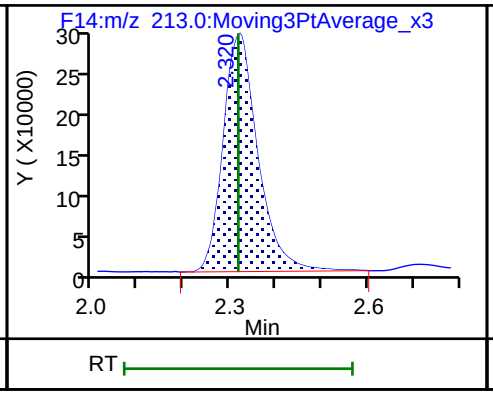
4 RDX



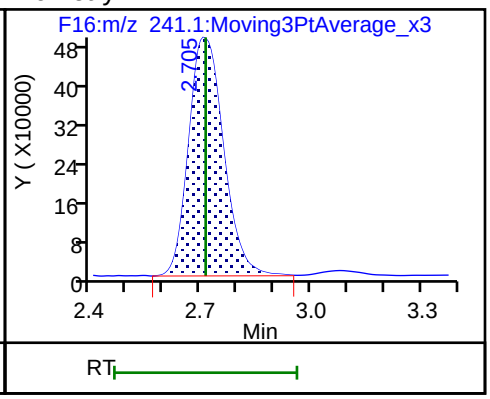
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



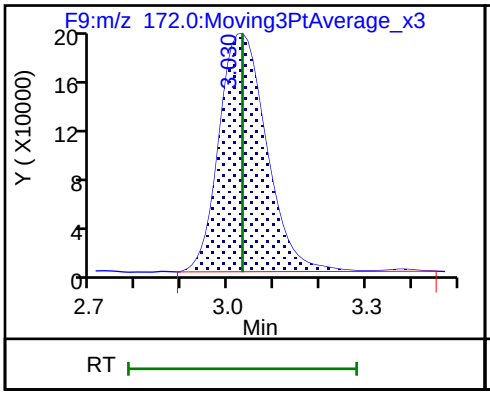
5 1,3,5-Trinitrobenzene



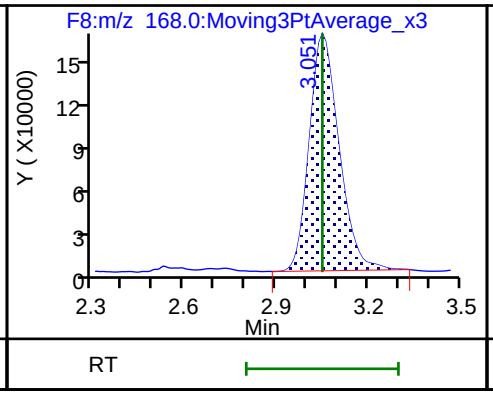
6 Tetryl



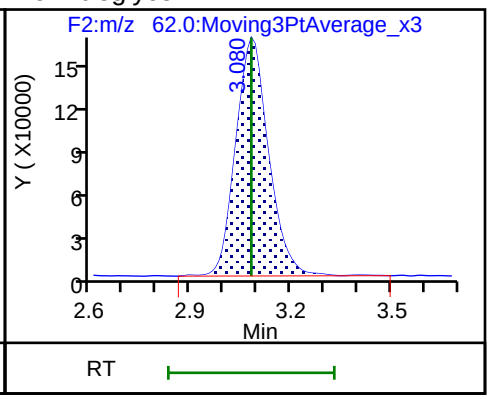
* 7 1,3-Dinitrobenzene-d4



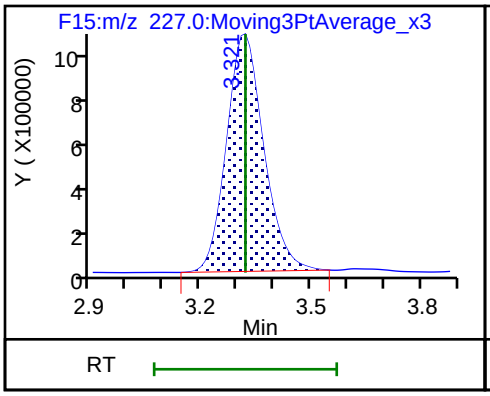
8 1,3-Dinitrobenzene



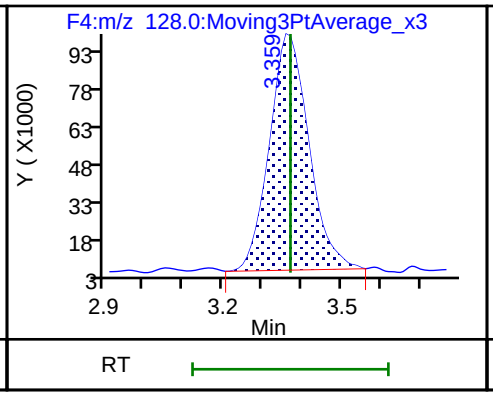
9 Nitroglycerin



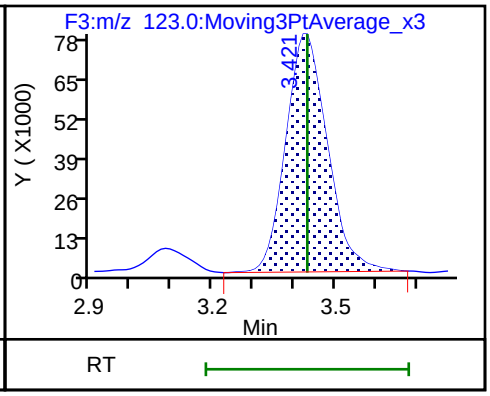
10 2,4,6-Trinitrotoluene



$ 11 Nitrobenzene-d5

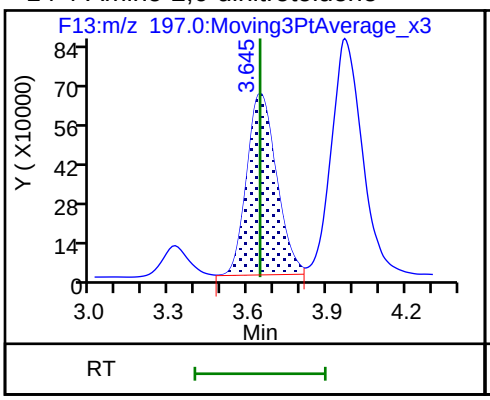


12 Nitrobenzene

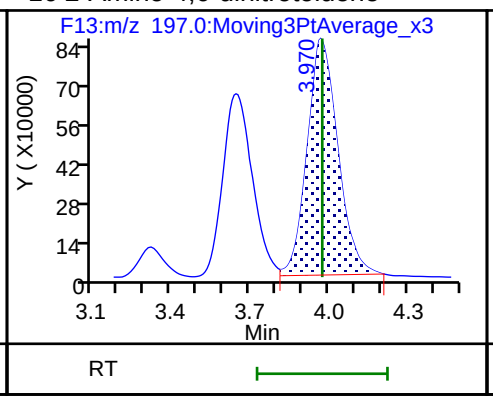


Report Date: 08-Apr-2022 07:32:22 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07013.d

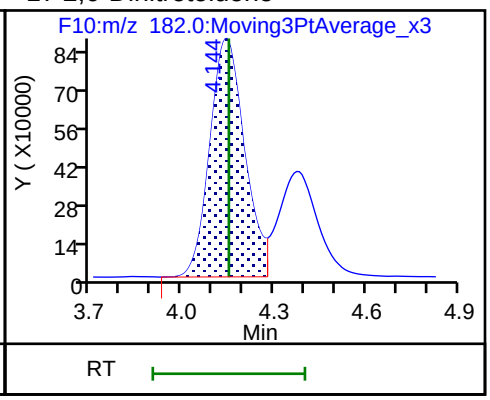
14 4-Amino-2,6-dinitrotoluene



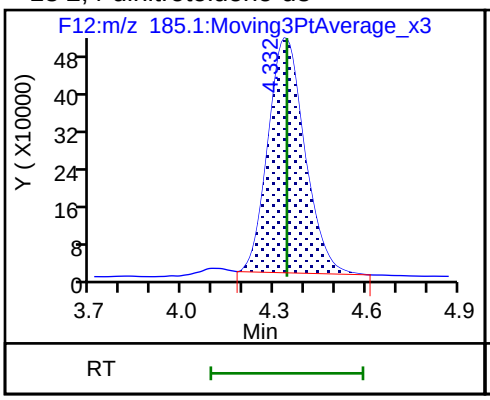
16 2-Amino-4,6-dinitrotoluene



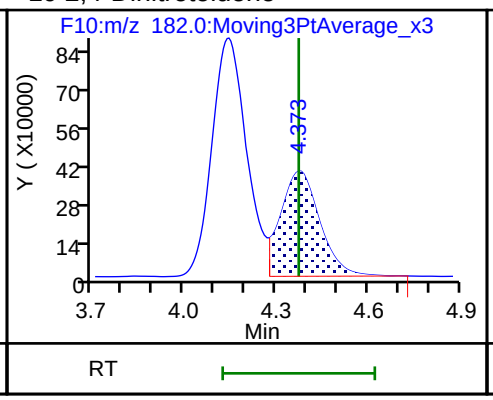
17 2,6-Dinitrotoluene



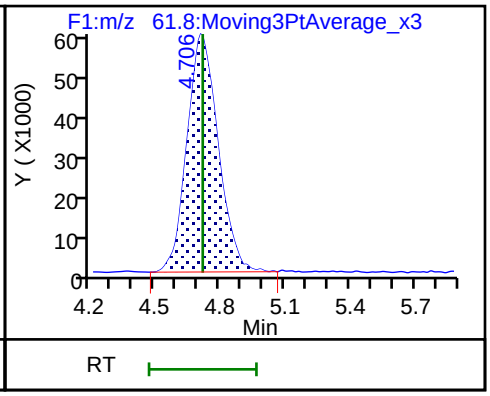
* 18 2,4-dinitrotoluene-d3



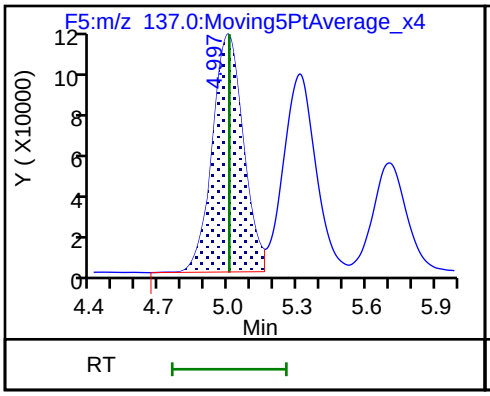
19 2,4-Dinitrotoluene



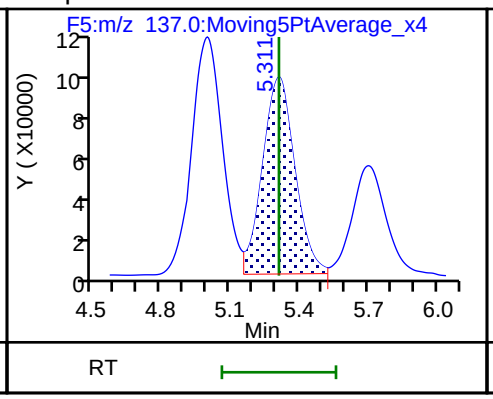
20 PETN



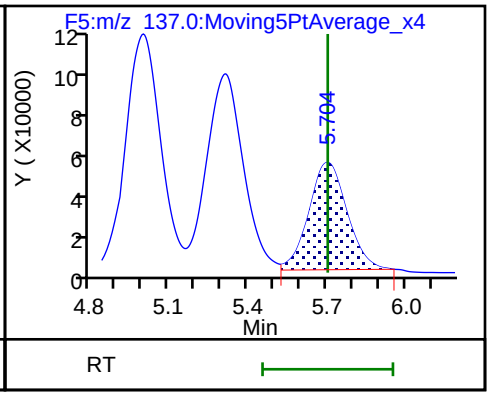
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



Report Date: 08-Apr-2022 07:32:22 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07013.d
Lims ID: LCS 280-570718/2-A
Client ID:
Sample Type: LCS
Inject. Date: 07-Apr-2022 11:45:12 ALS Bottle#: 11 Worklist Smp#: 13
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-570718/2-A
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:21 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 12:34:48

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	98.6	98.30

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCS 280-571022/2-A
Matrix: Solid | Lab File ID: ex722D14013.d
Analysis Method: 8321A | Date Collected:
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:23
Sample wt/vol: 10(g) | Date Analyzed: 04/14/2022 13:33
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571896 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.348		0.10	0.050	0.045
99-65-0	1,3-Dinitrobenzene	0.344		0.10	0.050	0.045
118-96-7	2,4,6-Trinitrotoluene	0.377		0.10	0.050	0.037
121-14-2	2,4-Dinitrotoluene	0.337		0.10	0.050	0.047
606-20-2	2,6-Dinitrotoluene	0.351		0.10	0.050	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.339		0.10	0.050	0.050
19406-51-0	4-Amino-2,6-dinitrotoluene	0.336		0.10	0.050	0.031
2691-41-0	HMX	0.312		0.10	0.050	0.046
99-08-1	m-Nitrotoluene	0.354		0.10	0.050	0.043
98-95-3	Nitrobenzene	0.362		0.11	0.050	0.038
55-63-0	Nitroglycerin	0.359		0.10	0.050	0.029
88-72-2	o-Nitrotoluene	0.360		0.10	0.050	0.043
78-11-5	PETN	0.378		0.10	0.050	0.034
99-99-0	p-Nitrotoluene	0.361		0.10	0.050	0.049
121-82-4	RDX	0.315		0.12	0.050	0.043
479-45-8	Tetryl	0.540	Q	0.10	0.050	0.039

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	98		68-140

Report Date: 15-Apr-2022 08:03:01 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14013.d
Lims ID: LCS 280-571022/2-A
Client ID:
Sample Type: LCS
Inject. Date: 14-Apr-2022 13:33:45 ALS Bottle#: 11 Worklist Smp#: 13
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-571022/2-A
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:00 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 14-Apr-2022 14:27:41
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	193484	78.0	95.1	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		143864	125.0	198	
4 RDX								
281.2	1.833	1.833	0.0	0.998	248395	78.7	62.9	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		607172	125.0	177	
5 1,3,5-Trinitrobenzene								
213.0	2.299	2.299	0.0	0.769	1425646	86.9	144	
6 Tetryl								
241.1	2.679	2.679	0.0	0.896	3373850	135.1	224	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1209866	129.4	330	
8 1,3-Dinitrobenzene								
168.0	3.022	3.022	0.0	1.010	859793	85.9	126	
9 Nitroglycerin								
62.0	3.040	3.040	0.0	1.016	810350	89.8	263	
10 2,4,6-Trinitrotoluene								
227.0	3.281	3.281	0.0	0.768	6676865	94.2	316	
$ 11 Nitrobenzene-d5								
128.0	3.315	3.324	-0.009	0.775	531451	98.0	76.8	
12 Nitrobenzene								
123.0	3.372	3.382	-0.010	0.789	405648	90.4	30.6	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.611	3.611	0.0	0.845	4039672	84.1	47.0	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.918	3.924	-0.006	0.916	5639972	84.8	61.9	

Report Date: 15-Apr-2022 08:03:01 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14013.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
17 2,6-Dinitrotoluene								
182.0	4.087	4.093	-0.006	0.956	5232475	87.7	549	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3698942	125.0	121	
19 2,4-Dinitrotoluene								
182.0	4.316	4.316	0.0	1.010	2655384	84.3	249	
20 PETN								
61.8	4.628	4.638	-0.010	1.082	559439	94.5	111	
22 o-Nitrotoluene								
137.0	4.932	4.932	0.0	1.153	785862	90.1	230	
23 p-Nitrotoluene								
137.0	5.231	5.230	0.001	1.223	695549	90.2	200	
24 m-Nitrotoluene								
137.0	5.624	5.614	0.010	1.315	398953	88.5	112	

QC Flag Legend

Processing Flags

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:01 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14013.d

Injection Date: 14-Apr-2022 13:33:45 Instrument ID: LC_LCMS7

Lims ID: LCS 280-571022/2-A

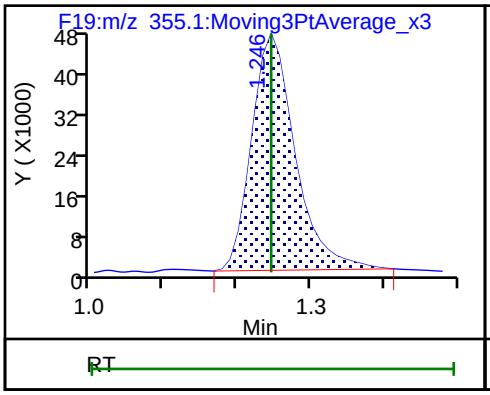
Client ID:

Operator ID: acm ALS Bottle#: 11 Worklist Smp#: 13

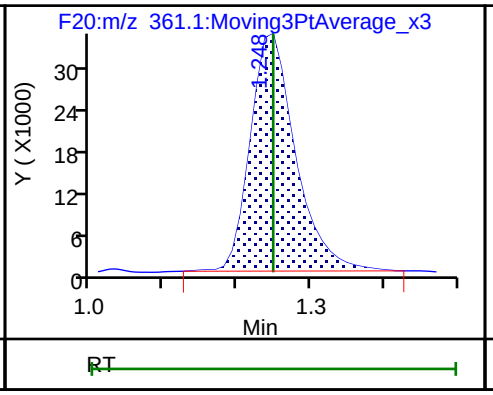
Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

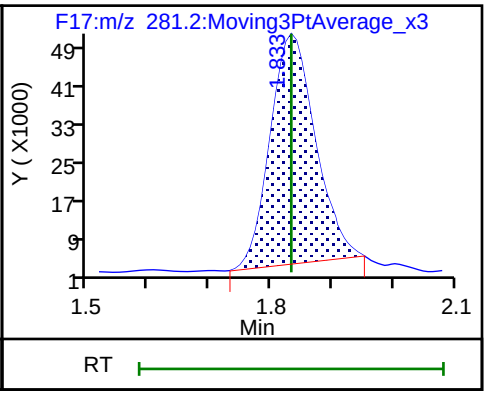
2 HMX



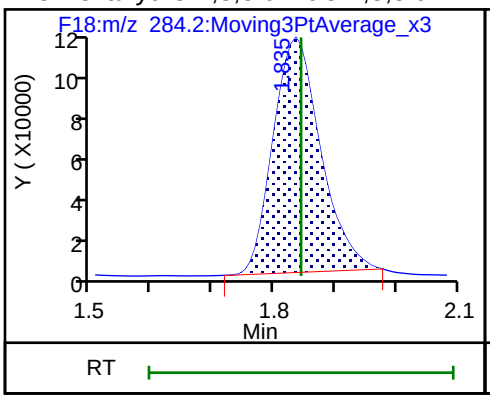
* 1 HMX-13C4



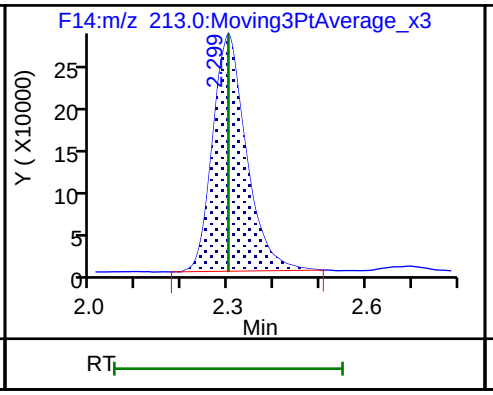
4 RDX



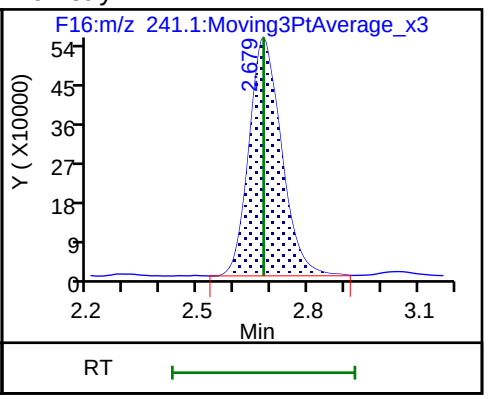
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



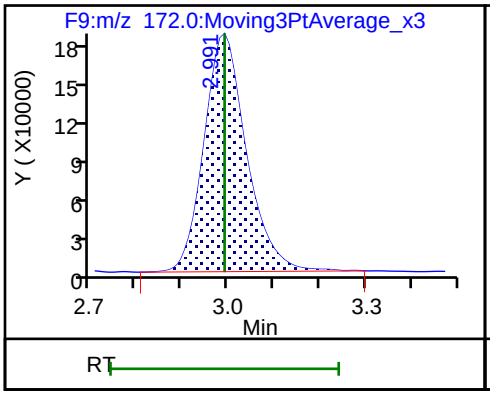
5 1,3,5-Trinitrobenzene



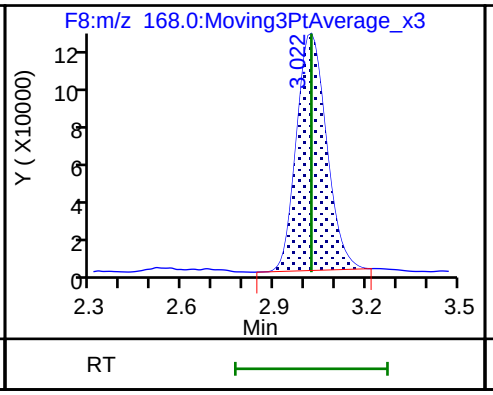
6 Tetryl



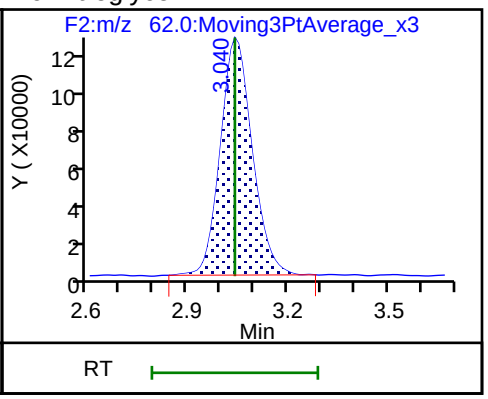
* 7 1,3-Dinitrobenzene-d4



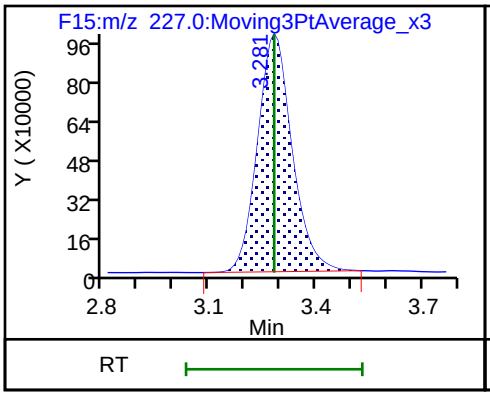
8 1,3-Dinitrobenzene



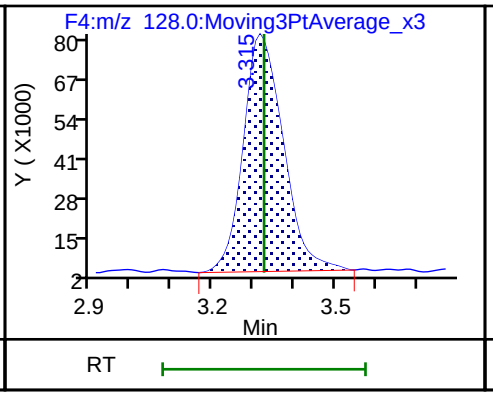
9 Nitroglycerin



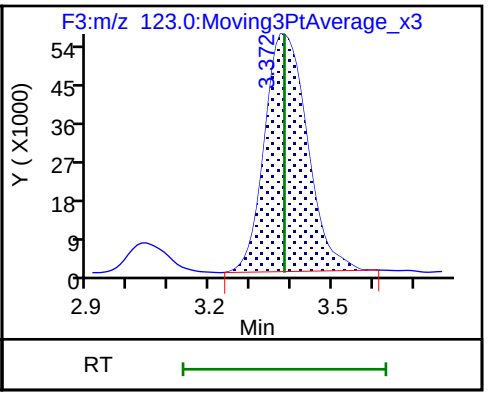
10 2,4,6-Trinitrotoluene



$ 11 Nitrobenzene-d5



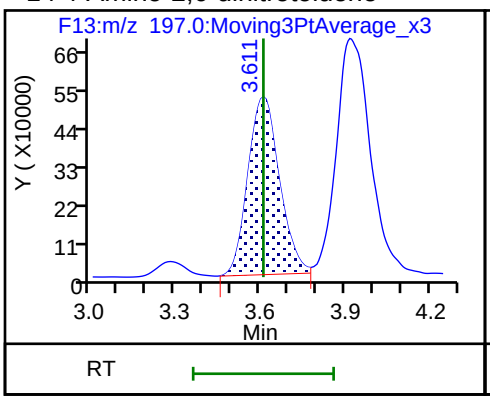
12 Nitrobenzene



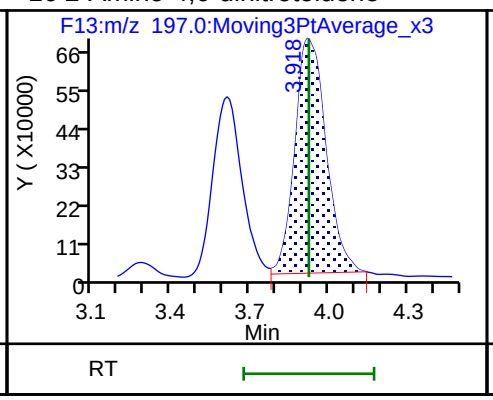
Report Date: 15-Apr-2022 08:03:01 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14013.d

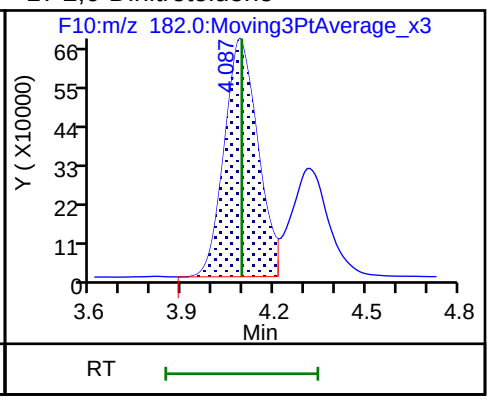
14 4-Amino-2,6-dinitrotoluene



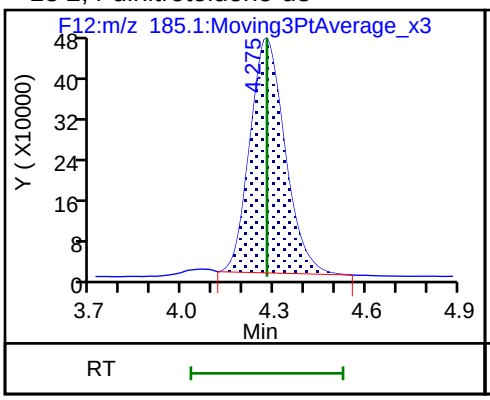
16 2-Amino-4,6-dinitrotoluene



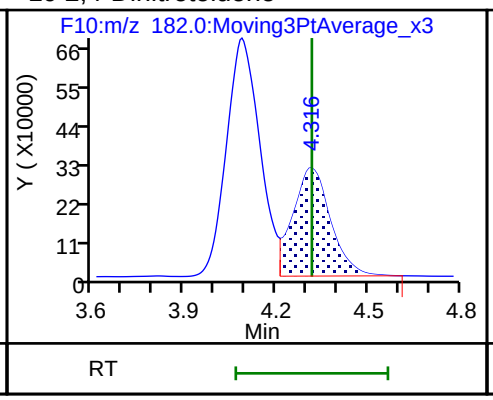
17 2,6-Dinitrotoluene



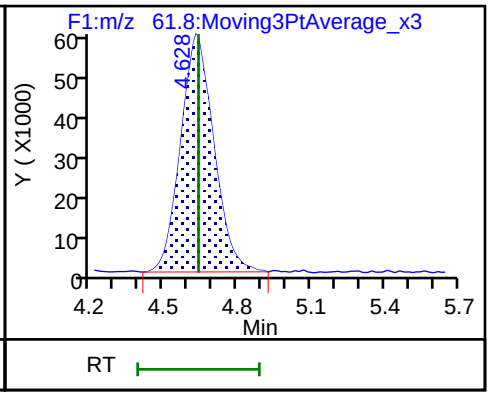
* 18 2,4-dinitrotoluene-d3



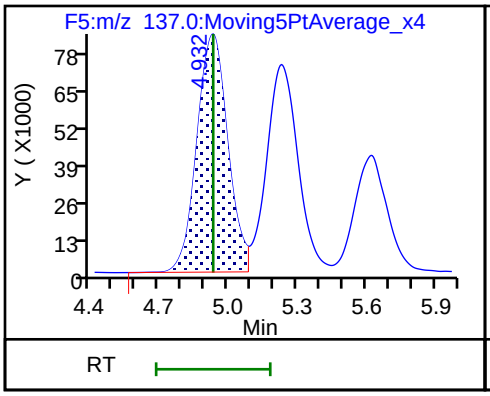
19 2,4-Dinitrotoluene



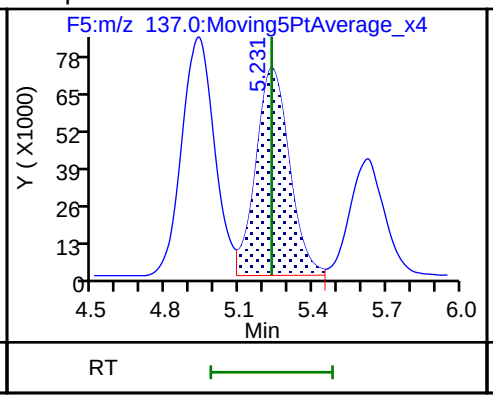
20 PETN



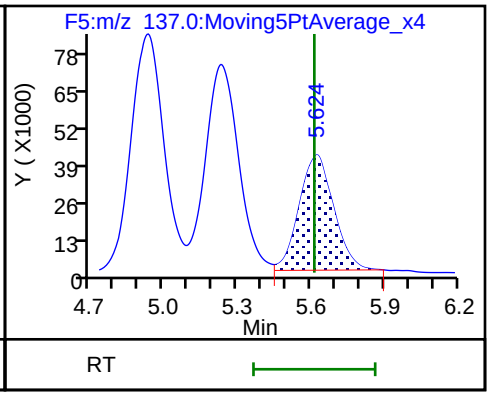
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



Report Date: 15-Apr-2022 08:03:01 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14013.d
Lims ID: LCS 280-571022/2-A
Client ID:
Sample Type: LCS
Inject. Date: 14-Apr-2022 13:33:45 ALS Bottle#: 11 Worklist Smp#: 13
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-571022/2-A
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:00 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 14-Apr-2022 14:27:41

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	98.0	97.72

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCS 280-571024/2-A
Matrix: Solid | Lab File ID: ex722D08013.d
Analysis Method: 8321A | Date Collected:
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20
Sample wt/vol: 10(g) | Date Analyzed: 04/08/2022 10:54
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571224 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.420		0.10	0.050	0.045
99-65-0	1,3-Dinitrobenzene	0.394		0.10	0.050	0.045
118-96-7	2,4,6-Trinitrotoluene	0.431		0.10	0.050	0.037
121-14-2	2,4-Dinitrotoluene	0.380		0.10	0.050	0.047
606-20-2	2,6-Dinitrotoluene	0.410		0.10	0.050	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.384		0.10	0.050	0.050
19406-51-0	4-Amino-2,6-dinitrotoluene	0.393		0.10	0.050	0.031
2691-41-0	HMX	0.347		0.10	0.050	0.046
99-08-1	m-Nitrotoluene	0.392		0.10	0.050	0.043
98-95-3	Nitrobenzene	0.429		0.11	0.050	0.038
55-63-0	Nitroglycerin	0.455		0.10	0.050	0.029
88-72-2	o-Nitrotoluene	0.412		0.10	0.050	0.043
78-11-5	PETN	0.404		0.10	0.050	0.034
99-99-0	p-Nitrotoluene	0.402		0.10	0.050	0.049
121-82-4	RDX	0.380		0.12	0.050	0.043
479-45-8	Tetryl	0.640	Q	0.10	0.050	0.039

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	115		68-140

Report Date: 14-Apr-2022 10:06:46 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08013.d
Lims ID: LCS 280-571024/2-A
Client ID:
Sample Type: LCS
Inject. Date: 08-Apr-2022 10:54:01 ALS Bottle#: 11 Worklist Smp#: 13
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-571024/2-A
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:44 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:39:40
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	179855	86.6	119	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		116083	125.0	200	
4 RDX								
281.2	1.841	1.833	0.0	0.998	234940	94.9	70.5	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		423834	125.0	477	
5 1,3,5-Trinitrobenzene								
213.0	2.313	2.322	0.0	0.769	1582704	105.0	134	
6 Tetryl								
241.1	2.705	2.708	0.006	0.899	3583692	160.1	240	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.008	3.008	0.0		1251696	129.4	338	
8 1,3-Dinitrobenzene								
168.0	3.051	3.051	0.011	1.014	1032037	98.4	124	
9 Nitroglycerin								
62.0	3.080	3.081	0.011	1.024	1035033	113.9	551	
10 2,4,6-Trinitrotoluene								
227.0	3.310	3.316	0.0	0.765	6939074	107.6	142	
$ 11 Nitrobenzene-d5								
128.0	3.348	3.354	0.0	0.774	680122	115.0	87.2	
12 Nitrobenzene								
123.0	3.411	3.418	0.0	0.789	541153	107.1	46.2	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.645	3.652	0.0	0.843	4837310	98.2	31.6	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.957	3.971	-0.006	0.915	6048683	95.9	38.8	

Report Date: 14-Apr-2022 10:06:46 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08013.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
17 2,6-Dinitrotoluene								
182.0	4.138	4.138	0.012	0.957	6793193	102.5	429	
* 18 2,4-dinitrotoluene-d3								
185.1	4.324	4.315	0.009		4000946	125.0	120	
19 2,4-Dinitrotoluene								
182.0	4.365	4.373	0.0	1.009	3213287	94.9	194	
20 PETN								
61.8	4.706	4.706	0.010	1.089	559163	101.1	159	
22 o-Nitrotoluene								
137.0	4.987	4.987	0.010	1.154	1054469	103.0	338	
23 p-Nitrotoluene								
137.0	5.286	5.297	0.0	1.223	895018	100.5	281	
24 m-Nitrotoluene								
137.0	5.685	5.686	0.010	1.315	519319	98.1	153	

QC Flag Legend

Processing Flags

Reagents:

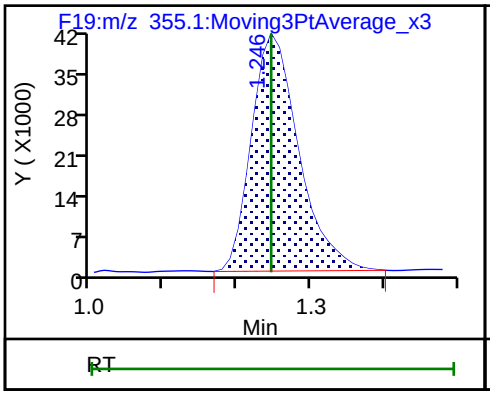
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 14-Apr-2022 10:06:46 Chrom Revision: 2.3 12-Apr-2022 20:29:44

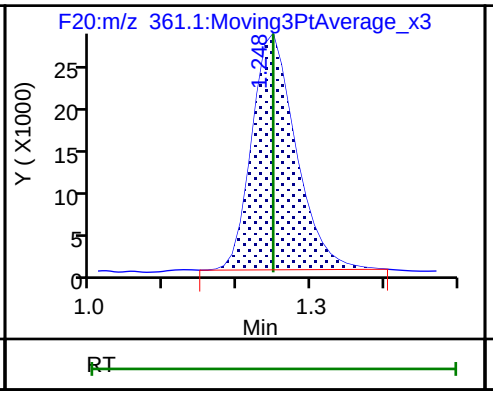
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08013.d
Injection Date: 08-Apr-2022 10:54:01 Instrument ID: LC_LCMS7
Lims ID: LCS 280-571024/2-A
Client ID:
Operator ID: acm ALS Bottle#: 11 Worklist Smp#: 13
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

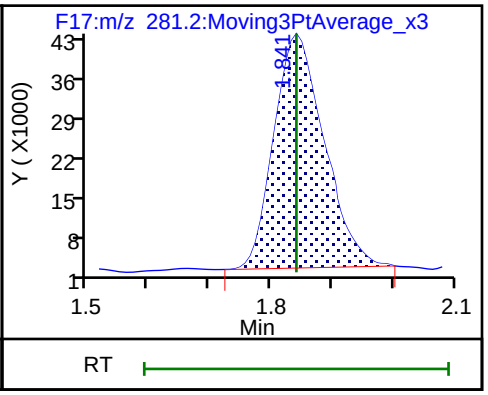
2 HMX



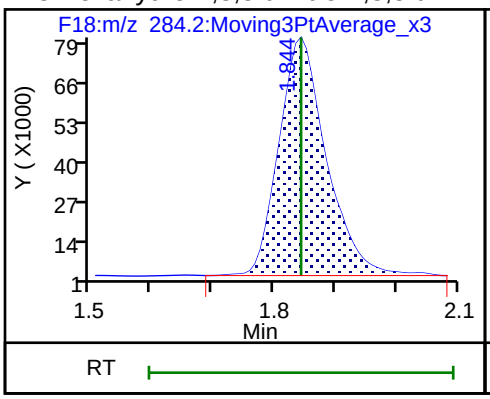
* 1 HMX-13C4



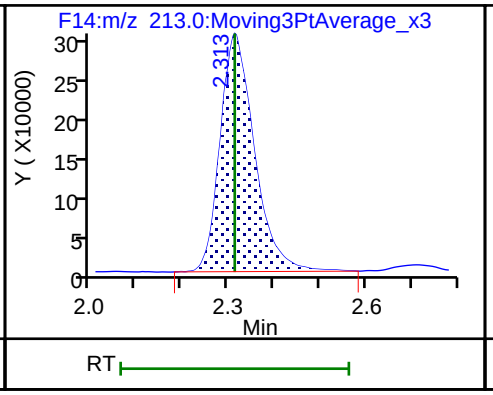
4 RDX



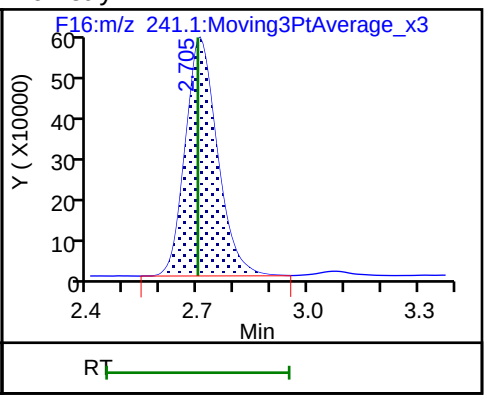
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



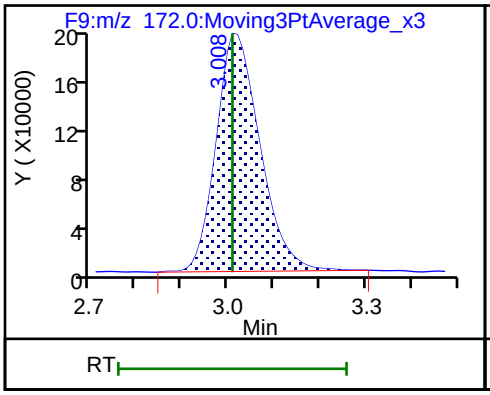
5 1,3,5-Trinitrobenzene



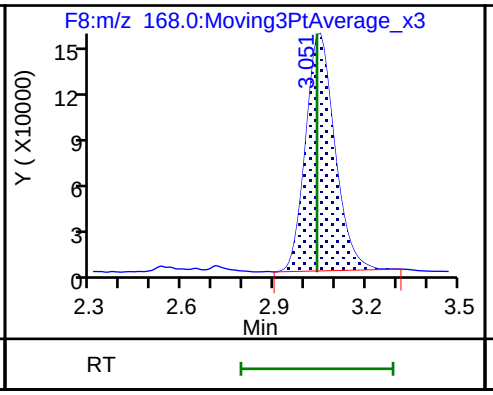
6 Tetryl



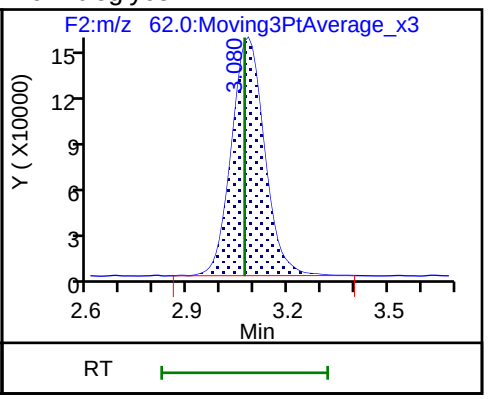
* 7 1,3-Dinitrobenzene-d4



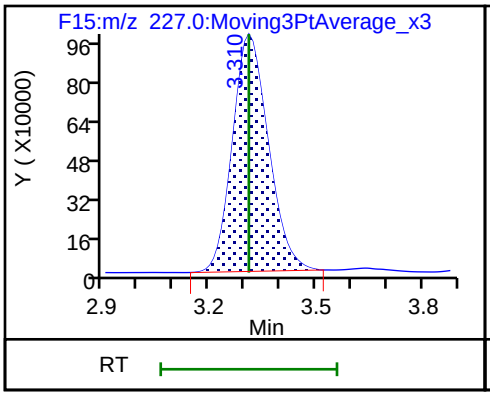
8 1,3-Dinitrobenzene



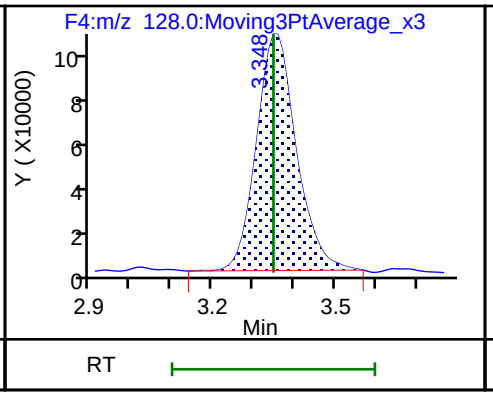
9 Nitroglycerin



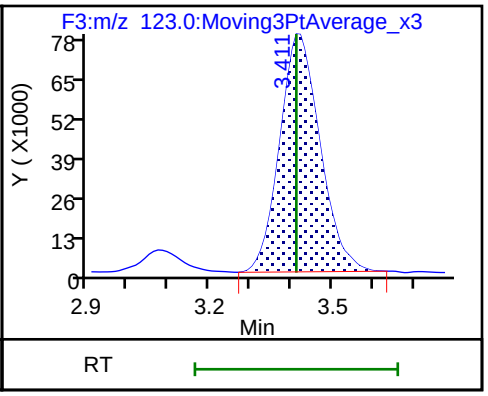
10 2,4,6-Trinitrotoluene



$ 11 Nitrobenzene-d5



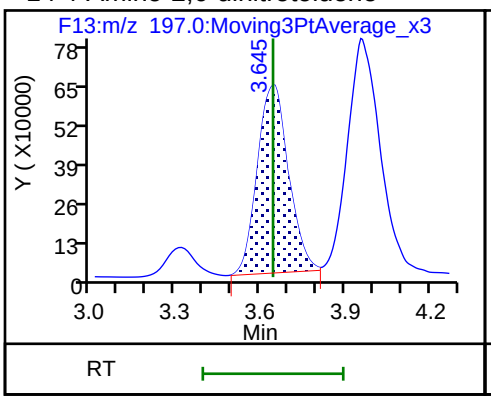
12 Nitrobenzene



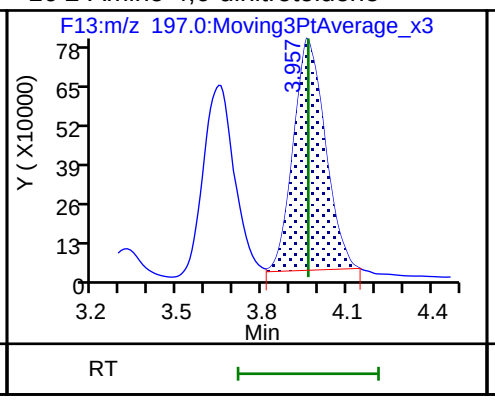
Report Date: 14-Apr-2022 10:06:46 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08013.d

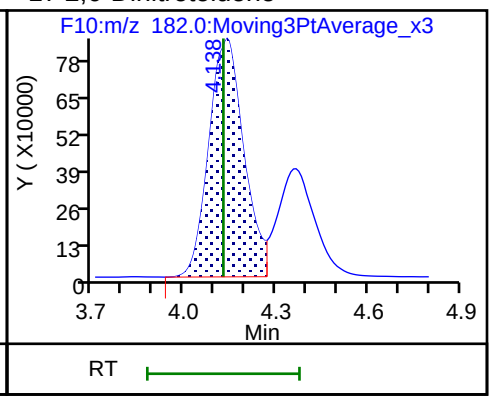
14 4-Amino-2,6-dinitrotoluene



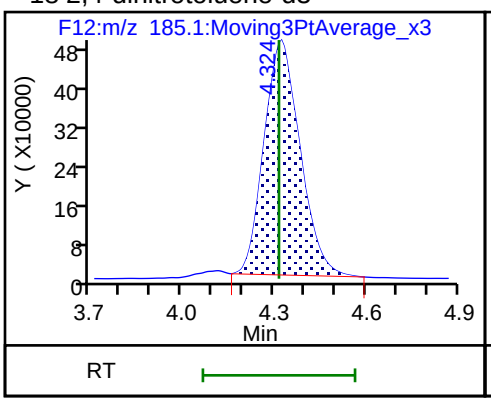
16 2-Amino-4,6-dinitrotoluene



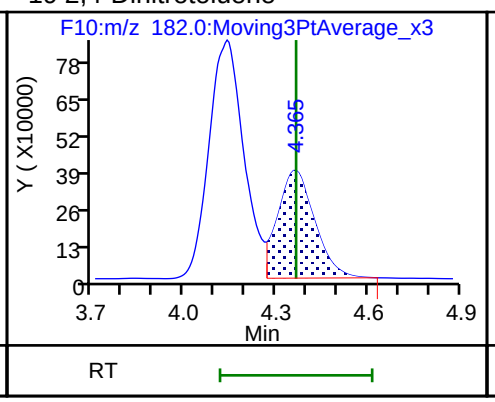
17 2,6-Dinitrotoluene



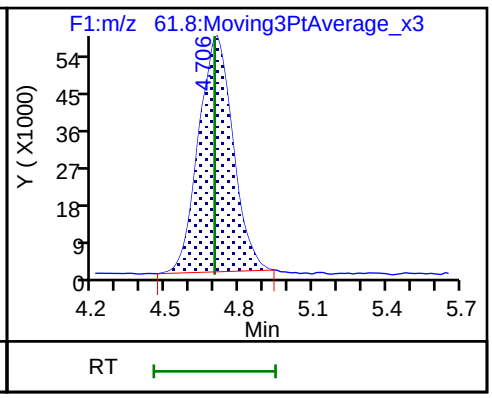
* 18 2,4-dinitrotoluene-d3



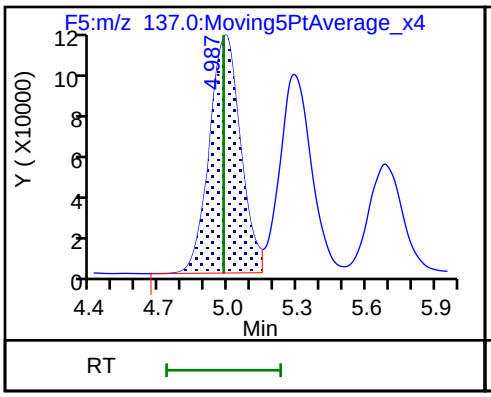
19 2,4-Dinitrotoluene



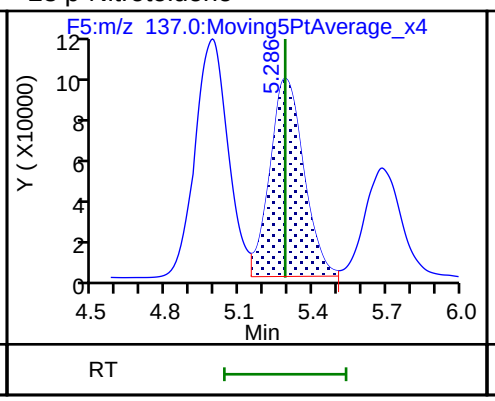
20 PETN



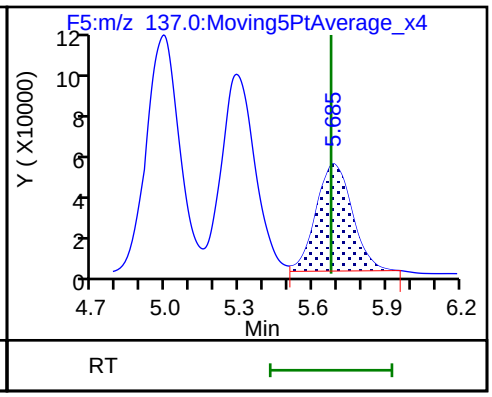
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



Report Date: 14-Apr-2022 10:06:46 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08013.d
Lims ID: LCS 280-571024/2-A
Client ID:
Sample Type: LCS
Inject. Date: 08-Apr-2022 10:54:01 ALS Bottle#: 11 Worklist Smp#: 13
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-571024/2-A
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:44 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:39:40

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	115.0	114.59

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCS 280-571025/2-A
Matrix: Solid | Lab File ID: ex722D14045.d
Analysis Method: 8321A | Date Collected:
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:17
Sample wt/vol: 10(g) | Date Analyzed: 04/14/2022 17:04
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571897 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.353		0.10	0.050	0.045
99-65-0	1,3-Dinitrobenzene	0.367		0.10	0.050	0.045
118-96-7	2,4,6-Trinitrotoluene	0.395		0.10	0.050	0.037
121-14-2	2,4-Dinitrotoluene	0.350		0.10	0.050	0.047
606-20-2	2,6-Dinitrotoluene	0.373		0.10	0.050	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.334		0.10	0.050	0.050
19406-51-0	4-Amino-2,6-dinitrotoluene	0.345		0.10	0.050	0.031
2691-41-0	HMX	0.350		0.10	0.050	0.046
99-08-1	m-Nitrotoluene	0.398		0.10	0.050	0.043
98-95-3	Nitrobenzene	0.413		0.11	0.050	0.038
55-63-0	Nitroglycerin	0.409		0.10	0.050	0.029
88-72-2	o-Nitrotoluene	0.385		0.10	0.050	0.043
78-11-5	PETN	0.435		0.10	0.050	0.034
99-99-0	p-Nitrotoluene	0.387		0.10	0.050	0.049
121-82-4	RDX	0.360		0.12	0.050	0.043
479-45-8	Tetryl	0.579	Q	0.10	0.050	0.039

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	103		68-140

Report Date: 15-Apr-2022 08:03:21 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14045.d
Lims ID: LCS 280-571025/2-A
Client ID:
Sample Type: LCS
Inject. Date: 14-Apr-2022 17:04:49 ALS Bottle#: 40 Worklist Smp#: 45
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-571025/2-A
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:20 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:35:55
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	202439	87.5	107	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		134443	125.0	38.6	
4 RDX								
281.2	1.833	1.833	0.0	0.998	286787	90.0	96.8	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		627068	125.0	498	
5 1,3,5-Trinitrobenzene								
213.0	2.299	2.299	0.0	0.769	1268281	88.3	179	
6 Tetryl								
241.1	2.673	2.679	-0.006	0.894	3165235	144.7	201	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1059596	129.4	363	
8 1,3-Dinitrobenzene								
168.0	3.010	3.022	-0.012	1.007	803250	91.7	124	
9 Nitroglycerin								
62.0	3.040	3.040	0.0	1.016	806749	102.2	332	
10 2,4,6-Trinitrotoluene								
227.0	3.281	3.281	0.0	0.768	6060229	98.7	275	
$ 11 Nitrobenzene-d5								
128.0	3.324	3.324	0.0	0.778	492317	103.8	165	
12 Nitrobenzene								
123.0	3.382	3.382	0.0	0.791	405429	103.2	36.6	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.611	3.611	0.0	0.845	3588468	86.2	49.0	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.924	3.924	0.0	0.918	4806073	83.4	61.9	

Report Date: 15-Apr-2022 08:03:21 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14045.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
17 2,6-Dinitrotoluene								
182.0	4.087	4.093	-0.006	0.956	4821923	93.3	645	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3205573	125.0	120	
19 2,4-Dinitrotoluene								
182.0	4.308	4.316	-0.008	1.008	2389167	87.6	292	
20 PETN								
61.8	4.638	4.638	0.0	1.085	556867	108.8	92.6	
22 o-Nitrotoluene								
137.0	4.927	4.932	-0.005	1.152	727388	96.2	440	
23 p-Nitrotoluene								
137.0	5.230	5.230	0.0	1.223	646112	96.8	368	
24 m-Nitrotoluene								
137.0	5.624	5.614	0.010	1.315	388785	99.5	209	

QC Flag Legend

Processing Flags

Reagents:

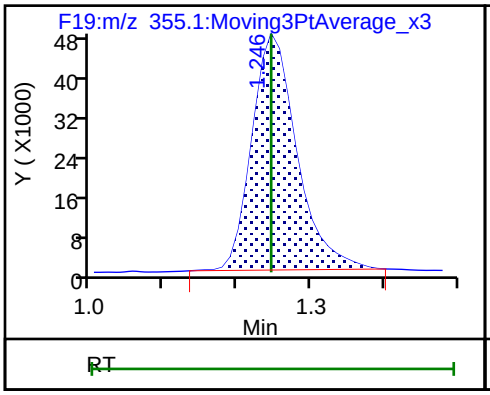
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:21 Chrom Revision: 2.3 12-Apr-2022 20:29:44

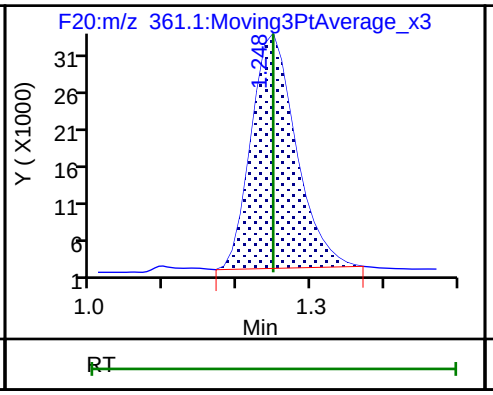
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14045.d
Injection Date: 14-Apr-2022 17:04:49 Instrument ID: LC_LCMS7
Lims ID: LCS 280-571025/2-A
Client ID:
Operator ID: acm ALS Bottle#: 40 Worklist Smp#: 45
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

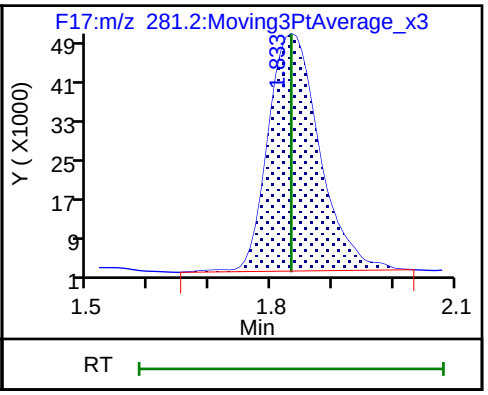
2 HMX



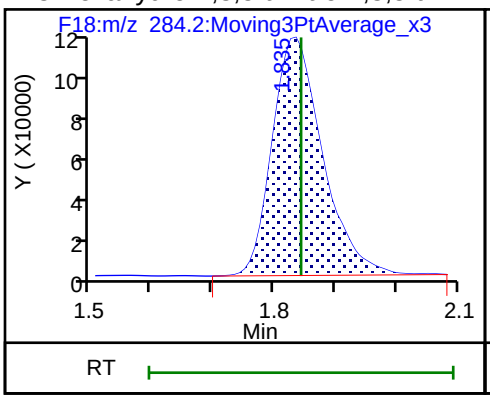
* 1 HMX-13C4



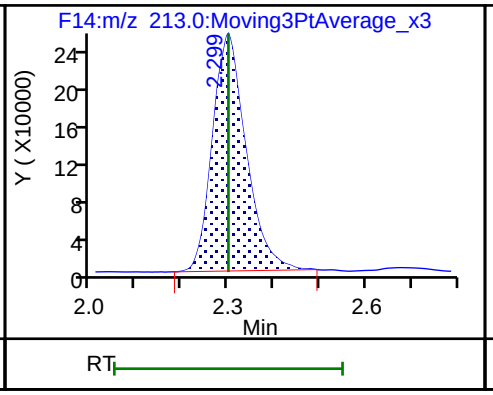
4 RDX



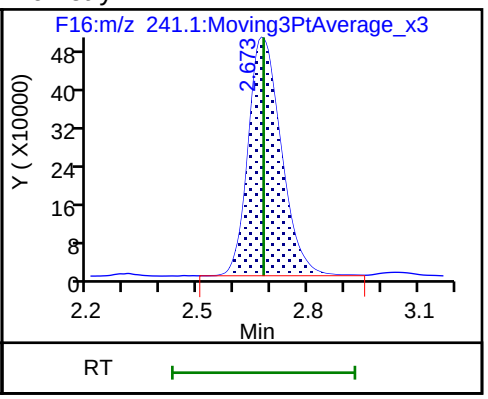
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



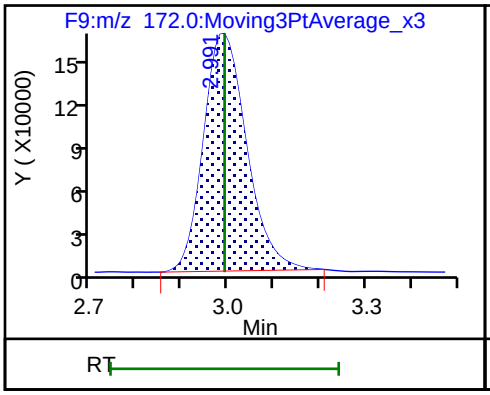
5 1,3,5-Trinitrobenzene



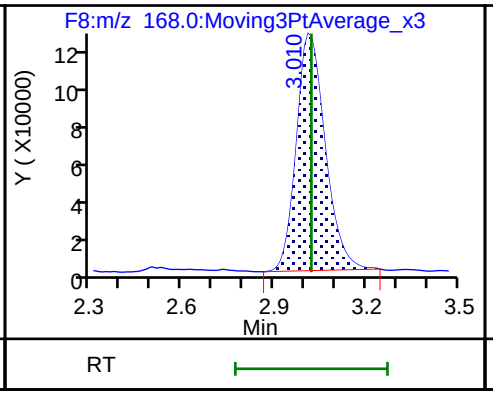
6 Tetryl



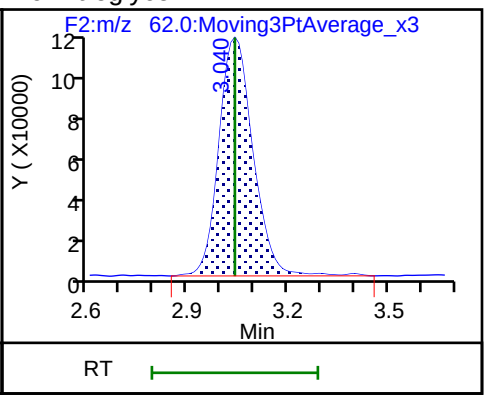
* 7 1,3-Dinitrobenzene-d4



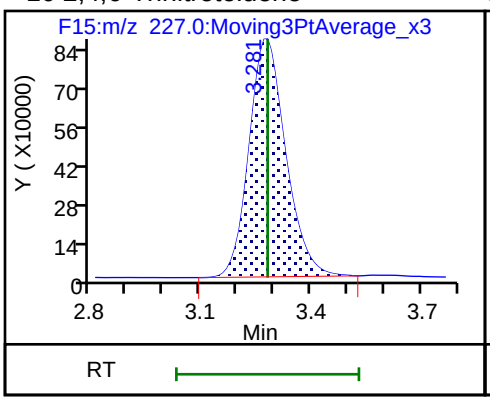
8 1,3-Dinitrobenzene



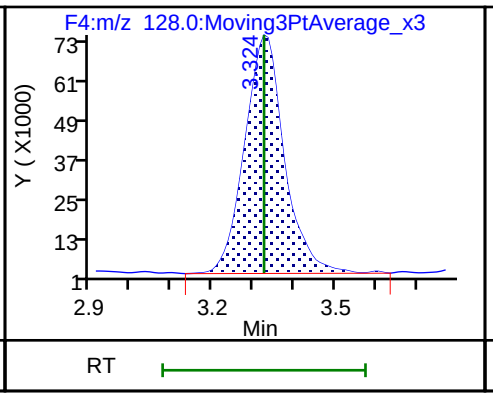
9 Nitroglycerin



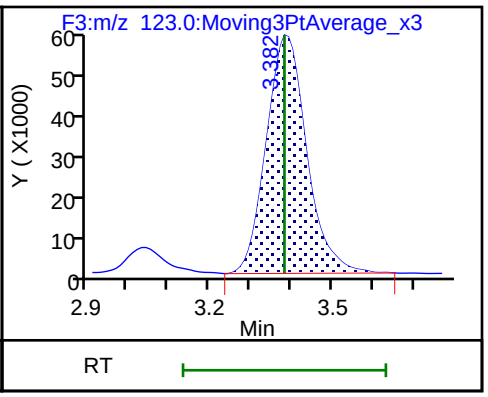
10 2,4,6-Trinitrotoluene



$ 11 Nitrobenzene-d5

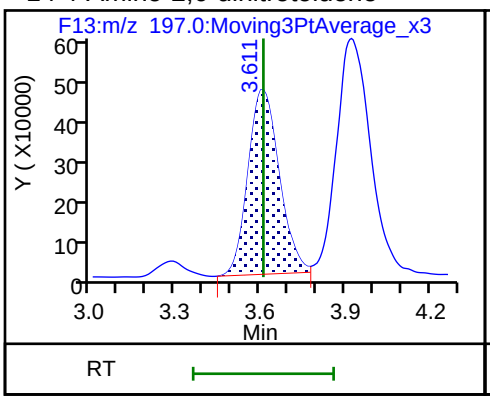


12 Nitrobenzene

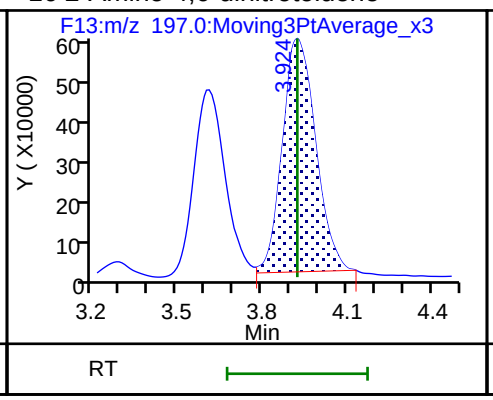


Report Date: 15-Apr-2022 08:03:21 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14045.d

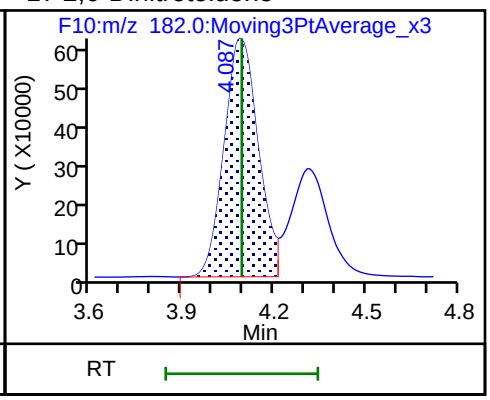
14 4-Amino-2,6-dinitrotoluene



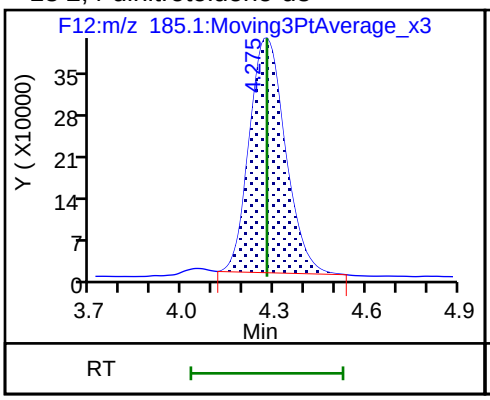
16 2-Amino-4,6-dinitrotoluene



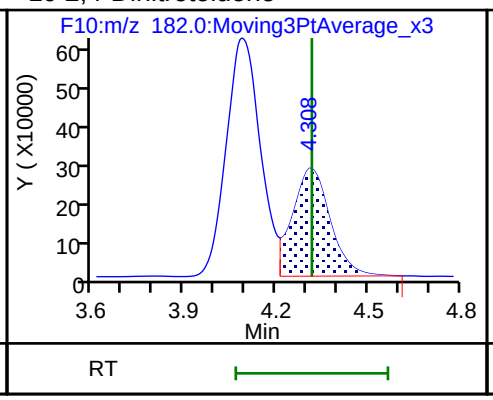
17 2,6-Dinitrotoluene



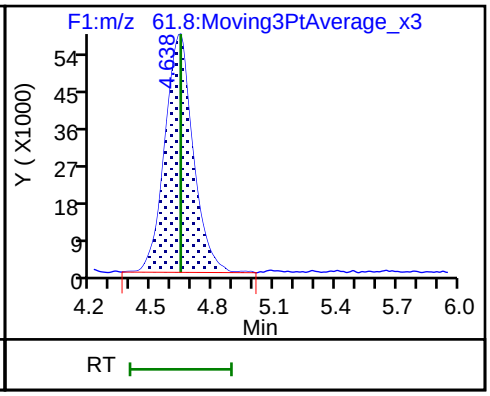
* 18 2,4-dinitrotoluene-d3



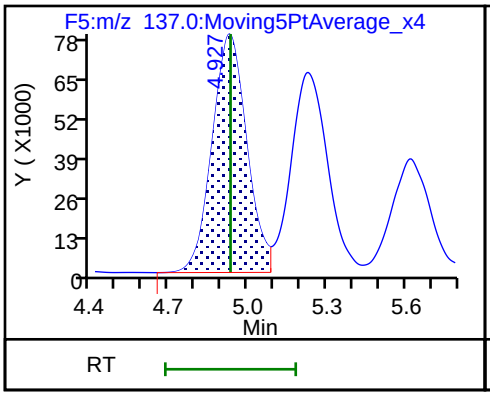
19 2,4-Dinitrotoluene



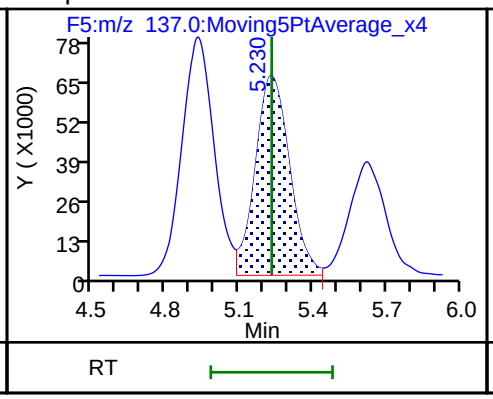
20 PETN



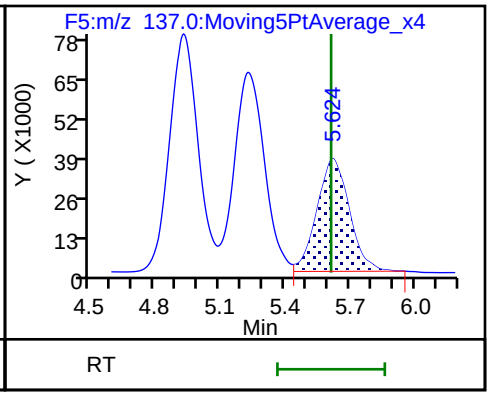
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



Report Date: 15-Apr-2022 08:03:21 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14045.d				
Lims ID:	LCS 280-571025/2-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	14-Apr-2022 17:04:49	ALS Bottle#:	40	Worklist Smp#:	45
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-571025/2-A				
Misc. Info.:	ex722D14				
Operator ID:	acm	Instrument ID:	LC_LCMS7		
Method:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m				
Limit Group:	LC - 8321A Expl				
Last Update:	15-Apr-2022 08:03:20	Calib Date:	14-Apr-2022 13:07:22		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1652				
First Level Reviewer: meyera		Date:	15-Apr-2022 07:35:55		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	103.8	103.47

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCSD 280-570053/3-A
Matrix: Water | Lab File ID: ex722D05014.d
Analysis Method: 8321A | Date Collected:
Extraction Method: 3535 | Date Extracted: 03/29/2022 13:01
Sample wt/vol: 1000(mL) | Date Analyzed: 04/05/2022 11:30
Con. Extract Vol.: 5(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 570784 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.477		0.10	0.060	0.023
99-65-0	1,3-Dinitrobenzene	0.501		0.10	0.060	0.022
118-96-7	2,4,6-Trinitrotoluene	0.522		0.10	0.060	0.030
121-14-2	2,4-Dinitrotoluene	0.456		0.10	0.060	0.027
606-20-2	2,6-Dinitrotoluene	0.490		0.10	0.060	0.025
35572-78-2	2-Amino-4,6-dinitrotoluene	0.492		0.10	0.060	0.030
19406-51-0	4-Amino-2,6-dinitrotoluene	0.493		0.10	0.060	0.039
2691-41-0	HMX	0.452		0.10	0.060	0.033
99-08-1	m-Nitrotoluene	0.431		0.10	0.060	0.028
98-95-3	Nitrobenzene	0.435		0.15	0.060	0.028
55-63-0	Nitroglycerin	0.556		0.15	0.060	0.029
88-72-2	o-Nitrotoluene	0.441		0.10	0.060	0.032
78-11-5	PETN	0.556		0.10	0.060	0.035
99-99-0	p-Nitrotoluene	0.434		0.10	0.060	0.029
121-82-4	RDX	0.515		0.10	0.060	0.027
479-45-8	Tetryl	0.724	Q	0.10	0.060	0.028

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	91		48-130

Report Date: 06-Apr-2022 06:44:10 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05014.d
Lims ID: LCSD 280-570053/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 05-Apr-2022 11:30:50 ALS Bottle#: 12 Worklist Smp#: 14
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-570053/3-A
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 06:44:08 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 12:47:23
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.223	1.223	0.0	0.998	373556	90.5	95.8	
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		234377	125.0	144	
4 RDX								
281.2	1.791	1.774	0.017	0.998	533710	103.0	217	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.793	1.777	0.016		836989	125.0	189	
5 1,3,5-Trinitrobenzene								
213.0	2.215	2.199	0.016	0.771	2246490	95.4	146	
6 Tetryl								
241.1	2.556	2.540	0.016	0.890	5551969	144.8	173	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.872	2.850	0.022		1743098	129.4	155	
8 1,3-Dinitrobenzene								
168.0	2.893	2.871	0.022	1.007	1470250	100.2	140	
9 Nitroglycerin								
62.0	2.900	2.878	0.022	1.010	1572624	111.3	780	
10 2,4,6-Trinitrotoluene								
227.0	3.127	3.107	0.020	0.771	11128214	104.4	553	
$ 11 Nitrobenzene-d5								
128.0	3.170	3.150	0.020	0.782	773989	91.0	108	
12 Nitrobenzene								
123.0	3.227	3.208	0.019	0.796	628319	87.1	38.3	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.422	3.391	0.031	0.844	7102558	98.6	66.0	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.721	3.708	0.013	0.918	9783689	98.4	86.9	

Report Date: 06-Apr-2022 06:44:10 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05014.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
17 2,6-Dinitrotoluene								
182.0	3.877	3.852	0.025	0.956	8606381	98.1	584	
* 18 2,4-dinitrotoluene-d3								
185.1	4.054	4.028	0.026		5463650	125.0	125	
19 2,4-Dinitrotoluene								
182.0	4.087	4.052	0.035	1.008	4204289	91.2	272	
20 PETN								
61.8	4.325	4.305	0.020	1.067	1126303	111.3	354	
22 o-Nitrotoluene								
137.0	4.656	4.631	0.025	1.148	1194397	88.1	710	
23 p-Nitrotoluene								
137.0	4.945	4.910	0.035	1.220	1022692	86.8	598	
24 m-Nitrotoluene								
137.0	5.298	5.268	0.030	1.307	605430	86.3	325	

QC Flag Legend

Processing Flags

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 06:44:10 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05014.d

Injection Date: 05-Apr-2022 11:30:50 Instrument ID: LC_LCMS7

Lims ID: LCSD 280-570053/3-A

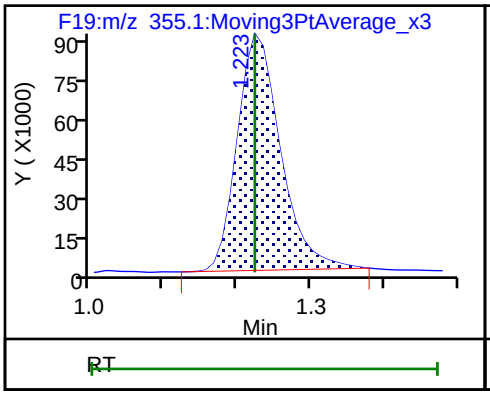
Client ID:

Operator ID: acm ALS Bottle#: 12 Worklist Smp#: 14

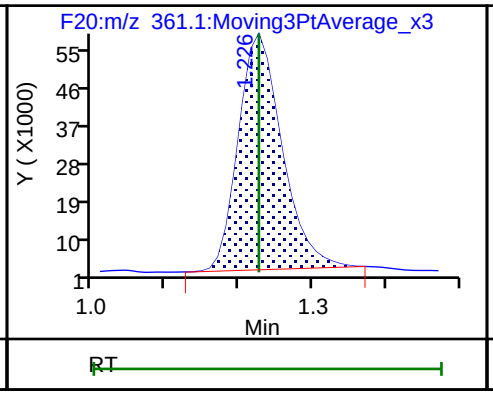
Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

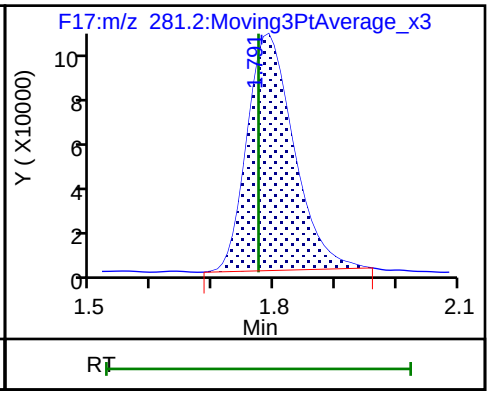
2 HMX



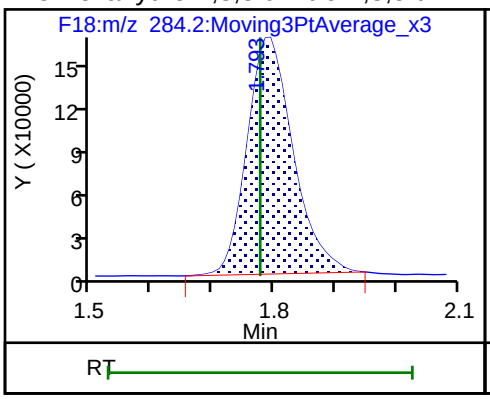
* 1 HMX-13C4



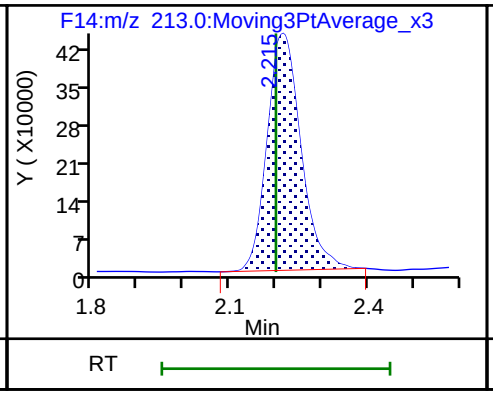
4 RDX



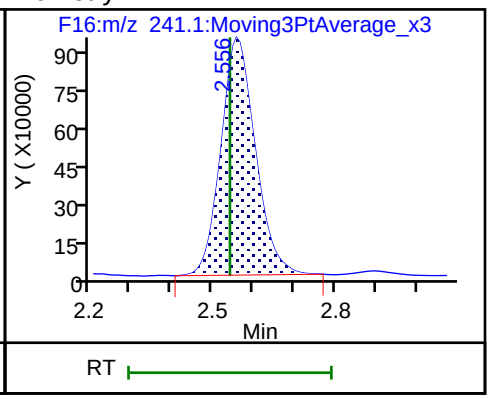
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



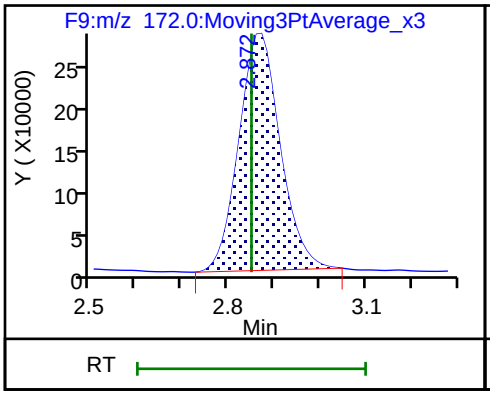
5 1,3,5-Trinitrobenzene



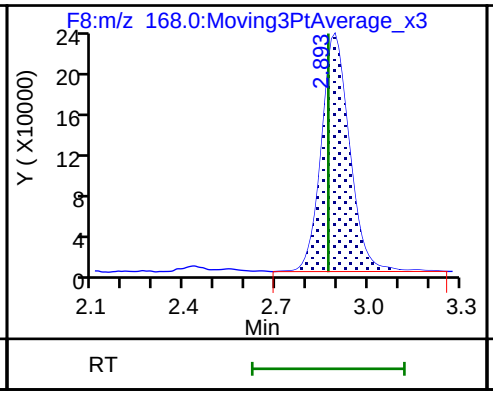
6 Tetryl



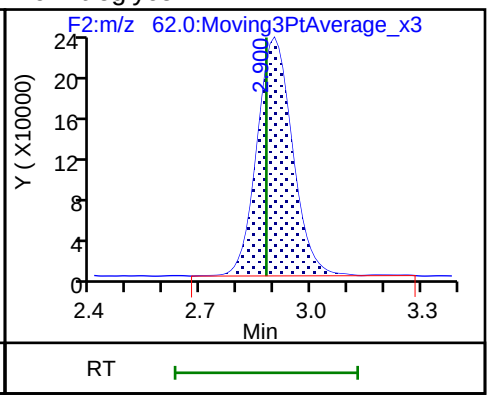
* 7 1,3-Dinitrobenzene-d4



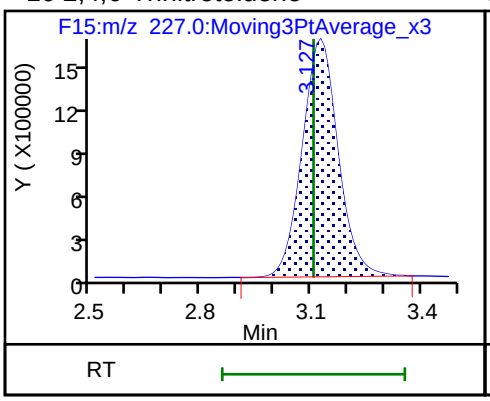
8 1,3-Dinitrobenzene



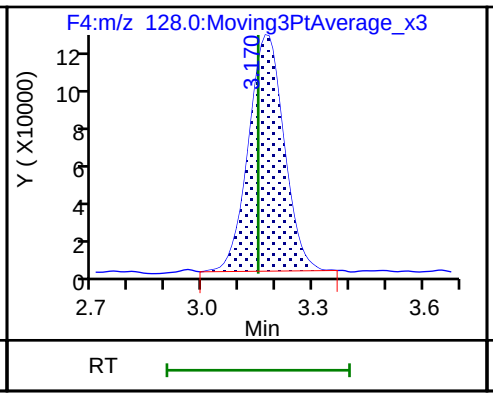
9 Nitroglycerin



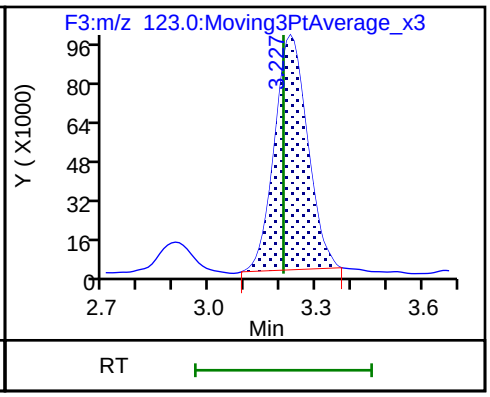
10 2,4,6-Trinitrotoluene



$ 11 Nitrobenzene-d5



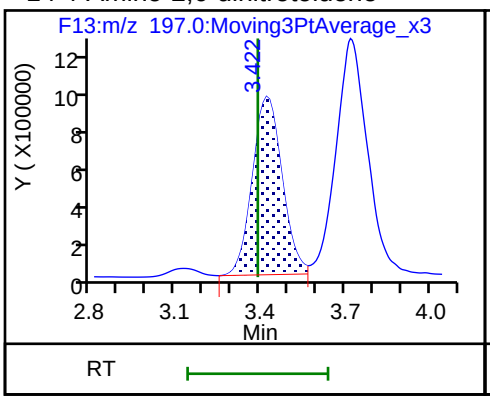
12 Nitrobenzene



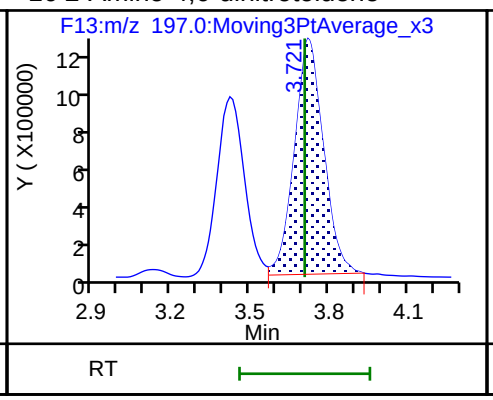
Report Date: 06-Apr-2022 06:44:10 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05014.d

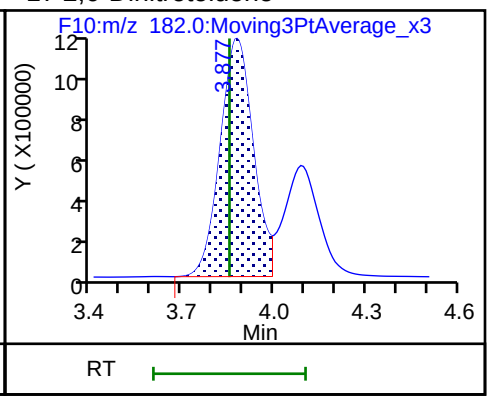
14 4-Amino-2,6-dinitrotoluene



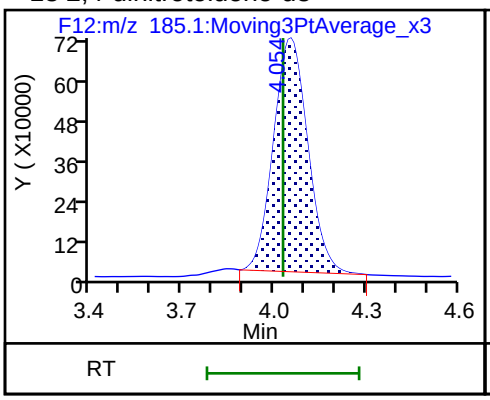
16 2-Amino-4,6-dinitrotoluene



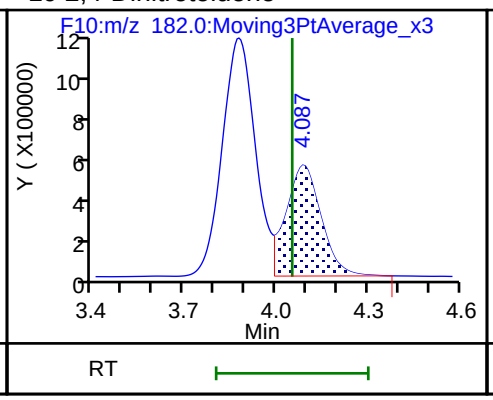
17 2,6-Dinitrotoluene



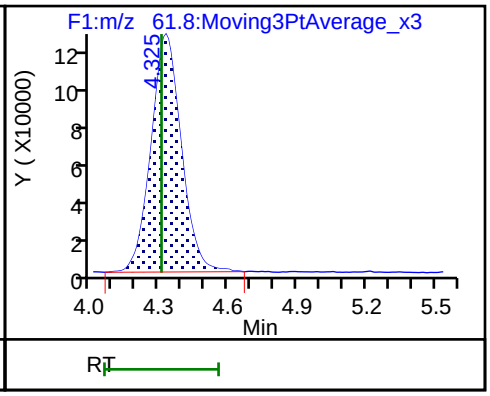
* 18 2,4-dinitrotoluene-d3



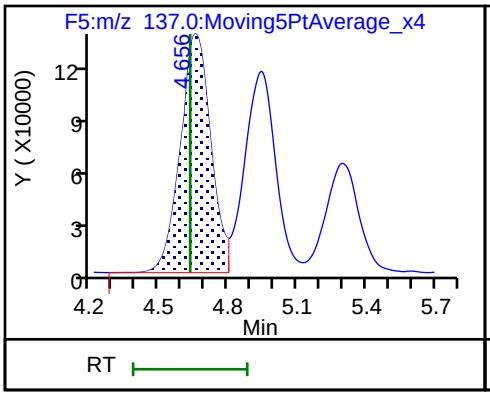
19 2,4-Dinitrotoluene



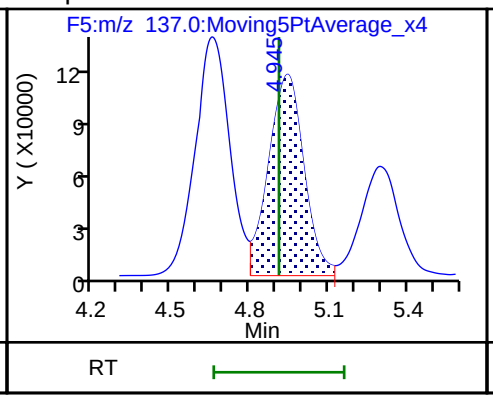
20 PETN



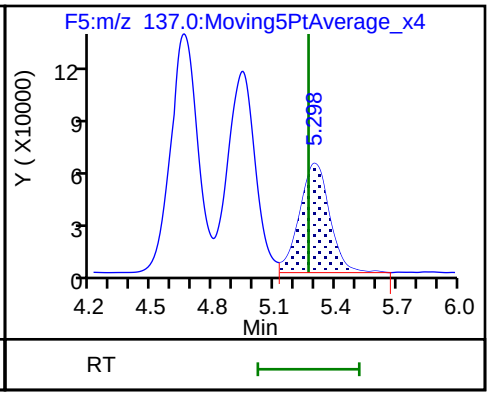
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



Report Date: 06-Apr-2022 06:44:10 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05014.d
Lims ID: LCSD 280-570053/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 05-Apr-2022 11:30:50 ALS Bottle#: 12 Worklist Smp#: 14
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-570053/3-A
Misc. Info.: ex722D05
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 06-Apr-2022 06:44:08 Calib Date: 05-Apr-2022 10:58:50
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05009.d

Column 1 : Det: F1:SIR
Process Host: CTX1632

First Level Reviewer: meyera Date: 05-Apr-2022 12:47:23

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	91.0	90.71

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCSD 280-570718/3-A
Matrix: Solid | Lab File ID: ex722D07014.d
Analysis Method: 8321A | Date Collected:
Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57
Sample wt/vol: 10(g) | Date Analyzed: 04/07/2022 11:51
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571108 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.398		0.10	0.050	0.045
99-65-0	1,3-Dinitrobenzene	0.391		0.10	0.050	0.045
118-96-7	2,4,6-Trinitrotoluene	0.421		0.10	0.050	0.037
121-14-2	2,4-Dinitrotoluene	0.393		0.10	0.050	0.047
606-20-2	2,6-Dinitrotoluene	0.411		0.10	0.050	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.405		0.10	0.050	0.050
19406-51-0	4-Amino-2,6-dinitrotoluene	0.404		0.10	0.050	0.031
2691-41-0	HMX	0.400		0.10	0.050	0.046
99-08-1	m-Nitrotoluene	0.395		0.10	0.050	0.043
98-95-3	Nitrobenzene	0.390		0.11	0.050	0.038
55-63-0	Nitroglycerin	0.404		0.10	0.050	0.029
88-72-2	o-Nitrotoluene	0.403		0.10	0.050	0.043
78-11-5	PETN	0.451		0.10	0.050	0.034
99-99-0	p-Nitrotoluene	0.414		0.10	0.050	0.049
121-82-4	RDX	0.438		0.12	0.050	0.043
479-45-8	Tetryl	0.595	Q	0.10	0.050	0.039

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	101		68-140

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07014.d
Lims ID: LCSD 280-570718/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 07-Apr-2022 11:51:48 ALS Bottle#: 12 Worklist Smp#: 14
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-570718/3-A
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:21 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 12:35:00
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	170287	100.1	48.6	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		107169	125.0	126	
4 RDX								
281.2	1.841	1.841	0.0	0.998	249985	109.6	77.6	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		412142	125.0	269	
5 1,3,5-Trinitrobenzene								
213.0	2.317	2.317	0.0	0.765	1619126	99.6	120	
6 Tetryl								
241.1	2.705	2.712	-0.007	0.893	3366326	148.8	201	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.030	3.030	0.0		1380244	129.4	342	
8 1,3-Dinitrobenzene								
168.0	3.051	3.051	0.0	1.007	1126663	97.7	145	
9 Nitroglycerin								
62.0	3.080	3.080	0.0	1.017	1032974	100.9	392	
10 2,4,6-Trinitrotoluene								
227.0	3.321	3.321	0.0	0.765	7611814	105.2	186	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.774	679747	101.4	97.1	
12 Nitrobenzene								
123.0	3.421	3.431	-0.010	0.788	564086	97.5	45.7	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.652	3.645	0.007	0.841	5193762	101.0	31.8	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.970	3.976	-0.006	0.914	6732232	101.2	38.5	

Report Date: 08-Apr-2022 07:32:23 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07014.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
17 2,6-Dinitrotoluene								
182.0	4.138	4.150	-0.012	0.953	7012838	102.6	414	
* 18 2,4-dinitrotoluene-d3								
185.1	4.341	4.341	0.0		4148312	125.0	110	
19 2,4-Dinitrotoluene								
182.0	4.373	4.373	0.0	1.007	3415815	98.1	186	
20 PETN								
61.8	4.716	4.716	0.0	1.086	609850	112.7	133	
22 o-Nitrotoluene								
137.0	4.992	5.002	-0.010	1.150	1054878	100.9	254	
23 p-Nitrotoluene								
137.0	5.306	5.311	-0.005	1.222	935903	103.4	216	
24 m-Nitrotoluene								
137.0	5.704	5.704	0.0	1.314	539000	98.9	114	

QC Flag Legend

Processing Flags

Reagents:

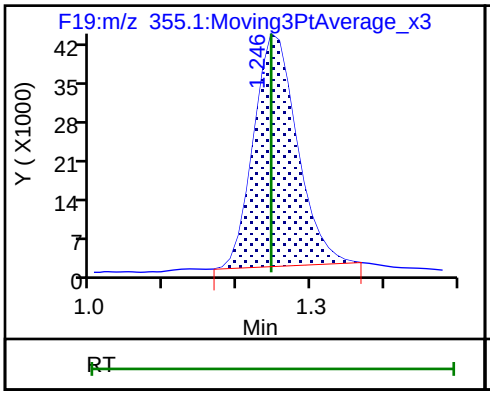
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 08-Apr-2022 07:32:23 Chrom Revision: 2.3 18-Mar-2022 09:07:22

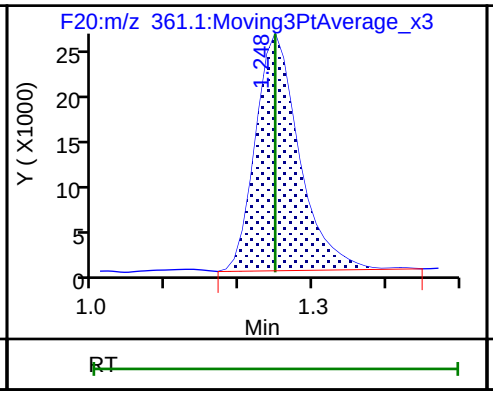
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07014.d
Injection Date: 07-Apr-2022 11:51:48 Instrument ID: LC_LCMS7
Lims ID: LCSD 280-570718/3-A
Client ID:
Operator ID: acm ALS Bottle#: 12 Worklist Smp#: 14
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

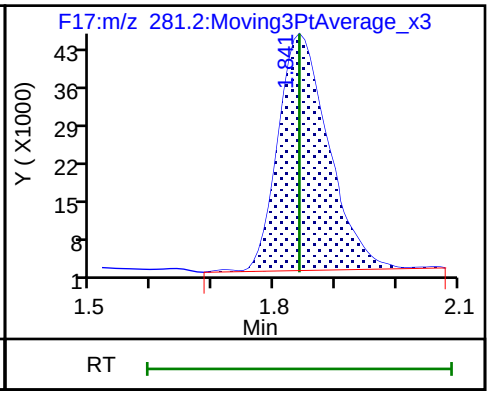
2 HMX



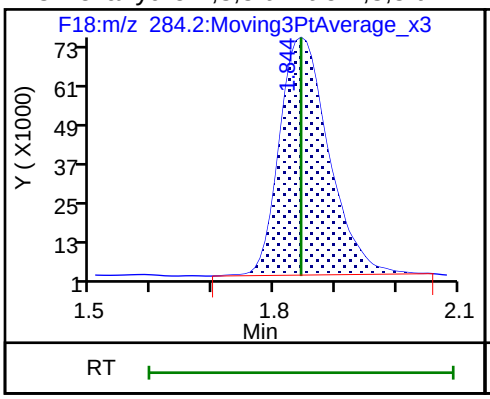
* 1 HMX-13C4



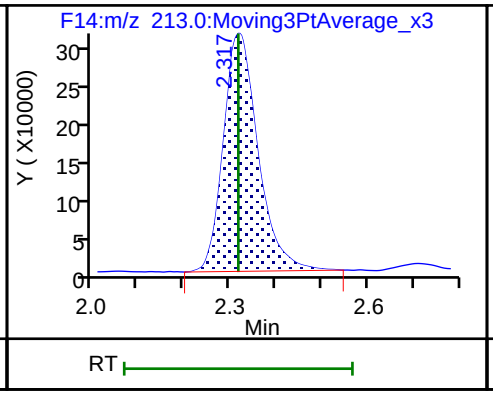
4 RDX



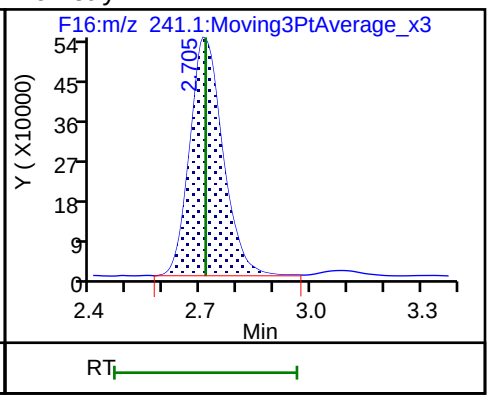
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



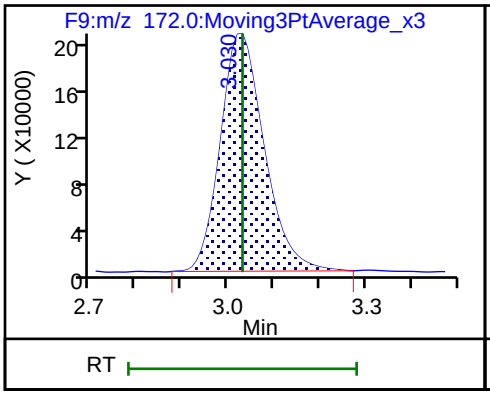
5 1,3,5-Trinitrobenzene



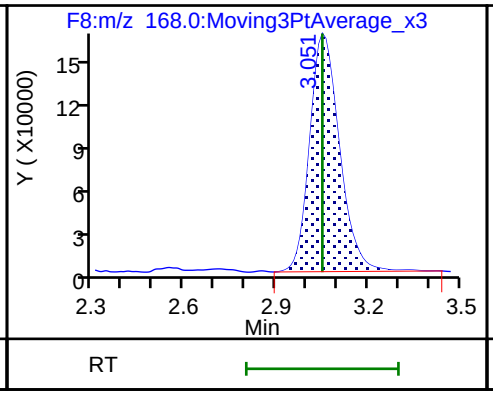
6 Tetryl



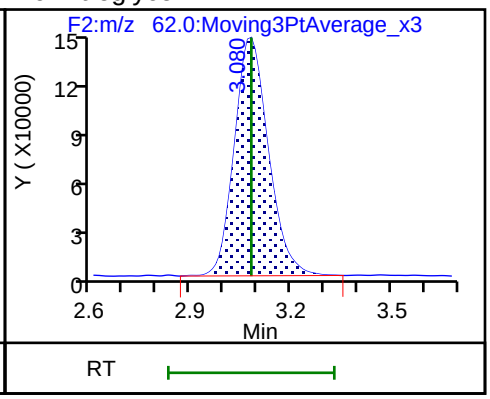
* 7 1,3-Dinitrobenzene-d4



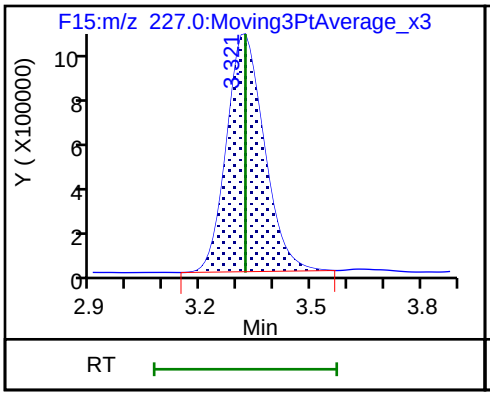
8 1,3-Dinitrobenzene



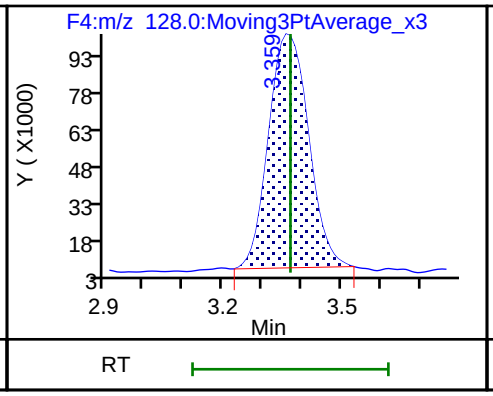
9 Nitroglycerin



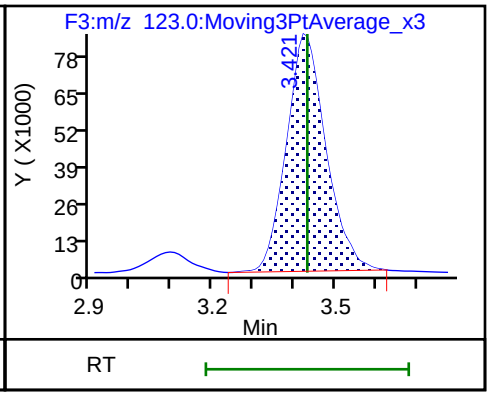
10 2,4,6-Trinitrotoluene



$ 11 Nitrobenzene-d5

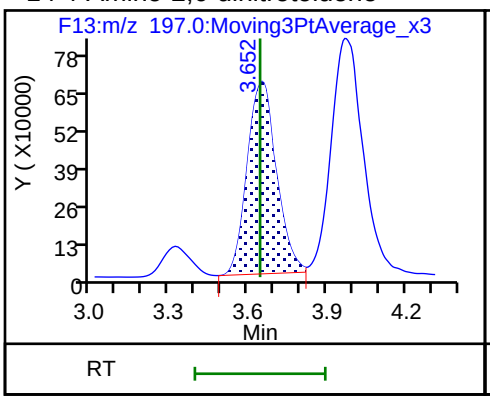


12 Nitrobenzene

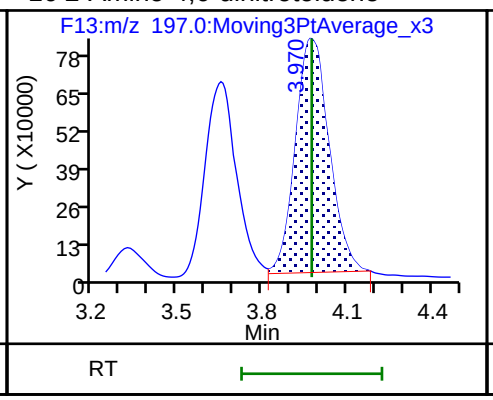


Report Date: 08-Apr-2022 07:32:23 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07014.d

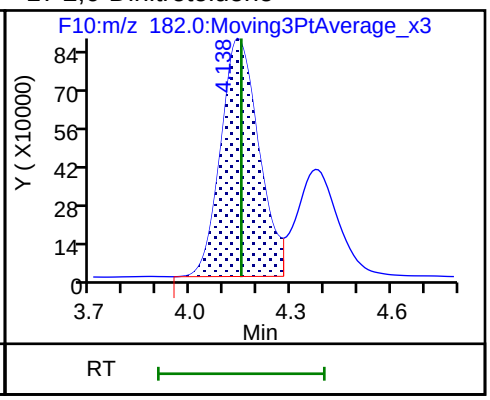
14 4-Amino-2,6-dinitrotoluene



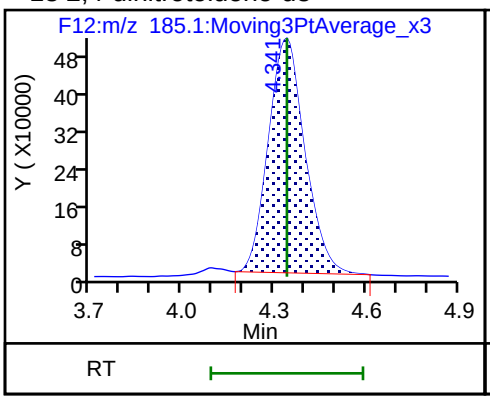
16 2-Amino-4,6-dinitrotoluene



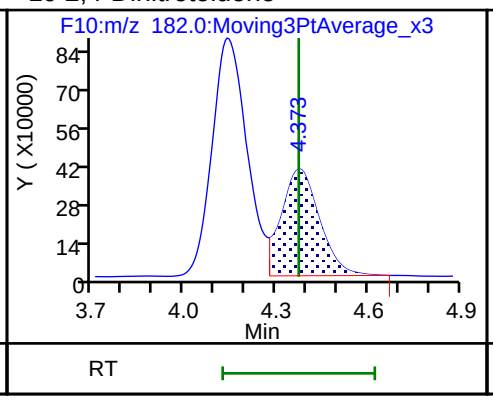
17 2,6-Dinitrotoluene



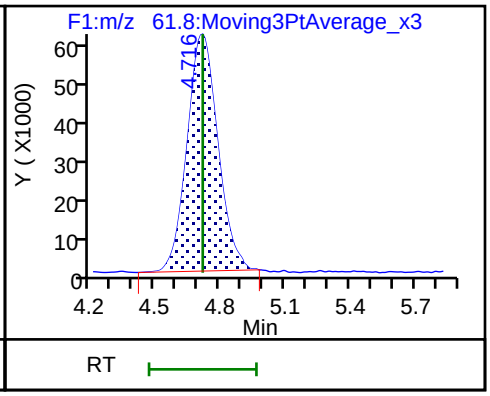
* 18 2,4-dinitrotoluene-d3



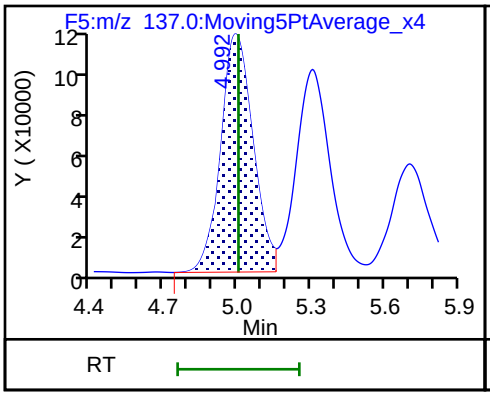
19 2,4-Dinitrotoluene



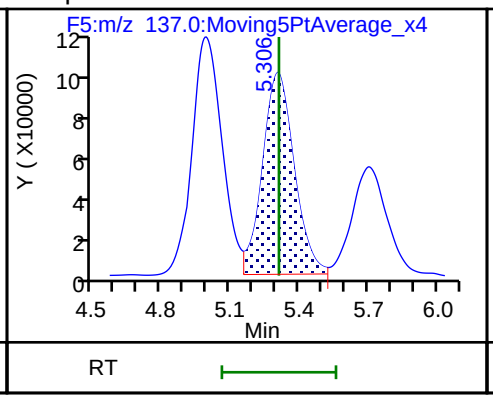
20 PETN



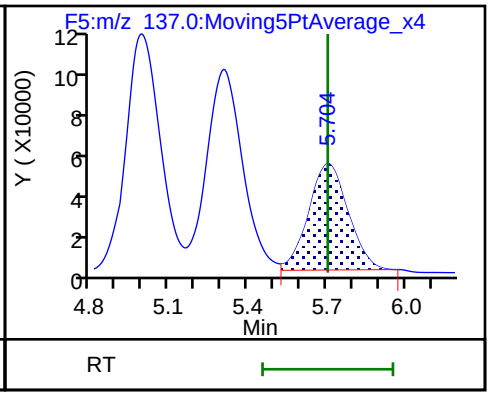
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



Report Date: 08-Apr-2022 07:32:23 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07014.d
Lims ID: LCSD 280-570718/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 07-Apr-2022 11:51:48 ALS Bottle#: 12 Worklist Smp#: 14
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-570718/3-A
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:21 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 12:35:00

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	101.4	101.04

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCSD 280-571022/3-A
Matrix: Solid | Lab File ID: ex722D14014.d
Analysis Method: 8321A | Date Collected:
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:23
Sample wt/vol: 10(g) | Date Analyzed: 04/14/2022 13:40
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571896 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.346		0.10	0.050	0.045
99-65-0	1,3-Dinitrobenzene	0.346		0.10	0.050	0.045
118-96-7	2,4,6-Trinitrotoluene	0.379		0.10	0.050	0.037
121-14-2	2,4-Dinitrotoluene	0.342		0.10	0.050	0.047
606-20-2	2,6-Dinitrotoluene	0.355		0.10	0.050	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.336		0.10	0.050	0.050
19406-51-0	4-Amino-2,6-dinitrotoluene	0.339		0.10	0.050	0.031
2691-41-0	HMX	0.330		0.10	0.050	0.046
99-08-1	m-Nitrotoluene	0.375		0.10	0.050	0.043
98-95-3	Nitrobenzene	0.376		0.11	0.050	0.038
55-63-0	Nitroglycerin	0.393		0.10	0.050	0.029
88-72-2	o-Nitrotoluene	0.372		0.10	0.050	0.043
78-11-5	PETN	0.379		0.10	0.050	0.034
99-99-0	p-Nitrotoluene	0.372		0.10	0.050	0.049
121-82-4	RDX	0.324	M	0.12	0.050	0.043
479-45-8	Tetryl	0.545	Q	0.10	0.050	0.039

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	93		68-140

Report Date: 15-Apr-2022 08:03:02 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14014.d
Lims ID: LCSD 280-571022/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 14-Apr-2022 13:40:21 ALS Bottle#: 12 Worklist Smp#: 14
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-571022/3-A
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:00 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:56:20
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	193565	82.6	105	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		136058	125.0	128	
4 RDX								M
281.2	1.824	1.833	-0.009	0.998	259702	81.1	92.4	M
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.827	1.844	-0.017		619006	125.0	315	
5 1,3,5-Trinitrobenzene								
213.0	2.299	2.299	0.0	0.769	1381820	86.6	147	
6 Tetryl								
241.1	2.679	2.679	0.0	0.896	3312078	136.3	181	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1176938	129.4	475	
8 1,3-Dinitrobenzene								
168.0	3.010	3.022	-0.012	1.007	843316	86.6	134	
9 Nitroglycerin								
62.0	3.040	3.040	0.0	1.016	862739	98.4	373	
10 2,4,6-Trinitrotoluene								
227.0	3.281	3.281	0.0	0.768	6602669	94.8	322	
$ 11 Nitrobenzene-d5								
128.0	3.315	3.324	-0.009	0.775	491685	93.1	89.3	
12 Nitrobenzene								
123.0	3.382	3.382	0.0	0.791	410472	94.1	36.9	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.601	3.611	-0.010	0.842	4005070	84.8	48.1	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.924	3.924	0.0	0.918	5487568	84.0	61.0	

Report Date: 15-Apr-2022 08:03:02 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14014.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
17 2,6-Dinitrotoluene								
182.0	4.087	4.093	-0.006	0.956	5200835	88.7	624	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3635103	125.0	134	
19 2,4-Dinitrotoluene								
182.0	4.316	4.316	0.0	1.010	2648941	85.6	284	
20 PETN								
61.8	4.638	4.638	0.0	1.085	550382	94.6	100	
22 o-Nitrotoluene								
137.0	4.927	4.932	-0.005	1.152	797226	93.0	285	
23 p-Nitrotoluene								
137.0	5.230	5.230	0.0	1.223	704100	93.0	237	
24 m-Nitrotoluene								
137.0	5.619	5.614	0.005	1.314	415572	93.8	131	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

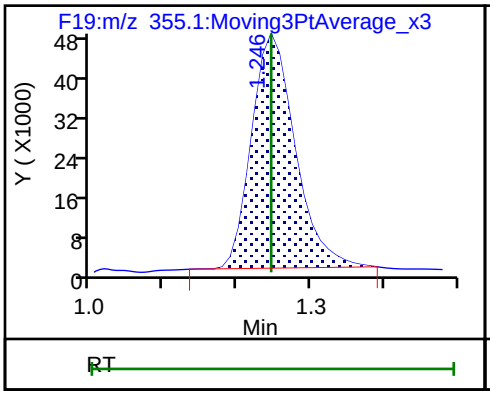
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:02 Chrom Revision: 2.3 12-Apr-2022 20:29:44

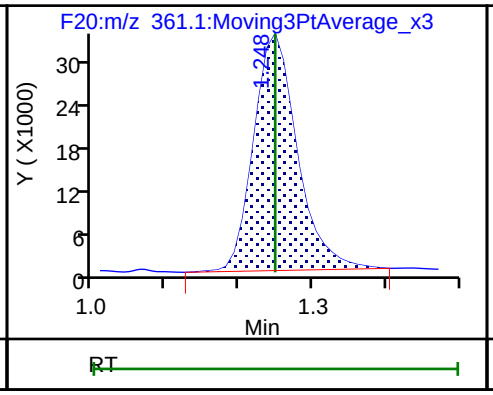
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14014.d
Injection Date: 14-Apr-2022 13:40:21 Instrument ID: LC_LCMS7
Lims ID: LCSD 280-571022/3-A
Client ID:
Operator ID: acm ALS Bottle#: 12 Worklist Smp#: 14
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

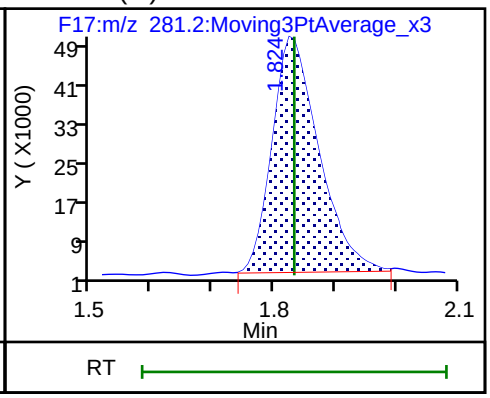
2 HMX



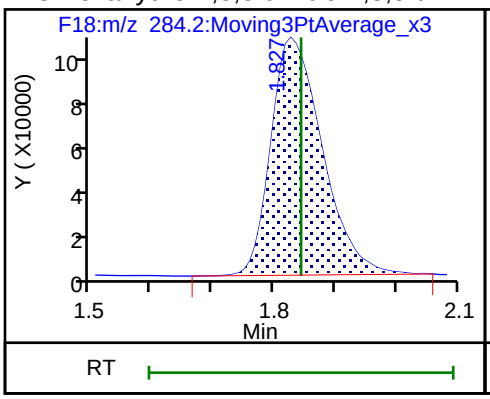
* 1 HMX-13C4



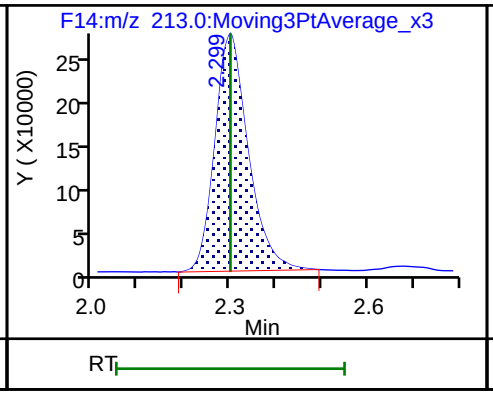
4 RDX (M)



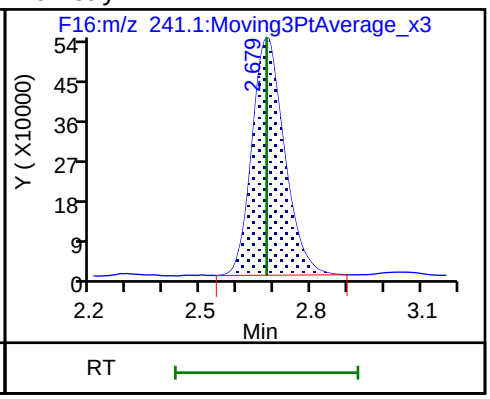
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



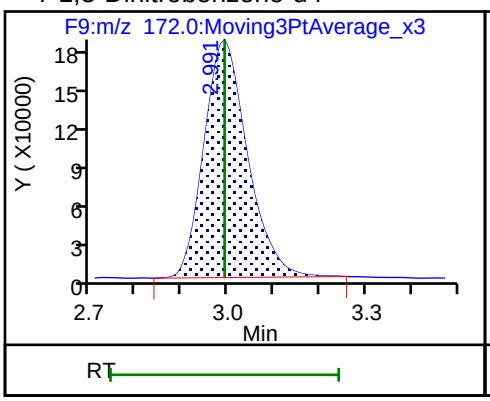
5 1,3,5-Trinitrobenzene



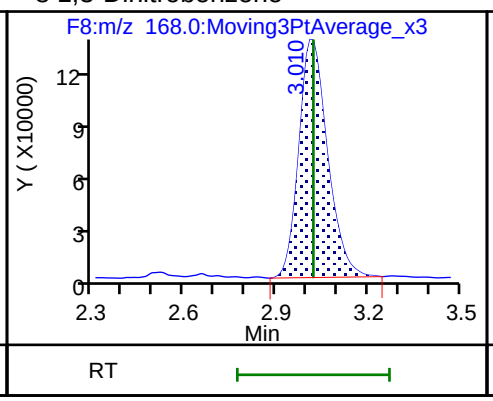
6 Tetryl



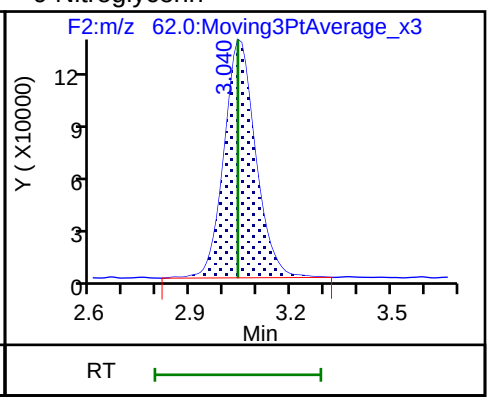
* 7 1,3-Dinitrobenzene-d4



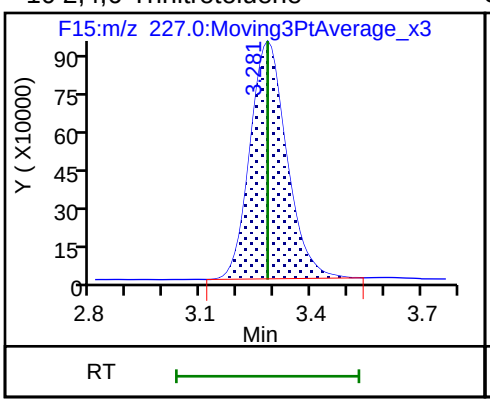
8 1,3-Dinitrobenzene



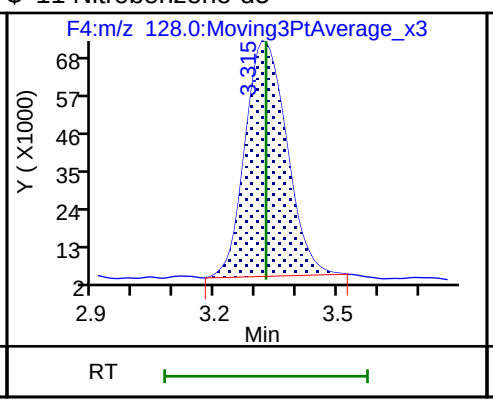
9 Nitroglycerin



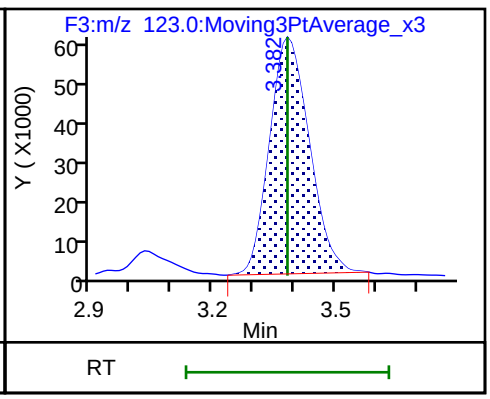
10 2,4,6-Trinitrotoluene



$ 11 Nitrobenzene-d5

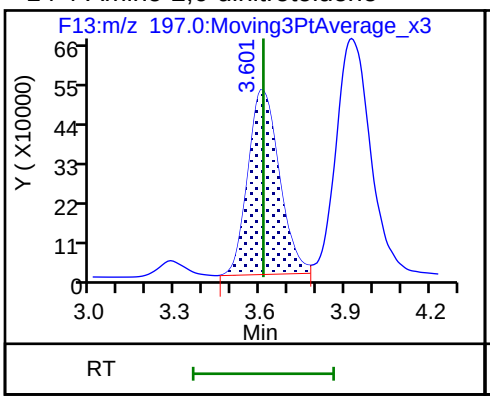


12 Nitrobenzene

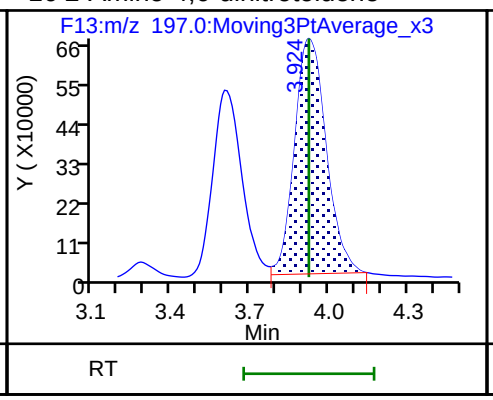


Report Date: 15-Apr-2022 08:03:02 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14014.d

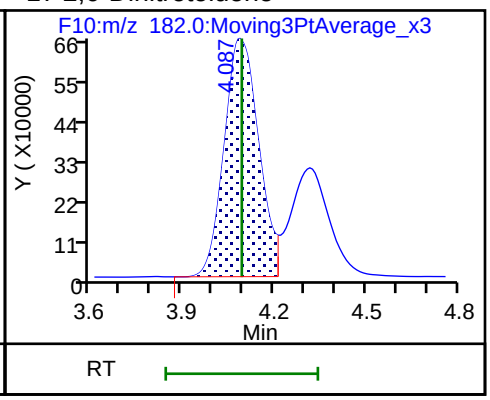
14 4-Amino-2,6-dinitrotoluene



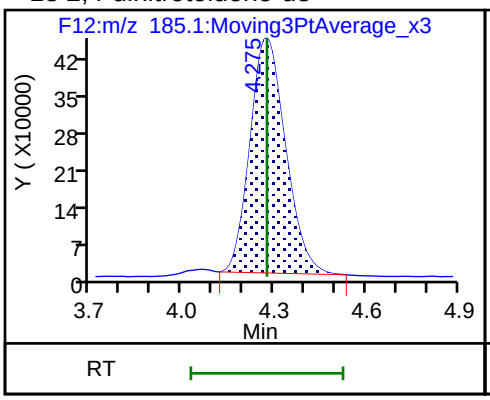
16 2-Amino-4,6-dinitrotoluene



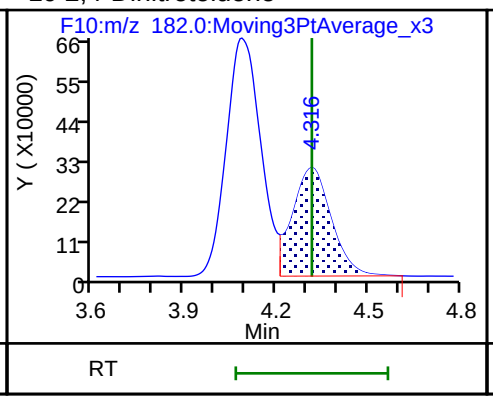
17 2,6-Dinitrotoluene



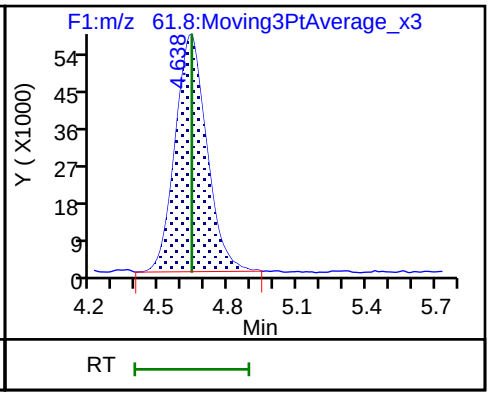
* 18 2,4-dinitrotoluene-d3



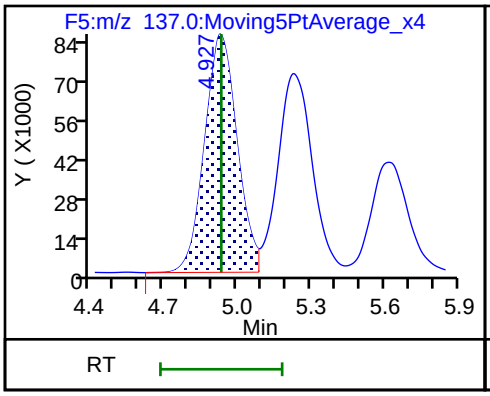
19 2,4-Dinitrotoluene



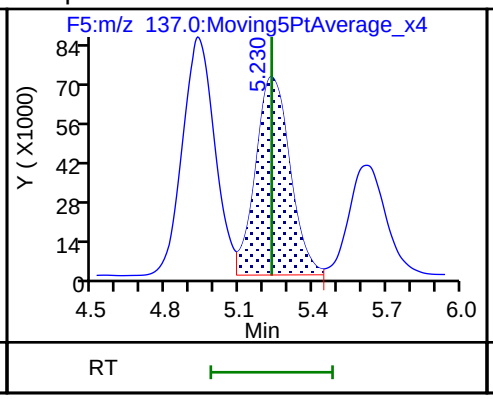
20 PETN



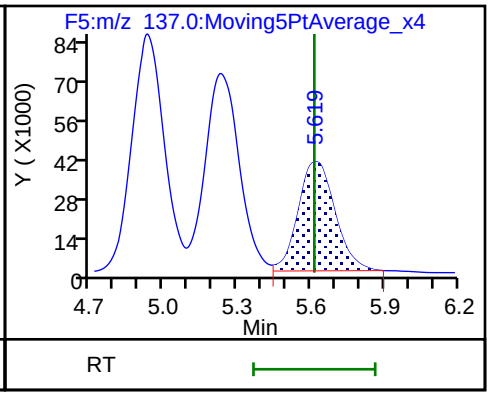
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



Report Date: 15-Apr-2022 08:03:02 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14014.d
Lims ID: LCSD 280-571022/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 14-Apr-2022 13:40:21 ALS Bottle#: 12 Worklist Smp#: 14
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-571022/3-A
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:00 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:56:20

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	93.1	92.85

Report Date: 15-Apr-2022 08:03:02 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

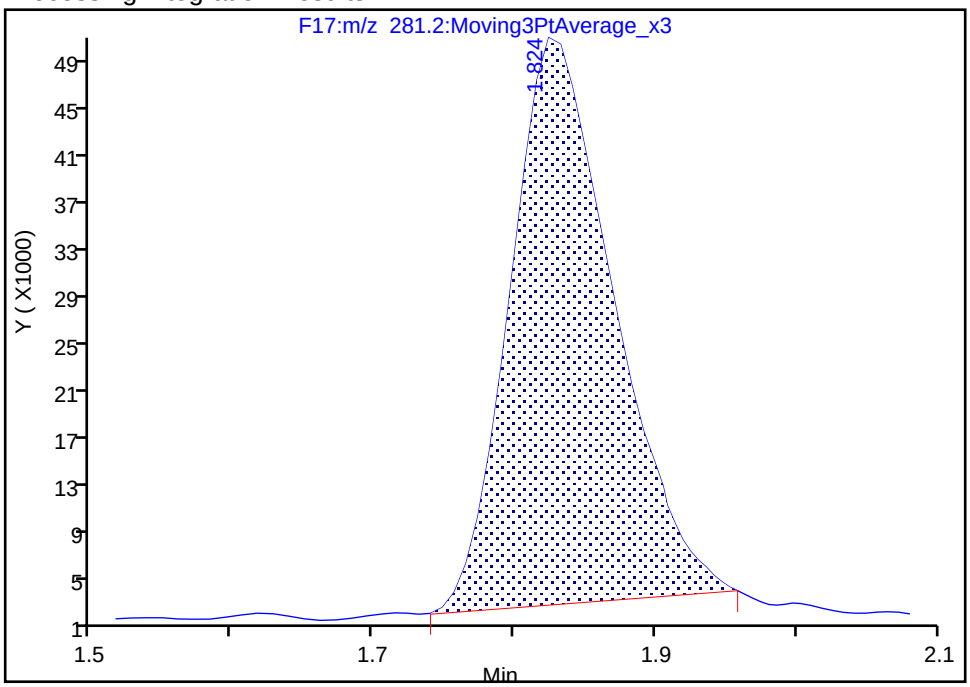
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14014.d
Injection Date: 14-Apr-2022 13:40:21 Instrument ID: LC_LCMS7
Lims ID: LCSD 280-571022/3-A
Client ID:
Operator ID: acm ALS Bottle#: 12 Worklist Smp#: 14
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F17:SIR

4 RDX, CAS: 121-82-4

Signal: 1

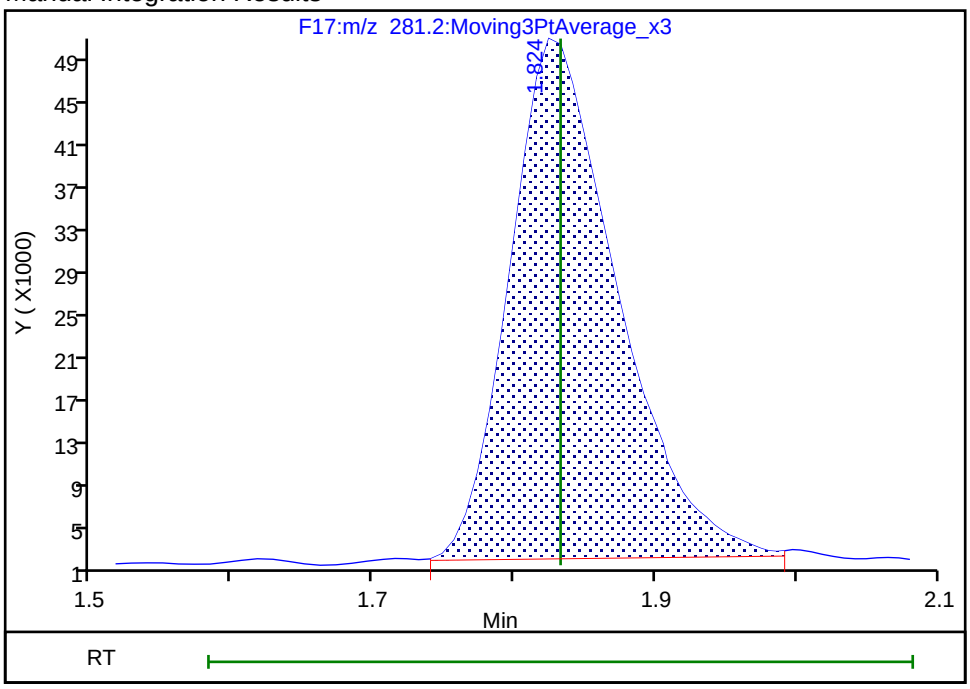
Processing Integration Results

RT: 1.82
Area: 246316
Amount: 76.158497
Amount Units: ug/l



Manual Integration Results

RT: 1.82
Area: 259702
Amount: 81.115986
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:56:12
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 280-571024/3-A

Matrix: Solid | Lab File ID: ex722D08014.d

Analysis Method: 8321A | Date Collected:

Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20

Sample wt/vol: 10(g) | Date Analyzed: 04/08/2022 11:00

Con. Extract Vol.: 40(mL) | Dilution Factor: 1

Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:

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

Analysis Batch No.: 571224 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.412		0.10	0.050	0.045
99-65-0	1,3-Dinitrobenzene	0.396		0.10	0.050	0.045
118-96-7	2,4,6-Trinitrotoluene	0.432		0.10	0.050	0.037
121-14-2	2,4-Dinitrotoluene	0.389		0.10	0.050	0.047
606-20-2	2,6-Dinitrotoluene	0.399		0.10	0.050	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.403	M	0.10	0.050	0.050
19406-51-0	4-Amino-2,6-dinitrotoluene	0.399	M	0.10	0.050	0.031
2691-41-0	HMX	0.450	Q	0.10	0.050	0.046
99-08-1	m-Nitrotoluene	0.390		0.10	0.050	0.043
98-95-3	Nitrobenzene	0.418		0.11	0.050	0.038
55-63-0	Nitroglycerin	0.443		0.10	0.050	0.029
88-72-2	o-Nitrotoluene	0.397		0.10	0.050	0.043
78-11-5	PETN	0.418		0.10	0.050	0.034
99-99-0	p-Nitrotoluene	0.404		0.10	0.050	0.049
121-82-4	RDX	0.445		0.12	0.050	0.043
479-45-8	Tetryl	0.608	Q	0.10	0.050	0.039

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	111		68-140

Report Date: 14-Apr-2022 10:06:46 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08014.d
Lims ID: LCSD 280-571024/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 08-Apr-2022 11:00:36 ALS Bottle#: 12 Worklist Smp#: 14
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-571024/3-A
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:44 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:40:03
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	204559	112.4	108	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		102053	125.0	266	
4 RDX								
281.2	1.841	1.833	0.0	0.998	233587	111.3	99.1	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		361568	125.0	181	
5 1,3,5-Trinitrobenzene								
213.0	2.313	2.322	0.0	0.766	1578555	102.9	158	
6 Tetryl								
241.1	2.705	2.708	0.006	0.896	3461041	152.0	222	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.008	0.011		1273600	129.4	365	
8 1,3-Dinitrobenzene								
168.0	3.040	3.051	0.0	1.007	1055035	98.9	145	
9 Nitroglycerin								
62.0	3.080	3.081	0.011	1.020	1023984	110.7	575	
10 2,4,6-Trinitrotoluene								
227.0	3.310	3.316	0.0	0.765	7077519	107.9	162	
$ 11 Nitrobenzene-d5								
128.0	3.348	3.354	0.0	0.774	670553	111.4	142	
12 Nitrobenzene								
123.0	3.421	3.418	0.010	0.791	536633	104.4	40.2	
14 4-Amino-2,6-dinitrotoluene								M
197.0	3.638	3.652	-0.007	0.841	4978406	99.6	32.0	M
16 2-Amino-4,6-dinitrotoluene								M
197.0	3.982	3.971	0.019	0.921	6444710	100.8	34.8	M

Report Date: 14-Apr-2022 10:06:46 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08014.d

Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
17 2,6-Dinitrotoluene								
182.0	4.126	4.138	0.0	0.954	6703098	99.7	498	
* 18 2,4-dinitrotoluene-d3								
185.1	4.324	4.315	0.009		4057101	125.0	117	
19 2,4-Dinitrotoluene								
182.0	4.356	4.373	-0.009	1.007	3337020	97.2	224	
20 PETN								
61.8	4.696	4.706	0.0	1.086	586872	104.6	122	
22 o-Nitrotoluene								
137.0	4.977	4.987	0.0	1.151	1029747	99.2	311	
23 p-Nitrotoluene								
137.0	5.291	5.297	0.005	1.224	911502	100.9	258	
24 m-Nitrotoluene								
137.0	5.685	5.686	0.010	1.315	523095	97.4	137	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

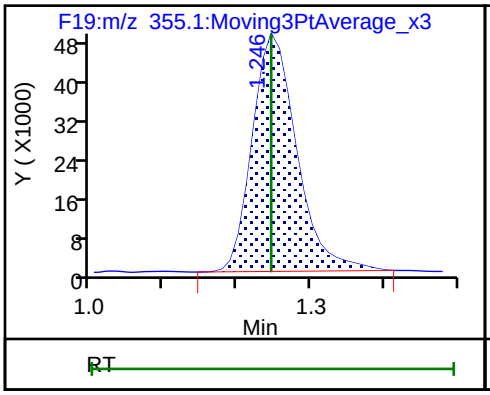
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 14-Apr-2022 10:06:46 Chrom Revision: 2.3 12-Apr-2022 20:29:44

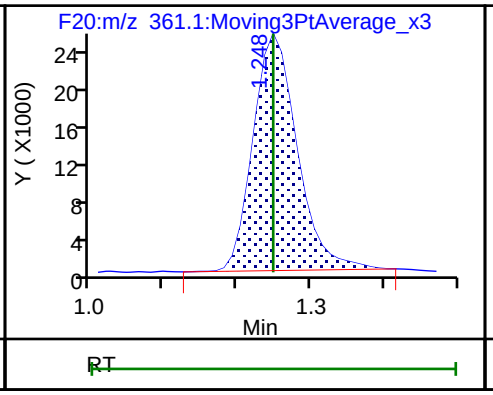
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08014.d
Injection Date: 08-Apr-2022 11:00:36 Instrument ID: LC_LCMS7
Lims ID: LCSD 280-571024/3-A
Client ID:
Operator ID: acm ALS Bottle#: 12 Worklist Smp#: 14
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

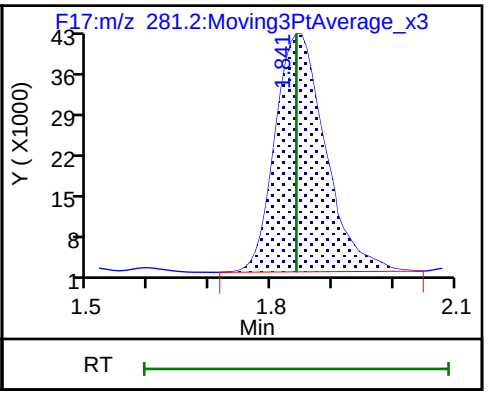
2 HMX



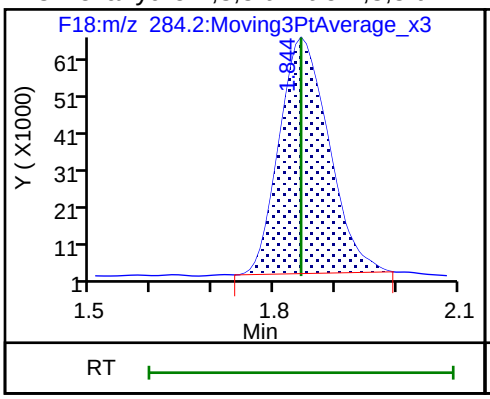
* 1 HMX-13C4



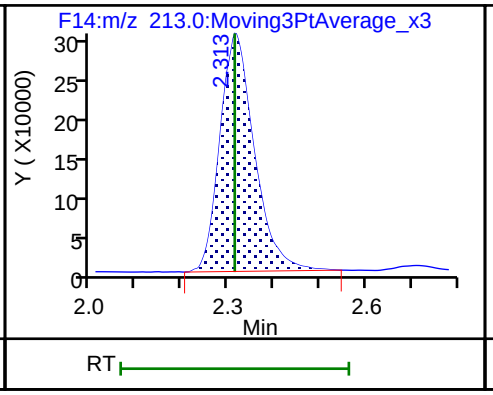
4 RDX



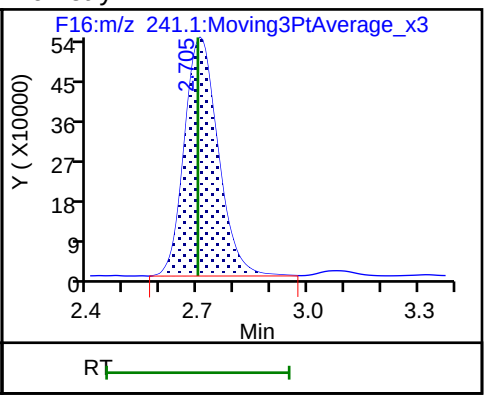
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



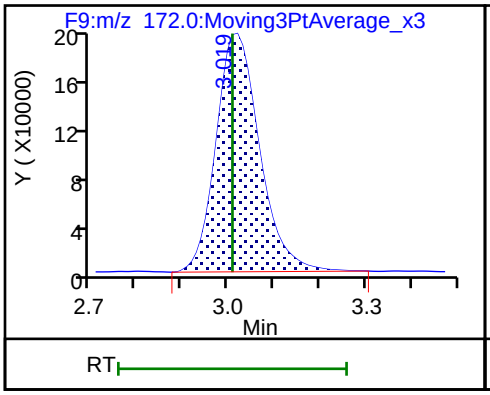
5 1,3,5-Trinitrobenzene



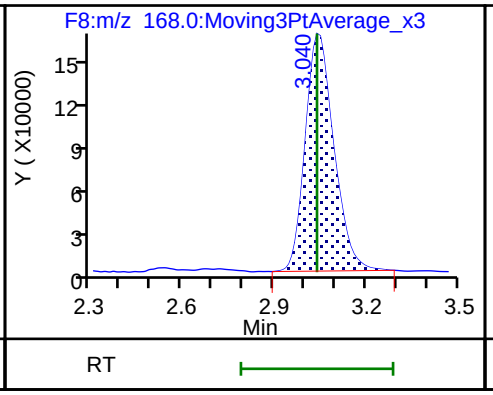
6 Tetryl



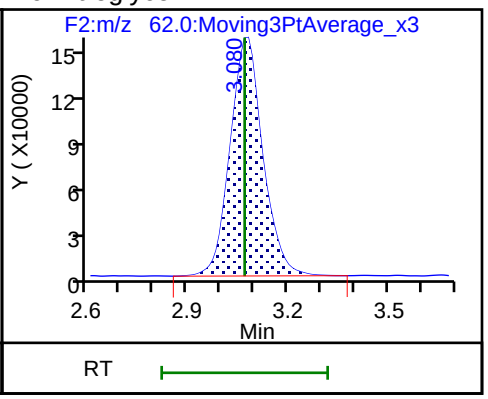
* 7 1,3-Dinitrobenzene-d4



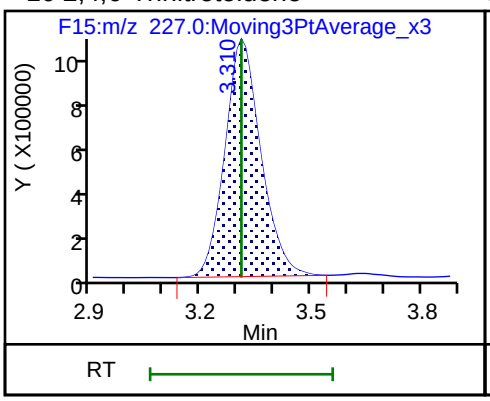
8 1,3-Dinitrobenzene



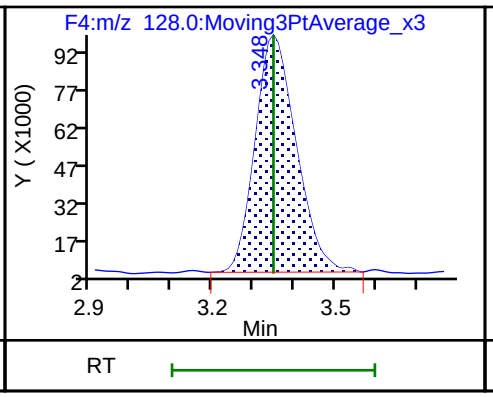
9 Nitroglycerin



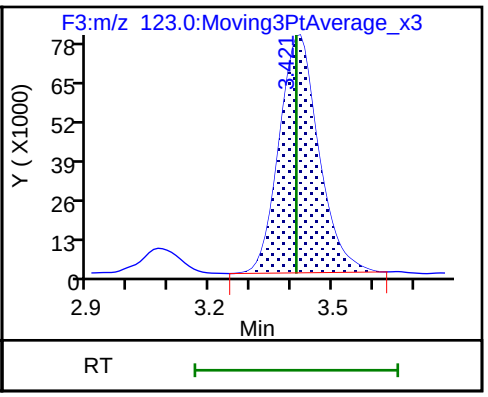
10 2,4,6-Trinitrotoluene



$ 11 Nitrobenzene-d5



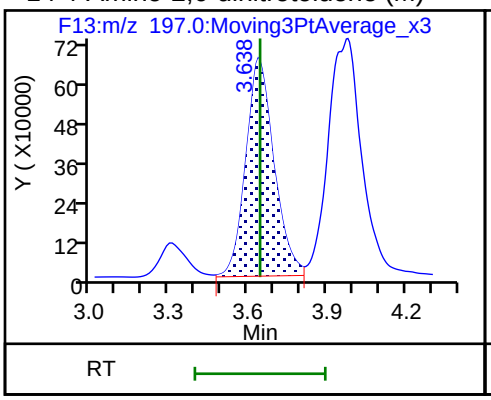
12 Nitrobenzene



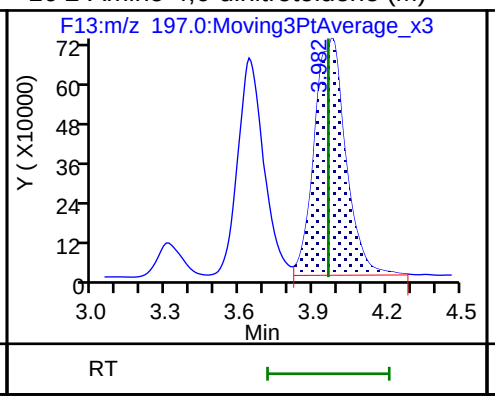
Report Date: 14-Apr-2022 10:06:46 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08014.d

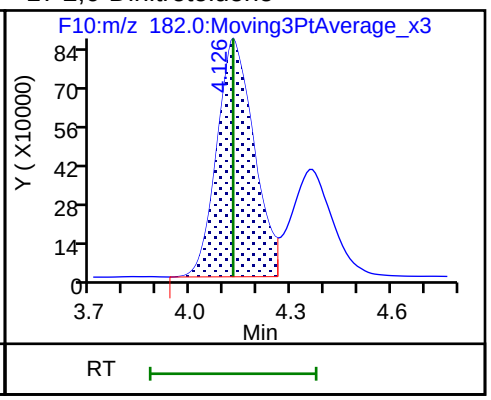
14 4-Amino-2,6-dinitrotoluene (M)



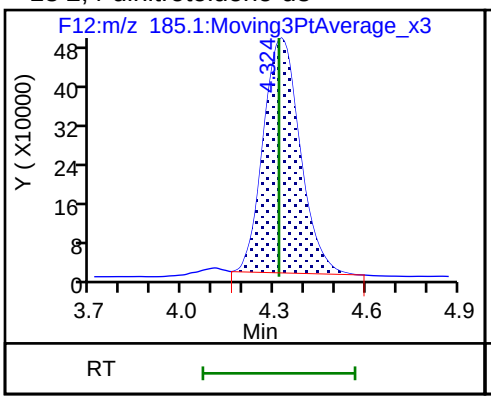
16 2-Amino-4,6-dinitrotoluene (M)



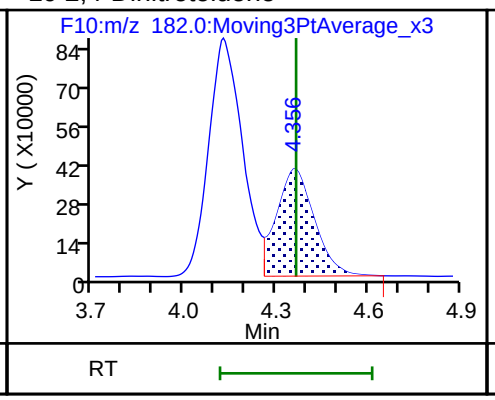
17 2,6-Dinitrotoluene



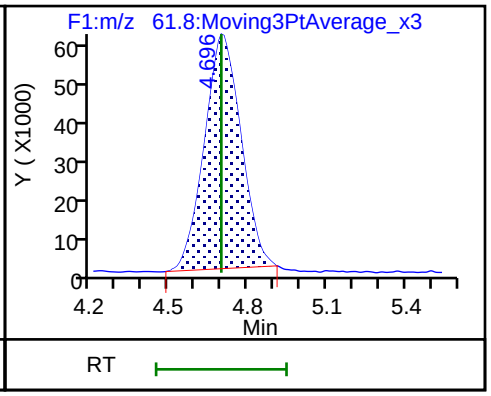
* 18 2,4-dinitrotoluene-d3



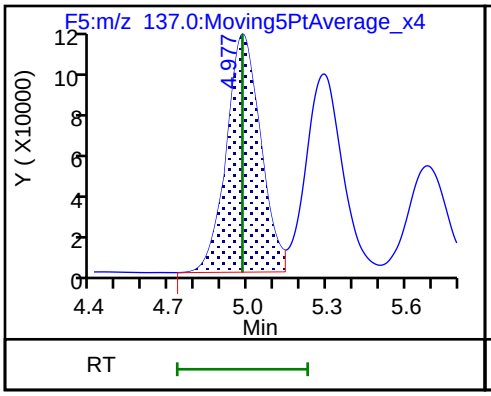
19 2,4-Dinitrotoluene



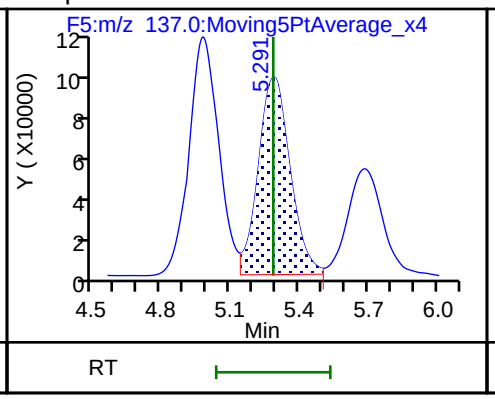
20 PETN



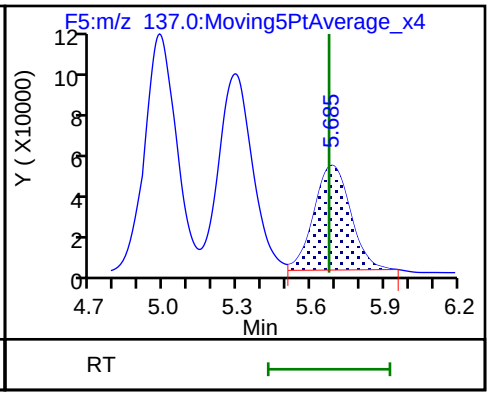
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



Report Date: 14-Apr-2022 10:06:46 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08014.d
Lims ID: LCSD 280-571024/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 08-Apr-2022 11:00:36 ALS Bottle#: 12 Worklist Smp#: 14
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-571024/3-A
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:44 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:40:03

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	111.4	111.02

Report Date: 14-Apr-2022 10:06:46 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08014.d

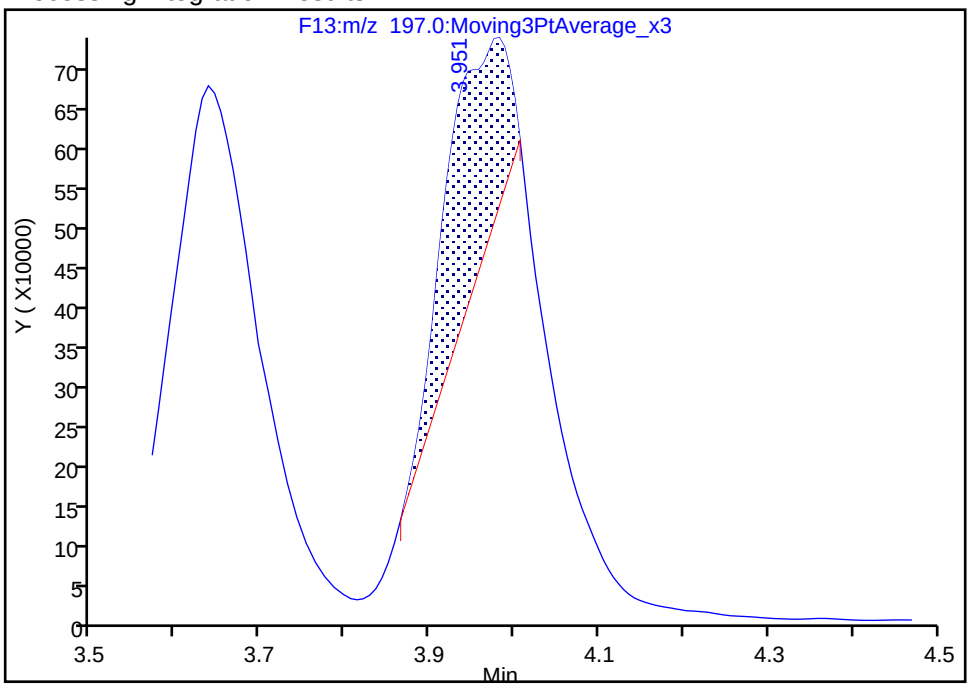
Injection Date:	08-Apr-2022 11:00:36	Instrument ID:	LC_LCMS7
Lims ID:	LCSD 280-571024/3-A		
Client ID:			
Operator ID:	acm	ALS Bottle#:	12 Worklist Smp#: 14
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F13:SIR

16 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

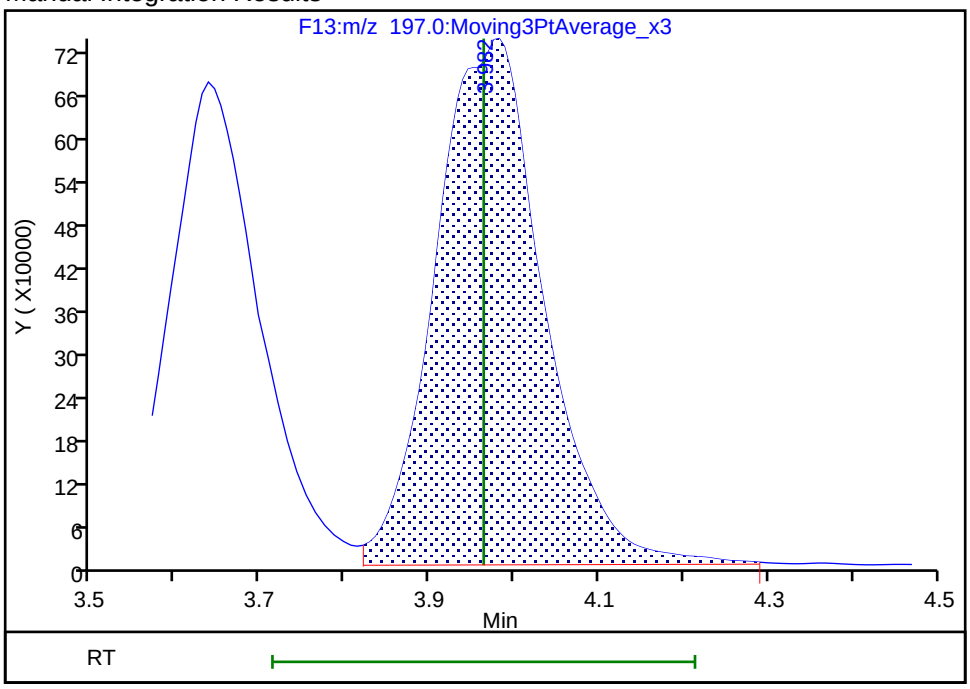
Processing Integration Results

RT: 3.95
Area: 1424928
Amount: 21.907179
Amount Units: ug/l



Manual Integration Results

RT: 3.98
Area: 6444710
Amount: 100.8035
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:39:58

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:06:46

Chrom Revision: 2.3 12-Apr-2022 20:29:44
Manual Integration/User Assign Peak Report

Eurofins Denver

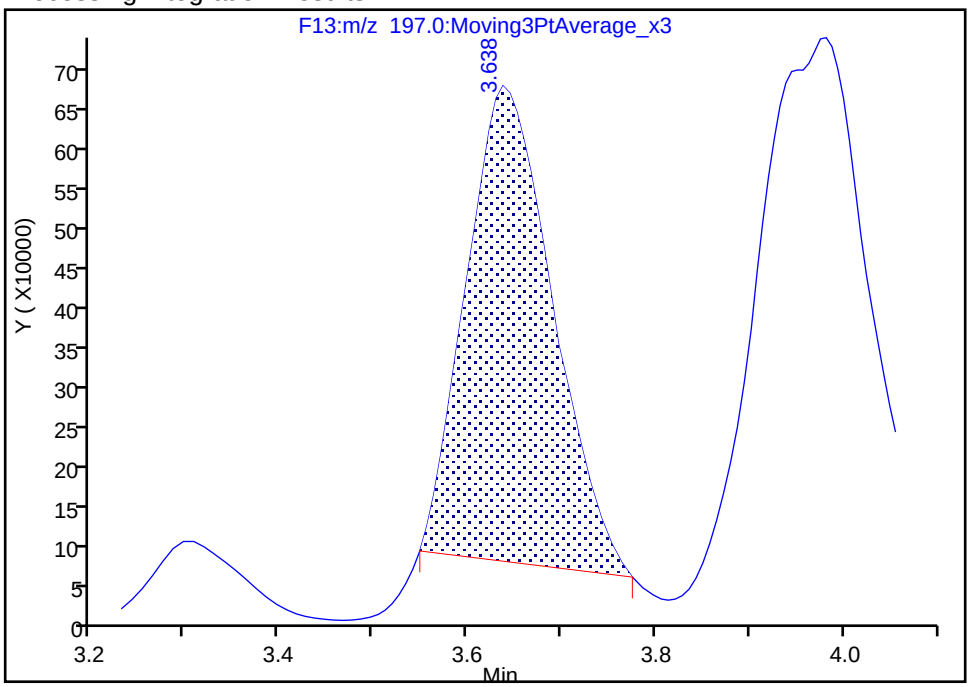
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08014.d
Injection Date: 08-Apr-2022 11:00:36 Instrument ID: LC_LCMS7
Lims ID: LCSD 280-571024/3-A
Client ID:
Operator ID: acm ALS Bottle#: 12 Worklist Smp#: 14
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F13:SIR

14 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

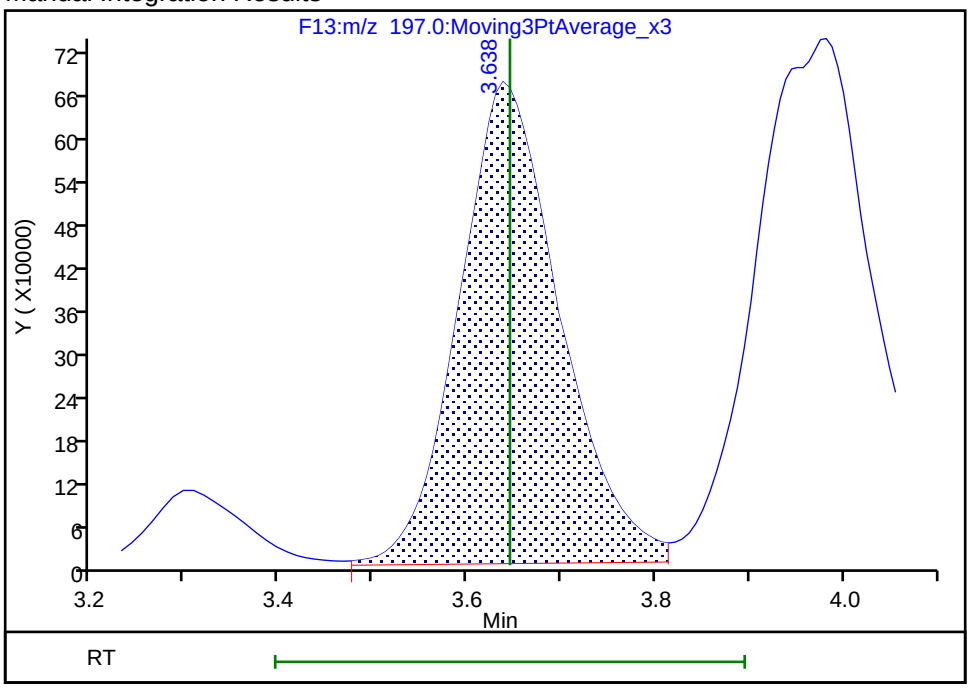
Processing Integration Results

RT: 3.64
Area: 3775289
Amount: 75.407333
Amount Units: ug/l



Manual Integration Results

RT: 3.64
Area: 4978406
Amount: 99.629930
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:39:54
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCSD 280-571025/3-A
Matrix: Solid | Lab File ID: ex722D14046.d
Analysis Method: 8321A | Date Collected:
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:17
Sample wt/vol: 10(g) | Date Analyzed: 04/14/2022 17:11
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571897 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.352		0.10	0.050	0.045
99-65-0	1,3-Dinitrobenzene	0.363		0.10	0.050	0.045
118-96-7	2,4,6-Trinitrotoluene	0.379		0.10	0.050	0.037
121-14-2	2,4-Dinitrotoluene	0.354		0.10	0.050	0.047
606-20-2	2,6-Dinitrotoluene	0.371		0.10	0.050	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.353		0.10	0.050	0.050
19406-51-0	4-Amino-2,6-dinitrotoluene	0.352		0.10	0.050	0.031
2691-41-0	HMX	0.348		0.10	0.050	0.046
99-08-1	m-Nitrotoluene	0.385		0.10	0.050	0.043
98-95-3	Nitrobenzene	0.402		0.11	0.050	0.038
55-63-0	Nitroglycerin	0.379		0.10	0.050	0.029
88-72-2	o-Nitrotoluene	0.390		0.10	0.050	0.043
78-11-5	PETN	0.410		0.10	0.050	0.034
99-99-0	p-Nitrotoluene	0.377		0.10	0.050	0.049
121-82-4	RDX	0.368		0.12	0.050	0.043
479-45-8	Tetryl	0.557	Q	0.10	0.050	0.039

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	94		68-140

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14046.d
Lims ID: LCSD 280-571025/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 14-Apr-2022 17:11:24 ALS Bottle#: 41 Worklist Smp#: 46
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-571025/3-A
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:20 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:36:03
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	203196	86.9	100	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		135850	125.0	126	
4 RDX								
281.2	1.833	1.833	0.0	0.998	251285	91.9	65.3	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		539971	125.0	93.6	
5 1,3,5-Trinitrobenzene								
213.0	2.299	2.299	0.0	0.769	1254672	88.0	164	
6 Tetryl								
241.1	2.685	2.679	0.006	0.898	3023101	139.3	221	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1051413	129.4	578	
8 1,3-Dinitrobenzene								
168.0	3.022	3.022	0.0	1.010	788882	90.7	152	
9 Nitroglycerin								
62.0	3.040	3.040	0.0	1.016	743148	94.8	228	
10 2,4,6-Trinitrotoluene								
227.0	3.272	3.281	-0.009	0.765	5851014	94.6	317	
$ 11 Nitrobenzene-d5								
128.0	3.315	3.324	-0.009	0.775	445112	94.4	28.9	
12 Nitrobenzene								
123.0	3.382	3.382	0.0	0.791	391649	100.5	45.7	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.601	3.611	-0.010	0.842	3684436	87.9	52.7	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.924	3.924	0.0	0.918	5112822	88.2	69.3	

Report Date: 15-Apr-2022 08:03:22 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14046.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
17 2,6-Dinitrotoluene								
182.0	4.081	4.093	-0.012	0.954	4830884	92.8	668	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3226884	125.0	110	
19 2,4-Dinitrotoluene								
182.0	4.308	4.316	-0.008	1.008	2432142	88.5	310	
20 PETN								
61.8	4.618	4.638	-0.020	1.080	528685	102.5	81.2	
22 o-Nitrotoluene								
137.0	4.917	4.932	-0.015	1.150	741329	97.4	276	
23 p-Nitrotoluene								
137.0	5.226	5.230	-0.004	1.222	633138	94.2	222	
24 m-Nitrotoluene								
137.0	5.619	5.614	0.005	1.314	378305	96.2	123	

QC Flag Legend

Processing Flags

Reagents:

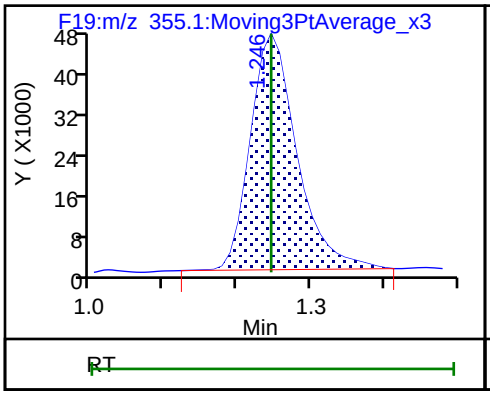
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:22 Chrom Revision: 2.3 12-Apr-2022 20:29:44

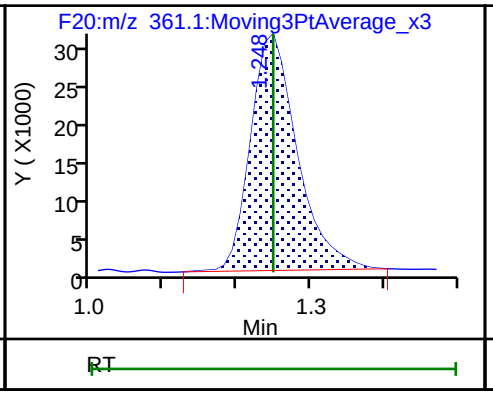
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14046.d
Injection Date: 14-Apr-2022 17:11:24 Instrument ID: LC_LCMS7
Lims ID: LCSD 280-571025/3-A
Client ID:
Operator ID: acm ALS Bottle#: 41 Worklist Smp#: 46
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

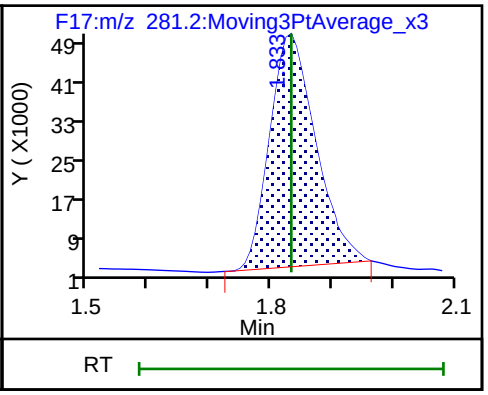
2 HMX



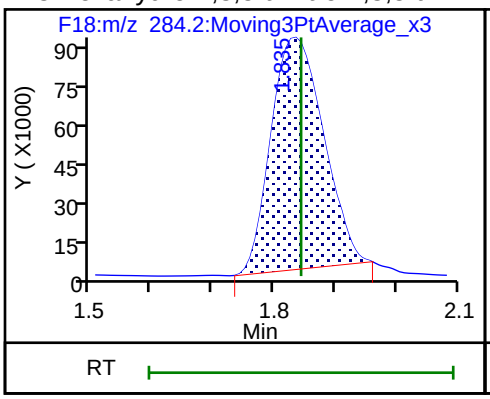
* 1 HMX-13C4



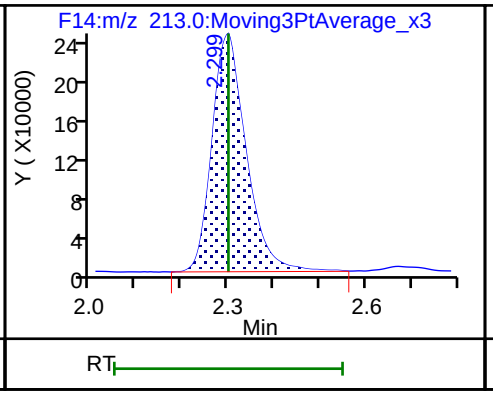
4 RDX



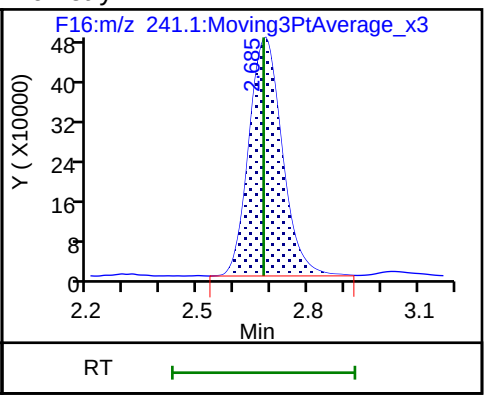
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



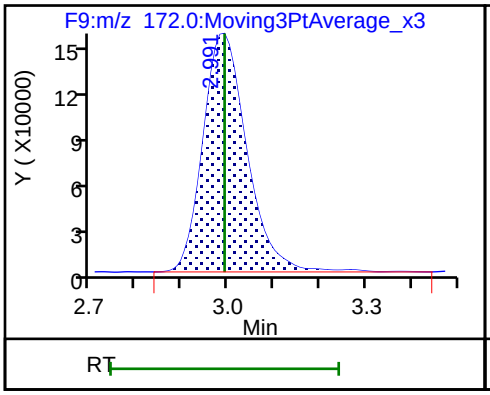
5 1,3,5-Trinitrobenzene



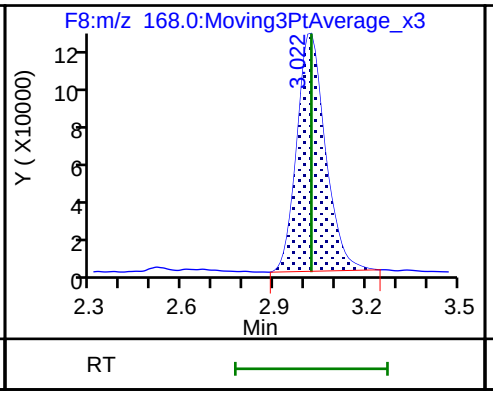
6 Tetryl



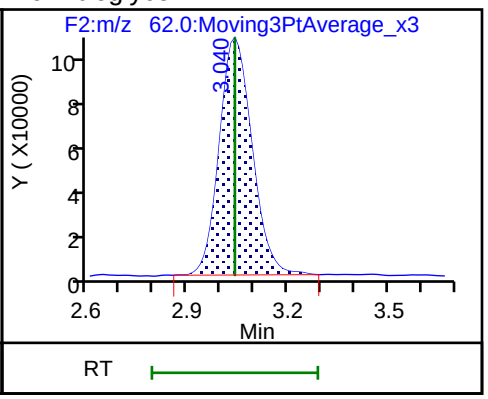
* 7 1,3-Dinitrobenzene-d4



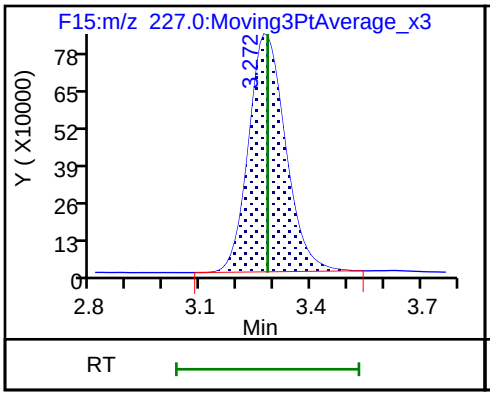
8 1,3-Dinitrobenzene



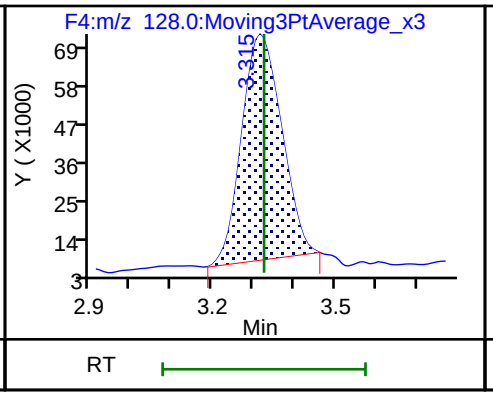
9 Nitroglycerin



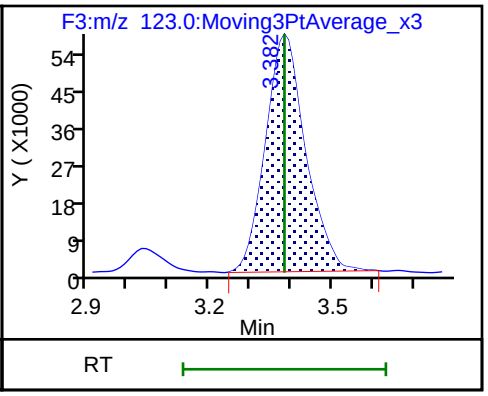
10 2,4,6-Trinitrotoluene



$ 11 Nitrobenzene-d5



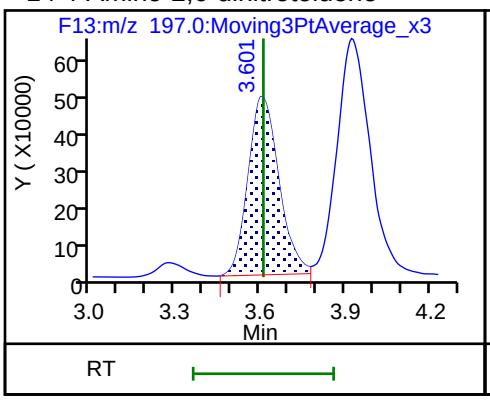
12 Nitrobenzene



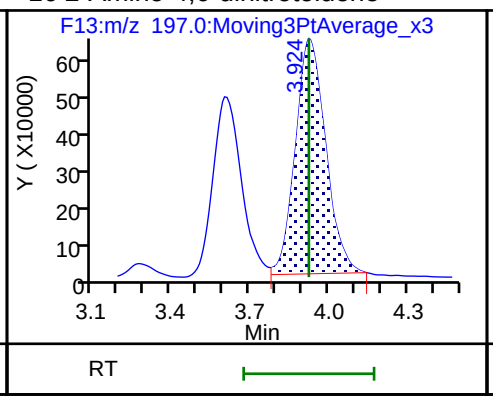
Report Date: 15-Apr-2022 08:03:22 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14046.d

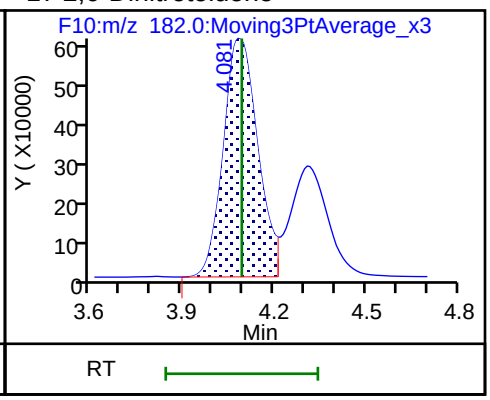
14 4-Amino-2,6-dinitrotoluene



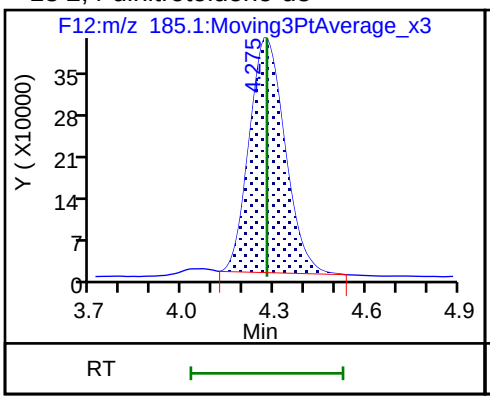
16 2-Amino-4,6-dinitrotoluene



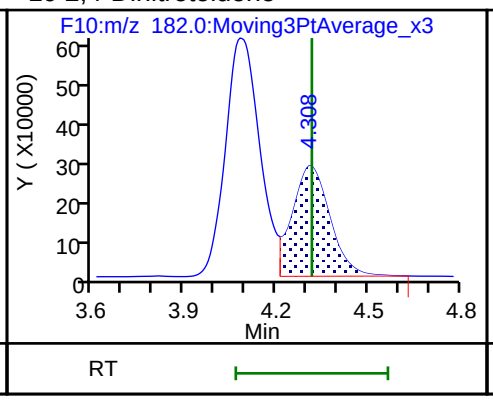
17 2,6-Dinitrotoluene



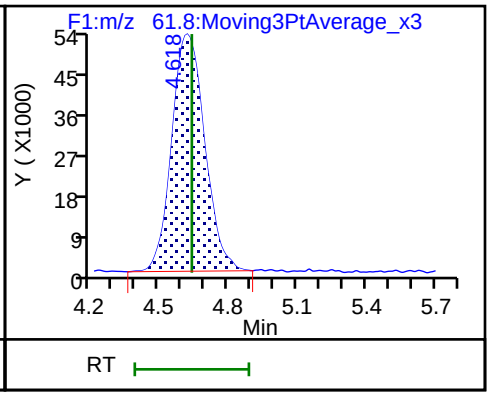
* 18 2,4-dinitrotoluene-d3



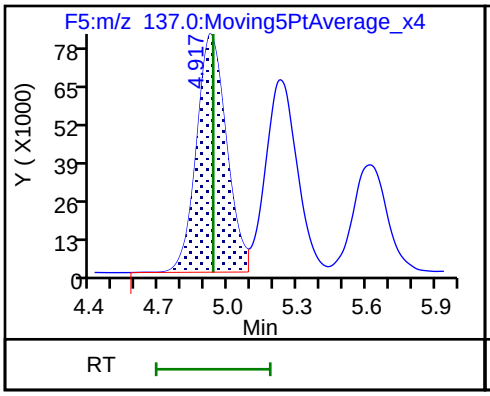
19 2,4-Dinitrotoluene



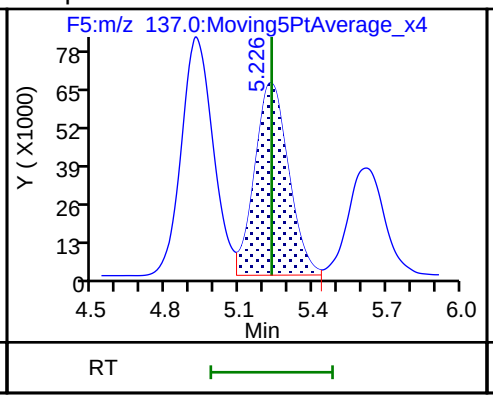
20 PETN



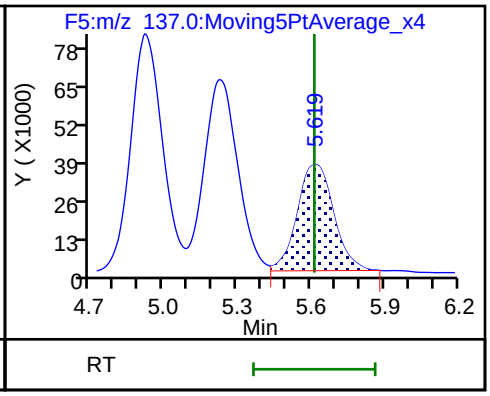
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



Report Date: 15-Apr-2022 08:03:22 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14046.d
Lims ID: LCSD 280-571025/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 14-Apr-2022 17:11:24 ALS Bottle#: 41 Worklist Smp#: 46
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-571025/3-A
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:20 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:36:03

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	94.4	94.11

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCSSRM 280-570105/2-B
Matrix: Solid | Lab File ID: ex722D07016.d
Analysis Method: 8321A | Date Collected:
Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57
Sample wt/vol: 10.49(g) | Date Analyzed: 04/07/2022 12:05
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571108 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.523		0.095	0.048	0.043
99-65-0	1,3-Dinitrobenzene	0.555		0.095	0.048	0.043
118-96-7	2,4,6-Trinitrotoluene	0.395	Q	0.095	0.048	0.035
121-14-2	2,4-Dinitrotoluene	0.534		0.095	0.048	0.044
606-20-2	2,6-Dinitrotoluene	0.559		0.095	0.048	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.517		0.095	0.048	0.047
19406-51-0	4-Amino-2,6-dinitrotoluene	0.475		0.095	0.048	0.030
2691-41-0	HMX	0.521		0.095	0.048	0.044
99-08-1	m-Nitrotoluene	0.578		0.095	0.048	0.041
98-95-3	Nitrobenzene	0.511		0.10	0.048	0.036
55-63-0	Nitroglycerin	0.527		0.095	0.048	0.028
88-72-2	o-Nitrotoluene	0.571		0.095	0.048	0.041
78-11-5	PETN	0.544		0.095	0.048	0.032
99-99-0	p-Nitrotoluene	0.555		0.095	0.048	0.047
121-82-4	RDX	0.508		0.11	0.048	0.041
479-45-8	Tetryl	0.349		0.095	0.048	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	91		68-140

Report Date: 08-Apr-2022 07:32:24 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07016.d
Lims ID: LCSSRM 280-570105/2-B
Client ID:
Sample Type: LCSSRM
Inject. Date: 07-Apr-2022 12:05:00 ALS Bottle#: 14 Worklist Smp#: 16
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCSSRM 280-570105/2-B
Misc. Info.: ex722D07
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 08-Apr-2022 07:32:21 Calib Date: 07-Apr-2022 11:18:48
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

Column 1 : Det: F1:SIR
Process Host: CTX1621

First Level Reviewer: meyera Date: 07-Apr-2022 12:35:38
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	240926	136.7	90.8	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		107476	125.0	102	
4 RDX								
281.2	1.841	1.841	0.0	1.003	304939	133.1	73.7	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		414553	125.0	143	
5 1,3,5-Trinitrobenzene								
213.0	2.317	2.317	0.0	0.765	2204566	137.1	178	
6 Tetryl								
241.1	2.705	2.712	-0.007	0.893	2046549	91.6	103	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.030	3.030	0.0		1366388	129.4	373	
8 1,3-Dinitrobenzene								
168.0	3.051	3.051	0.0	1.007	1659457	145.6	431	
9 Nitroglycerin								
62.0	3.080	3.080	0.0	1.017	1395564	138.1	530	
28 3,5-Dinitroaniline								M
183.0	3.241	3.230	0.011	1.070	6809265	138.1	48.6	M
10 2,4,6-Trinitrotoluene								
227.0	3.310	3.321	-0.011	0.764	7428984	103.7	151	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.775	607679	91.7	77.7	
12 Nitrobenzene								
123.0	3.421	3.431	-0.010	0.790	764806	134.0	43.4	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.645	3.645	0.0	0.841	6445262	124.7	36.3	

Report Date: 08-Apr-2022 07:32:24 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07016.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
16 2-Amino-4,6-dinitrotoluene								
197.0	3.988	3.976	0.012	0.921	9076393	135.7	46.7	
17 2,6-Dinitrotoluene								
182.0	4.144	4.150	-0.006	0.957	10062720	146.5	859	
* 18 2,4-dinitrotoluene-d3								
185.1	4.332	4.341	-0.009		4175240	125.0	106	
19 2,4-Dinitrotoluene								
182.0	4.373	4.373	0.0	1.009	4895210	140.0	384	
20 PETN								
61.8	4.706	4.716	-0.010	1.086	778380	142.6	149	
22 o-Nitrotoluene								
137.0	4.992	5.002	-0.010	1.152	1575312	149.8	537	
23 p-Nitrotoluene								
137.0	5.311	5.311	0.0	1.226	1324039	145.6	434	
24 m-Nitrotoluene								
137.0	5.694	5.704	-0.010	1.314	831196	151.7	260	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

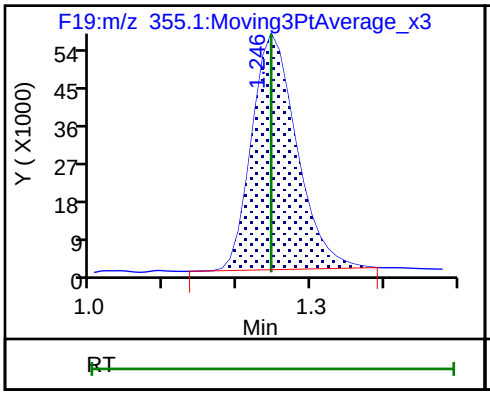
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 08-Apr-2022 07:32:24 Chrom Revision: 2.3 18-Mar-2022 09:07:22

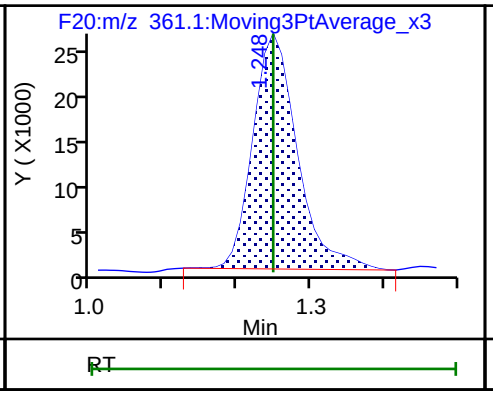
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07016.d
Injection Date: 07-Apr-2022 12:05:00 Instrument ID: LC_LCMS7
Lims ID: LCSSRM 280-570105/2-B
Client ID:
Operator ID: acm ALS Bottle#: 14 Worklist Smp#: 16
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

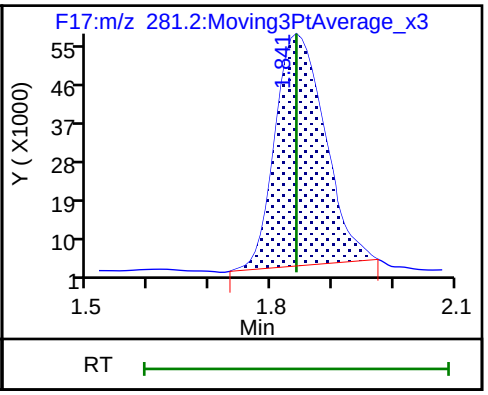
2 HMX



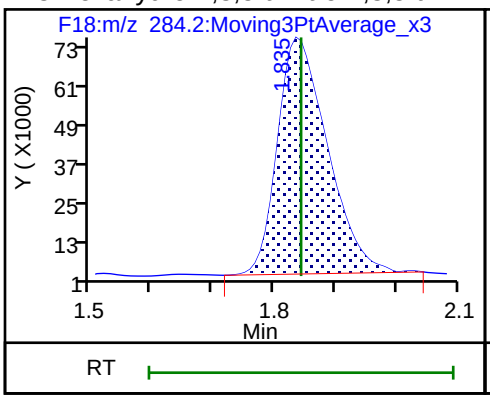
* 1 HMX-13C4



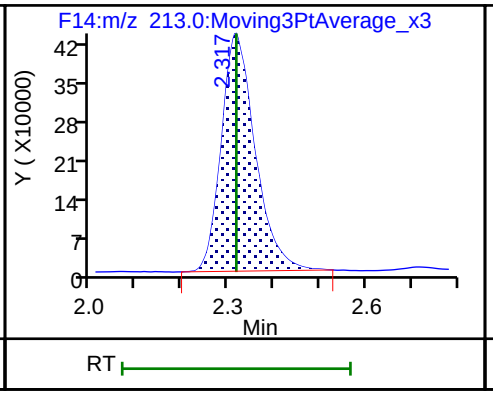
4 RDX



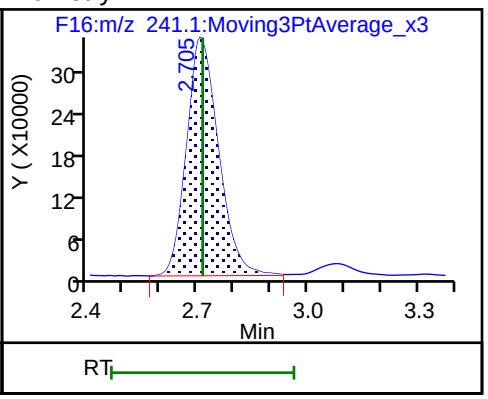
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



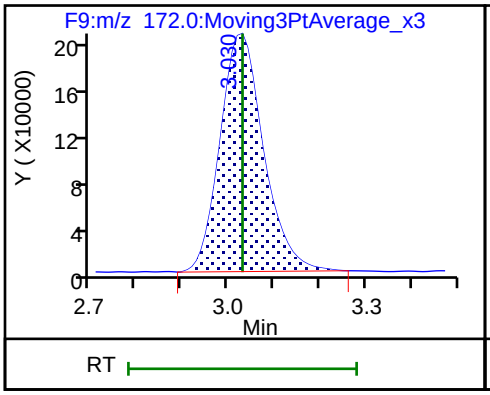
5 1,3,5-Trinitrobenzene



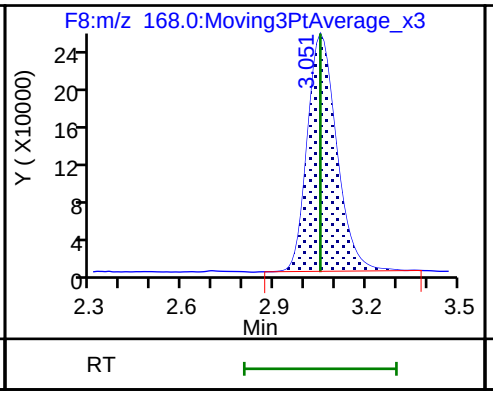
6 Tetryl



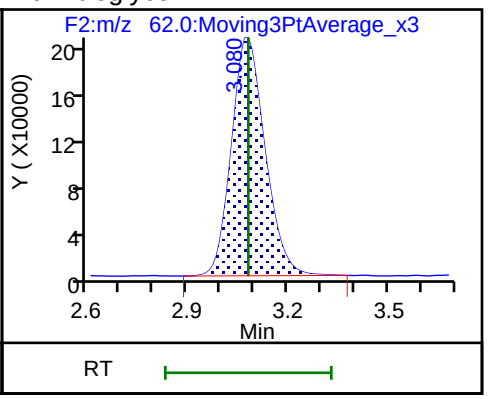
* 7 1,3-Dinitrobenzene-d4



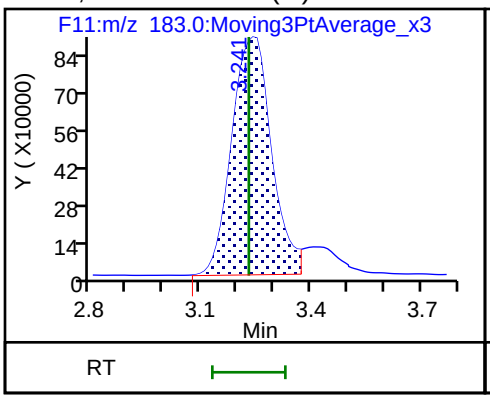
8 1,3-Dinitrobenzene



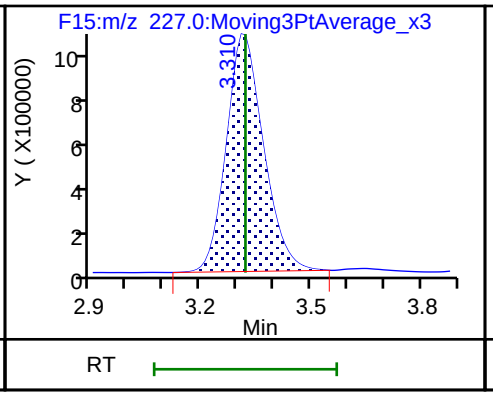
9 Nitroglycerin



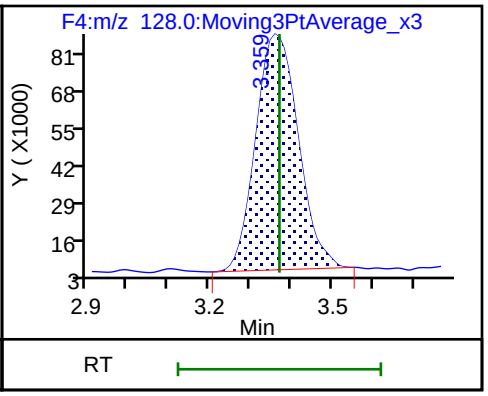
28 3,5-Dinitroaniline (M)



10 2,4,6-Trinitrotoluene



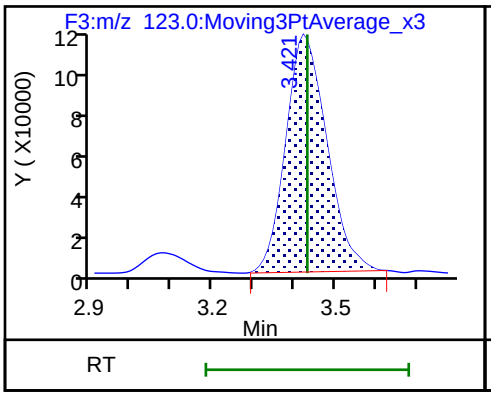
$ 11 Nitrobenzene-d5



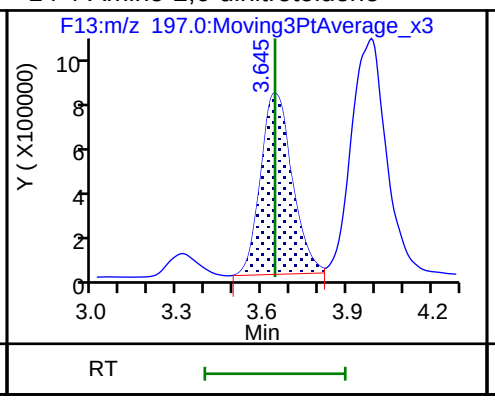
Report Date: 08-Apr-2022 07:32:24 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07016.d

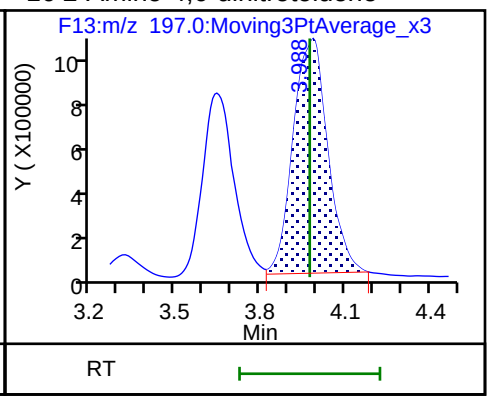
12 Nitrobenzene



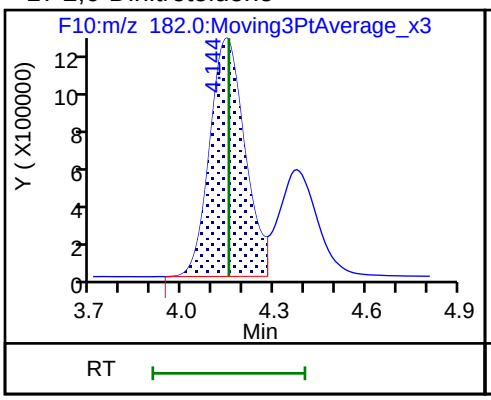
14 4-Amino-2,6-dinitrotoluene



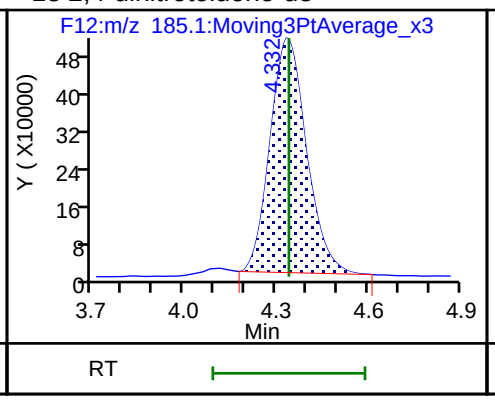
16 2-Amino-4,6-dinitrotoluene



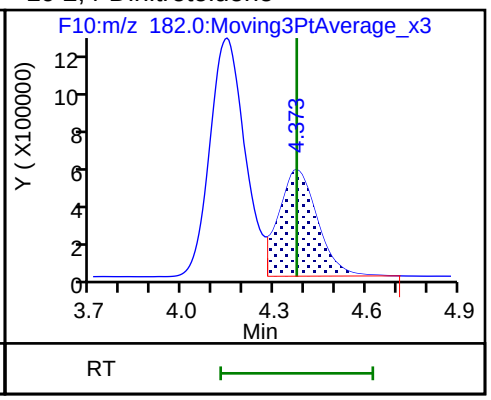
17 2,6-Dinitrotoluene



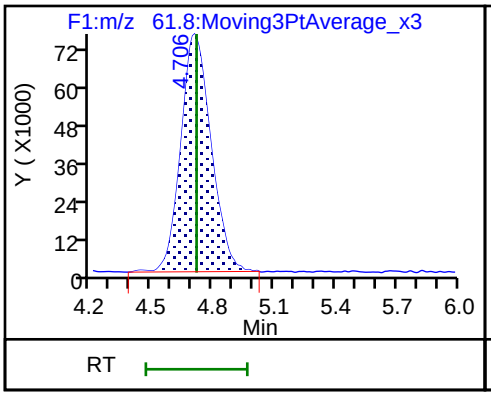
* 18 2,4-dinitrotoluene-d3



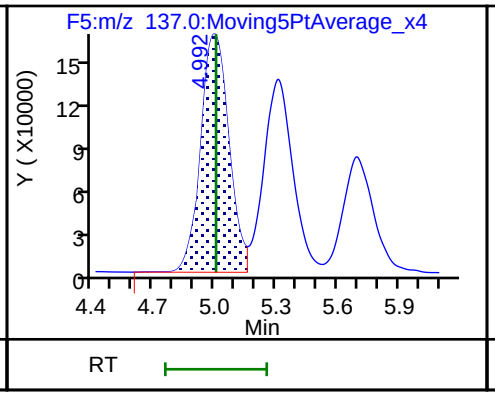
19 2,4-Dinitrotoluene



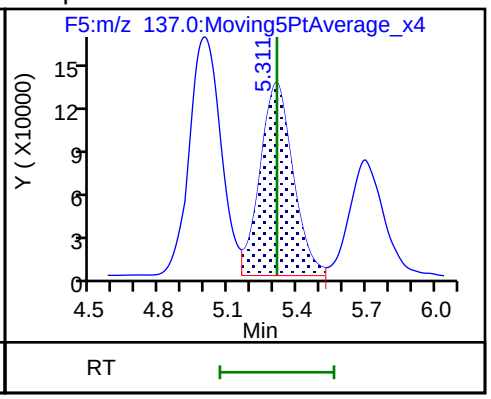
20 PETN



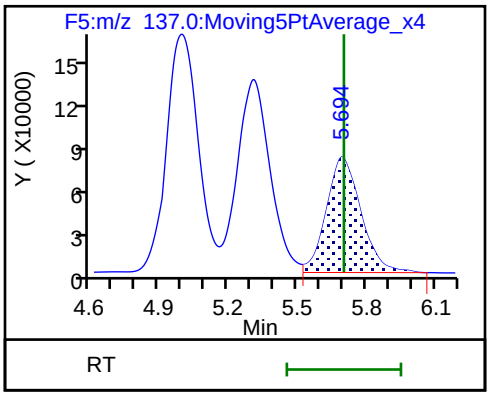
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



Report Date: 08-Apr-2022 07:32:24 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07016.d				
Lims ID:	LCSSRM 280-570105/2-B				
Client ID:					
Sample Type:	LCSSRM				
Inject. Date:	07-Apr-2022 12:05:00	ALS Bottle#:	14	Worklist Smp#:	16
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCSSRM 280-570105/2-B				
Misc. Info.:	ex722D07				
Operator ID:	acm	Instrument ID:	LC_LCMS7		
Method:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\8330_SIR.m				
Limit Group:	LC - 8321A Expl				
Last Update:	08-Apr-2022 07:32:21	Calib Date:	07-Apr-2022 11:18:48		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1621				
First Level Reviewer: meyera		Date:	07-Apr-2022 12:35:38		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	91.7	91.41

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCSSRM 280-570112/2-B
Matrix: Solid | Lab File ID: ex722D14016.d
Analysis Method: 8321A | Date Collected:
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:23
Sample wt/vol: 10.48(g) | Date Analyzed: 04/14/2022 13:53
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571896 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.505		0.095	0.048	0.043
99-65-0	1,3-Dinitrobenzene	0.557		0.095	0.048	0.043
118-96-7	2,4,6-Trinitrotoluene	0.412		0.095	0.048	0.035
121-14-2	2,4-Dinitrotoluene	0.524		0.095	0.048	0.044
606-20-2	2,6-Dinitrotoluene	0.572		0.095	0.048	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.493		0.095	0.048	0.047
19406-51-0	4-Amino-2,6-dinitrotoluene	0.470		0.095	0.048	0.030
2691-41-0	HMX	0.518		0.095	0.048	0.044
99-08-1	m-Nitrotoluene	0.576		0.095	0.048	0.041
98-95-3	Nitrobenzene	0.593		0.10	0.048	0.036
55-63-0	Nitroglycerin	0.547		0.095	0.048	0.028
88-72-2	o-Nitrotoluene	0.581		0.095	0.048	0.041
78-11-5	PETN	0.520		0.095	0.048	0.032
99-99-0	p-Nitrotoluene	0.562		0.095	0.048	0.047
121-82-4	RDX	0.459		0.11	0.048	0.041
479-45-8	Tetryl	0.418		0.095	0.048	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	99		68-140

Report Date: 15-Apr-2022 08:03:03 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14016.d
Lims ID: LCSSRM 280-570112/2-B
Client ID:
Sample Type: LCSSRM
Inject. Date: 14-Apr-2022 13:53:32 ALS Bottle#: 14 Worklist Smp#: 16
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCSSRM 280-570112/2-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:00 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 14-Apr-2022 14:28:23
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	297593	135.8	193	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		128069	125.0	92.4	
4 RDX								
281.2	1.833	1.833	0.0	0.998	390747	120.1	133	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		678119	125.0	285	
5 1,3,5-Trinitrobenzene								
213.0	2.303	2.299	0.004	0.770	2169070	132.4	184	
6 Tetryl								
241.1	2.685	2.679	0.006	0.898	2734341	109.5	114	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1210125	129.4	224	
8 1,3-Dinitrobenzene								
168.0	3.022	3.022	0.0	1.010	1454288	145.9	578	
9 Nitroglycerin								
62.0	3.040	3.040	0.0	1.016	1288743	143.4	373	
28 3,5-Dinitroaniline								
183.0	3.200	3.200	0.0	1.070	5348320	125.3	45.7	
10 2,4,6-Trinitrotoluene								
227.0	3.281	3.281	0.0	0.768	7585177	108.0	308	
$ 11 Nitrobenzene-d5								
128.0	3.324	3.324	0.0	0.778	540728	99.8	160	
12 Nitrobenzene								
123.0	3.382	3.382	0.0	0.791	696670	155.4	44.3	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.611	3.611	0.0	0.845	5851991	123.1	53.8	

Report Date: 15-Apr-2022 08:03:03 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14016.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
16 2-Amino-4,6-dinitrotoluene								
197.0	3.931	3.924	0.007	0.919	8500518	129.1	73.8	
17 2,6-Dinitrotoluene								
182.0	4.087	4.093	-0.006	0.956	8852566	149.8	903	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3672552	125.0	118	
19 2,4-Dinitrotoluene								
182.0	4.316	4.316	0.0	1.010	4278353	137.4	401	
20 PETN								
61.8	4.628	4.638	-0.010	1.082	796820	136.2	136	
22 o-Nitrotoluene								
137.0	4.932	4.932	0.0	1.153	1314977	152.1	332	
23 p-Nitrotoluene								
137.0	5.240	5.230	0.010	1.226	1124812	147.3	277	
24 m-Nitrotoluene								
137.0	5.624	5.614	0.010	1.315	674648	151.0	159	

QC Flag Legend

Processing Flags

Reagents:

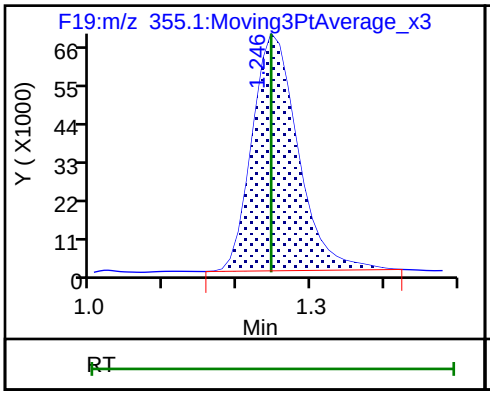
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:03 Chrom Revision: 2.3 12-Apr-2022 20:29:44

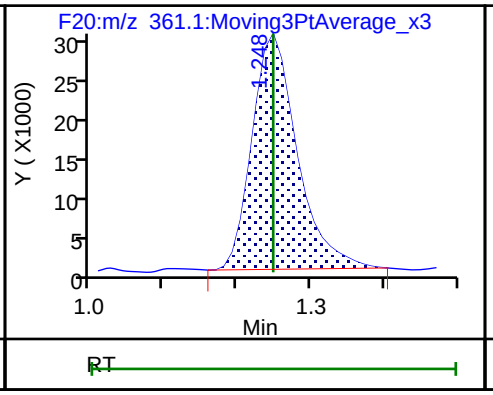
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14016.d
Injection Date: 14-Apr-2022 13:53:32 Instrument ID: LC_LCMS7
Lims ID: LCSSRM 280-570112/2-B
Client ID:
Operator ID: acm ALS Bottle#: 14 Worklist Smp#: 16
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

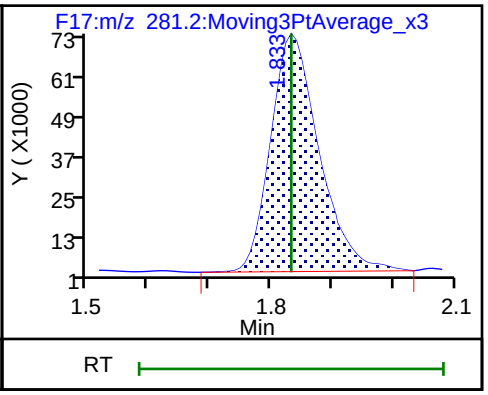
2 HMX



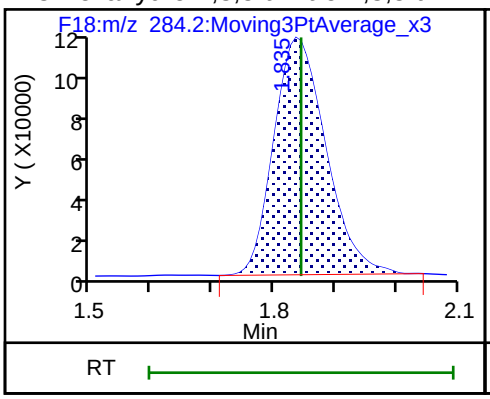
* 1 HMX-13C4



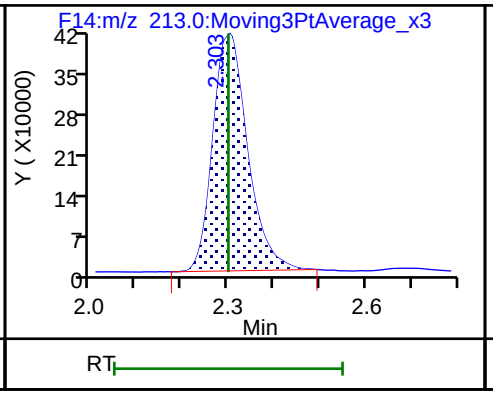
4 RDX



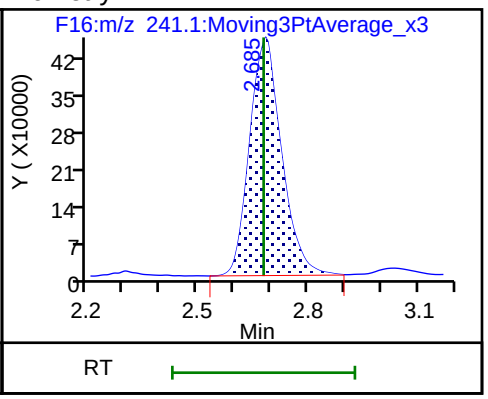
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



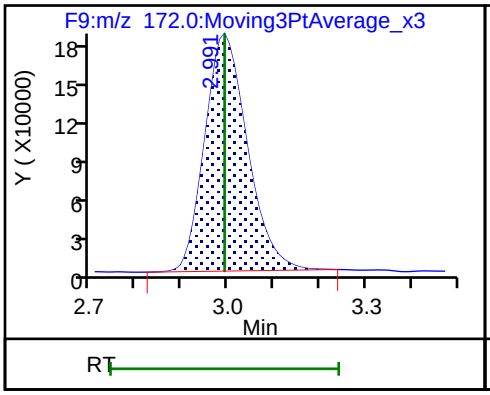
5 1,3,5-Trinitrobenzene



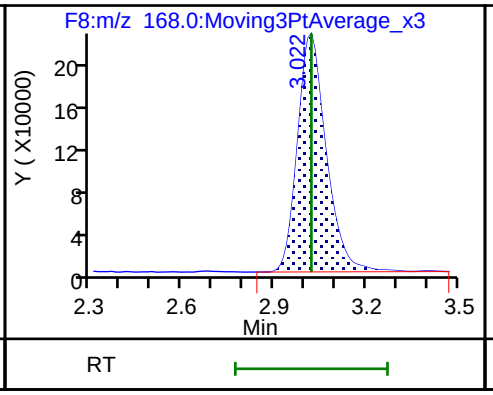
6 Tetryl



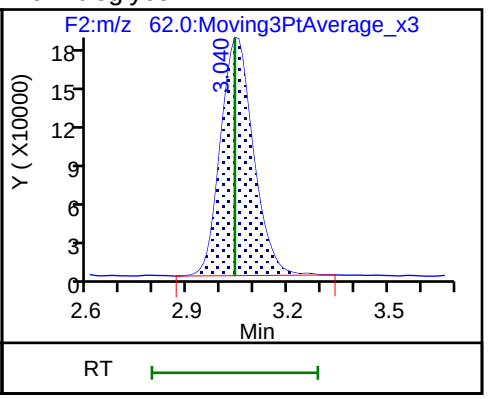
* 7 1,3-Dinitrobenzene-d4



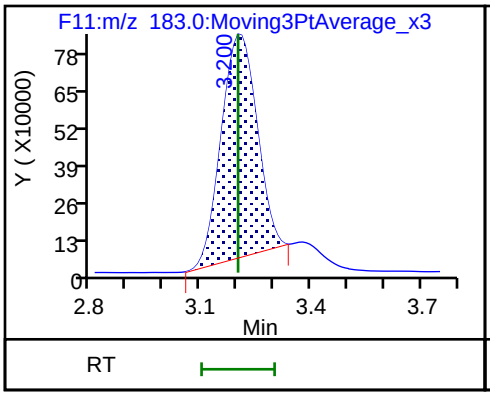
8 1,3-Dinitrobenzene



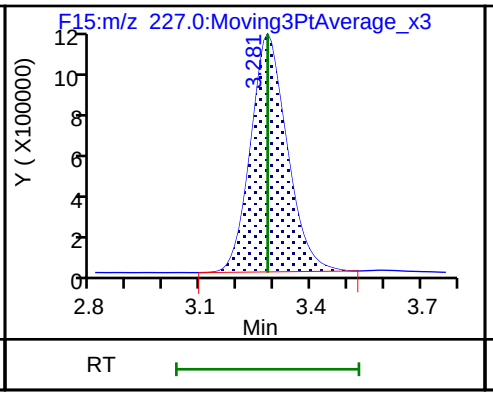
9 Nitroglycerin



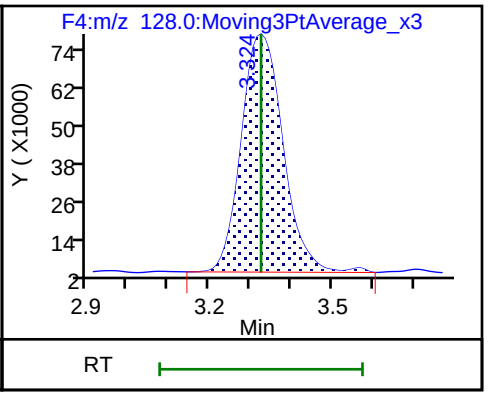
28 3,5-Dinitroaniline



10 2,4,6-Trinitrotoluene



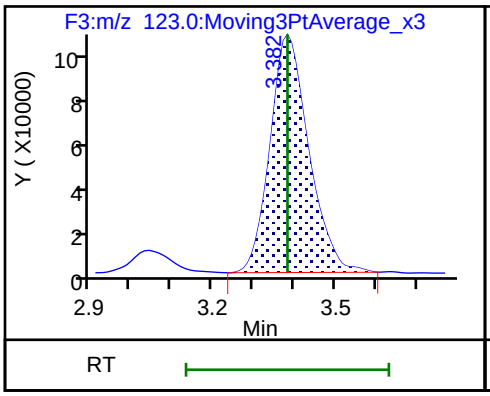
$ 11 Nitrobenzene-d5



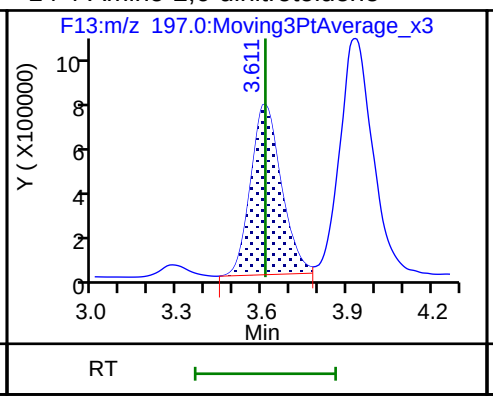
Report Date: 15-Apr-2022 08:03:03 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14016.d

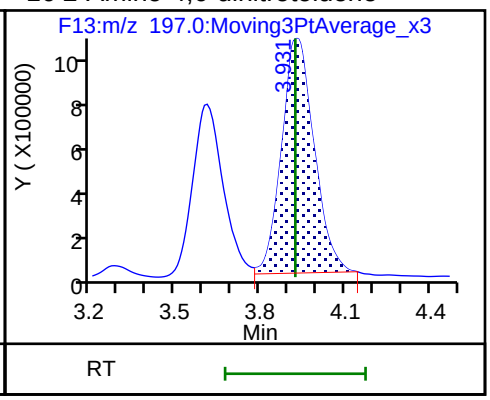
12 Nitrobenzene



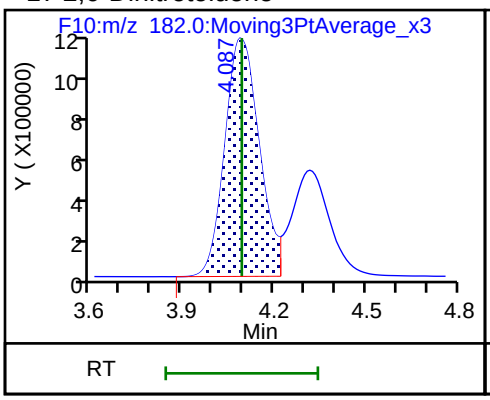
14 4-Amino-2,6-dinitrotoluene



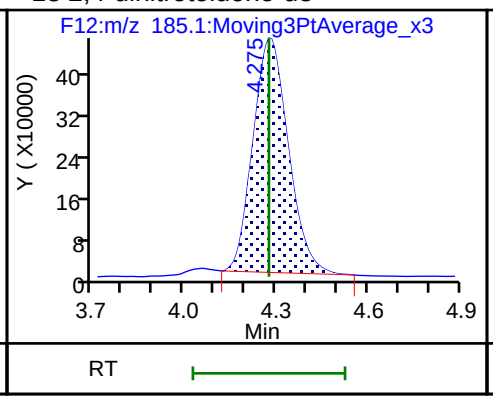
16 2-Amino-4,6-dinitrotoluene



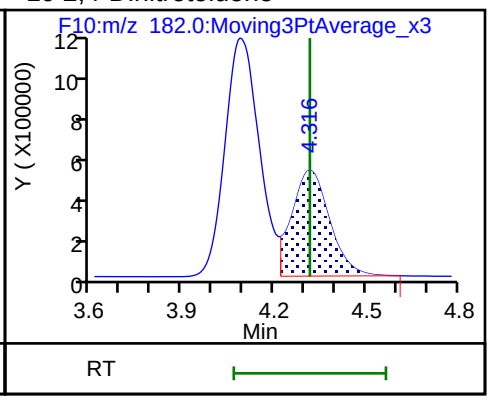
17 2,6-Dinitrotoluene



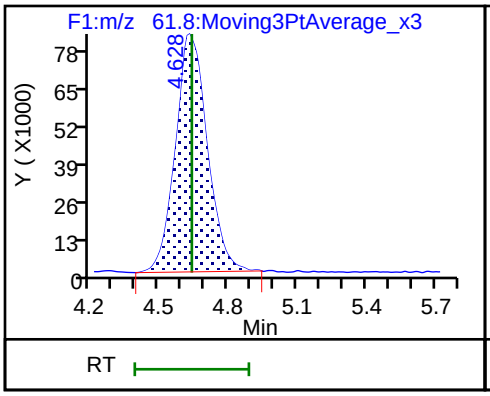
* 18 2,4-dinitrotoluene-d3



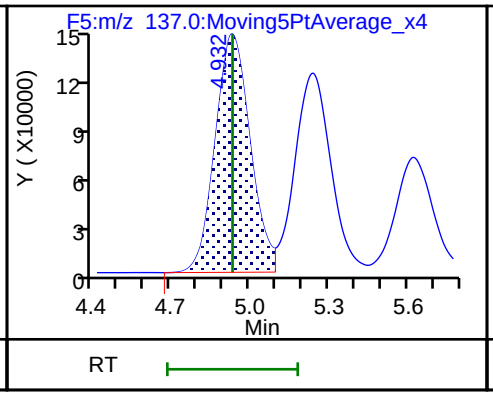
19 2,4-Dinitrotoluene



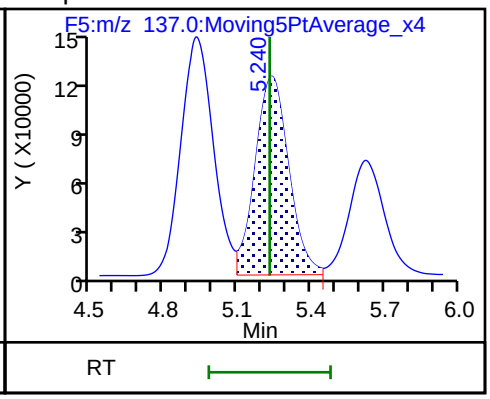
20 PETN



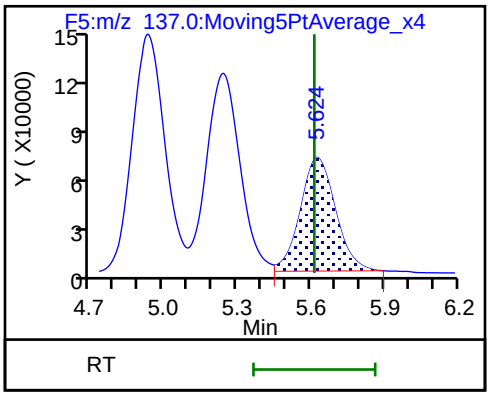
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



Report Date: 15-Apr-2022 08:03:03 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14016.d
Lims ID: LCSSRM 280-570112/2-B
Client ID:
Sample Type: LCSSRM
Inject. Date: 14-Apr-2022 13:53:32 ALS Bottle#: 14 Worklist Smp#: 16
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCSSRM 280-570112/2-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:00 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 14-Apr-2022 14:28:23

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	99.8	99.44

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCSSRM 280-570111/2-B
Matrix: Solid | Lab File ID: ex722D08016.d
Analysis Method: 8321A | Date Collected:
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20
Sample wt/vol: 10.12(g) | Date Analyzed: 04/08/2022 11:13
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571224 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.556		0.099	0.049	0.044
99-65-0	1,3-Dinitrobenzene	0.573		0.099	0.049	0.044
118-96-7	2,4,6-Trinitrotoluene	0.420		0.099	0.049	0.036
121-14-2	2,4-Dinitrotoluene	0.563		0.099	0.049	0.046
606-20-2	2,6-Dinitrotoluene	0.589		0.099	0.049	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.524		0.099	0.049	0.049
19406-51-0	4-Amino-2,6-dinitrotoluene	0.489		0.099	0.049	0.031
2691-41-0	HMX	0.501		0.099	0.049	0.046
99-08-1	m-Nitrotoluene	0.570		0.099	0.049	0.043
98-95-3	Nitrobenzene	0.583		0.11	0.049	0.038
55-63-0	Nitroglycerin	0.596		0.099	0.049	0.029
88-72-2	o-Nitrotoluene	0.586		0.099	0.049	0.042
78-11-5	PETN	0.549		0.099	0.049	0.034
99-99-0	p-Nitrotoluene	0.571		0.099	0.049	0.049
121-82-4	RDX	0.520		0.12	0.049	0.043
479-45-8	Tetryl	0.443		0.099	0.049	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	103		68-140

Report Date: 14-Apr-2022 10:06:48 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08016.d
Lims ID: LCSSRM 280-570111/2-B
Client ID:
Sample Type: LCSSRM
Inject. Date: 08-Apr-2022 11:13:47 ALS Bottle#: 14 Worklist Smp#: 16
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCSSRM 280-570111/2-B
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:44 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:40:41
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	242804	126.9	111	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		107447	125.0	122	
4 RDX								
281.2	1.841	1.833	0.0	0.998	308034	131.5	88.1	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								M
284.2	1.844	1.844	0.0		405815	125.0	177	M
5 1,3,5-Trinitrobenzene								
213.0	2.317	2.322	0.004	0.767	2116455	140.7	200	
6 Tetryl								
241.1	2.705	2.708	0.006	0.896	2502090	112.0	139	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.008	0.011		1250972	129.4	382	
8 1,3-Dinitrobenzene								
168.0	3.051	3.051	0.011	1.011	1518290	145.1	402	
9 Nitroglycerin								
62.0	3.080	3.081	0.011	1.020	1368201	150.7	561	
28 3,5-Dinitroaniline								M
183.0	3.230	3.231	0.011	1.070	4890455	129.1	44.6	M
10 2,4,6-Trinitrotoluene								
227.0	3.321	3.316	0.011	0.768	6840083	106.2	118	
$ 11 Nitrobenzene-d5								
128.0	3.348	3.354	0.0	0.774	608980	102.9	155	
12 Nitrobenzene								
123.0	3.411	3.418	0.0	0.789	744118	147.4	50.3	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.638	3.652	-0.007	0.841	5746680	123.8	37.8	

Report Date: 14-Apr-2022 10:06:48 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08016.d

Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
16 2-Amino-4,6-dinitrotoluene								
197.0	3.957	3.971	-0.006	0.915	7864137	132.5	47.5	
17 2,6-Dinitrotoluene								
182.0	4.126	4.138	0.0	0.954	9288068	148.9	759	
* 18 2,4-dinitrotoluene-d3								
185.1	4.324	4.315	0.009		3772064	125.0	106	
19 2,4-Dinitrotoluene								
182.0	4.356	4.373	-0.009	1.007	4545389	142.5	336	
20 PETN								
61.8	4.696	4.706	0.0	1.086	722698	138.8	174	
22 o-Nitrotoluene								
137.0	4.982	4.987	0.005	1.152	1429583	148.2	397	
23 p-Nitrotoluene								
137.0	5.291	5.297	0.005	1.224	1212021	144.6	315	
24 m-Nitrotoluene								
137.0	5.685	5.686	0.010	1.315	720361	144.2	180	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

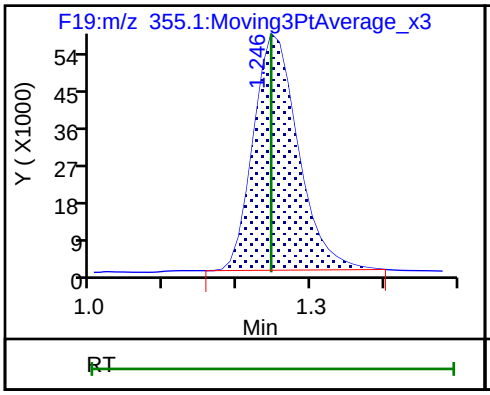
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 14-Apr-2022 10:06:48 Chrom Revision: 2.3 12-Apr-2022 20:29:44

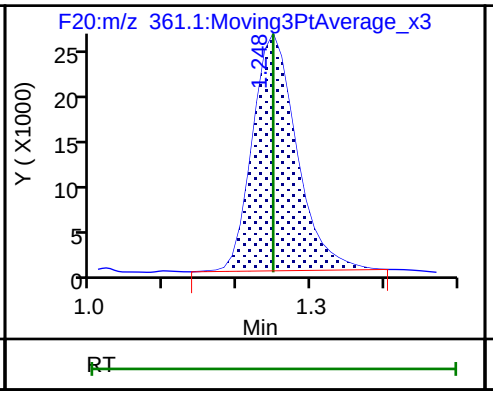
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08016.d
Injection Date: 08-Apr-2022 11:13:47 Instrument ID: LC_LCMS7
Lims ID: LCSSRM 280-570111/2-B
Client ID:
Operator ID: acm ALS Bottle#: 14 Worklist Smp#: 16
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

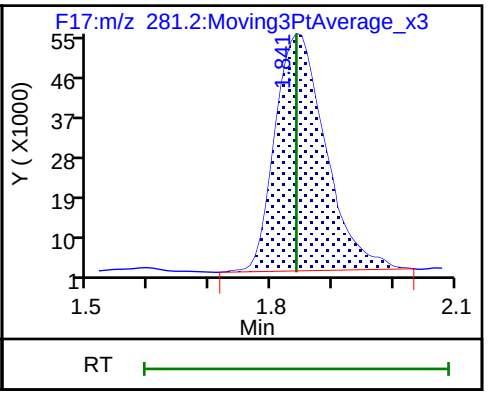
2 HMX



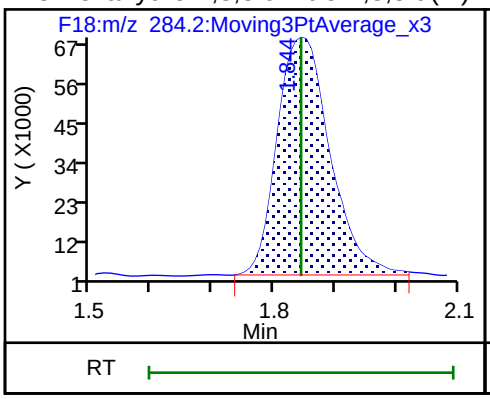
* 1 HMX-13C4



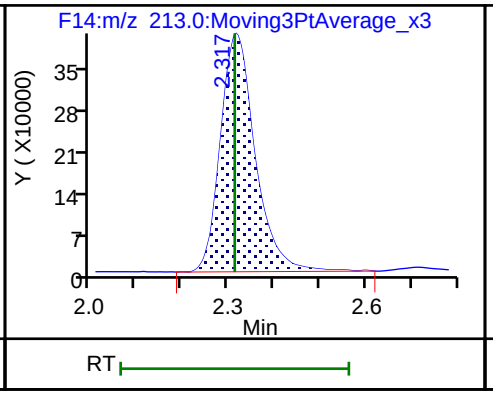
4 RDX



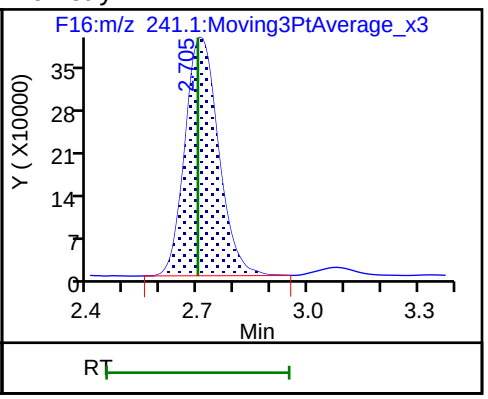
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t (M)



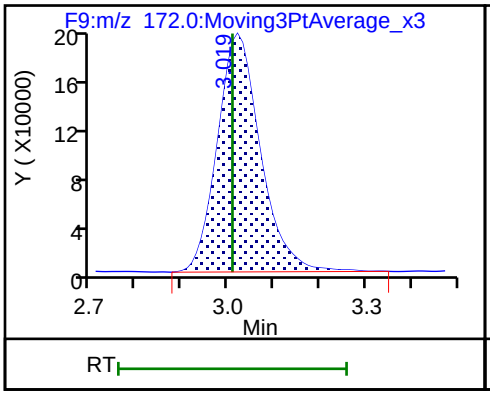
5 1,3,5-Trinitrobenzene



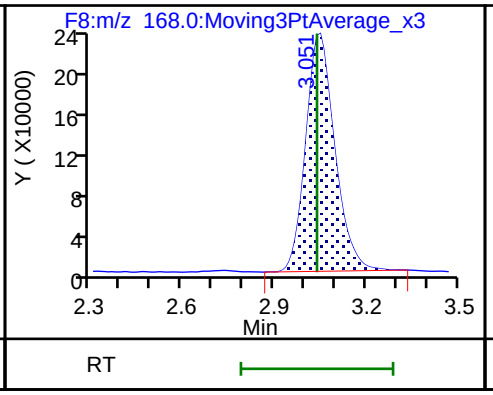
6 Tetryl



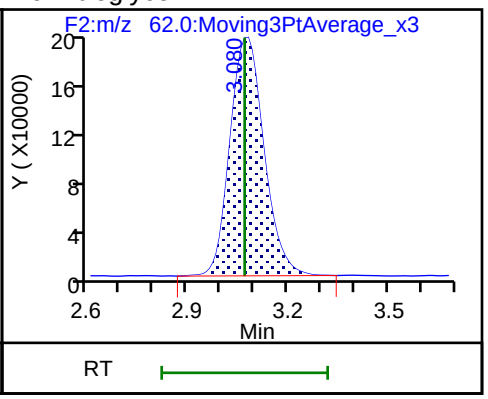
* 7 1,3-Dinitrobenzene-d4



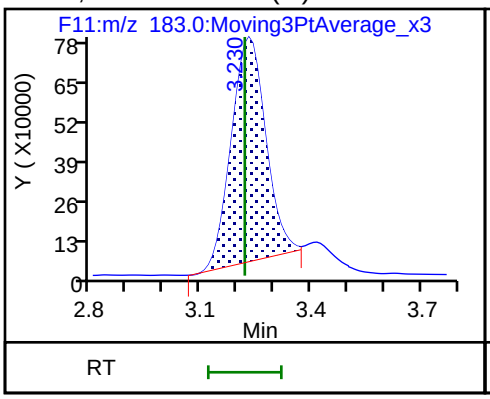
8 1,3-Dinitrobenzene



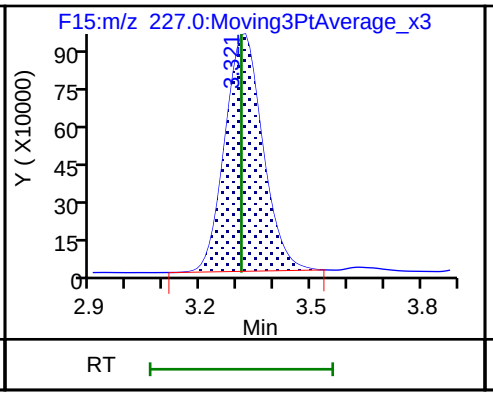
9 Nitroglycerin



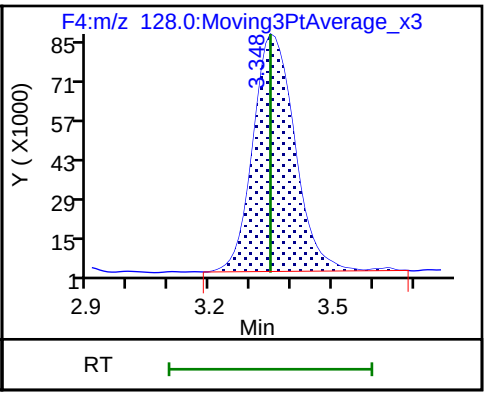
28 3,5-Dinitroaniline (M)



10 2,4,6-Trinitrotoluene



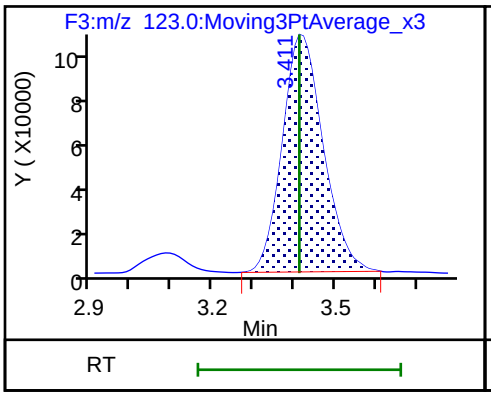
$ 11 Nitrobenzene-d5



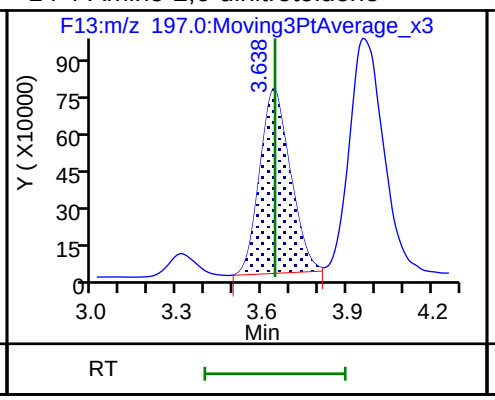
Report Date: 14-Apr-2022 10:06:48 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08016.d

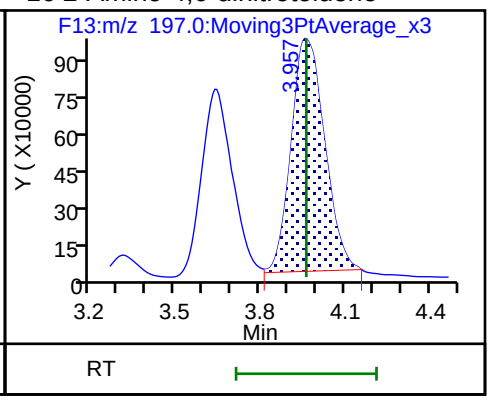
12 Nitrobenzene



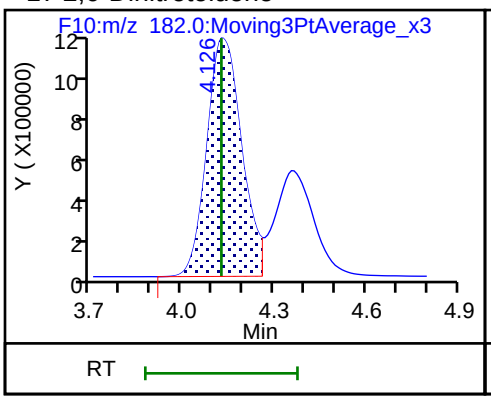
14 4-Amino-2,6-dinitrotoluene



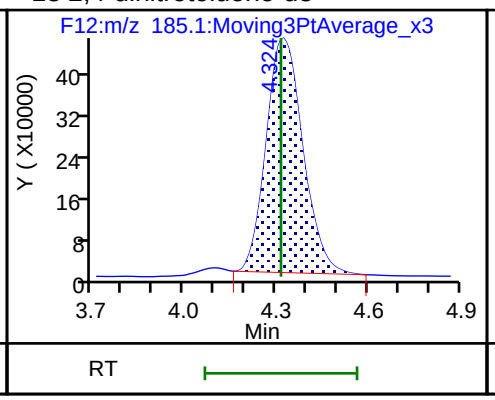
16 2-Amino-4,6-dinitrotoluene



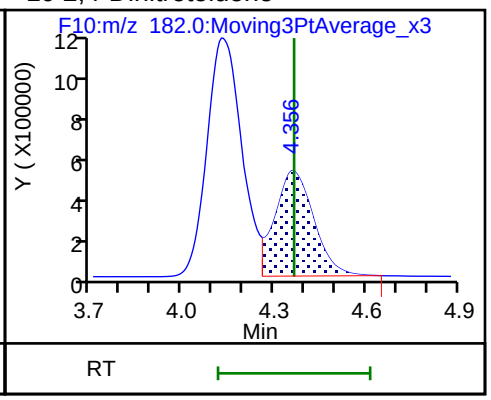
17 2,6-Dinitrotoluene



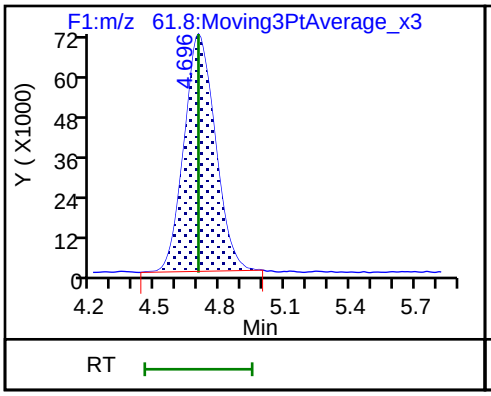
* 18 2,4-dinitrotoluene-d3



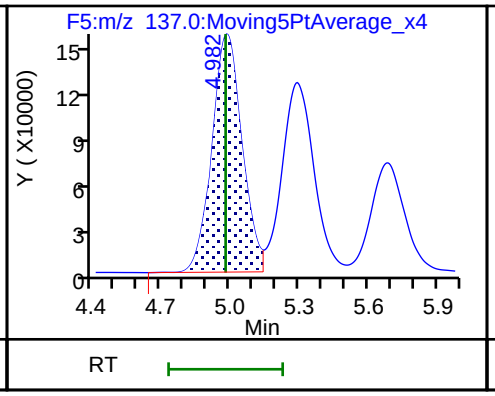
19 2,4-Dinitrotoluene



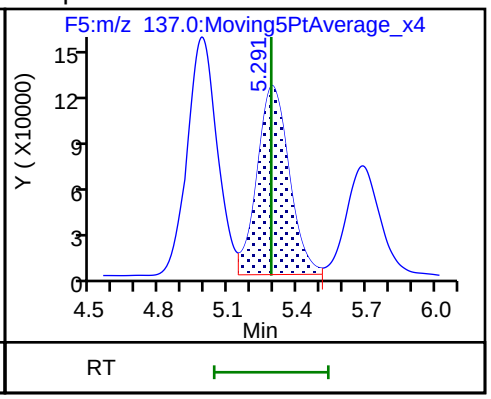
20 PETN



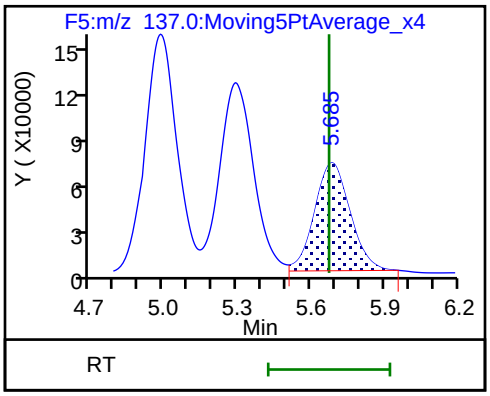
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



Report Date: 14-Apr-2022 10:06:48 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08016.d				
Lims ID:	LCSSRM 280-570111/2-B				
Client ID:					
Sample Type:	LCSSRM				
Inject. Date:	08-Apr-2022 11:13:47	ALS Bottle#:	14	Worklist Smp#:	16
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCSSRM 280-570111/2-B				
Misc. Info.:	ex722D08				
Operator ID:	acm	Instrument ID:	LC_LCMS7		
Method:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m				
Limit Group:	LC - 8321A Expl				
Last Update:	14-Apr-2022 10:06:44	Calib Date:	08-Apr-2022 10:27:37		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1619				
First Level Reviewer: meyera		Date:	11-Apr-2022 11:40:41		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	102.9	102.60

Report Date: 14-Apr-2022 10:06:48 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08016.d

Injection Date: 08-Apr-2022 11:13:47 Instrument ID: LC_LCMS7

Lims ID: LCSSRM 280-570111/2-B

Client ID:

Operator ID: acm ALS Bottle#: 14 Worklist Smp#: 16

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

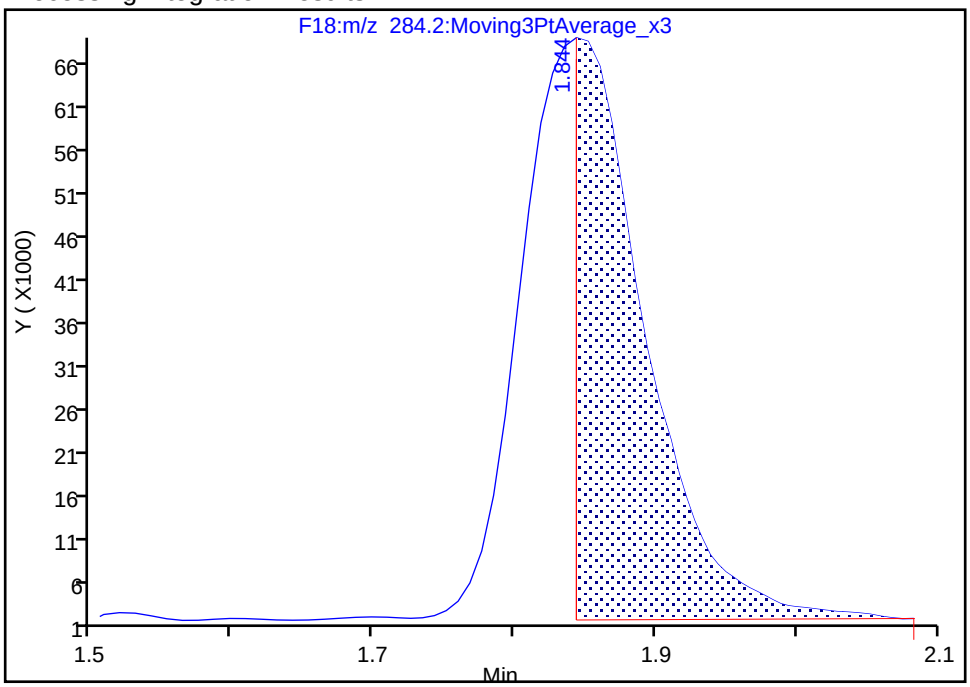
Column: Detector F18:SIR

* 3 Hexahydro-1,3,5-trinitro-1,3,5-t, CAS: STL00205

Signal: 1

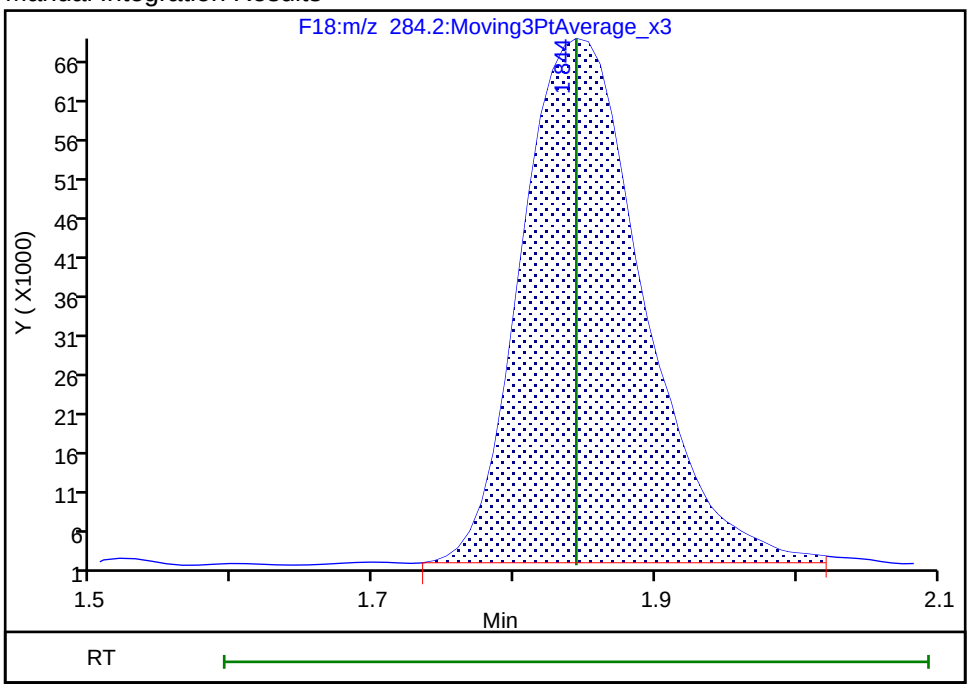
Processing Integration Results

RT: 1.84
Area: 229971
Amount: 125.0000
Amount Units: ug/l



Manual Integration Results

RT: 1.84
Area: 405815
Amount: 125.0000
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:40:24

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCSSRM 280-570115/2-B
Matrix: Solid | Lab File ID: ex722D14048.d
Analysis Method: 8321A | Date Collected:
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:17
Sample wt/vol: 10.53(g) | Date Analyzed: 04/14/2022 17:24
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571897 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.510		0.095	0.047	0.043
99-65-0	1,3-Dinitrobenzene	0.538		0.095	0.047	0.042
118-96-7	2,4,6-Trinitrotoluene	0.409	Q	0.095	0.047	0.035
121-14-2	2,4-Dinitrotoluene	0.526		0.095	0.047	0.044
606-20-2	2,6-Dinitrotoluene	0.569		0.095	0.047	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.484		0.095	0.047	0.047
19406-51-0	4-Amino-2,6-dinitrotoluene	0.465		0.095	0.047	0.030
2691-41-0	HMX	0.562		0.095	0.047	0.044
99-08-1	m-Nitrotoluene	0.595		0.095	0.047	0.041
98-95-3	Nitrobenzene	0.597		0.10	0.047	0.036
55-63-0	Nitroglycerin	0.574		0.095	0.047	0.028
88-72-2	o-Nitrotoluene	0.612		0.095	0.047	0.041
78-11-5	PETN	0.577		0.095	0.047	0.032
99-99-0	p-Nitrotoluene	0.616		0.095	0.047	0.047
121-82-4	RDX	0.469		0.11	0.047	0.041
479-45-8	Tetryl	0.433		0.095	0.047	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	102		68-140

Report Date: 15-Apr-2022 08:03:23 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14048.d
Lims ID: LCSSRM 280-570115/2-B
Client ID:
Sample Type: LCSSRM
Inject. Date: 14-Apr-2022 17:24:36 ALS Bottle#: 43 Worklist Smp#: 48
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCSSRM 280-570115/2-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:20 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:36:23
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	305108	147.9	122	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		120673	125.0	77.2	
4 RDX								
281.2	1.833	1.833	0.0	1.003	383614	123.6	145	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.827	1.844	-0.017		651460	125.0	282	
5 1,3,5-Trinitrobenzene								
213.0	2.292	2.299	-0.007	0.769	1958197	134.3	217	
6 Tetryl								
241.1	2.673	2.679	-0.006	0.897	2534274	114.1	112	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.981	2.991	-0.010		1076378	129.4	255	
8 1,3-Dinitrobenzene								
168.0	3.022	3.022	0.0	1.014	1256218	141.7	381	
9 Nitroglycerin								
62.0	3.040	3.040	0.0	1.020	1207021	151.1	619	
28 3,5-Dinitroaniline								
183.0	3.200	3.200	0.0	1.074	4551816	120.3	43.4	
10 2,4,6-Trinitrotoluene								
227.0	3.272	3.281	-0.009	0.765	6701283	107.6	279	
$ 11 Nitrobenzene-d5								
128.0	3.305	3.324	-0.019	0.773	493053	102.3	29.0	
12 Nitrobenzene								
123.0	3.382	3.382	0.0	0.791	626706	157.2	51.1	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.601	3.611	-0.010	0.842	5157288	122.3	56.6	

Report Date: 15-Apr-2022 08:03:23 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14048.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
16 2-Amino-4,6-dinitrotoluene								
197.0	3.931	3.924	0.007	0.919	7434472	127.3	79.0	
17 2,6-Dinitrotoluene								
182.0	4.087	4.093	-0.006	0.956	7849838	149.8	924	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3256301	125.0	129	
19 2,4-Dinitrotoluene								
182.0	4.308	4.316	-0.008	1.008	3822814	138.5	420	
20 PETN								
61.8	4.618	4.638	-0.020	1.080	787340	151.9	125	
22 o-Nitrotoluene								
137.0	4.922	4.932	-0.010	1.151	1234489	161.1	379	
23 p-Nitrotoluene								
137.0	5.231	5.230	0.001	1.223	1096758	162.1	345	
24 m-Nitrotoluene								
137.0	5.619	5.614	0.005	1.314	620000	156.5	173	

QC Flag Legend

Processing Flags

Reagents:

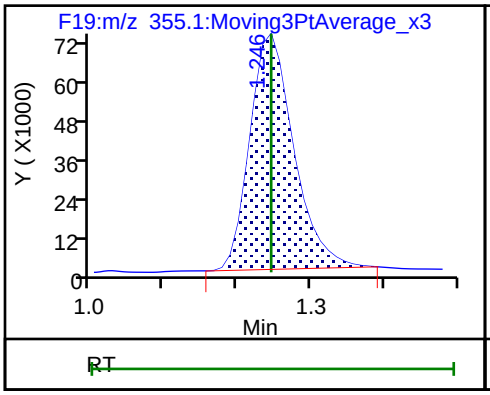
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:23 Chrom Revision: 2.3 12-Apr-2022 20:29:44

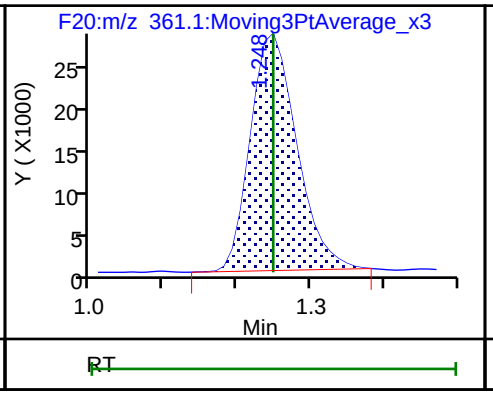
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14048.d
Injection Date: 14-Apr-2022 17:24:36 Instrument ID: LC_LCMS7
Lims ID: LCSSRM 280-570115/2-B
Client ID:
Operator ID: acm ALS Bottle#: 43 Worklist Smp#: 48
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

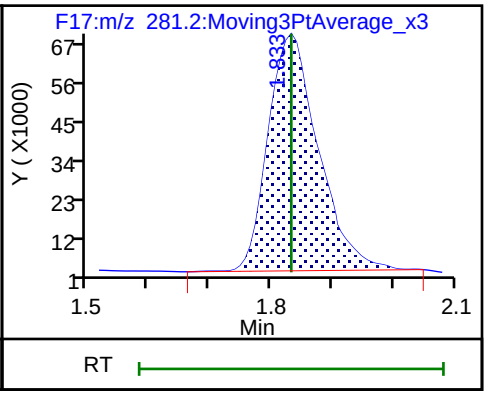
2 HMX



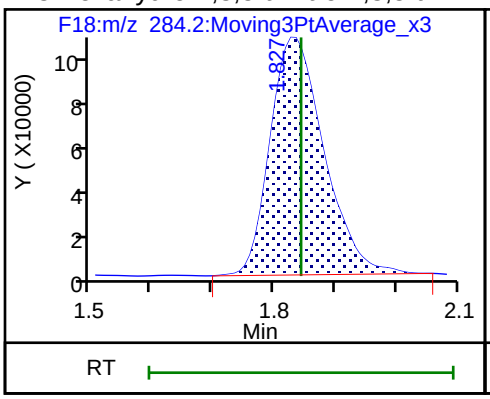
* 1 HMX-13C4



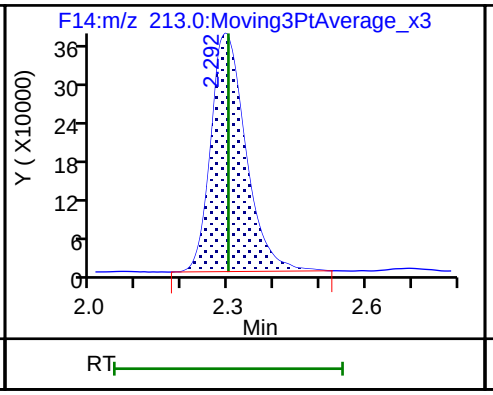
4 RDX



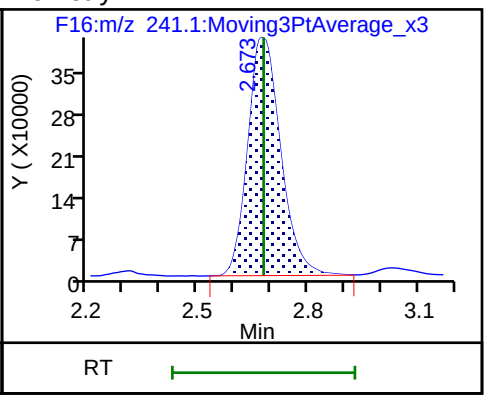
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



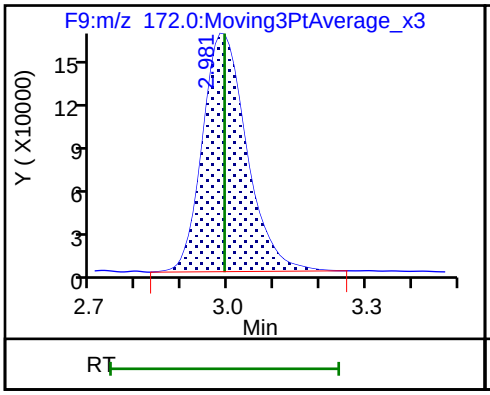
5 1,3,5-Trinitrobenzene



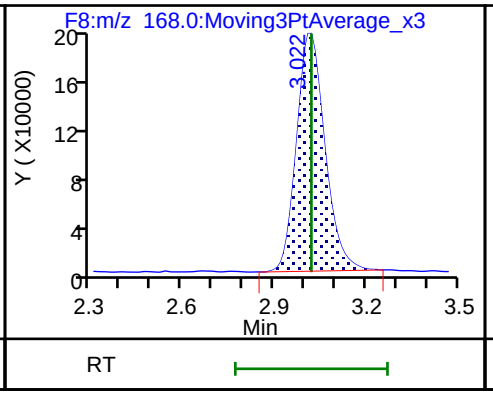
6 Tetryl



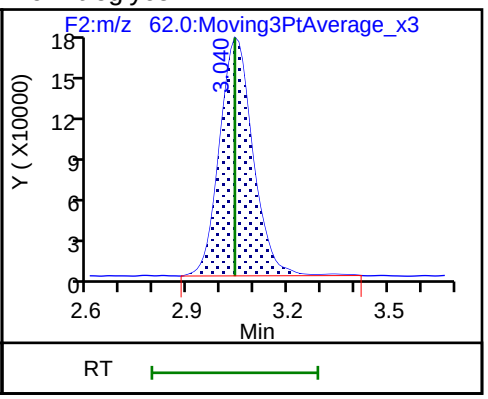
* 7 1,3-Dinitrobenzene-d4



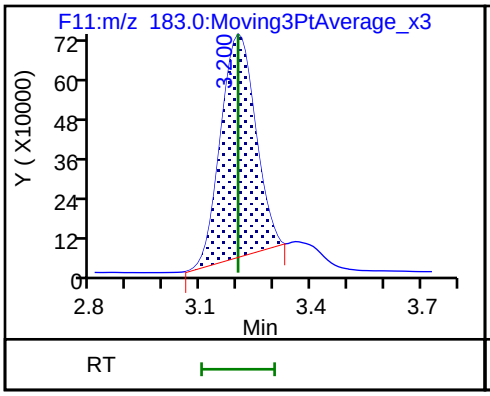
8 1,3-Dinitrobenzene



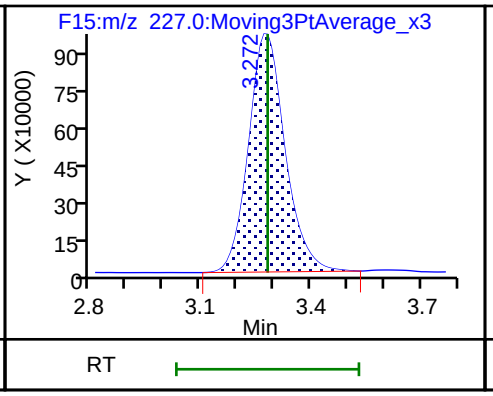
9 Nitroglycerin



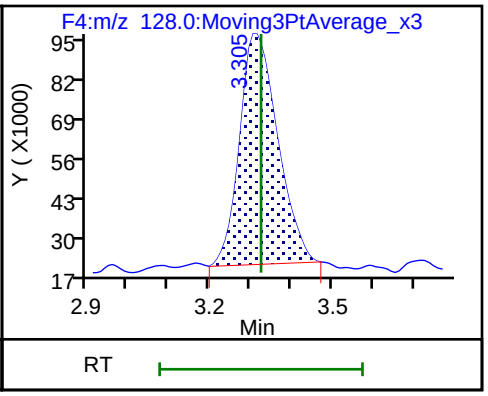
28 3,5-Dinitroaniline



10 2,4,6-Trinitrotoluene

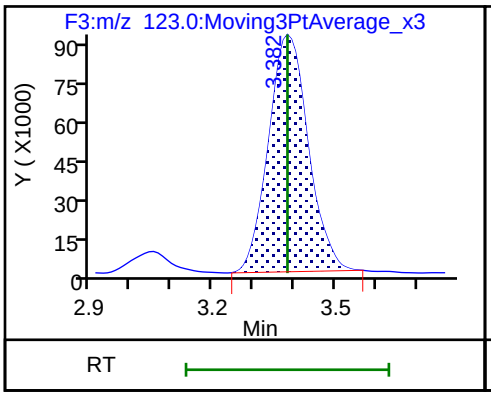


$ 11 Nitrobenzene-d5

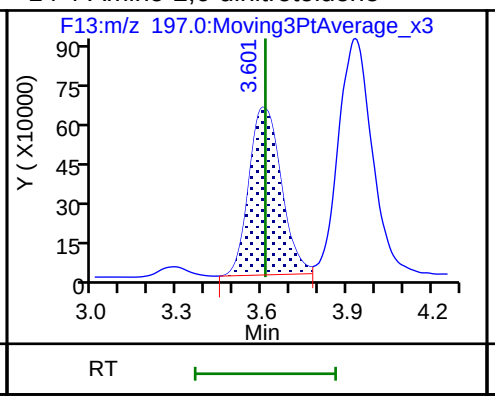


Report Date: 15-Apr-2022 08:03:23 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14048.d

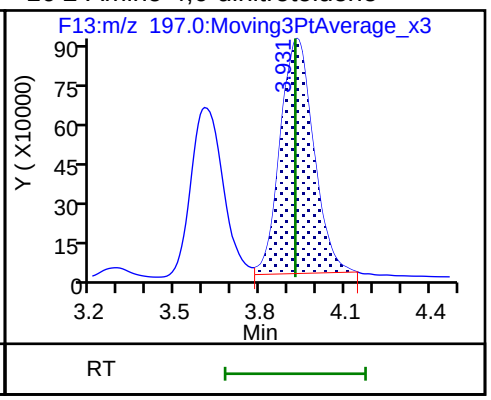
12 Nitrobenzene



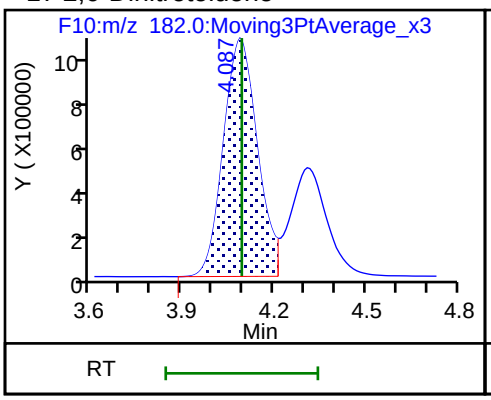
14 4-Amino-2,6-dinitrotoluene



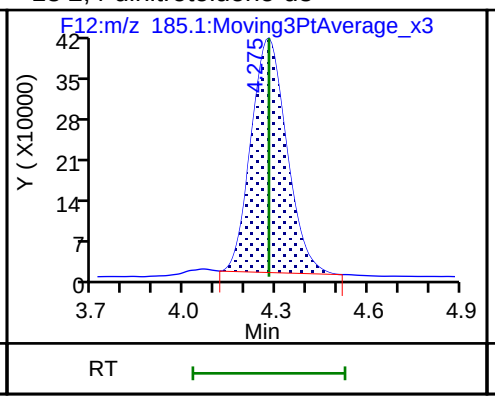
16 2-Amino-4,6-dinitrotoluene



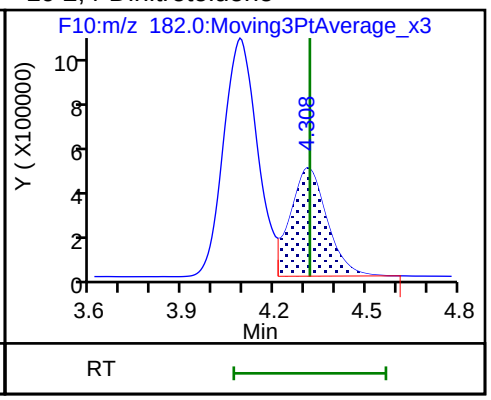
17 2,6-Dinitrotoluene



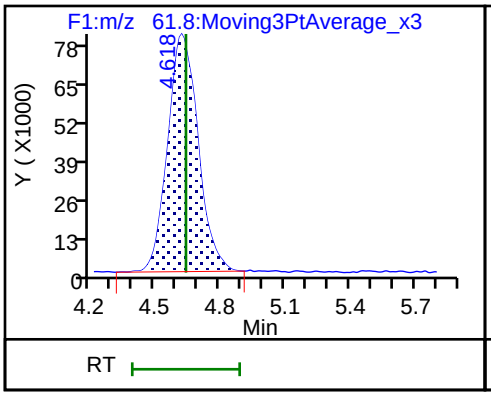
* 18 2,4-dinitrotoluene-d3



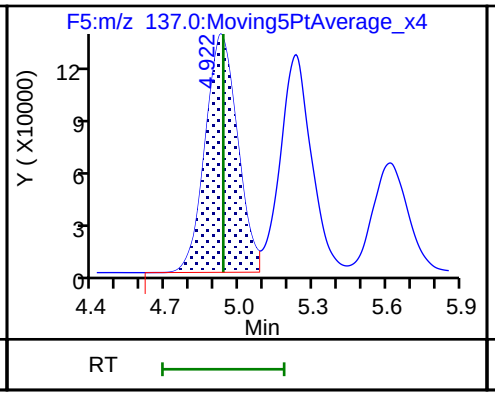
19 2,4-Dinitrotoluene



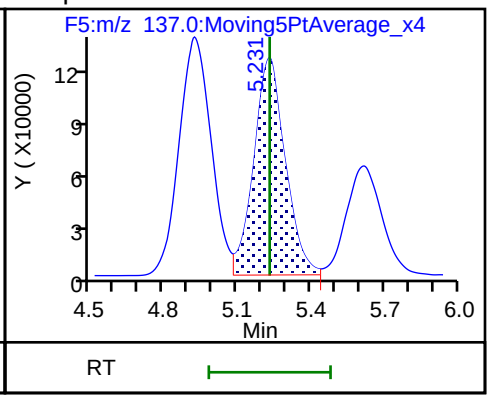
20 PETN



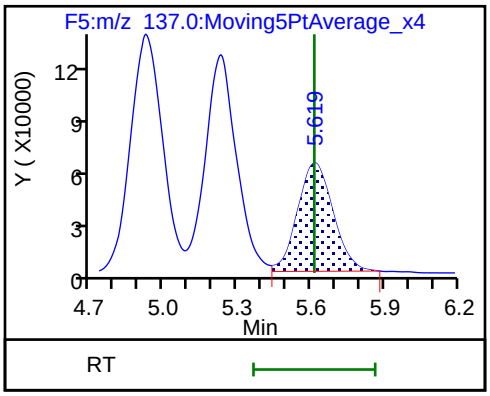
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



Report Date: 15-Apr-2022 08:03:23 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14048.d
Lims ID: LCSSRM 280-570115/2-B
Client ID:
Sample Type: LCSSRM
Inject. Date: 14-Apr-2022 17:24:36 ALS Bottle#: 43 Worklist Smp#: 48
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: LCSSRM 280-570115/2-B
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:20 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:36:23

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	102.3	101.98

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1

SDG No.:

Client Sample ID: 29SB168 (6-7) MS | Lab Sample ID: 280-160190-19 MS

Matrix: Solid | Lab File ID: ex722D08030.d

Analysis Method: 8321A | Date Collected: 03/24/2022 11:58

Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20

Sample wt/vol: 10.58(g) | Date Analyzed: 04/08/2022 12:46

Con. Extract Vol.: 40(mL) | Dilution Factor: 1

Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:

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

Analysis Batch No.: 571224 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.471		0.095	0.047	0.042
99-65-0	1,3-Dinitrobenzene	0.370		0.095	0.047	0.042
606-20-2	2,6-Dinitrotoluene	0.814		0.095	0.047	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.559	M	0.095	0.047	0.047
19406-51-0	4-Amino-2,6-dinitrotoluene	0.487	M	0.095	0.047	0.029
2691-41-0	HMX	0.332		0.095	0.047	0.044
99-08-1	m-Nitrotoluene	0.417	M	0.095	0.047	0.041
98-95-3	Nitrobenzene	0.370		0.10	0.047	0.036
55-63-0	Nitroglycerin	0.393		0.095	0.047	0.027
88-72-2	o-Nitrotoluene	0.562	M	0.095	0.047	0.040
78-11-5	PETN	0.395		0.095	0.047	0.032
99-99-0	p-Nitrotoluene	0.498	M	0.095	0.047	0.047
121-82-4	RDX	0.391		0.11	0.047	0.041
479-45-8	Tetryl	0.535	J1	0.095	0.047	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	99		68-140

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08030.d
Lims ID: 280-160190-A-19-G MS
Client ID: 29SB168 (6-7)
Sample Type: MS
Inject. Date: 08-Apr-2022 12:46:11 ALS Bottle#: 27 Worklist Smp#: 30
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-19-G MS
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:52 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:50:09
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	149687	87.8	79.5	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		95311	125.0	45.4	
4 RDX								
281.2	1.849	1.833	0.008	1.003	190923	103.4	52.0	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		317173	125.0	32.3	
5 1,3,5-Trinitrobenzene								
213.0	2.317	2.322	0.004	0.767	1944325	124.4	85.2	
6 Tetryl								
241.1	2.705	2.708	0.006	0.896	3284809	141.5	204	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.008	0.011		1298512	129.4	351	
8 1,3-Dinitrobenzene								
168.0	3.051	3.051	0.011	1.011	1065764	98.0	84.8	
9 Nitroglycerin								
62.0	3.080	3.081	0.011	1.020	980050	103.9	682	
28 3,5-Dinitroaniline								
183.0	3.241	3.231	0.022	1.073	281345	6.16	3.8	
10 2,4,6-Trinitrotoluene								E
227.0	3.310	3.316	0.0	0.765	30995238	463.3	293	E
$ 11 Nitrobenzene-d5								
128.0	3.348	3.354	0.0	0.774	609110	99.2	105	
12 Nitrobenzene								
123.0	3.411	3.418	0.0	0.789	512300	97.8	28.5	
14 4-Amino-2,6-dinitrotoluene								M
197.0	3.645	3.652	0.0	0.843	6559911	128.9	12.5	M

Report Date: 14-Apr-2022 10:07:00 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08030.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
16 2-Amino-4,6-dinitrotoluene								M
197.0	3.976	3.971	0.013	0.920	9620674	147.8	16.4	M
17 2,6-Dinitrotoluene								
182.0	4.132	4.138	0.006	0.956	14717366	215.4	37.7	
* 18 2,4-dinitrotoluene-d3								
185.1	4.324	4.315	0.009		4137957	125.0	102	
19 2,4-Dinitrotoluene								E
182.0	4.365	4.373	0.0	1.009	52025427	1490.0	110	E
20 PETN								
61.8	4.696	4.706	0.0	1.086	597712	104.5	114	
22 o-Nitrotoluene								M
137.0	4.982	4.987	0.005	1.152	1574191	148.8	423	M
23 p-Nitrotoluene								M
137.0	5.291	5.297	0.005	1.224	1213106	131.8	299	M
24 m-Nitrotoluene								M
137.0	5.685	5.686	0.010	1.315	604333	110.4	138	M

QC Flag Legend

Processing Flags
E - Exceeded Maximum Amount
Review Flags
M - Manually Integrated

Reagents:

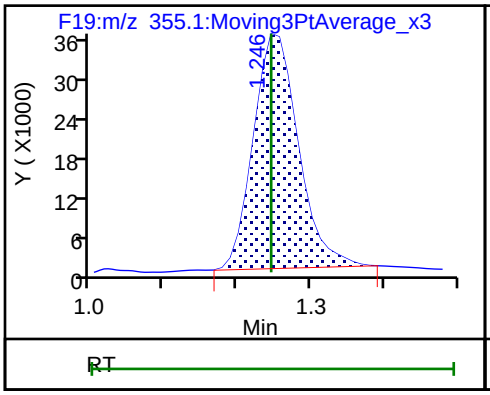
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 14-Apr-2022 10:07:00 Chrom Revision: 2.3 12-Apr-2022 20:29:44

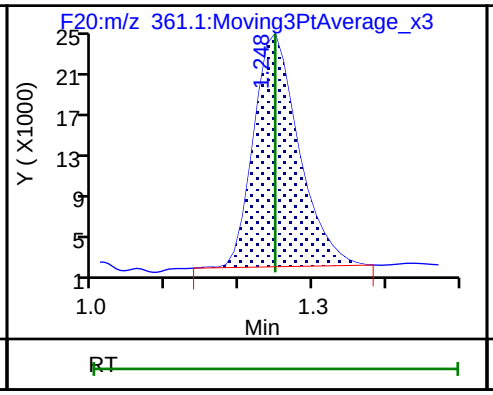
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08030.d
Injection Date: 08-Apr-2022 12:46:11 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-19-G MS
Client ID: 29SB168 (6-7)
Operator ID: acm ALS Bottle#: 27 Worklist Smp#: 30
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

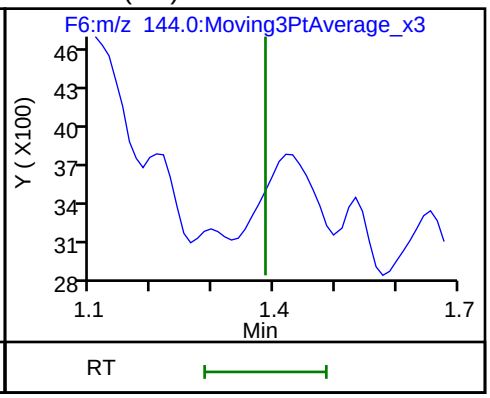
2 HMX



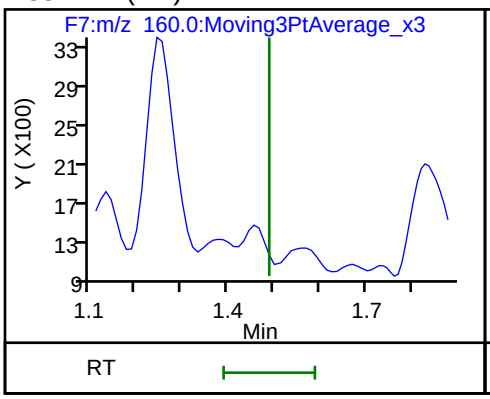
* 1 HMX-13C4



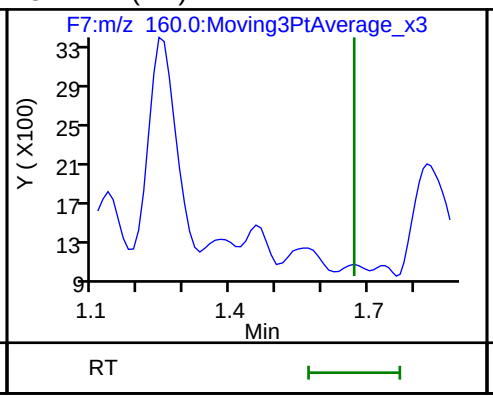
36 TNX (ND)



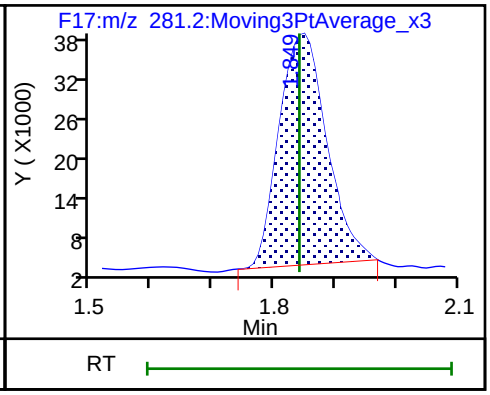
33 DNX (ND)



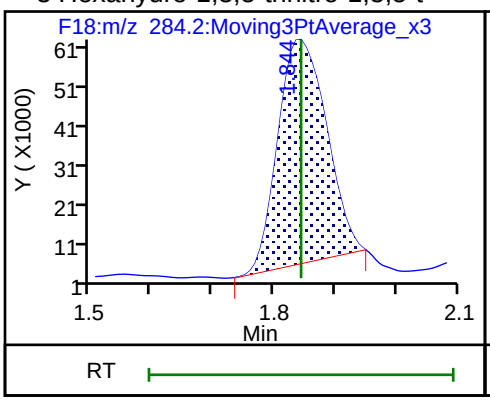
34 MNX (ND)



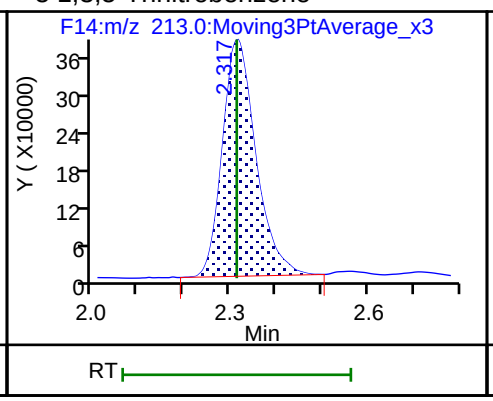
4 RDX



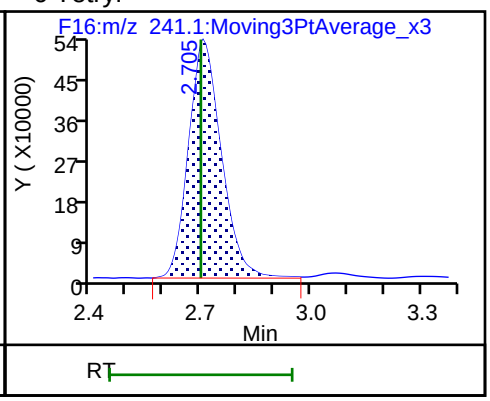
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



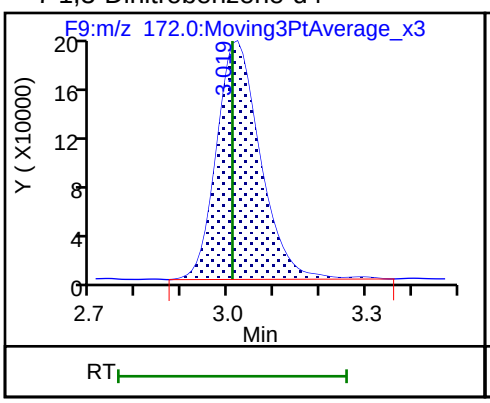
5 1,3,5-Trinitrobenzene



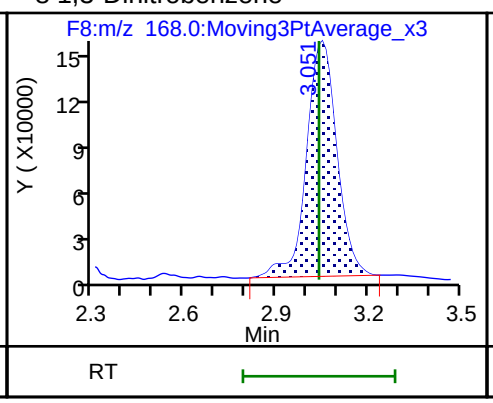
6 Tetryl



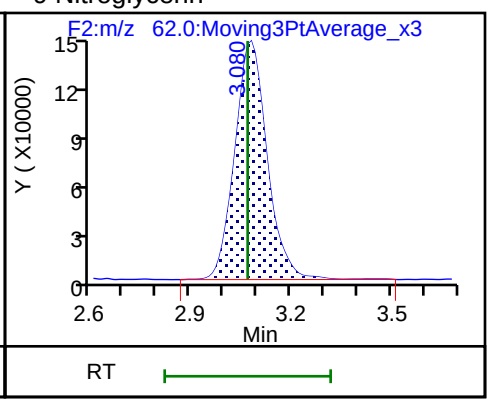
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



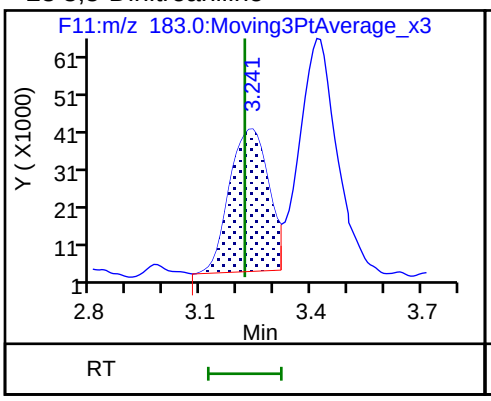
9 Nitroglycerin



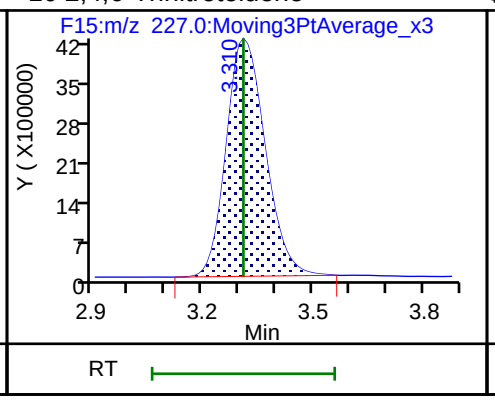
Report Date: 14-Apr-2022 10:07:00 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08030.d

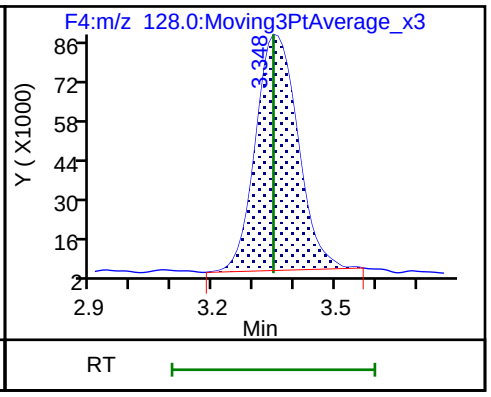
28 3,5-Dinitroaniline



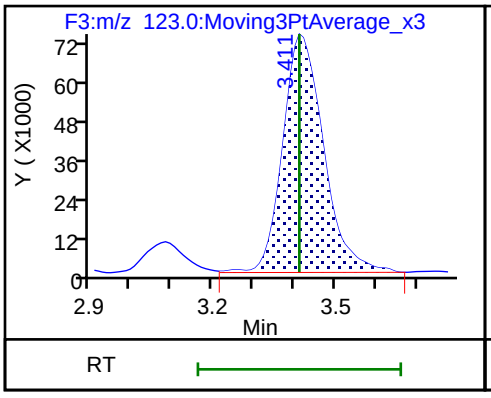
10 2,4,6-Trinitrotoluene



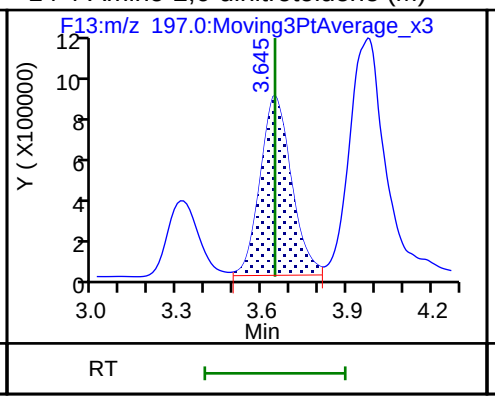
$ 11 Nitrobenzene-d5



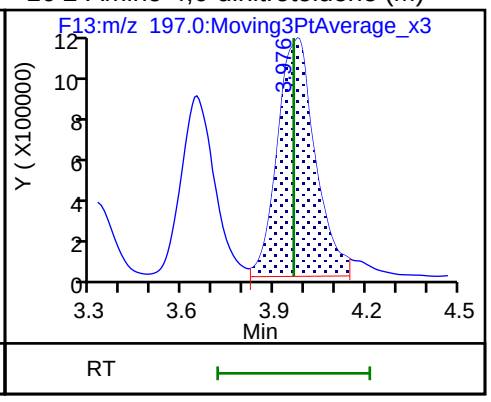
12 Nitrobenzene



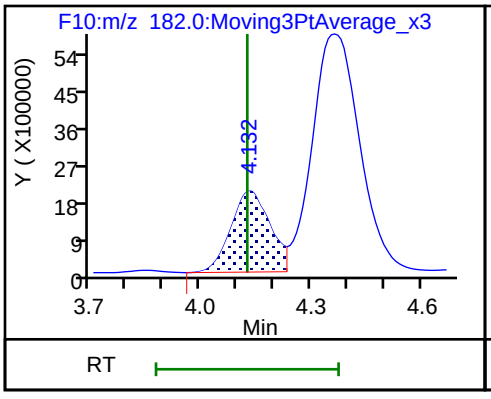
14 4-Amino-2,6-dinitrotoluene (M)



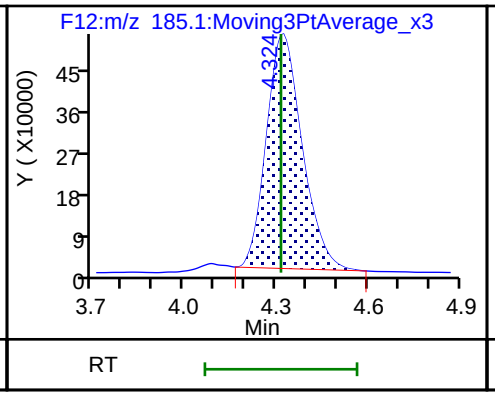
16 2-Amino-4,6-dinitrotoluene (M)



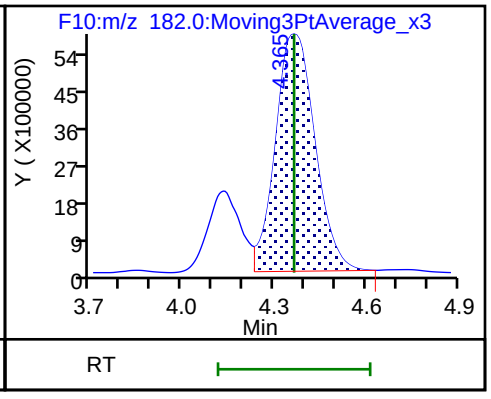
17 2,6-Dinitrotoluene



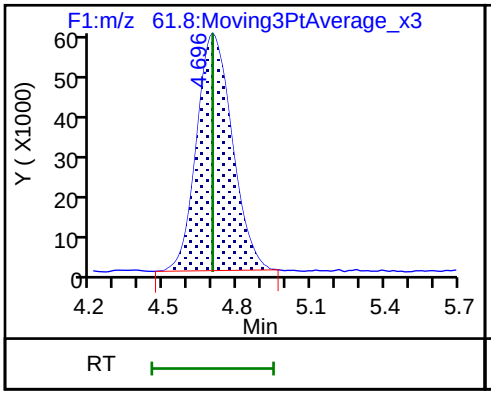
* 18 2,4-dinitrotoluene-d3



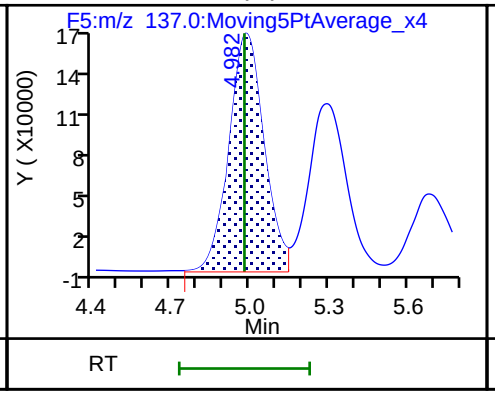
19 2,4-Dinitrotoluene



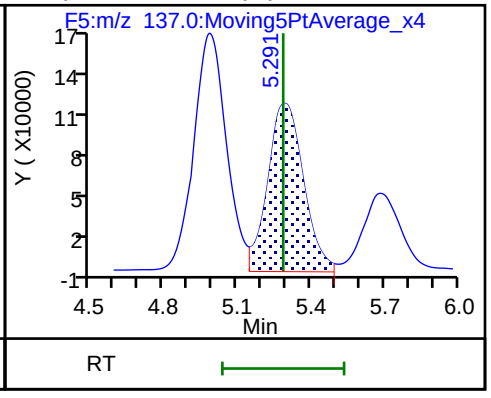
20 PETN



22 o-Nitrotoluene (M)

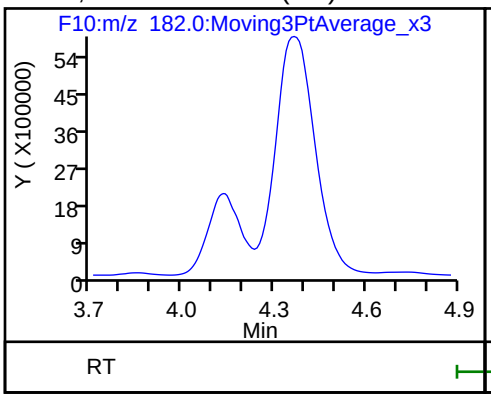


23 p-Nitrotoluene (M)

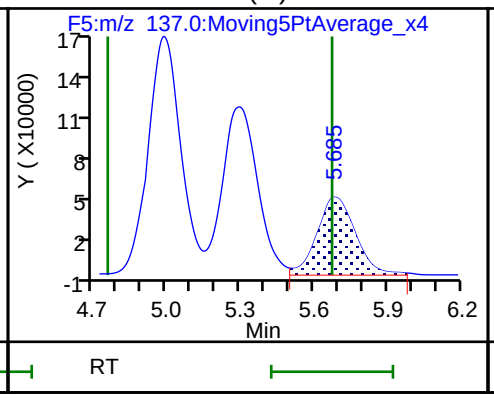


Report Date: 14-Apr-2022 10:07:00 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08030.d

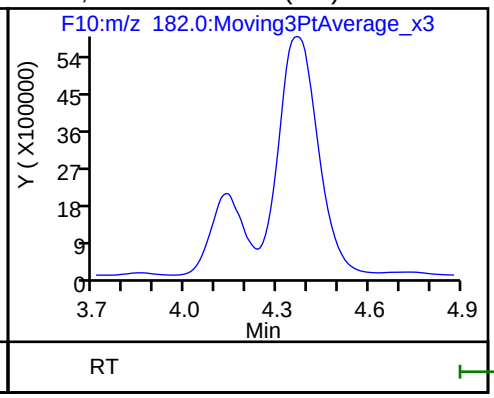
13 3,4-Dinitrotoluene (ND)



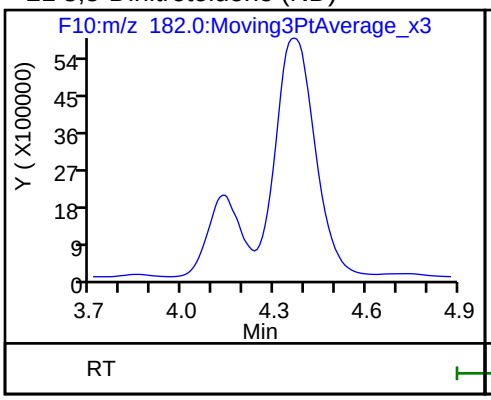
24 m-Nitrotoluene (M)



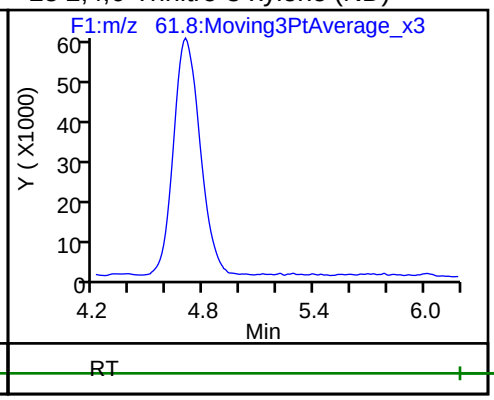
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 14-Apr-2022 10:07:00 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08030.d
Lims ID: 280-160190-A-19-G MS
Client ID: 29SB168 (6-7)
Sample Type: MS
Inject. Date: 08-Apr-2022 12:46:11 ALS Bottle#: 27 Worklist Smp#: 30
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-19-G MS
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:52 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:50:09

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	99.2	98.85

Report Date: 14-Apr-2022 10:07:00 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

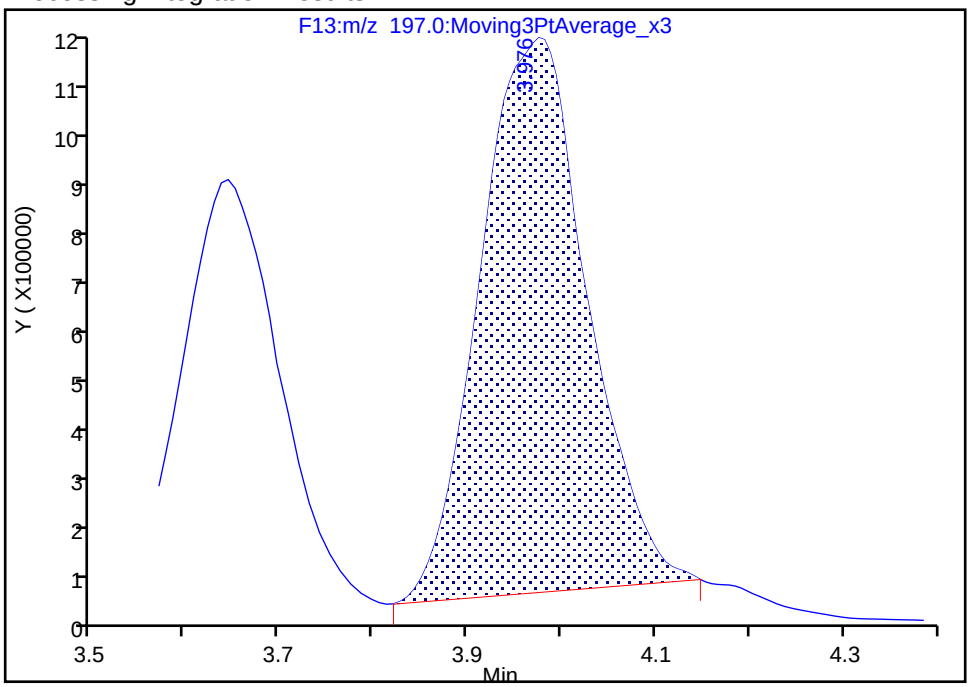
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08030.d				
Injection Date:	08-Apr-2022 12:46:11	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-19-G MS				
Client ID:	29SB168 (6-7)				
Operator ID:	acm	ALS Bottle#:	27	Worklist Smp#:	30
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

16 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

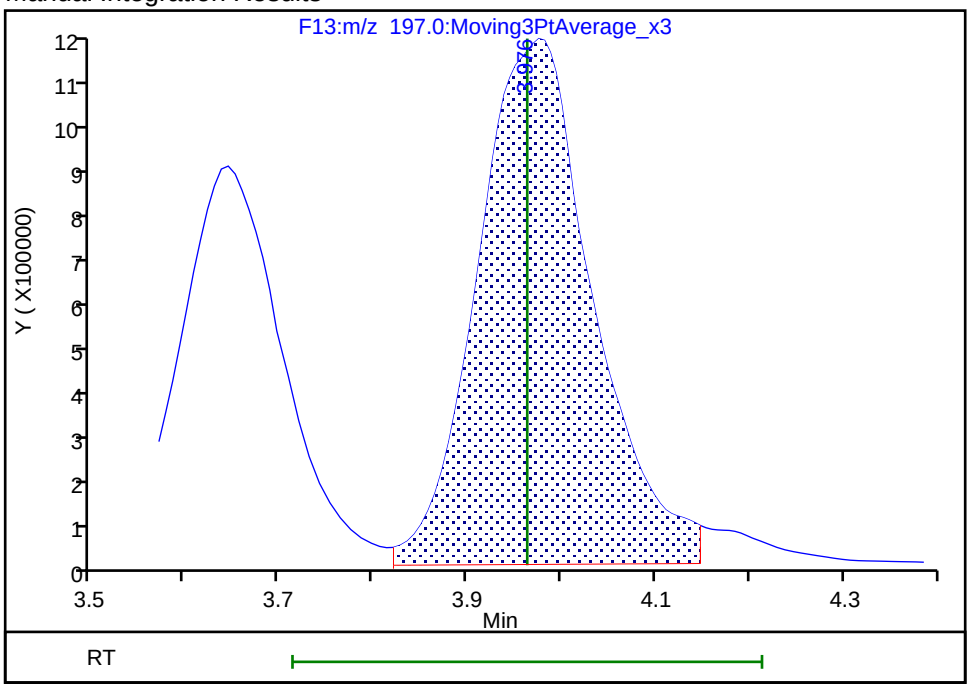
Processing Integration Results

RT: 3.98
Area: 8456487
Amount: 129.8257
Amount Units: ug/l



Manual Integration Results

RT: 3.98
Area: 9620674
Amount: 147.7658
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:50:01

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:07:00 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08030.d

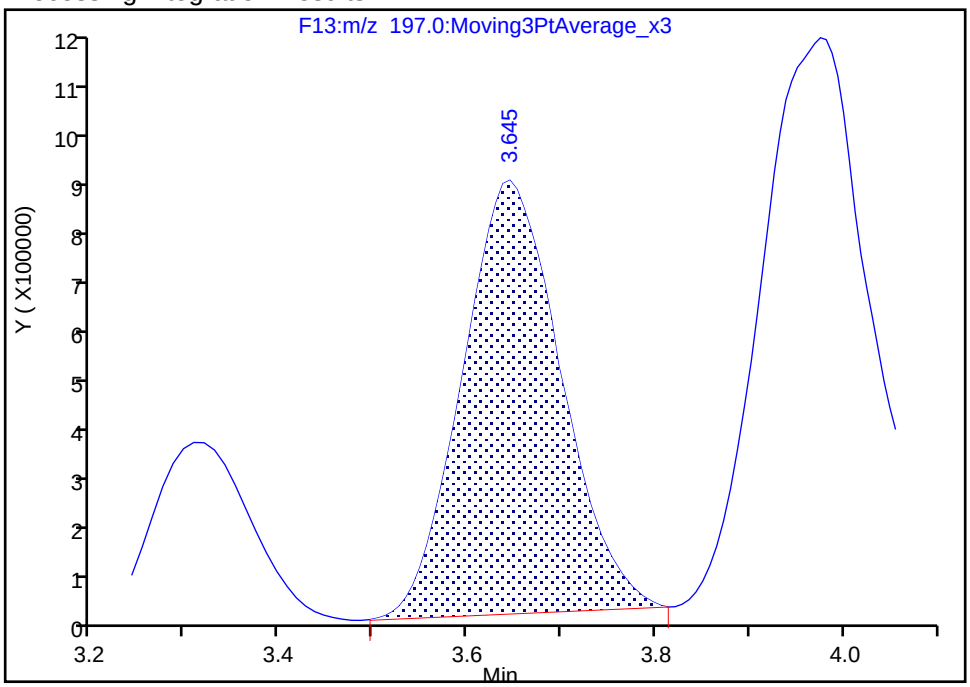
Injection Date:	08-Apr-2022 12:46:11	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-19-G MS				
Client ID:	29SB168 (6-7)				
Operator ID:	acm	ALS Bottle#:	27	Worklist Smp#:	30
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

14 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

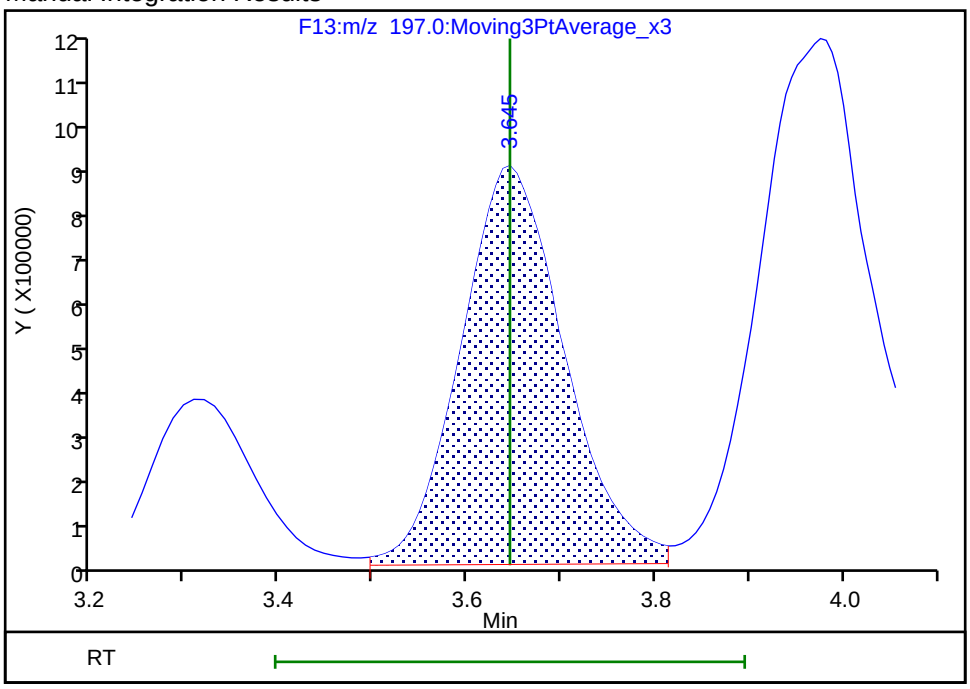
Processing Integration Results

RT: 3.65
Area: 6050064
Amount: 118.8257
Amount Units: ug/l



Manual Integration Results

RT: 3.65
Area: 6559911
Amount: 128.8900
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:50:01

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:07:00 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

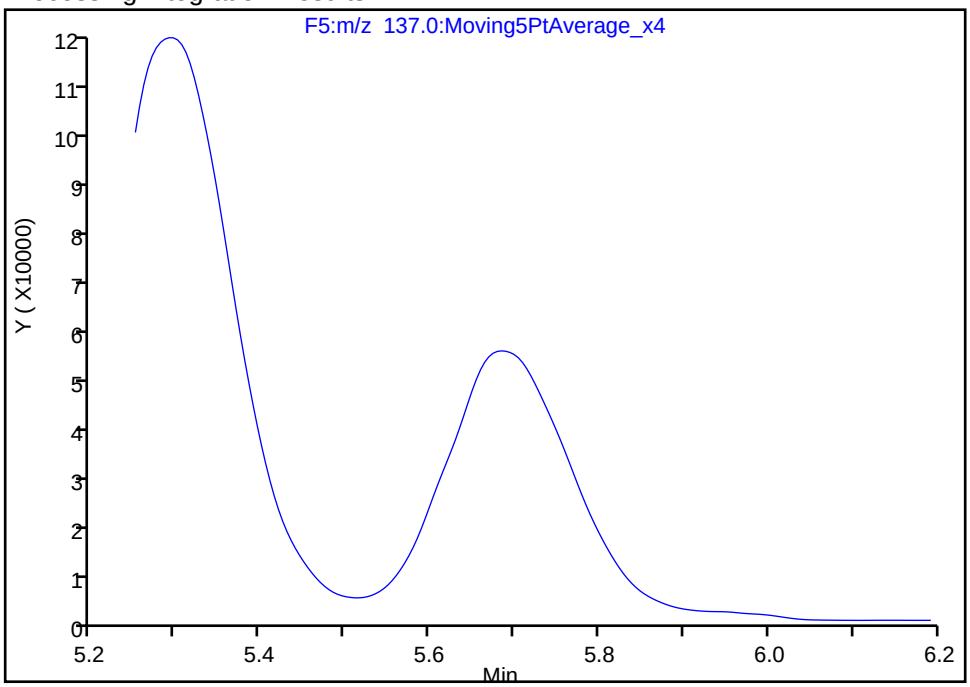
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08030.d
Injection Date: 08-Apr-2022 12:46:11 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-19-G MS
Client ID: 29SB168 (6-7)
Operator ID: acm ALS Bottle#: 27 Worklist Smp#: 30
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F5:SIR

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

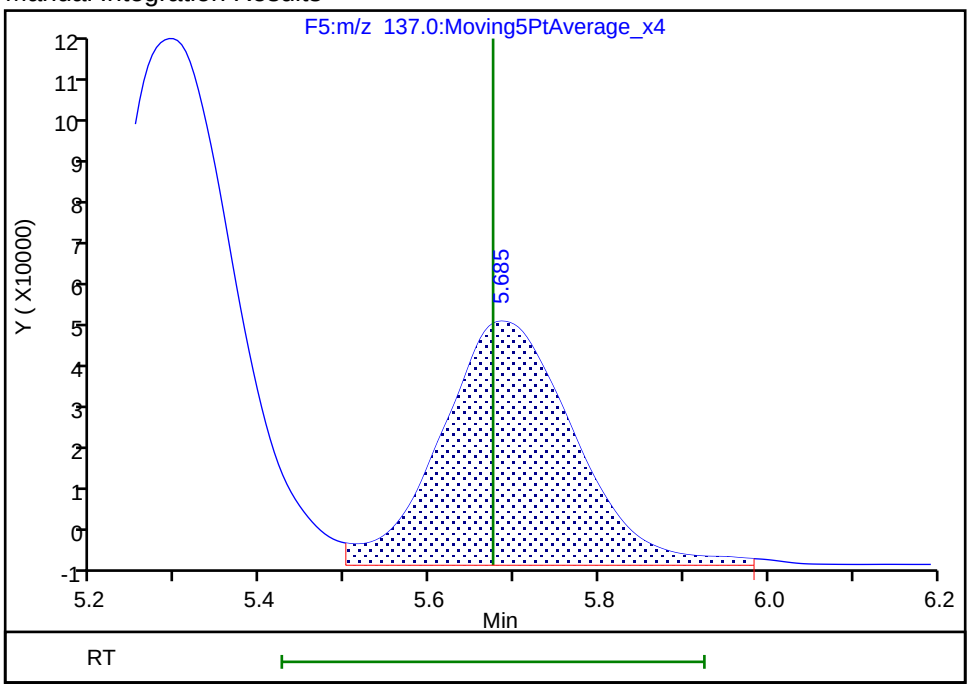
Not Detected
Expected RT: 5.67

Processing Integration Results



Manual Integration Results

RT: 5.68
Area: 604333
Amount: 110.3518
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:49:44
Audit Action: Assigned New Baseline Audit Reason: Baseline

Report Date: 14-Apr-2022 10:07:00 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08030.d

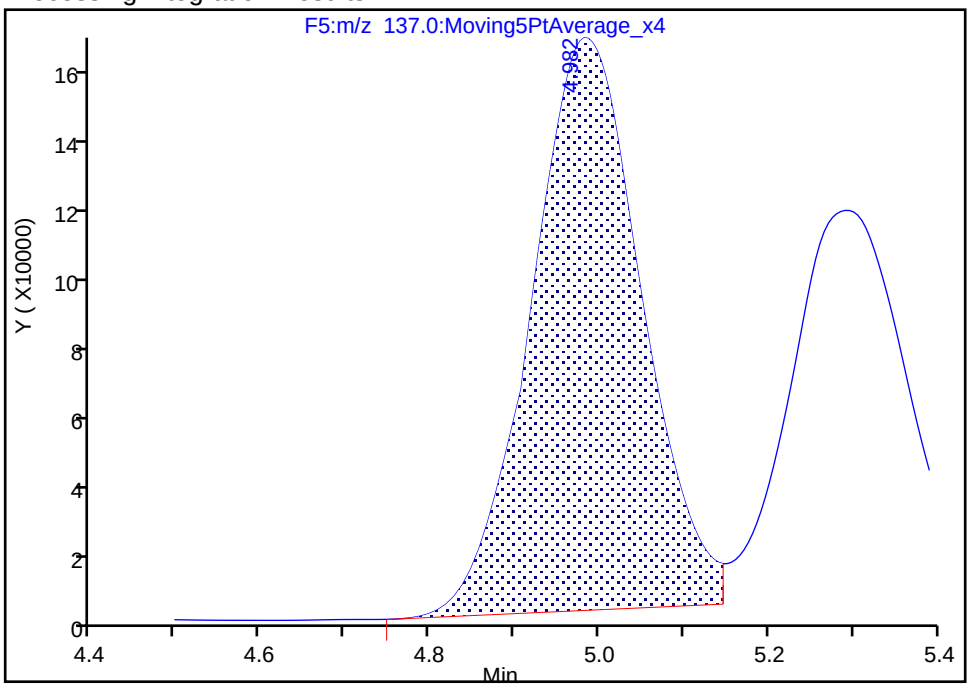
Injection Date:	08-Apr-2022 12:46:11	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-19-G MS				
Client ID:	29SB168 (6-7)				
Operator ID:	acm	ALS Bottle#:	27	Worklist Smp#:	30
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F5:SIR		

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

Signal: 1

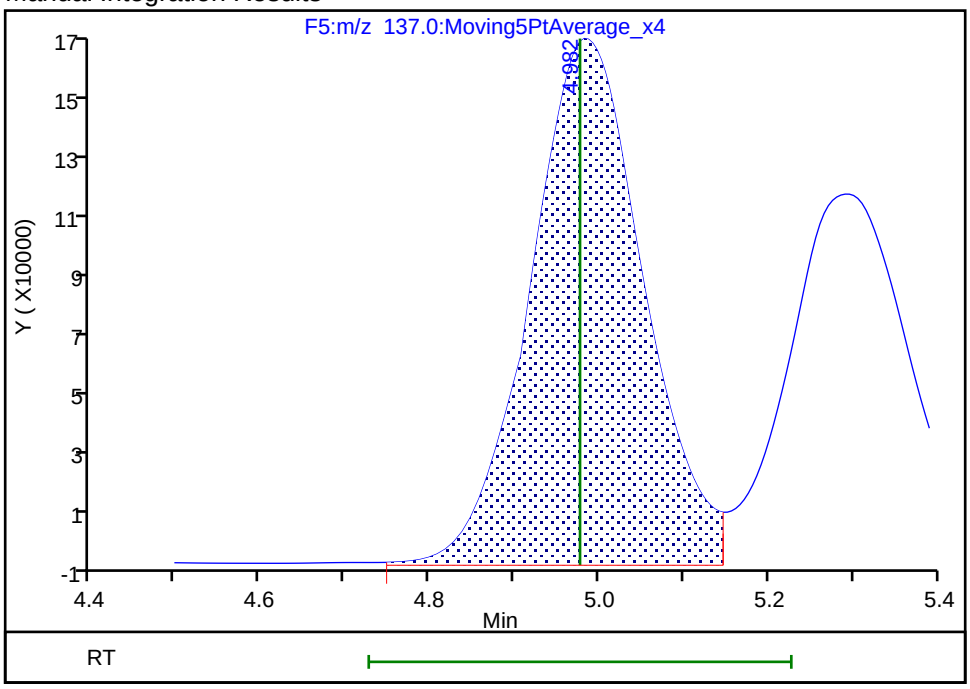
Processing Integration Results

RT: 4.98
Area: 1500228
Amount: 141.7593
Amount Units: ug/l



Manual Integration Results

RT: 4.98
Area: 1574191
Amount: 148.7610
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:49:44

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:07:00 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08030.d

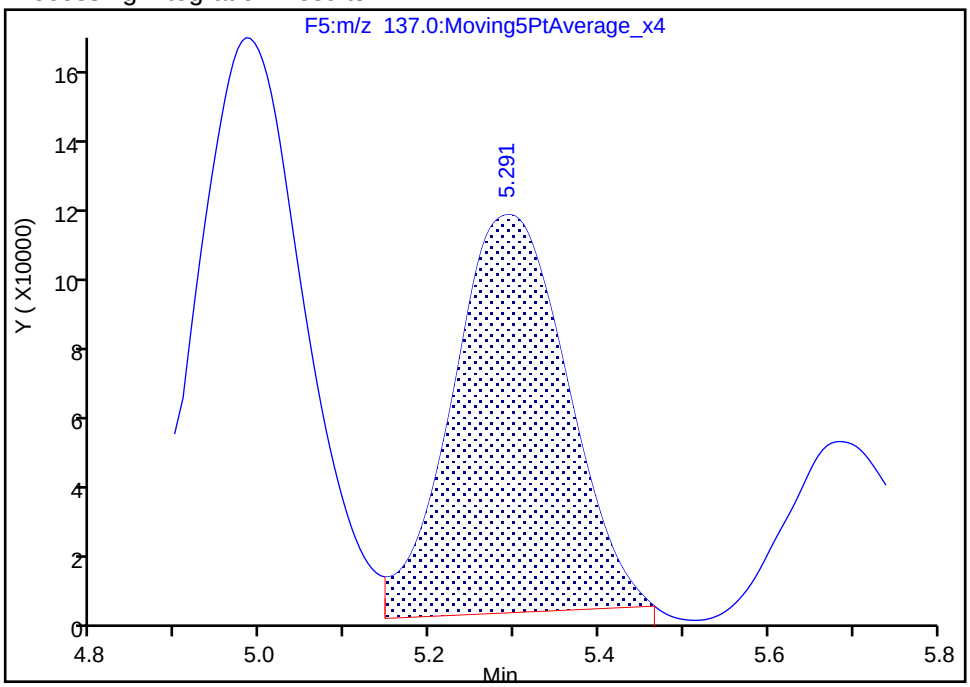
Injection Date:	08-Apr-2022 12:46:11	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-19-G MS				
Client ID:	29SB168 (6-7)				
Operator ID:	acm	ALS Bottle#:	27	Worklist Smp#:	30
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F5:SIR		

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

Signal: 1

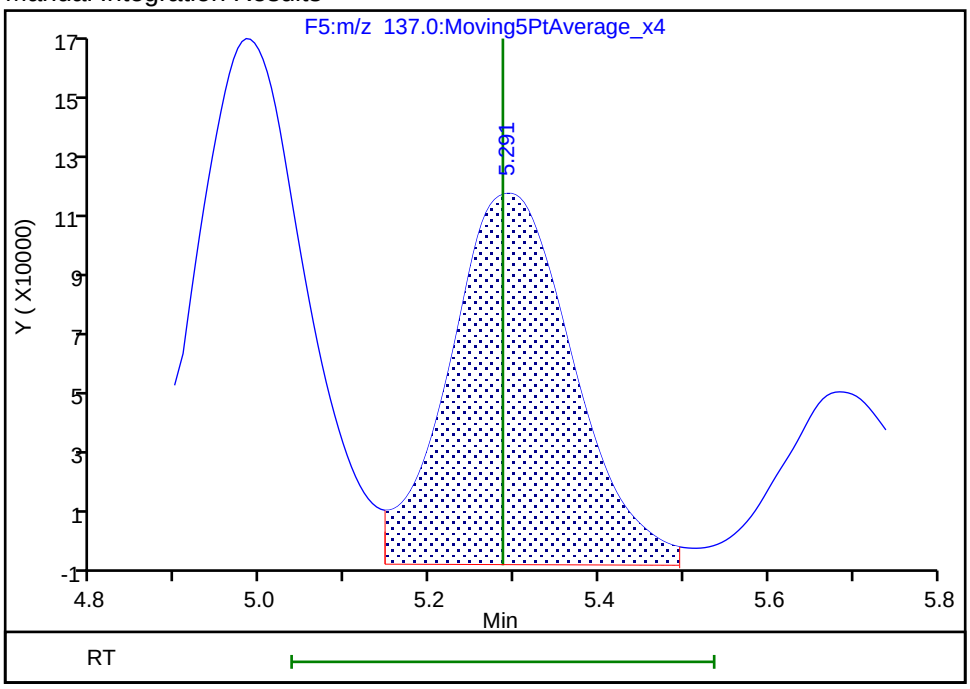
Processing Integration Results

RT: 5.29
Area: 1055767
Amount: 114.6754
Amount Units: ug/l



Manual Integration Results

RT: 5.29
Area: 1213106
Amount: 131.8483
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:49:54

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1

SDG No.:

Client Sample ID: 29SB168 (6-7) MS DL | Lab Sample ID: 280-160190-19 MS DL

Matrix: Solid | Lab File ID: ex422D12067.d

Analysis Method: 8321A | Date Collected: 03/24/2022 11:58

Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20

Sample wt/vol: 10.58(g) | Date Analyzed: 04/12/2022 21:49

Con. Extract Vol.: 40(mL) | Dilution Factor: 10

Injection Volume: 40(uL) | GC Column: IonPac ID: 2(mm)

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

Analysis Batch No.: 571614 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
118-96-7	2,4,6-Trinitrotoluene	1.57	D J1	0.95	0.47	0.35
121-14-2	2,4-Dinitrotoluene	5.10	D 4	0.95	0.47	0.44

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	92	D	68-140

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12067.d
Lims ID: 280-160190-A-19-G MS
Client ID: 29SB168 (6-7)
Sample Type: MS
Inject. Date: 12-Apr-2022 21:49:28 ALS Bottle#: 60 Worklist Smp#: 68
Injection Vol: 40.0 ul Dil. Factor: 10.0000
Sample Info: 280-160190-A-19-G MS 10x
Misc. Info.: 04/08/2022 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\8321expDuPont.m
Limit Group: LC - 8321A Expl
Last Update: 13-Apr-2022 13:58:36 Calib Date: 12-Apr-2022 10:31:58
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d

Column 1 : Det: F1:SIR
Process Host: CTX1683

First Level Reviewer: meyera Date: 13-Apr-2022 13:51:08
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.964	1.964	0.0	1.000	25603	7.23	44.0	
* 1 HMX-13C4								
360.9	1.964	1.964	0.0		197016	125.0	116	
3 TNX								
233.1	1.964	2.153	-0.189	0.709	797	-2.95	1.7	
6 RDX								
281.1	2.745	2.772	-0.027	0.990	16910	6.72	15.2	
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.1	2.772	2.798	-0.026		333389	125.0	316	
8 1,3,5-Trinitrobenzene								
213.1	3.458	3.458	0.0	0.785	108896	11.6	60.7	
11 Tetryl								
241.1	4.003	4.003	0.0	0.909	110287	12.7	74.0	
* 12 1,3-Dinitrobenzene-d4								
172.1	4.404	4.461	-0.057		1204761	129.4	82.1	
13 1,3-Dinitrobenzene								
168.1	4.461	4.518	-0.057	1.013	86115	8.62	37.6	
14 Nitroglycerin								
61.9	4.559	4.558	0.001	1.035	645167	8.92	105	
33 3,5-Dinitroaniline								
183.1	4.761	4.760	0.001	1.081	13224	1.44	2.6	
15 2,4,6-Trinitrotoluene								
227.1	4.841	4.841	0.0	0.768	1388526	41.5	850	
$ 16 Nitrobenzene-d5								
128.1	4.922	4.962	-0.040	1.118	84542	9.22	33.6	
17 Nitrobenzene								
123.1	5.043	5.043	0.0	1.145	63172	8.89	106	

Report Date: 13-Apr-2022 13:58:43 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12067.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
19 4-Amino-2,6-dinitrotoluene								
197.2	5.377	5.417	-0.040	0.853	352050	11.0	32.5	
22 2-Amino-4,6-dinitrotoluene								
197.2	5.821	5.861	-0.040	0.923	471427	12.8	37.4	
23 2,6-Dinitrotoluene								
182.1	6.064	6.094	-0.030	0.961	850843	16.5	114	
* 24 2,4-dinitrotoluene-d3								
185.1	6.307	6.336	-0.029		3231172	125.0	728	
25 2,4-Dinitrotoluene								
182.1	6.367	6.367	0.0	1.010	3935912	135.0	356	
26 PETN								
61.9	6.782	6.812	-0.030	1.075	631383	9.68	74.8	
28 o-Nitrotoluene								
137.1	7.359	7.389	-0.030	1.167	170912	13.6	43.0	
29 p-Nitrotoluene								
137.1	7.815	7.875	-0.060	1.239	135506	12.6	30.2	
30 m-Nitrotoluene								
137.1	8.392	8.391	0.001	1.331	68351	9.25	14.7	

QC Flag Legend

Processing Flags

Reagents:

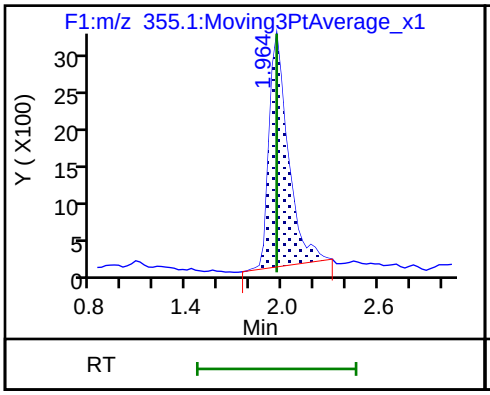
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 13-Apr-2022 13:58:43 Chrom Revision: 2.3 18-Mar-2022 09:07:22

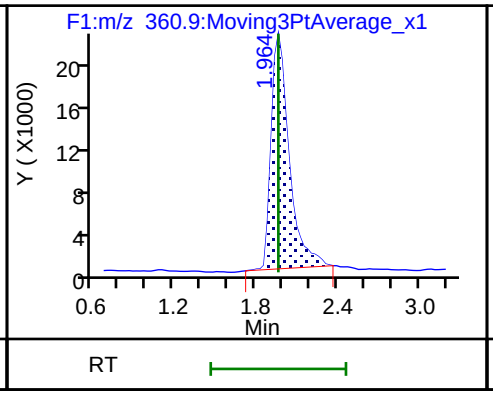
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12067.d
Injection Date: 12-Apr-2022 21:49:28 Instrument ID: LC_LCMS4
Lims ID: 280-160190-A-19-G MS
Client ID: 29SB168 (6-7)
Operator ID: acm ALS Bottle#: 60 Worklist Smp#: 68
Injection Vol: 40.0 ul Dil. Factor: 10.0000
Method: 8321expDuPont Limit Group: LC - 8321A Expl

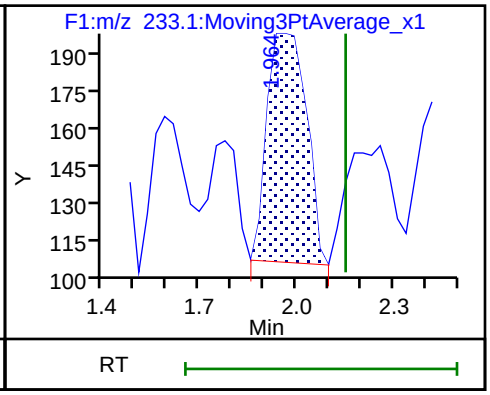
2 HMX



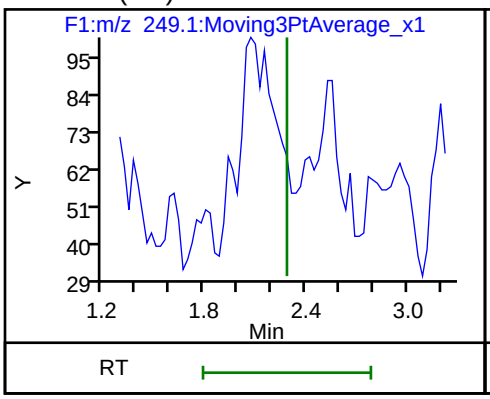
* 1 HMX-13C4



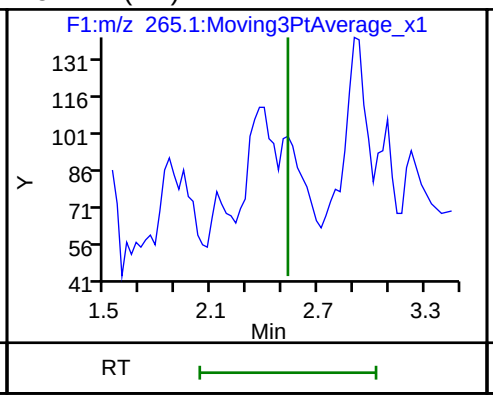
3 TNX



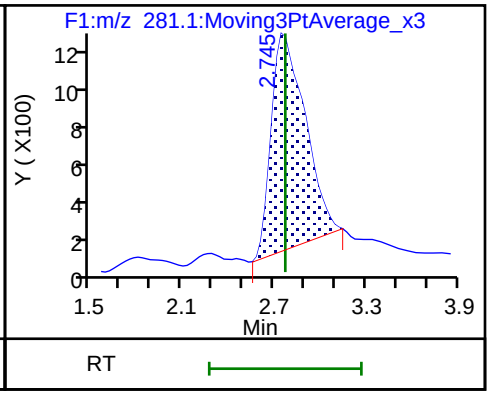
4 DNX (ND)



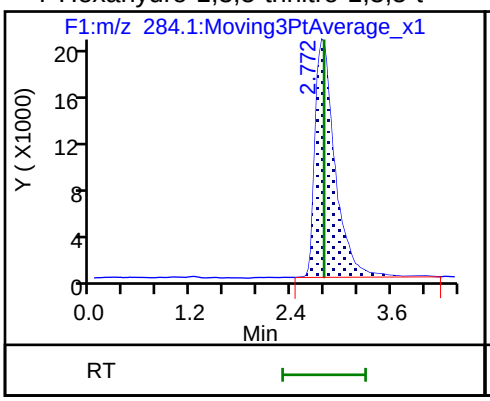
5 MNX (ND)



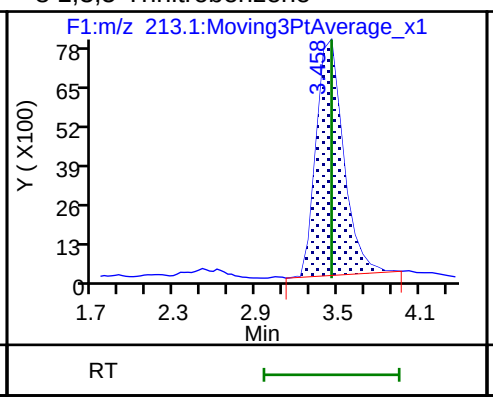
6 RDX



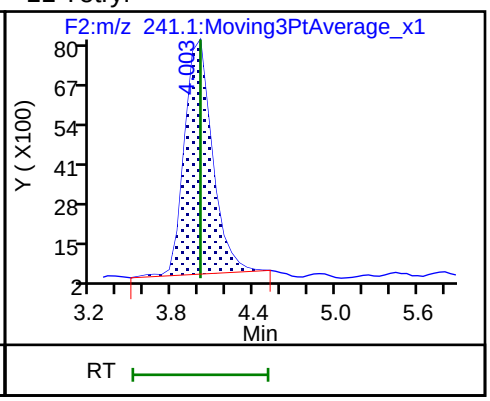
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t



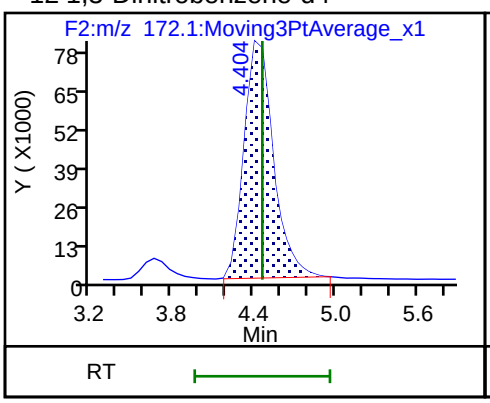
8 1,3,5-Trinitrobenzene



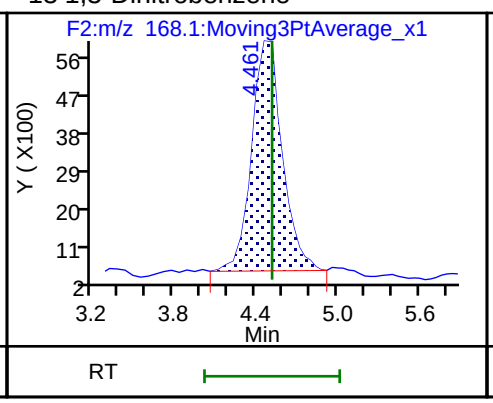
11 Tetryl



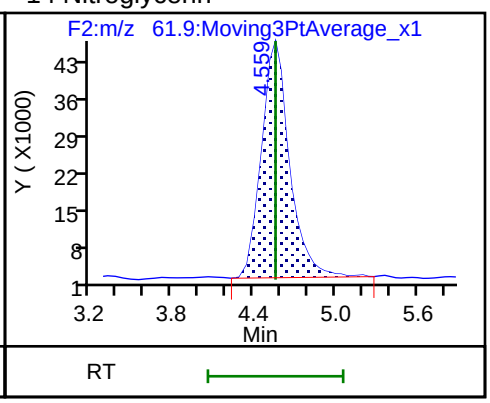
* 12 1,3-Dinitrobenzene-d4



13 1,3-Dinitrobenzene

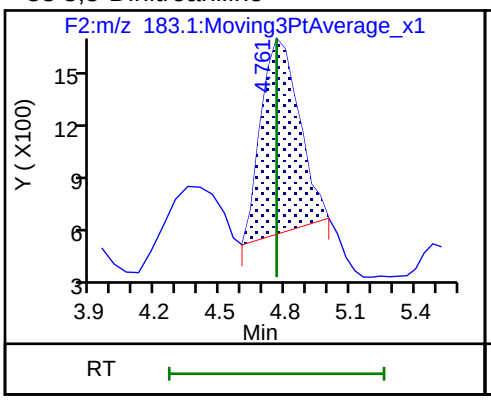


14 Nitroglycerin

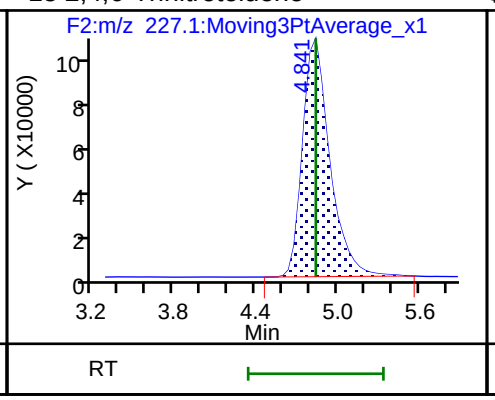


Report Date: 13-Apr-2022 13:58:43 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12067.d

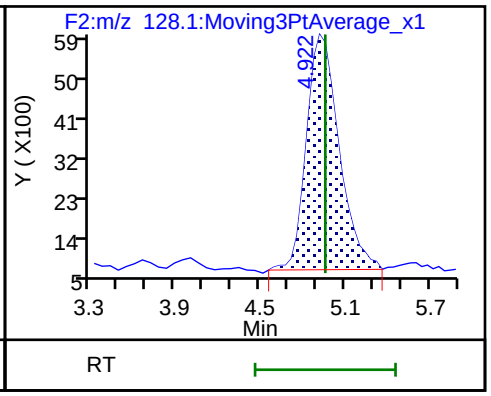
33 3,5-Dinitroaniline



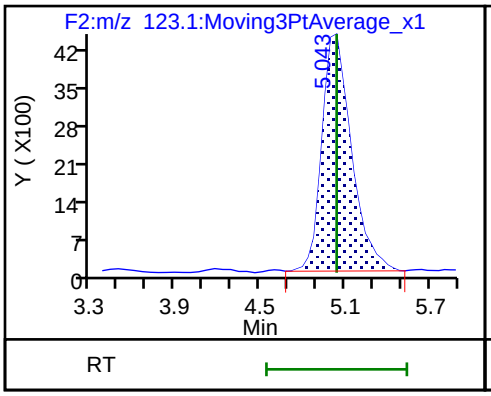
15 2,4,6-Trinitrotoluene



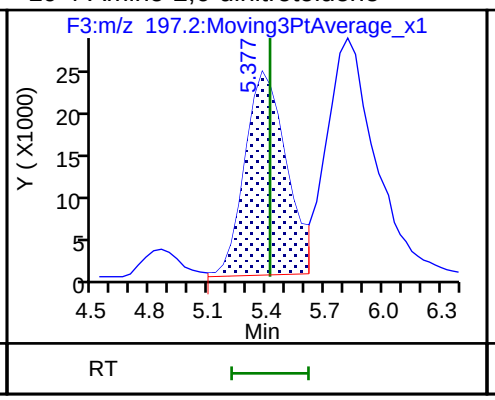
$ 16 Nitrobenzene-d5



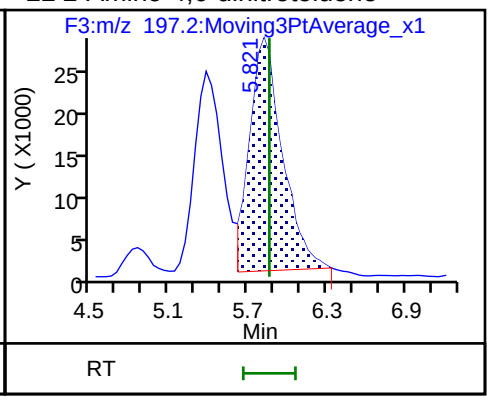
17 Nitrobenzene



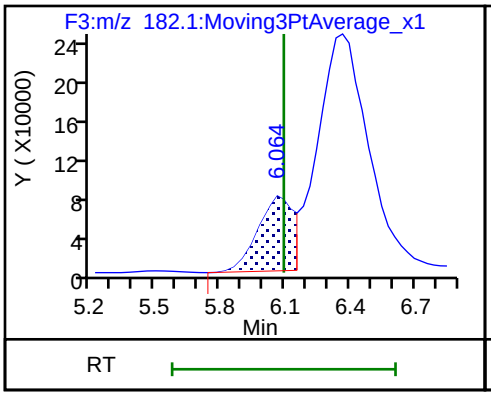
19 4-Amino-2,6-dinitrotoluene



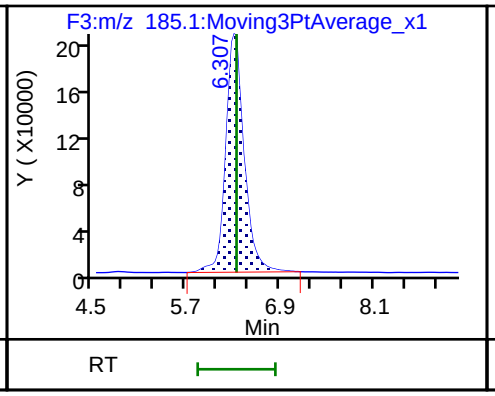
22 2-Amino-4,6-dinitrotoluene



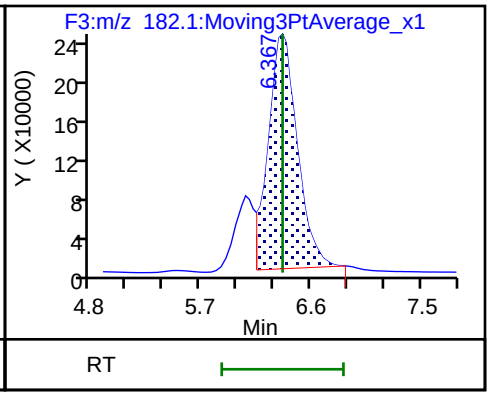
23 2,6-Dinitrotoluene



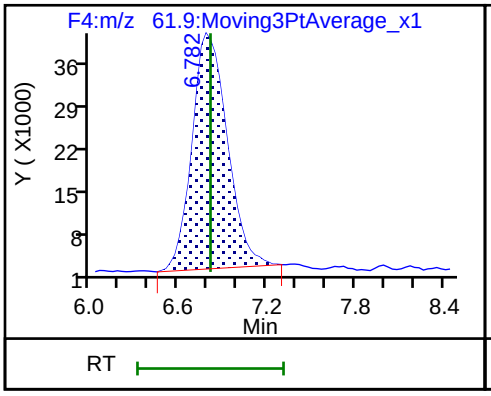
* 24 2,4-dinitrotoluene-d3



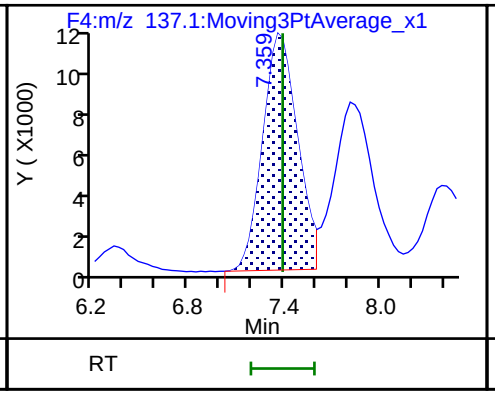
25 2,4-Dinitrotoluene



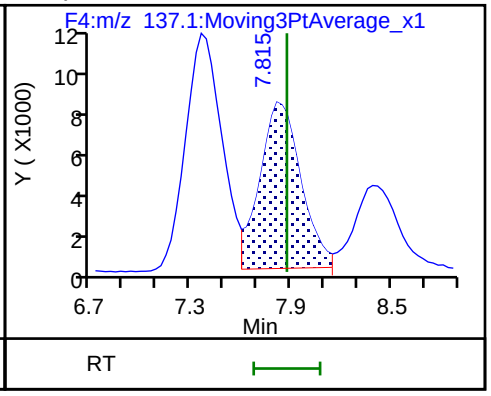
26 PETN



28 o-Nitrotoluene

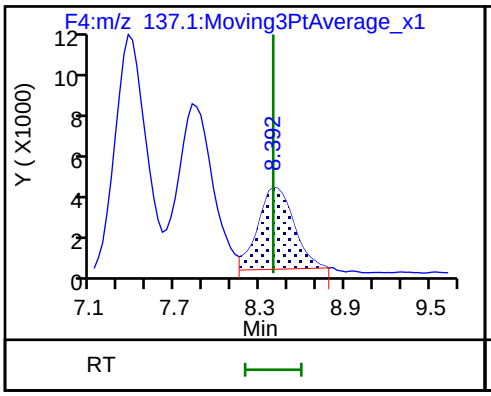


29 p-Nitrotoluene

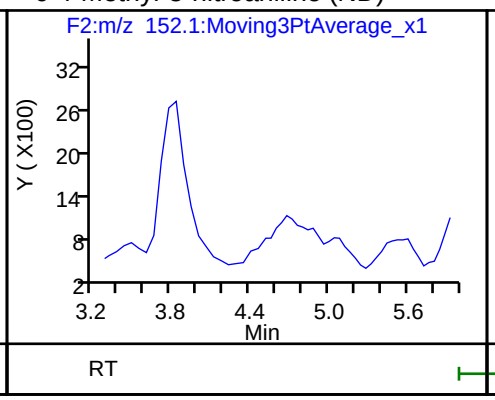


Report Date: 13-Apr-2022 13:58:43
Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12067.d

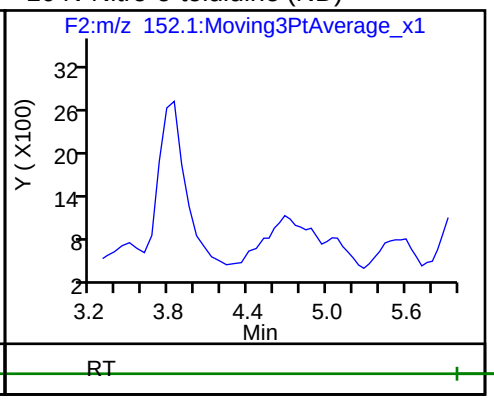
30 m-Nitrotoluene



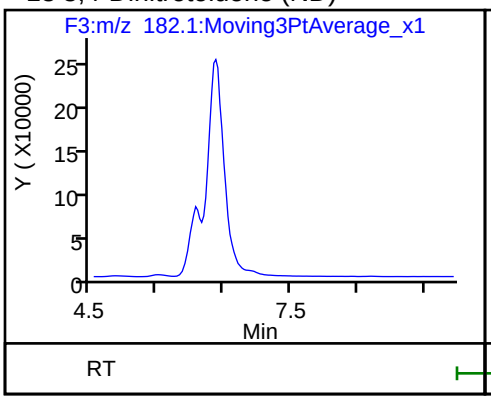
9 4-Methyl-3-nitroaniline (ND)



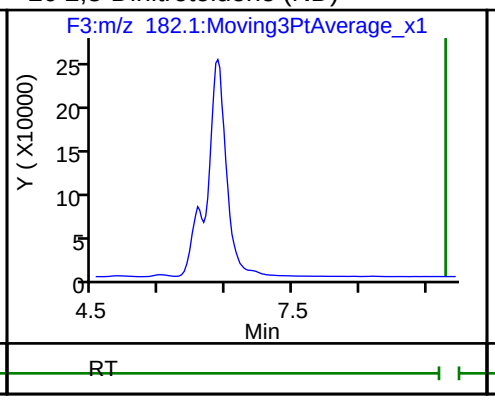
10 N-Nitro-o-toluidine (ND)



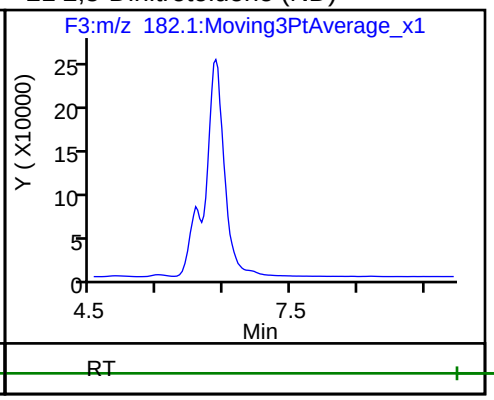
18 3,4-Dinitrotoluene (ND)



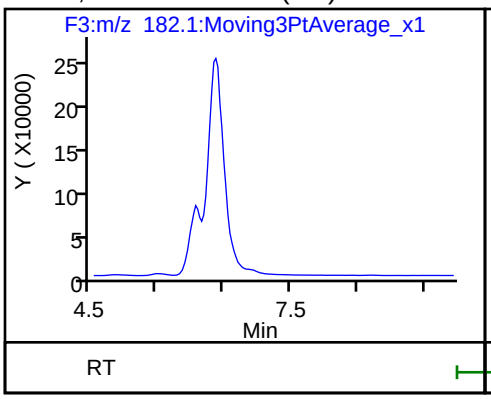
20 2,3-Dinitrotoluene (ND)



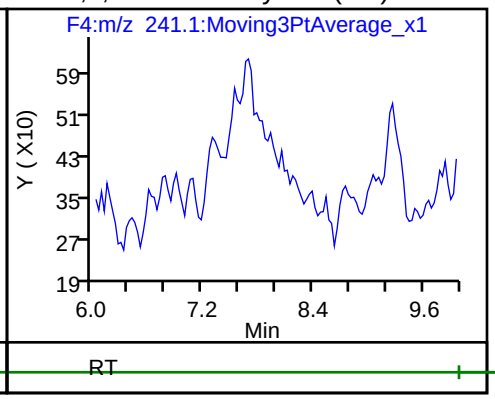
21 2,5-Dinitrotoluene (ND)



27 3,5-Dinitrotoluene (ND)



31 2,4,6-Trinitro-3-xylene (ND)



Report Date: 13-Apr-2022 13:58:43 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12067.d
Lims ID: 280-160190-A-19-G MS
Client ID: 29SB168 (6-7)
Sample Type: MS
Inject. Date: 12-Apr-2022 21:49:28 ALS Bottle#: 60 Worklist Smp#: 68
Injection Vol: 40.0 ul Dil. Factor: 10.0000
Sample Info: 280-160190-A-19-G MS 10x
Misc. Info.: 04/08/2022 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\8321expDuPont.m
Limit Group: LC - 8321A Expl
Last Update: 13-Apr-2022 13:58:36 Calib Date: 12-Apr-2022 10:31:58
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d

Column 1 : Det: F1:SIR
Process Host: CTX1683

First Level Reviewer: meyera Date: 13-Apr-2022 13:51:08

Compound	Amount Added	Amount Recovered	% Rec.
$ 16 Nitrobenzene-d5	100.3	9.22	9.19

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: | Lab Sample ID: 280-160190-A-28-E MS
Matrix: Solid | Lab File ID: ex722D14018.d
Analysis Method: 8321A | Date Collected: 03/24/2022 12:35
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:23
Sample wt/vol: 10.36(g) | Date Analyzed: 04/14/2022 14:06
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571896 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.341		0.097	0.048	0.043
99-65-0	1,3-Dinitrobenzene	0.357		0.097	0.048	0.043
118-96-7	2,4,6-Trinitrotoluene	0.514		0.097	0.048	0.036
121-14-2	2,4-Dinitrotoluene	0.714		0.097	0.048	0.045
606-20-2	2,6-Dinitrotoluene	0.360		0.097	0.048	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.322		0.097	0.048	0.048
19406-51-0	4-Amino-2,6-dinitrotoluene	0.284	J1	0.097	0.048	0.030
2691-41-0	HMX	0.315		0.097	0.048	0.044
99-08-1	m-Nitrotoluene	0.362		0.097	0.048	0.042
98-95-3	Nitrobenzene	0.358		0.11	0.048	0.037
55-63-0	Nitroglycerin	0.385		0.097	0.048	0.028
88-72-2	o-Nitrotoluene	0.362		0.097	0.048	0.041
78-11-5	PETN	0.377		0.097	0.048	0.033
99-99-0	p-Nitrotoluene	0.382		0.097	0.048	0.048
121-82-4	RDX	0.300		0.12	0.048	0.042
479-45-8	Tetryl	0.552	J1	0.097	0.048	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	98		68-140

Report Date: 15-Apr-2022 08:03:04 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14018.d
Lims ID: 280-160190-A-28-E MS
Client ID:
Sample Type: MS
Inject. Date: 14-Apr-2022 14:06:42 ALS Bottle#: 16 Worklist Smp#: 18
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-28-E MS
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:00 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:26:02
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	193530	81.7	102	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		137573	125.0	116	
4 RDX								
281.2	1.833	1.833	0.0	0.998	234838	77.6	71.4	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		580747	125.0	109	
5 1,3,5-Trinitrobenzene								
213.0	2.303	2.299	0.004	0.770	1399809	88.4	138	
6 Tetryl								
241.1	2.679	2.679	0.0	0.896	3448917	143.0	210	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1168181	129.4	235	
8 1,3-Dinitrobenzene								
168.0	3.022	3.022	0.0	1.010	891718	92.3	127	
9 Nitroglycerin								
62.0	3.051	3.040	0.011	1.020	866950	99.6	310	
10 2,4,6-Trinitrotoluene								
227.0	3.281	3.281	0.0	0.768	9286242	133.2	380	
$ 11 Nitrobenzene-d5								
128.0	3.324	3.324	0.0	0.778	516666	98.7	118	
12 Nitrobenzene								
123.0	3.382	3.382	0.0	0.791	401277	92.6	37.8	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.601	3.611	-0.010	0.842	3495380	73.6	29.9	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.937	3.924	0.013	0.921	5478911	83.5	45.6	

Report Date: 15-Apr-2022 08:03:04 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14018.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
17 2,6-Dinitrotoluene								
182.0	4.093	4.093	0.0	0.957	5483997	93.1	256	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3651112	125.0	128	
19 2,4-Dinitrotoluene								
182.0	4.325	4.316	0.009	1.012	5711319	184.9	239	
20 PETN								
61.8	4.638	4.638	0.0	1.085	569928	97.6	90.7	
22 o-Nitrotoluene								
137.0	4.932	4.932	0.0	1.153	807088	93.7	287	
23 p-Nitrotoluene								
137.0	5.240	5.230	0.010	1.226	752917	99.0	261	
24 m-Nitrotoluene								
137.0	5.619	5.614	0.005	1.314	417636	93.8	135	

QC Flag Legend

Processing Flags

Reagents:

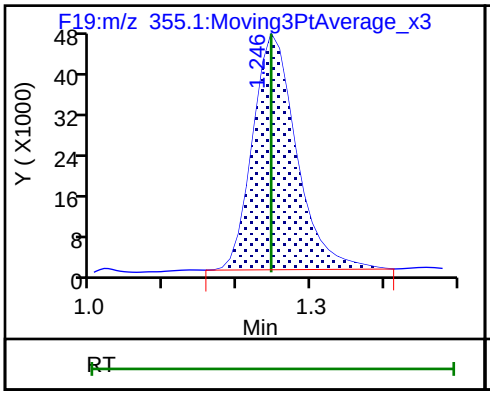
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:05 Chrom Revision: 2.3 12-Apr-2022 20:29:44

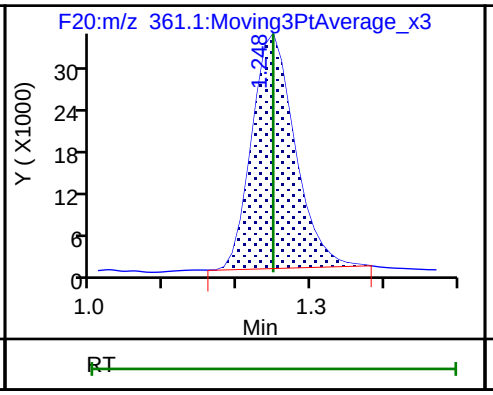
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14018.d
Injection Date: 14-Apr-2022 14:06:42 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-28-E MS
Client ID:
Operator ID: acm ALS Bottle#: 16 Worklist Smp#: 18
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

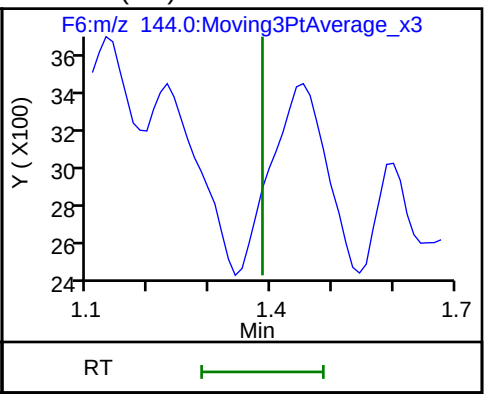
2 HMX



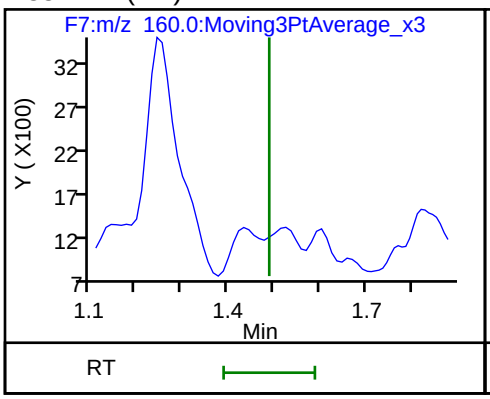
* 1 HMX-13C4



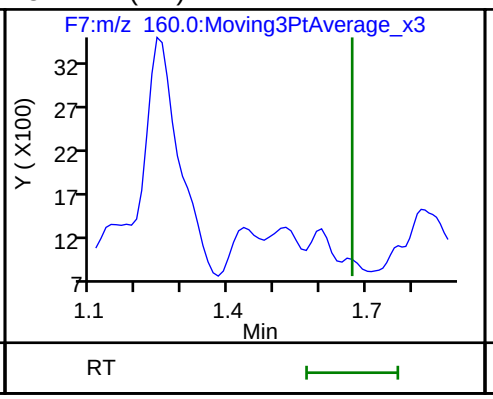
36 TNX (ND)



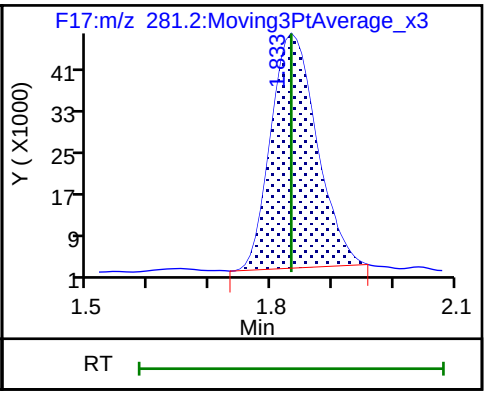
33 DNX (ND)



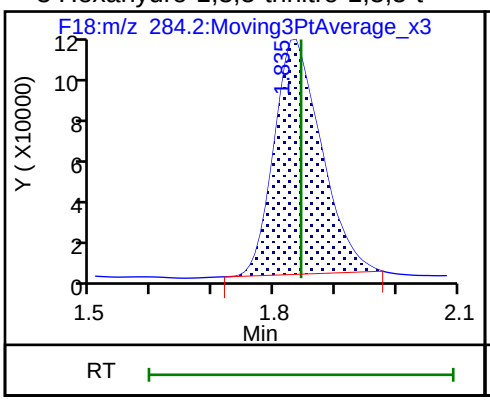
34 MNX (ND)



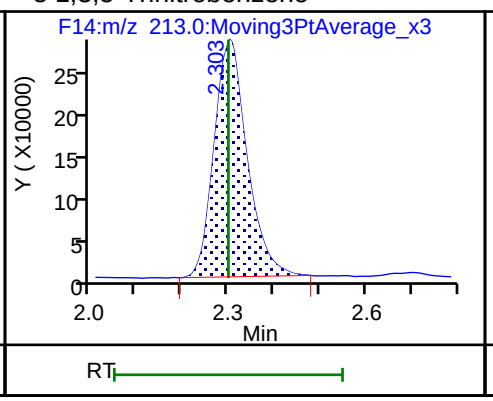
4 RDX



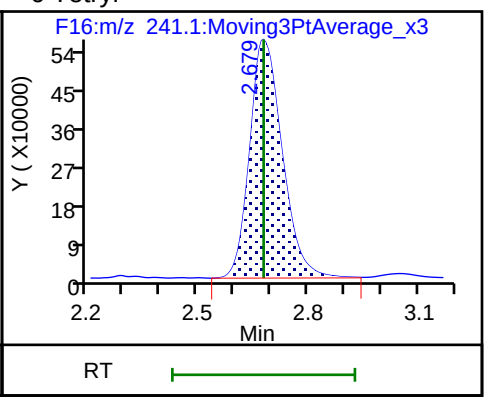
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



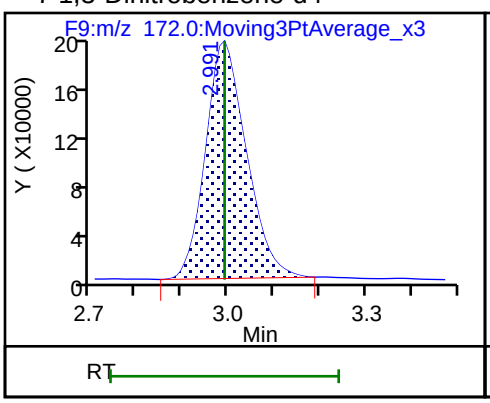
5 1,3,5-Trinitrobenzene



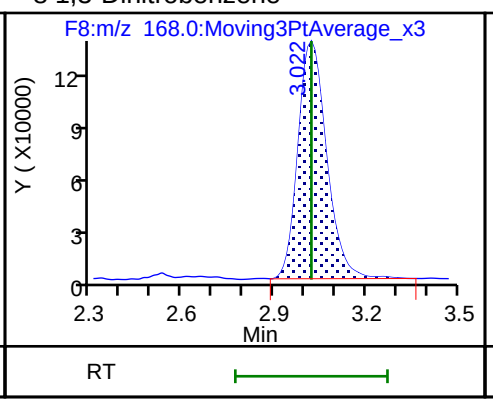
6 Tetryl



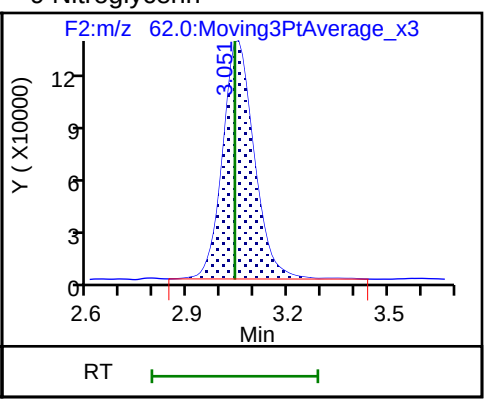
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

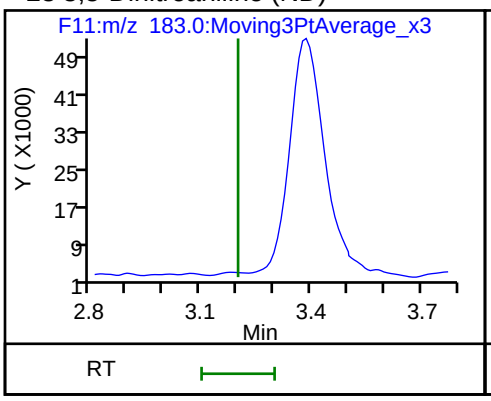


9 Nitroglycerin

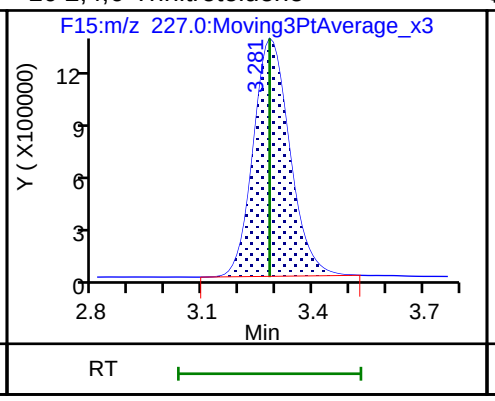


Report Date: 15-Apr-2022 08:03:05 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14018.d

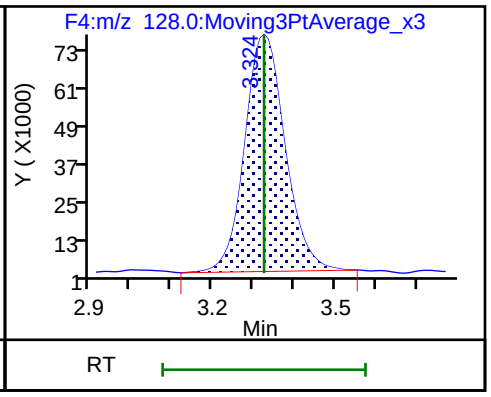
28 3,5-Dinitroaniline (ND)



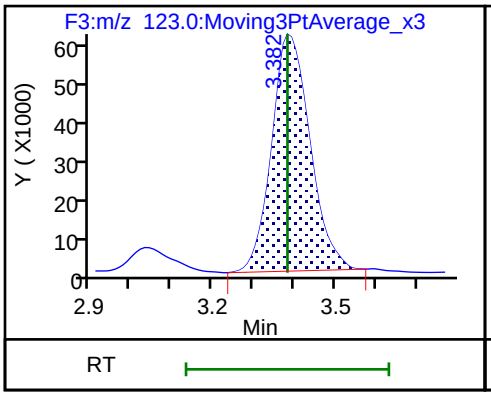
10 2,4,6-Trinitrotoluene



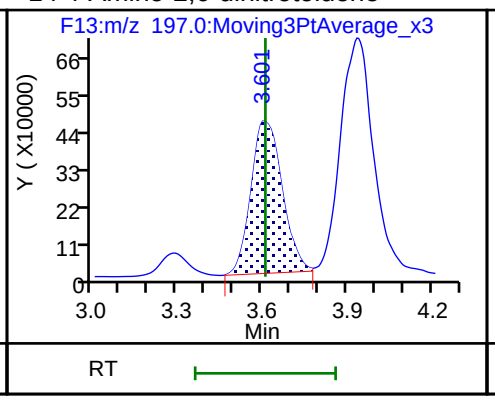
$ 11 Nitrobenzene-d5



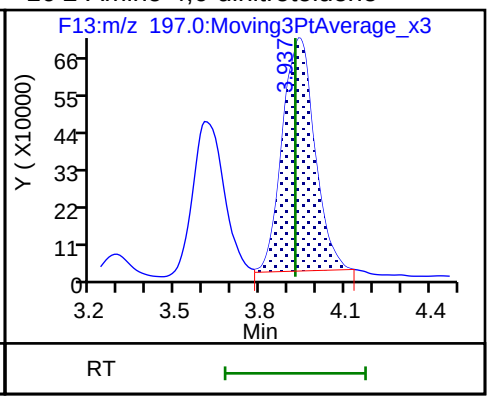
12 Nitrobenzene



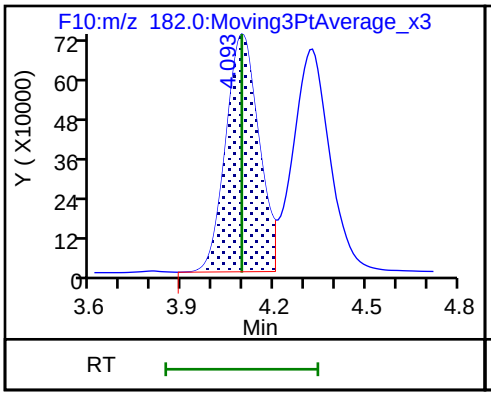
14 4-Amino-2,6-dinitrotoluene



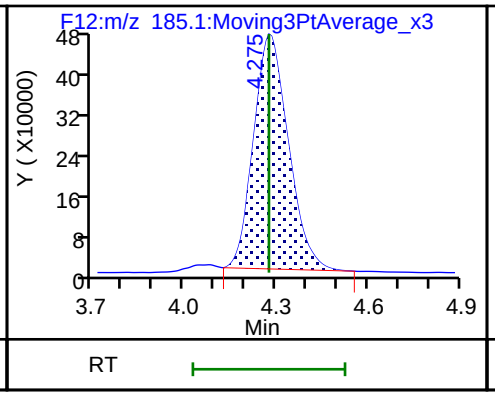
16 2-Amino-4,6-dinitrotoluene



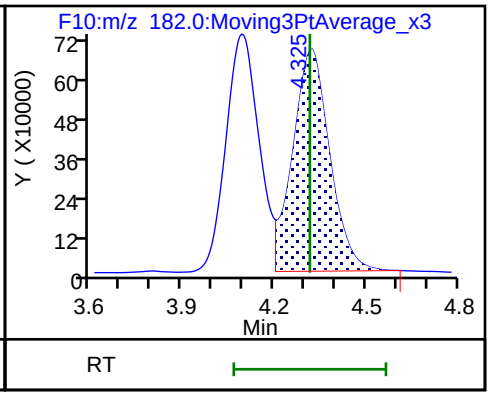
17 2,6-Dinitrotoluene



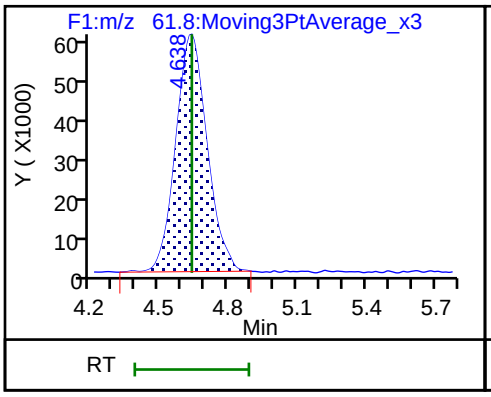
* 18 2,4-dinitrotoluene-d3



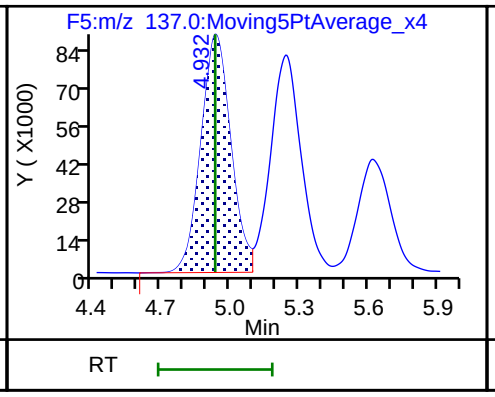
19 2,4-Dinitrotoluene



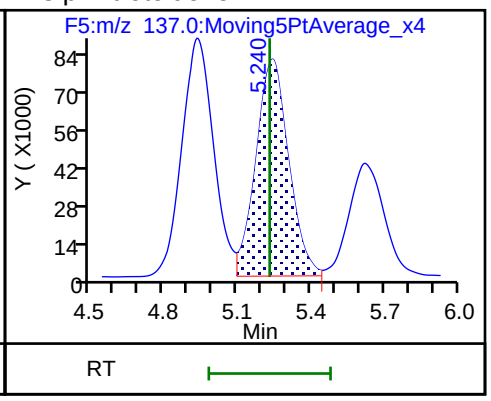
20 PETN



22 o-Nitrotoluene



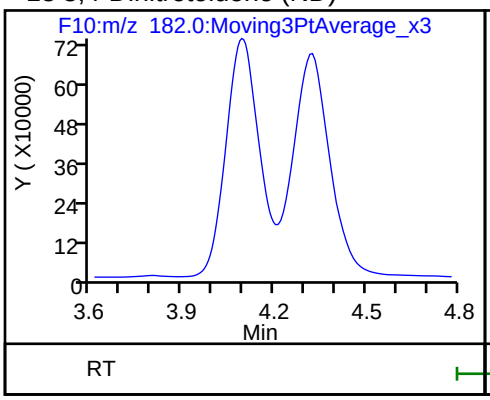
23 p-Nitrotoluene



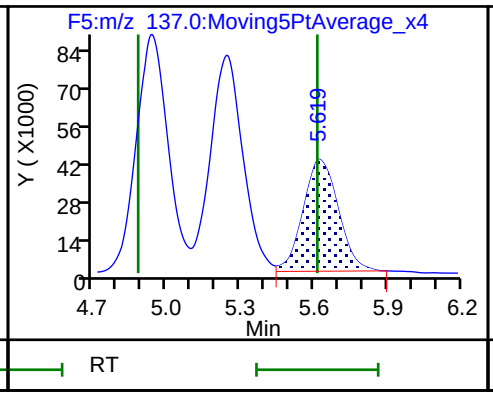
Report Date: 15-Apr-2022 08:03:05 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14018.d

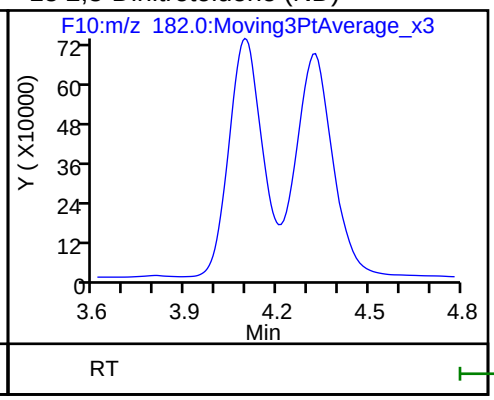
13 3,4-Dinitrotoluene (ND)



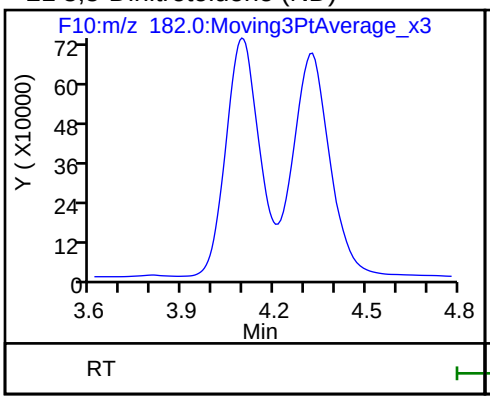
24 m-Nitrotoluene



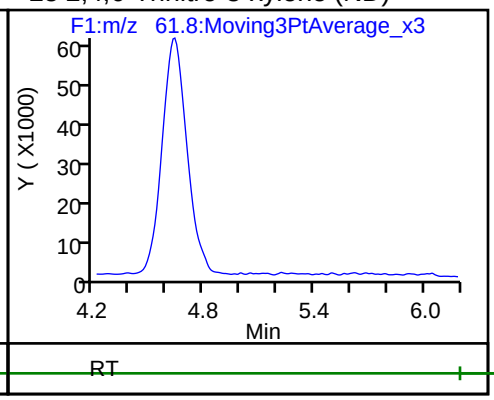
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14018.d				
Lims ID:	280-160190-A-28-E MS				
Client ID:					
Sample Type:	MS				
Inject. Date:	14-Apr-2022 14:06:42	ALS Bottle#:	16	Worklist Smp#:	18
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160190-A-28-E MS				
Misc. Info.:	ex722D14				
Operator ID:	acm	Instrument ID:	LC_LCMS7		
Method:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m				
Limit Group:	LC - 8321A Expl				
Last Update:	15-Apr-2022 08:03:00	Calib Date:	14-Apr-2022 13:07:22		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1652				
First Level Reviewer: meyera		Date:	15-Apr-2022 07:26:02		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	98.7	98.40

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB203 (3-4) MS | Lab Sample ID: 280-160190-52MS
Matrix: Solid | Lab File ID: ex722D14055.d
Analysis Method: 8321A | Date Collected: 03/24/2022 15:15
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:17
Sample wt/vol: 10.13(g) | Date Analyzed: 04/14/2022 18:10
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571897 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.330		0.099	0.049	0.044
99-65-0	1,3-Dinitrobenzene	0.349		0.099	0.049	0.044
118-96-7	2,4,6-Trinitrotoluene	0.368		0.099	0.049	0.036
121-14-2	2,4-Dinitrotoluene	0.340		0.099	0.049	0.046
606-20-2	2,6-Dinitrotoluene	0.382		0.099	0.049	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.262	J1	0.099	0.049	0.049
19406-51-0	4-Amino-2,6-dinitrotoluene	0.132	J1	0.099	0.049	0.031
2691-41-0	HMX	0.305		0.099	0.049	0.046
99-08-1	m-Nitrotoluene	0.411		0.099	0.049	0.043
98-95-3	Nitrobenzene	0.362		0.11	0.049	0.038
55-63-0	Nitroglycerin	0.370		0.099	0.049	0.029
88-72-2	o-Nitrotoluene	0.361		0.099	0.049	0.042
78-11-5	PETN	0.416		0.099	0.049	0.034
99-99-0	p-Nitrotoluene	0.361		0.099	0.049	0.049
121-82-4	RDX	0.323	M	0.12	0.049	0.043
479-45-8	Tetryl	0.531	J1	0.099	0.049	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	95		68-140

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14055.d
Lims ID: 280-160190-A-52-G MS
Client ID: 29SB203 (3-4)
Sample Type: MS
Inject. Date: 14-Apr-2022 18:10:47 ALS Bottle#: 1 Worklist Smp#: 55
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-52-G MS
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:19:35 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:38:21
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	189763	77.2	132	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		142487	125.0	75.2	
4 RDX								M
281.2	1.833	1.833	0.0	0.998	251267	81.9	108	M
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		594187	125.0	220	
5 1,3,5-Trinitrobenzene								
213.0	2.296	2.299	-0.003	0.770	1273697	83.6	162	
6 Tetryl								
241.1	2.679	2.679	0.0	0.899	3115271	134.4	207	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.981	2.991	-0.010		1122803	129.4	291	
8 1,3-Dinitrobenzene								
168.0	3.010	3.022	-0.012	1.010	821341	88.4	137	
9 Nitroglycerin								
62.0	3.040	3.040	0.0	1.020	784792	93.7	230	
10 2,4,6-Trinitrotoluene								
227.0	3.272	3.281	-0.009	0.765	5942906	93.1	392	
$ 11 Nitrobenzene-d5								
128.0	3.315	3.324	-0.009	0.775	480733	95.5	43.9	
12 Nitrobenzene								
123.0	3.372	3.382	-0.010	0.789	381219	91.6	44.3	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.601	3.611	-0.010	0.842	1470153	33.4	22.1	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.924	3.924	0.0	0.918	3979576	66.3	57.7	

Report Date: 15-Apr-2022 08:19:35 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14055.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
17 2,6-Dinitrotoluene								
182.0	4.074	4.093	-0.019	0.953	5194283	96.7	576	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3332163	125.0	126	
19 2,4-Dinitrotoluene								
182.0	4.299	4.316	-0.017	1.006	2441058	86.0	250	
20 PETN								
61.8	4.618	4.638	-0.020	1.080	561254	105.4	83.2	
22 o-Nitrotoluene								
137.0	4.922	4.932	-0.010	1.151	717499	91.3	279	
23 p-Nitrotoluene								
137.0	5.231	5.230	0.001	1.223	635142	91.5	241	
24 m-Nitrotoluene								
137.0	5.609	5.614	-0.005	1.312	422128	104.0	157	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

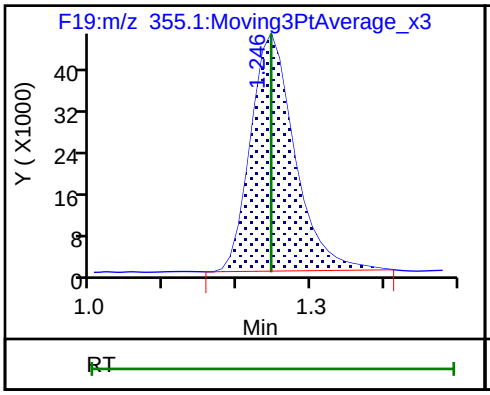
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:19:35 Chrom Revision: 2.3 12-Apr-2022 20:29:44

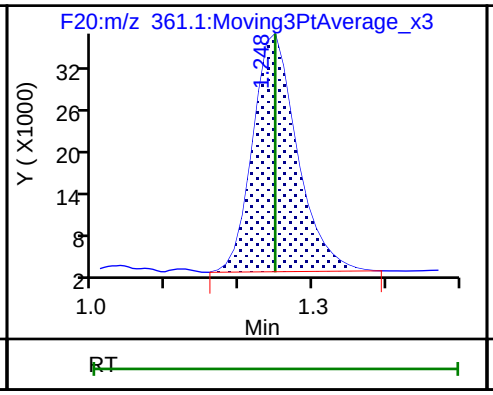
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14055.d
Injection Date: 14-Apr-2022 18:10:47 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-52-G MS
Client ID: 29SB203 (3-4)
Operator ID: acm ALS Bottle#: 1 Worklist Smp#: 55
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

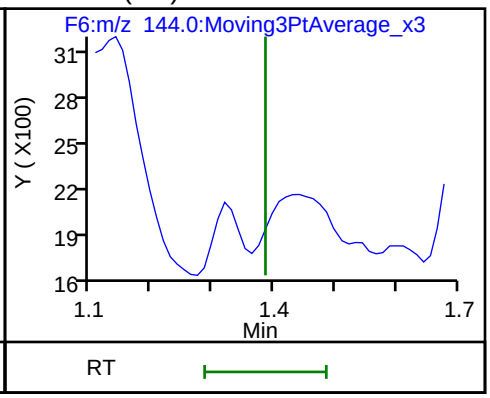
2 HMX



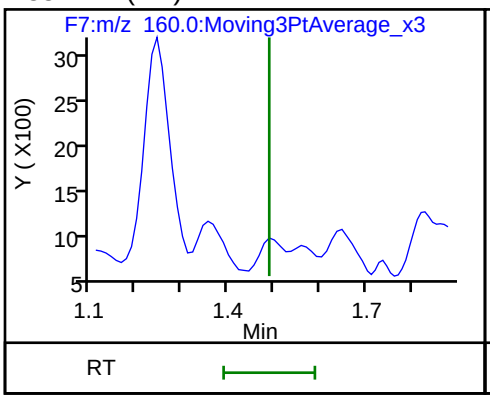
* 1 HMX-13C4



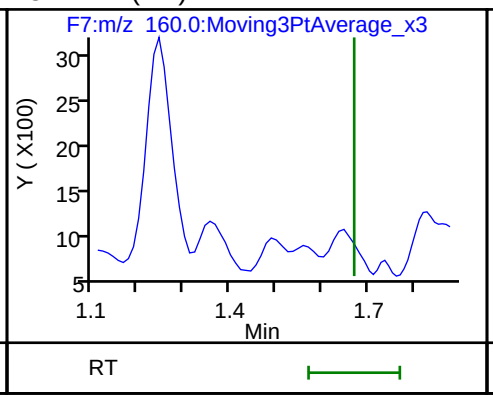
36 TNX (ND)



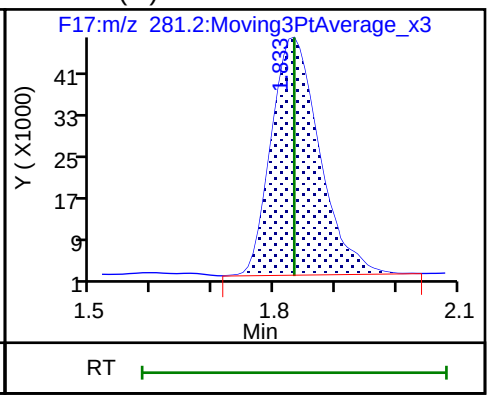
33 DNX (ND)



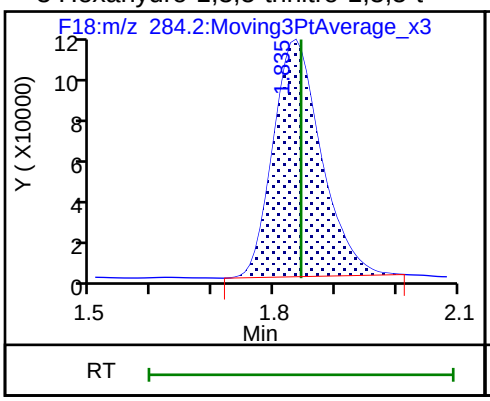
34 MNX (ND)



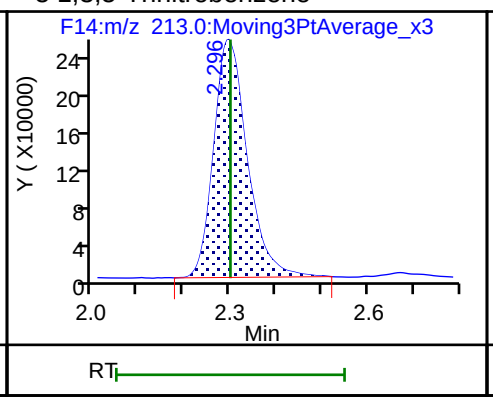
4 RDX (M)



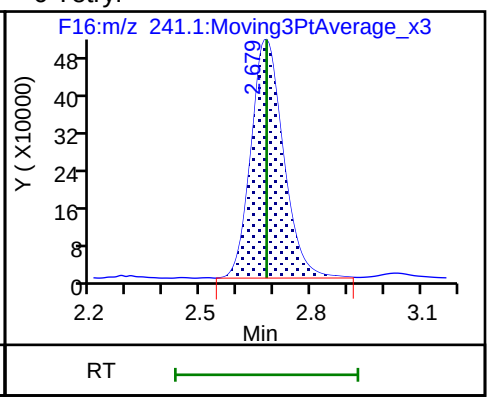
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



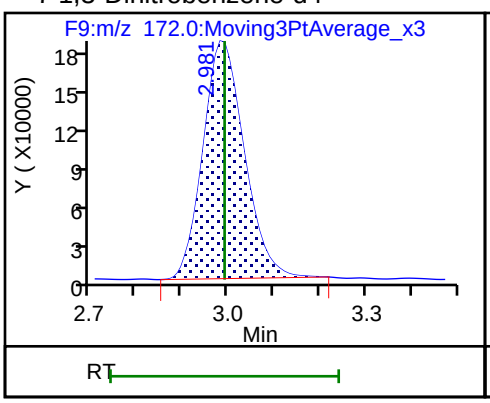
5 1,3,5-Trinitrobenzene



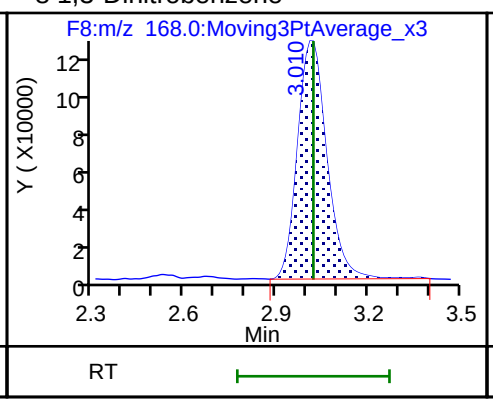
6 Tetryl



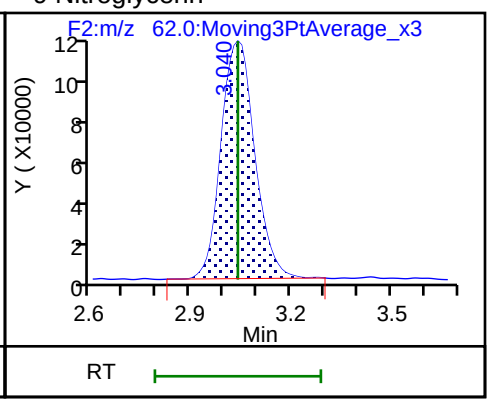
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



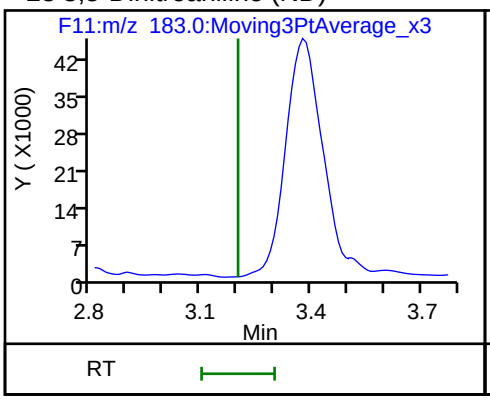
9 Nitroglycerin



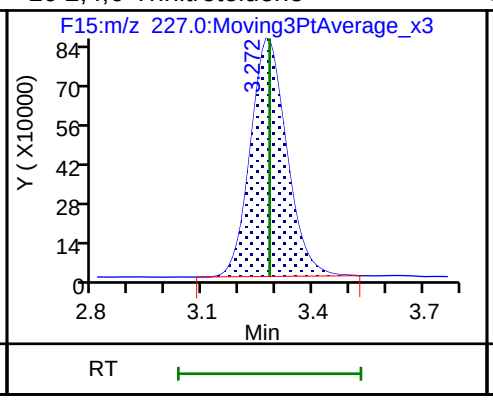
Report Date: 15-Apr-2022 08:19:35 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14055.d

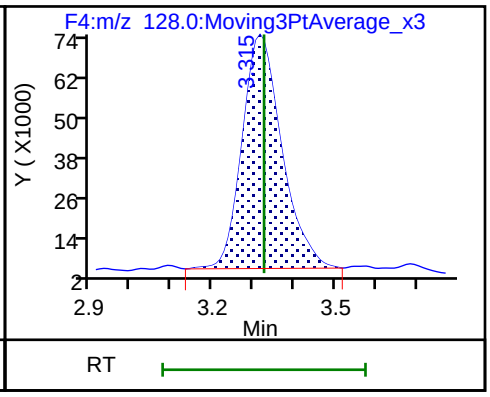
28 3,5-Dinitroaniline (ND)



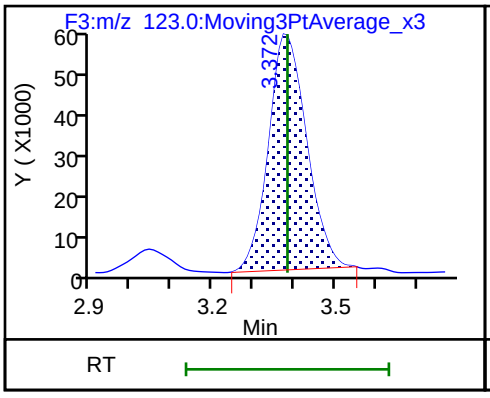
10 2,4,6-Trinitrotoluene



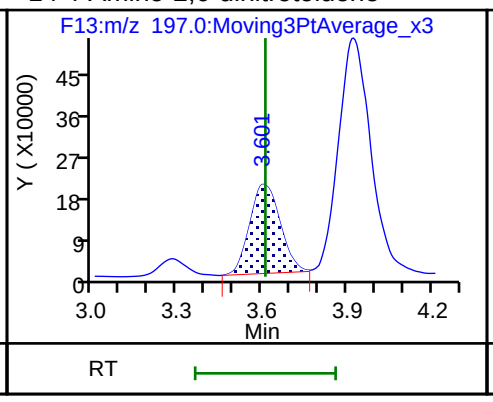
$ 11 Nitrobenzene-d5



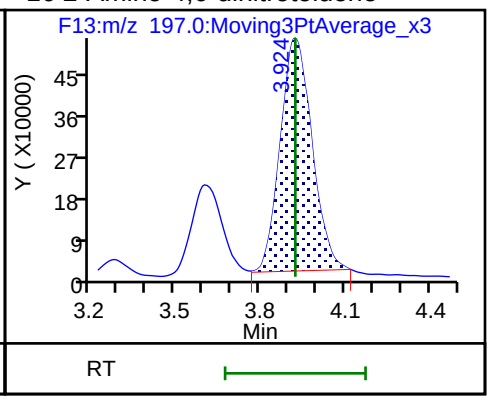
12 Nitrobenzene



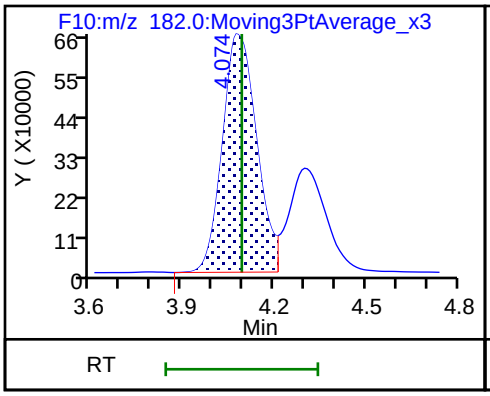
14 4-Amino-2,6-dinitrotoluene



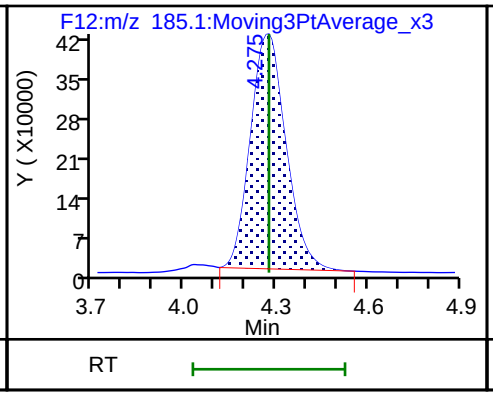
16 2-Amino-4,6-dinitrotoluene



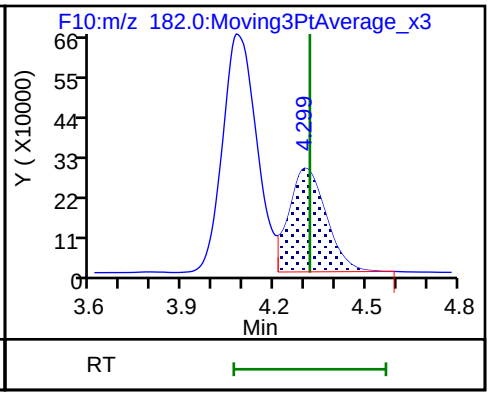
17 2,6-Dinitrotoluene



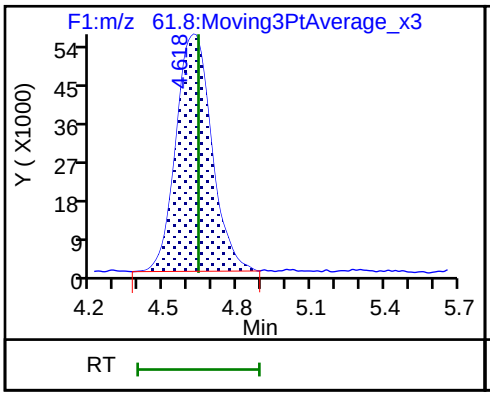
* 18 2,4-dinitrotoluene-d3



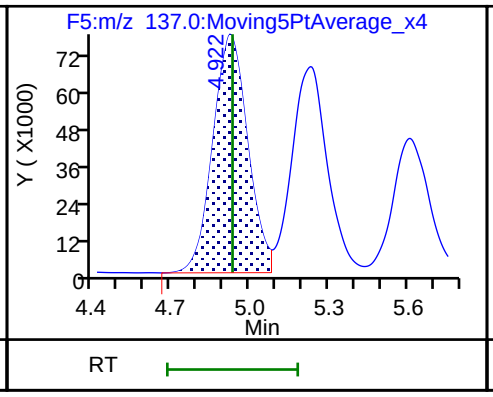
19 2,4-Dinitrotoluene



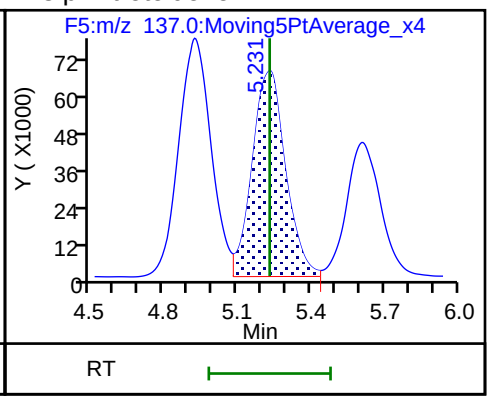
20 PETN



22 o-Nitrotoluene



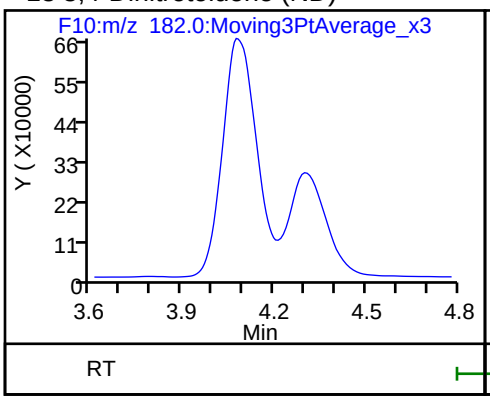
23 p-Nitrotoluene



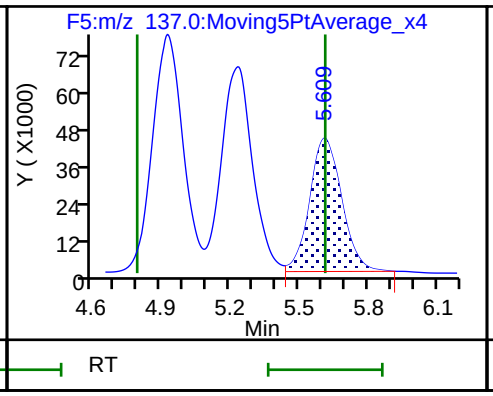
Report Date: 15-Apr-2022 08:19:35 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14055.d

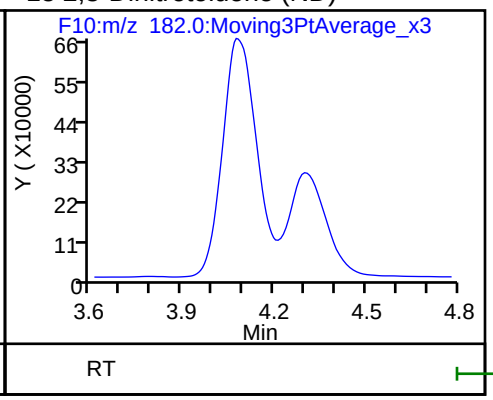
13 3,4-Dinitrotoluene (ND)



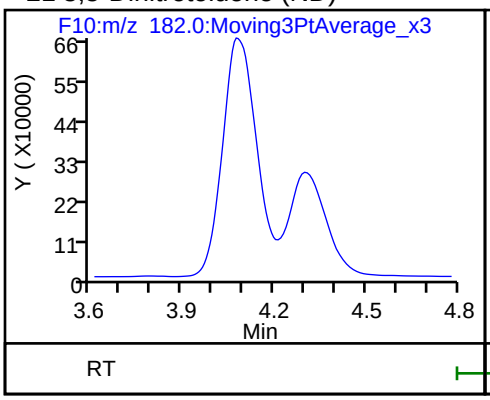
24 m-Nitrotoluene



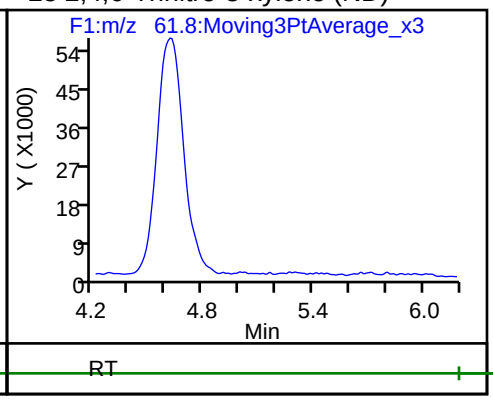
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:19:35 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14055.d				
Lims ID:	280-160190-A-52-G MS				
Client ID:	29SB203 (3-4)				
Sample Type:	MS				
Inject. Date:	14-Apr-2022 18:10:47	ALS Bottle#:	1	Worklist Smp#:	55
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160190-A-52-G MS				
Misc. Info.:	ex722D14				
Operator ID:	acm	Instrument ID:	LC_LCMS7		
Method:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m				
Limit Group:	LC - 8321A Expl				
Last Update:	15-Apr-2022 08:19:35	Calib Date:	14-Apr-2022 13:07:22		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1652				
First Level Reviewer: meyera		Date:	15-Apr-2022 07:38:21		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	95.5	95.20

Report Date: 15-Apr-2022 08:19:35

Chrom Revision: 2.3 12-Apr-2022 20:29:44
Manual Integration/User Assign Peak Report

Eurofins Denver

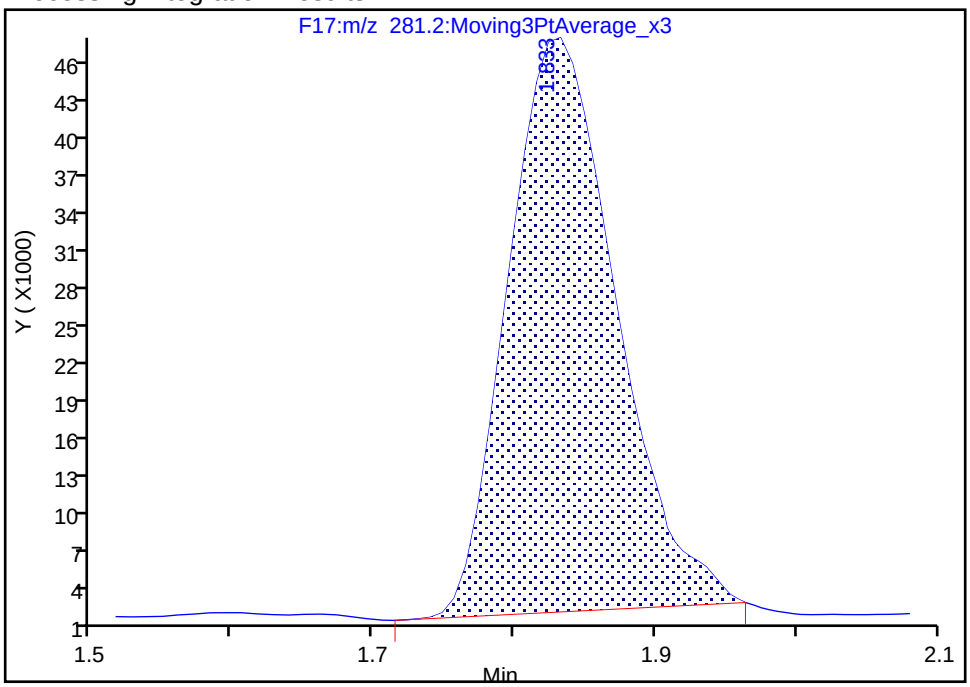
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14055.d
Injection Date: 14-Apr-2022 18:10:47 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-52-G MS
Client ID: 29SB203 (3-4)
Operator ID: acm ALS Bottle#: 1 Worklist Smp#: 55
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F17:SIR

4 RDX, CAS: 121-82-4

Signal: 1

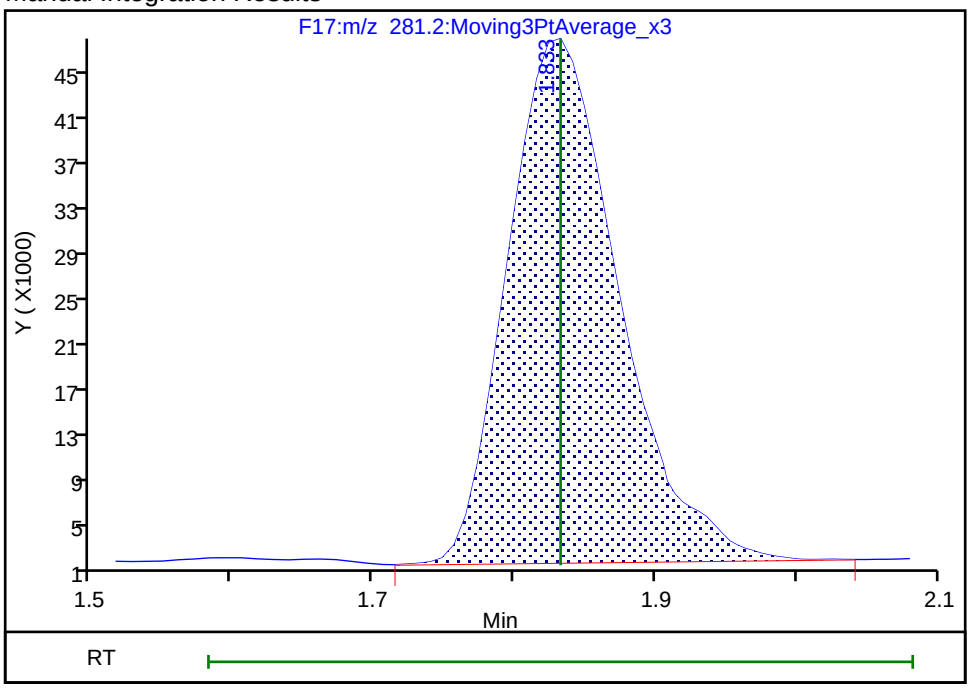
Processing Integration Results

RT: 1.83
Area: 241387
Amount: 78.056608
Amount Units: ug/l



Manual Integration Results

RT: 1.83
Area: 251267
Amount: 81.887048
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 08:19:32
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1

SDG No.:

Client Sample ID: 29SB168 (6-7) MSD | Lab Sample ID: 280-160190-19 MSD

Matrix: Solid | Lab File ID: ex722D08031.d

Analysis Method: 8321A | Date Collected: 03/24/2022 11:58

Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20

Sample wt/vol: 10.33(g) | Date Analyzed: 04/08/2022 12:52

Con. Extract Vol.: 40(mL) | Dilution Factor: 1

Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:

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

Analysis Batch No.: 571224 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.502		0.097	0.048	0.043
99-65-0	1,3-Dinitrobenzene	0.436		0.097	0.048	0.043
606-20-2	2,6-Dinitrotoluene	0.818		0.097	0.048	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.563	M	0.097	0.048	0.048
19406-51-0	4-Amino-2,6-dinitrotoluene	0.501	M	0.097	0.048	0.030
2691-41-0	HMX	0.323		0.097	0.048	0.045
99-08-1	m-Nitrotoluene	0.405		0.097	0.048	0.042
98-95-3	Nitrobenzene	0.382		0.11	0.048	0.037
55-63-0	Nitroglycerin	0.429		0.097	0.048	0.028
88-72-2	o-Nitrotoluene	0.547		0.097	0.048	0.041
78-11-5	PETN	0.396		0.097	0.048	0.033
99-99-0	p-Nitrotoluene	0.509		0.097	0.048	0.048
121-82-4	RDX	0.334		0.12	0.048	0.042
479-45-8	Tetryl	0.560	J1	0.097	0.048	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	106		68-140

Report Date: 14-Apr-2022 10:07:01 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08031.d
Lims ID: 280-160190-A-19-H MSD
Client ID: 29SB168 (6-7)
Sample Type: MSD
Inject. Date: 08-Apr-2022 12:52:46 ALS Bottle#: 28 Worklist Smp#: 31
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-19-H MSD
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:52 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:50:29
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	152185	83.4	75.1	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		101933	125.0	31.7	
4 RDX								
281.2	1.841	1.833	0.0	0.998	182296	86.1	59.6	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		360735	125.0	62.5	
5 1,3,5-Trinitrobenzene								
213.0	2.313	2.322	0.0	0.769	1920552	129.7	87.4	
6 Tetryl								
241.1	2.705	2.708	0.006	0.899	3180423	144.6	150	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.008	3.008	0.0		1230435	129.4	280	
8 1,3-Dinitrobenzene								
168.0	3.051	3.051	0.011	1.014	1160229	112.6	91.1	
9 Nitroglycerin								
62.0	3.069	3.081	0.0	1.020	990883	110.9	373	
28 3,5-Dinitroaniline								
183.0	3.230	3.231	0.011	1.074	266642	5.96	4.1	
10 2,4,6-Trinitrotoluene								E
227.0	3.310	3.316	0.0	0.765	30064262	474.2	304	E
$ 11 Nitrobenzene-d5								
128.0	3.359	3.354	0.011	0.777	616246	105.9	134	
12 Nitrobenzene								
123.0	3.421	3.418	0.010	0.791	489829	98.7	37.0	
14 4-Amino-2,6-dinitrotoluene								M
197.0	3.645	3.652	0.0	0.843	6427663	129.3	12.7	M

Report Date: 14-Apr-2022 10:07:01 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08031.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
16 2-Amino-4,6-dinitrotoluene								M
197.0	3.963	3.971	0.0	0.917	9255397	145.5	17.3	M
17 2,6-Dinitrotoluene								
182.0	4.132	4.138	0.006	0.956	14103056	211.3	38.7	
* 18 2,4-dinitrotoluene-d3								
185.1	4.324	4.315	0.009		4042999	125.0	118	
19 2,4-Dinitrotoluene								E
182.0	4.365	4.373	0.0	1.009	50057793	1467.4	117	E
20 PETN								
61.8	4.696	4.706	0.0	1.086	571765	102.3	113	
22 o-Nitrotoluene								
137.0	4.977	4.987	0.0	1.151	1459760	141.2	412	
23 p-Nitrotoluene								
137.0	5.301	5.297	0.015	1.226	1182174	131.5	334	
24 m-Nitrotoluene								
137.0	5.685	5.686	0.010	1.315	559587	104.6	152	

QC Flag Legend

Processing Flags
E - Exceeded Maximum Amount
Review Flags
M - Manually Integrated

Reagents:

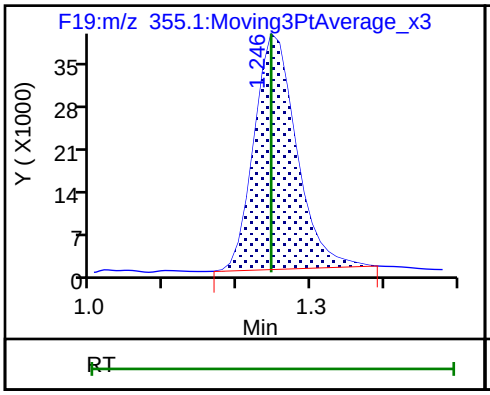
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 14-Apr-2022 10:07:01 Chrom Revision: 2.3 12-Apr-2022 20:29:44

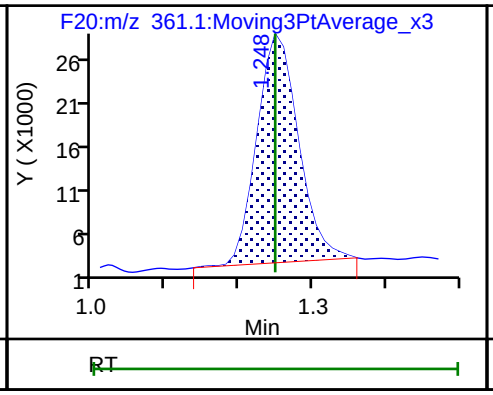
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08031.d
Injection Date: 08-Apr-2022 12:52:46 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-19-H MSD
Client ID: 29SB168 (6-7)
Operator ID: acm ALS Bottle#: 28 Worklist Smp#: 31
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

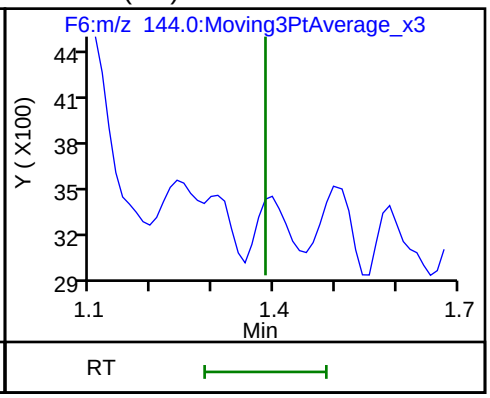
2 HMX



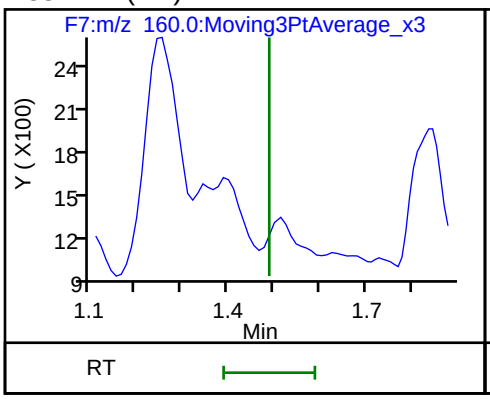
* 1 HMX-13C4



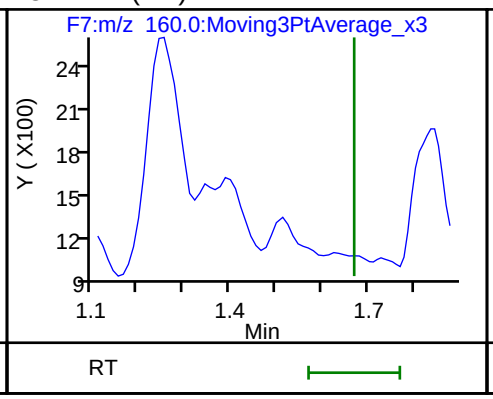
36 TNX (ND)



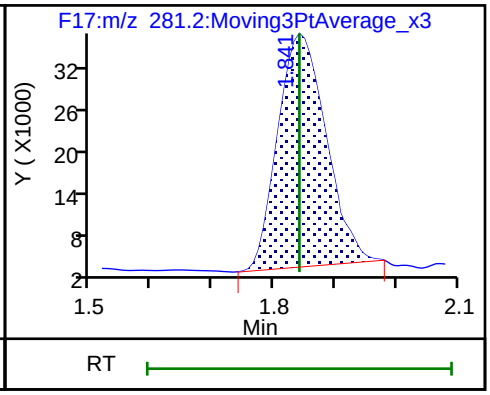
33 DNX (ND)



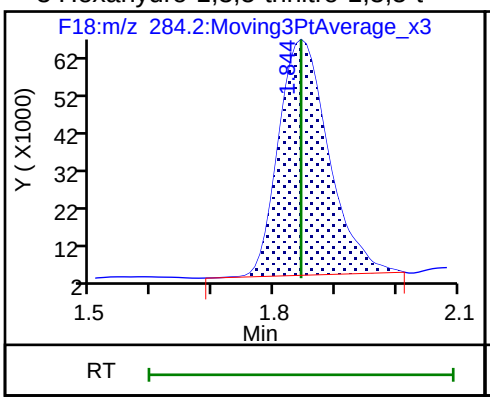
34 MNX (ND)



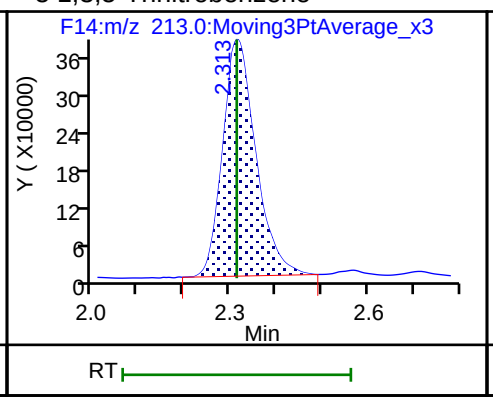
4 RDX



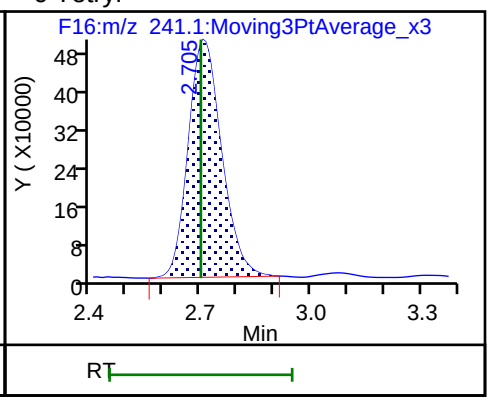
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



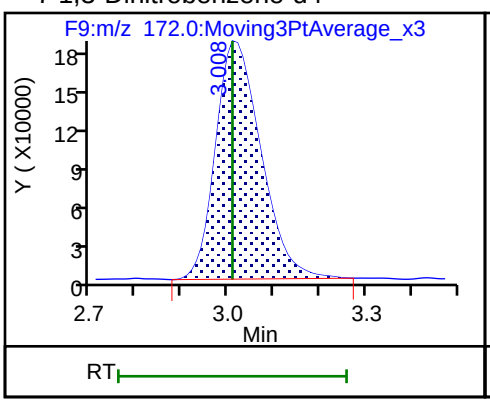
5 1,3,5-Trinitrobenzene



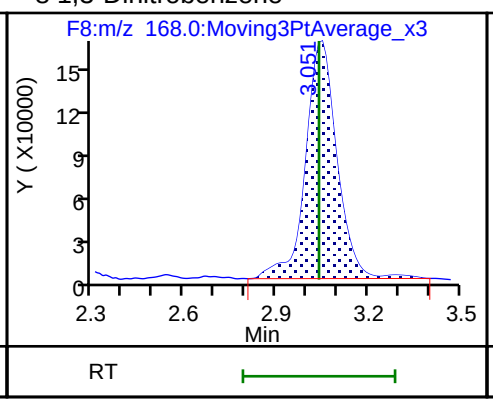
6 Tetryl



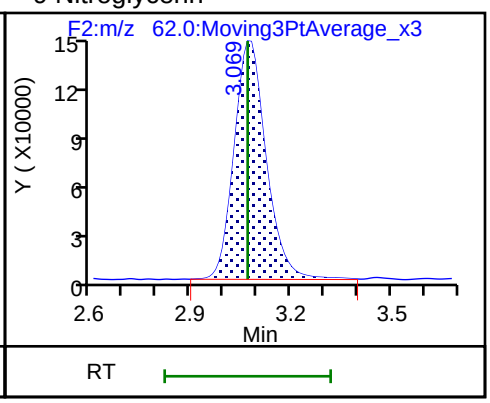
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



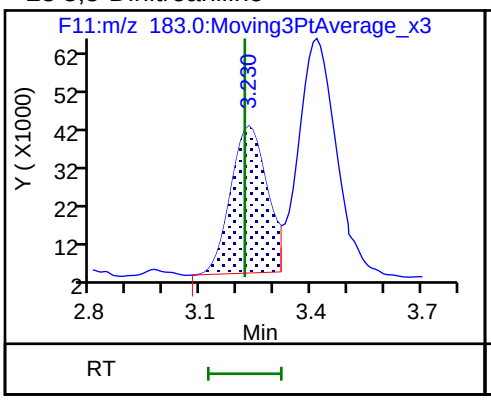
9 Nitroglycerin



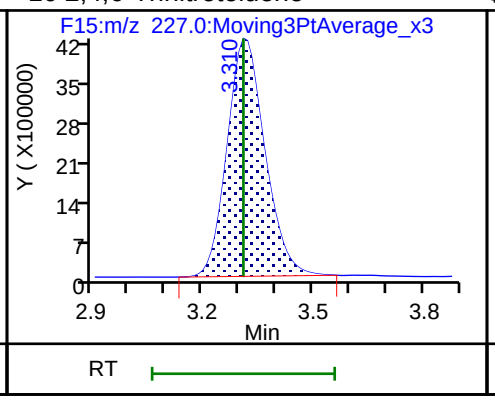
Report Date: 14-Apr-2022 10:07:01 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08031.d

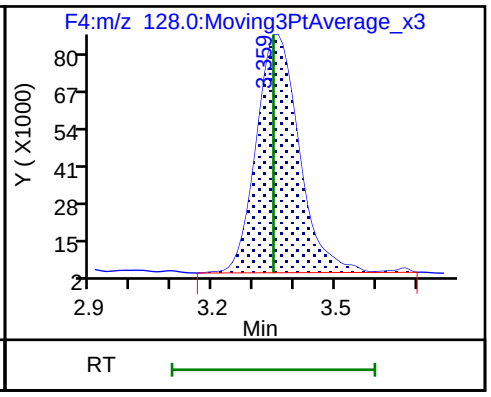
28 3,5-Dinitroaniline



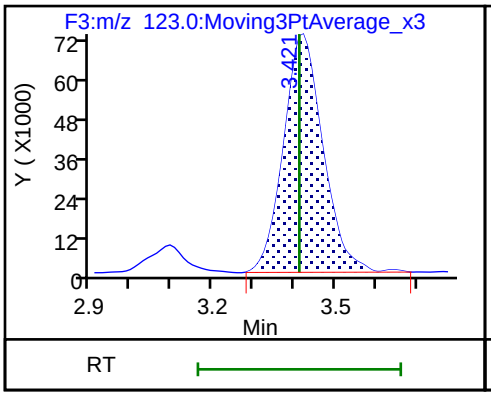
10 2,4,6-Trinitrotoluene



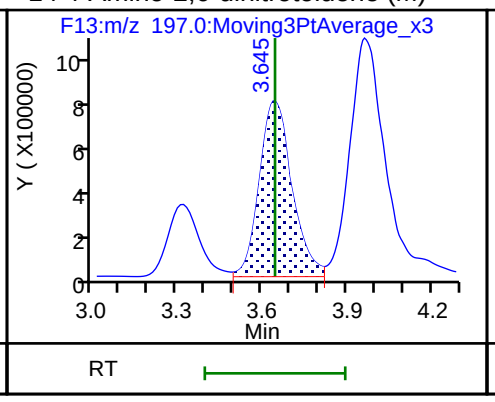
$ 11 Nitrobenzene-d5



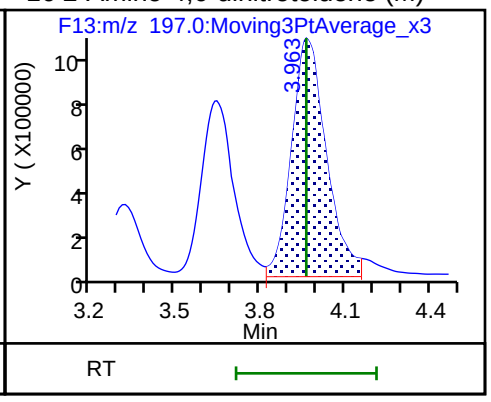
12 Nitrobenzene



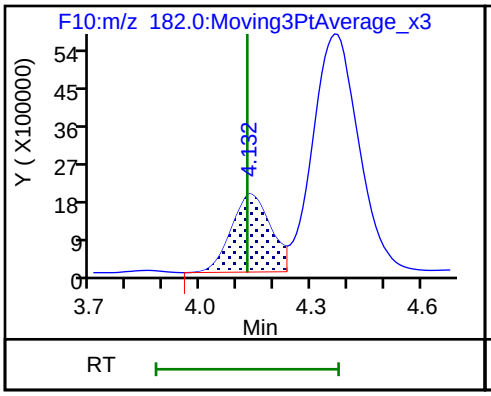
14 4-Amino-2,6-dinitrotoluene (M)



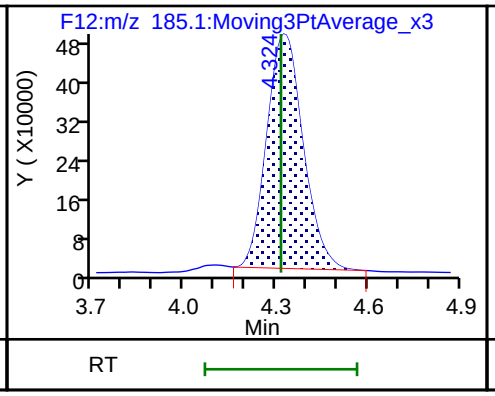
16 2-Amino-4,6-dinitrotoluene (M)



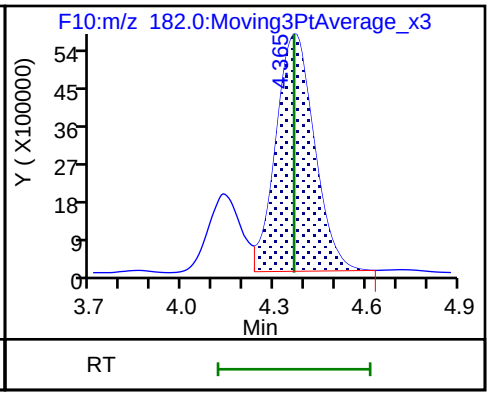
17 2,6-Dinitrotoluene



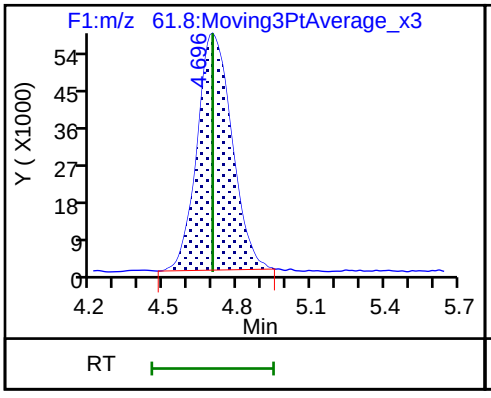
* 18 2,4-dinitrotoluene-d3



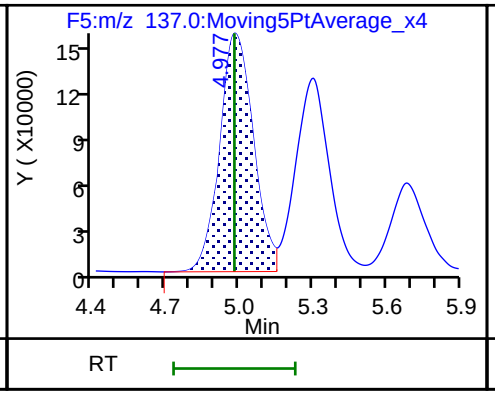
19 2,4-Dinitrotoluene



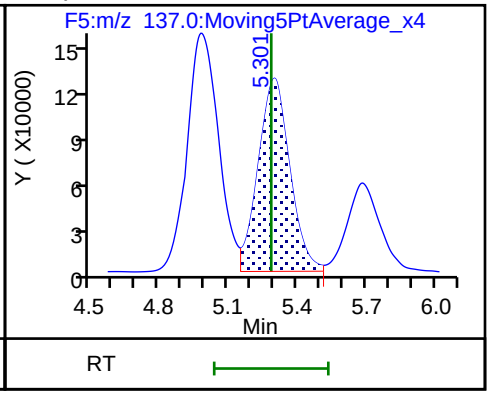
20 PETN



22 o-Nitrotoluene



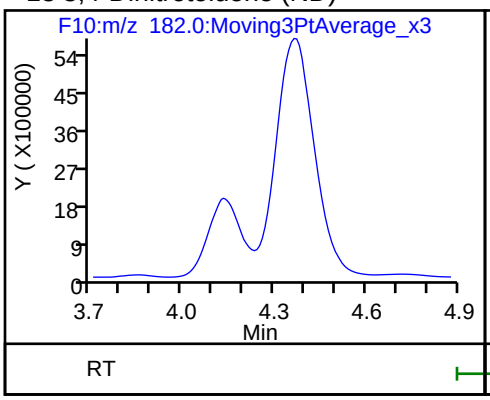
23 p-Nitrotoluene



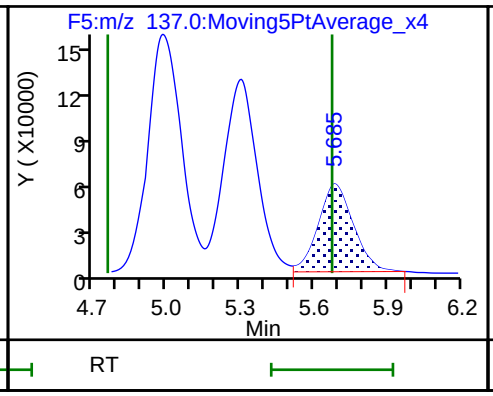
Report Date: 14-Apr-2022 10:07:01 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08031.d

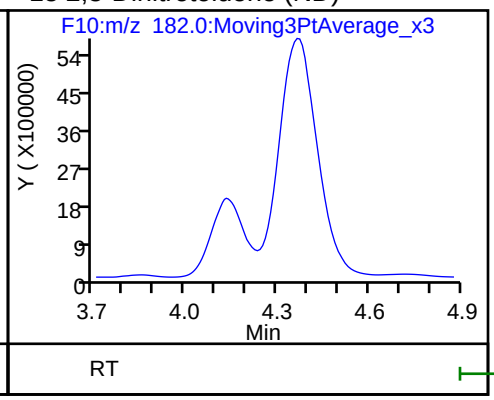
13 3,4-Dinitrotoluene (ND)



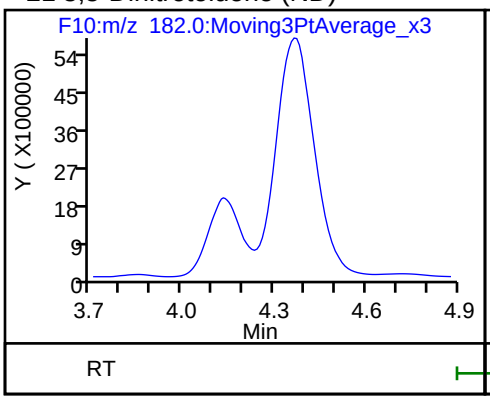
24 m-Nitrotoluene



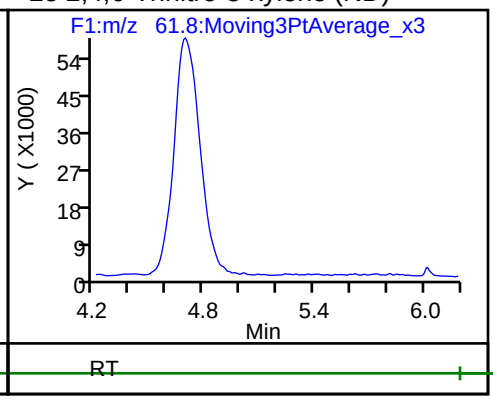
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 14-Apr-2022 10:07:01 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08031.d
Lims ID: 280-160190-A-19-H MSD
Client ID: 29SB168 (6-7)
Sample Type: MSD
Inject. Date: 08-Apr-2022 12:52:46 ALS Bottle#: 28 Worklist Smp#: 31
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-19-H MSD
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:06:52 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:50:29

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	105.9	105.58

Report Date: 14-Apr-2022 10:07:01 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08031.d

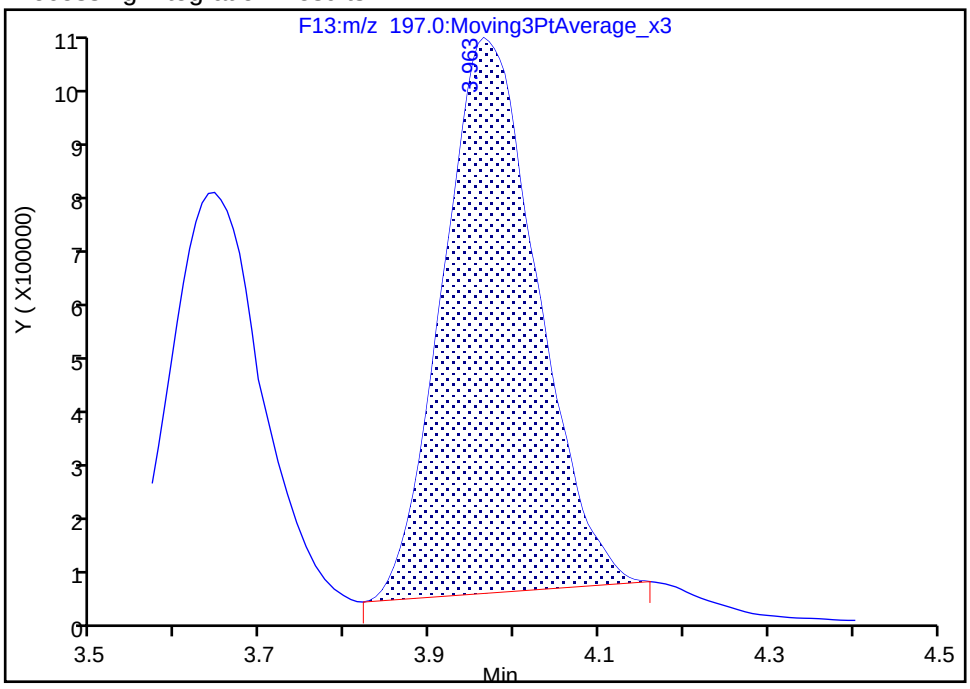
Injection Date:	08-Apr-2022 12:52:46	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-19-H MSD				
Client ID:	29SB168 (6-7)				
Operator ID:	acm	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

16 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

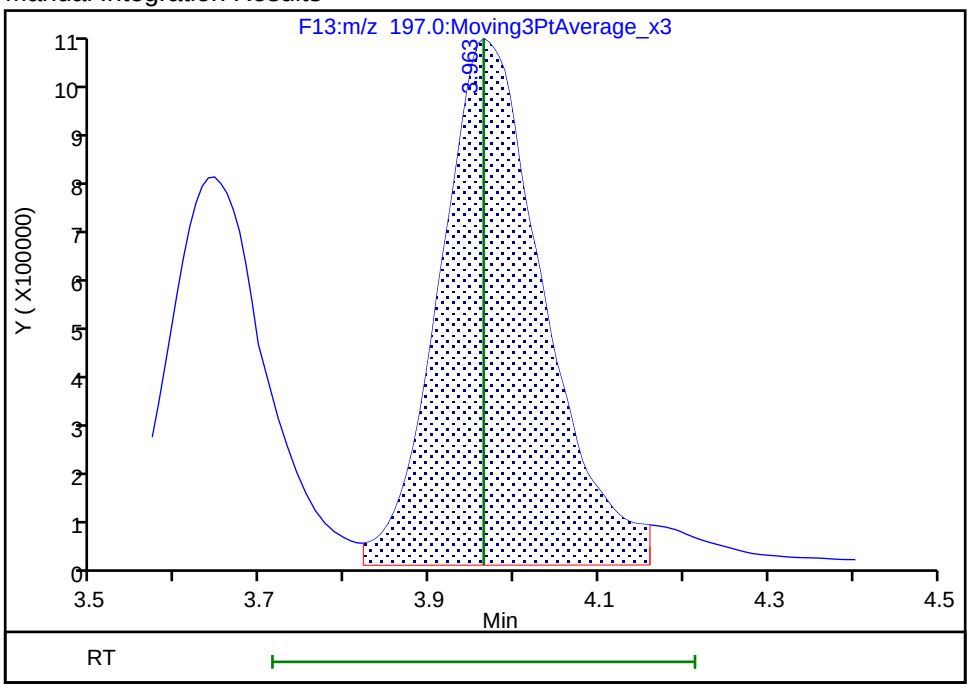
Processing Integration Results

RT: 3.96
Area: 7957247
Amount: 125.0124
Amount Units: ug/l



Manual Integration Results

RT: 3.96
Area: 9255397
Amount: 145.4867
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:50:21

Audit Action: Assigned New Baseline Audit Reason: Baseline

Report Date: 14-Apr-2022 10:07:01 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08031.d

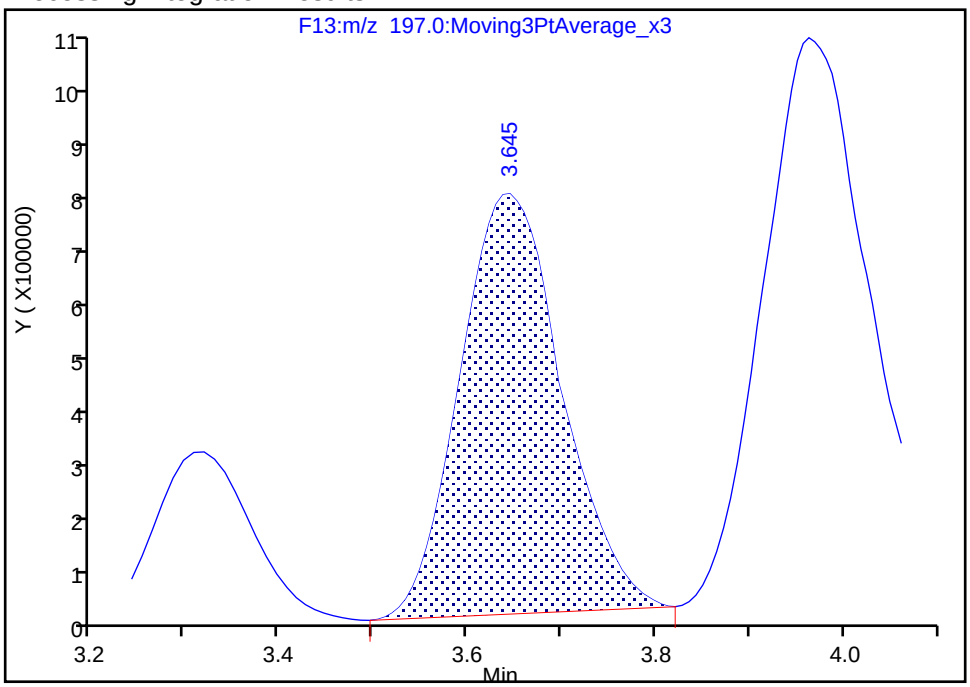
Injection Date:	08-Apr-2022 12:52:46	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-19-H MSD				
Client ID:	29SB168 (6-7)				
Operator ID:	acm	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F13:SIR		

14 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

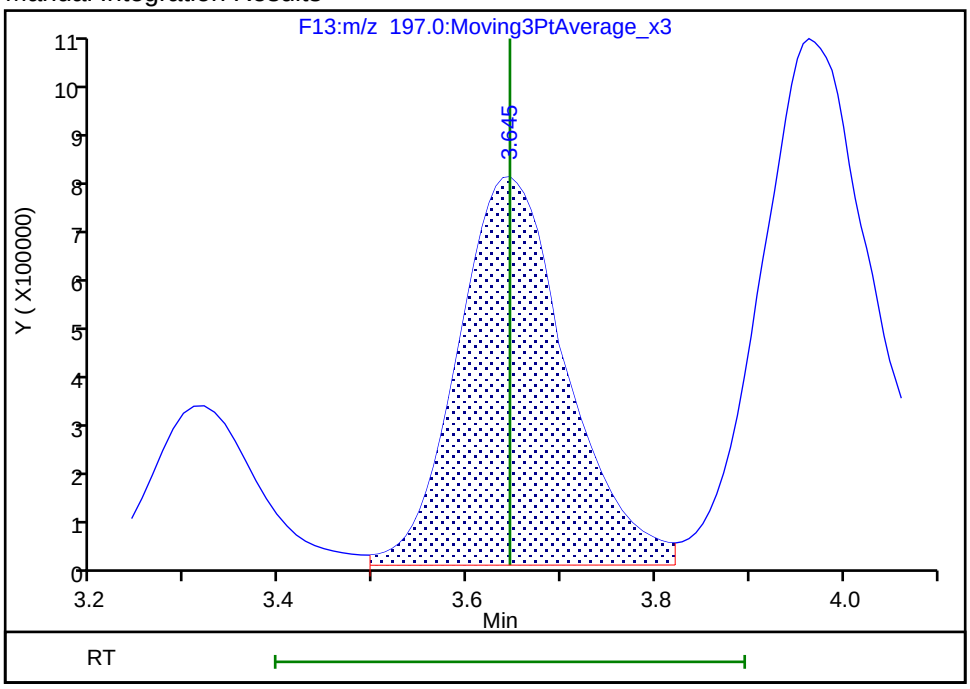
Processing Integration Results

RT: 3.65
Area: 5783407
Amount: 116.2433
Amount Units: ug/l



Manual Integration Results

RT: 3.65
Area: 6427663
Amount: 129.2595
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:50:21

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB168 (6-7) MSD DL | Lab Sample ID: 280-160190-19 MSD DL
Matrix: Solid | Lab File ID: ex422D12068.d
Analysis Method: 8321A | Date Collected: 03/24/2022 11:58
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20
Sample wt/vol: 10.33(g) | Date Analyzed: 04/12/2022 22:01
Con. Extract Vol.: 40(mL) | Dilution Factor: 10
Injection Volume: 40(uL) | GC Column: IonPac ID: 2(mm)
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571614 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
118-96-7	2,4,6-Trinitrotoluene	1.62	D	0.97	0.48	0.36
121-14-2	2,4-Dinitrotoluene	5.47	D 4	0.97	0.48	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	92	D	68-140

Report Date: 13-Apr-2022 13:58:45 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12068.d
Lims ID: 280-160190-A-19-H MSD
Client ID: 29SB168 (6-7)
Sample Type: MSD
Inject. Date: 12-Apr-2022 22:01:00 ALS Bottle#: 61 Worklist Smp#: 69
Injection Vol: 40.0 ul Dil. Factor: 10.0000
Sample Info: 280-160190-A-19-H MSD 10x
Misc. Info.: 04/08/2022 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\8321expDuPont.m
Limit Group: LC - 8321A Expl
Last Update: 13-Apr-2022 13:58:36 Calib Date: 12-Apr-2022 10:31:58
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d

Column 1 : Det: F1:SIR
Process Host: CTX1683

First Level Reviewer: meyera Date: 13-Apr-2022 13:51:28
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.964	1.964	0.0	1.000	27377	7.59	30.4	
* 1 HMX-13C4								
360.9	1.964	1.964	0.0		202795	125.0	99.0	
6 RDX								
281.1	2.772	2.772	0.0	1.000	27682	8.62	30.7	
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.1	2.772	2.798	-0.026		437254	125.0	400	
8 1,3,5-Trinitrobenzene								
213.1	3.458	3.458	0.0	0.785	106131	13.2	79.9	
11 Tetryl								
241.1	4.003	4.003	0.0	0.909	95175	12.9	94.3	
* 12 1,3-Dinitrobenzene-d4								
172.1	4.404	4.461	-0.057		1023442	129.4	70.7	
13 1,3-Dinitrobenzene								
168.1	4.461	4.518	-0.057	1.013	75535	8.90	25.6	
14 Nitroglycerin								
61.9	4.558	4.558	0.0	1.035	525889	8.49	49.4	
33 3,5-Dinitroaniline								
183.1	4.720	4.760	-0.040	1.072	13723	1.52	2.2	
15 2,4,6-Trinitrotoluene								
227.1	4.841	4.841	0.0	0.768	1188370	41.9	612	
$ 16 Nitrobenzene-d5								
128.1	4.922	4.962	-0.040	1.118	72089	9.26	28.4	
17 Nitrobenzene								
123.1	5.043	5.043	0.0	1.145	48067	7.85	69.9	
19 4-Amino-2,6-dinitrotoluene								
197.2	5.417	5.417	0.0	0.859	303410	11.1	29.0	

Report Date: 13-Apr-2022 13:58:45 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12068.d

Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
22 2-Amino-4,6-dinitrotoluene								
197.2	5.821	5.861	-0.040	0.923	378491	11.9	28.1	
23 2,6-Dinitrotoluene								
182.1	6.063	6.094	-0.031	0.961	740506	16.7	149	
* 24 2,4-dinitrotoluene-d3								
185.1	6.306	6.336	-0.030		2777592	125.0	509	
25 2,4-Dinitrotoluene								
182.1	6.367	6.367	0.0	1.010	3543185	141.4	507	
26 PETN								
61.9	6.812	6.812	0.0	1.080	571504	10.2	53.9	
28 o-Nitrotoluene								
137.1	7.359	7.389	-0.030	1.167	150441	14.1	34.7	
29 p-Nitrotoluene								
137.1	7.845	7.875	-0.030	1.244	123676	13.6	27.7	
30 m-Nitrotoluene								
137.1	8.422	8.391	0.031	1.335	69709	11.2	16.1	

QC Flag Legend

Processing Flags

Reagents:

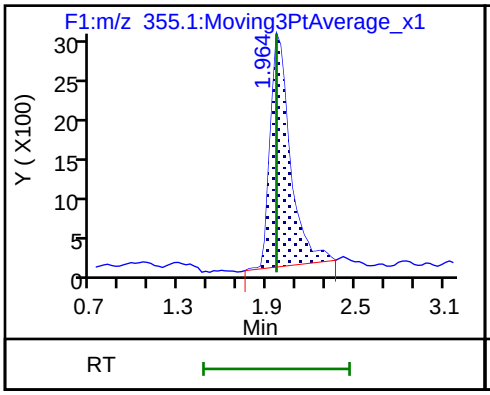
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 13-Apr-2022 13:58:45 Chrom Revision: 2.3 18-Mar-2022 09:07:22

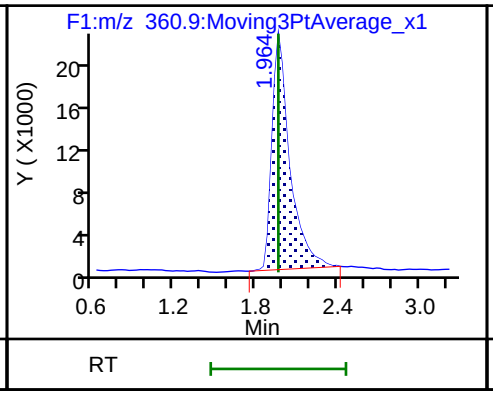
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12068.d
Injection Date: 12-Apr-2022 22:01:00 Instrument ID: LC_LCMS4
Lims ID: 280-160190-A-19-H MSD
Client ID: 29SB168 (6-7)
Operator ID: acm ALS Bottle#: 61 Worklist Smp#: 69
Injection Vol: 40.0 ul Dil. Factor: 10.0000
Method: 8321expDuPont Limit Group: LC - 8321A Expl

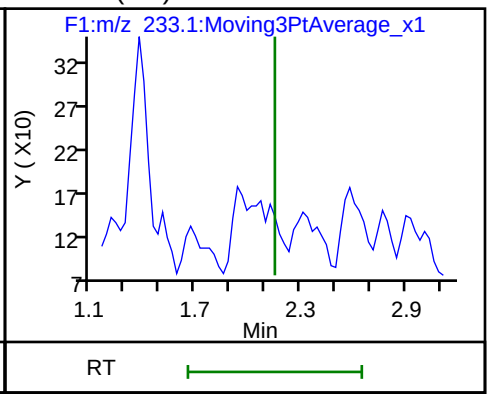
2 HMX



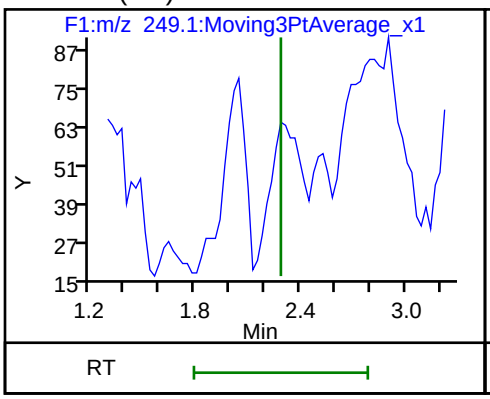
* 1 HMX-13C4



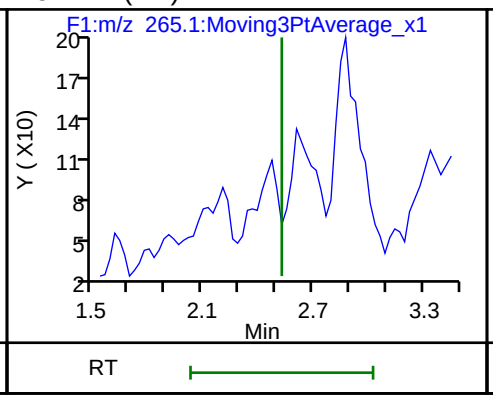
3 TNX (ND)



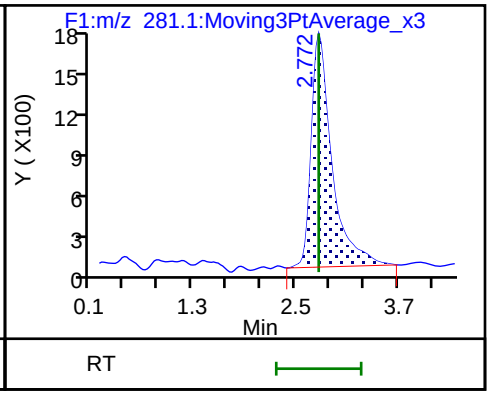
4 DNX (ND)



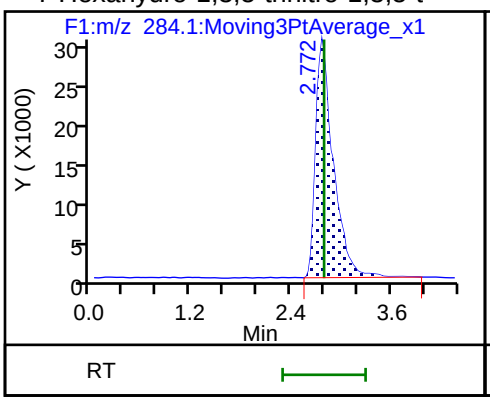
5 MNX (ND)



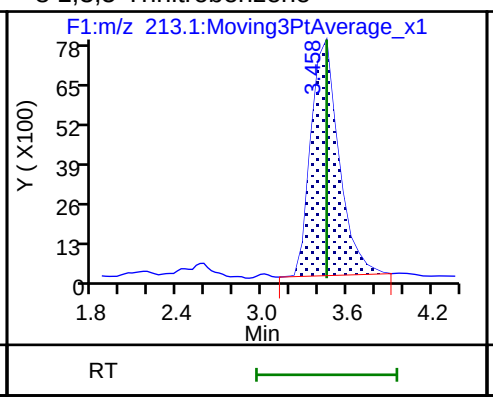
6 RDX



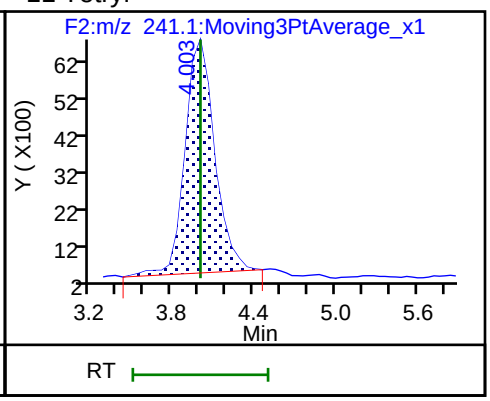
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t



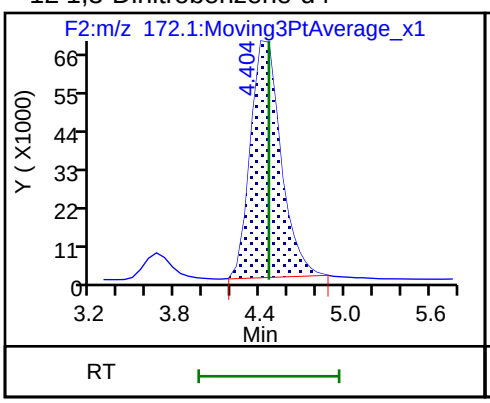
8 1,3,5-Trinitrobenzene



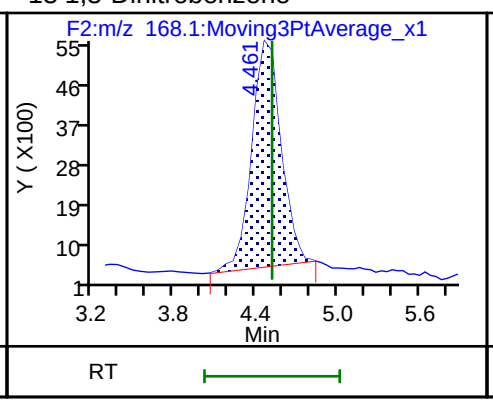
11 Tetryl



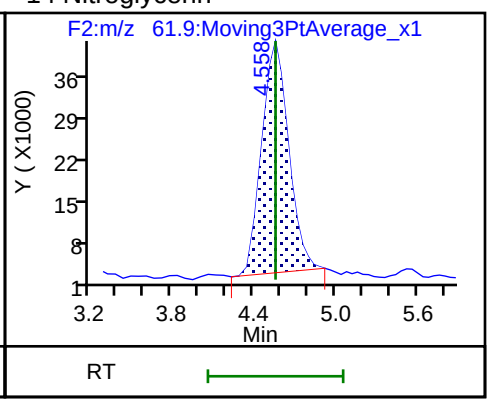
* 12 1,3-Dinitrobenzene-d4



13 1,3-Dinitrobenzene



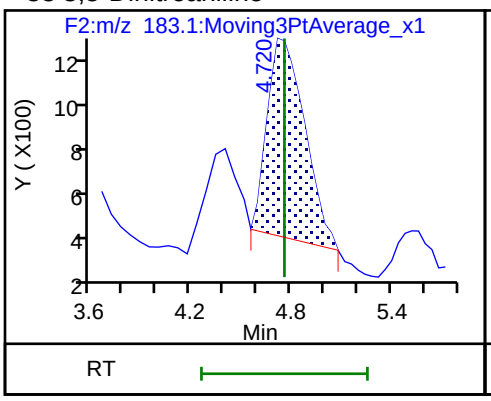
14 Nitroglycerin



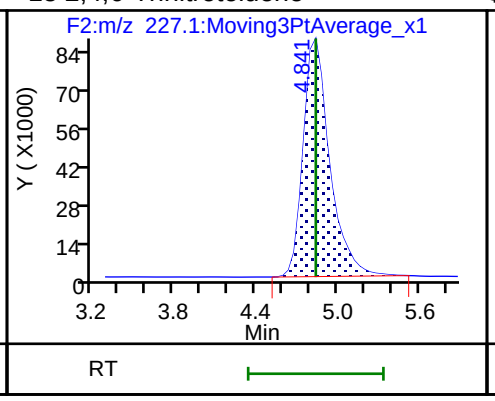
Report Date: 13-Apr-2022 13:58:45 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12068.d

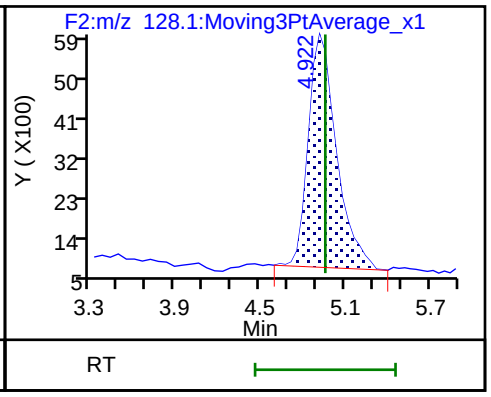
33 3,5-Dinitroaniline



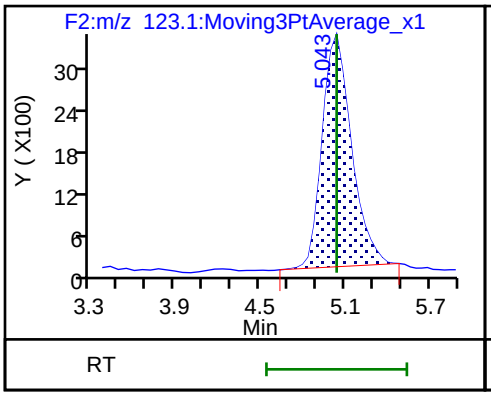
15 2,4,6-Trinitrotoluene



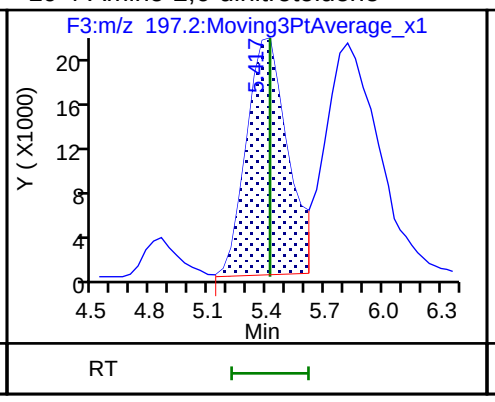
$ 16 Nitrobenzene-d5



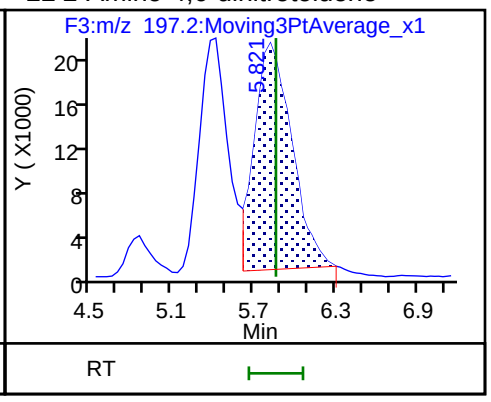
17 Nitrobenzene



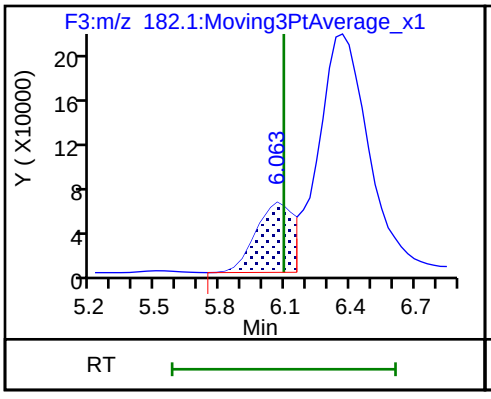
19 4-Amino-2,6-dinitrotoluene



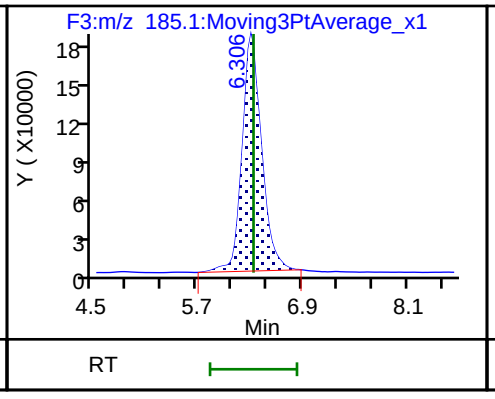
22 2-Amino-4,6-dinitrotoluene



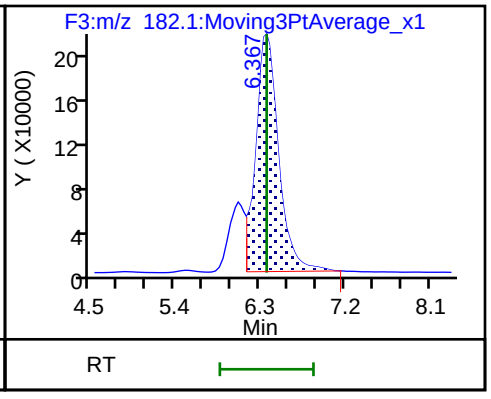
23 2,6-Dinitrotoluene



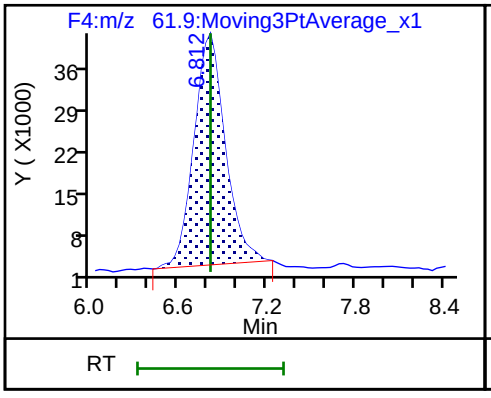
* 24 2,4-dinitrotoluene-d3



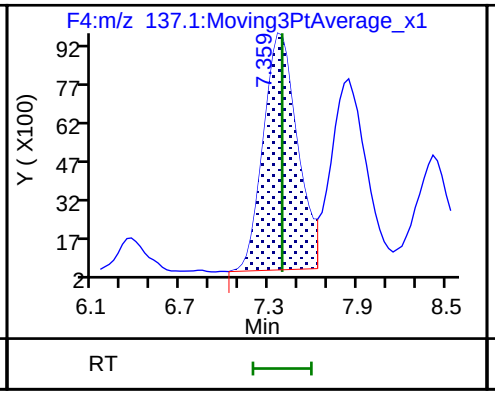
25 2,4-Dinitrotoluene



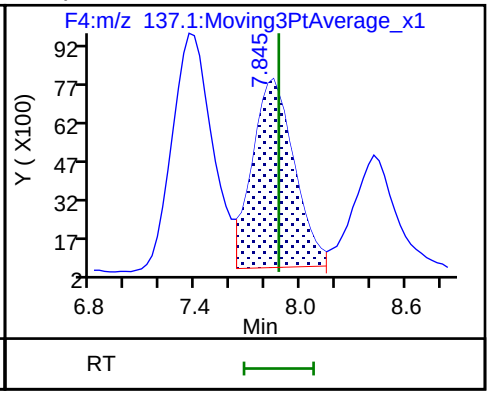
26 PETN



28 o-Nitrotoluene

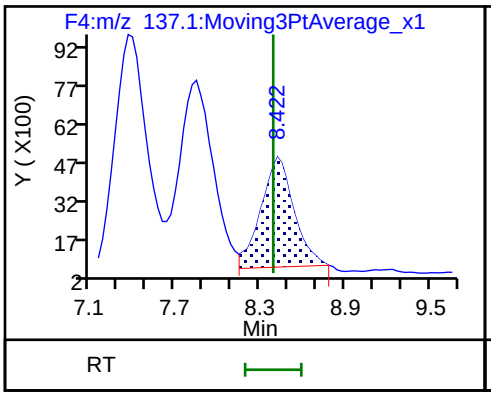


29 p-Nitrotoluene

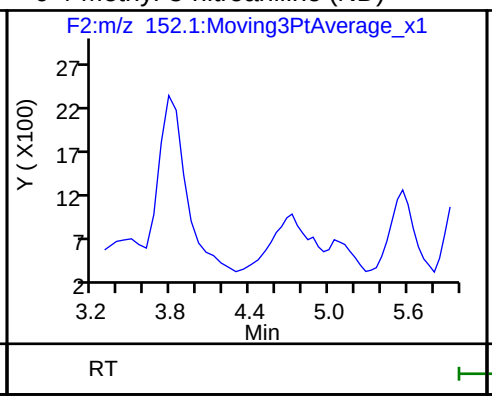


Report Date: 13-Apr-2022 13:58:45 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12068.d

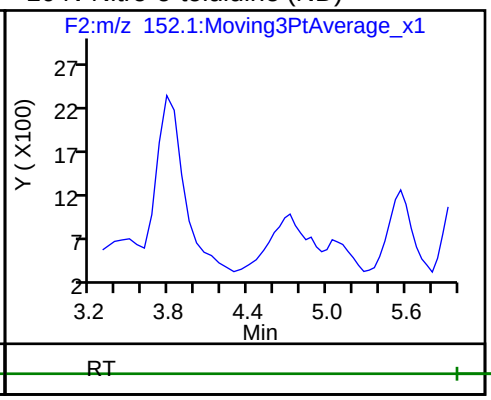
30 m-Nitrotoluene



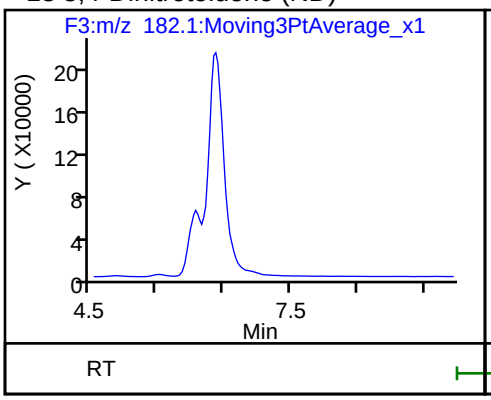
9 4-Methyl-3-nitroaniline (ND)



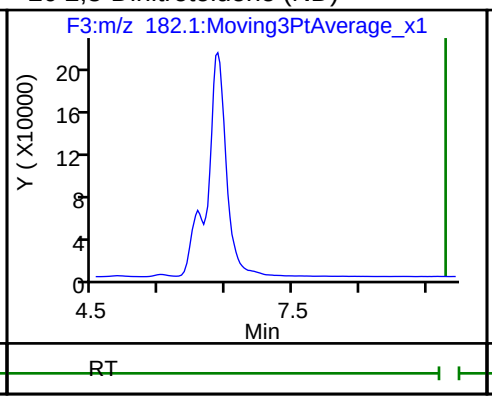
10 N-Nitro-o-toluidine (ND)



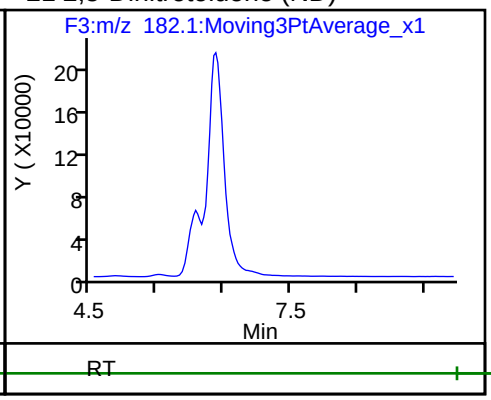
18 3,4-Dinitrotoluene (ND)



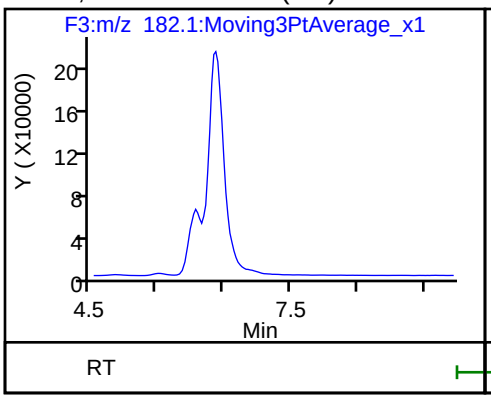
20 2,3-Dinitrotoluene (ND)



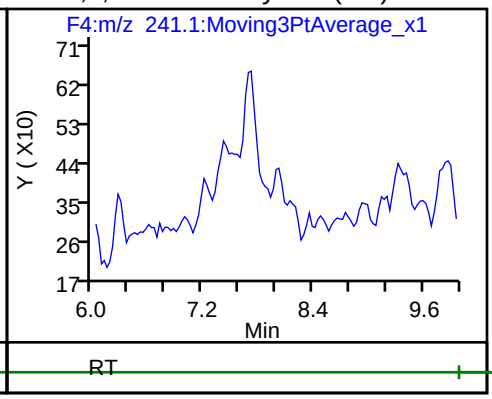
21 2,5-Dinitrotoluene (ND)



27 3,5-Dinitrotoluene (ND)



31 2,4,6-Trinitro-3-xylene (ND)



Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12068.d
Lims ID: 280-160190-A-19-H MSD
Client ID: 29SB168 (6-7)
Sample Type: MSD
Inject. Date: 12-Apr-2022 22:01:00 ALS Bottle#: 61 Worklist Smp#: 69
Injection Vol: 40.0 ul Dil. Factor: 10.0000
Sample Info: 280-160190-A-19-H MSD 10x
Misc. Info.: 04/08/2022 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\8321expDuPont.m
Limit Group: LC - 8321A Expl
Last Update: 13-Apr-2022 13:58:36 Calib Date: 12-Apr-2022 10:31:58
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d

Column 1 : Det: F1:SIR
Process Host: CTX1683

First Level Reviewer: meyera Date: 13-Apr-2022 13:51:28

Compound	Amount Added	Amount Recovered	% Rec.
$ 16 Nitrobenzene-d5	100.3	9.26	9.23

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: | Lab Sample ID: 280-160190-A-28-F MSD
Matrix: Solid | Lab File ID: ex722D14019.d
Analysis Method: 8321A | Date Collected: 03/24/2022 12:35
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:23
Sample wt/vol: 10.17(g) | Date Analyzed: 04/14/2022 14:13
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571896 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.339		0.098	0.049	0.044
99-65-0	1,3-Dinitrobenzene	0.363		0.098	0.049	0.044
118-96-7	2,4,6-Trinitrotoluene	0.521		0.098	0.049	0.036
121-14-2	2,4-Dinitrotoluene	0.717		0.098	0.049	0.046
606-20-2	2,6-Dinitrotoluene	0.365		0.098	0.049	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.319		0.098	0.049	0.049
19406-51-0	4-Amino-2,6-dinitrotoluene	0.288	J1	0.098	0.049	0.031
2691-41-0	HMX	0.300		0.098	0.049	0.045
99-08-1	m-Nitrotoluene	0.364		0.098	0.049	0.042
98-95-3	Nitrobenzene	0.368		0.11	0.049	0.037
55-63-0	Nitroglycerin	0.367		0.098	0.049	0.029
88-72-2	o-Nitrotoluene	0.373		0.098	0.049	0.042
78-11-5	PETN	0.376		0.098	0.049	0.033
99-99-0	p-Nitrotoluene	0.380		0.098	0.049	0.049
121-82-4	RDX	0.317		0.12	0.049	0.042
479-45-8	Tetryl	0.541	J1	0.098	0.049	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	93		68-140

Report Date: 15-Apr-2022 08:03:05 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14019.d
Lims ID: 280-160190-A-28-F MSD
Client ID:
Sample Type: MSD
Inject. Date: 14-Apr-2022 14:13:18 ALS Bottle#: 17 Worklist Smp#: 19
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-28-F MSD
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:00 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:26:12
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	172002	76.3	58.6	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		130694	125.0	92.0	
4 RDX								
281.2	1.833	1.833	0.0	0.998	237988	80.7	61.6	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		569856	125.0	236	
5 1,3,5-Trinitrobenzene								
213.0	2.299	2.299	0.0	0.769	1430380	86.2	144	
6 Tetryl								
241.1	2.685	2.679	0.006	0.898	3473384	137.5	197	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1223981	129.4	263	
8 1,3-Dinitrobenzene								
168.0	3.022	3.022	0.0	1.010	933736	92.3	124	
9 Nitroglycerin								
62.0	3.040	3.040	0.0	1.016	852479	93.4	285	
10 2,4,6-Trinitrotoluene								
227.0	3.281	3.281	0.0	0.766	9394847	132.3	759	
$ 11 Nitrobenzene-d5								
128.0	3.315	3.324	-0.009	0.774	512978	93.5	186	
12 Nitrobenzene								
123.0	3.382	3.382	0.0	0.789	425144	93.7	38.4	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.611	3.611	0.0	0.843	3545233	73.3	30.9	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.943	3.924	0.019	0.920	5427102	81.2	44.5	

Report Date: 15-Apr-2022 08:03:05 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14019.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
17 2,6-Dinitrotoluene								
182.0	4.093	4.093	0.0	0.955	5570791	92.9	273	
* 18 2,4-dinitrotoluene-d3								
185.1	4.284	4.275	0.009		3717836	125.0	124	
19 2,4-Dinitrotoluene								
182.0	4.316	4.316	0.0	1.008	5733611	182.2	252	
20 PETN								
61.8	4.628	4.638	-0.010	1.080	568722	95.6	93.3	
22 o-Nitrotoluene								
137.0	4.932	4.932	0.0	1.151	830816	94.8	549	
23 p-Nitrotoluene								
137.0	5.235	5.230	0.005	1.222	748217	96.6	474	
24 m-Nitrotoluene								
137.0	5.629	5.614	0.015	1.314	418936	92.4	248	

QC Flag Legend

Processing Flags

Reagents:

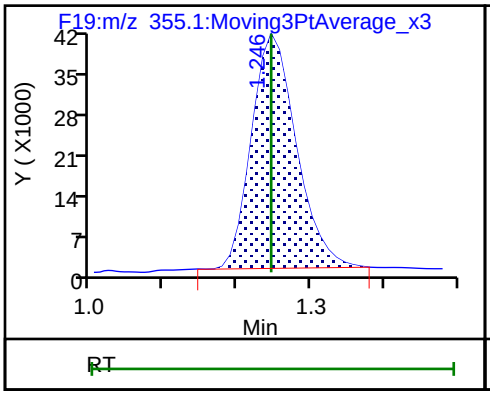
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:05 Chrom Revision: 2.3 12-Apr-2022 20:29:44

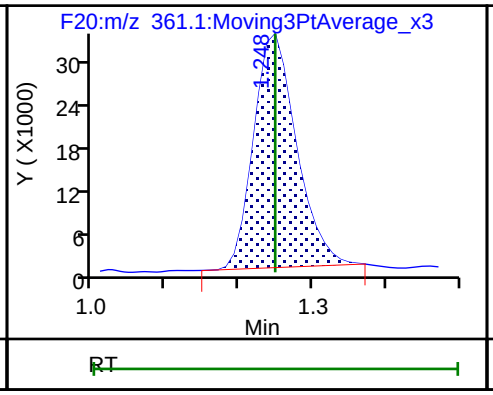
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14019.d
Injection Date: 14-Apr-2022 14:13:18 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-28-F MSD
Client ID:
Operator ID: acm ALS Bottle#: 17 Worklist Smp#: 19
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

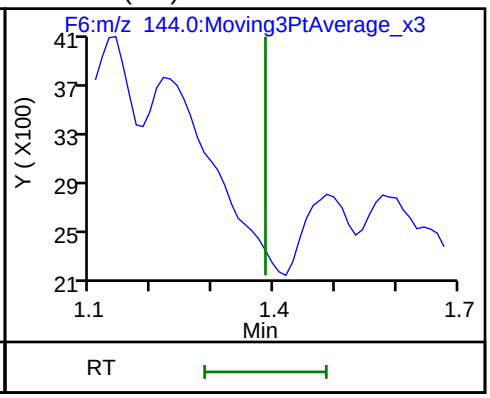
2 HMX



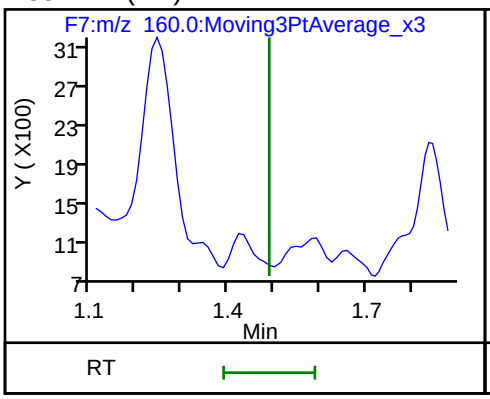
* 1 HMX-13C4



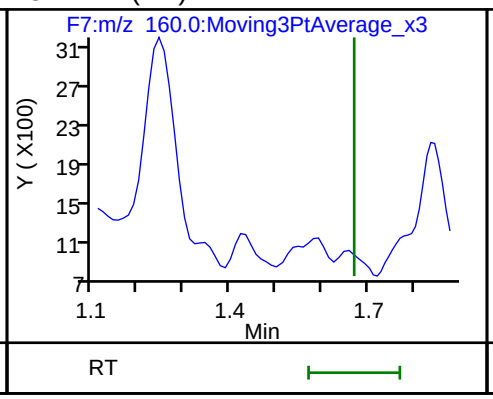
36 TNX (ND)



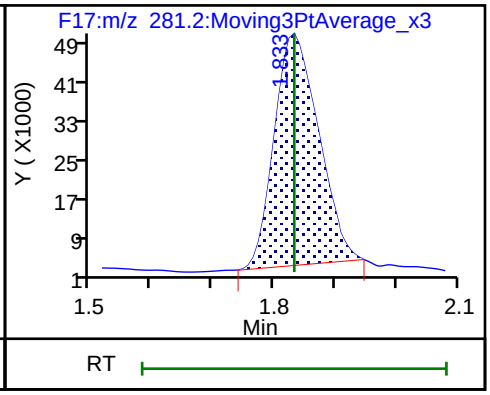
33 DNX (ND)



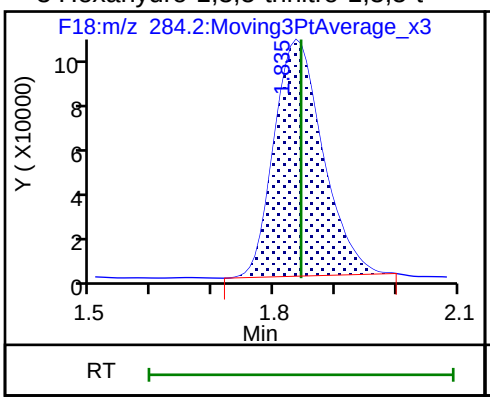
34 MNX (ND)



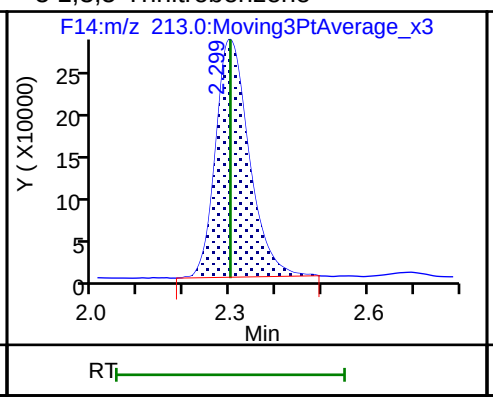
4 RDX



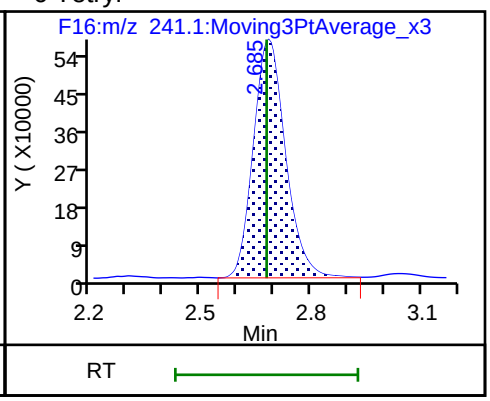
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



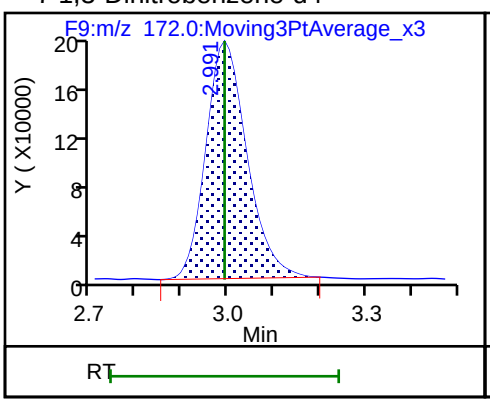
5 1,3,5-Trinitrobenzene



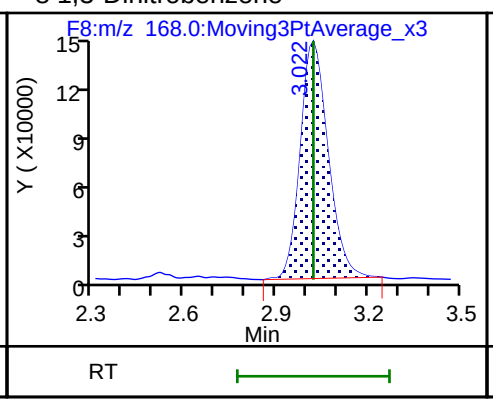
6 Tetryl



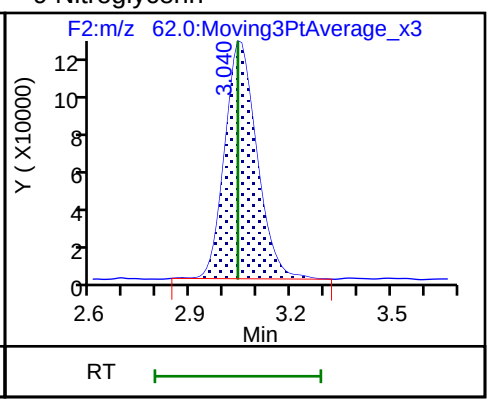
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

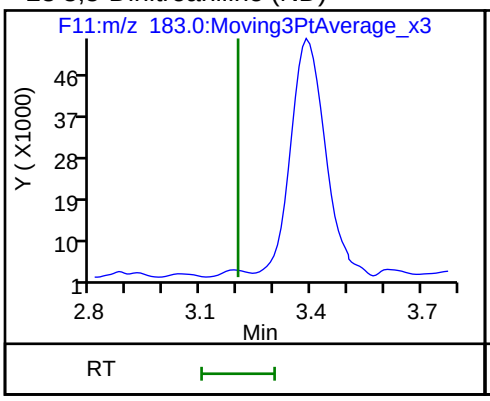


9 Nitroglycerin

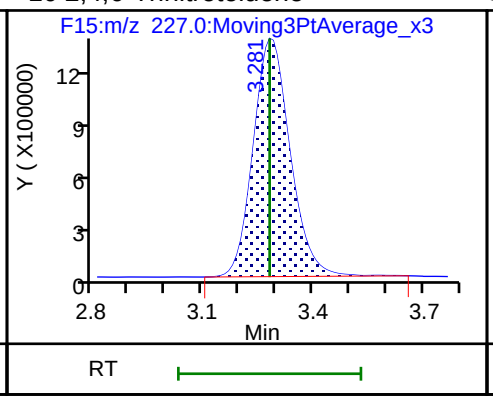


Report Date: 15-Apr-2022 08:03:05 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14019.d

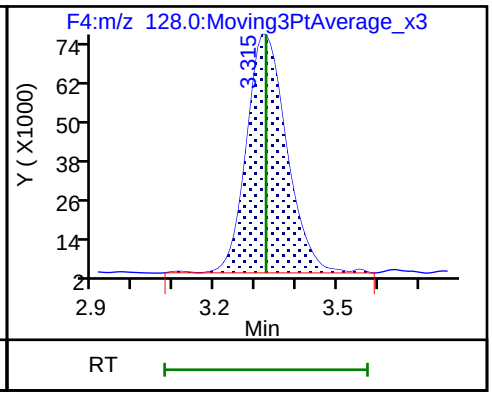
28 3,5-Dinitroaniline (ND)



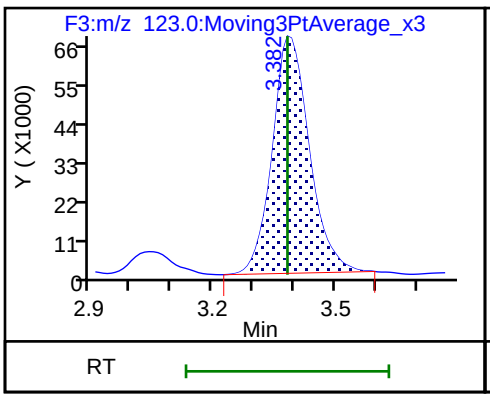
10 2,4,6-Trinitrotoluene



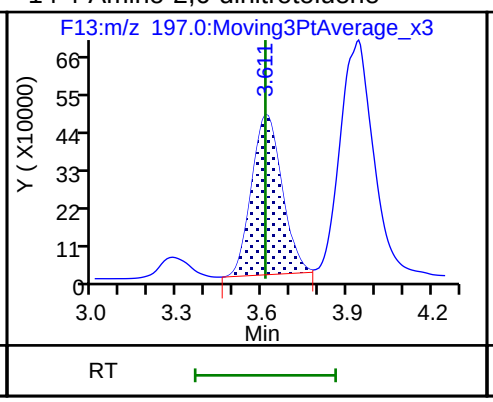
$ 11 Nitrobenzene-d5



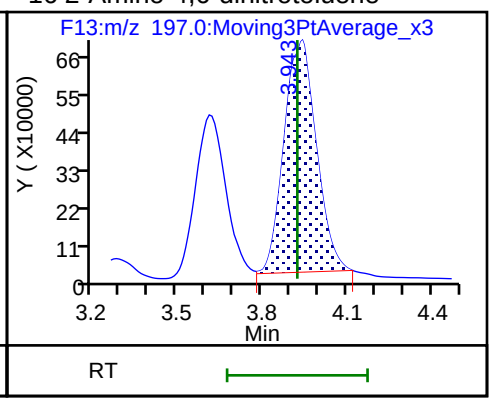
12 Nitrobenzene



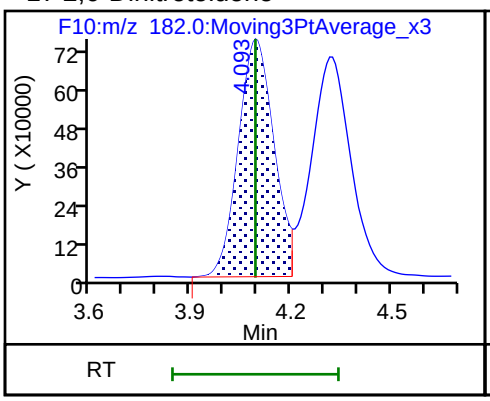
14 4-Amino-2,6-dinitrotoluene



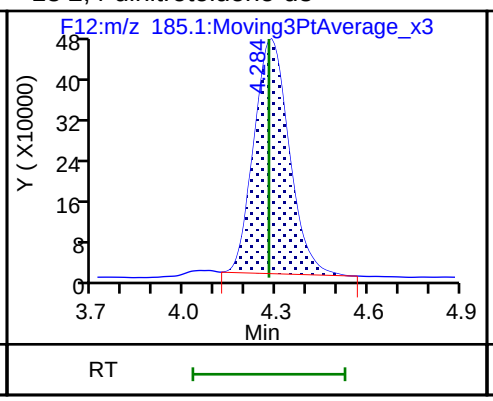
16 2-Amino-4,6-dinitrotoluene



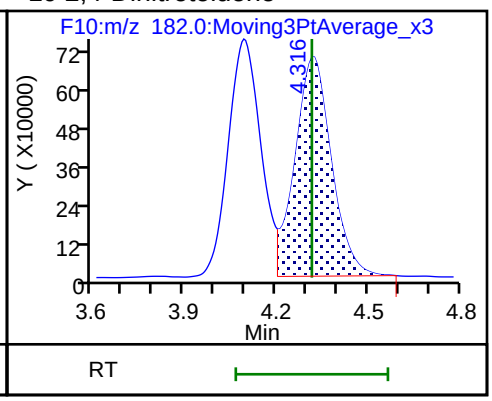
17 2,6-Dinitrotoluene



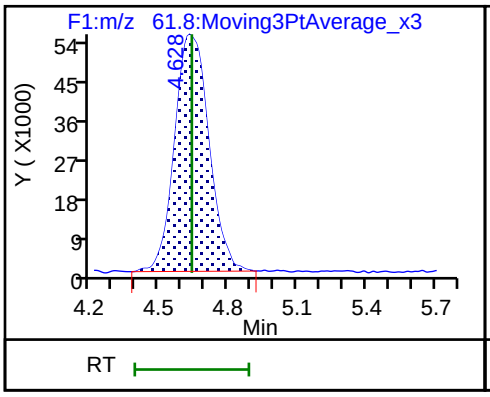
* 18 2,4-dinitrotoluene-d3



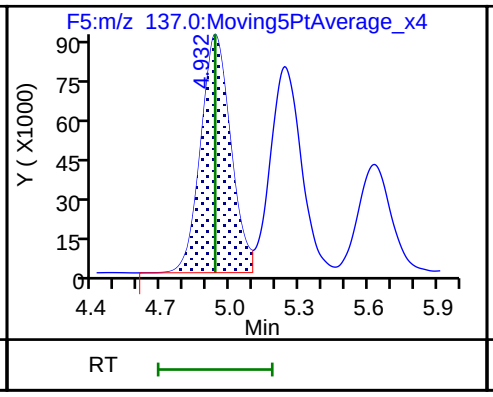
19 2,4-Dinitrotoluene



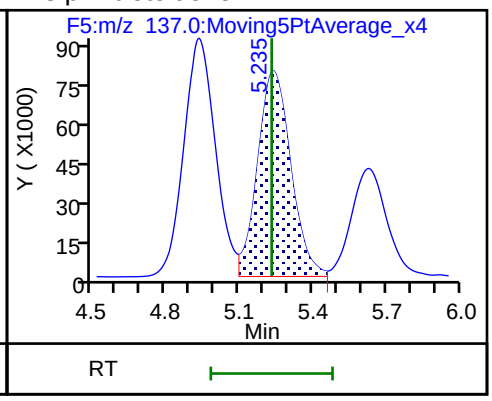
20 PETN



22 o-Nitrotoluene



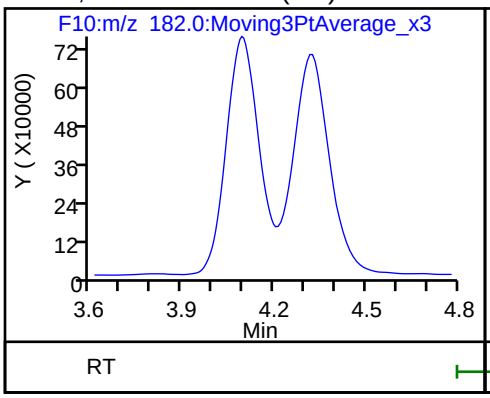
23 p-Nitrotoluene



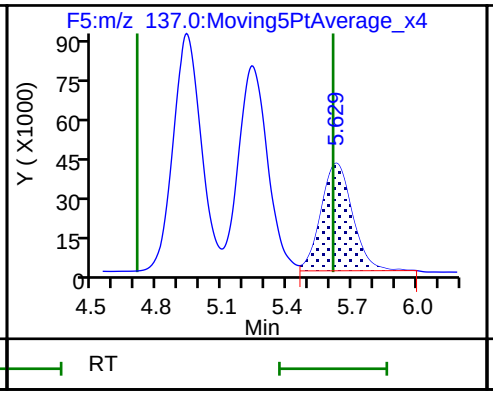
Report Date: 15-Apr-2022 08:03:05 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14019.d

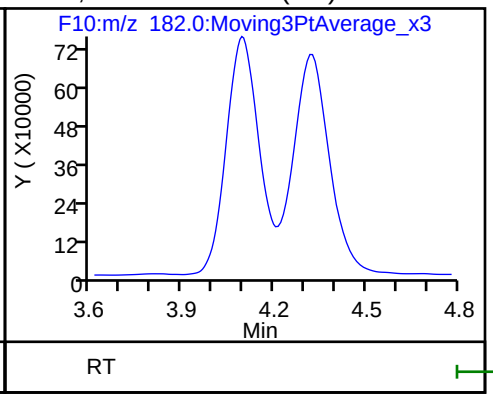
13 3,4-Dinitrotoluene (ND)



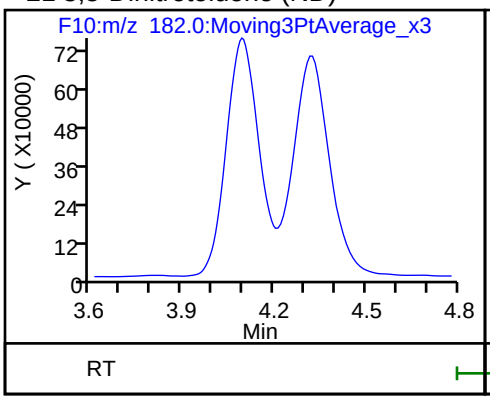
24 m-Nitrotoluene



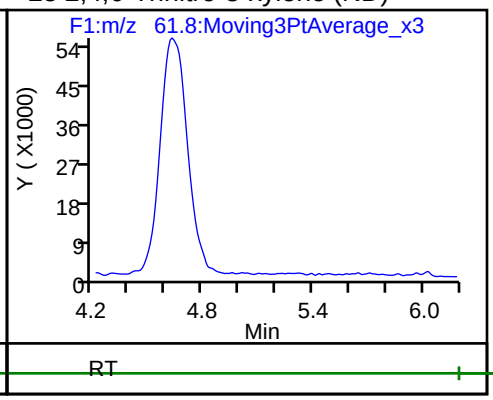
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:05 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14019.d
Lims ID: 280-160190-A-28-F MSD
Client ID:
Sample Type: MSD
Inject. Date: 14-Apr-2022 14:13:18 ALS Bottle#: 17 Worklist Smp#: 19
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-28-F MSD
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:00 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:26:12

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	93.5	93.15

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB203 (3-4) MSD | Lab Sample ID: 280-160190-52MSD
Matrix: Solid | Lab File ID: ex722D14056.d
Analysis Method: 8321A | Date Collected: 03/24/2022 15:15
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:17
Sample wt/vol: 10.39(g) | Date Analyzed: 04/14/2022 18:17
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571897 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.344		0.096	0.048	0.043
99-65-0	1,3-Dinitrobenzene	0.340		0.096	0.048	0.043
118-96-7	2,4,6-Trinitrotoluene	0.349		0.096	0.048	0.035
121-14-2	2,4-Dinitrotoluene	0.334		0.096	0.048	0.045
606-20-2	2,6-Dinitrotoluene	0.361		0.096	0.048	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.252	J1	0.096	0.048	0.048
19406-51-0	4-Amino-2,6-dinitrotoluene	0.118	J1	0.096	0.048	0.030
2691-41-0	HMX	0.342		0.096	0.048	0.044
99-08-1	m-Nitrotoluene	0.343		0.096	0.048	0.042
98-95-3	Nitrobenzene	0.357		0.11	0.048	0.037
55-63-0	Nitroglycerin	0.404		0.096	0.048	0.028
88-72-2	o-Nitrotoluene	0.352		0.096	0.048	0.041
78-11-5	PETN	0.386		0.096	0.048	0.033
99-99-0	p-Nitrotoluene	0.353		0.096	0.048	0.048
121-82-4	RDX	0.297	M	0.12	0.048	0.041
479-45-8	Tetryl	0.557	J1	0.096	0.048	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	97		68-140

Report Date: 15-Apr-2022 08:18:49 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14056.d
Lims ID: 280-160190-A-52-H MSD
Client ID: 29SB203 (3-4)
Sample Type: MSD
Inject. Date: 14-Apr-2022 18:17:24 ALS Bottle#: 2 Worklist Smp#: 56
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-52-H MSD
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:18:49 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:38:29
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
2 HMX								
355.1	1.246	1.246	0.0	0.998	198715	88.7	100	
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		130200	125.0	77.5	
4 RDX								M
281.2	1.824	1.824	-0.009	0.994	255984	77.2	251	M
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		635935	125.0	518	
5 1,3,5-Trinitrobenzene								
213.0	2.292	2.299	-0.007	0.769	1345424	89.3	172	
6 Tetryl								
241.1	2.685	2.679	0.006	0.901	3320371	144.8	226	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.981	2.991	-0.010		1110839	129.4	333	
8 1,3-Dinitrobenzene								
168.0	3.010	3.022	-0.012	1.010	812054	88.4	131	
9 Nitroglycerin								
62.0	3.040	3.040	0.0	1.020	868432	105.0	315	
10 2,4,6-Trinitrotoluene								
227.0	3.272	3.281	-0.009	0.767	6052714	90.8	383	
$ 11 Nitrobenzene-d5								
128.0	3.324	3.324	0.0	0.779	483262	97.1	104	
12 Nitrobenzene								
123.0	3.372	3.382	-0.010	0.790	381463	92.6	43.3	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.601	3.611	-0.010	0.844	1415968	30.8	22.9	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.918	3.924	-0.006	0.918	4108905	65.6	63.1	

Report Date: 15-Apr-2022 08:18:49 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14056.d

Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
17 2,6-Dinitrotoluene								
182.0	4.081	4.093	-0.012	0.956	5265929	93.8	516	
* 18 2,4-dinitrotoluene-d3								
185.1	4.267	4.275	-0.008		3478833	125.0	126	
19 2,4-Dinitrotoluene								
182.0	4.299	4.316	-0.017	1.008	2567236	86.7	229	
20 PETN								
61.8	4.618	4.638	-0.020	1.082	557571	100.3	81.6	
22 o-Nitrotoluene								
137.0	4.922	4.932	-0.010	1.154	749278	91.3	369	
23 p-Nitrotoluene								
137.0	5.221	5.230	-0.009	1.224	664093	91.6	313	
24 m-Nitrotoluene								
137.0	5.609	5.614	-0.005	1.315	377417	89.0	163	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

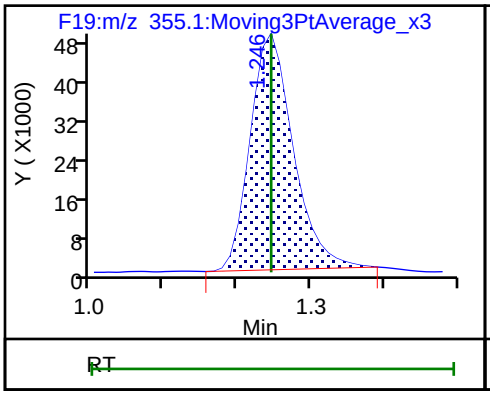
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:18:49 Chrom Revision: 2.3 12-Apr-2022 20:29:44

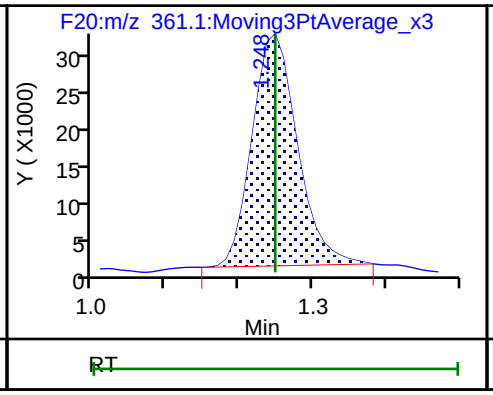
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14056.d
Injection Date: 14-Apr-2022 18:17:24 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-52-H MSD
Client ID: 29SB203 (3-4)
Operator ID: acm ALS Bottle#: 2 Worklist Smp#: 56
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

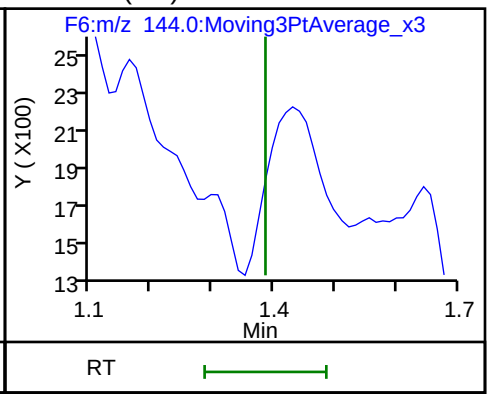
2 HMX



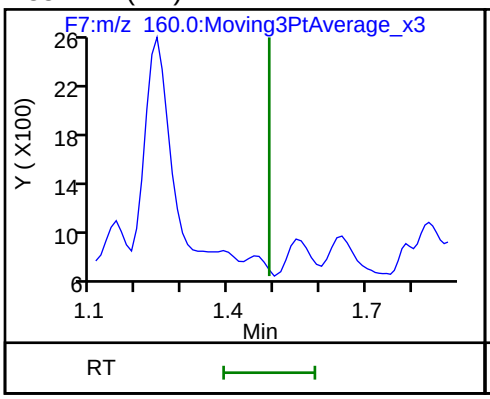
* 1 HMX-13C4



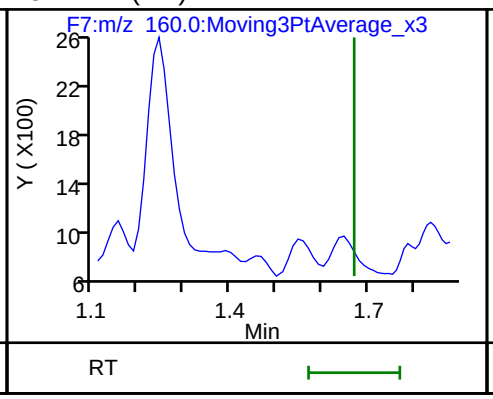
36 TNX (ND)



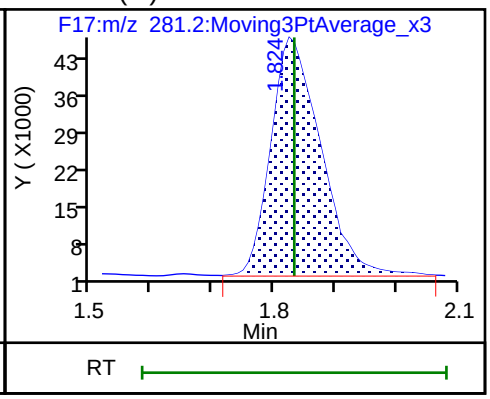
33 DNX (ND)



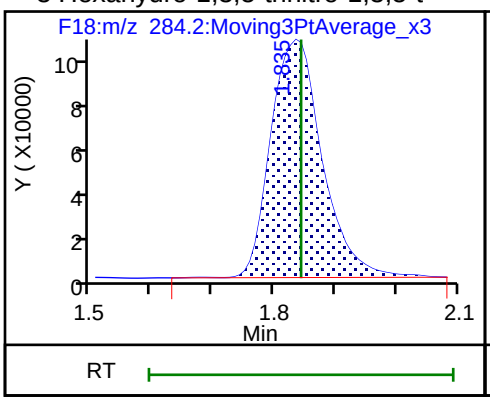
34 MNX (ND)



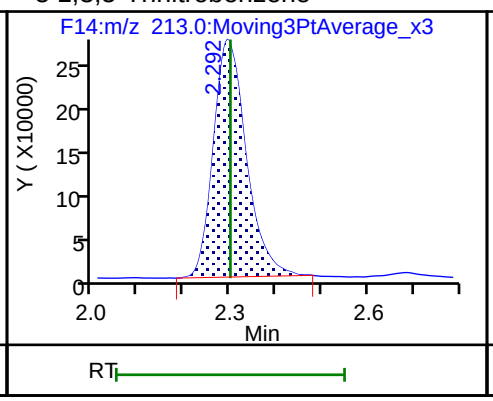
4 RDX (M)



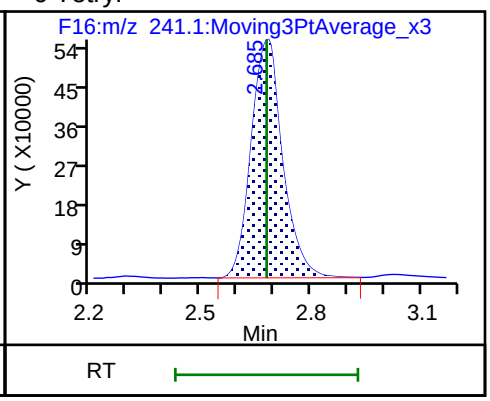
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



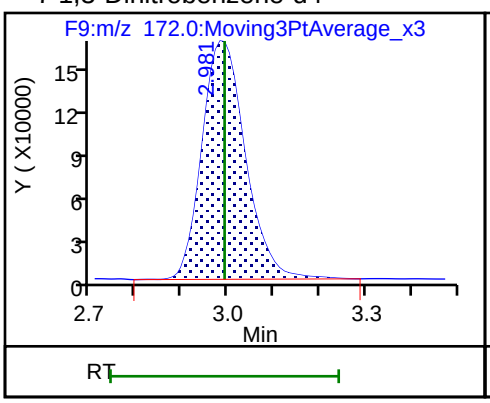
5 1,3,5-Trinitrobenzene



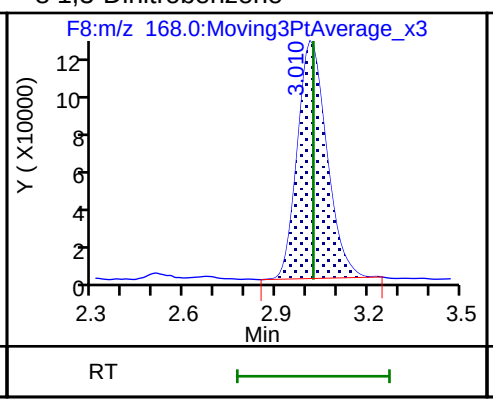
6 Tetryl



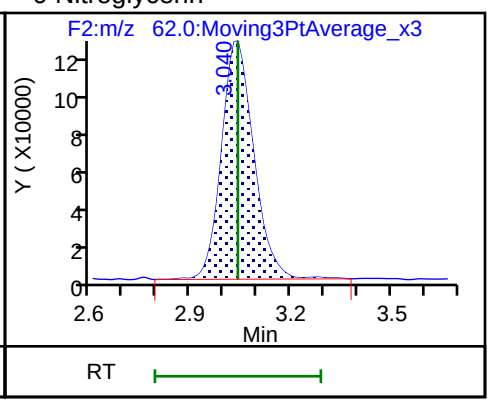
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



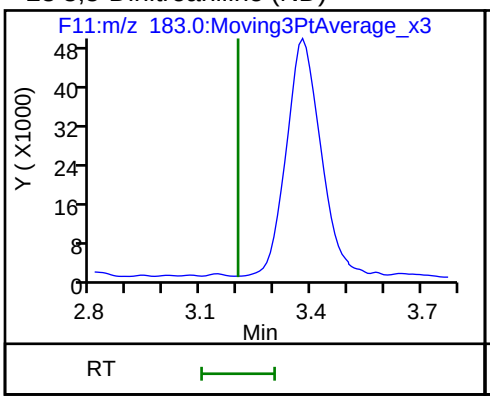
9 Nitroglycerin



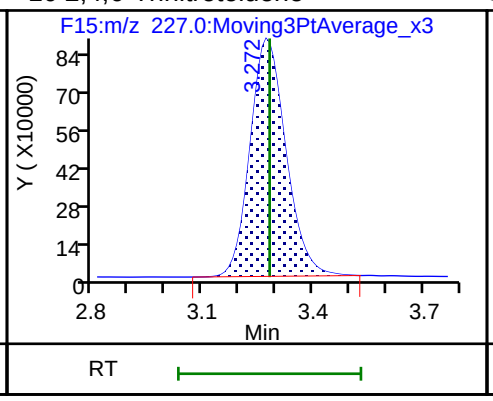
Report Date: 15-Apr-2022 08:18:49 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14056.d

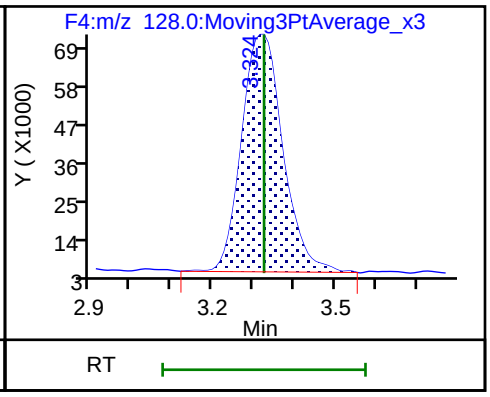
28 3,5-Dinitroaniline (ND)



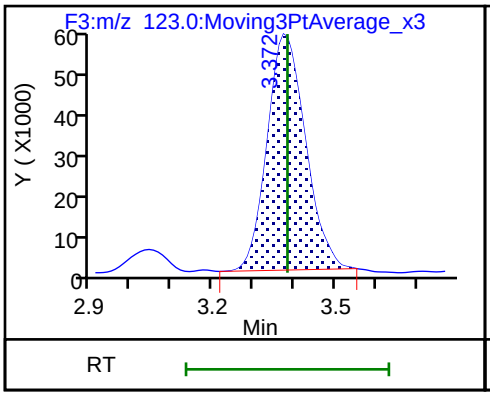
10 2,4,6-Trinitrotoluene



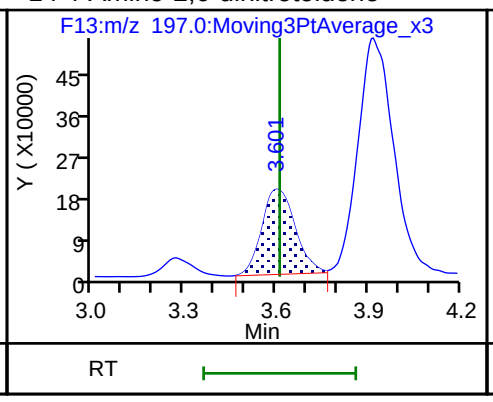
$ 11 Nitrobenzene-d5



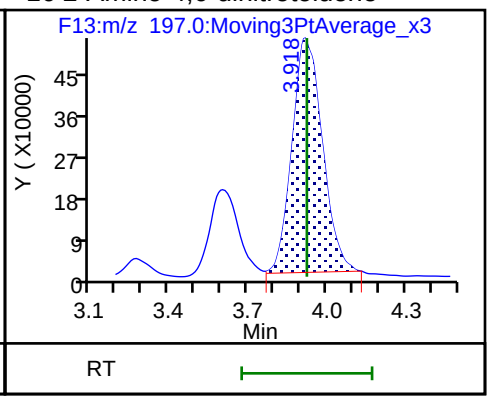
12 Nitrobenzene



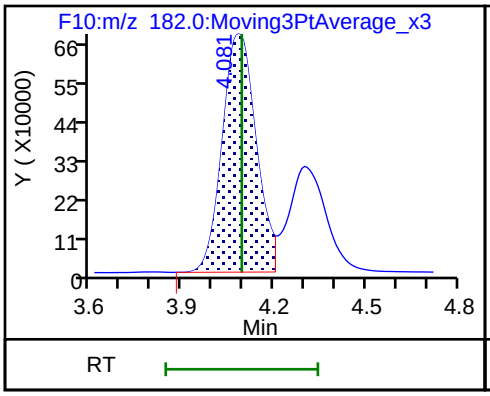
14 4-Amino-2,6-dinitrotoluene



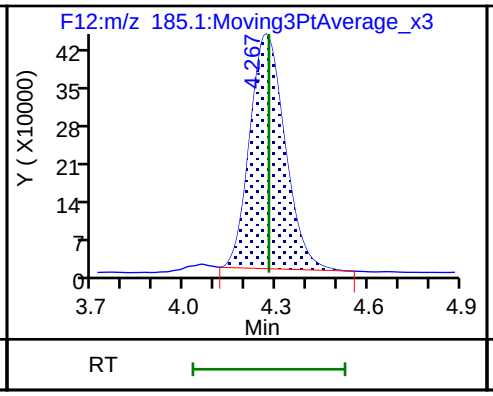
16 2-Amino-4,6-dinitrotoluene



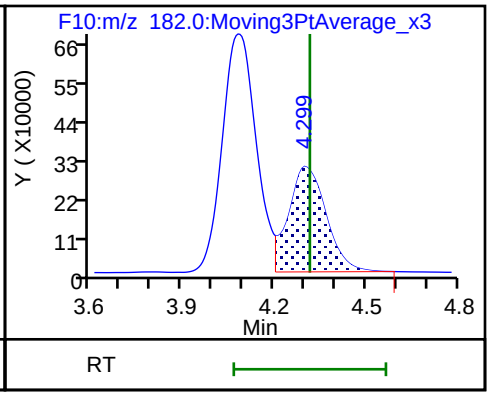
17 2,6-Dinitrotoluene



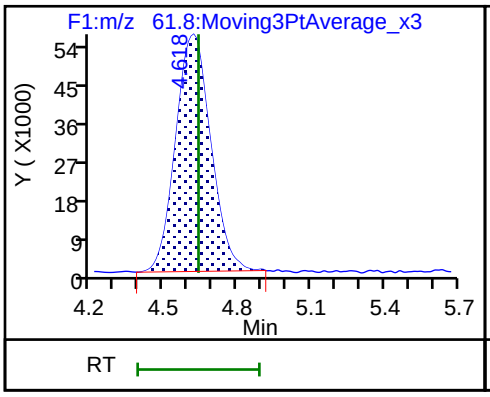
* 18 2,4-dinitrotoluene-d3



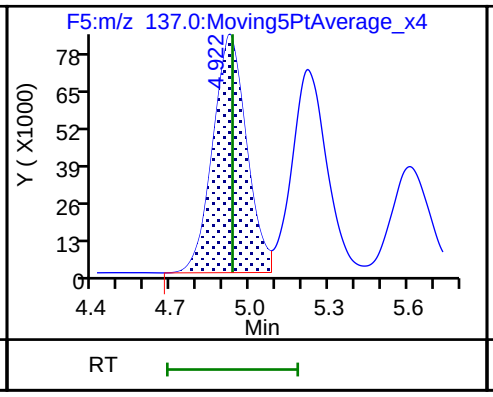
19 2,4-Dinitrotoluene



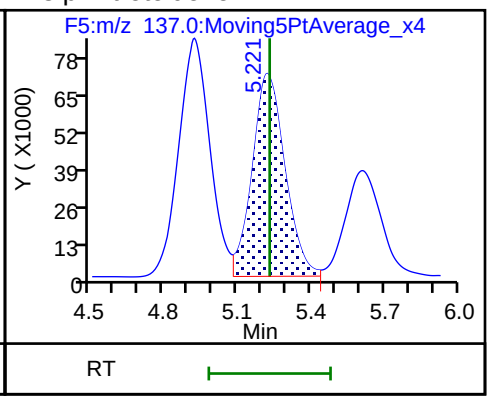
20 PETN



22 o-Nitrotoluene

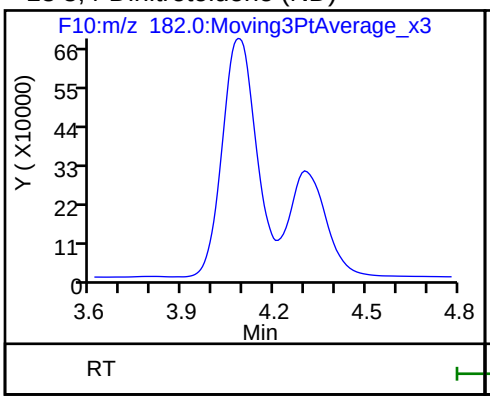


23 p-Nitrotoluene

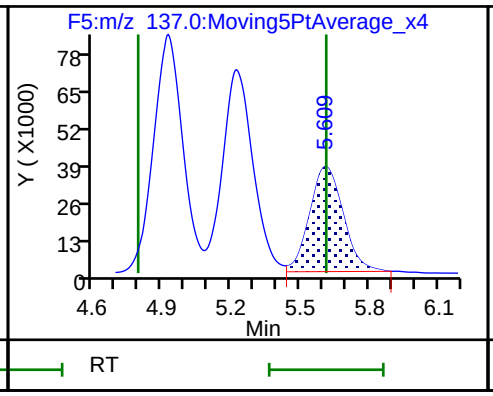


Report Date: 15-Apr-2022 08:18:49 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14056.d

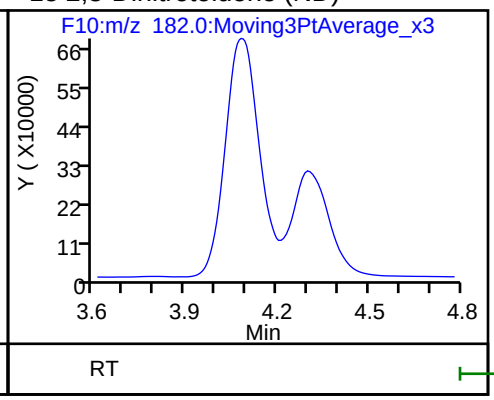
13 3,4-Dinitrotoluene (ND)



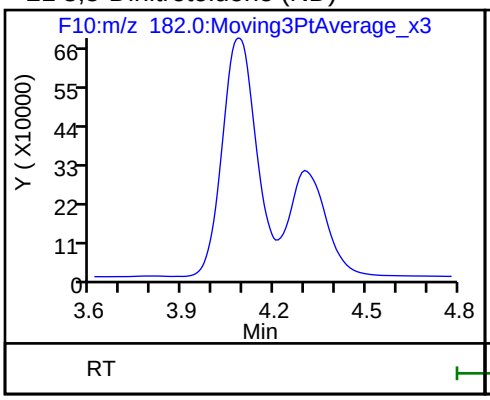
24 m-Nitrotoluene



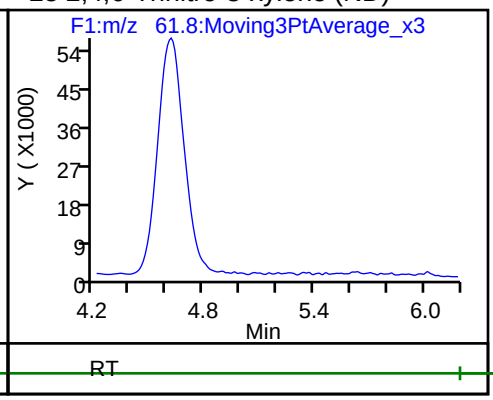
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:18:49 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14056.d
Lims ID: 280-160190-A-52-H MSD
Client ID: 29SB203 (3-4)
Sample Type: MSD
Inject. Date: 14-Apr-2022 18:17:24 ALS Bottle#: 2 Worklist Smp#: 56
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-52-H MSD
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:18:49 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:38:29

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	97.1	96.76

Report Date: 15-Apr-2022 08:18:49 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

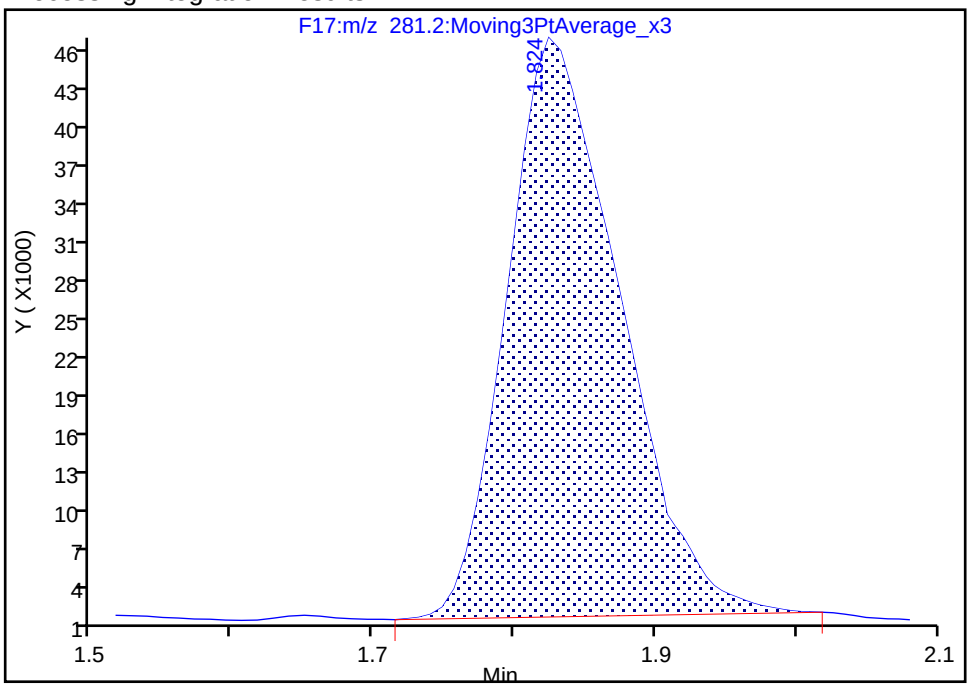
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14056.d				
Injection Date:	14-Apr-2022 18:17:24	Instrument ID:	LC_LCMS7		
Lims ID:	280-160190-A-52-H MSD				
Client ID:	29SB203 (3-4)				
Operator ID:	acm	ALS Bottle#:	2	Worklist Smp#:	56
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F17:SIR		

4 RDX, CAS: 121-82-4

Signal: 1

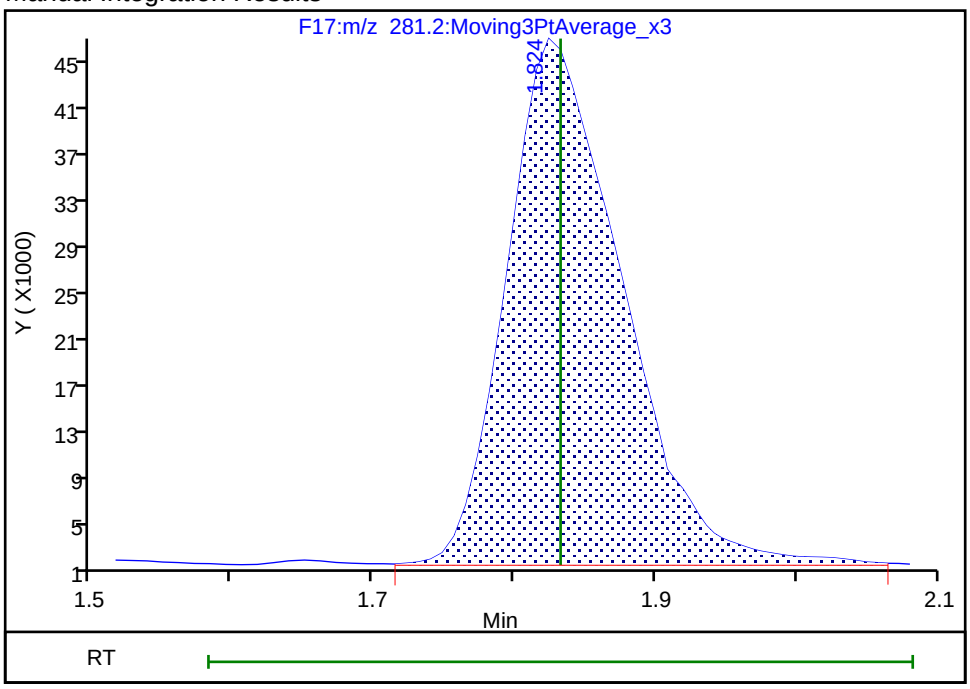
Processing Integration Results

RT: 1.82
Area: 247758
Amount: 74.273324
Amount Units: ug/l



Manual Integration Results

RT: 1.82
Area: 255984
Amount: 77.207859
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 08:18:43

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1

SDG No.:

Client Sample ID: 29SB168 (6-7) DU | Lab Sample ID: 280-160190-19 DU

Matrix: Solid | Lab File ID: ex722D08033.d

Analysis Method: 8321A | Date Collected: 03/24/2022 11:58

Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20

Sample wt/vol: 10.72(g) | Date Analyzed: 04/08/2022 13:05

Con. Extract Vol.: 40(mL) | Dilution Factor: 1

Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:

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

Analysis Batch No.: 571224 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.119		0.093	0.047	0.042
99-65-0	1,3-Dinitrobenzene	0.047	U M	0.093	0.047	0.042
606-20-2	2,6-Dinitrotoluene	0.447		0.093	0.047	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.175	M	0.093	0.047	0.046
19406-51-0	4-Amino-2,6-dinitrotoluene	0.158	M	0.093	0.047	0.029
2691-41-0	HMX	0.047	U M Q	0.093	0.047	0.043
99-08-1	m-Nitrotoluene	0.0450	J M	0.093	0.047	0.040
98-95-3	Nitrobenzene	0.047	U	0.10	0.047	0.035
55-63-0	Nitroglycerin	0.047	U	0.093	0.047	0.027
88-72-2	o-Nitrotoluene	0.195	M	0.093	0.047	0.040
78-11-5	PETN	0.047	U	0.093	0.047	0.032
99-99-0	p-Nitrotoluene	0.142	M	0.093	0.047	0.046
121-82-4	RDX	0.047	U	0.11	0.047	0.040
479-45-8	Tetryl	0.047	U Q	0.093	0.047	0.036

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	100		68-140

Report Date: 14-Apr-2022 10:09:35 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08033.d
Lims ID: 280-160190-A-19-I DU
Client ID:
Sample Type: DU
Inject. Date: 08-Apr-2022 13:05:58 ALS Bottle#: 29 Worklist Smp#: 33
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-19-I DU
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:07:02 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:51:33
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		114470	125.0	25.1	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		347994	125.0	51.2	
5 1,3,5-Trinitrobenzene								
213.0	2.306	2.322	-0.007	0.764	511512	31.9	43.5	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.008	0.011		1321257	129.4	407	
8 1,3-Dinitrobenzene								M
168.0	3.040	3.051	0.0	1.007	73179	6.20	4.5	M
28 3,5-Dinitroaniline								
183.0	3.241	3.231	0.022	1.073	304490	6.72	23.3	
10 2,4,6-Trinitrotoluene								E
227.0	3.310	3.316	0.0	0.765	24493377	359.8	493	E
$ 11 Nitrobenzene-d5								
128.0	3.348	3.354	0.0	0.774	625736	100.1	111	
14 4-Amino-2,6-dinitrotoluene								M
197.0	3.645	3.652	0.0	0.843	2178146	42.4	4.9	M
16 2-Amino-4,6-dinitrotoluene								M
197.0	3.963	3.971	0.0	0.917	3085375	47.0	6.7	M
17 2,6-Dinitrotoluene								
182.0	4.132	4.138	0.006	0.956	8208678	119.8	23.6	
* 18 2,4-dinitrotoluene-d3								
185.1	4.324	4.315	0.009		4141364	125.0	99.9	
19 2,4-Dinitrotoluene								E
182.0	4.365	4.373	0.0	1.009	48344641	1383.5	120	E
22 o-Nitrotoluene								M
137.0	4.982	4.987	0.005	1.152	556531	52.4	185	M

Report Date: 14-Apr-2022 10:09:35 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08033.d

Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
23 p-Nitrotoluene								M
137.0	5.291	5.297	0.005	1.224	352879	37.9	111	M
24 m-Nitrotoluene								M
137.0	5.670	5.686	-0.005	1.311	64935	12.1	17.6	M

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

Reagents:

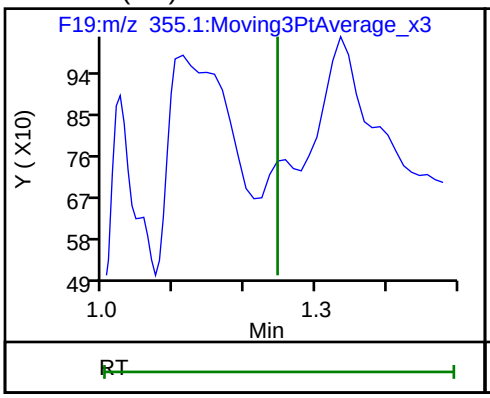
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 14-Apr-2022 10:09:35 Chrom Revision: 2.3 12-Apr-2022 20:29:44

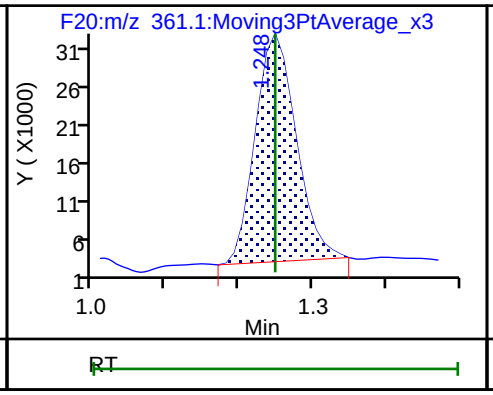
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08033.d
Injection Date: 08-Apr-2022 13:05:58 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-19-I DU
Client ID:
Operator ID: acm ALS Bottle#: 29 Worklist Smp#: 33
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

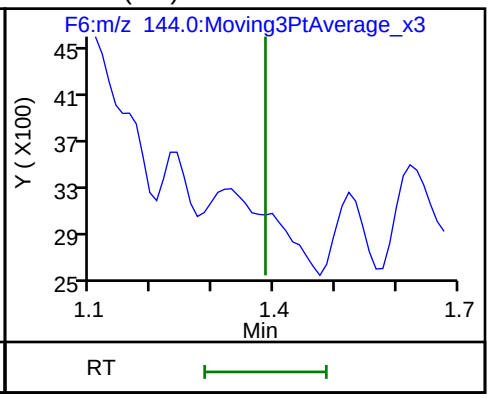
2 HMX (ND)



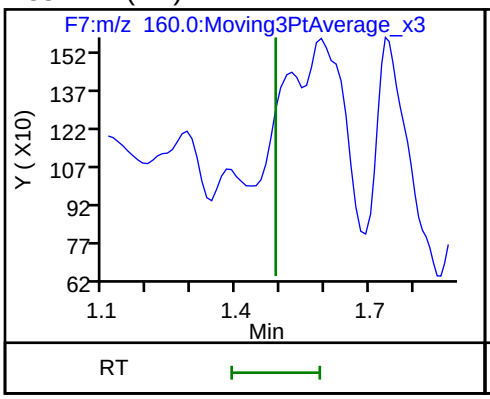
* 1 HMX-13C4



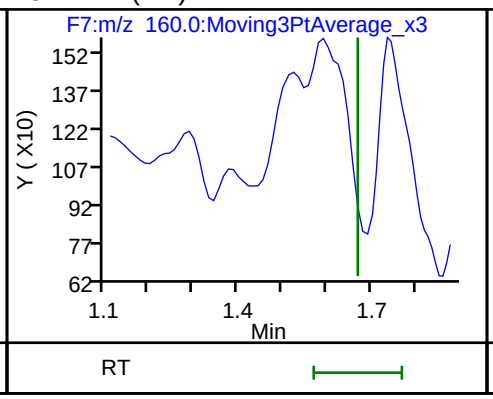
36 TNX (ND)



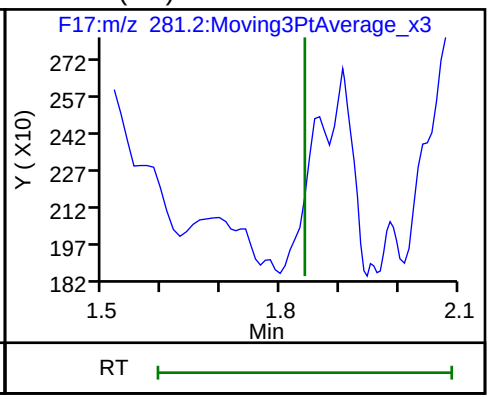
33 DNX (ND)



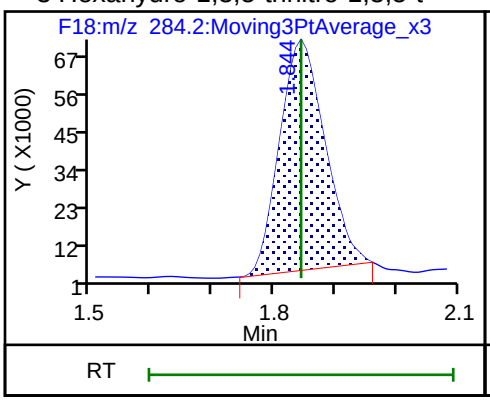
34 MNX (ND)



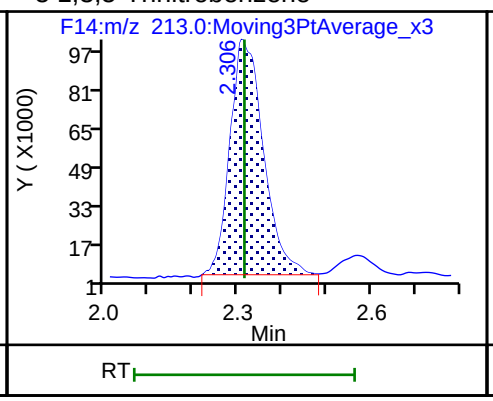
4 RDX (ND)



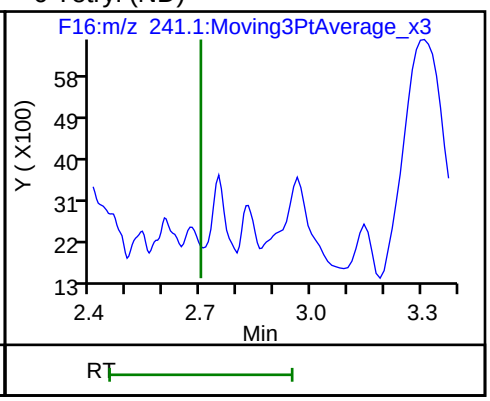
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



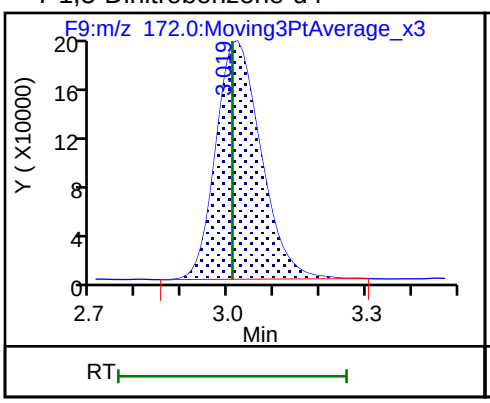
5 1,3,5-Trinitrobenzene



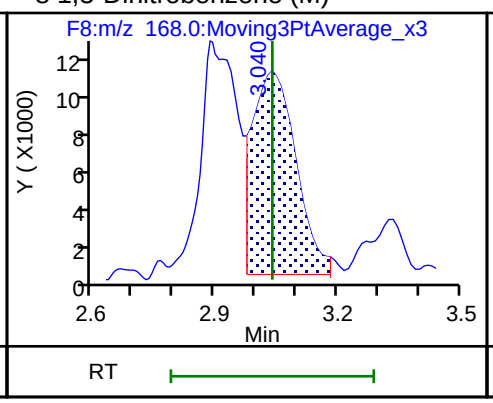
6 Tetryl (ND)



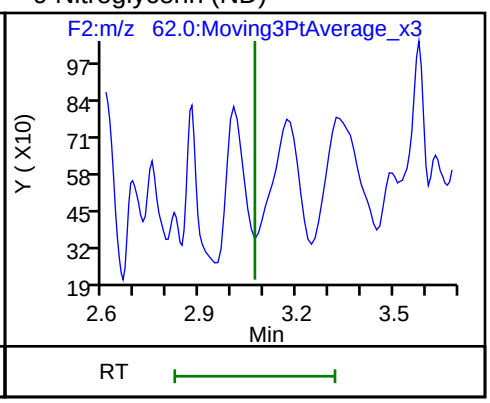
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (M)



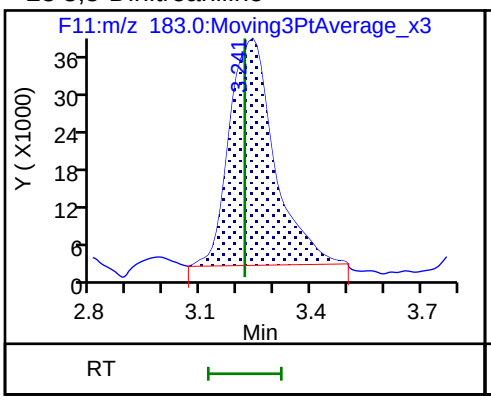
9 Nitroglycerin (ND)



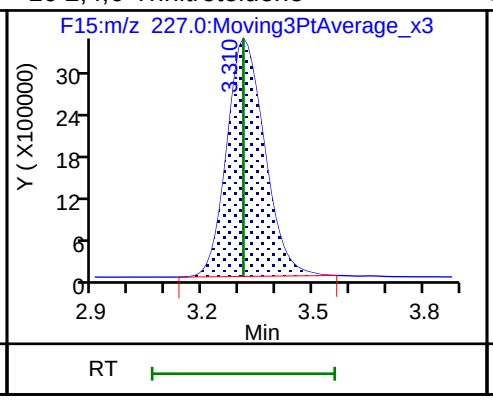
Report Date: 14-Apr-2022 10:09:35 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08033.d

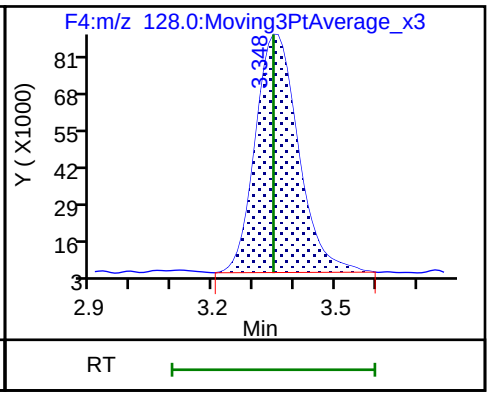
28 3,5-Dinitroaniline



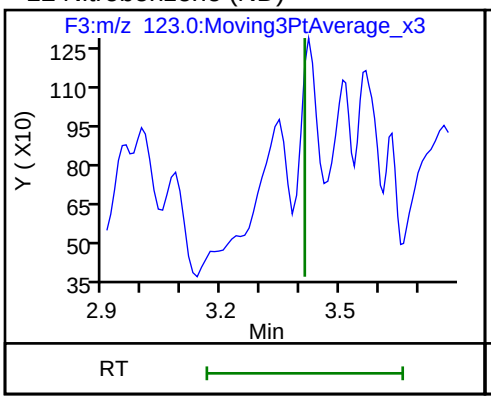
10 2,4,6-Trinitrotoluene



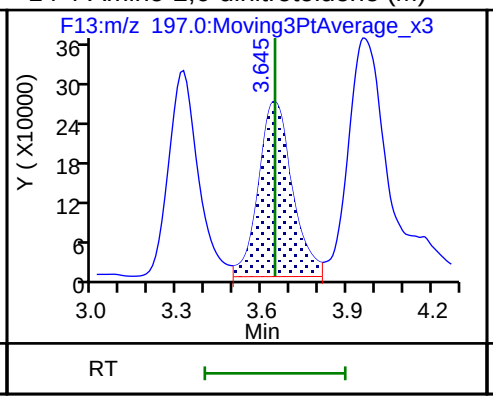
$ 11 Nitrobenzene-d5



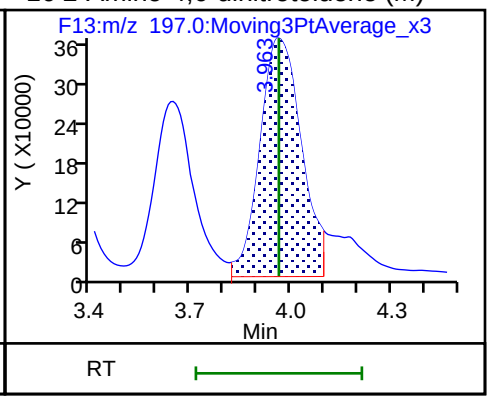
12 Nitrobenzene (ND)



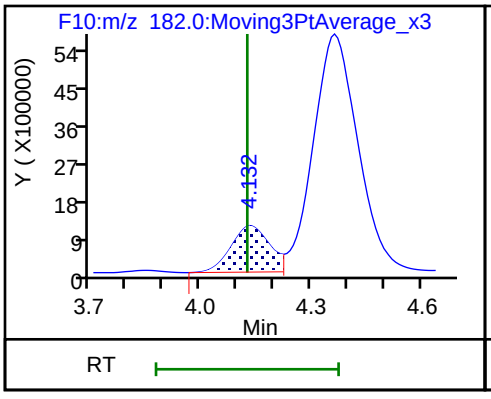
14 4-Amino-2,6-dinitrotoluene (M)



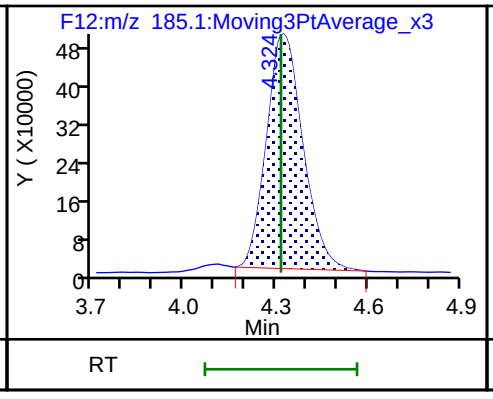
16 2-Amino-4,6-dinitrotoluene (M)



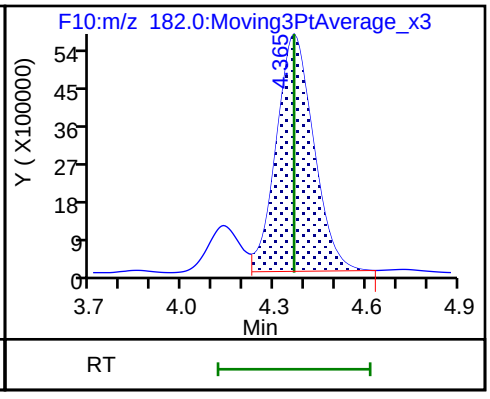
17 2,6-Dinitrotoluene



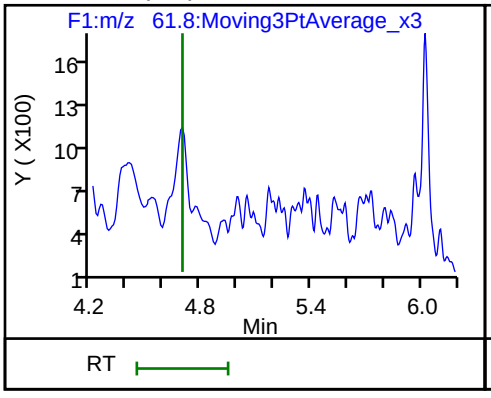
* 18 2,4-dinitrotoluene-d3



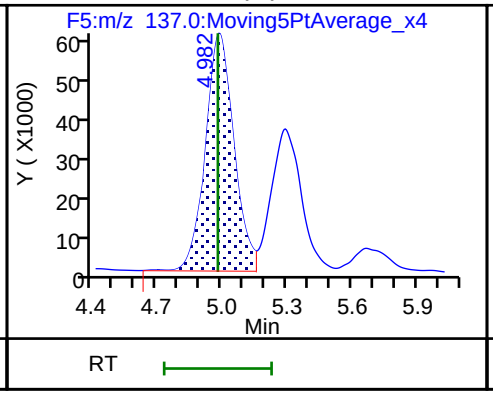
19 2,4-Dinitrotoluene



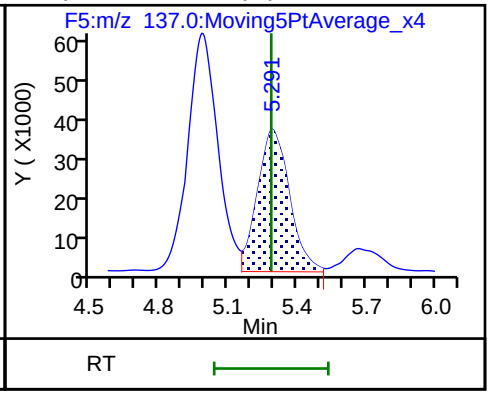
20 PETN (ND)



22 o-Nitrotoluene (M)



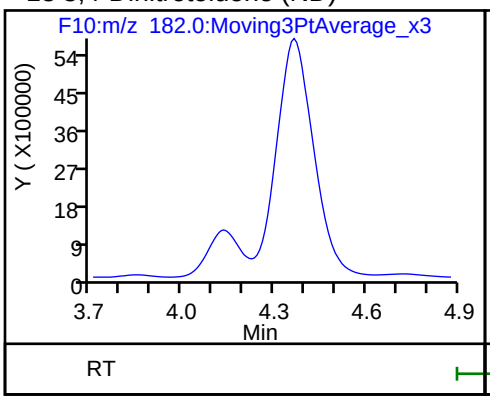
23 p-Nitrotoluene (M)



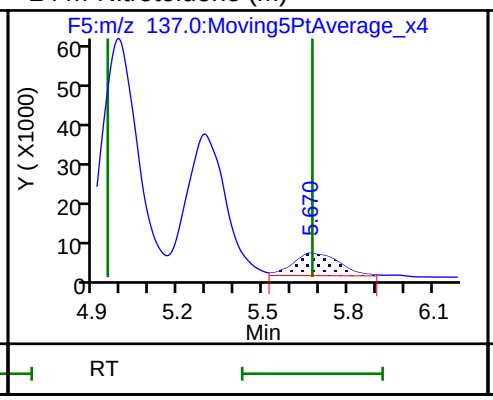
Report Date: 14-Apr-2022 10:09:35 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08033.d

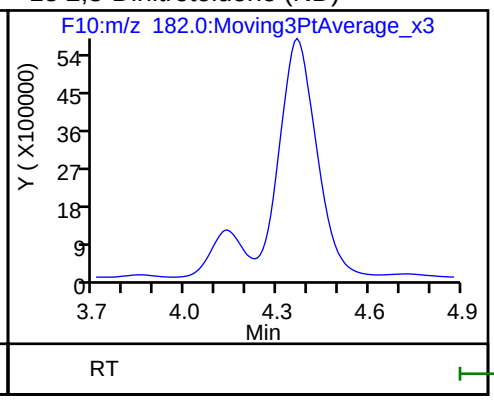
13 3,4-Dinitrotoluene (ND)



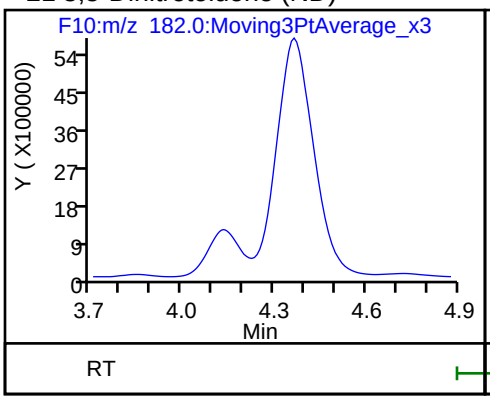
24 m-Nitrotoluene (M)



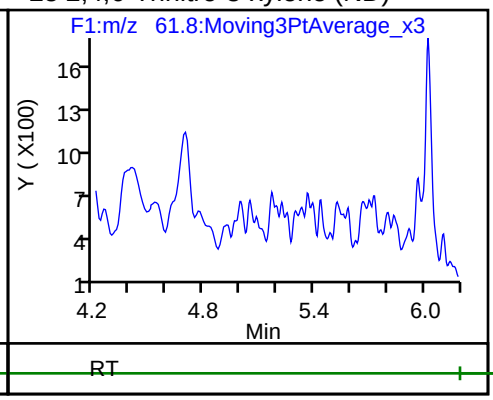
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 14-Apr-2022 10:09:35 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08033.d
Lims ID: 280-160190-A-19-I DU
Client ID:
Sample Type: DU
Inject. Date: 08-Apr-2022 13:05:58 ALS Bottle#: 29 Worklist Smp#: 33
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-19-I DU
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:07:02 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:51:33

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	100.1	99.80

Report Date: 14-Apr-2022 10:09:35 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08033.d

Injection Date: 08-Apr-2022 13:05:58 Instrument ID: LC_LCMS7

Lims ID: 280-160190-A-19-I DU

Client ID:

Operator ID: acm ALS Bottle#: 29 Worklist Smp#: 33

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

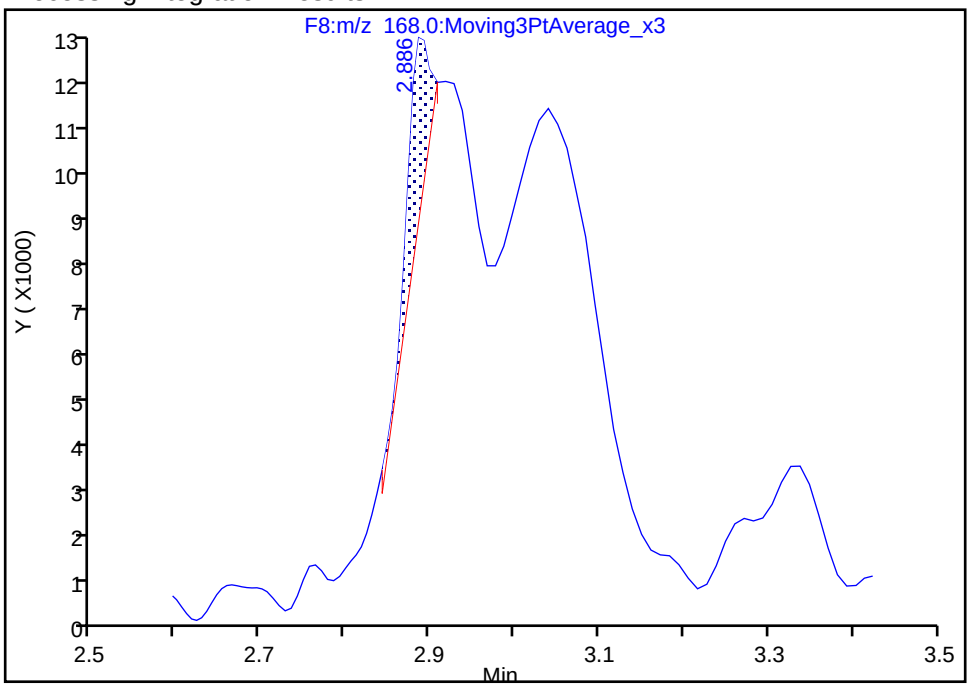
Column: Detector F8:SIR

8 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

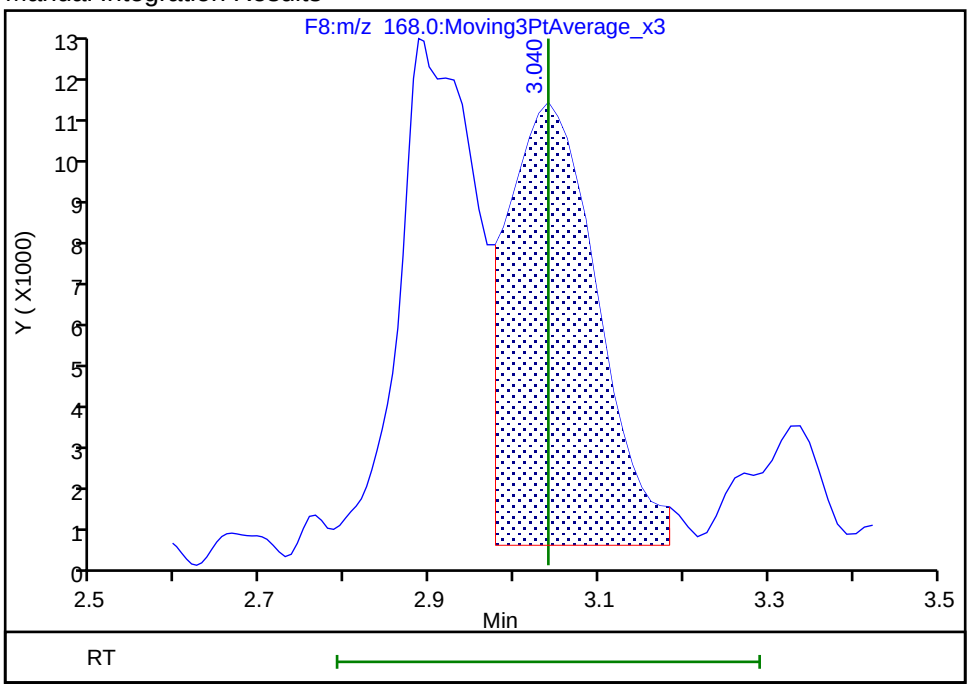
Processing Integration Results

RT: 2.89
Area: 6348
Amount: 0.138045
Amount Units: ug/l



Manual Integration Results

RT: 3.04
Area: 73179
Amount: 6.202765
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:50:54

Audit Action: Manually Integrated Audit Reason: Assign Peak

Report Date: 14-Apr-2022 10:09:35 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

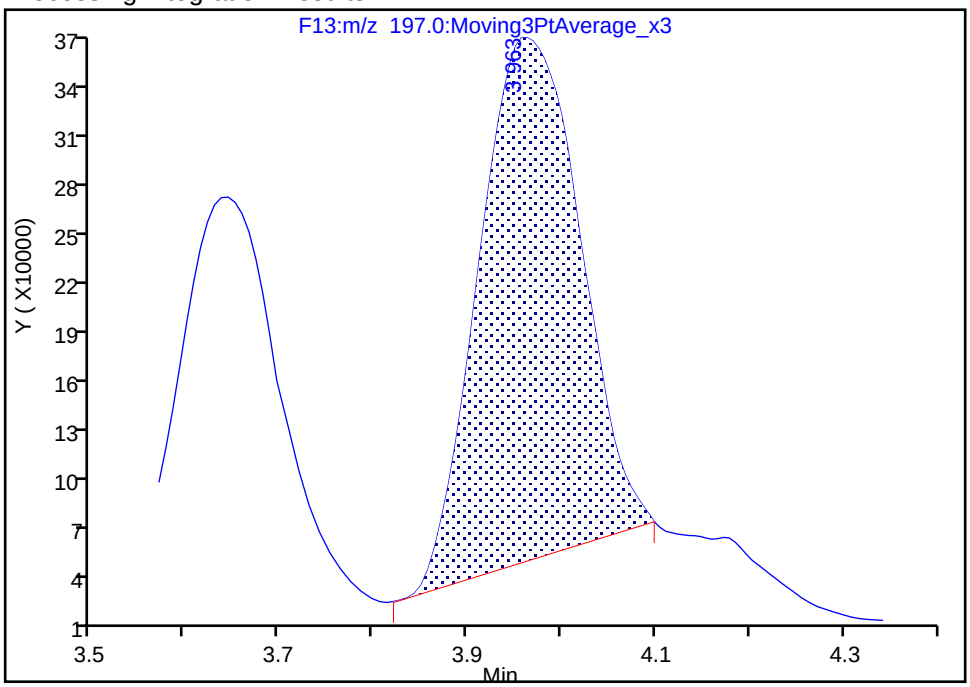
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08033.d
Injection Date: 08-Apr-2022 13:05:58 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-19-I DU
Client ID:
Operator ID: acm ALS Bottle#: 29 Worklist Smp#: 33
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F13:SIR

16 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

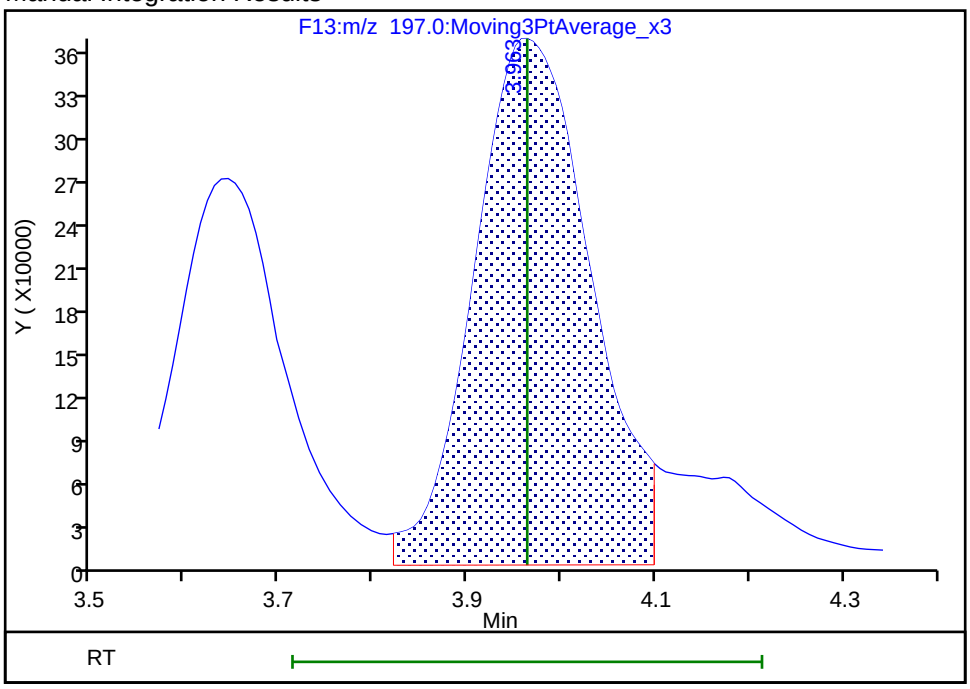
Processing Integration Results

RT: 3.96
Area: 2339423
Amount: 35.532252
Amount Units: ug/l



Manual Integration Results

RT: 3.96
Area: 3085375
Amount: 47.017897
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:51:06
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:09:35 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

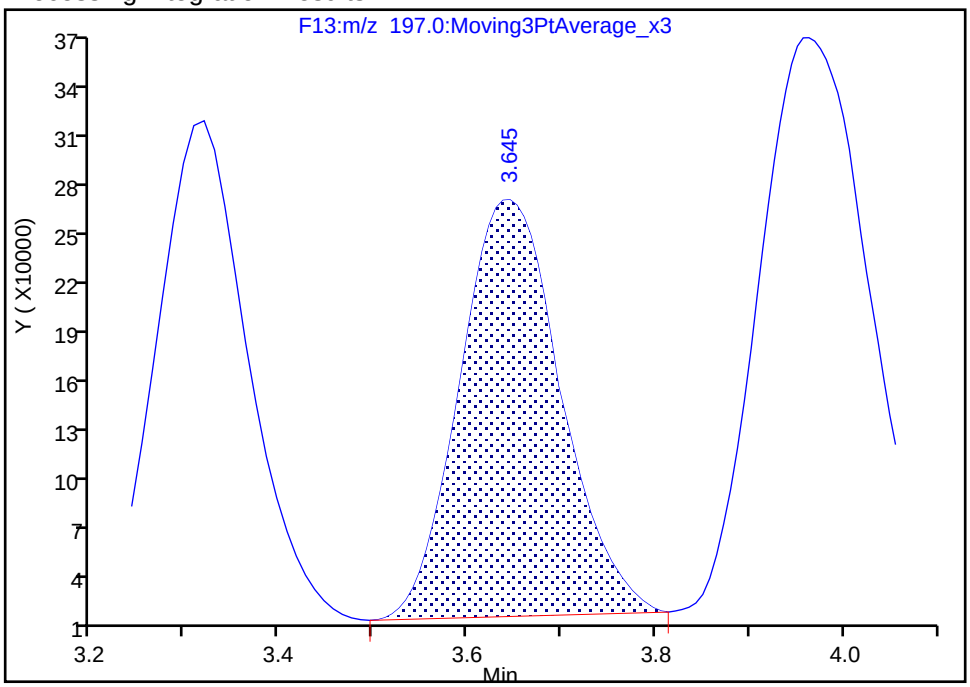
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08033.d
Injection Date: 08-Apr-2022 13:05:58 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-19-I DU
Client ID:
Operator ID: acm ALS Bottle#: 29 Worklist Smp#: 33
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F13:SIR

14 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

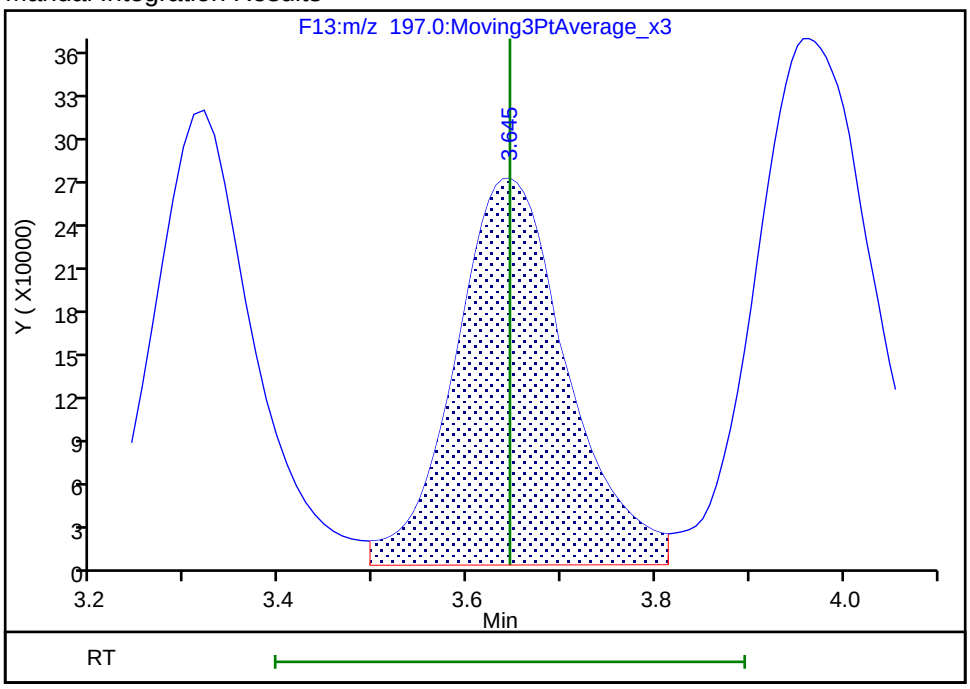
Processing Integration Results

RT: 3.65
Area: 1822786
Amount: 35.350504
Amount Units: ug/l



Manual Integration Results

RT: 3.65
Area: 2178146
Amount: 42.359468
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:51:06
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:09:35 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08033.d

Injection Date: 08-Apr-2022 13:05:58 Instrument ID: LC_LCMS7

Lims ID: 280-160190-A-19-I DU

Client ID:

Operator ID: acm ALS Bottle#: 29 Worklist Smp#: 33

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

Column: Detector F5:SIR

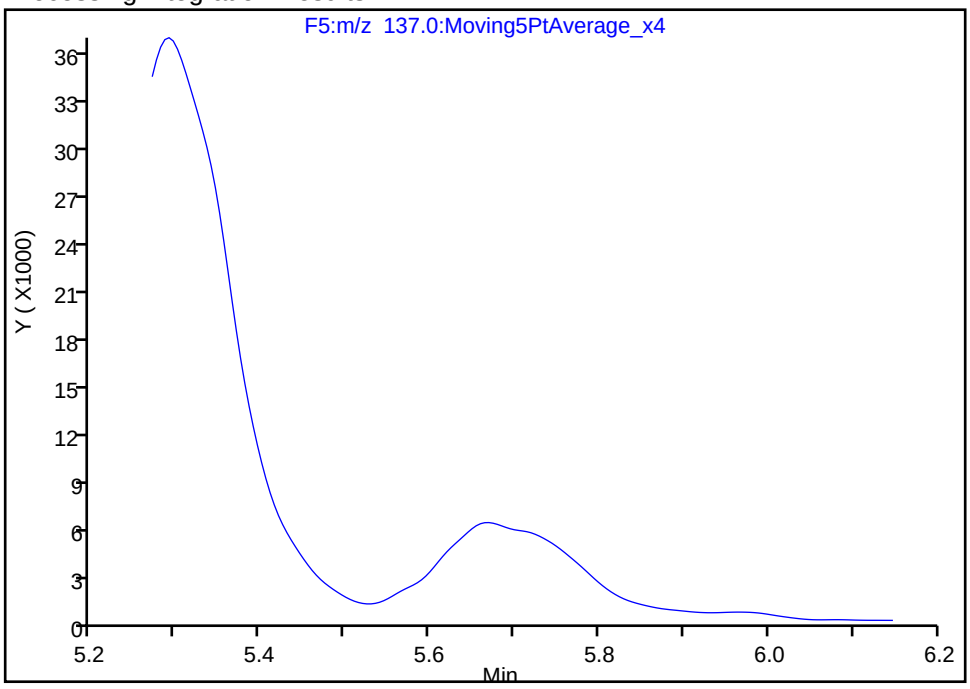
24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

Not Detected

Expected RT: 5.67

Processing Integration Results



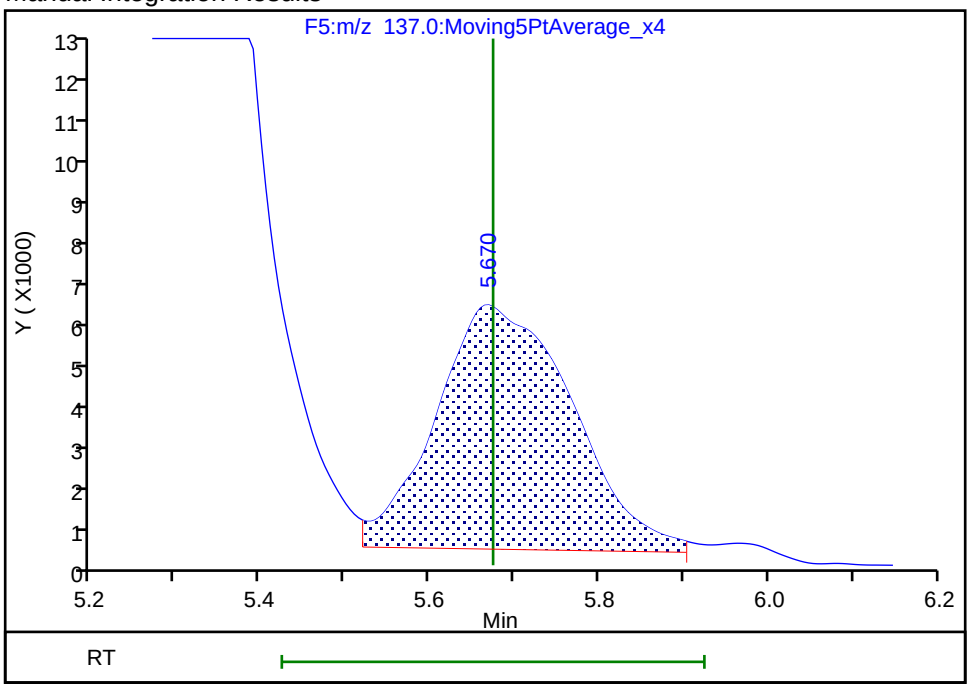
Manual Integration Results

RT: 5.67

Area: 64935

Amount: 12.064700

Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:51:21

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:09:35 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

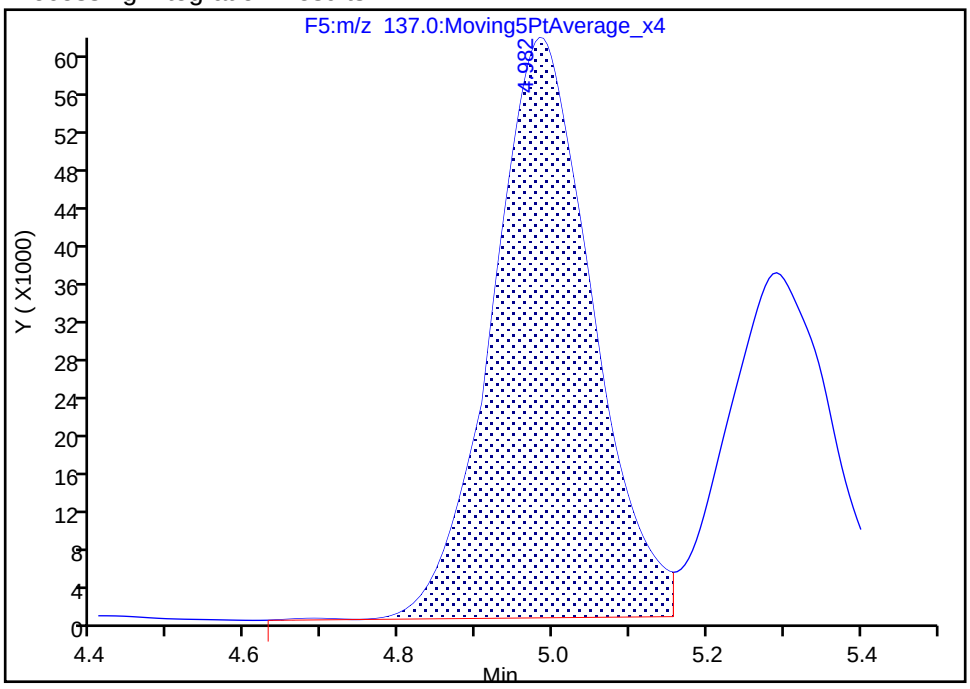
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08033.d
Injection Date: 08-Apr-2022 13:05:58 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-19-I DU
Client ID:
Operator ID: acm ALS Bottle#: 29 Worklist Smp#: 33
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F5:SIR

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

Signal: 1

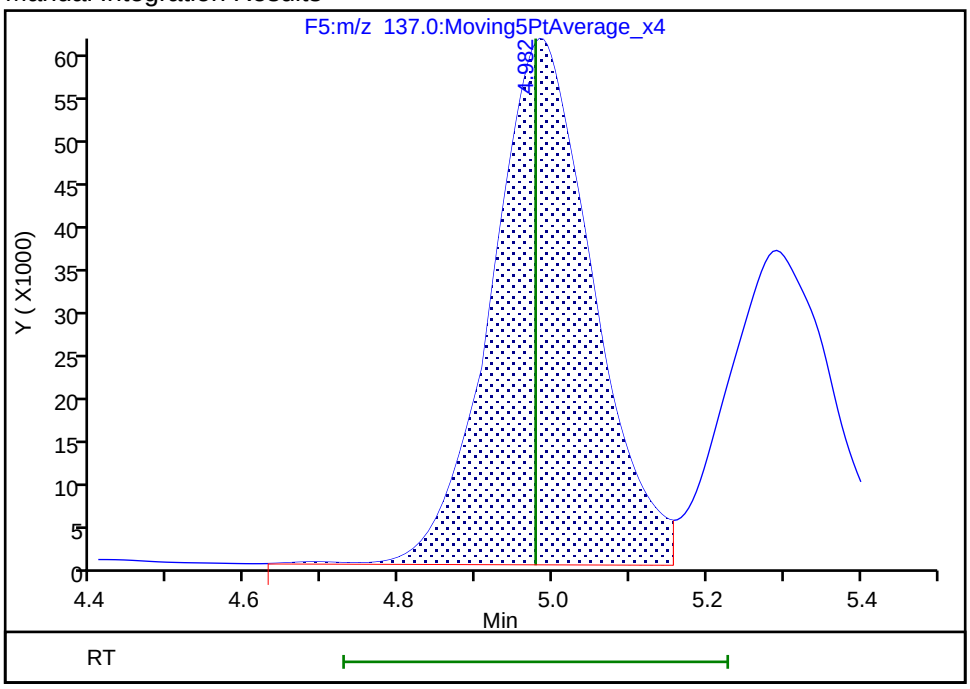
Processing Integration Results

RT: 4.98
Area: 546990
Amount: 51.479194
Amount Units: ug/l



Manual Integration Results

RT: 4.98
Area: 556531
Amount: 52.381642
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:51:16
Audit Action: Assigned New Baseline Audit Reason: Baseline

Report Date: 14-Apr-2022 10:09:35 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08033.d

Injection Date: 08-Apr-2022 13:05:58 Instrument ID: LC_LCMS7

Lims ID: 280-160190-A-19-I DU

Client ID:

Operator ID: acm ALS Bottle#: 29 Worklist Smp#: 33

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

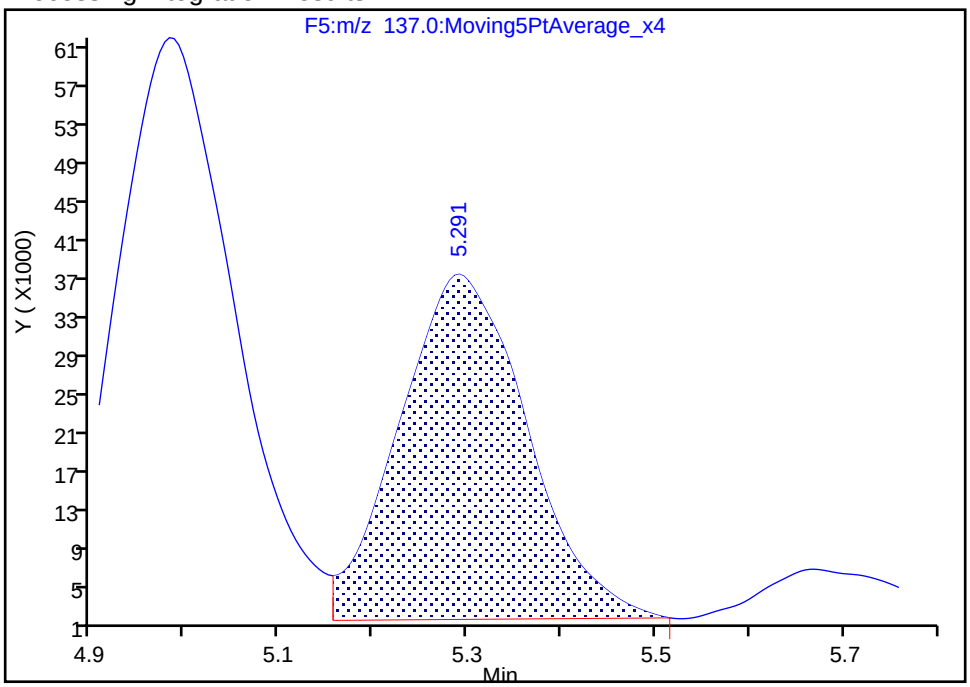
Column: Detector F5:SIR

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

Signal: 1

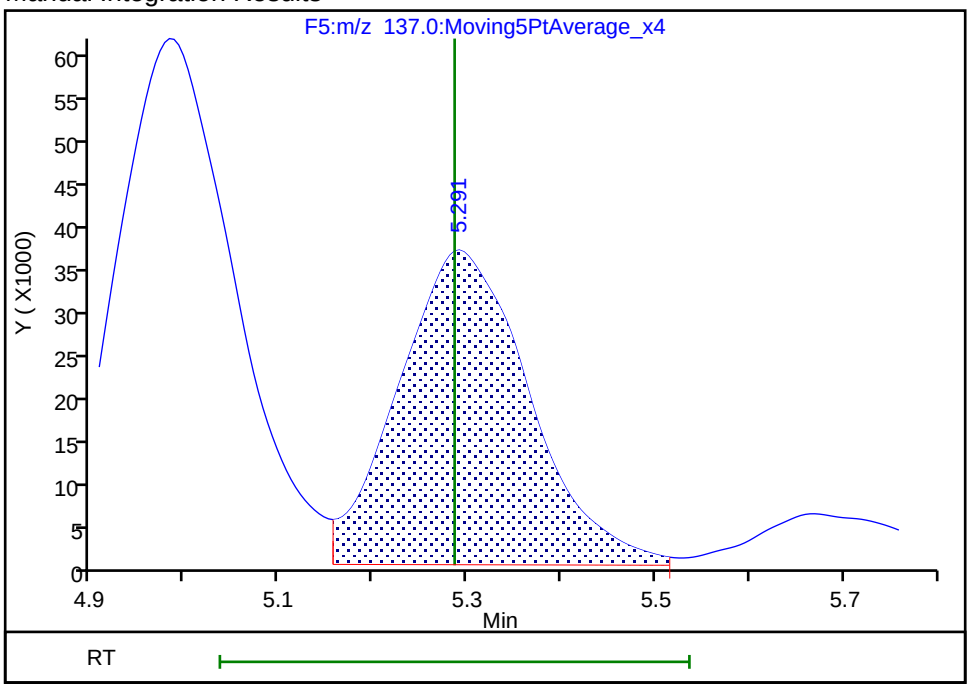
Processing Integration Results

RT: 5.29
Area: 336788
Amount: 36.171591
Amount Units: ug/l



Manual Integration Results

RT: 5.29
Area: 352879
Amount: 37.926412
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:51:16

Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1

SDG No.:

Client Sample ID: 29SB168 (6-7) DU DL | Lab Sample ID: 280-160190-19 DU DL

Matrix: Solid | Lab File ID: ex422D12069.d

Analysis Method: 8321A | Date Collected: 03/24/2022 11:58

Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20

Sample wt/vol: 10.72(g) | Date Analyzed: 04/12/2022 22:12

Con. Extract Vol.: 40(mL) | Dilution Factor: 10

Injection Volume: 40(uL) | GC Column: IonPac ID: 2(mm)

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

Analysis Batch No.: 571614 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
118-96-7	2,4,6-Trinitrotoluene	1.23	D	0.93	0.47	0.34
121-14-2	2,4-Dinitrotoluene	5.01	D	0.93	0.47	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	89	D	68-140

Report Date: 13-Apr-2022 13:58:47 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12069.d
Lims ID: 280-160190-A-19-I DU
Client ID:
Sample Type: DU
Inject. Date: 12-Apr-2022 22:12:31 ALS Bottle#: 62 Worklist Smp#: 70
Injection Vol: 40.0 ul Dil. Factor: 10.0000
Sample Info: 280-160190-A-19-I DU 10x
Misc. Info.: 04/08/2022 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\8321expDuPont.m
Limit Group: LC - 8321A Expl
Last Update: 13-Apr-2022 13:58:36 Calib Date: 12-Apr-2022 10:31:58
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d

Column 1 : Det: F1:SIR
Process Host: CTX1683

First Level Reviewer: meyera Date: 13-Apr-2022 13:52:10
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
360.9	1.965	1.964	0.001		211092	125.0	102	
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.1	2.772	2.798	-0.026		435513	125.0	455	
8 1,3,5-Trinitrobenzene								
213.1	3.459	3.458	0.001	0.785	31665	3.79	20.4	
* 12 1,3-Dinitrobenzene-d4								
172.1	4.404	4.461	-0.057		1221640	129.4	75.7	
13 1,3-Dinitrobenzene								
168.1	4.347	4.518	-0.171	0.987	10754	1.05	3.2	
33 3,5-Dinitroaniline								
183.1	4.761	4.760	0.001	1.081	11543	1.38	3.1	
15 2,4,6-Trinitrotoluene								
227.1	4.842	4.841	0.001	0.768	1123797	33.1	783	
$ 16 Nitrobenzene-d5								
128.1	4.923	4.962	-0.039	1.118	83340	8.93	50.3	
17 Nitrobenzene								
123.1	4.923	5.043	-0.120	1.118	1241	-0.9184	3.1	
19 4-Amino-2,6-dinitrotoluene								
197.2	5.377	5.417	-0.040	0.853	109650	2.68	11.2	
22 2-Amino-4,6-dinitrotoluene								
197.2	5.822	5.861	-0.039	0.924	209072	5.07	17.1	
23 2,6-Dinitrotoluene								
182.1	6.061	6.094	-0.033	0.961	542704	9.91	114	
* 24 2,4-dinitrotoluene-d3								
185.1	6.304	6.336	-0.032		3385207	125.0	706	
25 2,4-Dinitrotoluene								
182.1	6.365	6.367	-0.002	1.010	4098454	134.2	598	

Report Date: 13-Apr-2022 13:58:47 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12069.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
26 PETN 61.9	6.658	6.812	-0.154	1.056	19705	-0.5173	1.6	
28 o-Nitrotoluene 137.1	7.387	7.389	-0.002	1.172	64880	4.72	21.4	M M
29 p-Nitrotoluene 137.1	7.873	7.875	-0.002	1.249	37989	2.94	11.6	M M
30 m-Nitrotoluene 137.1	8.389	8.391	-0.002	1.331	9932	0.7787	3.0	M M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 13-Apr-2022 13:58:47 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12069.d

Injection Date: 12-Apr-2022 22:12:31 Instrument ID: LC_LCMS4

Lims ID: 280-160190-A-19-I DU

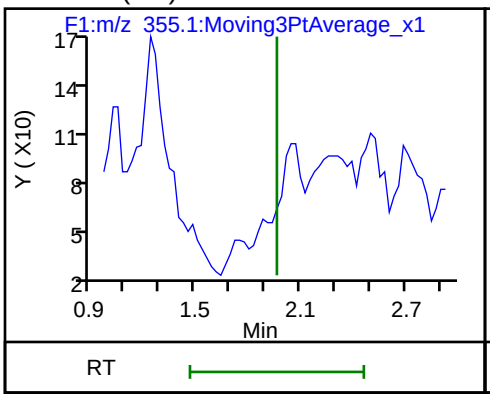
Client ID:

Operator ID: acm ALS Bottle#: 62 Worklist Smp#: 70

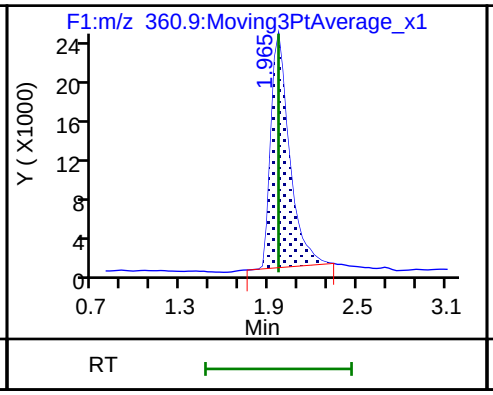
Injection Vol: 40.0 ul Dil. Factor: 10.0000

Method: 8321expDuPont Limit Group: LC - 8321A Expl

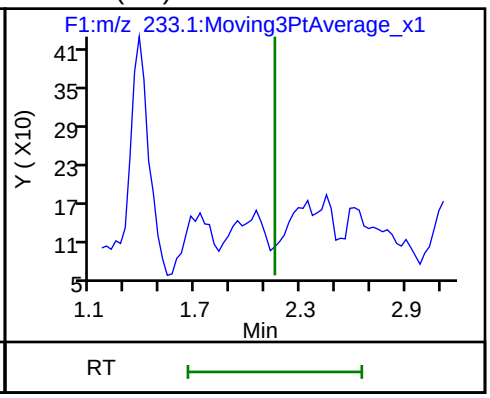
2 HMX (ND)



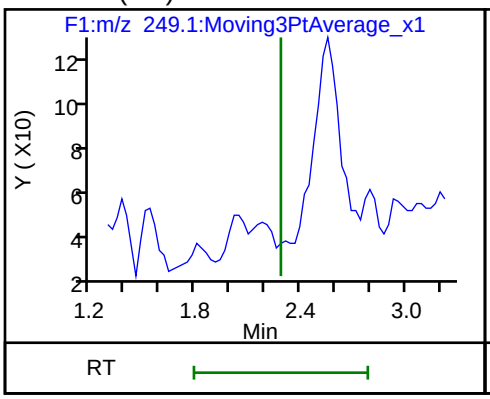
* 1 HMX-13C4



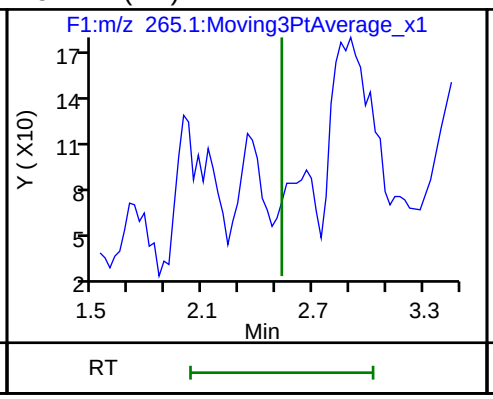
3 TNX (ND)



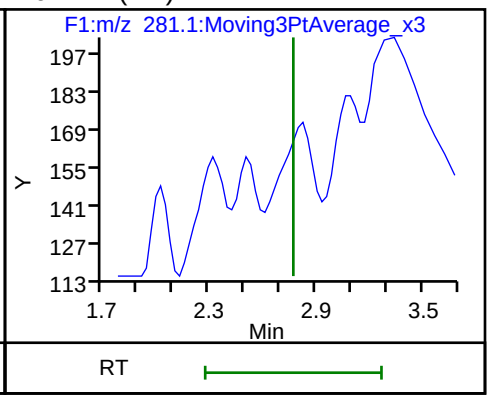
4 DNX (ND)



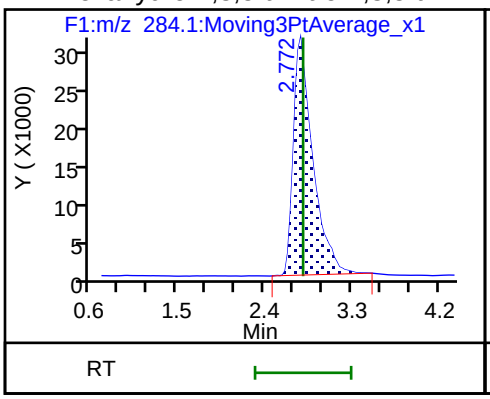
5 MNX (ND)



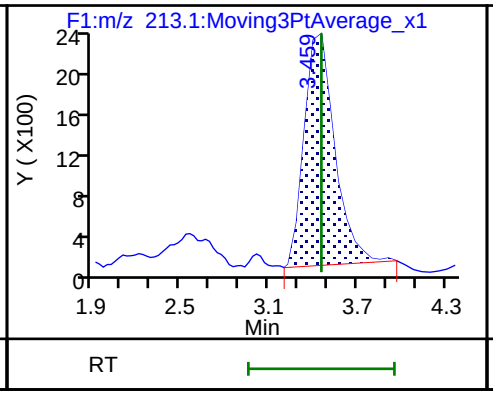
6 RDX (ND)



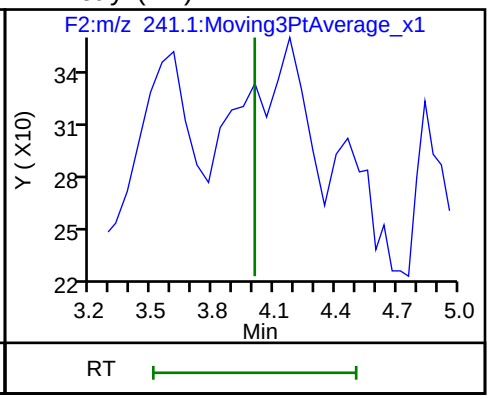
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t



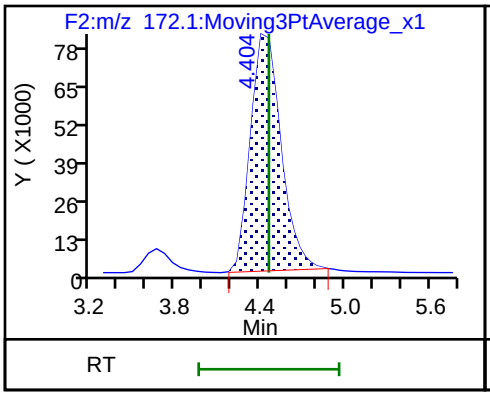
8 1,3,5-Trinitrobenzene



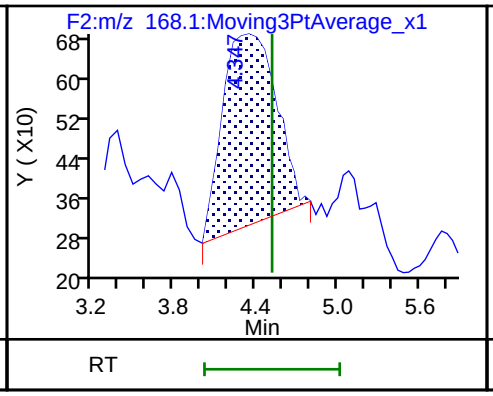
11 Tetryl (ND)



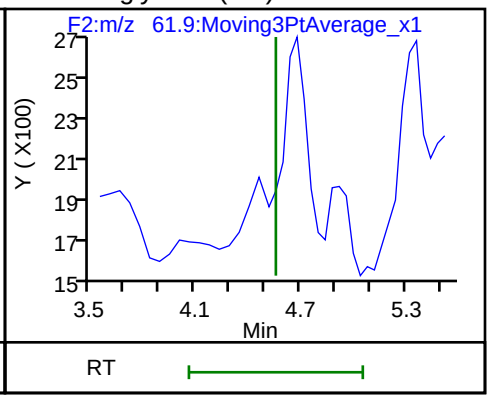
* 12 1,3-Dinitrobenzene-d4



13 1,3-Dinitrobenzene

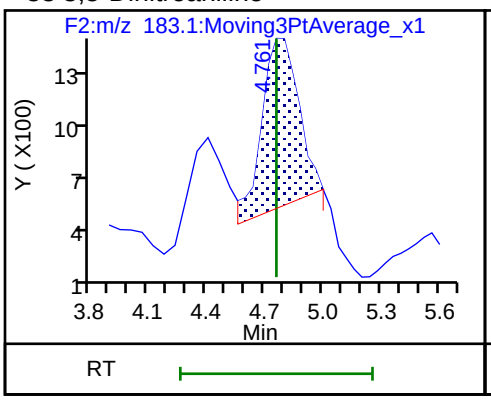


14 Nitroglycerin (ND)

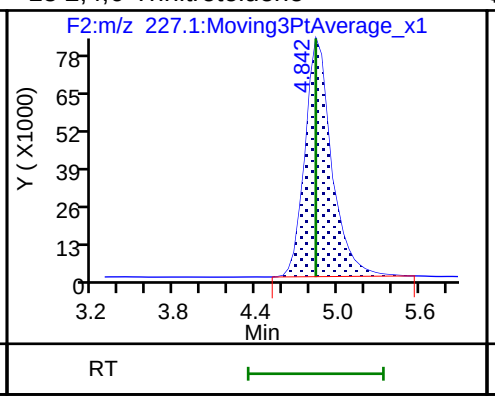


Report Date: 13-Apr-2022 13:58:47 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12069.d

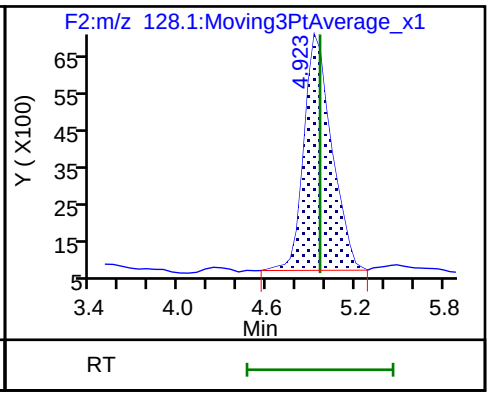
33 3,5-Dinitroaniline



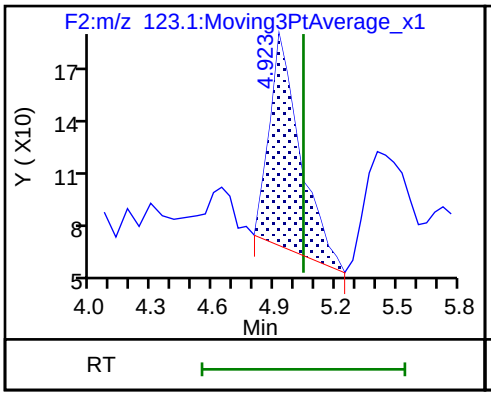
15 2,4,6-Trinitrotoluene



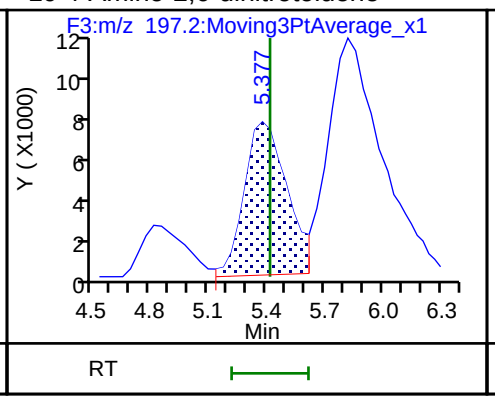
$ 16 Nitrobenzene-d5



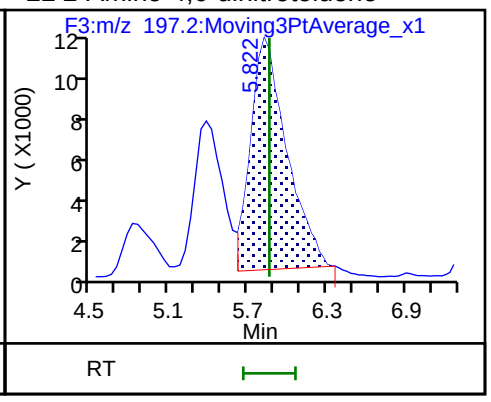
17 Nitrobenzene



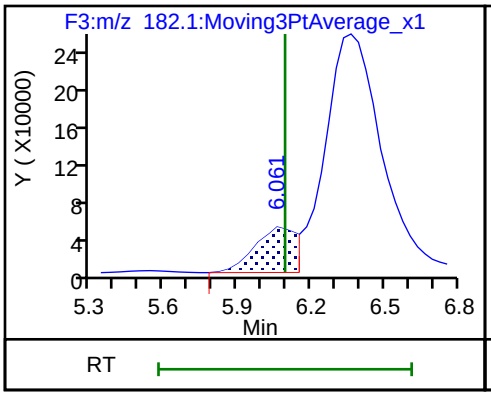
19 4-Amino-2,6-dinitrotoluene



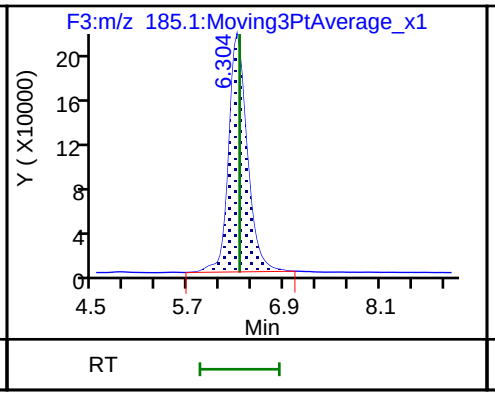
22 2-Amino-4,6-dinitrotoluene



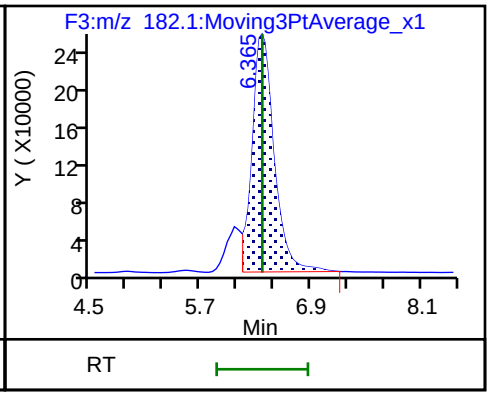
23 2,6-Dinitrotoluene



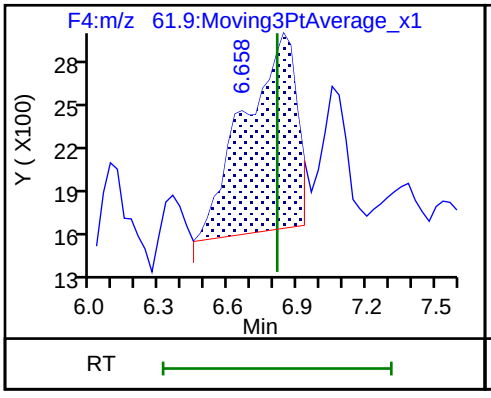
* 24 2,4-dinitrotoluene-d3



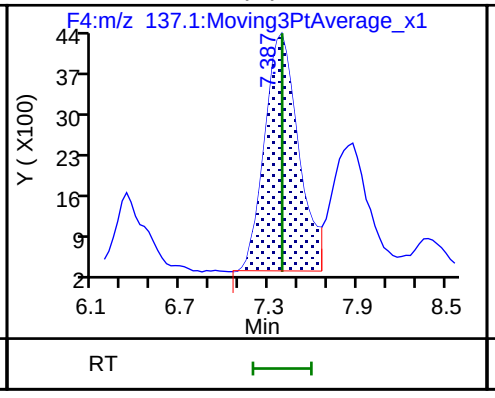
25 2,4-Dinitrotoluene



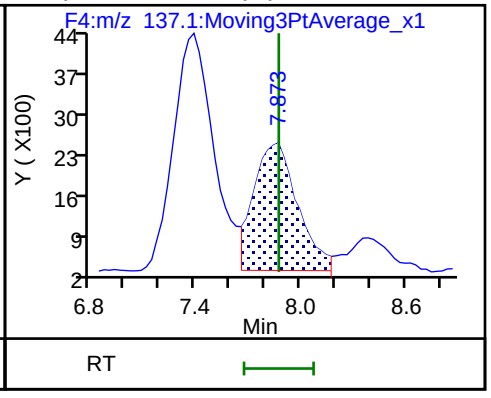
26 PETN



28 o-Nitrotoluene (M)



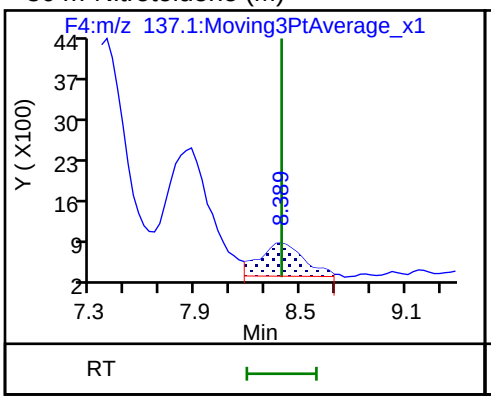
29 p-Nitrotoluene (M)



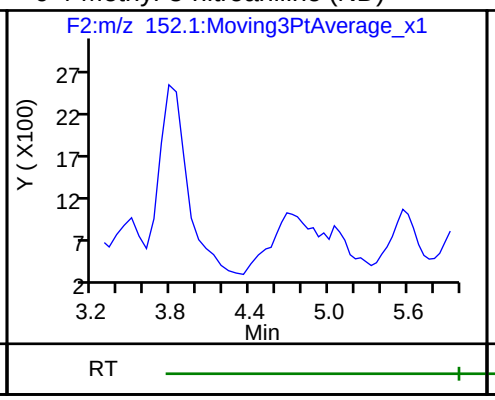
Report Date: 13-Apr-2022 13:58:47 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12069.d

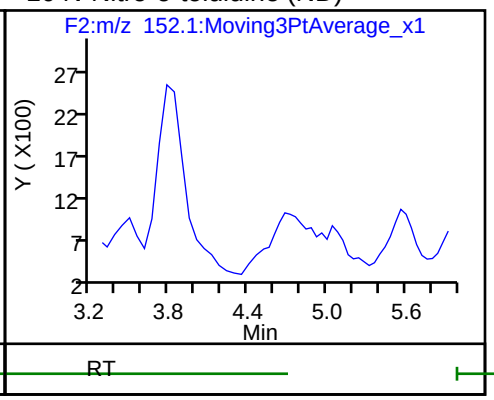
30 m-Nitrotoluene (M)



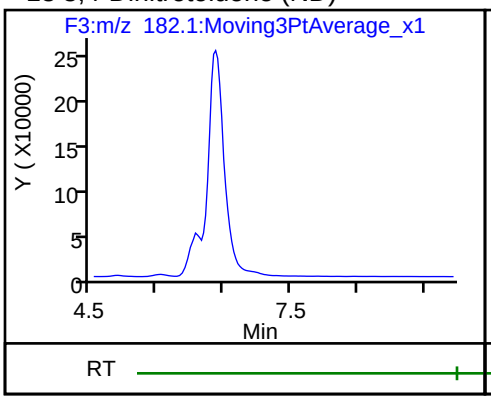
9 4-Methyl-3-nitroaniline (ND)



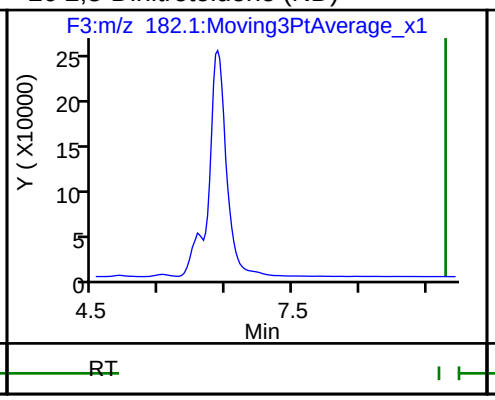
10 N-Nitro-o-toluidine (ND)



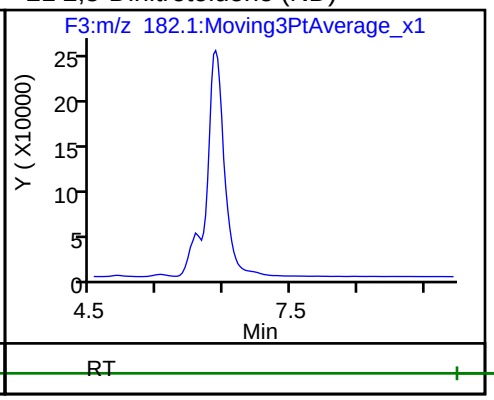
18 3,4-Dinitrotoluene (ND)



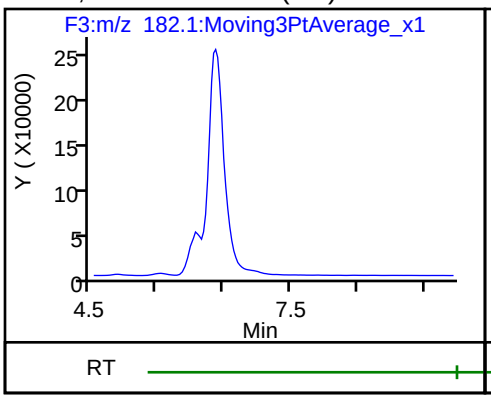
20 2,3-Dinitrotoluene (ND)



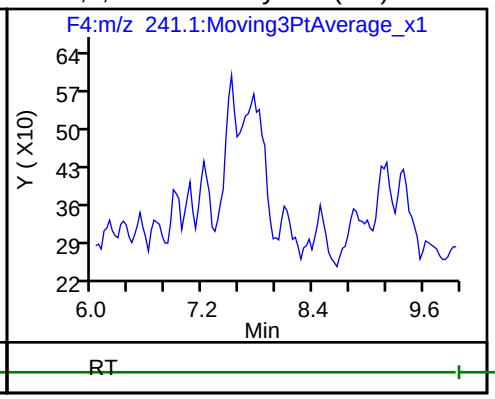
21 2,5-Dinitrotoluene (ND)



27 3,5-Dinitrotoluene (ND)



31 2,4,6-Trinitro-3-xylene (ND)



Report Date: 13-Apr-2022 13:58:47 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12069.d
Lims ID: 280-160190-A-19-I DU
Client ID:
Sample Type: DU
Inject. Date: 12-Apr-2022 22:12:31 ALS Bottle#: 62 Worklist Smp#: 70
Injection Vol: 40.0 ul Dil. Factor: 10.0000
Sample Info: 280-160190-A-19-I DU 10x
Misc. Info.: 04/08/2022 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\8321expDuPont.m
Limit Group: LC - 8321A Expl
Last Update: 13-Apr-2022 13:58:36 Calib Date: 12-Apr-2022 10:31:58
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d

Column 1 : Det: F1:SIR
Process Host: CTX1683

First Level Reviewer: meyera Date: 13-Apr-2022 13:52:10

Compound	Amount Added	Amount Recovered	% Rec.
$ 16 Nitrobenzene-d5	100.3	8.93	8.90

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: | Lab Sample ID: 280-160190-A-29-E DU
Matrix: Solid | Lab File ID: ex722D14022.d
Analysis Method: 8321A | Date Collected: 03/24/2022 12:37
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:23
Sample wt/vol: 10.43(g) | Date Analyzed: 04/14/2022 14:33
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571896 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.048	U	0.096	0.048	0.043
99-65-0	1,3-Dinitrobenzene	0.048	U	0.096	0.048	0.043
118-96-7	2,4,6-Trinitrotoluene	0.048	U	0.096	0.048	0.035
121-14-2	2,4-Dinitrotoluene	0.048	U	0.096	0.048	0.045
606-20-2	2,6-Dinitrotoluene	0.048	U	0.096	0.048	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.048	U	0.096	0.048	0.048
19406-51-0	4-Amino-2,6-dinitrotoluene	0.048	U	0.096	0.048	0.030
2691-41-0	HMX	0.048	U M	0.096	0.048	0.044
99-08-1	m-Nitrotoluene	0.048	U	0.096	0.048	0.041
98-95-3	Nitrobenzene	0.048	U	0.11	0.048	0.036
55-63-0	Nitroglycerin	0.048	U	0.096	0.048	0.028
88-72-2	o-Nitrotoluene	0.048	U M	0.096	0.048	0.041
78-11-5	PETN	0.048	U	0.096	0.048	0.033
99-99-0	p-Nitrotoluene	0.048	U M	0.096	0.048	0.047
121-82-4	RDX	0.048	U	0.12	0.048	0.041
479-45-8	Tetryl	0.048	U Q	0.096	0.048	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	95		68-140

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14022.d
Lims ID: 280-160190-A-29-E DU
Client ID:
Sample Type: DU
Inject. Date: 14-Apr-2022 14:33:03 ALS Bottle#: 19 Worklist Smp#: 22
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-29-E DU
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:06 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:27:36
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		169604	125.0	94.5	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		510946	125.0	233	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1192437	129.4	523	
10 2,4,6-Trinitrotoluene								
227.0	3.301	3.281	0.020	0.772	34231	-0.6460	9.6	
$ 11 Nitrobenzene-d5								
128.0	3.324	3.324	0.0	0.778	507641	95.0	20.2	
12 Nitrobenzene								
123.0	3.382	3.382	0.0	0.791	2099	0.2197	2.8	
14 4-Amino-2,6-dinitrotoluene								M
197.0	3.630	3.611	0.019	0.849	18359	-0.5259	3.8	M
16 2-Amino-4,6-dinitrotoluene								M
197.0	3.937	3.924	0.013	0.921	20569	-0.2570	6.2	M
17 2,6-Dinitrotoluene								
182.0	4.074	4.093	-0.019	0.953	36213	-0.0711	17.3	
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3812883	125.0	132	
19 2,4-Dinitrotoluene								
182.0	4.316	4.316	0.0	1.010	348060	9.84	124	
22 o-Nitrotoluene								M
137.0	4.962	4.932	0.030	1.160	7421	0.3889	2.3	M
23 p-Nitrotoluene								M
137.0	5.240	5.230	0.010	1.226	10610	0.7319	4.5	M

Report Date: 15-Apr-2022 08:03:07 Chrom Revision: 2.3 12-Apr-2022 20:29:44

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

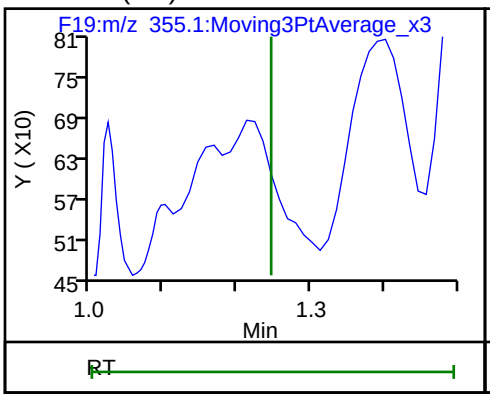
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 15-Apr-2022 08:03:07 Chrom Revision: 2.3 12-Apr-2022 20:29:44

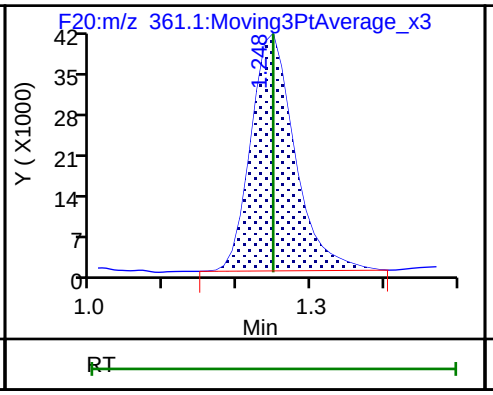
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14022.d
Injection Date: 14-Apr-2022 14:33:03 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-29-E DU
Client ID:
Operator ID: acm ALS Bottle#: 19 Worklist Smp#: 22
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

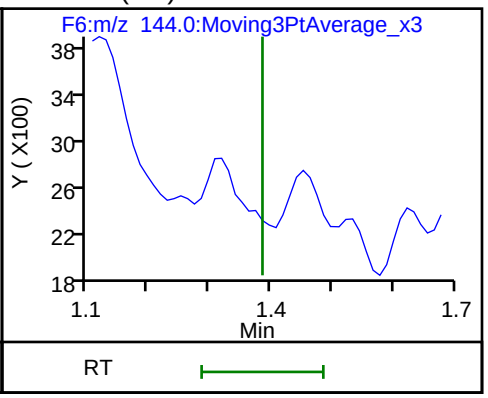
2 HMX (ND)



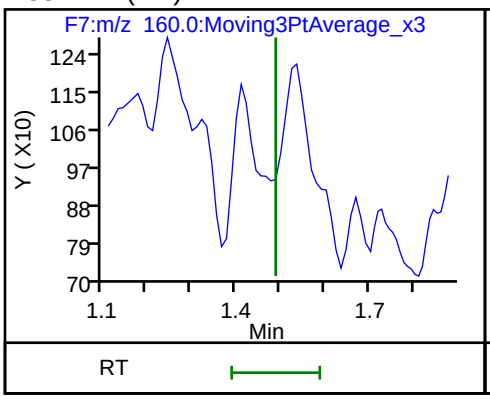
* 1 HMX-13C4



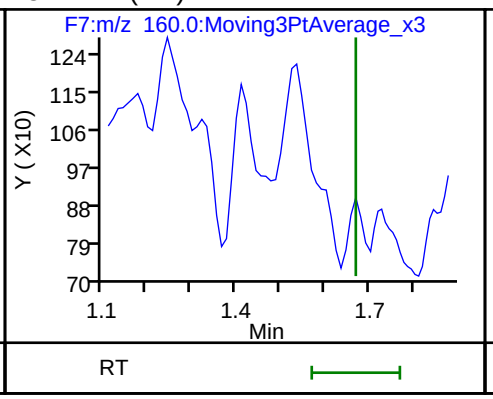
36 TNX (ND)



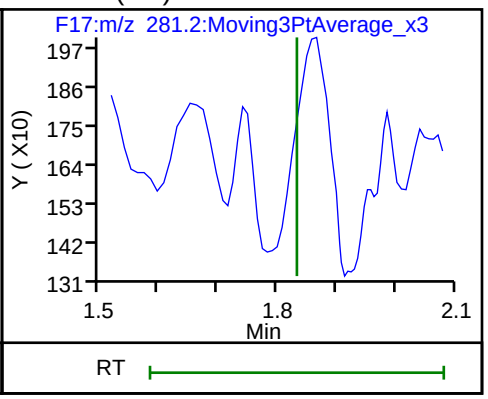
33 DNX (ND)



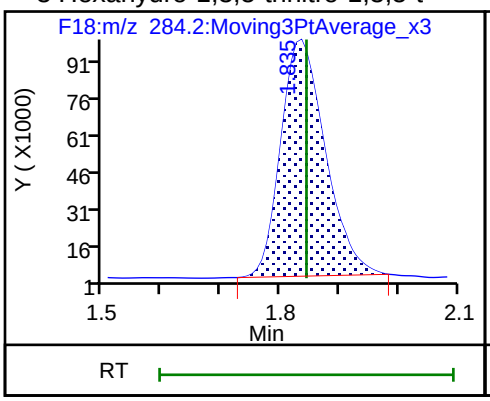
34 MNX (ND)



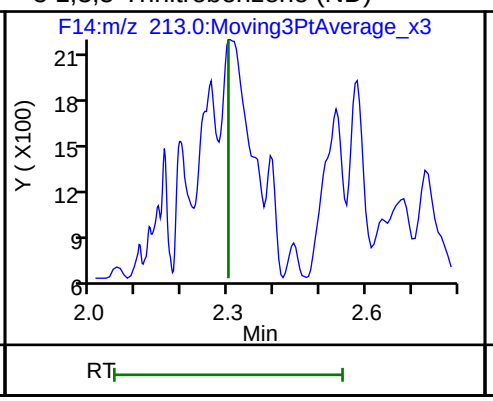
4 RDX (ND)



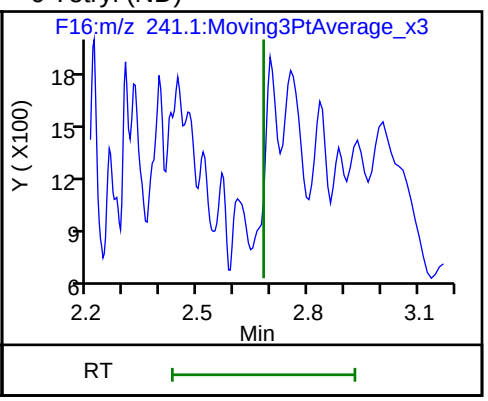
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



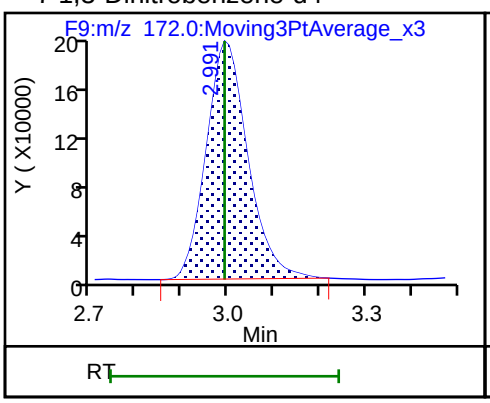
5 1,3,5-Trinitrobenzene (ND)



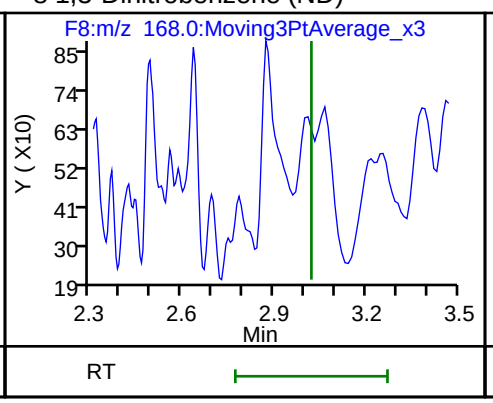
6 Tetryl (ND)



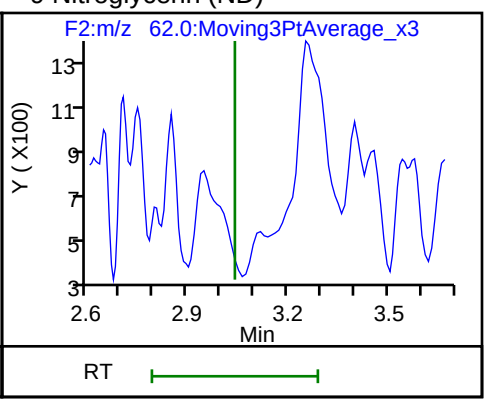
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



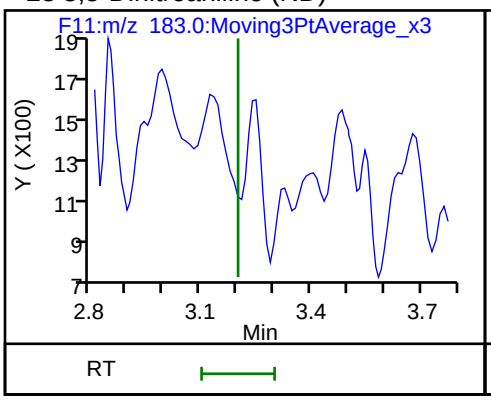
9 Nitroglycerin (ND)



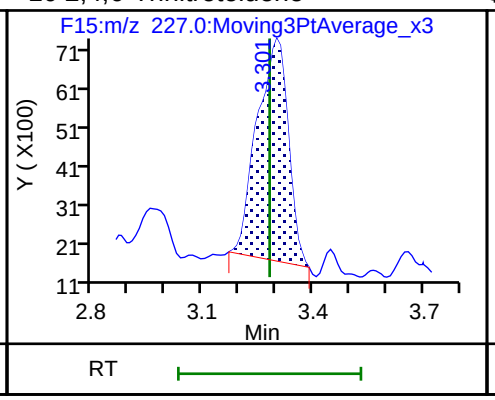
Report Date: 15-Apr-2022 08:03:07 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14022.d

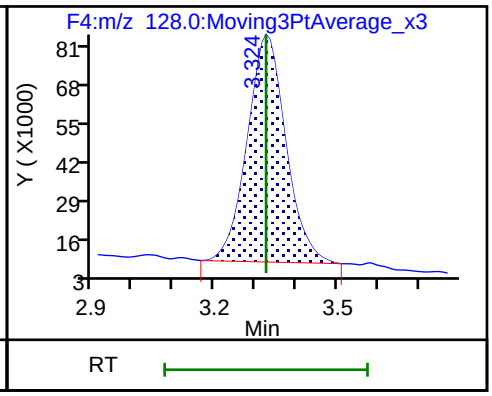
28 3,5-Dinitroaniline (ND)



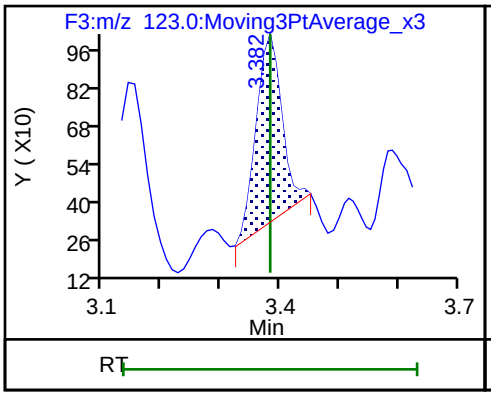
10 2,4,6-Trinitrotoluene



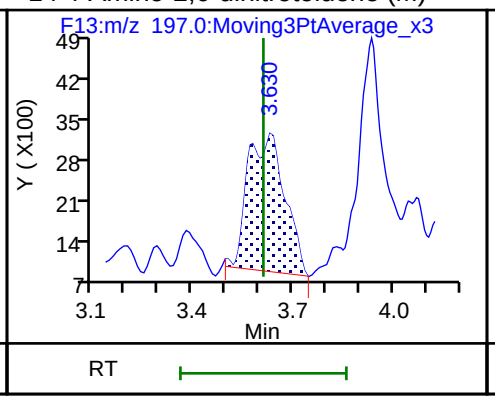
$ 11 Nitrobenzene-d5



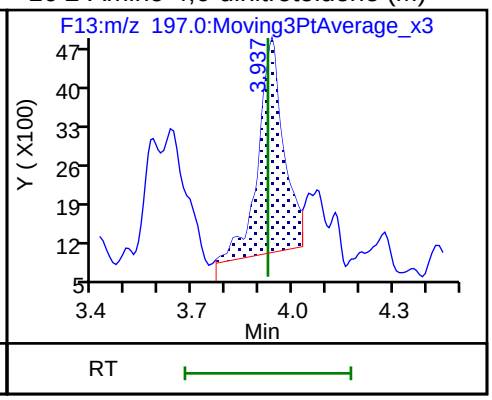
12 Nitrobenzene



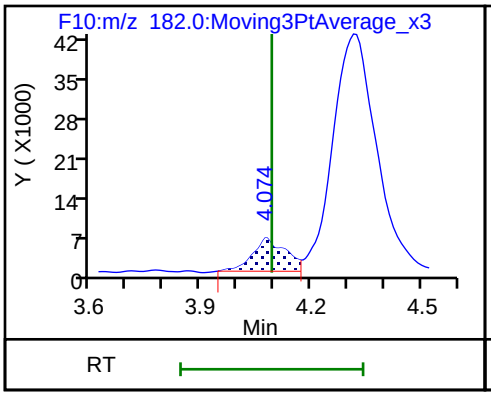
14 4-Amino-2,6-dinitrotoluene (M)



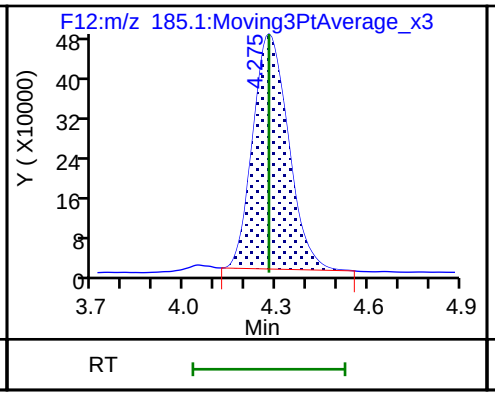
16 2-Amino-4,6-dinitrotoluene (M)



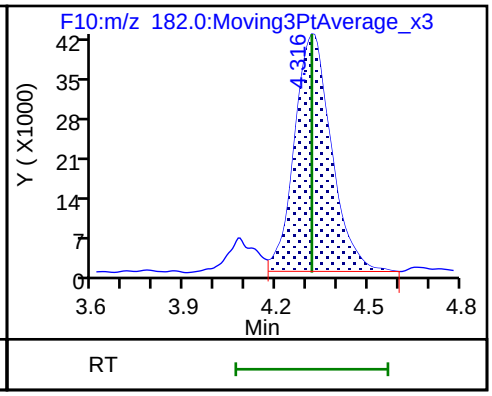
17 2,6-Dinitrotoluene



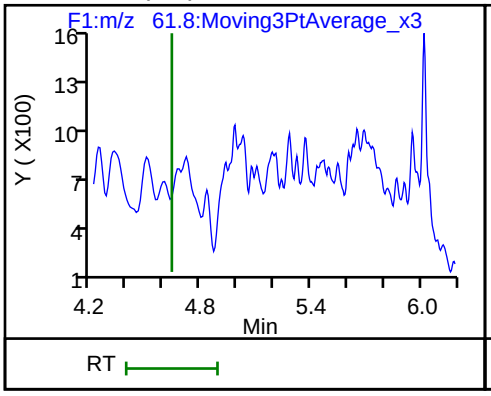
* 18 2,4-dinitrotoluene-d3



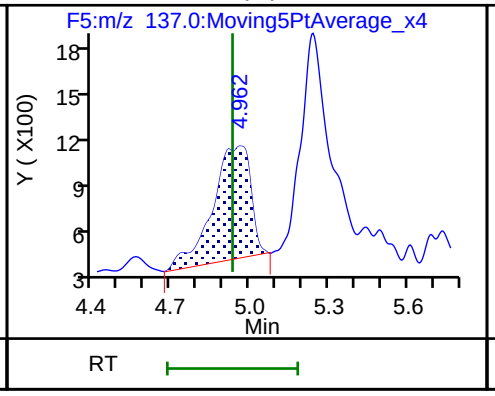
19 2,4-Dinitrotoluene



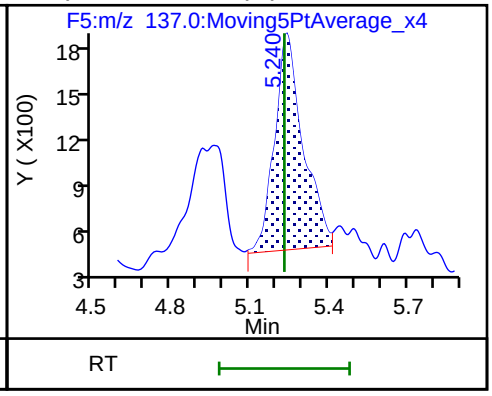
20 PETN (ND)



22 o-Nitrotoluene (M)

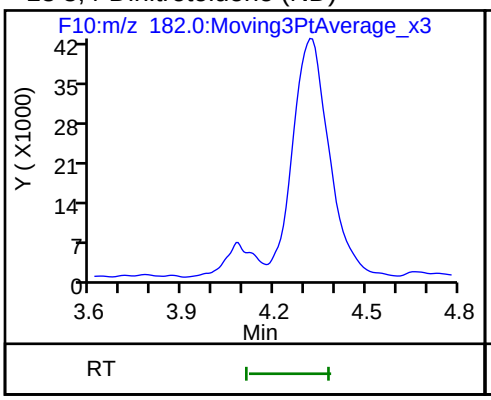


23 p-Nitrotoluene (M)

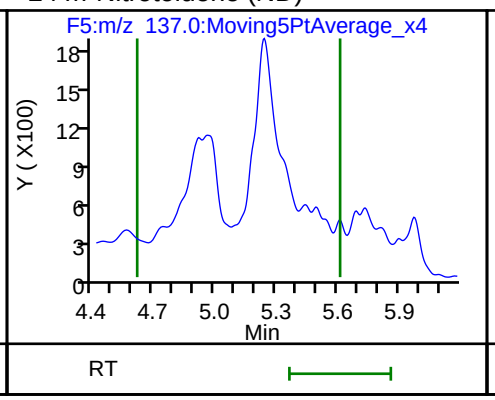


Report Date: 15-Apr-2022 08:03:07 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14022.d

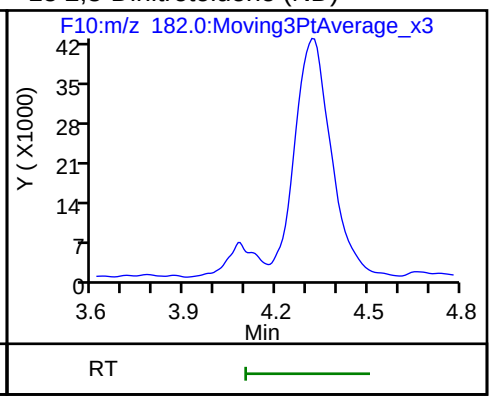
13 3,4-Dinitrotoluene (ND)



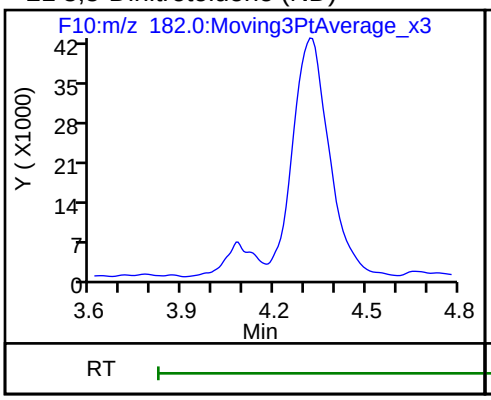
24 m-Nitrotoluene (ND)



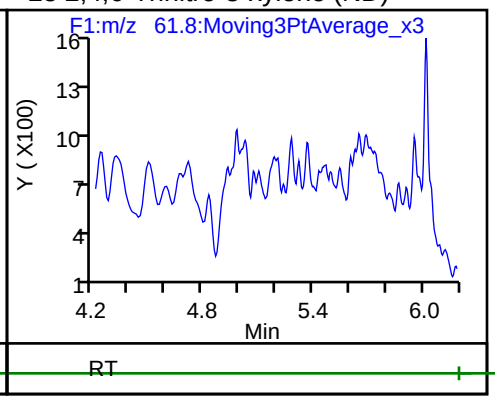
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:07 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14022.d
Lims ID: 280-160190-A-29-E DU
Client ID:
Sample Type: DU
Inject. Date: 14-Apr-2022 14:33:03 ALS Bottle#: 19 Worklist Smp#: 22
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-29-E DU
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:06 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:27:36

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	95.0	94.65

Report Date: 15-Apr-2022 08:03:07 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

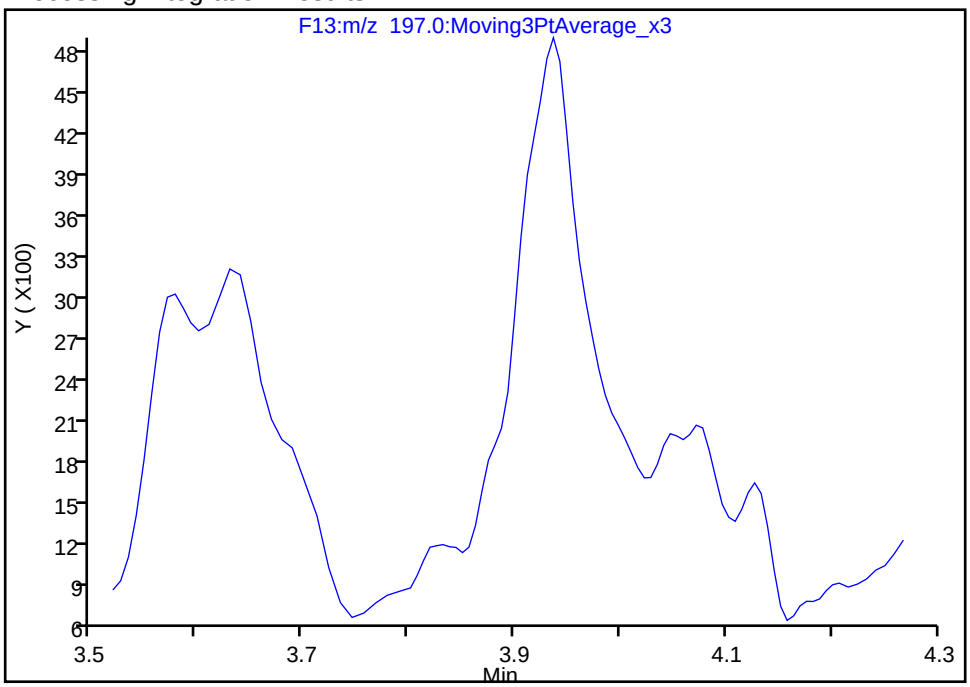
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14022.d
Injection Date: 14-Apr-2022 14:33:03 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-29-E DU
Client ID:
Operator ID: acm ALS Bottle#: 19 Worklist Smp#: 22
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F13:SIR

16 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

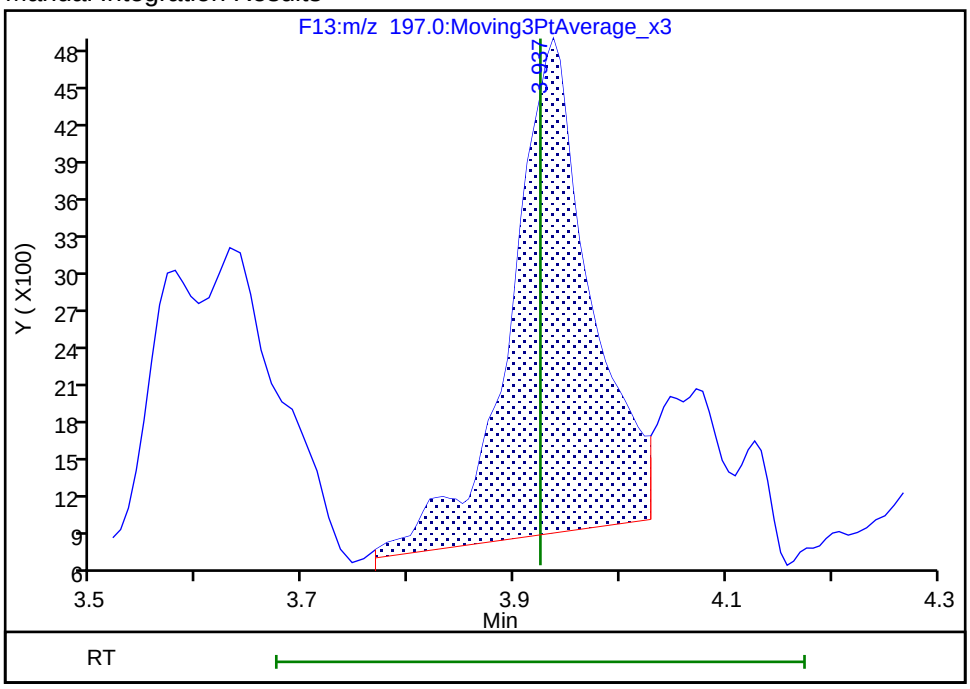
Not Detected
Expected RT: 3.92

Processing Integration Results



Manual Integration Results

RT: 3.94
Area: 20569
Amount: -0.257019
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:28:04
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:03:07 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14022.d

Injection Date: 14-Apr-2022 14:33:03 Instrument ID: LC_LCMS7

Lims ID: 280-160190-A-29-E DU

Client ID:

Operator ID: acm ALS Bottle#: 19 Worklist Smp#: 22

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

Column: Detector F13:SIR

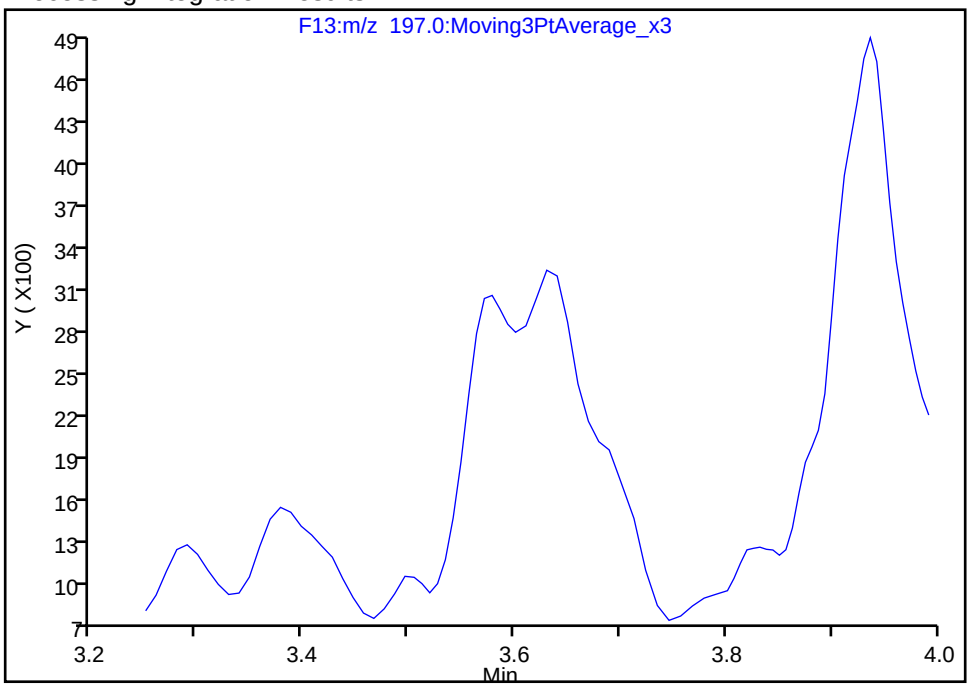
14 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

Not Detected

Expected RT: 3.61

Processing Integration Results



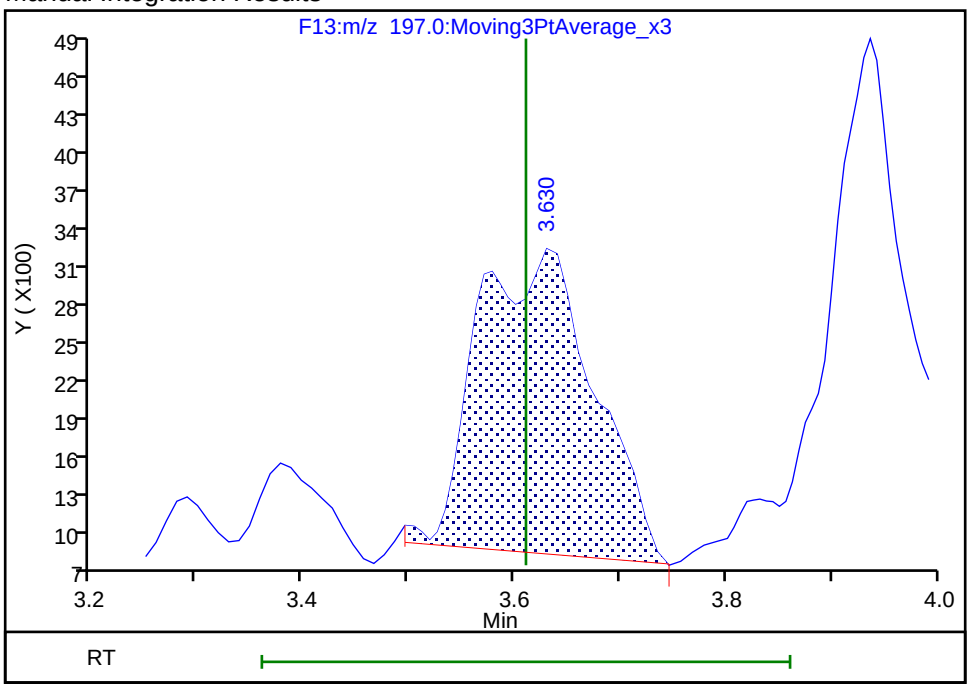
Manual Integration Results

RT: 3.63

Area: 18359

Amount: -0.525918

Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:28:07

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:03:07

Chrom Revision: 2.3 12-Apr-2022 20:29:44
Manual Integration/User Assign Peak Report

Eurofins Denver

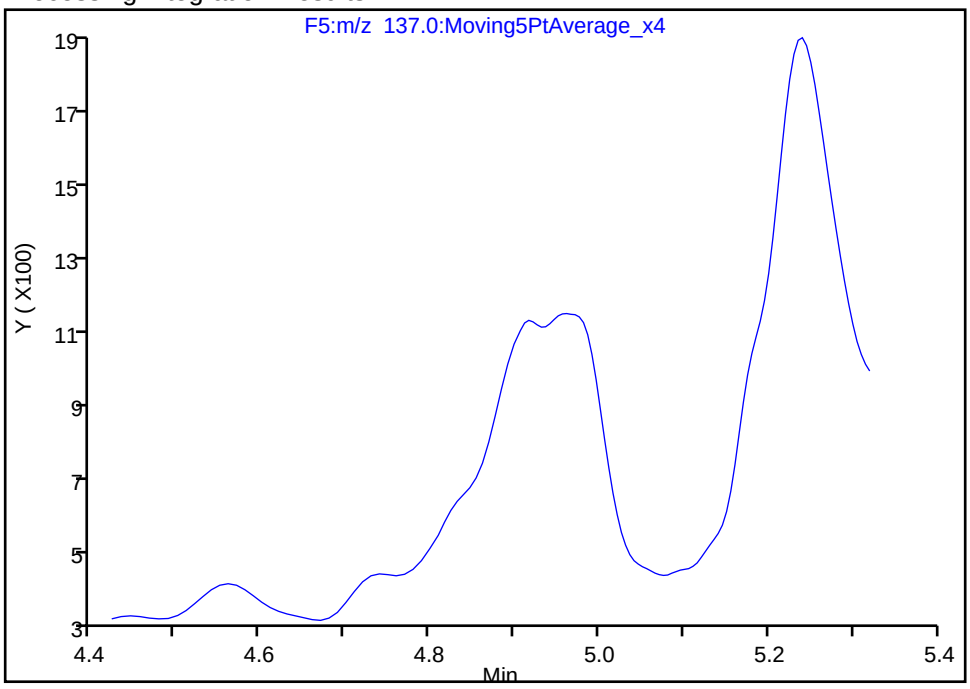
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14022.d
Injection Date: 14-Apr-2022 14:33:03 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-29-E DU
Client ID:
Operator ID: acm ALS Bottle#: 19 Worklist Smp#: 22
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F5:SIR

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

Signal: 1

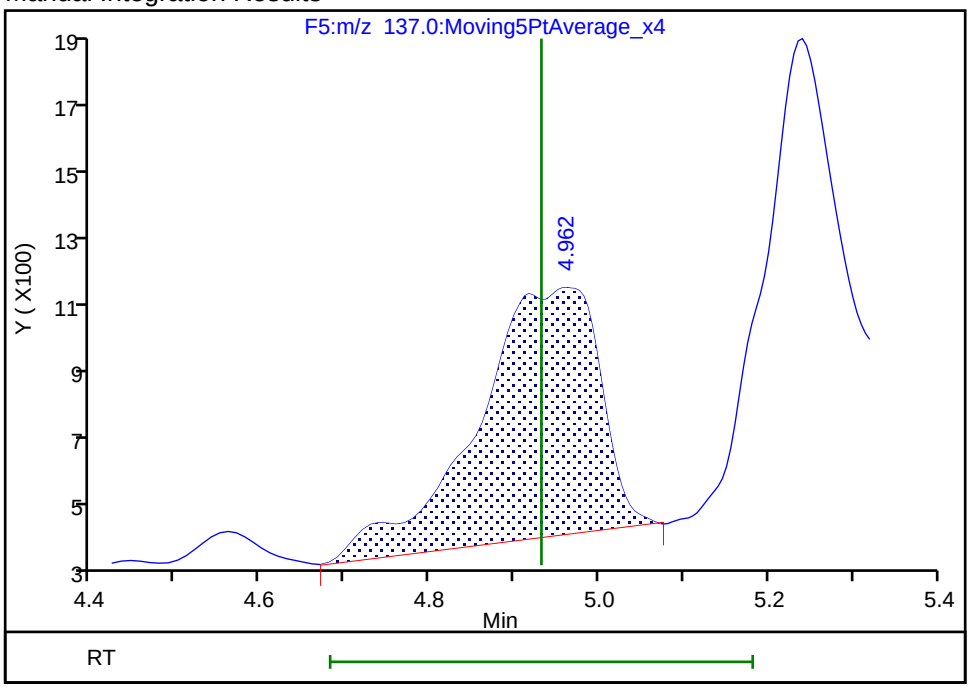
Not Detected
Expected RT: 4.93

Processing Integration Results



Manual Integration Results

RT: 4.96
Area: 7421
Amount: 0.388868
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:27:57
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:03:07 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14022.d

Injection Date:	14-Apr-2022 14:33:03	Instrument ID:	LC_LCMS7
Lims ID:	280-160190-A-29-E DU		
Client ID:			
Operator ID:	acm	ALS Bottle#:	19 Worklist Smp#: 22
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F5:SIR

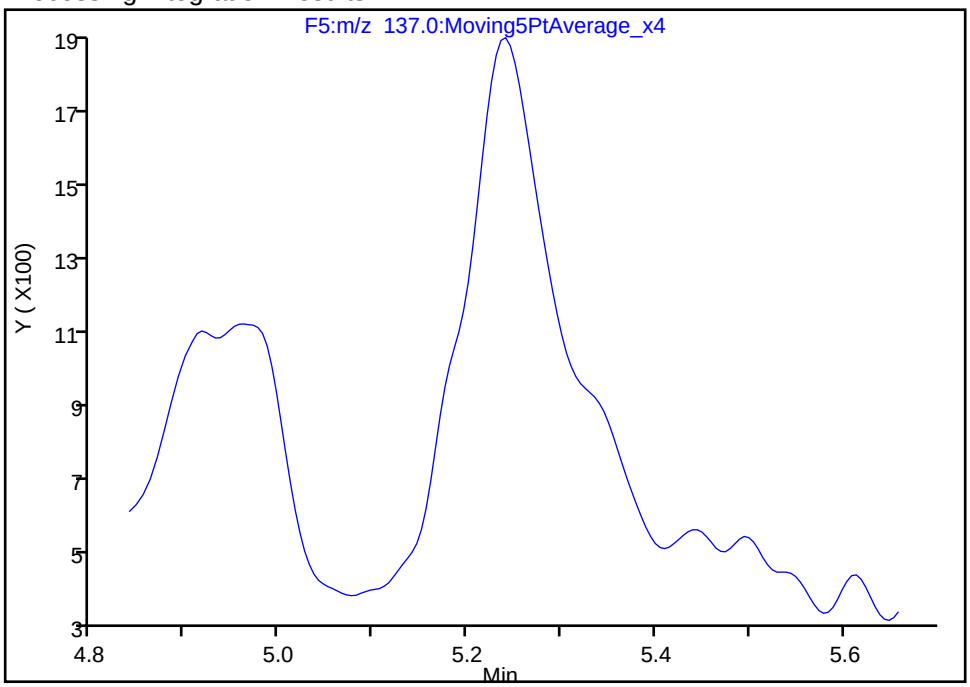
23 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

Not Detected

Expected RT: 5.23

Processing Integration Results



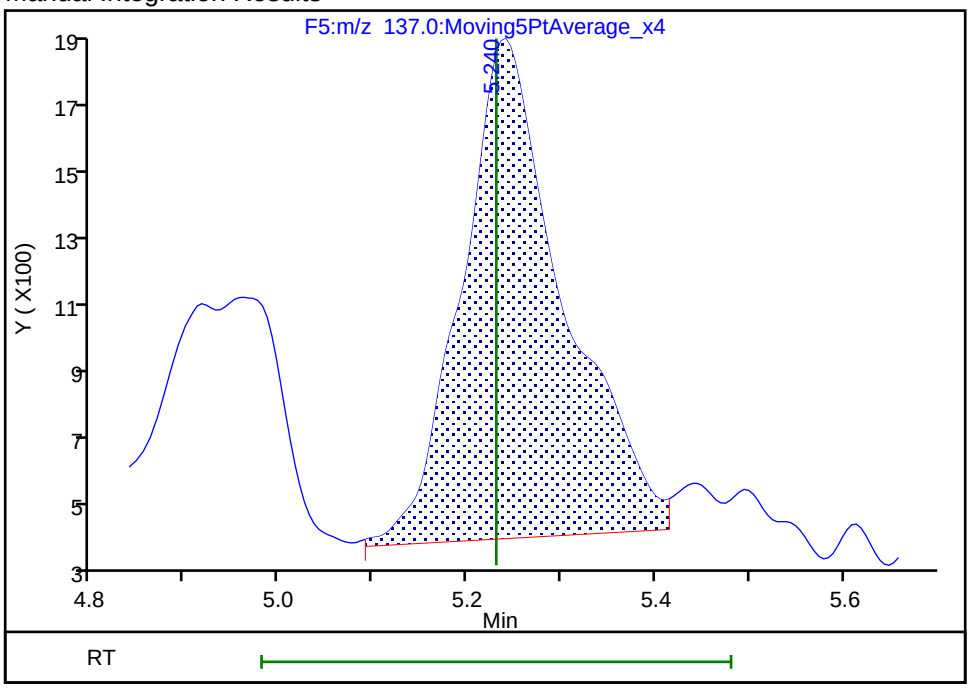
Manual Integration Results

RT: 5.24

Area: 10610

Amount: 0.731886

Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:27:54

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1

SDG No.:

Client Sample ID: | Lab Sample ID: 280-160190-A-52-I DU

Matrix: Solid | Lab File ID: ex722D14057.d

Analysis Method: 8321A | Date Collected: 03/24/2022 15:15

Extraction Method: 8330B | Date Extracted: 04/06/2022 18:17

Sample wt/vol: 10.18(g) | Date Analyzed: 04/14/2022 18:24

Con. Extract Vol.: 40(mL) | Dilution Factor: 1

Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:

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

Analysis Batch No.: 571897 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.049	U	0.098	0.049	0.044
99-65-0	1,3-Dinitrobenzene	0.049	U	0.098	0.049	0.044
118-96-7	2,4,6-Trinitrotoluene	0.049	U M Q	0.098	0.049	0.036
121-14-2	2,4-Dinitrotoluene	0.049	U	0.098	0.049	0.046
606-20-2	2,6-Dinitrotoluene	0.049	U	0.098	0.049	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.049	U	0.098	0.049	0.049
19406-51-0	4-Amino-2,6-dinitrotoluene	0.049	U	0.098	0.049	0.031
2691-41-0	HMX	0.049	U	0.098	0.049	0.045
99-08-1	m-Nitrotoluene	0.049	U	0.098	0.049	0.042
98-95-3	Nitrobenzene	0.049	U	0.11	0.049	0.037
55-63-0	Nitroglycerin	0.049	U	0.098	0.049	0.028
88-72-2	o-Nitrotoluene	0.049	U	0.098	0.049	0.042
78-11-5	PETN	0.049	U	0.098	0.049	0.033
99-99-0	p-Nitrotoluene	0.049	U	0.098	0.049	0.049
121-82-4	RDX	0.049	U	0.12	0.049	0.042
479-45-8	Tetryl	0.049	U Q	0.098	0.049	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	107		68-140

Report Date: 15-Apr-2022 08:03:29 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14057.d
Lims ID: 280-160190-A-52-I DU
Client ID:
Sample Type: DU
Inject. Date: 14-Apr-2022 18:24:00 ALS Bottle#: 3 Worklist Smp#: 57
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-52-I DU
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:26 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:38:41
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.237	1.248	-0.011		155833	125.0	75.5	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		504306	125.0	177	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.981	2.991	-0.010		1056986	129.4	483	
$ 11 Nitrobenzene-d5								
128.0	3.315	3.324	-0.009	0.777	507624	107.4	123	
* 18 2,4-dinitrotoluene-d3								
185.1	4.267	4.275	-0.008		3314569	125.0	125	

QC Flag Legend
Processing Flags

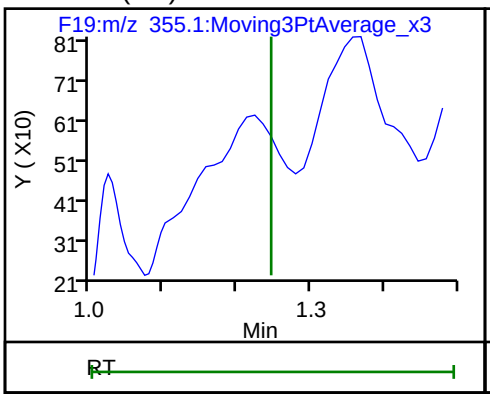
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:29 Chrom Revision: 2.3 12-Apr-2022 20:29:44

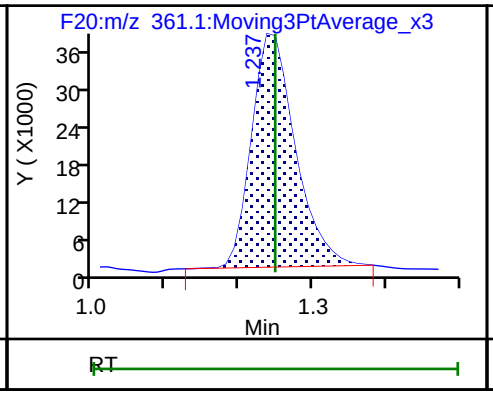
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14057.d
Injection Date: 14-Apr-2022 18:24:00 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-52-I DU
Client ID:
Operator ID: acm ALS Bottle#: 3 Worklist Smp#: 57
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

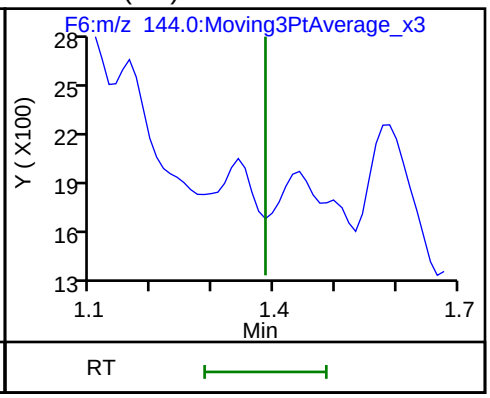
2 HMX (ND)



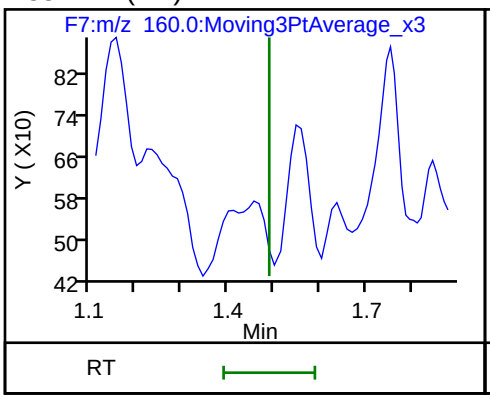
* 1 HMX-13C4



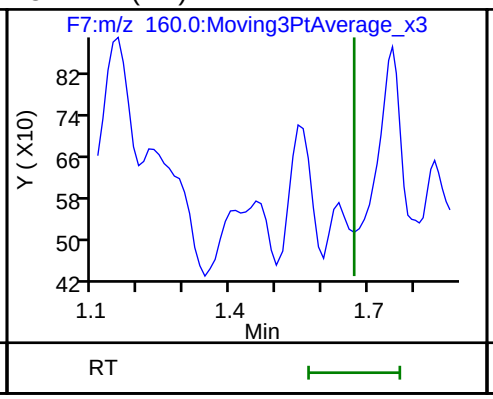
36 TNX (ND)



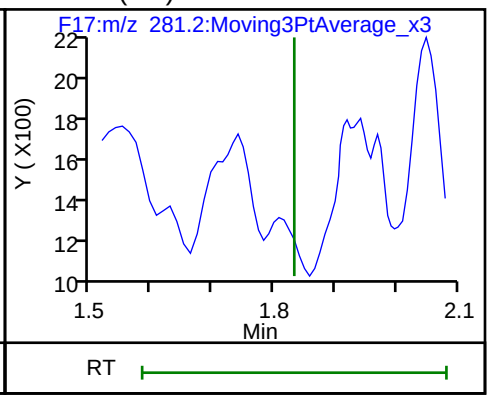
33 DNX (ND)



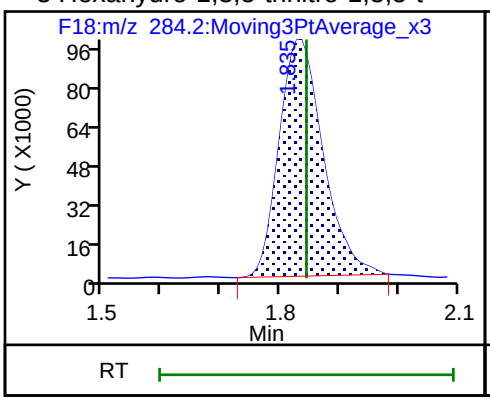
34 MNX (ND)



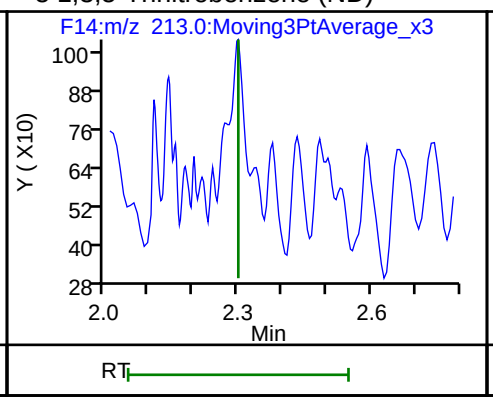
4 RDX (ND)



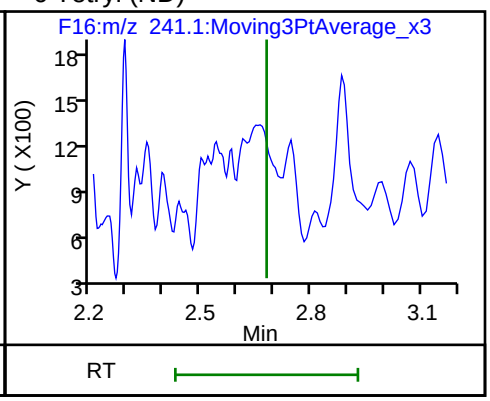
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



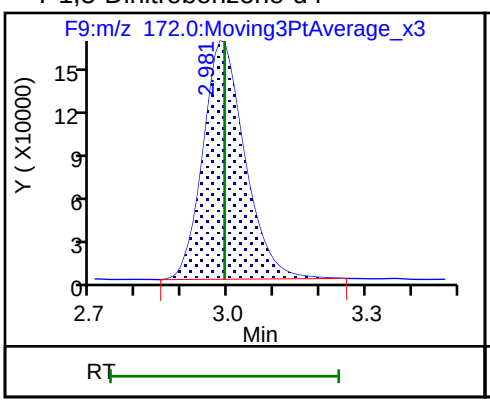
5 1,3,5-Trinitrobenzene (ND)



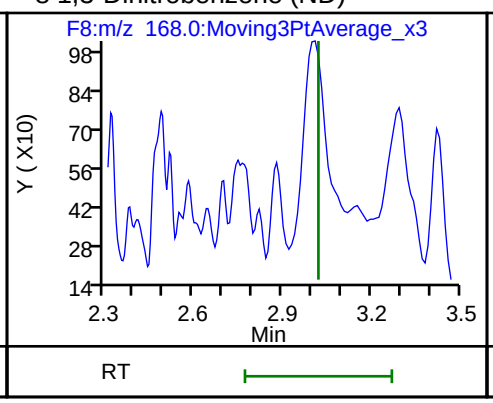
6 Tetryl (ND)



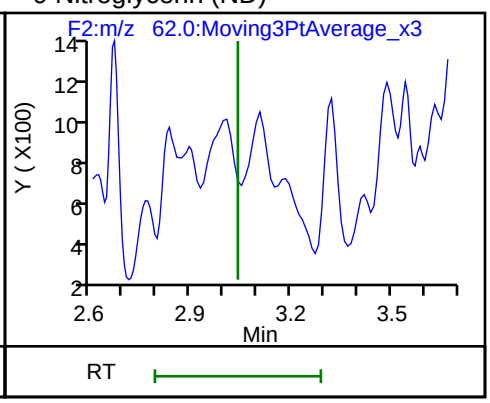
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

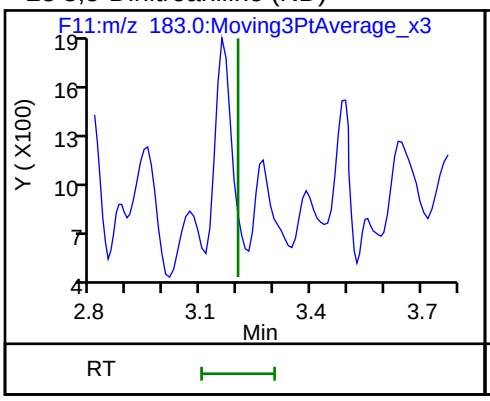


9 Nitroglycerin (ND)

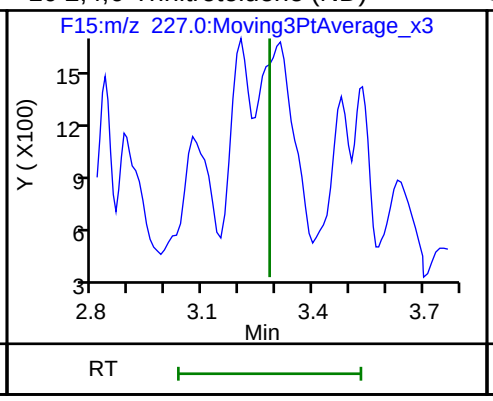


Report Date: 15-Apr-2022 08:03:29 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14057.d

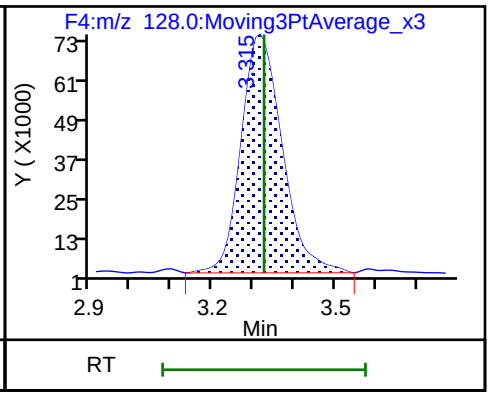
28 3,5-Dinitroaniline (ND)



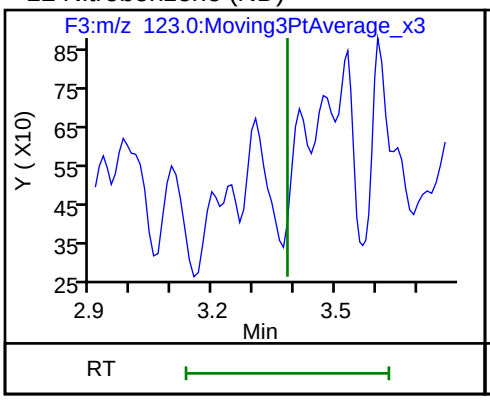
10 2,4,6-Trinitrotoluene (ND)



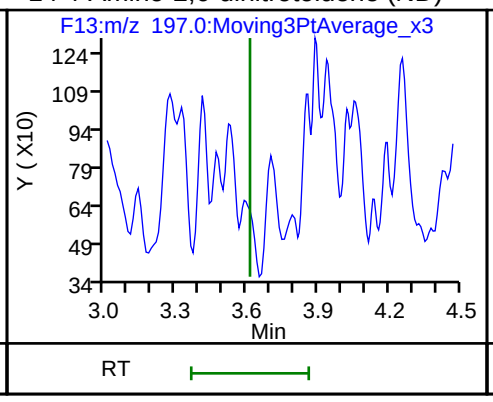
$ 11 Nitrobenzene-d5



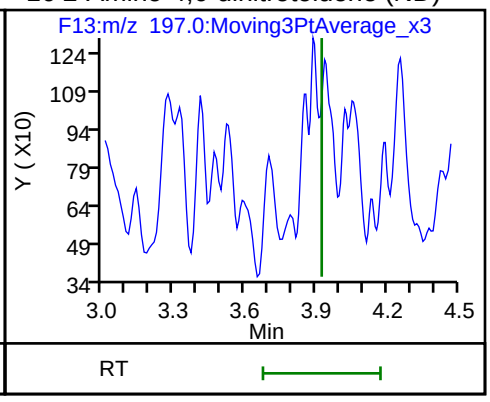
12 Nitrobenzene (ND)



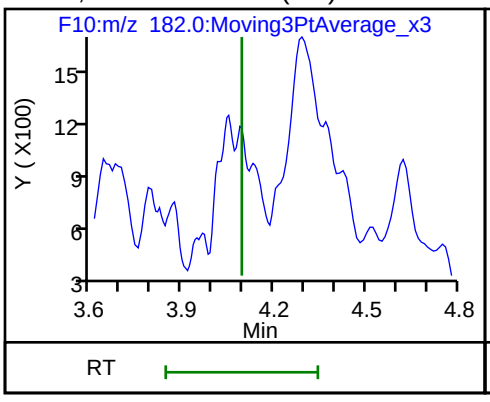
14 4-Amino-2,6-dinitrotoluene (ND)



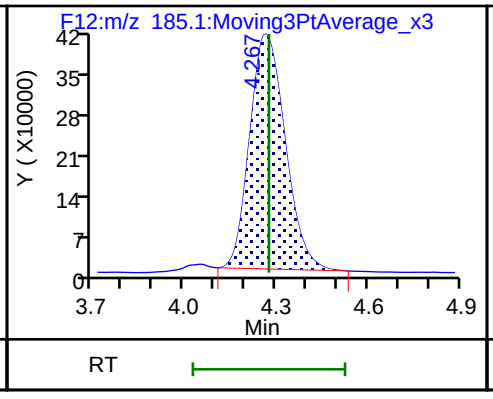
16 2-Amino-4,6-dinitrotoluene (ND)



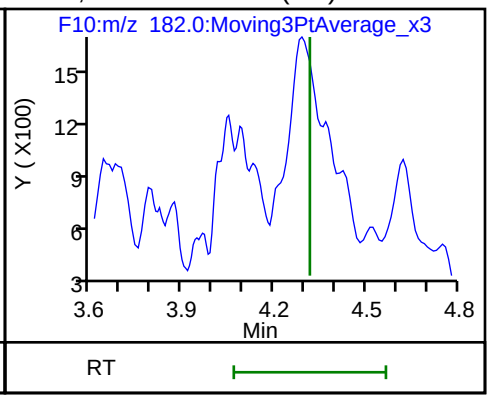
17 2,6-Dinitrotoluene (ND)



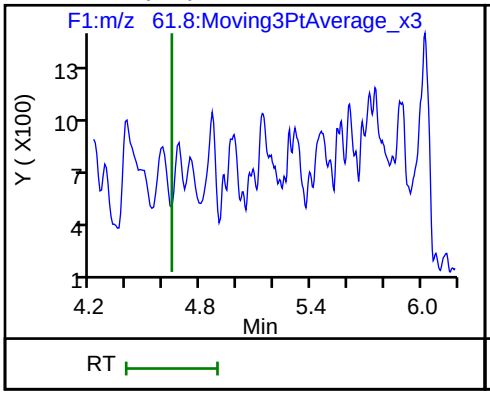
* 18 2,4-dinitrotoluene-d3



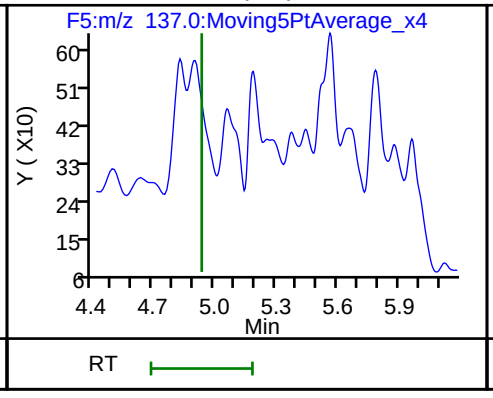
19 2,4-Dinitrotoluene (ND)



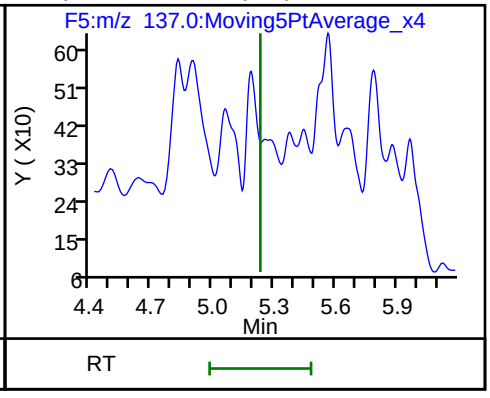
20 PETN (ND)



22 o-Nitrotoluene (ND)



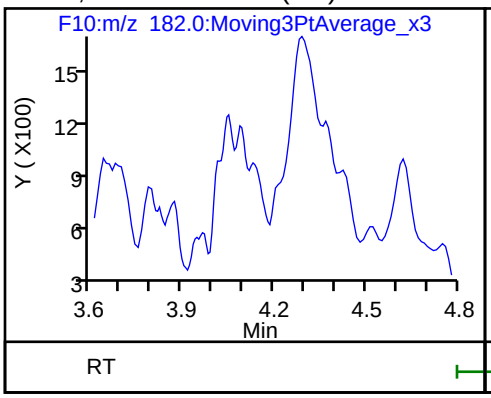
23 p-Nitrotoluene (ND)



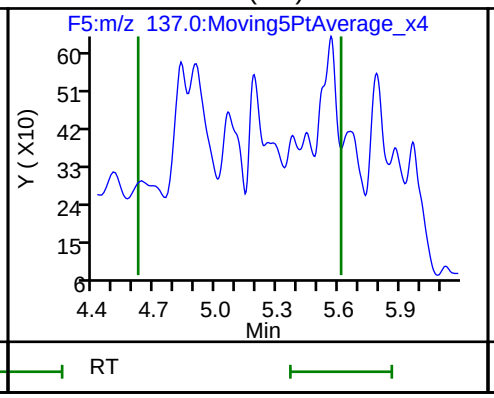
Report Date: 15-Apr-2022 08:03:29 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14057.d

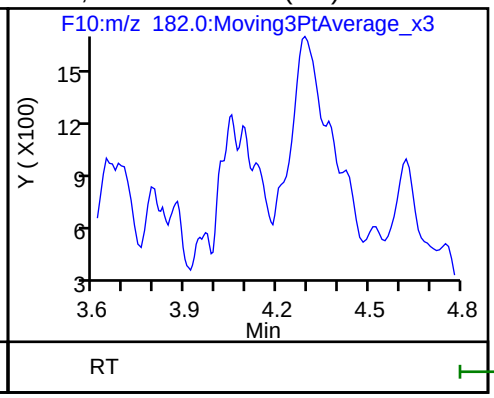
13 3,4-Dinitrotoluene (ND)



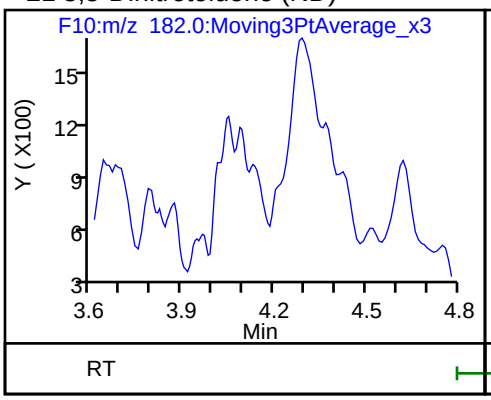
24 m-Nitrotoluene (ND)



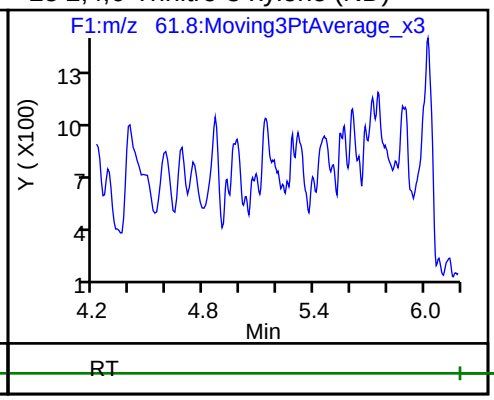
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:29 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14057.d
Lims ID: 280-160190-A-52-I DU
Client ID:
Sample Type: DU
Inject. Date: 14-Apr-2022 18:24:00 ALS Bottle#: 3 Worklist Smp#: 57
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-52-I DU
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:26 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:38:41

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	107.4	107.02

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: 29SB168 (6-7) TRL | Lab Sample ID: 280-160190-19 TRL
Matrix: Solid | Lab File ID: ex722D08034.d
Analysis Method: 8321A | Date Collected: 03/24/2022 11:58
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20
Sample wt/vol: 10.31(g) | Date Analyzed: 04/08/2022 13:12
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571224 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.120		0.097	0.048	0.043
99-65-0	1,3-Dinitrobenzene	0.048	U M	0.097	0.048	0.043
606-20-2	2,6-Dinitrotoluene	0.442		0.097	0.048	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.177	M	0.097	0.048	0.048
19406-51-0	4-Amino-2,6-dinitrotoluene	0.150	M	0.097	0.048	0.030
2691-41-0	HMX	0.048	U M Q	0.097	0.048	0.045
99-08-1	m-Nitrotoluene	0.0471	J M	0.097	0.048	0.042
98-95-3	Nitrobenzene	0.048	U	0.11	0.048	0.037
55-63-0	Nitroglycerin	0.048	U	0.097	0.048	0.028
88-72-2	o-Nitrotoluene	0.206	M	0.097	0.048	0.042
78-11-5	PETN	0.048	U	0.097	0.048	0.033
99-99-0	p-Nitrotoluene	0.149	M	0.097	0.048	0.048
121-82-4	RDX	0.048	U	0.12	0.048	0.042
479-45-8	Tetryl	0.048	U Q	0.097	0.048	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	89		68-140

Report Date: 14-Apr-2022 10:09:36 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08034.d
Lims ID: 280-160190-A-19-J TRL
Client ID:
Sample Type: TRL
Inject. Date: 08-Apr-2022 13:12:34 ALS Bottle#: 30 Worklist Smp#: 34
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-19-J TRL
Misc. Info.: ex722D08
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 14-Apr-2022 10:07:02 Calib Date: 08-Apr-2022 10:27:37
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d

Column 1 : Det: F1:SIR
Process Host: CTX1619

First Level Reviewer: meyera Date: 11-Apr-2022 11:52:23
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		114269	125.0	36.6	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		354127	125.0	55.0	
5 1,3,5-Trinitrobenzene								
213.0	2.310	2.322	-0.003	0.765	494032	31.1	47.2	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.008	0.011		1309215	129.4	430	
8 1,3-Dinitrobenzene								M
168.0	3.051	3.051	0.011	1.011	57927	4.87	4.3	M
28 3,5-Dinitroaniline								
183.0	3.219	3.231	0.0	1.066	210548	4.66	22.1	
10 2,4,6-Trinitrotoluene								E
227.0	3.310	3.316	0.0	0.765	23169067	343.5	561	E
$ 11 Nitrobenzene-d5								
128.0	3.359	3.354	0.011	0.777	551690	89.0	72.1	
14 4-Amino-2,6-dinitrotoluene								M
197.0	3.645	3.652	0.0	0.843	1914138	38.7	5.3	M
16 2-Amino-4,6-dinitrotoluene								M
197.0	3.976	3.971	0.013	0.920	2872933	45.6	7.2	M
17 2,6-Dinitrotoluene								
182.0	4.144	4.138	0.018	0.958	7496180	113.8	20.5	
* 18 2,4-dinitrotoluene-d3								
185.1	4.324	4.315	0.009		3978395	125.0	115	
19 2,4-Dinitrotoluene								E
182.0	4.365	4.373	0.0	1.009	46432698	1383.2	115	E
22 o-Nitrotoluene								M
137.0	4.987	4.987	0.010	1.154	542048	53.1	155	M

Report Date: 14-Apr-2022 10:09:36 Chrom Revision: 2.3 12-Apr-2022 20:29:44
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08034.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
23 p-Nitrotoluene								M
137.0	5.296	5.297	0.010	1.225	342520	38.3	95.6	M
24 m-Nitrotoluene								M
137.0	5.699	5.686	0.024	1.318	62742	12.1	14.2	M

QC Flag Legend

Processing Flags
E - Exceeded Maximum Amount
Review Flags
M - Manually Integrated

Reagents:

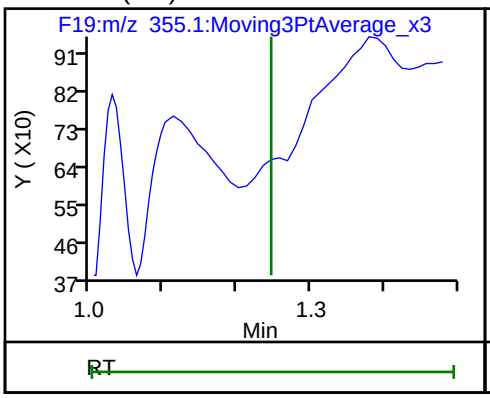
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 14-Apr-2022 10:09:36 Chrom Revision: 2.3 12-Apr-2022 20:29:44

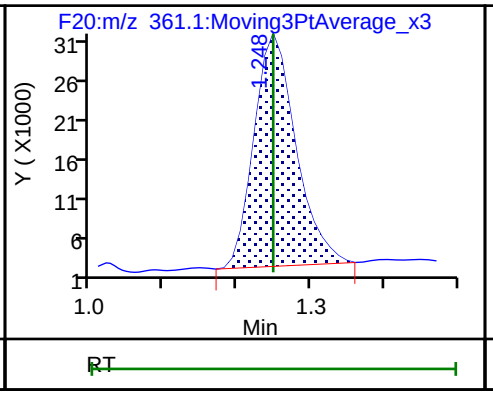
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08034.d
Injection Date: 08-Apr-2022 13:12:34 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-19-J TRL
Client ID:
Operator ID: acm ALS Bottle#: 30 Worklist Smp#: 34
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

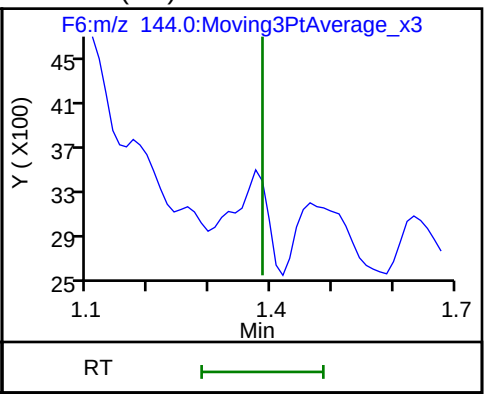
2 HMX (ND)



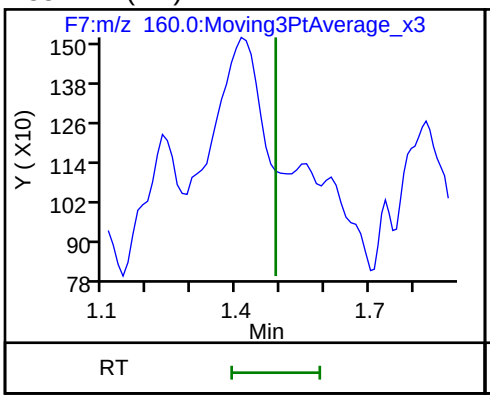
* 1 HMX-13C4



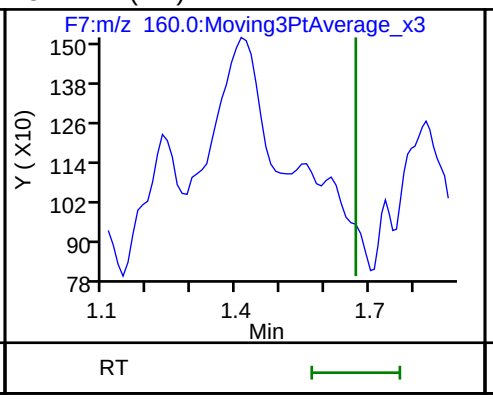
36 TNX (ND)



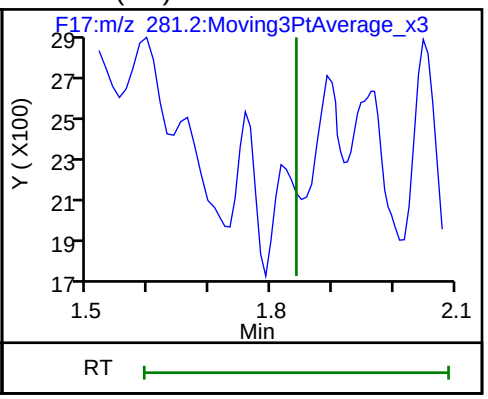
33 DNX (ND)



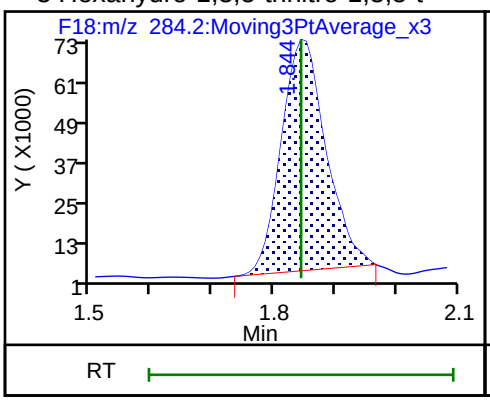
34 MNX (ND)



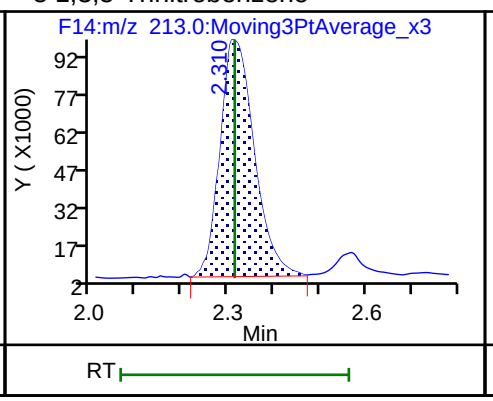
4 RDX (ND)



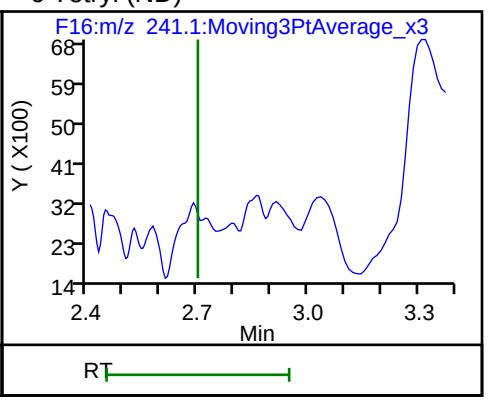
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



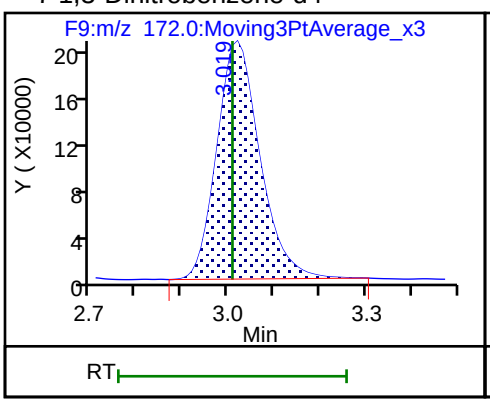
5 1,3,5-Trinitrobenzene



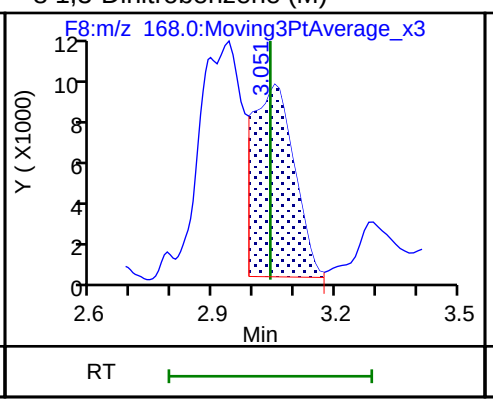
6 Tetryl (ND)



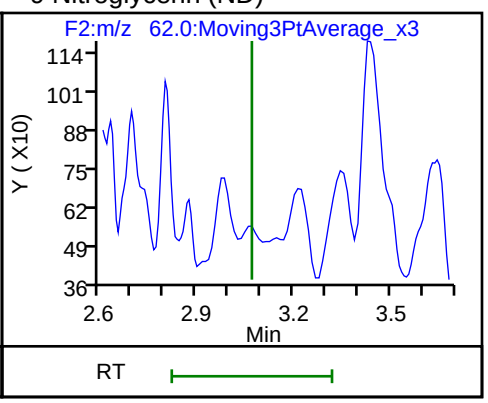
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (M)



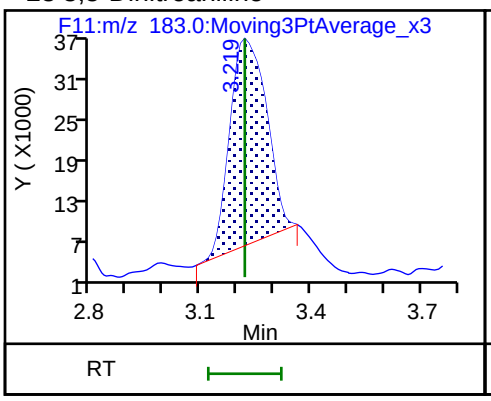
9 Nitroglycerin (ND)



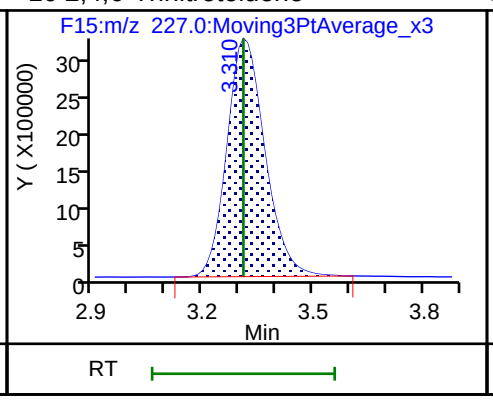
Report Date: 14-Apr-2022 10:09:36 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08034.d

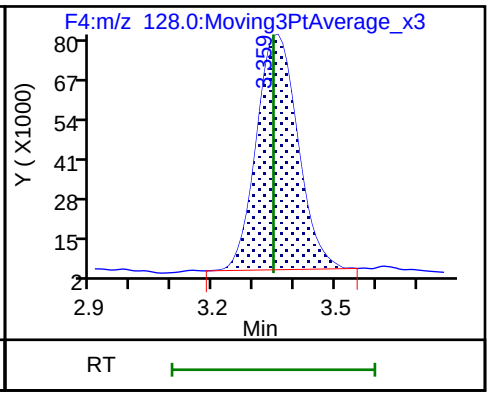
28 3,5-Dinitroaniline



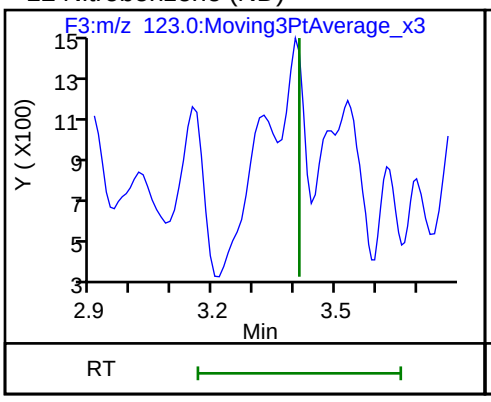
10 2,4,6-Trinitrotoluene



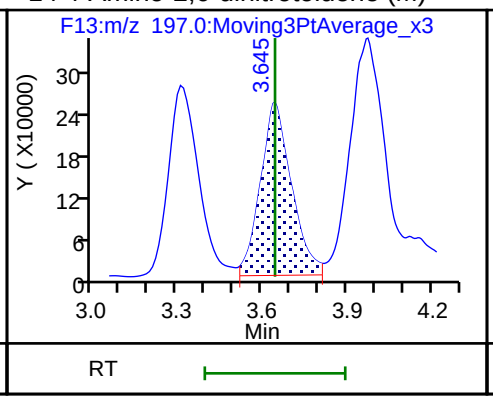
$ 11 Nitrobenzene-d5



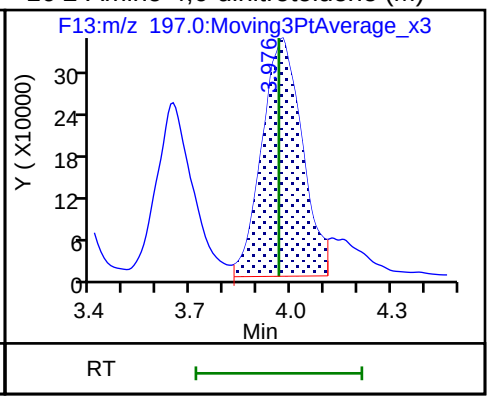
12 Nitrobenzene (ND)



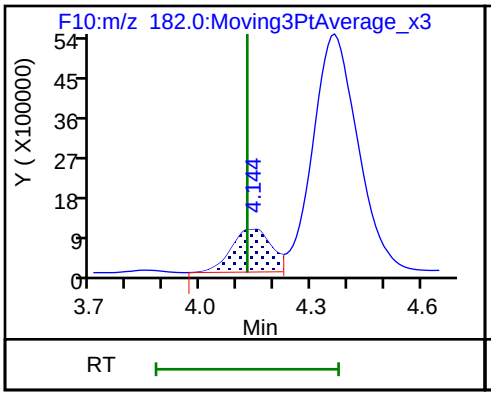
14 4-Amino-2,6-dinitrotoluene (M)



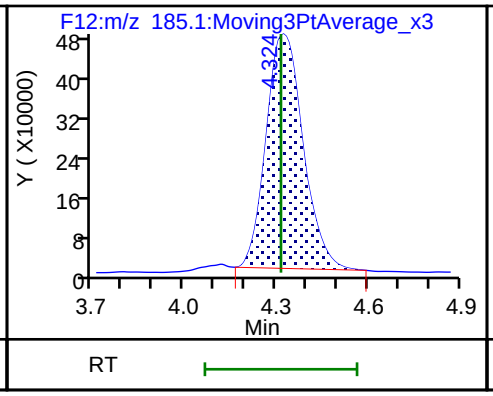
16 2-Amino-4,6-dinitrotoluene (M)



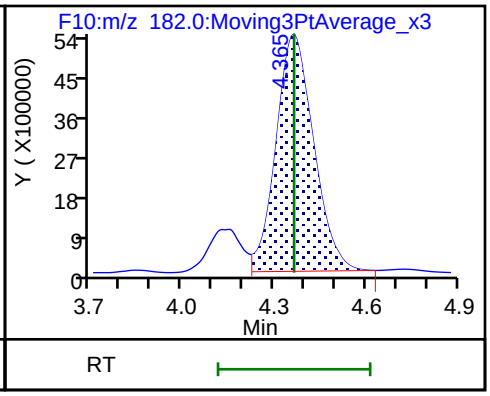
17 2,6-Dinitrotoluene



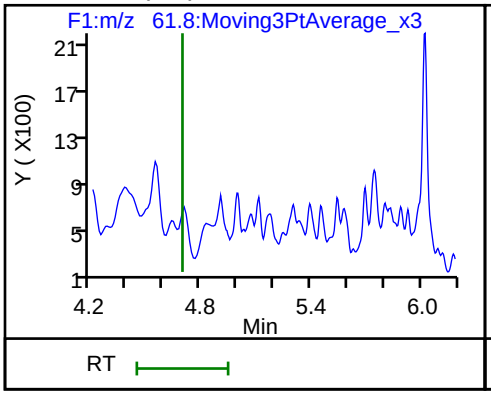
* 18 2,4-dinitrotoluene-d3



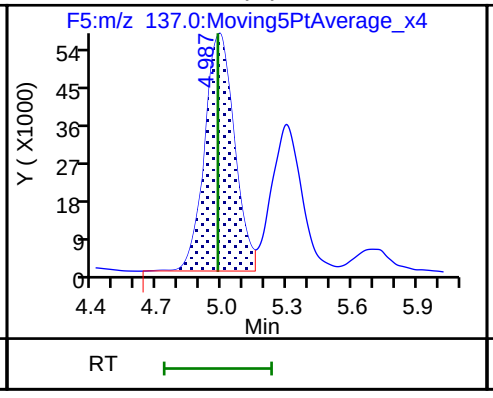
19 2,4-Dinitrotoluene



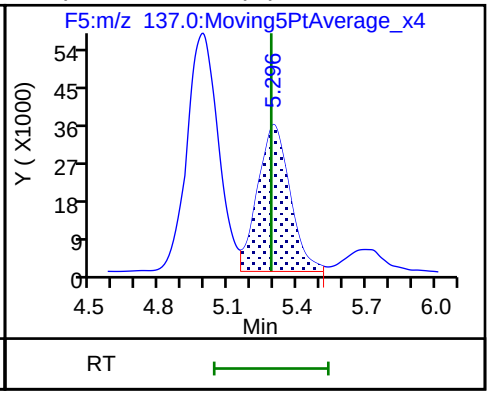
20 PETN (ND)



22 o-Nitrotoluene (M)



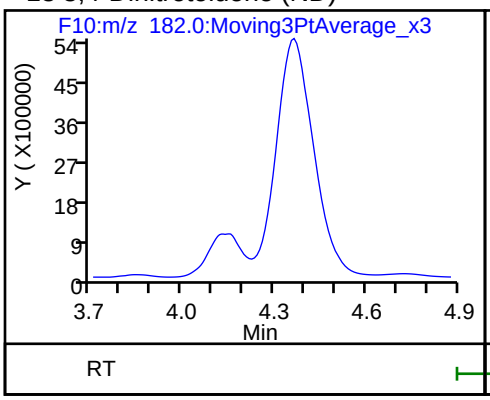
23 p-Nitrotoluene (M)



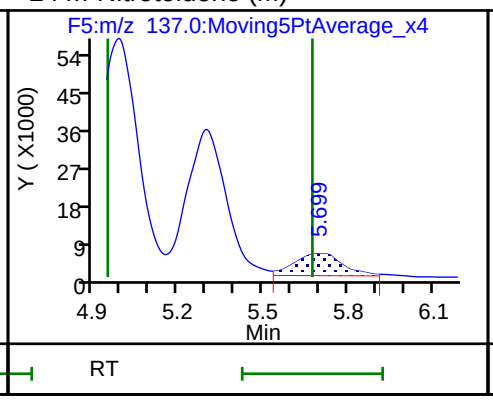
Report Date: 14-Apr-2022 10:09:36 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08034.d

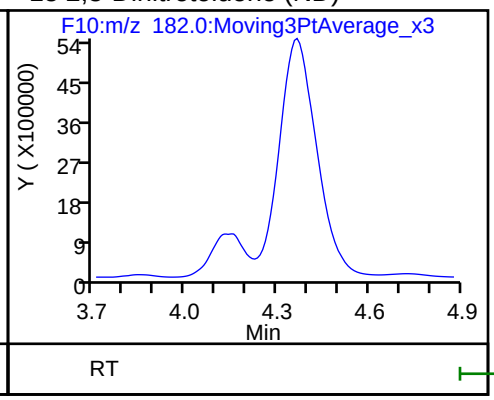
13 3,4-Dinitrotoluene (ND)



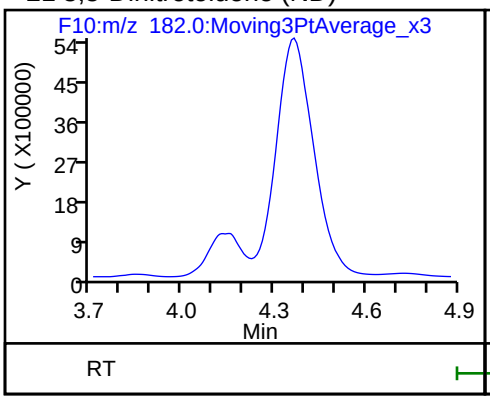
24 m-Nitrotoluene (M)



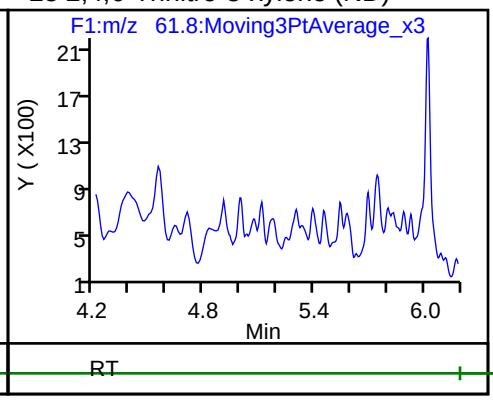
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08034.d				
Lims ID:	280-160190-A-19-J TRL				
Client ID:					
Sample Type:	TRL				
Inject. Date:	08-Apr-2022 13:12:34	ALS Bottle#:	30	Worklist Smp#:	34
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160190-A-19-J TRL				
Misc. Info.:	ex722D08				
Operator ID:	acm	Instrument ID:	LC_LCMS7		
Method:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\8330_SIR.m				
Limit Group:	LC - 8321A Expl				
Last Update:	14-Apr-2022 10:07:02	Calib Date:	08-Apr-2022 10:27:37		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1619				
First Level Reviewer: meyera		Date:	11-Apr-2022 11:52:23		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	89.0	88.73

Report Date: 14-Apr-2022 10:09:36 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08034.d

Injection Date: 08-Apr-2022 13:12:34 Instrument ID: LC_LCMS7

Lims ID: 280-160190-A-19-J TRL

Client ID:

Operator ID: acm ALS Bottle#: 30 Worklist Smp#: 34

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

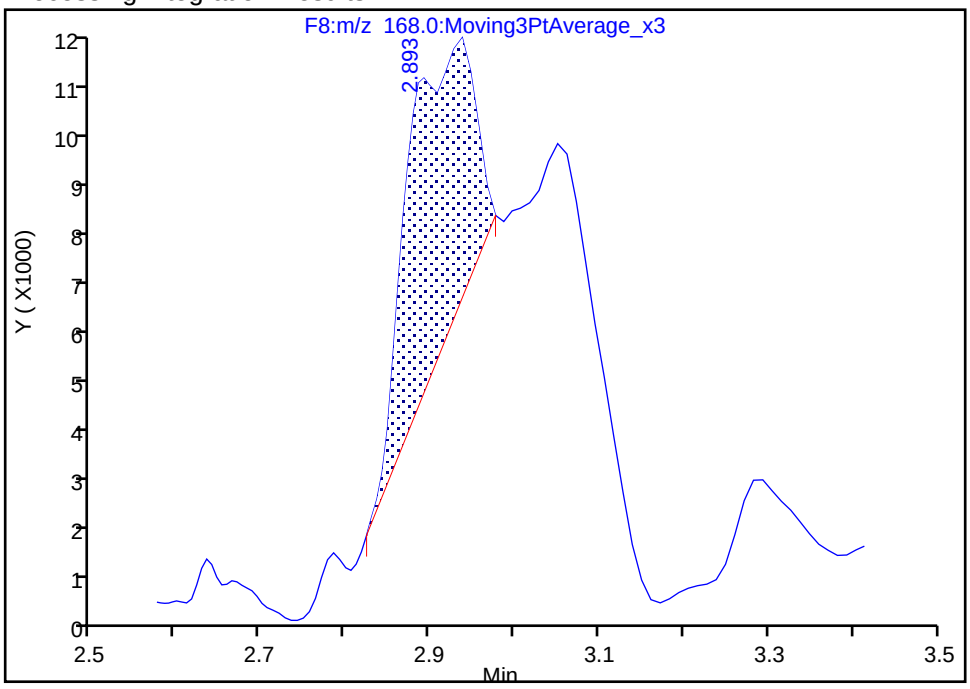
Column: Detector F8:SIR

8 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

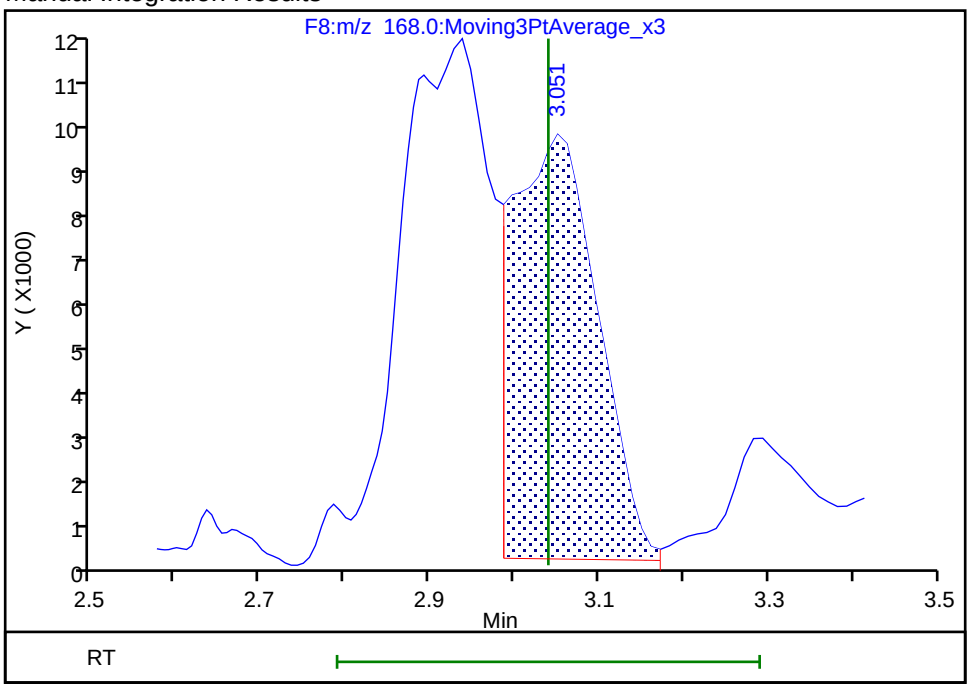
Processing Integration Results

RT: 2.89
Area: 30076
Amount: 2.316396
Amount Units: ug/l



Manual Integration Results

RT: 3.05
Area: 57927
Amount: 4.867040
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:52:17

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:09:36 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

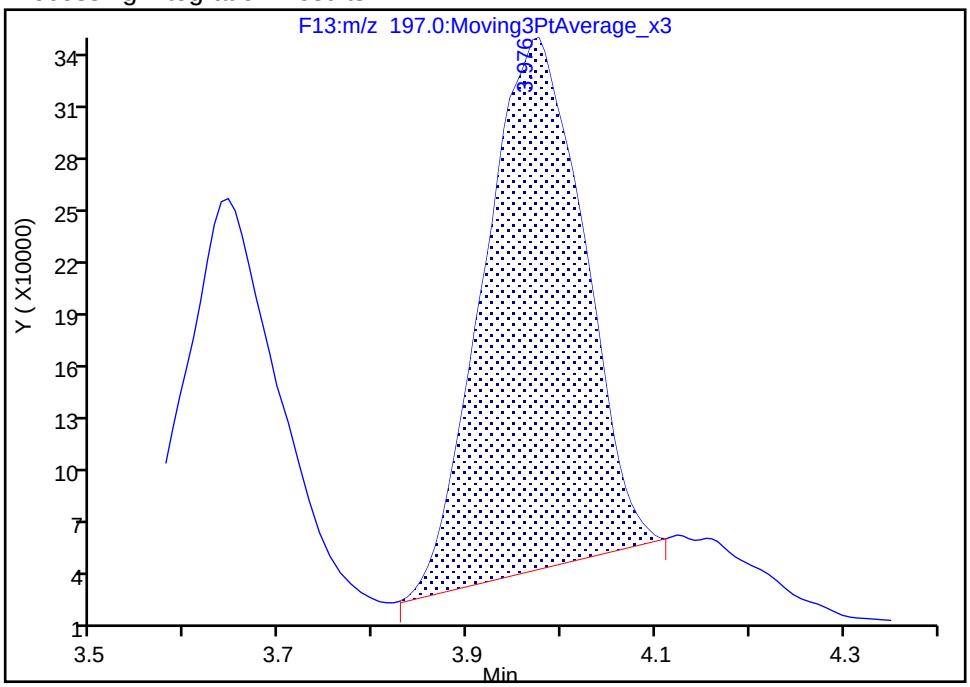
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08034.d
Injection Date: 08-Apr-2022 13:12:34 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-19-J TRL
Client ID:
Operator ID: acm ALS Bottle#: 30 Worklist Smp#: 34
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F13:SIR

16 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

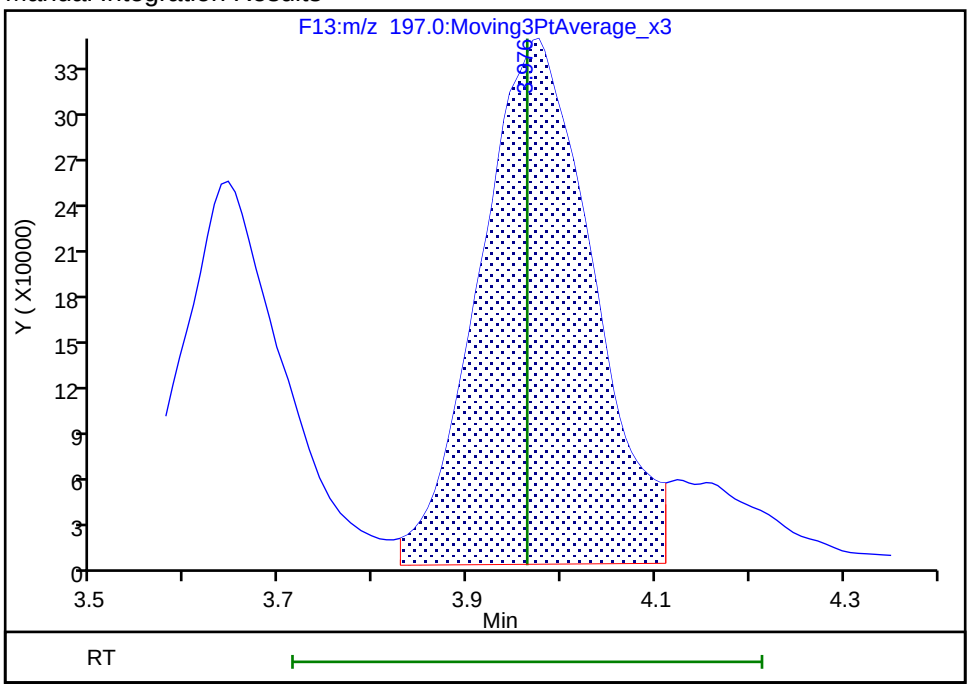
Processing Integration Results

RT: 3.98
Area: 2288197
Amount: 36.186738
Amount Units: ug/l



Manual Integration Results

RT: 3.98
Area: 2872933
Amount: 45.558901
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:52:07
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:09:36 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08034.d

Injection Date: 08-Apr-2022 13:12:34 Instrument ID: LC_LCMS7

Lims ID: 280-160190-A-19-J TRL

Client ID:

Operator ID: acm ALS Bottle#: 30 Worklist Smp#: 34

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

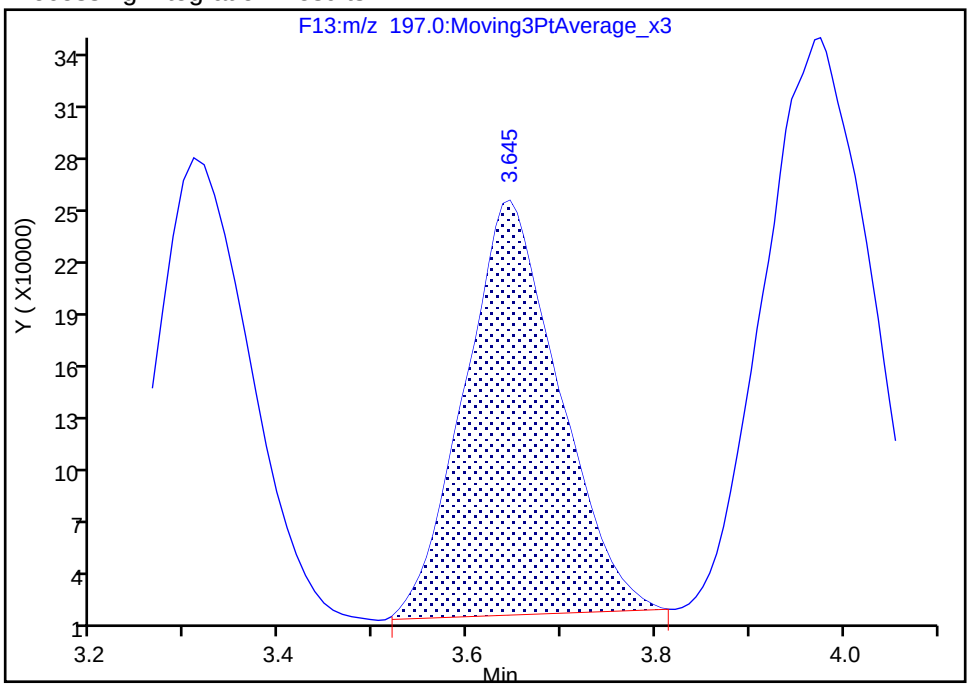
Column: Detector F13:SIR

14 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

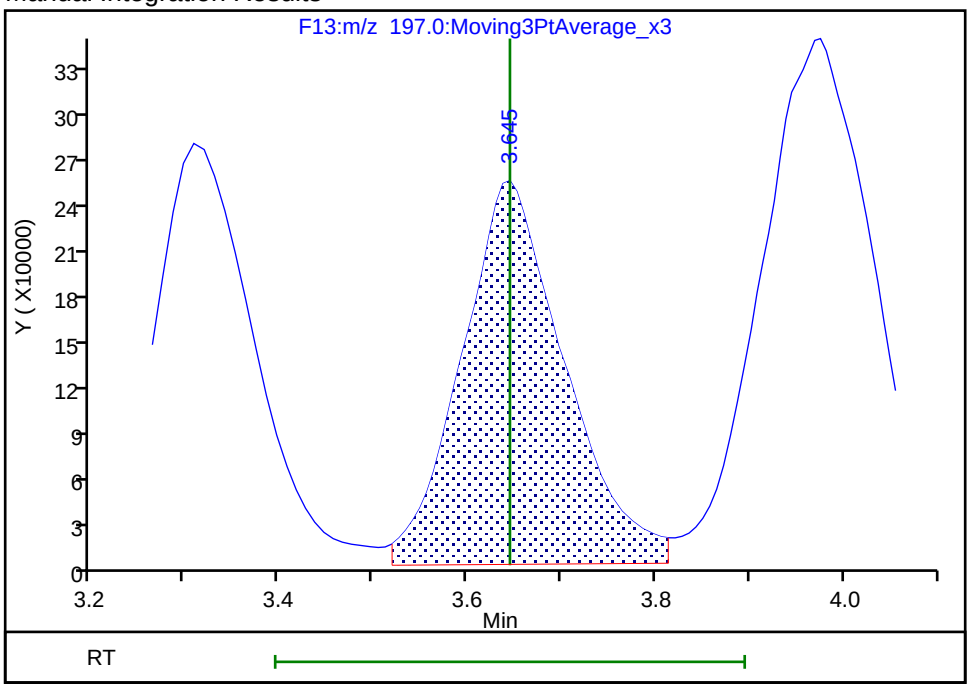
Processing Integration Results

RT: 3.65
Area: 1659677
Amount: 33.474344
Amount Units: ug/l



Manual Integration Results

RT: 3.65
Area: 1914138
Amount: 38.698811
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:52:07

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 14-Apr-2022 10:09:36 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

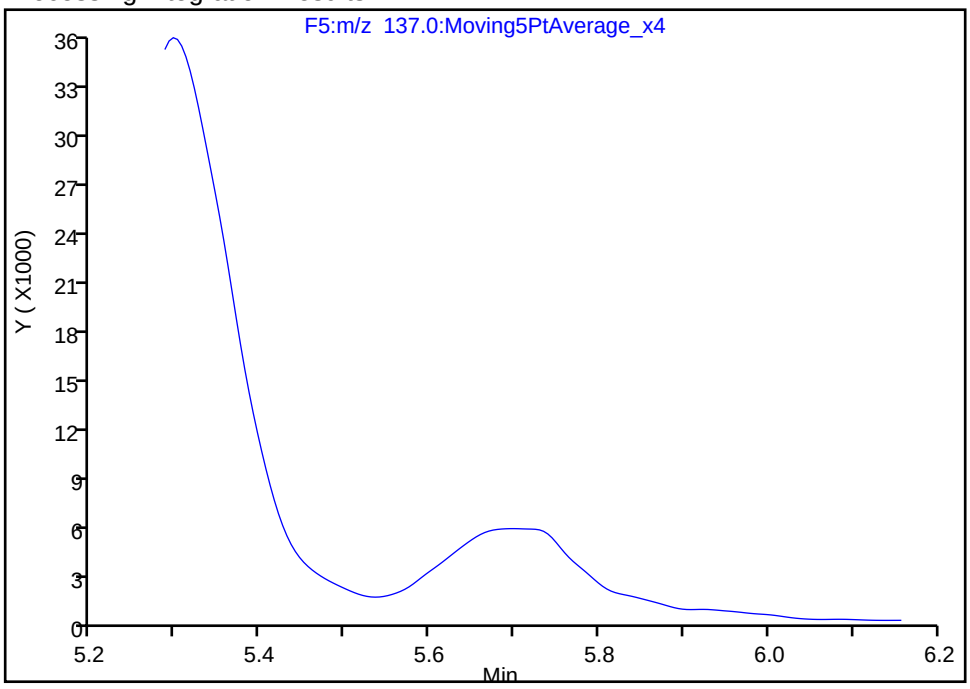
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08034.d
Injection Date: 08-Apr-2022 13:12:34 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-19-J TRL
Client ID:
Operator ID: acm ALS Bottle#: 30 Worklist Smp#: 34
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F5:SIR

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

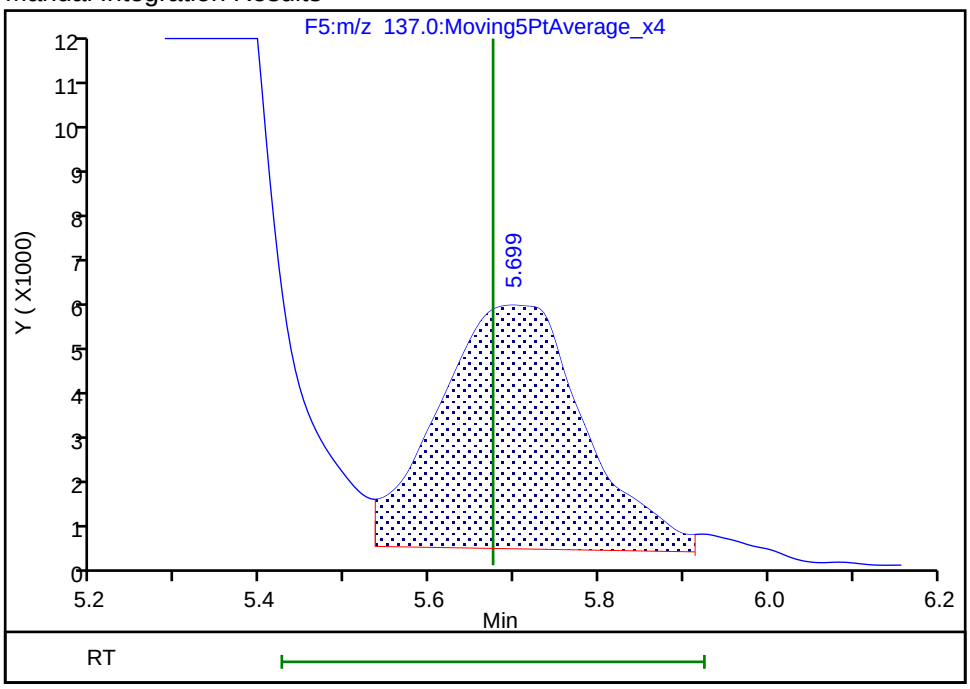
Not Detected
Expected RT: 5.67

Processing Integration Results



Manual Integration Results

RT: 5.70
Area: 62742
Amount: 12.133357
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:51:58
Audit Action: Manually Integrated Audit Reason: Assign Peak

Report Date: 14-Apr-2022 10:09:36 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08034.d

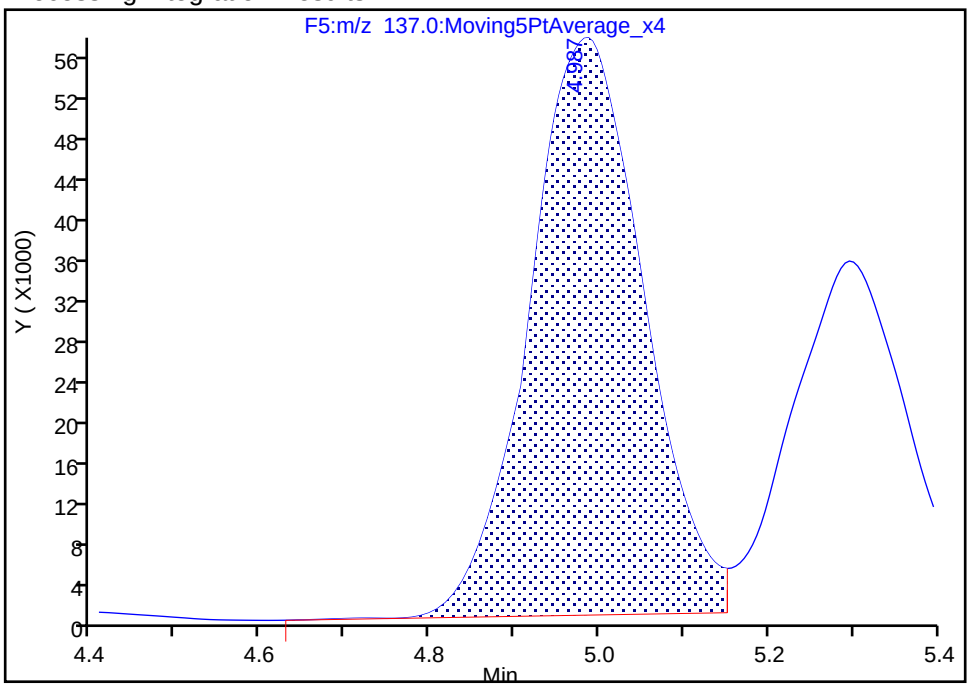
Injection Date:	08-Apr-2022 13:12:34	Instrument ID:	LC_LCMS7
Lims ID:	280-160190-A-19-J TRL		
Client ID:			
Operator ID:	acm	ALS Bottle#:	30 Worklist Smp#: 34
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F5:SIR

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

Signal: 1

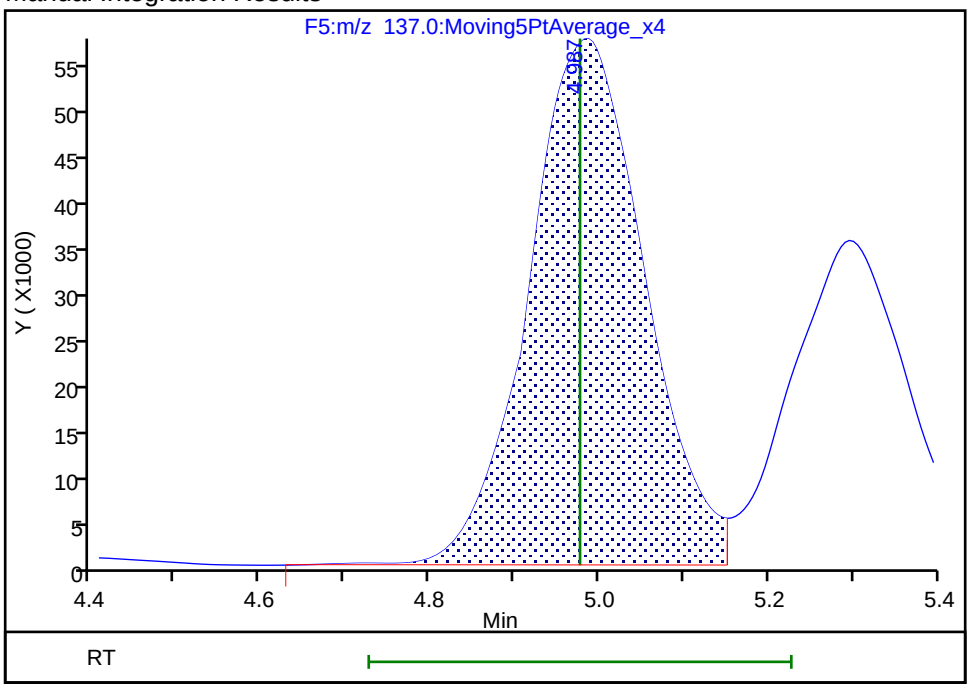
Processing Integration Results

RT: 4.99
Area: 531609
Amount: 52.084127
Amount Units: ug/l



Manual Integration Results

RT: 4.99
Area: 542048
Amount: 53.111961
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:51:48

Audit Action: Assigned New Baseline Audit Reason: Baseline

Report Date: 14-Apr-2022 10:09:36 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220408-109943.b\ex722D08034.d

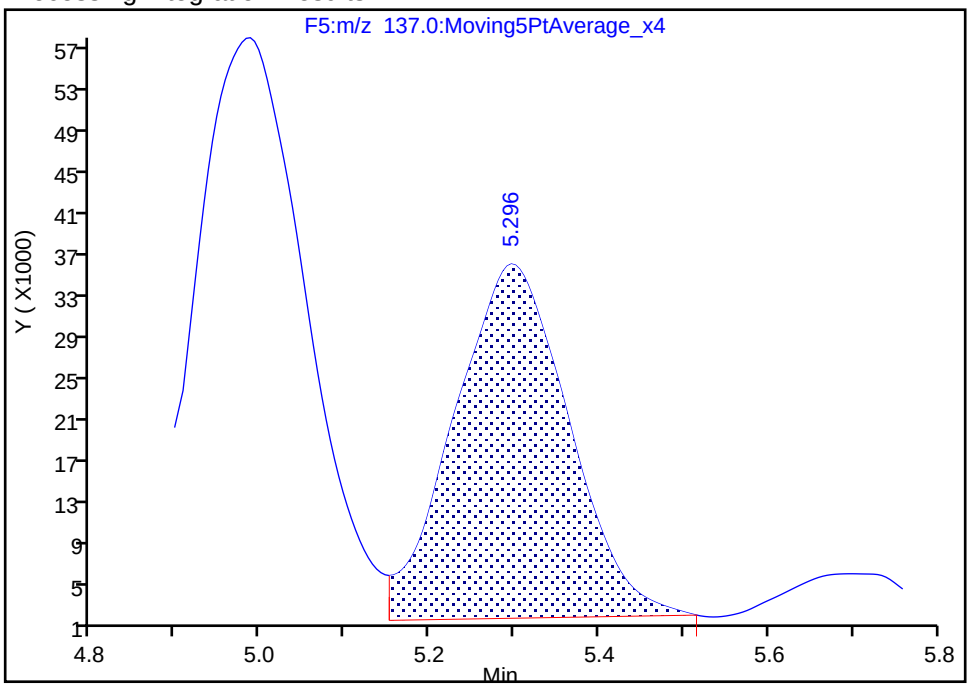
Injection Date:	08-Apr-2022 13:12:34	Instrument ID:	LC_LCMS7
Lims ID:	280-160190-A-19-J TRL		
Client ID:			
Operator ID:	acm	ALS Bottle#:	30 Worklist Smp#: 34
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F5:SIR

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

Signal: 1

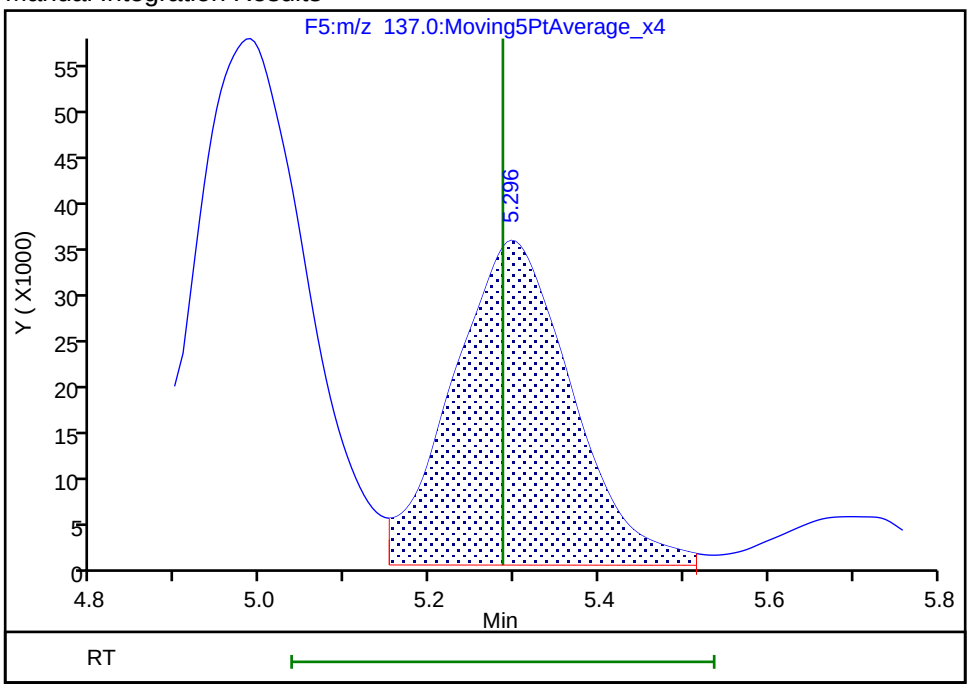
Processing Integration Results

RT: 5.30
Area: 320786
Amount: 35.859529
Amount Units: ug/l



Manual Integration Results

RT: 5.30
Area: 342520
Amount: 38.326846
Amount Units: ug/l



Reviewer: meyera, 11-Apr-2022 11:51:48

Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1

SDG No.:

Client Sample ID: 29SB168 (6-7) TRL DL | Lab Sample ID: 280-160190-19 TRL DL

Matrix: Solid | Lab File ID: ex422D12070.d

Analysis Method: 8321A | Date Collected: 03/24/2022 11:58

Extraction Method: 8330B | Date Extracted: 04/06/2022 18:20

Sample wt/vol: 10.31(g) | Date Analyzed: 04/12/2022 22:24

Con. Extract Vol.: 40(mL) | Dilution Factor: 10

Injection Volume: 40(uL) | GC Column: IonPac ID: 2(mm)

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

Analysis Batch No.: 571614 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
118-96-7	2,4,6-Trinitrotoluene	1.32	D	0.97	0.48	0.36
121-14-2	2,4-Dinitrotoluene	4.75	D	0.97	0.48	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	91	D	68-140

Report Date: 13-Apr-2022 13:58:49 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12070.d
Lims ID: 280-160190-A-19-J TRL
Client ID:
Sample Type: TRL
Inject. Date: 12-Apr-2022 22:24:03 ALS Bottle#: 63 Worklist Smp#: 71
Injection Vol: 40.0 ul Dil. Factor: 10.0000
Sample Info: 280-160190-A-19-J TRL 10x
Misc. Info.: 04/08/2022 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\8321expDuPont.m
Limit Group: LC - 8321A Expl
Last Update: 13-Apr-2022 13:58:36 Calib Date: 12-Apr-2022 10:31:58
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d

Column 1 : Det: F1:SIR
Process Host: CTX1683

First Level Reviewer: meyera Date: 13-Apr-2022 13:52:45
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
360.9	1.965	1.964	0.001		180839	125.0	117	
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.1	2.745	2.798	-0.053		365005	125.0	460	
8 1,3,5-Trinitrobenzene								
213.1	3.459	3.458	0.001	0.775	27568	3.69	21.9	
* 12 1,3-Dinitrobenzene-d4								
172.1	4.462	4.461	0.001		1099281	129.4	77.7	
33 3,5-Dinitroaniline								
183.1	4.761	4.760	0.001	1.067	13843	1.50	6.4	
15 2,4,6-Trinitrotoluene								
227.1	4.842	4.841	0.001	0.768	1043317	34.1	775	
$ 16 Nitrobenzene-d5								
128.1	4.923	4.962	-0.039	1.103	76539	9.14	27.9	
19 4-Amino-2,6-dinitrotoluene								
197.2	5.378	5.417	-0.039	0.853	110714	3.20	12.1	
22 2-Amino-4,6-dinitrotoluene								
197.2	5.782	5.861	-0.079	0.917	155501	4.20	11.9	
23 2,6-Dinitrotoluene								
182.1	6.061	6.094	-0.033	0.961	371879	7.65	58.7	
* 24 2,4-dinitrotoluene-d3								
185.1	6.304	6.336	-0.032		2977424	125.0	621	
25 2,4-Dinitrotoluene								
182.1	6.365	6.367	-0.002	1.010	3289481	122.5	314	
28 o-Nitrotoluene								M
137.1	7.387	7.389	-0.002	1.172	60247	4.89	21.7	M
29 p-Nitrotoluene								M
137.1	7.812	7.875	-0.063	1.239	39440	3.51	12.9	M

Report Date: 13-Apr-2022 13:58:49 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12070.d

Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
30 m-Nitrotoluene								M
137.1	8.420	8.391	0.029	1.336	7942	0.6210	2.4	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

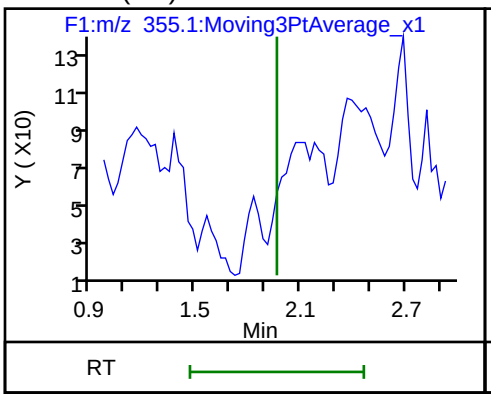
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 13-Apr-2022 13:58:49 Chrom Revision: 2.3 18-Mar-2022 09:07:22

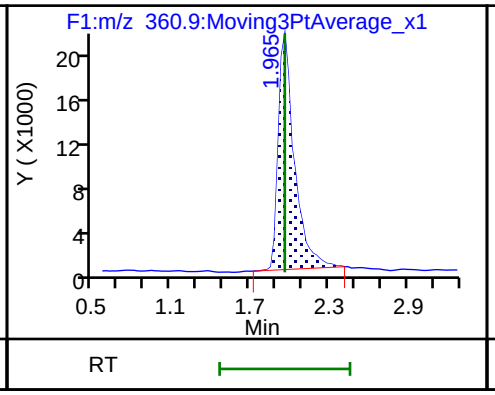
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12070.d
Injection Date: 12-Apr-2022 22:24:03 Instrument ID: LC_LCMS4
Lims ID: 280-160190-A-19-J TRL
Client ID:
Operator ID: acm ALS Bottle#: 63 Worklist Smp#: 71
Injection Vol: 40.0 ul Dil. Factor: 10.0000
Method: 8321expDuPont Limit Group: LC - 8321A Expl

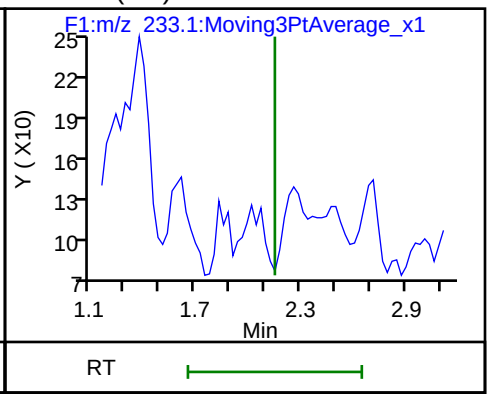
2 HMX (ND)



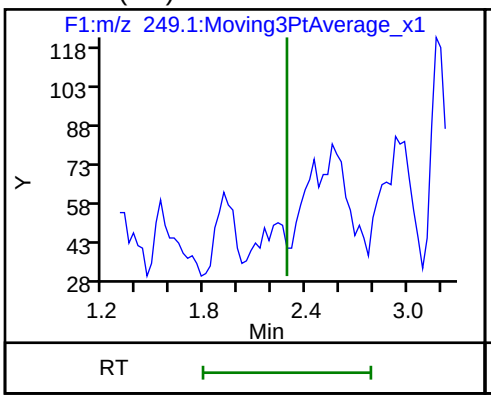
* 1 HMX-13C4



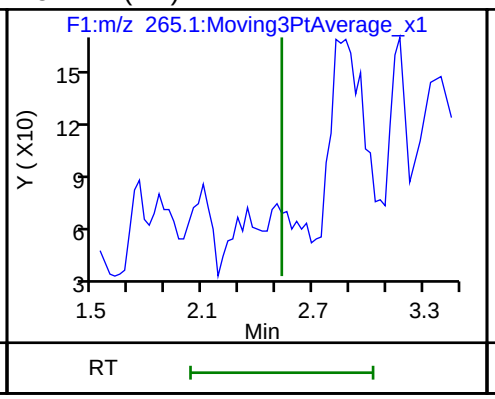
3 TNX (ND)



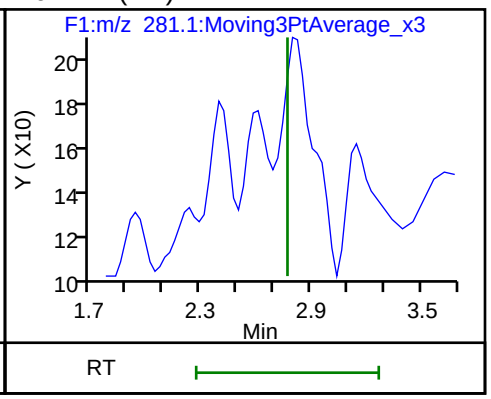
4 DNX (ND)



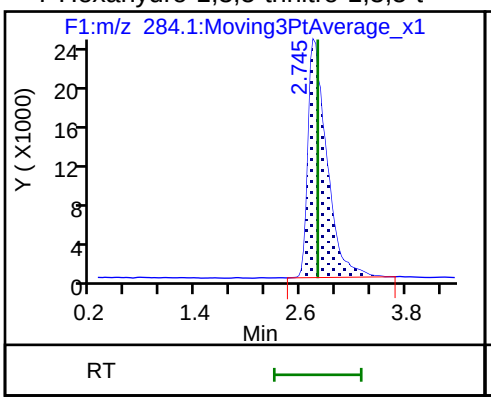
5 MNX (ND)



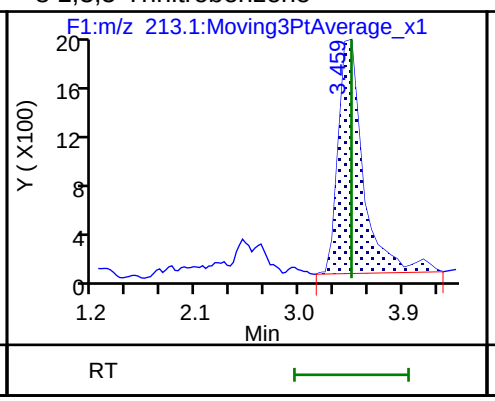
6 RDX (ND)



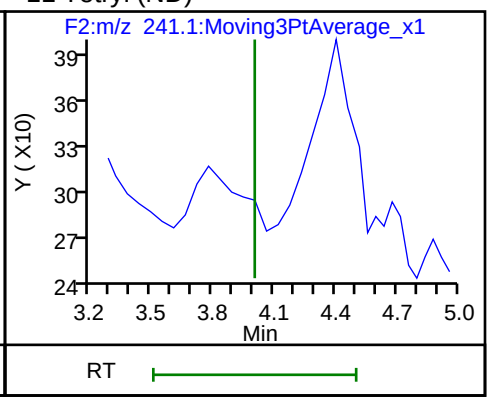
* 7 Hexahydro-1,3,5-trinitro-1,3,5-t



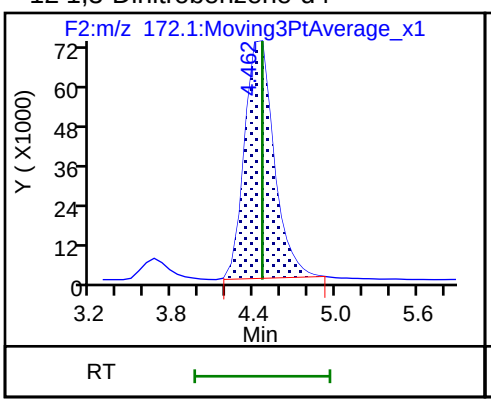
8 1,3,5-Trinitrobenzene



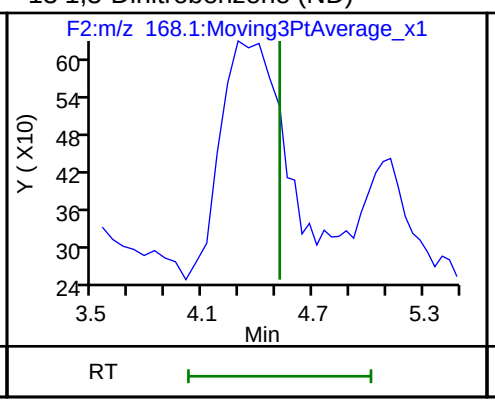
11 Tetryl (ND)



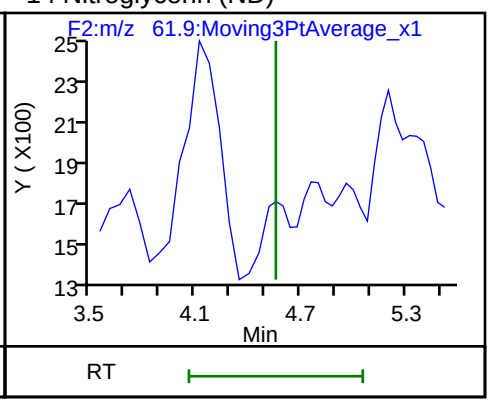
* 12 1,3-Dinitrobenzene-d4



13 1,3-Dinitrobenzene (ND)



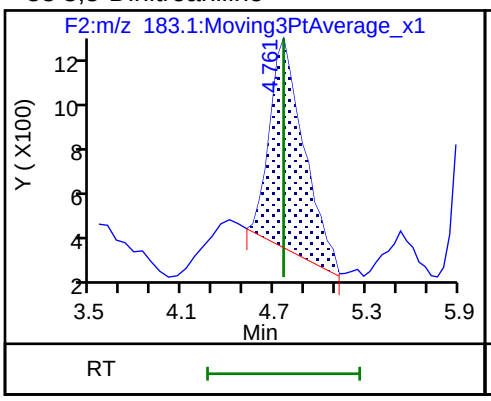
14 Nitroglycerin (ND)



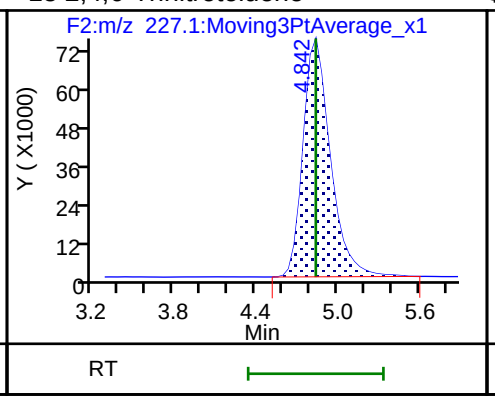
Report Date: 13-Apr-2022 13:58:49 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12070.d

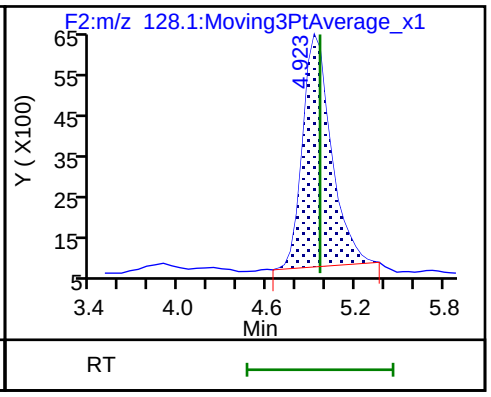
33 3,5-Dinitroaniline



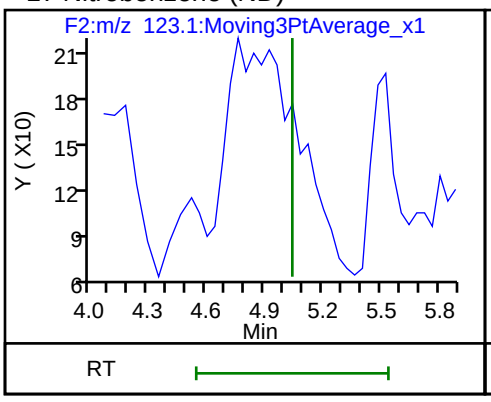
15 2,4,6-Trinitrotoluene



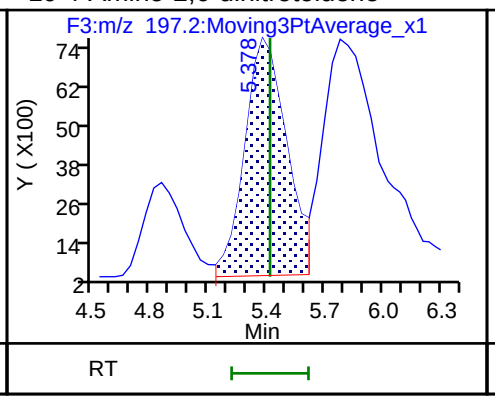
$ 16 Nitrobenzene-d5



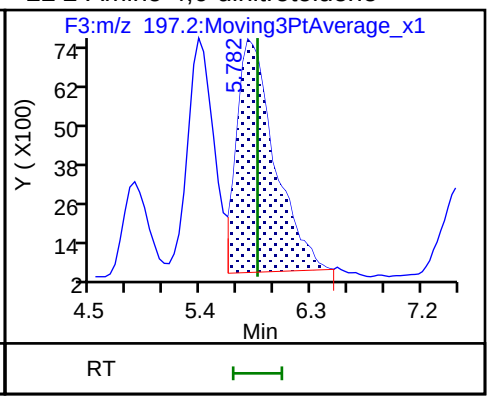
17 Nitrobenzene (ND)



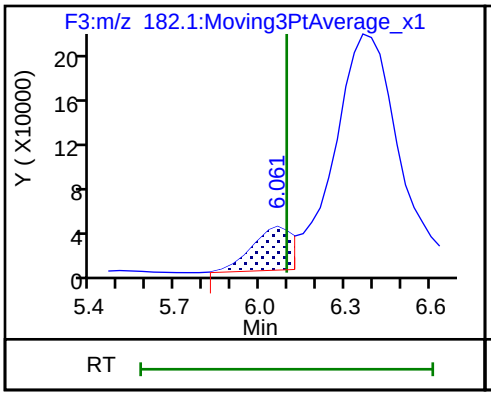
19 4-Amino-2,6-dinitrotoluene



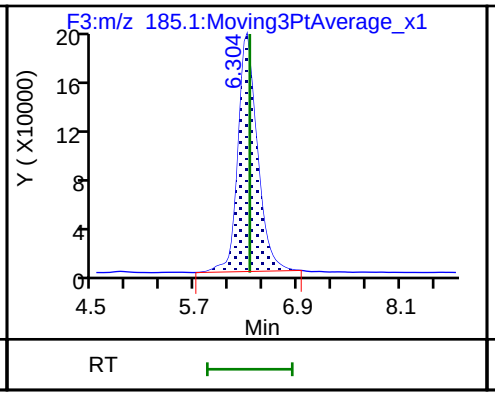
22 2-Amino-4,6-dinitrotoluene



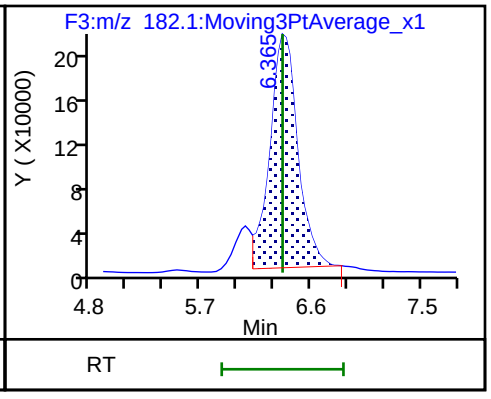
23 2,6-Dinitrotoluene



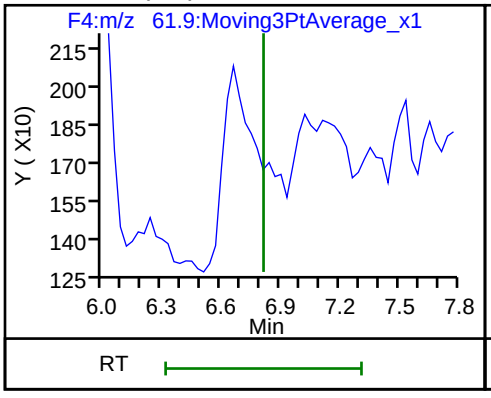
* 24 2,4-dinitrotoluene-d3



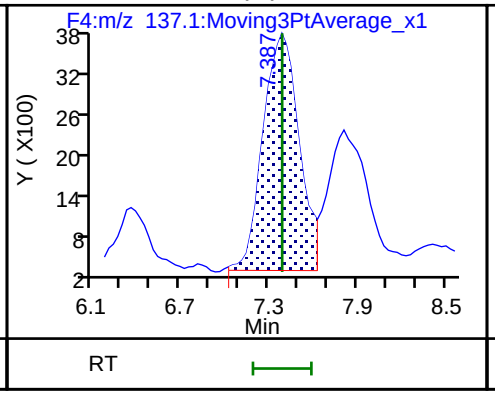
25 2,4-Dinitrotoluene



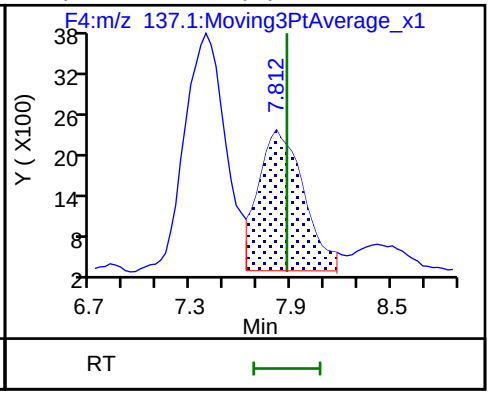
26 PETN (ND)



28 o-Nitrotoluene (M)

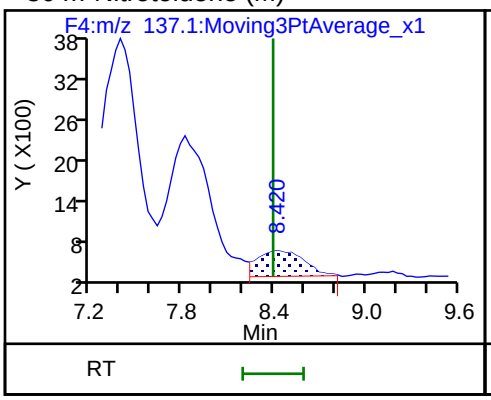


29 p-Nitrotoluene (M)

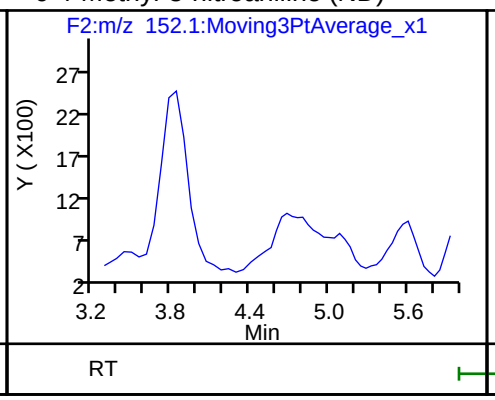


Report Date: 13-Apr-2022 13:58:49 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12070.d

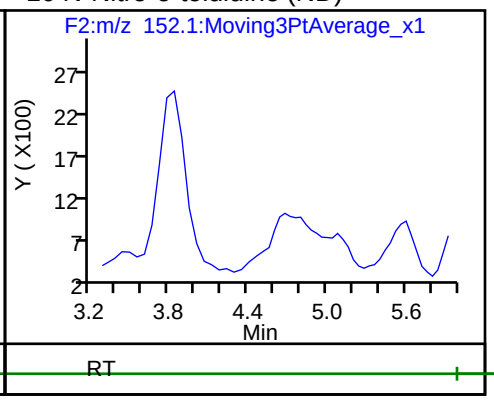
30 m-Nitrotoluene (M)



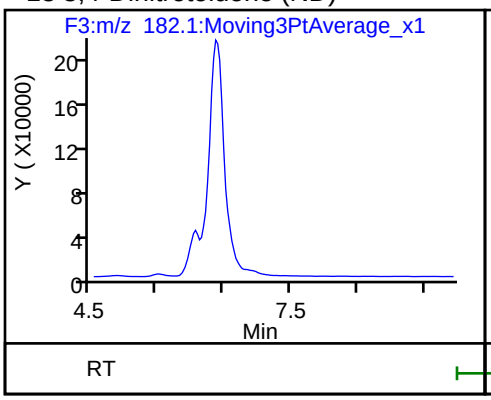
9 4-Methyl-3-nitroaniline (ND)



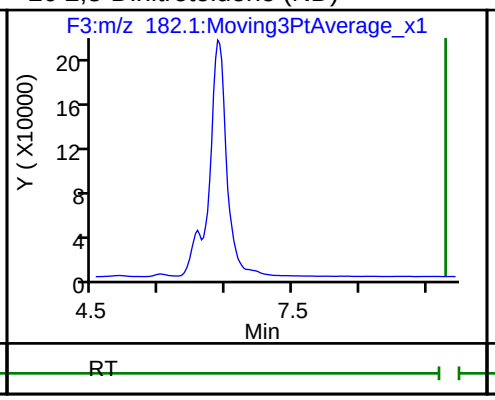
10 N-Nitro-o-toluidine (ND)



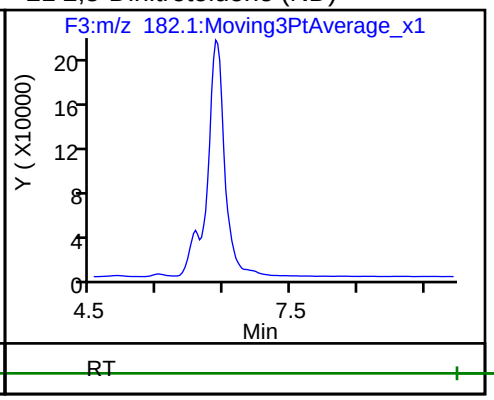
18 3,4-Dinitrotoluene (ND)



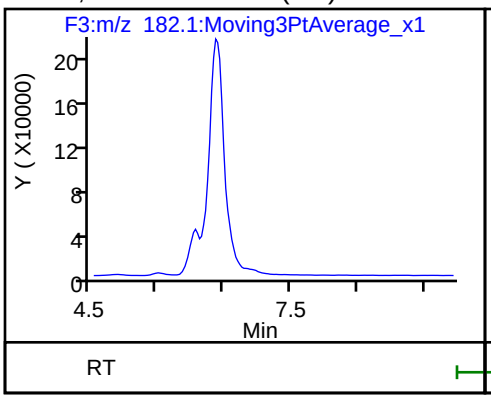
20 2,3-Dinitrotoluene (ND)



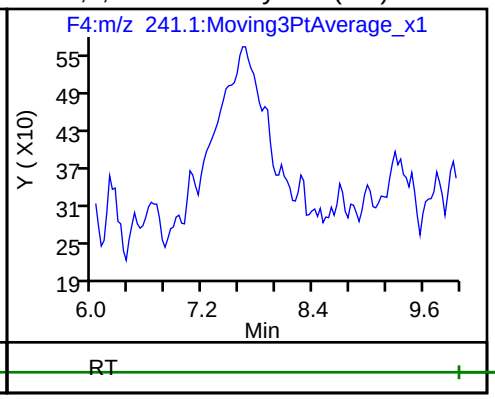
21 2,5-Dinitrotoluene (ND)



27 3,5-Dinitrotoluene (ND)



31 2,4,6-Trinitro-3-xylene (ND)



Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12070.d
Lims ID: 280-160190-A-19-J TRL
Client ID:
Sample Type: TRL
Inject. Date: 12-Apr-2022 22:24:03 ALS Bottle#: 63 Worklist Smp#: 71
Injection Vol: 40.0 ul Dil. Factor: 10.0000
Sample Info: 280-160190-A-19-J TRL 10x
Misc. Info.: 04/08/2022 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\8321expDuPont.m
Limit Group: LC - 8321A Expl
Last Update: 13-Apr-2022 13:58:36 Calib Date: 12-Apr-2022 10:31:58
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20220412-110046.b\ex422D12009.d

Column 1 : Det: F1:SIR
Process Host: CTX1683

First Level Reviewer: meyera Date: 13-Apr-2022 13:52:45

Compound	Amount Added	Amount Recovered	% Rec.
$ 16 Nitrobenzene-d5	100.3	9.14	9.11

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1
SDG No.:
Client Sample ID: | Lab Sample ID: 280-160190-A-29-F TRL
Matrix: Solid | Lab File ID: ex722D14023.d
Analysis Method: 8321A | Date Collected: 03/24/2022 12:37
Extraction Method: 8330B | Date Extracted: 04/06/2022 18:23
Sample wt/vol: 10.15(g) | Date Analyzed: 04/14/2022 14:39
Con. Extract Vol.: 40(mL) | Dilution Factor: 1
Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 571896 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.049	U	0.099	0.049	0.044
99-65-0	1,3-Dinitrobenzene	0.049	U	0.099	0.049	0.044
118-96-7	2,4,6-Trinitrotoluene	0.049	U	0.099	0.049	0.036
121-14-2	2,4-Dinitrotoluene	0.049	U M	0.099	0.049	0.046
606-20-2	2,6-Dinitrotoluene	0.049	U	0.099	0.049	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.049	U	0.099	0.049	0.049
19406-51-0	4-Amino-2,6-dinitrotoluene	0.049	U	0.099	0.049	0.031
2691-41-0	HMX	0.049	U M	0.099	0.049	0.045
99-08-1	m-Nitrotoluene	0.049	U	0.099	0.049	0.043
98-95-3	Nitrobenzene	0.049	U	0.11	0.049	0.037
55-63-0	Nitroglycerin	0.049	U	0.099	0.049	0.029
88-72-2	o-Nitrotoluene	0.049	U M	0.099	0.049	0.042
78-11-5	PETN	0.049	U	0.099	0.049	0.033
99-99-0	p-Nitrotoluene	0.049	U M	0.099	0.049	0.049
121-82-4	RDX	0.049	U	0.12	0.049	0.042
479-45-8	Tetryl	0.049	U Q	0.099	0.049	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	90		68-140

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14023.d
Lims ID: 280-160190-A-29-F TRL
Client ID:
Sample Type: TRL
Inject. Date: 14-Apr-2022 14:39:38 ALS Bottle#: 20 Worklist Smp#: 23
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-29-F TRL
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:06 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:29:06
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		146570	125.0	79.5	
33 DNX								M
160.0	1.500	1.489	0.011	0.817	3323	-1.66	3.2	M
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		474149	125.0	136	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1145199	129.4	309	
10 2,4,6-Trinitrotoluene								
227.0	3.291	3.281	0.010	0.770	20906	-0.8138	5.4	
$ 11 Nitrobenzene-d5								
128.0	3.324	3.324	0.0	0.778	462853	90.1	23.6	
17 2,6-Dinitrotoluene								M
182.0	4.093	4.093	0.0	0.957	33722	-0.0800	8.9	M
* 18 2,4-dinitrotoluene-d3								
185.1	4.275	4.275	0.0		3604624	125.0	132	
19 2,4-Dinitrotoluene								M
182.0	4.308	4.316	-0.008	1.008	340511	10.2	83.3	M
22 o-Nitrotoluene								M
137.0	4.912	4.932	-0.020	1.149	8599	0.5760	2.9	M
23 p-Nitrotoluene								M
137.0	5.221	5.230	-0.009	1.221	13116	1.15	5.5	M

QC Flag Legend
Processing Flags

Report Date: 15-Apr-2022 08:03:08 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Review Flags

M - Manually Integrated

Reagents:

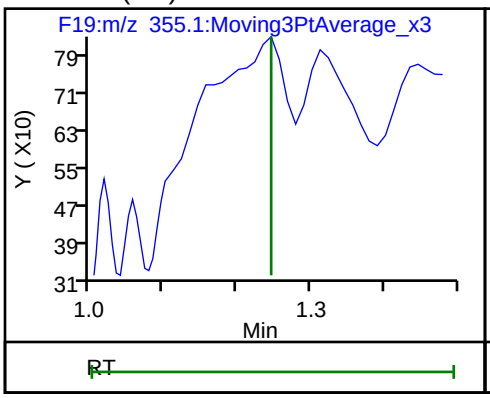
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:08 Chrom Revision: 2.3 12-Apr-2022 20:29:44

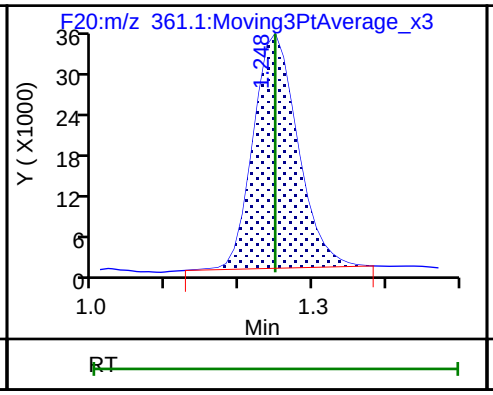
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14023.d
Injection Date: 14-Apr-2022 14:39:38 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-29-F TRL
Client ID:
Operator ID: acm ALS Bottle#: 20 Worklist Smp#: 23
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

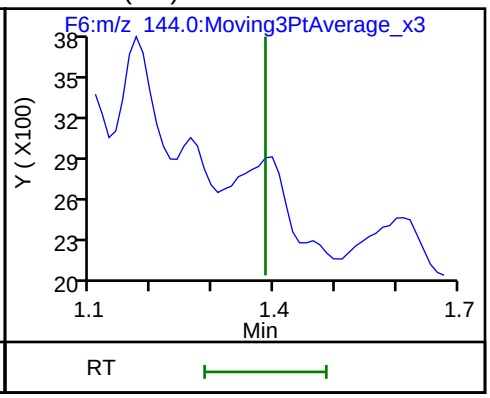
2 HMX (ND)



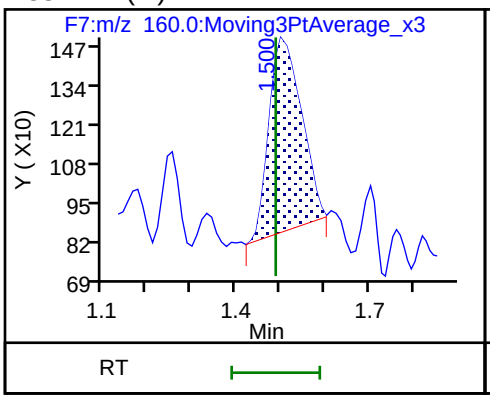
* 1 HMX-13C4



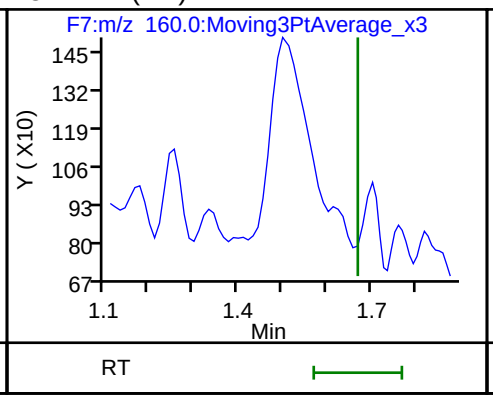
36 TNX (ND)



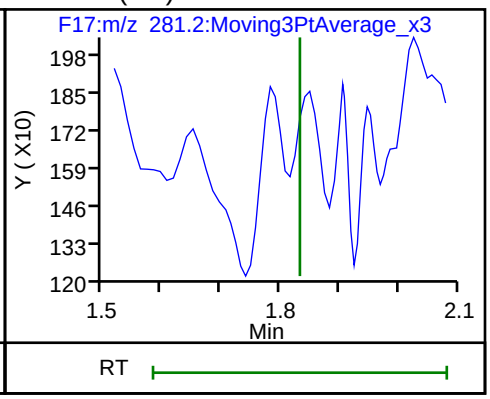
33 DNX (M)



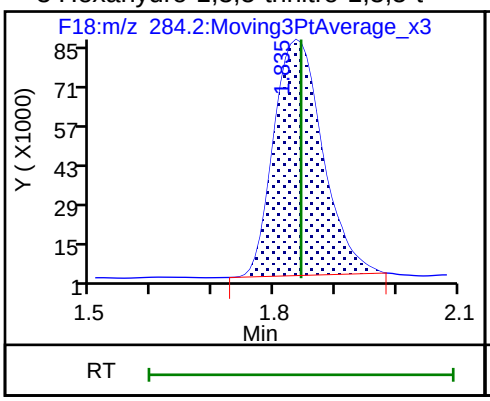
34 MNX (ND)



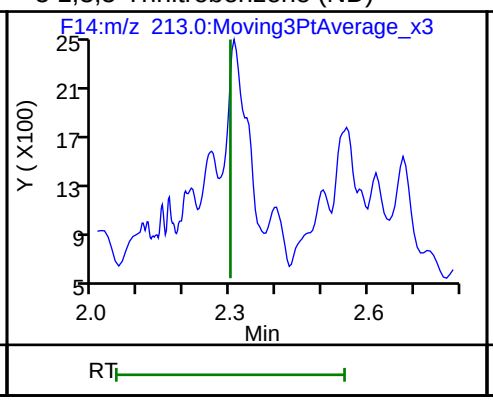
4 RDX (ND)



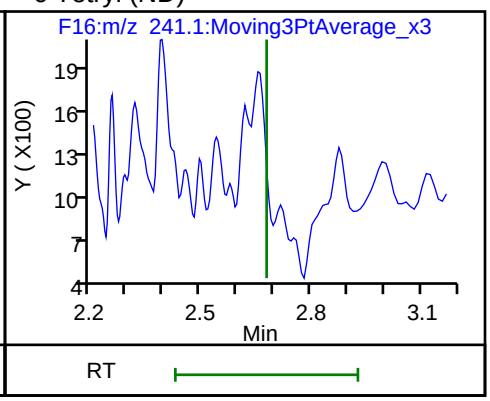
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



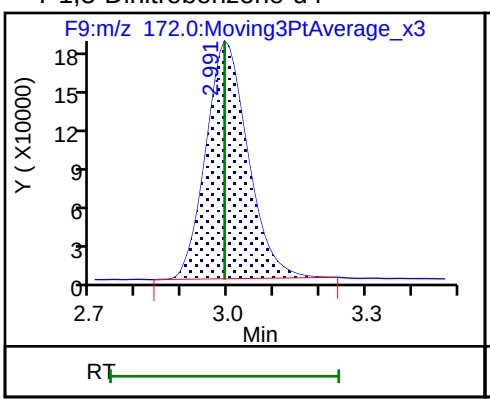
5 1,3,5-Trinitrobenzene (ND)



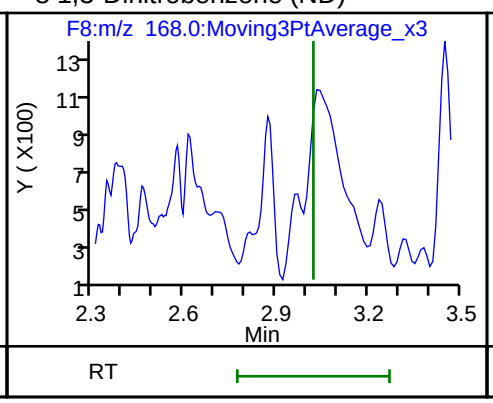
6 Tetryl (ND)



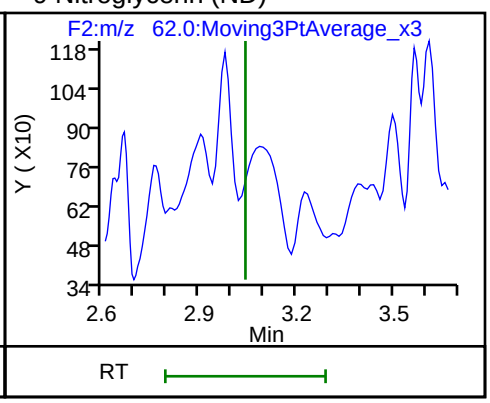
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



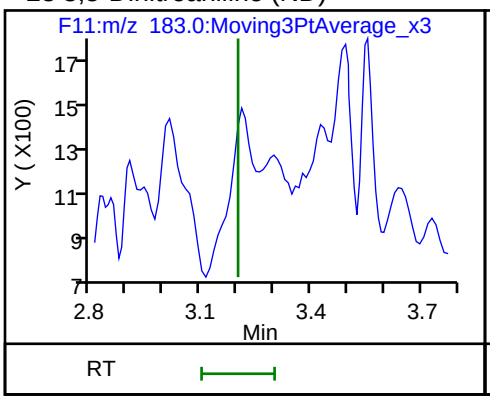
9 Nitroglycerin (ND)



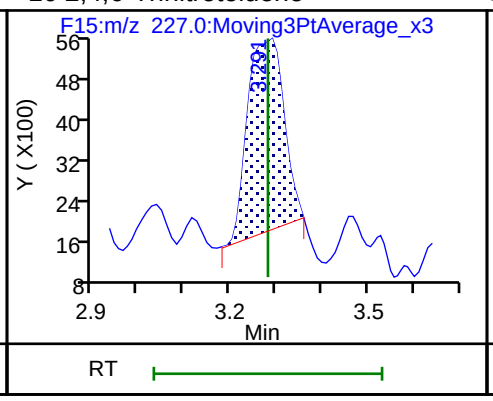
Report Date: 15-Apr-2022 08:03:08 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14023.d

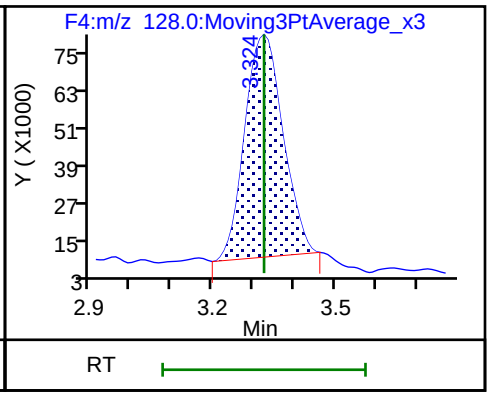
28 3,5-Dinitroaniline (ND)



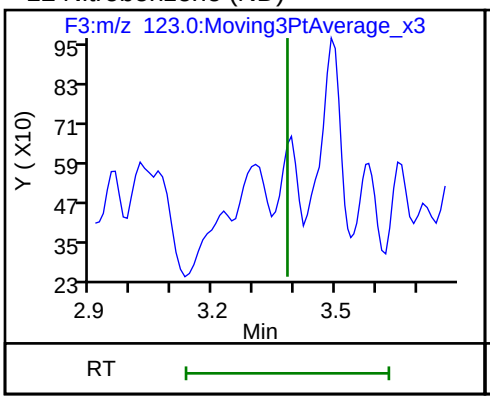
10 2,4,6-Trinitrotoluene



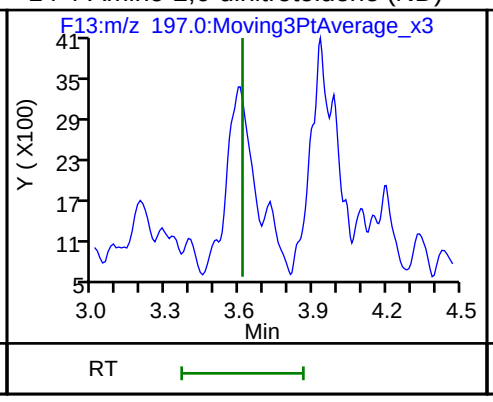
$ 11 Nitrobenzene-d5



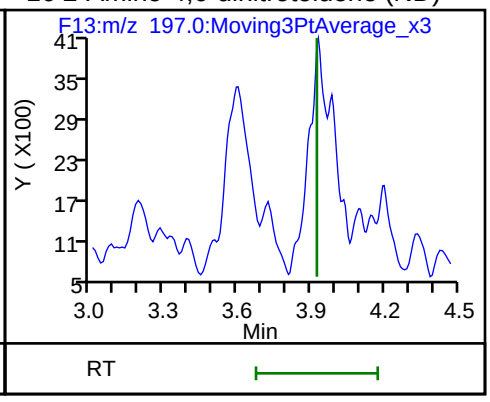
12 Nitrobenzene (ND)



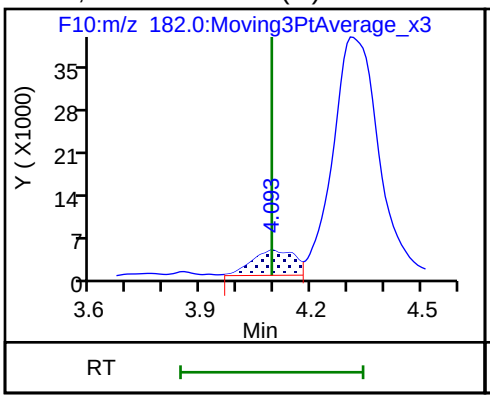
14 4-Amino-2,6-dinitrotoluene (ND)



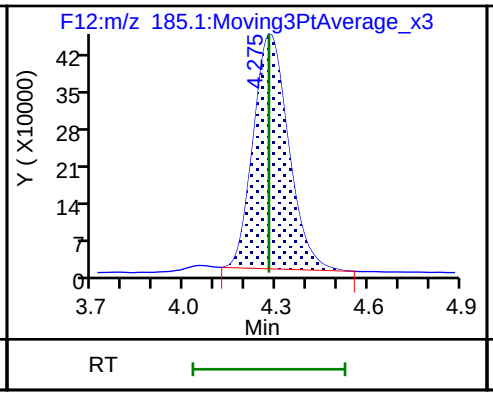
16 2-Amino-4,6-dinitrotoluene (ND)



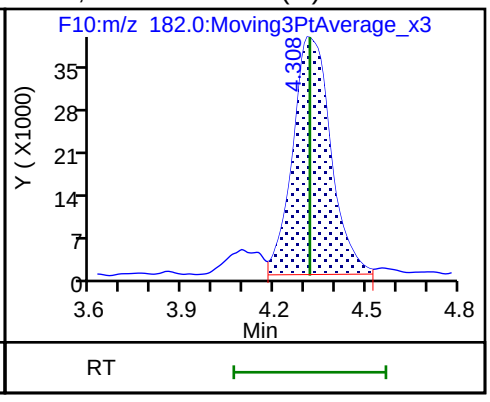
17 2,6-Dinitrotoluene (M)



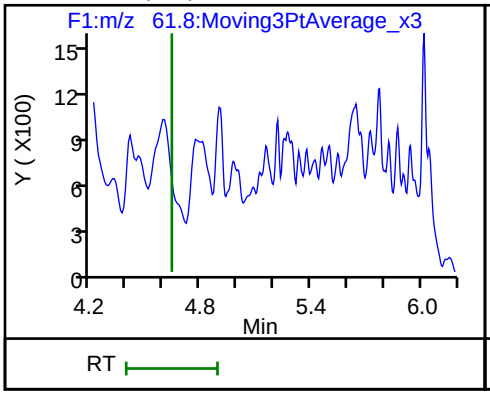
* 18 2,4-dinitrotoluene-d3



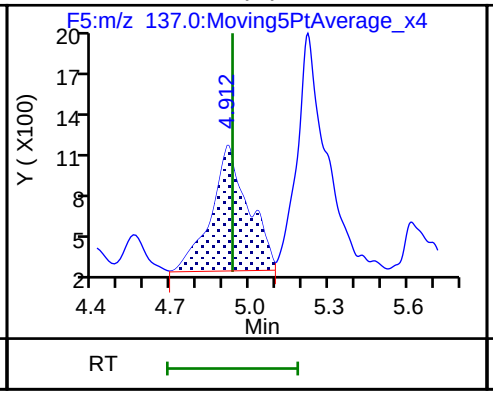
19 2,4-Dinitrotoluene (M)



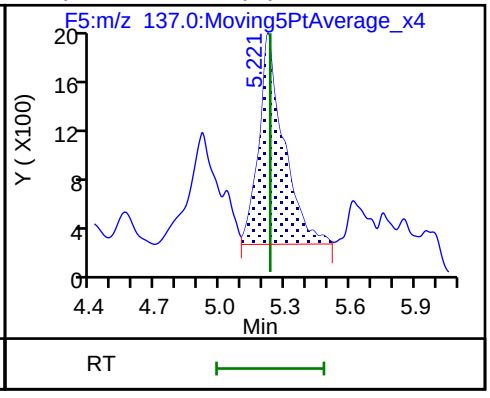
20 PETN (ND)



22 o-Nitrotoluene (M)



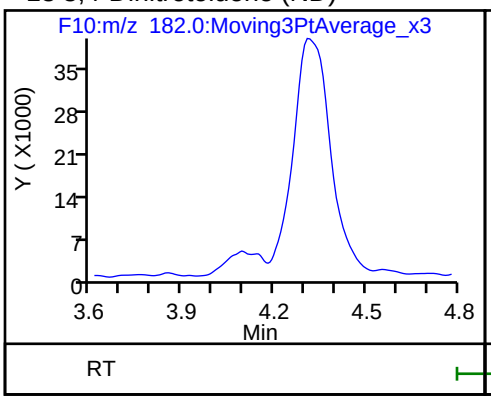
23 p-Nitrotoluene (M)



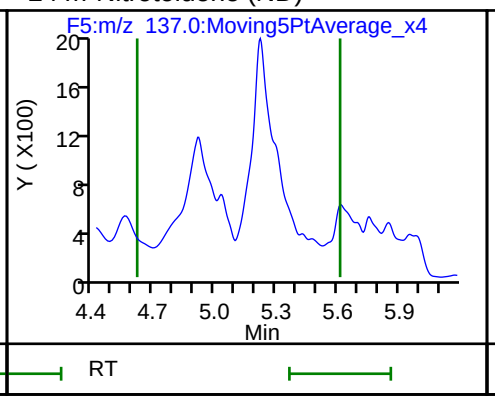
Report Date: 15-Apr-2022 08:03:08 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14023.d

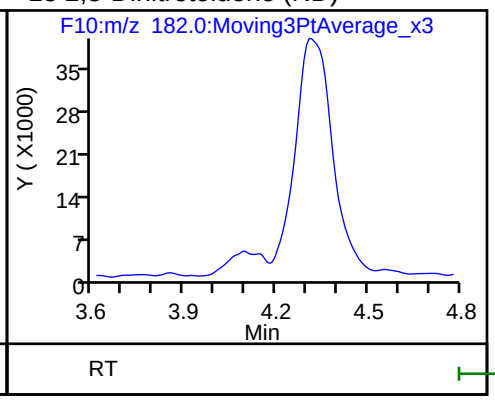
13 3,4-Dinitrotoluene (ND)



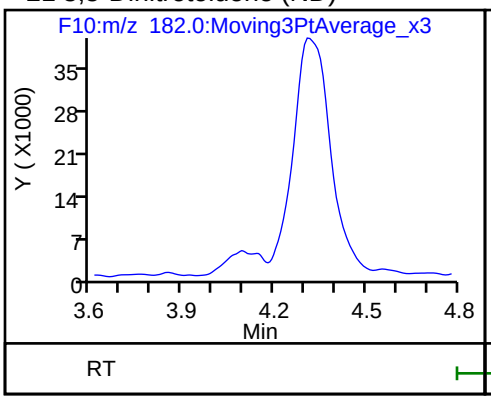
24 m-Nitrotoluene (ND)



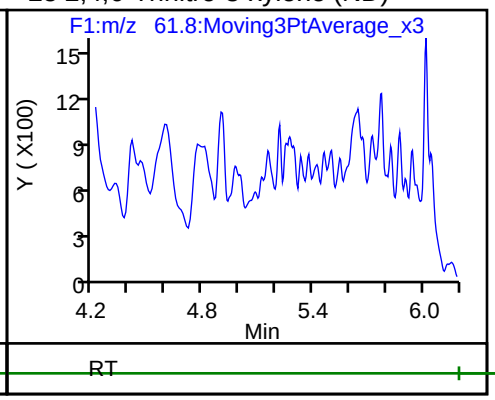
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:08 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14023.d
Lims ID: 280-160190-A-29-F TRL
Client ID:
Sample Type: TRL
Inject. Date: 14-Apr-2022 14:39:38 ALS Bottle#: 20 Worklist Smp#: 23
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-29-F TRL
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:06 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:29:06

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	90.1	89.76

Report Date: 15-Apr-2022 08:03:08 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14023.d

Injection Date: 14-Apr-2022 14:39:38 Instrument ID: LC_LCMS7

Lims ID: 280-160190-A-29-F TRL

Client ID:

Operator ID: acm ALS Bottle#: 20 Worklist Smp#: 23

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

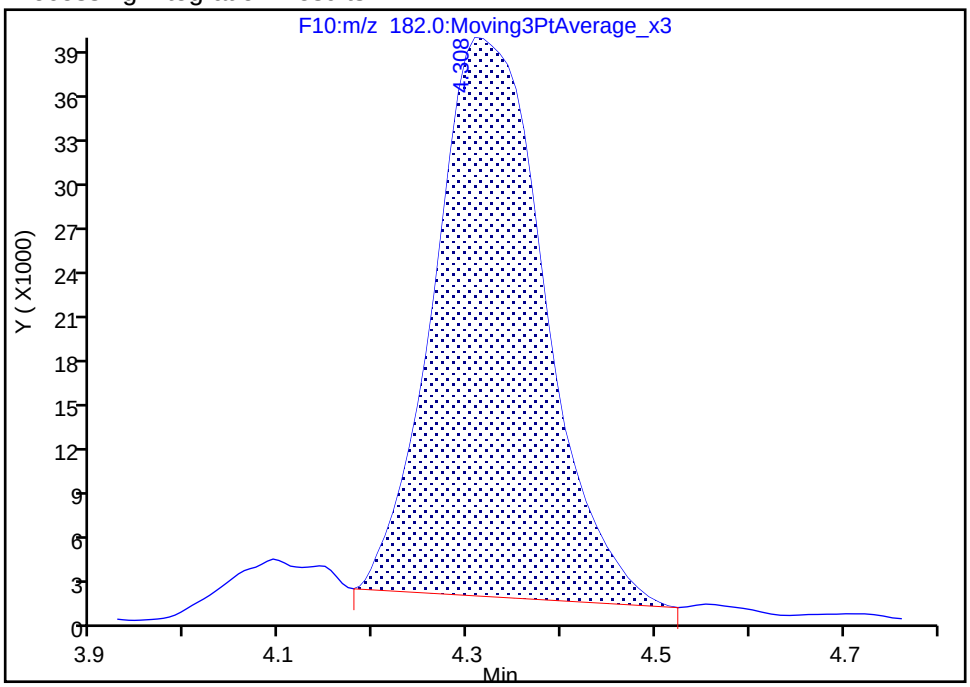
Column: Detector F10:SIR

19 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

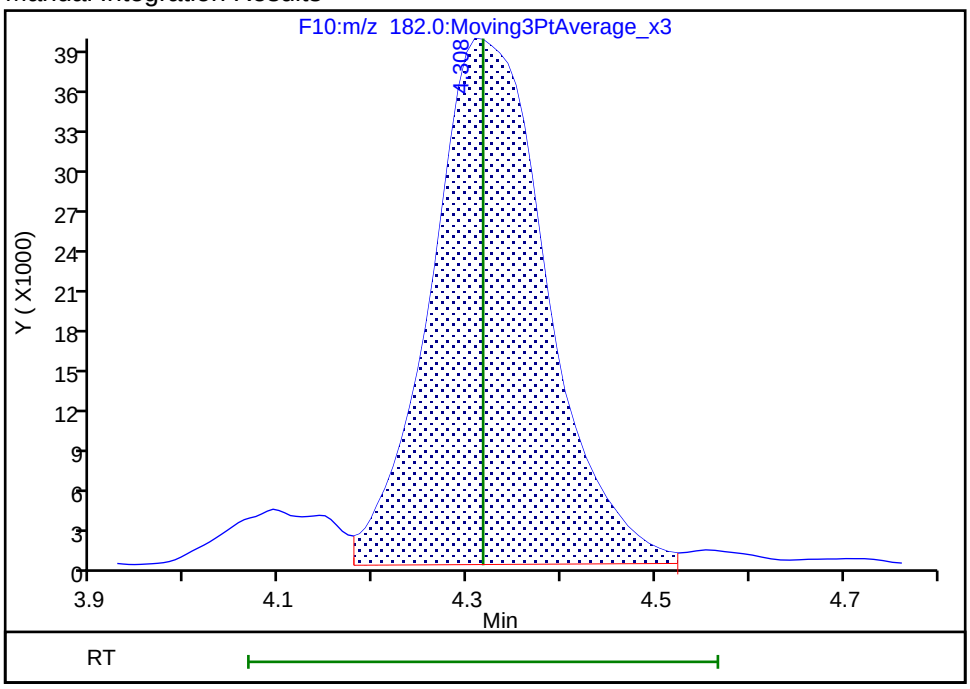
Processing Integration Results

RT: 4.31
Area: 309865
Amount: 9.208089
Amount Units: ug/l



Manual Integration Results

RT: 4.31
Area: 340511
Amount: 10.218271
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:28:42

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:03:08 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14023.d

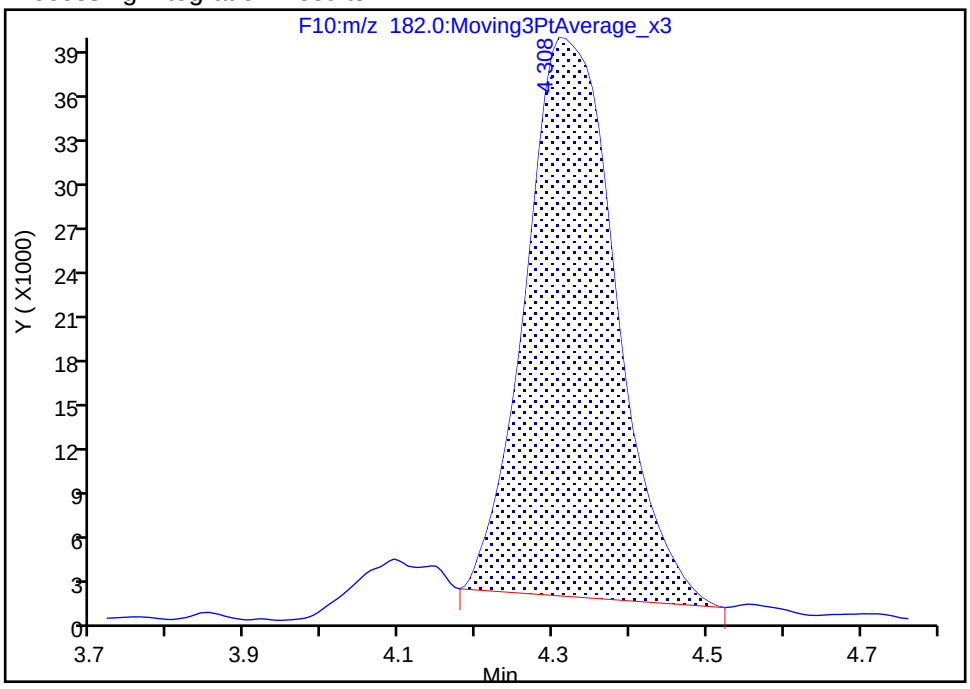
Injection Date:	14-Apr-2022 14:39:38	Instrument ID:	LC_LCMS7
Lims ID:	280-160190-A-29-F TRL		
Client ID:			
Operator ID:	acm	ALS Bottle#:	20 Worklist Smp#: 23
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F10:SIR

17 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

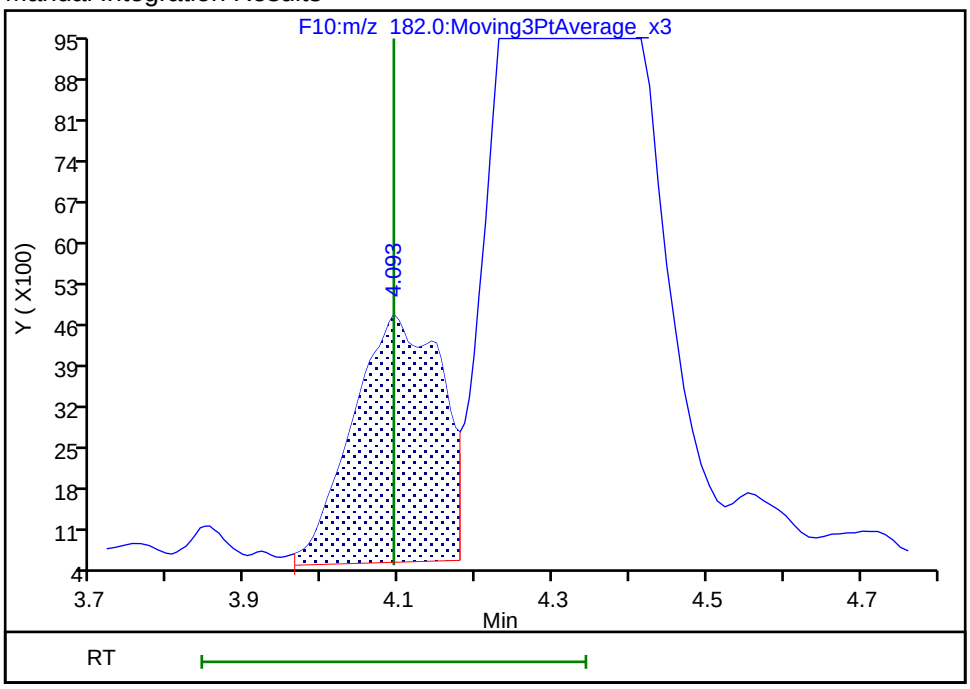
Processing Integration Results

RT: 4.31
Area: 309865
Amount: 4.702962
Amount Units: ug/l



Manual Integration Results

RT: 4.09
Area: 33722
Amount: -0.079955
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:28:42

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:03:08 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14023.d

Injection Date: 14-Apr-2022 14:39:38 Instrument ID: LC_LCMS7

Lims ID: 280-160190-A-29-F TRL

Client ID:

Operator ID: acm ALS Bottle#: 20 Worklist Smp#: 23

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: 8330_SIR Limit Group: LC - 8321A Expl

Column: Detector F5:SIR

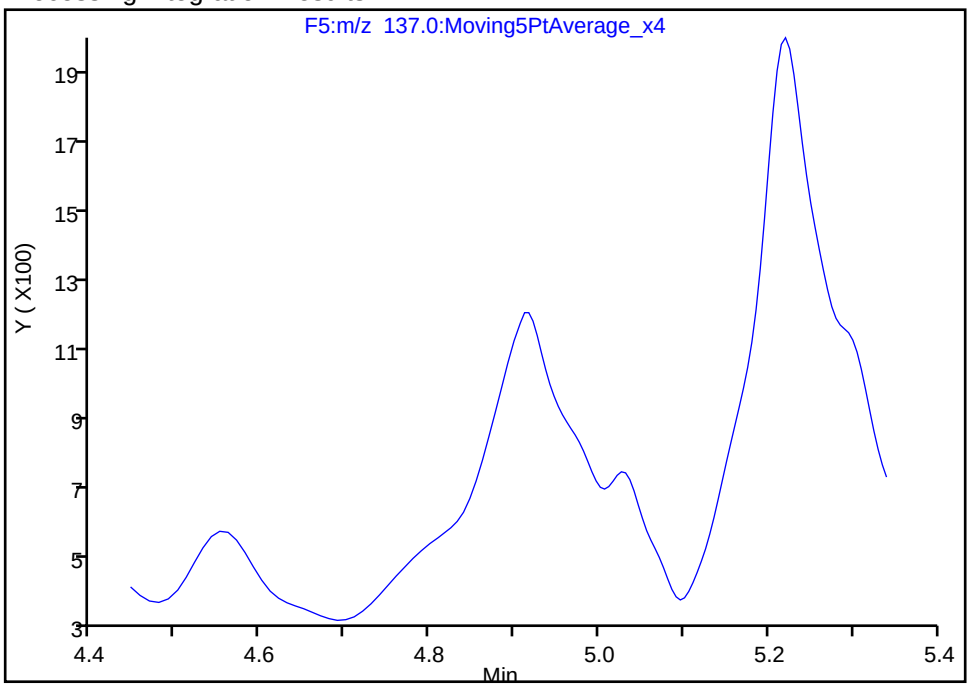
22 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

Not Detected

Expected RT: 4.93

Processing Integration Results



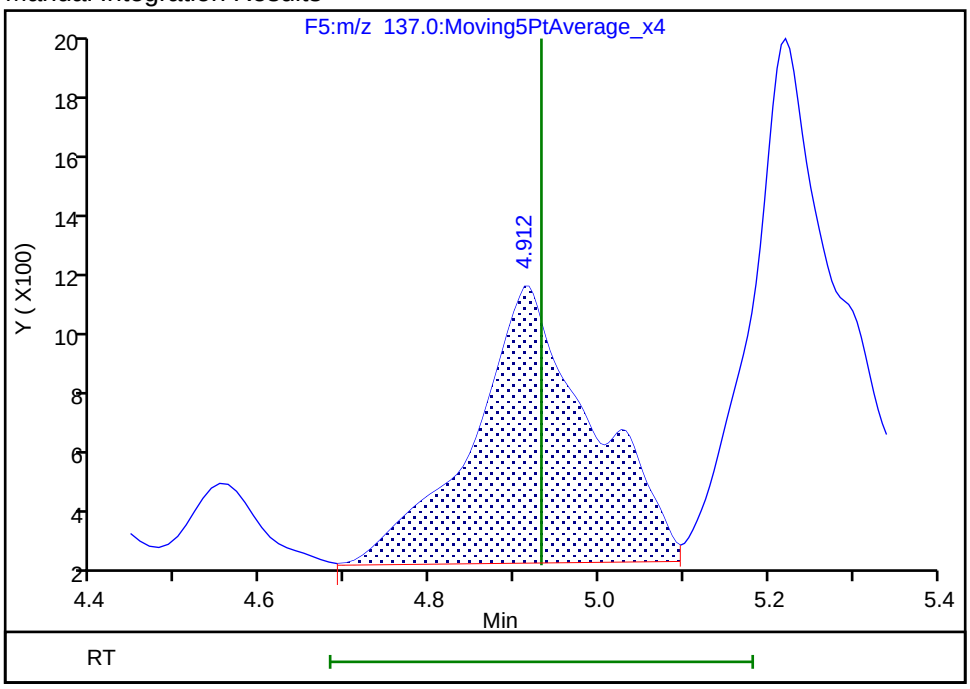
Manual Integration Results

RT: 4.91

Area: 8599

Amount: 0.576010

Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:28:58

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Apr-2022 08:03:08

Chrom Revision: 2.3 12-Apr-2022 20:29:44
Manual Integration/User Assign Peak Report

Eurofins Denver

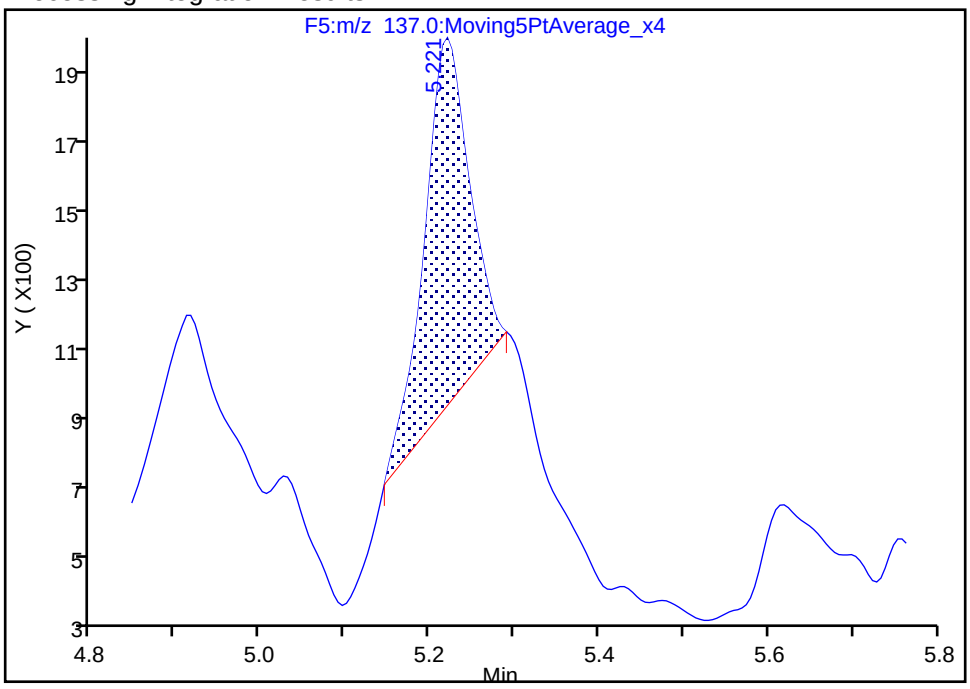
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14023.d
Injection Date: 14-Apr-2022 14:39:38 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-29-F TRL
Client ID:
Operator ID: acm ALS Bottle#: 20 Worklist Smp#: 23
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F5:SIR

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

Signal: 1

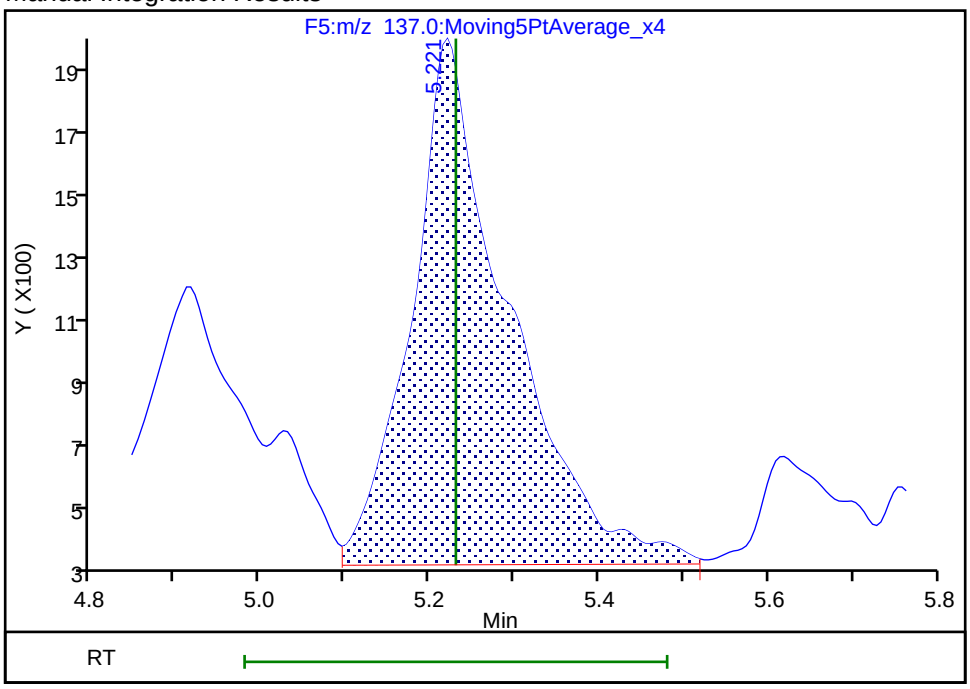
Processing Integration Results

RT: 5.22
Area: 3840
Amount: -0.097738
Amount Units: ug/l



Manual Integration Results

RT: 5.22
Area: 13116
Amount: 1.145394
Amount Units: ug/l



Reviewer: meyera, 15-Apr-2022 07:29:03
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160190-1

SDG No.:

Client Sample ID: | Lab Sample ID: 280-160190-A-52-J TRL

Matrix: Solid | Lab File ID: ex722D14058.d

Analysis Method: 8321A | Date Collected: 03/24/2022 15:15

Extraction Method: 8330B | Date Extracted: 04/06/2022 18:17

Sample wt/vol: 10.37(g) | Date Analyzed: 04/14/2022 18:30

Con. Extract Vol.: 40(mL) | Dilution Factor: 1

Injection Volume: 10(uL) | GC Column: Synergi Hydro ID:

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

Analysis Batch No.: 571897 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.048	U	0.096	0.048	0.043
99-65-0	1,3-Dinitrobenzene	0.048	U	0.096	0.048	0.043
118-96-7	2,4,6-Trinitrotoluene	0.048	U M	0.096	0.048	0.035
121-14-2	2,4-Dinitrotoluene	0.048	U	0.096	0.048	0.045
606-20-2	2,6-Dinitrotoluene	0.048	U	0.096	0.048	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.048	U	0.096	0.048	0.048
19406-51-0	4-Amino-2,6-dinitrotoluene	0.048	U	0.096	0.048	0.030
2691-41-0	HMX	0.048	U M	0.096	0.048	0.044
99-08-1	m-Nitrotoluene	0.048	U	0.096	0.048	0.042
98-95-3	Nitrobenzene	0.048	U	0.11	0.048	0.037
55-63-0	Nitroglycerin	0.048	U	0.096	0.048	0.028
88-72-2	o-Nitrotoluene	0.048	U	0.096	0.048	0.041
78-11-5	PETN	0.048	U	0.096	0.048	0.033
99-99-0	p-Nitrotoluene	0.048	U	0.096	0.048	0.048
121-82-4	RDX	0.048	U	0.12	0.048	0.042
479-45-8	Tetryl	0.048	U Q	0.096	0.048	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	94		68-140

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14058.d
Lims ID: 280-160190-A-52-J TRL
Client ID:
Sample Type: TRL
Inject. Date: 14-Apr-2022 18:30:35 ALS Bottle#: 4 Worklist Smp#: 58
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-52-J TRL
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:26 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:38:53
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		155269	125.0	144	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		507449	125.0	219	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.991	2.991	0.0		1165075	129.4	223	
$ 11 Nitrobenzene-d5								
128.0	3.315	3.324	-0.009	0.777	493964	94.6	120	
* 18 2,4-dinitrotoluene-d3								
185.1	4.267	4.275	-0.008		3504522	125.0	123	

QC Flag Legend
Processing Flags

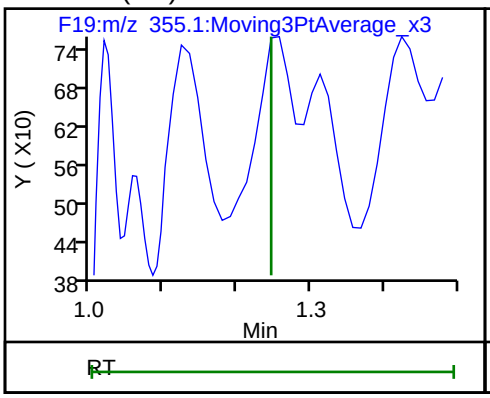
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Apr-2022 08:03:30 Chrom Revision: 2.3 12-Apr-2022 20:29:44

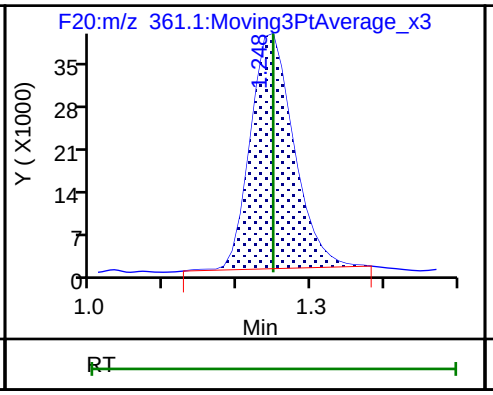
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14058.d
Injection Date: 14-Apr-2022 18:30:35 Instrument ID: LC_LCMS7
Lims ID: 280-160190-A-52-J TRL
Client ID:
Operator ID: acm ALS Bottle#: 4 Worklist Smp#: 58
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

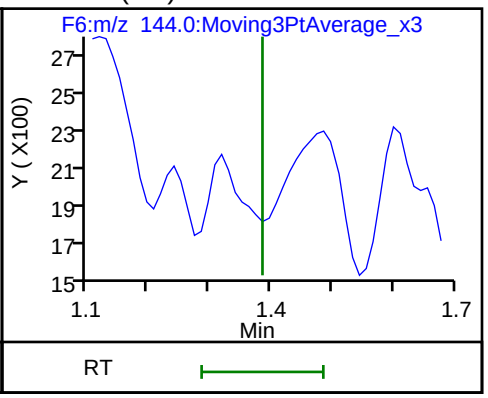
2 HMX (ND)



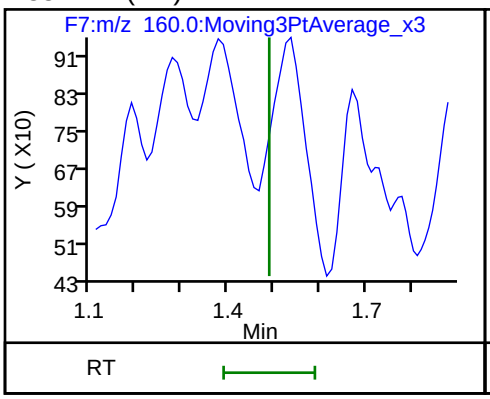
* 1 HMX-13C4



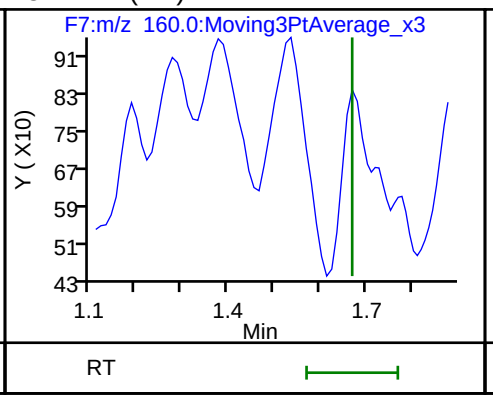
36 TNX (ND)



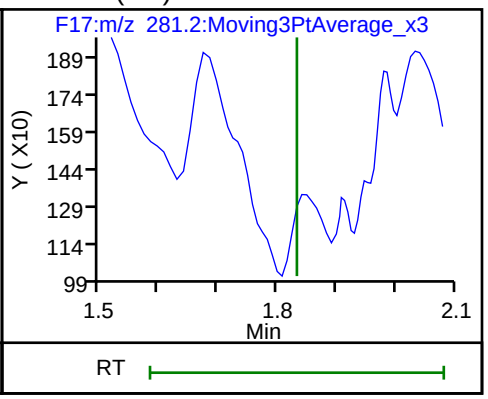
33 DNX (ND)



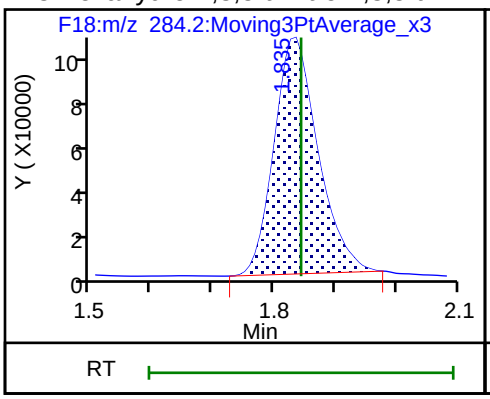
34 MNX (ND)



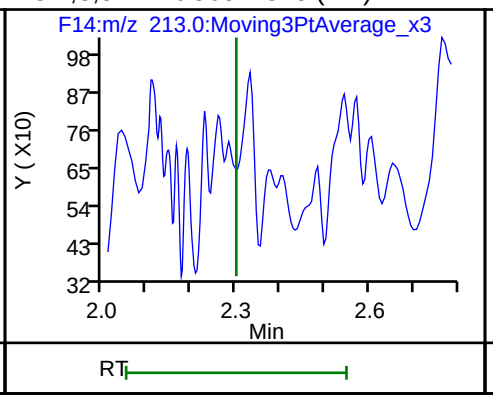
4 RDX (ND)



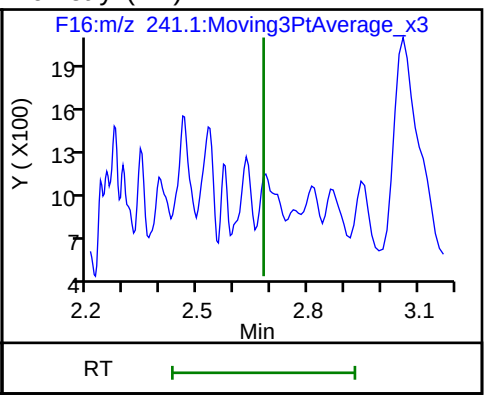
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



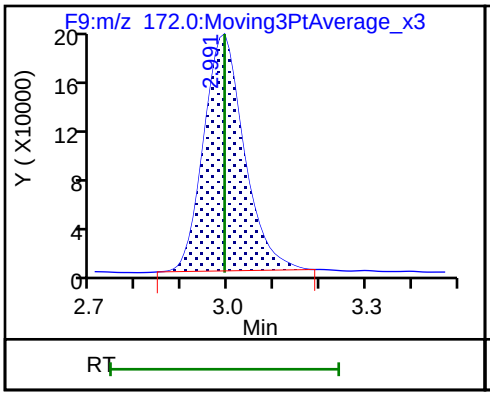
5 1,3,5-Trinitrobenzene (ND)



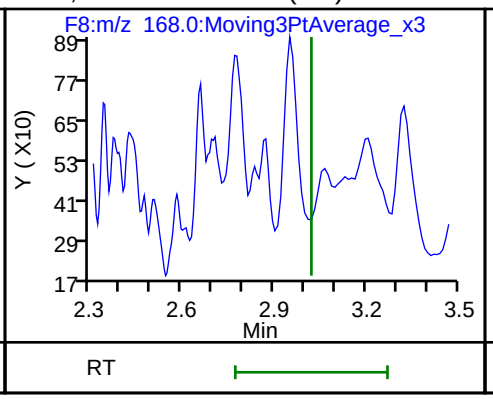
6 Tetryl (ND)



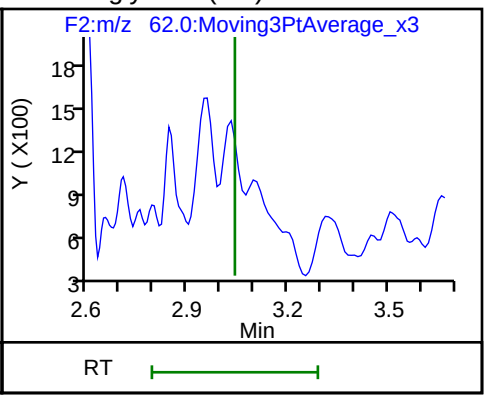
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



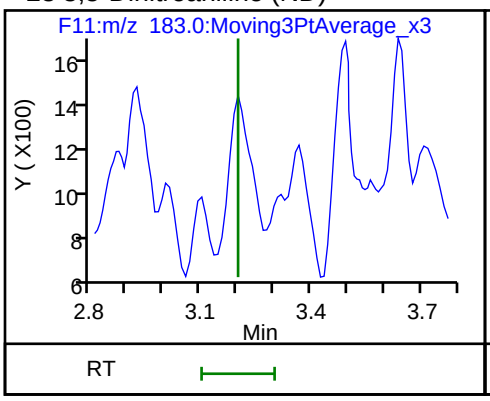
9 Nitroglycerin (ND)



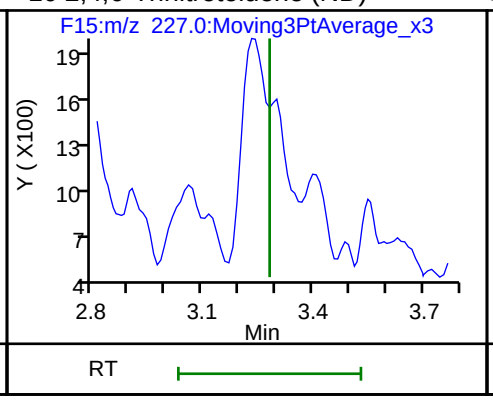
Report Date: 15-Apr-2022 08:03:30 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14058.d

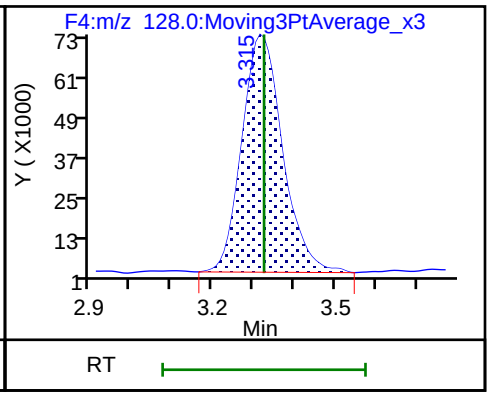
28 3,5-Dinitroaniline (ND)



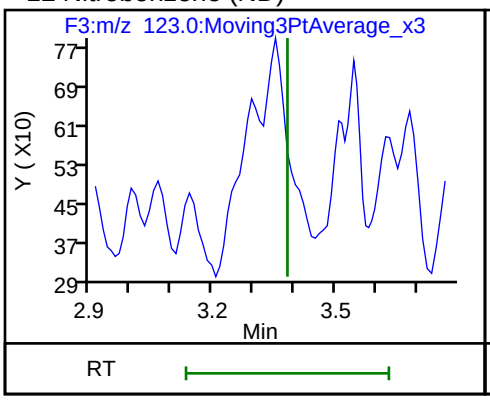
10 2,4,6-Trinitrotoluene (ND)



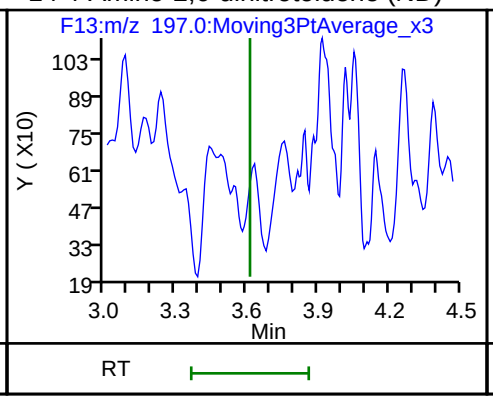
$ 11 Nitrobenzene-d5



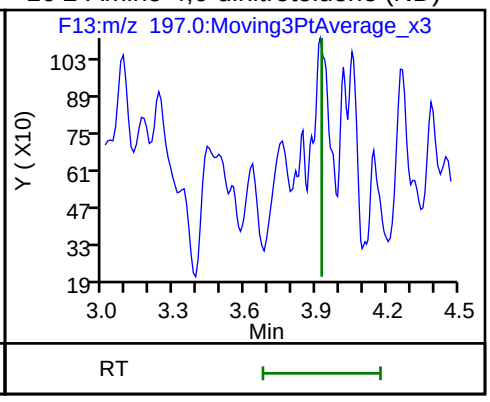
12 Nitrobenzene (ND)



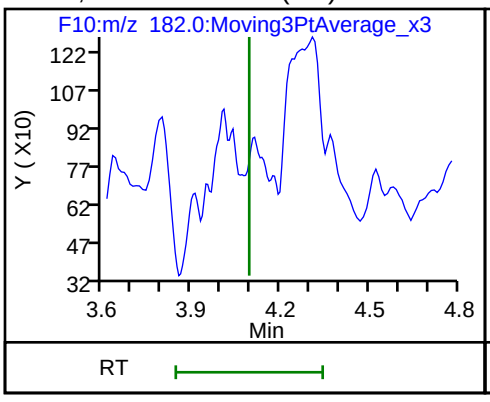
14 4-Amino-2,6-dinitrotoluene (ND)



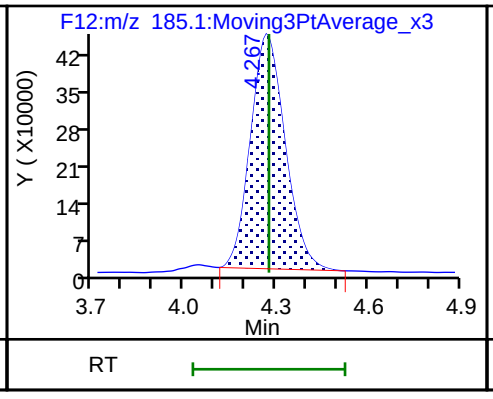
16 2-Amino-4,6-dinitrotoluene (ND)



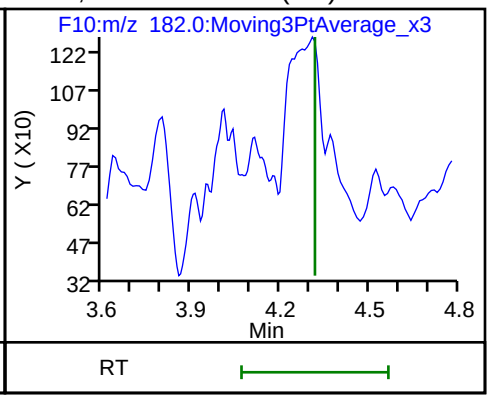
17 2,6-Dinitrotoluene (ND)



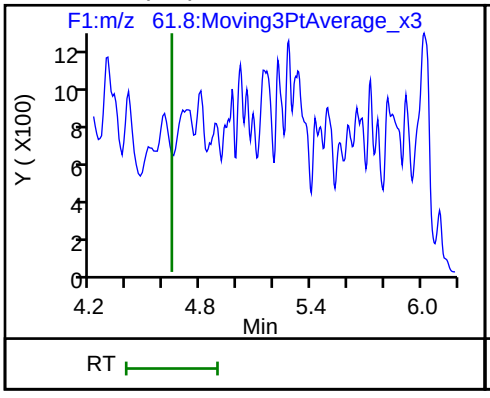
* 18 2,4-dinitrotoluene-d3



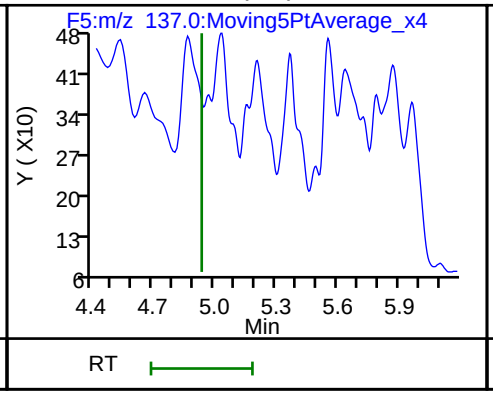
19 2,4-Dinitrotoluene (ND)



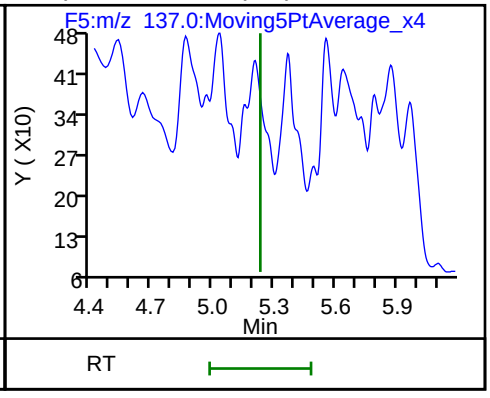
20 PETN (ND)



22 o-Nitrotoluene (ND)



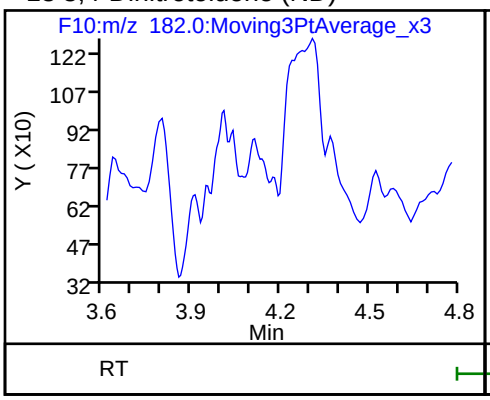
23 p-Nitrotoluene (ND)



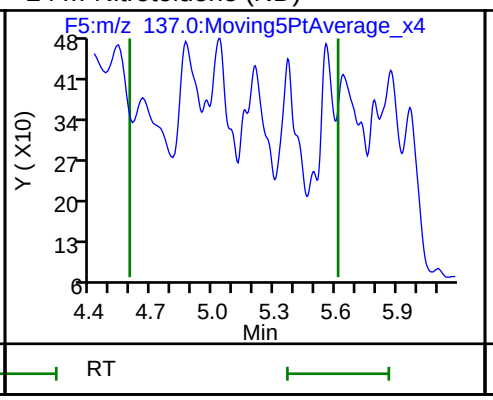
Report Date: 15-Apr-2022 08:03:30 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14058.d

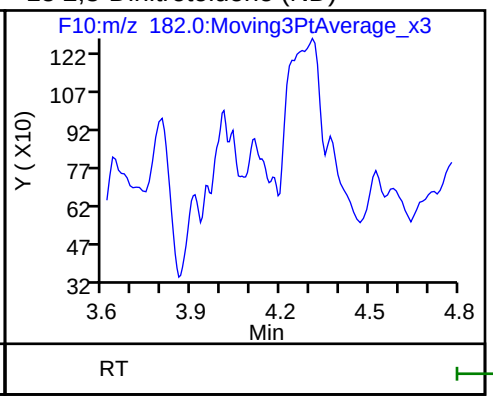
13 3,4-Dinitrotoluene (ND)



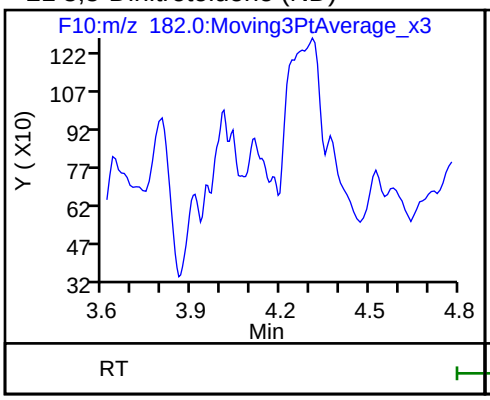
24 m-Nitrotoluene (ND)



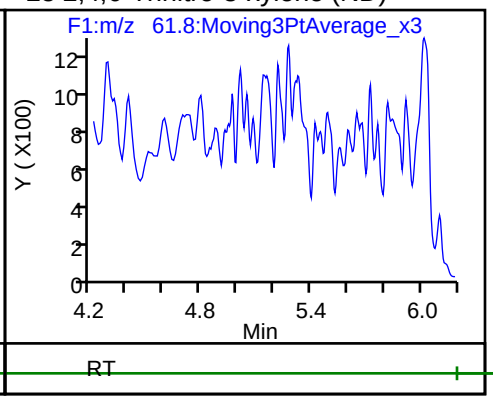
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene (ND)



Report Date: 15-Apr-2022 08:03:30 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14058.d
Lims ID: 280-160190-A-52-J TRL
Client ID:
Sample Type: TRL
Inject. Date: 14-Apr-2022 18:30:35 ALS Bottle#: 4 Worklist Smp#: 58
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160190-A-52-J TRL
Misc. Info.: ex722D14
Operator ID: acm Instrument ID: LC_LCMS7

Method: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\8330_SIR.m
Limit Group: LC - 8321A Expl
Last Update: 15-Apr-2022 08:03:26 Calib Date: 14-Apr-2022 13:07:22
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS7\20220414-110120.b\ex722D14009.d

Column 1 : Det: F1:SIR
Process Host: CTX1652

First Level Reviewer: meyera Date: 15-Apr-2022 07:38:53

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	94.6	94.25

LCMS ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Start Date: 04/05/2022 10:20

Analysis Batch Number: 570784 End Date: 04/05/2022 11:56

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD001 280-570784/3 IC		04/05/2022 10:20	1	ex722D05003.d	Synergi Hydro
STD002 280-570784/4 IC		04/05/2022 10:26	1	ex722D05004.d	Synergi Hydro
STD003 280-570784/5 IC		04/05/2022 10:33	1	ex722D05005.d	Synergi Hydro
STD004 280-570784/6 IC		04/05/2022 10:39	1	ex722D05006.d	Synergi Hydro
STD005 280-570784/7 ICISAV		04/05/2022 10:46	1	ex722D05007.d	Synergi Hydro
STD006 280-570784/8 IC		04/05/2022 10:52	1	ex722D05008.d	Synergi Hydro
STD007 280-570784/9 IC		04/05/2022 10:58	1	ex722D05009.d	Synergi Hydro
ICB 280-570784/10		04/05/2022 11:05	1	ex722D05010.d	Synergi Hydro
ICV 280-570784/11		04/05/2022 11:11	1	ex722D05011.d	Synergi Hydro
MB 280-570053/1-A		04/05/2022 11:18	1	ex722D05012.d	Synergi Hydro
LCS 280-570053/2-A		04/05/2022 11:24	1	ex722D05013.d	Synergi Hydro
LCSD 280-570053/3-A		04/05/2022 11:30	1	ex722D05014.d	Synergi Hydro
ZZZZZ		04/05/2022 11:37	1		Synergi Hydro
ZZZZZ		04/05/2022 11:43	1		Synergi Hydro
280-160190-56	EB-03	04/05/2022 11:50	1	ex722D05017.d	Synergi Hydro
CCV 280-570784/18		04/05/2022 11:56	1	ex722D05021.d	Synergi Hydro

LCMS ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Start Date: 04/07/2022 10:39

Analysis Batch Number: 571107 End Date: 04/07/2022 11:32

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD001 280-571107/3 IC		04/07/2022 10:39	1	ex722D07003.d	Synergi Hydro
STD002 280-571107/4 IC		04/07/2022 10:45	1	ex722D07004.d	Synergi Hydro
STD003 280-571107/5 IC		04/07/2022 10:52	1	ex722D07005.d	Synergi Hydro
STD004 280-571107/6 IC		04/07/2022 10:59	1	ex722D07006.d	Synergi Hydro
STD005 280-571107/7 ICISAV		04/07/2022 11:05	1	ex722D07007.d	Synergi Hydro
STD006 280-571107/8 IC		04/07/2022 11:12	1	ex722D07008.d	Synergi Hydro
STD007 280-571107/9 IC		04/07/2022 11:18	1	ex722D07009.d	Synergi Hydro
ICB 280-571107/10		04/07/2022 11:25	1	ex722D07010.d	Synergi Hydro
ICV 280-571107/11		04/07/2022 11:32	1	ex722D07011.d	Synergi Hydro

LCMS ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Start Date: 04/07/2022 11:38

Analysis Batch Number: 571108 End Date: 04/07/2022 15:24

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
MB 280-570718/1-A		04/07/2022 11:38	1	ex722D07012.d	Synergi Hydro
LCS 280-570718/2-A		04/07/2022 11:45	1	ex722D07013.d	Synergi Hydro
LCSD 280-570718/3-A		04/07/2022 11:51	1	ex722D07014.d	Synergi Hydro
GB 280-570105/1-B		04/07/2022 11:58	1	ex722D07015.d	Synergi Hydro
LCSSRM 280-570105/2-B		04/07/2022 12:05	1	ex722D07016.d	Synergi Hydro
ZZZZZ		04/07/2022 12:11	1		Synergi Hydro
ZZZZZ		04/07/2022 12:18	1		Synergi Hydro
ZZZZZ		04/07/2022 12:24	1		Synergi Hydro
ZZZZZ		04/07/2022 12:31	1		Synergi Hydro
CCV 280-571108/21		04/07/2022 12:38	1	ex722D07021.d	Synergi Hydro
ZZZZZ		04/07/2022 12:44	1		Synergi Hydro
ZZZZZ		04/07/2022 12:51	1		Synergi Hydro
ZZZZZ		04/07/2022 12:57	1		Synergi Hydro
ZZZZZ		04/07/2022 13:04	1		Synergi Hydro
ZZZZZ		04/07/2022 13:10	1		Synergi Hydro
ZZZZZ		04/07/2022 13:17	1		Synergi Hydro
ZZZZZ		04/07/2022 13:24	1		Synergi Hydro
ZZZZZ		04/07/2022 13:30	1		Synergi Hydro
ZZZZZ		04/07/2022 13:37	1		Synergi Hydro
ZZZZZ		04/07/2022 13:43	1		Synergi Hydro
CCV 280-571108/32		04/07/2022 13:50	1	ex722D07032.d	Synergi Hydro
ZZZZZ		04/07/2022 13:57	1		Synergi Hydro
ZZZZZ		04/07/2022 14:03	1		Synergi Hydro
ZZZZZ		04/07/2022 14:10	1		Synergi Hydro
280-160190-1	29SB173 (14.5-15)	04/07/2022 14:16	1	ex722D07036.d	Synergi Hydro
280-160190-2	29SB181 (14.5-15)	04/07/2022 14:23	1	ex722D07037.d	Synergi Hydro
280-160190-3	29SB182 (14.5-15)	04/07/2022 14:30	1	ex722D07038.d	Synergi Hydro
280-160190-4	29SB175 (3-4)	04/07/2022 14:36	1	ex722D07039.d	Synergi Hydro
280-160190-5	29SB175 (6-7)	04/07/2022 14:43	1	ex722D07040.d	Synergi Hydro
280-160190-6	29SB175 (11-12)	04/07/2022 14:49	1	ex722D07041.d	Synergi Hydro
280-160190-7	29SB175 (14.5-15)	04/07/2022 14:56	1	ex722D07042.d	Synergi Hydro
CCV 280-571108/43		04/07/2022 15:03	1	ex722D07043.d	Synergi Hydro
280-160190-1 DL	29SB173 (14.5-15) DL	04/07/2022 15:09	5	ex722D07044.d	Synergi Hydro
280-160190-2 DL	29SB181 (14.5-15) DL	04/07/2022 15:17	5	ex722D07045.d	Synergi Hydro
CCV 280-571108/46		04/07/2022 15:24	1	ex722D07046.d	Synergi Hydro

LCMS ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Start Date: 04/08/2022 09:48

Analysis Batch Number: 571224 End Date: 04/08/2022 14:11

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD001 280-571224/3 IC		04/08/2022 09:48	1	ex722D08003.d	Synergi Hydro
STD002 280-571224/4 IC		04/08/2022 09:54	1	ex722D08004.d	Synergi Hydro
STD003 280-571224/5 IC		04/08/2022 10:01	1	ex722D08005.d	Synergi Hydro
STD004 280-571224/6 IC		04/08/2022 10:07	1	ex722D08006.d	Synergi Hydro
STD005 280-571224/7 ICISAV		04/08/2022 10:14	1	ex722D08007.d	Synergi Hydro
STD006 280-571224/8 IC		04/08/2022 10:21	1	ex722D08008.d	Synergi Hydro
STD007 280-571224/9 IC		04/08/2022 10:27	1	ex722D08009.d	Synergi Hydro
ICB 280-571224/10		04/08/2022 10:34	1	ex722D08010.d	Synergi Hydro
ICV 280-571224/11		04/08/2022 10:40	1	ex722D08011.d	Synergi Hydro
MB 280-571024/1-A		04/08/2022 10:47	1	ex722D08012.d	Synergi Hydro
LCS 280-571024/2-A		04/08/2022 10:54	1	ex722D08013.d	Synergi Hydro
LCSD 280-571024/3-A		04/08/2022 11:00	1	ex722D08014.d	Synergi Hydro
GB 280-570111/1-B		04/08/2022 11:07	1	ex722D08015.d	Synergi Hydro
LCSSRM 280-570111/2-B		04/08/2022 11:13	1	ex722D08016.d	Synergi Hydro
280-160190-8	DUP-05	04/08/2022 11:20	1	ex722D08017.d	Synergi Hydro
280-160190-9	29SB167 (3-4)	04/08/2022 11:26	1	ex722D08018.d	Synergi Hydro
280-160190-10	29SB167 (6-7)	04/08/2022 11:33	1	ex722D08019.d	Synergi Hydro
280-160190-11	29SB167 (11-12)	04/08/2022 11:40	1	ex722D08020.d	Synergi Hydro
280-160190-12	29SB167 (14.5-15)	04/08/2022 11:46	1	ex722D08021.d	Synergi Hydro
CCV 280-571224/22		04/08/2022 11:53	1	ex722D08022.d	Synergi Hydro
280-160190-13	DUP-06	04/08/2022 11:59	1	ex722D08023.d	Synergi Hydro
280-160190-14	29SB176 (14.5-15)	04/08/2022 12:06	1	ex722D08024.d	Synergi Hydro
280-160190-15	29SB179 (14.5-15)	04/08/2022 12:13	1	ex722D08025.d	Synergi Hydro
280-160190-16	29SB178 (14.5-15)	04/08/2022 12:19	1	ex722D08026.d	Synergi Hydro
280-160190-17	29SB177 (14.5-15)	04/08/2022 12:26	1	ex722D08027.d	Synergi Hydro
280-160190-18	29SB168 (3-4)	04/08/2022 12:32	1	ex722D08028.d	Synergi Hydro
280-160190-19	29SB168 (6-7)	04/08/2022 12:39	1	ex722D08029.d	Synergi Hydro
280-160190-19 MS	29SB168 (6-7) MS	04/08/2022 12:46	1	ex722D08030.d	Synergi Hydro
280-160190-19 MSD	29SB168 (6-7) MSD	04/08/2022 12:52	1	ex722D08031.d	Synergi Hydro
CCV 280-571224/32		04/08/2022 12:59	1	ex722D08032.d	Synergi Hydro
280-160190-19 DU	29SB168 (6-7) DU	04/08/2022 13:05	1	ex722D08033.d	Synergi Hydro
280-160190-19 TRL	29SB168 (6-7) TRL	04/08/2022 13:12	1	ex722D08034.d	Synergi Hydro
280-160190-20	29SB168 (11-12)	04/08/2022 13:19	1	ex722D08035.d	Synergi Hydro
280-160190-21	29SB168 (14.5-15)	04/08/2022 13:25	1	ex722D08036.d	Synergi Hydro
280-160190-22	29SB169 (3-4)	04/08/2022 13:32	1	ex722D08037.d	Synergi Hydro
280-160190-23	29SB169 (6-7)	04/08/2022 13:38	1	ex722D08038.d	Synergi Hydro
280-160190-24	29SB169 (11-12)	04/08/2022 13:45	1	ex722D08039.d	Synergi Hydro
280-160190-25	29SB169 (14.5-15)	04/08/2022 13:52	1	ex722D08040.d	Synergi Hydro
280-160190-26	DUP-07	04/08/2022 13:58	1	ex722D08041.d	Synergi Hydro
280-160190-27	29SB170 (3-4)	04/08/2022 14:05	1	ex722D08042.d	Synergi Hydro
CCV 280-571224/43		04/08/2022 14:11	1	ex722D08043.d	Synergi Hydro

LCMS ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS4 Start Date: 04/12/2022 09:22

Analysis Batch Number: 571614 End Date: 04/12/2022 22:58

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD005 280-571614/4 IC		04/12/2022 09:22	1	ex422D12003.d	IonPac 2(mm)
STD010 280-571614/5 IC		04/12/2022 09:34	1	ex422D12004.d	IonPac 2(mm)
STD025 280-571614/6 IC		04/12/2022 09:45	1	ex422D12005.d	IonPac 2(mm)
STD050 280-571614/7 IC		04/12/2022 09:57	1	ex422D12006.d	IonPac 2(mm)
STD100 280-571614/8 ICISAV		04/12/2022 10:08	1	ex422D12007.d	IonPac 2(mm)
STD200 280-571614/9 IC		04/12/2022 10:20	1	ex422D12008.d	IonPac 2(mm)
STD300 280-571614/10 IC		04/12/2022 10:31	1	ex422D12009.d	IonPac 2(mm)
ICB 280-571614/11		04/12/2022 10:43	1	ex422D12010.d	IonPac 2(mm)
ICV 280-571614/12		04/12/2022 10:55	1	ex422D12011.d	IonPac 2(mm)
ZZZZZ		04/12/2022 11:06	1		IonPac 2(mm)
ZZZZZ		04/12/2022 11:18	1		IonPac 2(mm)
ZZZZZ		04/12/2022 11:29	1		IonPac 2(mm)
ZZZZZ		04/12/2022 11:41	1		IonPac 2(mm)
ZZZZZ		04/12/2022 11:52	1		IonPac 2(mm)
ZZZZZ		04/12/2022 12:04	1		IonPac 2(mm)
ZZZZZ		04/12/2022 12:15	1		IonPac 2(mm)
ZZZZZ		04/12/2022 12:27	1		IonPac 2(mm)
ZZZZZ		04/12/2022 12:38	1		IonPac 2(mm)
CCV 280-571614/22		04/12/2022 12:50	1		IonPac 2(mm)
ZZZZZ		04/12/2022 13:02	1		IonPac 2(mm)
ZZZZZ		04/12/2022 13:13	1		IonPac 2(mm)
ZZZZZ		04/12/2022 13:25	1		IonPac 2(mm)
ZZZZZ		04/12/2022 13:36	1		IonPac 2(mm)
ZZZZZ		04/12/2022 13:48	1		IonPac 2(mm)
ZZZZZ		04/12/2022 13:59	1		IonPac 2(mm)
ZZZZZ		04/12/2022 14:11	1		IonPac 2(mm)
ZZZZZ		04/12/2022 14:23	1		IonPac 2(mm)
ZZZZZ		04/12/2022 14:34	1		IonPac 2(mm)
ZZZZZ		04/12/2022 14:46	1		IonPac 2(mm)
CCV 280-571614/33		04/12/2022 14:57	1		IonPac 2(mm)
ZZZZZ		04/12/2022 15:09	1		IonPac 2(mm)
ZZZZZ		04/12/2022 15:27	1		IonPac 2(mm)
ZZZZZ		04/12/2022 15:38	1		IonPac 2(mm)
ZZZZZ		04/12/2022 15:50	1		IonPac 2(mm)
ZZZZZ		04/12/2022 16:01	1		IonPac 2(mm)
ZZZZZ		04/12/2022 16:13	1		IonPac 2(mm)
ZZZZZ		04/12/2022 16:24	1		IonPac 2(mm)
ZZZZZ		04/12/2022 16:36	1		IonPac 2(mm)
ZZZZZ		04/12/2022 16:47	1		IonPac 2(mm)
ZZZZZ		04/12/2022 16:59	1		IonPac 2(mm)
CCV 280-571614/44		04/12/2022 17:10	1		IonPac 2(mm)
ZZZZZ		04/12/2022 17:22	1		IonPac 2(mm)

LCMS ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS4 Start Date: 04/12/2022 09:22

Analysis Batch Number: 571614 End Date: 04/12/2022 22:58

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		04/12/2022 17:34	1		IonPac 2(mm)
ZZZZZ		04/12/2022 17:46	1		IonPac 2(mm)
ZZZZZ		04/12/2022 17:57	1		IonPac 2(mm)
ZZZZZ		04/12/2022 18:09	1		IonPac 2(mm)
ZZZZZ		04/12/2022 18:20	1		IonPac 2(mm)
ZZZZZ		04/12/2022 18:32	1		IonPac 2(mm)
ZZZZZ		04/12/2022 18:43	1		IonPac 2(mm)
ZZZZZ		04/12/2022 18:55	1		IonPac 2(mm)
CCV 280-571614/54		04/12/2022 19:06	1		IonPac 2(mm)
ZZZZZ		04/12/2022 19:18	1		IonPac 2(mm)
ZZZZZ		04/12/2022 19:30	1		IonPac 2(mm)
ZZZZZ		04/12/2022 19:42	1		IonPac 2(mm)
ZZZZZ		04/12/2022 19:53	1		IonPac 2(mm)
ZZZZZ		04/12/2022 20:05	1		IonPac 2(mm)
ZZZZZ		04/12/2022 20:16	1		IonPac 2(mm)
ZZZZZ		04/12/2022 20:28	1		IonPac 2(mm)
ZZZZZ		04/12/2022 20:39	1		IonPac 2(mm)
CCV 280-571614/63		04/12/2022 20:51	1	ex422D12062.d	IonPac 2(mm)
280-160190-14 DL	29SB176 (14.5-15) DL	04/12/2022 21:03	10	ex422D12063.d	IonPac 2(mm)
280-160190-17 DL	29SB177 (14.5-15) DL	04/12/2022 21:14	10	ex422D12064.d	IonPac 2(mm)
280-160190-18 DL	29SB168 (3-4) DL	04/12/2022 21:26	10	ex422D12065.d	IonPac 2(mm)
280-160190-19 DL	29SB168 (6-7) DL	04/12/2022 21:37	10	ex422D12066.d	IonPac 2(mm)
280-160190-19 MS DL	29SB168 (6-7) MS DL	04/12/2022 21:49	10	ex422D12067.d	IonPac 2(mm)
280-160190-19 MSD DL	29SB168 (6-7) MSD DL	04/12/2022 22:01	10	ex422D12068.d	IonPac 2(mm)
280-160190-19 DU DL	29SB168 (6-7) DU DL	04/12/2022 22:12	10	ex422D12069.d	IonPac 2(mm)
280-160190-19 TRL DL	29SB168 (6-7) TRL DL	04/12/2022 22:24	10	ex422D12070.d	IonPac 2(mm)
280-160190-20 DL	29SB168 (11-12) DL	04/12/2022 22:35	10	ex422D12071.d	IonPac 2(mm)
280-160190-20 DL2	29SB168 (11-12) DL2	04/12/2022 22:47	50	ex422D12072.d	IonPac 2(mm)
CCV 280-571614/74		04/12/2022 22:58	1	ex422D12073.d	IonPac 2(mm)

LCMS ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Start Date: 04/14/2022 12:27

Analysis Batch Number: 571895 End Date: 04/14/2022 13:20

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD001 280-571895/3 IC		04/14/2022 12:27	1	ex722D14003.d	Synergi Hydro
STD002 280-571895/4 IC		04/14/2022 12:34	1	ex722D14004.d	Synergi Hydro
STD003 280-571895/5 IC		04/14/2022 12:41	1	ex722D14005.d	Synergi Hydro
STD004 280-571895/6 IC		04/14/2022 12:47	1	ex722D14006.d	Synergi Hydro
STD005 280-571895/7 ICISAV		04/14/2022 12:54	1	ex722D14007.d	Synergi Hydro
STD006 280-571895/8 IC		04/14/2022 13:00	1	ex722D14008.d	Synergi Hydro
STD007 280-571895/9 IC		04/14/2022 13:07	1	ex722D14009.d	Synergi Hydro
ICB 280-571895/10		04/14/2022 13:13	1	ex722D14010.d	Synergi Hydro
ICV 280-571895/11		04/14/2022 13:20	1	ex722D14011.d	Synergi Hydro

LCMS ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Start Date: 04/14/2022 13:27

Analysis Batch Number: 571896 End Date: 04/14/2022 16:51

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
MB 280-571022/1-A		04/14/2022 13:27	1	ex722D14012.d	Synergi Hydro
LCS 280-571022/2-A		04/14/2022 13:33	1	ex722D14013.d	Synergi Hydro
LCSD 280-571022/3-A		04/14/2022 13:40	1	ex722D14014.d	Synergi Hydro
GB 280-570112/1-B		04/14/2022 13:46	1	ex722D14015.d	Synergi Hydro
LCSSRM 280-570112/2-B		04/14/2022 13:53	1	ex722D14016.d	Synergi Hydro
280-160190-28	29SB170 (6-7)	04/14/2022 14:00	1	ex722D14017.d	Synergi Hydro
280-160190-A-28-E MS		04/14/2022 14:06	1	ex722D14018.d	Synergi Hydro
280-160190-A-28-F MSD		04/14/2022 14:13	1	ex722D14019.d	Synergi Hydro
280-160190-29	29SB170 (11-12)	04/14/2022 14:19	1	ex722D14020.d	Synergi Hydro
CCV 280-571896/21		04/14/2022 14:26	1	ex722D14021.d	Synergi Hydro
280-160190-A-29-E DU		04/14/2022 14:33	1	ex722D14022.d	Synergi Hydro
280-160190-A-29-F TRL		04/14/2022 14:39	1	ex722D14023.d	Synergi Hydro
280-160190-30	29SB170 (14.5-15)	04/14/2022 14:46	1	ex722D14024.d	Synergi Hydro
280-160190-31	29SB171 (3-4)	04/14/2022 14:52	1	ex722D14025.d	Synergi Hydro
280-160190-32	29SB171 (6-7)	04/14/2022 14:59	1	ex722D14026.d	Synergi Hydro
280-160190-33	29SB171 (11-12)	04/14/2022 15:06	1	ex722D14027.d	Synergi Hydro
280-160190-34	29SB171 (14.5-15)	04/14/2022 15:12	1	ex722D14028.d	Synergi Hydro
280-160190-35	DUP-08	04/14/2022 15:19	1	ex722D14029.d	Synergi Hydro
280-160190-36	29SB174 (3-4)	04/14/2022 15:25	1	ex722D14030.d	Synergi Hydro
280-160190-37	29SB174 (6-7)	04/14/2022 15:32	1	ex722D14031.d	Synergi Hydro
CCV 280-571896/32		04/14/2022 15:39	1	ex722D14032.d	Synergi Hydro
280-160190-38	29SB174 (11-12)	04/14/2022 15:45	1	ex722D14033.d	Synergi Hydro
280-160190-39	29SB174 (14.5-15)	04/14/2022 15:52	1	ex722D14034.d	Synergi Hydro
280-160190-40	29SB190 (3-4)	04/14/2022 15:58	1	ex722D14035.d	Synergi Hydro
280-160190-41	29SB190 (19-20)	04/14/2022 16:05	1	ex722D14036.d	Synergi Hydro
280-160190-42	29SB192 (7-8)	04/14/2022 16:12	1	ex722D14037.d	Synergi Hydro
280-160190-43	29SB192 (11-12)	04/14/2022 16:18	1	ex722D14038.d	Synergi Hydro
280-160190-44	29SB192 (15-16)	04/14/2022 16:25	1	ex722D14039.d	Synergi Hydro
280-160190-45	29SB192 (19-20)	04/14/2022 16:31	1	ex722D14040.d	Synergi Hydro
280-160190-46	DUP-09	04/14/2022 16:38	1	ex722D14041.d	Synergi Hydro
280-160190-47	29SB193 (7-8)	04/14/2022 16:45	1	ex722D14042.d	Synergi Hydro
CCV 280-571896/43		04/14/2022 16:51	1	ex722D14043.d	Synergi Hydro

LCMS ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Instrument ID: LC_LCMS7 Start Date: 04/14/2022 16:51

Analysis Batch Number: 571897 End Date: 04/14/2022 18:56

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-571897/43		04/14/2022 16:51	1	ex722D14043.d	Synergi Hydro
MB 280-571025/1-A		04/14/2022 16:58	1	ex722D14044.d	Synergi Hydro
LCS 280-571025/2-A		04/14/2022 17:04	1	ex722D14045.d	Synergi Hydro
LCSD 280-571025/3-A		04/14/2022 17:11	1	ex722D14046.d	Synergi Hydro
GB 280-570115/1-B		04/14/2022 17:18	1	ex722D14047.d	Synergi Hydro
LCSSRM 280-570115/2-B		04/14/2022 17:24	1	ex722D14048.d	Synergi Hydro
280-160190-48	29SB193 (11-12)	04/14/2022 17:31	1	ex722D14049.d	Synergi Hydro
280-160190-49	29SB193 (15-16)	04/14/2022 17:37	1	ex722D14050.d	Synergi Hydro
280-160190-50	29SB193 (19-20)	04/14/2022 17:44	1	ex722D14051.d	Synergi Hydro
280-160190-51	DUP-10	04/14/2022 17:50	1	ex722D14052.d	Synergi Hydro
CCV 280-571897/53		04/14/2022 17:57	1	ex722D14053.d	Synergi Hydro
280-160190-52	29SB203 (3-4)	04/14/2022 18:04	1	ex722D14054.d	Synergi Hydro
280-160190-52MS	29SB203 (3-4) MS	04/14/2022 18:10	1	ex722D14055.d	Synergi Hydro
280-160190-52MSD	29SB203 (3-4) MSD	04/14/2022 18:17	1	ex722D14056.d	Synergi Hydro
280-160190-A-52-I DU		04/14/2022 18:24	1	ex722D14057.d	Synergi Hydro
280-160190-A-52-J TRL		04/14/2022 18:30	1	ex722D14058.d	Synergi Hydro
280-160190-53	29SB203 (7-8)	04/14/2022 18:37	1	ex722D14059.d	Synergi Hydro
280-160190-54	29SB204 (3-4)	04/14/2022 18:43	1	ex722D14060.d	Synergi Hydro
280-160190-55	29SB204 (7-8)	04/14/2022 18:50	1	ex722D14061.d	Synergi Hydro
CCV 280-571897/62		04/14/2022 18:56	1	ex722D14062.d	Synergi Hydro

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Batch Number: 570053 Batch Start Date: 03/29/22 13:01 Batch Analyst: Cook, Ashleigh R

Batch Method: 3535 Batch End Date: 03/29/22 16:10

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8321ExplosLCS 00049	8321ExplosSur 00058
MB 280-570053/1		3535, 8321A				1000 mL	5 mL		0.125 mL
LCS 280-570053/2		3535, 8321A				1000 mL	5 mL	0.125 mL	0.125 mL
LCSD 280-570053/3		3535, 8321A				1000 mL	5 mL	0.125 mL	0.125 mL
280-160190-B-56	EB-03	3535, 8321A	T	1437.2 g	508.9 g	928.3 mL	5 mL		0.125 mL

Batch Notes	
First Start time	03/29/2022 13:29
First End time	03/29/2022 15:55
SPE Cartridge Type	Strata SDBL
SPE Cartridge Lot ID	S22-000436
Balance ID	24350888
Pipette/Syringe/Dispenser ID	Jiji, Soot, DOD
Solvent Name	N. Elga
Solvent Lot #	N. Elga
Rinse Solvent Name	Acetonitrile
Rinse Solvent Lot	Acetonitrile_0055
Acid Name	0.1% AAinACN
Acid ID	0.1 % AAinACN_00179
Analyst ID - Spike Analyst	ARC
Analyst ID - Spike Witness Analyst	Reviewer: TH
Batch Comment	DV-OP-0019; Mantle: C

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.

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Batch Number: 570105 Batch Start Date: 03/29/22 13:09 Batch Analyst: Bunzli, Eric K

Batch Method: Dry and Grind Batch End Date: 04/04/22 15:51

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
GB 280-570105/1		Dry and Grind, 8330B, 8321A		10g aliquots					
LCSSRM 280-570105/2		Dry and Grind, 8330B, 8321A		10g aliquots					
280-160190-A-1	29SB173 (14.5-15)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-2	29SB181 (14.5-15)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-3	29SB182 (14.5-15)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-4	29SB175 (3-4)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-5	29SB175 (6-7)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-6	29SB175 (11-12)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-7	29SB175 (14.5-15)	Dry and Grind, 8330B, 8321A	T	10g aliquots					

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.

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Batch Number: 570105 Batch Start Date: 03/29/22 13:09 Batch Analyst: Bunzli, Eric K

Batch Method: Dry and Grind Batch End Date: 04/04/22 15:51

Batch Notes	
Analyst ID - Label Check	Reviewer: DL
Analyst ID - Drying	DL
SOP Number	DV-OP-0013, P22-001; P22-002; LCSSRM: 8330 GrindLCS 00338; Blank Sand: 210301, 216016
Analyst ID - Ball Mill Prep	puck mill analyst ID: EB, DL
Ball Mill Date and Time On	puck mill date and time: 4-2-2022 (LCSSRM, 280-160187-42-55, 280-160190-1) 4-4-2022 (280-160190-2-7)
Date and Time laid out to Dry	3-29-22 18-40
Laid out on Parchment or Foil	Foil
Balance ID	C33519, 38602403
Batch Comment	quarantine

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.

LogTag

Note: All Date-Time values are in UTC -07:00 DayLight

Alarm Status

Lower	✓	OK
Upper	✓	OK

Recorder Info

Serial #: 2000144856 Model: TRIX-8 Battery: OK Trip #: 38
Description: Explosives Room (-0.9)

Recorder Configuration

Start type :	Push button start	Temperature alarms	
Start delay :	1 Minute	Lower : 10.9 °C after 3 Consecutive	
Interval :	10 Minutes	or after 3 Accumulative	
Alert indicator :	Enabled lower & upper	Upper : 25.9 °C after 3 Consecutive	
OK indicator :	Enabled	or after 3 Accumulative	

Recorded Data

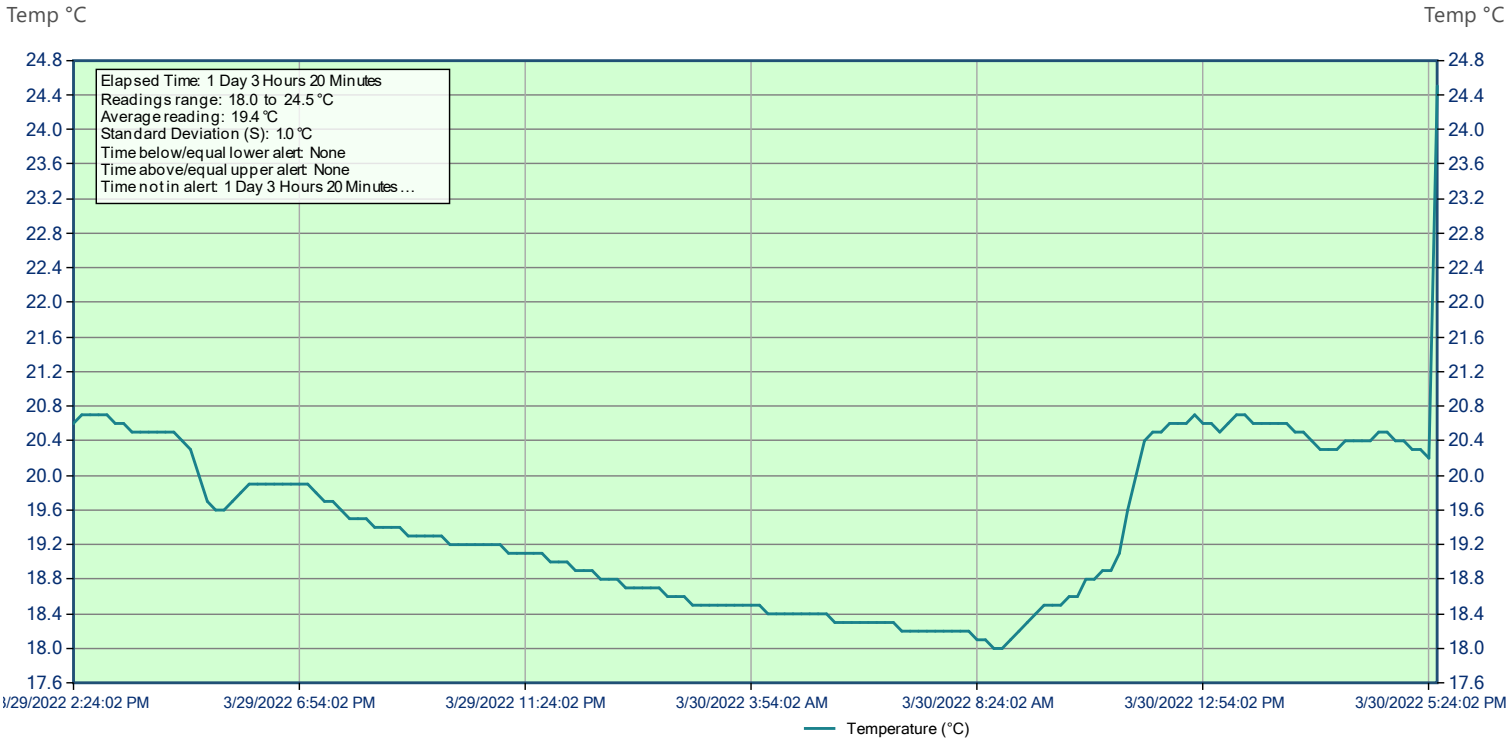
First reading :	3/29/2022 10:24:02 AM	Temperature statistics	
Last reading :	3/30/2022 5:34:02 PM	Lowest :	18.0 °C
Elapsed time :	1 Day 7 Hours 20 Minutes	@	3/30/2022 8:44:02 AM
Total readings :	188	Highest :	24.5 °C
First evaluated :	3/29/2022 2:24:02 PM	@	3/30/2022 5:34:02 PM
Last evaluated :	3/30/2022 5:34:02 PM	Average reading:	19.4 °C
Evaluated Time :	1 Day 3 Hours 20 Minutes	Standard Deviation:	1.0 °C(S)
Evaluated Readings :	164	MKT(ΔH 83.144):	19.5 °C

Lower Alarm

Triggered:	(none)
Time below/equal:	(none)
Occurrences :	0
°C - Minutes below :	0.00

Upper Alarm

Triggered:	(none)
Time above/equal:	(none)
Occurrences :	0
°C - Minutes above :	0.00



Source: Explosives Room (-0.9)TRIX-8- 2000144856 Started 3_29_2022, Finished 3_30_20222D34121435.ltd
Created : 3/30/2022 5:36:30 PM

ISM BATCH: 570105

Use this spreadsheet to document aliquot weights when aliquotting into digestion or extraction vessels. If aliquoting into a temporary vessel, no need to document the exact weight because the sample aliquot will be transferred and weighed at the time of analysis.

Login	Sample	Method --->	gross wt	container tare wt	sample wt (calced)	nonsoil material	combined aliquot				
		target range --->									
		Balance ID --->	38602403	38602403	calculated	C33519	C33519				
			(g)	(g)	(g)	(g)	(g)	(g)	(g)	(g)	(g)
280-160187	42	ALIQUOT 1	278.19	126.44	151.75		10.43				
		ALIQUOT 2			0						
280-160187	43ms/d du,trl	ALIQUOT 1	712.41	379.18	333.23		51.97				
		ALIQUOT 2			0						
280-160187	44	ALIQUOT 1	280.64	126.91	153.73		10.45				
		ALIQUOT 2			0						
280-160187	45	ALIQUOT 1	244.92	127.66	117.26		10.24				
		ALIQUOT 2			0						
280-160187	46	ALIQUOT 1	229.19	125.69	103.5		10.37				
		ALIQUOT 2			0						
280-160187	48	ALIQUOT 1	144.06	10.52	133.54		10.34				
		ALIQUOT 2			0						
280-160187	49	ALIQUOT 1	160.24	10.48	149.76		9.66				
		ALIQUOT 2			0						
280-160187	50	ALIQUOT 1	255.54	126.17	129.37		10.35				
		ALIQUOT 2			0						
280-160187	51	ALIQUOT 1	252.39	127.37	125.02		10.16				
		ALIQUOT 2			0						
280-160187	52	ALIQUOT 1	254.41	127.66	126.75	1.36	10.23				
		ALIQUOT 2			0						
280-160187	53	ALIQUOT 1	257.97	127.44	130.53		10.4				
		ALIQUOT 2			0						
280-160187	54	ALIQUOT 1	261.96	127.74	134.22		10.46				
		ALIQUOT 2			0						
280-160187	55	ALIQUOT 1	261.47	126.67	134.8		10.47				
		ALIQUOT 2			0						

ISM BATCH: 570105

Use this spreadsheet to document aliquot weights when aliquotting into digestion or extraction vessels. If aliquoting into a temporary vessel, no need to document the exact weight because the sample aliquot will be transferred and weighed at the time of analysis.

Login	Sample	Method --->	gross wt	container tare wt	sample wt (calced)	nonsoil material	combined aliquot				
		target range --->									
		Balance ID --->	38602403	38602403	calculated	C33519	C33519				
			(g)	(g)	(g)	(g)	(g)	(g)	(g)	(g)	(g)
280-160187	1	ALIQUOT 1	270.63	127.13	143.5		10.44				
		ALIQUOT 2			0						
280-160190	2	ALIQUOT 1	254.46	126.56	127.9		10.01				
		ALIQUOT 2			0						
280-160190	3	ALIQUOT 1	276.93	126.8	150.13		10.5				
		ALIQUOT 2			0						
280-160190	4	ALIQUOT 1	316.22	128.03	188.19	1.59	10.2				
		ALIQUOT 2			0						
280-160190	5	ALIQUOT 1	277.18	127.46	149.72	8.89	10.54				
		ALIQUOT 2			0						
280-160190	6	ALIQUOT 1	240.33	126.97	113.36		10.72				
		ALIQUOT 2			0						
280-160190	7	ALIQUOT 1	257.66	128.26	129.4		10.13				
		ALIQUOT 2			0						
280-160190		ALIQUOT 1			0						
		ALIQUOT 2			0						
GB		ALIQUOT 1			0		10.29				
		ALIQUOT 2			0						
LCSSRM		ALIQUOT 1					10.49				
		ALIQUOT 2			0						

ISM BATCH: 570105

Use this spreadsheet to document aliquo
vessel, no need to document the exact

Login	Sample	Method ---> target range ---> Balance ID --->	Comments
280-160187	42	ALIQUOT 1	
		ALIQUOT 2	
280-160187	43ms/d du,trl	ALIQUOT 1	43 - 10.53g; 10.76g; 10.11g; 10.5g; 10.07g
		ALIQUOT 2	
280-160187	44	ALIQUOT 1	
		ALIQUOT 2	
280-160187	45	ALIQUOT 1	
		ALIQUOT 2	
280-160187	46	ALIQUOT 1	
		ALIQUOT 2	
280-160187	48	ALIQUOT 1	
		ALIQUOT 2	
280-160187	49	ALIQUOT 1	
		ALIQUOT 2	
280-160187	50	ALIQUOT 1	
		ALIQUOT 2	
280-160187	51	ALIQUOT 1	
		ALIQUOT 2	
280-160187	52	ALIQUOT 1	non-soil material was rocks
		ALIQUOT 2	
280-160187	53	ALIQUOT 1	
		ALIQUOT 2	
280-160187	54	ALIQUOT 1	
		ALIQUOT 2	
280-160187	55	ALIQUOT 1	
		ALIQUOT 2	

ISM BATCH: 570105

Use this spreadsheet to document aliquo
vessel, no need to document the exact

Login	Sample	Method ---> target range ---> Balance ID --->	Comments
280-160187	1	ALIQUOT 1	
		ALIQUOT 2	
280-160190	2	ALIQUOT 1	
		ALIQUOT 2	
280-160190	3	ALIQUOT 1	
		ALIQUOT 2	
280-160190	4	ALIQUOT 1	non-soil material was rocks
		ALIQUOT 2	
280-160190	5	ALIQUOT 1	non-soil material was rocks
		ALIQUOT 2	
280-160190	6	ALIQUOT 1	
		ALIQUOT 2	
280-160190	7	ALIQUOT 1	
		ALIQUOT 2	
280-160190		ALIQUOT 1	
		ALIQUOT 2	
GB		ALIQUOT 1	
		ALIQUOT 2	
LCSSRM		ALIQUOT 1	
		ALIQUOT 2	

ISM Batch Number: 570105

DV-F-0070_Rev 2_01-7-2020 Use this spreadsheet to document drying samples to a constant weight.									
balance ID:		38602403	3-30-2022 1124	3-30-2022 1726	Dry?		Date/time 3	Dry?	
			EB	DL			analyst initials		
Login	Sample	Tare weight (weight of weighing vessel)	Gross weight (g) (weight of aliquot and weighing vessel)	Gross weight (g) (weight of aliquot and weighing vessel)	Change in weights 1, 2	Proceed with ISM?	Gross weight (g) (weight of aliquot and weighing vessel)	Change in weights 2, 3	Proceed with ISM?
160187	42	1.83	19.24	19.18	0.34%	Yes		110.55%	No
160187	43	1.71	30.98	30.92	0.20%	Yes		105.85%	No
160187	44	1.75	18	17.98	0.12%	Yes		110.78%	No
160187	45	1.88	18.68	18.72	-0.24%	Yes		111.16%	No
160187	46	1.88	17.47	17.43	0.26%	Yes		112.09%	No
160187	48	1.87	22.68	22.66	0.10%	Yes		108.99%	No
160187	49	2	24.63	24.63	0.00%	Yes		108.84%	No
160187	50	2.16	18.98	18.94	0.24%	Yes		112.87%	No
160187	51	2.25	18.27	18.17	0.62%	Yes		114.13%	No
160187	52	2.22	19.69	19.58	0.63%	Yes		112.79%	No
160187	53	2.16	22.5	22.56	-0.29%	Yes		110.59%	No
160187	54	2.24	24.75	24.8	-0.22%	Yes		109.93%	No
160187	55	2.27	22.16	22.01	0.75%	Yes		111.50%	No
160187	1	1.89	19.61	19.47	0.79%	Yes		110.75%	No
160190	2	1.89	20.22	20.07	0.82%	Yes		110.40%	No
160190	3	2.13	19.42	19.37	0.29%	Yes		112.35%	No
160190	4	1.45	18.82	18.84	-0.12%	Yes		108.34%	No
160190	5	1.53	24.83	24.83	0.00%	Yes		106.57%	No
160190	6	1.42	14.2	14.2	0.00%	Yes		111.11%	No
160190	7	1.5	16.71	16.65	0.39%	Yes		109.90%	No

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Batch Number: 570111 Batch Start Date: 03/29/22 13:29 Batch Analyst: Bunzli, Eric K

Batch Method: Dry and Grind Batch End Date: 04/06/22 16:53

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
GB 280-570111/1		Dry and Grind, 8330B, 8321A		10g aliquots					
LCSSRM 280-570111/2		Dry and Grind, 8330B, 8321A		10g aliquots					
280-160190-A-8	DUP-05	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-9	29SB167 (3-4)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-10	29SB167 (6-7)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-11	29SB167 (11-12)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-12	29SB167 (14.5-15)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-13	DUP-06	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-14	29SB176 (14.5-15)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-15	29SB179 (14.5-15)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-16	29SB178 (14.5-15)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-17	29SB177 (14.5-15)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-18	29SB168 (3-4)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-19	29SB168 (6-7)	Dry and Grind, 8330B, 8321A	T	10g aliquots					

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.

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Batch Number: 570111 Batch Start Date: 03/29/22 13:29 Batch Analyst: Bunzli, Eric K

Batch Method: Dry and Grind Batch End Date: 04/06/22 16:53

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
280-160190-A-19 MS	29SB168 (6-7)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-19 MSD	29SB168 (6-7)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-19 DU	29SB168 (6-7)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-19 TRL	29SB168 (6-7)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-20	29SB168 (11-12)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-21	29SB168 (14.5-15)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-22	29SB169 (3-4)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-23	29SB169 (6-7)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-24	29SB169 (11-12)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-25	29SB169 (14.5-15)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-26	DUP-07	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-27	29SB170 (3-4)	Dry and Grind, 8330B, 8321A	T	10g aliquots					

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.

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Batch Number: 570111 Batch Start Date: 03/29/22 13:29 Batch Analyst: Bunzli, Eric K

Batch Method: Dry and Grind Batch End Date: 04/06/22 16:53

Batch Notes	
Analyst ID - Label Check	Reviewer: DL
Analyst ID - Drying	DL
SOP Number	DV-OP-0013, P22-001; P22/002; Blank Sand; 216016; 8330 GrindLCS 00339 (container 6989627)
Analyst ID - Ball Mill Prep	puck mill analyst ID: DL
Ball Mill Date and Time On	puck mill date and time: 4/4/22 17:53
Date and Time laid out to Dry	3/30/22 16:17
Laid out on Parchment or Foil	Foil
Balance ID	Multiple
Batch Comment	quarantine

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.

ISM BATCH: 570111

Use this spreadsheet to document aliquot weights when aliquotting into digestion or extraction vessels. If aliquoting into a temporary vessel, no need to document the exact weight because the sample aliquot will be transferred and weighed at the time of analysis.

Login	Sample	Method --->	gross wt	container tare wt	sample wt (calced)	nonsoil material	combined aliquot				
		target range --->									
		Balance ID --->	24750399	24750399	calculated		C33519				
			(g)	(g)	(g)	(g)	(g)	(g)	(g)	(g)	(g)
280-160190	8	ALIQUOT 1	130.7	10.5	120.2		10.55				
		ALIQUOT 2			0						
280-160190	9	ALIQUOT 1	190.1	10.5	179.6		10.36				
		ALIQUOT 2			0						
280-160190	10	ALIQUOT 1	288.1	127.6	160.5		10.25				
		ALIQUOT 2			0						
280-160190	11	ALIQUOT 1	281.6	126.5	155.1		10.33				
		ALIQUOT 2			0						
280-160190	12	ALIQUOT 1	148.8	10.5	138.3		10.59				
		ALIQUOT 2			0						
280-160190	13	ALIQUOT 1	281.2	128.2	153		10.15				
		ALIQUOT 2			0						
280-160190	14	ALIQUOT 1	271.2	126.3	144.9		10.23				
		ALIQUOT 2			0						
280-160190	15	ALIQUOT 1	285.6	126.8	158.8		10.08				
		ALIQUOT 2			0						
280-160190	16	ALIQUOT 1	272	126.9	145.1		10.35				
		ALIQUOT 2			0						
280-160190	17	ALIQUOT 1	287.5	126.5	161		10.29				
		ALIQUOT 2			0						
280-160190	18	ALIQUOT 1	305.3	128.8	176.5		10.27				
		ALIQUOT 2			0						
280-160190	19ms/d du,trl	ALIQUOT 1	870	382.9	487.1		52.67				
		ALIQUOT 2			0						
280-160190	20	ALIQUOT 1	262.7	127.1	135.6		10.49				
		ALIQUOT 2			0						

ISM BATCH: 570111

Use this spreadsheet to document aliquot weights when aliquotting into digestion or extraction vessels. If aliquoting into a temporary vessel, no need to document the exact weight because the sample aliquot will be transferred and weighed at the time of analysis.

Login	Sample	Method --->	gross wt	container tare wt	sample wt (calced)	nonsoil material	combined aliquot				
		target range --->									
		Balance ID --->	24750399	24750399	calculated		C33519				
			(g)	(g)	(g)	(g)	(g)	(g)	(g)	(g)	(g)
280-160190	21	ALIQUOT 1	138.4	10.7	127.7		10.62				
		ALIQUOT 2			0						
280-160190	22	ALIQUOT 1	280.7	127.3	153.4		10.42				
		ALIQUOT 2			0						
280-160190	23	ALIQUOT 1	281.5	126.8	154.7		10.07				
		ALIQUOT 2			0						
280-160190	24	ALIQUOT 1	142.6	10.6	132		10.33				
		ALIQUOT 2			0						
280-160190	25	ALIQUOT 1	277.4	127.6	149.8		10.72				
		ALIQUOT 2			0						
280-160190	26	ALIQUOT 1	163.7	10.6	153.1		10.84				
		ALIQUOT 2			0						
280-160190	27	ALIQUOT 1	300.9	127.1	173.8		10.26				
		ALIQUOT 2			0						
GB		ALIQUOT 1			0		10.4				
		ALIQUOT 2			0						
LCSSRM		ALIQUOT 1			0		10.12				
		ALIQUOT 2			0						

ISM BATCH: 570111

Use this spreadsheet to document aliquo
vessel, no need to document the exact

Login	Sample	Method ---> target range ---> Balance ID --->	Comments
280-160190	8	ALIQUOT 1	
		ALIQUOT 2	
280-160190	9	ALIQUOT 1	
		ALIQUOT 2	
280-160190	10	ALIQUOT 1	
		ALIQUOT 2	
280-160190	11	ALIQUOT 1	
		ALIQUOT 2	
280-160190	12	ALIQUOT 1	
		ALIQUOT 2	
280-160190	13	ALIQUOT 1	
		ALIQUOT 2	
280-160190	14	ALIQUOT 1	
		ALIQUOT 2	
280-160190	15	ALIQUOT 1	
		ALIQUOT 2	
280-160190	16	ALIQUOT 1	
		ALIQUOT 2	
280-160190	17	ALIQUOT 1	
		ALIQUOT 2	
280-160190	18	ALIQUOT 1	
		ALIQUOT 2	
280-160190	19ms/d du,trl	ALIQUOT 1	9-10.73g; 9ms-10.58g; msd-10.33g; du-10.72g; trl-10.31g
		ALIQUOT 2	
280-160190	20	ALIQUOT 1	
		ALIQUOT 2	

ISM BATCH: 570111

Use this spreadsheet to document aliquo
vessel, no need to document the exact

Login	Sample	Method ---> target range ---> Balance ID --->	Comments
280-160190	21	ALIQUOT 1	
		ALIQUOT 2	
280-160190	22	ALIQUOT 1	
		ALIQUOT 2	
280-160190	23	ALIQUOT 1	
		ALIQUOT 2	
280-160190	24	ALIQUOT 1	
		ALIQUOT 2	
280-160190	25	ALIQUOT 1	
		ALIQUOT 2	
280-160190	26	ALIQUOT 1	
		ALIQUOT 2	
280-160190	27	ALIQUOT 1	
		ALIQUOT 2	
GB		ALIQUOT 1	
		ALIQUOT 2	
LCSSRM		ALIQUOT 1	
		ALIQUOT 2	

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Batch Number: 570112 Batch Start Date: 03/29/22 13:38 Batch Analyst: Bunzli, Eric K

Batch Method: Dry and Grind Batch End Date: 04/06/22 16:54

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
GB 280-570112/1		Dry and Grind, 8330B, 8321A		10g					
LCSSRM 280-570112/2		Dry and Grind, 8330B, 8321A		10g					
280-160190-A-28	29SB170 (6-7)	Dry and Grind, 8330B, 8321A	T	10g					
280-160190-A-28 MS		Dry and Grind, 8330B, 8321A	T	10g					
280-160190-A-28 MSD		Dry and Grind, 8330B, 8321A	T	10g					
280-160190-A-29	29SB170 (11-12)	Dry and Grind, 8330B, 8321A	T	10g					
280-160190-A-29 DU		Dry and Grind, 8330B, 8321A	T	10g					
280-160190-A-29 TRL		Dry and Grind, 8330B, 8321A	T	10g					
280-160190-A-30	29SB170 (14.5-15)	Dry and Grind, 8330B, 8321A	T	10g					
280-160190-A-31	29SB171 (3-4)	Dry and Grind, 8330B, 8321A	T	10g					
280-160190-A-32	29SB171 (6-7)	Dry and Grind, 8330B, 8321A	T	10g					
280-160190-A-33	29SB171 (11-12)	Dry and Grind, 8330B, 8321A	T	10g					
280-160190-A-34	29SB171 (14.5-15)	Dry and Grind, 8330B, 8321A	T	10g					
280-160190-A-35	DUP-08	Dry and Grind, 8330B, 8321A	T	10g					

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.

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Batch Number: 570112 Batch Start Date: 03/29/22 13:38 Batch Analyst: Bunzli, Eric K

Batch Method: Dry and Grind Batch End Date: 04/06/22 16:54

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
280-160190-A-36	29SB174 (3-4)	Dry and Grind, 8330B, 8321A	T	10g					
280-160190-A-37	29SB174 (6-7)	Dry and Grind, 8330B, 8321A	T	10g					
280-160190-A-38	29SB174 (11-12)	Dry and Grind, 8330B, 8321A	T	10g					
280-160190-A-39	29SB174 (14.5-15)	Dry and Grind, 8330B, 8321A	T	10g					
280-160190-A-40	29SB190 (3-4)	Dry and Grind, 8330B, 8321A	T	10g					
280-160190-A-41	29SB190 (19-20)	Dry and Grind, 8330B, 8321A	T	10g					
280-160190-A-42	29SB192 (7-8)	Dry and Grind, 8330B, 8321A	T	10g					
280-160190-A-43	29SB192 (11-12)	Dry and Grind, 8330B, 8321A	T	10g					
280-160190-A-44	29SB192 (15-16)	Dry and Grind, 8330B, 8321A	T	10g					
280-160190-A-45	29SB192 (19-20)	Dry and Grind, 8330B, 8321A	T	10g					
280-160190-A-46	DUP-09	Dry and Grind, 8330B, 8321A	T	10g					
280-160190-A-47	29SB193 (7-8)	Dry and Grind, 8330B, 8321A	T	10g					

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.

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Batch Number: 570112 Batch Start Date: 03/29/22 13:38 Batch Analyst: Bunzli, Eric K

Batch Method: Dry and Grind Batch End Date: 04/06/22 16:54

Batch Notes	
Analyst ID - Label Check	Reviewer: DL
Analyst ID - Drying	DL
SOP Number	DV-OP-0013, P22-001; P22-002; Blank Sand: 216016; LCSSRM: 8330 GrindLCS 00339 (Container 6989627)
Analyst ID - Ball Mill Prep	puck mill analyst ID: DL
Ball Mill Date and Time On	puck mill date and time: 4/5/22 13:30
Date and Time laid out to Dry	3/30/22 15:44
Laid out on Parchment or Foil	Foil
Balance ID	C33519, 38602403
Batch Comment	quarantine

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.

ISM BATCH: 570112

Use this spreadsheet to document aliquot weights when aliquotting into digestion or extraction vessels. If aliquoting into a temporary vessel, no need to document the exact weight because the sample aliquot will be transferred and weighed at the time of analysis.

Login	Sample	Method --->	gross wt	container tare wt	sample wt (calced)	nonsoil material	combined aliquot				
		target range --->									
		Balance ID --->	24750399	24750399	calculated		C33519				
			(g)	(g)	(g)	(g)	(g)	(g)	(g)	(g)	(g)
280-160190	28 ms/d	ALIQUOT 1	293.1	128.3	164.8		31.07				
		ALIQUOT 2			0						
280-160190	29 du/trl	ALIQUOT 1	262.1	126.7	135.4		30.78				
		ALIQUOT 2			0						
280-160190	30	ALIQUOT 1	277.9	127.9	150		10.33				
		ALIQUOT 2			0						
280-160190	31	ALIQUOT 1	269.7	126.7	143		10.3				
		ALIQUOT 2			0						
280-160190	32	ALIQUOT 1	289.5	127.6	161.9		10.05				
		ALIQUOT 2			0						
280-160190	33	ALIQUOT 1	244.3	126.4	117.9		10.13				
		ALIQUOT 2			0						
280-160190	34	ALIQUOT 1	261.5	127	134.5		10.5				
		ALIQUOT 2			0						
280-160190	35	ALIQUOT 1	251	126.6	124.4		10.45				
		ALIQUOT 2			0						
280-160190	36	ALIQUOT 1	268.4	126.9	141.5		10.7				
		ALIQUOT 2			0						
280-160190	37	ALIQUOT 1	332.6	128.6	204		10.37				
		ALIQUOT 2			0						
280-160190	38	ALIQUOT 1	267.5	126.3	141.2		10.23				
		ALIQUOT 2			0						
280-160190	39	ALIQUOT 1	270.4	126.7	143.7		10.21				
		ALIQUOT 2			0						
280-160190	40	ALIQUOT 1	279.7	127.1	152.6		10.11				
		ALIQUOT 2			0						

ISM BATCH: 570112

Use this spreadsheet to document aliquot weights when aliquotting into digestion or extraction vessels. If aliquoting into a temporary vessel, no need to document the exact weight because the sample aliquot will be transferred and weighed at the time of analysis.

Login	Sample	Method --->	gross wt	container tare wt	sample wt (calced)	nonsoil material	combined aliquot				
		target range --->									
		Balance ID --->	24750399	24750399	calculated		C33519				
			(g)	(g)	(g)	(g)	(g)	(g)	(g)	(g)	(g)
280-160190	41	ALIQUOT 1	255.7	126.8	128.9		10.34				
		ALIQUOT 2			0						
280-160190	42	ALIQUOT 1	229.2	127.1	102.1		10.36				
		ALIQUOT 2			0						
280-160190	43	ALIQUOT 1	252.5	126.7	125.8		10.09				
		ALIQUOT 2			0						
280-160190	44	ALIQUOT 1	258.6	125.9	132.7		10.66				
		ALIQUOT 2			0						
280-160190	45	ALIQUOT 1	253	126.7	126.3		10.21				
		ALIQUOT 2			0						
280-160190	46	ALIQUOT 1	240.5	126.5	114		10.52				
		ALIQUOT 2			0						
280-160190	47	ALIQUOT 1	241.5	126	115.5		10.75				
		ALIQUOT 2			0						
GB		ALIQUOT 1			0		10.82				
		ALIQUOT 2			0						
LCSSRM		ALIQUOT 1			0		10.48				
		ALIQUOT 2			0						

ISM BATCH: 570112

Use this spreadsheet to document aliquo
vessel, no need to document the exact

Login	Sample	Method ---> target range ---> Balance ID --->	Comments
280-160190	28 ms/d	ALIQUOT 1	28-10.54g; ms-10.36g; msd-10.17g
		ALIQUOT 2	
280-160190	29 du/trl	ALIQUOT 1	29-10.2g; du-10.43g; trl-10.15
		ALIQUOT 2	
280-160190	30	ALIQUOT 1	
		ALIQUOT 2	
280-160190	31	ALIQUOT 1	
		ALIQUOT 2	
280-160190	32	ALIQUOT 1	
		ALIQUOT 2	
280-160190	33	ALIQUOT 1	
		ALIQUOT 2	
280-160190	34	ALIQUOT 1	
		ALIQUOT 2	
280-160190	35	ALIQUOT 1	
		ALIQUOT 2	
280-160190	36	ALIQUOT 1	
		ALIQUOT 2	
280-160190	37	ALIQUOT 1	
		ALIQUOT 2	
280-160190	38	ALIQUOT 1	
		ALIQUOT 2	
280-160190	39	ALIQUOT 1	
		ALIQUOT 2	
280-160190	40	ALIQUOT 1	
		ALIQUOT 2	

ISM BATCH: 570112

Use this spreadsheet to document aliquo
vessel, no need to document the exact

Login	Sample	Method ---> target range ---> Balance ID --->	Comments
280-160190	41	ALIQUOT 1	
		ALIQUOT 2	
280-160190	42	ALIQUOT 1	
		ALIQUOT 2	
280-160190	43	ALIQUOT 1	
		ALIQUOT 2	
280-160190	44	ALIQUOT 1	
		ALIQUOT 2	
280-160190	45	ALIQUOT 1	
		ALIQUOT 2	
280-160190	46	ALIQUOT 1	
		ALIQUOT 2	
280-160190	47	ALIQUOT 1	
		ALIQUOT 2	
GB		ALIQUOT 1	
		ALIQUOT 2	
LCSSRM		ALIQUOT 1	
		ALIQUOT 2	

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Batch Number: 570115 Batch Start Date: 03/29/22 13:49 Batch Analyst: Bunzli, Eric K

Batch Method: Dry and Grind Batch End Date: 04/06/22 16:39

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
GB 280-570115/1		Dry and Grind, 8330B, 8321A		10g aliquots					
LCSSRM 280-570115/2		Dry and Grind, 8330B, 8321A		10g aliquots					
280-160190-A-48	29SB193 (11-12)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-49	29SB193 (15-16)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-50	29SB193 (19-20)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-51	DUP-10	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-52	29SB203 (3-4)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-52 MS	29SB203 (3-4)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-52 MSD	29SB203 (3-4)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-52 DU		Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-52 TRL		Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-53	29SB203 (7-8)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-54	29SB204 (3-4)	Dry and Grind, 8330B, 8321A	T	10g aliquots					
280-160190-A-55	29SB204 (7-8)	Dry and Grind, 8330B, 8321A	T	10g aliquots					

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.

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Batch Number: 570115 Batch Start Date: 03/29/22 13:49 Batch Analyst: Bunzli, Eric K

Batch Method: Dry and Grind Batch End Date: 04/06/22 16:39

Batch Notes	
Analyst ID - Label Check	Reviewer: DL
Analyst ID - Drying	DL
SOP Number	DV-OP-0013, P22-001
Analyst ID - Ball Mill Prep	puck mill analyst ID: DL
Ball Mill Date and Time On	puck mill date and time: 4-5-2022 14:30
Date and Time laid out to Dry	3/30/22 16:17
Laid out on Parchment or Foil	Foil
Balance ID	Multiple
Batch Comment	quarantine; Blank Sand: 216016; Tower: Mio; LCSSRM: 8330 GrindLCS 00339 (Container 6989627)

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.

ISM BATCH: 570115

Use this spreadsheet to document aliquot weights when aliquotting into digestion or extraction vessels. If aliquoting into a temporary vessel, no need to document the exact weight because the sample aliquot will be transferred and weighed at the time of analysis.

Login	Sample	Method --->	gross wt	container tare wt	sample wt (calced)	nonsoil material	combined aliquot				
		target range --->									
		Balance ID --->	24750399	24750399	calculated		C33519				
			(g)	(g)	(g)	(g)	(g)	(g)	(g)	(g)	(g)
280-160190	48	ALIQUOT 1	231.7	126.3	105.4		10.19				
		ALIQUOT 2			0						
280-160190	49	ALIQUOT 1	226.9	126.6	100.3		10.08				
		ALIQUOT 2			0						
280-160190	50	ALIQUOT 1	275.1	126.9	148.2		10.49				
		ALIQUOT 2			0						
280-160190	51	ALIQUOT 1	232.2	126.6	105.6		10.15				
		ALIQUOT 2			0						
280-160190	52/ms/msd/du/trl	ALIQUOT 1	686.2	380.3	305.9		51.64				
		ALIQUOT 2			0						
280-160190	53	ALIQUOT 1	248.3	127.1	121.2		10.25				
		ALIQUOT 2			0						
280-160190	54	ALIQUOT 1	254	126.4	127.6		10.52				
		ALIQUOT 2			0						
280-160190	55	ALIQUOT 1	238.3	126.5	111.8		10.34				
		ALIQUOT 2			0						
GB		ALIQUOT 1			0		10.6				
		ALIQUOT 2			0						
LCSSRM		ALIQUOT 1			0		10.53				
		ALIQUOT 2			0						

ISM BATCH: 570115

Use this spreadsheet to document aliquo
vessel, no need to document the exact

Login	Sample	Method ---> target range ---> Balance ID --->	Comments
280-160190	48	ALIQUOT 1	
		ALIQUOT 2	
280-160190	49	ALIQUOT 1	
		ALIQUOT 2	
280-160190	50	ALIQUOT 1	
		ALIQUOT 2	
280-160190	51	ALIQUOT 1	
		ALIQUOT 2	
280-160190	52/ms/msd/du/trl	ALIQUOT 1	52-10.57g; ms-10.13g; msd-10.39g; du-10.18g; trl-10.37g
		ALIQUOT 2	
280-160190	53	ALIQUOT 1	
		ALIQUOT 2	
280-160190	54	ALIQUOT 1	
		ALIQUOT 2	
280-160190	55	ALIQUOT 1	
		ALIQUOT 2	
GB		ALIQUOT 1	
		ALIQUOT 2	
LCSSRM		ALIQUOT 1	
		ALIQUOT 2	

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Batch Number: 570718 Batch Start Date: 04/04/22 16:57 Batch Analyst: Holahan, Thomas E

Batch Method: 8330B Batch End Date: 04/05/22 13:34

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8321ExplosLCS 00049	8321ExplosSur 00058	8330 GrindLCS 00338	
MB 280-570718/1		8330B, 8321A		10 g	40 mL		1 mL		
LCS 280-570718/2		8330B, 8321A		10 g	40 mL	1 mL	1 mL		
LCSD 280-570718/3		8330B, 8321A		10 g	40 mL	1 mL	1 mL		
GB 280-570105/1-A		8330B, 8321A		10.29 g	40 mL		1 mL		
LCSSRM 280-570105/2-A		8330B, 8321A		10.49 g	40 mL		1 mL	10.49 g	
280-160190-A-1-A	29SB173 (14.5-15)	8330B, 8321A	T	10.44 g	40 mL		1 mL		
280-160190-A-2-A	29SB181 (14.5-15)	8330B, 8321A	T	10.01 g	40 mL		1 mL		
280-160190-A-3-A	29SB182 (14.5-15)	8330B, 8321A	T	10.5 g	40 mL		1 mL		
280-160190-A-4-A	29SB175 (3-4)	8330B, 8321A	T	10.2 g	40 mL		1 mL		
280-160190-A-5-A	29SB175 (6-7)	8330B, 8321A	T	10.54 g	40 mL		1 mL		
280-160190-A-6-A	29SB175 (11-12)	8330B, 8321A	T	10.72 g	40 mL		1 mL		
280-160190-A-7-A	29SB175 (14.5-15)	8330B, 8321A	T	10.13 g	40 mL		1 mL		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Batch Number: 570718 Batch Start Date: 04/04/22 16:57 Batch Analyst: Holahan, Thomas E

Batch Method: 8330B Batch End Date: 04/05/22 13:34

Batch Notes	
Solvent Name	0.1%AAinACN
Solvent Lot #	0.1%AAinACN_00181
Prep Solvent Volume Used	20 mL
Analyst ID - Reagent Drop Witness	Reviewer: ARC
Analyst ID - Concentration	TH
Balance ID	C33519
Blank Sand Lot #	210301
Pipette ID for Solvent	Firine
Pipette ID	Tia
Sonication Start Time	17:31
Sonication Stop Time	11:31
Filter Type	0.2 um
Filter ID	R1EB03881
Date Sample was Dried	570105
Date Sample was Ground	570105
SOP Number	DV-OP-0018

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.

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Batch Number: 571022 Batch Start Date: 04/06/22 18:23 Batch Analyst: Holahan, Thomas E

Batch Method: 8330B Batch End Date: 04/07/22 15:46

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8321ExplosLCS 00049	8321ExplosSur 00059	8330 GrindLCS 00339	
MB 280-571022/1		8330B, 8321A		10 g	40 mL		1 mL		
LCS 280-571022/2		8330B, 8321A		10 g	40 mL	1 mL	1 mL		
LCSD 280-571022/3		8330B, 8321A		10 g	40 mL	1 mL	1 mL		
GB 280-570112/1-A		8330B, 8321A		10.82 g	40 mL		1 mL		
LCSSRM 280-570112/2-A		8330B, 8321A		10.48 g	40 mL		1 mL	10.48 g	
280-160190-A-28-A	29SB170 (6-7)	8330B, 8321A	T	10.54 g	40 mL		1 mL		
280-160190-A-28-B MS		8330B, 8321A	T	10.36 g	40 mL	1 mL	1 mL		
280-160190-A-28-C MSD		8330B, 8321A	T	10.17 g	40 mL	1 mL	1 mL		
280-160190-A-29-A	29SB170 (11-12)	8330B, 8321A	T	10.2 g	40 mL		1 mL		
280-160190-A-29-B DU		8330B, 8321A	T	10.43 g	40 mL		1 mL		
280-160190-A-29-C TRL		8330B, 8321A	T	10.15 g	40 mL		1 mL		
280-160190-A-30-A	29SB170 (14.5-15)	8330B, 8321A	T	10.33 g	40 mL		1 mL		
280-160190-A-31-A	29SB171 (3-4)	8330B, 8321A	T	10.3 g	40 mL		1 mL		
280-160190-A-32-A	29SB171 (6-7)	8330B, 8321A	T	10.05 g	40 mL		1 mL		
280-160190-A-33-A	29SB171 (11-12)	8330B, 8321A	T	10.13 g	40 mL		1 mL		
280-160190-A-34-A	29SB171 (14.5-15)	8330B, 8321A	T	10.5 g	40 mL		1 mL		
280-160190-A-35-A	DUP-08	8330B, 8321A	T	10.45 g	40 mL		1 mL		
280-160190-A-36-A	29SB174 (3-4)	8330B, 8321A	T	10.7 g	40 mL		1 mL		
280-160190-A-37-A	29SB174 (6-7)	8330B, 8321A	T	10.37 g	40 mL		1 mL		
280-160190-A-38-A	29SB174 (11-12)	8330B, 8321A	T	10.23 g	40 mL		1 mL		
280-160190-A-39-A	29SB174 (14.5-15)	8330B, 8321A	T	10.21 g	40 mL		1 mL		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Batch Number: 571022 Batch Start Date: 04/06/22 18:23 Batch Analyst: Holahan, Thomas E

Batch Method: 8330B Batch End Date: 04/07/22 15:46

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8321ExplosLCS 00049	8321ExplosSur 00059	8330 GrindLCS 00339	
280-160190-A-40-A	29SB190 (3-4)	8330B, 8321A	T	10.11 g	40 mL		1 mL		
280-160190-A-41-A	29SB190 (19-20)	8330B, 8321A	T	10.34 g	40 mL		1 mL		
280-160190-A-42-A	29SB192 (7-8)	8330B, 8321A	T	10.36 g	40 mL		1 mL		
280-160190-A-43-A	29SB192 (11-12)	8330B, 8321A	T	10.09 g	40 mL		1 mL		
280-160190-A-44-A	29SB192 (15-16)	8330B, 8321A	T	10.66 g	40 mL		1 mL		
280-160190-A-45-A	29SB192 (19-20)	8330B, 8321A	T	10.21 g	40 mL		1 mL		
280-160190-A-46-A	DUP-09	8330B, 8321A	T	10.52 g	40 mL		1 mL		
280-160190-A-47-A	29SB193 (7-8)	8330B, 8321A	T	10.75 g	40 mL		1 mL		

Batch Notes	
Solvent Name	0.1%AAinACN
Solvent Lot #	0.1%AAinACN_00181
Prep Solvent Volume Used	20 mL
Analyst ID - Reagent Drop Witness	Reviewer: DL
Analyst ID - Concentration	TH
Balance ID	C33519
Blank Sand Lot #	210301
Pipette ID for Solvent	Firine
Pipette ID	Tia
Sonication Start Time	18:46
Sonication Stop Time	12:46
Filter Type	0.2 um
Filter ID	R1EB03381
Date Sample was Dried	570112
Date Sample was Ground	570112
SOP Number	DV-OP-0018

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.

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Batch Number: 571022 Batch Start Date: 04/06/22 18:23 Batch Analyst: Holahan, Thomas E

Batch Method: 8330B Batch End Date: 04/07/22 15:46

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.

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Batch Number: 571024 Batch Start Date: 04/06/22 18:20 Batch Analyst: Holahan, Thomas E

Batch Method: 8330B Batch End Date: 04/07/22 16:18

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8321ExplosLCS 00049	8321ExplosSur 00059	8330 GrindLCS 00339	
MB 280-571024/1		8330B, 8321A		10 g	40 mL		1 mL		
LCS 280-571024/2		8330B, 8321A		10 g	40 mL	1 mL	1 mL		
LCSD 280-571024/3		8330B, 8321A		10 g	40 mL	1 mL	1 mL		
GB 280-570111/1-A		8330B, 8321A		10.4 g	40 mL		1 mL		
LCSSRM 280-570111/2-A		8330B, 8321A		10.12 g	40 mL		1 mL	10.12 g	
280-160190-A-8-A	DUP-05	8330B, 8321A	T	10.55 g	40 mL		1 mL		
280-160190-A-9-A	29SB167 (3-4)	8330B, 8321A	T	10.36 g	40 mL		1 mL		
280-160190-A-10-A	29SB167 (6-7)	8330B, 8321A	T	10.25 g	40 mL		1 mL		
280-160190-A-11-A	29SB167 (11-12)	8330B, 8321A	T	10.33 g	40 mL		1 mL		
280-160190-A-12-A	29SB167 (14.5-15)	8330B, 8321A	T	10.59 g	40 mL		1 mL		
280-160190-A-13-A	DUP-06	8330B, 8321A	T	10.15 g	40 mL		1 mL		
280-160190-A-14-A	29SB176 (14.5-15)	8330B, 8321A	T	10.23 g	40 mL		1 mL		
280-160190-A-15-A	29SB179 (14.5-15)	8330B, 8321A	T	10.08 g	40 mL		1 mL		
280-160190-A-16-A	29SB178 (14.5-15)	8330B, 8321A	T	10.35 g	40 mL		1 mL		
280-160190-A-17-A	29SB177 (14.5-15)	8330B, 8321A	T	10.29 g	40 mL		1 mL		
280-160190-A-18-A	29SB168 (3-4)	8330B, 8321A	T	10.27 g	40 mL		1 mL		
280-160190-A-19-A	29SB168 (6-7)	8330B, 8321A	T	10.73 g	40 mL		1 mL		
280-160190-A-19-B MS	29SB168 (6-7)	8330B, 8321A	T	10.58 g	40 mL	1 mL	1 mL		
280-160190-A-19-C MSD	29SB168 (6-7)	8330B, 8321A	T	10.33 g	40 mL	1 mL	1 mL		
280-160190-A-19-D DU	29SB168 (6-7)	8330B, 8321A	T	10.72 g	40 mL		1 mL		
280-160190-A-19-E TRL	29SB168 (6-7)	8330B, 8321A	T	10.31 g	40 mL		1 mL		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Batch Number: 571024 Batch Start Date: 04/06/22 18:20 Batch Analyst: Holahan, Thomas E

Batch Method: 8330B Batch End Date: 04/07/22 16:18

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8321ExplosLCS 00049	8321ExplosSur 00059	8330 GrindLCS 00339	
280-160190-A-20-A	29SB168 (11-12)	8330B, 8321A	T	10.49 g	40 mL		1 mL		
280-160190-A-21-A	29SB168 (14.5-15)	8330B, 8321A	T	10.62 g	40 mL		1 mL		
280-160190-A-22-A	29SB169 (3-4)	8330B, 8321A	T	10.42 g	40 mL		1 mL		
280-160190-A-23-A	29SB169 (6-7)	8330B, 8321A	T	10.07 g	40 mL		1 mL		
280-160190-A-24-A	29SB169 (11-12)	8330B, 8321A	T	10.33 g	40 mL		1 mL		
280-160190-A-25-A	29SB169 (14.5-15)	8330B, 8321A	T	10.72 g	40 mL		1 mL		
280-160190-A-26-A	DUP-07	8330B, 8321A	T	10.84 g	40 mL		1 mL		
280-160190-A-27-A	29SB170 (3-4)	8330B, 8321A	T	10.26 g	40 mL		1 mL		

Batch Notes	
Solvent Name	0.1%AAinACN
Solvent Lot #	0.1%AAinACN_00181
Prep Solvent Volume Used	20 mL
Analyst ID - Reagent Drop Witness	Reviewer: DL
Analyst ID - Concentration	TH
Balance ID	C33519
Blank Sand Lot #	210301
Pipette ID for Solvent	Firine
Pipette ID	Tia
Sonication Start Time	18:46
Sonication Stop Time	12:46
Filter Type	0.2 um
Filter ID	R1EB03381
Date Sample was Dried	570111
Date Sample was Ground	570111
SOP Number	DV-OP-0018

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.

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Batch Number: 571024 Batch Start Date: 04/06/22 18:20 Batch Analyst: Holahan, Thomas E

Batch Method: 8330B Batch End Date: 04/07/22 16:18

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.

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Batch Number: 571025 Batch Start Date: 04/06/22 18:17 Batch Analyst: Holahan, Thomas E

Batch Method: 8330B Batch End Date: 04/07/22 16:32

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8321ExplosLCS 00049	8321ExplosSur 00058	8330 GrindLCS 00339	
MB 280-571025/1		8330B, 8321A		10 g	40 mL		1 mL		
LCS 280-571025/2		8330B, 8321A		10 g	40 mL	1 mL	1 mL		
LCSD 280-571025/3		8330B, 8321A		10 g	40 mL	1 mL	1 mL		
GB 280-570115/1-A		8330B, 8321A		10.6 g	40 mL		1 mL		
LCSSRM 280-570115/2-A		8330B, 8321A		10.53 g	40 mL		1 mL	10.53 g	
280-160190-A-48 -A	29SB193 (11-12)	8330B, 8321A	T	10.19 g	40 mL		1 mL		
280-160190-A-49 -A	29SB193 (15-16)	8330B, 8321A	T	10.08 g	40 mL		1 mL		
280-160190-A-50 -A	29SB193 (19-20)	8330B, 8321A	T	10.49 g	40 mL		1 mL		
280-160190-A-51 -A	DUP-10	8330B, 8321A	T	10.15 g	40 mL		1 mL		
280-160190-A-52 -A	29SB203 (3-4)	8330B, 8321A	T	10.57 g	40 mL		1 mL		
280-160190-A-52 -B MS	29SB203 (3-4)	8330B, 8321A	T	10.13 g	40 mL	1 mL	1 mL		
280-160190-A-52 -C MSD	29SB203 (3-4)	8330B, 8321A	T	10.39 g	40 mL	1 mL	1 mL		
280-160190-A-52 -D DU		8330B, 8321A	T	10.18 g	40 mL		1 mL		
280-160190-A-52 -E TRL		8330B, 8321A	T	10.37 g	40 mL		1 mL		
280-160190-A-53 -A	29SB203 (7-8)	8330B, 8321A	T	10.25 g	40 mL		1 mL		
280-160190-A-54 -A	29SB204 (3-4)	8330B, 8321A	T	10.52 g	40 mL		1 mL		
280-160190-A-55 -A	29SB204 (7-8)	8330B, 8321A	T	10.34 g	40 mL		1 mL		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

LCMS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-160190-1

SDG No.:

Batch Number: 571025 Batch Start Date: 04/06/22 18:17 Batch Analyst: Holahan, Thomas E

Batch Method: 8330B Batch End Date: 04/07/22 16:32

Batch Notes	
Solvent Name	0.1%AAinACN
Solvent Lot #	0.1%AAinACN_00181
Prep Solvent Volume Used	20 mL
Analyst ID - Reagent Drop Witness	Reviewer: DL
Analyst ID - Concentration	TH
Balance ID	C33519
Blank Sand Lot #	210301
Pipette ID for Solvent	Firine
Pipette ID	Tia
Sonication Start Time	18:46
Sonication Stop Time	12:46
Filter Type	0.2 um
Filter ID	R1EB03881
Date Sample was Dried	570115
Date Sample was Ground	570115
SOP Number	DV-OP-0018

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

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Phone (303) 431-7171

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler:	Lab PM: Rydberg, Donna R	Carrier Tracking No(s):	COC No: 280-118117-33317.7
Client Contact: Lynn Lutz	Phone:	E-Mail: Donna.Rydberg@Eurofinset.com	State of Origin:	Page: Page ~~7 of 13~~ 6 of 11
Company: HDR Inc	PWSID:	Analysis Requested		Job #:
Address: 369 Inverness Parkway Suite 325	Due Date Requested:			Preservation Codes:
City: Englewood	TAT Requested (days):			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: CO, 80112	Compliance Project: Δ Yes Δ No			
Phone: 720-633-2380(Tel)	PO #: 1000300001807			Other:
Email: Lynn.Lutz@hdrinc.com	WO #:			
Project Name: Longhorn AAP, TX	Project #: 28022219			
Site:	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8321A_EXP_DOD5 - Explosives	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
295B 173 (14.5 - 15)	3/24/22	0914		Solid					
295B 181 (14.5 - 15)	3/24/22	0930		Solid					
295B 182 (14.5 - 15)	3/24/22	0940		Solid					
295B 175 (3 - 4)	3/24/22	0955		Solid					
295B 175 (6 - 7)	3/24/22	0957		Solid					
295B 175 (11 - 12)	3/24/22	0958		Solid					
295B 175 (14.5 - 15)	3/24/22	1000		Solid					
DUP - 05	3/24/22	1200		Solid					
295B 167 (3-4)	3/24/22	1030		Solid					
295B 167 (6-7)	3/24/22	1032		Solid					
295B 167 (11-12)	3/24/22	1033		Solid					

280-160190 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	AUS	3/24/22 1830		FedEx	3/24/22 1830	
2	FedEx	3/25/22			3/25/22 1120	FEDEX
3						

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 1.3, 1.3 IR12 CF+0.1

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Phone (303) 431-7171

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler:	Lab PM: Rydberg, Donna R	Carrier Tracking No(s):	COC No: 280-118117-33317.7
Client Contact: Lynn Lutz	Phone:	E-Mail: Donna.Rydberg@Eurofinset.com	State of Origin:	Page: Page 7 of ~~8~~ 11
Company: HDR Inc	PWSID:			Job #:
Address: 369 Inverness Parkway Suite 325	Due Date Requested:			
City: Englewood	TAT Requested (days):			
State, Zip: CO, 80112	Compliance Project: Δ Yes Δ No			
Phone: 720-633-2380(Tel)	PO #: 1000300001807			
Email: Lynn.Lutz@hdrinc.com	WO #:			
Project Name: Longhorn AAP, TX	Project #: 28022219			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8321A_EXP_DOD5 - Explosives	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
295B167 (14.5-15)	3/24/22	1034		Solid					
DUP-06	3/24/22	1210		Solid					
295B176 (14.5-15)	~~3/24/22~~ AB 3/24/22	1050		Solid					
295B179 (14.5-15)	3/24/22	1105		Solid					
295B178 (14.5-15)	3/24/22	1140		Solid					
295B177 (14.5-15)	3/24/22	1150		Solid					
295B168 (3-4)	3/24/22	1155		Solid					
295B168 (6-7)	3/24/22	1158		Solid					MS/MSD
295B168 (11-12)	3/24/22	1202		Solid					
295B168 (14.5-15)	3/24/22	1204		Solid					
295B169 (3-4)	3/24/22	1211		Solid					

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: AB	Date/Time: 3/24/22 1830	Company	Received by: FedEx	Date/Time: 3/24/22 ~~1830~~ 1830	Company
Relinquished by: FedEx	Date/Time:	Company	Received by:	Date/Time: 3/25/22 1120	Company ETA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Phone (303) 431-7171

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler:	Lab PM: Rydberg, Donna R	Carrier Tracking No(s):	COC No: 280-118117-33317.7
Client Contact: Lynn Lutz	Phone:	E-Mail: Donna.Rydberg@Eurofinset.com	State of Origin:	Page: Page ~~7 of 13~~ 8 of 11
Company: HDR Inc	PWSID:	Analysis Requested		Job #:
Address: 369 Inverness Parkway Suite 325	Due Date Requested:			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
City: Englewood	TAT Requested (days):			
State, Zip: CO, 80112	Compliance Project: Δ Yes Δ No			
Phone: 720-633-2380(Tel)	PO #: 1000300001807			Other:
Email: Lynn.Lutz@hdrinc.com	WO #:			
Project Name: Longhorn AAP, TX	Project #: 28022219			
Site:	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8321A_EXP_DOD5 - Explosives	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
295B169 (6-7)	3/24/22	1213		Solid					
295B169 (11-12)	3/24/22	1215		Solid					
295B169 (14.5-15)	3/24/22	1217		Solid					
DUP-07	3/24/22	1300		Solid					
295B170 (3-4)	3/24/22	1230		Solid					
295B170 (6-7)	3/24/22	1235		Solid					
295B170 (11-12)	3/24/22	1237		Solid					
295B170 (14.5-15)	3/24/22	1240		Solid					
295B171 (3-4)	3/24/22	1248		Solid					
295B171 (6-7)	3/24/22	1250		Solid					
295B171 (11-12)	3/24/22	1252		Solid					

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	AM	3/24/22 1830		FedEx	3/24/22 1830	
	Relinquished by: FedEx	Date/Time:	Company	Received by:	Date/Time: 3/25/22 1120	Company EDADEN
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Phone (303) 431-7171

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler:	Lab PM: Rydberg, Donna R	Carrier Tracking No(s):	COC No: 280-118117-33317.7
Client Contact: Lynn Lutz	Phone:	E-Mail: Donna.Rydberg@Eurofinset.com	State of Origin:	Page: ~~Page 7 of 13~~ 9 of 11
Company: HDR Inc	PWSID:			Job #:
Address: 369 Inverness Parkway Suite 325	Due Date Requested:			
City: Englewood	TAT Requested (days):			
State, Zip: CO, 80112	Compliance Project: Δ Yes Δ No			
Phone: 720-633-2380(Tel)	PO #: 1000300001807			
Email: Lynn.Lutz@hdrinc.com	WO #:			
Project Name: Longhorn AAP, TX	Project #: 28022219			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8321A_EXP_DOD5 - Explosives	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
295B 171 (14.5-15)	3/24/22	1254		Solid					
DUP-08	3/24/22	1400		Solid					
295B 174 (3-4)	3/24/22	1310		Solid					
295B 174 (6-7)	3/24/22	1311		Solid					
295B 174 (11-12)	3/24/22	1312		Solid					
295B 174 (14.5-15)	3/24/22	1315		Solid					
295B 190 (3-4)	3/24/22	1355		Solid					
295B 190 (19-20)	3/24/22	1405		Solid					
295B 192 (7-8)	3/24/22	1415		Solid					
295B 192 (11-12)	3/24/22	1420		Solid					
295B 192 (15-16)	3/24/22	1425		Solid					

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: [signature]	Date/Time: 3/24/22 1830	Company	Received by: FedEx	Date/Time: 3/24/22 1830	Company	
Relinquished by: FedEx	Date/Time:	Company	Received by: [signature]	Date/Time: 3/25/22 1120	Company	ETADEN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Phone (303) 431-7171

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler:	Lab PM: Rydberg, Donna R	Carrier Tracking No(s):	COC No: 280-118117-33317.7
Client Contact: Lynn Lutz	Phone:	E-Mail: Donna.Rydberg@Eurofinset.com	State of Origin:	Page: ~~Page 7 of 13~~ 10 of 11
Company: HDR Inc	PWSID:			Job #:
Address: 369 Inverness Parkway Suite 325	Due Date Requested:			
City: Englewood	TAT Requested (days):			
State, Zip: CO, 80112	Compliance Project: Δ Yes Δ No			
Phone: 720-633-2380(Tel)	PO #: 1000300001807			
Email: Lynn.Lutz@hdrinc.com	WO #:			
Project Name: Longhorn AAP, TX	Project #: 28022219			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8321A_EXP_DOD5 - Explosives	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
295B192 (19-20)	3/24/22	1427		Solid					
DUP-09	3/24/22	1500		Solid					
295B193 (7-8)	3/24/22	1440		Solid					
295B193 (11-12)	3/24/22	1442		Solid					
295B193 (15-16)	3/24/22	1445		Solid					
295B193 (19-20)	3/24/22	1450		Solid					
DUP-10	3/24/22	1530		Solid					
295B203 (3-4)	3/24/22	1515		Solid					MS/MSD
295B203 (7-8)	3/24/22	1517		Solid					
295B204 (3-4)	3/24/22	1525		Solid					
295B204 (7-8)	3/24/22	1526		Solid					

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	3/24/22 1830		Fedex	3/24/22 1830	
2	FedEx			[signature]	3/25/22 1120	EMSL
3						

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Phone (303) 431-7171

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler:	Lab PM: Rydberg, Donna R	Carrier Tracking No(s):	COC No: 280-118117-33317.7
Client Contact: Lynn Lutz	Phone:	E-Mail: Donna.Rydberg@Eurofinset.com	State of Origin:	Page: ~~Page 7 of 13~~ 11 of 11
Company: HDR Inc	PWSID:	Analysis Requested		Job #:
Address: 369 Inverness Parkway Suite 325	Due Date Requested:			Preservation Codes:
City: Englewood	TAT Requested (days):			A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify) Other:
State, Zip: CO, 80112	Compliance Project: Δ Yes Δ No			
Phone: 720-633-2380(Tel)	PO #: 1000300001807			
Email: Lynn.Lutz@hdrinc.com	WO #:			
Project Name: Longhorn AAP, TX	Project #: 28022219			
Site:	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8321A_EXP_DOD5 - Explosives	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
EB-03	3/24/22	1600		Solid					
				Solid					
				Solid					
				Solid					
				Solid					
				Solid					
				Solid					
				Solid					
				Solid					
				Solid					
				Solid					

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For _____ Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
ACM	3/24/22 1830		FedEx	3/24/22 1830	
Relinquished by: FedEx	Date/Time:	Company	Received by:	Date/Time: 3/25/22 1120	Company EDAD
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 280-160190-1

Login Number: 160190
List Number: 1
Creator: Rydberg, Donna R

List Source: Eurofins Denver

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Attachment 6.
March 2022 Sample Rationale Tech Memo

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LHAAP-29 PDI Data Summary and Proposed New Field Work

A summary of sampling results from the March 3, 2021 LHAAP-29 field investigation and the Eurofins reanalysis of a select subset of those samples is presented in this memorandum. The data set was evaluated to identify areas where data gaps exist. New sample locations and depths are recommended to close the data gaps.

A total of 91 samples were sent for re-analysis using Method 8321A. In the original analysis, 86 samples were non-detects and 5 had positive results. Of the 86 samples with non-detects, 52 of the re-analyzed samples showed a positive detection. In this group of 52, three samples (29SB121, 29SB123 and 29SB151) were found to have concentrations of explosives (2,4-DNT and 2,6-DNT) that exceeded the GWP-Ind MSC. The original 5 samples with positive results again tested positive for explosives. The re-analysis confirmed two of the original samples with concentrations of explosives exceeded the GWP-Ind MSC. The relative percent difference was calculated for the confirmed positive results, which varied from 5.3 to 143 percent. In most cases, the re-analyzed results were lower than the originally detected concentration.

Initial field efforts will include determining depth to the water table, either through the installation of temporary piezometers or gauging of adjacent wells, if present, or a combination of both methods. Water table measurements will be used to determine the depth of proposed DPT borings and sample collection by defining the extent that GWP-Ind screening levels can be applied; that is, GWP-Ind's are not applicable to saturated soils and saturated soil will not be collected for analysis. Water table measurements will be collected at all areas of concern including Cooling Water Outfall / Ditch, North and South Cooling Water Lines, and Transite and Wooden TNT Wastewater Lines to determine practical depth to apply GWP-Ind screening levels.

Bldg. 812-F

Data Summary

Results from the 3 March PDI investigation revealed concentrations of explosives that exceeded the Texas Commission on Environmental Quality soil medium specific concentration for industrial use based on groundwater protection (MSC GWP-Ind) at 6 of the 8 borings where samples were collected. In most cases, each boring had multiple detections at various depths. Two borings (29SB121 and 29SB123) did not show explosives at concentrations above the method detection limit (MDL). Results from the March sampling event are provided in **Table 1**. Based on these results, all four sample depths from borings 29SB121 and 29SB123 were submitted to Euronfins/Test America for re-analysis using Method 8321A. Low concentrations of explosives were detected above the MDL in three of the 29SB121 samples and two from boring 29SB123. 2,4-Dinitrotoluene (2,4-DNT) was found to exceed the GWP-Ind MSC in 29SB121 at the 3 - 4 foot depth, while 2,6-DNT was found to exceed the GWP-Ind MSC in 29SB123 at the 15 – 16 foot depth. Based on this data, vertical and spatial extent of contamination has not been fully defined at 29SB123, while spatial extent at 29SB121 has not been defined. The Euronfins/Test America results are provided in **Table 2**.

Table 1. Bldg. 812-F March 2021 PDI Sample Results

Chemical Name	Sample ID	29SB118				29SB119				29SB120			
	Collection Date	3/2/2021				3/2/2021				3/2/2021			
	Depth Interval (ft bgs)	3-4	7-8	11-12	15-16	3-4	7-8	11-12	15-16	3-4	7-8	11-12	15-16
	LOQ (mg/kg)	0.393	0.405	0.406	0.399	0.397	0.402	0.409	0.391	0.393	0.401	0.388	0.415
	LOD (mg/kg)	0.196	0.202	0.203	0.200	0.198	0.201	0.205	0.196	0.197	0.201	0.194	0.207
	DL (mg/kg)	0.0981	0.101	0.101	0.0998	0.0992	0.100	0.102	0.0978	0.0983	0.100	0.0971	0.104
	Comparison Levels[1] (mg/kg)												
2,4,6-Trinitrotoluene (2,4,6-TNT)	4.7[a]/5.1[b]	<0.196 U	<0.202 U	<0.203 U	<0.200 U	1.04	<0.201 U	<0.205 U	<0.196 U	<0.197 U	0.296 J	<0.194 U	<0.207 U
2,4-Dinitrotoluene (2,4-DNT)	0.042	**0.258 J**	<0.202 U	<0.203 U	**0.132 J+**	**0.647**	<0.201 U	**0.548**	**0.763 J+**	**0.581**	**0.746**	**2.12**	**0.571**
2,6-Dinitrotoluene (2,6-DNT)	0.042	<0.196 U	<0.202 U	<0.203 U	<0.200 U	**0.0996 J**	<0.201 U	<0.205 U	**0.683 J+**	<0.197 U	<0.201 U	**0.45**	**0.135 J**

Chemical Name	Sample ID	29SB121				29SB122				29SB123			
	Collection Date	3/2/2021				3/2/2021				3/2/2021			
	Depth Interval (ft bgs)	3-4	7-8	11-12	15-16	3-4	7-8	11-12	15-16	2-3	7-8	11-12	15-16
	LOQ (mg/kg)	0.408	0.396	0.383	0.407	0.398	0.393	0.412	0.397	0.386	0.404	0.388	0.402
	LOD (mg/kg)	0.204	0.198	0.192	0.203	0.199	0.196	0.206	0.198	0.193	0.202	0.194	0.201
	DL (mg/kg)	0.102	0.0989	0.0958	0.102	0.0996	0.0982	0.103	0.0992	0.0964	0.101	0.0969	0.101
	Comparison Levels[1] (mg/kg)												
2,4,6-Trinitrotoluene (2,4,6-TNT)	4.7[a]/5.1[b]	<0.204 U	<0.198 U	<0.192 U	<0.203 U	<0.199 U	<0.196 U	<0.206 U	<0.198 U	<0.193 U	<0.202 U	<0.194 U	<0.201 U
2,4-Dinitrotoluene (2,4-DNT)	0.042	<0.204 U	<0.198 U	<0.192 U	<0.203 U	**0.418**	**0.43**	**0.609**	**4.78 J+**	<0.193 U	<0.202 U	<0.194 U	<0.201 U
2,6-Dinitrotoluene (2,6-DNT)	0.042	<0.204 U	<0.198 U	<0.192 U	<0.203 U	<0.199 U	<0.196 U	<0.206 U	**0.318 J+**	<0.193 U	<0.202 U	<0.194 U	<0.201 U

Chemical Name	Sample ID	29SB124				29SB125			
	Collection Date	3/2/2021				3/2/2021			
	Depth Interval (ft bgs)	3-4	7-8	11-12	15-16	3-4	6-7	11-12	15-16
	LOQ (mg/kg)	0.387	0.391	0.416	0.405	0.401	0.408	0.401	0.416
	LOD (mg/kg)	0.193	0.196	0.208	0.203	0.200	0.204	0.201	0.208
	DL (mg/kg)	0.0967	0.0978	0.104	0.101	0.100	0.102	0.100	0.104
	Comparison Levels[1] (mg/kg)								
2,4,6-Trinitrotoluene (2,4,6-TNT)	4.7[a]/5.1[b]	<0.193 U	<0.196 U	<0.208 U	<0.203 U	<0.200 U	<0.204 U	<0.201 U	<0.208 U
2,4-Dinitrotoluene (2,4-DNT)	0.042	<0.193 U	<0.196 U	<0.208 U	**5.78 J+**	<0.200 U	**0.201 J**	<0.201 U	**0.3 J**
2,6-Dinitrotoluene (2,6-DNT)	0.042	<0.193 U	<0.196 U	<0.208 U	**1.13 J+**	<0.200 U	<0.204 U	<0.201 U	<0.208 U

Notes:
1 = GWP-Ind Texas Commission on Environmental Quality soil medium specific concentration for industrial use based on groundwater protection
mg/kg = milligrams per kilogram
J+ = Estimated Biased High
J- = Estimated Biased Low
J = Estimated
<0.195 U = Nondetect
<0.195 UJ = Nondetect, LOD estimated
Shaded = Positive Detection
Bold = Exceeds Comparison Level

Table 2. Re-Analyzed Bldg. 812-F March 2021 PDI Sample Results

Eurofins Re-Analyses Results: Subset 1 & 2									
Explosive	Sample ID	29SB121				29SB123			
	Re-analyses Date	10/7/21	10/7/21	10/7/21	10/7/21	10/7/21	10/7/21	10/7/21	9/1/21
	Depth Interval (ft bgs)	3-4	7-8	11-12	15-16	2-3	7-8	11-12	15-16
	Comparison Level[1] (mg/kg)								
2,4,6-TNT	4.7[a]/5.1[b]	0.014 J	0.015 UJ	0.014 UJ	0.015 UJ	0.015 UJ	0.014 UJ	0.014 UJ	0.0066 J+
2,4-DNT	0.042	**0.068 J**	0.0081 J	0.027 UJ	0.0096 J	0.012 J	0.028 UJ	0.028 UJ	0.028 UJ
2,6-DNT	0.042	0.028 UJ	0.02 J	0.027 UJ	0.023 J	0.029 UJ	0.028 UJ	0.028 UJ	**0.047 J**

Notes:
1 = GWP-Ind Texas Commission on Environmental Quality soil medium specific concentration for industrial use based on groundwater protection
mg/kg = milligrams per kilogram
J+ = Estimated Biased High
J = Estimated
<0.015 UJ = Nondetect
Shaded = Positive Detection
Bold = Exceeds Comparison Level

Proposed New Field Work

Vertical extent of contamination has not been delineated at 7 borings including: 29SB118, 29SB119, 29SB120, 29SB122, 29SB123, 29SB124, and 29SB125. To define vertical extent (i.e., total unsaturated soil depth), one boring would be co-located with the former boring locations and one sample collected from 19 – 20 feet below ground surface (ft bgs) and analyzed for explosives using Method 8321A. All eight borings, at various depths, showed explosives concentrations that exceeded the GWP-Ind MSC in the original lab results and re-analysis. As such, the spatial extent has not been fully delineated. To determine spatial extent, nine additional borings would be located 15 to 20 ft outside the "grid" established for the March 2021 PDI investigation. Eight borings would be located outside of borings 29SB118, 29SB119, 29SB120, 29SB122, 29SB123, 29SB124, and 29SB125 to the northeast, southeast, and southwest and samples collected at 3 - 4, 6 - 7, 11 - 12, 15 - 16 and 19 - 20 ft bgs. New borings offset from 29SB119, 29SB120, and 29SB122 will be moved to 20 ft and closer to the former Building 812-F. These borings generally had higher concentrations of explosives. One boring would be located 15 ft to the northwest of 29SB121 and have three samples collected at 3 - 4, 7 - 8, and 11 – 12 ft bgs and analyzed for explosives. The total depth of each boring and sample collection will be dependent on water table elevation.

Total of 16 additional borings; 15 to total depth of 20 ft bgs dependent on water table elevation and one to a total depth of 12 ft bgs dependent on water table elevation.
50 samples for explosive analyses.
Figure 1 provides proposed new DPT locations.

Cooling Water Outfall / Ditch "B" and "C"

Data Summary

Results from the 3 March PDI investigation at the "B" location revealed concentrations of explosives that exceeded the GWP-Ind MSC at 2 of the 8 borings where samples were collected. Only one boring had multiple detections at various depths (29SB129), while the second boring (29SB126) had a single detection exceeding the GWP-Ind MSC. The remaining borings did not show explosives at concentrations above the MDL. Results from the March sampling event are provided in **Table 3**. Based on these results, samples from 6 borings were submitted to Euronfins/Test America for re-analysis using Method 8321A to either confirm results greater than the original lab MDL or where the result was a non-detect. Borings and samples included 29SB126 (3 – 4, 5 – 6 ft bgs), 29SB127 (1 – 2 ft bgs), 29SB128 (1 – 2 ft bgs), 29SB129 (5 – 6 ft bgs), 12SB130 (1 – 2 ft bgs), and 29SB132 (1 – 2 ft bgs). Low concentrations of explosives below the GWP-Ind MSC were detected in boring 29SB121 at the 3 -4 ft bgs sample depth, while the 5 – 6 ft bgs sample had no explosives detected above the MDL. Boring 29SB126 had low concentrations of 2,4,6-TNT, 2,4-DNT, and 2,6-DNT below the GWP-Ind, which defines vertical extent. Boring 29SB128 had a single detection of 2,4,6-TNT at the 1 – 2 ft bgs sample depth, which previously was reported as below the MDL. Boring 29SB129 had detections of 2,4,6-TNT, 2,4-DNT, and 2,6-DNT at concentrations exceeding the GWP-Ind MSC. Based on the re-analysis data, vertical and spatial extent of contamination has not been fully defined at/surrounding boring 29SB129, while spatial extent has not fully been delineated around 29SB126 at 1 – 2 ft bgs interval. At the "C" location, original sample results did not reveal any detections greater than the MDL. Samples were not selected from this area for re-analysis. After further review of historic data, sample 29SB15 (collected in 2005), which was located to the northeast across the road from area "C", contained 2,4,6-TNT concentrations of 110 mg/kg (0 – 2 ft bgs) and 54 mg/kg (5 – 7 ft bgs). Vertical extent will need to be defined at sample location 29SB15 and further down gradient to define spatial extent. No other data gaps are apparent based on historic, March 2021, and the re-analyzed data. The Eurofins/Test America sample results, which closely matched the original lab results, are provided in **Table 4**.

Table 3. Cooling Water Outfall / Ditch March 2021 PDI Sample Results

Chemical Name	Sample ID	29SB126				29SB127				29SB128			
	Collection Date	3/2/2021				3/3/2021				3/3/2021			
	Depth Interval (ft bgs)	1-2	3-4	5-6	7-8	1-2	3-4	5-6	7-8	1-2	3-4	5-6	7-8
	LOQ (mg/kg)	0.394	0.402	0.418	0.409	0.382	0.389	0.406	0.389	0.403	0.393	0.396	0.419
	LOD (mg/kg)	0.197	0.201	0.209	0.204	0.191	0.195	0.203	0.194	0.202	0.197	0.198	0.209
	DL (mg/kg)	0.0985	0.101	0.104	0.102	0.0954	0.0973	0.101	0.0972	0.101	0.0983	0.0989	0.105
	Comparison Levels[1] (mg/kg)												
2,4,6-Trinitrotoluene (2,4,6-TNT)	4.7[a]/5.1[b]	<0.197 UJ	<0.201 UJ	<0.209 UJ	<0.204 UJ	<0.191 UJ	<0.195 UJ	<0.203 UJ	<0.194 UJ	<0.202 UJ	<0.197 UJ	<0.198 UJ	<0.209 UJ
2,4-Dinitrotoluene (2,4-DNT)	0.042	<0.197 UJ	<0.201 UJ	<0.209 UJ	<0.204 UJ	<0.191 UJ	<0.195 UJ	<0.203 UJ	<0.194 UJ	<0.202 UJ	<0.197 UJ	<0.198 UJ	<0.209 UJ
2,6-Dinitrotoluene (2,6-DNT)	0.042	**0.178 J**	<0.201 UJ	<0.209 UJ	<0.204 UJ	<0.191 UJ	<0.195 UJ	<0.203 UJ	<0.194 UJ	<0.202 UJ	<0.197 UJ	<0.198 UJ	<0.209 UJ

Chemical Name	Sample ID	29SB129				29SB130				29SB131			
	Collection Date	3/2/2021				3/2/2021				3/2/2021			
	Depth Interval (ft bgs)	1-2	3-4	5-6	7-8	1-2	3-4	5-6	7-8	1-2	3-4	5-6	7-8
	LOQ (mg/kg)	0.409	0.382	0.410	0.387	0.384	0.391	0.399	0.393	0.393	0.402	0.419	0.399
	LOD (mg/kg)	0.205	0.191	0.205	0.193	0.192	0.196	0.199	0.197	0.197	0.201	0.210	0.200
	DL (mg/kg)	0.102	0.0956	0.102	0.0967	0.0960	0.0978	0.0997	0.0983	0.0983	0.101	0.105	0.0998
	Comparison Levels[1] (mg/kg)												
2,4,6-Trinitrotoluene (2,4,6-TNT)	4.7[a]/5.1[b]	<0.205 U	**5.13 J+**	**23.2 J+**	2.72 J+	<0.192 UJ	<0.196 UJ	<0.199 UJ	<0.197 UJ	<0.197 UJ	<0.201 UJ	<0.210 UJ	<0.200 UJ
2,4-Dinitrotoluene (2,4-DNT)	0.042	<0.205 U	**1.45 J+**	**212**	**6.7 J+**	<0.192 UJ	<0.196 UJ	<0.199 UJ	<0.197 UJ	<0.197 UJ	<0.201 UJ	<0.210 UJ	<0.200 UJ
2,6-Dinitrotoluene (2,6-DNT)	0.042	<0.205 U	**21.3 J+**	**108**	**58.3**	<0.192 UJ	<0.196 UJ	<0.199 UJ	<0.197 UJ	<0.197 UJ	<0.201 UJ	<0.210 UJ	<0.200 UJ

Chemical Name	Sample ID	29SB132				29SB133			
	Collection Date	3/2/2021				3/2/2021			
	Depth Interval (ft bgs)	1-2	3-4	5-6	7-8	1-2	3-4	5-6	7-8
	LOQ (mg/kg)	0.408	0.383	0.402	0.404	0.387	0.393	0.407	0.405
	LOD (mg/kg)	0.204	0.192	0.201	0.202	0.193	0.196	0.203	0.202
	DL (mg/kg)	0.102	0.0958	0.100	0.101	0.0967	0.0982	0.102	0.101
	Comparison Levels[1] (mg/kg)								
2,4,6-Trinitrotoluene (2,4,6-TNT)	4.7[a]/5.1[b]	<0.204 UJ	<0.192 UJ	<0.201 UJ	<0.202 UJ	<0.193 UJ	<0.196 UJ	<0.203 UJ	<0.206 UJ
2,4-Dinitrotoluene (2,4-DNT)	0.042	<0.204 UJ	<0.192 UJ	<0.201 UJ	<0.202 UJ	<0.193 UJ	<0.196 UJ	<0.203 UJ	<0.206 UJ
2,6-Dinitrotoluene (2,6-DNT)	0.042	<0.204 UJ	<0.192 UJ	<0.201 UJ	<0.202 UJ	<0.193 UJ	<0.196 UJ	<0.203 UJ	<0.206 UJ

Notes:
1 = GWP-Ind Texas Commission on Environmental Quality soil medium specific concentration for industrial use based on groundwater protection
mg/kg = milligrams per kilogram
a = applies to 0-3 feet below ground surface
b = applies from 3 feet below ground surface to groundwater interface
J+ = Estimated Biased High
J = Estimated
<0.195 UJ = Nondetect
Shaded = Positive Detection
Bold = Exceeds Comparison Level

Table 4. Re-Analyzed Cooling Water Outfall / Ditch March 2021 PDI Sample Results

Eurofins Re-Analyses Results: Subset 1 & 2								
Explosive	Sample ID	29SB126		29SB127	29SB128	29SB129	29SB130	29SB132
	Re-analyses Date	10/7/21	10/7/21	10/7/21	10/7/21	10/7/21	10/7/21	10/7/21
	Depth Interval (ft bgs)	3-4	5-6	1-2	1-2	5-6	1-2	1-2
	Comparison Level (mg/kg)							
2,4,6-TNT	4.7[a]/5.1[b]	0.011 J	0.015 UJ	0.015 UJ	0.0097 J	**22 J**	0.014 UJ	0.015 UJ
2,4-DNT	0.042	0.0088 J	0.029 UJ	0.029 UJ	0.029 UJ	**180 J**	0.029 UJ	0.029 UJ
2,6-DNT	0.042	0.022 J	0.029 UJ	0.029 UJ	0.029 UJ	**130 J**	0.029 UJ	0.029 UJ

Notes:
1 = GWP-Ind Texas Commission on Environmental Quality soil medium specific concentration for industrial use based on groundwater protection
mg/kg = milligrams per kilogram
a = applies to 0-3 feet below ground surface
b = applies from 3 feet below ground surface to groundwater interface
J = Estimated
0.15 UJ = Nondetect
Shaded = Positive Detection
Bold = Exceeds Comparison Level

Proposed New Field Work:

Vertical and spatial extent of contamination at/around boring 29SB129 has not been fully delineated. To capture vertical extent, one boring would be co-located with the former boring location and advanced to 12 ft bgs. Samples would be collected at 9 – 10 ft bgs and 11 – 12 ft bgs. Two additional borings would be located 10 ft to either side of 29SB129 to define spatial extent with samples collected at depths of 3 – 4 ft bgs, 7 – 8, and 11- 12 ft bgs. One boring would also be located 5 ft down gradient of 29SB126 to define spatial extent with samples collected 1 – 2 ft bgs and 3 – 4 ft bgs.

Down gradient of the C location and across the road, one sample would be co-located with historic sample 29SB15 to define vertical extent with a sample collected from 7 – 9 ft bgs. Two additional borings would be located adjacent to shallow groundwater monitoring wells 29WW05 and 29WW116 where concentrations of nitrotoluenes in groundwater were found to exceed Residential Groundwater PCLs. Soil samples would be collected from each boring at 0 – 2 ft bgs, 5 – 7 ft bgs, 10 – 12, and just above the depth of the water table. All samples would be analyzed for explosives using Method 8321A. The total depth of each boring and sample collection will be dependent on water table elevation.

Total of 7 additional borings; one to total depth of 4 ft bgs, one to total depth of 9 ft bgs, three to total depth of 12 ft bgs and two to the top of water table elevation.
19 samples for explosive analyses.
Figure 2 provides proposed DPT locations.

North Cooling Water Line

Data Summary

Results from the 3 March PDI investigation revealed concentrations of explosives that exceeded the GWP-Ind MSC at 3 of the 8 borings where samples were collected. Two borings had multiple detections at various depths (29SB138 and 29SB143), while the third boring (29SB139) had a single detection exceeding the GWP-Ind MSC. Three borings (29SB142, 29SB146 and 29SB147) had detections of explosives but below the GWP-Ind MSC, while the remaining two borings (29Sb144 and 29SB145) had no detections of explosives. Results from the March sampling event are provided in **Table 5**. Based on these results, samples from 4 borings were submitted to Euronfins/Test America for re-analysis using Method 8321A to either confirm results greater than the original lab MDL or where the result was a non-detect. Borings and samples included 29SB144 (3 –

4, 7 – 8, 11 – 12, and 15 - 16 ft bgs), 29SB145 (3 – 4, 7 – 8, 11 – 12, and 15 - 16 ft bgs), 29SB146 (3 – 4, 7 – 8, and 11 – 12 ft bgs), and 29SB147 (3 – 4, 7 – 8, and 11 – 12 ft bgs). Low concentrations of explosives (mainly 2,4,6-TNT) were detected below the GWP-Ind MSC in every sample submitted. The Eurofins/Test America results are provided in **Table 6**.

Table 5. North Cooling Water Line March 2021 PDI Sample Results

Chemical Name	Sample ID	29SB138				29SB139				29SB142			
	Collection Date	3/8/2021				3/9/2021				3/8/2021			
	Depth Interval (ft bgs)	3-4	7-8	11-12	15-16	3-4	7-8	11-12	15-16	3-4	7-8	11-12	15-16
	LOQ (mg/kg)	0.397	0.399	0.388	0.401	0.386	0.385	0.392	0.404	0.390	0.392	0.411	0.407
	LOD (mg/kg)	0.199	0.199	0.194	0.200	0.193	0.192	0.196	0.202	0.195	0.196	0.205	0.203
	DL (mg/kg)	0.0993	0.0997	0.0970	0.100	0.0966	0.0962	0.0979	0.101	0.0976	0.0980	0.103	0.102
	Comparison Levels[1] (mg/kg)												
2,4,6-Trinitrotoluene (2,4,6-TNT)	4.7[a]/5.1[b]	<0.199 U	<0.199 U	**9.14 J-**	**7.34 J-**	**97.6**	4.56 J-	<0.196 U	0.300 J	2.32 J-	3.24 J-	2.77 J-	0.626 J-
2,4-Dinitrotoluene (2,4-DNT)	0.042	<0.199 U	<0.199 U	<0.194 U	<0.200 U	<0.193 U	<0.192 U	<0.196 U	<0.202 U	<0.195 U	<0.196 U	<0.205 U	<0.203 UJ
2,6-Dinitrotoluene (2,6-DNT)	0.042	<0.199 U	<0.199 U	<0.194 UJ	<0.200 UJ	<0.193 U	<0.192 U	<0.196 U	<0.202 U	<0.195 UJ	<0.196 UJ	<0.205 UJ	<0.203 UJ

Chemical Name	Sample ID	29SB143				29SB144				29SB145			
	Collection Date	3/8/2021				3/8/2021				3/8/2021			
	Depth Interval (ft bgs)	3-4	7-8	11-12	15-16	3-4	7-8	11-12	15-16	3-4	7-8	11-12	15-16
	LOQ (mg/kg)	0.388	0.398	0.393	0.394	0.407	0.418	0.389	0.416	0.413	0.409	0.412	0.388
	LOD (mg/kg)	0.194	0.199	0.196	0.197	0.203	0.209	0.194	0.208	0.207	0.204	0.206	0.194
	DL (mg/kg)	0.0970	0.0994	0.0981	0.0985	0.102	0.104	0.0972	0.104	0.103	0.102	0.103	0.0971
	Comparison Levels[1] (mg/kg)												
2,4,6-Trinitrotoluene (2,4,6-TNT)	4.7[a]/5.1[b]	**6.25 J-**	**5.57 J-**	**4.87 J-**	**26.6 J-**	<0.203 U	<0.209 U	<0.194 U	<0.208 U	<0.207 UJ	<0.204 UJ	<0.206 U	<0.194 U
2,4-Dinitrotoluene (2,4-DNT)	0.042	<0.194 U	<0.199 U	<0.196 U	<0.197 U	<0.203 U	<0.209 U	<0.194 U	<0.208 U	<0.207 U	<0.204 U	<0.206 U	<0.194 U
2,6-Dinitrotoluene (2,6-DNT)	0.042	<0.194 UJ	<0.199 UJ	<0.196 UJ	<0.197 UJ	<0.203 U	<0.209 U	<0.194 U	<0.208 U	<0.207 UJ	<0.204 UJ	<0.206 U	<0.194 U

Chemical Name	Sample ID	29SB146				29SB147			
	Collection Date	3/9/2021				3/9/2021			
	Depth Interval (ft bgs)	3-4	7-8	11-12	15-16	3-4	7-8	11-12	15-16
	LOQ (mg/kg)	0.388	0.420	0.415	0.419	0.403	0.398	0.400	0.414
	LOD (mg/kg)	0.194	0.210	0.207	0.209	0.201	0.199	0.200	0.207
	DL (mg/kg)	0.0969	0.105	0.104	0.105	0.101	0.0996	0.100	0.104
	Comparison Levels[1] (mg/kg)								
2,4,6-Trinitrotoluene (2,4,6-TNT)	4.7[a]/5.1[b]	<0.194 U	<0.210 U	<0.207 U	0.143 J	<0.201 U	<0.199 U	<0.200 U	0.319 J
2,4-Dinitrotoluene (2,4-DNT)	0.042	<0.194 U	<0.210 U	<0.207 U	<0.209 U	<0.201 U	<0.199 U	<0.200 U	<0.207 U
2,6-Dinitrotoluene (2,6-DNT)	0.042	<0.194 U	<0.210 U	<0.207 U	<0.209 U	<0.201 U	<0.199 U	<0.200 U	<0.207 U

Notes:
1 = GWP-Ind Texas Commission on Environmental Quality soil medium specific concentration for industrial use based on groundwater protection
mg/kg = milligrams per kilogram
J- = Estimated Biased Low
J = Estimated
<0.200 U = Nondetect
<0.015 UJ = Nondetect
Shaded = Positive Detection
Bold = Exceeds Comparison Level

Table 6. Re-Analyzed North Cooling Water Line March 2021 PDI Sample Results

Eurofins Re-Analyses Results: Subset 1 & 2									
Explosive	Sample ID	29SB144				29SB145			
	Re-analyses Date	10/7/21	10/7/21	10/7/21	9/1/21	10/7/21	10/7/21	10/7/21	9/1/21
	Depth Interval (ft bgs)	3-4	7-8	11-12	15-16	3-4	7-8	11-12	14-15
	Comparison Level (mg/kg)								
2,4,6-TNT	4.7[a]/5.1[b]	0.034 J	0.021 J	0.022 J	0.018 J	0.013 J	0.17 J	0.02 J	0.024 J
2,4-DNT	0.042	0.03 UJ	0.03 UJ	0.03 UJ	0.03 UJ	0.028 UJ	0.029 UJ	0.029 UJ	0.01 J
2,6-DNT	0.042	0.03 UJ	0.03 UJ	0.03 UJ	0.03 UJ	0.028 UJ	0.029 UJ	0.029 UJ	0.03 UJ

Notes:
1 = GWP-Ind Texas Commission on Environmental Quality soil medium specific concentration for industrial use based on groundwater protection
mg/kg = milligrams per kilogram
J = Estimated
<0.015 UJ = Nondetect
Shaded = Positive Detection
Bold = Exceeds Comparison Level

Table 6. Re-Analyzed North Cooling Water Line March 2021 PDI Sample Results

Eurofins Re-Analyses Results: Subset 1 & 2							
Explosive	Sample ID	29SB146			29SB147		
	Re-analyses Date	10/7/21	10/7/21	10/7/21	10/7/21	10/7/21	10/7/21
	Depth Interval (ft bgs)	3-4	7-8	11-12	3-4	7-8	11-12
	Comparison Level (mg/kg)						
2,4,6-TNT	4.7[a]/5.1[b]	*0.1 J*	*0.019 J*	*0.022 J*	*0.045 J*	*0.061 J*	*0.03 J*
2,4-DNT	0.042	0.028 UJ	0.029 UJ	0.03 UJ	0.029 UJ	0.029 UJ	0.028 UJ
2,6-DNT	0.042	0.028 UJ	0.029 UJ	0.03 UJ	0.029 UJ	0.029 UJ	0.028 UJ

Notes:
1 = GWP-Ind Texas Commission on Environmental Quality soil medium specific concentration for industrial use based on groundwater protection
mg/kg = milligrams per kilogram
J = Estimated
<0.015 UJ = Nondetect
Shaded = Positive Detection
Bold = Exceeds Comparison Level

Proposed New Field Work

Vertical extent of contamination at boring 29SB138 has not been fully delineated. To capture vertical extent, one boring would be co-located with the former boring location and advanced to 20 ft bgs. Samples would be collected at 3 - 4 ft bgs to confirm depth to initial subsurface contamination and at 19 – 20 ft bgs to define total vertical extent. A second boring would be co-located with former boring 29SB143 to define vertical extent with a sample collected at 19 - 20 ft bgs. All samples would be analyzed for explosives using Method 8321A. Two borings would also be located 10 ft on either side of 29SB138, 29SB139, and 29SB143 to identify contaminant spatial extent. Borings advanced adjacent to 29SB138 and 29SB143 would have samples collected from 7 – 8, 11 – 12, 15 – 16, and 19 – 20 ft bgs and analyzed for explosives using Method 8321A. The two borings advanced on either side of 29SB139 would have samples collected from 3 – 4 ft bgs and 7 – 8 ft bgs and analyzed for explosives using Method 8321A. No other borings are proposed. Re-analysis of samples from borings 29SB144, 29SB145, 29SB146, and 29SB147 confirm presence of explosives (mainly 2,4,6-TNT), but at levels below the GWP-Ind MSC. The total depth of each boring and sample collection will be dependent on water table elevation.

Total of 8 additional borings; 6 to a total depth of 20 ft bgs and two to 8 ft bgs. Depth of borings and sample collection dependent on water table elevations.

24 samples for explosive analyses.
Figure 3 provides proposed DPT locations.

South Cooling Water Line

Data Summary

Results from the 3 March PDI investigation revealed concentrations of explosives that exceeded the MDL at 1 of the 9 borings where samples were collected. Boring 29SB165 had a low hit of 2,4,6-TNT at the 15 – 16 foot interval. Samples from eight borings were submitted for re-analysis to Eurofins/Test America for explosives analysis using Method 8321A to either confirm results greater than the original lab MDL or where the result was a non-detect. Results from the March sampling event are provided in **Table 7**. Based on the re-analysis, 2,4,6-TNT was detected at four borings (29SB135, 29SB136, 29SB164, and 29SB165) at low concentrations. No other explosives were detected. The Eurofins/Test America results are provided in **Table 8**.

Table 7. South Cooling Water Line March 2021 PDI Sample Results

Chemical Name	Sample ID	29SB135				29SB136				29SB160			
	Collection Date	3/4/2021				3/4/2021				3/3/2021			
	Depth Interval (ft bgs)	3-4	7-8	11-12	15-16	3-4	7-8	11-12	15-16	3-4	7-8	11-12	15-16
	LOQ (mg/kg)	0.399	0.396	0.389	0.407	0.394	0.405	0.399	0.412	0.388	0.415	0.413	0.396
	LOD (mg/kg)	0.200	0.198	0.195	0.204	0.197	0.202	0.199	0.206	0.194	0.207	0.207	0.198
	DL (mg/kg)	0.0998	0.0990	0.0973	0.102	0.0985	0.101	0.0997	0.103	0.0970	0.104	0.103	0.0989
	Comparison Levels[1] (mg/kg)												
2,4,6-Trinitrotoluene (2,4,6-TNT)	4.7[a]/5.1[b]	<0.200 UJ	<0.198 U	<0.195 UJ	<0.204 UJ	<0.197 UJ	<0.202 UJ	<0.199 UJ	<0.206 UJ	<0.194 U	<0.207 U	<0.207 U	<0.198 U
2,4-Dinitrotoluene (2,4-DNT)	0.042	<0.200 UJ	<0.198 U	<0.195 UJ	<0.204 U	<0.197 U	<0.202 U	<0.199 U	<0.206 U	<0.194 U	<0.207 U	<0.207 U	<0.198 U
2,6-Dinitrotoluene (2,6-DNT)	0.042	<0.200 UJ	<0.198 U	<0.195 UJ	<0.204 UJ	<0.197 UJ	<0.202 UJ	<0.199 UJ	<0.206 UJ	<0.194 U	<0.207 U	<0.207 U	<0.198 U

Chemical Name	Sample ID	29SB161				29SB162				29SB163			
	Collection Date	3/4/2021				3/4/2021				3/4/2021			
	Depth Interval (ft bgs)	3-4	7-8	11-12	15-16	3-4	7-8	11-12	15-16	3-4	7-8	11-12	15-16
	LOQ (mg/kg)	0.406	0.398	0.407	0.407	0.396	0.419	0.392	0.389	0.395	0.407	0.412	0.400
	LOD (mg/kg)	0.203	0.199	0.203	0.203	0.198	0.209	0.196	0.195	0.197	0.204	0.206	0.200
	DL (mg/kg)	0.101	0.0995	0.102	0.102	0.0990	0.105	0.0979	0.0974	0.0987	0.102	0.103	0.100
	Comparison Levels[1] (mg/kg)												
2,4,6-Trinitrotoluene (2,4,6-TNT)	4.7[a]/5.1[b]	<0.203 U	<0.199 U	<0.203 U	<0.203 UJ	<0.198 UJ	<0.209 UJ	<0.196 UJ	<0.195 UJ	<0.197 UJ	<0.204 UJ	<0.206 UJ	<0.200 UJ
2,4-Dinitrotoluene (2,4-DNT)	0.042	<0.203 U	<0.199 U	<0.203 U	<0.203 UJ	<0.198 UJ	<0.209 UJ	<0.196 U	<0.195 UJ	<0.197 U	<0.204 U	<0.206 U	<0.200 U
2,6-Dinitrotoluene (2,6-DNT)	0.042	<0.203 U	<0.199 U	<0.203 U	<0.203 UJ	<0.198 UJ	<0.209 UJ	<0.196 UJ	<0.195 UJ	<0.197 UJ	<0.204 UJ	<0.206 UJ	<0.200 UJ

Chemical Name	Sample ID	29SB164				29SB165				29SB166			
	Collection Date	3/4/2021				3/9/2021				3/3/2021			
	Depth Interval (ft bgs)	3-4	7-8	11-12	15-16	3-4	7-8	11-12	15-16	3-4	7-8	11-12	15-16
	LOQ (mg/kg)	0.383	0.389	0.388	0.396	0.401	0.410	0.414	0.405	0.411	0.393	0.410	0.397
	LOD (mg/kg)	0.191	0.195	0.194	0.198	0.201	0.205	0.207	0.203	0.206	0.197	0.205	0.198
	DL (mg/kg)	0.0957	0.0973	0.0970	0.0990	0.100	0.103	0.103	0.101	0.103	0.0983	0.103	0.0992
	Comparison Levels[1] (mg/kg)												
2,4,6-Trinitrotoluene (2,4,6-TNT)	4.7[a]/5.1[b]	<0.191 UJ	<0.195 UJ	<0.194 UJ	<0.198 UJ	<0.201 U	<0.205 U	<0.207 U	0.252 J	<0.206 U	<0.197 U	<0.205 U	<0.198 U
2,4-Dinitrotoluene (2,4-DNT)	0.042	<0.191 UJ	<0.195 U	<0.194 U	<0.198 U	<0.201 U	<0.205 U	<0.207 U	<0.203 U	<0.206 U	<0.197 U	<0.205 U	<0.198 U
2,6-Dinitrotoluene (2,6-DNT)	0.042	<0.191 UJ	<0.195 UJ	<0.194 UJ	<0.198 UJ	<0.201 U	<0.205 U	<0.207 U	<0.203 U	<0.206 U	<0.197 U	<0.205 U	<0.198 U

Notes:
1 = GWP-Ind Texas Commission on Environmental Quality soil medium specific concentration for industrial use based on groundwater protection
mg/kg = milligrams per kilogram
J = Estimated
<0.205 U = Nondetect
<0.200 UJ = Nondetect
Shaded = Positive Detection
Bold = Exceeds Comparison Level

Table 8. Re-Analyzed South Cooling Water Line March 2021 PDI Sample Results

Eurofins Re-Analyses Results: Subset 1 & 2									
Explosive	Sample ID	29SB135	29SB136	29SB160			29SB161		
	Re-analyses Date	10/7/21	10/7/21	10/7/21	10/7/21	10/7/21	10/7/21	10/7/21	10/7/21
	Depth Interval (ft bgs)	15-16	15-16	7-8	11-12	15-16	7-8	11-12	15-16
	Comparison Level (mg/kg)								
2,4,6-TNT	4.7[a]/5.1[b]	0.0072 J+	0.0072 J+	0.015 UJ	0.015 UJ	0.015UJ	0.015 UJ	0.015 UJ	0.015 UJ
2,4-DNT	0.042	0.029 UJ	0.029 UJ	0.03 UJ	0.03 UJ	0.03 UJ	0.029 UJ	0.029 UJ	0.03 UJ
2,6-DNT	0.042	0.029 UJ	0.029 UJ	0.03 UJ	0.03 UJ	0.03 UJ	0.029 UJ	0.029 UJ	0.03 UJ

Eurofins Re-Analyses Results: Subset 1 & 2									
Explosive	Sample ID	29SB163			29SB164			29SB165	
	Re-analyses Date	10/7/21	10/7/21	10/7/21	10/7/21	10/7/21	10/7/21	10/7/21	10/7/21
	Depth Interval (ft bgs)	7-8	11-12	15-16	7-8	11-12	15-16	7-8	11-12
	Comparison Level (mg/kg)								
2,4,6-TNT	4.7[a]/5.1[b]	0.014 UJ	0.015 UJ	0.015 UJ	0.0096 J	0.014 UJ	0.015UJ	0.039 J	0.71 J
2,4-DNT	0.042	0.028 UJ	0.029 UJ	0.03 UJ	0.029 UJ	0.029 UJ	0.029 UJ	0.029 UJ	0.03 UJ
2,6-DNT	0.042	0.028 UJ	0.029 UJ	0.03 UJ	0.029 UJ	0.029 UJ	0.029 UJ	0.029 UJ	0.03 UJ

Table 8. Re-Analyzed South Cooling Water Line March 2021 PDI Sample Results

Eurofins Re-Analyses Results: Subset 1 & 2				
Explosive	Sample ID	29SB166		
	Re-analyses Date	10/7/21	10/7/21	10/7/21
	Depth Interval (ft bgs)	7-8	11-12	15-16
	Comparison Level (mg/kg)			
2,4,6-TNT	4.7/5.1	0.015 UJ	0.015 UJ	0.015 UJ
2,4-DNT	0.042	0.03 UJ	0.029 UJ	0.028 UJ
2,6-DNT	0.042	0.03 UJ	0.029 UJ	0.028 UJ

Notes:
1 = GWP-Ind Texas Commission on Environmental Quality soil medium specific concentration for industrial use based on groundwater protection
mg/kg = milligrams per kilogram
J+ = Estimated Biased High
<0.015 UJ = Nondetect
Shaded = Positive Detection
Bold = Exceeds Comparison Level

Proposed New Field Work

Depth to possible contamination at boring 29SB135 has not been fully determined, while the vertical extent has been defined. To capture depth to contamination, one boring would be co-located with the former boring location and advanced to 8 ft bgs. Samples would be collected at 3 - 4 ft bgs to confirm presence and depth to initial subsurface contamination, if present, and at 7 – 8 ft bgs to define total vertical extent, if present. A second boring would be co-located with former boring 29SB136 to define depth to contamination and vertical extent with samples collected at 3 - 4 and 7 – 8 ft bgs, respectfully. All samples would be analyzed for explosives using Method 8321A. No other borings are proposed. Re-analysis of samples from borings 29SB160, 29SB161, 29SB163, 29SB164, 29SB165, and 29SB166 confirm either absence or presence of low levels of explosives at levels below the GWP-Ind MSC. There are no data gaps associated with vertical extent. The total depth of each boring and sample collection will be dependent on water table elevation.

Total of 2 additional borings; two to total depth of 8 ft bgs dependent on depth to water table.

4 samples for explosive analyses.
Figure 4 provides proposed DPT locations.

Transite TNT Wastewater Line

Data Summary

Results from the 3 March PDI investigation revealed concentrations of explosives that exceeded the GWP-Ind MSC at 2 of the 8 borings where samples were collected. Boring 29SB137 had 2,4,6-TNT concentrations at 11 – 12 and 15 – 16 ft bgs and 29SB152 had high 2,4,6-TNT concentrations at the 3 – 4 ft bgs interval. The remaining six borings had non-detects for explosives in all samples collected. Results from the March sampling event are provided in **Table 9**. Based on these results, samples from 8 borings were submitted to Euronfins/Test America for re-analysis using Method 8321A to either confirm results greater than the original lab MDL or where the result was a non-detect. Borings and samples included 29SB137 (15 - 16 ft bgs), 29SB140 (3 – 4, 11 – 12, and 15 - 16 ft bgs), 29SB148 (3 – 4, 11 – 12, and 15 - 16 ft bgs), 29SB149 (3 – 4, 11 – 12, and 15 – 16 ft bgs), 29SB150 (3 – 4, 11 – 12, and 15 - 16 ft bgs), 29SB151 (3 – 4, 11 – 12, and 15 - 16 ft bgs), 29SB152 (11 – 12 and 15 - 16 ft bgs), and 29SB153 (3 – 4, 11 – 12, and 15 - 16 ft bgs). The re-analysis of the sample collected from 29SB137 confirmed high 2,4,6-TNT concentrations that exceed the GWP-Ind, in addition to a concentration of 2,4-DNT that exceeded the GWP-IND. Boring 29SB151 had a detection of 2,4-DNT at the 3 – 4 ft bgs interval that exceeded the GWP-Ind MSC. However, sample results for the lower intervals at 11 – 12 and 15 – 16 ft bgs were non-detect for explosives. The remaining boring samples showed concentrations of 2,4,6-TNT below the GWP-Ind MSC. The Eurofins/Test America results are provided in **Table 10**.

Table 9. Transite TNT Wastewater Line March 2021 PDI Sample Results

Chemical Name	Sample ID	29SB137				29SB140				29SB148			
	Collection Date	3/8/2021				3/4/2021				3/8/2021			
	Depth Interval (ft bgs)	3-4	7-8	11-12	15-16	3-4	7-8	11-12	15-16	3-4	7-8	11-12	15-16
	LOQ (mg/kg)	0.385	0.416	0.402	0.404	0.393	0.398	0.404	0.393	0.390	0.402	0.402	0.398
	LOD (mg/kg)	0.193	0.208	0.201	0.202	0.196	0.199	0.202	0.197	0.195	0.201	0.201	0.199
	DL (mg/kg)	0.0963	0.104	0.101	0.101	0.0981	0.0994	0.101	0.0983	0.0976	0.101	0.101	0.0995
	Comparison Levels[1] (mg/kg)												
2,4,6-Trinitrotoluene (2,4,6-TNT)	4.7[a]/5.1[b]	0.209 J	<0.208 U	**41.6**	**31.8**	<0.196 U	<0.199 U	<0.202 U	<0.197 UJ	<0.195 U	<0.201 U	<0.201 U	<0.199 U
2,4-Dinitrotoluene (2,4-DNT)	0.042	<0.193 U	<0.208 U	**0.196 J**	**0.146 J**	<0.196 U	<0.199 U	<0.202 U	<0.197 U	<0.195 U	<0.201 U	<0.201 U	<0.199 U
2,6-Dinitrotoluene (2,6-DNT)	0.042	<0.193 U	<0.208 U	<0.201 U	<0.202 U	<0.196 U	<0.199 U	<0.202 U	<0.197 UJ	<0.195 U	<0.201 U	<0.201 U	<0.199 U

Chemical Name	Sample ID	29SB149				29SB150				29SB151			
	Collection Date	3/4/2021				3/4/2021				3/4/2021			
	Depth Interval (ft bgs)	3-4	7-8	11-12	15-16	3-4	7-8	11-12	15-16	3-4	7-8	11-12	15-16
	LOQ (mg/kg)	0.415	0.388	0.385	0.396	0.396	0.408	0.404	0.387	0.386	0.391	0.396	0.397
	LOD (mg/kg)	0.208	0.194	0.193	0.198	0.198	0.201	0.202	0.194	0.193	0.196	0.198	0.198
	DL (mg/kg)	0.104	0.0971	0.0963	0.0990	0.0991	0.102	0.101	0.0968	0.0964	0.0978	0.0989	0.0992
	Comparison Levels[1] (mg/kg)												
2,4,6-Trinitrotoluene (2,4,6-TNT)	4.7[a]/5.1[b]	<0.208 U	<0.194 U	<0.193 U	<0.198 U	<0.198 U	<0.204 U	<0.202 U	<0.194 U	<0.193 U	<0.196 U	<0.198 U	<0.198 U
2,4-Dinitrotoluene (2,4-DNT)	0.042	<0.208 U	<0.194 U	<0.193 U	<0.198 U	<0.198 U	<0.204 U	<0.202 U	<0.194 U	<0.193 U	<0.196 U	<0.198 U	<0.198 U
2,6-Dinitrotoluene (2,6-DNT)	0.042	<0.208 U	<0.194 U	<0.193 U	<0.198 U	<0.198 U	<0.204 U	<0.202 U	<0.194 U	<0.193 U	<0.196 U	<0.198 U	<0.198 U

Chemical Name	Sample ID	29SB152				29SB153			
	Collection Date	3/4/2021				3/4/2021			
	Depth Interval (ft bgs)	3-4	7-8	11-12	15-16	3-4	7-8	11-12	15-16
	LOQ (mg/kg)	0.391	0.405	0.395	0.386	0.398	0.397	0.402	0.413
	LOD (mg/kg)	0.196	0.203	0.198	0.193	0.199	0.199	0.201	0.207
	DL (mg/kg)	0.0978	0.101	0.0988	0.0965	0.0995	0.0993	0.101	0.103
	Comparison Levels[1] (mg/kg)								
2,4,6-Trinitrotoluene (2,4,6-TNT)	4.7[a]/5.1[b]	0.621	<0.203 U	<0.198 U	<0.193 U	<0.199 U	<0.199 U	<0.201 U	<0.207 U
2,4-Dinitrotoluene (2,4-DNT)	0.042	**0.770 J+**	<0.203 U	<0.198 U	<0.193 U	<0.199 U	<0.199 U	<0.201 U	<0.207 U
2,6-Dinitrotoluene (2,6-DNT)	0.042	<0.196 U	<0.203 U	<0.198 U	<0.193 U	<0.199 U	<0.199 U	<0.201 U	<0.207 U

Notes:
1 = GWP-Ind Texas Commission on Environmental Quality soil medium specific concentration for industrial use based on groundwater protection
mg/kg = milligrams per kilogram
J+ = Estimated Biased High
J = Estimated
<0.208 U = Nondetect
Shaded = Positive Detection
Bold = Exceeds Comparison Level

Table 10. Re-Analyzed Transite TNT Wastewater Line March 2021 PDI Sample Results

Eurofins Re-Analyses Results: Subset 1 & 2								
Explosive	Sample ID	29SB137	29SB140			29SB148		
	Re-analyses Date	10/7/21	10/7/21	10/7/21	9/1/21	10/7/21	10/7/21	9/1/21
	Depth Interval (ft bgs)	15-16	3-4	11-12	15-16	3-4	11-12	15-16
	Comparison Level (mg/kg)							
2,4,6-TNT	4.7[a]/5.1[b]	**21 J**	0.015 UJ	0.015 UJ	0.018 J	0.02 J	0.022 J	0.046 J
2,4-DNT	0.042	**0.069 J**	0.029 UJ	0.029 UJ	0.0094 J	0.029 UJ	0.028 UJ	0.029 UJ
2,6-DNT	0.042	0.029 UJ	0.029 UJ	0.029 UJ	0.029 UJ	0.029 UJ	0.028 UJ	0.029 UJ

Table 10. Re-Analyzed Transite TNT Wastewater Line March 2021 PDI Sample Results

Eurofins Re-Analyses Results: Subset 1 & 2							
Explosive	Sample ID	29SB149			29SB150		
	Re-analyses Date	10/7/21	10/7/21	10/7/21	10/7/21	10/7/21	10/7/21
	Depth Interval (ft bgs)	3-4	11-12	15-16	3-4	11-12	15-16
	Comparison Level (mg/kg)						
2,4,6-TNT	4.7[a]/5.1[b]	0.0091 J	0.015 UJ	0.015 UJ	0.011 J	0.015 UJ	0.0094 J
2,4-DNT	0.042	0.028 UJ	0.029 UJ	0.029 UJ	0.03 UJ	0.029 UJ	0.029 UJ
2,6-DNT	0.042	0.028 UJ	0.029 UJ	0.029 UJ	0.03 UJ	0.029 UJ	0.029 UJ

Eurofins Re-Analyses Results: Subset 1 & 2									
Explosive	Sample ID	29SB151			29SB152		29SB153		
	Re-analyses Date	10/7/21	10/7/21	10/7/21	10/7/21	10/7/21	10/7/21	10/7/21	10/7/21
	Depth Interval (ft bgs)	3-4	11-12	15-16	11-12	15-16	3-4	11-12	15-16
	Comparison Level (mg/kg)								
2,4,6-TNT	4.7[a]/5.1[b]	0.011 J	0.015 UJ	0.015 UJ	0.0094 J	0.14 UJ	0.015 UJ	0.14 UJ	0.015 UJ
2,4-DNT	0.042	**0.07 J**	0.03 UJ	0.029 UJ	0.029 UJ	0.029 UJ	0.029 UJ	0.029 UJ	0.029 UJ
2,6-DNT	0.042	0.029 UJ	0.03 UJ	0.029 UJ	0.029 UJ	0.029 UJ	0.029 UJ	0.029 UJ	0.029 UJ

Notes:
1 = GWP-Ind Texas Commission on Environmental Quality soil medium specific concentration for industrial use based on groundwater protection
mg/kg = milligrams per kilogram
J = Estimated
<0.015 UJ = Nondetect
Shaded = Positive Detection
Bold = Exceeds Comparison Level

Proposed New Field Work

Vertical extent of contamination at boring 29SB137 has not been fully delineated. To determine total extent of contamination, one boring would be co-located with the former boring location and advanced to 20 ft bgs. One sample would be collected at 19 - 20 ft bgs to define total vertical extent and analyzed for explosives using Method 8321A. Two additional borings would be offset 10 ft to either side from 29SB137 to determine if contaminants have spread. Samples would be collected from 3 – 4, 11 – 12, 15 – 16, and 19 – 20 ft bgs. Two borings would also be offset 10 ft to either side from 29SB151 with samples collected from 3 – 4 ft bgs and 7 – 8 ft bgs to define spatial extent. No other borings are proposed. Re-analysis of samples from borings 29SB140, 29SB148, 29SB149, 29SB150, 29SB152, and 29SB153 confirm either absence or presence of low levels of explosives at levels below the GWP-Ind MSC. The total depth of each boring and sample collection will be dependent on water table elevation.

Total of 5 additional borings; three to a total depth of 20 ft bgs and two to 8 ft bgs dependent on water table elevation.
14 samples for explosive analyses.
Figure 5 provides proposed DPT location.

Wooden TNT Wastewater Line

Data Summary

Results from the 3 March PDI investigation revealed low concentrations of explosives at 3 of the 8 borings where samples were collected. Two borings had two detections at various depths (29SB134 and 29SB155), while the third boring (29SB156) had a single detection exceeding the MDL. Results from the March sampling event and original analysis are provided in **Table 11**. Based on these results, samples from 8 borings were submitted to Euronfins/Test America for re-analysis using

Method 8321A to either confirm results greater than the original lab MDL or whether the result was a non-detect. Borings and samples included 29SB134 (3 – 4, 11 – 12, and 15 - 16 ft bgs), 29SB141 (10 – 11, 13 - 14 and 17 - 18 ft bgs), 29SB154 (3 – 4, 6 - 7, and 10 – 11 ft bgs), 29SB155 (11 – 12 ft bgs), 29SB156 (12 – 13 ft bgs), 29SB157 (12.5 – 13.5 ft bgs), 29SB158 (10 – 11, 13 - 14, and 17 – 18 ft bgs) and 29SB159 (1.5 – 2.5, 4.5 – 5.5, and 8.5 – 9.5 ft bgs). Low concentrations of explosives (mainly 2,4,6-TNT) were detected below the GWP-Ind MSC in every sample resubmitted. Boring 29SB134 had a detection of 2,4-DNT at the 3 – 4 ft bgs interval that exceeded the GWP-Ind MSC. However, sample results for the lower intervals at 11 – 12 and 15 – 16 ft bgs were non-detect for explosives. The Eurofins/Test America results are provided in **Table 12**.

Table 11. Wooden TNT Wastewater Line March 2021 PDI Sample Results

Chemical Name	Sample ID	29SB134			29SB141			29SB154			29SB155	
	Collection Date	3/10/2021			3/10/2021			3/10/2021			44264	
	Depth Interval (ft bgs)	5-6	8-9	12-13	10-11	13-14	17-18	3-4	6-7	10-11	11-12	15-16
	Comparison Levels[1] (mg/kg)											
2,4,6-Trinitrotoluene (2,4,6-TNT)	4.7[a]/5.1[b]	<0.197 U	0.117 J	0.189 J	<0.203 U	<0.199 U	<0.205 U	<0.206 U	<0.201 U	<0.203 U	0.436 J	0.197 J
2,4-Dinitrotoluene (2,4-DNT)	0.042	<0.197 U	<0.199 U	<0.205 U	<0.203 U	<0.199 U	<0.205 U	<0.206 U	<0.201 U	<0.203 U	<0.210 U	<0.195 U
2,6-Dinitrotoluene (2,6-DNT)	0.042	<0.197 U	<0.199 U	<0.205 U	<0.203 U	<0.199 U	<0.205 U	<0.206 U	<0.201 U	<0.203 U	<0.210 U	<0.195 U

Chemical Name	Sample ID	29SB156			29SB157			29SB158			29SB159		
	Collection Date	3/10/2021			3/10/2021			3/10/2021			3/10/2021		
	Depth Interval (ft bgs)	9-10	12-13	16-17	5.5-6.5	8.5-9.5	12.5-13.5	10-11	13-14	17-18	1.5-2.5	4.5-5.5	8.5-9.5
	Comparison Levels[1] (mg/kg)												
2,4,6-Trinitrotoluene (2,4,6-TNT)	4.7[a]/5.1[b]	2.50 J	<0.209 U	<0.208 U	<0.197 U	<0.201 U	<0.206 U	<0.190 U	<0.210 U	<0.209 U	<0.207 U	<0.206 U	<0.196 U
2,4-Dinitrotoluene (2,4-DNT)	0.042	<0.194 U	<0.209 U	<0.208 U	<0.197 U	<0.201 U	<0.206 U	<0.190 U	<0.210 U	<0.209 U	<0.207 U	<0.206 U	<0.196 U
2,6-Dinitrotoluene (2,6-DNT)	0.042	<0.194 U	<0.209 U	<0.208 U	<0.197 U	<0.201 U	<0.206 U	<0.190 U	<0.210 U	<0.209 U	<0.207 U	<0.206 U	<0.196 U

Notes:
1 = GWP-Ind Texas Commission on Environmental Quality soil medium specific concentration for industrial use based on groundwater protection
mg/kg = milligrams per kilogram
J = Estimated
<0.197 U = Nondetect
Shaded = Positive Detection
Bold = Exceeds Comparison Level

Table 12. Re-Analyzed Wooden TNT Wastewater Line March 2021 PDI Sample Results

Eurofins Re-Analyses Results: Subset 1 & 2										
Explosive	Sample ID	29SB134			29SB141			29SB154		
	Re-analyses Date	10/7/21	10/7/21	10/7/21	10/7/21	10/7/21	10/7/21	10/7/21	10/7/21	10/7/21
	Depth Interval (ft bgs) / Comparison Level (mg/kg)	3-4	11-12	15-16	10-11	13-14	17-18	3-4	6-7	10-11
2,4,6-TNT	4.7[a]/5.1[b]	0.011 J	0.015 UJ	0.015 UJ	0.0011 J	0.089 J	0.011 J	0.026 J	0.013 J	0.012 J
2,4-DNT	0.042	**0.07 J**	0.03 UJ	0.029 UJ	0.028 UJ	0.027 UJ	0.028 UJ	0.029 UJ	0.029 UJ	0.029 UJ
2,6-DNT	0.042	0.029 UJ	0.03 UJ	0.029 UJ	0.028 UJ	0.027 UJ	0.028 UJ	0.029 UJ	0.029 UJ	0.029 UJ
Eurofins Re-Analyses Results: Subset 1 & 2										
Explosive	Sample ID	29SB155	29SB156	29SB157	29SB158			29SB159		
	Re-analyses Date	10/7/21	10/7/21	10/7/21	10/7/21	10/7/21	10/7/21	10/7/21	10/7/21	10/7/21
	Depth Interval (ft bgs) / Comparison Level (mg/kg)	11-12	12-13	12.5-13.5	10-11	13-14	17-18	1.5-2.5	4.5-5.5	8.5-9.5
2,4,6-TNT	4.7[a]/5.1[b]	0.073 J	0.0069 J+	0.012 J	0.11 J	0.012 J	0.014 J	0.016 J	0.01 J	0.01 J
2,4-DNT	0.042	0.027 UJ	0.028 UJ	0.028 UJ	0.029 UJ	0.028 UJ	0.029 UJ	0.028 UJ	0.029 UJ	0.03 UJ
2,6-DNT	0.042	0.027 UJ	0.028 UJ	0.028 UJ	0.029 UJ	0.028 UJ	0.029 UJ	0.028 UJ	0.029 UJ	0.03 UJ

Notes:
1 = GWP-Ind Texas Commission on Environmental Quality soil medium specific concentration for industrial use based on groundwater protection
mg/kg = milligrams per kilogram
J+ = Estimated Biased High
J = Estimated
<0.015 UJ = Nondetect
Shaded = Exceeds Comparison Level
Bold = Positive Detection

Proposed New Field Work

Re-analysis of samples from borings 29SB134, 29SB141, 29SB154, 29SB155, 29SB156, 29SB157, 29SB158, and 29SB159 confirm either absence or presence of low levels of explosives at levels below the GWP-Ind MSC. There are no data gaps associated with vertical extent. (Note: The proposed approach for the RD is to completely remove the former wooden TNT wastewater line.) No additional field work is proposed for the Wooden TNT Wastewater Line.

01131709

Eurofins Re-Analyses Results: Subset 1 & 2								
Sample ID	29SB121				29SB123			
Re-analyses Date	10/7/2021	10/7/2021	10/7/2021	10/7/2021	10/7/2021	10/7/2021	10/7/2021	9/1/2021
Depth (ft bgs)	3-4	7-8	11-12	15-16	2-3	7-8	11-12	15-16
2,4,6-TNT	**0.014 J**	0.015 UJ	0.014 UJ	0.015 UJ	0.015 UJ	0.014 UJ	0.014 UJ	**0.0066 J+**
2,4-DNT 0.042	**0.068 J**	**0.0081 J**	0.027 UJ	**0.0096 J**	**0.012 J**	0.028 UJ	0.028 UJ	0.028 UJ
2,6-DNT 0.042	0.028 UJ	**0.02 J**	0.027 UJ	**0.023 J**	0.029 UJ	0.028 UJ	0.028 UJ	**0.047 J**

29SB77

STEP-29SW01

801-F

29SB89

29SB88

COC	29SB118 (3/2/2021)	
	3-4 (ft bgs)	15-16 (ft bgs)
2,4-DNT	**0.258 J**	**0.132 J+**

COC	29SB119 (3/2/2021)		
	3-4 (ft bgs)	11-12 (ft bgs)	15-16 (ft bgs)
2,4,6-TNT	1.04	ND	ND
2,4-DNT	**0.647**	**0.548**	**0.763 J+**
2,6-DNT	**0.0996J**	ND	**0.683 J+**

812-F

29SG118 *
6/11/2014
2,4-DNT
0.138 J (6')
17.10 (10')
2,6-DNT
3.42 (10')
*Units in milligrams per kilogram (mg/kg)

COC	29SB120 (3/2/2021)			
	3-4 (ft bgs)	6-7 (ft bgs)	11-12 (ft bgs)	15-16 (ft bgs)
2,4,6-TNT	ND	0.296 J	ND	ND
2,4-DNT	**0.581**	**0.746**	**2.12**	**0.571**
2,6-DNT	ND	ND	**0.45**	**0.135 J**

29SB121

29SB123

LHAAP-29

COC	29SB124 (3/2/2021)	
	3-4 (ft bgs)	15-16 (ft bgs)
2,4-DNT	ND	**5.87 J+**
2,6-DNT	ND	**1.13 J+**

COC	29SB122 (3/2/2021)			
	3-4 (ft bgs)	6-7 (ft bgs)	11-12 (ft bgs)	15-16 (ft bgs)
2,4-DNT	**0.418**	**0.43**	**0.609**	**4.78 J+**
2,6-DNT	ND	ND	ND	**0.318 J+**

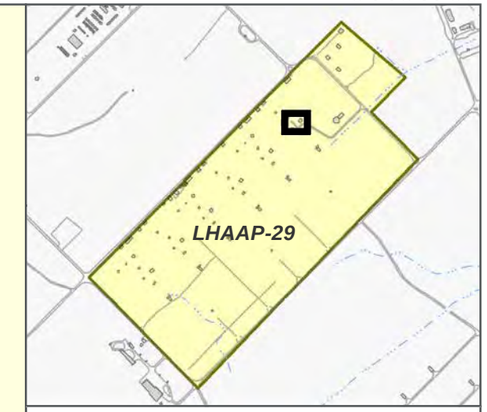
COC	29SB125 (3/2/2021)	
	6-7 (ft bgs)	15-16 (ft bgs)
2,4-DNT	**0.201 J**	**0.3 J**

803-F

29SB73

Screening levels	
	Comparison Levels[1] (mg/kg)
2,4,6-Trinitrotoluene (2,4,6-TNT)	4.7[a]/5.1[b]
2,4-Dinitrotoluene (2,4-DNT)	0.042
2,6-Dinitrotoluene (2,6-DNT)	0.042
For all sampling results see LHAAP 29 PDI Report Table 1 - Building 812-F Soil Sample Results	

NOTES:
1 = GWP-Ind Texas Commission on Environmental Quality soil medium specific concentration for industrial use based on groundwater protection
<0.195 U = Nondetect (ND)
Shaded = Positive Detection
mg/kg milligrams per kilogram
Depth Interval (ft bgs)
J+ = Estimated Biased High
J- = Estimated Biased Low
J = Estimated
Bold = Exceeds Comparison Level
a = applies to 0-3 feet below ground surface
b = applies from 3 feet below ground surface to groundwater interface



LEGEND

- Proposed New DPT Soil Boring Locations
- 2021 DPT Soil Boring Location (29SB118 - 29SB125)

Historic Sample Locations and Results (Shaw 2020)

- Solid Residual Sample from Line or Manhole
- Water Sample from Line or Man Hole
- Surface Soil Samples
- TNT Cooling Water Drain Line (North)
- Stream
- Road
- Building
- Site LHAAP-29

DATA SOURCES: Shaw, 2010, Final Feasibility Study, LHAAP-29, Former TNT Production Area, Group 2, Longhorn Army Ammunition Plant, Karnack, Texas, December.

BUILDING 812-F
2021 DPT SOIL SAMPLE
EXPLOSIVES DETECTIONS
LHAAP-29 PDI REPORT JUNE 2021
LONGHORN ARMY AMMUNITION PLANT
KARNACK, TEXAS

N

0 20 40
FEET

FIGURE 1

PATH: J:\2018\18-025_LHAAP_SITES29_47_18AND24_ROD_(WERNER)\7.2_WORK_IN_PROGRESS\MAP_DOCS\DRAFT\LHAAP29\LHAAP_29_PDI_2022NEWSAMPLING_BUILDING812F_FIG1.MXD - USER: KLOFGREN - DATE: 1/12/2022

Eurofins Re-Analyses Results: Subset 1 & 2							
Sample ID	29SB126		29SB127	29SB128	29SB129	29SB130	29SB132
Re-analyses Date	3/4/2022	10/7/2021	10/7/2021	10/7/2021	10/7/2021	10/7/2021	10/7/2021
Depth	3-4	5-6	1-2	1-2	5-6	1-2	1-2
2,4,6-TNT	**0.011 J**	0.015 UJ	0.015 UJ	**0.0097 J**	**22 J**	0.014 UJ	0.015 UJ
2,4-DNT 0.042	**0.0088 J**	0.029 UJ	0.029 UJ	0.029 UJ	**180 J**	0.029 UJ	0.029 UJ
2,6-DNT 0.042	**0.022 J**	0.029 UJ	0.029 UJ	0.029 UJ	**130 J**	0.029 UJ	0.029 UJ

COC	29SB15 (Shaw, 2005)	
	0-2 (ft bgs)	5-7 (ft bgs)
2,4,6-TNT	**110**	**54**

COC	29SB129 (3/2/2021)		
	3-4 (ft bgs)	5-6 (ft bgs)	7-8 (ft bgs)
2,4,6-TNT	**5.13 J+**	**23.2 J+**	2.72 J+
2,4-DNT	**1.45 J+**	**212**	**6.7 J+**
2,6-DNT	**21.3 J+**	**108**	**58.3**

COC	29SB126 (3/2/2021)
	1-2 (ft bgs)
2,6-DNT	**0.178 J**

29SD13
COC 0-0.5'
TNT 51 J

29SD46
COC 0-0.5'
TNT 26,000
2,4-DNT 8,000
2,6-DNT 15

29SB112
6/13/2014
2,4-DNT
0.0544 J (0-0.5')
<0.0596 (2'-4')
2,6-DNT
0.0862 (0-0.5')
0.0704J (2'-4')

29WW116 (Shaw, 2005)
2,4-DNT - 1 U
2,6-DNT - 239 ug/L
2-NT - 8,140 ug/L
3-NT - 451 ug/L
4-NT - 1,400 ug/L

29WW05 (Shaw, 2005)
2,4-DNT - 50.9 ug/L
2,6-DNT - 224 ug/L
2-NT - 1,230 ug/L
3-NT - 123 ug/L
4-NT - 42.7 ug/L

*Units in milligrams per kilogram (mg/kg)

Cooling Water Outfall/Ditch - C

Cooling Water Outfall/Ditch - B

o-NT
p-NT
2,6-DNT

29SB154 29SB149 29SB78 29SB15 29SB126 29SB127 29SB128 29SB129 29SB130 29SB131 29SB132 29SB133 29SB114 29SB115 29SB116 29SB117 29SB108 29SB109 29SB110 29SB111 29SB112 29SB113 29SB127 29SB128
29SD15 29SW15 29SD29 29SS04 29SD45 29SW45 29SD44 29SW44 29WL12 29SD14 29SD13 29SD30
GPS-12
STEP-29SS28 STEP-29SS27 STEP-29SS25 STEP-29SS26 STEP-29SS15
618-A 618-B 804-D 804-E

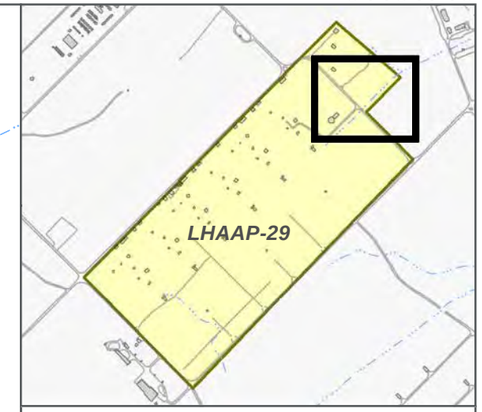
NITROTOLUENES IN SHALLOW ZONE GROUNDWATER

- 3(m)-NT and 4(p)-NT (TRRP Tier 1 Residential Groundwater PCL - all occurrences = 240 µg/L and 57 µg/L)*
- 2,4-DNT and 2,6-DNT (TRRP Tier 1 Residential Groundwater PCL - all occurrences = 1.3 ug/L) *
- 2(o)-NT (TRRP Tier 1 Residential Groundwater PCL - all occurrences = 4.1 µg/L)*

DATA SOURCES: Shaw, 2010, Final Feasibility Study, LHAAP-29, Former TNT Production Area, Group 2, Longhorn Army Ammunition Plant, Karnack, Texas, December.

Screening levels	
	Comparison Levels[1] (mg/kg)
2,4,6-Trinitrotoluene (2,4,6-TNT)	4.7[a]/5.1[b]
2,4-Dinitrotoluene (2,4-DNT)	0.042
2,6-Dinitrotoluene (2,6-DNT)	0.042
For all sampling results see LHAAP 29 PDI Report Table 2 - Cooling Water Outfall / Ditch Soil Sample Results	

NOTES:
1 = GWP-Ind Texas Commission on Environmental Quality soil medium specific concentration for industrial use based on groundwater protection
<0.195 U = Nondetect (ND)
Shaded = Positive Detection
mg/kg milligrams per kilogram
Depth Interval (ft bgs)
J+ = Estimated Biased High
J- = Estimated Biased Low
J = Estimated
Bold = Exceeds Comparison Level
a = applies to 0-3 feet below ground surface
b = applies from 3 feet below ground surface to groundwater interface



LEGEND

- Proposed New DPT Soil Boring Locations
- 2021 DPT Soil Boring Location (29SB126 - 29SB133)

Historic Sample Locations and Results (Shaw 2020)

- Water Sample from Line or Man Hole
- Water Sample from Line or Man Hole
- Shallow Groundwater Monitoring Well
- Sediment Samples
- Soil Boring Samples
- Surface Soil Samples
- Soil Sample from Cooling Water Outfall / Ditch
- Extent of soil contamination identified in the 2010 Shaw Final Feasibility Study and March 2021 PDI initial field investigation
- TNT Cooling Water Drain Line (North)
- TNT Wooden Wastewater Line
- TNT Transite Wastewater Line
- Stream
- Road
- Building
- Site LHAAP-29

COOLING WATER OUTFALL / DITCH - 2021 DPT SOIL SAMPLE EXPLOSIVES DETECTIONS

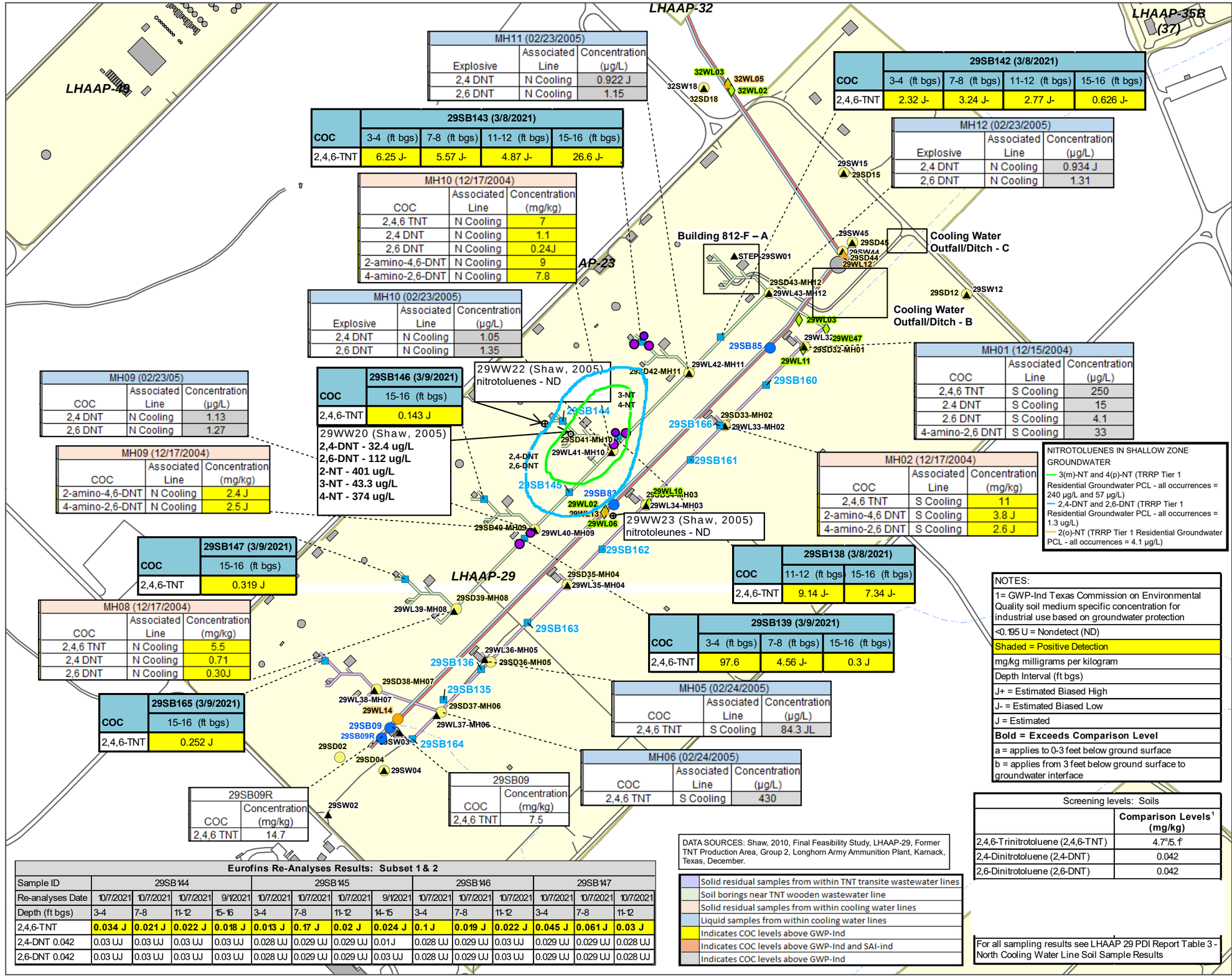
LHAAP-29 PDI REPORT JUNE 2021
LONGHORN ARMY AMMUNITION PLANT
KARNACK, TEXAS

N
0 40 80
FEET

FIGURE 2

PATH: J:\2018\18-025_LHAAP_SITES29_47_18AND24_ROD_(WERNER)\7.2_WORK_IN_PROGRESS\MAP_DOCS\DRAFT\LHAAP29\LHAAP_29_PDI_2022NEWSAMPLING_COOLINGWATEROUTFALLDITCH_FIG2.MXD - USER: KLOFGREN - DATE: 1/26/2022

01131711



MH11 (02/23/2005)		
Explosive	Associated Line	Concentration (µg/L)
2,4 DNT	N Cooling	0.922 J
2,6 DNT	N Cooling	1.15

COC	29SB142 (3/8/2021)			
	3-4 (ft bgs)	7-8 (ft bgs)	11-12 (ft bgs)	15-16 (ft bgs)
2,4,6-TNT	2.32 J-	3.24 J-	2.77 J-	0.626 J-

COC	29SB143 (3/8/2021)			
	3-4 (ft bgs)	7-8 (ft bgs)	11-12 (ft bgs)	15-16 (ft bgs)
2,4,6-TNT	6.25 J-	5.57 J-	4.87 J-	26.6 J-

MH12 (02/23/2005)		
Explosive	Associated Line	Concentration (µg/L)
2,4 DNT	N Cooling	0.934 J
2,6 DNT	N Cooling	1.31

MH10 (12/17/2004)		
COC	Associated Line	Concentration (mg/kg)
2,4,6 TNT	N Cooling	7
2,4 DNT	N Cooling	1.1
2,6 DNT	N Cooling	0.24J
2-amino-4,6-DNT	N Cooling	9
4-amino-2,6-DNT	N Cooling	7.8

MH10 (02/23/2005)		
Explosive	Associated Line	Concentration (µg/L)
2,4 DNT	N Cooling	1.05
2,6 DNT	N Cooling	1.35

MH09 (02/23/05)		
COC	Associated Line	Concentration (µg/L)
2,4 DNT	N Cooling	1.13
2,6 DNT	N Cooling	1.27

COC	29SB146 (3/9/2021)
	15-16 (ft bgs)
2,4,6-TNT	0.143 J

29WW22 (Shaw, 2005) nitrotoluenes - ND

29WW20 (Shaw, 2005)
2,4-DNT - 32.4 ug/L
2,6-DNT - 112 ug/L
2-NT - 401 ug/L
3-NT - 43.3 ug/L
4-NT - 374 ug/L

29WW23 (Shaw, 2005) nitrotoluenes - ND

MH01 (12/15/2004)		
COC	Associated Line	Concentration (µg/L)
2,4,6 TNT	S Cooling	250
2.4 DNT	S Cooling	15
2.6 DNT	S Cooling	4.1
4-amino-2,6 DNT	S Cooling	33

MH09 (12/17/2004)		
COC	Associated Line	Concentration (mg/kg)
2-amino-4,6-DNT	N Cooling	2.4 J
4-amino-2,6-DNT	N Cooling	2.5 J

MH02 (12/17/2004)		
COC	Associated Line	Concentration (mg/kg)
2,4,6 TNT	S Cooling	11
2-amino-4,6 DNT	S Cooling	3.8 J
4-amino-2,6 DNT	S Cooling	2.6 J

NITROTOLUENES IN SHALLOW ZONE GROUNDWATER
- 3(m)-NT and 4(p)-NT (TRRP Tier 1 Residential Groundwater PCL - all occurrences = 240 µg/L and 57 µg/L)
- 2,4-DNT and 2,6-DNT (TRRP Tier 1 Residential Groundwater PCL - all occurrences = 1.3 ug/L)
- 2(o)-NT (TRRP Tier 1 Residential Groundwater PCL - all occurrences = 4.1 µg/L)

COC	29SB147 (3/9/2021)
	15-16 (ft bgs)
2,4,6-TNT	0.319 J

COC	29SB138 (3/8/2021)	
	11-12 (ft bgs	15-16 (ft bgs)
2,4,6-TNT	9.14 J-	7.34 J-

MH08 (12/17/2004)		
COC	Associated Line	Concentration (mg/kg)
2,4,6 TNT	N Cooling	5.5
2,4 DNT	N Cooling	0.71
2,6 DNT	N Cooling	0.30J

COC	29SB139 (3/9/2021)		
	3-4 (ft bgs)	7-8 (ft bgs)	15-16 (ft bgs)
2,4,6-TNT	97.6	4.56 J-	0.3 J

COC	29SB165 (3/9/2021)
	15-16 (ft bgs)
2,4,6-TNT	0.252 J

MH05 (02/24/2005)		
COC	Associated Line	Concentration (µg/L)
2,4,6 TNT	S Cooling	84.3 JL

MH06 (02/24/2005)		
COC	Associated Line	Concentration (µg/L)
2,4,6 TNT	S Cooling	430

29SB09	
COC	Concentration (mg/kg)
2,4,6 TNT	7.5

29SB09R	
COC	Concentration (mg/kg)
2,4,6 TNT	14.7

NOTES:
1= GWP-Ind Texas Commission on Environmental Quality soil medium specific concentration for industrial use based on groundwater protection
<0.195 U = Nondetect (ND)
Shaded = Positive Detection
mg/kg milligrams per kilogram
Depth Interval (ft bgs)
J+ = Estimated Biased High
J- = Estimated Biased Low
J = Estimated
Bold = Exceeds Comparison Level
a = applies to 0-3 feet below ground surface
b = applies from 3 feet below ground surface to groundwater interface

Screening levels: Soils	
	Comparison Levels[1] (mg/kg)
2,4,6-Trinitrotoluene (2,4,6-TNT)	4.7[a]/5.1[b]
2,4-Dinitrotoluene (2,4-DNT)	0.042
2,6-Dinitrotoluene (2,6-DNT)	0.042

Eurofins Re-Analyses Results: Subset 1 & 2

Sample ID	29SB144				29SB145				29SB146			29SB147		
Re-analyses Date	10/7/2021	10/7/2021	10/7/2021	9/1/2021	10/7/2021	10/7/2021	10/7/2021	9/1/2021	10/7/2021	10/7/2021	10/7/2021	10/7/2021	10/7/2021	10/7/2021
Depth (ft bgs)	3-4	7-8	11-12	15-16	3-4	7-8	11-12	14-15	3-4	7-8	11-12	3-4	7-8	11-12
2,4,6-TNT	**0.034 J**	**0.021 J**	**0.022 J**	**0.018 J**	**0.013 J**	**0.17 J**	**0.02 J**	**0.024 J**	**0.1 J**	**0.019 J**	**0.022 J**	**0.045 J**	**0.061 J**	**0.03 J**
2,4-DNT 0.042	0.03 UJ	0.03 UJ	0.03 UJ	0.03 UJ	0.028 UJ	0.029 UJ	0.029 UJ	0.01J	0.028 UJ	0.029 UJ	0.03 UJ	0.029 UJ	0.029 UJ	0.028 UJ
2,6-DNT 0.042	0.03 UJ	0.03 UJ	0.03 UJ	0.03 UJ	0.028 UJ	0.029 UJ	0.029 UJ	0.03 UJ	0.028 UJ	0.029 UJ	0.03 UJ	0.029 UJ	0.029 UJ	0.028 UJ

DATA SOURCES: Shaw, 2010, Final Feasibility Study, LHAAP-29, Former TNT Production Area, Group 2, Longhorn Army Ammunition Plant, Karnack, Texas, December.

- Solid residual samples from within TNT transite wastewater lines
- Soil borings near TNT wooden wastewater line
- Solid residual samples from within cooling water lines
- Liquid samples from within cooling water lines
- Indicates COC levels above GWP-Ind
- Indicates COC levels above GWP-Ind and SAI-ind
- Indicates COC levels above GWP-Ind

For all sampling results see LHAAP 29 PDI Report Table 3 - North Cooling Water Line Soil Sample Results

LEGEND
- Proposed New DPT Soil Boring Locations
- 2021 DPT Soil Boring Location (North: 29SB138 - 29SB139, 29SB142 - 29SB147)(South: 29SB135 - 29SB136, 29SB160 - 29SB166)

Historic Sample Locations and Results (Shaw 2010)
- Water Sample from Line or Man Hole
- Solid residual Sample from Line or Man Hole
- Soil Boring
- Water Sample from Line or Man Hole
- Solid residual Sample from Line or Man Hole
- Water Line Sample
- Shallow Groundwater Monitoring Well
- TNT Cooling Water Drain Line (North)
- TNT Cooling Water Drain Line (South)
- TNT Wooden Wastewater Line
- TNT Transite Wastewater Line
- Stream
- Road
- Building
- Site LHAAP-29

NORTH AND SOUTH TNT COOLING WATER LINES
2021 DPT SOIL SAMPLE
EXPLOSIVES DETECTIONS

LHAAP-29 PDI REPORT JUNE 2021
LONGHORN ARMY AMMUNITION PLANT
KARNACK, TEXAS

N
0 200 400
FEET

FIGURE 3

PATH: J:\2018\18-025_LHAAP_SITES29_47_18AND24_ROD_(WERNER)\7.2_WORK_IN_PROGRESS\MAP_DOCS\DRAFT\LHAAP29\LHAAP_29_PDI_2022NEWSAMPLINGS_N_COOLING_WATER_DRAIN_LINE_HISTORIC_FIG3.MXD - USER: KLOFGREN - DATE: 1/12/2022

Eurofins Re-Analyses Results: Subset 1 & 2					
Sample ID	29SB165		29SB166		
Re-analyses Date	10/7/2021	10/7/2021	10/7/2021	10/7/2021	10/7/2021
Depth (ft bgs)	7-8	11-12	7-8	11-12	15-16
2,4,6-TNT	0.039 J	0.71 J	0.015 UJ	0.015 UJ	0.015 UJ
2,4-DNT 0.042	0.029 UJ	0.03 UJ	0.03 UJ	0.029 UJ	0.028 UJ
2,6-DNT 0.042	0.029 UJ	0.03 UJ	0.03 UJ	0.029 UJ	0.028 UJ

MH11 (02/23/2005)		
Explosive	Associated Line	Concentration (µg/L)
2,4 DNT	N Cooling	0.922 J
2,6 DNT	N Cooling	1.15

COC	29SB143 (3/8/2021)			
	3-4 (ft bgs)	7-8 (ft bgs)	11-12 (ft bgs)	15-16 (ft bgs)
2,4,6-TNT	6.25 J-	5.57 J-	4.87 J-	26.6 J-

MH10 (12/17/2004)		
COC	Associated Line	Concentration (mg/kg)
2,4,6 TNT	N Cooling	7
2,4 DNT	N Cooling	1.1
2,6 DNT	N Cooling	0.24J
2-amino-4,6-DNT	N Cooling	9
4-amino-2,6-DNT	N Cooling	7.8

MH10 (02/23/2005)		
Explosive	Associated Line	Concentration (µg/L)
2,4 DNT	N Cooling	1.05
2,6 DNT	N Cooling	1.35

MH09 (02/23/05)		
COC	Associated Line	Concentration (µg/L)
2,4 DNT	N Cooling	1.13
2,6 DNT	N Cooling	1.27

COC	29SB146 (3/9/2021)
	15-16 (ft bgs)
2,4,6-TNT	0.143 J

MH09 (12/17/2004)		
COC	Associated Line	Concentration (mg/kg)
2-amino-4,6-DNT	N Cooling	2.4 J
4-amino-2,6-DNT	N Cooling	2.5 J

COC	29SB147 (3/9/2021)
	15-16 (ft bgs)
2,4,6-TNT	0.319 J

MH08 (12/17/2004)		
COC	Associated Line	Concentration (mg/kg)
2,4,6 TNT	N Cooling	5.5
2,4 DNT	N Cooling	0.71
2,6 DNT	N Cooling	0.30J

COC	29SB165 (3/9/2021)
	15-16 (ft bgs)
2,4,6-TNT	0.252 J

29SB09R	
COC	Concentration (mg/kg)
2,4,6 TNT	14.7

29WW03 (Shaw, 2005)
2,4-DNT - 1 U
2,6-DNT - 9.32 ug/L
2-NT - 71.3 ug/L
3-NT - 5.5 ug/L
4-NT - 37.2 ug/L

29WW29 (Shaw, 2005)
nitrotoluenes - ND

29WW32 (Shaw, 2005)
nitrotoluenes - ND

29SB09	
COC	Concentration (mg/kg)
2,4,6 TNT	7.5

COC	29SB142 (3/8/2021)			
	3-4 (ft bgs)	7-8 (ft bgs)	11-12 (ft bgs)	15-16 (ft bgs)
2,4,6-TNT	2.32 J-	3.24 J-	2.77 J-	0.626 J-

MH12 (02/23/2005)		
Explosive	Associated Line	Concentration (µg/L)
2,4 DNT	N Cooling	0.934 J
2,6 DNT	N Cooling	1.31

MH01 (12/15/2004)		
COC	Associated Line	Concentration (µg/L)
2,4,6 TNT	S Cooling	250
2.4 DNT	S Cooling	15
2.6 DNT	S Cooling	4.1
4-amino-2,6 DNT	S Cooling	33

MH02 (12/17/2004)		
COC	Associated Line	Concentration (mg/kg)
2,4,6 TNT	S Cooling	11
2-amino-4,6 DNT	S Cooling	3.8 J
4-amino-2,6 DNT	S Cooling	2.6 J

COC	29SB138 (3/8/2021)	
	11-12 (ft bgs)	15-16 (ft bgs)
2,4,6-TNT	9.14 J-	7.34 J-

COC	29SB139 (3/9/2021)		
	3-4 (ft bgs)	7-8 (ft bgs)	15-16 (ft bgs)
2,4,6-TNT	97.6	4.56 J-	0.3 J

MH05 (02/24/2005)		
COC	Associated Line	Concentration (µg/L)
2,4,6 TNT	S Cooling	84.3 JL

MH06 (02/24/2005)		
COC	Associated Line	Concentration (µg/L)
2,4,6 TNT	S Cooling	430

NITROTOLUENES IN SHALLOW ZONE GROUNDWATER
- 3(m)-NT and 4(p)-NT (TRRP Tier 1 Residential Groundwater PCL - all occurrences = 240 µg/L and 57 µg/L)
- 2,4-DNT and 2,6-DNT (TRRP Tier 1 Residential Groundwater PCL - all occurrences = 1.3 ug/L)
- 2(o)-NT (TRRP Tier 1 Residential Groundwater PCL - all occurrences = 4.1 µg/L)

NOTES:
1= GWP-Ind Texas Commission on Environmental Quality soil medium specific concentration for industrial use based on groundwater protection
<0.195 U = Nondetect (ND)
Shaded = Positive Detection
mg/kg milligrams per kilogram
Depth Interval (ft bgs)
J+ = Estimated Biased High
J- = Estimated Biased Low
J = Estimated
Bold = Exceeds Comparison Level
a = applies to 0-3 feet below ground surface
b = applies from 3 feet below ground surface to groundwater interface

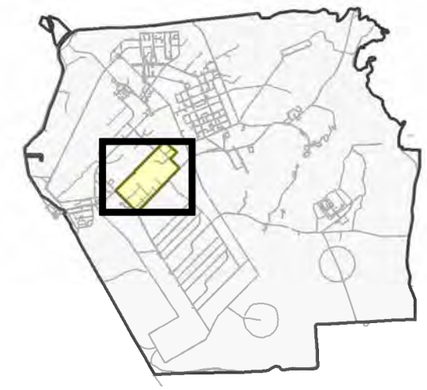
Screening levels: Soils	
	Comparison Levels[1] (mg/kg)
2,4,6-Trinitrotoluene (2,4,6-TNT)	4.7[a]/5.1[b]
2,4-Dinitrotoluene (2,4-DNT)	0.042
2,6-Dinitrotoluene (2,6-DNT)	0.042

For all sampling results see LHAAP 29 PDI Report Table 3 - North Cooling Water Line Soil Sample Results

DATA SOURCES: Shaw, 2010, Final Feasibility Study, LHAAP-29, Former TNT Production Area, Group 2, Longhorn Army Ammunition Plant, Karnack, Texas, December.

- Solid residual samples from within TNT transite wastewater lines
- Soil borings near TNT wooden wastewater line
- Solid residual samples from within cooling water lines
- Liquid samples from within cooling water lines
- Indicates COC levels above GWP-Ind
- Indicates COC levels above GWP-Ind and SAI-ind
- Indicates COC levels above GWP-Ind

Eurofins Re-Analyses Results: Subset 1 & 2															
Sample ID	29SB135	29SB136	29SB160			29SB161			29SB163			29SB164			
Re-analyses Date	10/7/2021	10/7/2021	10/7/2021	10/7/2021	10/7/2021	10/7/2021	10/7/2021	10/7/2021	10/7/2021	10/7/2021	10/7/2021	10/7/2021	10/7/2021	10/7/2021	10/7/2021
Depth (ft bgs)	15-16	15-16	7-8	11-12	15-16	7-8	11-12	15-16	7-8	11-12	15-16	7-8	11-12	15-16	
2,4,6-TNT	0.0072 J+	0.0072 J+	0.015 UJ	0.015 UJ	0.015UJ	0.015 UJ	0.015 UJ	0.015 UJ	0.014 UJ	0.015 UJ	0.015 UJ	0.0096 J	0.014 UJ	0.015UJ	
2,4-DNT 0.042	0.029 UJ	0.029 UJ	0.03 UJ	0.03 UJ	0.03 UJ	0.029 UJ	0.029 UJ	0.03 UJ	0.028 UJ	0.029 UJ	0.03 UJ	0.029 UJ	0.029 UJ	0.029 UJ	
2,6-DNT 0.042	0.029 UJ	0.029 UJ	0.03 UJ	0.03 UJ	0.03 UJ	0.029 UJ	0.029 UJ	0.03 UJ	0.028 UJ	0.029 UJ	0.03 UJ	0.029 UJ	0.029 UJ	0.029 UJ	



LEGEND

- Proposed New DPT Soil Boring Locations
- 2021 DPT Soil Boring Location (North: 29SB138 - 29SB139, 29SB142 - 29SB147)(South: 29SB135 - 29SB136, 29SB160 - 29SB166)

Historic Sample Locations and Results (Shaw 2010)

- Water Sample from Line or Man Hole
- Solid residual Sample from Line or Man Hole
- Soil Boring
- Water Sample from Line or Man Hole
- Solid residual Sample from Line or Man Hole
- Water Line Sample
- Shallow Groundwater Monitoring Well
- TNT Cooling Water Drain Line (North)
- TNT Cooling Water Drain Line (South)
- TNT Wooden Wastewater Line
- TNT Transite Wastewater Line
- Stream
- Road
- Building
- Site LHAAP-29

NORTH AND SOUTH TNT COOLING WATER LINES 2021 DPT SOIL SAMPLE EXPLOSIVES DETECTIONS

LHAAP-29 PDI REPORT JUNE 2021
LONGHORN ARMY AMMUNITION PLANT
KARNACK, TEXAS

N
0 200 400
FEET

FIGURE 4

Eurofins Re-Analyses Results: Subset 1 & 2

Sample ID	29SB149			29SB150			29SB151			29SB152		29SB153		
Re-analyses Date	10/7/2021	10/7/2021	10/7/2021	10/7/2021	10/7/2021	10/7/2021	10/7/2021	10/7/2021	10/7/2021	10/7/2021	10/7/2021	10/7/2021	10/7/2021	10/7/2021
Depth (ft bgs)	3-4	11-12	15-16	3-4	11-12	15-16	3-4	11-12	15-16	11-12	15-16	3-4	11-12	15-16
2,4,6-TNT	0.0091 J	0.015 UJ	0.015 UJ	0.011 J	0.015 UJ	0.0094 J	0.011 J	0.015 UJ	0.015 UJ	0.0094 J	0.14 UJ	0.015 UJ	0.14 UJ	0.015 UJ
2,4-DNT 0.042	0.028 UJ	0.029 UJ	0.029 UJ	0.03 UJ	0.029 UJ	0.029 UJ	**0.07 J**	0.03 UJ	0.029 UJ	0.029 UJ	0.029 UJ	0.029 UJ	0.029 UJ	0.029 UJ
2,6-DNT 0.042	0.028 UJ	0.029 UJ	0.029 UJ	0.03 UJ	0.029 UJ	0.029 UJ	0.029 UJ	0.03 UJ	0.029 UJ	0.029 UJ	0.029 UJ	0.029 UJ	0.029 UJ	0.029 UJ

Sample ID	29SB137	29SB140			29SB148		
Re-analyses Date	10/7/2021	10/7/2021	10/7/2021	9/1/2021	10/7/2021	10/7/2021	9/1/2021
Depth (ft bgs)	15-16	3-4	11-12	15-16	3-4	11-12	15-16
2,4,6-TNT	**21 J**	0.015 UJ	0.015 UJ	**0.018 J**	**0.02 J**	**0.022 J**	**0.046 J**
2,4-DNT 0.042	**0.069 J**	0.029 UJ	0.029 UJ	**0.0094 J**	0.029 UJ	0.028 UJ	0.029 UJ
2,6-DNT 0.042	0.029 UJ	0.029 UJ	0.029 UJ	0.029 UJ	0.029 UJ	0.028 UJ	0.029 UJ

COC	29SB137 (3/8/2021) 3-4 (ft bgs)	11-12 (ft bgs)	15-16 (ft bgs)
2,4,6-TNT	0.214 J	**41.6**	**31.8**
2,4-DNT	<0.194 U	**0.196 J**	**0.15 J**

COC	29SB85 (12/15/2004) Depth (bgs)	Concentration (mg/kg)
2-amino-4,6-DNT	4-5 ft	0.23 J
2-amino-4,6-DNT	8-9 ft	0.9
4-amino-2,6-DNT	8-9 ft	0.3 J

29WL13 (09/26/06) COC	Concentration (mg/kg)
2,4,6 TNT	526
2,4 DNT	89
1,3 DNB	1.08

COC	29SB152 (3/4/2021) 3-4 (ft bgs)
2,4,6-TNT	0.621
2,4-DNT	**0.77 J+**

COC	29SB151 (10/7/2021) 3-4 (ft bgs)
2,4,6-TNT	0.011 J
2,4-DNT	**0.07 J**

COC	29SB134 (3/10/2021) 8-9 (ft bgs)	12-13 (ft bgs)
2,4,6-TNT	0.118 J+	0.189 J

29WL14 (09/27/06) COC	Concentration (mg/kg)
2,4,6 TNT	58.4
2,4 DNT	7.21
2-amino-4,6 DNT	19 JH
4-amino-2,6 DNT	13.3

29SB09 COC	Concentration (mg/kg)
2,4,6 TNT	7.5

29SB09R COC	Concentration (mg/kg)
2,4,6 TNT	14.7

32WL05 (09/28/06) COC	Concentration (mg/kg)
2,4,6 TNT	17JL
2,4 DNT	5.15 JL

COC	29SB155 (3/9/2021) 11-12 (ft bgs)	15-16 (ft bgs)
2,4,6-TNT	0.436 J	0.197 J

COC	29SB156 (3/10/2021) 9-10 (ft bgs)
2,4,6-TNT	2.5 J

LHAAP-32

LHAAP-35B (37)

LHAAP-23

LHAAP-64

LHAAP-29

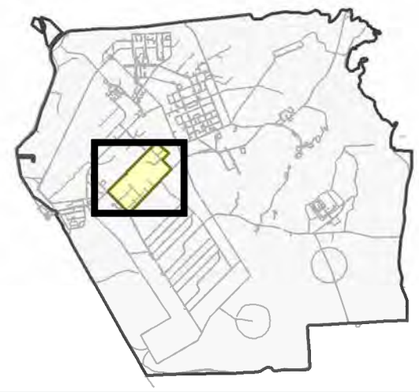
32SW18 32SD18 32WL03 32WL05 32WL02 29SB148 29SW15 29SD15 29SB154 29SW45 29SW44 29SD45 29SD44 29WL12 STEP-29SW01 29SB149 29WL43-MH12 29SD43-MH12 29SD12 29SW12 29WL03 29WL47 29SB85 29WL32-MH01 29SD32-MH01 29WL11 29SD42-MH11 29WL42-MH11 29SB150 29WL33-MH02 29SD33-MH02 29WL41-MH10 29SD41-MH10 29SB151 29SB83 29WL10-03 29WL34-MH03 29WL02 29WL13 29WL40-MH09 29WL06 29SD40-MH09 29SB157 29WL35-MH04 29SD35-MH04 29WL39-MH08 29SD39-MH08 29SB158 29WL36-MH05 29SD36-MH05 29SB153 29WL38-MH07 29SD38-MH07 29SD37-MH06 29WL14 29SB09 29SB140 29SB09R 29SD02 29SB159 29SD04 29SW04 29SW03 29WL37-MH06 29SW02

DATA SOURCES: Shaw, 2010, Final Feasibility Study, LHAAP-29, Former TNT Production Area, Group 2, Longhorn Army Ammunition Plant, Karnack, Texas, December.

Solid residual samples from within TNT transite wastewater lines
Soil borings near TNT wooden wastewater line
Solid residual samples from within cooling water lines
Liquid samples from within cooling water lines
Indicates COC levels above GWP-Ind
Indicates COC levels above GWP-Ind and SAI-ind
Indicates COC levels above GWP-Ind

NOTES:
1= GWP-Ind Texas Commission on Environmental Quality soil medium specific concentration for industrial use based on groundwater protection
<0.195 U = Nondetect (ND)
Shaded = Positive Detection
mg/kg milligrams per kilogram
Depth Interval (ft bgs)
J+ = Estimated Biased High
J- = Estimated Biased Low
J = Estimated
Bold = Exceeds Comparison Level
a = applies to 0-3 feet below ground surface
b = applies from 3 feet below ground surface to groundwater interface

Screening levels: Soils	Comparison Levels[1] (mg/kg)
2,4,6-Trinitrotoluene (2,4,6-TNT)	5.1
2,4-Dinitrotoluene (2,4-DNT)	0.042
2,6-Dinitrotoluene (2,6-DNT)	0.042
Screening Levels: Cooling Water / Transite Lines Solid Residue	
2,4,6-Trinitrotoluene (2,4,6-TNT)	5.1
2,4-Dinitrotoluene (2,4-DNT)	0.042
2,6-Dinitrotoluene (2,6-DNT)	0.042
For all sampling results see LHAAP 29 PDI Report Table 3 - North Cooling Water Line Soil Sample Results	



LEGEND

- Proposed New DPT Soil Boring Locations
- 2021 DPT Soil Boring Location (Wooden TNT Wastewater Line: 29SB134, 29SB141, 29SB54 - 29SB159)(Transite TNT Wastewater Line: 29SB137, 29SB140, 29SB148 - 29SB153)

Historic Sample Locations and Results (Shaw 2010)

- Water Sample from Line or Man Hole
- Solid residual Sample from Line or Man Hole
- Soil Boring
- Water Sample from Line or Man Hole
- Solid residual Sample from Line or Man Hole
- Water Line Sample

- TNT Cooling Water Drain Line (North)
- TNT Cooling Water Drain Line (South)
- TNT Wooden Wastewater Line
- TNT Transite Wastewater Line
- Stream
- Road
- Building
- Site LHAAP-29

WOODEN AND TRANSITE TNT WASTEWATER LINES
2021 DPT SOIL SAMPLE
EXPLOSIVES DETECTIONS

LHAAP-29 PDI REPORT JUNE 2021
LONGHORN ARMY AMMUNITION PLANT
KARNACK, TEXAS

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FIGURE 5

Eurofins Re-analysis Results							
Client Sample ID	Analysis Method	Analyte	Result	Unit	Final Qualifier	LOQ	DL
29SB123 (15-16)	8321A	1,3-Dinitrobenzene	0.015	mg/Kg	J	0.095	0.0068
29SB123 (15-16)	8321A	2,4,6-Trinitrotoluene	0.0066	mg/Kg	J+	0.095	0.0048
29SB123 (15-16)	8321A	2,6-Dinitrotoluene	0.047	mg/Kg	J	0.095	0.019
29SB123 (15-16)	8321A	m-Nitrotoluene	0.015	mg/Kg	J	0.095	0.012
29SB123 (15-16)	8321A	o-Nitrotoluene	0.067	mg/Kg	J	0.095	0.0054
29SB123 (15-16)	8321A	p-Nitrotoluene	0.1	mg/Kg	J	0.095	0.01
29SB129 (5-6)	8321A	1,3-Dinitrobenzene	0.77	mg/Kg	J	0.099	0.007
29SB129 (5-6)	8321A	2,4,6-Trinitrotoluene	22	mg/Kg	J	5	0.25
29SB129 (5-6)	8321A	2,4-Dinitrotoluene	180	mg/Kg	J	50	4.1
29SB129 (5-6)	8321A	2,6-Dinitrotoluene	130	mg/Kg	J	50	9.9
29SB129 (5-6)	8321A	m-Nitrotoluene	0.77	mg/Kg	J	0.099	0.013
29SB129 (5-6)	8321A	o-Nitrotoluene	3.5	mg/Kg	J	5	0.28
29SB129 (5-6)	8321A	p-Nitrotoluene	4.2	mg/Kg	J	5	0.54
29SB135 (15-16)	8321A	2,4,6-Trinitrotoluene	0.0072	mg/Kg	J+	0.098	0.0049
29SB136 (15-16)	8321A	2,4,6-Trinitrotoluene	0.0072	mg/Kg	J+	0.098	0.0049
29SB137 (15-16)	8321A	2,4,6-Trinitrotoluene	21	mg/Kg	J	4.9	0.25
29SB137 (15-16)	8321A	2,4-Dinitrotoluene	0.069	mg/Kg	J	0.098	0.008
29SB137 (15-16)	8321A	2-Amino-4,6-dinitrotoluene	0.046	mg/Kg	J	0.098	0.012
29SB137 (15-16)	8321A	4-Amino-2,6-dinitrotoluene	0.057	mg/Kg	J	0.098	0.005
29SB145 (15-16)	8321A	2,4,6-Trinitrotoluene	0.024	mg/Kg	J	0.099	0.005
29SB145 (15-16)	8321A	2,4-Dinitrotoluene	0.01	mg/Kg	J	0.099	0.0081
29SB146 (15-16)	8321A	2,4,6-Trinitrotoluene	0.074	mg/Kg	J	0.097	0.0049
29SB148 (15-16)	8321A	2,4,6-Trinitrotoluene	0.046	mg/Kg	J	0.096	0.0048
29SB155 (11-12)	8321A	2,4,6-Trinitrotoluene	0.073	mg/Kg	J	0.091	0.0046
29SB156 (12-13)	8321A	2,4,6-Trinitrotoluene	0.0069	mg/Kg	J+	0.093	0.0047
DUP18	8321A	2,4,6-Trinitrotoluene	0.0088	mg/Kg	J+	0.092	0.0046
29SB157(5.5-6.5)	8321A	2,4,6-Trinitrotoluene	0.0096	mg/Kg	J	0.091	0.0046
29SB158(10-11)	8321A	2,4,6-Trinitrotoluene	0.11	mg/Kg	J	0.098	0.0049
29SB158(13-14)	8321A	2,4,6-Trinitrotoluene	0.012	mg/Kg	J	0.092	0.0046
29SB158(17-18)	8321A	2,4,6-Trinitrotoluene	0.014	mg/Kg	J	0.097	0.0049

MicroBac Original Results								
Analysis Method	parm_syn	Result	Unit	Final Qualifier	LOQ	DL	LOD	RPD
8330B	1,3-Dinitrobenzene	<0.201	mg/kg	U	0.402	0.1	0.201	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.201	mg/kg	U	0.402	0.1	0.201	low hit, high ND
8330B	2,6-Dinitrotoluene	<0.201	mg/kg	U	0.402	0.1	0.201	low hit, high ND
8330B	3-Nitrotoluene	<0.201	mg/kg	U	0.402	0.1	0.201	low hit, high ND
8330B	2-Nitrotoluene	<0.201	mg/kg	U	0.402	0.1	0.201	low hit, high ND
8330B	4-Nitrotoluene	<0.201	mg/kg	U	0.402	0.1	0.201	low hit, high ND
8330B	1,3-Dinitrobenzene	0.53	mg/kg	J+	0.41	0.1	0.205	37%
8330B	2,4,6-Trinitrotoluene	23.2	mg/kg	J+	2.05	0.51	1.02	5.30%
8330B	2,4-Dinitrotoluene	212	mg/kg		10.2	2.56	5.12	16%
8330B	2,6-Dinitrotoluene	108	mg/kg		10.2	2.56	5.12	18%
8330B	3-Nitrotoluene	0.387	mg/kg	J+	0.41	0.1	0.205	66%
8330B	2-Nitrotoluene	2.17	mg/kg	J+	0.41	0.1	0.205	47%
8330B	4-Nitrotoluene	3.48	mg/kg	J+	0.41	0.1	0.205	19%
8330B	2,4,6-Trinitrotoluene	<0.204	mg/kg	UJ	0.407	0.1	0.204	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.206	mg/kg	UJ	0.412	0.1	0.206	low hit, high ND
8330B	2,4,6-Trinitrotoluene	31.8	mg/kg		4.04	1.01	2.02	41%
8330B	2,4-Dinitrotoluene	0.146	mg/kg	J	0.404	0.1	0.202	72%
8330B	2-Amino-4,6-dinitrotoluene	<0.202	mg/kg	UJ	0.404	0.1	0.202	low hit, high ND
8330B	4-Amino-2,6-dinitrotoluene	0.245	mg/kg	J-	0.404	0.1	0.202	125%
8330B	2,4,6-Trinitrotoluene	<0.194	mg/kg	U	0.388	0.1	0.194	low hit, high ND
8330B	2,4-Dinitrotoluene	<0.194	mg/kg	U	0.388	0.1	0.194	low hit, high ND
8330B	2,4,6-Trinitrotoluene	0.143	mg/kg	J	0.419	0.11	0.209	64%
8330B	2,4,6-Trinitrotoluene	<0.199	mg/kg	U	0.398	0.1	0.199	low hit, high ND
8330B	2,4,6-Trinitrotoluene	0.436	mg/kg	J	0.42	0.11	0.21	143%
8330B	2,4,6-Trinitrotoluene	<0.209	mg/kg	U	0.418	0.11	0.209	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.196	mg/kg	UJ	0.393	0.1	0.196	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.197	mg/kg	U	0.394	0.1	0.197	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.190	mg/kg	U	0.381	0.1	0.19	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.210	mg/kg	U	0.42	0.11	0.21	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.209	mg/kg	U	0.418	0.1	0.209	low hit, high ND

Eurofins Re-analysis Results							
Client Sample ID	Analysis Method	Analyte	Result	Unit	Final Qualifier	LOQ	DL
29SB141(10-11)	8321A	2,4,6-Trinitrotoluene	0.011	mg/Kg	J	0.092	0.0046
29SB141(13-14)	8321A	2,4,6-Trinitrotoluene	0.0089	mg/Kg	J	0.091	0.0046
29SB141(17-18)	8321A	2,4,6-Trinitrotoluene	0.011	mg/Kg	J	0.094	0.0047
29SB157(12.5-13.5)	8321A	2,4,6-Trinitrotoluene	0.012	mg/Kg	J	0.092	0.0046
29SB154(3-4)	8321A	2,4,6-Trinitrotoluene	0.026	mg/Kg	J	0.097	0.0049
29SB154(3-4)	8321A	4-Amino-2,6-dinitrotoluene	0.0085	mg/Kg	J	0.097	0.0049
29SB154(6-7)	8321A	2,4,6-Trinitrotoluene	0.013	mg/Kg	J	0.098	0.0049
29SB154(10-11)	8321A	2,4,6-Trinitrotoluene	0.012	mg/Kg	J	0.098	0.0049
29SB159(1.5-2.5)	8321A	2,4,6-Trinitrotoluene	0.016	mg/Kg	J	0.095	0.0048
29SB159(4.5-5.5)	8321A	2,4,6-Trinitrotoluene	0.01	mg/Kg	J	0.096	0.0048
29SB159(8.5-9.5)	8321A	2,4,6-Trinitrotoluene	0.01	mg/Kg	J	0.099	0.005
29SB123(2-3)	8321A	2,4-Dinitrotoluene	0.012	mg/Kg	J	0.097	0.008
29SB128(1-2)	8321A	2,4,6-Trinitrotoluene	0.0097	mg/Kg	J	0.097	0.0049
29SB128(1-2)	8321A	4-Amino-2,6-dinitrotoluene	0.0053	mg/Kg	J	0.097	0.0049
29SB121(3-4)	8321A	2,4,6-Trinitrotoluene	0.014	mg/Kg	J	0.093	0.0047
29SB121(3-4)	8321A	2,4-Dinitrotoluene	0.068	mg/Kg	J	0.093	0.0076
29SB121(3-4)	8321A	4-Amino-2,6-dinitrotoluene	0.0061	mg/Kg	J	0.093	0.0047
29SB121(3-4)	8321A	p-Nitrotoluene	0.01	mg/Kg	J	0.093	0.01
29SB121(7-8)	8321A	2,4-Dinitrotoluene	0.0081	mg/Kg	J	0.099	0.0081
29SB121(7-8)	8321A	2,6-Dinitrotoluene	0.02	mg/Kg	J	0.099	0.02
29SB121(15-16)	8321A	2,4-Dinitrotoluene	0.0096	mg/Kg	J	0.099	0.0081
29SB121(15-16)	8321A	2,6-Dinitrotoluene	0.023	mg/Kg	J	0.099	0.02
29SB121(15-16)	8321A	m-Nitrotoluene	0.064	mg/Kg	J	0.099	0.013
29SB121(15-16)	8321A	o-Nitrotoluene	0.4	mg/Kg	J	0.099	0.0057
29SB121(15-16)	8321A	p-Nitrotoluene	1.1	mg/Kg	J	0.099	0.011
29SB126(3-4)	8321A	2,4,6-Trinitrotoluene	0.011	mg/Kg	J	0.097	0.0049
29SB126(3-4)	8321A	2,4-Dinitrotoluene	0.0088	mg/Kg	J	0.097	0.008

MicroBac Original Results									
Analysis Method	parm_syn	Result	Unit	Final Qualifier	LOQ	DL	LOD	RPD
8330B	2,4,6-Trinitrotoluene	<0.203	mg/kg	U	0.407	0.1	0.203	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.199	mg/kg	U	0.397	0.1	0.199	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.205	mg/kg	U	0.409	0.1	0.205	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.206	mg/kg	U	0.412	0.1	0.206	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.206	mg/kg	U	0.413	0.1	0.206	low hit, high ND
8330B	4-Amino-2,6-dinitrotoluene	<0.206	mg/kg	U	0.413	0.1	0.206	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.201	mg/kg	U	0.402	0.1	0.201	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.203	mg/kg	U	0.406	0.1	0.203	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.207	mg/kg	U	0.414	0.1	0.207	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.206	mg/kg	U	0.412	0.1	0.206	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.196	mg/kg	U	0.393	0.1	0.196	low hit, high ND
8330B	2,4-Dinitrotoluene	<0.193	mg/kg dry	U	0.386	0.1	0.193	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.202	mg/kg	UJ	0.403	0.1	0.202	low hit, high ND
8330B	4-Amino-2,6-dinitrotoluene	<0.202	mg/kg	UJ	0.403	0.1	0.202	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.204	mg/kg	U	0.408	0.1	0.204	low hit, high ND
8330B	2,4-Dinitrotoluene	<0.204	mg/kg	U	0.408	0.1	0.204	low hit >Screening, high ND
8330B	4-Amino-2,6-dinitrotoluene	<0.204	mg/kg	U	0.408	0.1	0.204	low hit, high ND
8330B	4-Nitrotoluene	<0.204	mg/kg	U	0.408	0.1	0.204	low hit, high ND
8330B	2,4-Dinitrotoluene	<0.198	mg/kg	U	0.396	0.1	0.198	low hit, high ND
8330B	2,6-Dinitrotoluene	<0.198	mg/kg	U	0.396	0.1	0.198	low hit, high ND
8330B	2,4-Dinitrotoluene	<0.203	mg/kg	U	0.407	0.1	0.203	low hit, high ND
8330B	2,6-Dinitrotoluene	<0.203	mg/kg	U	0.407	0.1	0.203	low hit, high ND
8330B	3-Nitrotoluene	<0.203	mg/kg	U	0.407	0.1	0.203	low hit, high ND
8330B	2-Nitrotoluene	0.283	mg/kg	J+	0.407	0.1	0.203	34%
8330B	4-Nitrotoluene	0.937	mg/kg	J+	0.407	0.1	0.203	16%
8330B	2,4,6-Trinitrotoluene	<0.201	mg/kg	UJ	0.402	0.1	0.201	low hit, high ND
8330B	2,4-Dinitrotoluene	<0.201	mg/kg	UJ	0.402	0.1	0.201	low hit, high ND

Eurofins Re-analysis Results							
Client Sample ID	Analysis Method	Analyte	Result	Unit	Final Qualifier	LOQ	DL
29SB126(5-6)	8321A	o-Nitrotoluene	0.0082	mg/Kg	J	0.098	0.0056
29SB140(15-16)	8321A	2,4-Dinitrotoluene	0.0094	mg/Kg	J	0.098	0.008
29SB162(11-12)	8321A	2,4,6-Trinitrotoluene	0.0092	mg/Kg	J	0.096	0.0048
29SB164(7-8)	8321A	2,4,6-Trinitrotoluene	0.0096	mg/Kg	J	0.098	0.0049
29SB149(3-4)	8321A	2,4,6-Trinitrotoluene	0.0091	mg/Kg	J	0.093	0.0047
29SB150(3-4)	8321A	2,4,6-Trinitrotoluene	0.011	mg/Kg	J	0.099	0.005
29SB150(15-16)	8321A	2,4,6-Trinitrotoluene	0.0094	mg/Kg	J	0.097	0.0049
29SB151(3-4)	8321A	2,4,6-Trinitrotoluene	0.011	mg/Kg	J	0.096	0.0048
29SB151(3-4)	8321A	2,4-Dinitrotoluene	0.07	mg/Kg	J	0.096	0.0079
29SB152(11-12)	8321A	2,4,6-Trinitrotoluene	0.0094	mg/Kg	J	0.096	0.0049
29SB145(3-4)	8321A	2,4,6-Trinitrotoluene	0.013	mg/Kg	J	0.094	0.0047
29SB146(3-4)	8321A	2,4,6-Trinitrotoluene	0.1	mg/Kg	J	0.093	0.0047
29SB146(7-8)	8321A	2,4,6-Trinitrotoluene	0.019	mg/Kg	J	0.096	0.0049
29SB146(11-12)	8321A	2,4,6-Trinitrotoluene	0.022	mg/Kg	J	0.099	0.005
29SB147(3-4)	8321A	2,4,6-Trinitrotoluene	0.045	mg/Kg	J	0.095	0.0048
29SB147(7-8)	8321A	2,4,6-Trinitrotoluene	0.061	mg/Kg	J	0.095	0.0048
29SB147(11-12)	8321A	2,4,6-Trinitrotoluene	0.03	mg/Kg	J	0.094	0.0047
29SB165(7-8)	8321A	2,4,6-Trinitrotoluene	0.039	mg/Kg	J	0.098	0.0049
29SB165(11-12)	8321A	2,4,6-Trinitrotoluene	0.71	mg/Kg	J	0.099	0.005
29SB145(7-8)	8321A	2,4,6-Trinitrotoluene	0.017	mg/Kg	J	0.098	0.0049
29SB145(11-12)	8321A	2,4,6-Trinitrotoluene	0.02	mg/Kg	J	0.096	0.0048
29SB144(3-4)	8321A	2,4,6-Trinitrotoluene	0.034	mg/Kg	J	0.099	0.005
29SB144(7-8)	8321A	2,4,6-Trinitrotoluene	0.021	mg/Kg	J	0.099	0.005

MicroBac Original Results								
Analysis Method	parm_syn	Result	Unit	Final Qualifier	LOQ	DL	LOD	RPD
8330B	2-Nitrotoluene	<0.201	mg/kg	UJ	0.418	0.1	0.201	low hit, high ND
8330B	2,4-Dinitrotoluene	<0.197	mg/kg	U	0.393	0.1	0.197	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.196	mg/kg	UJ	0.392	0.1	0.196	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.195	mg/kg	UJ	0.389	0.1	0.195	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.208	mg/kg	U	0.415	0.1	0.208	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.198	mg/kg	U	0.396	0.1	0.198	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.194	mg/kg	U	0.387	0.1	0.194	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.193	mg/kg	U	0.386	0.1	0.193	low hit, high ND
8330B	2,4-Dinitrotoluene	<0.193	mg/kg	U	0.386	0.1	0.193	low hit >Screening, high ND
8330B	2,4,6-Trinitrotoluene	<0.198	mg/kg	U	0.395	0.1	0.198	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.207	mg/kg	UJ	0.413	0.1	0.207	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.194	mg/kg	U	0.388	0.1	0.194	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.210	mg/kg	U	0.42	0.11	0.21	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.207	mg/kg	U	0.415	0.1	0.207	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.201	mg/kg	U	0.403	0.1	0.201	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.199	mg/kg	U	0.398	0.1	0.199	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.200	mg/kg	U	0.4	0.1	0.2	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.205	mg/kg	U	0.41	0.1	0.205	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.207	mg/kg	U	0.414	0.1	0.207	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.204	mg/kg	UJ	0.409	0.1	0.204	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.206	mg/kg	U	0.412	0.1	0.206	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.203	mg/kg	U	0.407	0.1	0.203	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.209	mg/kg	U	0.418	0.1	0.209	low hit, high ND

Eurofins Re-analysis Results							
Client Sample ID	Analysis Method	Analyte	Result	Unit	Final Qualifier	LOQ	DL
29SB144(11-12)	8321A	2,4,6-Trinitrotoluene	0.022	mg/Kg	J	0.098	0.005
29SB144(15-16)	8321A	2,4,6-Trinitrotoluene	0.018	mg/Kg	J	0.1	0.005
29SB148(3-4)	8321A	2,4,6-Trinitrotoluene	0.02	mg/Kg	J	0.097	0.0049
29SB148(11-12)	8321A	2,4,6-Trinitrotoluene	0.022	mg/Kg	J	0.095	0.0048

MicroBac Original Results								RPD
Analysis Method	parm_syn	Result	Unit	Final Qualifier	LOQ	DL	LOD	
8330B	2,4,6-Trinitrotoluene	<0.194	mg/kg	U	0.389	0.1	0.194	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.208	mg/kg	U	0.416	0.1	0.208	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.195	mg/kg	U	0.39	0.1	0.195	low hit, high ND
8330B	2,4,6-Trinitrotoluene	<0.201	mg/kg	U	0.402	0.1	0.201	low hit, high ND

Subject: **Final Monthly Managers' Meeting (MMM), Longhorn Army Ammunition Plant (LHAAP)**
Location of Meeting: **WebEx Conference Call**
Date of Meeting: **19 October 2022 – 10:00 AM Central Daylight Time (CDT)**

Attendees:

Army BRAC:	Rose M. Zeiler (RMZ)
USEPA:	Brian Follin (BF); Tim Bartos and Christopher Braun with United States Geological Survey (USGS) in support of the USEPA
TCEQ:	April Palmie (ABP)
USACE:	Aaron Williams (AW)
USFWS:	Paul Bruckwicki (PB)
Bhate:	Kim Nemmers (KN) and Zachary Beck (ZB)
APTIM:	William Foss (WF) and Praveen Srivastav (PS)
TLI:	Jon Tatman (JT)
HDR:	Amita Patel (AP) and Gregory Kelly (GK)

Defense Environmental Restoration Program (DERP) Performance-Based Remediation Update

Groundwater Treatment Plant (GWTP) – ZB said that efforts are ongoing to repair the blockage identified in the pre-treatment process of the GWTP in Tanks 200A, 200B, and 200C. ZB said that the blockage is restricting flow and preventing the GWTP from operating properly. ZB said that Tanks 200A, 200B, and 200C were drained on 13 September 2022 and inspected. ZB said the inspection did not identify the exact location of the blockage, but determined the blockage was not within the tanks but likely in the 10-inch steel piping that runs between the tanks. ZB explained that the 10-inch steel pipes are 15 feet overhead, and that scaffolding was being purchased to allow safe access to the steel pipes. In the interim, the tanks have been refilled and the GWTP has resumed operation as normal with the restricted groundwater flow.

ZB said that outside of the blockage, the fluidized bed reactor (FBR) is operating properly. ZB explained that, since the LHAAP-17 extraction system was incorporated into the GWTP, an increase in the influent perchlorate concentrations was observed. ZB presented the GWTP weekly perchlorate effluent and monthly perchlorate influent results. ZB explained that prior to LHAAP-17 being brought online on 5 August 2022, GWTP influent perchlorate detections were consistently around 9,000 micrograms per liter (µg/L). However, on 7 September 2022 with the addition of water from LHAAP-17, influent perchlorate was detected at 22,900 µg/L, up from 15,000 µg/L in August 2022. ZB explained that despite the increased perchlorate concentrations in the influent the latest effluent sample collected after the FBR on 27 September 2022 had a concentration of 3.98 µg/L. ZB explained that treated groundwater is currently being discharged to the Intermediate Range Nuclear Forces (INF) Pond as there is not enough flow to discharge directly to Harrison Bayou.

ZB explained that there are currently two perchlorate effluent samples collected weekly, one after the FBR treatment and a second one after the first ion exchange vessel to ensure discharged effluent is in compliance prior to discharge to the INF Pond. ZB stated that the latest effluent sample collected on 27 September 2022 was 0.16 µg/L after the first ion exchange vessel, indicating adequate treatment.

ZB said that sludge from the GWTP secondary containment sump was being characterized for offsite disposal. ZB explained that the sludge would be removed via a vac truck and properly disposed offsite pending the characterization results.

Field Work – ZB said that monthly performance monitoring sampling at LHAAP-17 is ongoing. WF stated that the Year 3 semiannual groundwater sampling event 1 was completed at LHAAP-50 in October 2022. WF said that groundwater sampling at LHAAP-37 (Year 6 annual event) and LHAAP-67 (Year 9 annual event) is scheduled for November 2022.

ZB asked everyone to refer to the Document and Issues (DI) Tracking Table dated 19 October 2022.

- **Task 1** (Project Management) – ZB said that the September 2022 Monthly Manager's Meeting (MMM) minutes were issued Final. ZB said that the next RAB is scheduled for 16 November 2022.
- **Task 4** (LHAAP-04) – PS stated that the Year 3 2nd semiannual Remedial Action-Operation (RA-O) Report is in progress with an estimated delivery to the regulators in December 2022.
- **Task 5** (LHAAP-12) – PS said that the 2022 annual sampling event is upcoming in December 2022 with the validated data deliverable to be presented at the January 2023 MMM.
- **Task 6** (LHAAP-16) – PS said that the Year 3 1st Semiannual RA-O Sampling Event was completed in June/July 2022. PS said that the Year 3 1st Semiannual RA-O Sampling Event validated data package will be presented in the November 2022 MMM. PS said that the Year 2 RA-O Report is in progress with estimated delivery to the Regulators in November 2022.
- **Task 9** (LHAAP-37) – PS said that the Year 6 RA-O annual sampling event is scheduled for November 2022 with the validated data deliverable to be presented at the January 2023 MMM. PS said that the Year 5 RA-O Report is in progress and will be submitted to the Regulators in October 2022.
- **Task 10** (LHAAP-46) – PS said that the Year 8 RA-O Report is in progress and will be submitted to the Regulators in November 2022.
- **Task 11** (LHAAP-50) **–** PS said that the Year 3 semiannual 1 groundwater sampling event was completed in October 2022 with the validated data package to be presented at the December 2022 MMM. PS said that the Year 8 RA-O Report is in progress and will be submitted to the Regulators in October 2022.
- **Task 12** (LHAAP-58) – ZB stated that the Year 8 RA-O Report was being prepared with an anticipated submittal in November 2022 to the Regulators. ZB said that the Year 8 RA-O Report will include recommendations to install two new monitoring wells (35AWW25 and 35AWW26). ZB said that with the December 2022 semi-annual sampling event upcoming, these wells would need to be installed prior to Regulatory approval of the Year 8 RA-O Report. ZB presented the proposed locations of monitoring wells 35AWW25 (downgradient western plume) and 35AWW26 (upgradient western plume). ZB said that 35AWW25 would replace 35AWW04 which has been dry as a downgradient point in the southwest portion of the western plume. BF asked if the new monitoring well 35AWW25 installed near 35AWW04 would be dry too. ZB explained that 35AWW04 was installed at an earlier date when groundwater elevations were higher and isn't screened as deep as the surrounding wells. ZB said that, while drilling lithology would determine the actual depths of the screened interval at 35AWW25, it was anticipated that the screened interval would be about 10 feet deeper than 35AWW04 (currently dry). BF and ABP said they would provide email approval or comments after review of the locations. ZB said that the well would need to be installed the week 14 November 2022 to ensure enough time to develop the new wells and complete the semi-annual sampling event by the end of December 2022.
- **Task 13** (LHAAP-67) – PS stated that Year 9 annual sampling event is scheduled for November 2022.

- **Task 14** (LHAAP-001-R-01 and LHAAP-003-R-01) – ZB said that land use control (LUC) inspections at LHAAP-001-R-01 and LHAAP-003-R-01 were completed in October 2022. ZB said that the Annual LUC Report has an estimated deliver date of November 2022 to the Regulators.
- **Task 16** (GWTP) **–** ZB said that United States Environmental Protection Agency (USEPA) comments to the 2nd Quarter 2022 GWTP Report were received on 10 October 2022. ZB explained that the comments received on the 2nd Quarter 2022 GWTP Report will be addressed in the 3rd Quarter 2022 GWTP Report. ZB said that 3rd Quarter GWTP Report is in progress with an anticipated delivery date in December 2022 to the Regulators.
- **Task 17** (LHAAP-18/24) – ZB said that the 1st semiannual sampling event was completed in August 2022 and the validated data package will be presented at the November 2022 MMM. ZB said that the August 2022 data will be presented in the 3rd Quarter GWTP Report.
- **Task 18** (Surface Water) – ZB said that the 3rd Quarter 2022 surface water samples were collected in August 2022 and the analytical results are presented in the October 2022 MMM validated data package. ZB presented the August 2022 surface water analytical results. ZB said that all perchlorate detections were well below 1 µg/L.
- **Task 19** (2022 LUC Management Plan) – ZB said that the 2022 LUC Management Plan update which includes the LHAAP-47 ROD was submitted for Regulatory review on 18 October 2022.
- **Administrative Record (AR) –** PS said that the April – June 2022 AR is currently printing with an estimated delivery date before the end of October 2022. PS said that the list for the July – September 2022 AR is currently being compiled.

Update on other DERP Sites:

- **LHAAP 18/24 –** AP stated that comments were received from Texas Commission on Environmental Quality (TCEQ) and USEPA on the 60-percent Remedial Design (RD). AP explained that the Pre-Final RD will be submitted in February 2023. AP asked if a basewide survey has been completed at LHAAP. AP added that the topographical survey completed at LHAAP-18/24 ended at the interceptor collection trench boundary and didn't include the remainder of the site. WF said that Light Detection and Ranging (LIDAR) based elevation information may be available at the Texas Natural Resource Information System website.
- **LHAAP-29** – GK said that the Draft Final Pre-Design Investigation (PDI) Report was submitted for regulatory review on 16 September 2022. ABP confirmed that TCEQ has submitted comments to the PDI Report. AP said that the 60-percent RD will be submitted to the Regulators in November 2022.
- **LHAAP-47** – GK said that the Draft PDI Work Plan is in progress, with a tentatively delivery date of January 2023 to the Regulators. AW added that prior to the LHAAP-47 RD there were Regulator comments from the Preliminary Site Investigation (PSI) regarding the need for monitoring wells to define the extent of the plume. AW said that the PDI is the response to those PSI comments prior to RD. ABP requested that comments from the LHAAP-18/24 and LHAAP-29 RDs, are considered in preparation of the LHAAP-47 RD to avoid duplicate comments. AW said that GK will be provided all previous comments to the LHAAP-18/24 and LHAAP-29 RDs.
- **LHAAP-17** – JT said that the Final After Action Report has been submitted to USACE. JT said that the Remedial Action Completion Report (RACR) was in progress and planned for submittal to Army in October 2022 and to the Regulators in November 2022. ZB said that since the groundwater extraction system was started up on 5 August 2022, monthly perchlorate performance monitoring (PM) is ongoing. ZB said that first monthly PM began on 30 August 2022 and the analytical results are included in the October 2022 validated data

package. ZB presented the August 2022 PM results which indicated that perchlorate detections are increasing at 17WW01 and 17WW02 as compared to the April 2022 baseline groundwater data. ZB said that this increase in perchlorate is expected as the groundwater extraction system pulls groundwater towards 17WW02, located in the center of the recently excavated area. ZB said that the August 2022 perchlorate concentration at 17WW06 of 101,000 µg/L has decreased from 120,000 µg/L April 2022. ZB explained that the August 2022 PM data combined with the increased perchlorate observed in the September 2022 GWTP influent results indicate that the LHAAP-17 extraction system is successfully removing perchlorate-impacted groundwater from the site.

Community Implementation Plan:

RMZ noted that the agenda incorrectly stated that Army had provided an interview list to EPA. Instead it should have stated that Army had discussed interview lists with TCEQ and USEPA.

Five-Year Review:

RMZ stated that a five-year review Site Inspection will be upcoming in 2023. ABP asked who will be performing the Five-Year Review. AW said that Dawson has been contracted to perform the Five-Year Review.

Per- and Polyfluoroalkyl Substance (PFAS) Update: RMZ said that Army provided a courtesy copy of the PFAS UFP-QAPP. BF and ABP said they will be providing comment. RMZ said that the PFAS field work will be ongoing in November 2022 at the same time as the RAB meeting. RMZ said that they plan to make a site visit to the PFAS field work as well as LHAAP-58.

Schedule Next Managers' Meeting: The next MMM will be held on Wednesday, 16 November 2022 at 10:30 am CDT via WebEx.

Meeting concluded at approximately 10:54 am CDT.

ACRONYM LIST

µg/L	micrograms per liter
AP	Amita Patel
ABP	April Palmie
APTIM	APTIM Federal Services, LLC
AR	Administrative Record
AW	Aaron Williams
BF	Brian Follin
Bhate	Bhate Environmental Associates, Inc.
BRAC	Base Realignment and Closure
CDT	Central Daylight Time
DERP	Defense Environmental Restoration Program
DI	Documents and Issues
DO	Dissolved Oxygen
ECP	Environmental Condition of Property
FBR	Fluidized Bed Reactor
GK	Gregory Kelly
GWTP	Groundwater Treatment Plant
INF	Intermediate Range Nuclear Forces
JT	Jon Tatman
LHAAP	Longhorn Army Ammunition Plant
LIDAR	Light Detection and Ranging
LUC	Land Use Control
MEC	Munitions and Explosives of Concern
MMM	Monthly Managers' Meeting
ORP	Oxidation-Reduction Potential
PDI	Pre-Design Investigation
PFAS	Per- and Polyfluoroalkyl Substance
PM	Performance Monitoring
PSI	Preliminary Site Inspection
QAPP	Quality Assurance Project Plan
RAB	Restoration Advisory Board
RACR	Remedial Action Completion Report
RA-O	Remedial Action – Operation
RD	Remedial Design
RMZ	Rose M. Zeiler
ROD	Record of Decision
TCEQ	Texas Commission on Environmental Quality
TCRA	Time Critical Removal Action
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
WF	William (Bill) Foss
ZB	Zachary Beck

LHAAP Validated Data
October MMM

GWTP Effluent	*Weekly Perchlorate Sampling –September 2022* Perchlorate (6850)
GWTP Effluent	*Weekly, Bi-Weekly, and Monthly Sampling – September 2022* Ammonia (350.3) Ortho-Phosphate (365.3) Total Organic Carbon (415.1) VOC (8260C) Metals (6020A) Hexavalent Chromium (7196A) 1,4-Dioxane (8270D-SIM) Anions (9056)
GWTP Influent	*Monthly Sampling – September 2022* Metals (6020A) Perchlorate (6850) Hexavalent Chromium (7196A)
LHAAP 17	*Monthly Perchlorate Sampling - August 2022* Perchlorate (6850)
Surface Water	*3Q Quarterly Sampling - August 2022* Perchlorate (6850)

GWTP Weekly/Effluent Perchlorate Sampling - September 2022

Location ID: Sample Date:	Units	Daily Maximum Conc	PCL	LH18/24-SP650_090822_BIX 9/8/22	LH18/24-SP650_090822_AIX 9/8/22	LH18/24-SP650_090722_AIX 9/7/22	LH18/24-SP650_091422_BIX 9/14/22	LH18/24-SP650_091422_AIX 9/14/22	LH18/24-SP650_0921_BIX 9/21/22	LH18/24-SP650_092122_AIX 9/21/22	LH18/24-SP650_0927_BIX 9/27/22	LH18/24-SP650_092722_AIX 9/27/22
Location Description												
				Weekly	Weekly	Monthly EFF	Weekly	Weekly	Weekly	Weekly	Weekly	Weekly
Perchlorate (6850)												
Perchlorate	µg/L	589	17	**0.698**	**0.0494 J**	< 0.0500 U	**2.43**	**0.105**	**0.0438 J**	**0.338**	**3.89**	**0.166**

µg/L - micrograms per liter

BIX - before ion exchange/AIX - after ion exchange

U- Undetected: The analyte was analyzed for, but not detected and reported to the limit of detection.

J - estimated value between the detection limit and limit of quantitation

GWTP Weekly Sampling - September 2022

Location ID: Sample Date:	Units	Daily Maximum Conc	LH18/24-SP650_090822 9/8/22	LH18/24-SP650_091422 9/14/22	LH18/24-SP650_092122 9/21/22	LH18/24-SP650_092722 9/27/22
Location Description			**GWTP–Collected from a spigot on the discharge of effluent TK-650. Sampled Weekly.**			
Ammonia as N (350.3)						
Ammonia as N	mg/L	NV	**12**	**10**	**21**	**25**
Ortho-Phosphate (365.3)						
Ortho-Phosphate	mg/L	NV	**5.28**	**3.25**	**6.90**	**3.03**
Organic Carbon (415.1)						
Total Organic Carbon (TOC)	mg/L	NV	**6.92**	**6.76**	**8.78**	**20.8**

mg/L - milligrams per liter

NV - No Value

GWTP Bi-Weekly Sampling - September 2022

Location ID: Sample Date:	Units	(Bayou) Daily Maximum Conc	(INF pond) MCL	LH18/24-SP650_091422 9/14/22	LH18/24-SP650_092722 9/27/22
Location Description				**GWTP – Collected from a spigot on the discharge of effluent TK-650. Sampled Biweekly.**	
Volatile Organic Compounds (8260C)					
1,1,1-Trichloroethane	µg/L	7,230	200	< 0.50 U	< 0.50 U
1,1,2-Trichloroethane	µg/L	216.9	5	< 1.0 U	< 1.0 U
1,1-Dichloroethane	µg/L	14,032	NV	< 0.50 U	< 0.50 U
1,1-Dichloroethene	µg/L	253	7	< 0.50 U	< 0.50 U
1,2-Dichloroethane	µg/L	181	5	< 0.50 U	< 0.50 U
1,2-Dichloropropane	µg/L	5	5	< 1.0 U	< 1.0 U
Acetone	µg/L	2,395	NV	< 2.0 U	< 2.0 U
Benzene	µg/L	181	5	< 0.50 U	< 0.50 U
Carbon tetrachloride	µg/L	181	5	< 1.0 U	< 1.0 U
Chlorobenzene	µg/L	47,180	100	< 1.0 U	< 1.0 U
Chloroform	µg/L	3,615	NV	< 0.50 U	< 0.50 U
cis-1,2-Dichloroethene	µg/L	NV	70	**2.6**	**2.5**
Ethylbenzene	µg/L	57,025	700	< 1.0 U	< 1.0 U
m,p-Xylene	µg/L	83.6	NV	< 1.0 U	< 1.0 U
Methylene chloride	µg/L	1,699	5	< 1.0 U	< 1.0 U
o-Xylene	µg/L	83.6	NV	< 1.0 U	< 1.0 U
Styrene	µg/L	5,987	100	< 1.0 U	< 1.0 U
Tetrachloroethene	µg/L	180.7	5	< 1.0 U	< 1.0 U
Toluene	µg/L	4,189	10	< 0.50 U	< 0.50 U
Trichloroethene	µg/L	181	5	< 0.50 U	< 0.50 U
Vinyl chloride	µg/L	72	2	< 0.50 U	< 0.50 U
Anions (9056)					
Chloride	mg/L	NV	NV	**1,170**	**1,140**
Sulfate	mg/L	NV	NV	**26.8**	**33.5**

µg/L - micrograms per liter

mg/L - milligrams per liter

U- Undetected: The analyte was analyzed for, but not detected and reported to the limit of detection.

NV - No Value

GWTP Monthly Effluent Sampling - September 2022

Location ID: / Sample Date:	Units	Daily Maximum Conc	(INF pond) MCL	LH18/24-SP650_090722 9/7/22
Location Description				**GWTP – Collected from a spigot on the discharge of effluent TK-650. Sampled monthly**
Volatile Organic Compounds (8260C)				
1,1,1-Trichloroethane	µg/L	7,230	200	< 0.50 U
1,1,2-Trichloroethane	µg/L	216.9	5	< 1.0 U
1,1-Dichloroethane	µg/L	14,032	NV	< 0.50 U
1,1-Dichloroethene	µg/L	253	7	< 0.50 U
1,2-Dichloroethane	µg/L	181	5	< 0.50 U
1,2-Dichloropropane	µg/L	5	5	< 1.0 U
Acetone	µg/L	2,395	NV	< 2.0 U
Benzene	µg/L	181	5	< 0.50 U
Carbon tetrachloride	µg/L	181	5	< 1.0 U
Chlorobenzene	µg/L	47,180	100	< 1.0 U
Chloroform	µg/L	3,615	NV	< 0.50 U
cis-1,2-dichloroethene	µg/L	NV	70	**2.8**
Ethylbenzene	µg/L	57,025	700	< 1.0 U
m,p-Xylene	µg/L	83.6	NV	< 1.0 U
Methylene chloride	µg/L	1,699	5	< 2.0 U
o-Xylene	µg/L	83.6	NV	< 1.0 U
Styrene	µg/L	5,987	100	< 1.0 U
Tetrachloroethene	µg/L	180.7	5	< 1.0 U
Toluene	µg/L	4,189	10	< 0.50 U
Trichloroethene	µg/L	181	5	< 0.50 U
Vinyl chloride	µg/L	72	2	< 0.50 U
Metals (6020A)				
Barium	mg/L	2	2	**0.242**
Lead	mg/L	0.0046	0.015	< 0.00125 U
Selenium	mg/L	0.012	0.05	< 0.00250 UJ
Silver	mg/L	0.003	0.1	< 0.000500 U
Hexavalent Chromium (7196A)				
Hexavalent Chromium	mg/L	0.1244	NV	< 0.00600 U
Semi-Volatile Organic Compounds (8270D SIM)				
1,4-Dioxane	µg/L	134.2	NV	**7.8**

µg/L - micrograms per liter

mg/L - milligrams per liter

U- Undetected: The analyte was analyzed for, but not detected and reported to the limit of detection.

NV - no value

UJ - estimated non-detect due to quality control discrepancies

GWTP Monthly Influent Sampling - September 2022

Location ID: Sample Date:	Units	LH18/24-SP140_090722 9/7/22
Location Description		**GWTP – Collected from a spigot on the influent to TK-140. Sampled Monthly.**
Metals (6020A)		
Selenium	mg/L	< 0.00250 U
Silver	mg/L	< 0.000500 U
Hexavalent Chromium (7196A)		
Hexavalent Chromium	mg/L	< 0.00600 U
Perchlorate (6850)		
Perchlorate	µg/L	**22,900**

mg/L - milligrams per liter

µg/L - micrograms per liter

U- Undetected: The analyte was analyzed for, but not detected and reported to the limit of detection.

Perchlorate Groundwater Analytical Results
LHAAP-17 August 2022

Location ID: / Sample Date:	Units	PCL	130_083122 8/31/22	17WW01_083122 8/31/22	17WW02_083122 8/31/22	17WW02_083122_a 8/31/22	17WW03_083122 8/31/22	17WW06_083122 8/31/22
Perchlorate (6850)								
Perchlorate	µg/L	17	**0.0640 J**	**1,740**	**16,400**	**16,200**	**0.0694 J**	**101,000**

PCL – Texas Risk Reduction Program (TRRP) Tier 1 Groundwater Residential Protective Concentration Level

Highlighted results exceed the perchlorate PCL

µg/L - micrograms per liter

J - Estimated Value. Concentration found below the limit of quantitation

17WW15
17WW20
17WW12
17WW18
MW-19
17WW09
17WW19
17WW13
17WW17
17WW14
17WW04
17WW07
17WW08
18WW15
18WW14
C-07
SCUDDAY AVE
AVE "Q"
LONG POINT RD
HAYSTACK RD.

17WW02		4/8/2022
COC	PCL	Result
Perchlorate	17	5,250

130		4/8/2022
COC	PCL	Result
Perchlorate	17	15.0

17WW06		4/8/2022
COC	PCL	Result
Perchlorate	17	120,000

17WW01		4/8/2022	4/21/2022
COC	PCL	Result	Result
Perchlorate	17	239	46.8

17WW03		4/8/2022
COC	PCL	Result
Perchlorate	17	44.7 J / 7.78 J

COCs shown on this figure	
COC	PCL
Perchlorate	17

Notes:
PCL – TRRP Tier 1 Groundwater Residential Protective Concentration Level
TRRP - Texas Risk Reduction Program
Bold Red values exceed the PCL
J - Estimated Value. Concentration found below the limit of quantitation
All results and PCLs are reported in micrograms per liter (µg/L)

N

Legend

- Extraction Well
- Shallow Monitoring Well
- Intermediate Monitoring Well
- LHAAP-17 Boundary
- Road
- Stream

Longhorn Army Ammunition Plant
Karnack, Texas

Figure X
Baseline Groundwater Sampling Analytical Results (April 2022)

0 50 100 200 Feet

1 inch = 100 feet

Prepared By: MMG / TLI JOINT VENTURE

Map Date: 9/27/2022

Service Layer Credits: Google satellite imagery

Document Path: Z:\Projects\MSC20200016 Longhorn\0002 RIP\0031 RA RACR\AB Extraction LHAAP 17\Figure X.mxd

LHAAP-Quarterly Surface Water Sampling

August 2022 (Quarter 3)

Location ID: / Sample Date:	Units	PCL	HBW7_082622 8/26/22	HBW10_082622 8/26/22	HBW1_082622 8/26/22	HBW1_082622_a 8/26/22	GPW1_082622 8/26/22	GPW3_082622 8/26/22
Perchlorate (6850)			Harrison Bayou				Goose Prairie Creek	
Perchlorate	µg/L	17	**0.0880 J**	**0.171**	**0.0540 J**	< 0.0500 U	**0.104**	**0.132**

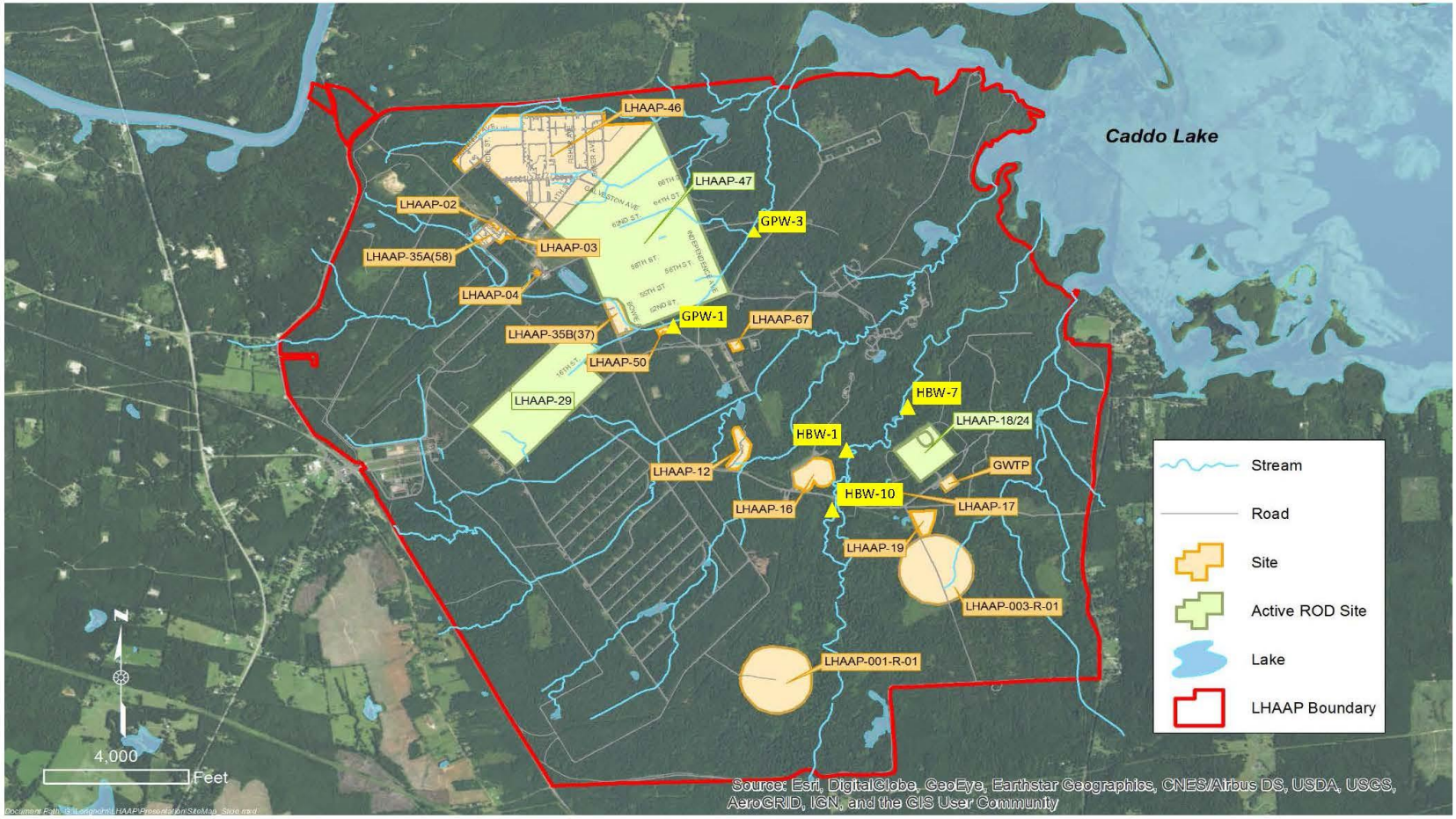
PCL – Texas Risk Reduction Program (TRRP) Tier 1 Groundwater Residential Protective Concentration Level

µg/L - micrograms per liter

J - estimated value between the detection limit and limit of quantitation and/or due to quality contol issues

U - nondetect; reported to the limit of detection

Longhorn Army Ammuntion Plant Creek Sampling Locations



Subject: Final Minutes, Quarterly Restoration Advisory Board (RAB) Meeting
Longhorn Army Ammunition Plant (LHAAP)
Location of Meeting: Karnack Community Center
Date of Meeting: June 22, 2022, 6:00 PM Central Standard Time (CST)

Meeting Participants:

Army BRAC:	Rose M. Zeiler
USACE:	Aaron Williams, Chelsea Montoya (on the phone)
USAEC:	Lena Sierocinski, Michael Bowlby
Bhate:	Zachary Beck
APTIM:	Bill Foss
HDR, Inc.	Philip Werner, Amita Patel
USEPA Region 6:	Brian Follin
USGS:	Christopher Braun
TCEQ:	April Palmie (on the phone)
RAB:	Present: John Fortune, Sharon McAvoy, Richard LeTourneau, and Judy VanDeventer Absent: Deon Hall, Charles Dixon, Nigel Shivers, Tom Walker
Public:	USEPA Technical Advisory Group: Laura-Ashleigh Overdyke (Caddo Lake Institute), Nicolette Ledbury (Caddo Lake State Park), Erik Duerkop (Caddo Lake National Wildlife Refuge Manager), Charlene Franks

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A color copy of the slide presentation and handouts (see list at end of meeting minutes) were provided for meeting attendees.

Welcome and Introduction

Ms. Judy VanDeventer welcomed everyone to the RAB Meeting. Ms. Rose Zeiler explained that a website has been established for LHAAP which includes a schedule and administrative record of documents (www.longhornaap.com).

Membership Update

Ms. Zeiler asked if there were any members of the public interested in joining the RAB. Ms. Zeiler provided an overview of the process for joining the RAB. Anyone in the public can become a RAB member. She explained that there is an application to become a RAB member on the website for LHAAP but that an application will be provided to those interested in joining. Ms. VanDeventer stated that a Mr. Ray Polk (not in attendance) would be interested. Ms. Charlene Franks (in attendance) stated that she was interested in becoming a RAB member. Ms. Zeiler encouraged participation of the public attending the RAB regardless of whether they are part of the board.

Ms. Zeiler stated that as approved by the RAB members in January 2022, the meeting frequency has been reduced to three times per year. The new schedule is to meet in February, June, and November of each year, with the next RAB meeting planned for the third Wednesday of

November, on November 16, 2022.

Minutes (January 2022 RAB Meeting)

Ms. Zeiler verified that there were no comments or changes to the January meeting minutes. Motion to approve the January 2022 RAB meeting minutes was provided by Mr. Richard LeTourneau with Mr. John Fortune seconding the motion.

LHAAP-18/24

Ms. Amita Patel with HDR, Inc., presented the preliminary remedial design for Longhorn Site LHAAP-18/24. Ms. Patel outlined the selected remedy which includes enhancement of the existing groundwater extraction and treatment system, enhanced in-situ bioremediation (EISB), thermal treatment to remove dense non-aqueous phase liquid (DNAPL), maintenance of the existing cap over the Unlined Evaporation Pond, unsaturated soil excavation and off-site disposal, land use controls (LUCs), monitored natural attenuation (MNA), and long-term monitoring (LTM).

Ms. Patel explained that the remedy will be implemented in a phased approach. The first phase will include soil excavation, thermal treatment to remove DNAPL, and EISB in the shallow groundwater source area. Ms. Patel explained that the second phase will include EISB within the thermal treatment area, continuation of the EISB in the shallow groundwater source area, and EISB barriers off-site to ensure contamination leaving the site is treated. Ms. Patel explained that the thermal treatment would inhibit the EISB treatment which is why the remedy will be implemented in phases. The third contingent phase will involve soil excavation beneath the Unlined Evaporation Pond if necessary. After the remedy is implemented, MNA and LTM will be conducted to evaluate the remedy.

Ms. Patel presented the most recent perchlorate and TCE groundwater data collected in the shallow and Wilcox aquifer zones. Ms. Zeiler explained that the data was collected as part of the pre-design investigation (PDI). Ms. Zeiler explained that the treatment will be concentrated in the most contaminated part of the shallow zone aquifer. Ms. Patel stated that there is 169,000 square feet of EISB treatment area or nearly three quarters of the area of the site. Ms. Laura-Ashleigh Overdyke, with the Caddo Lake Institute, asked when the soil excavation would begin. Ms. Zeiler explained that the remedy will be implemented under a different contract from the remedial design process. Ms. Patel stated that the 60 percent design is due to the regulators in August 2022 and will not be finalized until October 2022, at which point the remedy implementation will go out for bid to the next contractor. Ms. Zeiler explained that the site is complicated and it is a long process to ensure that the contaminated media is adequately addressed.

Documents in Progress

Mr. Zachary Beck, with Bhate Environmental Associates, Inc. (Bhate), introduced the three contractors performing work at LHAAP. He explained which sites each of the contractors are managing. Mr. Beck explained that LHAAP-18/24, which Bhate manages as an interim remedy, overlaps with HDR, Inc., who is developing the final remedial design as Ms. Patel presented. Mr.

Beck then explained where the LHAAP sites are in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process and pointed out how far along the sites are in that process.

Mr. Beck presented the documents and field work completed in the past 3 months. Mr. Beck explained that Remedial Action-Operation (RA-O) is predominantly groundwater monitoring at LHAAP. Sites with RA-O have remedies in place, such that the groundwater monitoring is completed to evaluate those remedies. An annual report is then produced to document the monitoring. Mr. Beck explained that when a remedy is first put into place, quarterly groundwater sampling is performed for 2 years, followed by semi-annual sampling for another 3 years, and then annual sampling thereafter. Mr. Beck said that a quarterly report is prepared for the Groundwater Treatment Plant (GWTP) and that the groundwater monitoring wells are currently sampled every 6 months at LHAAP-18/24. Mr. Beck explained the document review process and pointed out that each of the reports are posted on the Administrative Record (AR) after Army and regulatory review. Mr. Beck said that the surface water is sampled quarterly and an annual report is produced. He said that the last surface water samples were collected at the beginning of Quarter 2 in April 2022. He stated that the handout for the surface water sampling was provided and included the quarterly data.

LHAAP-12

Mr. Bill Foss with APTIM, explained that LHAAP-12 was a landfill that has been closed since 1998. He stated that the landfill which was in operation from 1978 to 1994 received a variety of waste including cafeteria waste, chemical waste, petroleum contaminated soil, and asbestos. Mr. Foss stated that a cap was placed on the landfill in 1998 as an interim remedy. He stated that a small plume of chlorinated solvents came out of the north end of Landfill 12. Mr. Foss stated that groundwater flows from the west to the east at the site. He said that only one well currently has contamination. At monitoring well 12WW24, trichloroethene (TCE) was detected at 5.5 micrograms per liter (µg/L) just above the clean-up level of 5 µg/L. Mr. Foss presented the chlorinated solvent trends over time for 12WW24 and noted that since 2014, TCE has been consistently trending lower and should continue to decrease to below the clean-up level. Mr. Fortune pointed out that groundwater flow to the east is different than the overall trend in groundwater which is more to the north. Mr. Foss indicated that groundwater flow in the vicinity of Landfill 12 follows the local topography which slopes to the east.

GWTP Update

Mr. Beck then provided an overview of the GWTP, which currently treats groundwater from LHAAP-18/24. He presented a handout with a graph of the amount of treated groundwater discharged each month. He explained that the amount of treated groundwater varies based on rainfall and where the groundwater can be discharged. Mr. Beck explained that weekly monitoring of flow in the Harrison Bayou is performed which determines how treated water is discharged. Currently, there is flow in Harrison Bayou so treated groundwater is discharged directly to the Bayou. He explained that if there is not enough flow in Harrison Bayou the treated groundwater is discharged to a holding pond. Higher volumes of discharged water means that

the Bayou has a high flow and treated groundwater is being discharged from both the GWTP and the holding pond.

Mr. Beck presented the surface water sampling and explained that a handout was provided for the meeting. Surface water is sampled for perchlorate quarterly when the Bayous are flowing. Mr. Beck explained that the locations of the samples collected are presented in the handout.

LHAAP-29 and -47 Status

Mr. Philip Werner, with HDR, then provided an update on LHAAP-29 which does not have a final remedy in place. Mr. Werner discussed the site features including two former wastewater lines. One wastewater line was made of transite and one wastewater line was constructed of wooden staves and held together with iron bands. Ms. VanDeventer asked about the condition of the transite wastewater line. Mr. Werner explained that as part of the PDI in March 2021, eight trenches were dug across the wooden wastewater lines and three trenches across the transite lines. The transite lines were found to be in good condition. The wooden wastewater lines were found to be in poor condition. Mr. Fortune asked what the wastewater lines were used for. Ms. Zeiler explained that the lines were wastewater lines from the production of trinitrotoluene (TNT). Mr. Werner explained that five areas were investigated during the PDI, the former building 812-F, the cooling water outfall ditch, the north TNT cooling water line, the south TNT cooling water line, and the two wastewater lines. Mr. Werner stated that the PDI Report was in progress.

Mr. Werner provided an update on the preliminary 30% remedial design for LHAAP-29. He stated that the selected remedy includes contaminated soil removal, flushing, inspection, and plugging of the transite TNT wastewater line and the vitrified clay cooling water lines. Based on the PDI the wooden TNT wastewater line is in such disrepair that it will be excavated along with surrounding impacted soil for off-site disposal. Groundwater treatment includes in-situ thermal desorption (ISTD) treatment of the intermediate groundwater zone DNAPL plume, followed by MNA in the shallow groundwater zone plumes and for the intermediate groundwater plume following ISTD.

The Final LHAAP-47 Record of Decision (ROD) has been submitted to the United States Environmental Protection Agency (USEPA) for signature and Texas Commission on Environmental Quality (TCEQ) concurrence. He explained that the next step will be LUC notification, Texas Department of Licensing and Regulations (TDLR) notification for well drillers, and placement of the ROD in the AR.

LHAAP-17 Remedial Action

Mr. Beck discussed the ongoing work being performed at LHAAP-17. Mr. Beck summarized the major work elements completed. He explained that excavation and sifting of the soils was completed robotically so that the contaminated soil could safely be removed and sifted. Mr. Beck stated that over 4,048 cubic yards of soil have been excavated and approximately 2,500 cubic yards of this material have been sifted and transported for off-site disposal. All excavations with validated confirmation sidewall samples are complete and backfilled. Mr. Beck said that 96 Munition and Explosives of Concern (MEC) items have been disposed of through on-site

detonations. He said an estimated 41,000 pounds of Non-Munitions Related debris and 18,700 pounds of Munitions Debris have been inspected and transported off-site for recycling/disposal.

Mr. Beck stated that installation of the groundwater extraction system is ongoing and is anticipated to be completed in July 2022. He explained that the groundwater extraction system will be integrated into the GWTP. The extracted groundwater from LHAAP-17 will be pumped to the GWTP for treatment. Mr. LeTourneau asked how deep the extraction pumps will be set. Mr. Beck explained that during the remedial design phase a pump test was conducted to determine the ideal pump depth and pumping rate to maximize extracted volume without pumping the well dry. Based on the pump test, the extraction pumps will be placed at approximately 20 feet below ground surface.

Next RAB Meeting Schedule and Closing Remarks

Ms. Zeiler stated that the next RAB meeting will be held on November 16, 2022. Ms. Zeiler said that an application for RAB membership will be provided to Mr. Ray Polk and Ms. Charlene Franks. Ms. Zeiler thanked the RAB and asked if everyone was ready to adjourn.

Adjourn

Mr. Fortune made a motion to adjourn, which was seconded by Ms. VanDeventer. The meeting adjourned at 6:54 pm CST.

June 2022 Meeting Attachments and Handouts:

- Color copy of Bhate presentation slides
- GWTP – Processed Groundwater Volumes Handout
- Surface Water Sampling Handout

Longhorn Army Ammunition Plant Quarterly Restoration Advisory Board Meeting

June 22, 2022
6:00 PM CST

APTIM

bhate

Restoration Advisory Board Meeting

Abbreviations and Acronyms

#	Number
lbs	pounds
µg/L	Micrograms per liter
amsl	Above mean sea level
bgs	Below ground surface
COC	Chemical of concern
Cy	Cubic Yards
DCE	Dichloroethene
DERP	Defense Environmental Restoration Program
DNAPL	Dense Non-aqueous Phase Liquid
DPT	Direct push technology
EISB	Enhanced In-Situ Bioremediation
ft	Feet
GPW	Goose Prairie Creek Water Sample
GWP-Res	Residential Groundwater Use Protection
GWTP	Groundwater Treatment Plant
HBW	Harrison Bayou Water Sample
ISTD	In-Situ Thermal Desorption
J	Estimated laboratory value
LHAAP	Longhorn Army Ammunition Plant
LTM	Long Term Management
LUCs	Land Use Controls
MC	Methylene Chloride
MDAS	Material documented as safe
MEC	Munitions and explosives of concern
mg/L	Milligrams per liter
MNA	Monitored Natural Attenuation
MPPEH	Material Potentially Presenting an Explosive Hazard
MSC	Medium-Specific Concentration
PC	Perchlorate
PCL	Protective Concentration Level
ppb	Parts per billion
RAB	Restoration Advisory Board
PDI	Pre-Design Investigation
RA(O)	Remedial Action Operation
ROD	Record of Decision
sf	Square foot
TCE	Trichloroethene
TCRA	Time Critical Removal Action
TNT	Trinitrotoluene
TOI	Target of Interest
TRRP	Texas Risk Reduction Program
UEP	Unlined Evaporative Pond
UU/UE	Unlimited Use/Unrestricted Exposure
VC	Vinyl Chloride

Restoration Advisory Board Meeting

Agenda

06:00 Welcome and Introduction

06:05 Open Items {RMZ}
- Ongoing Outreach/Website
- Restoration Advisory Board (RAB) Administrative Issues
  - o Membership Update
  - o Change in Meeting Frequency
  - o Minutes (January 2022 RAB Meeting)

06:15 Defense Environmental Restoration Program (DERP) Update {Bhate}
- Documents and Field Work Completed since last RAB
- Three Month Look ahead
- LHAAP-12
- Groundwater Treatment Plant (GWTP) Update

06:30 Other DERP Update
- LHAAP-18/24, -29, and -47 Status {HDR}
- LHAAP-17 Status {MMG-TLI Joint Venture}

06:50 Transfer Update {RMZ}

06:55 Next RAB Meeting Schedule and Closing Remarks {RMZ}

RAB Administrative Issues

- Membership Update
  - Persons interested in being new members
- Change in Meeting Frequency
- Minutes (January 2022 RAB Meeting)

The Army Wants You to be Informed

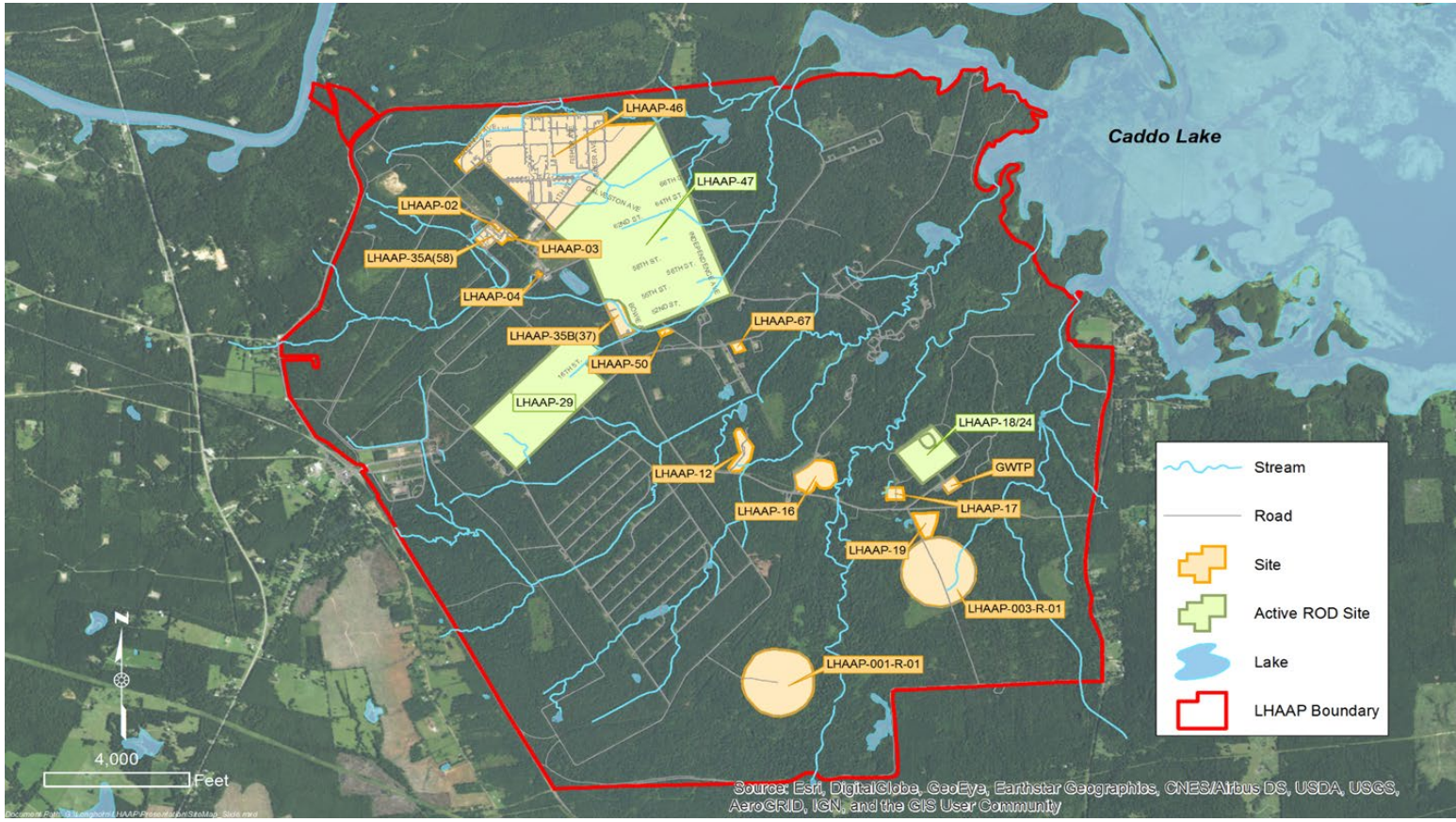
- The Army is committed to protecting human health and the environment; key to that commitment is engaging the community and increasing public participation in environmental restoration at the Longhorn Army Ammunition Plant (LHAAP)
- You are encouraged to:
  - Attend RAB Meetings and/or become a member of the RAB
  - Visit the Longhorn environmental website at www.longhornaap.com.
- The website is regularly updated to indicate the upcoming field events at each site including groundwater sampling, monitoring well installations, soil sampling, or remediation activities.
  - Make suggestions for improving communication – the Army welcomes and appreciates community feedback
- There are three contractors working at LHAAP: Bhate/APTIM; HDR, Inc.; and MMG-TLI Joint Venture. The work conducted by these contractors will be presented in the following slides in that order.

LHAAP Environmental Contractors

- Bhate/APTIM: LHAAP-02, -03, -04, -12, -16, -37, -46, -50, -58, -67, -001-R-01, -001-R-03, and -18/24 (interim remedy)
- HDR: LHAAP-18/24, -29, and -47
- MMG-TLI Joint Venture: LHAAP-17

Restoration Advisory Board Meeting

Bhate/APTIM



Documents in Process

Site	Document
LHAAP-04	Year 2 Annual Remedial Action Operation (RA[O]) Report – In Process
LHAAP-12	2021 Annual RA(O) Report – under Regulatory review
LHAAP-16	Year 2 Annual RA(O) Report – In Process
LHAAP-67	Year 8 Annual RA(O) Report – under Regulatory review
GWTP	Quarterly Evaluation Report: Fourth Quarter (October – December 2021) – with Regulators Quarterly Evaluation Report: First Quarter (January – March 2022) – In Process

Restoration Advisory Board Meeting

Completed Field Work Since Last RAB Meeting

Site	Activity
LHAAP-04	Year 3 Semi-Annual Sampling Event #1 (February)
LHAAP-12	Year 2 Quarter 4 Performance Monitoring (January)
LHAAP-37	Year 5 Semi-Annual Sampling Event #2 (May)
LHAAP-46	Year 8 Annual RA(O) Sampling (February)
LHAAP-50	Year 2 Quarter 3 Performance Monitoring (January)
Surface Water	First Quarter (March) Second Quarter (April)

3 Month Look Ahead – Documents by Bhate Team

Site	Document
LHAAP-04	Draft RA(O) Report to Regulators
LHAAP-12	Draft Final 2021 RA(O) Report to Regulators
LHAAP-16	Draft RA(O) Report to Regulators
LHAAP-58	Draft Year 8 RA(O) Report to regulators
LHAAP-67	Draft Final Year 8 RA(O) Report to Regulators
GWTP and LHAAP-18/24	Quarterly Evaluation Report First Quarter (January – March 2022) to Regulators

Restoration Advisory Board Meeting

3 Month Look Ahead - Field Work by Bhate Team

Site	Activity
LHAAP-04	Year 3 Semi-Annual Sampling Event #2 (August)
LHAAP-16	Year 3 Semi-Annual Sampling Event #1 (June)
LHAAP-58	Year 8 Semi-Annual Sampling Event #1 (June)
LHAAP-18/24	Semi-annual Groundwater Sampling (July)
Surface Water	Third Quarter Sampling (July-September depending on rainfall)

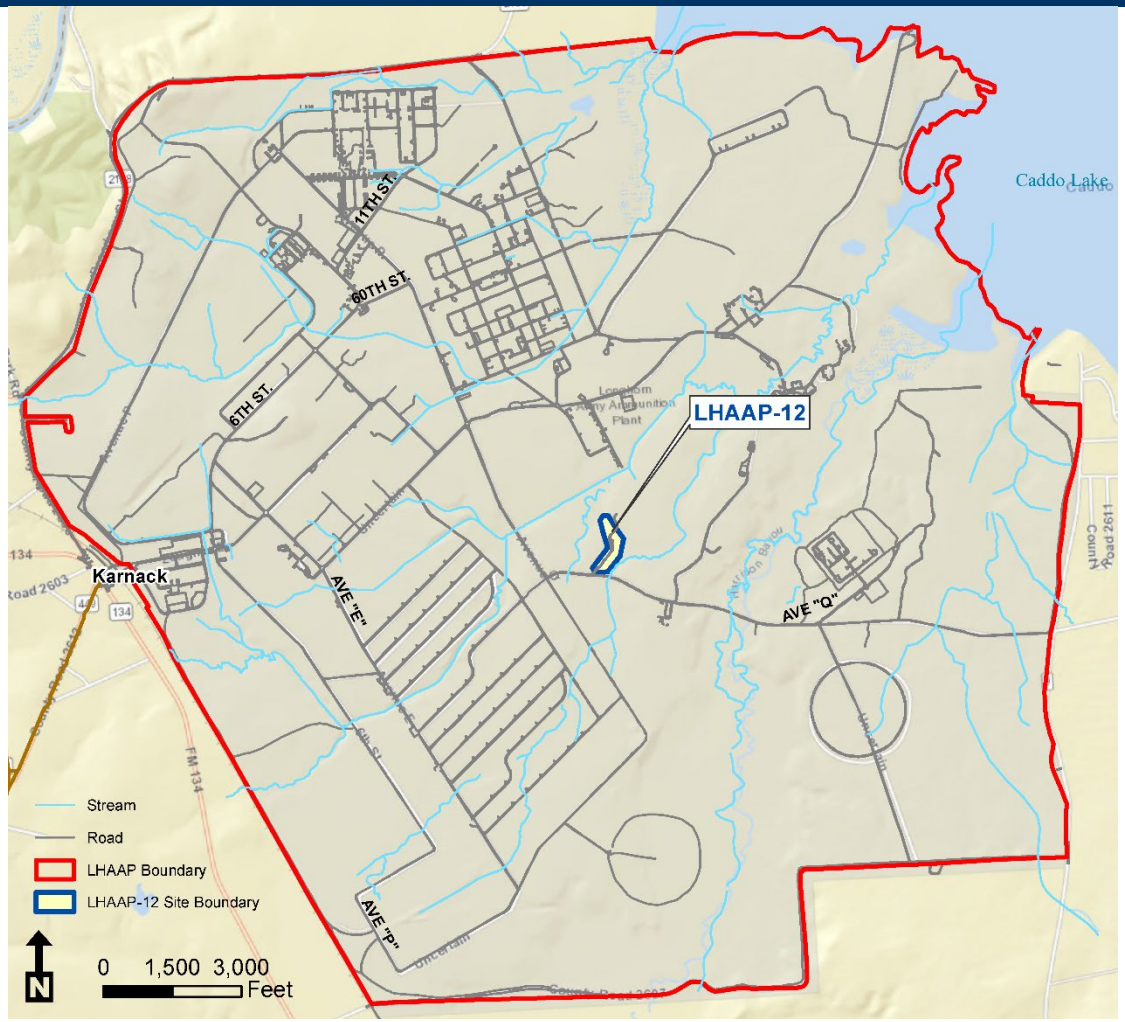
Restoration Advisory Board Meeting

LHAAP-12 Remedy Update

- Landfill 12 (LHAAP-12) established in 1963
- Approximately 7 acres in size
- Disposal of cafeteria waste, chemical waste, petroleum contaminated soil, and asbestos from 1978 to 1994
- Cap placed on landfill in 1998 as interim remedy
- Final remedy is monitored natural attenuation and land use controls
- Primary constituents of concern in groundwater are chlorinated solvents

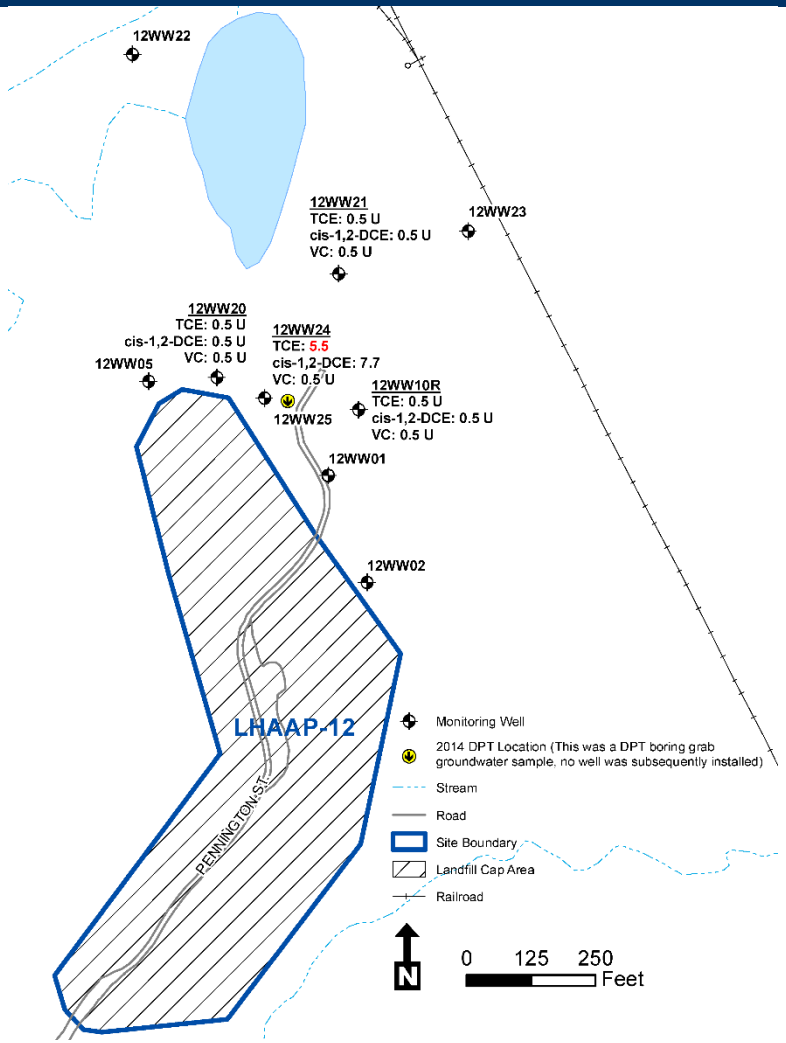
Restoration Advisory Board Meeting

LHAAP-12 Site Location



Restoration Advisory Board Meeting

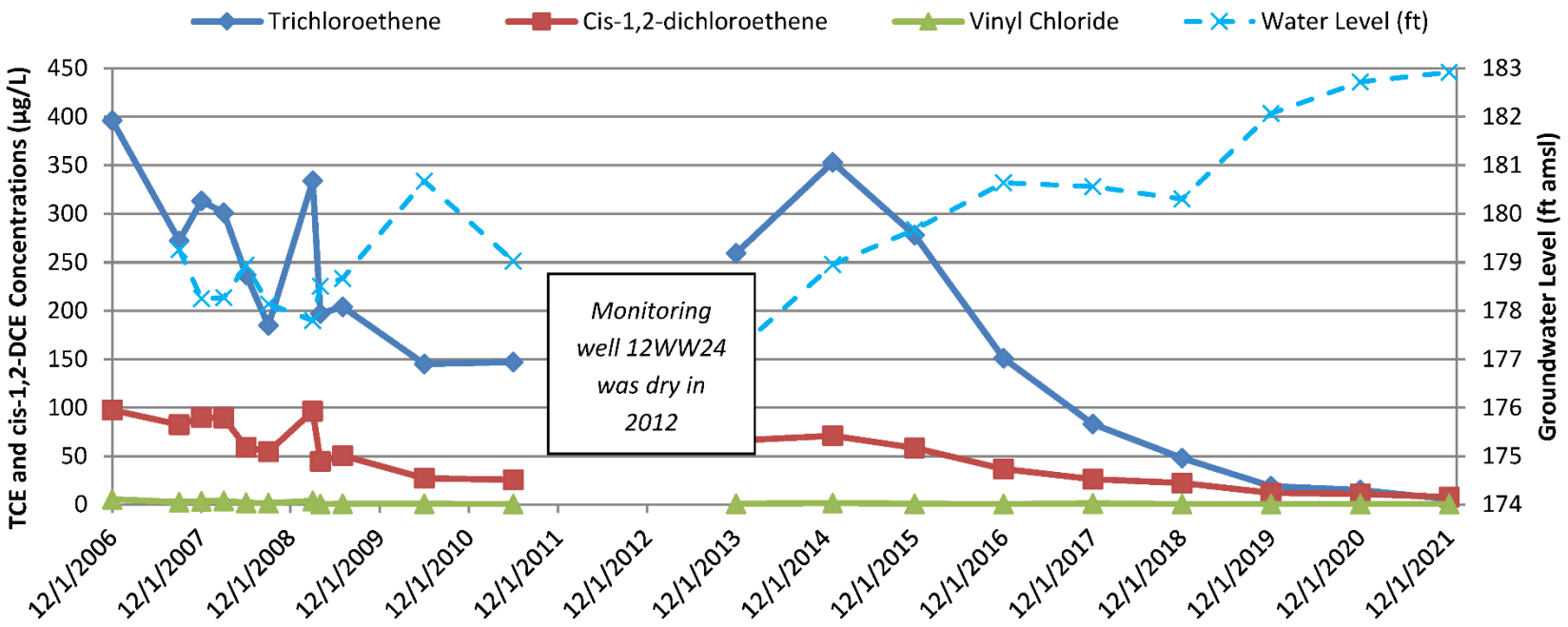
LHAAP-12 December 2021 Groundwater Concentrations



Restoration Advisory Board Meeting

LHAAP-12 Monitoring Well 12WW24 Trend Chart

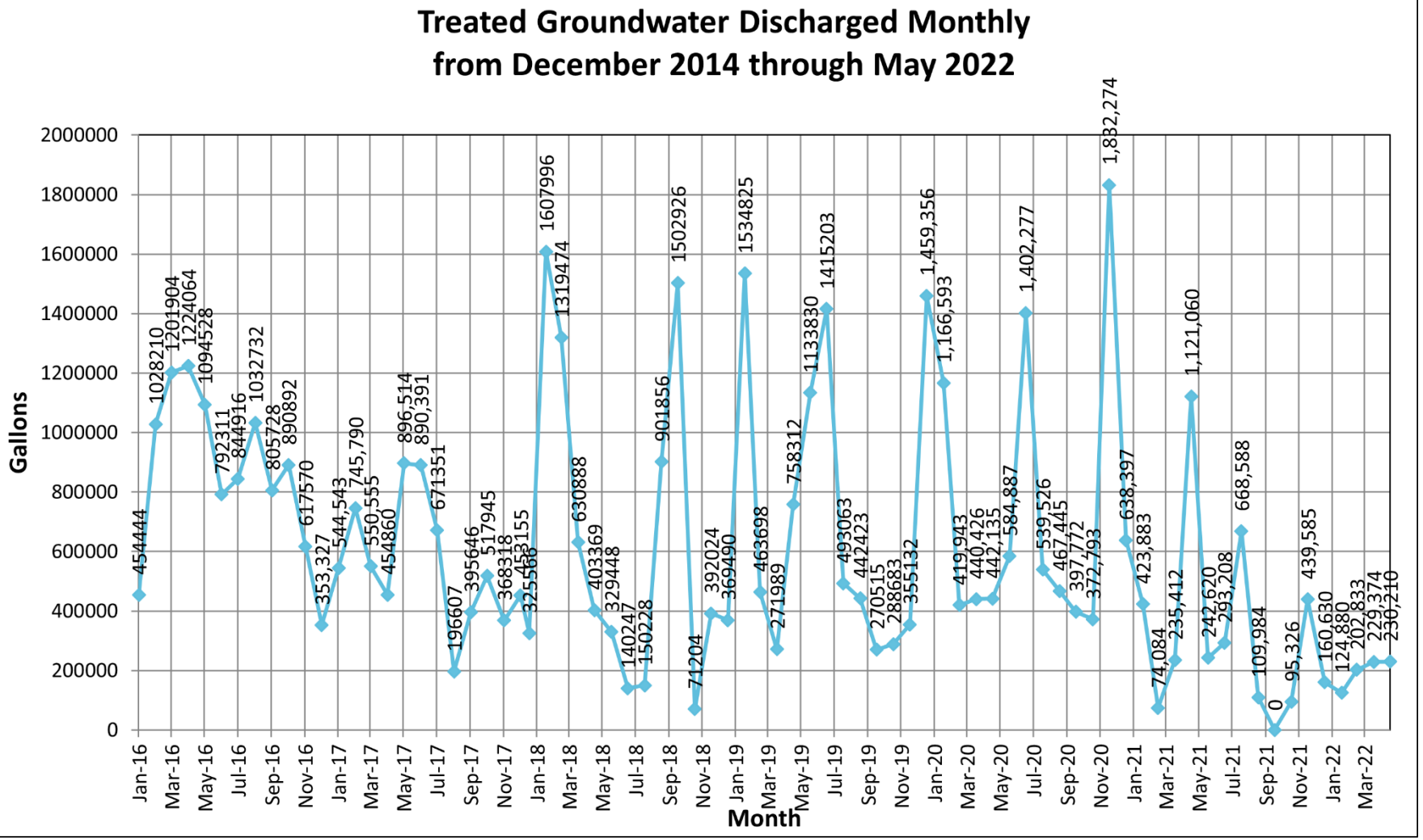
TCE, cis-1,2-DCE, and VC Concentrations in 12WW24
LHAAP-12



Notes:
Maximum Contaminant Levels: TCE = 5 µg/L; cis-1,2-DCE = 70 µg/L; VC = 2 µg/L
µg/L - micrograms per liter
DCE - dichloroethene
ft amsl - feet above mean sea level
TCE - trichloroethene
VC - vinyl chloride

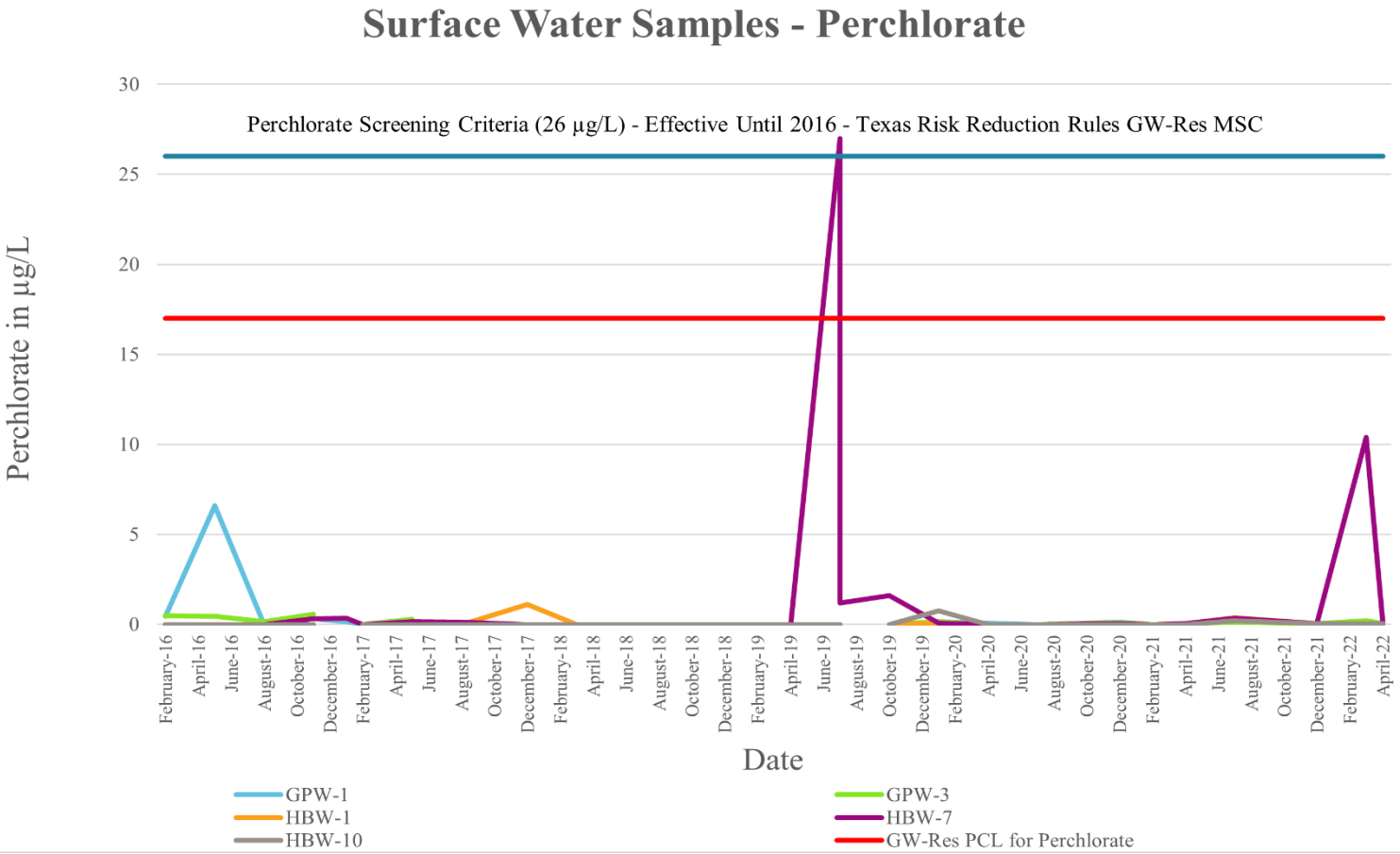
Restoration Advisory Board Meeting

GWTP Update



Restoration Advisory Board Meeting

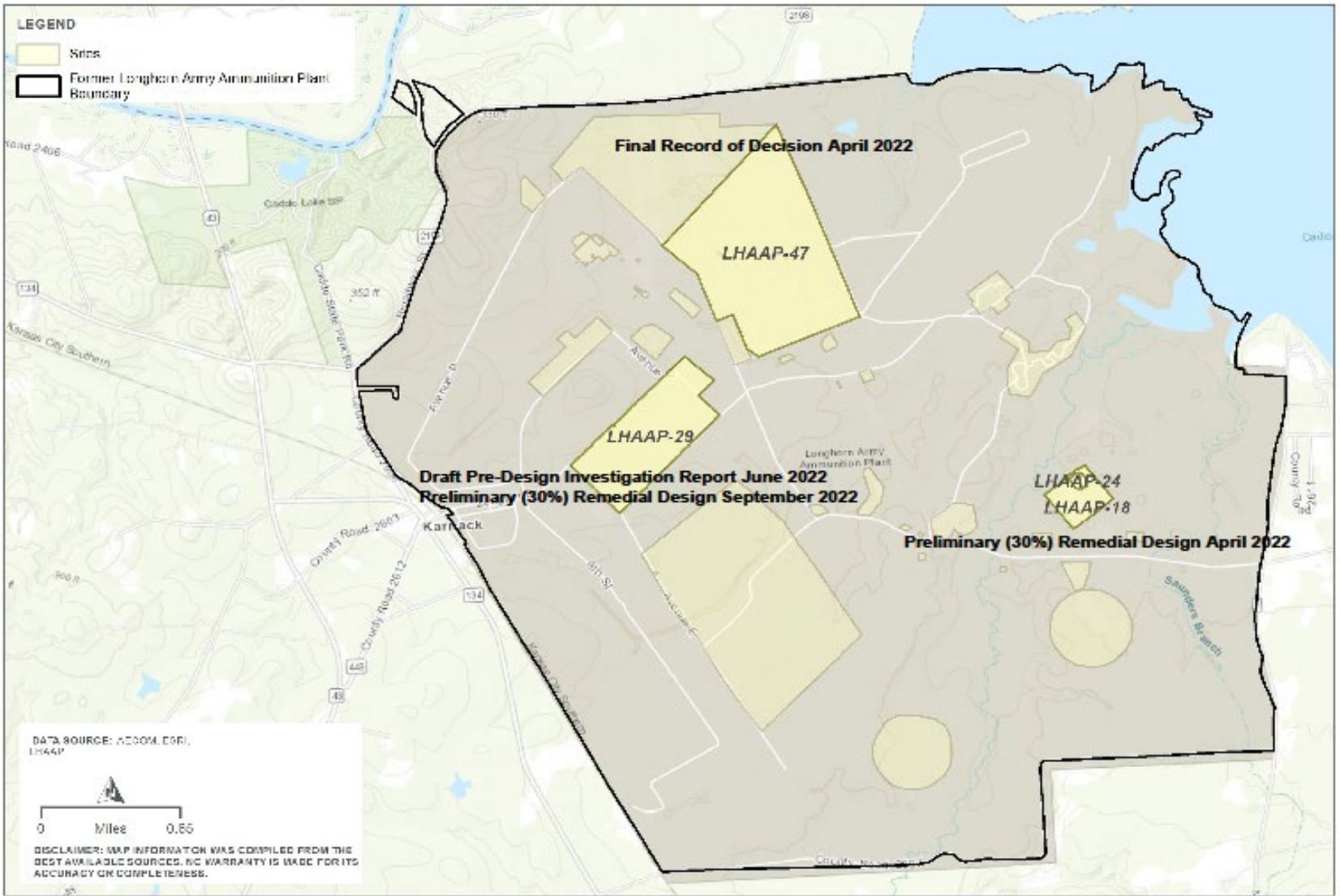
Surface Water Sample Results



Note: Surface water at HBW-7 had a detection of 27 µg/L from a sample collected on 11 July 2019. Surface water at HBW-7 was resampled 19 days later (30 July 2019) with a detection of 1.2 J µg/L.

Restoration Advisory Board Meeting

HDR Update



LHAAP-18/24, -29, and -47 Document Status, HDR

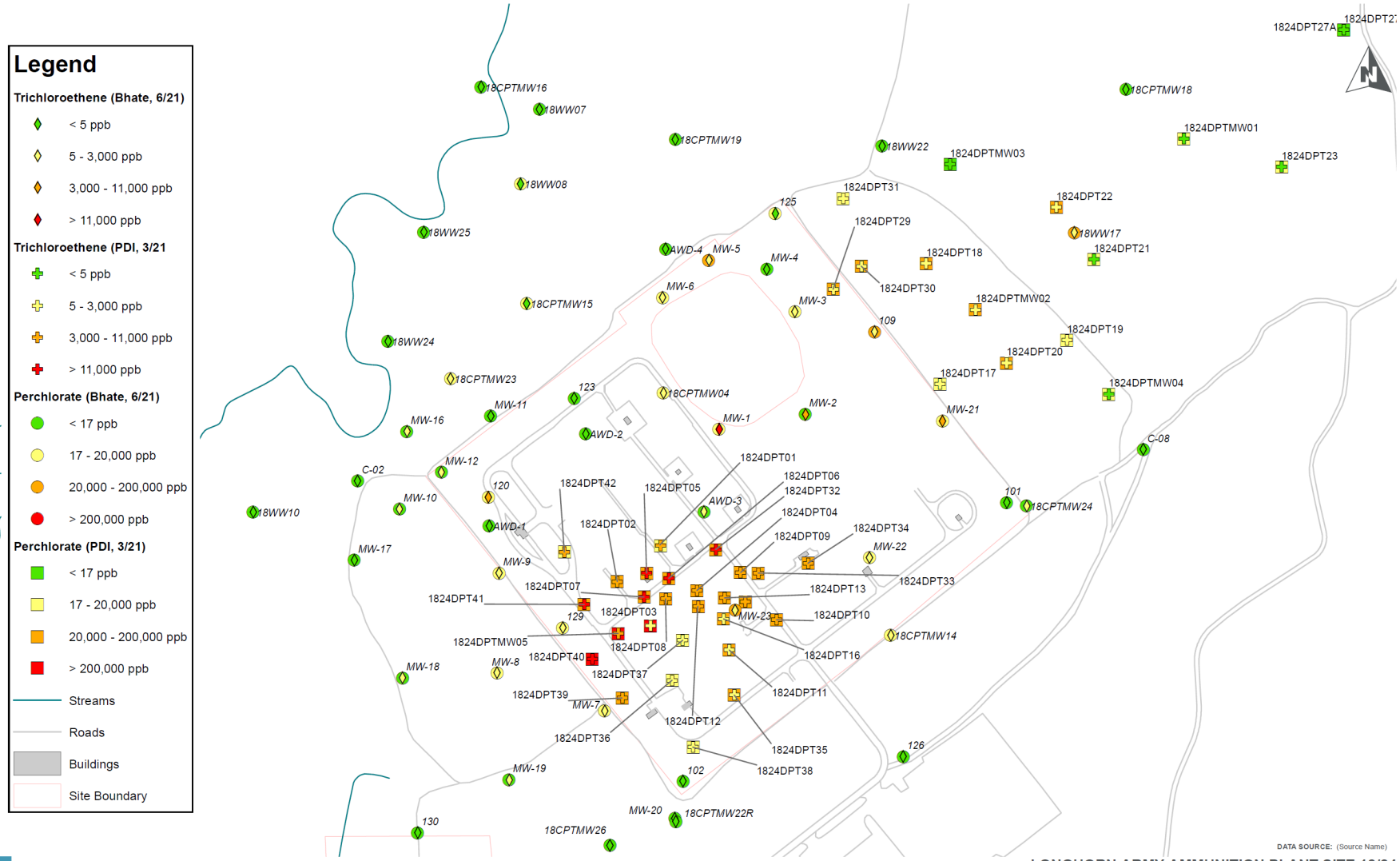
Site	Document
LHAAP-18/24	Preliminary (30%) Remedial Design, April 2022
LHAAP-29	Draft Pre-Design Investigation (PDI) Report, June 2022
LHAAP-29	Preliminary (30%) Remedial Design, September 2022
LHAAP-47	April 2022 Final Record of Decision (ROD) Routed for Signatures and Concurrence

LHAAP-18/24 Preliminary (30%) Remedial Design

- **Selected Remedy**
  - Enhancement of the existing groundwater extraction and treatment system
  - Enhanced In-Situ Bioremediation (EISB) in Shallow Zone and Wilcox Formation groundwater both inside and outside the containment area
  - Thermal treatment to remove Dense Non-aqueous Phase Liquid (DNAPL)
  - Maintenance of the existing cap over the Unlined Evaporative Pond (UEP)
  - Unsaturated soil excavation and off-site disposal
  - Land Use Controls (LUCs), Monitored Natural Attenuation (MNA), and long-term monitoring (LTM)
- **Design Approach**
- **Phase I:**
  - Soil Excavation
  - In-Situ Thermal Desorption (ISTD) to remove DNAPL
  - EISB in groundwater source areas (shallow)
- **Phase II:**
  - EISB within ISTD areas
  - Continuation of EISB in groundwater source areas (shallow)
  - EISB Barriers in the Shallow & Wilcox Formation
- **Phase III:**
  - Excavation of soil beneath the UEP, if required

Restoration Advisory Board Meeting

LHAAP-18/24 Preliminary (30%) Remedial Design
Summary of Shallow Groundwater Perchlorate and TCE Results



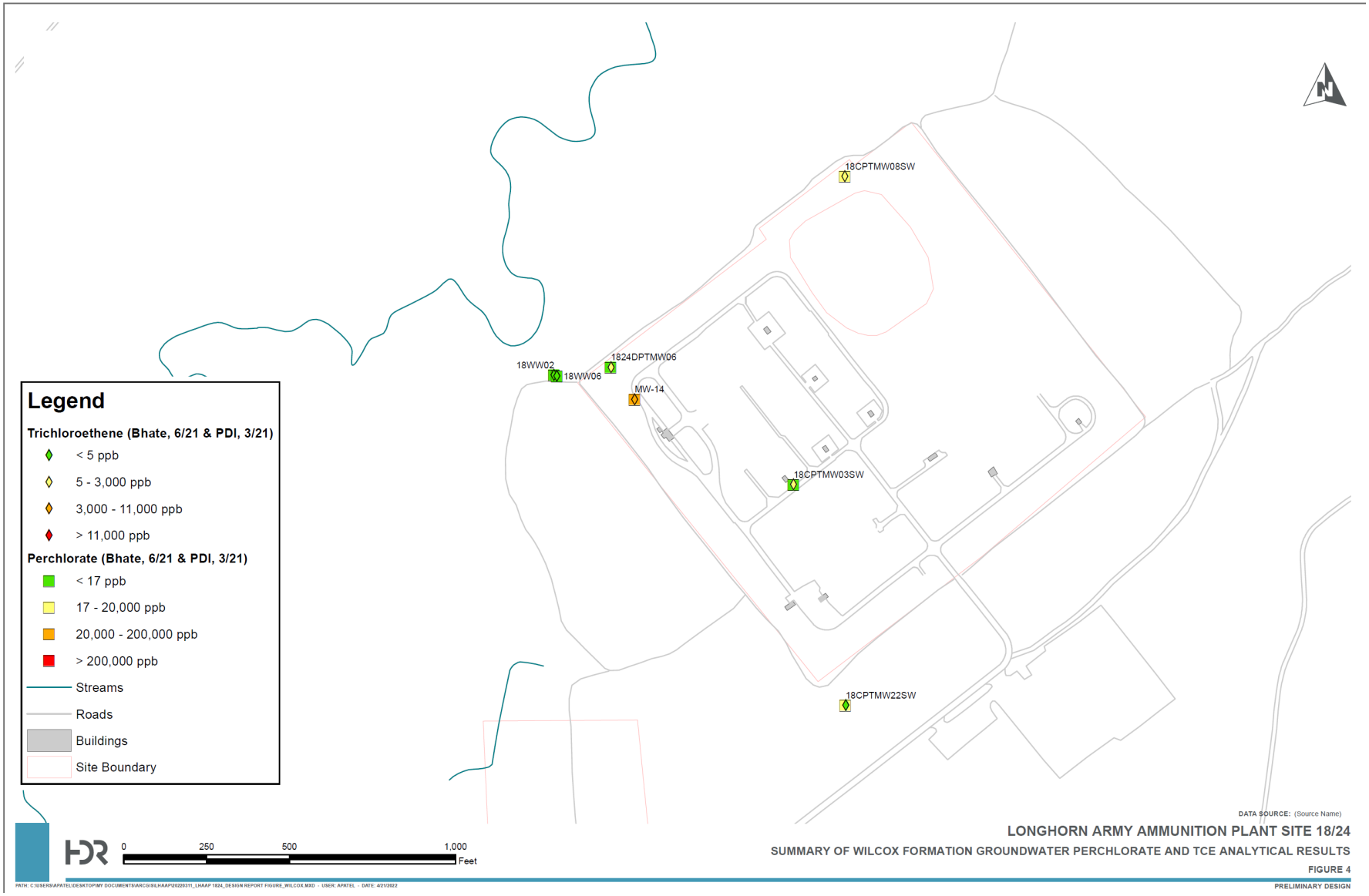
LONGHORN ARMY AMMUNITION PLANT SITE 18/24

SUMMARY OF SHALLOW ZONE GROUNDWATER PERCHLORATE AND TCE ANALYTICAL RESULTS

FIGURE 3

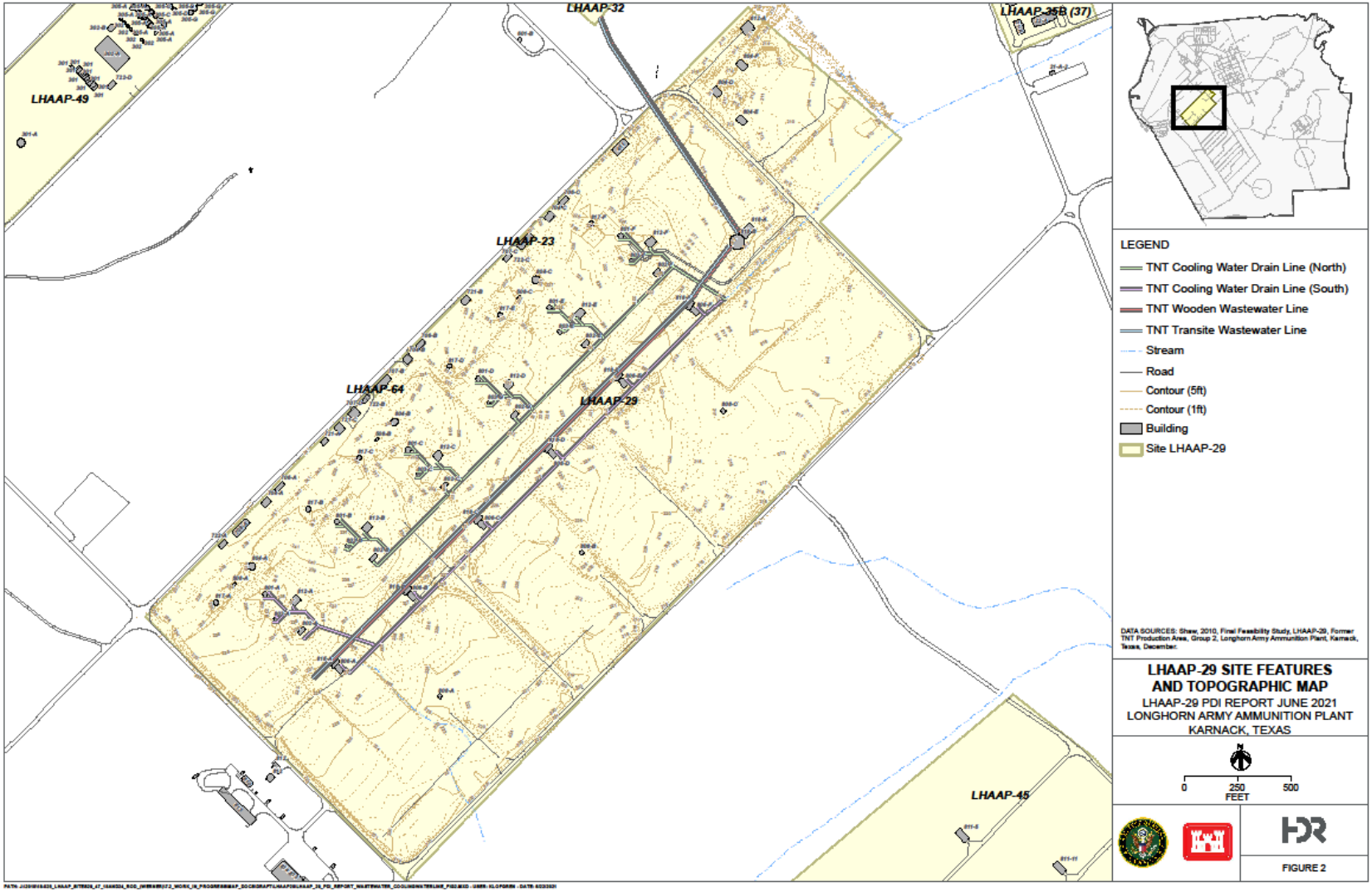
Restoration Advisory Board Meeting

LHAAP-18/24 Preliminary (30%) Remedial Design
Summary of Wilcox Groundwater Perchlorate and TCE Results



Restoration Advisory Board Meeting

Site Map LHAAP-29



Restoration Advisory Board Meeting

Status of LHAAP-29 PDI Investigation

- ✓ Second round of PDI field investigation performed March 2022 to fill data gaps identified during initial investigation.
- ✓ Areas of investigation:
  - Former Building 812-F
  - Cooling Water Outfall/Ditch
  - North trinitrotoluene (TNT) Cooling Water Line
  - South TNT Cooling Water Line
  - Transite TNT Wastewater Line
- ✓ Total of 87 boreholes advanced across LHAAP-29, collection of 98 soil samples for explosives testing.
- ✓ Data currently in review.

Restoration Advisory Board Meeting

LHAAP-29 Preliminary (30%) Remedial Design

- ✓ LHAAP-29 Preliminary (30%) Remedial Design
- ✓ Selected Remedy:
  - Contaminated soil removal with off-site disposal.
  - Flushing, inspection, and plugging of the transite TNT wastewater line and the vitrified clay cooling water lines.
  - Excavation and off-site disposal of the wooden TNT wastewater line and impacted soil.
  - In situ thermal desorption (ISTD) treatment of the intermediate groundwater zone dense non aqueous phase liquid (DNAPL) plume
  - MNA in the shallow groundwater zone plumes and for the intermediate groundwater plume following ISTD.
  - Land use controls (LUCs) for soil and groundwater.

Restoration Advisory Board Meeting

LHAAP-47 Record of Decision

- ✓ **Final LHAAP-47 ROD signed by Army and submitted for EPA signature and TCEQ concurrence on the 1st of June.**
- ✓ **Next Actions:**
  - **LUC Notification and Submittal of Transmittal Letters**
  - **Placement in Administrative Record**

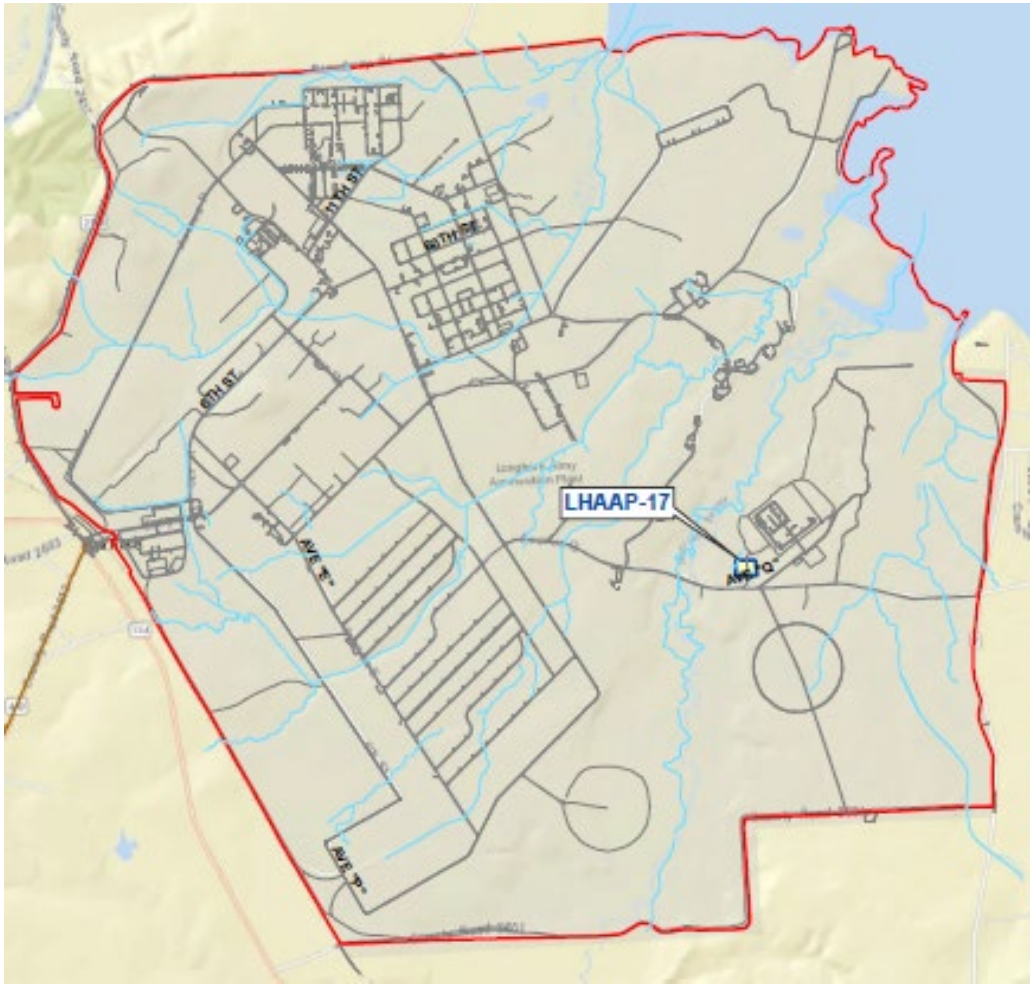
Restoration Advisory Board Meeting

LHAAP-47 Record of Decision Responsiveness Summary

- Responsiveness Summary serves three purposes:
  - Provides the U. S. Army, USEPA, and TCEQ with information about community concerns with the preferred alternative;
  - Shows how the public's comments were considered in the decision-making process for selection of the remedy; and
  - Provides a formal mechanism for the U.S. Army to respond to public comments.
- Information provided through public meetings, Administrative Record, and announcements published in the Marshall News Messenger including:
  - Transcripts of the public meetings on January 9, 2013 and July 21, 2021;
  - Presentation slides from the January 9, 2013 and July 21, 2021 public meetings; and
  - Public questions/comments from the public comment period and U.S. Army responses.

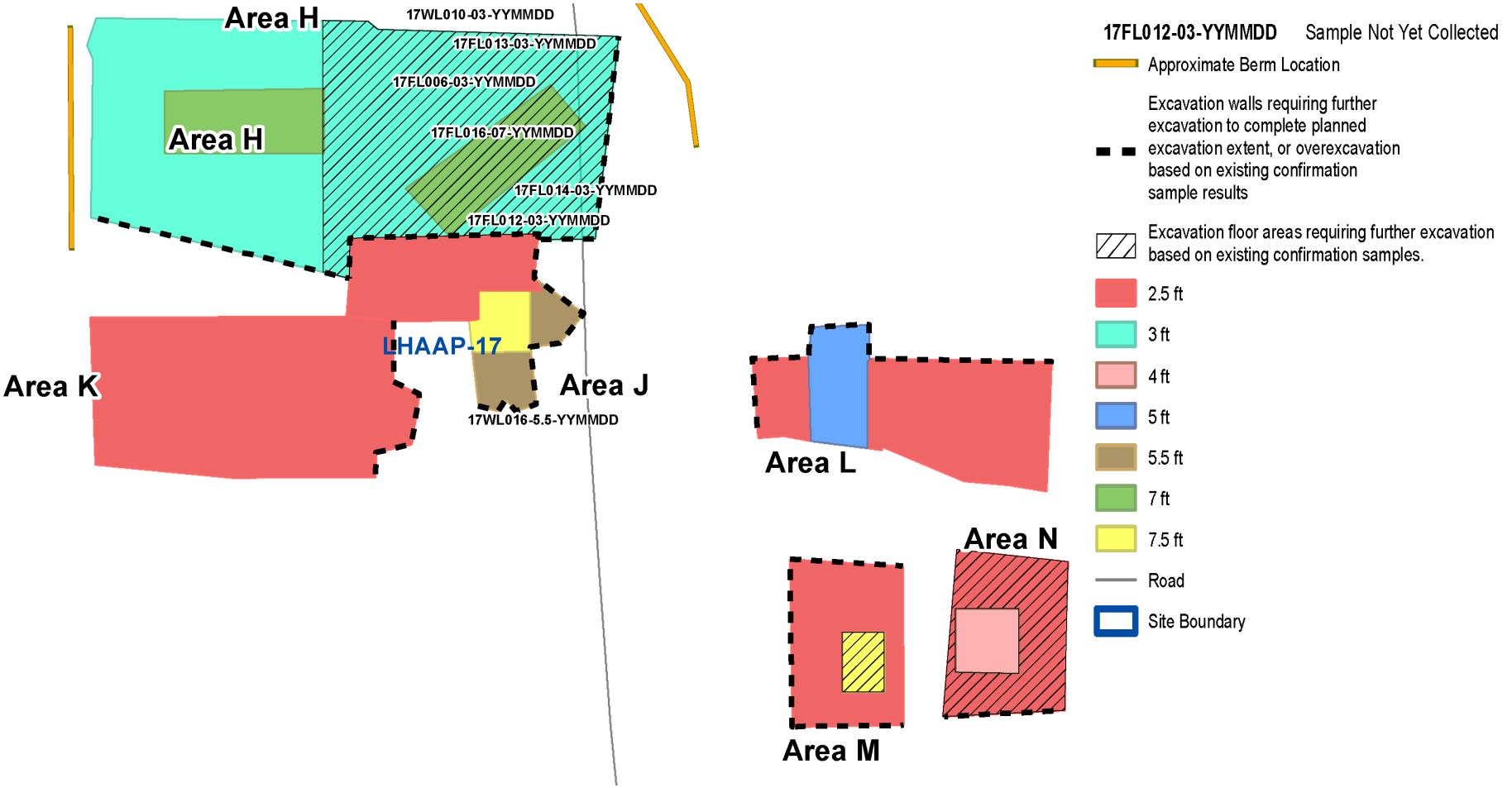
Restoration Advisory Board Meeting

MMG-TLI Joint Venture Update



Restoration Advisory Board Meeting

LHAAP-17 Time Critical Removal Action



Restoration Advisory Board Meeting

LHAAP-17 Time Critical Removal Action

- **Major Work Elements:**
  - Civil survey, Vegetation removal & Erosion control repair
  - Robotic sifting of all pre-existing soil piles to remove potential MEC
  - Confirmation sampling and analysis to confirm excavation extents
  - Backfilling in areas previously determined clean
  - Off-site disposal of sifted soils
  - Complete excavations and receive regulatory approval to backfill all areas
  - Complete geophysical survey across the site to identify subsurface anomalies (i.e., targets) that may be MEC
  - Dig/remove identified targets
  - Install the groundwater extraction system components & Site restoration

Restoration Advisory Board Meeting

LHAAP-17 Time Critical Removal Action

- **Status:**
  - All soil piles have been sifted and disposed of off-site
  - Over 4,048 cubic yards of soil have been excavated and approximately 2,500 cubic yards of this material have been sifted and transported for off-site disposal
  - All excavations with validated confirmation samples are complete and backfilled
  - 96 MEC items have been disposed of through on-site detonations
  - An estimated 41,000 pounds of Non-Munitions Related debris and 18,700 pounds of Munitions Debris have been inspected and disposed of off-site for recycling/disposal
  - Groundwater extraction system installation ongoing
  - Fieldwork is anticipated to be completed in June 2022

Next RAB Meeting Schedule & Closing Remarks

- Schedule Next RAB Meeting
  - November 15, 2022
- Other Issues/Remarks
- Thank you for coming

Harrison Bayou and Goose Prairie Creek – Perchlorate Data

Surface water samples are collected quarterly from each location in Harrison Bayou and Goose Prairie Creek, unless the sampling location is dry.

Surface Water Sample Data (in micrograms per liter)

Quarter	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st
Creek Sample ID	Jul 1999	Sep 1999	Feb 2000	Apr 2000	Aug 2000	Dec 2000	Feb 2001	Apr 2001	July 2001	Oct 2001	Jan 2002
GPW-1	<1.0 U	-	4	<4.0 U	<4.0 U	<4.0 U	-	2.65	<4.0 U	<4.0 U	<4.0 U
GPW-3	<1.0 U	<4.0 U	17	8	<4.0 U	<4.0 U	-	2.28	<4.0 U	<4.0 U	<4.0 U
HBW-1	-	<8.0 U	310	23	-	-	<4.0 U	-	<4.0 U	<4.0 U	<4.0 U
HBW-7	-	<8.0 U	370	110	-	-	<4.0 U	-	<4.0 U	<4.0 U	<4.0 U
HBW-10	-	<8.0 U	905	650	<4.0 U	-	<4.0 U	-	<4.0 U	-	-

Quarter	2nd	3rd	4th	1st	2nd	3rd	3rd	4th	2nd	3rd	4th
Creek Sample ID	June 2002	Sept 2002	Dec 2002	Feb 2003	June 2003	Aug 2003	July 2004	Dec 2006	May 2007	Aug 2007	Dec 2007
GPW-1	<4.0 U	<4.0 U	18.3	18.6	59.9	-	2.25	-	<1.0 U	<1.0 U	10.7
GPW-3	<4.0 U	<4.0 U	5.49	12.6	14.7	-	2.2	-	<1.0 U	<1.0 U	7.48
HBW-1	<4.0 U	<4.0 U	<4.0 U	-	<4.0 U	99.3	<0.2 U	<1.0 U	<1.0 U	122	<1.0 U
HBW-7	<4.0 U	<4.0 U	<4.0 U	-	<4.0 U	<4.0 U	<0.2 U	<1.0 U	<1.0 U	1.02	<1.0 U
HBW-10	<4.0 U	<4.0 U	<4.0 U	-	<4.0 U	-	<0.2 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U

Quarter	1st	2nd	3rd	4th	2nd	3rd	3rd	3rd	4th	1st	2nd
Creek Sample ID	Mar 2008	Jun 2008	Sep 2008	Dec 2008	May 2009	Jul 2009	Aug 2009	Sep 2009	Dec 2009	Mar 2010	Jun 2010
GPW-1	27	<0.5 U	<0.5 U	<0.22 U	16	<4 U	NS	<1.2 U	3.7	1.3 J	<0.6 U
GPW-3	21.9	9.42	1.1	<0.22 U	8.9	<4 U	NS	<0.6 U	2.8	1.8 J	<0.6 U
HBW-1	<0.5 U	<0.5 U	<0.5 U	<0.22 U	<0.55 U	<4 U	NS	<1.5 U	<0.275 U	1.5 U	<0.6 U
HBW-7	<0.5 U	<0.5 U	<0.5 U	<0.22 U	<0.55 U	<4 U	24	<1.2 U	<0.275 U	1.5 U	<0.6 U
HBW-10	<0.5 U	<0.5 U	<0.5 U	<0.22 U	<0.55 U	<4 U	NS	<1.5 U	<0.275 U	1.2 U	<0.6 U

Quarter	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st
Creek Sample ID	Sep 2010	Dec 2010	Mar 2011	Jun 2011	Sep 2011	Dec 2011	Mar 2012	Jun 2012	Not Applicable	Jan & Feb 2013	Mar 2013
GPW-1	Dry	<0.1 U	8.7	Dry	Dry	1.76	0.163 J	Dry	NS	1.65	0.735
GPW-3	Dry	0.199 J	0.673	Dry	Dry	1.31	0.261	Dry	NS	1.74	0.754
HBW-1	Dry	<0.1 U	<0.2 U	Dry	Dry	<0.1 U	<0.1 U	Dry	NS	<0.2 U	<0.2 U
HBW-7	Dry	<0.1 U	<0.2 U	Dry	Dry	0.171 J	<0.1 U	Dry	NS	<0.2 U	<0.2 U
HBW-10	Dry	<0.1 U	<0.2 U	Dry	Dry	<0.1 U	<0.1 U	Dry	NS	<0.2 U	<0.2 U

Quarter	2nd	3rd	4th	1st	2nd	3nd	4th	1st	2nd	3rd	4th
Creek Sample ID	Jun 2013	Sept 2013	Dec 2013	Feb 2014	May 2014	Aug 2014	Nov 2014	Feb 2015	May 2015	Aug 2015	Nov 2015
GPW-1	Dry	<0.2 U	Dry	0.766	Dry	Dry	0.244 J	0.311 J	0.156 J	Dry	0.142 J
GPW-3	Dry	<0.2 U	Dry	1.15	Dry	Dry	0.276 J	0.344 J	Dry	Dry	0.311 J
HBW-1	<0.2 U	<0.2 U	Dry	<0.2 U	Dry	Dry	<0.2 U	<0.2 U	Dry	Dry	<0.2 U
HBW-7	<0.2 U	<0.2 U	Dry	0.201 J	Dry	Dry	<0.2 U	0.124 J	Dry	Dry	<0.2 U
HBW-10	<0.2 U	<0.2 U	Dry	<0.2 U	Dry	Dry	<0.2 U	<0.2 U	Dry	Dry	<0.2 U

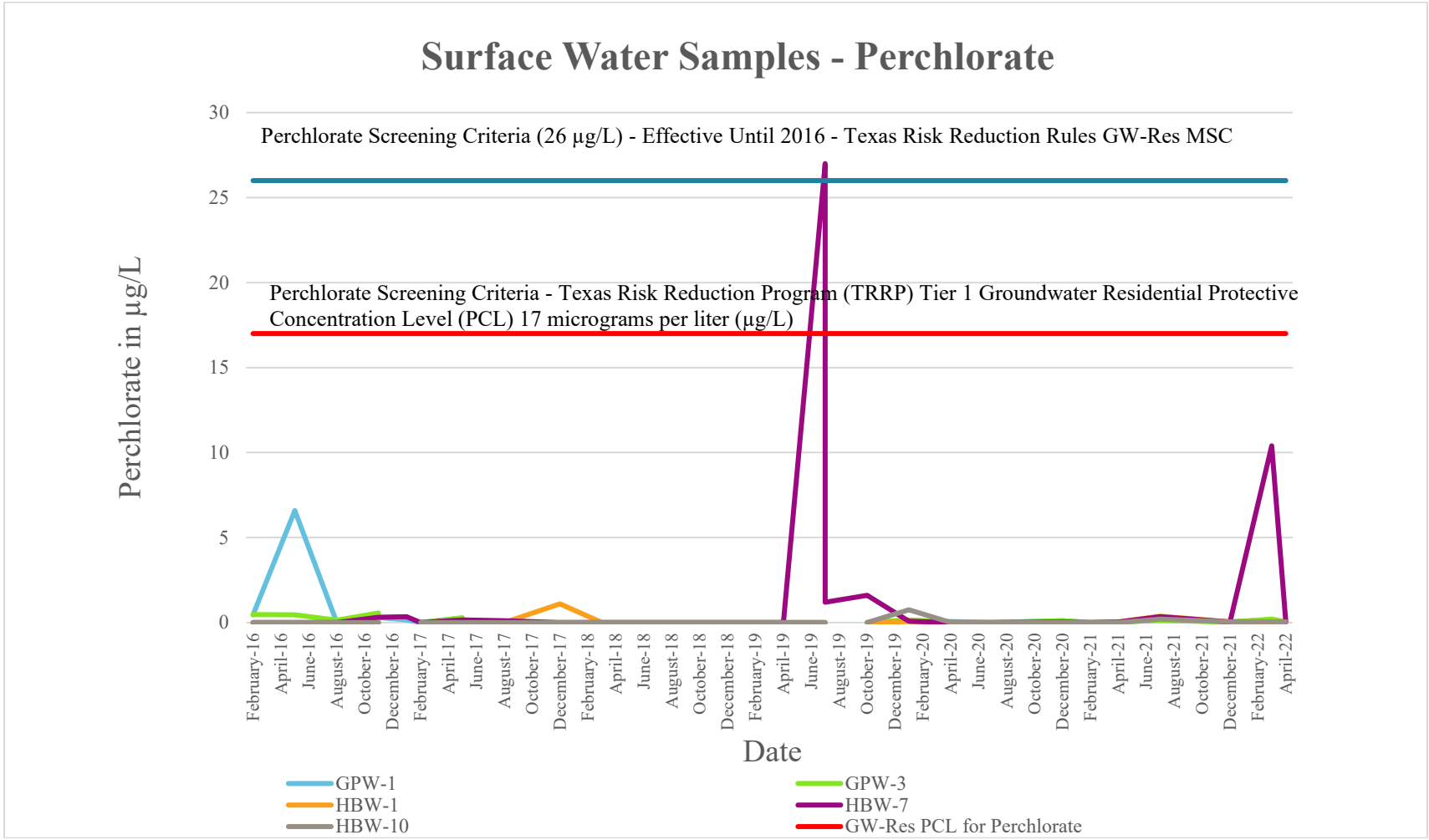
Quarter	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd
Creek Sample ID	Feb 2016	May 2016	Aug 2016	Nov 2016	Feb 2017	May 2017	Aug 2017	Dec 2017	Mar 2018	Jun 2018	Aug 2018
GPW-1	0.447	6.59	<0.2 U	0.301 J	<1 U	0.263	Dry	<2.0 U	<2.0 U	Dry	<2.0 U
GPW-3	0.474	0.457	0.141	0.563	<1 U	0.274	Dry	<2.0 U	<2.0 U	Dry	<2.0 U
HBW-1	<0.2 U	<0.2 U	<0.2 U	<0.2 U	<1 U	<0.2 U	<0.2 U	1.1 J	<2.0 U	Dry	<2.0 U
HBW-7	<0.2 U	<0.2 U	<0.2 U	0.318 J	<1 U	0.155	<0.2 U	<2.0 U	<2.0 U	Dry	<2.0 U
HBW-10	<0.2 U	<0.2 U	<0.2 U	<0.2 U	<1 U	<0.2 U	0.111 J	<2.0 U	<2.0 U	Dry	<2.0 U

NS – not sampled U – non-detect J – Estimated Dry – no surface water

Quarter	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st
Creek Sample ID	Oct 2018	Jan 2019	Apr 2019	Jul 2019	Oct 2019	Jan 2020	Apr 2020	Jul 2020	Dec 2020	Feb 2021
GPW-1	<2.0 U	<2.0 U	<2.0 U	<2.0 U	<2.0 U	0.163	0.0589 J	<0.05 U	0.110	<0.05 U
GPW-3	<2.0 U	<2.0 U	<2.0 U	<2.0 U	<2.0 U	0.156	0.0662 J	0.0326 J	0.108	<0.05 U
HBW-1	<2.0 U	<2.0 U	<2.0 U	<2.0 U	<2.0 U	0.0600 J	<0.05 U	<0.05 U	0.0374 J	<0.05 U
HBW-7	<2.0 U	<2.0 U	<2.0 U	27 (initial)/ 1.2 J (resample)	1.6 J	0.0761 J	<0.05 U	0.0318 J	0.0265 J	<0.05 U
HBW-10	<2.0 U	<2.0 U	<2.0 U	<2.0 U	<2.0 U	0.0782 J	<0.05 U	<0.05 U	<0.05 U	<0.05 U

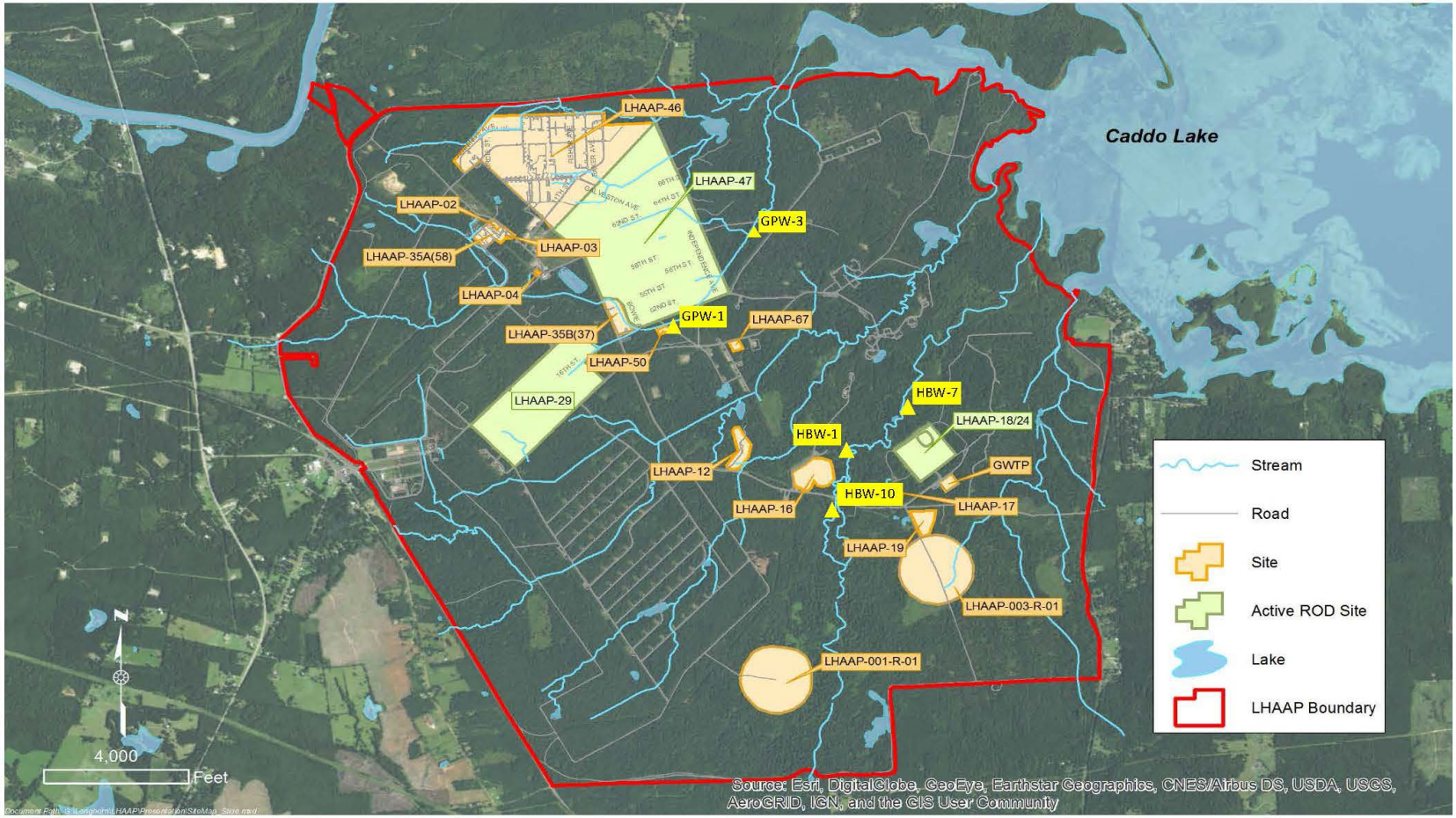
Quarter	2nd	3rd	4th	1st	2nd
Creek Sample ID	Apr 2021	Jul 2021	Dec 2021	Mar 2022	Apr 2022
GPW-1	0.0268 J	0.154	0.0394 J	0.162	0.042 J
GPW-3	0.0321 J	0.122	0.0344 J	0.198	0.0384 J
HBW-1	0.0410 J	0.369	0.050 U	0.052 J	<0.05 U
HBW-7	0.0373 J	0.348	0.0359 J	10.4	0.0493 J
HBW-10	<0.05 U	0.207	0.0464 J	<0.05 U	<0.05 U

NS – not sampled U – non-detect J – Estimated Dry – no surface water



Note: Surface water at HBW-7 had a detection of 27 µg/L from a sample collected on 11 July 2019. Surface water at HBW-7 was resampled 19 days later (30 July 2019) with a detection of 1.2 J µg/L.

Longhorn Army Ammuntion Plant Creek Sampling Locations



Groundwater Treatment Plant - Processed Groundwater Volumes

The amount of groundwater treated is determined by measuring the number of gallons of processed water discharged.

Processed Water Discharged Data (in gallons)

Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08
1,041,491	848,356	804,822	792,148	665,883	818,872	791,306	568,812	776,904	748,377	690,052	617,199

Oct-08	Nov-08	Dec-08	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09
655,059	619,274	726,118	552,299	598,144	433,800	488,807	526,958	387,644	0	414,853	735,716

Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10
808,322	636,306	727,492	391,898	695,343	802,656	894,731	962,121	1,257,977	1,314,924	1,041,495	1,136,547

Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11
956,567	705,805	849,712	811,679	668,281	1,090,348	817,325	900,338	916,552	784,369	652,524	733,456

Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12
748,102	658,250	684,903	865,453	725,000*	730,000*	980,000*	630,000*	0	0	0	349,012

Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13
617,037	607,610	560,436	869,710	751,213	641,708	699,776	746,885	392,719	962,890	843,913	716,057

Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14
813,974	727,442	706,416	552,657	738,691	844,095	811,346	972,913	611,505	626,253	573,601	575,376

Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15
440,877	572,479	634,890	614,073	516,592	1,111,859	1,108,336	822,637	1,020,313	1,002,887	951,758	306,467

Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16
128,586	209,088	120,234	454,444	1,028,210	1,201,904	1,224,064	1,094,528	792,311	844,916	1,032,732	805,728

Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17
890,892	617,570	353,327	544,543	745,790	550,555	454,860	896,514	890,391	528,538	195,198	961,324

Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul - 18	Aug-18	Sep-18
517,945	368,318	453,155	325,566	1,607,996	1,319,474	630,888	403,369	329,448	140,247	150,228	901,856

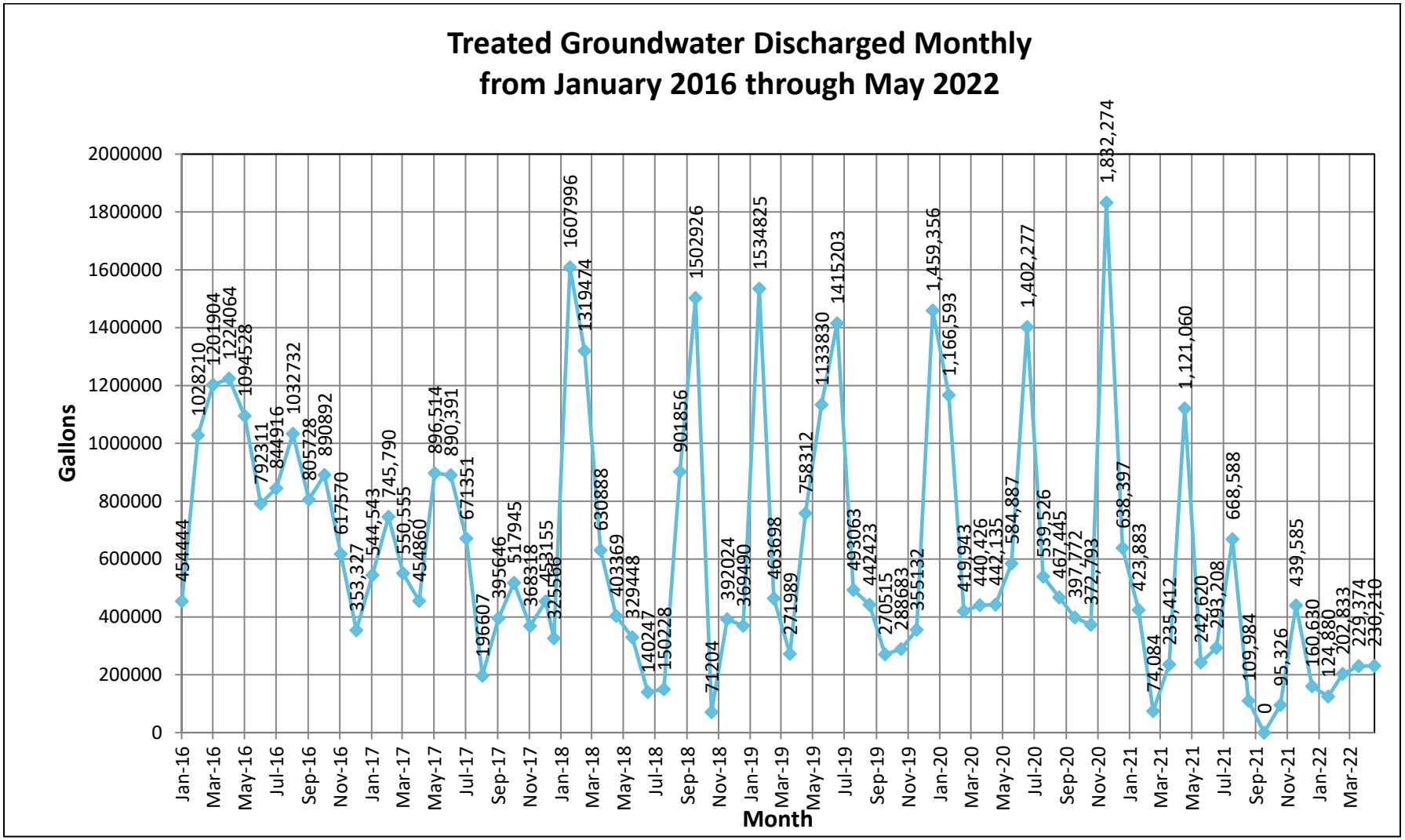
Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul - 19	Aug-19	Sep-19
1,502,926	71,204	392,024	369,490	1,534,825	463,698	271,989	758,312	1,133,830	1,415,203	493,063	442,423

Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20
270,515	288,683	355,132	1,459,356	1,166,593	419,943	440,426	442,135	584,887	1,402,277	539,526	467,445

Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21
397,772	372,793	1,832,274	638,397	423,883	74,084	235,412	1,121,060	242,620	293,208	668,588	109,984

Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22
0	95,326	439,585	322,130	124,880	202,833	229,374	230,210

*Indicates Estimate


Treated Groundwater Discharged Monthly
from January 2016 through May 2022
Gallons
Month
2000000
1800000
1600000
1400000
1200000
1000000
800000
600000
400000
200000
0
Jan-16
Mar-16
May-16
Jul-16
Sep-16
Nov-16
Jan-17
Mar-17
May-17
Jul-17
Sep-17
Nov-17
Jan-18
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May-20
Jul-20
Sep-20
Nov-20
Jan-21
Mar-21
May-21
Jul-21
Sep-21
Nov-21
Jan-22
Mar-22
454444
1028210
1201904
1224064
1094528
792311
844916
1032732
805728
890892
617570
353,327
544,543
745,790
550,555
454860
896,514
890,391
671351
196607
395646
517945
368318
453155
325568
1607996
1319474
630888
403369
329448
140247
150228
901856
1502926
71204
392024
369490
463698
271989
758312
1133830
1415203
493063
442423
270515
288683
355132
1,459,356
1,166,593
419,943
440,426
442,135
584,887
1,402,277
539,526
467,445
397,772
372,793
1,832,274
638,397
423,883
74,084
235,412
1,121,060
242,620
293,208
668,588
109,984
0
95,326
439,585
160,630
124,880
202,833
229,374
230,210

Water Discharge Location and Volume (Gallons)

Month	Total Combined to Harrison Bayou	LHAAP-18/24 Sprinklers	GWTP To INF Pond	INF Pond to Harrison Bayou	Contract Hauled Off-Site
Dec-16	0	236,688	0	0	0
Jan-17	0	0	0	0	0
Feb-17	0	0	0	0	14,355
Mar-17	127,242	0	0	0	14,400
Apr-17	113,038	0	236,821	0	0
May-17	0	0	534,155	0	0
Jun-17	958,404	0	294,550	490,574	0
Jul-17	0	0	528,538	0	0
Aug-17	0	0	195,197	0	0
Sep-17	651,434	0	309,980	651,434	0
Oct-17	0	0	517,945	0	0
Nov-17	0	0	368,318	0	0
Dec-17	560,350	0	453,155	560,350	0
Jan-18	325,566	0	253,177	325,566	0
Feb-18	1,607,996	0	62,017	1,430,634	0
Mar-18	1,319,474	0	0	870,816	0
Apr-18	630,888	0	0	630,888	0
May-18	403,369	0	0	403,369	0
Jun-18	193,669	0	135,779	0	0
Jul -18	0	0	140,247	0	0
Aug -18	49,409	0	100,819	0	0
Sep-18	585,397	0	316,459	524,484	0
Oct-18	1,409,106	0	93,820	1,016,285	0
Nov-18	71,204	0	0	0	0
Dec-18	392,024	0	0	0	0
Jan-19	369,490	0	0	369,490	0
Feb-19	1,534,825	0	0	1,326,485	0
Mar-19	463,698	0	0	83,250	0
Apr-19	271,989	0	0	0	0
May-19	758,312	0	0	253,817	0
Jun-19	1,133,830	0	0	847,918	0
Jul-19	1,415,203	0	0	903,001	0
Aug-19	374,629	0	118,434	0	0
Sep-19	0	0	442,423	0	0
Oct-19	0	0	270,515	0	0
Nov-19	115,503	0	173,180	0	0

Month	Total Combined to Harrison Bayou	LHAAP-18/24 Sprinklers	GWTP To INF Pond	INF Pond to Harrison Bayou	Contract Hauled Off-Site
Dec-19	318,248	0	36,884	0	0
Jan-20	1,459,396	0	0	1,115,183	0
Feb-20	1,166,593	0	0	741,954	0
Mar-20	419,943	0	0	0	0
Apr-20	440,426	0	0	0	0
May-20	442,135	0	0	0	0
June-20	584,887	0	0	0	0
July-20	1,402,277	0	0	984,393	0
Aug-20	216,197	0	323,359	0	0
Sep-20	0	0	467,445	0	0
Oct-20	0	0	397,772	0	0
Nov-20	0	0	372,793	0	0
Dec-20	1,832,274	0	60,199	1,571,432	0
Jan-21	638,397	0	0	383,318	0
Feb-21	423,883	0	0	259,875	0
Mar-21	74,084	0	0	74,084	0
Apr-21	235,412	0	0	0	0
May-21	1,121,060	0	0	900,000	0
Jun-21	242,620	0	0	0	0
Jul-21	293,208	0	0	243,675	0
Aug-21	668,588	0	0	561,527	0
Sep-21	0	0	109,984	0	0
Oct-21	0	0	0	0	0
Nov-21	0	0	95,326	0	0
Dec-21	271,500	0	168,085	271,500	0
Jan-22	161,500	0	160,630	161,500	0
Feb-22	0	0	124,880	0	0
Mar-22	190,898	0	11,935	0	0
Apr-22	229,374	0	0	0	0
May-22	230,210	0	0	0	0

Subject:	**Final Monthly Managers' Meeting (MMM), Longhorn Army Ammunition Plant (LHAAP)**
Location of Meeting:	**LHAAP Groundwater Treatment Plant (GWTP)**
Date of Meeting:	**16 November 2022 – 09:40 AM Central Standard Time (CST)**

Attendees:

Army BRAC:	Rose M. Zeiler (RMZ)
USEPA:	Brian Follin (BF); Tim Bartos with United States Geological Survey (USGS) in support of the United States Environmental Protection Agency (USEPA) (on the phone)
AEC:	Michael Bowlby (MB) and Lena Sierocinski (LS)
USACE:	Chelsea Montoya
TCEQ:	April Palmie (ABP) (on the phone)
USFWS:	Paul Bruckwicki (PB)
Bhate:	Kim Nemmers (KN), Scott Beesinger (SB) and Zachary Beck (ZB)
APTIM:	William Foss (WF)
TLI:	Jon Tatman (JT) (on the phone)
HDR:	Amita Patel (AP) and Phil Werner (PW)

Defense Environmental Restoration Program (DERP) Performance-Based Remediation Update

There were no outstanding action items to discuss**.**

Groundwater Treatment Plant (GWTP) – SB stated that the GWTP had been operating properly until this weekend when the caustic tank valve cracked. SB explained that the caustic is being transferred into another tank currently to allow for repairs but that the Fluidized Bed Reactor (FBR) did receive the treated water with the high pH. SB said that the treatment system is in recycle. Rush turn around for perchlorate would be completed because the water will not be discharged until the pH is back to normal and perchlorate is below criteria for discharge.

SB said that scaffolding to access the piping where a plug is likely occurring has been received. However, the high pH water has to be removed from the floor or the scaffolding would be damaged and unsafe. SB clarified that the plug is likely in the overhead piping between tanks 200 A, B and/or C (Metals Precipitation tanks). RMZ asked about the influent from LHAAP-17 and how big of an issue the caustic release is. SB stated that the GWTP is receiving about 1,500 gallons per day from LHAAP-17 and that there is sufficient storage capacity for flow from the wells. RMZ said that she wants to understand the percent volume from LHAAP-17. KN said that it depends on the month. The data presented with the validated data for the MMM was based on approximately half of the influent to the GWTP coming from LHAAP-17. However, KN said that results were just received from the early November 2022 influent. The November 2022 had about one-quarter of the influent coming from LHAAP-17 and was about half the result observed in October. KN concluded that the percentage of LHAAP-17 influent compared to the overall water volume determines the perchlorate present in the influent.

SB stated that there is approximately 3 feet of freeboard left in the Intermediate Range Nuclear Forces (INF) Pond, which equates to approximately 1-million gallons. SB stated that once flow is observed in the bayou that the plan is to discharge from the INF Pond to allow for increased volume in the pond.

Field Work – SB said that he had sampled LHAAP-17, LHAAP-37 and LHAAP-67 in November 2022. SB said that no surface water samples had been collected. SB stated the Goose Prairie Creek is currently dry. SB said that he planned to develop the new monitoring wells that ZB installed this

week. SB said that he plans to sample LHAAP-12, LHAAP-18/24 and LHAAP-58 in December 2022. SB stated that he is having knee replacement surgery after Thanksgiving such that the sampling will not occur until later in the month. However, he stated that another person is coming to support LHAAP activities. KN clarified that completion of all sampling may spill into January 2023 due to Scott's surgery.

KN asked everyone to refer to the Document and Issues (DI) Tracking Table dated 16 November 2022.

- **Task 1** (Project Management) – KN said that the October 2022 Monthly Manager's Meeting (MMM) minutes were issued Final by ZB on 10 November 2022. KN reminded everyone that the next Restoration Advisory Board (RAB) meeting was being held that evening. She said that a call-in number had been sent out. BF asked for the call-in number to be shared with the United States Geological Survey (USGS).
- **Task 4** (LHAAP-04) – WF stated that the Year 3 2nd semiannual Remedial Action-Operation (RA-O) Report is in progress with an estimated delivery to the regulators in December 2022. He said that perchlorate continues to be non-detect; however, reducing conditions have come back in some of the wells. WF stated that sampling will continue on a semi-annual basis for maybe another year or until the oxidation reduction potential (ORP) increase to more natural conditions again.
- **Task 5** (LHAAP-12) – WF said that the 2022 annual sampling event is upcoming in December 2022 with the validated data deliverable to be presented at the January 2023 MMM. WF reminded everyone that the previous sampling event in December 2021 only had one well with trichloroethylene (TCE) detected. WF also clarified that the delivery of the validated data will depend on the laboratory (lab) completing the analysis, as the labs have been taking longer to complete analysis.
- **Task 6** (LHAAP-16) – WF said that the Year 3 1st Semiannual RA-O Sampling Event validated data package was included with the November 2022 MMM validated data. WF said that the extraction well 16IW26 is looking good with high dehalococcoides (DHC) present and TCE less than 5 micrograms per liter (ug/L) WF said that these results are a good sign for the mid-plume biobarrier. WF said that biobarriers 1,2 and 3 are showing increases but within the range of detections previously observed. WF said that seasonal trends will need to be assessed and considered in evaluating the remedy performance over time. WF said that the orientation of the bayou barrier is also discussed in the Year 2 Report because the orientation with groundwater flow may not be correct. WF stated that 16WW58 has the highest detection of TCE across the bayou. WF said that there may not be a strong aquitard present between the intermediate and shallow based on the groundwater elevations at co-located wells. RMZ discussed a cross-section from a prior report indicating that there could also be shallow contamination present though the concentrations of the contamination might be lower. WB said that 16WW57 was not wet at the depth where the shallow zone was anticipated to be at time of the well was being installed. RMZ said that the Army is working on the follow-on contract and needs to evaluate the current site conditions. WF said that 16WW48 continues to increase but the other monitoring wells in the area are fluctuating. WF said that the flow of groundwater through the biobarriers is being assessed. WF also pointed out that the area where increasing trends are observed is near standing water recharge that may be affecting the remedy performance.
- **Task 9** (LHAAP-37) – WF said that the Year 6 RA-O annual sampling event was completed in November 2022 with the validated data deliverable to be presented at the January 2023

MMM. WF said that the Year 5 RA-O Report is in progress and will be submitted to the Regulators in December 2022.

- **Task 10** (LHAAP-46) – WF said that the Year 8 RA-O Report is in progress and will be submitted to the Regulators in December 2022.
- **Task 11** (LHAAP-50) **–** WF said that the Year 3 semiannual 1 groundwater sampling event was completed in October 2022 with the validated data package to be presented at the December 2022 MMM. WF said that the Year 8 RA-O Report was submitted to the Regulators in November 2022.
- **Task 12** (LHAAP-58) – ZB stated that the Year 8 RA-O Report was being prepared with an anticipated submittal in December 2022 to the Regulators. ZB discussed the installation of the two new monitoring wells (35AWW25 and 35AWW26) using hollow-stem auger on 15 November 2022. ZB said that the wells will be developed the following week and then sampled in December 2022. ZB said that each of the wells had water present. ZB said that a well 35AWW25 was placed 50 feet away from 35AWW04, which is about 5 feet vertically different from the other well. ZB said he was not sure why 35AWWW04 was dry. ZB said the two wells presented differently with evidence of a water zone in the shallow well 35AWW25 but no clear water zone in the deeper well 35AWW26.
- **Task 13** (LHAAP-67) – WF stated that Year 9 annual sampling event was completed in November 2022 with the validated data planned for the January 2023 MMM.
- **Task 14** (LHAAP-001-R-01 and LHAAP-003-R-01) – KN said that land use control (LUC) Report for LHAAP-001-R-01 and LHAAP-003-R-01 is still planned for submittal in November 2022 to the Regulators.
- **Task 16** (GWTP) **–** KN said that 3rd Quarter GWTP Report is in progress with an anticipated delivery date in December 2022 to the Regulators. ABP pointed out that comments from the Texas Commission on Environmental Quality (TCEQ) had been provided. ZB confirmed that comments from the TCEQ and USEPA had been received. ZB asked if the changes needed to be made to the 2nd Quarterly Report or if they could be made going forward. Discussion regarding the Figures and how to make them more readable was held. ZB said that he will work to make improvements that are acceptable.
- **Task 17** (LHAAP-18/24) – KN said that the 1st semiannual sampling event was completed in August 2022 and the validated data package was included for the November 2022 MMM. KN said that the August 2022 data will be presented in the 3rd Quarter GWTP Report.
- **Task 18** (Surface Water) – KN said that no samples for the 4th quarter had been collected to date because there is no flow in the bayou.
- **Task 19** (2022 LUC Management Plan) – Comments from the TCEQ were received on the 2022 LUC Management Plan and are currently being addressed.
- **Administrative Record (AR) –** WF said that the April – June 2022 AR was printed and currently undergoing QC and will be shipping soon. WF said that the list for the July – September 2022 AR is currently being compiled. MB asked about the AR location to which it was explained that hard copies are present in the trailer and that DVDs are sent to the library in Marshall. MB then asked if it was just the AR or an Information Repository (IR). MB explained that the AR only includes specific documents up to the AR but the IR would include all documents. RMZ said that it does include all documents.

Update on other DERP Sites:

- **LHAAP 18/24 –** AP stated that comments, received from TCEQ and USEPA on the 60-percent (%) Remedial Design (RD), were being addressed and changes were being incorporated into the 90% RD. AP said that the 90% RD will be submitted by the 7 February 2023 deadline.

- **LHAAP-29** –AP said that the 60% RD was submitted to the Regulators on 14 November 2022. ABP had requested an extension to 6 January, which was determined to be acceptable to everyone.
- **LHAAP-47** – PW said that the draft Responsiveness Summary from the Record of Decision (ROD) comments will be presented at the RAB. RMZ said that it would be helpful to explain to the RAB how their input is being used. AP pointed out the comment regarding hydraulic conductivity not relying on slug tests versus a pumping test. ABP said it could be pointed out to the RAB members that a pumping test will be completed as part of the Pre-Design Investigation (PDI) based on this input. KN was asked to send out the Responsiveness Summary to the RAB members ahead of the meeting also, which she said she would do. PW said that the Draft PDI Work Plan is in progress, with a tentatively delivery date of January 2023 to the Regulators.
- **LHAAP-17** – JT said that the Final After Action Report (AAR) is final but confirmed that the report is not a submittal to the Regulators and won't be submitted to DDESB for closure. JT said that the Army Draft Interim Remedial Action Completion Report (RACR) was in submitted to USACE for review and planned for submittal to the Regulators in December 2022. BF asked about the Time Critical Removal Action (TCRA) discussion. JT said that the TCRA is an appendix to the Interim RACR so that it can be pulled out as a standalone document if needed. MB explained that the AAR closes out the Explosives Safety Plan. JT said that the AAR will be interim because there is potential for a Phase II for the site. ZB said that monthly perchlorate performance monitoring (PM) is ongoing for the groundwater with three events completed to date. ZB said that first monthly PM began on 30 August 2022, and the analytical results from October 2022 sampling event (2nd event) is included in the November 2022 validated data package. ZB presented the October 2022 PM data stating that 17WW006 is showing increasing perchlorate trends with the perchlorate decreasing on the edges of the plume. ZB discussed how the perchlorate concentration in the influent to the GWTP had also increased from baseline.

Community Implementation Plan:

RMZ noted that there will be an update to the plan. RMZ explained that the update is part of a multi-installation contract and asked LS if she knew the next steps. LS said that the Contracting Officer's Representative is looking at how to address the comments received by the USEPA Environmental Justice without the plan being an established legal document. MB said that AEC is also looking at the changes about the big picture impact of the changes. BF said that Environmental Justice comments need to be addressed in writing regardless of the decisions. BF confirmed with RMZ that she had received the screening documents from him.

Five-Year Review:

RMZ stated that a Five-Year Review (FYR) Site Inspection will be upcoming in 2023, with the site inspection planned for the third week in January. ABP asked about being present to which RMZ said that the Regulators should be present. ABP said that she could not be onsite in January. WF suggested the RAB scheduled for February 2023. MB explained that the FYR due date was established and that the site visit date had been developed to achieve the due date. ABP said that she could attend a site visit in February but could not travel in January. RMZ said that she would discuss changing the RAB meeting date with the RAB board that evening

Transfer Update. RMZ said that the transfer of property is ongoing but is slowed because of reviews and because the document format had to be changed a bit since she is no longer a government employee. PB said that he understood. PB asked about the records building. RMZ said that Longhorn has a contractor selected but needs some clarifications from the contractor. RMZ said that things are moving forward with the records disposal.

Schedule Next Managers' Meeting: The next MMM will be held on Wednesday, 18 January 2023 at 10:00 am CDT via WebEx. A meeting slot will be established for a possible meeting in December 2022. KN agreed to send out a tentative meeting invitation for 14 December 2022. KN agreed to also ensure that the DI Tracker and validated data be provided in December 2022 regardless of whether the meeting is held. ABP also suggested moving the January up to 11 January 2023 to bridge the gap between meetings if the December 2022 meeting is not held. RMZ said that it is an action item to reschedule the RAB meeting and the January 2023 MMM.

Meeting concluded at approximately 11:07 am CST.

Action Items

1. Provide call-in number for the November 2022 RAB Meeting to USGS. (KN) – Completed.
2. Send out tentative meeting invitation for 14 December 2022. (KN) – Completed.
3. Send out the Responsiveness Summary to the RAB members ahead of the meeting. (KN) – Completed.
4. Reschedule the RAB and MMM in February. (RMZ)

ACRONYM LIST

%	percent
µg/L	micrograms per liter
AAR	After Action Report
AP	Amita Patel
ABP	April Palmie
APTIM	APTIM Federal Services, LLC
AR	Administrative Record
AW	Aaron Williams
BF	Brian Follin
Bhate	Bhate Environmental Associates, Inc.
BRAC	Base Realignment and Closure
CST	Central Standard Time
DERP	Defense Environmental Restoration Program
DHC	dehalococcoides
DI	Documents and Issues
FBR	Fluidized Bed Reactor
FYR	Five Year Review
GWTP	Groundwater Treatment Plant
INF	Intermediate Range Nuclear Forces
IR	Information Repository
JT	Jon Tatman
Lab	Laboratory
LHAAP	Longhorn Army Ammunition Plant
LS	Lena Sierocinski
LUC	Land Use Control
MB	Michael Bowlby
MEC	Munitions and Explosives of Concern
MMM	Monthly Managers' Meeting
ORP	Oxidation-Reduction Potential
PB	Paul Bruckwicki
PDI	Pre-Design Investigation
PM	Performance Monitoring
RAB	Restoration Advisory Board
RACR	Remedial Action Completion Report
RA-O	Remedial Action – Operation
RD	Remedial Design
RMZ	Rose M. Zeiler
ROD	Record of Decision
SB	Scott Beesinger
TCE	Trichloroethylene
TCEQ	Texas Commission on Environmental Quality
TCRA	Time Critical Removal Action
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
WF	William (Bill) Foss
ZB	Zachary Beck

LHAAP Validated Data
December 2022 MMM

GWTP Effluent	*Weekly Perchlorate Sampling –November 2022* Perchlorate (6850)
GWTP Effluent	*Weekly, Bi-Weekly, and Monthly Sampling – November 2022* Ammonia (350.3) Ortho-Phosphate (365.3) Total Organic Carbon (415.1) VOC (8260C) Metals (6020A) Hexavalent Chromium (7196A) 1,4-Dioxane (8270D-SIM) Anions (9056)
GWTP Influent	*Monthly Sampling – November 2022* Metals (6020A) Perchlorate (6850) Hexavalent Chromium (7196A)
LHAAP 17	*Monthly Sampling - November 2022* Perchlorate (6850)

GWTP Weekly/Effluent Perchlorate Sampling - November 2022

Location ID: / Sample Date:	Units	Daily Maximum Conc	PCL	LH18/24-SP650_110122_BIX 11/1/22	LH18/24-SP650_110122_AIX 11/1/22	LH18/24-SP650_110122_AIX 11/1/22	LH18/24-SP650_110822_BIX 11/8/22	LH18/24-SP650_110822_AIX 11/8/22	LH18/24-SP650_111822_BIX 11/18/22	LH18/24-SP650_111822_AIX 11/18/22
Location Description				Weekly	Weekly	Monthly EFF	Weekly	Weekly	Weekly	Weekly
Perchlorate (6850)										
Perchlorate	µg/L	589	17	**34.7**	< 0.0500 U	< 0.0500 U	**15.9**	**0.0441 J**	**12,400 ***	**0.620**

µg/L - micrograms per liter

BIX - before ion exchange/AIX - after ion exchange

U- Undetected: The analyte was analyzed for, but not detected and reported to the limit of detection.

J - estimated value between the detection limit and limit of quantitation

All groundwater discharged in November 2022 to the INF Pond was also run through the ion exchange vessels. Sample suffix AIX represents groundwater concentrations after the first ion exchange vessel

* Elevated perchlorate from sample collected on 11/18/22 a result of a valve failure on the sodium hydroxide (caustic) tank. The caustic leak dramatically increased the pH in the Fluidized Bed Reactor.

GWTP Weekly Sampling - November 2022

Location ID: Sample Date:	Units	Daily Maximum Conc	LH18/24-SP650_110122 11/1/22	LH18/24-SP650_110822 11/8/22
Location Description			**GWTP – Collected after the first ion exchange vessel. Sampled Biweekly.**	
Ammonia as N (350.3)				
Ammonia as N	mg/L	NV	**13**	**3.5**
Ortho-Phosphate (365.3)				
Ortho-Phosphate	mg/L	NV	**4.82**	**2.99**
Organic Carbon (415.1)				
Total Organic Carbon (TOC)	mg/L	NV	**4.81**	**6.68**

mg/L - milligrams per liter

NV - No Value

GWTP Bi-Weekly Sampling - November 2022

Location ID: / Sample Date:	Units	(Bayou) Daily Maximum Conc	(INF pond) MCL	LH18/24-SP650_110822 11/8/22
Location Description				**GWTP – Collected after the first ion exchange vessel. Sampled Biweekly.**
Volatile Organic Compounds (8260C)				
1,1,1-Trichloroethane	µg/L	7,230	200	< 0.50 U
1,1,2-Trichloroethane	µg/L	216.9	5	< 1.0 U
1,1-Dichloroethane	µg/L	14,032	NV	< 0.50 U
1,1-Dichloroethene	µg/L	253	7	< 0.50 U
1,2-Dichloroethane	µg/L	181	5	< 0.50 U
1,2-Dichloropropane	µg/L	5	5	< 1.0 U
Acetone	µg/L	2,395	NV	< 2.0 U
Benzene	µg/L	181	5	< 0.50 U
Carbon tetrachloride	µg/L	181	5	< 1.0 U
Chlorobenzene	µg/L	47,180	100	< 1.0 U
Chloroform	µg/L	3,615	NV	< 0.50 U
cis-1,2-Dichloroethene	µg/L	NV	70	**1.3**
Ethylbenzene	µg/L	57,025	700	< 1.0 U
m,p-Xylene	µg/L	83.6	NV	< 1.0 U
Methylene chloride	µg/L	1,699	5	< 2.0 U
o-Xylene	µg/L	83.6	NV	< 1.0 U
Styrene	µg/L	5,987	100	< 1.0 U
Tetrachloroethene	µg/L	180.7	5	< 1.0 U
Toluene	µg/L	4,189	10	< 0.50 U
Trichloroethene	µg/L	181	5	< 0.50 U
Vinyl chloride	µg/L	72	2	< 0.50 U
Anions (9056)				
Chloride	mg/L	NV	NV	**1,060**
Sulfate	mg/L	NV	NV	**56.3**

µg/L - micrograms per liter

mg/L - milligrams per liter

U- Undetected: The analyte was analyzed for, but not detected and reported to the limit of detection.

NV - No Value

GWTP Monthly Effluent Sampling - November 2022

Location ID: / Sample Date:	Units	Daily Maximum Conc	(INF pond) MCL	LH18/24-SP650_110122 11/1/22
Location Description				**GWTP – Collected after the first ion exchange vessel. Sampled Biweekly.**
Volatile Organic Compounds (8260C)				
1,1,1-Trichloroethane	µg/L	7,230	200	< 1.0 U
1,1,2-Trichloroethane	µg/L	216.9	5	< 1.0 U
1,1-Dichloroethane	µg/L	14,032	NV	< 1.0 U
1,1-Dichloroethene	µg/L	253	7	< 1.0 U
1,2-Dichloroethane	µg/L	181	5	< 1.0 U
1,2-Dichloropropane	µg/L	5	5	< 1.0 U
Acetone	µg/L	2,395	NV	< 1.0 U
Benzene	µg/L	181	5	< 1.0 U
Carbon tetrachloride	µg/L	181	5	< 1.0 U
Chlorobenzene	µg/L	47,180	100	< 1.0 U
Chloroform	µg/L	3,615	NV	< 1.0 U
cis-1,2-dichloroethene	µg/L	NV	70	**1.6**
Ethylbenzene	µg/L	57,025	700	< 1.0 U
m,p-Xylene	µg/L	83.6	NV	< 1.0 U
Methylene chloride	µg/L	1,699	5	< 1.0 U
o-Xylene	µg/L	83.6	NV	< 1.0 U
Styrene	µg/L	5,987	100	< 1.0 U
Tetrachloroethene	µg/L	180.7	5	< 1.0 U
Toluene	µg/L	4,189	10	< 1.0 U
Trichloroethene	µg/L	181	5	< 1.0 U
Vinyl chloride	µg/L	72	2	< 1.0 U
Metals (6020A)				
Barium	mg/L	2	2	**0.0946**
Lead	mg/L	0.0046	0.015	< 0.00125 U
Selenium	mg/L	0.012	0.05	< 0.00250 U
Silver	mg/L	0.003	0.1	< 0.000500 U
Hexavalent Chromium (7196A)				
Hexavalent Chromium	mg/L	0.1244	NV	< 0.00600 U
Semi-Volatile Organic Compounds (8270D SIM)				
1,4-Dioxane	µg/L	134.2	NV	**0.11**

µg/L - micrograms per liter

mg/L - milligrams per liter

U- Undetected: The analyte was analyzed for, but not detected and reported to the limit of detection.

NV - no value

GWTP Monthly Influent Sampling - November 2022

Location ID: Sample Date:	Units	LH18/24-SP140_110122 11/1/22
Location Description		**GWTP – Collected from a spigot on the influent to TK-140. Sampled Monthly.**
Metals (6020A)		
Selenium	mg/L	< 0.00250 U
Silver	mg/L	< 0.000500 U
Hexavalent Chromium (7196A)		
Hexavalent Chromium	mg/L	< 0.00600 U
Perchlorate (6850)		
Perchlorate	µg/L	**29,600**

mg/L - milligrams per liter

µg/L - micrograms per liter

U- Undetected: The analyte was analyzed for, but not detected and reported to the limit of detection.

17WW15
17WW20
17WW12
17WW18
MW-19
17WW09
17WW19
17WW13
17WW17
17WW14
17WW04
17WW07
17WW08
18WW15
18WW14
C-07
SCUDDAY AVE
AVE "Q"
LONG POINT RD
HAYSTACK RD.

17WW02		4/8/2022
COC	PCL	Result
Perchlorate	17	5,250

130		4/8/2022
COC	PCL	Result
Perchlorate	17	15.0

17WW06		4/8/2022
COC	PCL	Result
Perchlorate	17	120,000

17WW01		4/8/2022	4/21/2022
COC	PCL	Result	Result
Perchlorate	17	239	46.8

17WW03		4/8/2022
COC	PCL	Result
Perchlorate	17	44.7 J / 7.78 J

COCs shown on this figure	
COC	PCL
Perchlorate	17

Notes:
PCL – TRRP Tier 1 Groundwater Residential Protective Concentration Level
TRRP - Texas Risk Reduction Program
Bold Red values exceed the PCL
J - Estimated Value. Concentration found below the limit of quantitation
All results and PCLs are reported in micrograms per liter (µg/L)

N

Legend

- Extraction Well
- Shallow Monitoring Well
- Intermediate Monitoring Well
- LHAAP-17 Boundary
- Road
- Stream

Longhorn Army Ammunition Plant
Karnack, Texas

Figure X
Baseline Groundwater Sampling Analytical Results (April 2022)

0 50 100 200 Feet

1 inch = 100 feet

Prepared By: MMG / TLI JOINT VENTURE

Map Date: 9/27/2022

Service Layer Credits: Google satellite imagery

Document Path: Z:\Projects\MSC20200016 Longhorn\0002 RIP\0031 RA RACR\AB Extraction LHAAP 17\Figure X.mxd

Perchlorate Groundwater Analytical Results
LHAAP-17 November 2022

Location ID: / Sample Date:	Units	PCL	130_111022 11/10/22	17WW01_111022 11/10/22	17WW02_111022 11/10/22	17WW03_111022 11/10/22	17WW03_111022_a 11/10/22	17WW06_111022 11/10/22
Perchlorate (6850)								
Perchlorate	µg/L	17	**0.463**	**0.549**	**17,200**	**0.0271 J**	< 0.0500 U	**89,900**

PCL – Texas Risk Reduction Program (TRRP) Tier 1 Groundwater Residential Protective Concentration Level

Highlighted results exceed the perchlorate PCL

µg/L - micrograms per liter

J - Estimated Value. Concentration found below the limit of quantitation