LONGHORN ARMY AMMUNITION PLANT KARNACK, TEXAS

ADMINISTRATIVE RECORD

Volume 30

2022

Bate Stamp Numbers
01127680 – 01129723

Prepared for

Department of the Army
Longhorn Army Ammunition Plant

1976–2022

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

VOLUME 30

2022

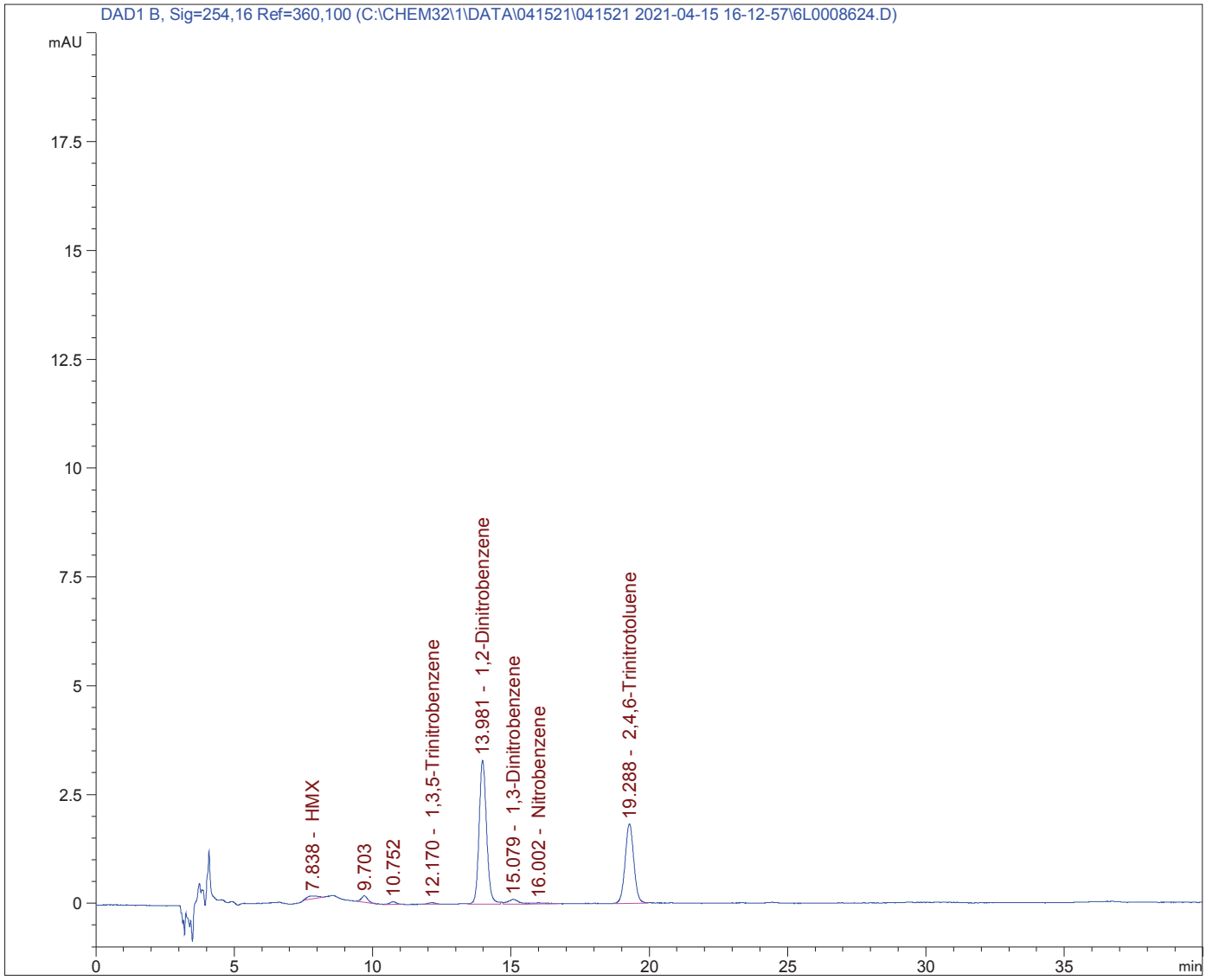
A.	Title:	(Cont'd) Report, File 2 – Final Pre-Design Investigation Report, LHAAP-29 Former TNT Production Area Group 2, Longhorn Army Ammunition Plant, Karnack, Texas
	Author(s):	Department of the Army
	Recipient:	U.S. Environmental Protection Agency and Texas Commission on Environmental Quality
	Date:	November 8, 2022
	Bate Stamp:	01127680 – 01129723

Data File C:\CHEM32\1\DATA\041521\041521 2021-04-15 16-12-57\6L0008624.D
Sample Name: M1C1288-11RE1

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    Acq. Instrument : HPLC6                         Location :   15
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    Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
    Last changed    : 4/21/2021 11:13:26 AM by ECL
    Method Info     : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

    Sample Info     : 1

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Data File C:\CHEM32\1\DATA\041521\041521 2021-04-15 16-12-57\6L0008624.D
Sample Name: M1C1288-11RE1

Acq. Operator : JWR Seq. Line : 16
Acq. Instrument : HPLC6 Location : 15
Injection Date : 4/16/2021 7:58:36 AM Inj : 1
Inj Volume : 100.000 µl
Acq. Method : C:\Chem32\1\Data\041521\041521 2021-04-15 16-12-57\8330.M
Last changed : 4/15/2021 4:12:57 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
Last changed : 4/21/2021 11:13:26 AM by ECL
Method Info : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

Sample Info : 1

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/19/2021 4:31:23 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
7.838	BV	1.65781	1.82379	3.02349		HMX
11.699		-	-	-		RDX
12.170	BV	6.77619e-1	2.81788	1.90945		1,3,5-Trinitrobenzene
13.981	BB	61.94540	3.78960	234.74815		1,2-Dinitrobenzene
15.079	BV	2.83191	1.87049	5.29707		1,3-Dinitrobenzene
16.002	VB	1.08017	4.01010	4.33160		Nitrobenzene
19.288	BB	39.76733	2.46772	98.13454		2,4,6-Trinitrotoluene
19.737		-	-	-		Tetryl
21.942		-	-	-		2,6-Dinitrotoluene
23.261		-	-	-		2,4-Dinitrotoluene
24.758		-	-	-		2-Nitrotoluene
26.955		-	-	-		4-Nitrotoluene
28.837		-	-	-		3-Nitrotoluene
29.604		-	-	-		4-Amino-2,6-Dinitrotoluene
32.146		-	-	-		2-Amino-4,6-Dinitrotoluene

Totals : 347.44429

1 Warnings or Errors :

Warning : Calibrated compound(s) not found

*** End of Report ***

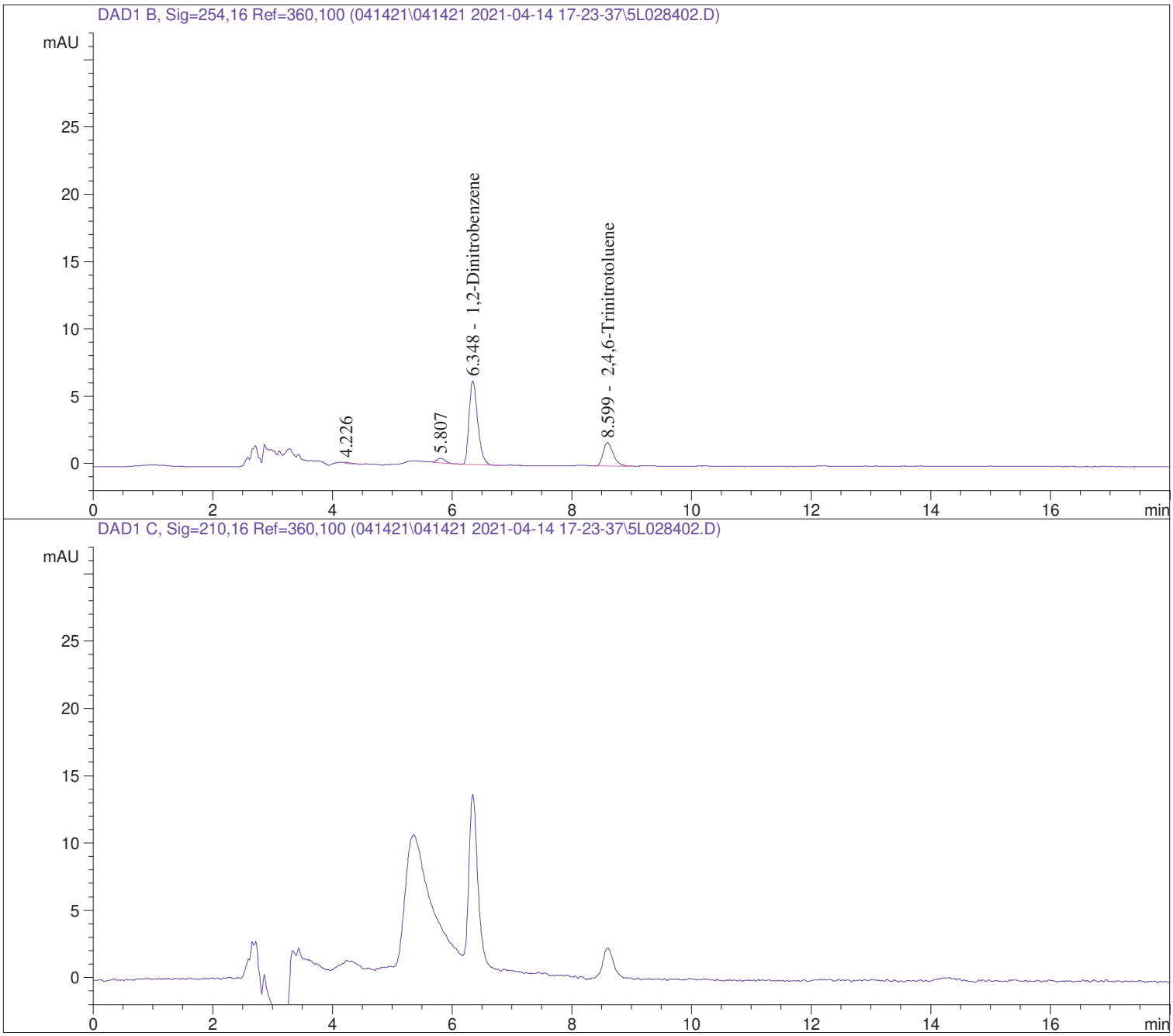
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Sample Name: M1C1288-12

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Acq. Operator : JWR Seq. Line : 17
Acq. Instrument : HPLC5 Location : Vial 16
Injection Date : 4/14/2021 9:40:39 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/15/2021 8:37:13 AM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1

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Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 17-23-37\5L028402.D
Sample Name: M1C1288-12

Acq. Operator : JWR Seq. Line : 17
Acq. Instrument : HPLC5 Location : Vial 16
Injection Date : 4/14/2021 9:40:39 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/15/2021 8:37:13 AM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/13/2021 5:44:33 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.766		-	-	-		HMX
5.009		-	-	-		RDX
6.108		-	-	-		1,3,5-Trinitrobenzene
6.348	VBA	62.67986	3.56252	223.29851		1,2-Dinitrobenzene
7.275		-	-	-		1,3-Dinitrobenzene
7.528		-	-	-		Tetryl
7.985		-	-	-		Nitrobenzene
8.599	VB	20.53225	2.46092	50.52825		2,4,6-Trinitrotoluene
9.219		-	-	-		4-Amino-2,6-Dinitrotoluene
9.657		-	-	-		2-Amino-4,6-Dinitrotoluene
9.956		-	-	-		2,6-Dinitrotoluene
10.236		-	-	-		2,4-Dinitrotoluene
11.581		-	-	-		2-Nitrotoluene
12.140		-	-	-		4-Nitrotoluene
13.030		-	-	-		3-Nitrotoluene

Totals : 273.82676

Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 17-23-37\5L028402.D
Sample Name: M1C1288-12

Acq. Operator : JWR Seq. Line : 17
Acq. Instrument : HPLC5 Location : Vial 16
Injection Date : 4/14/2021 9:40:39 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/15/2021 8:37:13 AM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.750		-	-	-		PETN

Totals : 0.00000

1 Warnings or Errors :

Warning : Calibrated compound(s) not found

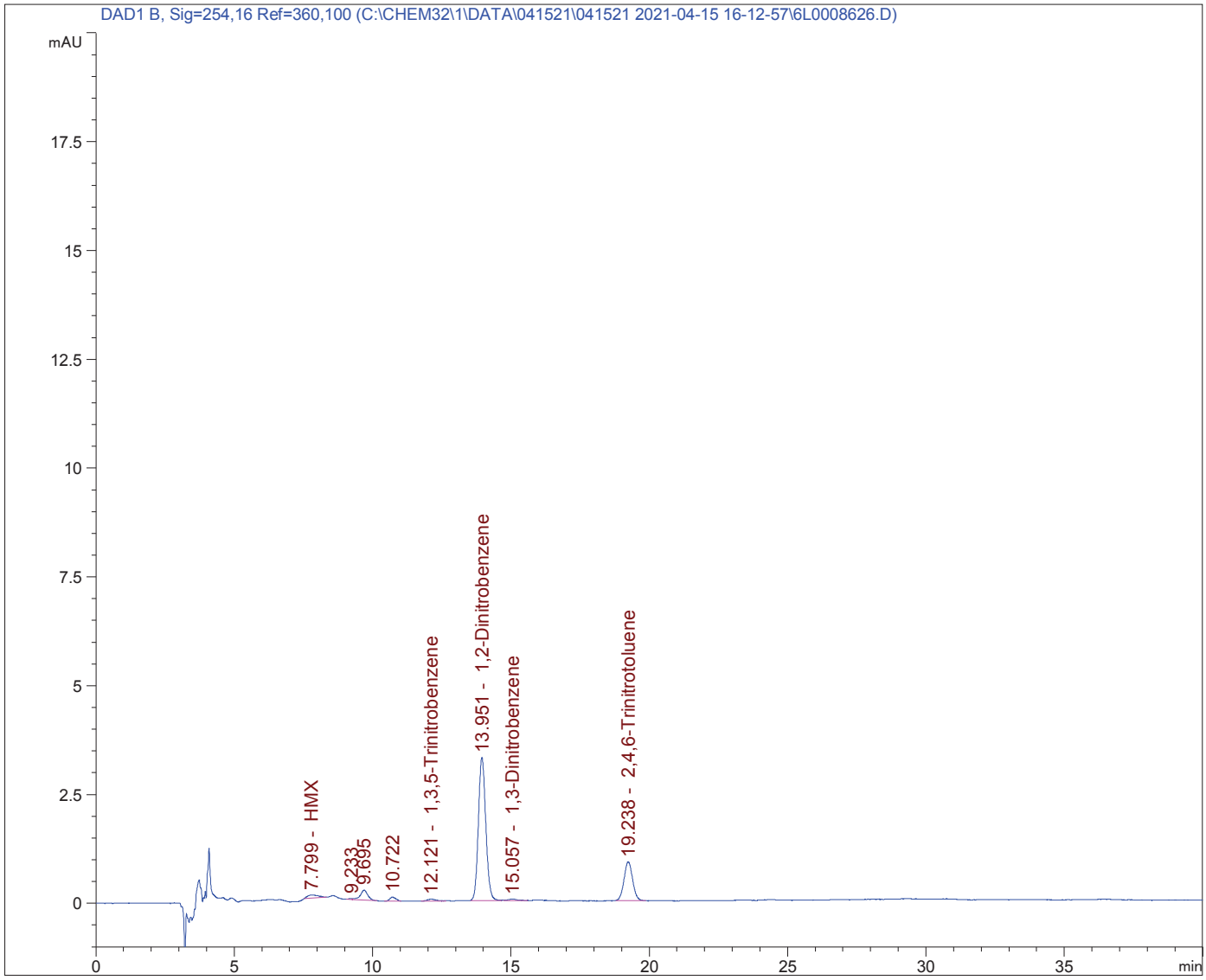
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Sample Name: M1C1288-12RE1

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    Acq. Instrument : HPLC6                         Location :   16
    Injection Date  : 4/16/2021 10:04:20 AM              Inj :   1
                                                  Inj Volume : 100.000 µl
    Acq. Method     : C:\Chem32\1\Data\041521\041521 2021-04-15 16-12-57\8330.M
    Last changed    : 4/15/2021 4:12:57 PM by JWR
    Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
    Last changed    : 4/21/2021 11:13:26 AM by ECL
    Method Info     : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

    Sample Info     : 1

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Data File C:\CHEM32\1\DATA\041521\041521 2021-04-15 16-12-57\6L0008626.D
Sample Name: M1C1288-12RE1

Acq. Operator : JWR Seq. Line : 18
Acq. Instrument : HPLC6 Location : 16
Injection Date : 4/16/2021 10:04:20 AM Inj : 1
Inj Volume : 100.000 µl
Acq. Method : C:\Chem32\1\Data\041521\041521 2021-04-15 16-12-57\8330.M
Last changed : 4/15/2021 4:12:57 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
Last changed : 4/21/2021 11:13:26 AM by ECL
Method Info : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

Sample Info : 1

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/19/2021 4:31:23 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
7.799	BV	2.03362	2.59567	5.27860		HMX
11.699		-	-	-		RDX
12.121	BB	9.50002e-1	2.69721	2.56235		1,3,5-Trinitrobenzene
13.951	BB	61.42751	3.78968	232.79073		1,2-Dinitrobenzene
15.057	BB	8.75064e-1	2.23434	1.95519		1,3-Dinitrobenzene
15.848		-	-	-		Nitrobenzene
19.238	BB	19.54651	2.43030	47.50396		2,4,6-Trinitrotoluene
19.737		-	-	-		Tetryl
21.942		-	-	-		2,6-Dinitrotoluene
23.261		-	-	-		2,4-Dinitrotoluene
24.758		-	-	-		2-Nitrotoluene
26.955		-	-	-		4-Nitrotoluene
28.837		-	-	-		3-Nitrotoluene
29.604		-	-	-		4-Amino-2,6-Dinitrotoluene
32.146		-	-	-		2-Amino-4,6-Dinitrotoluene

Totals : 290.09083

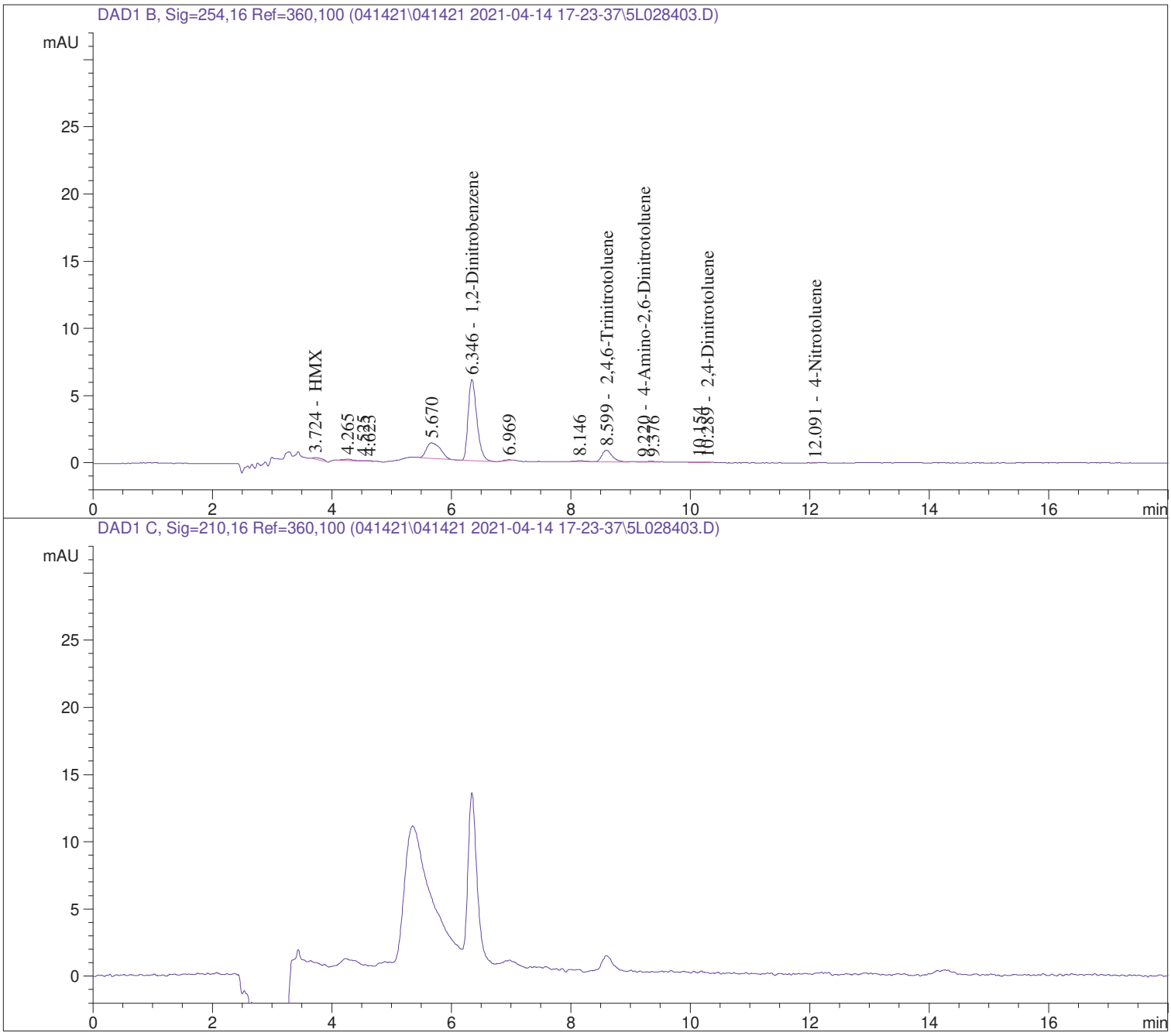
1 Warnings or Errors :

Warning : Calibrated compound(s) not found

*** End of Report ***

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Acq. Operator	: JWR	Seq. Line	: 18
Acq. Instrument	: HPLC5	Location	: Vial 17
Injection Date	: 4/14/2021 10:08:50 PM	Inj	: 1
		Inj Volume	: 100 µl
Acq. Method	: C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M		
Last changed	: 4/14/2021 1:45:51 PM by JWR		
Analysis Method	: C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M		
Last changed	: 4/15/2021 8:37:13 AM by ECL		
Method Info	: OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021		
Sample Info	: 1		



Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 17-23-37\5L028403.D
Sample Name: M1C1288-13

Acq. Operator : JWR Seq. Line : 18
Acq. Instrument : HPLC5 Location : Vial 17
Injection Date : 4/14/2021 10:08:50 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/15/2021 8:37:13 AM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/13/2021 5:44:33 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.724	BV	1.42182	4.37917	6.22640		HMX
5.009		-	-	-		RDX
6.108		-	-	-		1,3,5-Trinitrobenzene
6.346	VB	61.55109	3.56268	219.28671		1,2-Dinitrobenzene
7.275		-	-	-		1,3-Dinitrobenzene
7.528		-	-	-		Tetryl
7.985		-	-	-		Nitrobenzene
8.599	VV	10.49934	2.37909	24.97884		2,4,6-Trinitrotoluene
9.220	VV	2.67132e-1	7.98759	2.13374		4-Amino-2,6-Dinitrotoluene
9.657		-	-	-		2-Amino-4,6-Dinitrotoluene
9.956		-	-	-		2,6-Dinitrotoluene
10.289	VV	2.81724e-1	1.18066	3.32621e-1		2,4-Dinitrotoluene
11.581		-	-	-		2-Nitrotoluene
12.091	VV	2.35526e-1	6.88967	1.62270		4-Nitrotoluene
13.030		-	-	-		3-Nitrotoluene

Totals : 254.58101

Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 17-23-37\5L028403.D
Sample Name: M1C1288-13

Acq. Operator : JWR Seq. Line : 18
Acq. Instrument : HPLC5 Location : Vial 17
Injection Date : 4/14/2021 10:08:50 PM Inj : 1
Inj Volume : 100 µl
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Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
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Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.750		-	-	-		PETN

Totals : 0.00000

1 Warnings or Errors :

Warning : Calibrated compound(s) not found

*** End of Report ***

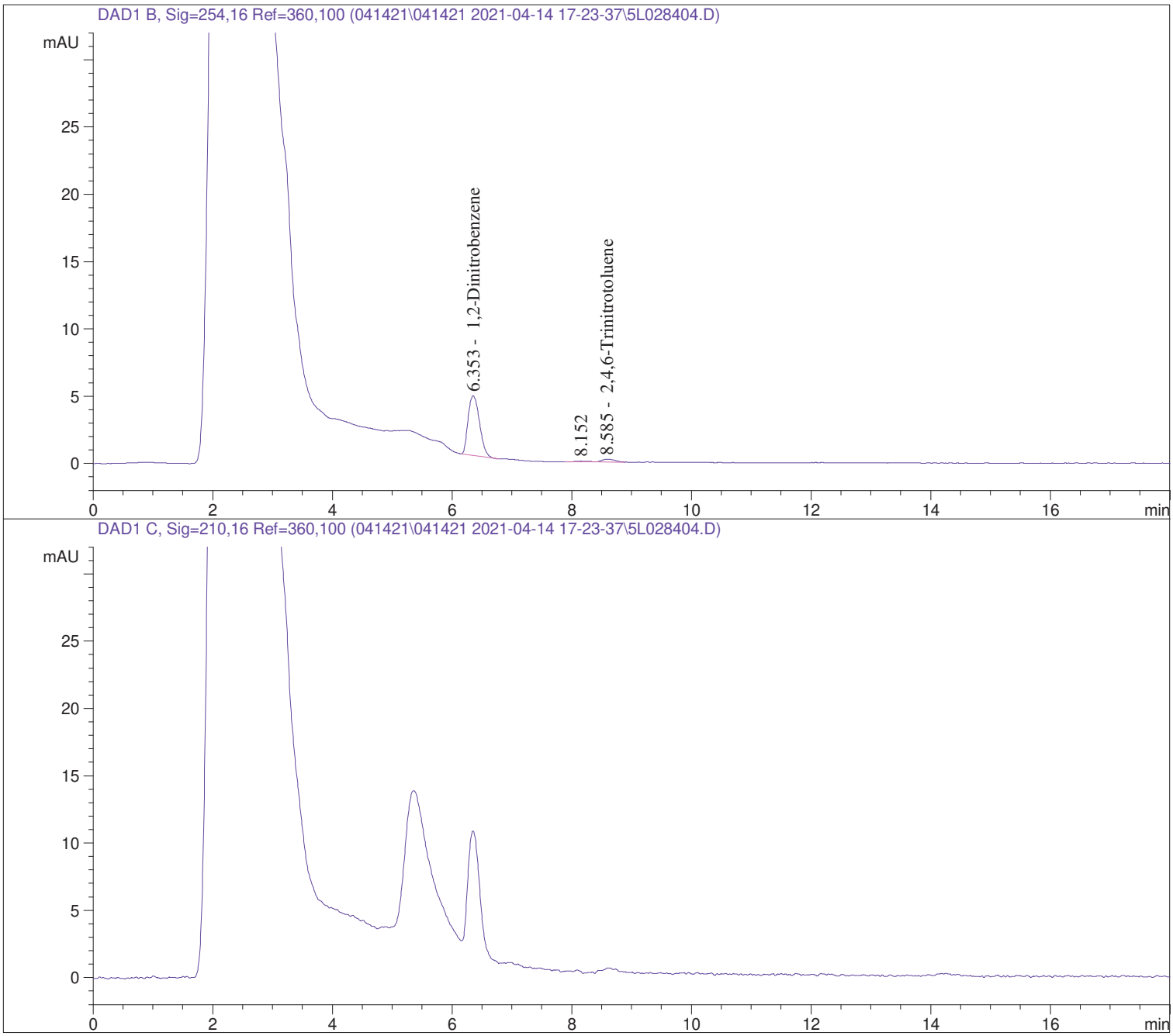
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Sample Name: M1C1288-14

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Acq. Instrument : HPLC5 Location : Vial 18
Injection Date : 4/14/2021 10:37:05 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M
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Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/15/2021 8:37:13 AM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1

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Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 17-23-37\5L028404.D
Sample Name: M1C1288-14

Acq. Operator : JWR Seq. Line : 19
Acq. Instrument : HPLC5 Location : Vial 18
Injection Date : 4/14/2021 10:37:05 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/15/2021 8:37:13 AM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/13/2021 5:44:33 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.766		-	-	-		HMX
5.009		-	-	-		RDX
6.108		-	-	-		1,3,5-Trinitrobenzene
6.353	BBA	59.03957	3.56304	210.36038		1,2-Dinitrobenzene
7.275		-	-	-		1,3-Dinitrobenzene
7.528		-	-	-		Tetryl
7.985		-	-	-		Nitrobenzene
8.585	VV	3.14146	1.98683	6.24153		2,4,6-Trinitrotoluene
9.219		-	-	-		4-Amino-2,6-Dinitrotoluene
9.657		-	-	-		2-Amino-4,6-Dinitrotoluene
9.956		-	-	-		2,6-Dinitrotoluene
10.236		-	-	-		2,4-Dinitrotoluene
11.581		-	-	-		2-Nitrotoluene
12.140		-	-	-		4-Nitrotoluene
13.030		-	-	-		3-Nitrotoluene

Totals : 216.60192

Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 17-23-37\5L028404.D
Sample Name: M1C1288-14

Acq. Operator : JWR Seq. Line : 19
Acq. Instrument : HPLC5 Location : Vial 18
Injection Date : 4/14/2021 10:37:05 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/15/2021 8:37:13 AM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.750		-	-	-		PETN

Totals : 0.00000

1 Warnings or Errors :

Warning : Calibrated compound(s) not found

*** End of Report ***

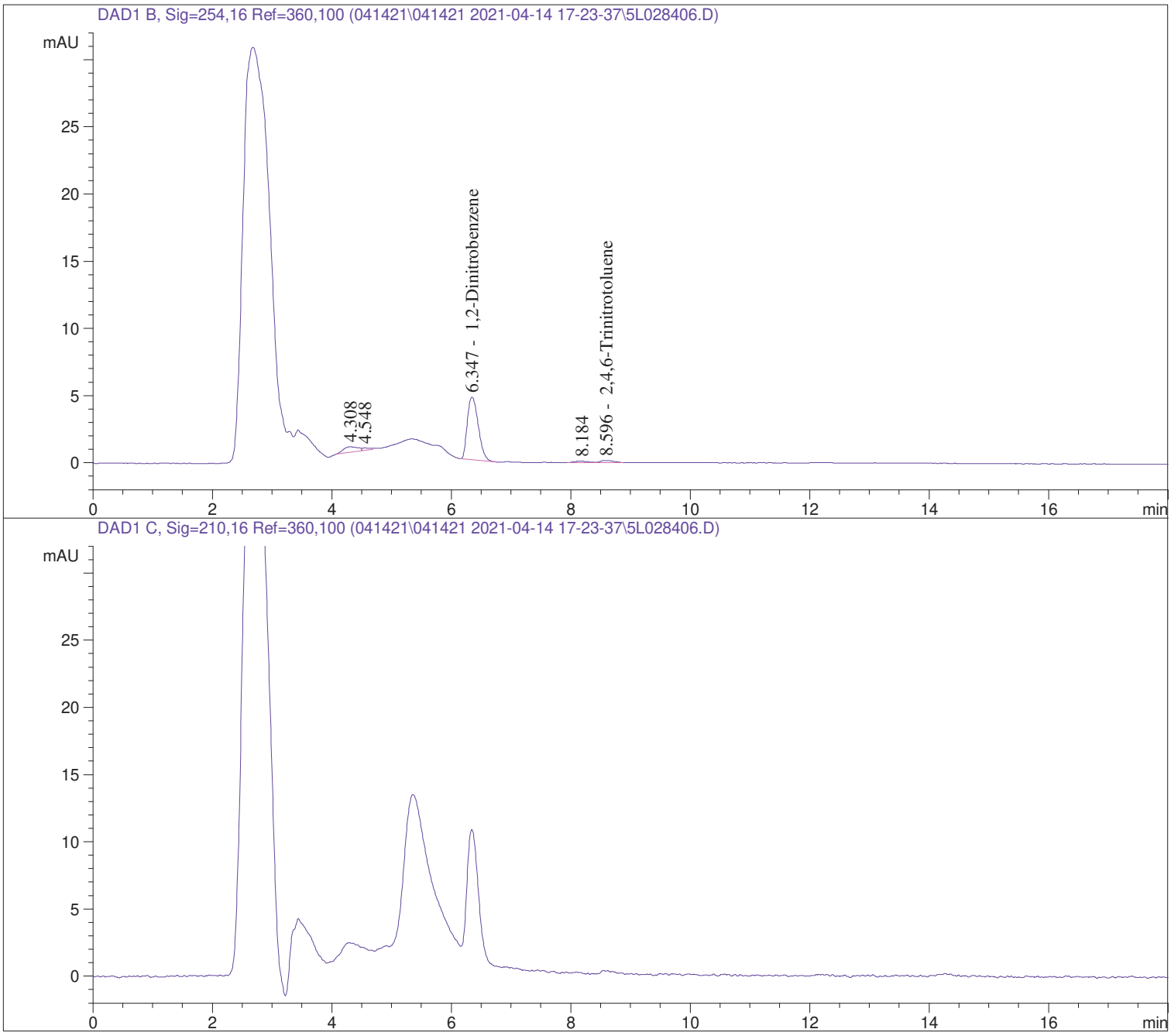
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Sample Name: M1C1288-15

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Acq. Operator : JWR Seq. Line : 21
Acq. Instrument : HPLC5 Location : Vial 19
Injection Date : 4/14/2021 11:33:36 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/15/2021 8:37:13 AM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1

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Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 17-23-37\5L028406.D
Sample Name: M1C1288-15

Acq. Operator : JWR Seq. Line : 21
Acq. Instrument : HPLC5 Location : Vial 19
Injection Date : 4/14/2021 11:33:36 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/15/2021 8:37:13 AM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/13/2021 5:44:33 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.766		-	-	-		HMX
5.009		-	-	-		RDX
6.108		-	-	-		1,3,5-Trinitrobenzene
6.347	BBA	59.08428	3.56303	210.51927		1,2-Dinitrobenzene
7.275		-	-	-		1,3-Dinitrobenzene
7.528		-	-	-		Tetryl
7.985		-	-	-		Nitrobenzene
8.596	VV	2.34452	1.79656	4.21207		2,4,6-Trinitrotoluene
9.219		-	-	-		4-Amino-2,6-Dinitrotoluene
9.657		-	-	-		2-Amino-4,6-Dinitrotoluene
9.956		-	-	-		2,6-Dinitrotoluene
10.236		-	-	-		2,4-Dinitrotoluene
11.581		-	-	-		2-Nitrotoluene
12.140		-	-	-		4-Nitrotoluene
13.030		-	-	-		3-Nitrotoluene

Totals : 214.73135

Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 17-23-37\5L028406.D
Sample Name: M1C1288-15

Acq. Operator : JWR Seq. Line : 21
Acq. Instrument : HPLC5 Location : Vial 19
Injection Date : 4/14/2021 11:33:36 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/15/2021 8:37:13 AM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.750		-	-	-		PETN

Totals : 0.00000

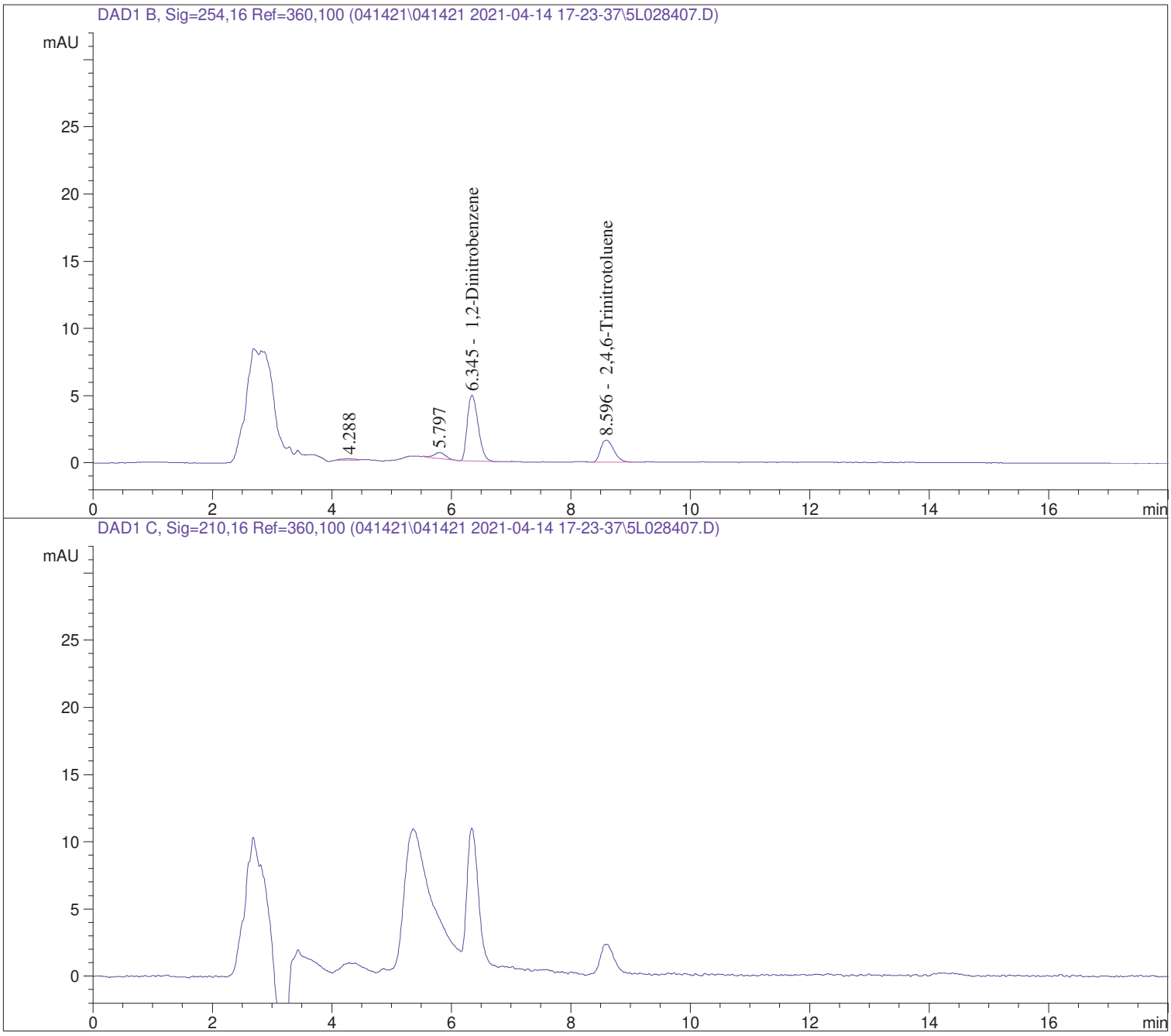
1 Warnings or Errors :

Warning : Calibrated compound(s) not found

*** End of Report ***

Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 17-23-37\5L028407.D
Sample Name: M1C1288-16

Acq. Operator	: JWR	Seq. Line	: 22
Acq. Instrument	: HPLC5	Location	: Vial 20
Injection Date	: 4/15/2021 12:01:46 AM	Inj	: 1
		Inj Volume	: 100 µl
Acq. Method	: C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M		
Last changed	: 4/14/2021 1:45:51 PM by JWR		
Analysis Method	: C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M		
Last changed	: 4/15/2021 8:37:13 AM by ECL		
Method Info	: OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021		
Sample Info	: 1		



Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 17-23-37\5L028407.D
Sample Name: M1C1288-16

Acq. Operator : JWR Seq. Line : 22
Acq. Instrument : HPLC5 Location : Vial 20
Injection Date : 4/15/2021 12:01:46 AM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/15/2021 8:37:13 AM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/13/2021 5:44:33 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.766		-	-	-		HMX
5.009		-	-	-		RDX
6.108		-	-	-		1,3,5-Trinitrobenzene
6.345	VBA	62.19234	3.56259	221.56582		1,2-Dinitrobenzene
7.275		-	-	-		1,3-Dinitrobenzene
7.528		-	-	-		Tetryl
7.985		-	-	-		Nitrobenzene
8.596	VV	25.10179	2.47651	62.16488		2,4,6-Trinitrotoluene
9.219		-	-	-		4-Amino-2,6-Dinitrotoluene
9.657		-	-	-		2-Amino-4,6-Dinitrotoluene
9.956		-	-	-		2,6-Dinitrotoluene
10.236		-	-	-		2,4-Dinitrotoluene
11.581		-	-	-		2-Nitrotoluene
12.140		-	-	-		4-Nitrotoluene
13.030		-	-	-		3-Nitrotoluene

Totals : 283.73070

Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 17-23-37\5L028407.D
Sample Name: M1C1288-16

Acq. Operator : JWR Seq. Line : 22
Acq. Instrument : HPLC5 Location : Vial 20
Injection Date : 4/15/2021 12:01:46 AM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/15/2021 8:37:13 AM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.750		-	-	-		PETN

Totals : 0.00000

1 Warnings or Errors :

Warning : Calibrated compound(s) not found

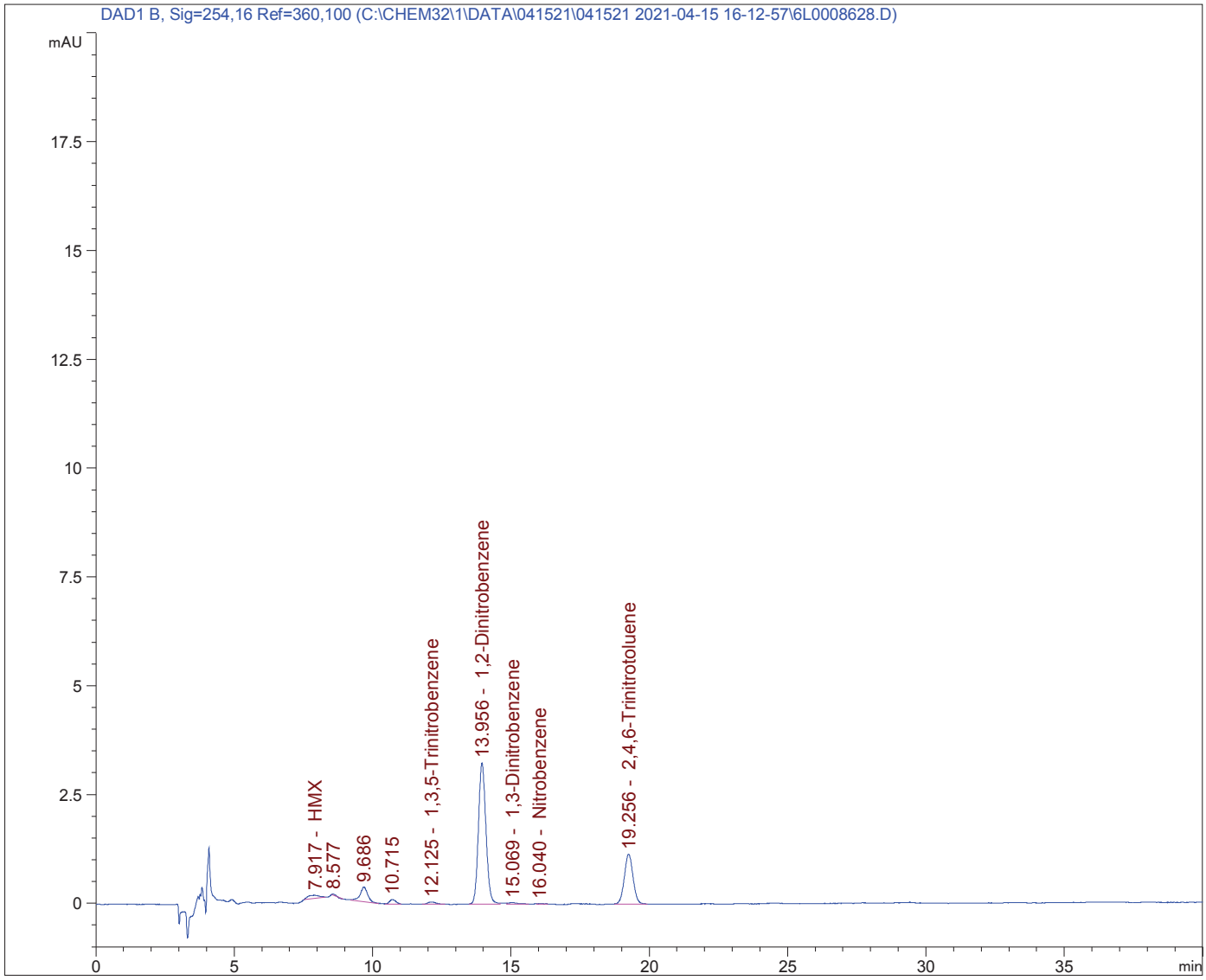
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Data File C:\CHEM32\1\DATA\041521\041521 2021-04-15 16-12-57\6L0008628.D
Sample Name: M1C1288-16RE1

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    ======================================================================
    Acq. Operator   : JWR                          Seq. Line :  20
    Acq. Instrument : HPLC6                         Location :   18
    Injection Date  : 4/16/2021 12:10:03 PM              Inj :   1
                                                  Inj Volume : 100.000 µl
    Acq. Method     : C:\Chem32\1\Data\041521\041521 2021-04-15 16-12-57\8330.M
    Last changed    : 4/15/2021 4:12:57 PM by JWR
    Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
    Last changed    : 4/21/2021 11:13:26 AM by ECL
    Method Info     : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

    Sample Info     : 1

    ======================================================================
```



Data File C:\CHEM32\1\DATA\041521\041521 2021-04-15 16-12-57\6L0008628.D
Sample Name: M1C1288-16RE1

Acq. Operator : JWR Seq. Line : 20
Acq. Instrument : HPLC6 Location : 18
Injection Date : 4/16/2021 12:10:03 PM Inj : 1
Inj Volume : 100.000 µl
Acq. Method : C:\Chem32\1\Data\041521\041521 2021-04-15 16-12-57\8330.M
Last changed : 4/15/2021 4:12:57 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
Last changed : 4/21/2021 11:13:26 AM by ECL
Method Info : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

Sample Info : 1

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/19/2021 4:31:23 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
7.917	BV	2.25525	2.93028	6.60850		HMX
11.699		-	-	-		RDX
12.125	BV	1.09237	2.65808	2.90360		1,3,5-Trinitrobenzene
13.956	VB	61.44380	3.78968	232.85231		1,2-Dinitrobenzene
15.069	BB	8.48421e-1	2.25088	1.90969		1,3-Dinitrobenzene
16.040	BB	1.62436e-1	11.96057	1.94282		Nitrobenzene
19.256	BB	25.36990	2.44719	62.08505		2,4,6-Trinitrotoluene
19.737		-	-	-		Tetryl
21.942		-	-	-		2,6-Dinitrotoluene
23.261		-	-	-		2,4-Dinitrotoluene
24.758		-	-	-		2-Nitrotoluene
26.955		-	-	-		4-Nitrotoluene
28.837		-	-	-		3-Nitrotoluene
29.604		-	-	-		4-Amino-2,6-Dinitrotoluene
32.146		-	-	-		2-Amino-4,6-Dinitrotoluene

Totals : 308.30197

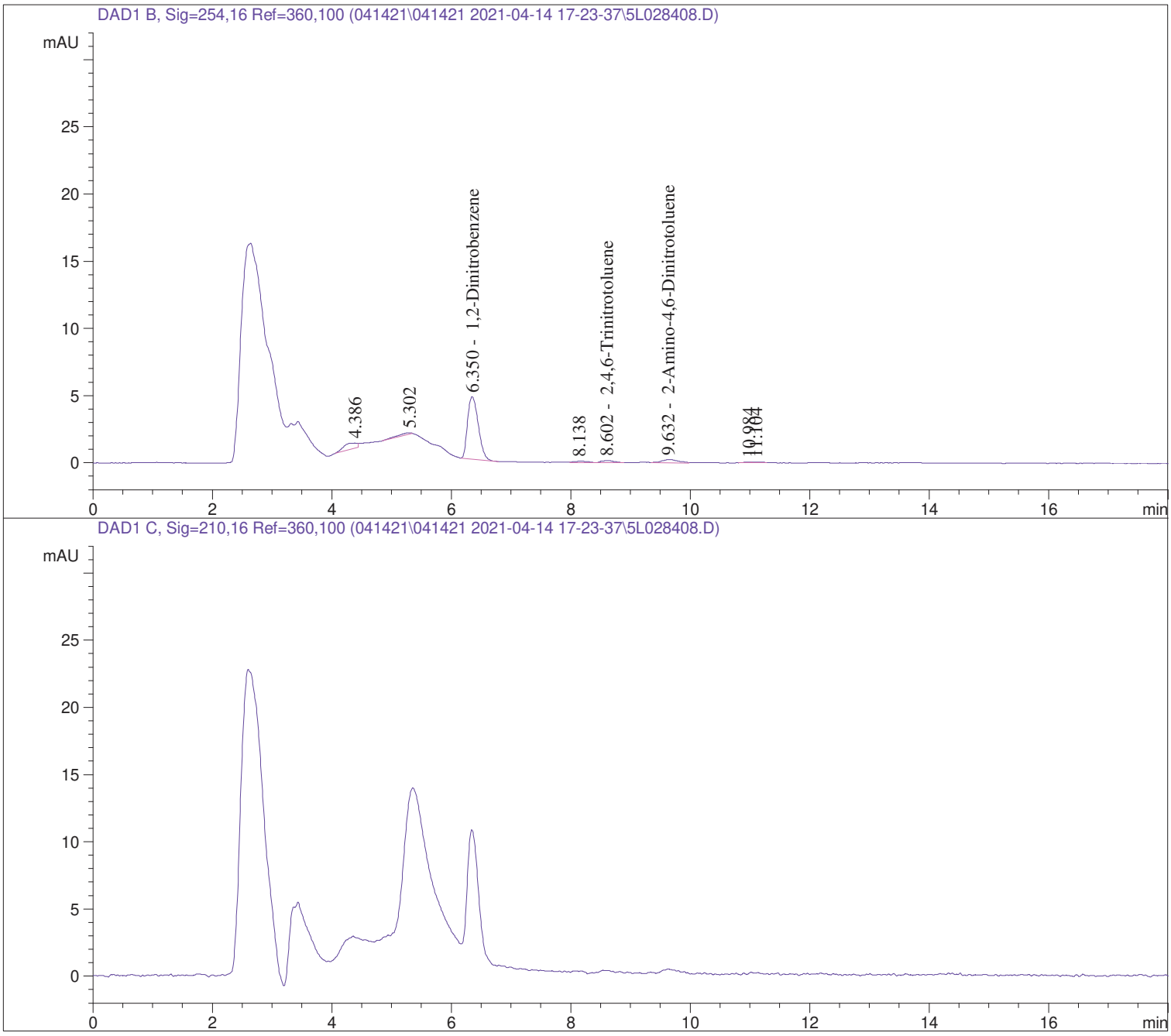
1 Warnings or Errors :

Warning : Calibrated compound(s) not found

*** End of Report ***

Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 17-23-37\5L028408.D
Sample Name: M1C1288-17

Acq. Operator	: JWR	Seq. Line	: 23
Acq. Instrument	: HPLC5	Location	: Vial 21
Injection Date	: 4/15/2021 12:29:58 AM	Inj	: 1
		Inj Volume	: 100 µl
Acq. Method	: C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M		
Last changed	: 4/14/2021 1:45:51 PM by JWR		
Analysis Method	: C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M		
Last changed	: 4/15/2021 8:37:13 AM by ECL		
Method Info	: OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021		
Sample Info	: 1		



Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 17-23-37\5L028408.D
Sample Name: M1C1288-17

Acq. Operator : JWR Seq. Line : 23
Acq. Instrument : HPLC5 Location : Vial 21
Injection Date : 4/15/2021 12:29:58 AM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/15/2021 8:37:13 AM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/13/2021 5:44:33 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.766		-	-	-		HMX
5.009		-	-	-		RDX
6.108		-	-	-		1,3,5-Trinitrobenzene
6.350	BBA	58.01748	3.56320	206.72770		1,2-Dinitrobenzene
7.275		-	-	-		1,3-Dinitrobenzene
7.528		-	-	-		Tetryl
7.985		-	-	-		Nitrobenzene
8.602	VV	2.24595	1.76365	3.96106		2,4,6-Trinitrotoluene
9.219		-	-	-		4-Amino-2,6-Dinitrotoluene
9.632	VV	4.71605	3.09565	14.59923		2-Amino-4,6-Dinitrotoluene
9.956		-	-	-		2,6-Dinitrotoluene
10.236		-	-	-		2,4-Dinitrotoluene
11.581		-	-	-		2-Nitrotoluene
12.140		-	-	-		4-Nitrotoluene
13.030		-	-	-		3-Nitrotoluene

Totals : 225.28799

Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 17-23-37\5L028408.D
Sample Name: M1C1288-17

Acq. Operator : JWR Seq. Line : 23
Acq. Instrument : HPLC5 Location : Vial 21
Injection Date : 4/15/2021 12:29:58 AM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/15/2021 8:37:13 AM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.750		-	-	-		PETN

Totals : 0.00000

1 Warnings or Errors :

Warning : Calibrated compound(s) not found

*** End of Report ***

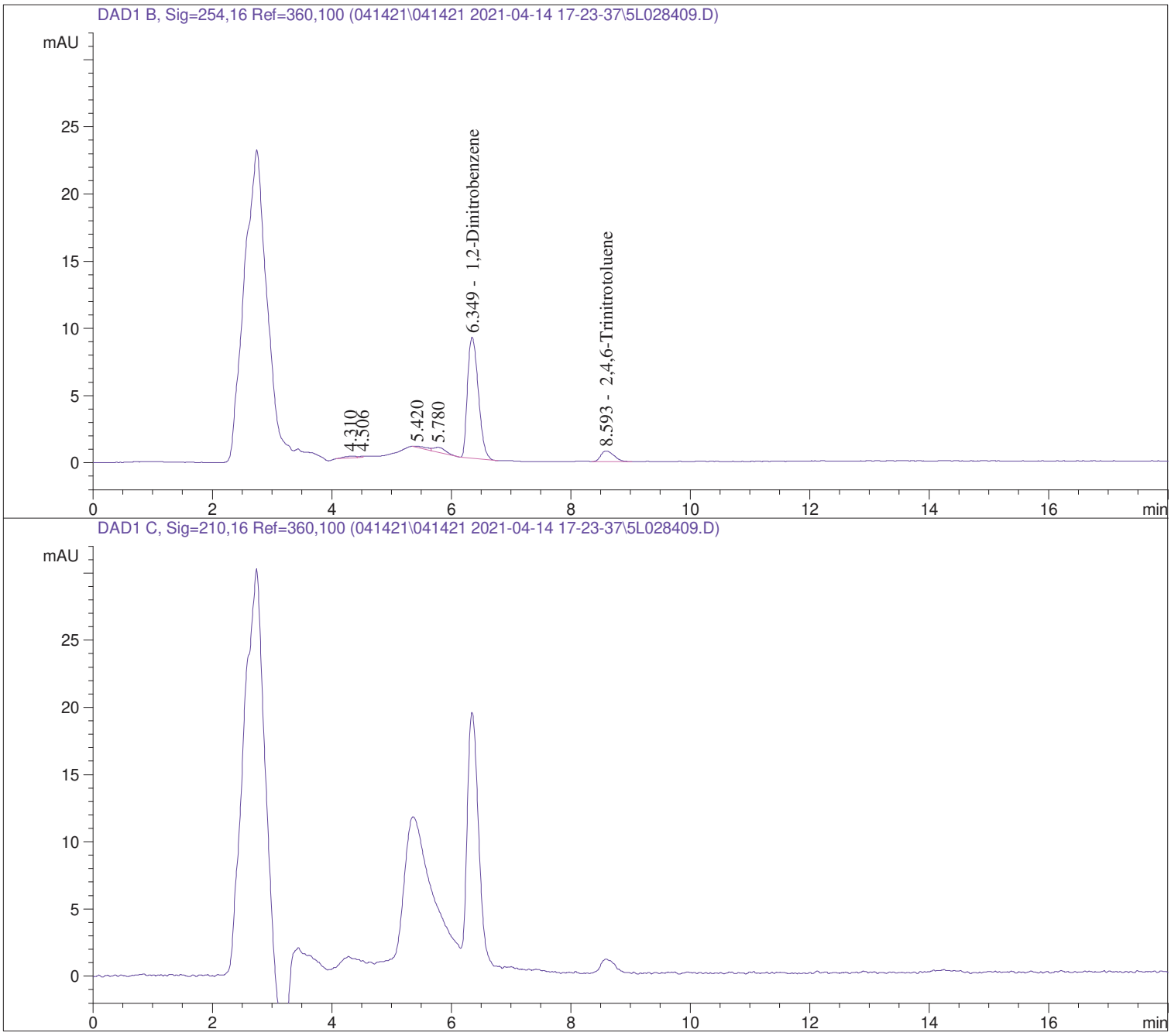
Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 17-23-37\5L028409.D
Sample Name: M1C1288-18

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Acq. Operator : JWR Seq. Line : 24
Acq. Instrument : HPLC5 Location : Vial 22
Injection Date : 4/15/2021 12:58:11 AM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/15/2021 8:37:13 AM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1

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Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 17-23-37\5L028409.D
Sample Name: M1C1288-18

Acq. Operator : JWR Seq. Line : 24
Acq. Instrument : HPLC5 Location : Vial 22
Injection Date : 4/15/2021 12:58:11 AM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/15/2021 8:37:13 AM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/13/2021 5:44:33 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.766		-	-	-		HMX
5.009		-	-	-		RDX
6.108		-	-	-		1,3,5-Trinitrobenzene
6.349	VBA	114.18618	3.55875	406.35991		1,2-Dinitrobenzene
7.275		-	-	-		1,3-Dinitrobenzene
7.528		-	-	-		Tetryl
7.985		-	-	-		Nitrobenzene
8.593	VV	12.24051	2.40291	29.41281		2,4,6-Trinitrotoluene
9.219		-	-	-		4-Amino-2,6-Dinitrotoluene
9.657		-	-	-		2-Amino-4,6-Dinitrotoluene
9.956		-	-	-		2,6-Dinitrotoluene
10.236		-	-	-		2,4-Dinitrotoluene
11.581		-	-	-		2-Nitrotoluene
12.140		-	-	-		4-Nitrotoluene
13.030		-	-	-		3-Nitrotoluene

Totals : 435.77273

Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 17-23-37\5L028409.D
Sample Name: M1C1288-18

Acq. Operator : JWR Seq. Line : 24
Acq. Instrument : HPLC5 Location : Vial 22
Injection Date : 4/15/2021 12:58:11 AM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/15/2021 8:37:13 AM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.750		-	-	-		PETN

Totals : 0.00000

1 Warnings or Errors :

Warning : Calibrated compound(s) not found

*** End of Report ***

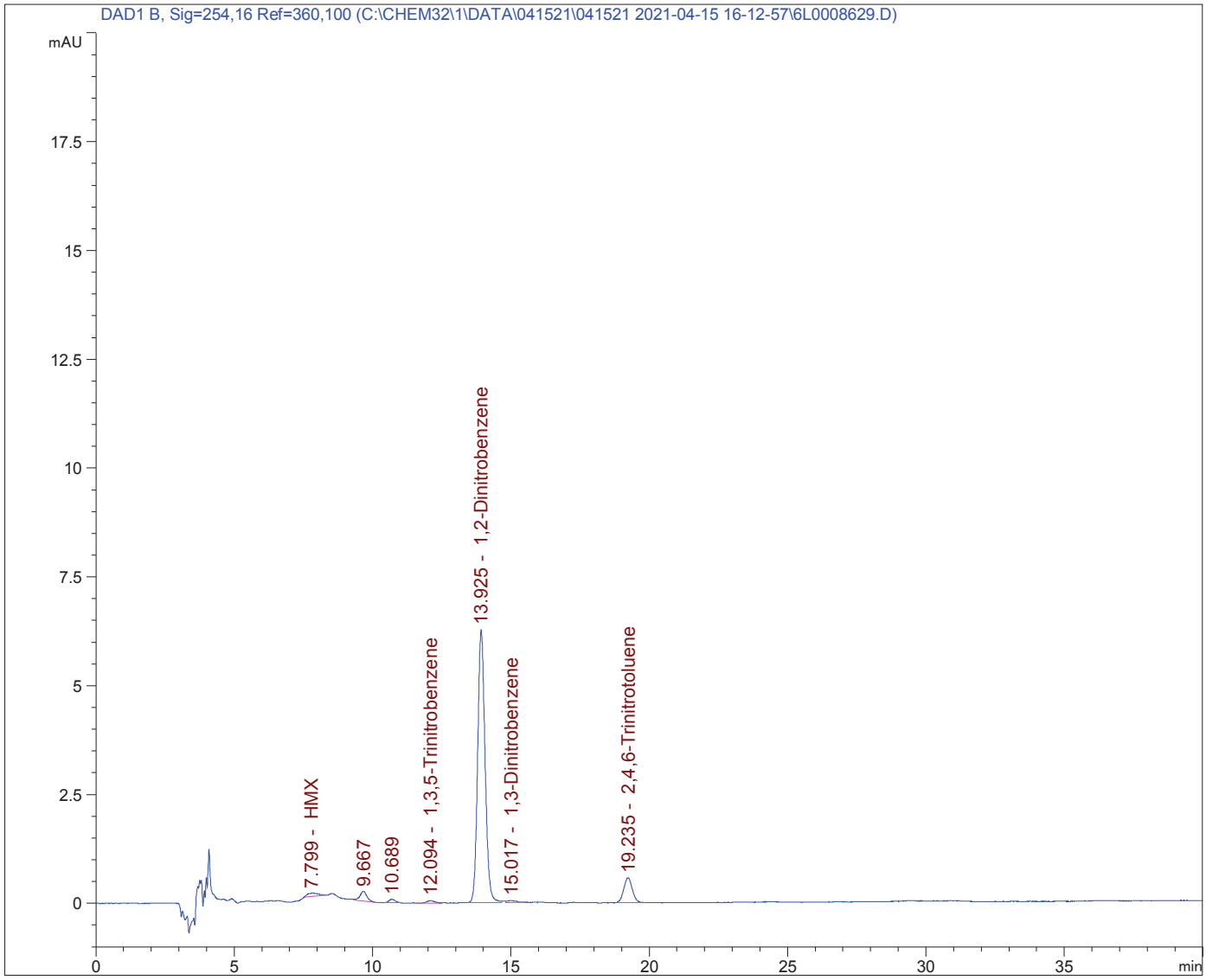
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Sample Name: M1C1288-18RE1

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Acq. Operator : JWR Seq. Line : 21
Acq. Instrument : HPLC6 Location : 19
Injection Date : 4/16/2021 1:12:55 PM Inj : 1
Inj Volume : 100.000 µl
Acq. Method : C:\Chem32\1\Data\041521\041521 2021-04-15 16-12-57\8330.M
Last changed : 4/15/2021 4:12:57 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
Last changed : 4/21/2021 11:13:26 AM by ECL
Method Info : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

Sample Info : 1

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Data File C:\CHEM32\1\DATA\041521\041521 2021-04-15 16-12-57\6L0008629.D
Sample Name: M1C1288-18RE1

Acq. Operator : JWR Seq. Line : 21
Acq. Instrument : HPLC6 Location : 19
Injection Date : 4/16/2021 1:12:55 PM Inj : 1
Inj Volume : 100.000 µl
Acq. Method : C:\Chem32\1\Data\041521\041521 2021-04-15 16-12-57\8330.M
Last changed : 4/15/2021 4:12:57 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
Last changed : 4/21/2021 11:13:26 AM by ECL
Method Info : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

Sample Info : 1

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/19/2021 4:31:23 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
7.799	BV	2.16426	2.80120	6.06253		HMX
11.699		-	-	-		RDX
12.094	VV	1.20197	2.63428	3.16632		1,3,5-Trinitrobenzene
13.925	VB	116.53502	3.78491	441.07402		1,2-Dinitrobenzene
15.017	BB	1.01749	2.16064	2.19842		1,3-Dinitrobenzene
15.848		-	-	-		Nitrobenzene
19.235	BB	12.37082	2.38763	29.53688		2,4,6-Trinitrotoluene
19.737		-	-	-		Tetryl
21.942		-	-	-		2,6-Dinitrotoluene
23.261		-	-	-		2,4-Dinitrotoluene
24.758		-	-	-		2-Nitrotoluene
26.955		-	-	-		4-Nitrotoluene
28.837		-	-	-		3-Nitrotoluene
29.604		-	-	-		4-Amino-2,6-Dinitrotoluene
32.146		-	-	-		2-Amino-4,6-Dinitrotoluene

Totals : 482.03816

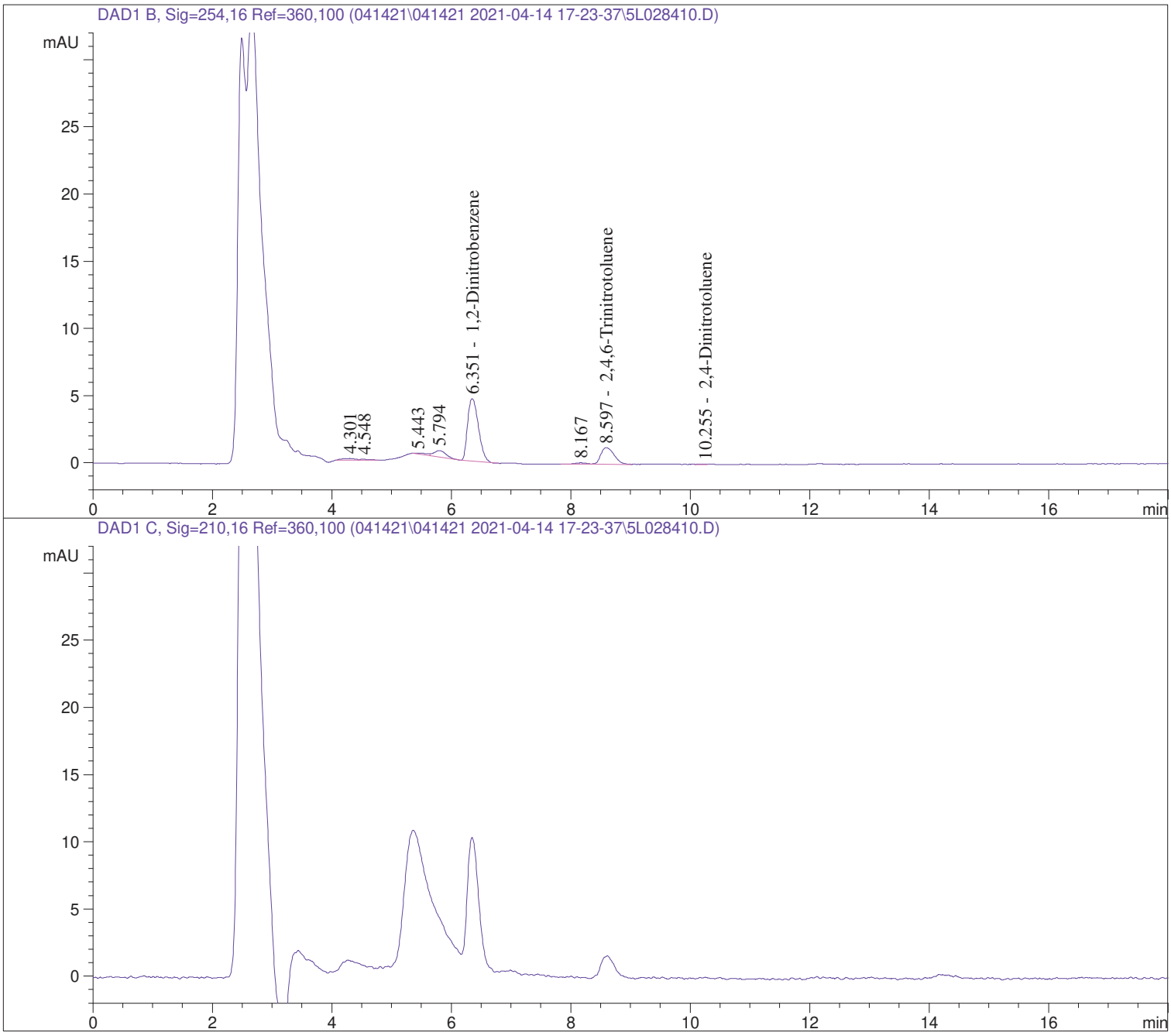
1 Warnings or Errors :

Warning : Calibrated compound(s) not found

*** End of Report ***

Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 17-23-37\5L028410.D
Sample Name: M1C1288-19

Acq. Operator	: JWR	Seq. Line	: 25
Acq. Instrument	: HPLC5	Location	: Vial 23
Injection Date	: 4/15/2021 1:26:21 AM	Inj	: 1
		Inj Volume	: 100 µl
Acq. Method	: C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M		
Last changed	: 4/14/2021 1:45:51 PM by JWR		
Analysis Method	: C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M		
Last changed	: 4/15/2021 8:37:13 AM by ECL		
Method Info	: OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021		
Sample Info	: 1		



Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 17-23-37\5L028410.D
Sample Name: M1C1288-19

Acq. Operator : JWR Seq. Line : 25
Acq. Instrument : HPLC5 Location : Vial 23
Injection Date : 4/15/2021 1:26:21 AM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/15/2021 8:37:13 AM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/13/2021 5:44:33 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.766		-	-	-		HMX
5.009		-	-	-		RDX
6.108		-	-	-		1,3,5-Trinitrobenzene
6.351	VB	58.88586	3.56306	209.81406		1,2-Dinitrobenzene
7.275		-	-	-		1,3-Dinitrobenzene
7.528		-	-	-		Tetryl
7.985		-	-	-		Nitrobenzene
8.597	VV	18.80772	2.45307	46.13664		2,4,6-Trinitrotoluene
9.219		-	-	-		4-Amino-2,6-Dinitrotoluene
9.657		-	-	-		2-Amino-4,6-Dinitrotoluene
9.956		-	-	-		2,6-Dinitrotoluene
10.255	VV	4.72225e-1	1.44088	6.80419e-1		2,4-Dinitrotoluene
11.581		-	-	-		2-Nitrotoluene
12.140		-	-	-		4-Nitrotoluene
13.030		-	-	-		3-Nitrotoluene

Totals : 256.63112

Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 17-23-37\5L028410.D
Sample Name: M1C1288-19

Acq. Operator : JWR Seq. Line : 25
Acq. Instrument : HPLC5 Location : Vial 23
Injection Date : 4/15/2021 1:26:21 AM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/15/2021 8:37:13 AM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.750		-	-	-		PETN

Totals : 0.00000

1 Warnings or Errors :

Warning : Calibrated compound(s) not found

*** End of Report ***

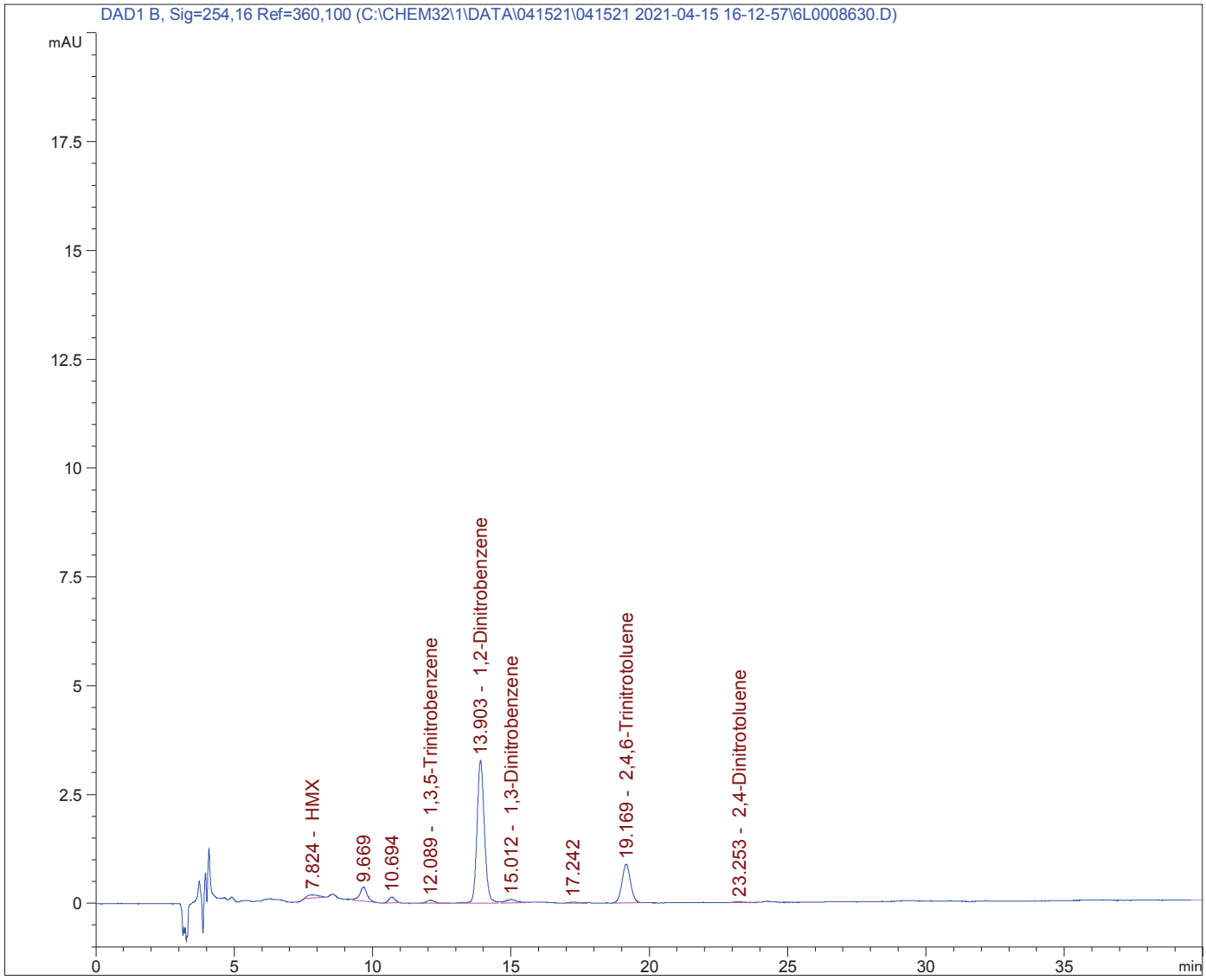
Data File C:\CHEM32\1\DATA\041521\041521 2021-04-15 16-12-57\6L0008630.D
Sample Name: M1C1288-19RE1

==========

Acq. Operator : JWR Seq. Line : 22
Acq. Instrument : HPLC6 Location : 20
Injection Date : 4/16/2021 2:15:49 PM Inj : 1
Inj Volume : 100.000 µl
Acq. Method : C:\Chem32\1\Data\041521\041521 2021-04-15 16-12-57\8330.M
Last changed : 4/15/2021 4:12:57 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
Last changed : 4/21/2021 11:13:26 AM by ECL
Method Info : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

Sample Info : 1

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Data File C:\CHEM32\1\DATA\041521\041521 2021-04-15 16-12-57\6L0008630.D
Sample Name: M1C1288-19RE1

Acq. Operator : JWR Seq. Line : 22
Acq. Instrument : HPLC6 Location : 20
Injection Date : 4/16/2021 2:15:49 PM Inj : 1
Inj Volume : 100.000 µl
Acq. Method : C:\Chem32\1\Data\041521\041521 2021-04-15 16-12-57\8330.M
Last changed : 4/15/2021 4:12:57 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
Last changed : 4/21/2021 11:13:26 AM by ECL
Method Info : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

Sample Info : 1

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/19/2021 4:31:23 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
7.824	BV	2.20078	2.85428	6.28163		HMX
11.699		-	-	-		RDX
12.089	BB	1.49727	2.58748	3.87415		1,3,5-Trinitrobenzene
13.903	BB	60.74805	3.78980	230.22267		1,2-Dinitrobenzene
15.012	BV	2.18577	1.91859	4.19360		1,3-Dinitrobenzene
15.848		-	-	-		Nitrobenzene
19.169	BB	19.08984	2.42854	46.36052		2,4,6-Trinitrotoluene
19.737		-	-	-		Tetryl
21.942		-	-	-		2,6-Dinitrotoluene
23.253	BV	5.28978e-1	2.41009	1.27489		2,4-Dinitrotoluene
24.758		-	-	-		2-Nitrotoluene
26.955		-	-	-		4-Nitrotoluene
28.837		-	-	-		3-Nitrotoluene
29.604		-	-	-		4-Amino-2,6-Dinitrotoluene
32.146		-	-	-		2-Amino-4,6-Dinitrotoluene

Totals : 292.20745

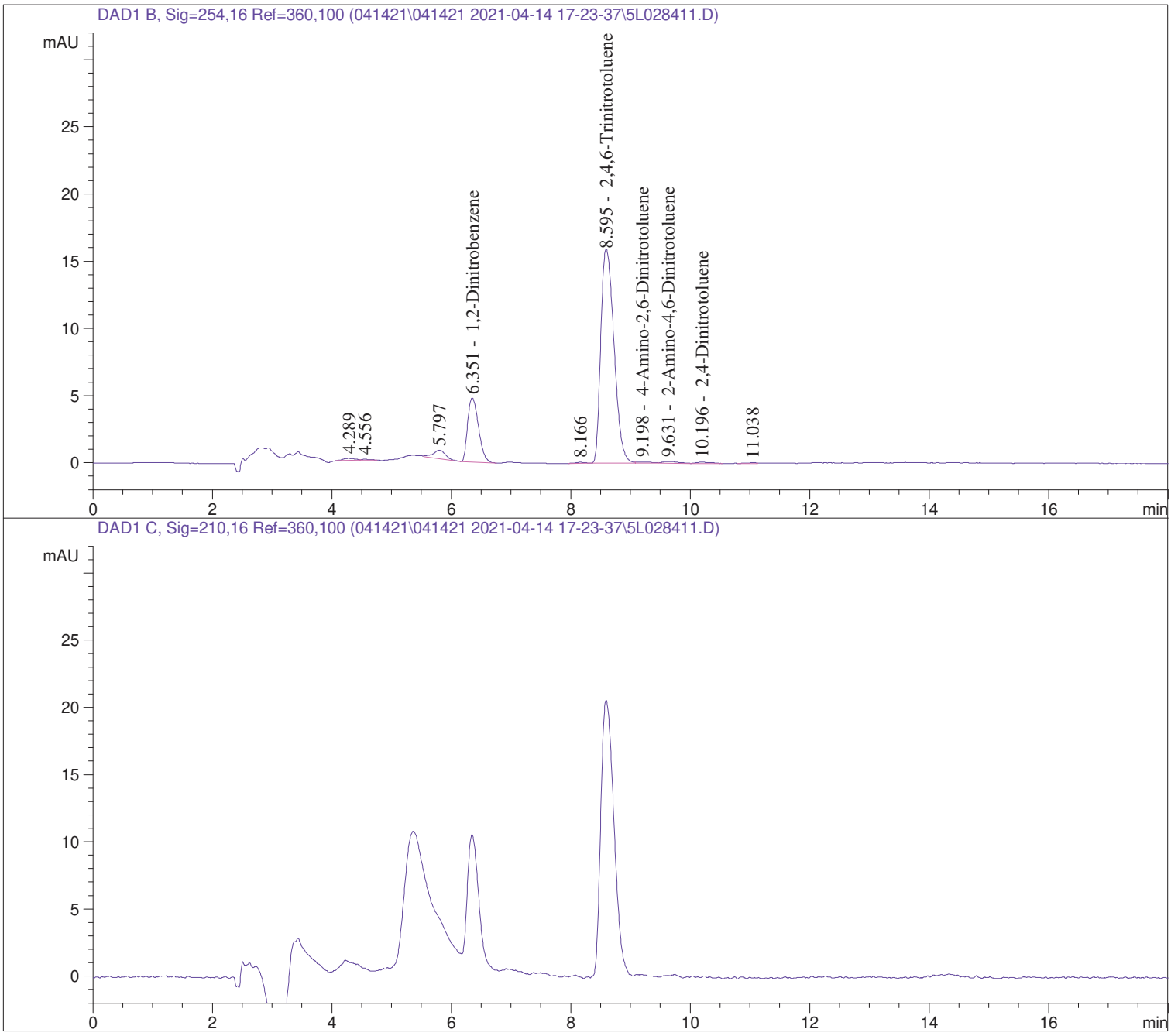
1 Warnings or Errors :

Warning : Calibrated compound(s) not found

*** End of Report ***

Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 17-23-37\5L028411.D
Sample Name: M1C1288-20

Acq. Operator	: JWR	Seq. Line	: 26
Acq. Instrument	: HPLC5	Location	: Vial 24
Injection Date	: 4/15/2021 1:54:30 AM	Inj	: 1
		Inj Volume	: 100 µl
Acq. Method	: C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M		
Last changed	: 4/14/2021 1:45:51 PM by JWR		
Analysis Method	: C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M		
Last changed	: 4/15/2021 8:37:13 AM by ECL		
Method Info	: OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021		
Sample Info	: 1		



Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 17-23-37\5L028411.D
Sample Name: M1C1288-20

Acq. Operator : JWR Seq. Line : 26
Acq. Instrument : HPLC5 Location : Vial 24
Injection Date : 4/15/2021 1:54:30 AM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/15/2021 8:37:13 AM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/13/2021 5:44:33 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.766		-	-	-		HMX
5.009		-	-	-		RDX
6.108		-	-	-		1,3,5-Trinitrobenzene
6.351	VBA	60.60333	3.56281	215.91822		1,2-Dinitrobenzene
7.275		-	-	-		1,3-Dinitrobenzene
7.528		-	-	-		Tetryl
7.985		-	-	-		Nitrobenzene
8.595	VV	243.97568	2.53935	619.54076		2,4,6-Trinitrotoluene
9.198	VV	1.89843	4.90289	9.30778		4-Amino-2,6-Dinitrotoluene
9.631	VV	2.70906	3.16805	8.58242		2-Amino-4,6-Dinitrotoluene
9.956		-	-	-		2,6-Dinitrotoluene
10.196	VV	1.72699	1.72048	2.97125		2,4-Dinitrotoluene
11.581		-	-	-		2-Nitrotoluene
12.140		-	-	-		4-Nitrotoluene
13.030		-	-	-		3-Nitrotoluene

Totals : 856.32044

Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 17-23-37\5L028411.D
Sample Name: M1C1288-20

Acq. Operator : JWR Seq. Line : 26
Acq. Instrument : HPLC5 Location : Vial 24
Injection Date : 4/15/2021 1:54:30 AM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/15/2021 8:37:13 AM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.750		-	-	-		PETN

Totals : 0.00000

1 Warnings or Errors :

Warning : Calibrated compound(s) not found

*** End of Report ***

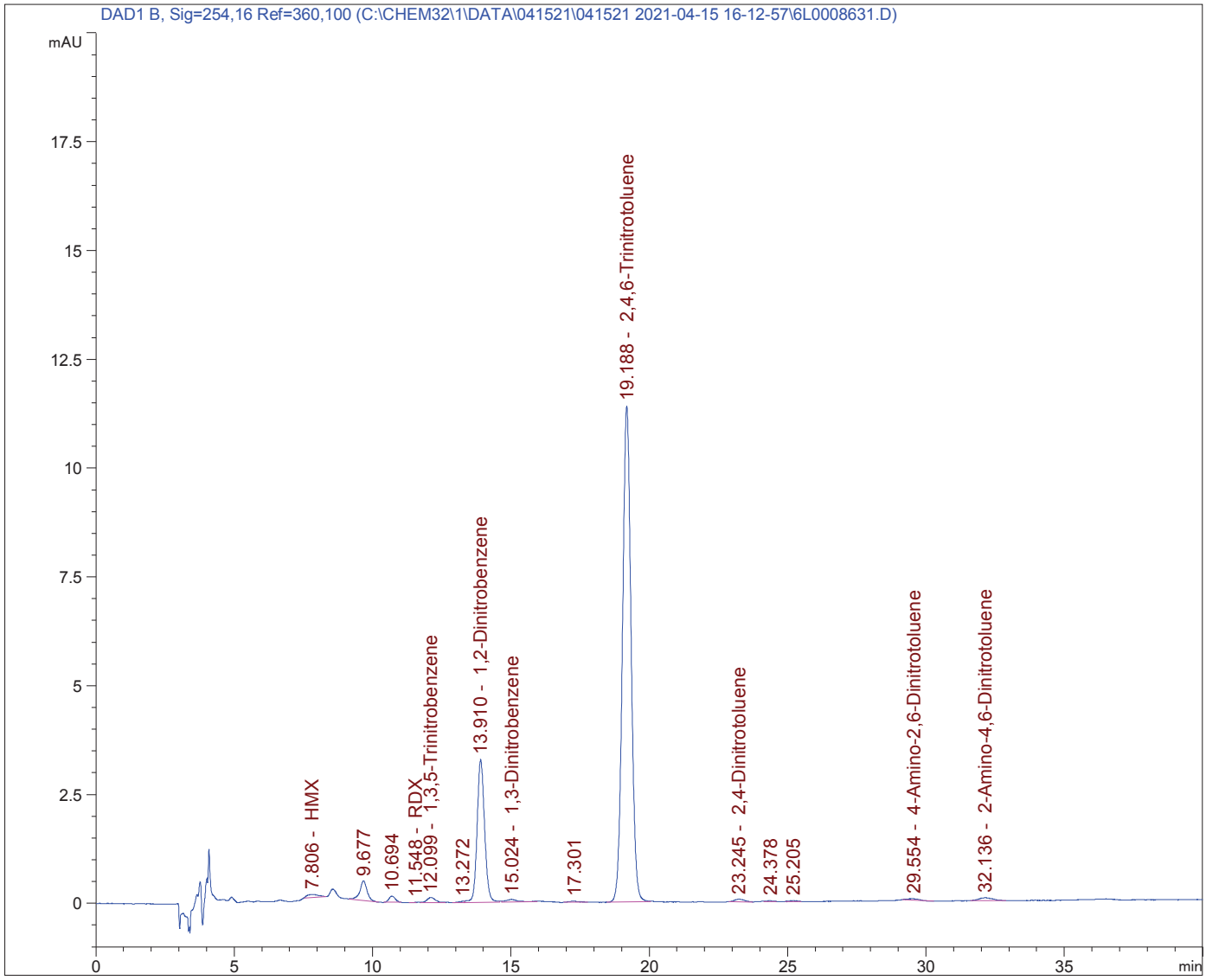
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Sample Name: M1C1288-20RE1

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Acq. Operator : JWR Seq. Line : 23
Acq. Instrument : HPLC6 Location : 21
Injection Date : 4/16/2021 3:18:42 PM Inj : 1
Inj Volume : 100.000 µl
Acq. Method : C:\Chem32\1\Data\041521\041521 2021-04-15 16-12-57\8330.M
Last changed : 4/15/2021 4:12:57 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
Last changed : 4/21/2021 11:13:26 AM by ECL
Method Info : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

Sample Info : 1

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Data File C:\CHEM32\1\DATA\041521\041521 2021-04-15 16-12-57\6L0008631.D
Sample Name: M1C1288-20RE1

Acq. Operator : JWR Seq. Line : 23
Acq. Instrument : HPLC6 Location : 21
Injection Date : 4/16/2021 3:18:42 PM Inj : 1
Inj Volume : 100.000 µl
Acq. Method : C:\Chem32\1\Data\041521\041521 2021-04-15 16-12-57\8330.M
Last changed : 4/15/2021 4:12:57 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
Last changed : 4/21/2021 11:13:26 AM by ECL
Method Info : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

Sample Info : 1

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/19/2021 4:31:23 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
7.806	BV	1.98669	2.51522	4.99696		HMX
11.548	VV	1.14968e-1	1.89322	2.17659e-1		RDX
12.099	VV	2.66197	2.50414	6.66595		1,3,5-Trinitrobenzene
13.910	VB	61.52893	3.78967	233.17409		1,2-Dinitrobenzene
15.024	BB	1.43761	2.02830	2.91590		1,3-Dinitrobenzene
15.848		-	-	-		Nitrobenzene
19.188	BB	246.57207	2.49805	615.94930		2,4,6-Trinitrotoluene
19.737		-	-	-		Tetryl
21.942		-	-	-		2,6-Dinitrotoluene
23.245	BB	1.62151	2.06332	3.34570		2,4-Dinitrotoluene
24.758		-	-	-		2-Nitrotoluene
26.955		-	-	-		4-Nitrotoluene
28.837		-	-	-		3-Nitrotoluene
29.554	BB	8.62503e-1	4.48771	3.87067		4-Amino-2,6-Dinitrotoluene
32.136	BB	2.40863	3.06960	7.39353		2-Amino-4,6-Dinitrotoluene

Totals : 878.52975

1 Warnings or Errors :

Warning : Calibrated compound(s) not found

*** End of Report ***

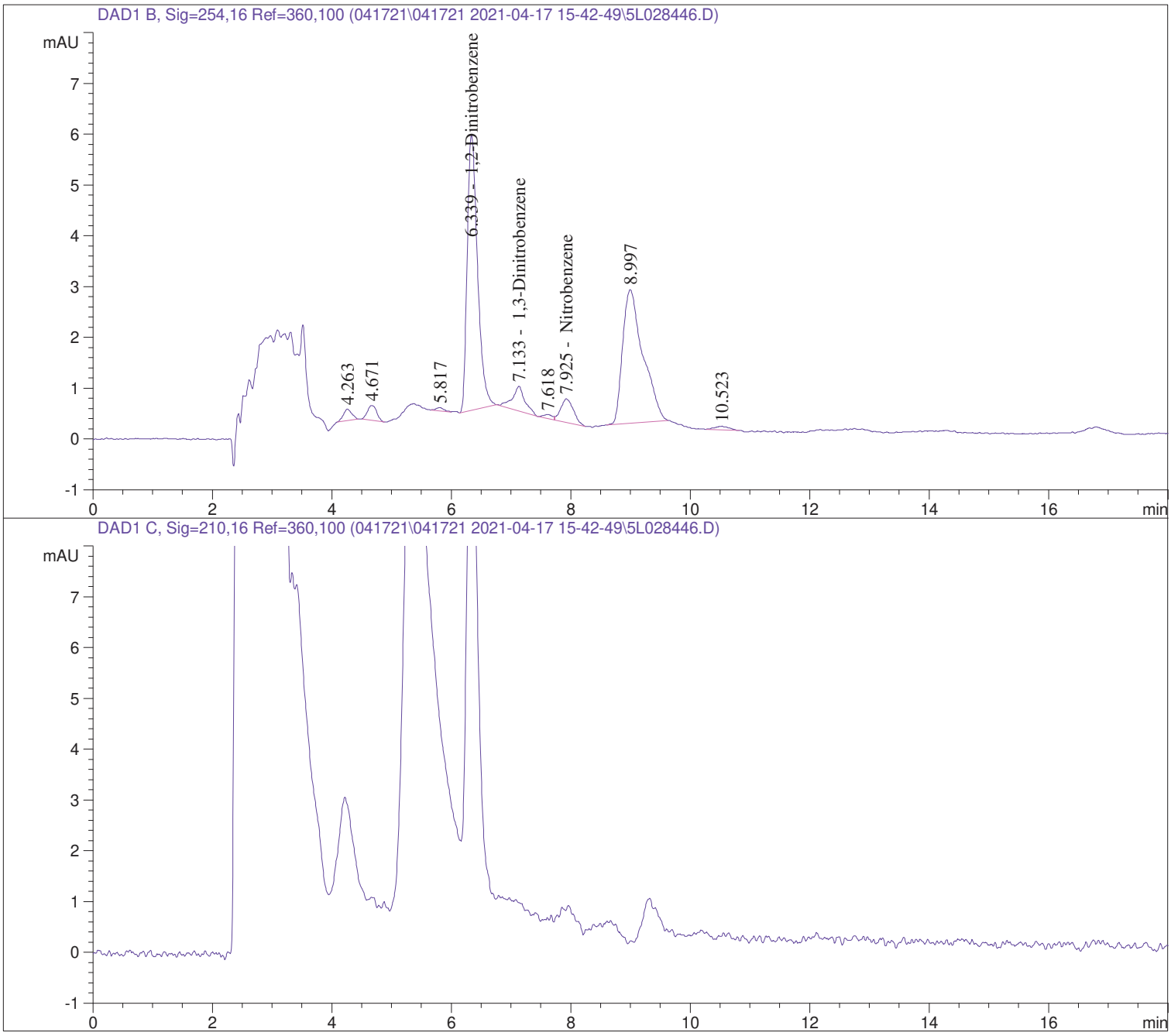
MICROBAC®

Section C:
HPLC Organics
EPA 8330B
QC Sample Raw Data

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

Data File C:\CHEM32\1\DATA\041721\041721 2021-04-17 15-42-49\5L028446.D
Sample Name: B1C1190-BLK1

Acq. Operator	: JWR	Seq. Line	: 2
Acq. Instrument	: HPLC5	Location	: Vial 2
Injection Date	: 4/17/2021 4:26:17 PM	Inj	: 1
		Inj Volume	: 100 µl
Acq. Method	: C:\Chem32\1\DATA\041721\041721 2021-04-17 15-42-49\8330PLUS-PETN.M		
Last changed	: 4/17/2021 3:42:35 PM by JWR		
Analysis Method	: C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M		
Last changed	: 4/20/2021 4:14:51 PM by ECL		
Method Info	: OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021		
Sample Info	: 1 (Surr 250ppb "OC")		



Data File C:\CHEM32\1\DATA\041721\041721 2021-04-17 15-42-49\5L028446.D
Sample Name: B1C1190-BLK1

Acq. Operator : JWR Seq. Line : 2
Acq. Instrument : HPLC5 Location : Vial 2
Injection Date : 4/17/2021 4:26:17 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041721\041721 2021-04-17 15-42-49\8330PLUS-PETN.M
Last changed : 4/17/2021 3:42:35 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/20/2021 4:14:51 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (Surr 250ppb "OC")

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/20/2021 3:06:35 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.749		-	-	-		HMX
4.990		-	-	-		RDX
6.073		-	-	-		1,3,5-Trinitrobenzene
6.339	VV	65.07966	3.56222	231.82778		1,2-Dinitrobenzene
7.133	VV	7.19936	1.78961	12.88402		1,3-Dinitrobenzene
7.456		-	-	-		Tetryl
7.925	VBA	6.95320	2.54837	17.71929		Nitrobenzene
8.572		-	-	-		2,4,6-Trinitrotoluene
9.176		-	-	-		4-Amino-2,6-Dinitrotoluene
9.616		-	-	-		2-Amino-4,6-Dinitrotoluene
9.870		-	-	-		2,6-Dinitrotoluene
10.166		-	-	-		2,4-Dinitrotoluene
11.507		-	-	-		2-Nitrotoluene
12.060		-	-	-		4-Nitrotoluene
12.945		-	-	-		3-Nitrotoluene

Totals : 262.43109

Data File C:\CHEM32\1\DATA\041721\041721 2021-04-17 15-42-49\5L028446.D
Sample Name: B1C1190-BLK1

Acq. Operator : JWR Seq. Line : 2
Acq. Instrument : HPLC5 Location : Vial 2
Injection Date : 4/17/2021 4:26:17 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041721\041721 2021-04-17 15-42-49\8330PLUS-PETN.M
Last changed : 4/17/2021 3:42:35 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/20/2021 4:14:51 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (Surr 250ppb "OC")

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.642		-	-	-		PETN

Totals : 0.00000

2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

*** End of Report ***

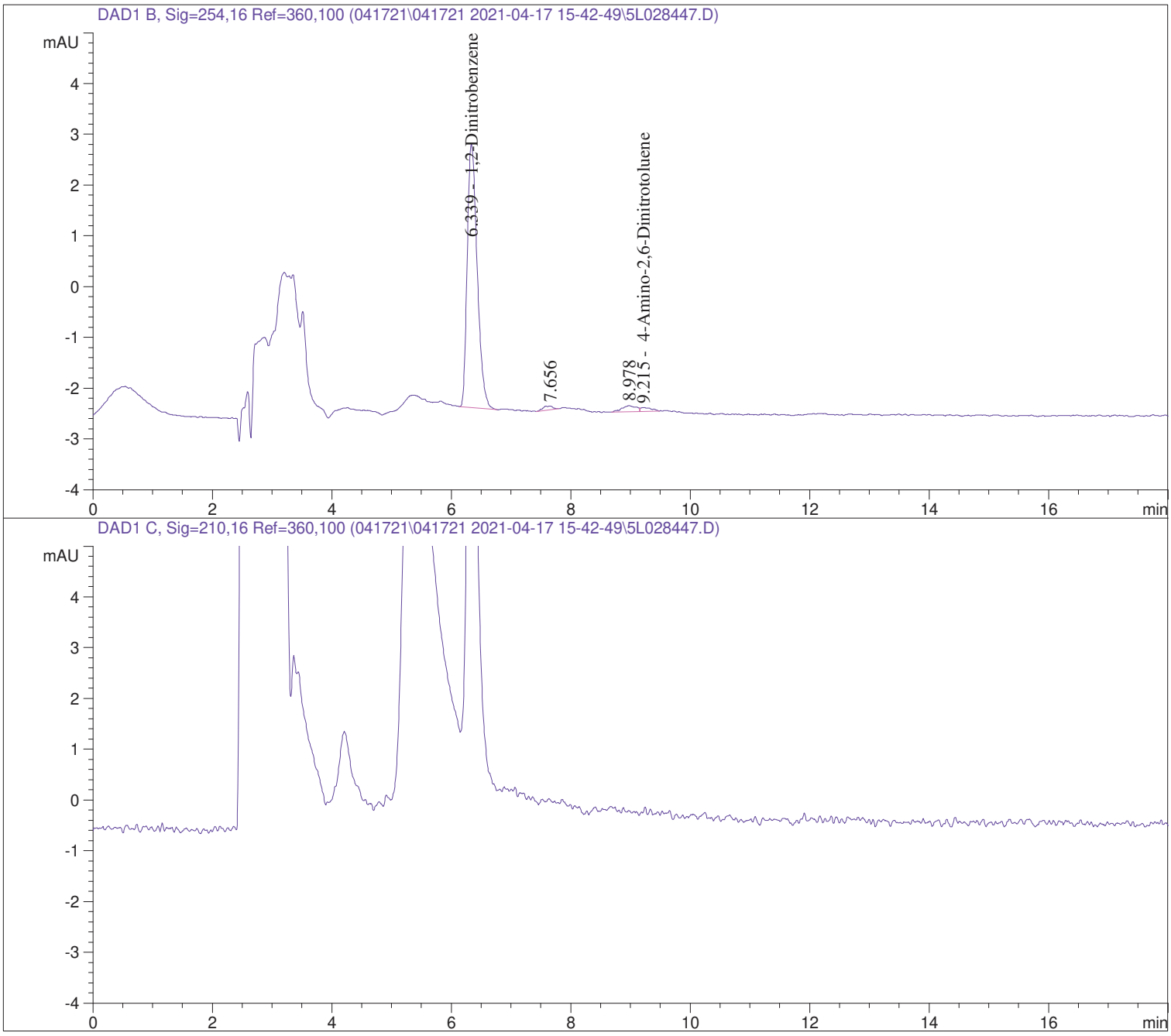
Data File C:\CHEM32\1\DATA\041721\041721 2021-04-17 15-42-49\5L028447.D
Sample Name: B1C1190-BLK2

==========

Acq. Operator : JWR Seq. Line : 3
Acq. Instrument : HPLC5 Location : Vial 3
Injection Date : 4/17/2021 4:59:28 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041721\041721 2021-04-17 15-42-49\8330PLUS-PETN.M
Last changed : 4/17/2021 3:42:35 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/20/2021 4:18:12 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (Surr 250ppb "OC") GBLK

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Data File C:\CHEM32\1\DATA\041721\041721 2021-04-17 15-42-49\5L028447.D
Sample Name: B1C1190-BLK2

Acq. Operator : JWR Seq. Line : 3
Acq. Instrument : HPLC5 Location : Vial 3
Injection Date : 4/17/2021 4:59:28 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041721\041721 2021-04-17 15-42-49\8330PLUS-PETN.M
Last changed : 4/17/2021 3:42:35 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/20/2021 4:18:12 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (Surr 250ppb "OC") GBLK

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/20/2021 3:06:35 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.749		-	-	-		HMX
4.990		-	-	-		RDX
6.073		-	-	-		1,3,5-Trinitrobenzene
6.339	VBA	59.83157	3.56292	213.17527		1,2-Dinitrobenzene
7.240		-	-	-		1,3-Dinitrobenzene
7.456		-	-	-		Tetryl
7.943		-	-	-		Nitrobenzene
8.572		-	-	-		2,4,6-Trinitrotoluene
9.215	VBA	9.22497e-1	5.43728	5.01587		4-Amino-2,6-Dinitrotoluene
9.616		-	-	-		2-Amino-4,6-Dinitrotoluene
9.870		-	-	-		2,6-Dinitrotoluene
10.166		-	-	-		2,4-Dinitrotoluene
11.507		-	-	-		2-Nitrotoluene
12.060		-	-	-		4-Nitrotoluene
12.945		-	-	-		3-Nitrotoluene

Totals : 218.19115

Data File C:\CHEM32\1\DATA\041721\041721 2021-04-17 15-42-49\5L028447.D
Sample Name: B1C1190-BLK2

Acq. Operator : JWR Seq. Line : 3
Acq. Instrument : HPLC5 Location : Vial 3
Injection Date : 4/17/2021 4:59:28 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041721\041721 2021-04-17 15-42-49\8330PLUS-PETN.M
Last changed : 4/17/2021 3:42:35 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/20/2021 4:18:12 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (Surr 250ppb "OC") GBLK

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.642		-	-	-		PETN

Totals : 0.00000

2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

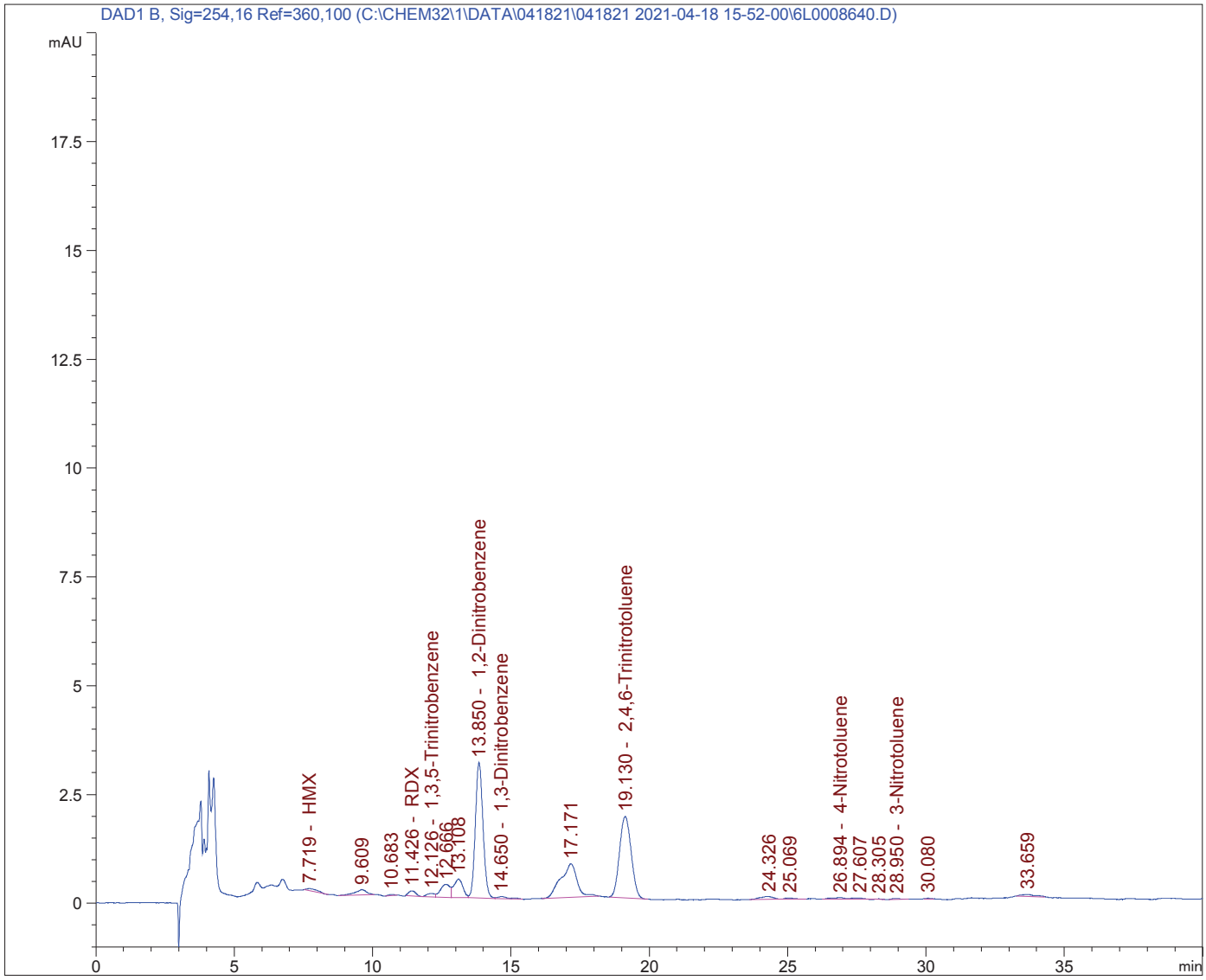
*** End of Report ***

Data File C:\CHEM32\1\DATA\041821\041821 2021-04-18 15-52-00\6L0008640.D
Sample Name: B1C1190-BLK3

```
    ======================================================================
    Acq. Operator   : JWR                          Seq. Line :   2
    Acq. Instrument : HPLC6                         Location :   2
    Injection Date  : 4/18/2021 4:57:38 PM               Inj :   1
                                                  Inj Volume : 100.000 µl
    Acq. Method     : C:\Chem32\1\Data\041821\041821 2021-04-18 15-52-00\8330.M
    Last changed    : 4/18/2021 3:52:00 PM by JWR
    Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
    Last changed    : 4/21/2021 1:58:30 PM by ECL
    Method Info     : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

    Sample Info     : 1 (Surr 250ppb "OC")

    ======================================================================
```



Data File C:\CHEM32\1\DATA\041821\041821 2021-04-18 15-52-00\6L0008640.D
Sample Name: B1C1190-BLK3

Acq. Operator : JWR Seq. Line : 2
Acq. Instrument : HPLC6 Location : 2
Injection Date : 4/18/2021 4:57:38 PM Inj : 1
Inj Volume : 100.000 µl
Acq. Method : C:\Chem32\1\Data\041821\041821 2021-04-18 15-52-00\8330.M
Last changed : 4/18/2021 3:52:00 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
Last changed : 4/21/2021 1:58:30 PM by ECL
Method Info : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

Sample Info : 1 (Surr 250ppb "OC")

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/21/2021 1:42:58 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
7.719	BV	1.56158	1.56640	2.44605		HMX
11.426	BV	2.08192	5.32593	11.08815		RDX
12.126	VV	1.52017	2.58461	3.92903		1,3,5-Trinitrobenzene
13.850	VV	59.88215	3.78994	226.94994		1,2-Dinitrobenzene
14.650	VB	1.43267	2.02940	2.90747		1,3-Dinitrobenzene
15.764		-	-	-		Nitrobenzene
19.130	BB	54.81289	2.47764	135.80685		2,4,6-Trinitrotoluene
19.618		-	-	-		Tetryl
21.847		-	-	-		2,6-Dinitrotoluene
23.167		-	-	-		2,4-Dinitrotoluene
24.681		-	-	-		2-Nitrotoluene
26.894	BV	1.29354	5.36064	6.93422		4-Nitrotoluene
28.950	BB	3.65448e-1	4.49674	1.64332		3-Nitrotoluene
29.344		-	-	-		4-Amino-2,6-Dinitrotoluene
31.892		-	-	-		2-Amino-4,6-Dinitrotoluene

Totals : 391.70503

2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

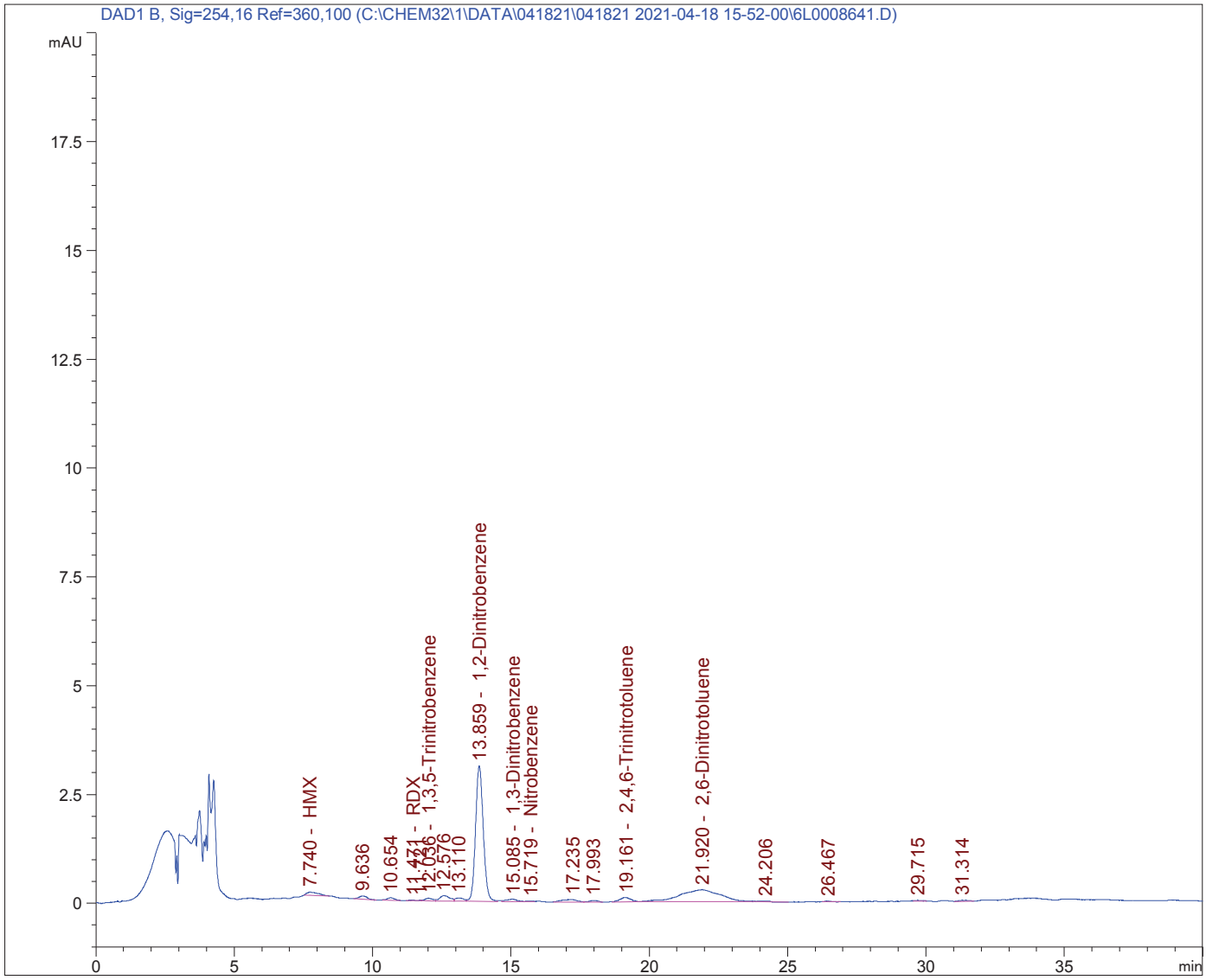
*** End of Report ***

Data File C:\CHEM32\1\DATA\041821\041821 2021-04-18 15-52-00\6L0008641.D
Sample Name: B1C1190-BLK4

```
    ======================================================================
    Acq. Operator   : JWR                          Seq. Line :   3
    Acq. Instrument : HPLC6                         Location :   3
    Injection Date  : 4/18/2021 6:00:28 PM               Inj :   1
                                                  Inj Volume : 100.000 µl
    Acq. Method     : C:\Chem32\1\Data\041821\041821 2021-04-18 15-52-00\8330.M
    Last changed    : 4/18/2021 3:52:00 PM by JWR
    Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
    Last changed    : 4/21/2021 1:58:30 PM by ECL
    Method Info     : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

    Sample Info     : 1 (Surr 250ppb "OC") GBLK

    ======================================================================
```



Data File C:\CHEM32\1\DATA\041821\041821 2021-04-18 15-52-00\6L0008641.D
Sample Name: B1C1190-BLK4

```
    ======================================================================
    Acq. Operator   : JWR                          Seq. Line :   3
    Acq. Instrument : HPLC6                         Location :   3
    Injection Date  : 4/18/2021 6:00:28 PM               Inj :   1
                                                  Inj Volume : 100.000 µl
    Acq. Method     : C:\Chem32\1\Data\041821\041821 2021-04-18 15-52-00\8330.M
    Last changed    : 4/18/2021 3:52:00 PM by JWR
    Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
    Last changed    : 4/21/2021 1:58:30 PM by ECL
    Method Info     : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

    Sample Info     : 1 (Surr 250ppb "OC") GBLK

    ======================================================================

     ======================================================================
                          External Standard Report
     ======================================================================

     Sorted By             :      Signal
     Calib. Data Modified  :      4/21/2021 1:42:58 PM
     Multiplier            :      1.0000
     Dilution              :      1.0000
     Do not use Multiplier & Dilution Factor with ISTDs

     Signal 1: DAD1 B, Sig=254,16 Ref=360,100

     RetTime  Type     Area     Amt/Area    Amount   Grp   Name
      [min]          [mAU*s]                [ug/L]
     -------|------|----------|----------|----------|--|------------------
       7.740 BV        2.29673    2.98574    6.85744    HMX
      11.471 BV     2.58733e-1    3.91210    1.01219    RDX
      12.036 VV        1.21487    2.63176    3.19724    1,3,5-Trinitrobenzene
      13.859 VB       60.35876    3.78986  228.75131    1,2-Dinitrobenzene
      15.085 BV        1.44240    2.02723    2.92408    1,3-Dinitrobenzene
      15.719 VV     1.93586e-1   10.45480    2.02391    Nitrobenzene
      19.161 BV        2.81089    1.99223    5.59996    2,4,6-Trinitrotoluene
      19.618             -          -          -        Tetryl
      21.920 VV       27.72871    3.78121  104.84802    2,6-Dinitrotoluene
      23.167             -          -          -        2,4-Dinitrotoluene
      24.681             -          -          -        2-Nitrotoluene
      26.843             -          -          -        4-Nitrotoluene
      28.743             -          -          -        3-Nitrotoluene
      29.344             -          -          -        4-Amino-2,6-Dinitrotoluene
      31.892             -          -          -        2-Amino-4,6-Dinitrotoluene

     Totals :                              355.21414


     2 Warnings or Errors :

     Warning : Calibration warnings (see calibration table listing)
     Warning : Calibrated compound(s) not found

     ======================================================================
                             *** End of Report ***
```

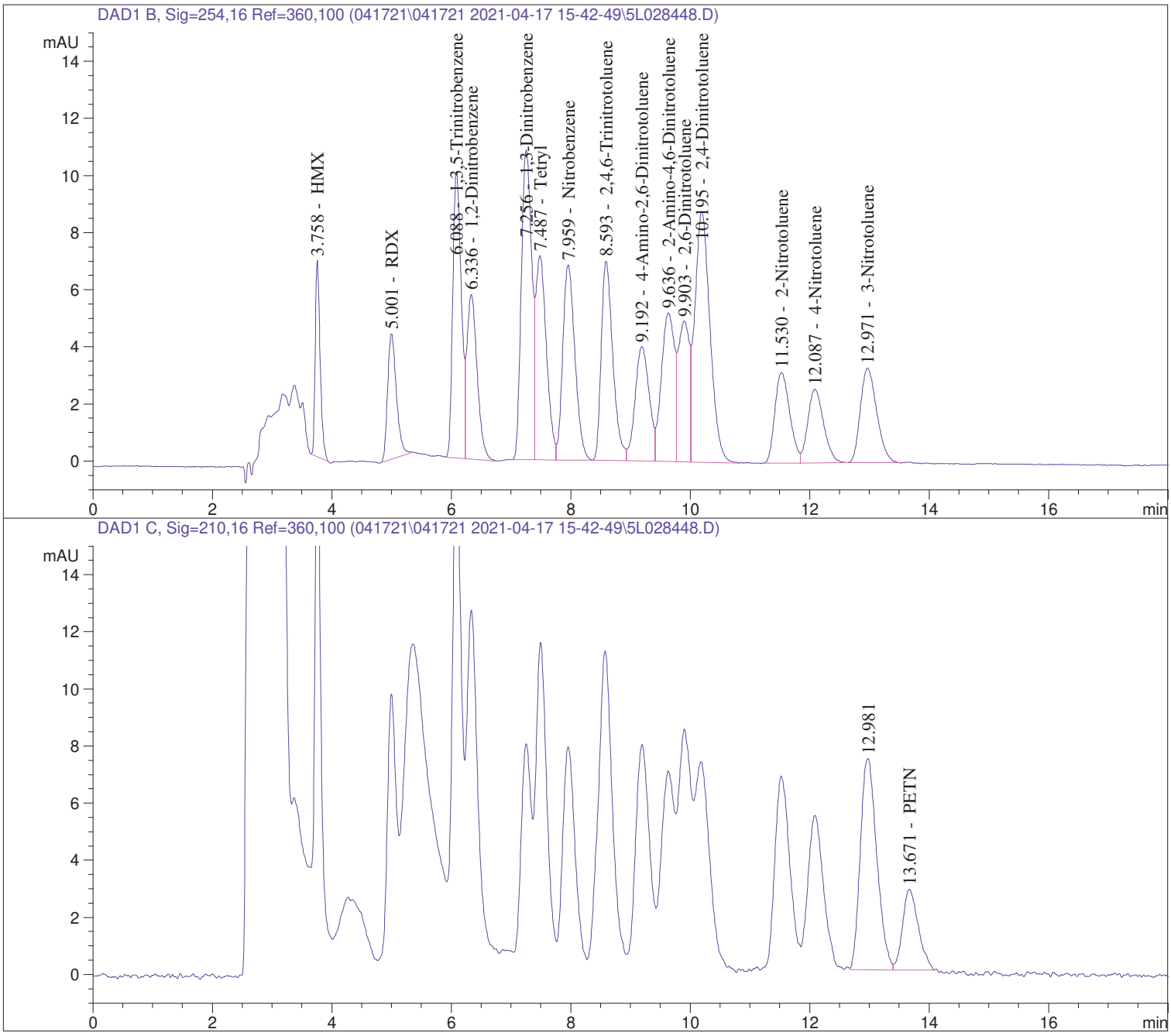
Data File C:\CHEM32\1\DATA\041721\041721 2021-04-17 15-42-49\5L028448.D
Sample Name: B1C1190-BS1

==========

Acq. Operator : JWR
Seq. Line : 4
Acq. Instrument : HPLC5
Location : Vial 4
Injection Date : 4/17/2021 5:32:37 PM
Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041721\041721 2021-04-17 15-42-49\8330PLUS-PETN.M
Last changed : 4/17/2021 3:42:35 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/20/2021 3:17:31 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (250ppb "OC")

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Data File C:\CHEM32\1\DATA\041721\041721 2021-04-17 15-42-49\5L028448.D
Sample Name: B1C1190-BS1

Acq. Operator : JWR Seq. Line : 4
Acq. Instrument : HPLC5 Location : Vial 4
Injection Date : 4/17/2021 5:32:37 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041721\041721 2021-04-17 15-42-49\8330PLUS-PETN.M
Last changed : 4/17/2021 3:42:35 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/20/2021 3:17:31 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (250ppb "OC")

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/20/2021 3:06:35 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.758	BBA	39.44623	6.17188	243.45758		HMX
5.001	BBA	44.95716	5.27310	237.06363		RDX
6.088	VV	99.86240	2.62175	261.81380		1,3,5-Trinitrobenzene
6.336	VBA	69.08563	3.56175	246.06562		1,2-Dinitrobenzene
7.256	BV	131.84427	1.81331	239.07483		1,3-Dinitrobenzene
7.487	VV	88.47495	2.98310	263.92978		Tetryl
7.959	VV	96.71574	2.64324	255.64337		Nitrobenzene
8.593	VV	94.34393	2.52792	238.49427		2,4,6-Trinitrotoluene
9.192	VV	65.66948	4.41236	289.75733		4-Amino-2,6-Dinitrotoluene
9.636	VV	80.43499	3.00366	241.59898		2-Amino-4,6-Dinitrotoluene
9.903	VV	62.81907	3.84472	241.52164		2,6-Dinitrotoluene
10.195	VBA	156.22179	1.82454	285.03281		2,4-Dinitrotoluene
11.530	BV	55.02031	4.51906	248.64005		2-Nitrotoluene
12.087	VV	47.63786	5.36713	255.67850		4-Nitrotoluene
12.971	VBA	63.33620	4.00510	253.66773		3-Nitrotoluene

Totals : 3801.43993

Data File C:\CHEM32\1\DATA\041721\041721 2021-04-17 15-42-49\5L028448.D
Sample Name: B1C1190-BS1

Acq. Operator : JWR Seq. Line : 4
Acq. Instrument : HPLC5 Location : Vial 4
Injection Date : 4/17/2021 5:32:37 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041721\041721 2021-04-17 15-42-49\8330PLUS-PETN.M
Last changed : 4/17/2021 3:42:35 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/20/2021 3:17:31 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (250ppb "OC")

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.671	VV	51.92804	3.82756	198.75769		PETN

Totals : 198.75769

1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

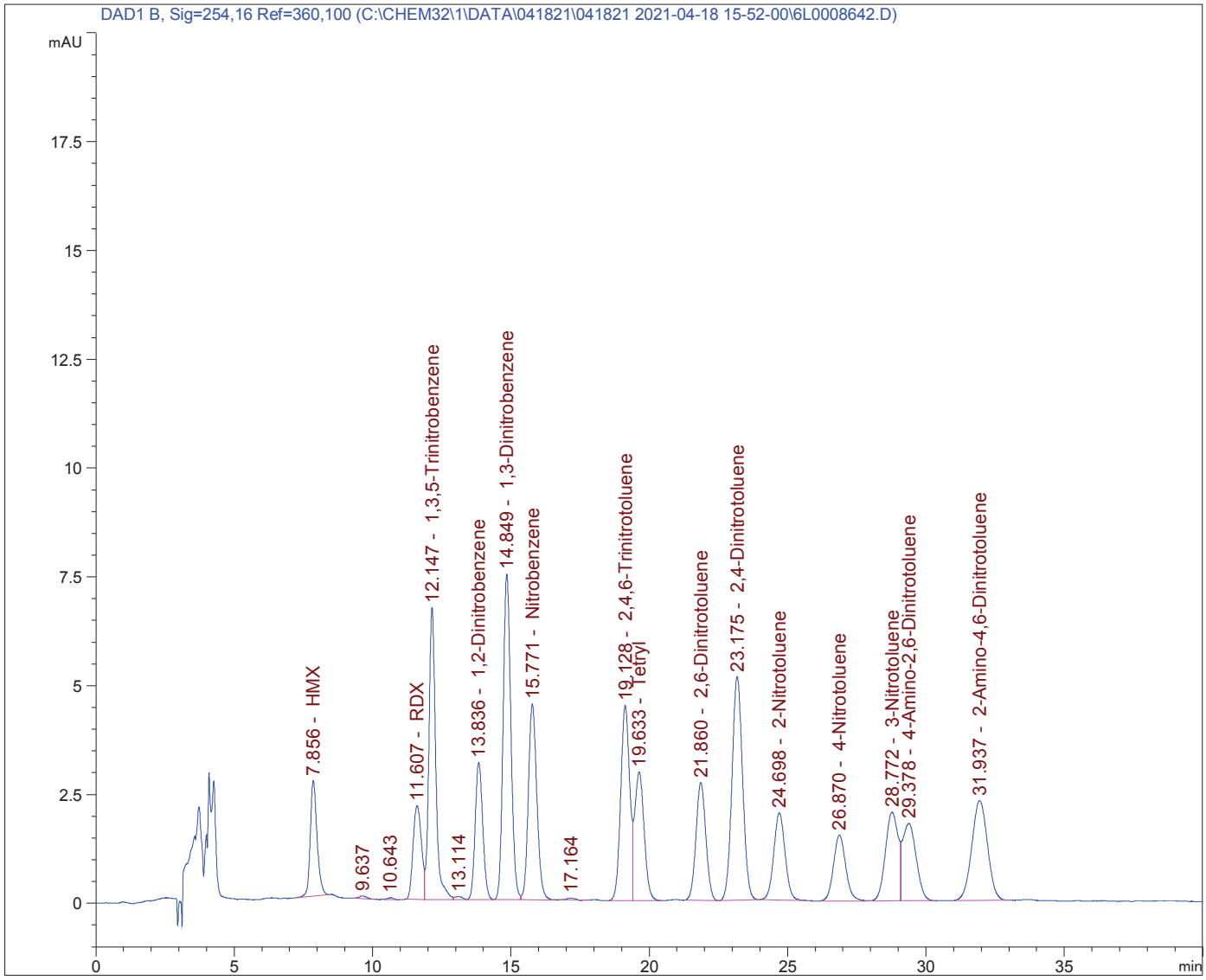
*** End of Report ***

Data File C:\CHEM32\1\DATA\041821\041821 2021-04-18 15-52-00\6L0008642.D
Sample Name: B1C1190-BS2

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    ======================================================================
    Acq. Operator   : JWR                          Seq. Line :   4
    Acq. Instrument : HPLC6                         Location :   4
    Injection Date  : 4/18/2021 7:03:19 PM               Inj :   1
                                                  Inj Volume : 100.000 µl
    Acq. Method     : C:\Chem32\1\Data\041821\041821 2021-04-18 15-52-00\8330.M
    Last changed    : 4/18/2021 3:52:00 PM by JWR
    Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
    Last changed    : 4/21/2021 2:00:01 PM by ECL
    Method Info     : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

    Sample Info     : 1 (250ppb "OC")

    ======================================================================
```



Data File C:\CHEM32\1\DATA\041821\041821 2021-04-18 15-52-00\6L0008642.D
Sample Name: B1C1190-BS2

Acq. Operator : JWR Seq. Line : 4
Acq. Instrument : HPLC6 Location : 4
Injection Date : 4/18/2021 7:03:19 PM Inj : 1
Inj Volume : 100.000 µl
Acq. Method : C:\Chem32\1\Data\041821\041821 2021-04-18 15-52-00\8330.M
Last changed : 4/18/2021 3:52:00 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
Last changed : 4/21/2021 2:00:01 PM by ECL
Method Info : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

Sample Info : 1 (250ppb "OC")

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/21/2021 1:42:58 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
7.856	BB	45.12309	5.84716	263.84207		HMX
11.607	BV	45.45841	5.51738	250.81122		RDX
12.147	VV	114.82586	2.39948	275.52254		1,3,5-Trinitrobenzene
13.836	VV	60.02517	3.78992	227.49050		1,2-Dinitrobenzene
14.849	VV	145.71593	1.71095	249.31231		1,3-Dinitrobenzene
15.771	VB	95.95743	2.61874	251.28762		Nitrobenzene
19.128	BV	102.15960	2.48980	254.35744		2,4,6-Trinitrotoluene
19.633	VB	70.30968	3.31148	232.82925		Tetryl
21.860	BV	67.16809	3.77215	253.36840		2,6-Dinitrotoluene
23.175	VV	136.74022	1.89742	259.45298		2,4-Dinitrotoluene
24.698	VB	57.06434	4.46947	255.04717		2-Nitrotoluene
26.870	BB	46.47922	5.45116	253.36580		4-Nitrotoluene
28.772	BV	66.08656	4.00574	264.72552		3-Nitrotoluene
29.378	VB	60.61462	4.27340	259.03063		4-Amino-2,6-Dinitrotoluene
31.937	BB	90.59711	2.79758	253.45239		2-Amino-4,6-Dinitrotoluene

Totals : 3803.89585

1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

*** End of Report ***

Data File C:\CHEM32\1\DATA\041721\041721 2021-04-17 15-42-49\5L028449.D
Sample Name: B1C1190-SRM1

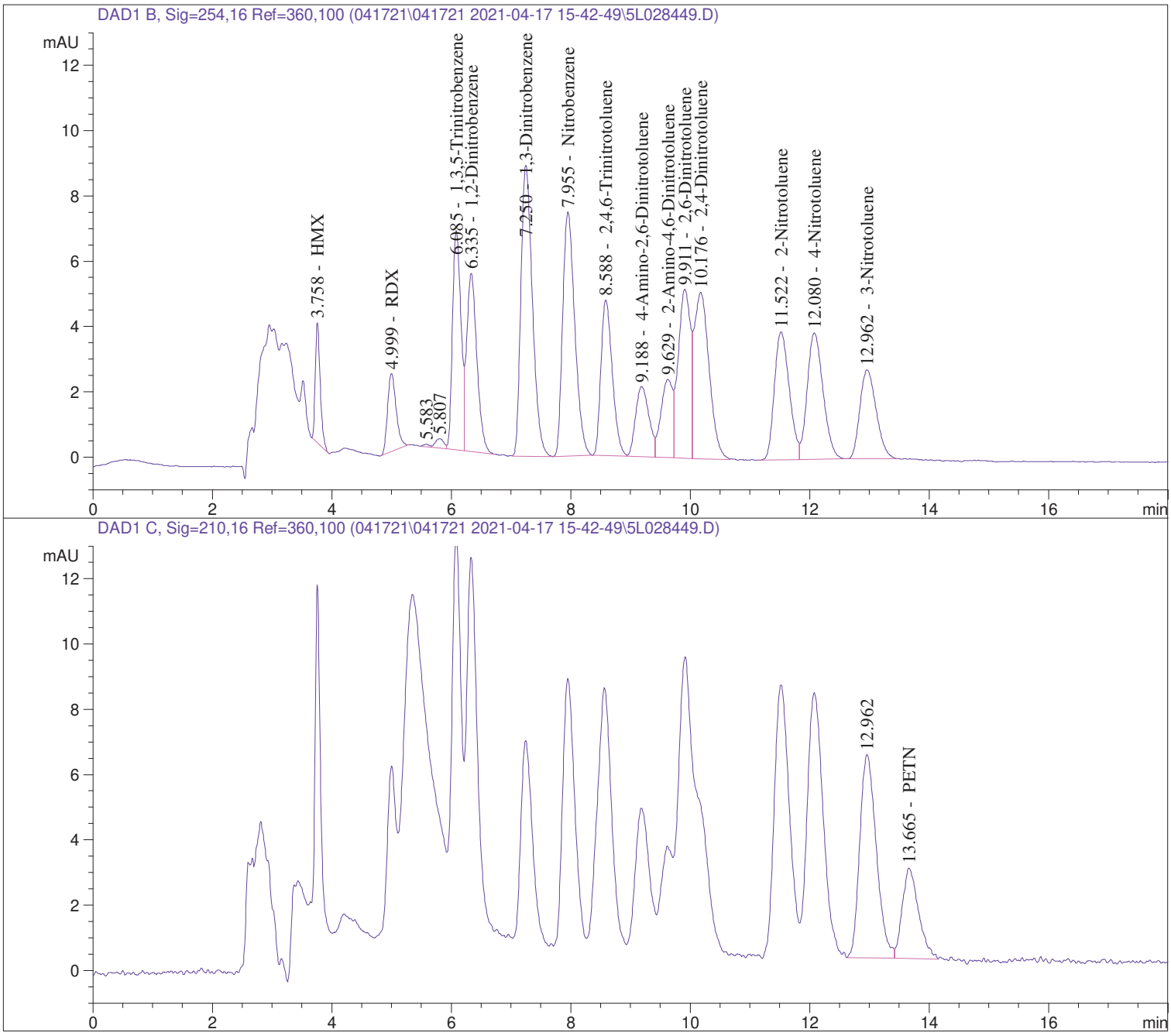
==========

Acq. Operator : JWR Seq. Line : 5
Acq. Instrument : HPLC5 Location : Vial 5
Injection Date : 4/17/2021 6:05:47 PM Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\Chem32\1\DATA\041721\041721 2021-04-17 15-42-49\8330PLUS-PETN.M
Last changed : 4/17/2021 3:42:35 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/20/2021 3:57:26 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (Surr 250ppb "OC")

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Data File C:\CHEM32\1\DATA\041721\041721 2021-04-17 15-42-49\5L028449.D
Sample Name: B1C1190-SRM1

Acq. Operator : JWR Seq. Line : 5
Acq. Instrument : HPLC5 Location : Vial 5
Injection Date : 4/17/2021 6:05:47 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041721\041721 2021-04-17 15-42-49\8330PLUS-PETN.M
Last changed : 4/17/2021 3:42:35 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/20/2021 3:57:26 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (Surr 250ppb "OC")

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/20/2021 3:06:35 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.758	BBA	20.96310	6.11278	128.14283		HMX
4.999	BV	23.86079	5.40946	129.07393		RDX
6.085	VV	65.79791	2.62204	172.52478		1,3,5-Trinitrobenzene
6.335	VBA	65.48022	3.56217	233.25142		1,2-Dinitrobenzene
7.250	VV	118.83426	1.81316	215.46581		1,3-Dinitrobenzene
7.456		-	-	-		Tetryl
7.955	VV	105.47032	2.64385	278.84821		Nitrobenzene
8.588	VV	63.19184	2.51874	159.16353		2,4,6-Trinitrotoluene
9.188	VV	33.71688	4.42620	149.23757		4-Amino-2,6-Dinitrotoluene
9.629	VV	32.96473	3.01191	99.28667		2-Amino-4,6-Dinitrotoluene
9.911	VV	75.07484	3.84654	288.77866		2,6-Dinitrotoluene
10.176	VF	88.15636	1.82364	160.76559		2,4-Dinitrotoluene
11.522	VV	68.49574	4.52104	309.67182		2-Nitrotoluene
12.080	VV	71.45040	5.36461	383.30335		4-Nitrotoluene
12.962	VBA	51.62468	4.00554	206.78470		3-Nitrotoluene

Totals : 2914.29886

Data File C:\CHEM32\1\DATA\041721\041721 2021-04-17 15-42-49\5L028449.D
Sample Name: B1C1190-SRM1

Acq. Operator : JWR Seq. Line : 5
Acq. Instrument : HPLC5 Location : Vial 5
Injection Date : 4/17/2021 6:05:47 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041721\041721 2021-04-17 15-42-49\8330PLUS-PETN.M
Last changed : 4/17/2021 3:42:35 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/20/2021 3:57:26 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (Surr 250ppb "OC")

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.665	VV	52.85921	3.82872	202.38295		PETN

Totals : 202.38295

2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

*** End of Report ***

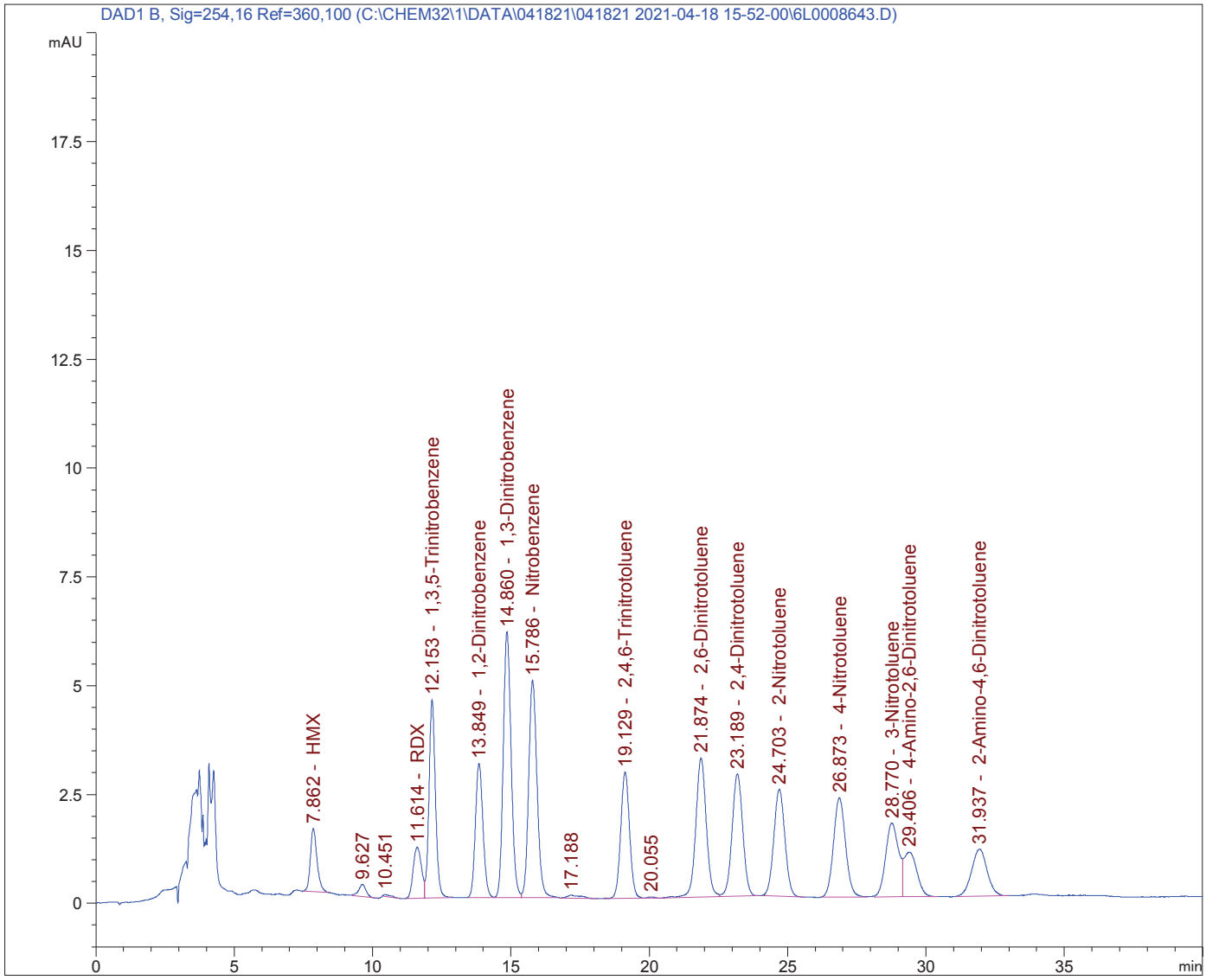
Data File C:\CHEM32\1\DATA\041821\041821 2021-04-18 15-52-00\6L0008643.D
Sample Name: B1C1190-SRM2

==========

Acq. Operator : JWR Seq. Line : 5
Acq. Instrument : HPLC6 Location : 5
Injection Date : 4/18/2021 8:06:10 PM Inj : 1
Inj Volume : 100.000 µl
Acq. Method : C:\Chem32\1\Data\041821\041821 2021-04-18 15-52-00\8330.M
Last changed : 4/18/2021 3:52:00 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
Last changed : 4/21/2021 2:00:01 PM by ECL
Method Info : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

Sample Info : 1 (Surr 250ppb "OC")

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Data File C:\CHEM32\1\DATA\041821\041821 2021-04-18 15-52-00\6L0008643.D
Sample Name: B1C1190-SRM2

Acq. Operator : JWR Seq. Line : 5
Acq. Instrument : HPLC6 Location : 5
Injection Date : 4/18/2021 8:06:10 PM Inj : 1
Inj Volume : 100.000 µl
Acq. Method : C:\Chem32\1\Data\041821\041821 2021-04-18 15-52-00\8330.M
Last changed : 4/18/2021 3:52:00 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
Last changed : 4/21/2021 2:00:01 PM by ECL
Method Info : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

Sample Info : 1 (Surr 250ppb "OC")

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/21/2021 1:42:58 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
7.862	BBA	24.54405	5.71850	140.35511		HMX
11.614	BV	24.45589	5.50949	134.73938		RDX
12.153	VB	74.24624	2.40084	178.25327		1,3,5-Trinitrobenzene
13.849	BV	58.73602	3.79015	222.61804		1,2-Dinitrobenzene
14.860	VV	120.87096	1.71160	206.88243		1,3-Dinitrobenzene
15.786	VBA	104.82719	2.61740	274.37471		Nitrobenzene
19.129	BV	64.43031	2.48156	159.88772		2,4,6-Trinitrotoluene
19.618		-	-	-		Tetryl
21.874	VV	84.75953	3.77083	319.61404		2,6-Dinitrotoluene
23.189	VB	75.59805	1.89903	143.56262		2,4-Dinitrotoluene
24.703	BB	68.56902	4.46523	306.17668		2-Nitrotoluene
26.873	BB	69.28862	5.45202	377.76269		4-Nitrotoluene
28.770	BV	55.78609	4.00624	223.49265		3-Nitrotoluene
29.406	VB	33.91816	4.27584	145.02854		4-Amino-2,6-Dinitrotoluene
31.937	BB	42.15165	2.80612	118.28241		2-Amino-4,6-Dinitrotoluene

Totals : 2951.03028

2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

*** End of Report ***

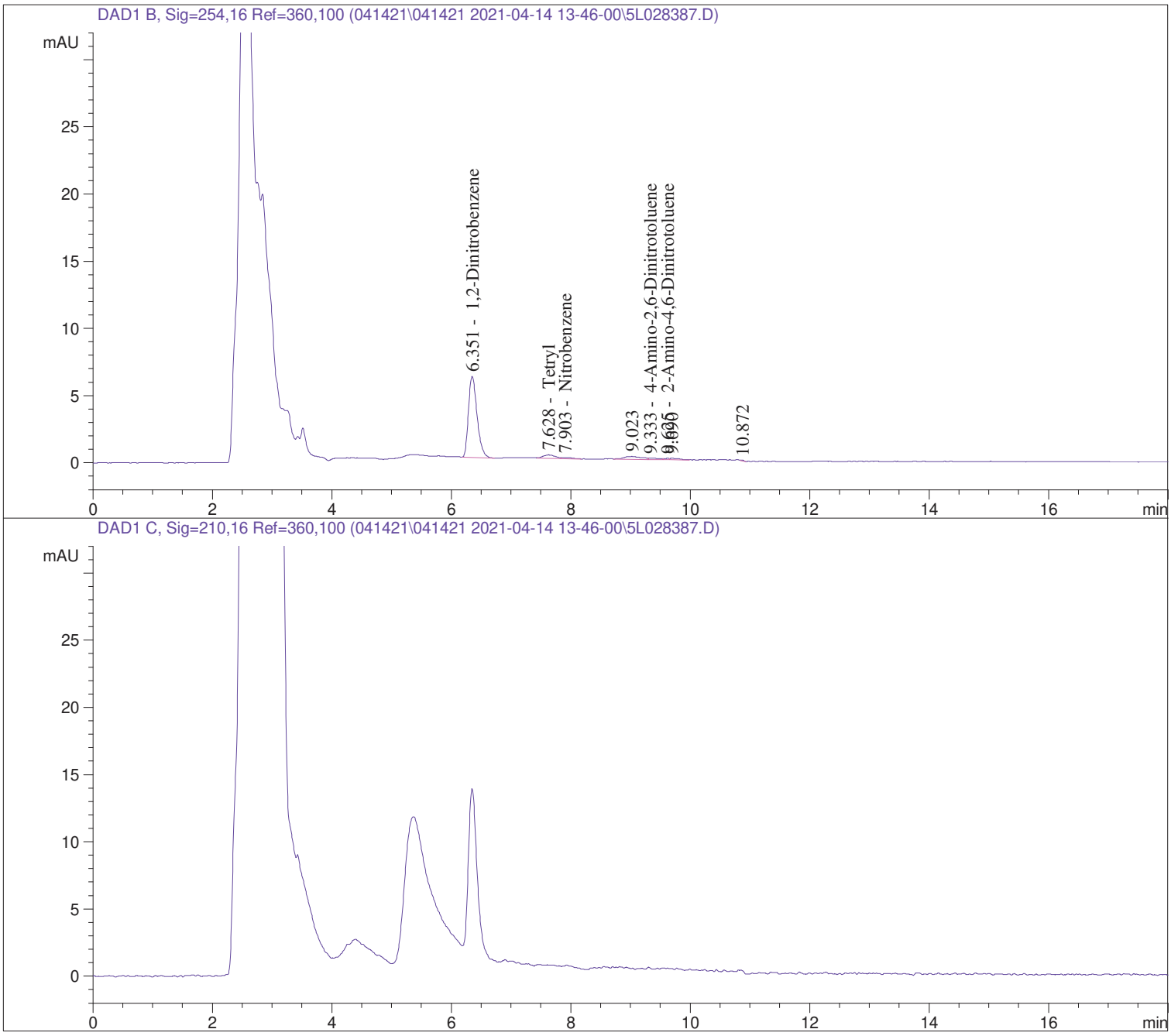
Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 13-46-00\5L028387.D
Sample Name: B1C1279-BLK1

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Acq. Operator : JWR Seq. Line : 2
Acq. Instrument : HPLC5 Location : Vial 2
Injection Date : 4/14/2021 2:17:08 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 13-46-00\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/13/2021 5:46:46 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (Surr 250ppb "OC")

==========



Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 13-46-00\5L028387.D
Sample Name: B1C1279-BLK1

Acq. Operator : JWR Seq. Line : 2
Acq. Instrument : HPLC5 Location : Vial 2
Injection Date : 4/14/2021 2:17:08 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 13-46-00\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/13/2021 5:46:46 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (Surr 250ppb "OC")

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/13/2021 5:44:33 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.766		-	-	-		HMX
5.009		-	-	-		RDX
6.108		-	-	-		1,3,5-Trinitrobenzene
6.351	VV	60.34884	3.56285	215.01371		1,2-Dinitrobenzene
7.275		-	-	-		1,3-Dinitrobenzene
7.628	VV	3.59750	2.92995	10.54048		Tetryl
7.903	VB	1.02324	1.95592	2.00137		Nitrobenzene
8.628		-	-	-		2,4,6-Trinitrotoluene
9.333	VV	1.47420	5.04825	7.44214		4-Amino-2,6-Dinitrotoluene
9.625	VV	6.28303e-1	3.73145	2.34448		2-Amino-4,6-Dinitrotoluene
9.956		-	-	-		2,6-Dinitrotoluene
10.236		-	-	-		2,4-Dinitrotoluene
11.581		-	-	-		2-Nitrotoluene
12.140		-	-	-		4-Nitrotoluene
13.030		-	-	-		3-Nitrotoluene

Totals : 237.34218

Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 13-46-00\5L028387.D
Sample Name: B1C1279-BLK1

Acq. Operator : JWR Seq. Line : 2
Acq. Instrument : HPLC5 Location : Vial 2
Injection Date : 4/14/2021 2:17:08 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 13-46-00\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/13/2021 5:46:46 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (Surr 250ppb "OC")

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.750		-	-	-		PETN

Totals : 0.00000

1 Warnings or Errors :

Warning : Calibrated compound(s) not found

*** End of Report ***

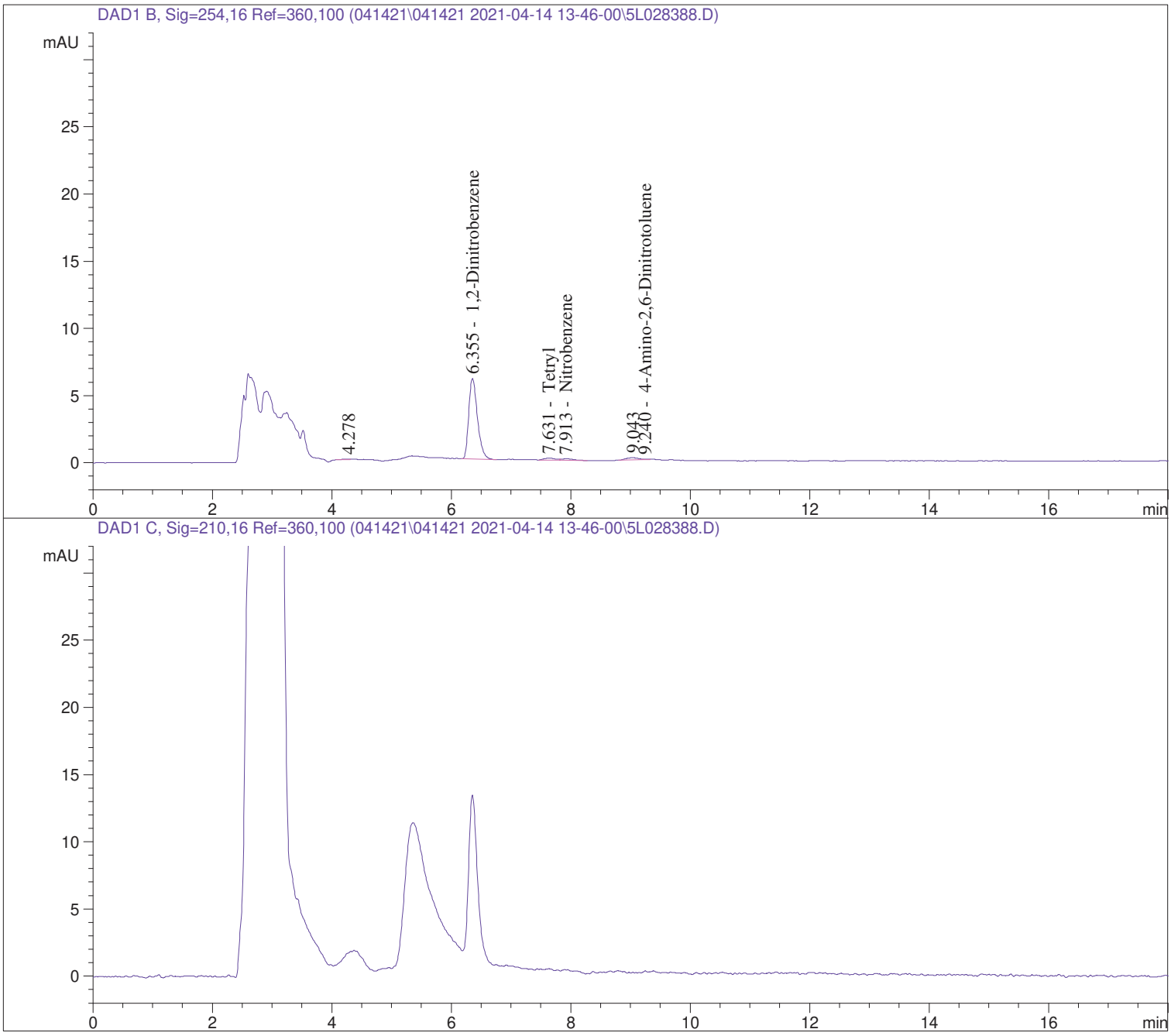
Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 13-46-00\5L028388.D
Sample Name: B1C1279-BLK2

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Acq. Operator : JWR
Seq. Line : 3
Acq. Instrument : HPLC5
Location : Vial 3
Injection Date : 4/14/2021 2:56:44 PM
Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 13-46-00\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/13/2021 5:46:46 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (Surr 250ppb "OC") GBLK

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Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 13-46-00\5L028388.D
Sample Name: B1C1279-BLK2

Acq. Operator : JWR Seq. Line : 3
Acq. Instrument : HPLC5 Location : Vial 3
Injection Date : 4/14/2021 2:56:44 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 13-46-00\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/13/2021 5:46:46 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (Surr 250ppb "OC") GBLK

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/13/2021 5:44:33 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.766		-	-	-		HMX
5.009		-	-	-		RDX
6.108		-	-	-		1,3,5-Trinitrobenzene
6.355	VB	61.13131	3.56274	217.79474		1,2-Dinitrobenzene
7.275		-	-	-		1,3-Dinitrobenzene
7.631	VV	2.08940	2.88995	6.03828		Tetryl
7.913	VV	1.82678	2.26149	4.13125		Nitrobenzene
8.628		-	-	-		2,4,6-Trinitrotoluene
9.240	VB	3.42893e-1	7.19442	2.46692		4-Amino-2,6-Dinitrotoluene
9.657		-	-	-		2-Amino-4,6-Dinitrotoluene
9.956		-	-	-		2,6-Dinitrotoluene
10.236		-	-	-		2,4-Dinitrotoluene
11.581		-	-	-		2-Nitrotoluene
12.140		-	-	-		4-Nitrotoluene
13.030		-	-	-		3-Nitrotoluene

Totals : 230.43118

Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 13-46-00\5L028388.D
Sample Name: B1C1279-BLK2

Acq. Operator : JWR Seq. Line : 3
Acq. Instrument : HPLC5 Location : Vial 3
Injection Date : 4/14/2021 2:56:44 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 13-46-00\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/13/2021 5:46:46 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (Surr 250ppb "OC") GBLK

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.750		-	-	-		PETN

Totals : 0.00000

1 Warnings or Errors :

Warning : Calibrated compound(s) not found

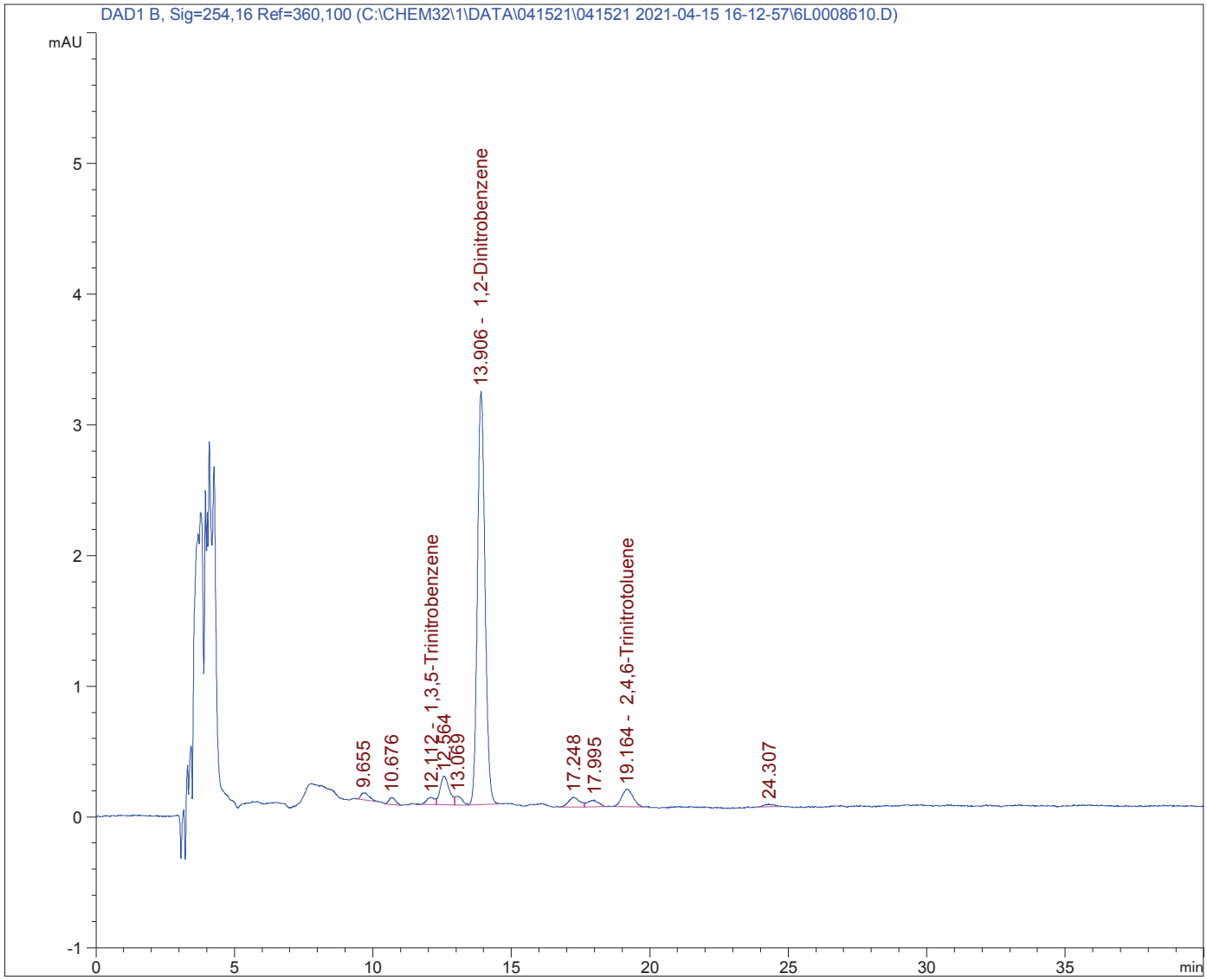
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Data File C:\CHEM32\1\DATA\041521\041521 2021-04-15 16-12-57\6L0008610.D
Sample Name: B1C1279-BLK3

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    Acq. Instrument : HPLC6                         Location :   2
    Injection Date  : 4/15/2021 5:18:37 PM               Inj :   1
                                                  Inj Volume : 100.000 µl
    Acq. Method     : C:\Chem32\1\Data\041521\041521 2021-04-15 16-12-57\8330.M
    Last changed    : 4/15/2021 4:12:57 PM by JWR
    Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
    Last changed    : 4/16/2021 6:50:48 PM by ECL
    Method Info     : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

    Sample Info     : 1 (Surr 250ppb "OC")

    ======================================================================
```



Data File C:\CHEM32\1\DATA\041521\041521 2021-04-15 16-12-57\6L0008610.D
Sample Name: B1C1279-BLK3

Acq. Operator : JWR Seq. Line : 2
Acq. Instrument : HPLC6 Location : 2
Injection Date : 4/15/2021 5:18:37 PM Inj : 1
Inj Volume : 100.000 µl
Acq. Method : C:\Chem32\1\Data\041521\041521 2021-04-15 16-12-57\8330.M
Last changed : 4/15/2021 4:12:57 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
Last changed : 4/16/2021 6:50:48 PM by ECL
Method Info : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

Sample Info : 1 (Surr 250ppb "OC")

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/16/2021 6:14:26 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
7.937		-	-	-		HMX
11.712		-	-	-		RDX
12.112	BV	1.18046	2.63860	3.11477		1,3,5-Trinitrobenzene
13.906	VV	59.84269	3.78995	226.80080		1,2-Dinitrobenzene
14.941		-	-	-		1,3-Dinitrobenzene
15.860		-	-	-		Nitrobenzene
19.164	BB	3.71712	2.11697	7.86903		2,4,6-Trinitrotoluene
19.794		-	-	-		Tetryl
21.985		-	-	-		2,6-Dinitrotoluene
23.313		-	-	-		2,4-Dinitrotoluene
24.800		-	-	-		2-Nitrotoluene
26.989		-	-	-		4-Nitrotoluene
28.884		-	-	-		3-Nitrotoluene
29.680		-	-	-		4-Amino-2,6-Dinitrotoluene
32.264		-	-	-		2-Amino-4,6-Dinitrotoluene

Totals : 237.78461

2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

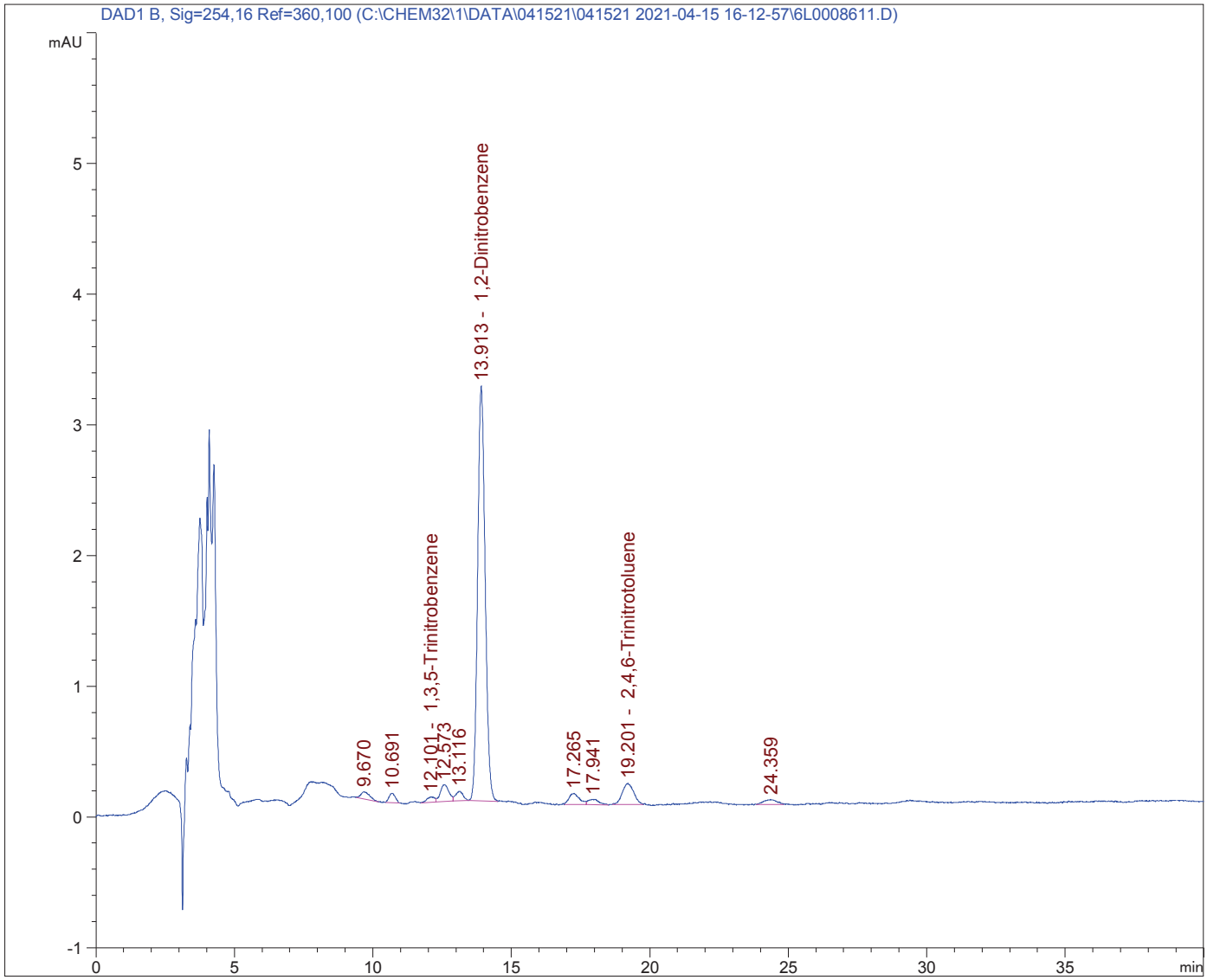
*** End of Report ***

Data File C:\CHEM32\1\DATA\041521\041521 2021-04-15 16-12-57\6L0008611.D
Sample Name: B1C1279-BLK4

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    Acq. Operator   : JWR                          Seq. Line :   3
    Acq. Instrument : HPLC6                         Location :   3
    Injection Date  : 4/15/2021 6:21:27 PM               Inj :   1
                                                  Inj Volume : 100.000 µl
    Acq. Method     : C:\Chem32\1\Data\041521\041521 2021-04-15 16-12-57\8330.M
    Last changed    : 4/15/2021 4:12:57 PM by JWR
    Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
    Last changed    : 4/16/2021 6:55:29 PM by ECL
    Method Info     : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

    Sample Info     : 1 (Surr 250ppb "OC") GBLK

    ======================================================================
```



Data File C:\CHEM32\1\DATA\041521\041521 2021-04-15 16-12-57\6L0008611.D
Sample Name: B1C1279-BLK4

Acq. Operator : JWR Seq. Line : 3
Acq. Instrument : HPLC6 Location : 3
Injection Date : 4/15/2021 6:21:27 PM Inj : 1
Inj Volume : 100.000 µl
Acq. Method : C:\Chem32\1\Data\041521\041521 2021-04-15 16-12-57\8330.M
Last changed : 4/15/2021 4:12:57 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
Last changed : 4/16/2021 6:55:29 PM by ECL
Method Info : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

Sample Info : 1 (Surr 250ppb "OC") GBLK

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/16/2021 6:14:26 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
7.937		-	-	-		HMX
11.712		-	-	-		RDX
12.101	VV	7.90259e-1	2.75789	2.17945		1,3,5-Trinitrobenzene
13.913	VV	59.96584	3.78993	227.26624		1,2-Dinitrobenzene
14.941		-	-	-		1,3-Dinitrobenzene
15.860		-	-	-		Nitrobenzene
19.201	BV	4.57389	2.18945	10.01429		2,4,6-Trinitrotoluene
19.794		-	-	-		Tetryl
21.985		-	-	-		2,6-Dinitrotoluene
23.313		-	-	-		2,4-Dinitrotoluene
24.800		-	-	-		2-Nitrotoluene
26.989		-	-	-		4-Nitrotoluene
28.884		-	-	-		3-Nitrotoluene
29.680		-	-	-		4-Amino-2,6-Dinitrotoluene
32.264		-	-	-		2-Amino-4,6-Dinitrotoluene

Totals : 239.45998

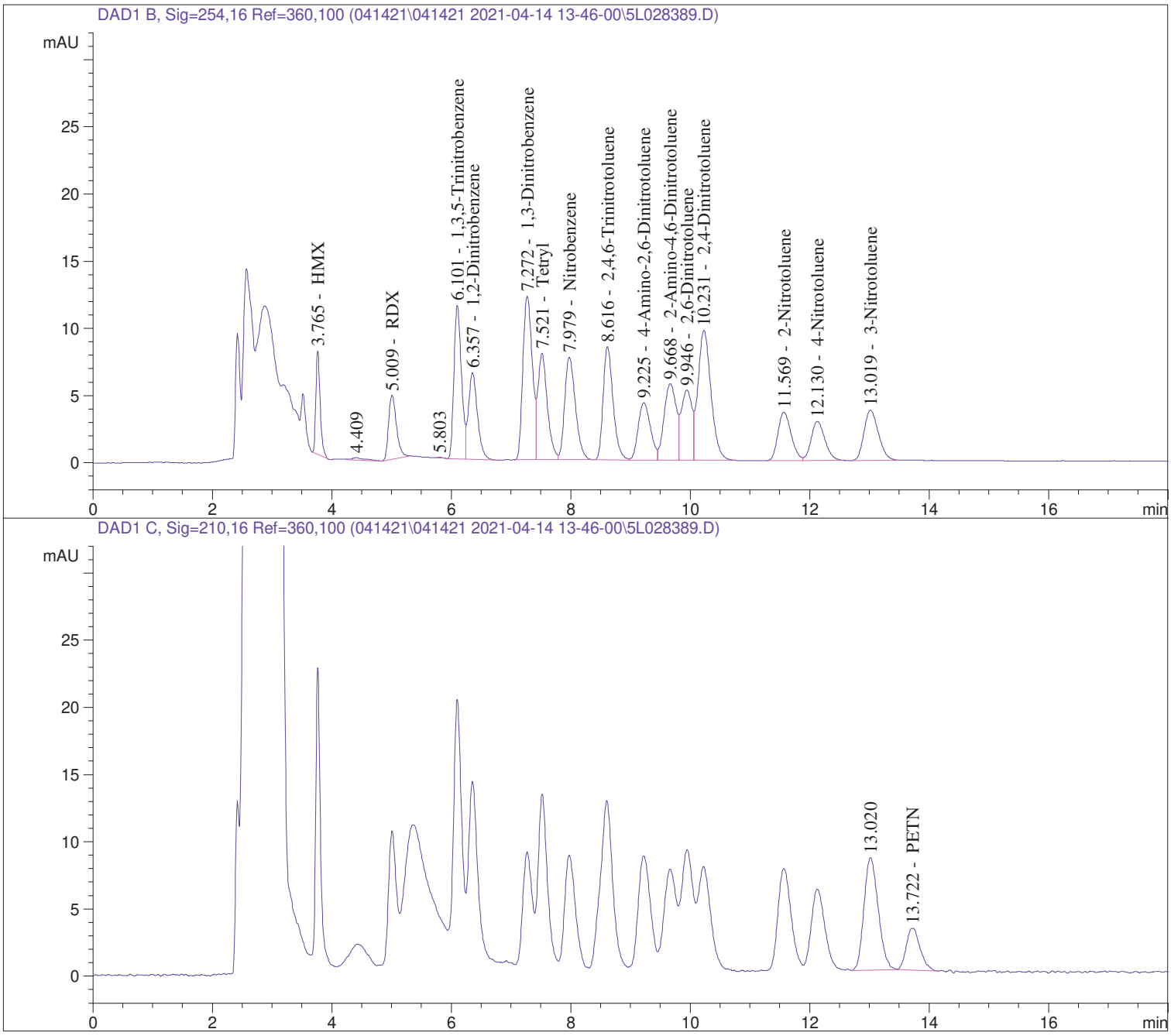
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

*** End of Report ***

Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 13-46-00\5L028389.D
Sample Name: B1C1279-BS1

Acq. Operator	: JWR	Seq. Line	: 4
Acq. Instrument	: HPLC5	Location	: Vial 4
Injection Date	: 4/14/2021 3:24:54 PM	Inj	: 1
		Inj Volume	: 100 µl
Acq. Method	: C:\Chem32\1\DATA\041421\041421 2021-04-14 13-46-00\8330PLUS-PETN.M		
Last changed	: 4/14/2021 1:45:51 PM by JWR		
Analysis Method	: C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M		
Last changed	: 4/13/2021 5:46:46 PM by ECL		
Method Info	: OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021		
Sample Info	: 1 (250ppb "OC")		



Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 13-46-00\5L028389.D
Sample Name: B1C1279-BS1

Acq. Operator : JWR Seq. Line : 4
Acq. Instrument : HPLC5 Location : Vial 4
Injection Date : 4/14/2021 3:24:54 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 13-46-00\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/13/2021 5:46:46 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (250ppb "OC")

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/13/2021 5:44:33 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.765	BBA	38.79533	6.17076	239.39668		HMX
5.009	BBA	44.27986	5.27546	233.59662		RDX
6.101	BV	100.61083	2.62174	263.77558		1,3,5-Trinitrobenzene
6.357	VBA	67.94921	3.56188	242.02661		1,2-Dinitrobenzene
7.272	BV	133.26546	1.81333	241.65384		1,3-Dinitrobenzene
7.521	VV	88.22661	2.98310	263.18839		Tetryl
7.979	VV	96.03944	2.64319	253.85078		Nitrobenzene
8.616	VV	98.07421	2.52863	247.99365		2,4,6-Trinitrotoluene
9.225	VV	60.94511	4.41349	268.98073		4-Amino-2,6-Dinitrotoluene
9.668	VV	81.17892	3.00360	243.82922		2-Amino-4,6-Dinitrotoluene
9.946	VV	64.80280	3.84506	249.17074		2,6-Dinitrotoluene
10.231	VBA	147.37997	1.82447	268.89029		2,4-Dinitrotoluene
11.569	BV	55.29364	4.51911	249.87801		2-Nitrotoluene
12.130	VB	46.63513	5.36729	250.30434		4-Nitrotoluene
13.019	BV	62.62638	4.00512	250.82621		3-Nitrotoluene

Totals : 3767.36166

Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 13-46-00\5L028389.D
Sample Name: B1C1279-BS1

Acq. Operator : JWR Seq. Line : 4
Acq. Instrument : HPLC5 Location : Vial 4
Injection Date : 4/14/2021 3:24:54 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 13-46-00\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/13/2021 5:46:46 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (250ppb "OC")

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.722	VV	50.49360	3.82570	193.17310		PETN

Totals : 193.17310

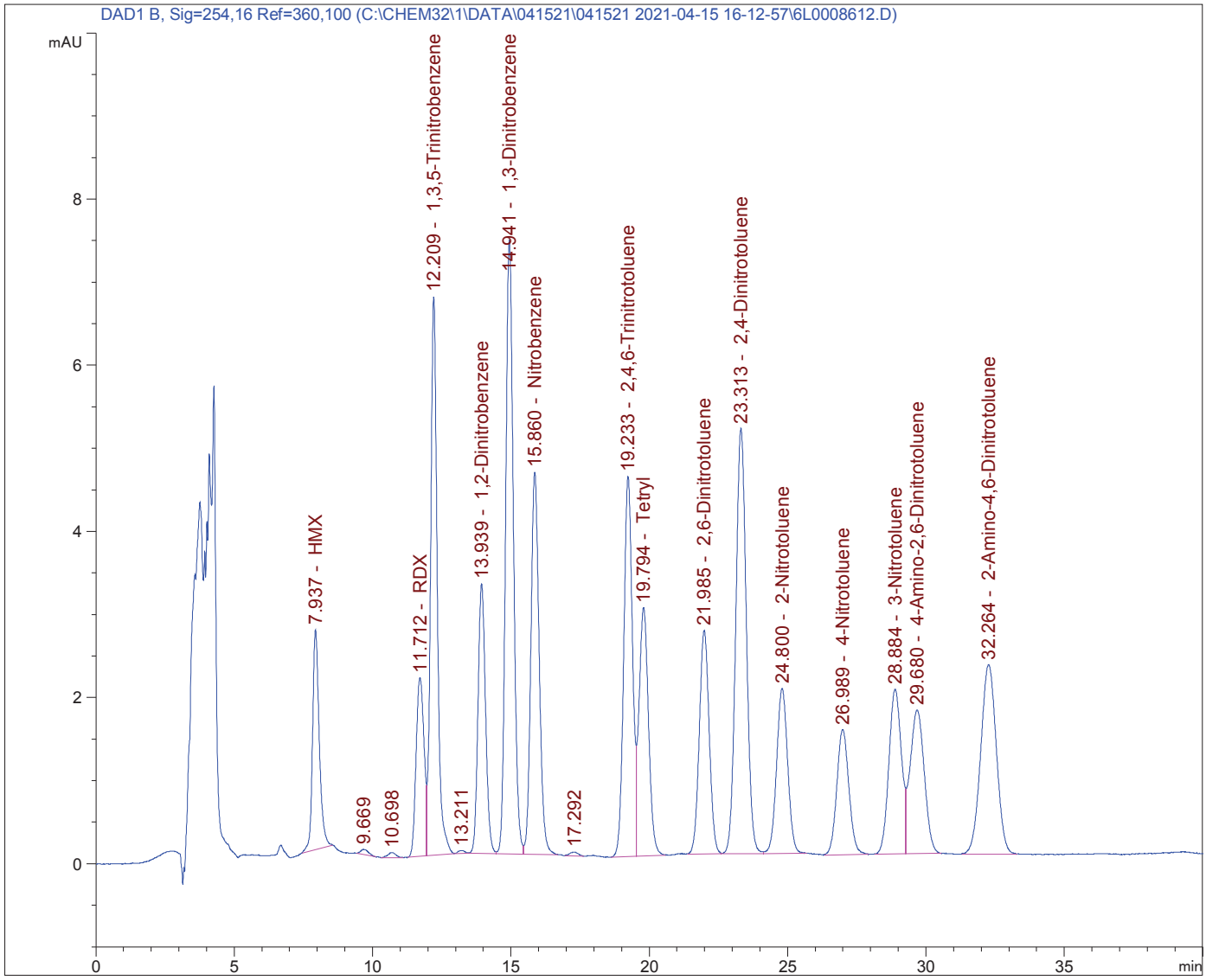
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Sample Name: B1C1279-BS2

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    ======================================================================
    Acq. Operator   : JWR                          Seq. Line :   4
    Acq. Instrument : HPLC6                         Location :   4
    Injection Date  : 4/15/2021 7:24:18 PM               Inj :   1
                                                  Inj Volume : 100.000 µl
    Acq. Method     : C:\Chem32\1\Data\041521\041521 2021-04-15 16-12-57\8330.M
    Last changed    : 4/15/2021 4:12:57 PM by JWR
    Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
    Last changed    : 4/16/2021 6:31:37 PM by ECL
    Method Info     : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

    Sample Info     : 1 (250ppb "OC")

    ======================================================================
```



Data File C:\CHEM32\1\DATA\041521\041521 2021-04-15 16-12-57\6L0008612.D
Sample Name: B1C1279-BS2

Acq. Operator : JWR Seq. Line : 4
Acq. Instrument : HPLC6 Location : 4
Injection Date : 4/15/2021 7:24:18 PM Inj : 1
Inj Volume : 100.000 µl
Acq. Method : C:\Chem32\1\Data\041521\041521 2021-04-15 16-12-57\8330.M
Last changed : 4/15/2021 4:12:57 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
Last changed : 4/16/2021 6:31:37 PM by ECL
Method Info : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

Sample Info : 1 (250ppb "OC")

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/16/2021 6:14:26 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
7.937	BBA	44.30067	5.84432	258.90708		HMX
11.712	BV	43.11795	5.51688	237.87648		RDX
12.209	VV	112.20045	2.39954	269.22945		1,3,5-Trinitrobenzene
13.939	VV	61.21474	3.78972	231.98657		1,2-Dinitrobenzene
14.941	VV	144.67044	1.71097	247.52684		1,3-Dinitrobenzene
15.860	VBA	95.57983	2.61880	250.30478		Nitrobenzene
19.233	BV	100.31783	2.48955	249.74588		2,4,6-Trinitrotoluene
19.794	VBA	71.64392	3.31082	237.20002		Tetryl
21.985	BV	66.82542	3.77219	252.07796		2,6-Dinitrotoluene
23.313	VV	136.07518	1.89743	258.19245		2,4-Dinitrotoluene
24.800	VBA	55.40738	4.47022	247.68321		2-Nitrotoluene
26.989	BBA	45.81074	5.45113	249.72008		4-Nitrotoluene
28.884	BV	63.25417	4.00586	253.38747		3-Nitrotoluene
29.680	VBA	61.92979	4.27334	264.64683		4-Amino-2,6-Dinitrotoluene
32.264	BBA	89.65555	2.79766	250.82530		2-Amino-4,6-Dinitrotoluene

Totals : 3759.31039

1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

*** End of Report ***

Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 13-46-00\5L028390.D
Sample Name: B1C1279-SRM1

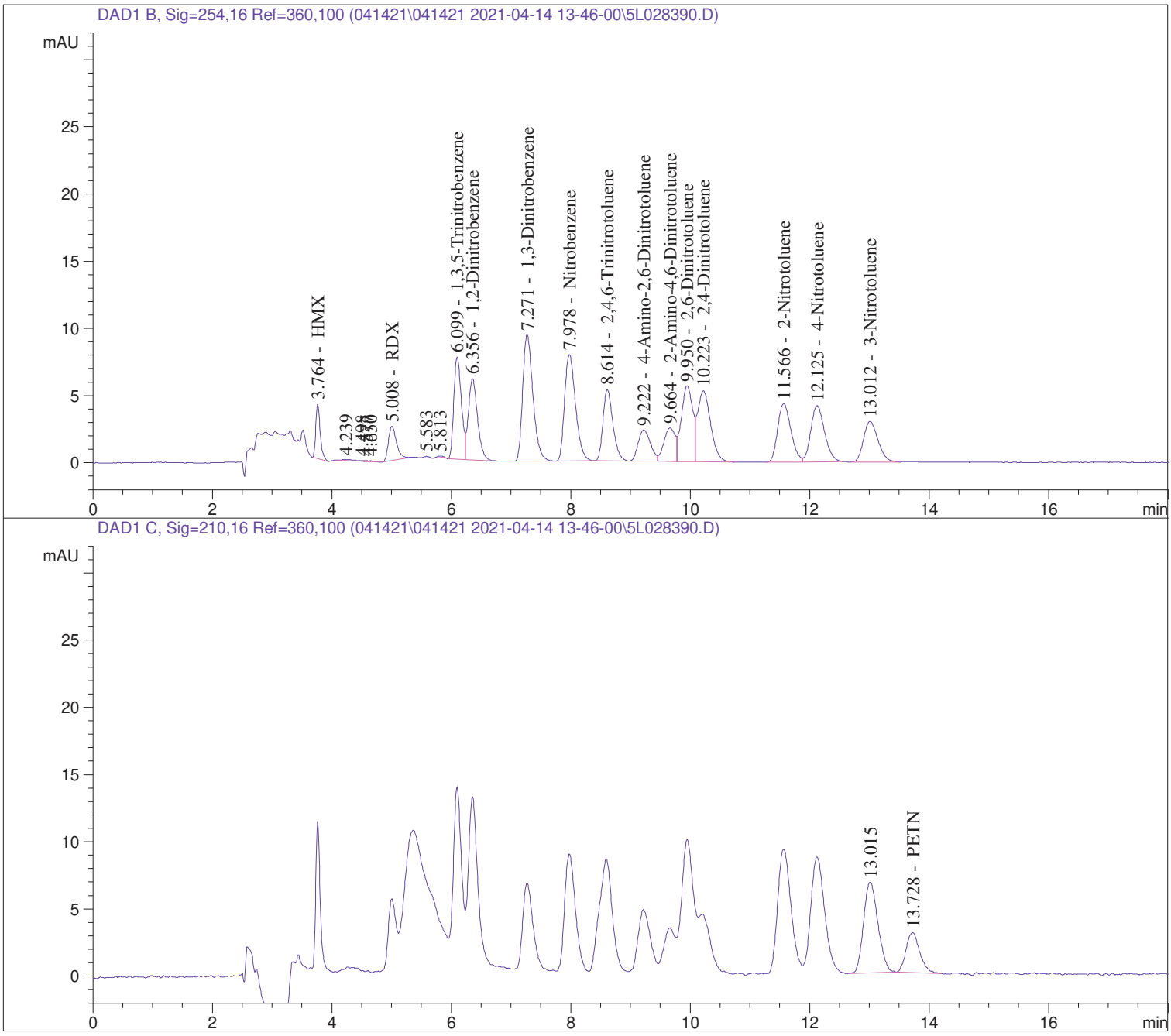
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Acq. Operator : JWR Seq. Line : 5
Acq. Instrument : HPLC5 Location : Vial 5
Injection Date : 4/14/2021 3:53:06 PM Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 13-46-00\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/13/2021 5:46:46 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (Surr 250ppb "OC")

==========



Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 13-46-00\5L028390.D
Sample Name: B1C1279-SRM1

Acq. Operator : JWR Seq. Line : 5
Acq. Instrument : HPLC5 Location : Vial 5
Injection Date : 4/14/2021 3:53:06 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 13-46-00\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/13/2021 5:46:46 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (Surr 250ppb "OC")

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/13/2021 5:44:33 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.764	BV	20.92247	6.11254	127.88935		HMX
5.008	BV	23.71399	5.41126	128.32247		RDX
6.099	BV	67.40828	2.62202	176.74583		1,3,5-Trinitrobenzene
6.356	VBA	64.06018	3.56234	228.20440		1,2-Dinitrobenzene
7.271	BV	112.82014	1.81308	204.55211		1,3-Dinitrobenzene
7.528		-	-	-		Tetryl
7.978	VV	100.32806	2.64351	265.21817		Nitrobenzene
8.614	VV	61.42939	2.51794	154.67535		2,4,6-Trinitrotoluene
9.222	VV	33.31884	4.42654	147.48710		4-Amino-2,6-Dinitrotoluene
9.664	VV	32.66618	3.01203	98.39166		2-Amino-4,6-Dinitrotoluene
9.950	VV	75.39196	3.84658	290.00146		2,6-Dinitrotoluene
10.223	VBA	79.85057	1.82343	145.60168		2,4-Dinitrotoluene
11.566	BV	67.14114	4.52088	303.53672		2-Nitrotoluene
12.125	VBA	67.01964	5.36494	359.55640		4-Nitrotoluene
13.012	BV	51.09802	4.00556	204.67641		3-Nitrotoluene

Totals : 2834.85910

Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 13-46-00\5L028390.D
Sample Name: B1C1279-SRM1

Acq. Operator : JWR Seq. Line : 5
Acq. Instrument : HPLC5 Location : Vial 5
Injection Date : 4/14/2021 3:53:06 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 13-46-00\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/13/2021 5:46:46 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (Surr 250ppb "OC")

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.728	VBA	47.42919	3.82133	181.24272		PETN

Totals : 181.24272

1 Warnings or Errors :

Warning : Calibrated compound(s) not found

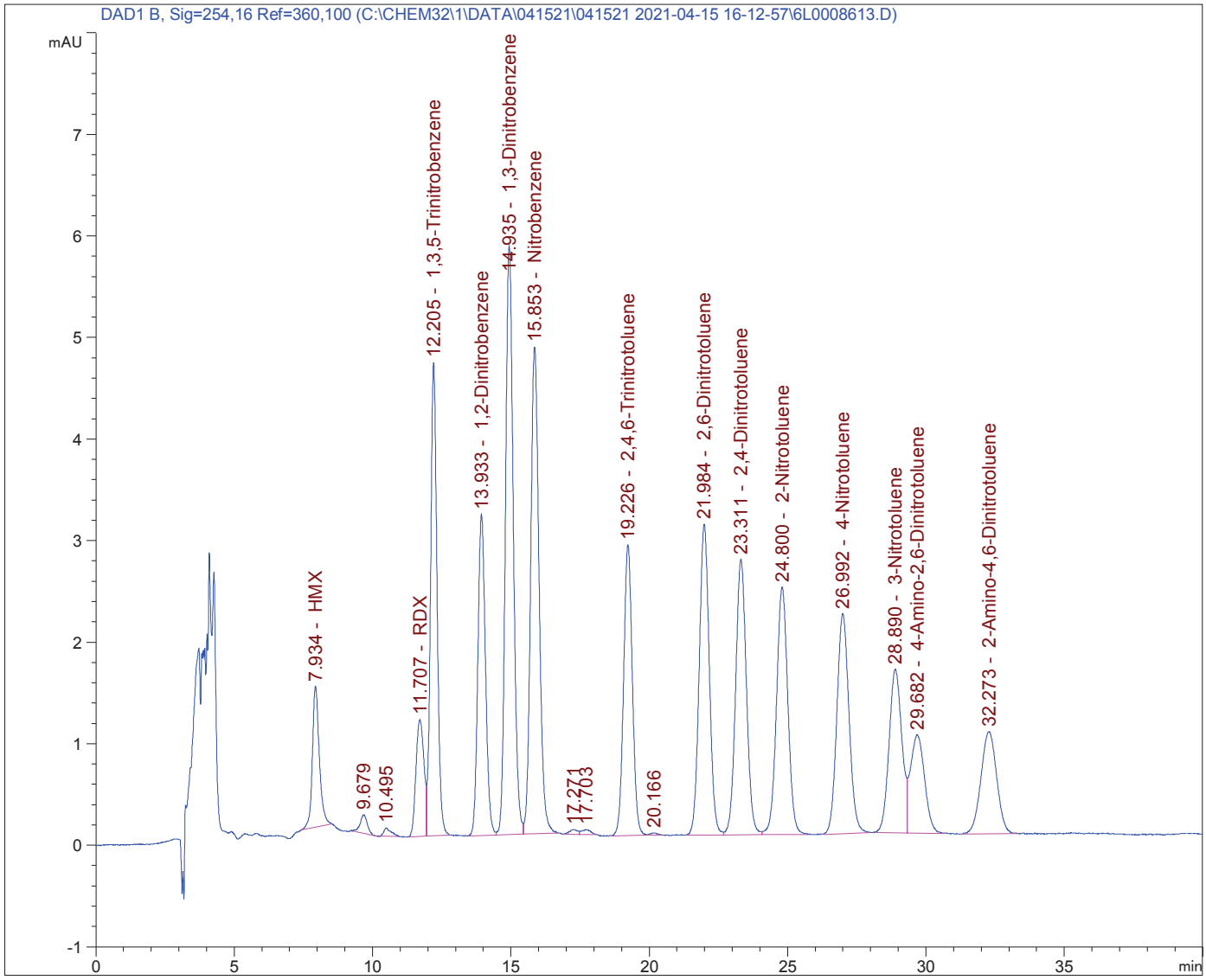
*** End of Report ***

Data File C:\CHEM32\1\DATA\041521\041521 2021-04-15 16-12-57\6L0008613.D
Sample Name: B1C1279-SRM2

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    ======================================================================
    Acq. Operator   : JWR                          Seq. Line :   5
    Acq. Instrument : HPLC6                         Location :   5
    Injection Date  : 4/15/2021 8:27:09 PM               Inj :   1
                                                  Inj Volume : 100.000 µl
    Acq. Method     : C:\Chem32\1\Data\041521\041521 2021-04-15 16-12-57\8330.M
    Last changed    : 4/15/2021 4:12:57 PM by JWR
    Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
    Last changed    : 4/16/2021 6:45:13 PM by ECL
    Method Info     : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

    Sample Info     : 1 (Surr 250ppb "OC")

    ======================================================================
```



Data File C:\CHEM32\1\DATA\041521\041521 2021-04-15 16-12-57\6L0008613.D
Sample Name: B1C1279-SRM2

```
    ======================================================================
    Acq. Operator   : JWR                          Seq. Line :   5
    Acq. Instrument : HPLC6                         Location :   5
    Injection Date  : 4/15/2021 8:27:09 PM               Inj :   1
                                                  Inj Volume : 100.000 µl
    Acq. Method     : C:\Chem32\1\Data\041521\041521 2021-04-15 16-12-57\8330.M
    Last changed    : 4/15/2021 4:12:57 PM by JWR
    Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
    Last changed    : 4/16/2021 6:45:13 PM by ECL
    Method Info     : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

    Sample Info     : 1 (Surr 250ppb "OC")

    ======================================================================

     ======================================================================
                          External Standard Report
     ======================================================================

     Sorted By             :      Signal
     Calib. Data Modified  :      4/16/2021 6:14:26 PM
     Multiplier            :      1.0000
     Dilution              :      1.0000
     Do not use Multiplier & Dilution Factor with ISTDs

     Signal 1: DAD1 B, Sig=254,16 Ref=360,100

     RetTime  Type     Area     Amt/Area    Amount   Grp   Name
      [min]          [mAU*s]                [ug/L]
     -------|------|----------|----------|----------|--|------------------
       7.934 BBA      24.24019    5.71496  138.53175    HMX
      11.707 VV       23.15492    5.50853  127.54949    RDX
      12.205 VBA      75.86155    2.40076  182.12517    1,3,5-Trinitrobenzene
      13.933 BV       60.49999    3.78984  229.28510    1,2-Dinitrobenzene
      14.935 VV      114.60685    1.71181  196.18468    1,3-Dinitrobenzene
      15.853 VBA     100.99493    2.61795  264.39974    Nitrobenzene
      19.226 VV       62.88547    2.48101  156.01963    2,4,6-Trinitrotoluene
      19.794            -          -          -         Tetryl
      21.984 BV       77.24526    3.77132  291.31690    2,6-Dinitrotoluene
      23.311 VV       73.44589    1.89913  139.48338    2,4-Dinitrotoluene
      24.800 VBA      69.36040    4.46499  309.69377    2-Nitrotoluene
      26.992 BBA      66.14463    5.45193  360.61614    4-Nitrotoluene
      28.890 BV       52.07685    4.00647  208.64456    3-Nitrotoluene
      29.682 VF       34.42752    4.27576  147.20365    4-Amino-2,6-Dinitrotoluene
      32.273 BF       40.03217    2.80696  112.36875    2-Amino-4,6-Dinitrotoluene

     Totals :                              2863.42272


     2 Warnings or Errors :

     Warning : Calibration warnings (see calibration table listing)
     Warning : Calibrated compound(s) not found

     ======================================================================
                              *** End of Report ***
```

MICROBAC®

Section D:
HPLC Organics
EPA 8330B
Calibration Raw Data

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

Calibration Table

OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Calib. Data Modified : Thursday, April 01, 2021 2:07:58 PM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 0.000 %
Abs. Reference Window : 0.250 min
Rel. Non-ref. Window : 0.000 %
Abs. Non-ref. Window : 0.250 min
Use Multiplier & Dilution Factor with ISTDs
Uncalibrated Peaks : not reported
Partial Calibration : No recalibration if peaks missing

Curve Type : Linear
Origin : Ignored
Weight : Linear (Amnt)

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: DAD1 B, Sig=254,16 Ref=360,100
Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Sig	Lvl	Amount [ug/L]	Area	Amt/Area	Ref	Grp	Name
3.777	1	1	25.00000	4.54842	5.49641			HMX
		2	50.00000	8.32549	6.00565			
		3	100.00000	16.25403	6.15232			
		4	500.00000	80.08501	6.24337			
		5	1000.00000	161.08388	6.20795			
		6	2500.00000	401.43262	6.22770			
5.037	1	1	25.00000	3.88141	6.44095			RDX
		2	50.00000	8.30998	6.01686			
		3	100.00000	17.06433	5.86018			
		4	500.00000	95.71388	5.22390			
		5	1000.00000	193.63412	5.16438			
		6	2500.00000	488.87799	5.11375			
6.147	1	1	25.00000	9.48840	2.63480			1,3,5-Trinitrobenzene
		2	50.00000	19.06912	2.62204			
		3	100.00000	38.05835	2.62754			
		4	500.00000	191.43898	2.61180			
		5	1000.00000	382.05386	2.61743			
		6	2500.00000	952.55750	2.62451			
6.409	1	1	25.00000	6.87514	3.63629			1,2-Dinitrobenzene
		2	50.00000	13.95521	3.58289			

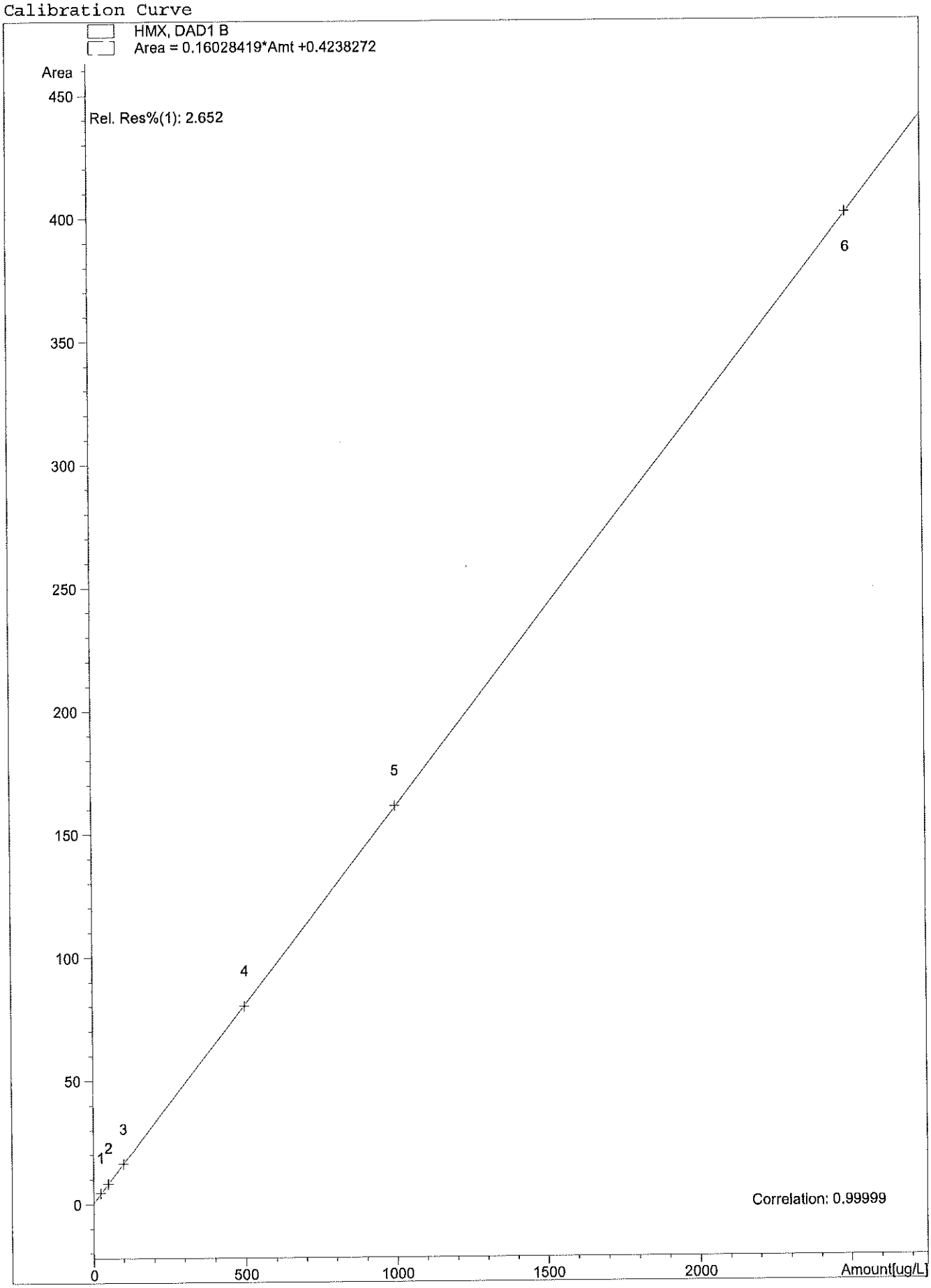
RetTime [min]	Sig	Lvl	Amount [ug/L]	Area	Amt/Area	Ref	Grp	Name
		3	100.00000	27.81739	3.59487			
		4	500.00000	140.95694	3.54718			
		5	1000.00000	282.42734	3.54073			
		6	2500.00000	701.76410	3.56245			
7.337	1	1	25.00000	13.92734	1.79503			1,3-Dinitrobenzene
		2	50.00000	27.56360	1.81399			
		3	100.00000	55.00174	1.81812			
		4	500.00000	276.37772	1.80912			
		5	1000.00000	551.94391	1.81178			
		6	2500.00000	1376.46179	1.81625			
7.599	1	1	25.00000	8.51359	2.93648			Tetryl
		2	50.00000	16.75534	2.98412			
		3	100.00000	33.26986	3.00572			
		4	500.00000	167.94156	2.97723			
		5	1000.00000	335.85779	2.97745			
		6	2500.00000	836.55627	2.98844			
8.043	1	1	25.00000	9.73033	2.56928			Nitrobenzene
		2	50.00000	19.11004	2.61643			
		3	100.00000	37.84610	2.64228			
		4	500.00000	188.99406	2.64559			
		5	1000.00000	378.40817	2.64265			
		6	2500.00000	942.63885	2.65213			
8.698	1	1	25.00000	10.41791	2.39971			2,4,6-Trinitrotoluene
		2	50.00000	20.51253	2.43753			
		3	100.00000	39.96470	2.50221			
		4	500.00000	196.51489	2.54434			
		5	1000.00000	394.46201	2.53510			
		6	2500.00000	981.73633	2.54651			
9.307	1	1	25.00000	5.56906	4.48909			4-Amino-2,6-Dinitrotoluene
		2	50.00000	11.09603	4.50612			
		3	100.00000	22.35393	4.47349			
		4	500.00000	112.32190	4.45149			
		5	1000.00000	227.96896	4.38656			
		6	2500.00000	568.72949	4.39576			
9.762	1	1	25.00000	8.34248	2.99671			2-Amino-4,6-Dinitrotoluene
		2	50.00000	16.35461	3.05724			
		3	100.00000	32.91534	3.03810			
		4	500.00000	166.28029	3.00697			
		5	1000.00000	334.11481	2.99298			
		6	2500.00000	833.69977	2.99868			
10.046	1	1	25.00000	6.58004	3.79937			2,6-Dinitrotoluene
		2	50.00000	13.24879	3.77393			
		3	100.00000	26.27336	3.80614			
		4	500.00000	129.84868	3.85064			
		5	1000.00000	259.43198	3.85457			
		6	2500.00000	648.46655	3.85525			
10.343	1	1	25.00000	13.67817	1.82773			2,4-Dinitrotoluene
		2	50.00000	27.64654	1.80854			
		3	100.00000	54.97282	1.81908			
		4	500.00000	274.59357	1.82087			
		5	1000.00000	546.90057	1.82849			
		6	2500.00000	1369.59631	1.82536			
11.674	1	1	25.00000	5.72113	4.36977			2-Nitrotoluene
		2	50.00000	11.02797	4.53393			
		3	100.00000	22.05132	4.53488			
		4	500.00000	110.90678	4.50829			
		5	1000.00000	221.43564	4.51598			

RetTime [min]	Sig	Lvl	Amount [ug/L]	Area	Amt/Area	Ref	Grp	Name
		6	2500.00000	551.40369	4.53388			
12.249	1	1	25.00000	4.59418	5.44167			4-Nitrotoluene
		2	50.00000	9.19717	5.43646			
		3	100.00000	18.71122	5.34439			
		4	500.00000	93.20029	5.36479			
		5	1000.00000	186.97565	5.34829			
		6	2500.00000	465.89938	5.36597			
13.146	1	1	25.00000	6.22419	4.01659			3-Nitrotoluene
		2	50.00000	12.29011	4.06831			
		3	100.00000	25.17490	3.97221			
		4	500.00000	125.27073	3.99136			
		5	1000.00000	249.97932	4.00033			
		6	2500.00000	623.80353	4.00767			
13.921	2	1	25.00000	6.92459	3.61032			PETN
		2	50.00000	13.58046	3.68176			
		3	100.00000	28.28012	3.53605			
		4	500.00000	130.54089	3.83022			
		5	1000.00000	256.02823	3.90582			
		6	2500.00000	642.27985	3.89238			

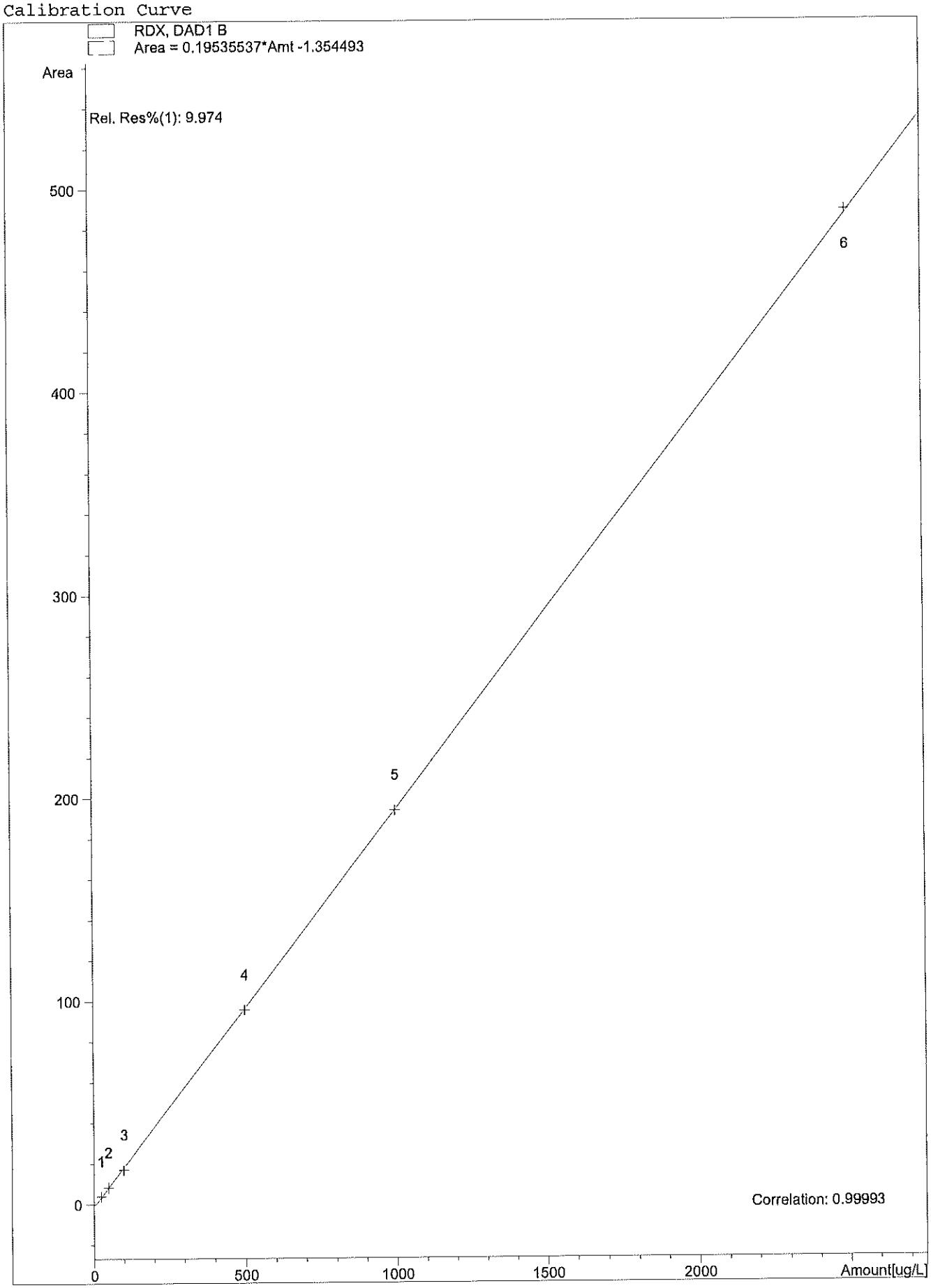
Peak Sum Table

No Entries in table

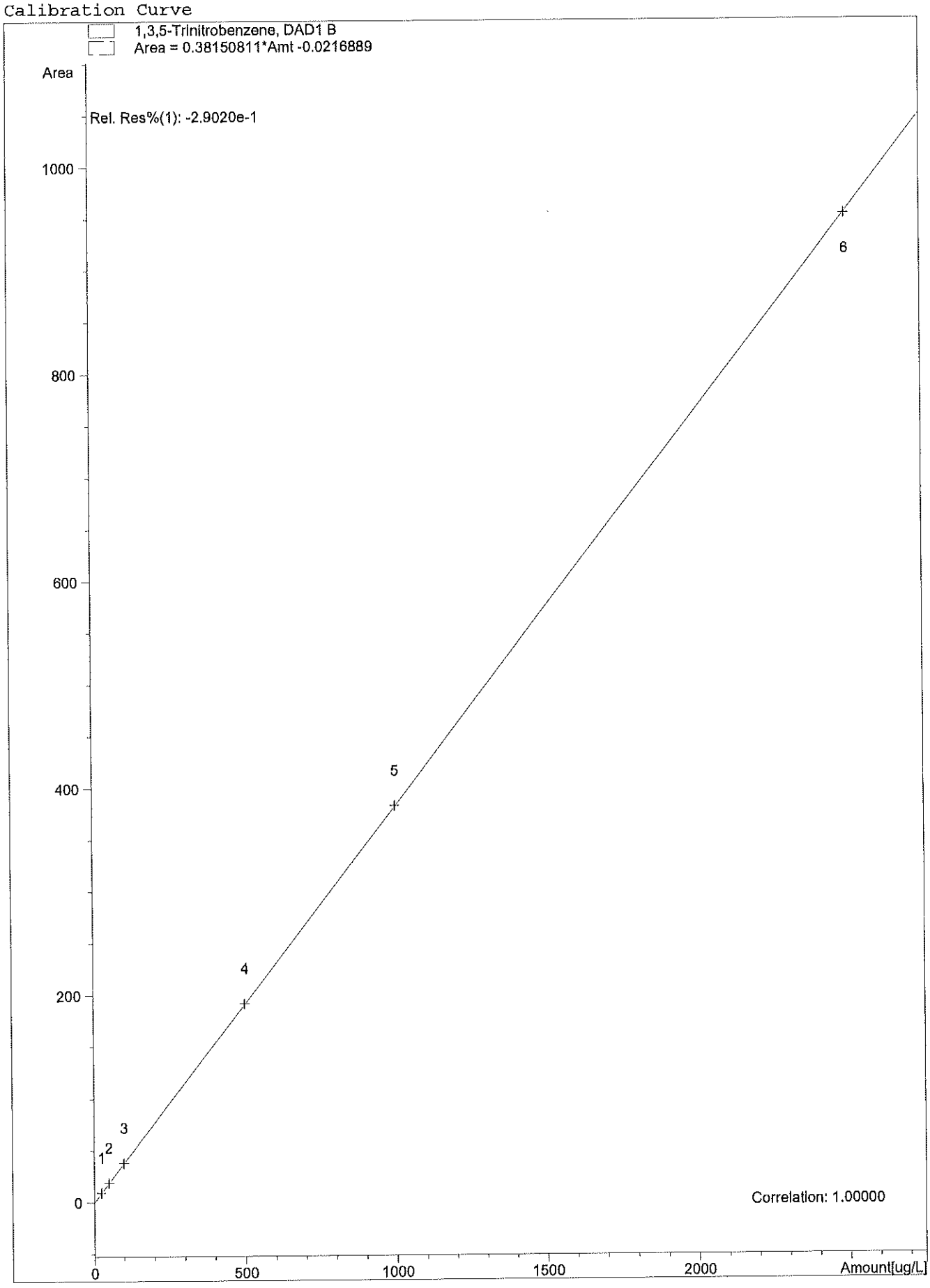
Calibration Curve



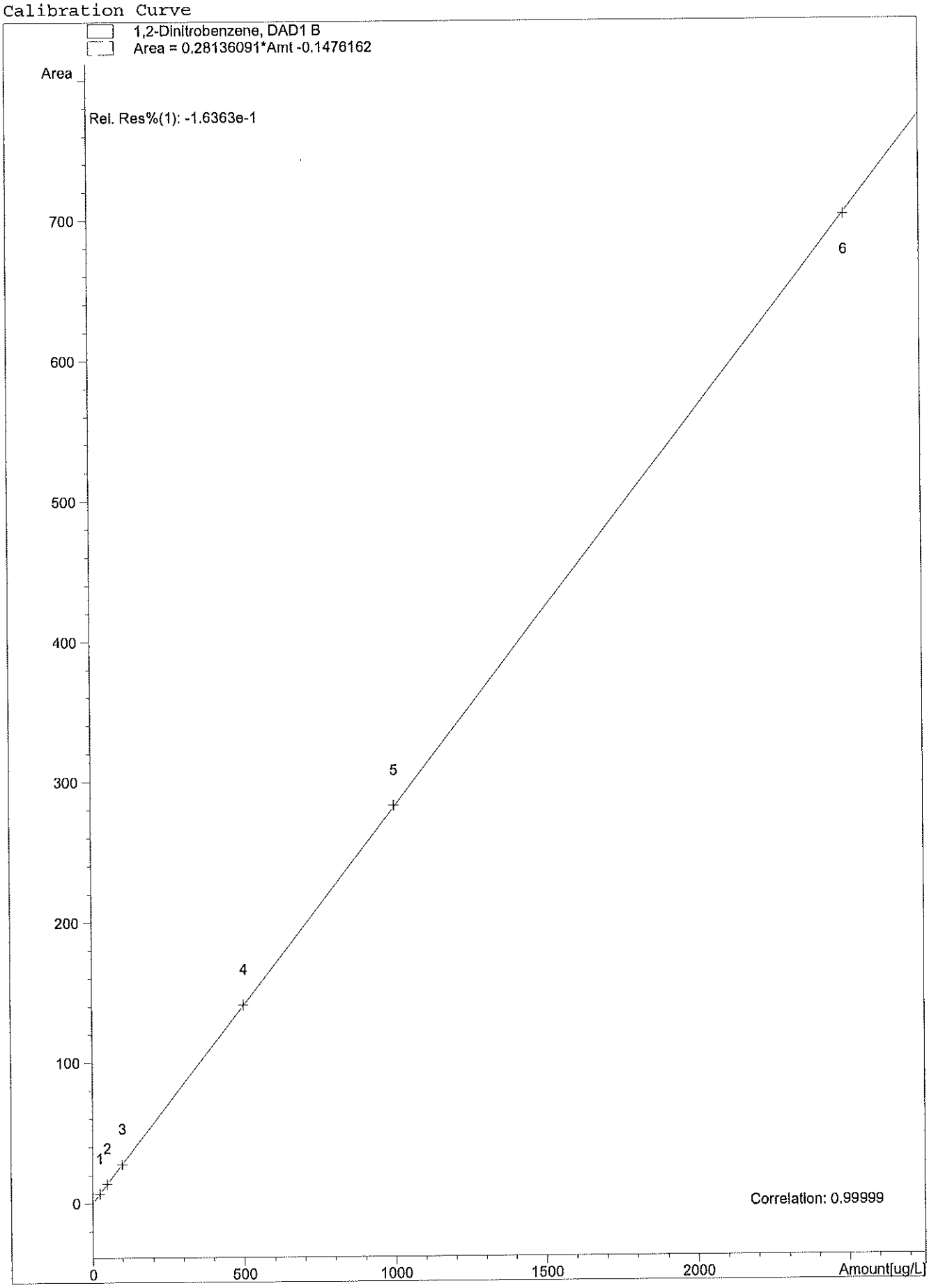
Calibration Curve



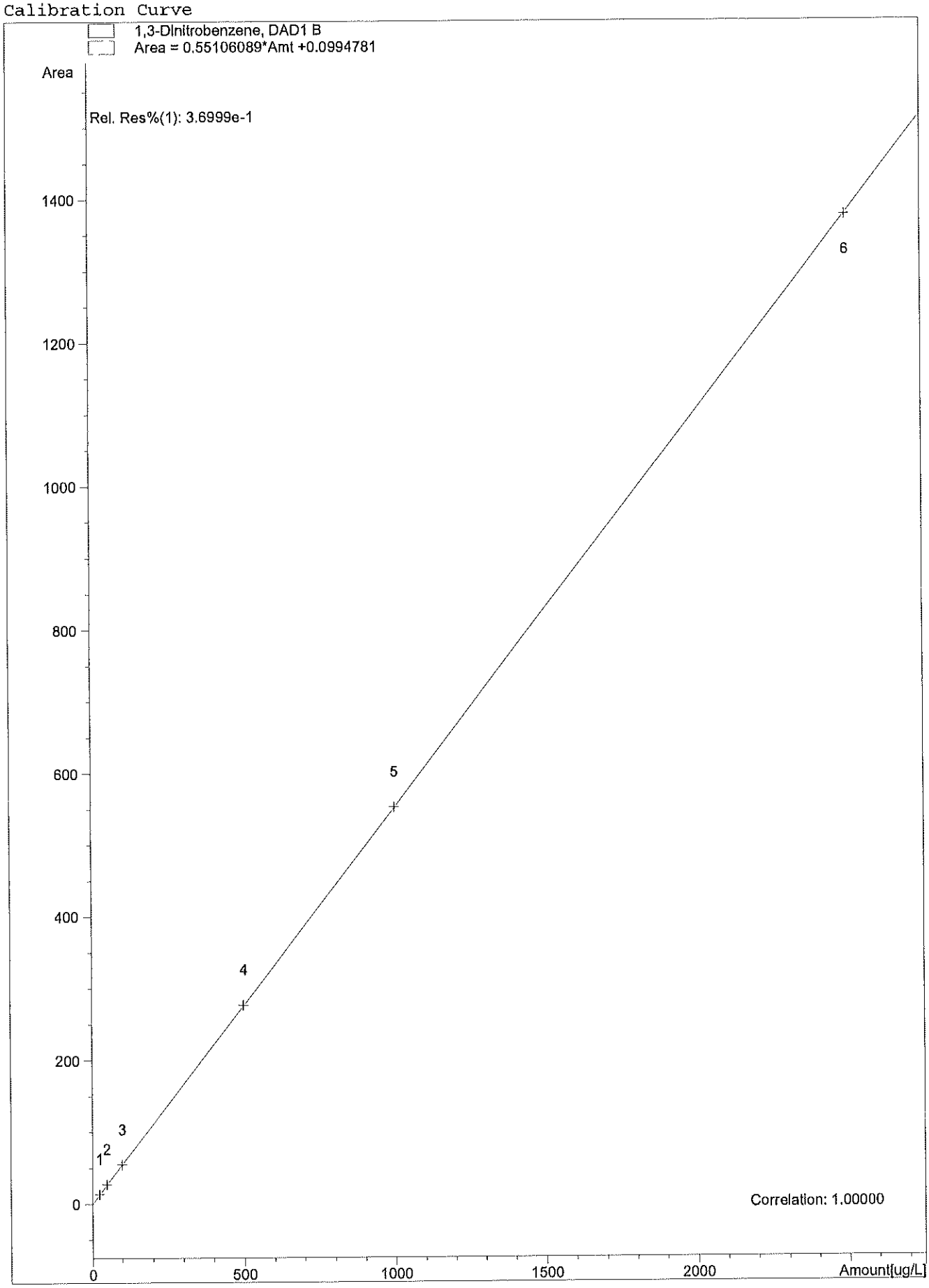
Calibration Curve



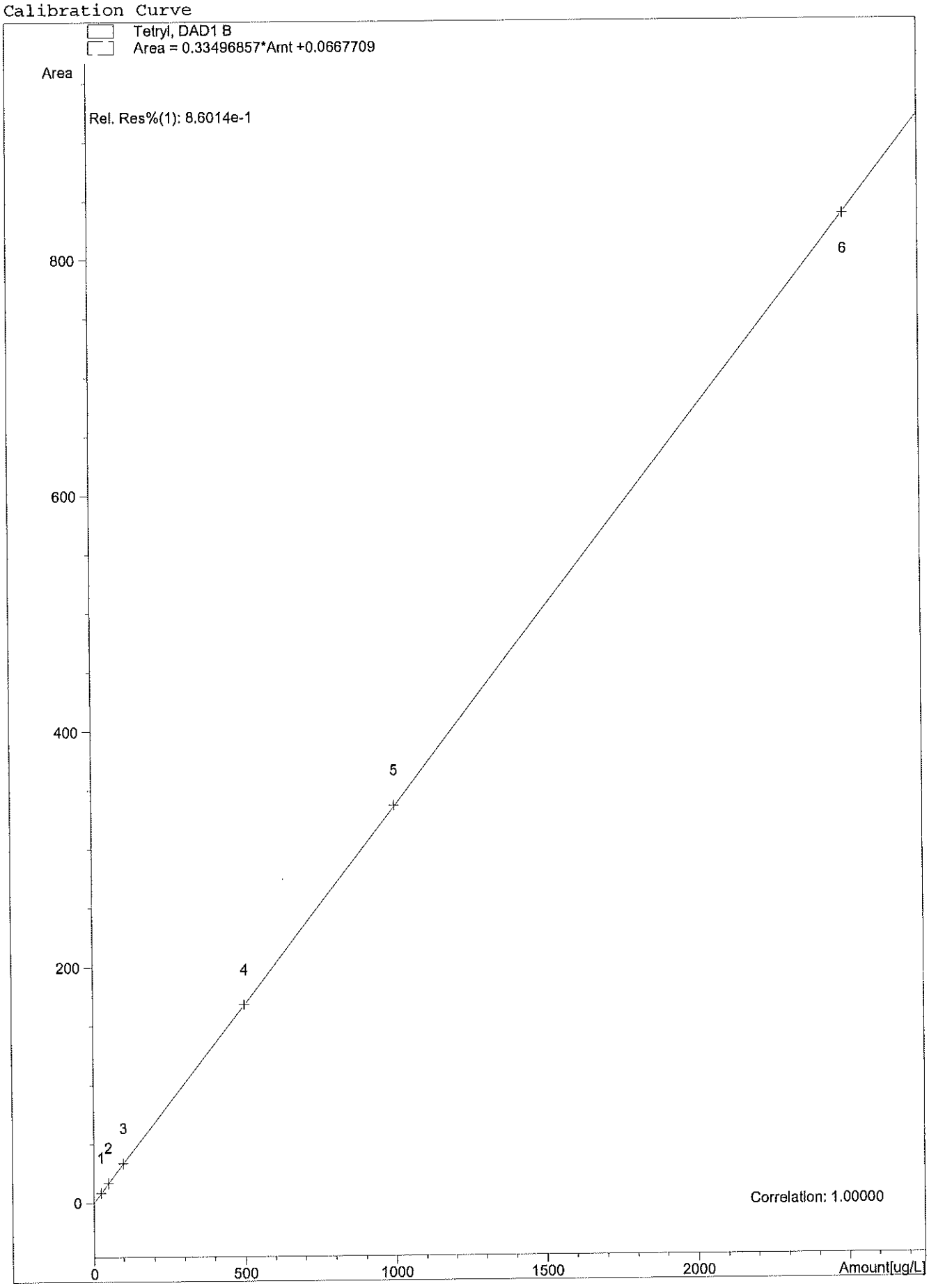
Calibration Curve



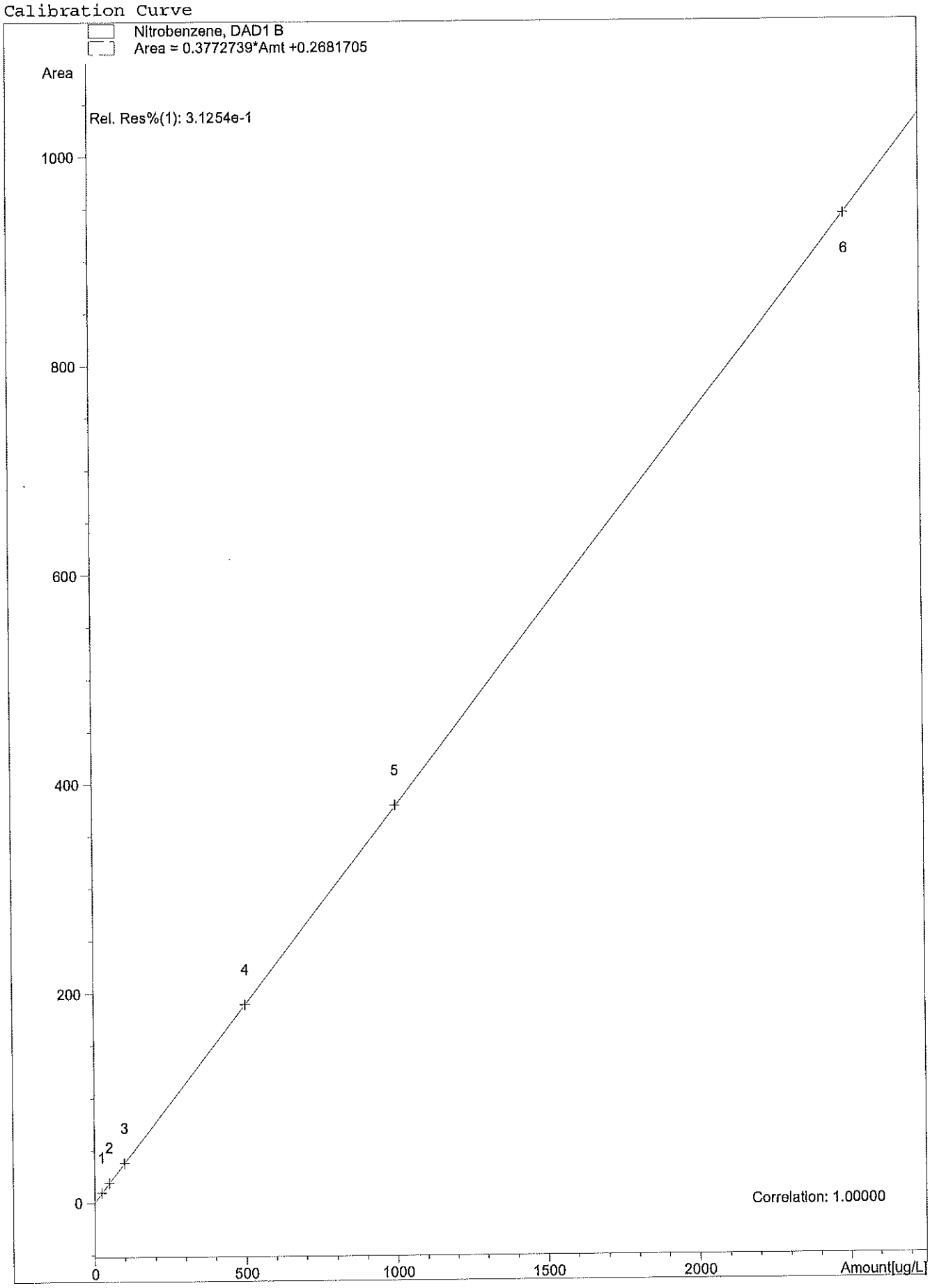
Calibration Curve



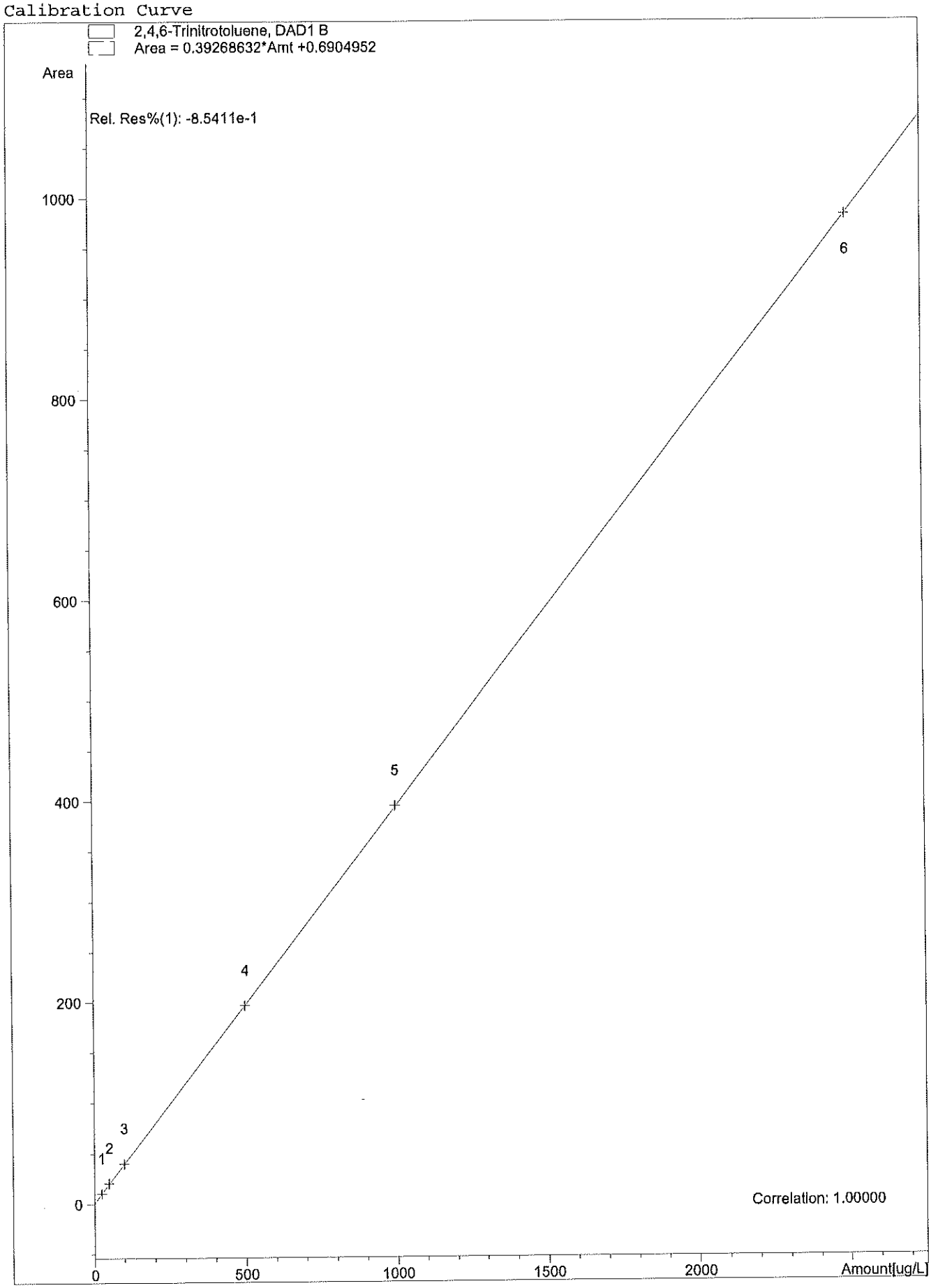
Calibration Curve



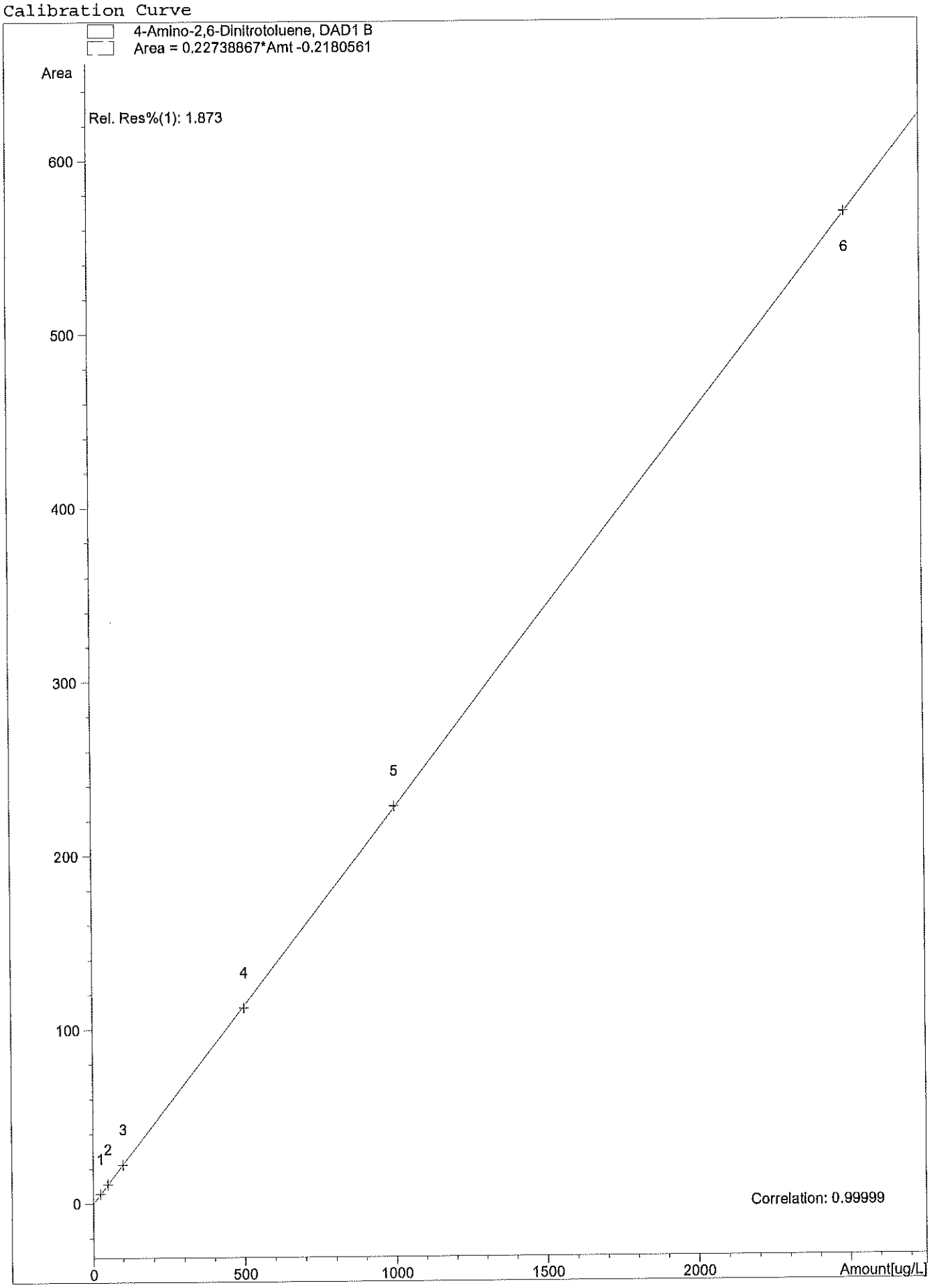
Calibration Curve



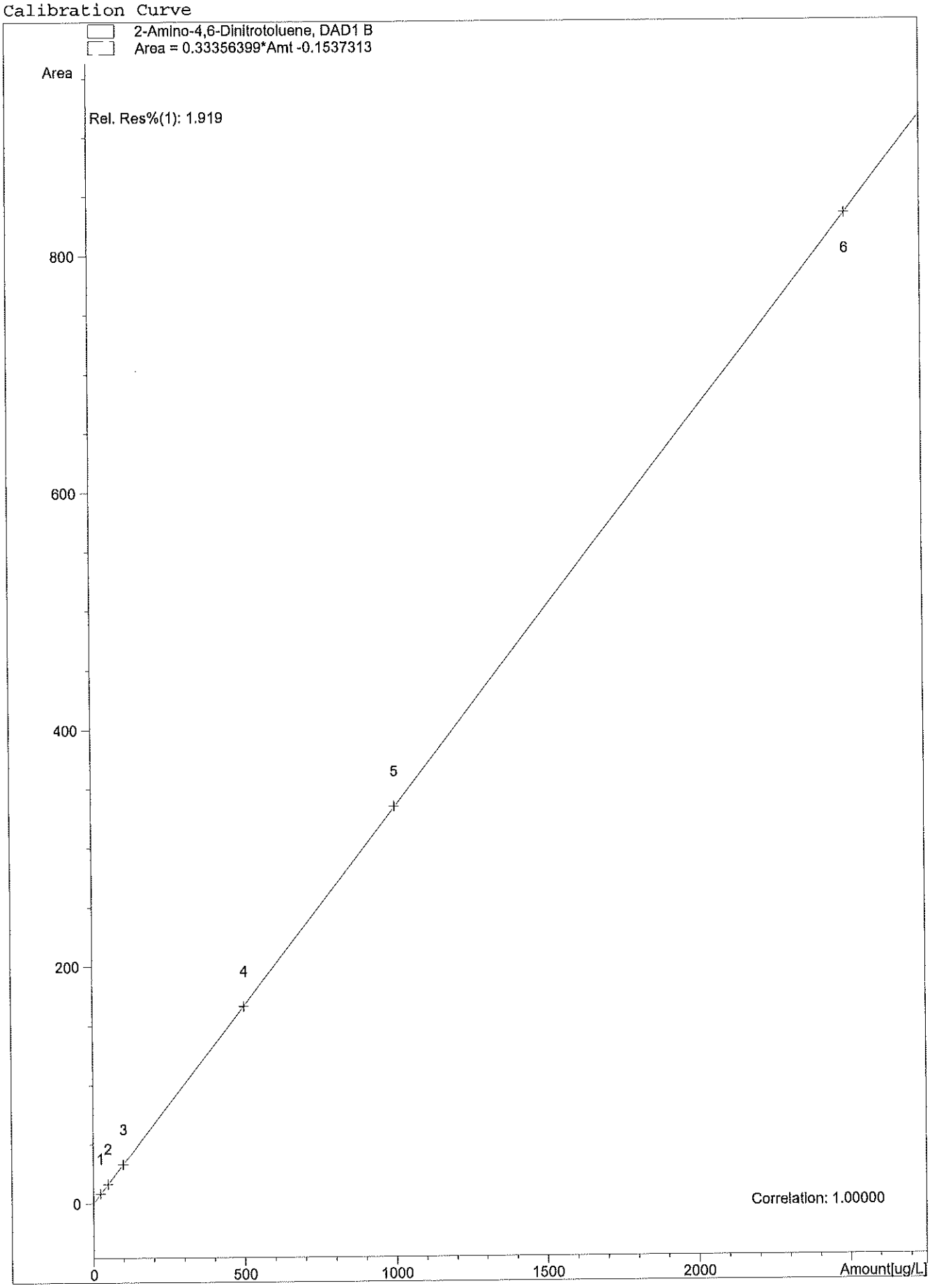
Calibration Curve



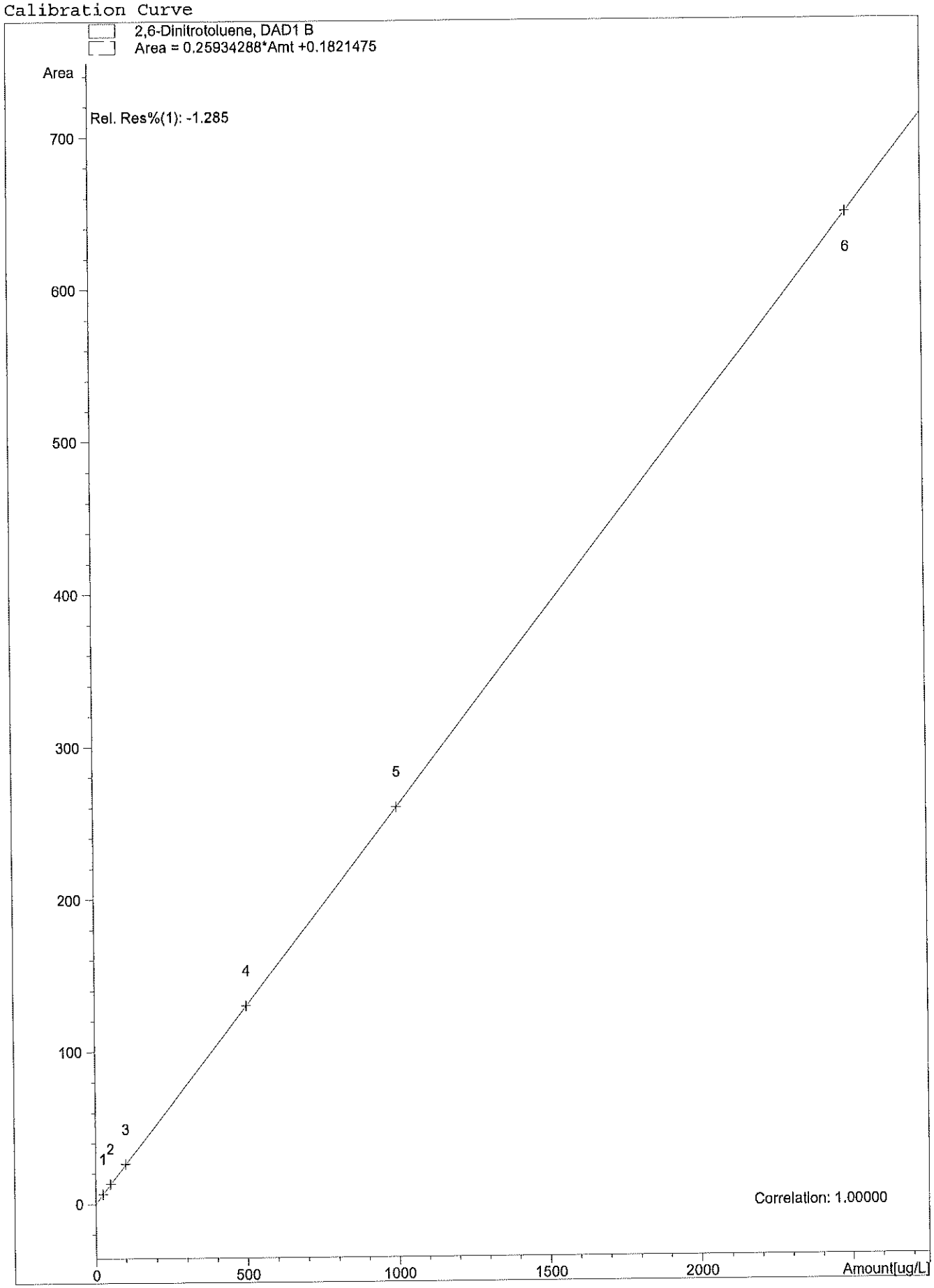
Calibration Curve



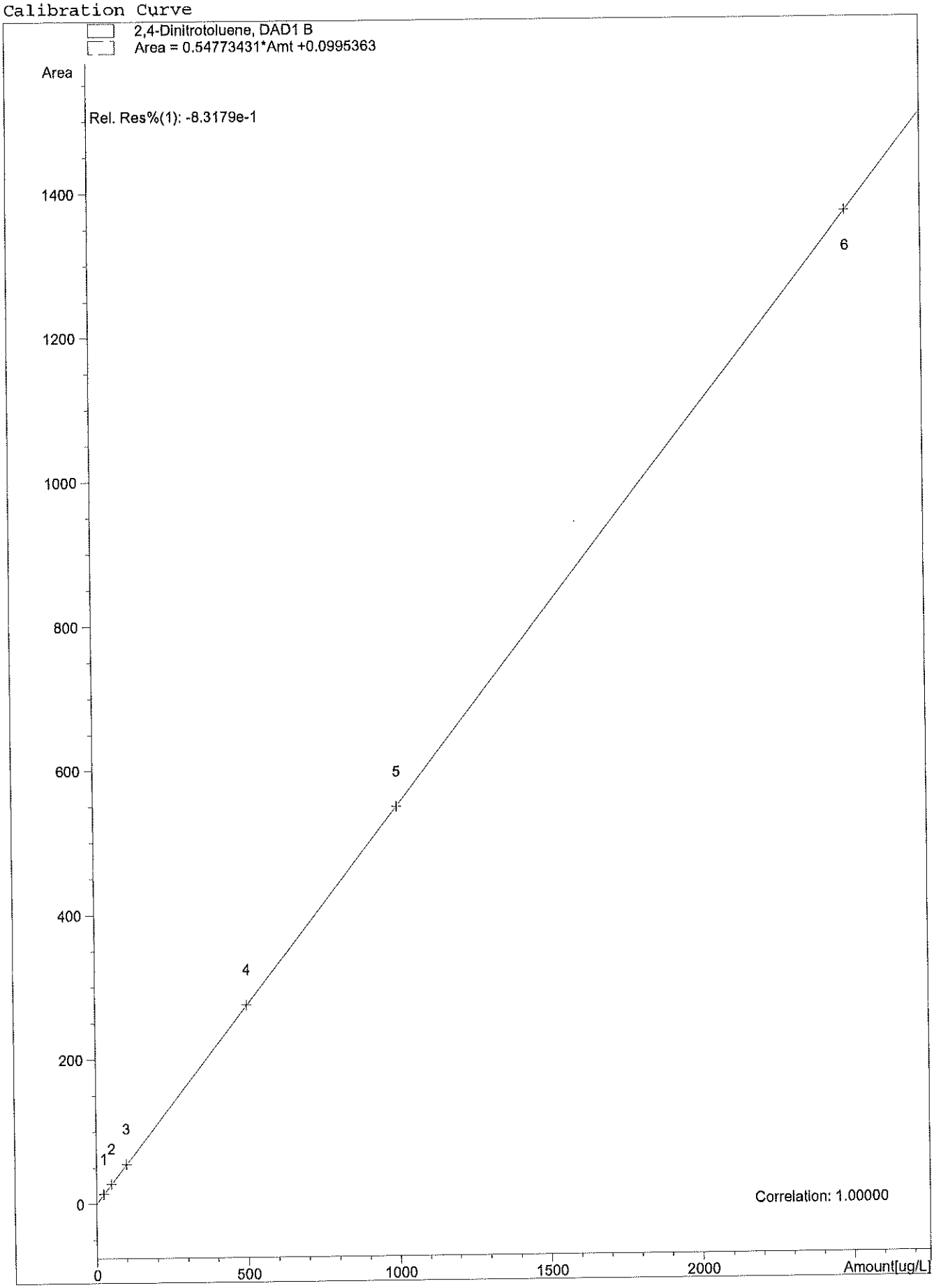
Calibration Curve



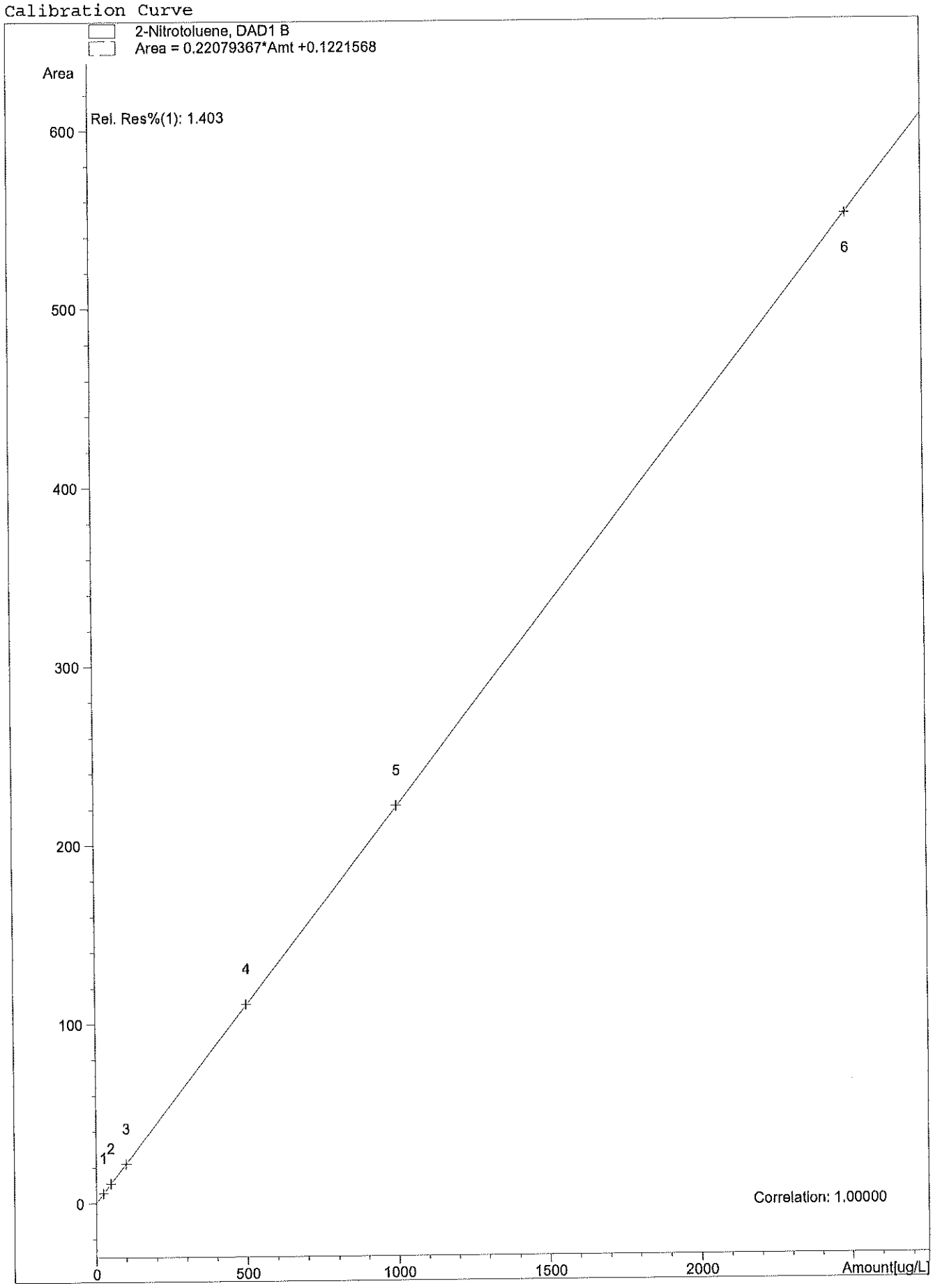
Calibration Curve



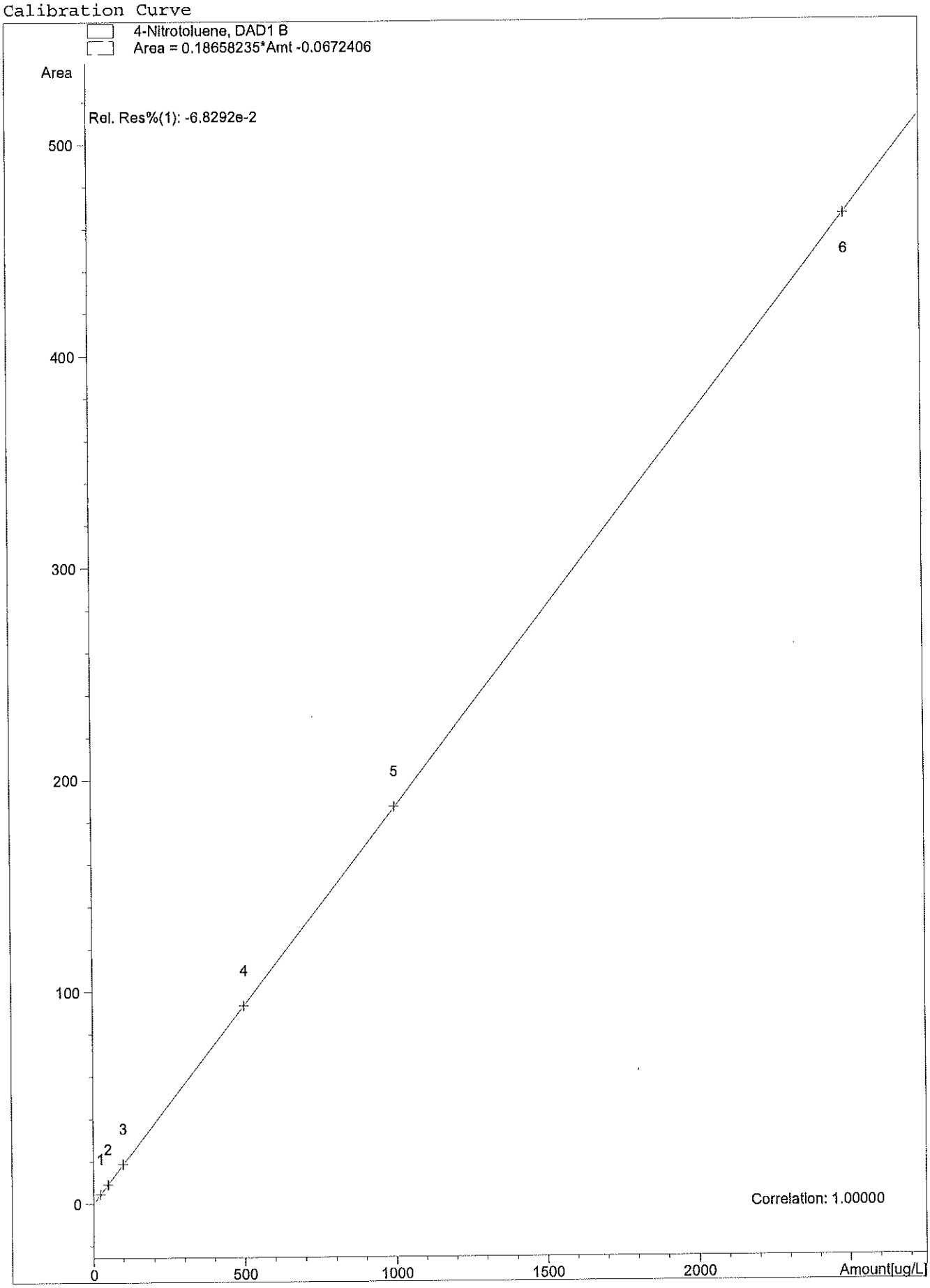
Calibration Curve



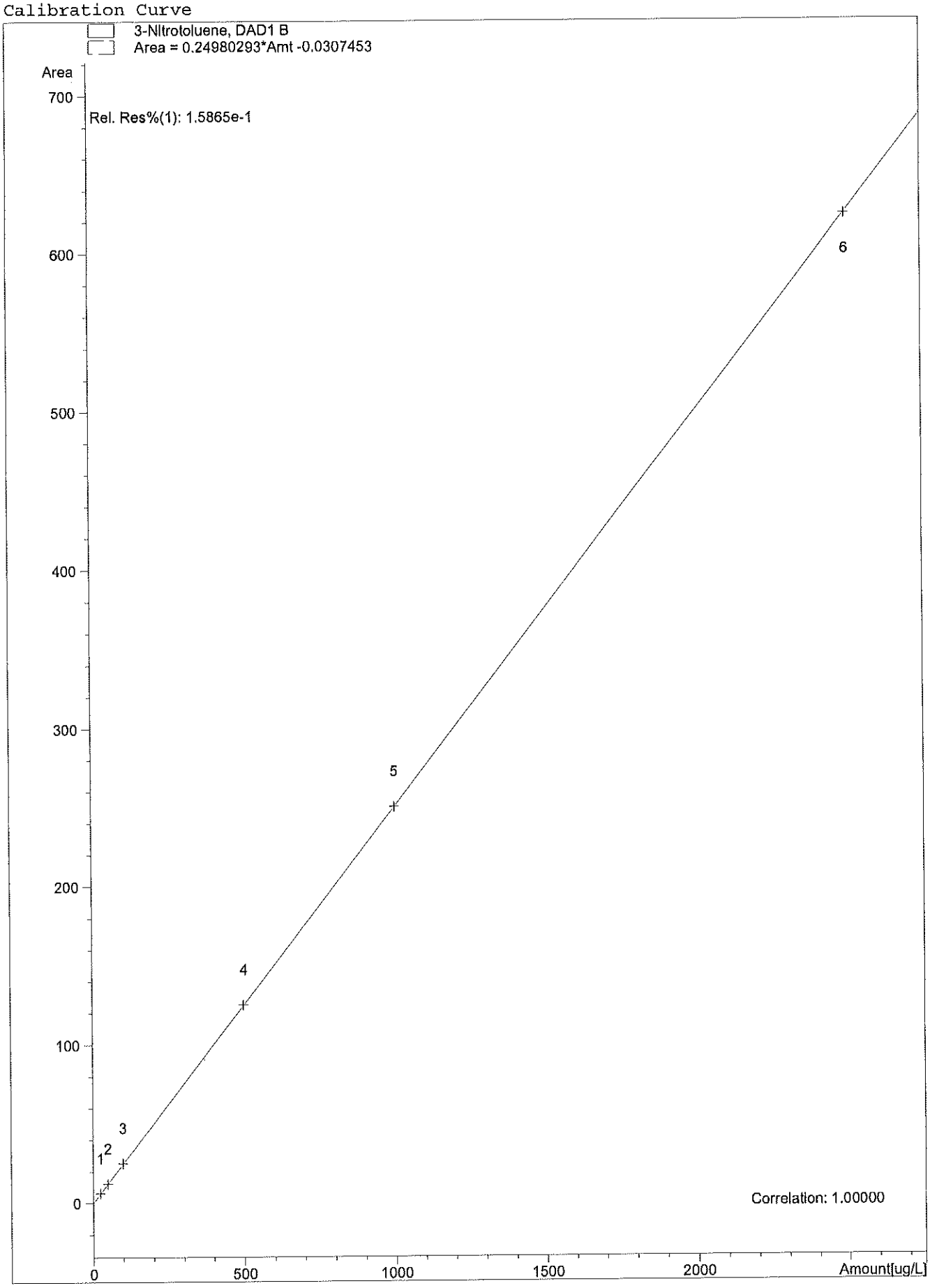
Calibration Curve



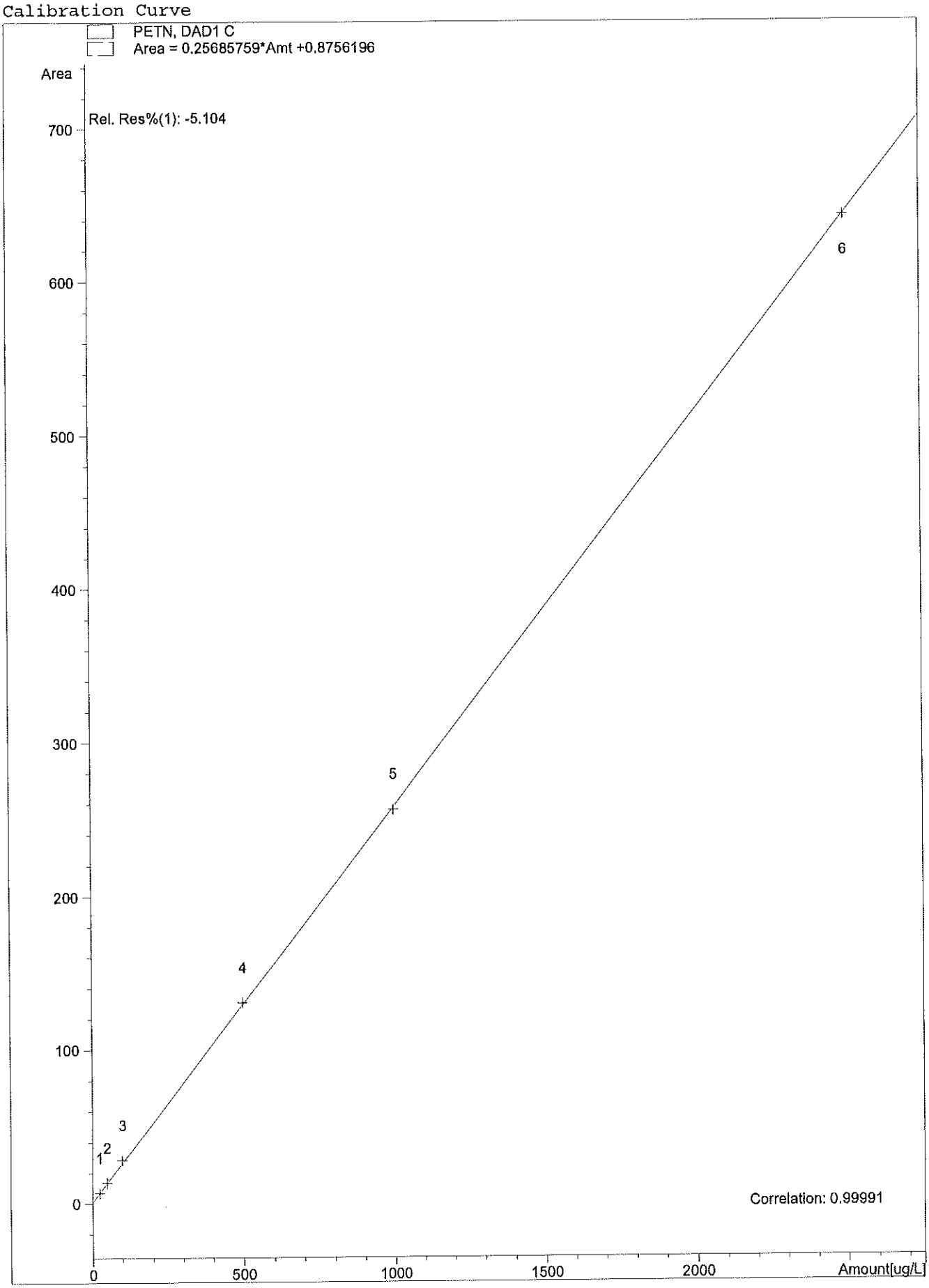
Calibration Curve



Calibration Curve



Calibration Curve



Data Review Report

Printed: 04/01/2021 5:06 pr

Analysis	Analyte	CalResult	True Value	% D	% Rec
Lab ID: S1C0592-CAL1 Cal Standard					
8330 Explosives	1,3,5-Trinitrobenzene	2496.88	2500.0	-0.12	99.88
	1,3-Dinitrobenzene	2497.66	2500.0	-0.09	99.91
	2,4,6-Trinitrotoluene	2498.29	2500.0	-0.07	99.93
	2,4-Dinitrotoluene	2500.29	2500.0	0.01	100.01
	2,6-Dinitrotoluene	2499.72	2500.0	-0.01	99.99
	2-Amino-4,6-dinitrotoluene (2-am-dnt)	2499.83	2500.0	-0.01	99.99
	2-Nitrotoluene	2496.82	2500.0	-0.13	99.87
	3-Nitrotoluene	2497.31	2500.0	-0.11	99.89
	4-Amino-2,6-dinitrotoluene	2502.09	2500.0	0.08	100.08
	4-Nitrotoluene	2497.38	2500.0	-0.10	99.90
	HMX	2501.86	2500.0	0.07	100.07
	Nitrobenzene	2497.84	2500.0	-0.09	99.91
	PETN	2497.12	2500.0	-0.12	99.88
	RDX	2509.44	2500.0	0.38	100.38
	Tetryl	2497.22	2500.0	-0.11	99.89
	1,2-Dinitrobenzene	2494.70	2500.0	-0.21	99.79
8330 Explosives DOD	1,3,5-Trinitrobenzene	2496.88	2500.0	-0.12	99.88
	1,3-Dinitrobenzene	2497.66	2500.0	-0.09	99.91
	2,4,6-Trinitrotoluene	2498.29	2500.0	-0.07	99.93
	2,4-Dinitrotoluene	2500.29	2500.0	0.01	100.01
	2,6-Dinitrotoluene	2499.72	2500.0	-0.01	99.99
	2-Amino-4,6-dinitrotoluene (2-am-dnt)	2499.83	2500.0	-0.01	99.99
	2-Nitrotoluene	2496.82	2500.0	-0.13	99.87
	3-Nitrotoluene	2497.31	2500.0	-0.11	99.89
	4-Amino-2,6-dinitrotoluene	2502.09	2500.0	0.08	100.08
	4-Nitrotoluene	2497.38	2500.0	-0.10	99.90
	HMX	2501.86	2500.0	0.07	100.07
	Nitrobenzene	2497.84	2500.0	-0.09	99.91
	PETN	2497.12	2500.0	-0.12	99.88
	RDX	2509.44	2500.0	0.38	100.38
	Tetryl	2497.22	2500.0	-0.11	99.89
	1,2-Dinitrobenzene	2494.70	2500.0	-0.21	99.79
Lab ID: S1C0592-CAL2 Cal Standard					
8330 Explosives	1,3,5-Trinitrobenzene	1001.49	1000.0	0.15	100.15
	1,3-Dinitrobenzene	1001.42	1000.0	0.14	100.14
	2,4,6-Trinitrotoluene	1002.76	1000.0	0.28	100.28
	2,4-Dinitrotoluene	998.30	1000.0	-0.17	99.83
	2,6-Dinitrotoluene	999.64	1000.0	-0.04	99.96
	2-Amino-4,6-dinitrotoluene (2-am-dnt)	1002.11	1000.0	0.21	100.21
	2-Nitrotoluene	1002.35	1000.0	0.24	100.24
	3-Nitrotoluene	1000.83	1000.0	0.08	100.08
	4-Amino-2,6-dinitrotoluene	1003.51	1000.0	0.35	100.35
	4-Nitrotoluene	1002.47	1000.0	0.25	100.25
	HMX	1002.34	1000.0	0.23	100.23
	Nitrobenzene	1002.30	1000.0	0.23	100.23
	PETN	993.36	1000.0	-0.66	99.34
	RDX	998.12	1000.0	-0.19	99.81

Data Review Report

(Continued)

Analysis	Analyte	CalResult	True Value	% D	% Rec
Lab ID: S1C0592-CAL2 Cal Standard (Continued)					
8330 Explosives (Continued)	Tetryl	1002.46	1000.0	0.25	100.25
	1,2-Dinitrobenzene	1004.31	1000.0	0.43	100.43
8330 Explosives DOD	1,3,5-Trinitrobenzene	1001.49	1000.0	0.15	100.15
	1,3-Dinitrobenzene	1001.42	1000.0	0.14	100.14
	2,4,6-Trinitrotoluene	1002.76	1000.0	0.28	100.28
	2,4-Dinitrotoluene	998.30	1000.0	-0.17	99.83
	2,6-Dinitrotoluene	999.64	1000.0	-0.04	99.96
	2-Amino-4,6-dinitrotoluene (2-am-dnt)	1002.11	1000.0	0.21	100.21
	2-Nitrotoluene	1002.35	1000.0	0.24	100.24
	3-Nitrotoluene	1000.83	1000.0	0.08	100.08
	4-Amino-2,6-dinitrotoluene	1003.51	1000.0	0.35	100.35
	4-Nitrotoluene	1002.47	1000.0	0.25	100.25
	HMX	1002.34	1000.0	0.23	100.23
	Nitrobenzene	1002.30	1000.0	0.23	100.23
	PETN	993.36	1000.0	-0.66	99.34
	RDX	998.12	1000.0	-0.19	99.81
	Tetryl	1002.46	1000.0	0.25	100.25
	1,2-Dinitrobenzene	1004.31	1000.0	0.43	100.43
Lab ID: S1C0592-CAL3 Cal Standard					
8330 Explosives	1,3,5-Trinitrobenzene	501.85	500.00	0.37	100.37
	1,3-Dinitrobenzene	501.36	500.00	0.27	100.27
	2,4,6-Trinitrotoluene	498.68	500.00	-0.26	99.74
	2,4-Dinitrotoluene	501.15	500.00	0.23	100.23
	2,6-Dinitrotoluene	499.98	500.00	0.00	100.00
	2-Amino-4,6-dinitrotoluene (2-am-dnt)	498.96	500.00	-0.21	99.79
	2-Nitrotoluene	501.76	500.00	0.35	100.35
	3-Nitrotoluene	501.60	500.00	0.32	100.32
	4-Amino-2,6-dinitrotoluene	494.92	500.00	-1.02	98.98
	4-Nitrotoluene	499.87	500.00	-0.03	99.97
	HMX	497.00	500.00	-0.60	99.40
	Nitrobenzene	500.24	500.00	0.05	100.05
	PETN	504.81	500.00	0.96	100.96
	RDX	496.88	500.00	-0.62	99.38
	Tetryl	501.17	500.00	0.23	100.23
	1,2-Dinitrobenzene	501.51	500.00	0.30	100.30
8330 Explosives DOD	1,3,5-Trinitrobenzene	501.85	500.00	0.37	100.37
	1,3-Dinitrobenzene	501.36	500.00	0.27	100.27
	2,4,6-Trinitrotoluene	498.68	500.00	-0.26	99.74
	2,4-Dinitrotoluene	501.15	500.00	0.23	100.23
	2,6-Dinitrotoluene	499.98	500.00	0.00	100.00
	2-Amino-4,6-dinitrotoluene (2-am-dnt)	498.96	500.00	-0.21	99.79
	2-Nitrotoluene	501.76	500.00	0.35	100.35
	3-Nitrotoluene	501.60	500.00	0.32	100.32
	4-Amino-2,6-dinitrotoluene	494.92	500.00	-1.02	98.98
	4-Nitrotoluene	499.87	500.00	-0.03	99.97
	HMX	497.00	500.00	-0.60	99.40
	Nitrobenzene	500.24	500.00	0.05	100.05

Data Review Report
(Continued)

Analysis	Analyte	CalResult	True Value	% D	% Rec
Lab ID: S1C0592-CAL3 Cal Standard (Continued)					
8330 Explosives DOD (Continue	PETN	504.81	500.00	0.96	100.96
	RDX	496.88	500.00	-0.62	99.38
	Tetryl	501.17	500.00	0.23	100.23
	1,2-Dinitrobenzene	501.51	500.00	0.30	100.30
Lab ID: S1C0592-CAL4 Cal Standard					
8330 Explosives	1,3,5-Trinitrobenzene	99.81	100.00	-0.19	99.81
	1,3-Dinitrobenzene	99.63	100.00	-0.37	99.63
	2,4,6-Trinitrotoluene	100.01	100.00	0.01	100.01
	2,4-Dinitrotoluene	100.18	100.00	0.18	100.18
	2,6-Dinitrotoluene	100.61	100.00	0.61	100.61
	2-Amino-4,6-dinitrotoluene (2-am-dnt)	99.14	100.00	-0.86	99.14
	2-Nitrotoluene	99.32	100.00	-0.68	99.32
	3-Nitrotoluene	100.90	100.00	0.90	100.90
	4-Amino-2,6-dinitrotoluene	99.27	100.00	-0.73	99.27
	4-Nitrotoluene	100.64	100.00	0.64	100.64
	HMX	98.76	100.00	-1.24	98.76
	Nitrobenzene	99.60	100.00	-0.40	99.60
	PETN	106.69	100.00	6.69	106.69
	RDX	94.28	100.00	-5.72	94.28
	Tetryl	99.12	100.00	-0.88	99.12
	1,2-Dinitrobenzene	99.39	100.00	-0.61	99.39
8330 Explosives DOD	1,3,5-Trinitrobenzene	99.81	100.00	-0.19	99.81
	1,3-Dinitrobenzene	99.63	100.00	-0.37	99.63
	2,4,6-Trinitrotoluene	100.01	100.00	0.01	100.01
	2,4-Dinitrotoluene	100.18	100.00	0.18	100.18
	2,6-Dinitrotoluene	100.61	100.00	0.61	100.61
	2-Amino-4,6-dinitrotoluene (2-am-dnt)	99.14	100.00	-0.86	99.14
	2-Nitrotoluene	99.32	100.00	-0.68	99.32
	3-Nitrotoluene	100.90	100.00	0.90	100.90
	4-Amino-2,6-dinitrotoluene	99.27	100.00	-0.73	99.27
	4-Nitrotoluene	100.64	100.00	0.64	100.64
	HMX	98.76	100.00	-1.24	98.76
	Nitrobenzene	99.60	100.00	-0.40	99.60
	PETN	106.69	100.00	6.69	106.69
	RDX	94.28	100.00	-5.72	94.28
	Tetryl	99.12	100.00	-0.88	99.12
	1,2-Dinitrobenzene	99.39	100.00	-0.61	99.39
Lab ID: S1C0592-CAL5 Cal Standard					
8330 Explosives	1,3,5-Trinitrobenzene	50.04	50.000	0.08	100.08
	1,3-Dinitrobenzene	49.84	50.000	-0.32	99.68
	2,4,6-Trinitrotoluene	50.48	50.000	0.96	100.96
	2,4-Dinitrotoluene	50.29	50.000	0.59	100.59
	2,6-Dinitrotoluene	50.38	50.000	0.77	100.77
	2-Amino-4,6-dinitrotoluene (2-am-dnt)	49.49	50.000	-1.02	98.98
	2-Nitrotoluene	49.39	50.000	-1.21	98.79
	3-Nitrotoluene	49.32	50.000	-1.36	98.64

Data Review Report

(Continued)

Analysis	Analyte	CalResult	True Value	% D	% Rec
Lab ID: S1C0592-CAL5 Cal Standard (Continued)					
8330 Explosives (Continued)	4-Amino-2,6-dinitrotoluene	49.76	50.000	-0.49	99.51
	4-Nitrotoluene	49.65	50.000	-0.69	99.31
	HMX	49.30	50.000	-1.40	98.60
	Nitrobenzene	49.94	50.000	-0.12	99.88
	PETN	49.46	50.000	-1.07	98.93
	RDX	49.47	50.000	-1.06	98.94
	Tetryl	49.82	50.000	-0.36	99.64
	1,2-Dinitrobenzene	50.12	50.000	0.25	100.25
8330 Explosives DOD	1,3,5-Trinitrobenzene	50.04	50.000	0.08	100.08
	1,3-Dinitrobenzene	49.84	50.000	-0.32	99.68
	2,4,6-Trinitrotoluene	50.48	50.000	0.96	100.96
	2,4-Dinitrotoluene	50.29	50.000	0.59	100.59
	2,6-Dinitrotoluene	50.38	50.000	0.77	100.77
	2-Amino-4,6-dinitrotoluene (2-am-dnt)	49.49	50.000	-1.02	98.98
	2-Nitrotoluene	49.39	50.000	-1.21	98.79
	3-Nitrotoluene	49.32	50.000	-1.36	98.64
	4-Amino-2,6-dinitrotoluene	49.76	50.000	-0.49	99.51
	4-Nitrotoluene	49.65	50.000	-0.69	99.31
	HMX	49.30	50.000	-1.40	98.60
	Nitrobenzene	49.94	50.000	-0.12	99.88
	PETN	49.46	50.000	-1.07	98.93
	RDX	49.47	50.000	-1.06	98.94
	Tetryl	49.82	50.000	-0.36	99.64
	1,2-Dinitrobenzene	50.12	50.000	0.25	100.25
Lab ID: S1C0592-CAL6 Cal Standard					
8330 Explosives	1,3,5-Trinitrobenzene	24.93	25.000	-0.29	99.71
	1,3-Dinitrobenzene	25.09	25.000	0.37	100.37
	2,4,6-Trinitrotoluene	24.77	25.000	-0.91	99.09
	2,4-Dinitrotoluene	24.79	25.000	-0.84	99.16
	2,6-Dinitrotoluene	24.67	25.000	-1.32	98.68
	2-Amino-4,6-dinitrotoluene (2-am-dnt)	25.47	25.000	1.88	101.88
	2-Nitrotoluene	25.36	25.000	1.43	101.43
	3-Nitrotoluene	25.04	25.000	0.16	100.16
	4-Amino-2,6-dinitrotoluene	25.45	25.000	1.80	101.80
	4-Nitrotoluene	24.98	25.000	-0.07	99.93
	HMX	25.73	25.000	2.93	102.93
	Nitrobenzene	25.08	25.000	0.32	100.32
	PETN	23.55	25.000	-5.80	94.20
	RDX	26.80	25.000	7.21	107.21
	Tetryl	25.22	25.000	0.87	100.87
	1,2-Dinitrobenzene	24.96	25.000	-0.16	99.84
8330 Explosives DOD	1,3,5-Trinitrobenzene	24.93	25.000	-0.29	99.71
	1,3-Dinitrobenzene	25.09	25.000	0.37	100.37
	2,4,6-Trinitrotoluene	24.77	25.000	-0.91	99.09
	2,4-Dinitrotoluene	24.79	25.000	-0.84	99.16
	2,6-Dinitrotoluene	24.67	25.000	-1.32	98.68
	2-Amino-4,6-dinitrotoluene (2-am-dnt)	25.47	25.000	1.88	101.88

Data Review Report

(Continued)

Analysis	Analyte	CalResult	True Value	% D	% Rec
Lab ID: S1C0592-CAL6 Cal Standard (Continued)					
8330 Explosives DOD (Continue	2-Nitrotoluene	25.36	25.000	1.43	101.43
	3-Nitrotoluene	25.04	25.000	0.16	100.16
	4-Amino-2,6-dinitrotoluene	25.45	25.000	1.80	101.80
	4-Nitrotoluene	24.98	25.000	-0.07	99.93
	HMX	25.73	25.000	2.93	102.93
	Nitrobenzene	25.08	25.000	0.32	100.32
	PETN	23.55	25.000	-5.80	94.20
	RDX	26.80	25.000	7.21	107.21
	Tetryl	25.22	25.000	0.87	100.87
	1,2-Dinitrobenzene	24.96	25.000	-0.16	99.84

Calibration Table

General Calibration Setting

Calib. Data Modified : Thursday, April 01, 2021 11:41:31 PM
Signals calculated separately : No

Rel. Reference Window : 0.000 %
Abs. Reference Window : 0.400 min
Rel. Non-ref. Window : 0.000 %
Abs. Non-ref. Window : 0.500 min
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: Yes, even for non-identified peaks

Curve Type : Linear
Origin : Ignored
Weight : Linear (Resp)

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal Details

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

Overview Table

RT	Sig	Lvl	Amount [ug/L]	Area	Rsp.Factor	Ref	ISTD	#	Compound
8.021	1	1	25.00000	5.32212	4.69738	No	No		HMX
		2	50.00000	9.34768	5.34892				
		3	100.00000	17.84794	5.60289				
		4	500.00000	85.52922	5.84596				
		5	1000.00000	168.58925	5.93158				

Method C:\CHEM32\1\METHODS\8330DATA.M

RT	Sig	Lvl	Amount [ug/L]	Area	Rsp.Factor	Ref	ISTD	#	Compound
		6	2500.00000	416.07462	6.00854				
11.823	1	1	25.00000	4.70871	5.30931	No	No		RDX
		2	50.00000	8.91248	5.61011				
		3	100.00000	18.11518	5.52023				
		4	500.00000	90.82465	5.50511				
		5	1000.00000	181.19002	5.51907				
		6	2500.00000	452.15326	5.52910				
12.273	1	1	25.00000	10.34519	2.41658	No	No		1,3,5-Trinitrobenzene
		2	50.00000	20.53619	2.43473				
		3	100.00000	41.63564	2.40179				
		4	500.00000	209.51237	2.38649				
		5	1000.00000	418.22992	2.39103				
		6	2500.00000	1040.80347	2.40199				
14.060	1	1	25.00000	6.44639	3.87814	No	No		1,2-Dinitrobenzene
		2	50.00000	13.03892	3.83467				
		3	100.00000	26.29048	3.80366				
		4	500.00000	132.34601	3.77798				
		5	1000.00000	265.00568	3.77350				
		6	2500.00000	660.51001	3.78495				
15.028	1	1	25.00000	14.39548	1.73666	No	No		1,3-Dinitrobenzene
		2	50.00000	28.83583	1.73395				
		3	100.00000	58.37860	1.71296				
		4	500.00000	292.90503	1.70704				
		5	1000.00000	586.66351	1.70455				
		6	2500.00000	1461.89624	1.71011				
15.960	1	1	25.00000	9.07996	2.75332	No	No		Nitrobenzene
		2	50.00000	18.65527	2.68021				
		3	100.00000	37.55727	2.66260				
		4	500.00000	191.26222	2.61421				
		5	1000.00000	383.66293	2.60645				
		6	2500.00000	960.26160	2.60346				
19.365	1	1	25.00000	10.42818	2.39735	No	No		2,4,6-Trinitrotoluene
		2	50.00000	20.75630	2.40891				
		3	100.00000	40.49722	2.46931				
		4	500.00000	200.41702	2.49480				
		5	1000.00000	401.36154	2.49152				
		6	2500.00000	997.40802	2.50650				
20.006	1	1	25.00000	7.00228	3.57027	No	No		Tetryl
		2	50.00000	14.38133	3.47673				
		3	100.00000	29.51302	3.38833				
		4	500.00000	150.90971	3.31324				
		5	1000.00000	305.48425	3.27349				
		6	2500.00000	762.61792	3.27818				
22.156	1	1	25.00000	6.53700	3.82438	No	No		2,6-Dinitrotoluene
		2	50.00000	13.08433	3.82137				
		3	100.00000	26.52874	3.76950				
		4	500.00000	132.51852	3.77306				
		5	1000.00000	266.26199	3.75570				
		6	2500.00000	663.05798	3.77041				
23.499	1	1	25.00000	13.12327	1.90501	No	No		2,4-Dinitrotoluene
		2	50.00000	26.06503	1.91828				
		3	100.00000	52.54412	1.90316				
		4	500.00000	263.64203	1.89651				
		5	1000.00000	529.12445	1.88991				
		6	2500.00000	1317.32104	1.89779				
24.988	1	1	25.00000	5.29878	4.71807	No	No		2-Nitrotoluene
		2	50.00000	10.99025	4.54949				

Method C:\CHEM32\1\METHODS\8330DATA.M

RT	Sig	Lvl	Amount [ug/L]	Area	Rsp.Factor	Ref	ISTD	#	Compound
		3	100.00000	22.09312	4.52630				
		4	500.00000	111.69813	4.47635				
		5	1000.00000	225.40410	4.43648				
		6	2500.00000	561.99573	4.44843				
27.249	1	1	25.00000	4.56352	5.47822	No	No		4-Nitrotoluene
		2	50.00000	9.25493	5.40253				
		3	100.00000	18.31980	5.45857				
		4	500.00000	92.20401	5.42276				
		5	1000.00000	183.38731	5.45294				
		6	2500.00000	457.93475	5.45929				
29.134	1	1	25.00000	6.18038	4.04506	No	No		3-Nitrotoluene
		2	50.00000	12.38534	4.03703				
		3	100.00000	25.04603	3.99265				
		4	500.00000	125.15771	3.99496				
		5	1000.00000	250.53180	3.99151				
		6	2500.00000	623.39941	4.01027				
30.022	1	1	25.00000	5.90509	4.23364	No	No		4-Amino-2,6-Dinitrotoluene
		2	50.00000	11.50086	4.34750				
		3	100.00000	23.23747	4.30340				
		4	500.00000	117.41345	4.25846				
		5	1000.00000	234.60602	4.26247				
		6	2500.00000	584.76221	4.27524				
32.661	1	1	25.00000	8.68584	2.87825	No	No		2-Amino-4,6-Dinitrotoluene
		2	50.00000	17.54877	2.84920				
		3	100.00000	35.86147	2.78851				
		4	500.00000	179.68408	2.78266				
		5	1000.00000	358.63574	2.78834				
		6	2500.00000	894.48169	2.79491				

Peak Sum Table

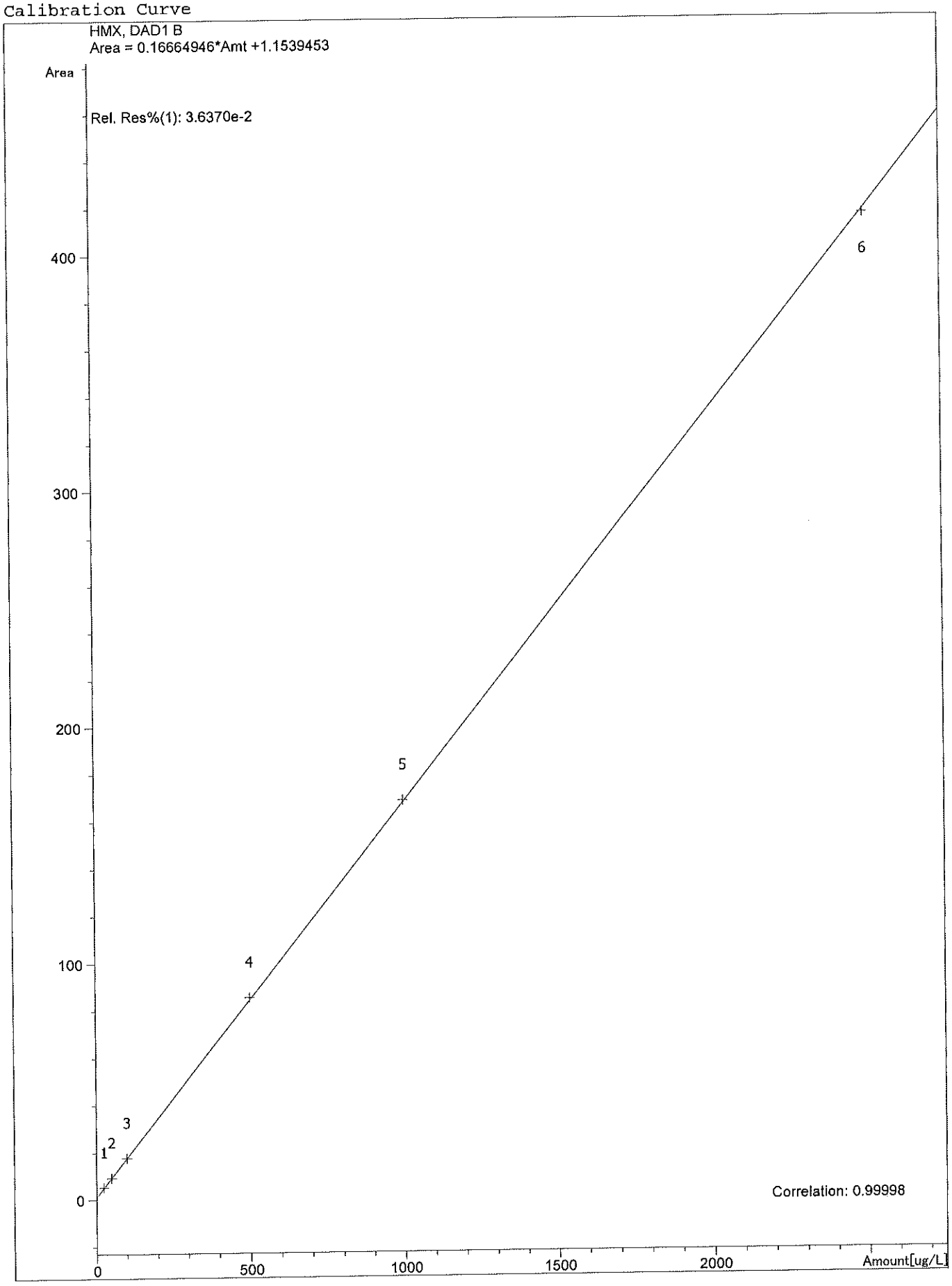
No Entries in table

1 Warnings or Errors :

Warning : Overlapping peak time windows at 11.823 min, signal 1

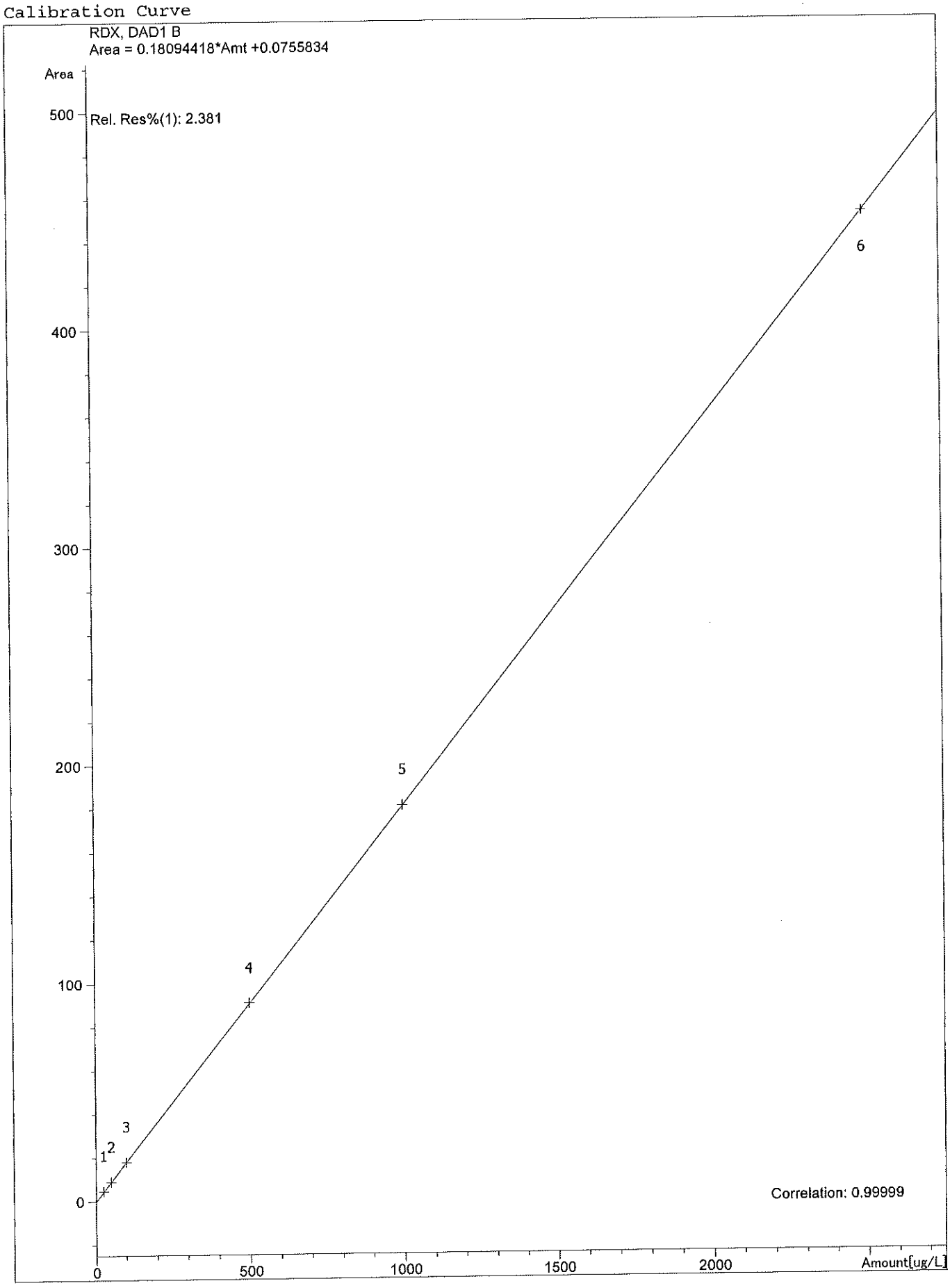
Print of window 66: Calibration Curve

Calibration Curve



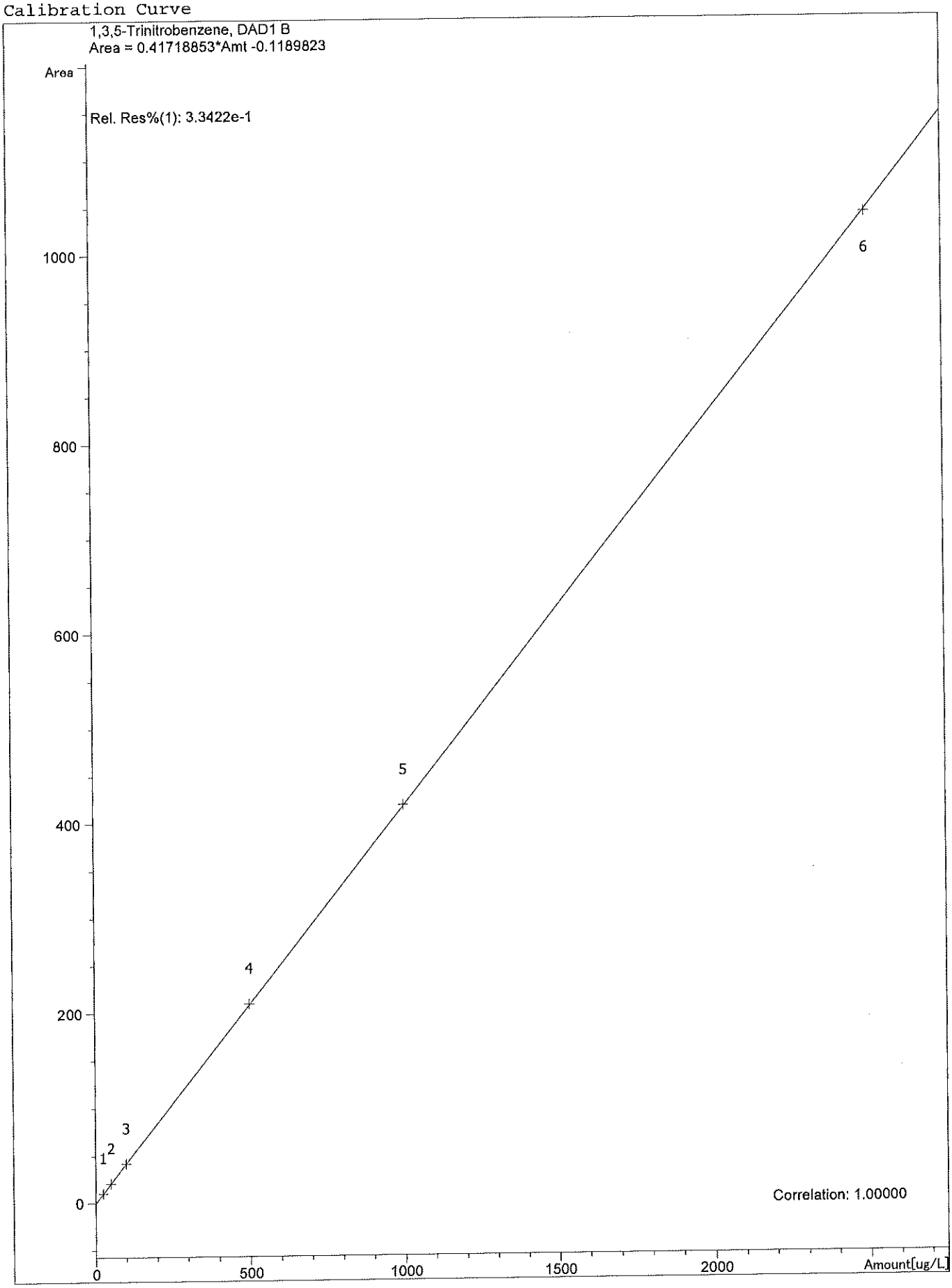
Print of window 66: Calibration Curve

Calibration Curve



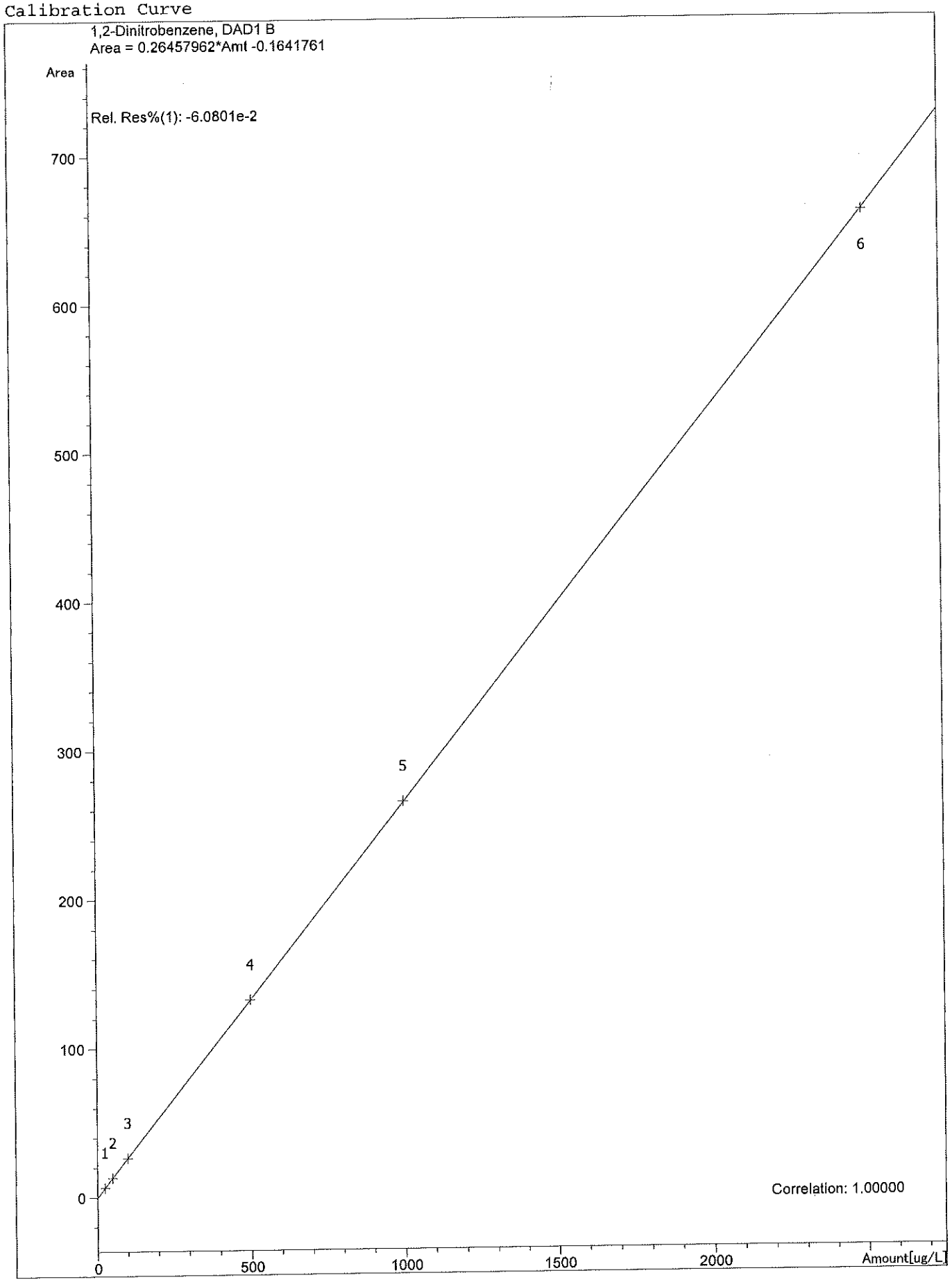
Print of window 66: Calibration Curve

Calibration Curve



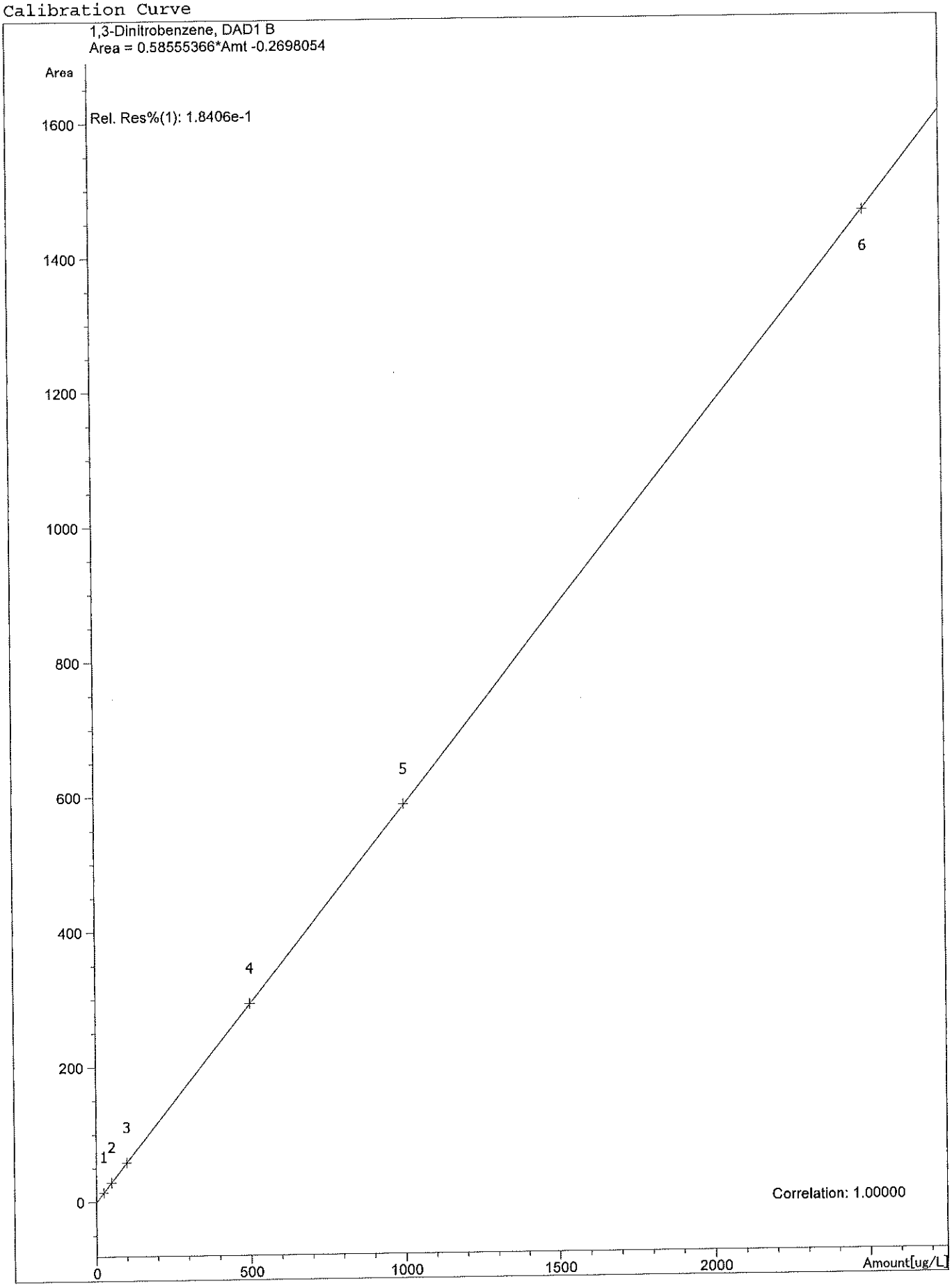
Print of window 66: Calibration Curve

Calibration Curve



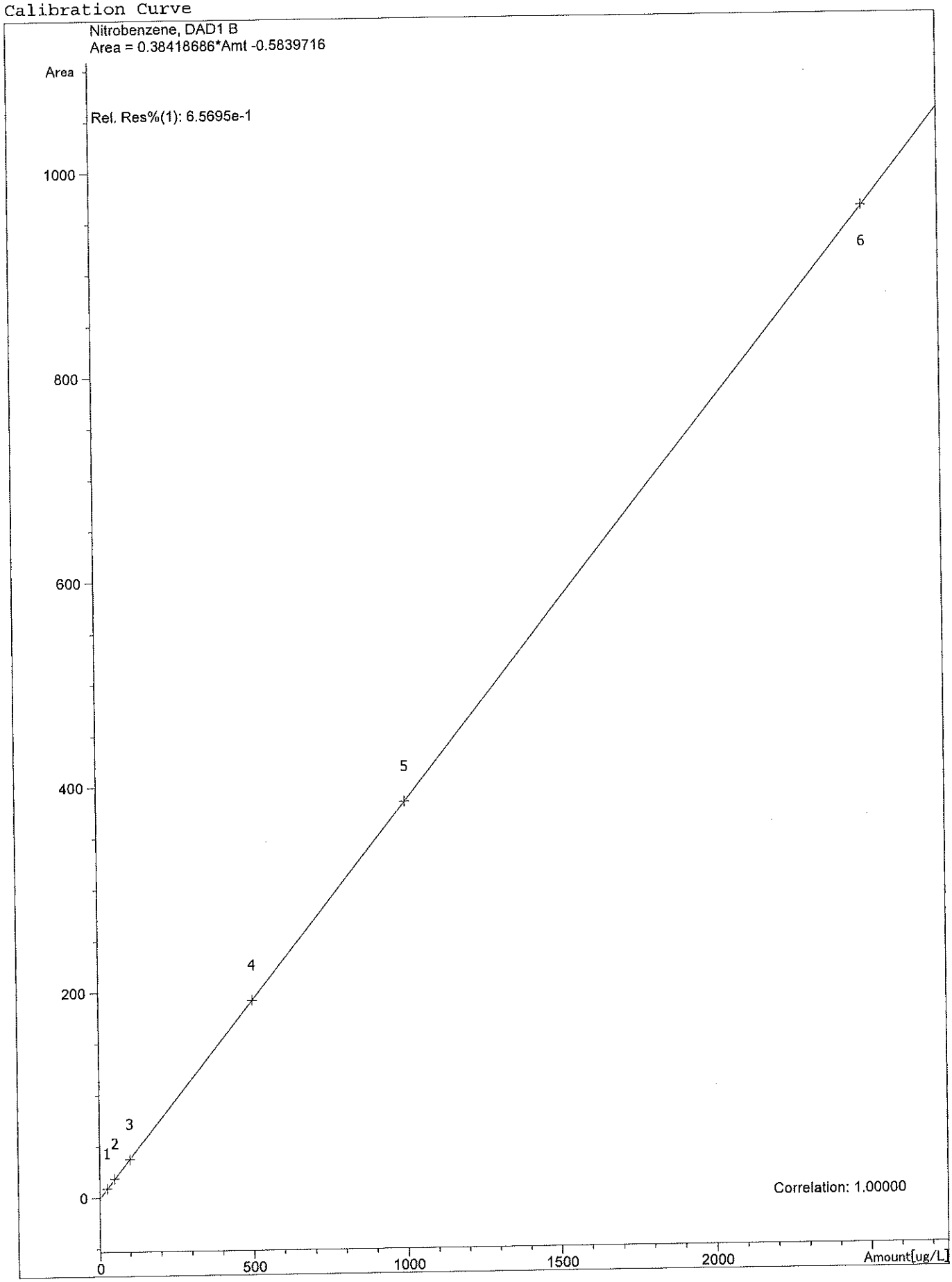
Print of window 66: Calibration Curve

Calibration Curve

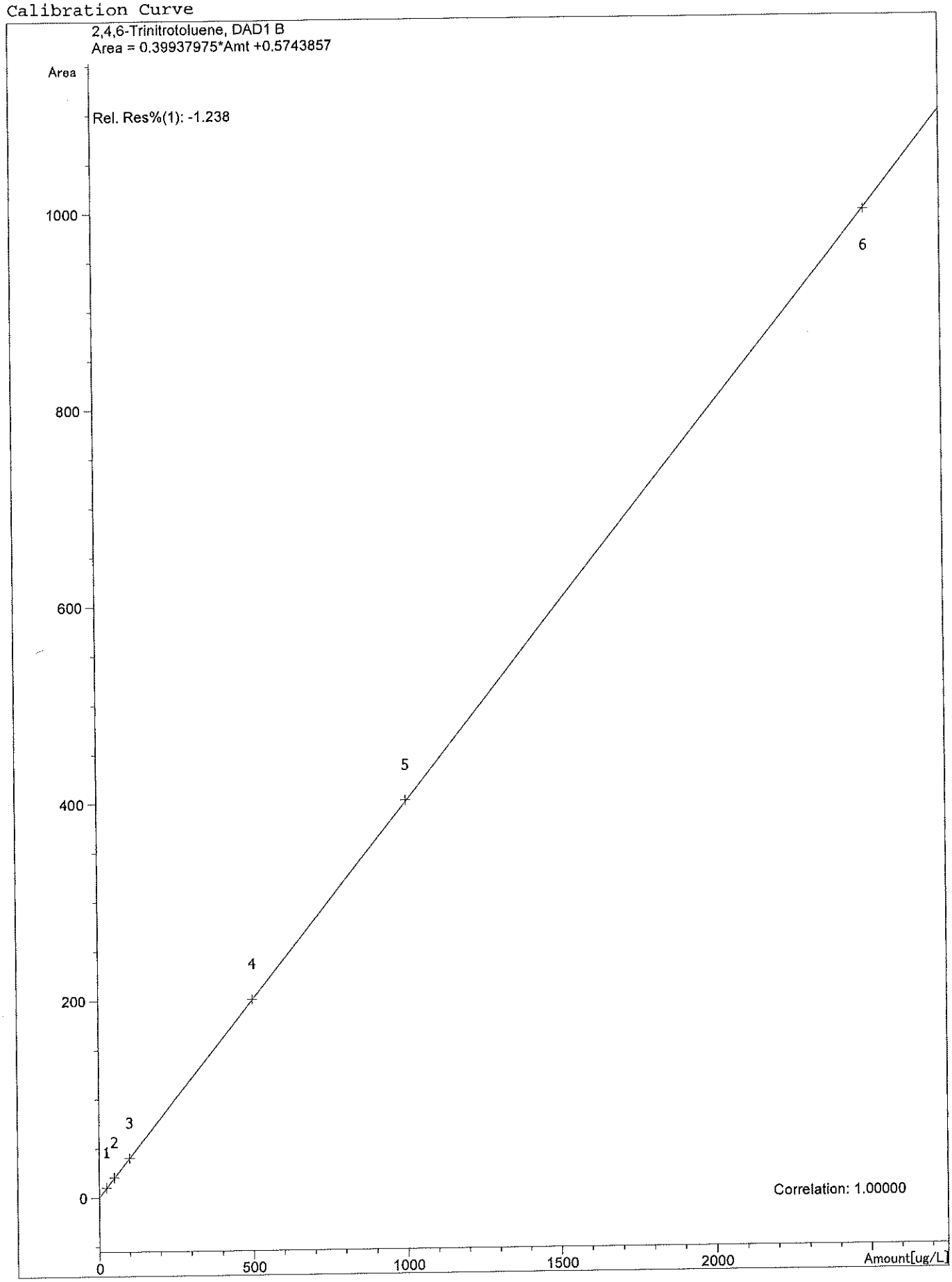


Print of window 66: Calibration Curve

Calibration Curve

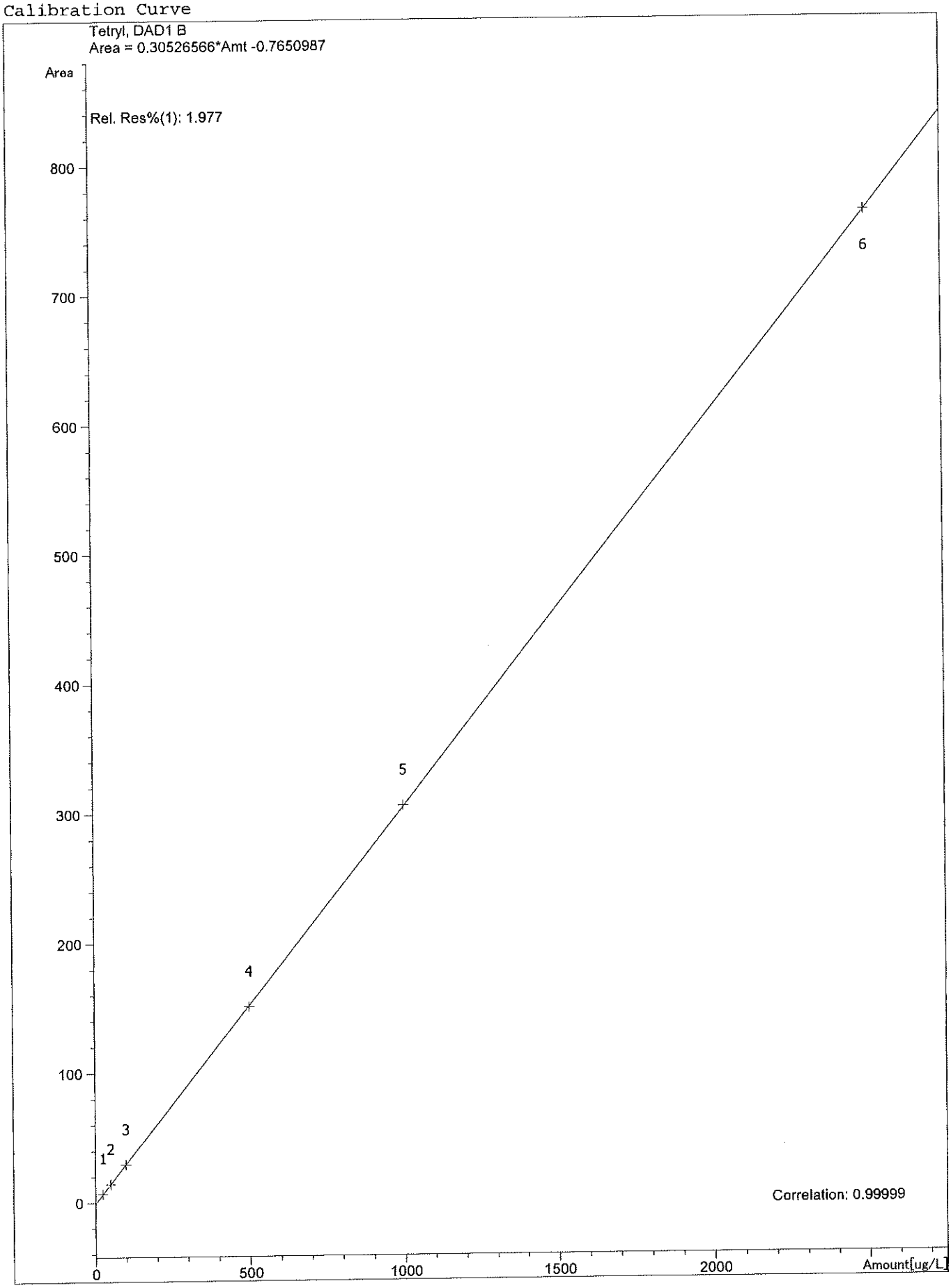


Calibration Curve



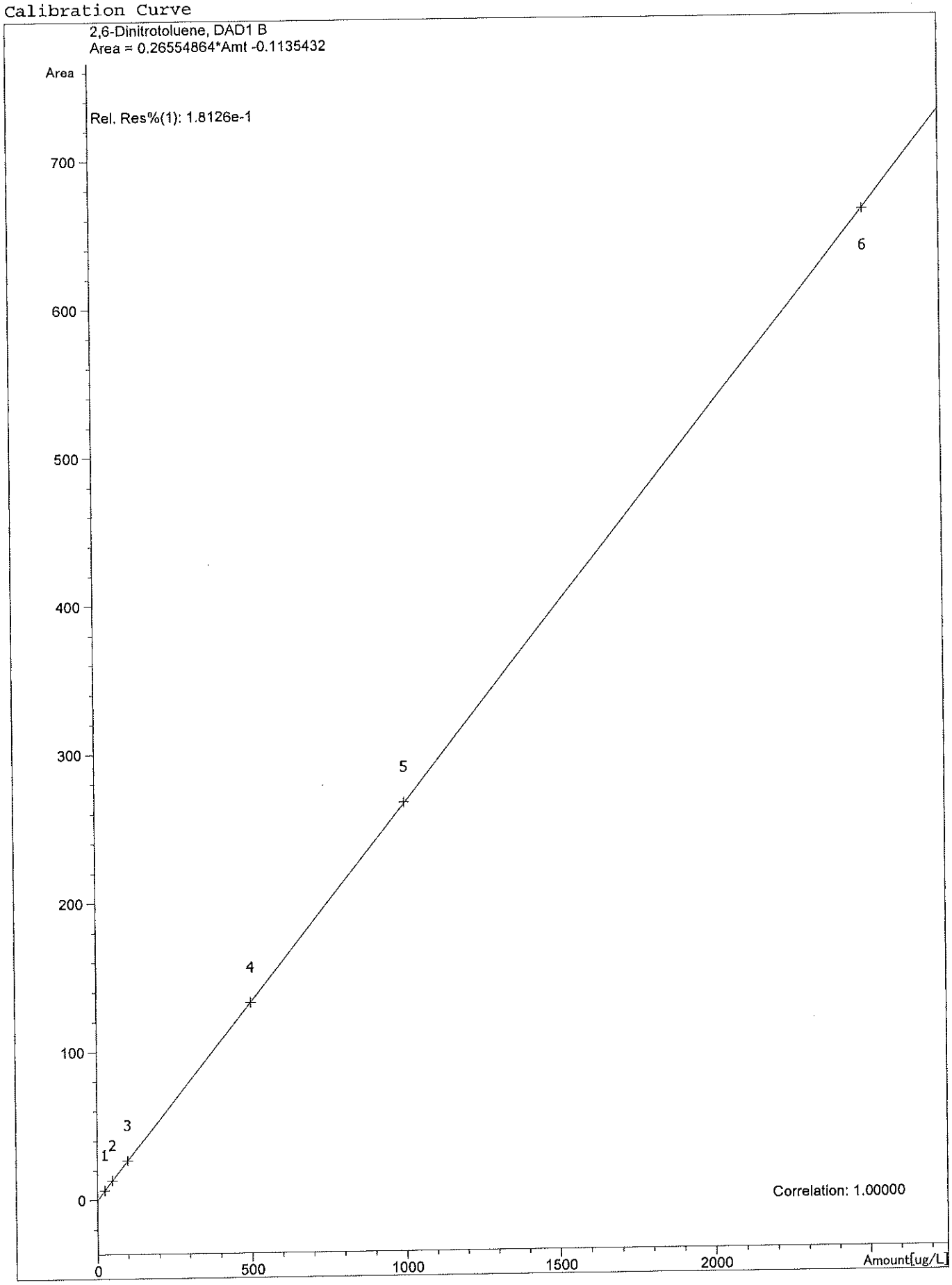
Print of window 66: Calibration Curve

Calibration Curve



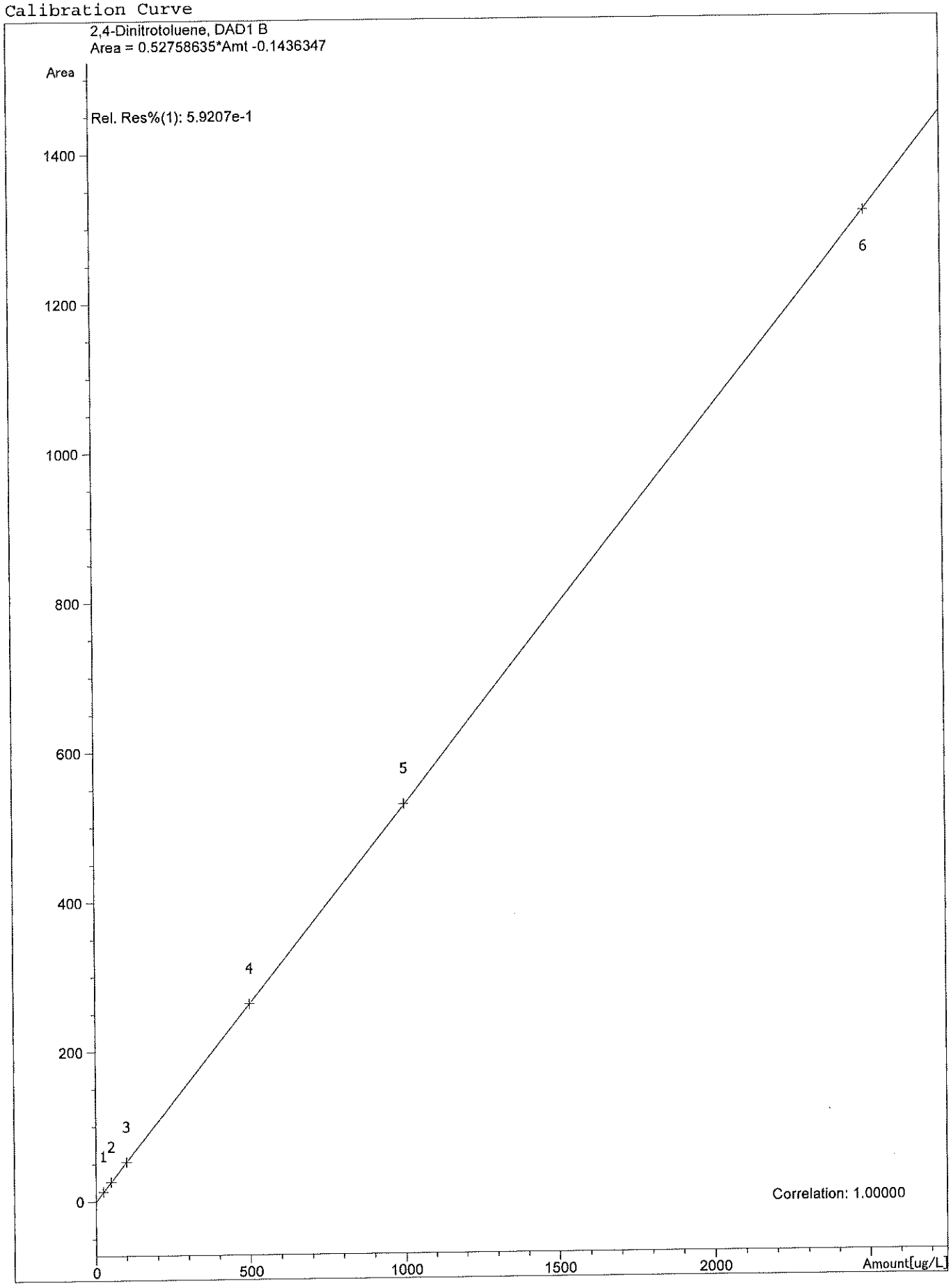
Print of window 66: Calibration Curve

Calibration Curve



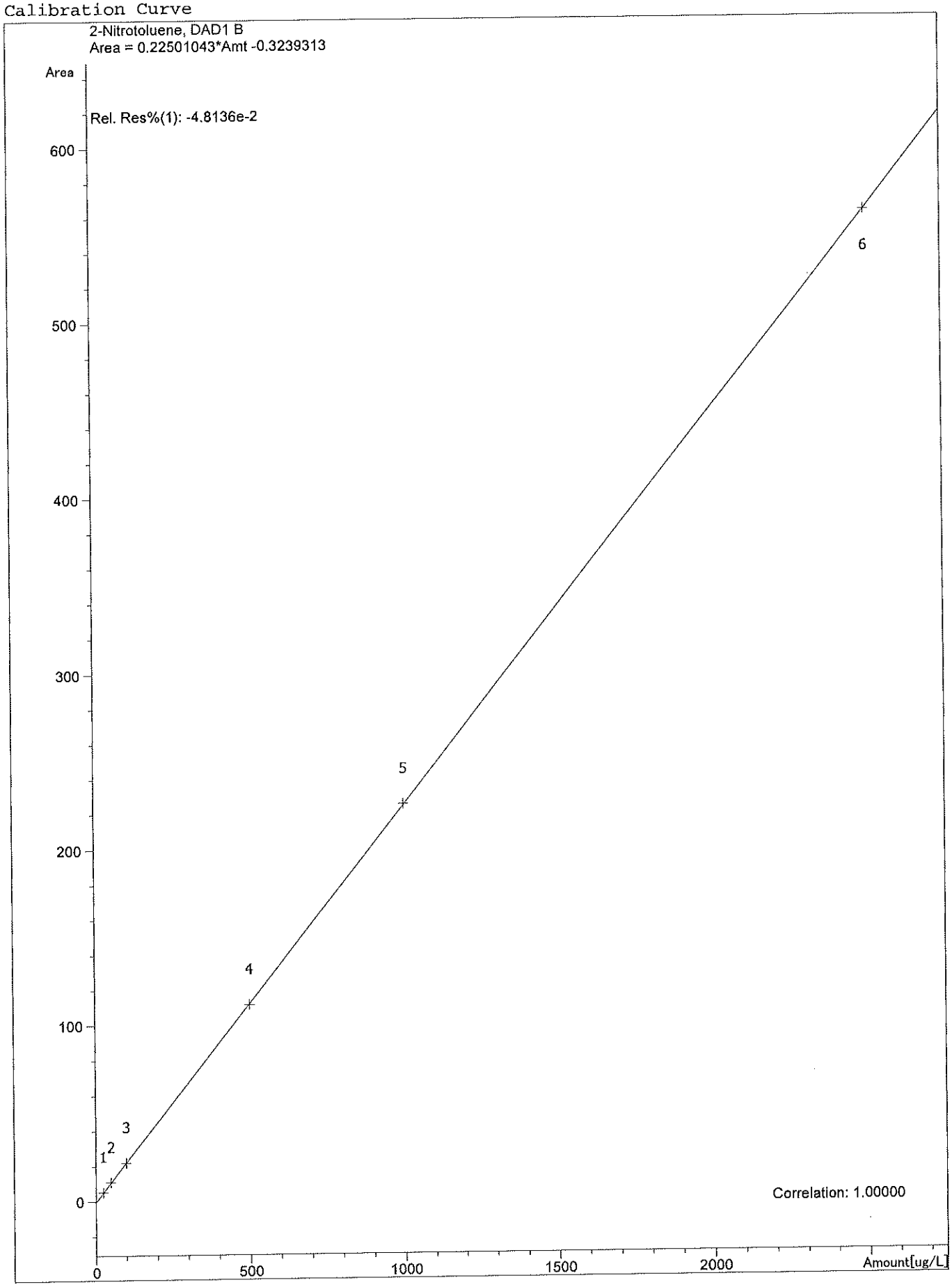
Print of window 66: Calibration Curve

Calibration Curve



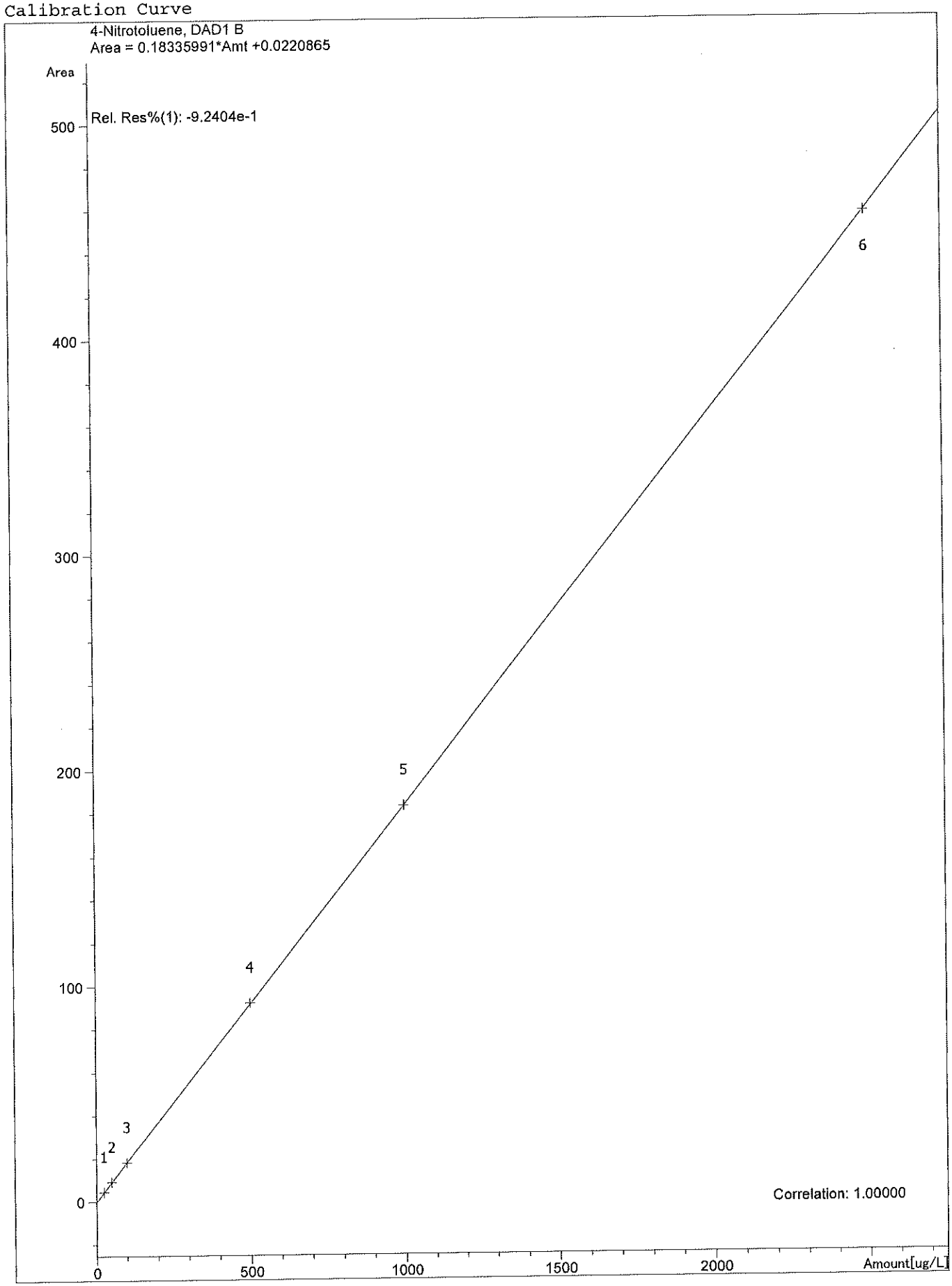
Print of window 66: Calibration Curve

Calibration Curve



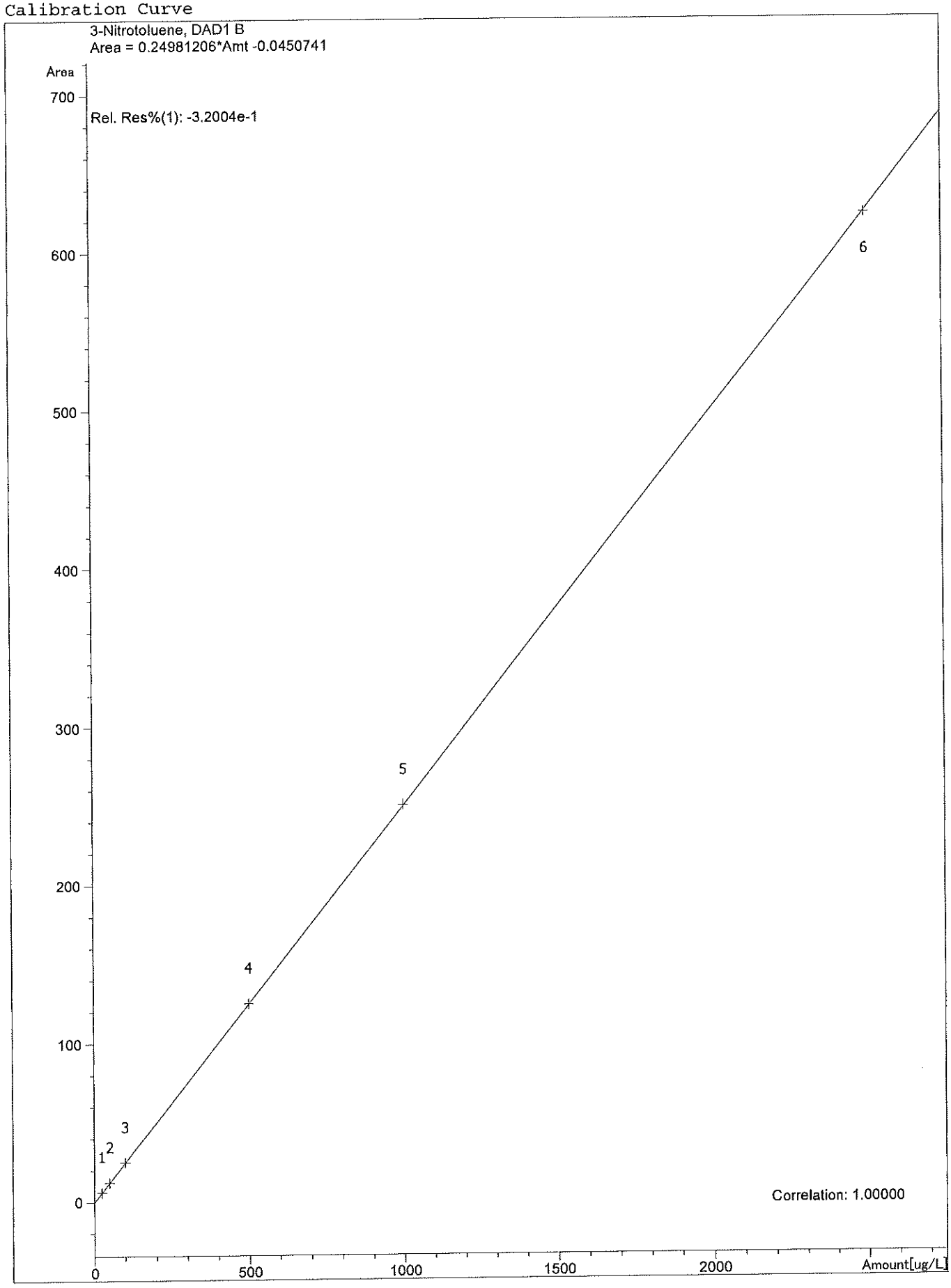
Print of window 66: Calibration Curve

Calibration Curve

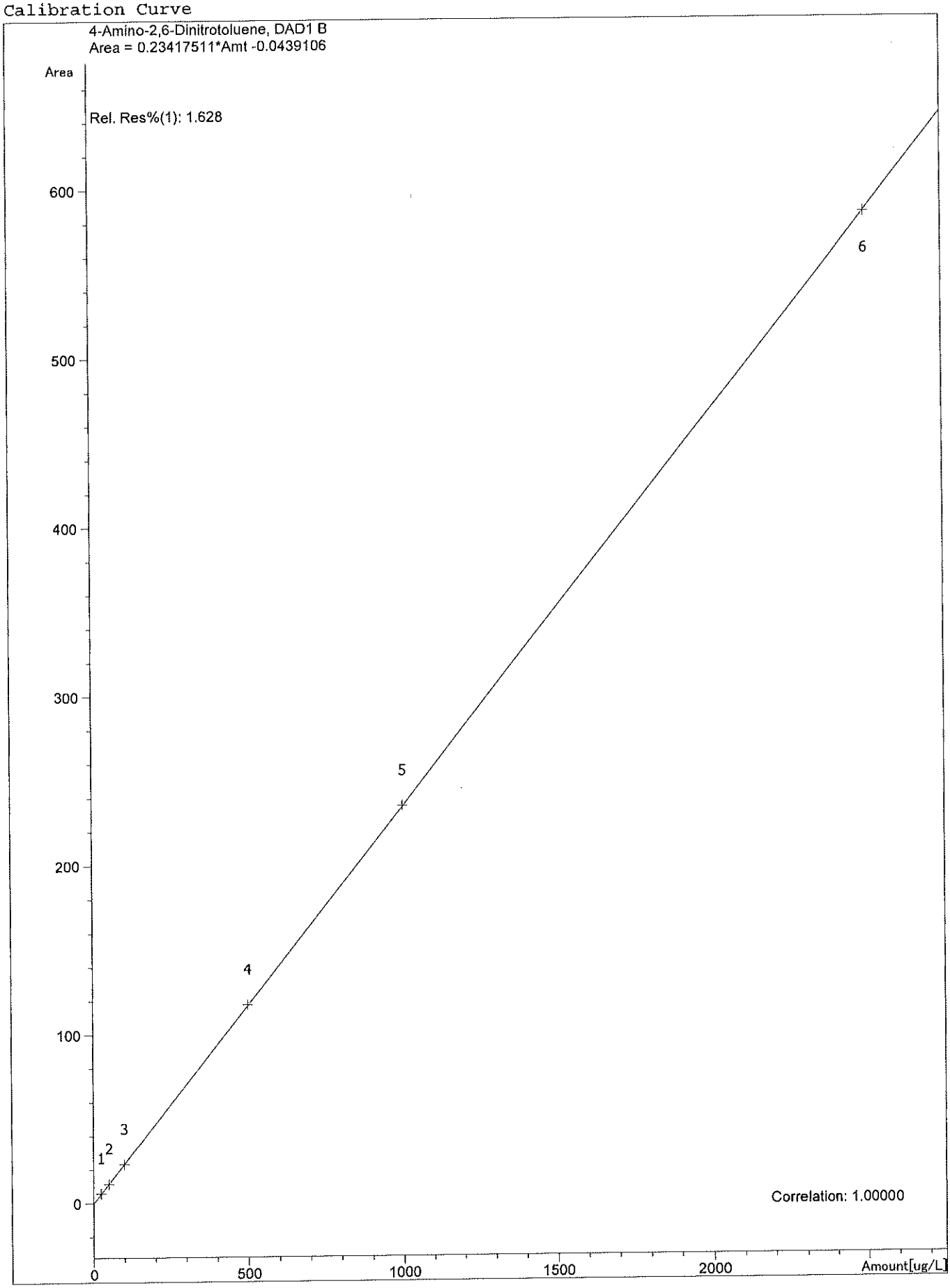


Print of window 66: Calibration Curve

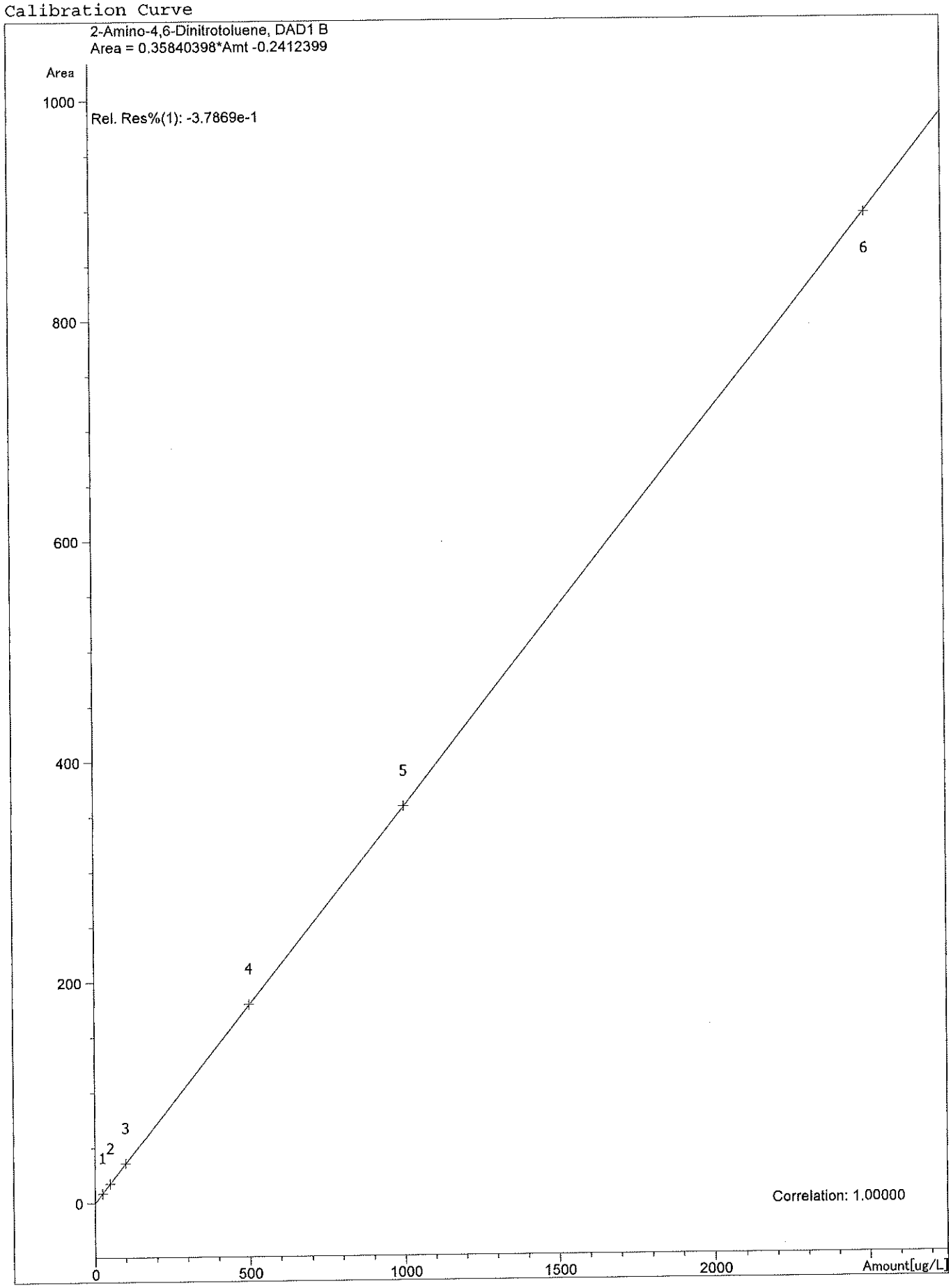
Calibration Curve



Calibration Curve



Calibration Curve



Data Review Report

Printed: 04/02/2021 12:44 ar

Analysis	Analyte	CalResult	True Value	% D	% Rec
Lab ID: S1C0593-CAL1 Cal Standard					
8330 Explosives	1,3,5-Trinitrobenzene	2495.07	2500.0	-0.20	99.80
	1,3-Dinitrobenzene	2497.06	2500.0	-0.12	99.88
	2,4,6-Trinitrotoluene	2495.93	2500.0	-0.16	99.84
	2,4-Dinitrotoluene	2497.15	2500.0	-0.11	99.89
	2,6-Dinitrotoluene	2497.36	2500.0	-0.11	99.89
	2-Amino-4,6-dinitrotoluene (2-am-dnt)	2496.40	2500.0	-0.14	99.86
	2-Nitrotoluene	2499.07	2500.0	-0.04	99.96
	3-Nitrotoluene	2495.64	2500.0	-0.17	99.83
	4-Amino-2,6-dinitrotoluene	2497.30	2500.0	-0.11	99.89
	4-Nitrotoluene	2497.33	2500.0	-0.11	99.89
	HMX	2489.63	2500.0	-0.41	99.59
	Nitrobenzene	2500.97	2500.0	0.04	100.04
	RDX	2498.46	2500.0	-0.06	99.94
	Tetryl	2500.65	2500.0	0.03	100.03
	1,2-Dinitrobenzene	2497.07	2500.0	-0.12	99.88
8330 Explosives DOD	1,3,5-Trinitrobenzene	2495.07	2500.0	-0.20	99.80
	1,3-Dinitrobenzene	2497.06	2500.0	-0.12	99.88
	2,4,6-Trinitrotoluene	2495.93	2500.0	-0.16	99.84
	2,4-Dinitrotoluene	2497.15	2500.0	-0.11	99.89
	2,6-Dinitrotoluene	2497.36	2500.0	-0.11	99.89
	2-Amino-4,6-dinitrotoluene (2-am-dnt)	2496.40	2500.0	-0.14	99.86
	2-Nitrotoluene	2499.07	2500.0	-0.04	99.96
	3-Nitrotoluene	2495.64	2500.0	-0.17	99.83
	4-Amino-2,6-dinitrotoluene	2497.30	2500.0	-0.11	99.89
	4-Nitrotoluene	2497.33	2500.0	-0.11	99.89
	HMX	2489.63	2500.0	-0.41	99.59
	Nitrobenzene	2500.97	2500.0	0.04	100.04
	RDX	2498.46	2500.0	-0.06	99.94
	Tetryl	2500.65	2500.0	0.03	100.03
	1,2-Dinitrobenzene	2497.07	2500.0	-0.12	99.88
Lab ID: S1C0593-CAL2 Cal Standard					
8330 Explosives	1,3,5-Trinitrobenzene	1002.77	1000.0	0.28	100.28
	1,3-Dinitrobenzene	1002.35	1000.0	0.24	100.24
	2,4,6-Trinitrotoluene	1003.52	1000.0	0.35	100.35
	2,4-Dinitrotoluene	1003.18	1000.0	0.32	100.32
	2,6-Dinitrotoluene	1003.11	1000.0	0.31	100.31
	2-Amino-4,6-dinitrotoluene (2-am-dnt)	1001.32	1000.0	0.13	100.13
	2-Nitrotoluene	1003.18	1000.0	0.32	100.32
	3-Nitrotoluene	1003.06	1000.0	0.31	100.31
	4-Amino-2,6-dinitrotoluene	1002.02	1000.0	0.20	100.20
	4-Nitrotoluene	1000.02	1000.0	0.00	100.00
	HMX	1004.67	1000.0	0.47	100.47
	Nitrobenzene	1000.15	1000.0	0.02	100.02
	RDX	1000.94	1000.0	0.09	100.09
	Tetryl	1003.21	1000.0	0.32	100.32
	1,2-Dinitrobenzene	1002.23	1000.0	0.22	100.22
8330 Explosives DOD	1,3,5-Trinitrobenzene	1002.77	1000.0	0.28	100.28

Data Review Report

(Continued)

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Analysis	Analyte	CalResult	True Value	% D	% Rec
Lab ID: S1C0593-CAL2 Cal Standard (Continued)					
8330 Explosives DOD (Continue	1,3-Dinitrobenzene	1002.35	1000.0	0.24	100.24
	2,4,6-Trinitrotoluene	1003.52	1000.0	0.35	100.35
	2,4-Dinitrotoluene	1003.18	1000.0	0.32	100.32
	2,6-Dinitrotoluene	1003.11	1000.0	0.31	100.31
	2-Amino-4,6-dinitrotoluene (2-am-dnt)	1001.32	1000.0	0.13	100.13
	2-Nitrotoluene	1003.18	1000.0	0.32	100.32
	3-Nitrotoluene	1003.06	1000.0	0.31	100.31
	4-Amino-2,6-dinitrotoluene	1002.02	1000.0	0.20	100.20
	4-Nitrotoluene	1000.02	1000.0	0.00	100.00
	HMX	1004.67	1000.0	0.47	100.47
	Nitrobenzene	1000.15	1000.0	0.02	100.02
	RDX	1000.94	1000.0	0.09	100.09
	Tetryl	1003.21	1000.0	0.32	100.32
	1,2-Dinitrobenzene	1002.23	1000.0	0.22	100.22
Lab ID: S1C0593-CAL3 Cal Standard					
8330 Explosives	1,3,5-Trinitrobenzene	502.48	500.00	0.50	100.50
	1,3-Dinitrobenzene	500.68	500.00	0.14	100.14
	2,4,6-Trinitrotoluene	500.38	500.00	0.08	100.08
	2,4-Dinitrotoluene	499.98	500.00	0.00	100.00
	2,6-Dinitrotoluene	499.46	500.00	-0.11	99.89
	2-Amino-4,6-dinitrotoluene (2-am-dnt)	502.01	500.00	0.40	100.40
	2-Nitrotoluene	497.85	500.00	-0.43	99.57
	3-Nitrotoluene	501.19	500.00	0.24	100.24
	4-Amino-2,6-dinitrotoluene	501.57	500.00	0.31	100.31
	4-Nitrotoluene	502.73	500.00	0.55	100.55
	HMX	506.29	500.00	1.26	101.26
	Nitrobenzene	499.36	500.00	-0.13	99.87
	RDX	501.52	500.00	0.30	100.30
	Tetryl	496.86	500.00	-0.63	99.37
	1,2-Dinitrobenzene	500.83	500.00	0.17	100.17
8330 Explosives DOD	1,3,5-Trinitrobenzene	502.48	500.00	0.50	100.50
	1,3-Dinitrobenzene	500.68	500.00	0.14	100.14
	2,4,6-Trinitrotoluene	500.38	500.00	0.08	100.08
	2,4-Dinitrotoluene	499.98	500.00	0.00	100.00
	2,6-Dinitrotoluene	499.46	500.00	-0.11	99.89
	2-Amino-4,6-dinitrotoluene (2-am-dnt)	502.01	500.00	0.40	100.40
	2-Nitrotoluene	497.85	500.00	-0.43	99.57
	3-Nitrotoluene	501.19	500.00	0.24	100.24
	4-Amino-2,6-dinitrotoluene	501.57	500.00	0.31	100.31
	4-Nitrotoluene	502.73	500.00	0.55	100.55
	HMX	506.29	500.00	1.26	101.26
	Nitrobenzene	499.36	500.00	-0.13	99.87
	RDX	501.52	500.00	0.30	100.30
	Tetryl	496.86	500.00	-0.63	99.37
	1,2-Dinitrobenzene	500.83	500.00	0.17	100.17

Lab ID: S1C0593-CAL4 Cal Standard

Data Review Report

(Continued)

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Analysis	Analyte	CalResult	True Value	% D	% Rec
Lab ID: S1C0593-CAL4 Cal Standard (Continued)					
8330 Explosives	1,3,5-Trinitrobenzene	100.08	100.00	0.08	100.08
	1,3-Dinitrobenzene	100.16	100.00	0.16	100.16
	2,4,6-Trinitrotoluene	99.96	100.00	-0.04	99.96
	2,4-Dinitrotoluene	99.86	100.00	-0.14	99.86
	2,6-Dinitrotoluene	100.33	100.00	0.33	100.33
	2-Amino-4,6-dinitrotoluene (2-am-dnt)	100.73	100.00	0.73	100.73
	2-Nitrotoluene	99.63	100.00	-0.37	99.63
	3-Nitrotoluene	100.44	100.00	0.44	100.44
	4-Amino-2,6-dinitrotoluene	99.41	100.00	-0.59	99.41
	4-Nitrotoluene	99.79	100.00	-0.21	99.79
	HMX	100.19	100.00	0.19	100.19
	Nitrobenzene	99.28	100.00	-0.72	99.28
	RDX	99.68	100.00	-0.32	99.68
	Tetryl	99.20	100.00	-0.80	99.20
	1,2-Dinitrobenzene	99.99	100.00	-0.01	99.99
8330 Explosives DOD	1,3,5-Trinitrobenzene	100.08	100.00	0.08	100.08
	1,3-Dinitrobenzene	100.16	100.00	0.16	100.16
	2,4,6-Trinitrotoluene	99.96	100.00	-0.04	99.96
	2,4-Dinitrotoluene	99.86	100.00	-0.14	99.86
	2,6-Dinitrotoluene	100.33	100.00	0.33	100.33
	2-Amino-4,6-dinitrotoluene (2-am-dnt)	100.73	100.00	0.73	100.73
	2-Nitrotoluene	99.63	100.00	-0.37	99.63
	3-Nitrotoluene	100.44	100.00	0.44	100.44
	4-Amino-2,6-dinitrotoluene	99.41	100.00	-0.59	99.41
	4-Nitrotoluene	99.79	100.00	-0.21	99.79
	HMX	100.19	100.00	0.19	100.19
	Nitrobenzene	99.28	100.00	-0.72	99.28
	RDX	99.68	100.00	-0.32	99.68
	Tetryl	99.20	100.00	-0.80	99.20
	1,2-Dinitrobenzene	99.99	100.00	-0.01	99.99
Lab ID: S1C0593-CAL5 Cal Standard					
8330 Explosives	1,3,5-Trinitrobenzene	49.51	50.000	-0.98	99.02
	1,3-Dinitrobenzene	49.71	50.000	-0.59	99.41
	2,4,6-Trinitrotoluene	50.54	50.000	1.07	101.07
	2,4-Dinitrotoluene	49.68	50.000	-0.65	99.35
	2,6-Dinitrotoluene	49.70	50.000	-0.60	99.40
	2-Amino-4,6-dinitrotoluene (2-am-dnt)	49.63	50.000	-0.73	99.27
	2-Nitrotoluene	50.28	50.000	0.57	100.57
	3-Nitrotoluene	49.76	50.000	-0.48	99.52
	4-Amino-2,6-dinitrotoluene	49.29	50.000	-1.41	98.59
	4-Nitrotoluene	50.35	50.000	0.70	100.70
	HMX	49.19	50.000	-1.63	98.37
	Nitrobenzene	50.08	50.000	0.16	100.16
	RDX	48.82	50.000	-2.36	97.64
	Tetryl	49.63	50.000	-0.74	99.26
	1,2-Dinitrobenzene	49.90	50.000	-0.20	99.80
8330 Explosives DOD	1,3,5-Trinitrobenzene	49.51	50.000	-0.98	99.02

Data Review Report
(Continued)

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Analysis	Analyte	CalResult	True Value	% D	% Rec
Lab ID: S1C0593-CAL5 Cal Standard (Continued)					
8330 Explosives DOD (Continue	1,3-Dinitrobenzene	49.71	50.000	-0.59	99.41
	2,4,6-Trinitrotoluene	50.54	50.000	1.07	101.07
	2,4-Dinitrotoluene	49.68	50.000	-0.65	99.35
	2,6-Dinitrotoluene	49.70	50.000	-0.60	99.40
	2-Amino-4,6-dinitrotoluene (2-am-dnt)	49.63	50.000	-0.73	99.27
	2-Nitrotoluene	50.28	50.000	0.57	100.57
	3-Nitrotoluene	49.76	50.000	-0.48	99.52
	4-Amino-2,6-dinitrotoluene	49.29	50.000	-1.41	98.59
	4-Nitrotoluene	50.35	50.000	0.70	100.70
	HMX	49.19	50.000	-1.63	98.37
	Nitrobenzene	50.08	50.000	0.16	100.16
	RDX	48.82	50.000	-2.36	97.64
	Tetryl	49.63	50.000	-0.74	99.26
	1,2-Dinitrobenzene	49.90	50.000	-0.20	99.80
Lab ID: S1C0593-CAL6 Cal Standard					
8330 Explosives	1,3,5-Trinitrobenzene	25.08	25.000	0.32	100.32
	1,3-Dinitrobenzene	25.04	25.000	0.18	100.18
	2,4,6-Trinitrotoluene	24.68	25.000	-1.30	98.70
	2,4-Dinitrotoluene	25.15	25.000	0.58	100.58
	2,6-Dinitrotoluene	25.04	25.000	0.18	100.18
	2-Amino-4,6-dinitrotoluene (2-am-dnt)	24.90	25.000	-0.38	99.62
	2-Nitrotoluene	24.99	25.000	-0.04	99.96
	3-Nitrotoluene	24.92	25.000	-0.32	99.68
	4-Amino-2,6-dinitrotoluene	25.40	25.000	1.59	101.59
	4-Nitrotoluene	24.77	25.000	-0.94	99.06
	HMX	25.03	25.000	0.13	100.13
	Nitrobenzene	25.16	25.000	0.63	100.63
	RDX	25.59	25.000	2.35	102.35
	Tetryl	25.46	25.000	1.83	101.83
	1,2-Dinitrobenzene	24.98	25.000	-0.06	99.94
8330 Explosives DOD	1,3,5-Trinitrobenzene	25.08	25.000	0.32	100.32
	1,3-Dinitrobenzene	25.04	25.000	0.18	100.18
	2,4,6-Trinitrotoluene	24.68	25.000	-1.30	98.70
	2,4-Dinitrotoluene	25.15	25.000	0.58	100.58
	2,6-Dinitrotoluene	25.04	25.000	0.18	100.18
	2-Amino-4,6-dinitrotoluene (2-am-dnt)	24.90	25.000	-0.38	99.62
	2-Nitrotoluene	24.99	25.000	-0.04	99.96
	3-Nitrotoluene	24.92	25.000	-0.32	99.68
	4-Amino-2,6-dinitrotoluene	25.40	25.000	1.59	101.59
	4-Nitrotoluene	24.77	25.000	-0.94	99.06
	HMX	25.03	25.000	0.13	100.13
	Nitrobenzene	25.16	25.000	0.63	100.63
	RDX	25.59	25.000	2.35	102.35
	Tetryl	25.46	25.000	1.83	101.83
	1,2-Dinitrobenzene	24.98	25.000	-0.06	99.94

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Section E:
HPLC Organics
EPA 8330B
Sequence QC Sample Raw Data

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-17-02\5L028018.D
Sample Name: S1C0592-CAL1

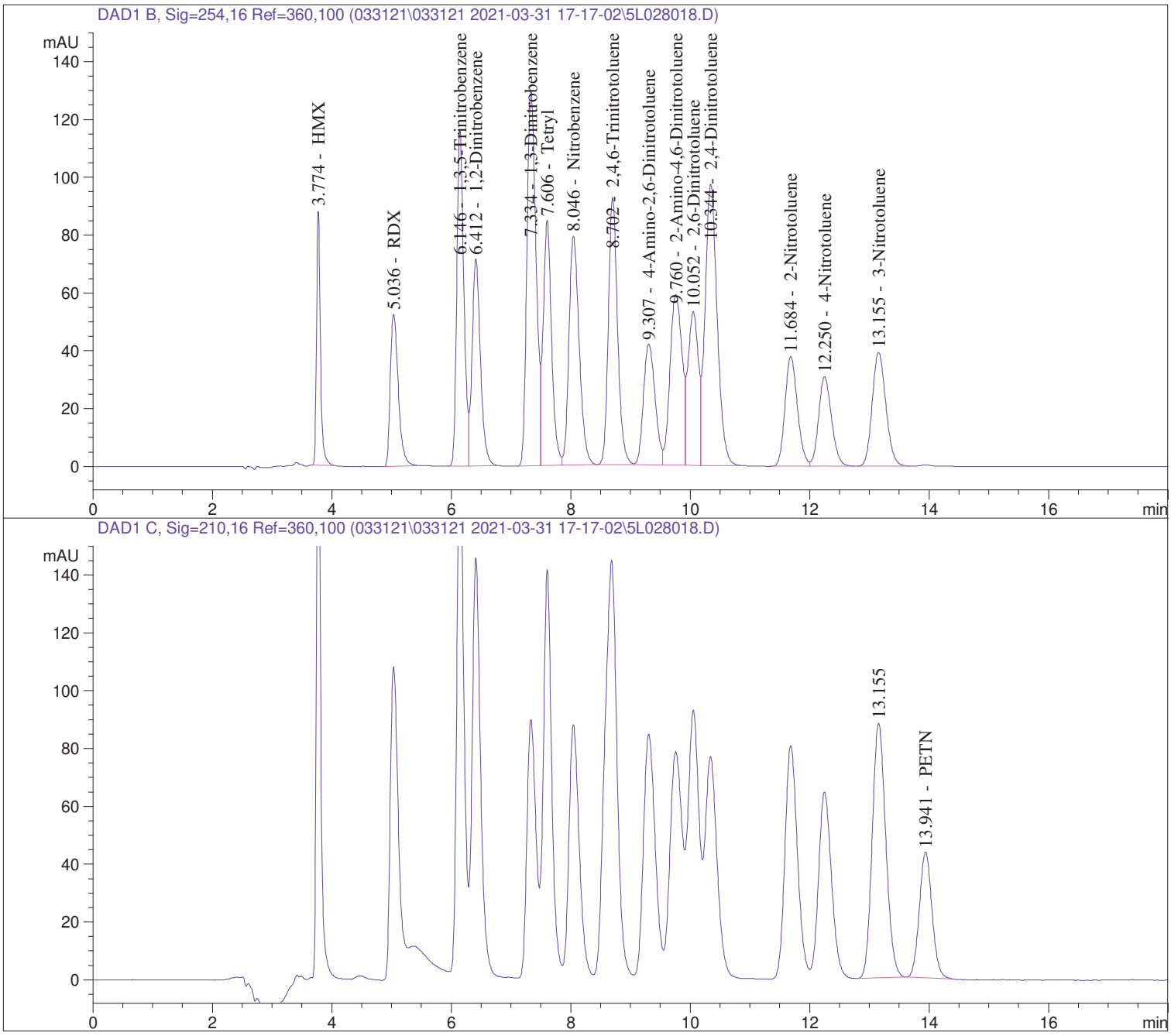
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Acq. Operator : JWR
Seq. Line : 1
Acq. Instrument : HPLC5
Location : Vial 1
Injection Date : 3/31/2021 5:19:58 PM
Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\Chem32\1\DATA\033121\033121 2021-03-31 17-17-02\8330PLUS-PETN.M
Last changed : 3/31/2021 5:16:20 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/1/2021 1:29:43 PM by JWR
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (2500ppb "OC")

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Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-17-02\5L028018.D
Sample Name: S1C0592-CAL1

Acq. Operator : JWR Seq. Line : 1
Acq. Instrument : HPLC5 Location : Vial 1
Injection Date : 3/31/2021 5:19:58 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\033121\033121 2021-03-31 17-17-02\8330PLUS-PETN.M
Last changed : 3/31/2021 5:16:20 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/1/2021 1:29:43 PM by JWR
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (2500ppb "OC")

External Standard Report

Sorted By : Signal
Calib. Data Modified : Thursday, April 01, 2021 1:29:20 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.774	BBA	401.43262	6.23231	2501.85101		HMX
5.036	BBA	488.87799	5.11665	2501.41965		RDX
6.146	BV	952.55750	2.62081	2496.47373		1,3,5-Trinitrobenzene
6.412	VBA	701.76410	3.55065	2491.72194		1,2-Dinitrobenzene
7.334	BV	1376.46179	1.81455	2497.66002		1,3-Dinitrobenzene
7.606	VV	836.55627	2.98512	2497.22158		Tetryl
8.046	VV	942.63885	2.64985	2497.85239		Nitrobenzene
8.702	VV	981.73633	2.54202	2495.59190		2,4,6-Trinitrotoluene
9.307	VV	568.72949	4.38580	2494.33521		4-Amino-2,6-Dinitrotoluene
9.760	VV	833.69977	2.99367	2495.81883		2-Amino-4,6-Dinitrotoluene
10.052	VV	648.46655	3.84958	2496.32524		2,6-Dinitrotoluene
10.344	VBA	1369.59631	1.82249	2496.07988		2,4-Dinitrotoluene
11.684	BV	551.40369	4.52721	2496.31950		2-Nitrotoluene
12.250	VBA	465.89938	5.35603	2495.37023		4-Nitrotoluene
13.155	BBA	623.80353	3.99905	2494.62065		3-Nitrotoluene

Totals : 3.74487e4

Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-17-02\5L028018.D
Sample Name: S1C0592-CAL1

Acq. Operator : JWR Seq. Line : 1
Acq. Instrument : HPLC5 Location : Vial 1
Injection Date : 3/31/2021 5:19:58 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\033121\033121 2021-03-31 17-17-02\8330PLUS-PETN.M
Last changed : 3/31/2021 5:16:20 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/1/2021 1:29:43 PM by JWR
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (2500ppb "OC")

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.941	VBA	642.27985	3.88725	2496.70470		PETN

Totals : 2496.70470

*** End of Report ***

Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-17-02\5L028019.D
Sample Name: S1C0592-CAL2

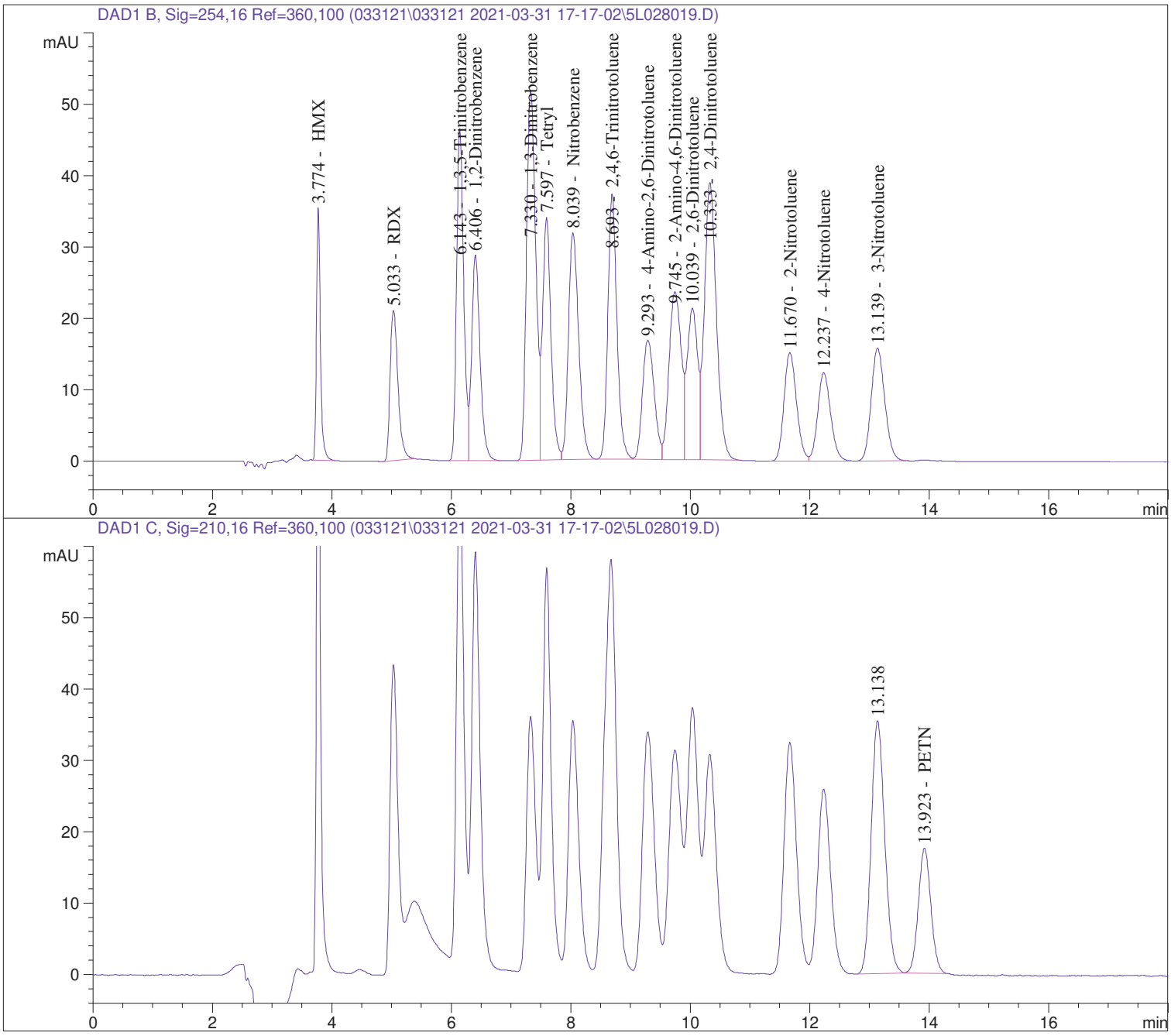
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Acq. Operator : JWR Seq. Line : 2
Acq. Instrument : HPLC5 Location : Vial 2
Injection Date : 3/31/2021 5:58:08 PM Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\Chem32\1\DATA\033121\033121 2021-03-31 17-17-02\8330PLUS-PETN.M
Last changed : 3/31/2021 5:16:20 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/1/2021 1:36:00 PM by JWR
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (1000ppb "OC")

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Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-17-02\5L028019.D
Sample Name: S1C0592-CAL2

Acq. Operator : JWR Seq. Line : 2
Acq. Instrument : HPLC5 Location : Vial 2
Injection Date : 3/31/2021 5:58:08 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\033121\033121 2021-03-31 17-17-02\8330PLUS-PETN.M
Last changed : 3/31/2021 5:16:20 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/1/2021 1:36:00 PM by JWR
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (1000ppb "OC")

External Standard Report

Sorted By : Signal
Calib. Data Modified : Thursday, April 01, 2021 1:35:47 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.774	BBA	161.08388	6.22246	1002.33774		HMX
5.033	BBA	193.63412	5.15472	998.13016		RDX
6.143	BV	382.05386	2.62083	1001.29861		1,3,5-Trinitrobenzene
6.406	VBA	282.42734	3.55151	1003.04423		1,2-Dinitrobenzene
7.330	BV	551.94391	1.81436	1001.42245		1,3-Dinitrobenzene
7.597	VV	335.85779	2.98477	1002.45793		Tetryl
8.039	VV	378.40817	2.64873	1002.30290		Nitrobenzene
8.693	VV	394.46201	2.53878	1001.45120		2,4,6-Trinitrotoluene
9.293	VV	227.96896	4.38810	1000.35068		4-Amino-2,6-Dinitrotoluene
9.745	VV	334.11481	2.99516	1000.72766		2-Amino-4,6-Dinitrotoluene
10.039	VV	259.43198	3.84932	998.63721		2,6-Dinitrotoluene
10.333	VBA	546.90057	1.82373	997.39691		2,4-Dinitrotoluene
11.670	BV	221.43564	4.52612	1002.24422		2-Nitrotoluene
12.237	VBA	186.97565	5.35900	1002.00327		4-Nitrotoluene
13.139	BBA	249.97932	4.00098	1000.16265		3-Nitrotoluene

Totals : 1.50140e4

Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-17-02\5L028019.D
Sample Name: S1C0592-CAL2

Acq. Operator : JWR Seq. Line : 2
Acq. Instrument : HPLC5 Location : Vial 2
Injection Date : 3/31/2021 5:58:08 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\033121\033121 2021-03-31 17-17-02\8330PLUS-PETN.M
Last changed : 3/31/2021 5:16:20 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/1/2021 1:36:00 PM by JWR
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (1000ppb "OC")

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.923	VBA	256.02823	3.87923	993.19317		PETN

Totals : 993.19317

*** End of Report ***

Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-17-02\5L028020.D
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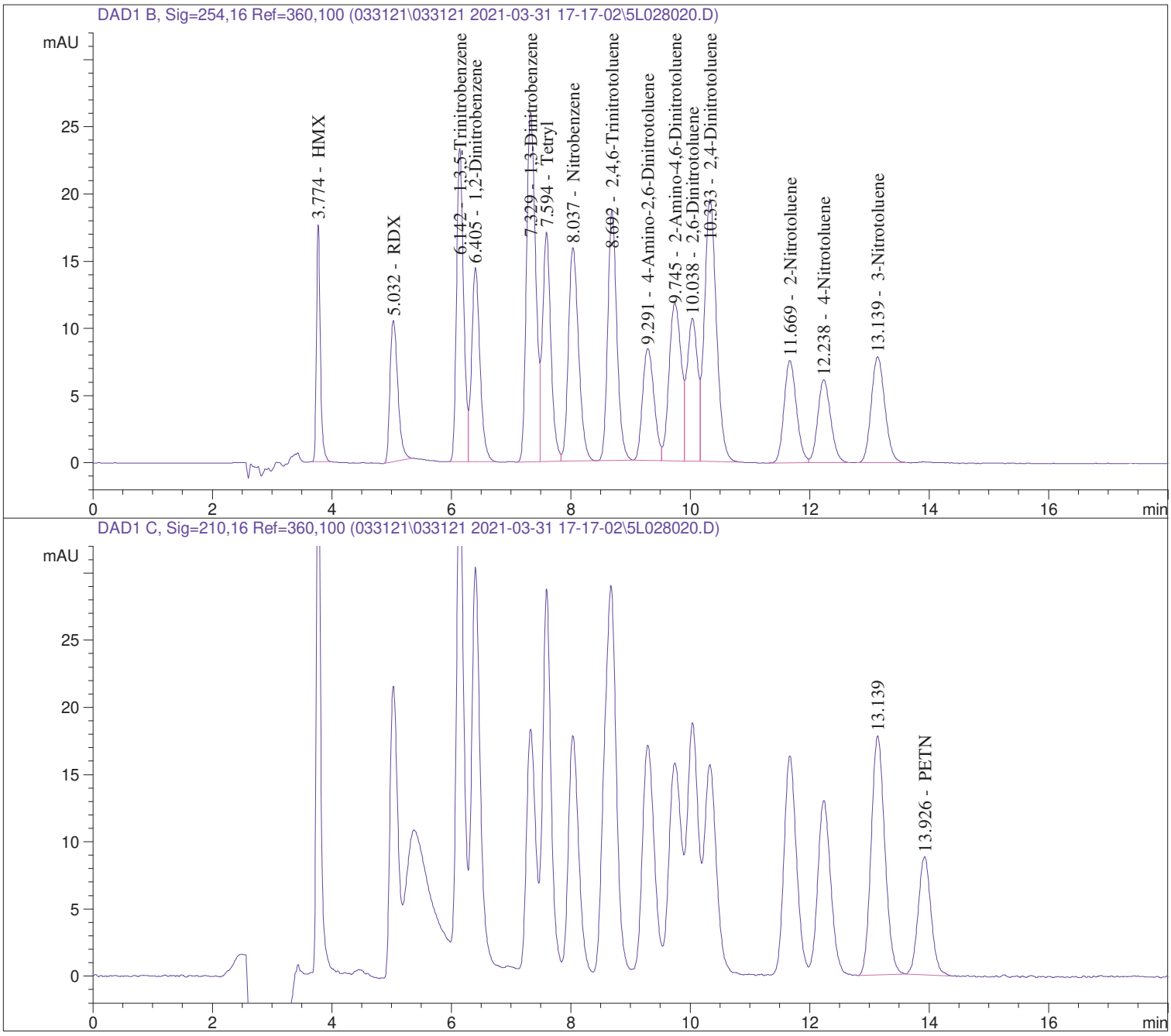
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Acq. Operator : JWR
Seq. Line : 3
Acq. Instrument : HPLC5
Location : Vial 3
Injection Date : 3/31/2021 6:36:17 PM
Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\Chem32\1\DATA\033121\033121 2021-03-31 17-17-02\8330PLUS-PETN.M
Last changed : 3/31/2021 5:16:20 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/1/2021 1:44:40 PM by JWR
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

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Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-17-02\5L028020.D
Sample Name: S1C0592-CAL3

Acq. Operator : JWR Seq. Line : 3
Acq. Instrument : HPLC5 Location : Vial 3
Injection Date : 3/31/2021 6:36:17 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\033121\033121 2021-03-31 17-17-02\8330PLUS-PETN.M
Last changed : 3/31/2021 5:16:20 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/1/2021 1:44:40 PM by JWR
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

External Standard Report

Sorted By : Signal
Calib. Data Modified : Thursday, April 01, 2021 1:44:11 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.774	BBA	80.08501	6.20582	496.99338		HMX
5.032	BBA	95.71388	5.19120	496.87018		RDX
6.142	BV	191.43898	2.62104	501.76904		1,3,5-Trinitrobenzene
6.405	VBA	140.95694	3.55430	501.00273		1,2-Dinitrobenzene
7.329	BV	276.37772	1.81403	501.35750		1,3-Dinitrobenzene
7.594	VV	167.94156	2.98418	501.16806		Tetryl
8.037	VV	188.99406	2.64687	500.24199		Nitrobenzene
8.692	VV	196.51489	2.53526	498.21660		2,4,6-Trinitrotoluene
9.291	VV	112.32190	4.39893	494.09672		4-Amino-2,6-Dinitrotoluene
9.745	VV	166.28029	2.99877	498.63662		2-Amino-4,6-Dinitrotoluene
10.038	VV	129.84868	3.84893	499.77866		2,6-Dinitrotoluene
10.333	VBA	274.59357	1.82468	501.04554		2,4-Dinitrotoluene
11.669	BV	110.90678	4.52421	501.76597		2-Nitrotoluene
12.238	VBA	93.20029	5.36331	499.86182		4-Nitrotoluene
13.139	BBA	125.27073	4.00249	501.39488		3-Nitrotoluene

Totals : 7494.19971

Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-17-02\5L028020.D
Sample Name: S1C0592-CAL3

Acq. Operator : JWR Seq. Line : 3
Acq. Instrument : HPLC5 Location : Vial 3
Injection Date : 3/31/2021 6:36:17 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\033121\033121 2021-03-31 17-17-02\8330PLUS-PETN.M
Last changed : 3/31/2021 5:16:20 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/1/2021 1:44:40 PM by JWR
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

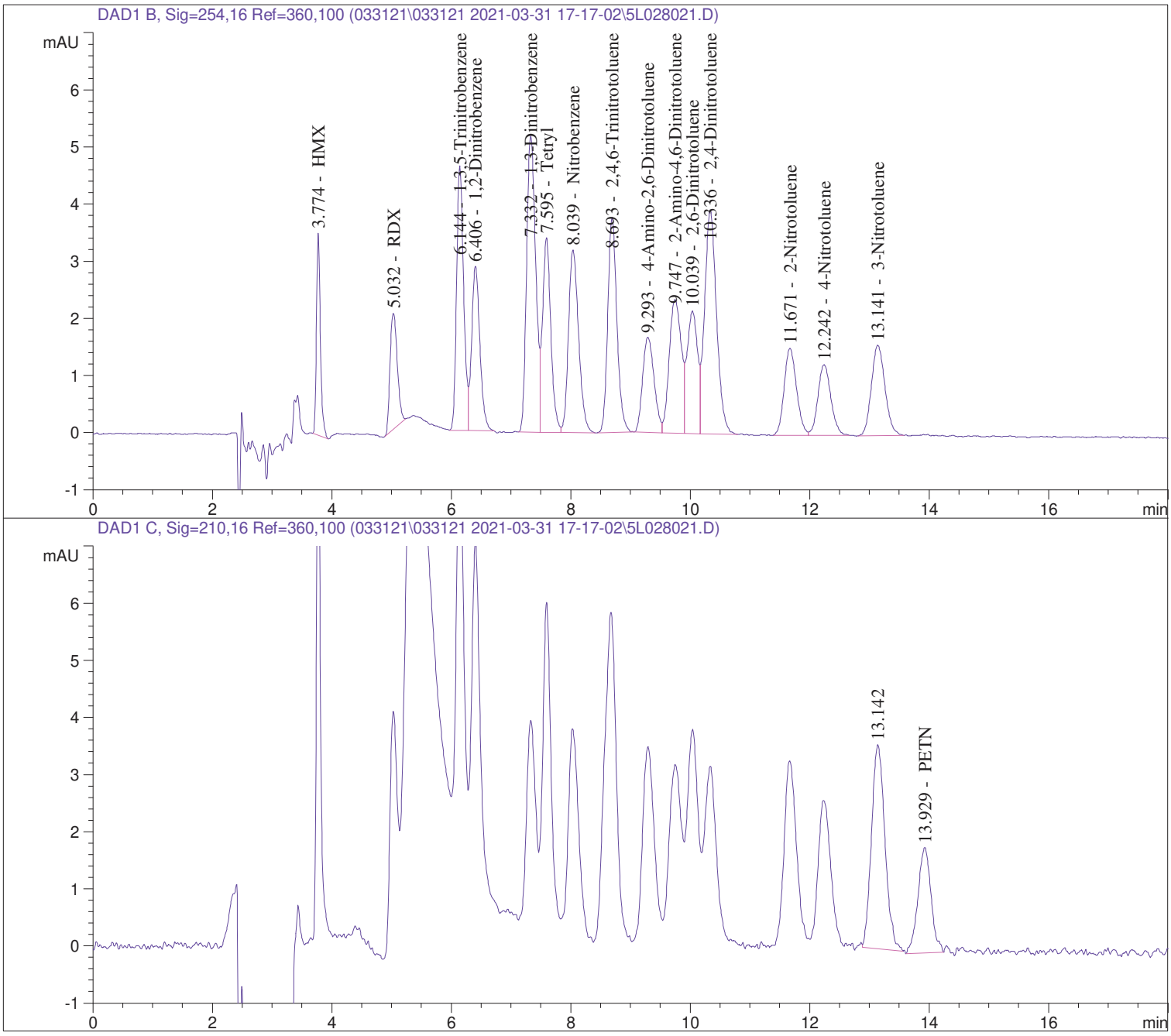
RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.926	VBA	130.54089	3.86709	504.81388		PETN

Totals : 504.81388

*** End of Report ***

Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-17-02\5L028021.D
Sample Name: S1C0592-CAL4

Acq. Operator	: JWR	Seq. Line	: 4
Acq. Instrument	: HPLC5	Location	: Vial 4
Injection Date	: 3/31/2021 7:14:27 PM	Inj	: 1
		Inj Volume	: 100 µl
Acq. Method	: C:\Chem32\1\DATA\033121\033121 2021-03-31 17-17-02\8330PLUS-PETN.M		
Last changed	: 3/31/2021 5:16:20 PM by JWR		
Analysis Method	: C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M		
Last changed	: 4/1/2021 1:51:34 PM by JWR		
Method Info	: OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021		
Sample Info	: 1 (100ppb "OC")		



Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-17-02\5L028021.D
Sample Name: S1C0592-CAL4

Acq. Operator : JWR Seq. Line : 4
Acq. Instrument : HPLC5 Location : Vial 4
Injection Date : 3/31/2021 7:14:27 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\033121\033121 2021-03-31 17-17-02\8330PLUS-PETN.M
Last changed : 3/31/2021 5:16:20 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/1/2021 1:51:34 PM by JWR
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (100ppb "OC")

External Standard Report

Sorted By : Signal
Calib. Data Modified : Thursday, April 01, 2021 1:51:26 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.774	BBA	16.25403	6.07624	98.76336		HMX
5.032	BV	17.06433	5.52341	94.25324		RDX
6.144	BV	38.05835	2.62107	99.75356		1,3,5-Trinitrobenzene
6.406	VBA	27.81739	3.56127	99.06532		1,2-Dinitrobenzene
7.332	BV	55.00174	1.81140	99.63012		1,3-Dinitrobenzene
7.595	VV	33.26986	2.97936	99.12300		Tetryl
8.039	VBA	37.84610	2.63181	99.60385		Nitrobenzene
8.693	BV	39.96470	2.49166	99.57832		2,4,6-Trinitrotoluene
9.293	VV	22.35393	4.41265	98.64008		4-Amino-2,6-Dinitrotoluene
9.747	VV	32.91534	3.00463	98.89826		2-Amino-4,6-Dinitrotoluene
10.039	VV	26.27336	3.82335	100.45235		2,6-Dinitrotoluene
10.336	VV	54.97282	1.82102	100.10647		2,4-Dinitrotoluene
11.671	BV	22.05132	4.50461	99.33264		2-Nitrotoluene
12.242	VBA	18.71122	5.37800	100.62903		4-Nitrotoluene
13.141	BBA	25.17490	3.99678	100.61858		3-Nitrotoluene

Totals : 1488.44818

Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-17-02\5L028021.D
Sample Name: S1C0592-CAL4

Acq. Operator : JWR Seq. Line : 4
Acq. Instrument : HPLC5 Location : Vial 4
Injection Date : 3/31/2021 7:14:27 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\033121\033121 2021-03-31 17-17-02\8330PLUS-PETN.M
Last changed : 3/31/2021 5:16:20 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/1/2021 1:51:34 PM by JWR
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (100ppb "OC")

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.929	BV	28.28012	3.77267	106.69142		PETN

Totals : 106.69142

*** End of Report ***

Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-17-02\5L028022.D
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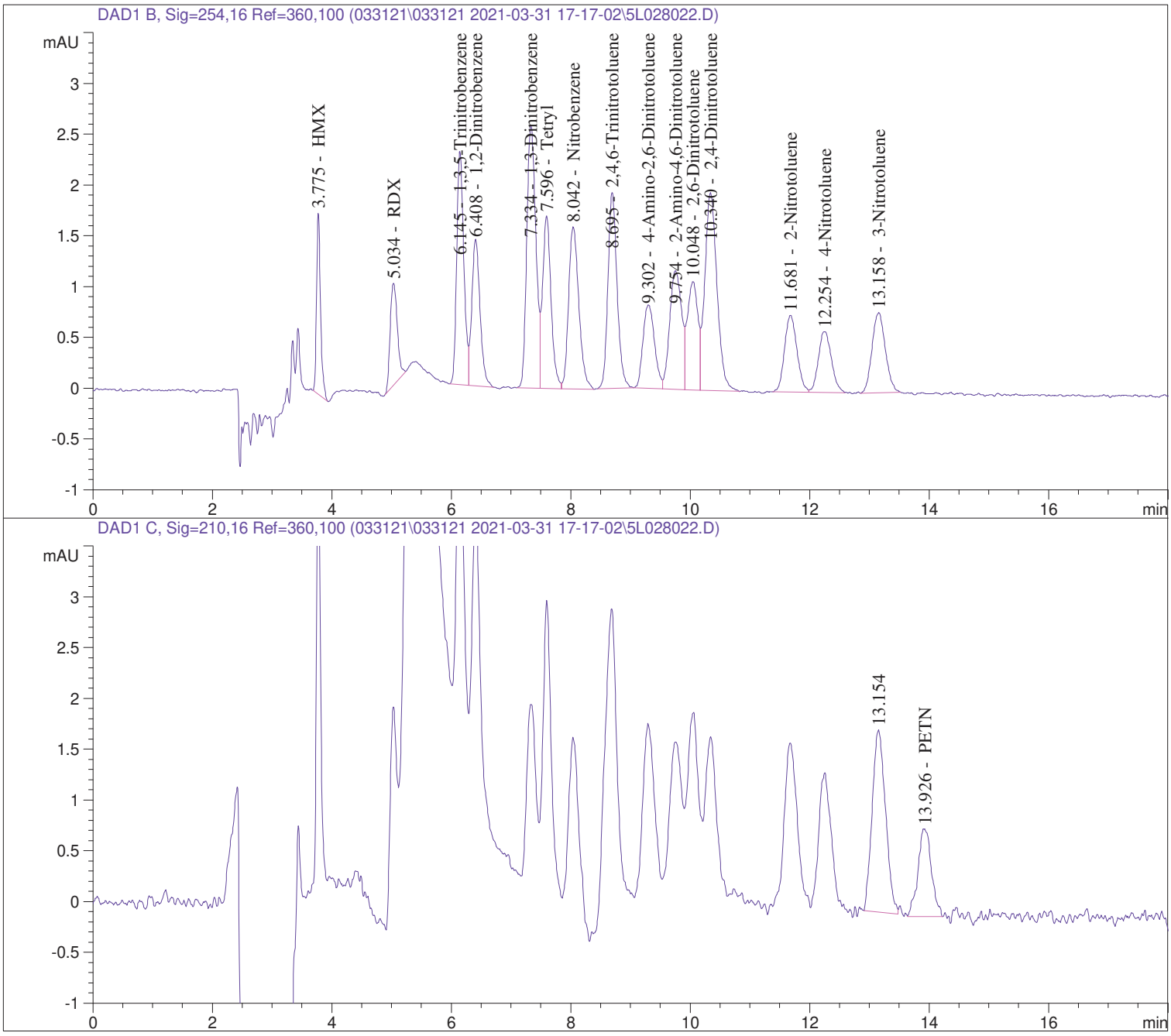
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Acq. Operator : JWR
Seq. Line : 5
Acq. Instrument : HPLC5
Location : Vial 5
Injection Date : 3/31/2021 7:52:41 PM
Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\Chem32\1\DATA\033121\033121 2021-03-31 17-17-02\8330PLUS-PETN.M
Last changed : 3/31/2021 5:16:20 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/1/2021 1:59:02 PM by JWR
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (50ppb "OC")

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Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-17-02\5L028022.D
Sample Name: S1C0592-CAL5

Acq. Operator : JWR Seq. Line : 5
Acq. Instrument : HPLC5 Location : Vial 5
Injection Date : 3/31/2021 7:52:41 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\033121\033121 2021-03-31 17-17-02\8330PLUS-PETN.M
Last changed : 3/31/2021 5:16:20 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/1/2021 1:59:02 PM by JWR
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (50ppb "OC")

External Standard Report

Sorted By : Signal
Calib. Data Modified : Thursday, April 01, 2021 1:58:47 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.775	BBA	8.32549	5.92131	49.29784		HMX
5.034	BV	8.30998	5.94938	49.43924		RDX
6.145	BV	19.06912	2.62078	49.97593		1,3,5-Trinitrobenzene
6.408	VBA	13.95521	3.56701	49.77843		1,2-Dinitrobenzene
7.334	BV	27.56360	1.80813	49.83863		1,3-Dinitrobenzene
7.596	VV	16.75534	2.97346	49.82130		Tetryl
8.042	VBA	19.11004	2.61340	49.94216		Nitrobenzene
8.695	BV	20.51253	2.45593	50.37731		2,4,6-Trinitrotoluene
9.302	VV	11.09603	4.48418	49.75660		4-Amino-2,6-Dinitrotoluene
9.754	VV	16.35461	3.02611	49.49077		2-Amino-4,6-Dinitrotoluene
10.048	VV	13.24879	3.80289	50.38366		2,6-Dinitrotoluene
10.340	VBA	27.64654	1.81913	50.29264		2,4-Dinitrotoluene
11.681	BV	11.02797	4.47895	49.39368		2-Nitrotoluene
12.254	VF	9.19717	5.39875	49.65317		4-Nitrotoluene
13.158	VBA	12.29011	4.01137	49.30013		3-Nitrotoluene

Totals : 746.74148

Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-17-02\5L028022.D
Sample Name: S1C0592-CAL5

Acq. Operator : JWR Seq. Line : 5
Acq. Instrument : HPLC5 Location : Vial 5
Injection Date : 3/31/2021 7:52:41 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\033121\033121 2021-03-31 17-17-02\8330PLUS-PETN.M
Last changed : 3/31/2021 5:16:20 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/1/2021 1:59:02 PM by JWR
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (50ppb "OC")

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.926	VV	13.58046	3.64219	49.46260		PETN

Totals : 49.46260

*** End of Report ***

Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-17-02\5L028023.D
Sample Name: S1C0592-CAL6

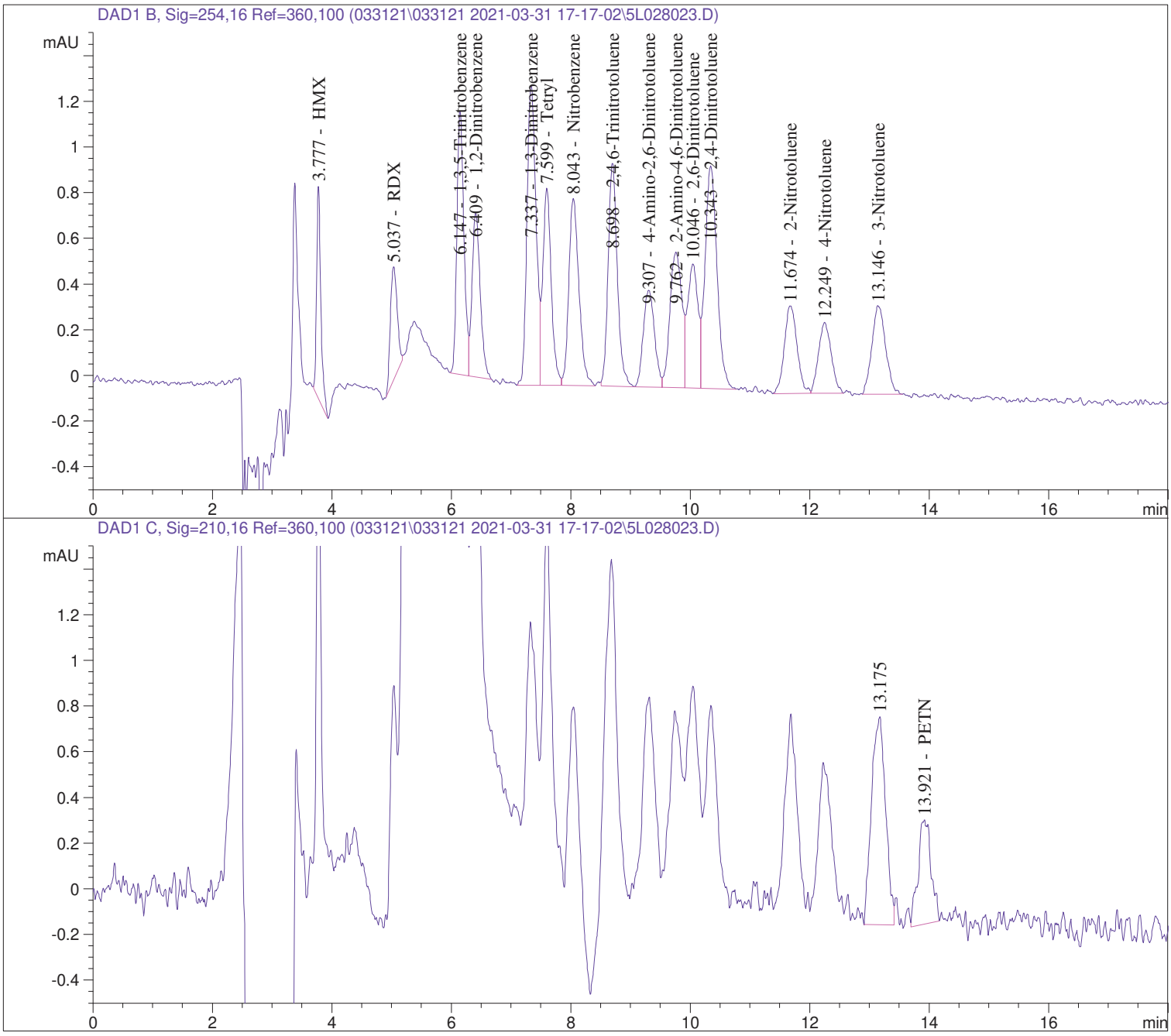
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Acq. Operator : JWR
Seq. Line : 6
Acq. Instrument : HPLC5
Location : Vial 6
Injection Date : 3/31/2021 8:30:49 PM
Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\Chem32\1\DATA\033121\033121 2021-03-31 17-17-02\8330PLUS-PETN.M
Last changed : 3/31/2021 5:16:20 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/1/2021 2:08:06 PM by JWR
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (25ppb "OC")

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Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-17-02\5L028023.D
Sample Name: S1C0592-CAL6

Acq. Operator : JWR Seq. Line : 6
Acq. Instrument : HPLC5 Location : Vial 6
Injection Date : 3/31/2021 8:30:49 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\033121\033121 2021-03-31 17-17-02\8330PLUS-PETN.M
Last changed : 3/31/2021 5:16:20 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/1/2021 2:08:06 PM by JWR
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (25ppb "OC")

External Standard Report

Sorted By : Signal
Calib. Data Modified : Thursday, April 01, 2021 2:07:58 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.777	BBA	4.54842	5.65757	25.73302		HMX
5.037	BV	3.88141	6.90521	26.80196		RDX
6.147	BV	9.48840	2.62717	24.92762		1,3,5-Trinitrobenzene
6.409	VBA	6.87514	3.63047	24.95995		1,2-Dinitrobenzene
7.337	BV	13.92734	1.80172	25.09317		1,3-Dinitrobenzene
7.599	VV	8.51359	2.96194	25.21675		Tetryl
8.043	VV	9.73033	2.57754	25.08036		Nitrobenzene
8.698	VV	10.41791	2.37778	24.77146		2,4,6-Trinitrotoluene
9.307	VV	5.56906	4.56995	25.45031		4-Amino-2,6-Dinitrotoluene
9.762	VV	8.34248	3.05317	25.47102		2-Amino-4,6-Dinitrotoluene
10.046	VV	6.58004	3.74916	24.66962		2,6-Dinitrotoluene
10.343	VBA	13.67817	1.81242	24.79054		2,4-Dinitrotoluene
11.674	BV	5.72113	4.43241	25.35839		2-Nitrotoluene
12.249	VV	4.59418	5.43801	24.98317		4-Nitrotoluene
13.146	BBA	6.22419	4.02293	25.03947		3-Nitrotoluene

Totals : 378.34679

Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-17-02\5L028023.D
Sample Name: S1C0592-CAL6

Acq. Operator : JWR Seq. Line : 6
Acq. Instrument : HPLC5 Location : Vial 6
Injection Date : 3/31/2021 8:30:49 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\033121\033121 2021-03-31 17-17-02\8330PLUS-PETN.M
Last changed : 3/31/2021 5:16:20 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/1/2021 2:08:06 PM by JWR
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (25ppb "OC")

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.921	VV	6.92459	3.40091	23.54989		PETN

Totals : 23.54989

*** End of Report ***

Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-17-02\5L028024.D
Sample Name: S1C0592-ICV1

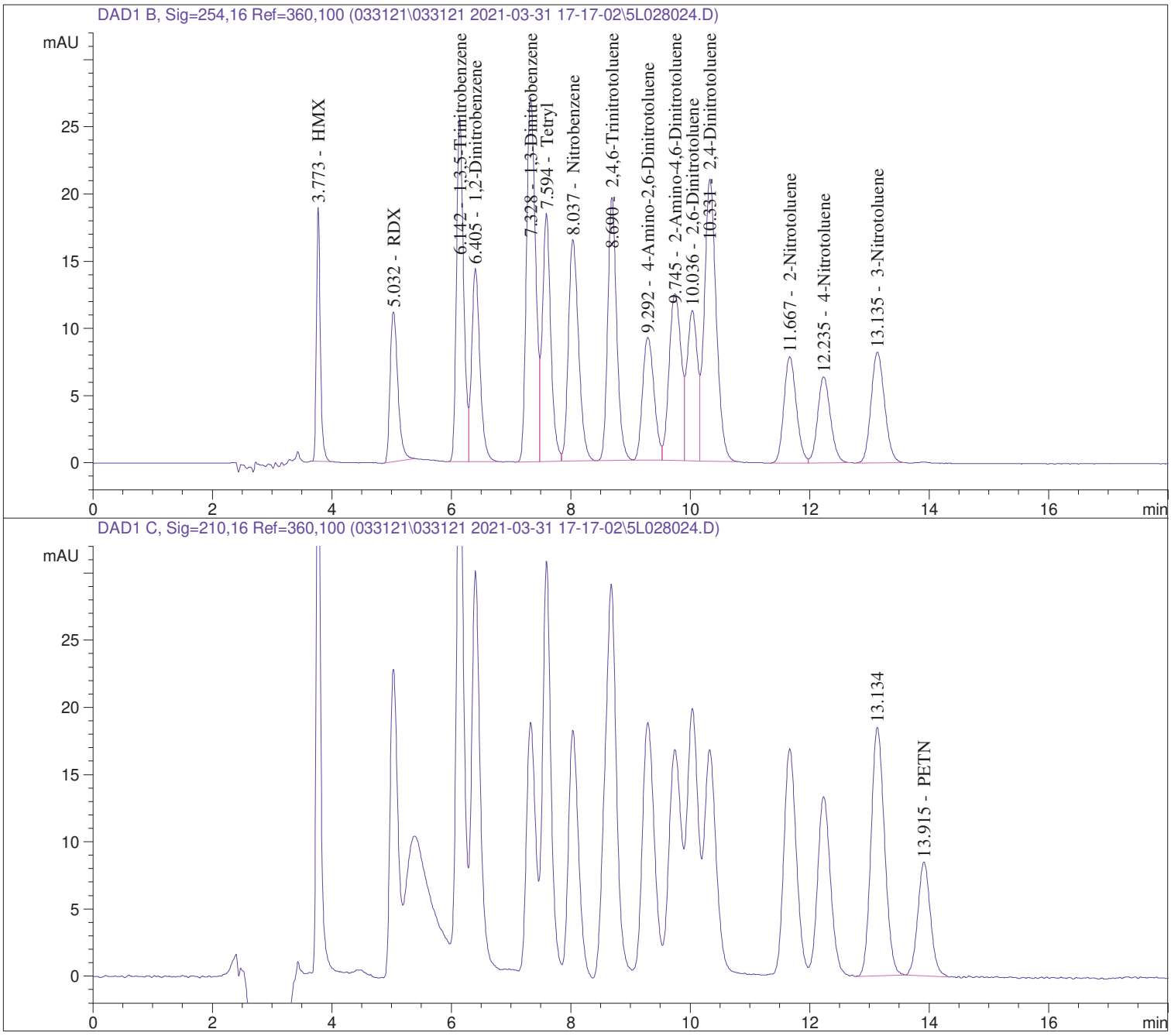
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Acq. Operator : JWR
Seq. Line : 7
Acq. Instrument : HPLC5
Location : Vial 7
Injection Date : 3/31/2021 9:09:05 PM
Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\Chem32\1\DATA\033121\033121 2021-03-31 17-17-02\8330PLUS-PETN.M
Last changed : 3/31/2021 5:16:20 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/1/2021 2:15:16 PM by JWR
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

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Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-17-02\5L028024.D
Sample Name: S1C0592-ICV1

Acq. Operator : JWR Seq. Line : 7
Acq. Instrument : HPLC5 Location : Vial 7
Injection Date : 3/31/2021 9:09:05 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\033121\033121 2021-03-31 17-17-02\8330PLUS-PETN.M
Last changed : 3/31/2021 5:16:20 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/1/2021 2:15:16 PM by JWR
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

External Standard Report

Sorted By : Signal
Calib. Data Modified : Thursday, April 01, 2021 2:07:58 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.773	BBA	85.31631	6.20793	529.63732		HMX
5.032	BBA	101.02442	5.18751	524.06501		RDX
6.142	BV	209.65569	2.62145	549.60136		1,3,5-Trinitrobenzene
6.405	VBA	140.17809	3.55790	498.73915		1,2-Dinitrobenzene
7.328	BV	285.53278	1.81405	517.97052		1,3-Dinitrobenzene
7.594	VV	180.80354	2.98425	539.56337		Tetryl
8.037	VV	195.01576	2.64695	516.19683		Nitrobenzene
8.690	VV	204.95653	2.53798	520.17608		2,4,6-Trinitrotoluene
9.292	VV	122.23077	4.40560	538.50010		4-Amino-2,6-Dinitrotoluene
9.745	VV	173.77637	3.00058	521.42947		2-Amino-4,6-Dinitrotoluene
10.036	VV	136.12360	3.85074	524.17653		2,6-Dinitrotoluene
10.331	VBA	292.16922	1.82508	533.23240		2,4-Dinitrotoluene
11.667	BV	114.41425	4.52428	517.64205		2-Nitrotoluene
12.235	VBA	96.13129	5.36331	515.58217		4-Nitrotoluene
13.135	BBA	129.34666	4.00411	517.91789		3-Nitrotoluene

Totals : 7864.43025

Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-17-02\5L028024.D
Sample Name: S1C0592-ICV1

Acq. Operator : JWR Seq. Line : 7
Acq. Instrument : HPLC5 Location : Vial 7
Injection Date : 3/31/2021 9:09:05 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\033121\033121 2021-03-31 17-17-02\8330PLUS-PETN.M
Last changed : 3/31/2021 5:16:20 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/1/2021 2:15:16 PM by JWR
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.915	VV	125.10968	3.86596	483.66903		PETN

Totals : 483.66903

*** End of Report ***

Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-17-02\5L028035.D
Sample Name: S1C0592-CCV1

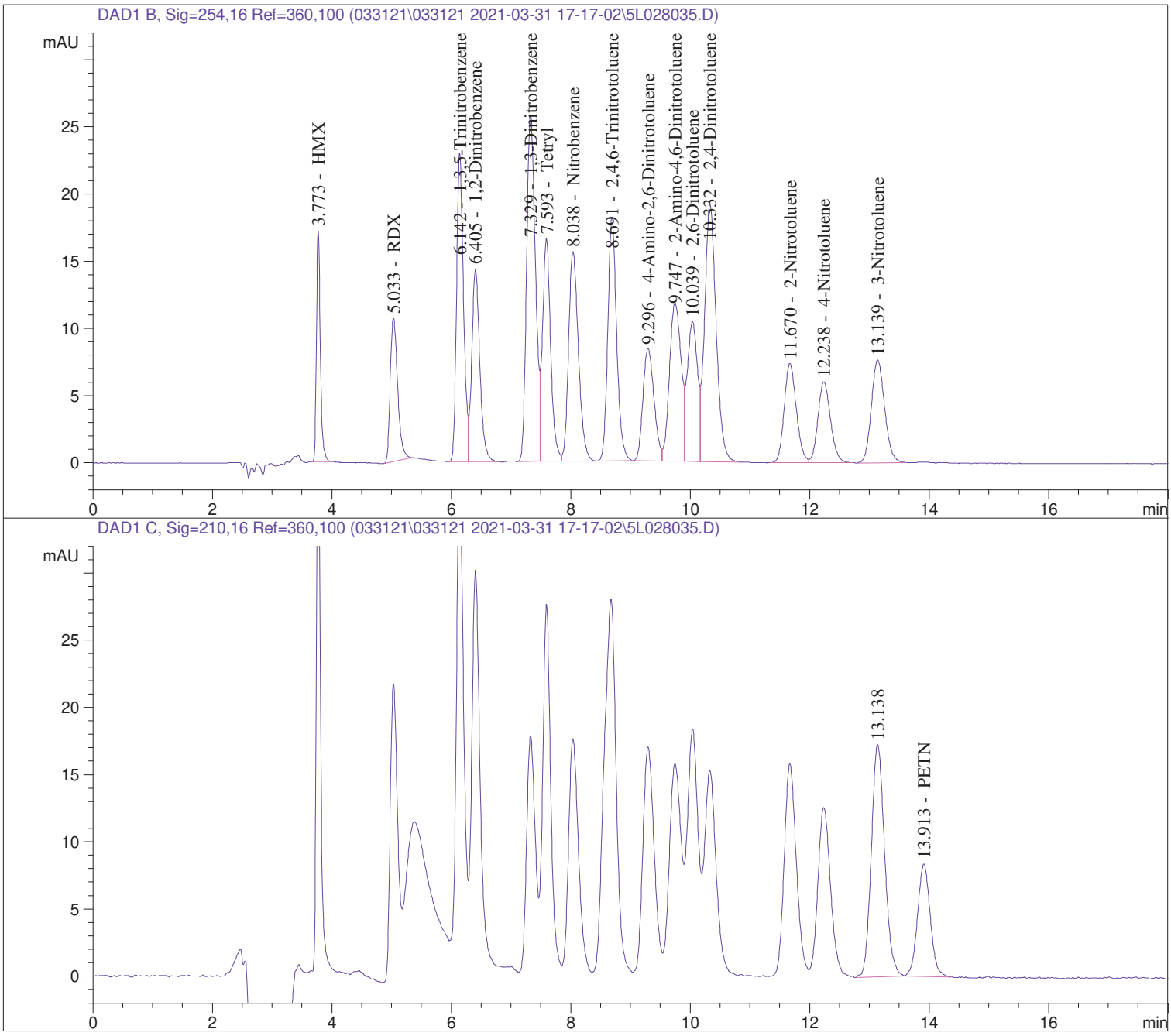
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Acq. Operator : JWR
Seq. Line : 18
Acq. Instrument : HPLC5
Location : Vial 3
Injection Date : 4/1/2021 4:09:11 AM
Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\Chem32\1\DATA\033121\033121 2021-03-31 17-17-02\8330PLUS-PETN.M
Last changed : 3/31/2021 5:16:20 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/1/2021 2:34:24 PM by JWR
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

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Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-17-02\5L028035.D
Sample Name: S1C0592-CCV1

Acq. Operator : JWR Seq. Line : 18
Acq. Instrument : HPLC5 Location : Vial 3
Injection Date : 4/1/2021 4:09:11 AM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\033121\033121 2021-03-31 17-17-02\8330PLUS-PETN.M
Last changed : 3/31/2021 5:16:20 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/1/2021 2:34:24 PM by JWR
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

External Standard Report

Sorted By : Signal
Calib. Data Modified : Thursday, April 01, 2021 2:07:58 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.773	BBA	76.40760	6.20431	474.05657		HMX
5.033	BBA	91.13274	5.19496	473.43070		RDX
6.142	BV	183.02959	2.62149	479.80966		1,3,5-Trinitrobenzene
6.405	VBA	134.24673	3.55806	477.65821		1,2-Dinitrobenzene
7.329	BV	264.33792	1.81400	479.50861		1,3-Dinitrobenzene
7.593	VV	158.78760	2.98410	473.83797		Tetryl
8.038	VV	178.90425	2.64662	473.49175		Nitrobenzene
8.691	VV	186.73866	2.53715	473.78316		2,4,6-Trinitrotoluene
9.296	VV	108.01854	4.40663	475.99819		4-Amino-2,6-Dinitrotoluene
9.747	VV	159.98570	3.00081	480.08609		2-Amino-4,6-Dinitrotoluene
10.039	VV	124.20621	3.85024	478.22431		2,6-Dinitrotoluene
10.332	VBA	260.42609	1.82500	475.27888		2,4-Dinitrotoluene
11.670	BV	104.65101	4.52383	473.42322		2-Nitrotoluene
12.238	VBA	88.57510	5.36363	475.08424		4-Nitrotoluene
13.139	BBA	118.32587	4.00420	473.79996		3-Nitrotoluene

Totals : 7137.47152

Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-17-02\5L028035.D
Sample Name: S1C0592-CCV1

Acq. Operator : JWR Seq. Line : 18
Acq. Instrument : HPLC5 Location : Vial 3
Injection Date : 4/1/2021 4:09:11 AM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\033121\033121 2021-03-31 17-17-02\8330PLUS-PETN.M
Last changed : 3/31/2021 5:16:20 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/1/2021 2:34:24 PM by JWR
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.913	VBA	123.50488	3.86561	477.42119		PETN

Totals : 477.42119

*** End of Report ***

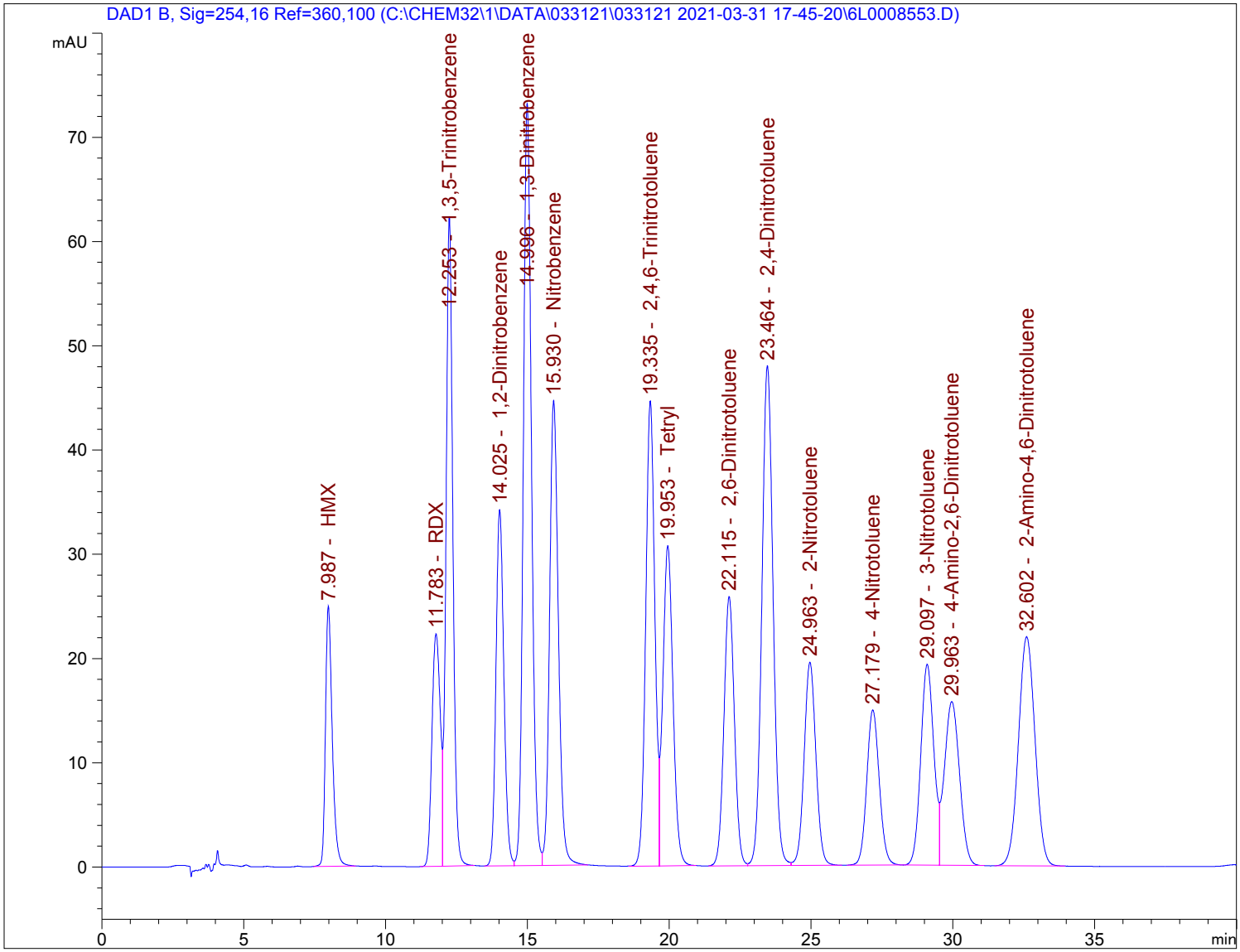
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Sample Name: S1C0593-CAL1

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Acq. Operator : JWR Seq. Line : 1
Acq. Instrument : HPLC6 Location : 1
Injection Date : 3/31/2021 5:48:08 PM Inj : 1
Inj Volume : 100.000 µl
Acq. Method : C:\Chem32\1\Data\033121\033121 2021-03-31 17-45-20\8330.M
Last changed : 3/31/2021 5:45:20 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
Last changed : 4/1/2021 10:38:56 PM by JWR
Method Info : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

Sample Info : 1 (2500ppb)

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Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-45-20\6L0008553.D
Sample Name: S1C0593-CAL1

Acq. Operator : JWR Seq. Line : 1
Acq. Instrument : HPLC6 Location : 1
Injection Date : 3/31/2021 5:48:08 PM Inj : 1
Inj Volume : 100.000 µl
Acq. Method : C:\Chem32\1\Data\033121\033121 2021-03-31 17-45-20\8330.M
Last changed : 3/31/2021 5:45:20 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
Last changed : 4/1/2021 10:38:56 PM by JWR
Method Info : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

Sample Info : 1 (2500ppb)

External Standard Report

Sorted By : Signal
Calib. Data Modified : Thursday, April 01, 2021 10:38:43 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
7.987	BBA	416.07462	5.97442	2485.80326		HMX
11.783	BV	452.15326	5.51525	2493.73795		RDX
12.253	VBA	1040.80347	2.39860	2496.46757		1,3,5-Trinitrobenzene
14.025	BV	660.51001	3.78005	2496.75850		1,2-Dinitrobenzene
14.996	VV	1461.89624	1.70752	2496.22043		1,3-Dinitrobenzene
15.930	VBA	960.26160	2.59951	2496.20510		Nitrobenzene
19.335	VV	997.40802	2.50204	2495.55960		2,4,6-Trinitrotoluene
19.953	VBA	762.61792	3.28012	2501.48145		Tetryl
22.115	BV	663.05798	3.76543	2496.70066		2,6-Dinitrotoluene
23.464	VV	1317.32104	1.89532	2496.74177		2,4-Dinitrotoluene
24.963	VBA	561.99573	4.44535	2498.27018		2-Nitrotoluene
27.179	BV	457.93475	5.45137	2496.37160		4-Nitrotoluene
29.097	VV	623.39941	4.00420	2496.21832		3-Nitrotoluene
29.963	VBA	584.76221	4.27422	2499.40518		4-Amino-2,6-Dinitrotoluene
32.602	BBA	894.48169	2.79030	2495.86808		2-Amino-4,6-Dinitrotoluene

Totals : 3.74418e4

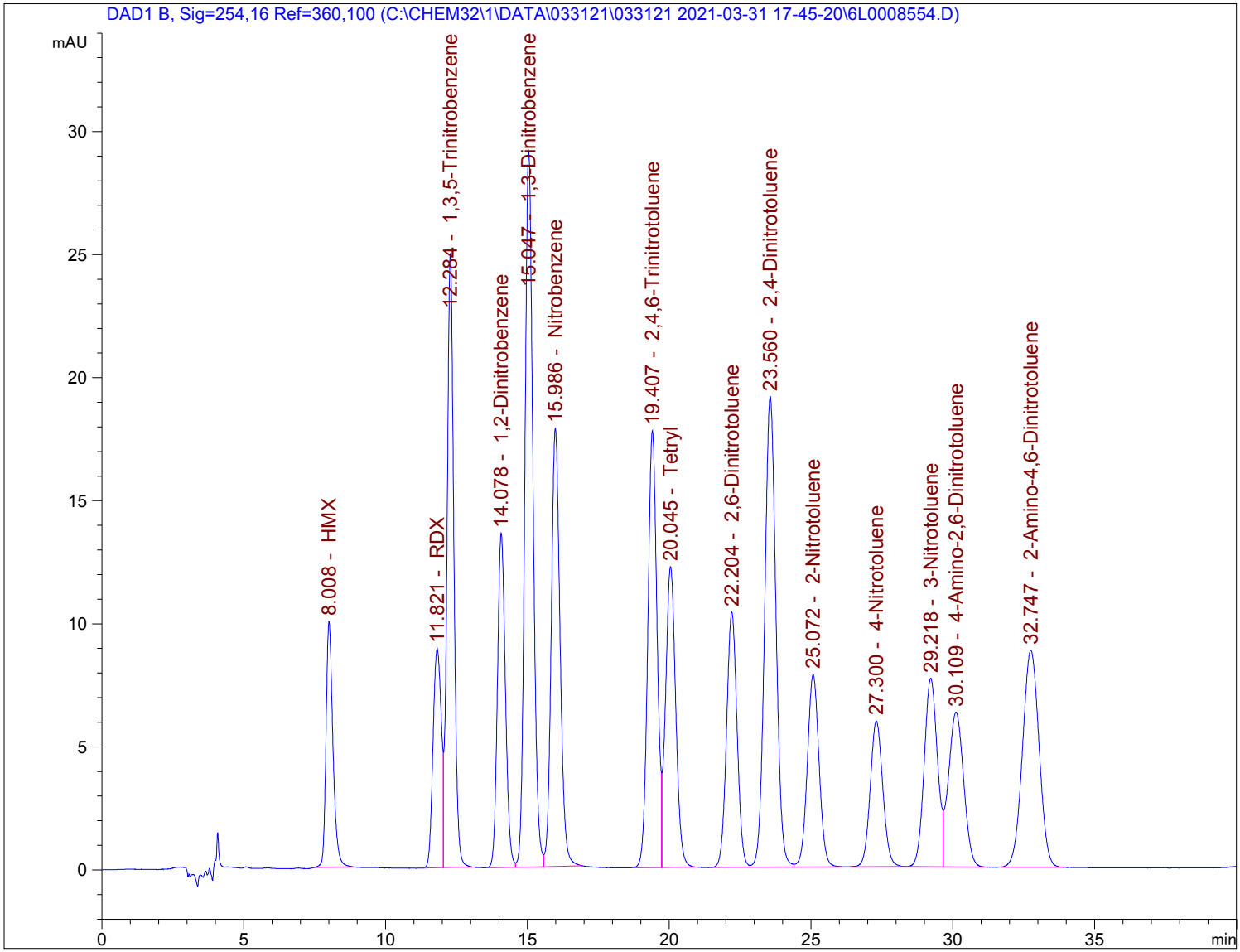
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

*** End of Report ***

Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-45-20\6L0008554.D
Sample Name: S1C0593-CAL2

Acq. Operator	: JWR	Seq. Line	: 2
Acq. Instrument	: HPLC6	Location	: 2
Injection Date	: 3/31/2021 6:40:58 PM	Inj	: 1
		Inj Volume	: 100.000 µl
Acq. Method	: C:\Chem32\1\Data\033121\033121 2021-03-31 17-45-20\8330.M		
Last changed	: 3/31/2021 5:45:20 PM by JWR		
Analysis Method	: C:\CHEM32\1\METHODS\8330DATA.M		
Last changed	: 4/1/2021 10:50:09 PM by JWR		
Method Info	: OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021		
Sample Info	: 1 (1000ppb)		



Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-45-20\6L0008554.D
Sample Name: S1C0593-CAL2

Acq. Operator : JWR Seq. Line : 2
Acq. Instrument : HPLC6 Location : 2
Injection Date : 3/31/2021 6:40:58 PM Inj : 1
Inj Volume : 100.000 µl
Acq. Method : C:\Chem32\1\Data\033121\033121 2021-03-31 17-45-20\8330.M
Last changed : 3/31/2021 5:45:20 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
Last changed : 4/1/2021 10:50:09 PM by JWR
Method Info : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

Sample Info : 1 (1000ppb)

External Standard Report

Sorted By : Signal
Calib. Data Modified : Thursday, April 01, 2021 10:49:55 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
8.008	BBA	168.58925	5.94969	1003.05426		HMX
11.821	BV	181.19002	5.52040	1000.24121		RDX
12.284	VBA	418.22992	2.39788	1002.86469		1,3,5-Trinitrobenzene
14.078	BV	265.00568	3.78077	1001.92454		1,2-Dinitrobenzene
15.047	VV	586.66351	1.70797	1002.00483		1,3-Dinitrobenzene
15.986	VBA	383.66293	2.60363	998.91488		Nitrobenzene
19.407	VV	401.36154	2.49934	1003.14035		2,4,6-Trinitrotoluene
20.045	VBA	305.48425	3.28413	1003.25027		Tetryl
22.204	BV	266.26199	3.76610	1002.76954		2,6-Dinitrotoluene
23.560	VV	529.12445	1.89546	1002.93394		2,4-Dinitrotoluene
25.072	VBA	225.40410	4.44832	1002.67021		2-Nitrotoluene
27.300	BV	183.38731	5.44908	999.29208		4-Nitrotoluene
29.218	VV	250.53180	4.00371	1003.05705		3-Nitrotoluene
30.109	VBA	234.60602	4.27139	1002.09429		4-Amino-2,6-Dinitrotoluene
32.747	BBA	358.63574	2.79123	1001.03422		2-Amino-4,6-Dinitrotoluene

Totals : 1.50292e4

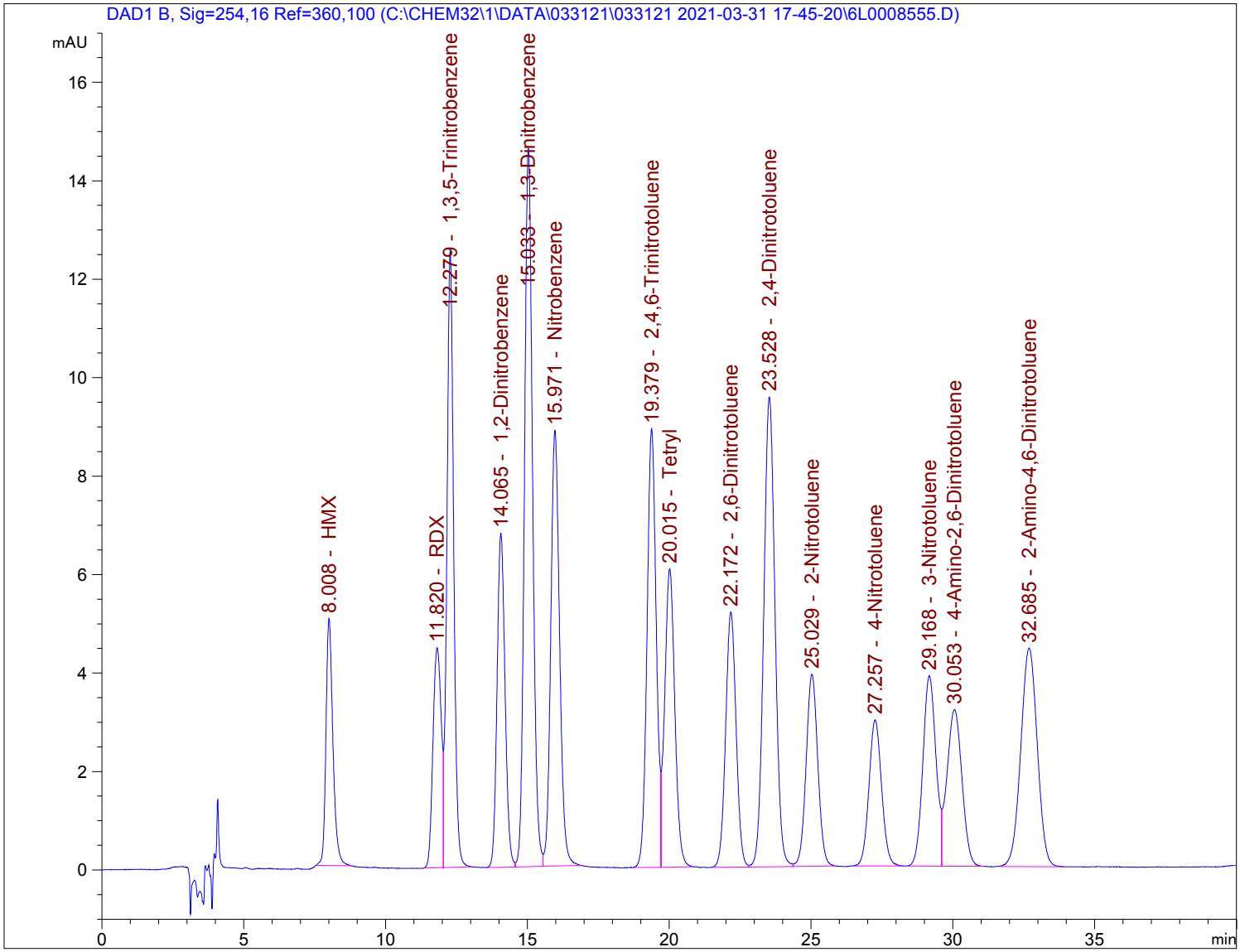
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

*** End of Report ***

Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-45-20\6L0008555.D
Sample Name: S1C0593-CAL3

Acq. Operator	: JWR	Seq. Line	: 3
Acq. Instrument	: HPLC6	Location	: 3
Injection Date	: 3/31/2021 7:33:48 PM	Inj	: 1
		Inj Volume	: 100.000 µl
Acq. Method	: C:\Chem32\1\Data\033121\033121 2021-03-31 17-45-20\8330.M		
Last changed	: 3/31/2021 5:45:20 PM by JWR		
Analysis Method	: C:\CHEM32\1\METHODS\8330DATA.M		
Last changed	: 4/1/2021 10:58:49 PM by JWR		
Method Info	: OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021		
Sample Info	: 1 (500ppb)		



Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-45-20\6L0008555.D
Sample Name: S1C0593-CAL3

Acq. Operator : JWR Seq. Line : 3
Acq. Instrument : HPLC6 Location : 3
Injection Date : 3/31/2021 7:33:48 PM Inj : 1
Inj Volume : 100.000 µl
Acq. Method : C:\Chem32\1\Data\033121\033121 2021-03-31 17-45-20\8330.M
Last changed : 3/31/2021 5:45:20 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
Last changed : 4/1/2021 10:58:49 PM by JWR
Method Info : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

Sample Info : 1 (500ppb)

External Standard Report

Sorted By : Signal
Calib. Data Modified : Thursday, April 01, 2021 10:58:23 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
8.008	BBA	85.52922	5.89311	504.03318		HMX
11.820	BV	90.82465	5.52078	501.42300		RDX
12.279	VBA	209.51237	2.39808	502.42744		1,3,5-Trinitrobenzene
14.065	BV	132.34601	3.78213	500.54972		1,2-Dinitrobenzene
15.033	VV	292.90503	1.70838	500.39400		1,3-Dinitrobenzene
15.971	VBA	191.26222	2.60786	498.78529		Nitrobenzene
19.379	VV	200.41702	2.49580	500.20106		2,4,6-Trinitrotoluene
20.015	VBA	150.90971	3.29078	496.61086		Tetryl
22.172	BV	132.51852	3.76834	499.37475		2,6-Dinitrotoluene
23.528	VV	263.64203	1.89614	499.90297		2,4-Dinitrotoluene
25.029	VBA	111.69813	4.45654	497.78722		2-Nitrotoluene
27.257	BBA	92.20401	5.45025	502.53524		4-Nitrotoluene
29.168	BV	125.15771	4.00387	501.11509		3-Nitrotoluene
30.053	VBA	117.41345	4.26992	501.34598		4-Amino-2,6-Dinitrotoluene
32.685	BBA	179.68408	2.79289	501.83720		2-Amino-4,6-Dinitrotoluene

Totals : 7508.32298

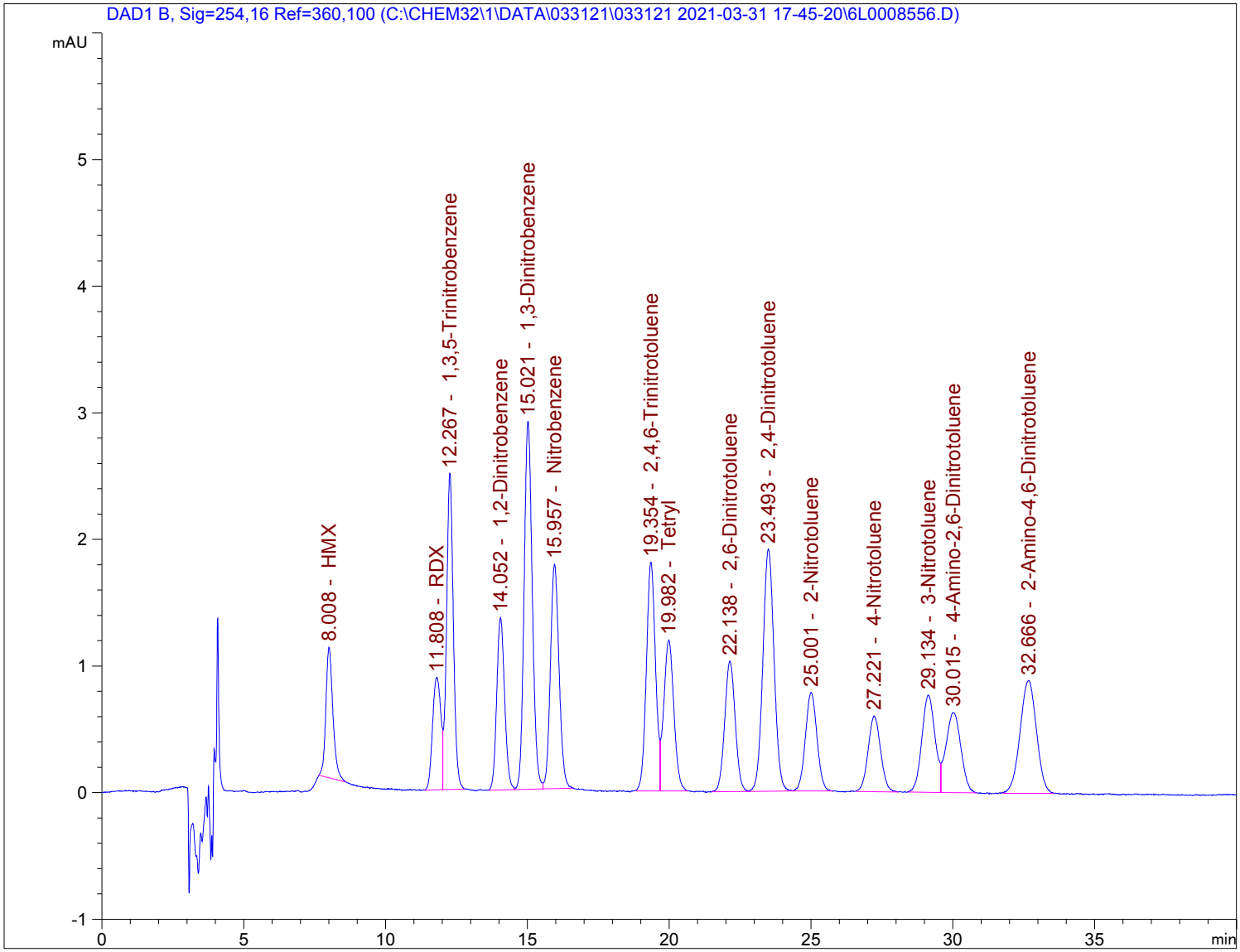
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

*** End of Report ***

Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-45-20\6L0008556.D
Sample Name: S1C0593-CAL4

Acq. Operator	: JWR	Seq. Line	: 4
Acq. Instrument	: HPLC6	Location	: 4
Injection Date	: 3/31/2021 8:26:39 PM	Inj	: 1
		Inj Volume	: 100.000 µl
Acq. Method	: C:\Chem32\1\Data\033121\033121 2021-03-31 17-45-20\8330.M		
Last changed	: 3/31/2021 5:45:20 PM by JWR		
Analysis Method	: C:\CHEM32\1\METHODS\8330DATA.M		
Last changed	: 4/1/2021 11:14:09 PM by JWR		
Method Info	: OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021		
Sample Info	: 1 (100ppb)		



Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-45-20\6L0008556.D
Sample Name: S1C0593-CAL4

Acq. Operator : JWR Seq. Line : 4
Acq. Instrument : HPLC6 Location : 4
Injection Date : 3/31/2021 8:26:39 PM Inj : 1
Inj Volume : 100.000 µl
Acq. Method : C:\Chem32\1\Data\033121\033121 2021-03-31 17-45-20\8330.M
Last changed : 3/31/2021 5:45:20 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
Last changed : 4/1/2021 11:14:09 PM by JWR
Method Info : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

Sample Info : 1 (100ppb)

External Standard Report

Sorted By : Signal
Calib. Data Modified : Thursday, April 01, 2021 11:13:57 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
8.008	BBA	17.84794	5.57969	99.58604		HMX
11.808	BV	18.11518	5.49977	99.62928		RDX
12.267	VBA	41.63564	2.40159	99.99182		1,3,5-Trinitrobenzene
14.052	BV	26.29048	3.78928	99.62188		1,2-Dinitrobenzene
15.021	VV	58.37860	1.70914	99.77704		1,3-Dinitrobenzene
15.957	VBA	37.55727	2.62347	98.53032		Nitrobenzene
19.354	BV	40.49722	2.46384	99.77887		2,4,6-Trinitrotoluene
19.982	VBA	29.51302	3.35060	98.88631		Tetryl
22.138	BV	26.52874	3.78213	100.33506		2,6-Dinitrotoluene
23.493	VV	52.54412	1.90036	99.85256		2,4-Dinitrotoluene
25.001	VBA	22.09312	4.51139	99.67059		2-Nitrotoluene
27.221	BBA	18.31980	5.43356	99.54176		4-Nitrotoluene
29.134	BV	25.04603	4.00594	100.33290		3-Nitrotoluene
30.015	VBA	23.23747	4.26806	99.17883		4-Amino-2,6-Dinitrotoluene
32.666	BBA	35.86147	2.80429	100.56585		2-Amino-4,6-Dinitrotoluene

Totals : 1495.27910

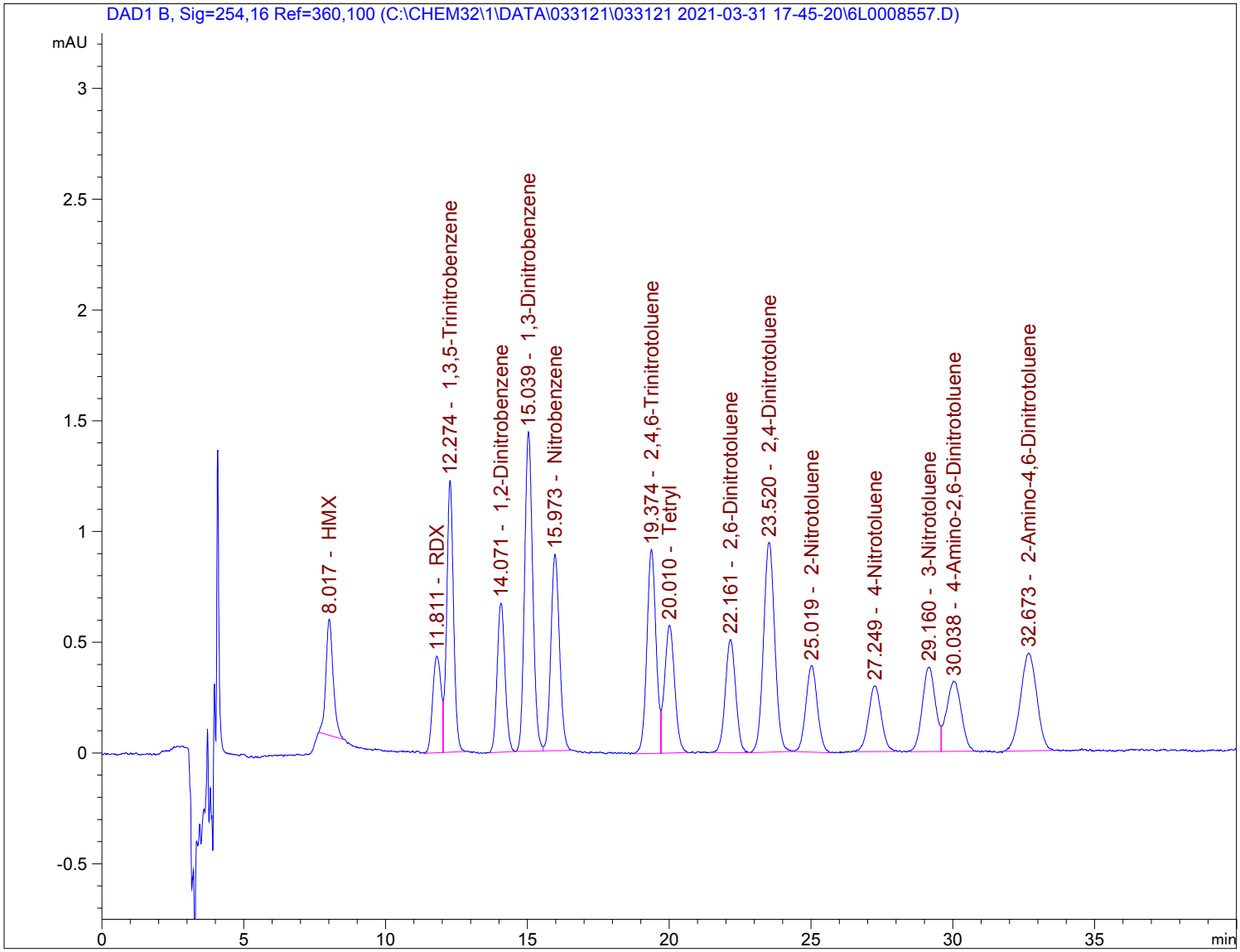
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

*** End of Report ***

Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-45-20\6L0008557.D
Sample Name: S1C0593-CAL5

Acq. Operator	: JWR	Seq. Line	: 5
Acq. Instrument	: HPLC6	Location	: 5
Injection Date	: 3/31/2021 9:19:29 PM	Inj	: 1
		Inj Volume	: 100.000 µl
Acq. Method	: C:\Chem32\1\Data\033121\033121 2021-03-31 17-45-20\8330.M		
Last changed	: 3/31/2021 5:45:20 PM by JWR		
Analysis Method	: C:\CHEM32\1\METHODS\8330DATA.M		
Last changed	: 4/1/2021 11:24:01 PM by JWR		
Method Info	: OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021		
Sample Info	: 1 (50ppb)		



Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-45-20\6L0008557.D
Sample Name: S1C0593-CAL5

Acq. Operator : JWR Seq. Line : 5
Acq. Instrument : HPLC6 Location : 5
Injection Date : 3/31/2021 9:19:29 PM Inj : 1
Inj Volume : 100.000 µl
Acq. Method : C:\Chem32\1\Data\033121\033121 2021-03-31 17-45-20\8330.M
Last changed : 3/31/2021 5:45:20 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
Last changed : 4/1/2021 11:24:01 PM by JWR
Method Info : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

Sample Info : 1 (50ppb)

External Standard Report

Sorted By : Signal
Calib. Data Modified : Thursday, April 01, 2021 11:23:41 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
8.017	BBA	9.34768	5.21503	48.74846		HMX
11.811	BV	8.91248	5.47255	48.77398		RDX
12.274	VBA	20.53619	2.40502	49.38996		1,3,5-Trinitrobenzene
14.071	BV	13.03892	3.80277	49.58407		1,2-Dinitrobenzene
15.039	VV	28.83583	1.71248	49.38085		1,3-Dinitrobenzene
15.973	VBA	18.65527	2.64891	49.41611		Nitrobenzene
19.374	BV	20.75630	2.42719	50.37944		2,4,6-Trinitrotoluene
20.010	VBA	14.38133	3.42678	49.28163		Tetryl
22.161	BV	13.08433	3.79949	49.71378		2,6-Dinitrotoluene
23.520	VV	26.06503	1.90570	49.67213		2,4-Dinitrotoluene
25.019	VB	10.99025	4.57254	50.25340		2-Nitrotoluene
27.249	BBA	9.25493	5.42785	50.23435		4-Nitrotoluene
29.160	BV	12.38534	4.01142	49.68279		3-Nitrotoluene
30.038	VBA	11.50086	4.28271	49.25482		4-Amino-2,6-Dinitrotoluene
32.673	BBA	17.54877	2.82568	49.58718		2-Amino-4,6-Dinitrotoluene

Totals : 743.35295

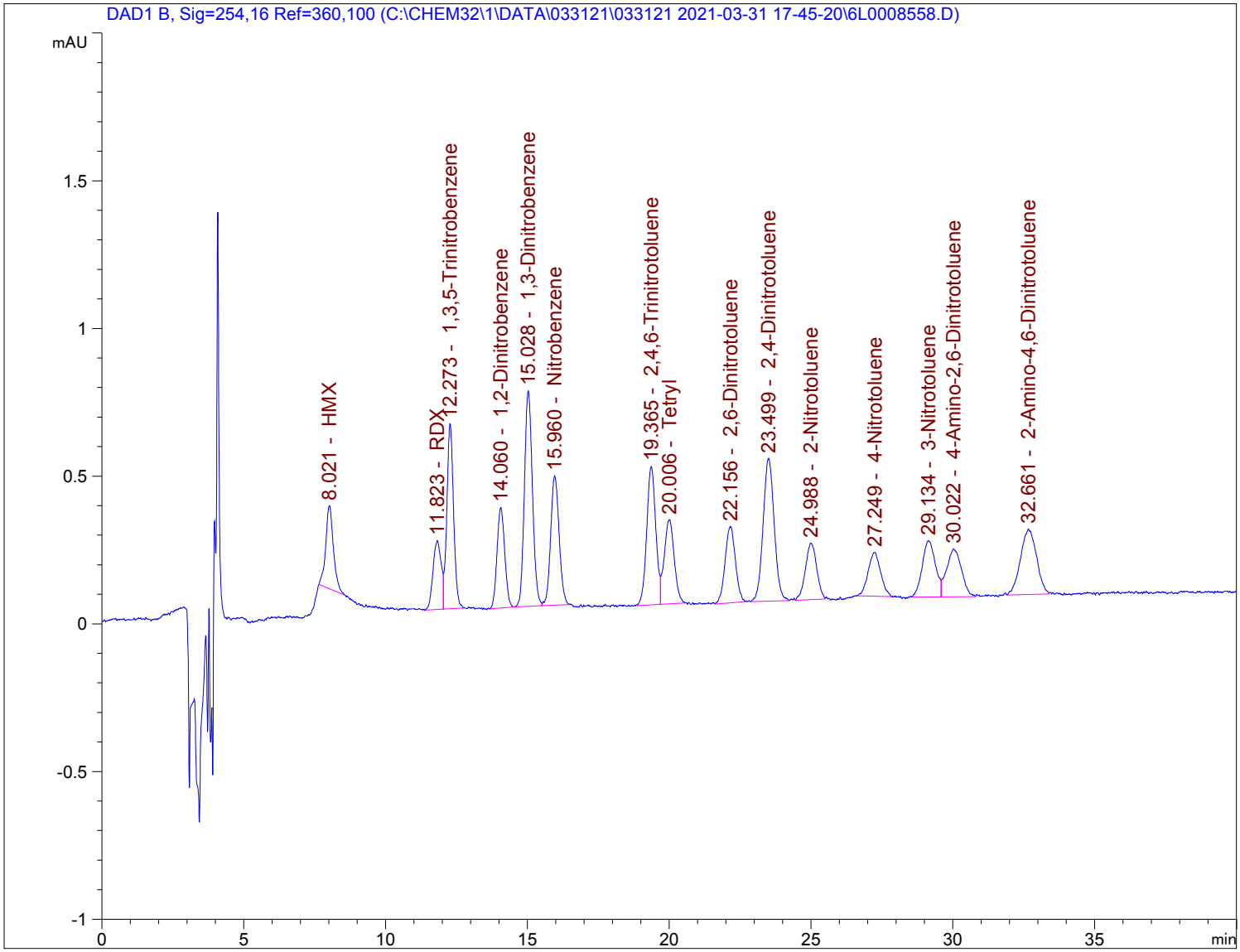
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

*** End of Report ***

Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-45-20\6L0008558.D
Sample Name: S1C0593-CAL6

Acq. Operator	: JWR	Seq. Line	: 6
Acq. Instrument	: HPLC6	Location	: 6
Injection Date	: 3/31/2021 10:12:20 PM	Inj	: 1
		Inj Volume	: 100.000 µl
Acq. Method	: C:\Chem32\1\Data\033121\033121 2021-03-31 17-45-20\8330.M		
Last changed	: 3/31/2021 5:45:20 PM by JWR		
Analysis Method	: C:\CHEM32\1\METHODS\8330DATA.M		
Last changed	: 4/1/2021 11:42:03 PM by JWR		
Method Info	: OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021		
Sample Info	: 1 (25ppb)		



Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-45-20\6L0008558.D
Sample Name: S1C0593-CAL6

Acq. Operator : JWR Seq. Line : 6
Acq. Instrument : HPLC6 Location : 6
Injection Date : 3/31/2021 10:12:20 PM Inj : 1
Inj Volume : 100.000 µl
Acq. Method : C:\Chem32\1\Data\033121\033121 2021-03-31 17-45-20\8330.M
Last changed : 3/31/2021 5:45:20 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
Last changed : 4/1/2021 11:42:03 PM by JWR
Method Info : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

Sample Info : 1 (25ppb)

External Standard Report

Sorted By : Signal
Calib. Data Modified : Thursday, April 01, 2021 11:41:31 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
8.021	BBA	5.32212	4.69956	25.01161		HMX
11.823	BV	4.70871	5.43785	25.60530		RDX
12.273	VBA	10.34519	2.42457	25.08260		1,3,5-Trinitrobenzene
14.060	BV	6.44639	3.87584	24.98518		1,2-Dinitrobenzene
15.028	VV	14.39548	1.73979	25.04517		1,3-Dinitrobenzene
15.960	VF	9.07996	2.77030	25.15425		Nitrobenzene
19.365	VV	10.42818	2.36597	24.67274		2,4,6-Trinitrotoluene
20.006	VBA	7.00228	3.63377	25.44465		Tetryl
22.156	BBA	6.53700	3.83120	25.04454		2,6-Dinitrotoluene
23.499	BV	13.12327	1.91617	25.14641		2,4-Dinitrotoluene
24.988	BF	5.29878	4.71593	24.98866		2-Nitrotoluene
27.249	BBA	4.56352	5.42736	24.76788		4-Nitrotoluene
29.134	BV	6.18038	4.03220	24.92057		3-Nitrotoluene
30.022	VV	5.90509	4.30206	25.40407		4-Amino-2,6-Dinitrotoluene
32.661	VF	8.68584	2.86764	24.90788		2-Amino-4,6-Dinitrotoluene

Totals : 376.18149

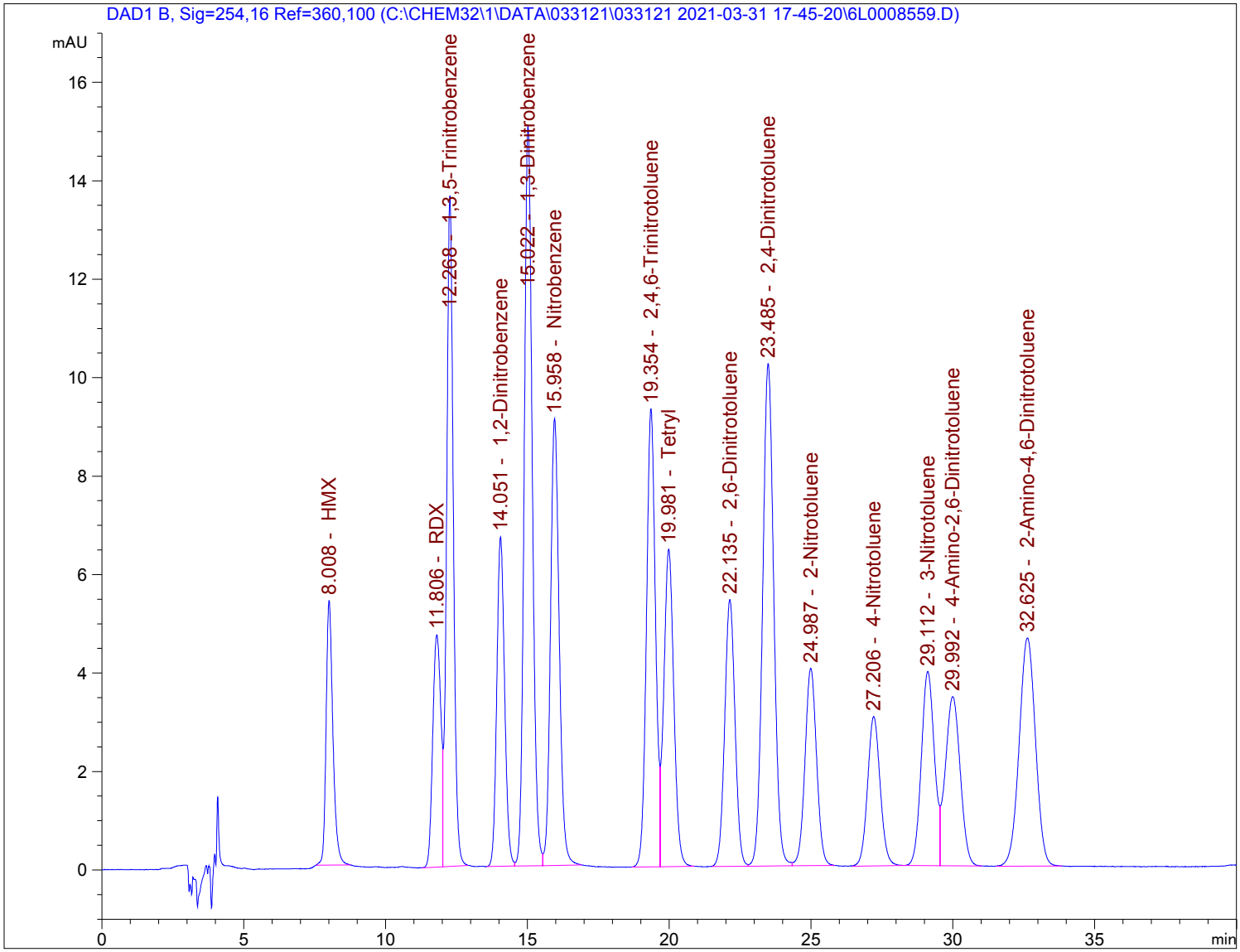
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

*** End of Report ***

Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-45-20\6L0008559.D
Sample Name: S1C0593-ICV1

Acq. Operator	: JWR	Seq. Line	: 7
Acq. Instrument	: HPLC6	Location	: 7
Injection Date	: 3/31/2021 11:05:10 PM	Inj	: 1
		Inj Volume	: 100.000 µl
Acq. Method	: C:\Chem32\1\Data\033121\033121 2021-03-31 17-45-20\8330.M		
Last changed	: 3/31/2021 5:45:20 PM by JWR		
Analysis Method	: C:\CHEM32\1\METHODS\8330DATA.M		
Last changed	: 4/1/2021 11:49:41 PM by JWR		
Method Info	: OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021		
Sample Info	: 1 (500ppb)		



Data File C:\CHEM32\1\DATA\033121\033121 2021-03-31 17-45-20\6L0008559.D
Sample Name: S1C0593-ICV1

Acq. Operator : JWR Seq. Line : 7
Acq. Instrument : HPLC6 Location : 7
Injection Date : 3/31/2021 11:05:10 PM Inj : 1
Inj Volume : 100.000 µl
Acq. Method : C:\Chem32\1\Data\033121\033121 2021-03-31 17-45-20\8330.M
Last changed : 3/31/2021 5:45:20 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
Last changed : 4/1/2021 11:49:41 PM by JWR
Method Info : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

Sample Info : 1 (500ppb)

External Standard Report

Sorted By : Signal
Calib. Data Modified : Thursday, April 01, 2021 11:41:31 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
8.008	BBA	89.46143	5.92322	529.89958		HMX
11.806	BV	94.12064	5.52213	519.74627		RDX
12.268	VBA	224.19757	2.39827	537.68629		1,3,5-Trinitrobenzene
14.051	BV	128.06741	3.78443	484.66163		1,2-Dinitrobenzene
15.022	VV	298.55432	1.70933	510.32749		1,3-Dinitrobenzene
15.958	VBA	193.79811	2.61074	505.95714		Nitrobenzene
19.354	BV	206.30359	2.49691	515.12176		2,4,6-Trinitrotoluene
19.981	VBA	158.34222	3.29166	521.20937		Tetryl
22.135	BV	136.97551	3.76891	516.24837		2,6-Dinitrotoluene
23.485	VV	278.19153	1.89640	527.56323		2,4-Dinitrotoluene
24.987	VBA	113.88067	4.45688	507.55247		2-Nitrotoluene
27.206	VV	93.81729	5.45247	511.53605		4-Nitrotoluene
29.112	VV	127.66073	4.00442	511.20751		3-Nitrotoluene
29.992	VBA	125.94215	4.27180	537.99934		4-Amino-2,6-Dinitrotoluene
32.625	BBA	185.72717	2.79377	518.87931		2-Amino-4,6-Dinitrotoluene

Totals : 7755.59583

1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

*** End of Report ***

Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 13-46-00\5L028386.D
Sample Name: S1D0267-CCV1

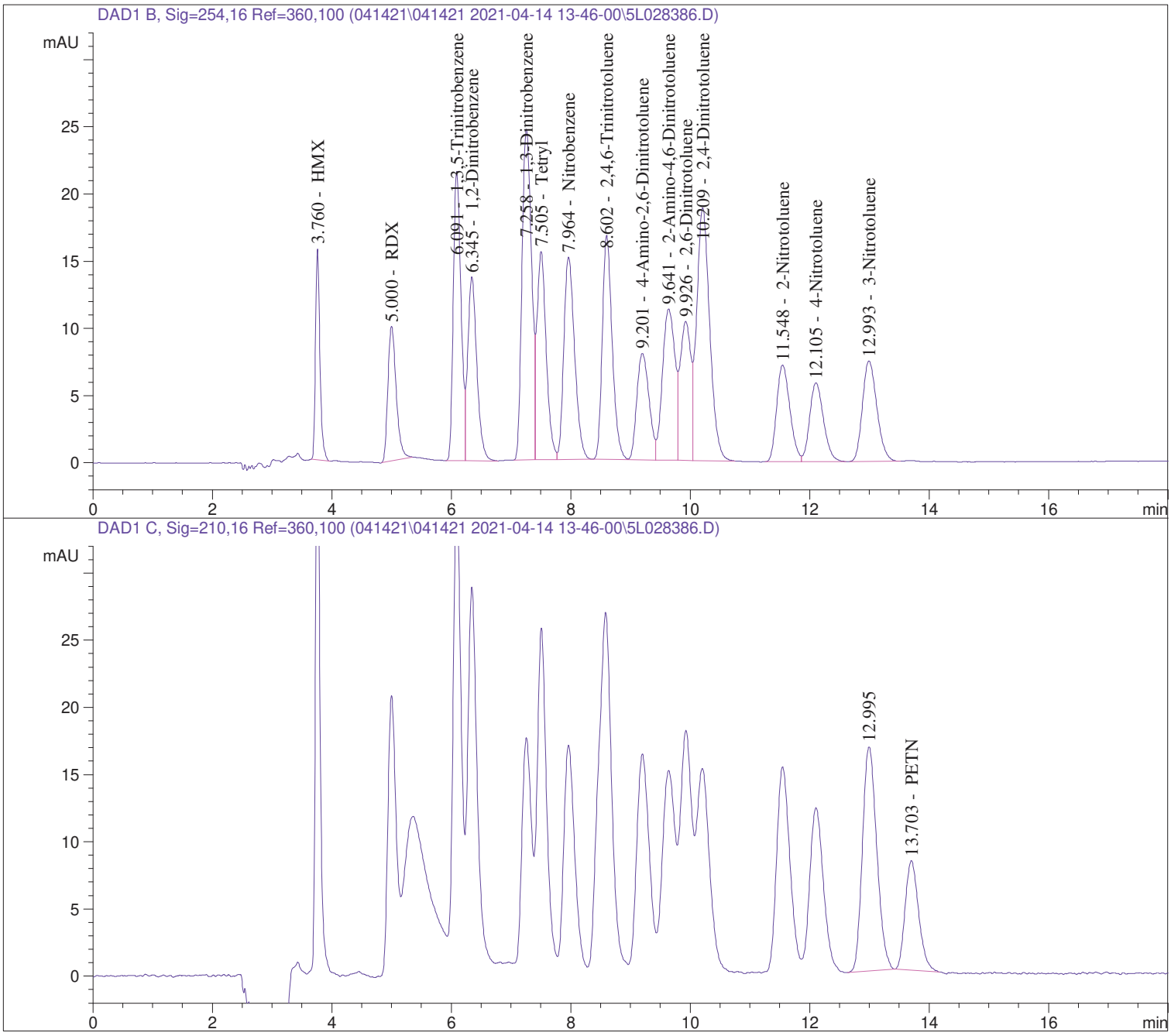
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Acq. Operator : JWR Seq. Line : 1
Acq. Instrument : HPLC5 Location : Vial 1
Injection Date : 4/14/2021 1:48:56 PM Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 13-46-00\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/13/2021 5:46:46 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

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Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 13-46-00\5L028386.D
Sample Name: S1D0267-CCV1

Acq. Operator : JWR Seq. Line : 1
Acq. Instrument : HPLC5 Location : Vial 1
Injection Date : 4/14/2021 1:48:56 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 13-46-00\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/13/2021 5:46:46 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/13/2021 5:44:33 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.760	BBA	80.31035	6.20599	498.40550		HMX
5.000	BBA	96.73672	5.19055	502.11678		RDX
6.091	BV	191.08984	2.62147	500.93702		1,3,5-Trinitrobenzene
6.345	VBA	146.34543	3.55774	520.65883		1,2-Dinitrobenzene
7.258	BV	273.38391	1.81402	495.92420		1,3-Dinitrobenzene
7.505	VV	167.79778	2.98417	500.73654		Tetryl
7.964	VV	189.72247	2.64685	502.16646		Nitrobenzene
8.602	VV	192.20680	2.53741	487.70812		2,4,6-Trinitrotoluene
9.201	VV	113.00462	4.40624	497.92577		4-Amino-2,6-Dinitrotoluene
9.641	VV	164.26340	3.00073	492.91030		2-Amino-4,6-Dinitrotoluene
9.926	VV	128.34264	3.85043	494.17393		2,6-Dinitrotoluene
10.209	VBA	288.15292	1.82507	525.89984		2,4-Dinitrotoluene
11.548	BV	110.79823	4.52412	501.26468		2-Nitrotoluene
12.105	VB	94.35543	5.36338	506.06431		4-Nitrotoluene
12.993	BB	125.62597	4.00414	503.02337		3-Nitrotoluene

Totals : 7529.91566

Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 13-46-00\5L028386.D
Sample Name: S1D0267-CCV1

Acq. Operator : JWR Seq. Line : 1
Acq. Instrument : HPLC5 Location : Vial 1
Injection Date : 4/14/2021 1:48:56 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 13-46-00\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/13/2021 5:46:46 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.703	VBA	128.79099	3.86674	498.00112		PETN

Totals : 498.00112

*** End of Report ***

Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 17-23-37\5L028397.D
Sample Name: S1D0267-CCV2

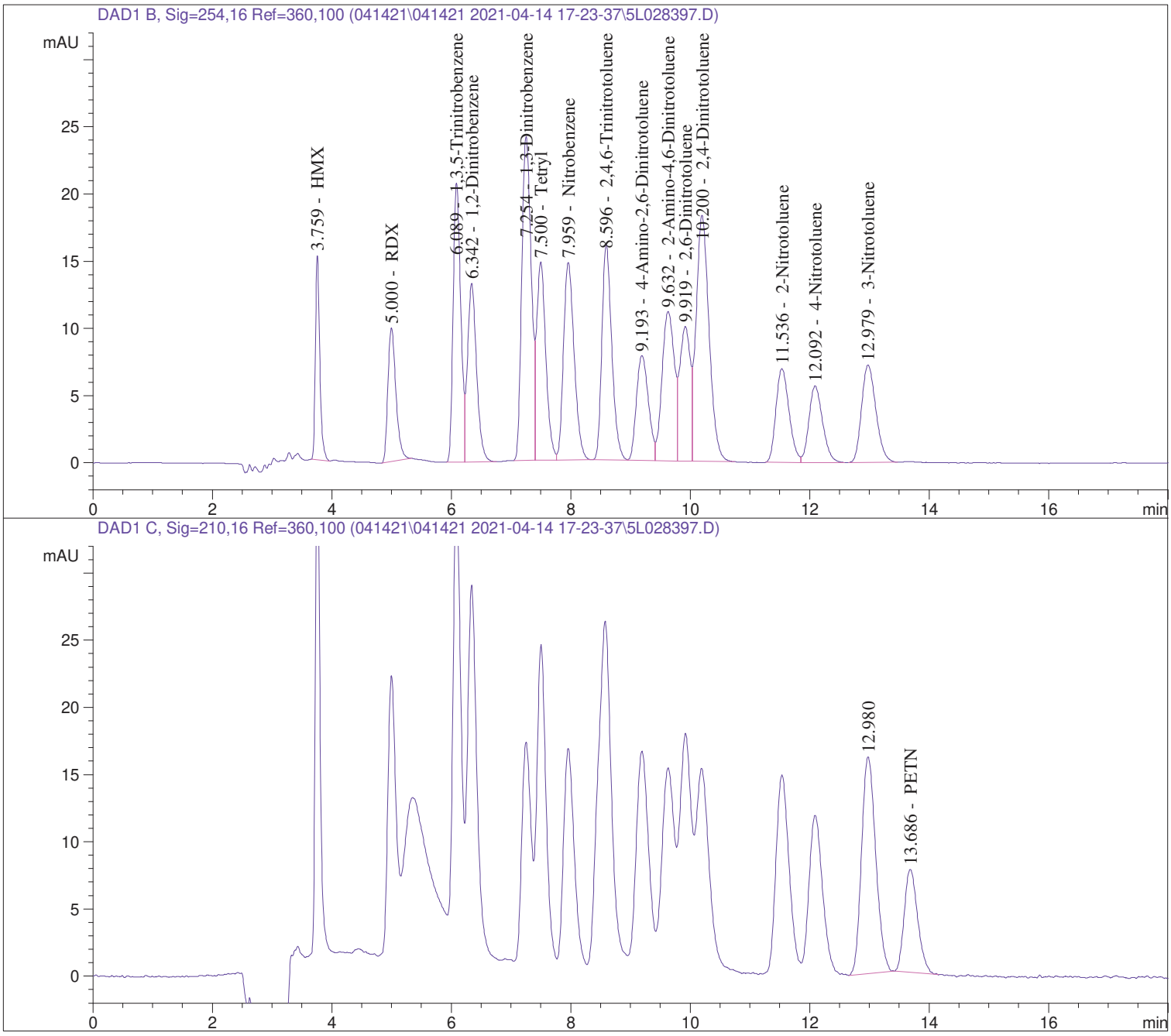
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Acq. Operator : JWR
Seq. Line : 12
Acq. Instrument : HPLC5
Location : Vial 1
Injection Date : 4/14/2021 7:19:41 PM
Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/13/2021 5:46:46 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

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Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 17-23-37\5L028397.D
Sample Name: S1D0267-CCV2

Acq. Operator : JWR Seq. Line : 12
Acq. Instrument : HPLC5 Location : Vial 1
Injection Date : 4/14/2021 7:19:41 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/13/2021 5:46:46 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/13/2021 5:44:33 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.759	BBA	78.19805	6.20510	485.22705		HMX
5.000	BBA	93.33182	5.19316	484.68752		RDX
6.089	BV	183.89935	2.62149	482.08947		1,3,5-Trinitrobenzene
6.342	VBA	140.07516	3.55790	498.37335		1,2-Dinitrobenzene
7.254	BV	264.83340	1.81400	480.40776		1,3-Dinitrobenzene
7.500	VV	158.10753	2.98409	471.80772		Tetryl
7.959	VV	182.44412	2.64670	482.87451		Nitrobenzene
8.596	VV	184.70067	2.53704	468.59328		2,4,6-Trinitrotoluene
9.193	VV	109.56910	4.40651	482.81717		4-Amino-2,6-Dinitrotoluene
9.632	VV	159.99051	3.00081	480.10050		2-Amino-4,6-Dinitrotoluene
9.919	VV	122.91403	3.85019	473.24178		2,6-Dinitrotoluene
10.200	VBA	277.39297	1.82505	506.25537		2,4-Dinitrotoluene
11.536	BV	106.57645	4.52392	482.14375		2-Nitrotoluene
12.092	VV	90.93266	5.36353	487.71973		4-Nitrotoluene
12.979	BB	120.67886	4.00418	483.21931		3-Nitrotoluene

Totals : 7249.55828

Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 17-23-37\5L028397.D
Sample Name: S1D0267-CCV2

Acq. Operator : JWR Seq. Line : 12
Acq. Instrument : HPLC5 Location : Vial 1
Injection Date : 4/14/2021 7:19:41 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/13/2021 5:46:46 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.686	VV	120.51678	3.86492	465.78794		PETN

Totals : 465.78794

*** End of Report ***

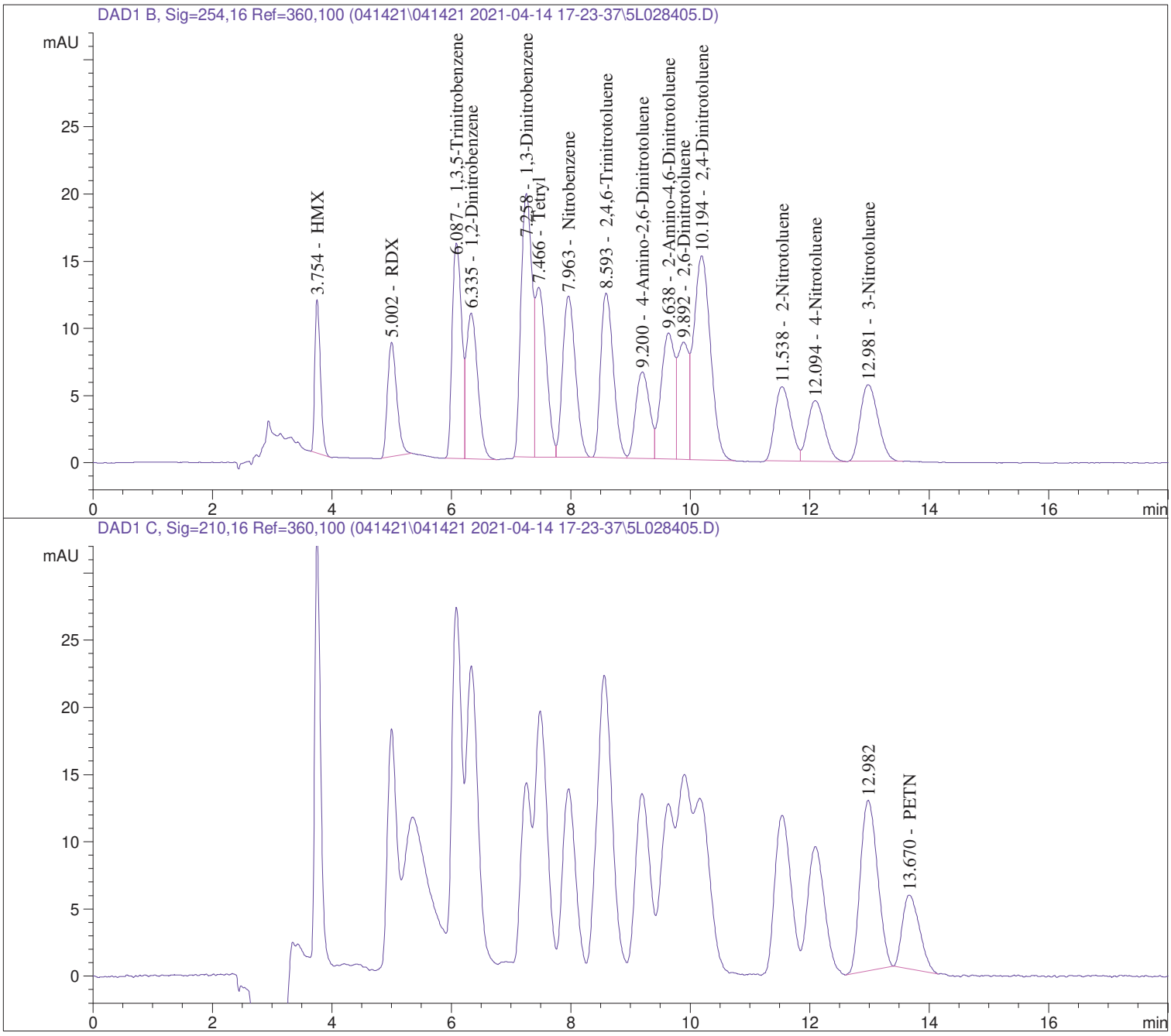
Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 17-23-37\5L028405.D
Sample Name: S1D0267-CCV3

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Acq. Operator : JWR
Seq. Line : 20
Acq. Instrument : HPLC5
Location : Vial 1
Injection Date : 4/14/2021 11:05:17 PM
Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/13/2021 5:46:46 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

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Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 17-23-37\5L028405.D
Sample Name: S1D0267-CCV3

Acq. Operator : JWR Seq. Line : 20
Acq. Instrument : HPLC5 Location : Vial 1
Injection Date : 4/14/2021 11:05:17 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/13/2021 5:46:46 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/13/2021 5:44:33 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.754	BBA	75.44670	6.20387	468.06160		HMX
5.002	BBA	92.05847	5.19419	478.16942		RDX
6.087	BV	177.17091	2.62150	464.45305		1,3,5-Trinitrobenzene
6.335	VBA	142.79301	3.55783	508.03301		1,2-Dinitrobenzene
7.258	BV	254.08516	1.81397	460.90311		1,3-Dinitrobenzene
7.466	VV	159.27222	2.98410	475.28473		Tetryl
7.963	VV	178.89368	2.64662	473.46372		Nitrobenzene
8.593	VV	180.54030	2.53682	457.99864		2,4,6-Trinitrotoluene
9.200	VV	104.17563	4.40696	459.09800		4-Amino-2,6-Dinitrotoluene
9.638	VV	148.48759	3.00103	445.61562		2-Amino-4,6-Dinitrotoluene
9.892	VV	109.54172	3.84949	421.67948		2,6-Dinitrotoluene
10.194	VBA	298.42462	1.82509	544.65291		2,4-Dinitrotoluene
11.538	BV	102.93483	4.52374	465.65045		2-Nitrotoluene
12.094	VV	89.54889	5.36359	480.30335		4-Nitrotoluene
12.981	BBA	117.98840	4.00420	472.44898		3-Nitrotoluene

Totals : 7075.81607

Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 17-23-37\5L028405.D
Sample Name: S1D0267-CCV3

Acq. Operator : JWR Seq. Line : 20
Acq. Instrument : HPLC5 Location : Vial 1
Injection Date : 4/14/2021 11:05:17 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/13/2021 5:46:46 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.670	VV	109.86659	3.86218	424.32452		PETN

Totals : 424.32452

*** End of Report ***

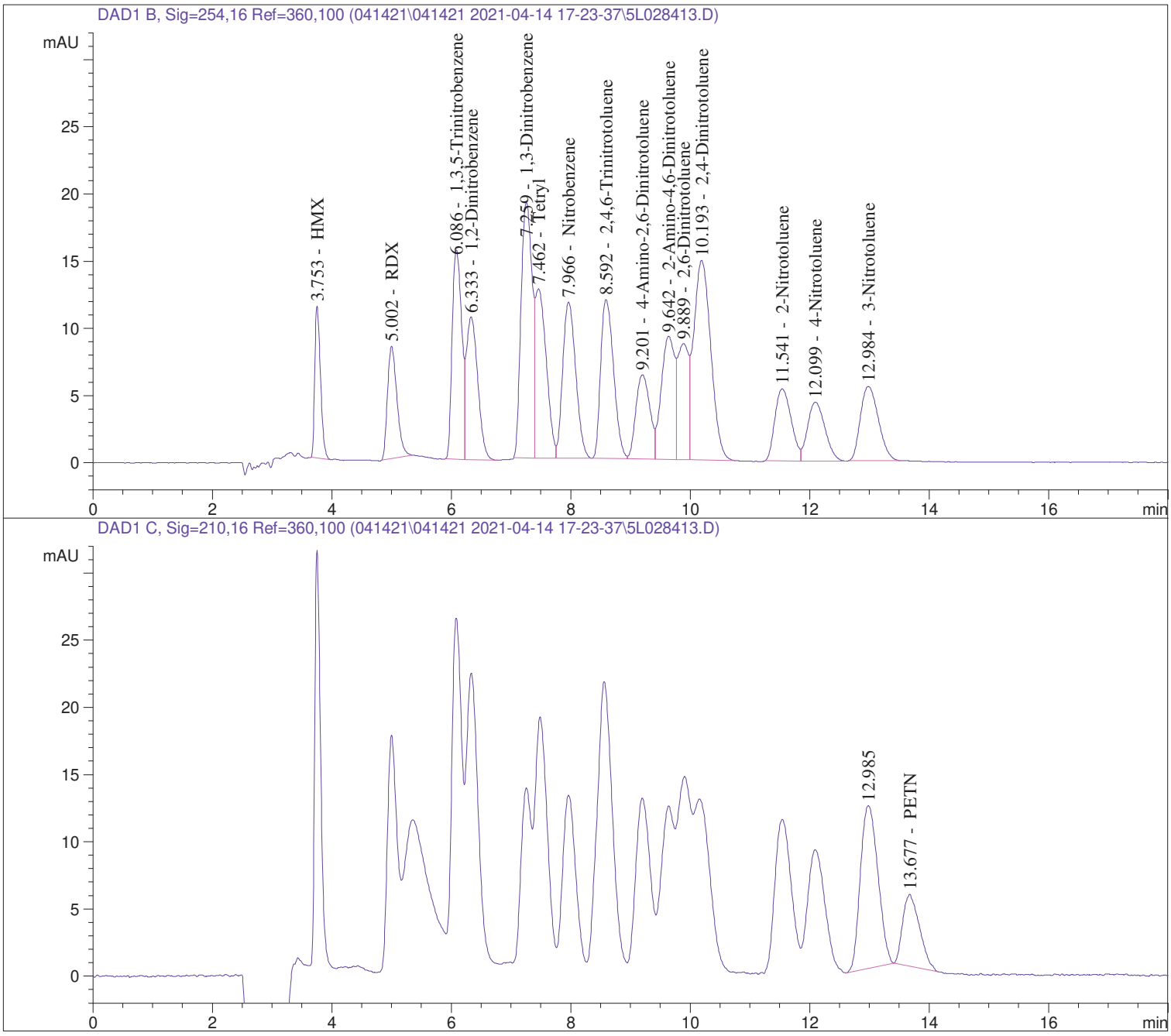
Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 17-23-37\5L028413.D
Sample Name: S1D0267-CCV4

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Acq. Operator : JWR
Seq. Line : 28
Acq. Instrument : HPLC5
Location : Vial 1
Injection Date : 4/15/2021 2:50:50 AM
Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/13/2021 5:46:46 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

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Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 17-23-37\5L028413.D
Sample Name: S1D0267-CCV4

Acq. Operator : JWR Seq. Line : 28
Acq. Instrument : HPLC5 Location : Vial 1
Injection Date : 4/15/2021 2:50:50 AM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/13/2021 5:46:46 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/13/2021 5:44:33 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.753	BBA	75.88406	6.20407	470.79022		HMX
5.002	BBA	91.72096	5.19447	476.44175		RDX
6.086	BV	174.07852	2.62150	456.34734		1,3,5-Trinitrobenzene
6.333	VBA	141.71153	3.55786	504.18925		1,2-Dinitrobenzene
7.259	BV	248.96902	1.81396	451.61896		1,3-Dinitrobenzene
7.462	VV	159.47096	2.98410	475.87805		Tetryl
7.966	VV	176.33351	2.64656	466.67776		Nitrobenzene
8.592	VV	177.44966	2.53665	450.12815		2,4,6-Trinitrotoluene
9.201	VV	102.54816	4.40711	451.94078		4-Amino-2,6-Dinitrotoluene
9.642	VV	144.15112	3.00112	432.61520		2-Amino-4,6-Dinitrotoluene
9.889	VV	109.35183	3.84948	420.94729		2,6-Dinitrotoluene
10.193	VBA	296.38846	1.82509	540.93548		2,4-Dinitrotoluene
11.541	BV	101.50231	4.52366	459.16241		2-Nitrotoluene
12.099	VV	88.95136	5.36362	477.10087		4-Nitrotoluene
12.984	BV	116.07397	4.00422	464.78525		3-Nitrotoluene

Totals : 6999.55877

Data File C:\CHEM32\1\DATA\041421\041421 2021-04-14 17-23-37\5L028413.D
Sample Name: S1D0267-CCV4

Acq. Operator : JWR Seq. Line : 28
Acq. Instrument : HPLC5 Location : Vial 1
Injection Date : 4/15/2021 2:50:50 AM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-14 17-23-37\8330PLUS-PETN.M
Last changed : 4/14/2021 1:45:51 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/13/2021 5:46:46 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.677	VV	105.67740	3.86095	408.01512		PETN

Totals : 408.01512

*** End of Report ***

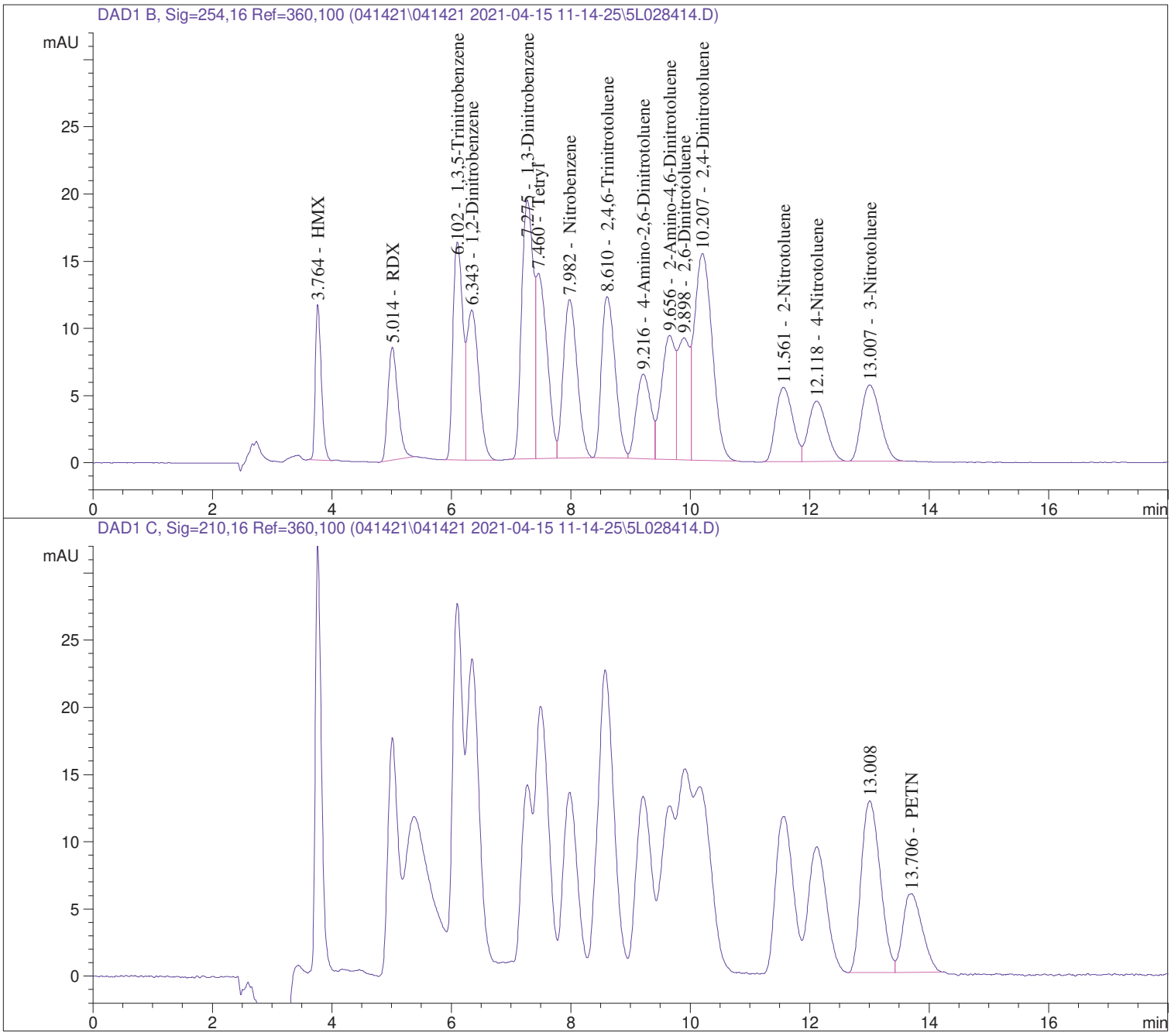
Data File C:\CHEM32\1\DATA\041421\041421 2021-04-15 11-14-25\5L028414.D
Sample Name: S1D0267-CCV5

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Acq. Operator : JWR
Seq. Line : 29
Acq. Instrument : HPLC5
Location : Vial 1
Injection Date : 4/15/2021 11:17:56 AM
Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-15 11-14-25\8330PLUS-PETN.M
Last changed : 4/15/2021 11:14:23 AM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/15/2021 12:00:58 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

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Data File C:\CHEM32\1\DATA\041421\041421 2021-04-15 11-14-25\5L028414.D
Sample Name: S1D0267-CCV5

Acq. Operator : JWR Seq. Line : 29
Acq. Instrument : HPLC5 Location : Vial 1
Injection Date : 4/15/2021 11:17:56 AM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-15 11-14-25\8330PLUS-PETN.M
Last changed : 4/15/2021 11:14:23 AM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/15/2021 12:00:58 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/13/2021 5:44:33 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.764	BBA	81.08035	6.20631	503.20950		HMX
5.014	BBA	97.35565	5.19009	505.28503		RDX
6.102	BV	186.78526	2.62148	489.65395		1,3,5-Trinitrobenzene
6.343	VBA	153.69415	3.55757	546.77733		1,2-Dinitrobenzene
7.275	BV	266.33383	1.81400	483.13055		1,3-Dinitrobenzene
7.460	VV	174.49979	2.98421	520.74442		Tetryl
7.982	VV	189.35660	2.64684	501.19668		Nitrobenzene
8.610	VV	190.30804	2.53732	482.87281		2,4,6-Trinitrotoluene
9.216	VV	107.04034	4.40672	471.69632		4-Amino-2,6-Dinitrotoluene
9.656	VV	149.97673	3.00100	450.07994		2-Amino-4,6-Dinitrotoluene
9.898	VV	125.79486	3.85032	484.34997		2,6-Dinitrotoluene
10.207	VBA	317.70645	1.82513	579.85579		2,4-Dinitrotoluene
11.561	BV	110.32957	4.52410	499.14210		2-Nitrotoluene
12.118	VV	96.17287	5.36331	515.80502		4-Nitrotoluene
13.007	VBA	125.47477	4.00414	502.41810		3-Nitrotoluene

Totals : 7536.21752

Data File C:\CHEM32\1\DATA\041421\041421 2021-04-15 11-14-25\5L028414.D
Sample Name: S1D0267-CCV5

Acq. Operator : JWR Seq. Line : 29
Acq. Instrument : HPLC5 Location : Vial 1
Injection Date : 4/15/2021 11:17:56 AM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-15 11-14-25\8330PLUS-PETN.M
Last changed : 4/15/2021 11:14:23 AM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/15/2021 12:00:58 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.706	VV	132.39738	3.86746	512.04158		PETN

Totals : 512.04158

*** End of Report ***

Data File C:\CHEM32\1\DATA\041421\041421 2021-04-15 14-44-52\5L028420.D
Sample Name: S1D0267-CCV6

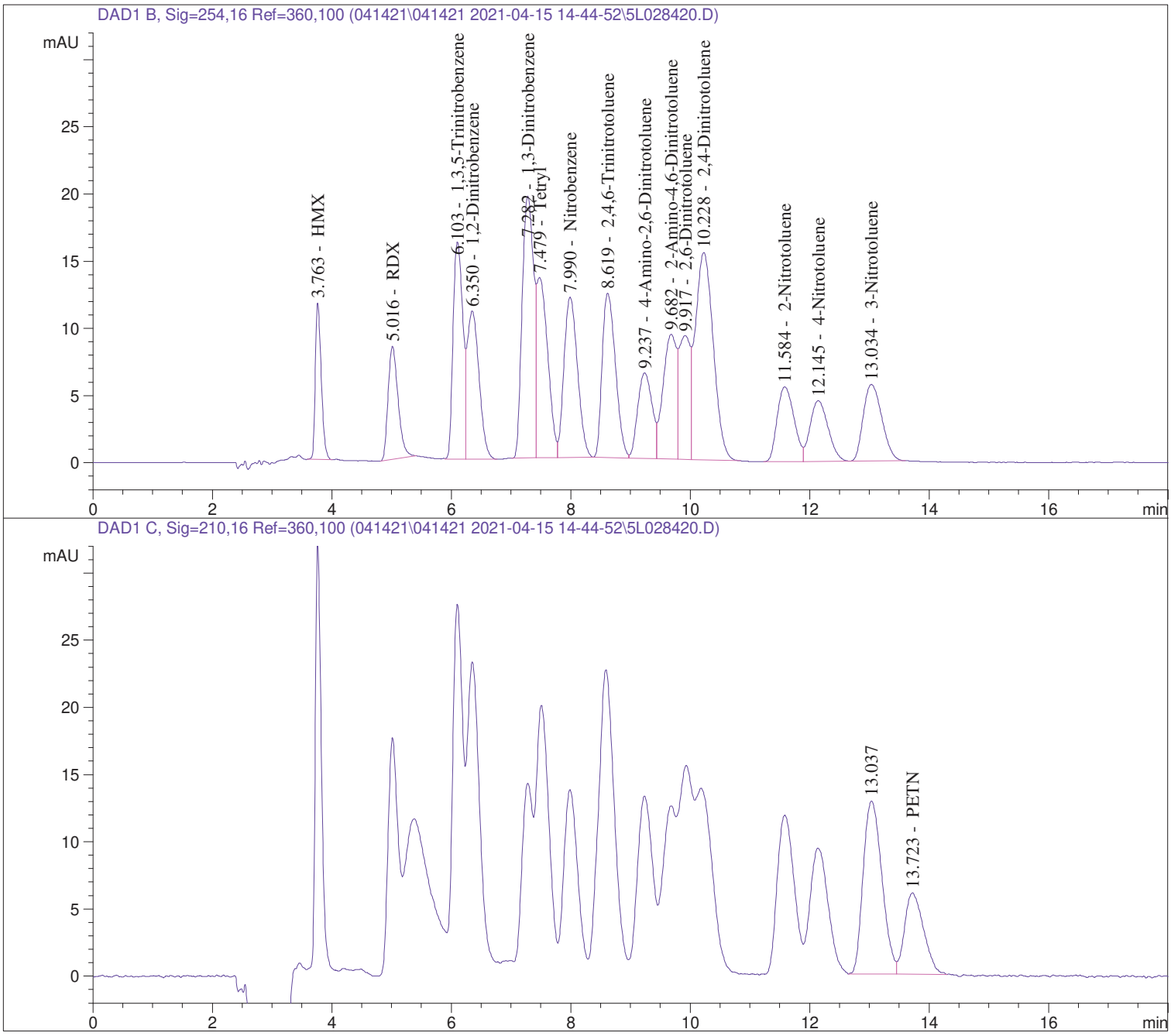
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Acq. Operator : JWR
Seq. Line : 35
Acq. Instrument : HPLC5
Location : Vial 1
Injection Date : 4/15/2021 3:22:22 PM
Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-15 14-44-52\8330PLUS-PETN.M
Last changed : 4/15/2021 11:14:23 AM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/15/2021 3:54:26 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

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Data File C:\CHEM32\1\DATA\041421\041421 2021-04-15 14-44-52\5L028420.D
Sample Name: S1D0267-CCV6

Acq. Operator : JWR Seq. Line : 35
Acq. Instrument : HPLC5 Location : Vial 1
Injection Date : 4/15/2021 3:22:22 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-15 14-44-52\8330PLUS-PETN.M
Last changed : 4/15/2021 11:14:23 AM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/15/2021 3:54:26 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/13/2021 5:44:33 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.763	BBA	81.09171	6.20631	503.28037		HMX
5.016	BBA	97.70947	5.18984	507.09616		RDX
6.103	VV	185.07069	2.62148	485.15976		1,3,5-Trinitrobenzene
6.350	VBA	151.29163	3.55762	538.23838		1,2-Dinitrobenzene
7.282	BV	264.87271	1.81400	480.47908		1,3-Dinitrobenzene
7.479	VV	170.87111	2.98419	509.91153		Tetryl
7.990	VV	188.18164	2.64682	498.08234		Nitrobenzene
8.619	VV	188.91257	2.53725	479.31914		2,4,6-Trinitrotoluene
9.237	VV	107.01411	4.40672	471.58097		4-Amino-2,6-Dinitrotoluene
9.682	VV	146.43112	3.00107	439.45047		2-Amino-4,6-Dinitrotoluene
9.917	VV	120.88732	3.85009	465.42699		2,6-Dinitrotoluene
10.228	VBA	320.73718	1.82514	585.38901		2,4-Dinitrotoluene
11.584	BV	109.56713	4.52407	495.68891		2-Nitrotoluene
12.145	VV	95.00053	5.36336	509.52179		4-Nitrotoluene
13.034	VBA	123.52161	4.00415	494.59931		3-Nitrotoluene

Totals : 7463.22422

Data File C:\CHEM32\1\DATA\041421\041421 2021-04-15 14-44-52\5L028420.D
Sample Name: S1D0267-CCV6

Acq. Operator : JWR Seq. Line : 35
Acq. Instrument : HPLC5 Location : Vial 1
Injection Date : 4/15/2021 3:22:22 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041421\041421 2021-04-15 14-44-52\8330PLUS-PETN.M
Last changed : 4/15/2021 11:14:23 AM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/15/2021 3:54:26 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.723	VV	134.94345	3.86795	521.95395		PETN

Totals : 521.95395

*** End of Report ***

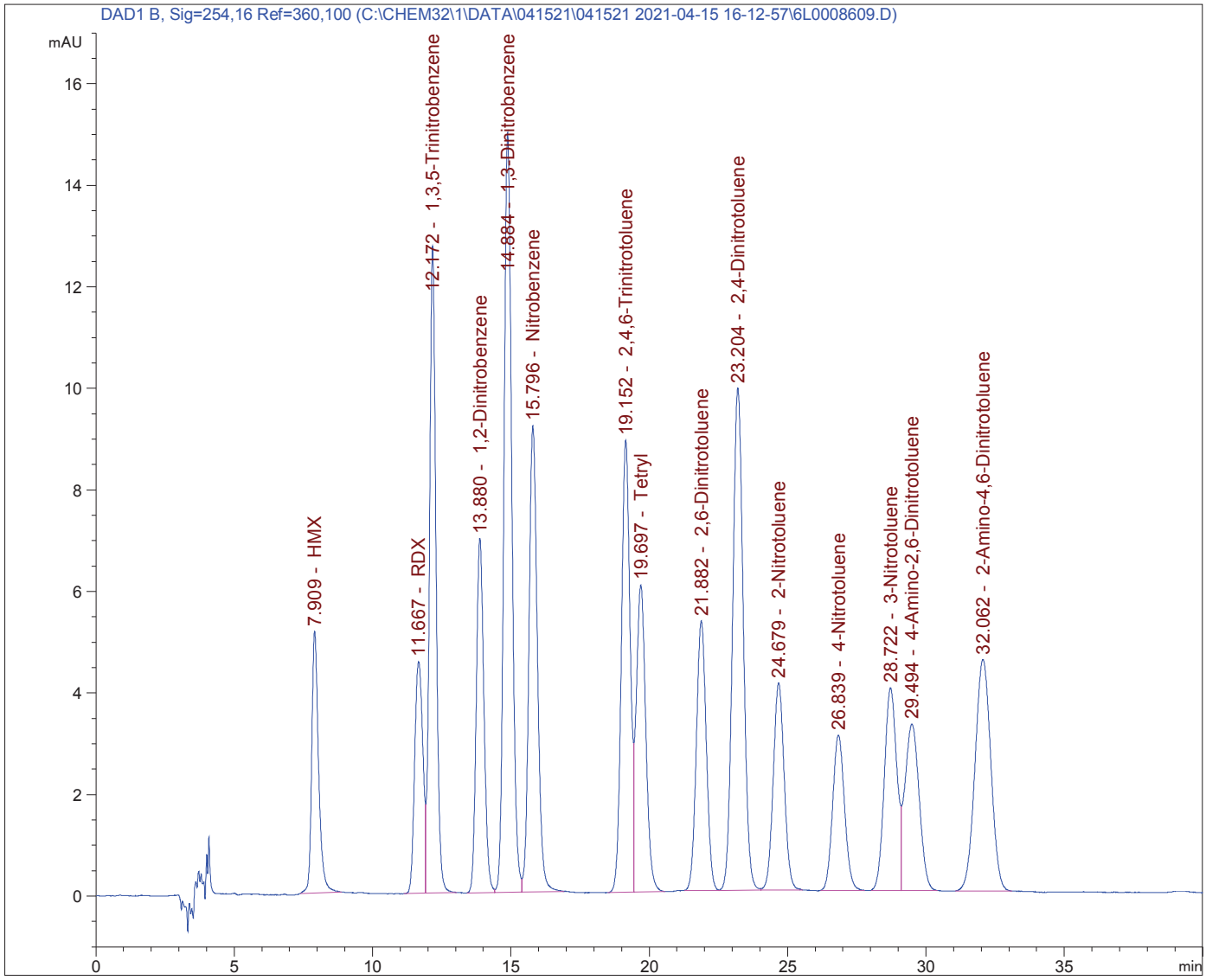
Data File C:\CHEM32\1\DATA\041521\041521 2021-04-15 16-12-57\6L0008609.D
Sample Name: S1D0299-CCV1

==========

Acq. Operator : JWR Seq. Line : 1
Acq. Instrument : HPLC6 Location : 1
Injection Date : 4/15/2021 4:15:46 PM Inj : 1
Inj Volume : 100.000 µl
Acq. Method : C:\Chem32\1\Data\041521\041521 2021-04-15 16-12-57\8330.M
Last changed : 4/15/2021 4:12:57 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
Last changed : 4/15/2021 5:50:03 PM by ECL
Method Info : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

Sample Info : 1 (500ppb)

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Data File C:\CHEM32\1\DATA\041521\041521 2021-04-15 16-12-57\6L0008609.D
Sample Name: S1D0299-CCV1

Acq. Operator : JWR Seq. Line : 1
Acq. Instrument : HPLC6 Location : 1
Injection Date : 4/15/2021 4:15:46 PM Inj : 1
Inj Volume : 100.000 µl
Acq. Method : C:\Chem32\1\Data\041521\041521 2021-04-15 16-12-57\8330.M
Last changed : 4/15/2021 4:12:57 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
Last changed : 4/15/2021 5:50:03 PM by ECL
Method Info : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

Sample Info : 1 (500ppb)

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/14/2021 8:29:14 AM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
7.909	BV	89.12222	5.92292	527.86416		HMX
11.667	BV	94.46830	5.52214	521.66761		RDX
12.172	VBA	210.06255	2.39836	503.80467		1,3,5-Trinitrobenzene
13.880	BV	134.13400	3.78421	507.59080		1,2-Dinitrobenzene
14.884	VV	297.25531	1.70934	508.10906		1,3-Dinitrobenzene
15.796	VBA	195.15477	2.61069	509.48839		Nitrobenzene
19.152	BV	196.47546	2.49656	490.51329		2,4,6-Trinitrotoluene
19.697	VBA	146.41193	3.29295	482.12768		Tetryl
21.882	BV	132.57448	3.76901	499.67502		2,6-Dinitrotoluene
23.204	VV	265.28915	1.89645	503.10776		2,4-Dinitrotoluene
24.679	VBA	112.30654	4.45706	500.55667		2-Nitrotoluene
26.839	BBA	92.02216	5.45245	501.74582		4-Nitrotoluene
28.722	BV	127.11307	4.00443	509.01522		3-Nitrotoluene
29.494	VBA	118.01381	4.27190	504.14290		4-Amino-2,6-Dinitrotoluene
32.062	BBA	181.46971	2.79386	507.00037		2-Amino-4,6-Dinitrotoluene

Totals : 7576.40941

*** End of Report ***

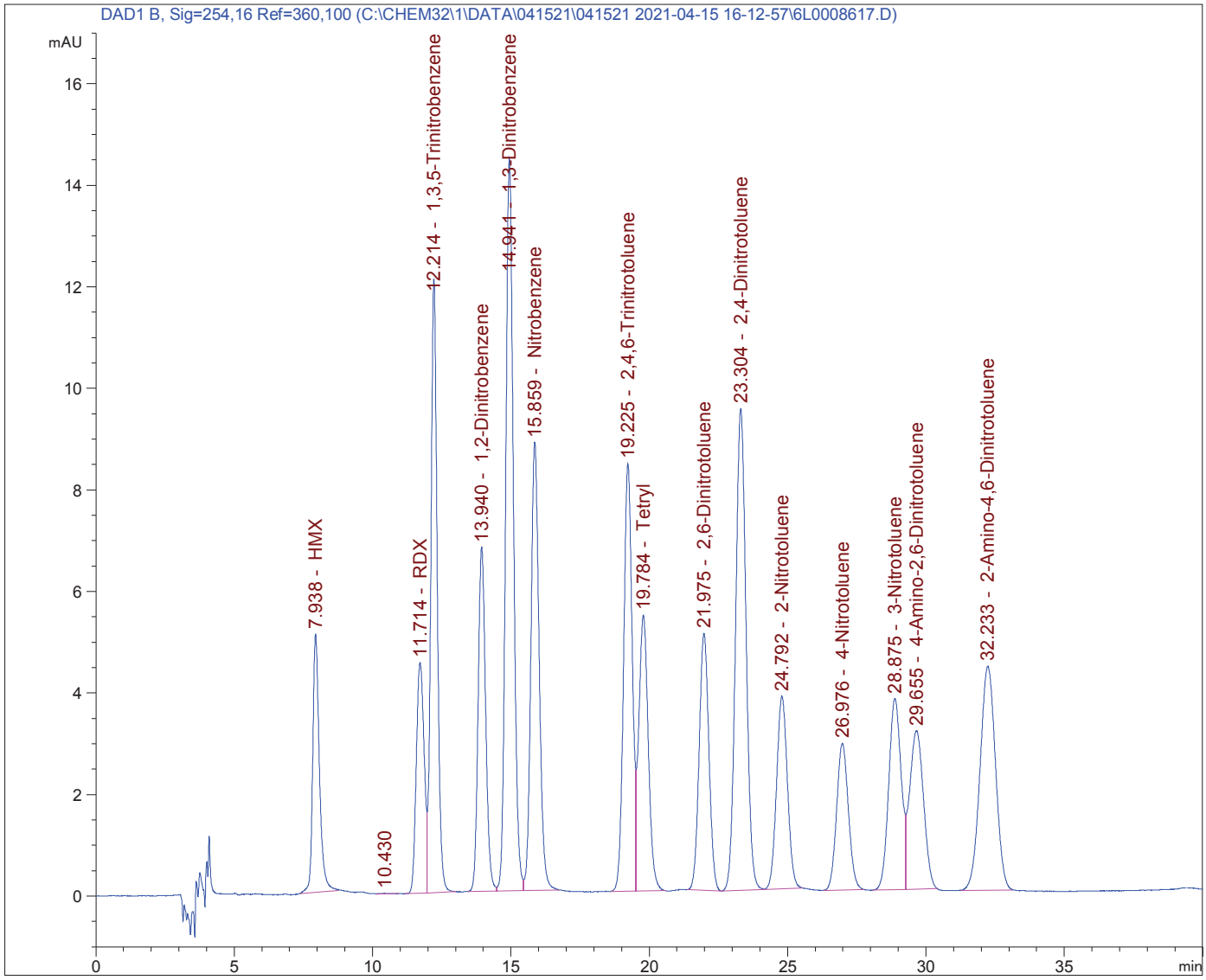
Data File C:\CHEM32\1\DATA\041521\041521 2021-04-15 16-12-57\6L0008617.D
Sample Name: S1D0299-CCV2

==========

Acq. Operator : JWR Seq. Line : 9
Acq. Instrument : HPLC6 Location : 1
Injection Date : 4/16/2021 12:38:34 AM Inj : 1
Inj Volume : 100.000 µl
Acq. Method : C:\Chem32\1\Data\041521\041521 2021-04-15 16-12-57\8330.M
Last changed : 4/15/2021 4:12:57 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
Last changed : 4/16/2021 8:33:20 AM by ECL
Method Info : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

Sample Info : 1 (500ppb)

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Data File C:\CHEM32\1\DATA\041521\041521 2021-04-15 16-12-57\6L0008617.D
Sample Name: S1D0299-CCV2

Acq. Operator : JWR Seq. Line : 9
Acq. Instrument : HPLC6 Location : 1
Injection Date : 4/16/2021 12:38:34 AM Inj : 1
Inj Volume : 100.000 µl
Acq. Method : C:\Chem32\1\Data\041521\041521 2021-04-15 16-12-57\8330.M
Last changed : 4/15/2021 4:12:57 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
Last changed : 4/16/2021 8:33:20 AM by ECL
Method Info : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

Sample Info : 1 (500ppb)

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/16/2021 8:32:36 AM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
7.938	BV	84.91769	5.91908	502.63438		HMX
11.714	BV	89.84753	5.52192	496.13060		RDX
12.214	VBA	194.11673	2.39847	465.58258		1,3,5-Trinitrobenzene
13.940	BV	127.78558	3.78444	483.59641		1,2-Dinitrobenzene
14.941	VV	281.15826	1.70942	480.61876		1,3-Dinitrobenzene
15.859	VBA	182.03201	2.61125	475.33116		Nitrobenzene
19.225	BV	182.85376	2.49602	456.40615		2,4,6-Trinitrotoluene
19.784	VBA	129.74022	3.29515	427.51392		Tetryl
21.975	BV	123.49484	3.76925	465.48303		2,6-Dinitrotoluene
23.304	VV	249.75465	1.89651	473.66329		2,4-Dinitrotoluene
24.792	VBA	103.69496	4.45812	462.28476		2-Nitrotoluene
26.976	BBA	85.45642	5.45235	465.93791		4-Nitrotoluene
28.875	BV	118.72803	4.00453	475.44982		3-Nitrotoluene
29.655	VBA	109.70863	4.27202	468.67723		4-Amino-2,6-Dinitrotoluene
32.233	BBA	171.32118	2.79408	478.68447		2-Amino-4,6-Dinitrotoluene

Totals : 7077.99448

1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

*** End of Report ***

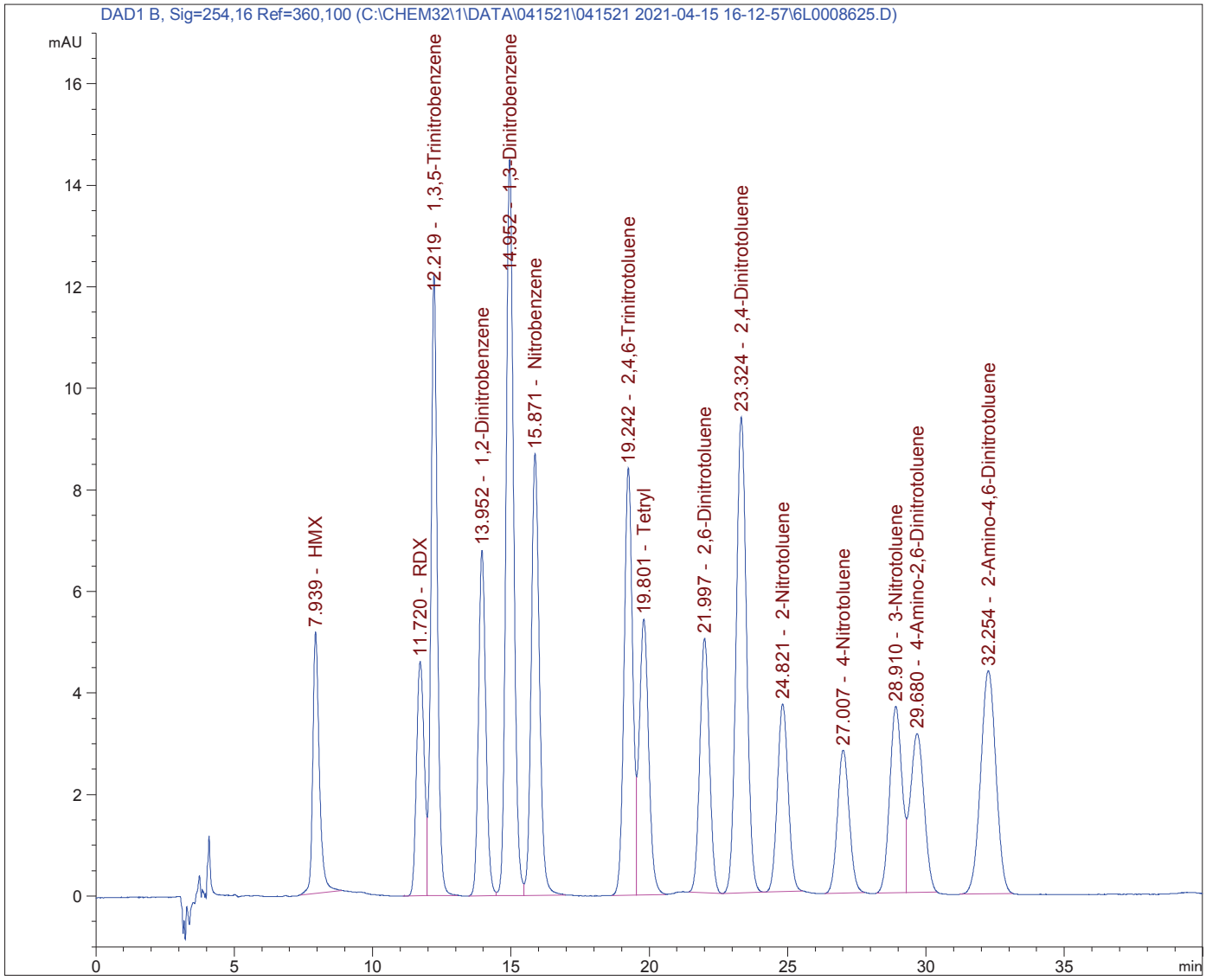
Data File C:\CHEM32\1\DATA\041521\041521 2021-04-15 16-12-57\6L0008625.D
Sample Name: S1D0299-CCV3

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Acq. Operator : JWR Seq. Line : 17
Acq. Instrument : HPLC6 Location : 1
Injection Date : 4/16/2021 9:01:27 AM Inj : 1
Inj Volume : 100.000 µl
Acq. Method : C:\Chem32\1\Data\041521\041521 2021-04-15 16-12-57\8330.M
Last changed : 4/15/2021 4:12:57 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
Last changed : 4/16/2021 8:33:20 AM by ECL
Method Info : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

Sample Info : 1 (500ppb)

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Data File C:\CHEM32\1\DATA\041521\041521 2021-04-15 16-12-57\6L0008625.D
Sample Name: S1D0299-CCV3

Acq. Operator : JWR Seq. Line : 17
Acq. Instrument : HPLC6 Location : 1
Injection Date : 4/16/2021 9:01:27 AM Inj : 1
Inj Volume : 100.000 µl
Acq. Method : C:\Chem32\1\Data\041521\041521 2021-04-15 16-12-57\8330.M
Last changed : 4/15/2021 4:12:57 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
Last changed : 4/16/2021 8:33:20 AM by ECL
Method Info : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

Sample Info : 1 (500ppb)

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/16/2021 8:32:36 AM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
7.939	BBA	84.47694	5.91865	499.98956		HMX
11.720	VV	89.47817	5.52190	494.08934		RDX
12.219	VBA	194.61565	2.39846	466.77848		1,3,5-Trinitrobenzene
13.952	BV	125.23039	3.78454	473.93888		1,2-Dinitrobenzene
14.952	VV	277.72247	1.70944	474.75116		1,3-Dinitrobenzene
15.871	VBA	178.59238	2.61141	466.37813		Nitrobenzene
19.242	BV	181.32619	2.49595	452.58128		2,4,6-Trinitrotoluene
19.801	VBA	128.77156	3.29530	424.34075		Tetryl
21.997	BV	121.57040	3.76931	458.23600		2,6-Dinitrotoluene
23.324	VV	244.99196	1.89654	464.63596		2,4-Dinitrotoluene
24.821	VBA	100.07731	4.45862	446.20705		2-Nitrotoluene
27.007	BBA	83.02215	5.45230	452.66199		4-Nitrotoluene
28.910	BV	114.85862	4.00458	459.96055		3-Nitrotoluene
29.680	VBA	108.16208	4.27204	462.07297		4-Amino-2,6-Dinitrotoluene
32.254	BBA	168.57520	2.79414	471.02276		2-Amino-4,6-Dinitrotoluene

Totals : 6967.64488

1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

*** End of Report ***

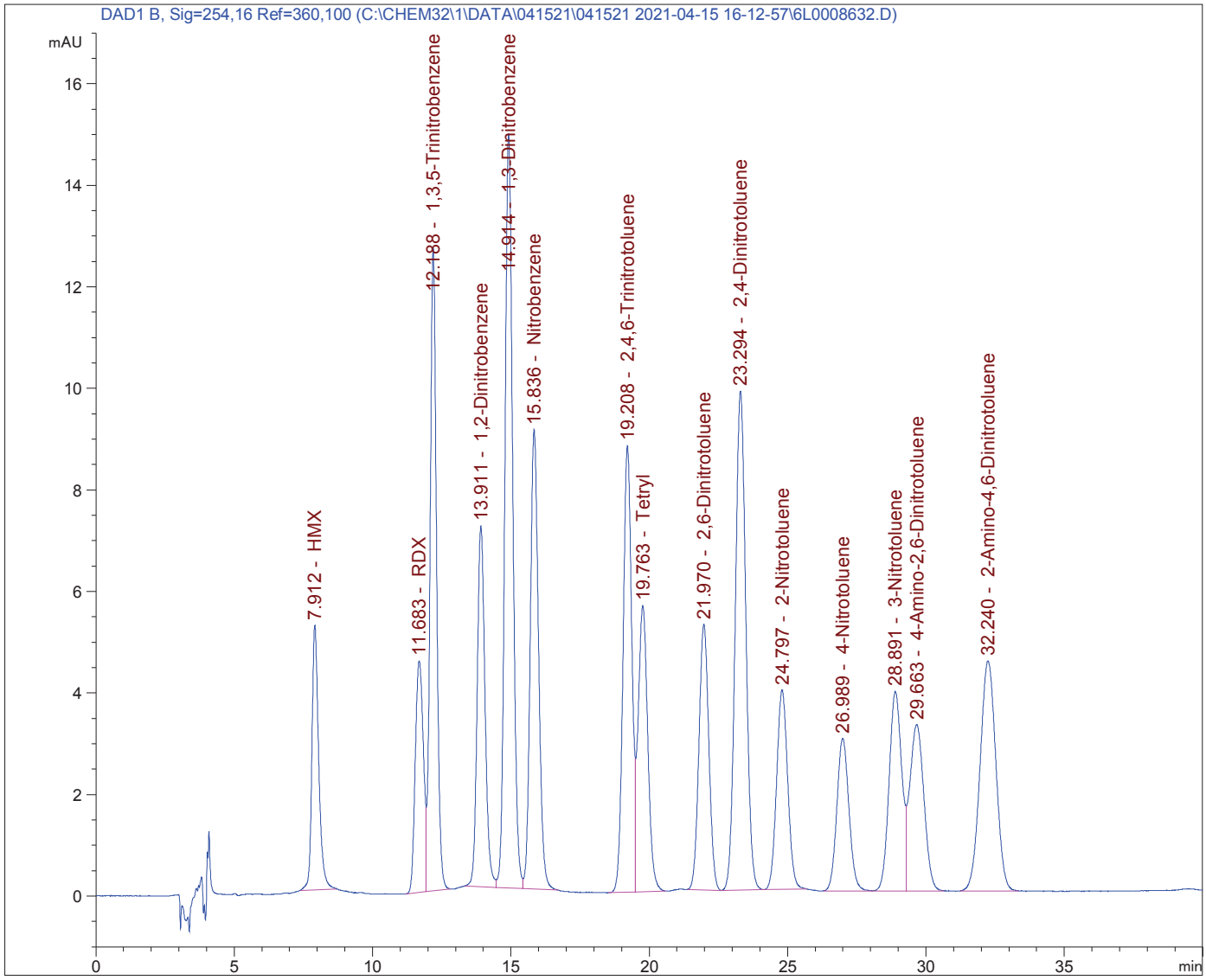
Data File C:\CHEM32\1\DATA\041521\041521 2021-04-15 16-12-57\6L0008632.D
Sample Name: S1D0299-CCV4

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Acq. Operator : JWR Seq. Line : 24
Acq. Instrument : HPLC6 Location : 1
Injection Date : 4/16/2021 4:21:31 PM Inj : 1
Inj Volume : 100.000 µl
Acq. Method : C:\Chem32\1\Data\041521\041521 2021-04-15 16-12-57\8330.M
Last changed : 4/15/2021 4:12:57 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
Last changed : 4/16/2021 6:00:33 PM by ECL
Method Info : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

Sample Info : 1 (500ppb)

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Data File C:\CHEM32\1\DATA\041521\041521 2021-04-15 16-12-57\6L0008632.D
Sample Name: S1D0299-CCV4

Acq. Operator : JWR Seq. Line : 24
Acq. Instrument : HPLC6 Location : 1
Injection Date : 4/16/2021 4:21:31 PM Inj : 1
Inj Volume : 100.000 µl
Acq. Method : C:\Chem32\1\Data\041521\041521 2021-04-15 16-12-57\8330.M
Last changed : 4/15/2021 4:12:57 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
Last changed : 4/16/2021 6:00:33 PM by ECL
Method Info : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

Sample Info : 1 (500ppb)

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/16/2021 8:32:36 AM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
7.912	BBA	88.52018	5.92240	524.25152		HMX
11.683	BV	93.29148	5.52209	515.16385		RDX
12.188	VBA	205.72357	2.39838	493.40415		1,3,5-Trinitrobenzene
13.911	BV	139.26509	3.78404	526.98416		1,2-Dinitrobenzene
14.914	VV	294.45111	1.70935	503.32009		1,3-Dinitrobenzene
15.836	VBA	188.68216	2.61096	492.64083		Nitrobenzene
19.208	BV	193.98735	2.49647	484.28335		2,4,6-Trinitrotoluene
19.763	VBA	136.03777	3.29426	448.14364		Tetryl
21.970	BV	130.09099	3.76908	490.32272		2,6-Dinitrotoluene
23.294	VV	262.03271	1.89646	496.93543		2,4-Dinitrotoluene
24.797	VBA	109.74377	4.45736	489.16709		2-Nitrotoluene
26.989	BV	91.34904	5.45244	498.07484		4-Nitrotoluene
28.891	VV	125.59852	4.00445	502.95246		3-Nitrotoluene
29.663	VBA	117.48006	4.27190	501.86364		4-Amino-2,6-Dinitrotoluene
32.240	BBA	180.61996	2.79387	504.62945		2-Amino-4,6-Dinitrotoluene

Totals : 7472.13722

1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

*** End of Report ***

Data File C:\CHEM32\1\DATA\041721\041721 2021-04-17 15-42-49\5L028445.D
Sample Name: S1D0331-CCV1

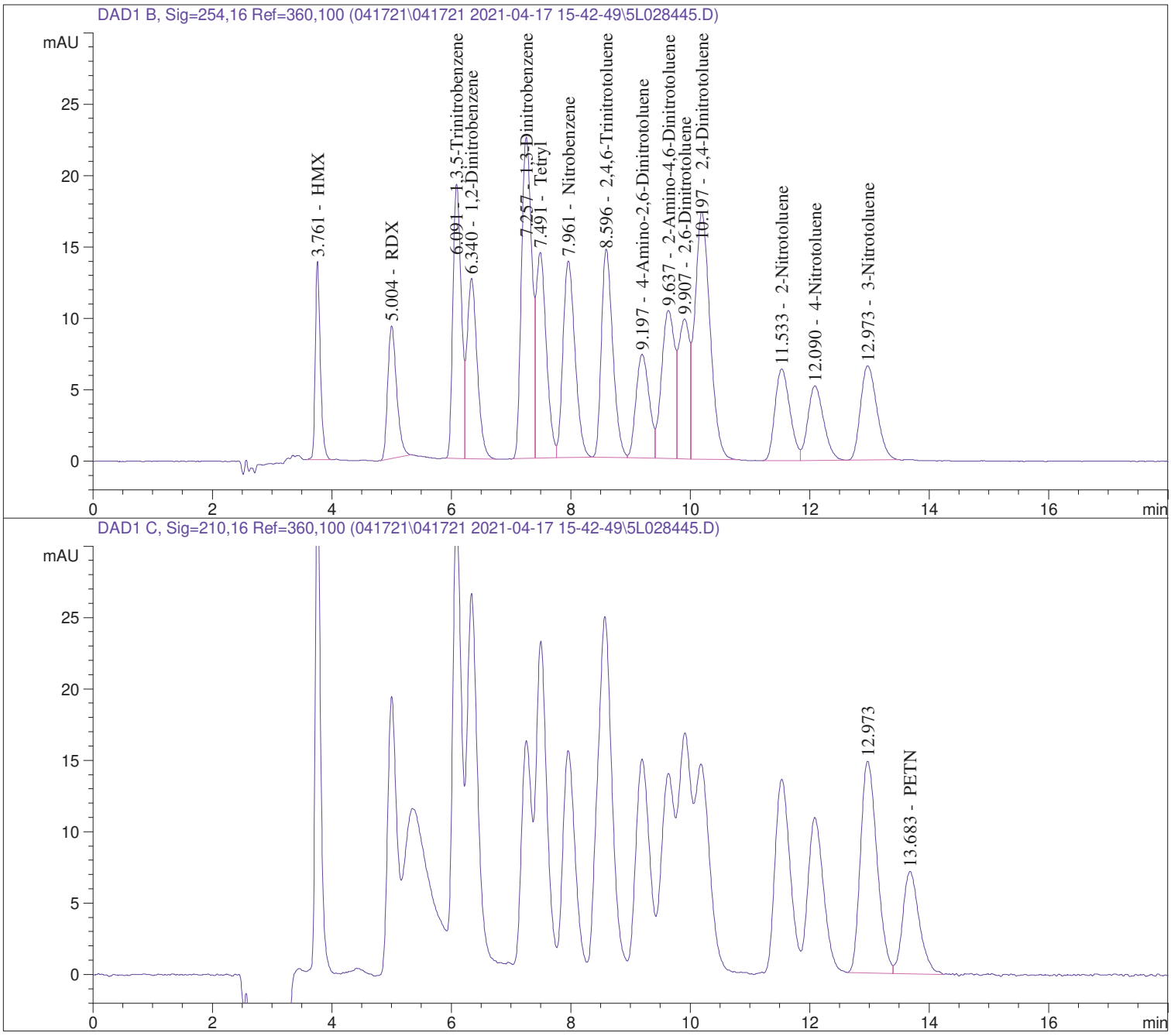
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Acq. Operator : JWR
Seq. Line : 1
Acq. Instrument : HPLC5
Location : Vial 1
Injection Date : 4/17/2021 3:45:45 PM
Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\Chem32\1\DATA\041721\041721 2021-04-17 15-42-49\8330PLUS-PETN.M
Last changed : 4/17/2021 3:42:35 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/17/2021 4:19:50 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

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Data File C:\CHEM32\1\DATA\041721\041721 2021-04-17 15-42-49\5L028445.D
Sample Name: S1D0331-CCV1

Acq. Operator : JWR Seq. Line : 1
Acq. Instrument : HPLC5 Location : Vial 1
Injection Date : 4/17/2021 3:45:45 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041721\041721 2021-04-17 15-42-49\8330PLUS-PETN.M
Last changed : 4/17/2021 3:42:35 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/17/2021 4:19:50 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/13/2021 5:44:33 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.761	BBA	81.86552	6.20662	508.10812		HMX
5.004	BBA	96.58279	5.19066	501.32887		RDX
6.091	BV	189.06174	2.62148	495.62099		1,3,5-Trinitrobenzene
6.340	VBA	150.07736	3.55765	533.92270		1,2-Dinitrobenzene
7.257	BV	271.22095	1.81402	491.99911		1,3-Dinitrobenzene
7.491	VV	172.26659	2.98420	514.07753		Tetryl
7.961	VV	192.26097	2.64690	508.89499		Nitrobenzene
8.596	VV	192.28902	2.53742	487.91748		2,4,6-Trinitrotoluene
9.197	VV	111.75660	4.40634	492.43726		4-Amino-2,6-Dinitrotoluene
9.637	VV	159.18611	3.00082	477.68898		2-Amino-4,6-Dinitrotoluene
9.907	VV	125.28350	3.85029	482.37821		2,6-Dinitrotoluene
10.197	VBA	306.94885	1.82511	560.21562		2,4-Dinitrotoluene
11.533	BV	111.71684	4.52416	505.42517		2-Nitrotoluene
12.090	VV	96.34541	5.36330	516.72971		4-Nitrotoluene
12.973	VBA	125.81658	4.00413	503.78642		3-Nitrotoluene

Totals : 7580.53116

Data File C:\CHEM32\1\DATA\041721\041721 2021-04-17 15-42-49\5L028445.D
Sample Name: S1D0331-CCV1

Acq. Operator : JWR Seq. Line : 1
Acq. Instrument : HPLC5 Location : Vial 1
Injection Date : 4/17/2021 3:45:45 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041721\041721 2021-04-17 15-42-49\8330PLUS-PETN.M
Last changed : 4/17/2021 3:42:35 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/17/2021 4:19:50 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.683	VV	138.13919	3.86853	534.39563		PETN

Totals : 534.39563

*** End of Report ***

Data File C:\CHEM32\1\DATA\041721\041721 2021-04-17 15-42-49\5L028456.D
Sample Name: S1D0331-CCV2

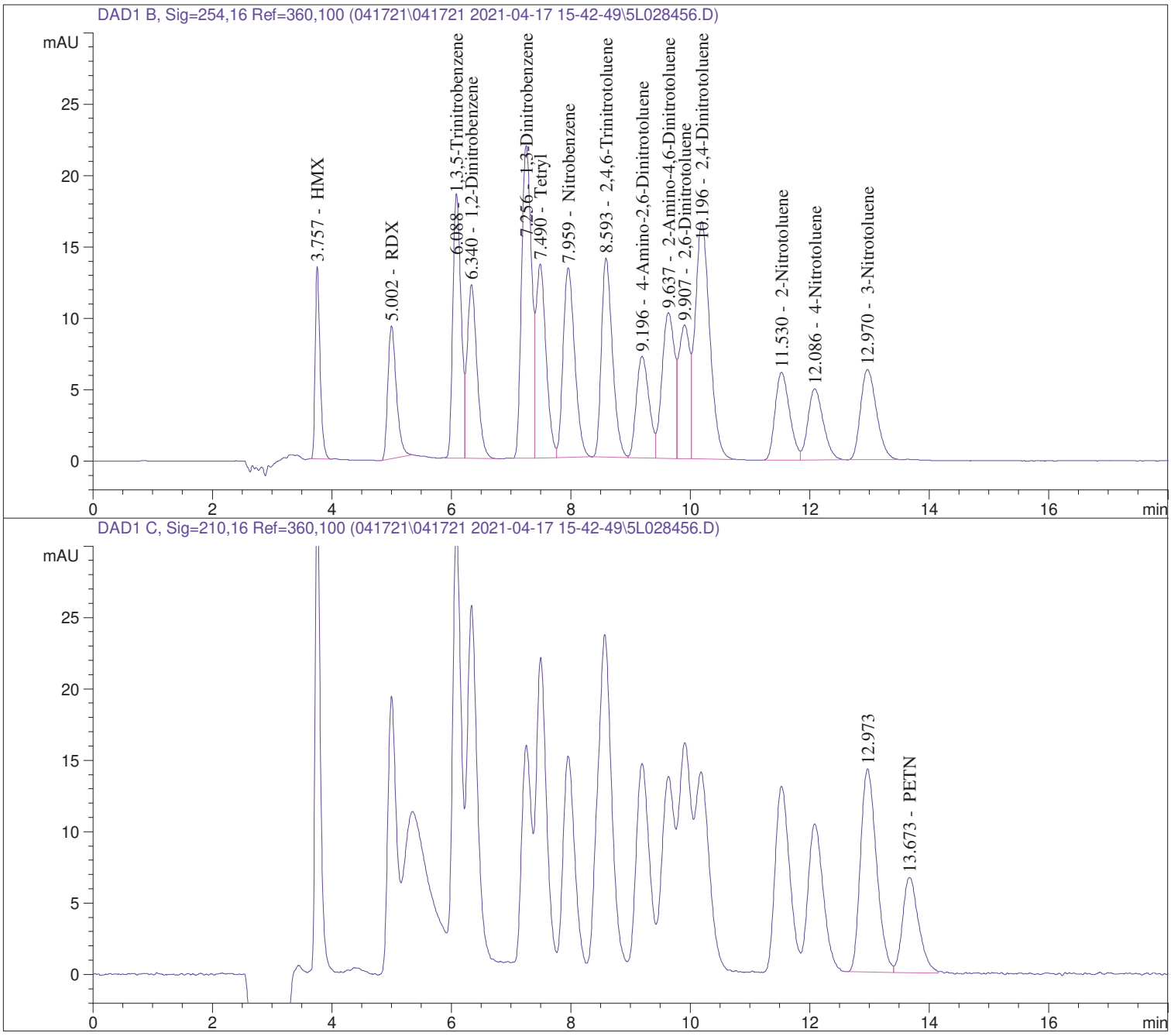
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Acq. Operator : JWR
Seq. Line : 12
Acq. Instrument : HPLC5
Location : Vial 1
Injection Date : 4/17/2021 9:58:13 PM
Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\Chem32\1\DATA\041721\041721 2021-04-17 15-42-49\8330PLUS-PETN.M
Last changed : 4/17/2021 3:42:35 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/20/2021 3:10:10 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

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Data File C:\CHEM32\1\DATA\041721\041721 2021-04-17 15-42-49\5L028456.D
Sample Name: S1D0331-CCV2

Acq. Operator : JWR Seq. Line : 12
Acq. Instrument : HPLC5 Location : Vial 1
Injection Date : 4/17/2021 9:58:13 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041721\041721 2021-04-17 15-42-49\8330PLUS-PETN.M
Last changed : 4/17/2021 3:42:35 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/20/2021 3:10:10 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/20/2021 3:06:35 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.757	BBA	76.97070	6.20456	477.56968		HMX
5.002	BBA	92.77973	5.19361	481.86146		RDX
6.088	VV	178.32411	2.62150	467.47578		1,3,5-Trinitrobenzene
6.340	VBA	140.16634	3.55790	498.69739		1,2-Dinitrobenzene
7.256	BV	255.69052	1.81398	463.81633		1,3-Dinitrobenzene
7.490	VV	157.10086	2.98409	468.80246		Tetryl
7.959	VV	178.93666	2.64662	473.57765		Nitrobenzene
8.593	VV	178.68802	2.53672	453.28170		2,4,6-Trinitrotoluene
9.196	VV	105.44888	4.40685	464.69743		4-Amino-2,6-Dinitrotoluene
9.637	VV	150.93266	3.00098	452.94575		2-Amino-4,6-Dinitrotoluene
9.907	VV	117.97988	3.84995	454.21619		2,6-Dinitrotoluene
10.196	VBA	283.93710	1.82506	518.20300		2,4-Dinitrotoluene
11.530	BV	103.79124	4.52378	469.52925		2-Nitrotoluene
12.086	VV	89.40481	5.36359	479.53114		4-Nitrotoluene
12.970	VBA	117.44158	4.00420	470.26000		3-Nitrotoluene

Totals : 7094.46522

Data File C:\CHEM32\1\DATA\041721\041721 2021-04-17 15-42-49\5L028456.D
Sample Name: S1D0331-CCV2

Acq. Operator : JWR Seq. Line : 12
Acq. Instrument : HPLC5 Location : Vial 1
Injection Date : 4/17/2021 9:58:13 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041721\041721 2021-04-17 15-42-49\8330PLUS-PETN.M
Last changed : 4/17/2021 3:42:35 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/20/2021 3:10:10 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.673	VF	125.18408	3.86598	483.95869		PETN

Totals : 483.95869

1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

*** End of Report ***

Data File C:\CHEM32\1\DATA\041721\041721 2021-04-17 15-42-49\5L028467.D
Sample Name: S1D0331-CCV3

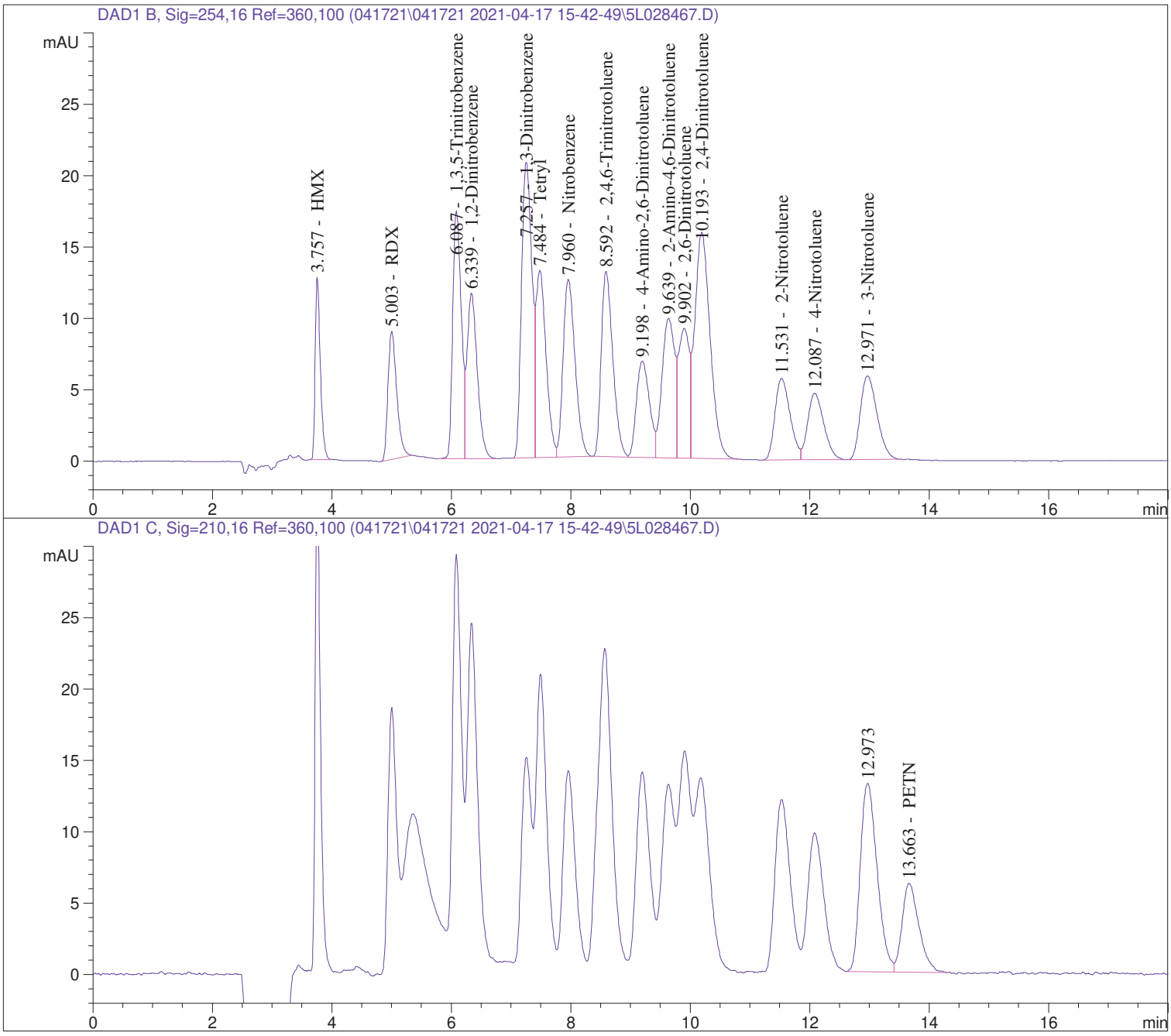
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Acq. Operator : JWR
Seq. Line : 23
Acq. Instrument : HPLC5
Location : Vial 1
Injection Date : 4/18/2021 4:03:18 AM
Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\Chem32\1\DATA\041721\041721 2021-04-17 15-42-49\8330PLUS-PETN.M
Last changed : 4/17/2021 3:42:35 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/20/2021 4:07:36 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

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Data File C:\CHEM32\1\DATA\041721\041721 2021-04-17 15-42-49\5L028467.D
Sample Name: S1D0331-CCV3

Acq. Operator : JWR Seq. Line : 23
Acq. Instrument : HPLC5 Location : Vial 1
Injection Date : 4/18/2021 4:03:18 AM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041721\041721 2021-04-17 15-42-49\8330PLUS-PETN.M
Last changed : 4/17/2021 3:42:35 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/20/2021 4:07:36 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/20/2021 3:06:35 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.757	VBA	76.19860	6.20422	472.75264		HMX
5.003	BBA	91.18919	5.19491	473.71966		RDX
6.087	BV	173.89087	2.62150	455.85547		1,3,5-Trinitrobenzene
6.339	VV	138.46674	3.55794	492.65675		1,2-Dinitrobenzene
7.257	BV	248.91617	1.81396	451.52304		1,3-Dinitrobenzene
7.484	VV	155.63921	2.98407	464.43890		Tetryl
7.960	VV	173.99342	2.64651	460.47514		Nitrobenzene
8.592	VV	174.32874	2.53648	442.18051		2,4,6-Trinitrotoluene
9.198	VV	102.55614	4.40711	451.97590		4-Amino-2,6-Dinitrotoluene
9.639	VV	145.27701	3.00110	435.99052		2-Amino-4,6-Dinitrotoluene
9.902	VV	115.55806	3.84982	444.87789		2,6-Dinitrotoluene
10.193	VBA	283.89813	1.82506	518.13186		2,4-Dinitrotoluene
11.531	VV	100.87289	4.52363	456.31167		2-Nitrotoluene
12.087	VBA	87.44341	5.36368	469.01892		4-Nitrotoluene
12.971	BBA	113.86485	4.00424	455.94180		3-Nitrotoluene

Totals : 6945.85067

Data File C:\CHEM32\1\DATA\041721\041721 2021-04-17 15-42-49\5L028467.D
Sample Name: S1D0331-CCV3

Acq. Operator : JWR Seq. Line : 23
Acq. Instrument : HPLC5 Location : Vial 1
Injection Date : 4/18/2021 4:03:18 AM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041721\041721 2021-04-17 15-42-49\8330PLUS-PETN.M
Last changed : 4/17/2021 3:42:35 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/20/2021 4:07:36 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.663	VV	122.52986	3.86539	473.62526		PETN

Totals : 473.62526

1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

*** End of Report ***

Data File C:\CHEM32\1\DATA\041721\041721 2021-04-17 15-42-49\5L028478.D
Sample Name: S1D0331-CCV4

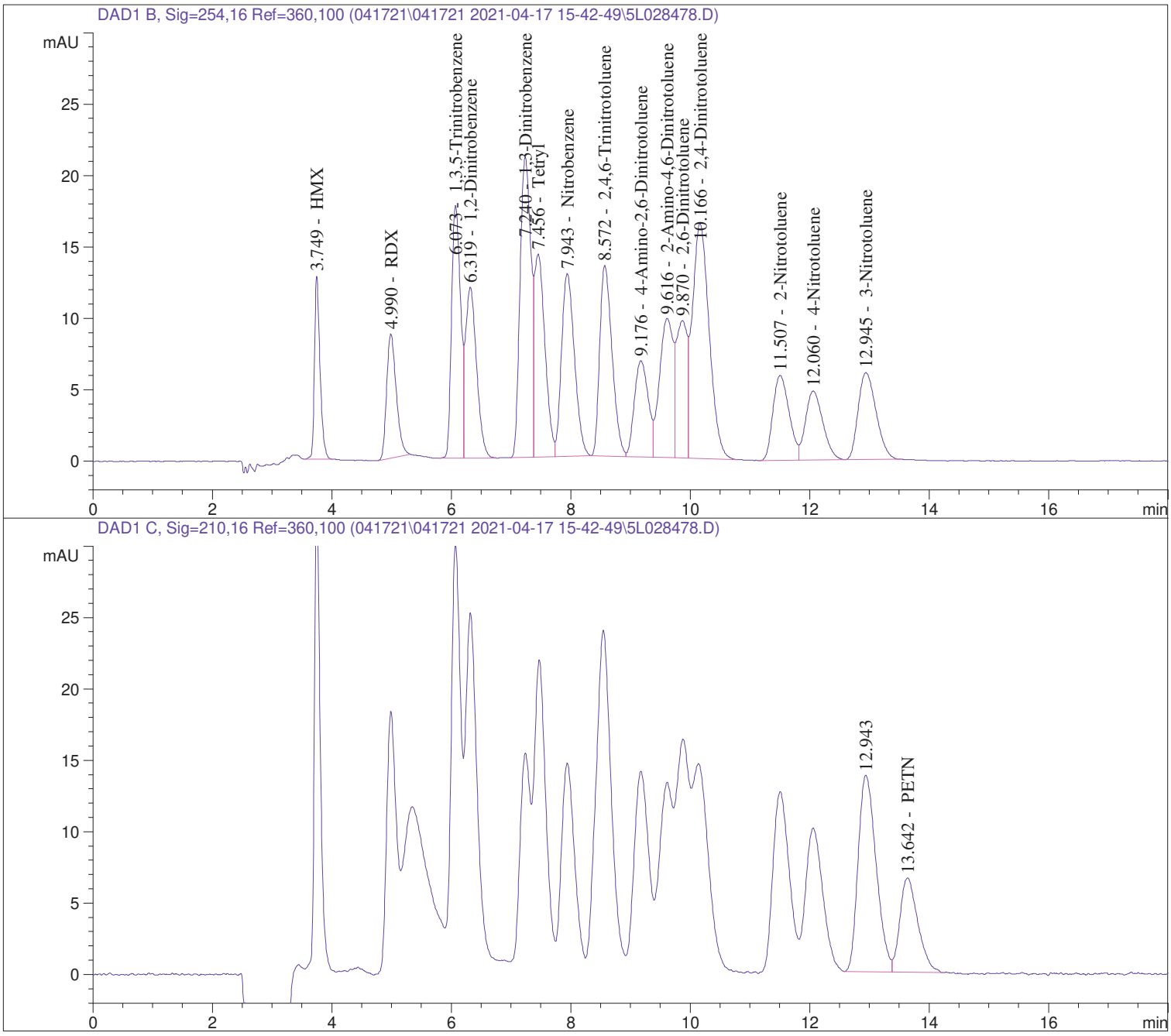
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Acq. Operator : JWR
Seq. Line : 34
Acq. Instrument : HPLC5
Location : Vial 1
Injection Date : 4/18/2021 10:08:22 AM
Inj : 1
Inj Volume : 100 µl

Acq. Method : C:\Chem32\1\DATA\041721\041721 2021-04-17 15-42-49\8330PLUS-PETN.M
Last changed : 4/17/2021 3:42:35 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/20/2021 3:02:26 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

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Data File C:\CHEM32\1\DATA\041721\041721 2021-04-17 15-42-49\5L028478.D
Sample Name: S1D0331-CCV4

Acq. Operator : JWR Seq. Line : 34
Acq. Instrument : HPLC5 Location : Vial 1
Injection Date : 4/18/2021 10:08:22 AM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041721\041721 2021-04-17 15-42-49\8330PLUS-PETN.M
Last changed : 4/17/2021 3:42:35 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/20/2021 3:02:26 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/19/2021 1:27:21 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.749	BBA	82.86407	6.20701	514.33794		HMX
4.990	BBA	97.41002	5.19005	505.56333		RDX
6.073	BV	187.53699	2.62148	491.62435		1,3,5-Trinitrobenzene
6.319	VV	153.97131	3.55756	547.76240		1,2-Dinitrobenzene
7.240	VV	269.02136	1.81401	488.00756		1,3-Dinitrobenzene
7.456	VV	174.06284	2.98421	519.43997		Tetryl
7.943	VV	193.15950	2.64691	511.27663		Nitrobenzene
8.572	VV	191.19684	2.53737	485.13618		2,4,6-Trinitrotoluene
9.176	VV	109.36356	4.40652	481.91327		4-Amino-2,6-Dinitrotoluene
9.616	VV	154.43069	3.00091	463.43259		2-Amino-4,6-Dinitrotoluene
9.870	VV	123.08285	3.85019	473.89272		2,6-Dinitrotoluene
10.166	VBA	323.39557	1.82514	590.24243		2,4-Dinitrotoluene
11.507	VV	112.03957	4.52418	506.88689		2-Nitrotoluene
12.060	VV	97.35601	5.36327	522.14611		4-Nitrotoluene
12.945	VBA	126.82822	4.00413	507.83616		3-Nitrotoluene

Totals : 7609.49854

Data File C:\CHEM32\1\DATA\041721\041721 2021-04-17 15-42-49\5L028478.D
Sample Name: S1D0331-CCV4

Acq. Operator : JWR Seq. Line : 34
Acq. Instrument : HPLC5 Location : Vial 1
Injection Date : 4/18/2021 10:08:22 AM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041721\041721 2021-04-17 15-42-49\8330PLUS-PETN.M
Last changed : 4/17/2021 3:42:35 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/20/2021 3:02:26 PM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.642	VV	139.34818	3.86874	539.10245		PETN

Totals : 539.10245

1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

*** End of Report ***

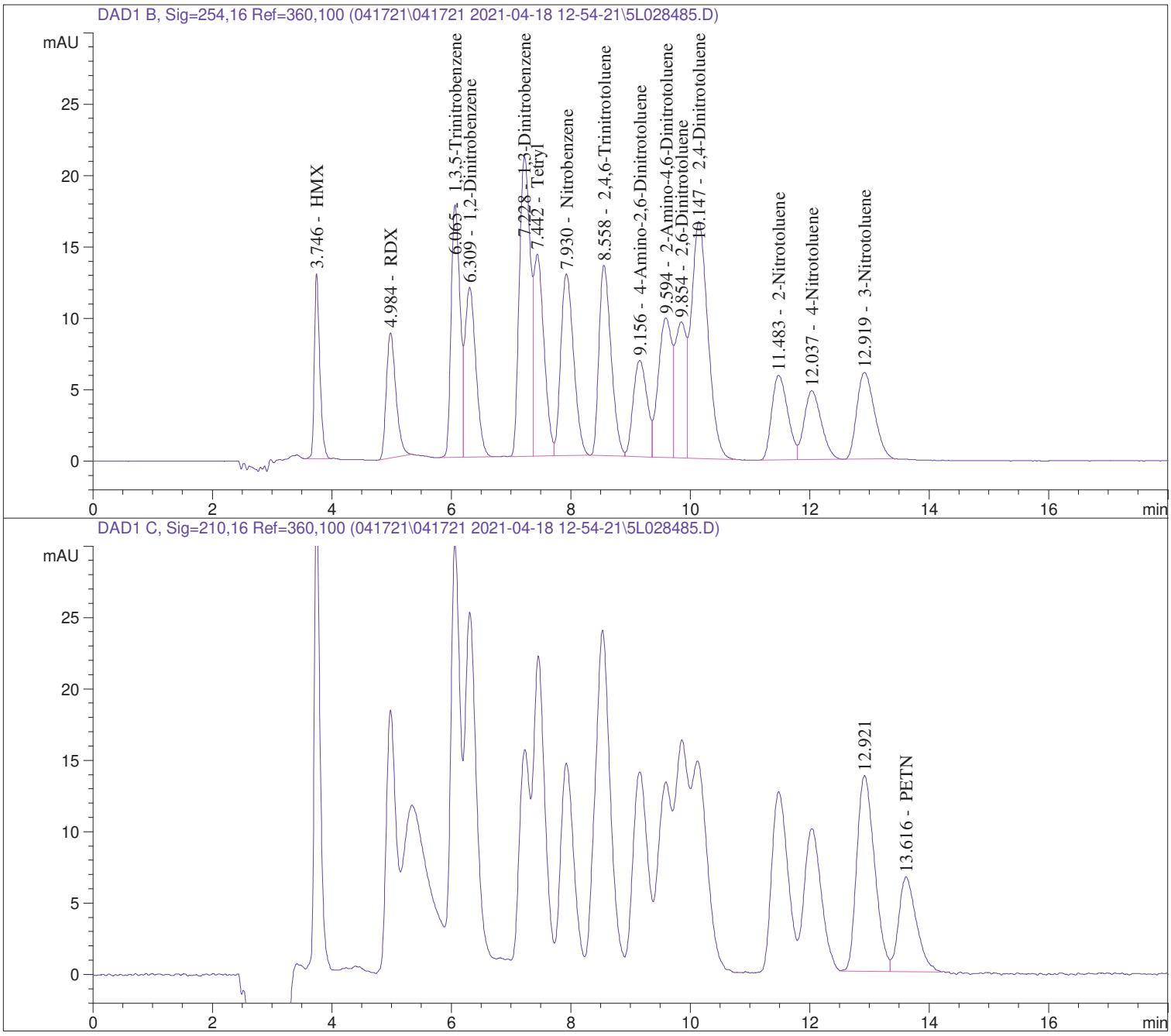
Data File C:\CHEM32\1\DATA\041721\041721 2021-04-18 12-54-21\5L028485.D
Sample Name: S1D0331-CCV5

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Acq. Operator : JWR
Seq. Line : 41
Acq. Instrument : HPLC5
Location : Vial 1
Injection Date : 4/18/2021 4:17:16 PM
Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041721\041721 2021-04-18 12-54-21\8330PLUS-PETN.M
Last changed : 4/17/2021 3:42:35 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/19/2021 8:58:16 AM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

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Data File C:\CHEM32\1\DATA\041721\041721 2021-04-18 12-54-21\5L028485.D
Sample Name: S1D0331-CCV5

Acq. Operator : JWR Seq. Line : 41
Acq. Instrument : HPLC5 Location : Vial 1
Injection Date : 4/18/2021 4:17:16 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041721\041721 2021-04-18 12-54-21\8330PLUS-PETN.M
Last changed : 4/17/2021 3:42:35 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/19/2021 8:58:16 AM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/19/2021 8:58:12 AM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
3.746	BV	82.36470	6.20681	511.22244		HMX
4.984	BBA	98.29674	5.18941	510.10233		RDX
6.065	BV	184.91066	2.62148	484.74029		1,3,5-Trinitrobenzene
6.309	VBA	150.88901	3.55763	536.80741		1,2-Dinitrobenzene
7.228	VV	266.87485	1.81401	484.11232		1,3-Dinitrobenzene
7.442	VV	169.98131	2.98418	507.25516		Tetryl
7.930	VV	190.28625	2.64686	503.66082		Nitrobenzene
8.558	VV	188.29527	2.53722	477.74717		2,4,6-Trinitrotoluene
9.156	VV	108.71313	4.40658	479.05281		4-Amino-2,6-Dinitrotoluene
9.594	VV	154.99156	3.00090	465.11403		2-Amino-4,6-Dinitrotoluene
9.854	VV	121.86888	3.85014	469.21178		2,6-Dinitrotoluene
10.147	VBA	322.70230	1.82514	588.97673		2,4-Dinitrotoluene
11.483	BV	110.83588	4.52412	501.43520		2-Nitrotoluene
12.037	VV	96.55704	5.36330	517.86401		4-Nitrotoluene
12.919	VBA	124.87953	4.00414	500.03527		3-Nitrotoluene

Totals : 7537.33777

Data File C:\CHEM32\1\DATA\041721\041721 2021-04-18 12-54-21\5L028485.D
Sample Name: S1D0331-CCV5

Acq. Operator : JWR Seq. Line : 41
Acq. Instrument : HPLC5 Location : Vial 1
Injection Date : 4/18/2021 4:17:16 PM Inj : 1
Inj Volume : 100 µl
Acq. Method : C:\Chem32\1\DATA\041721\041721 2021-04-18 12-54-21\8330PLUS-PETN.M
Last changed : 4/17/2021 3:42:35 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330PLUS-PETNDA.M
Last changed : 4/19/2021 8:58:16 AM by ECL
Method Info : OVD-SOP#HPLC02: 8330PLUS-PETN Calibration 03/31/2021

Sample Info : 1 (500ppb "OC")

Signal 2: DAD1 C, Sig=210,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
13.616	VBA	136.80959	3.86829	529.21920		PETN

Totals : 529.21920

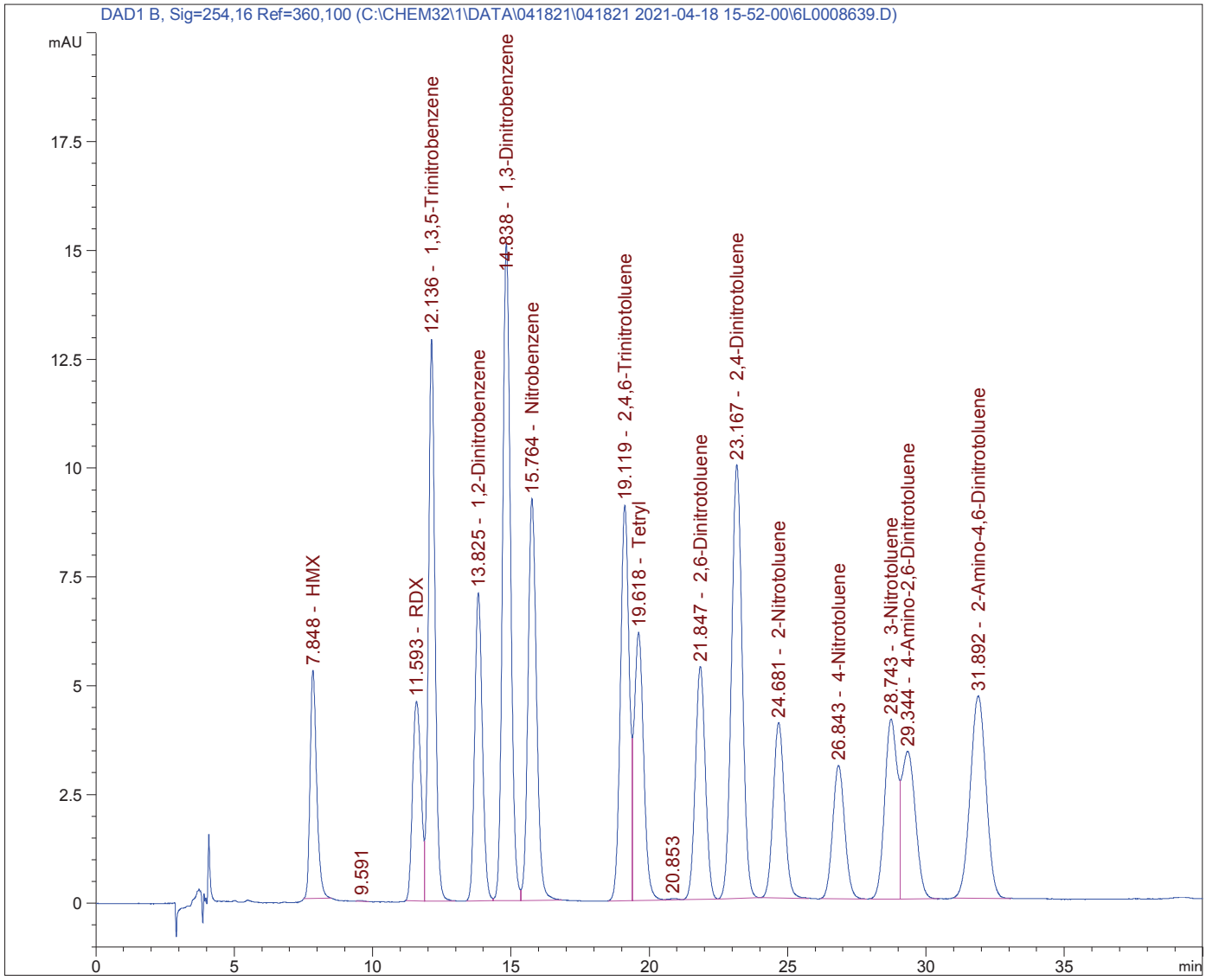
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Data File C:\CHEM32\1\DATA\041821\041821 2021-04-18 15-52-00\6L0008639.D
Sample Name: S1D0335-CCV1

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    ======================================================================
    Acq. Operator   : JWR                          Seq. Line :   1
    Acq. Instrument : HPLC6                         Location :   1
    Injection Date  : 4/18/2021 3:54:49 PM               Inj :   1
                                                  Inj Volume : 100.000 µl
    Acq. Method     : C:\Chem32\1\Data\041821\041821 2021-04-18 15-52-00\8330.M
    Last changed    : 4/18/2021 3:52:00 PM by JWR
    Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
    Last changed    : 4/21/2021 1:43:59 PM by ECL
    Method Info     : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

    Sample Info     : 1 (500ppb)

    ======================================================================
```



Data File C:\CHEM32\1\DATA\041821\041821 2021-04-18 15-52-00\6L0008639.D
Sample Name: S1D0335-CCV1

Acq. Operator : JWR Seq. Line : 1
Acq. Instrument : HPLC6 Location : 1
Injection Date : 4/18/2021 3:54:49 PM Inj : 1
Inj Volume : 100.000 µl
Acq. Method : C:\Chem32\1\Data\041821\041821 2021-04-18 15-52-00\8330.M
Last changed : 4/18/2021 3:52:00 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
Last changed : 4/21/2021 1:43:59 PM by ECL
Method Info : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

Sample Info : 1 (500ppb)

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/21/2021 1:42:58 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
7.848	BBA	86.53480	5.92060	512.33800		HMX
11.593	BV	97.16350	5.52227	536.56280		RDX
12.136	VB	212.40793	2.39834	509.42654		1,3,5-Trinitrobenzene
13.825	BV	136.34779	3.78413	515.95800		1,2-Dinitrobenzene
14.838	VV	301.93216	1.70931	516.09611		1,3-Dinitrobenzene
15.764	VB	197.29048	2.61060	515.04743		Nitrobenzene
19.119	BV	201.86627	2.49676	504.01124		2,4,6-Trinitrotoluene
19.618	VB	147.11711	3.29287	484.43775		Tetryl
21.847	VV	134.77364	3.76896	507.95658		2,6-Dinitrotoluene
23.167	VV	269.10019	1.89644	510.33129		2,4-Dinitrotoluene
24.681	VB	114.31767	4.45683	509.49459		2-Nitrotoluene
26.843	BB	92.69179	5.45246	505.39783		4-Nitrotoluene
28.743	BV	132.71030	4.00437	531.42098		3-Nitrotoluene
29.344	VB	117.21014	4.27191	500.71097		4-Amino-2,6-Dinitrotoluene
31.892	BB	184.30754	2.79380	514.91833		2-Amino-4,6-Dinitrotoluene

Totals : 7674.10845

1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

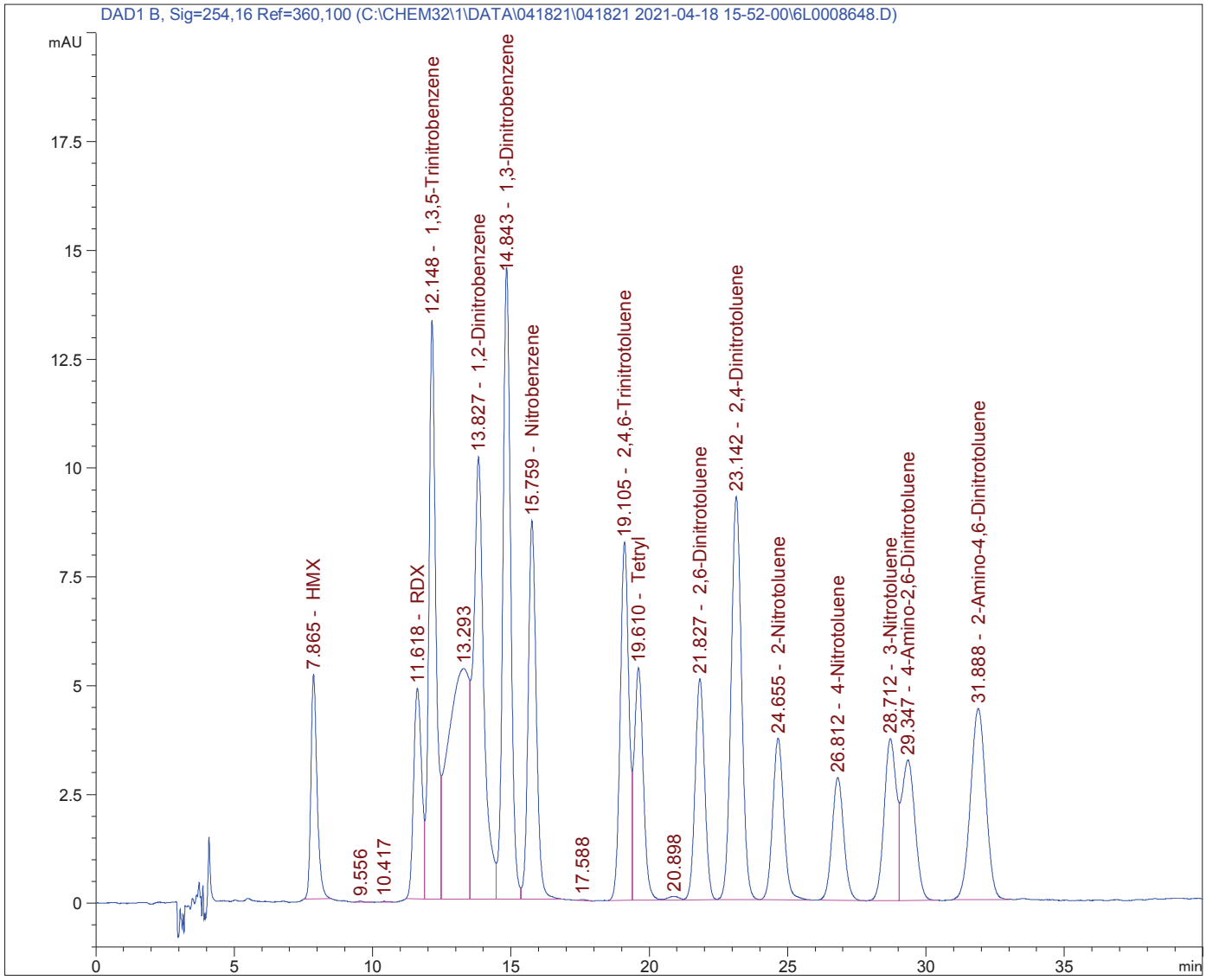
*** End of Report ***

Data File C:\CHEM32\1\DATA\041821\041821 2021-04-18 15-52-00\6L0008648.D
Sample Name: S1D0335-CCV2

```
    ======================================================================
    Acq. Operator   : JWR                          Seq. Line :  10
    Acq. Instrument : HPLC6                         Location :   1
    Injection Date  : 4/19/2021 1:20:26 AM               Inj :   1
                                                  Inj Volume : 100.000 µl
    Acq. Method     : C:\Chem32\1\Data\041821\041821 2021-04-18 15-52-00\8330.M
    Last changed    : 4/18/2021 3:52:00 PM by JWR
    Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
    Last changed    : 4/21/2021 1:43:59 PM by ECL
    Method Info     : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

    Sample Info     : 1 (500ppb)

    ======================================================================
```



Data File C:\CHEM32\1\DATA\041821\041821 2021-04-18 15-52-00\6L0008648.D
Sample Name: S1D0335-CCV2

Acq. Operator : JWR Seq. Line : 10
Acq. Instrument : HPLC6 Location : 1
Injection Date : 4/19/2021 1:20:26 AM Inj : 1
Inj Volume : 100.000 µl
Acq. Method : C:\Chem32\1\Data\041821\041821 2021-04-18 15-52-00\8330.M
Last changed : 4/18/2021 3:52:00 PM by JWR
Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
Last changed : 4/21/2021 1:43:59 PM by ECL
Method Info : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

Sample Info : 1 (500ppb)

External Standard Report

Sorted By : Signal
Calib. Data Modified : 4/21/2021 1:42:58 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 B, Sig=254,16 Ref=360,100

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/L]	Grp	Name
7.865	BBA	79.98820	5.91405	473.05439		HMX
11.618	BV	98.38264	5.52232	543.30050		RDX
12.148	VV	239.00673	2.39819	573.18381		1,3,5-Trinitrobenzene
13.827	VV	270.14908	3.78188	1021.67075		1,2-Dinitrobenzene
14.843	VV	285.09033	1.70940	487.33388		1,3-Dinitrobenzene
15.759	VBA	177.28290	2.61147	462.96969		Nitrobenzene
19.105	BV	178.33817	2.49582	445.09963		2,4,6-Trinitrotoluene
19.610	VB	122.42556	3.29631	403.55230		Tetryl
21.827	VV	121.56628	3.76931	458.22049		2,6-Dinitrotoluene
23.142	VV	243.88672	1.89654	462.54106		2,4-Dinitrotoluene
24.655	VB	102.91014	4.45823	458.79683		2-Nitrotoluene
26.812	BB	83.20748	5.45231	453.67275		4-Nitrotoluene
28.712	BV	116.25003	4.00456	465.53038		3-Nitrotoluene
29.347	VB	108.54667	4.27204	463.71529		4-Amino-2,6-Dinitrotoluene
31.888	BB	168.32814	2.79415	470.33344		2-Amino-4,6-Dinitrotoluene

Totals : 7642.97519

1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

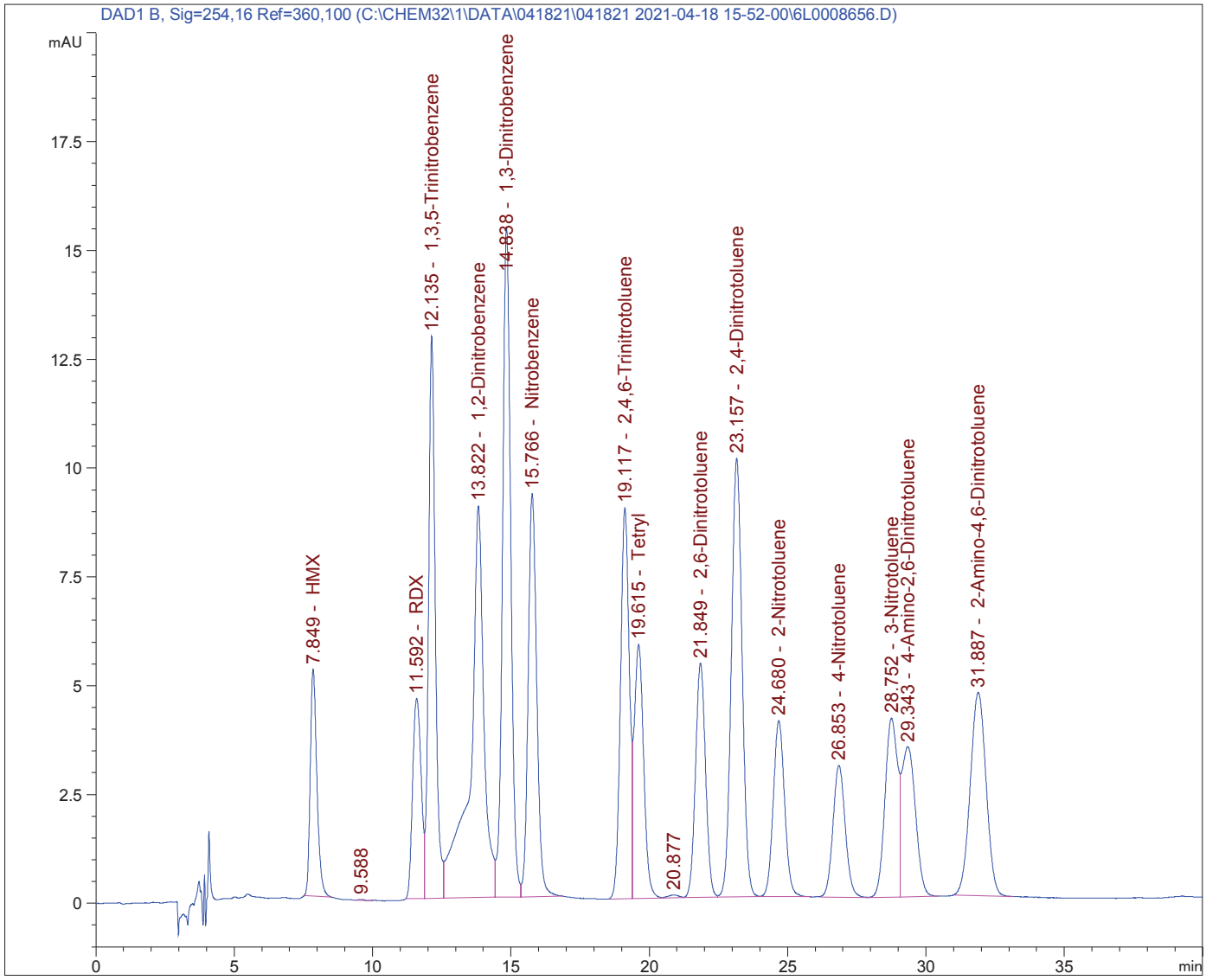
*** End of Report ***

Data File C:\CHEM32\1\DATA\041821\041821 2021-04-18 15-52-00\6L0008656.D
Sample Name: S1D0335-CCV3

```
    ======================================================================
    Acq. Operator   : JWR                          Seq. Line :  18
    Acq. Instrument : HPLC6                         Location :   1
    Injection Date  : 4/19/2021 9:43:19 AM               Inj :   1
                                                  Inj Volume : 100.000 µl
    Acq. Method     : C:\Chem32\1\Data\041821\041821 2021-04-18 15-52-00\8330.M
    Last changed    : 4/18/2021 3:52:00 PM by JWR
    Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
    Last changed    : 4/21/2021 1:43:59 PM by ECL
    Method Info     : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

    Sample Info     : 1 (500ppb)

    ======================================================================
```



Data File C:\CHEM32\1\DATA\041821\041821 2021-04-18 15-52-00\6L0008656.D
Sample Name: S1D0335-CCV3

```
    ======================================================================
    Acq. Operator   : JWR                          Seq. Line :  18
    Acq. Instrument : HPLC6                         Location :   1
    Injection Date  : 4/19/2021 9:43:19 AM               Inj :   1
                                                  Inj Volume : 100.000 µl
    Acq. Method     : C:\Chem32\1\Data\041821\041821 2021-04-18 15-52-00\8330.M
    Last changed    : 4/18/2021 3:52:00 PM by JWR
    Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
    Last changed    : 4/21/2021 1:43:59 PM by ECL
    Method Info     : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

    Sample Info     : 1 (500ppb)

    ======================================================================

     ======================================================================
                           External Standard Report
     ======================================================================

     Sorted By             :      Signal
     Calib. Data Modified  :      4/21/2021 1:42:58 PM
     Multiplier            :      1.0000
     Dilution              :      1.0000
     Do not use Multiplier & Dilution Factor with ISTDs

     Signal 1: DAD1 B, Sig=254,16 Ref=360,100

     RetTime  Type     Area     Amt/Area    Amount   Grp   Name
      [min]          [mAU*s]                [ug/L]
     -------|------|----------|----------|----------|--|------------------
       7.849 BBA      87.40458    5.92140  517.55723    HMX
      11.592 BV       99.10414    5.52235  547.28790    RDX
      12.135 VV      222.68102    2.39828  534.05111    1,3,5-Trinitrobenzene
      13.822 VV      313.66089    3.78156 1186.12714    1,2-Dinitrobenzene
      14.838 VV      318.21280    1.70923  543.89995    1,3-Dinitrobenzene
      15.766 VBA     200.62512    2.61048  523.72717    Nitrobenzene
      19.117 BV      199.74809    2.49668  498.70757    2,4,6-Trinitrotoluene
      19.615 VV      138.70462    3.29390  456.87982    Tetryl
      21.849 VV      136.16541    3.76893  513.19769    2,6-Dinitrotoluene
      23.157 VV      273.02313    1.89642  517.76693    2,4-Dinitrotoluene
      24.680 VB      115.29176    4.45673  513.82368    2-Nitrotoluene
      26.853 BV       93.49768    5.45247  509.79297    4-Nitrotoluene
      28.752 VV      133.44455    4.00436  534.36020    3-Nitrotoluene
      29.343 VB      118.36207    4.27189  505.63007    4-Amino-2,6-Dinitrotoluene
      31.887 BB      186.38316    2.79376  520.70962    2-Amino-4,6-Dinitrotoluene

     Totals :                             8423.51905


     1 Warnings or Errors :

     Warning : Calibration warnings (see calibration table listing)

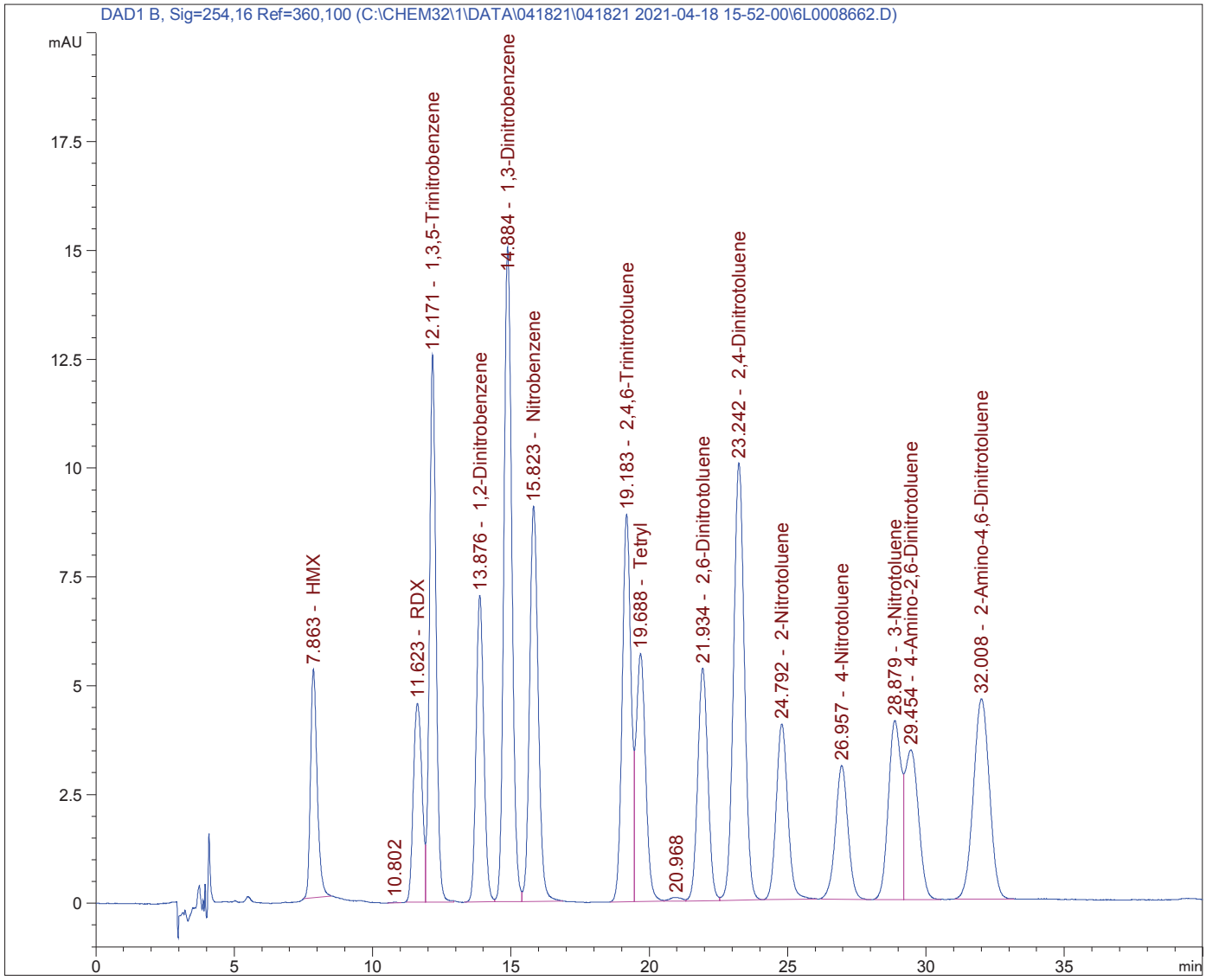
     ======================================================================
                              *** End of Report ***
```

Data File C:\CHEM32\1\DATA\041821\041821 2021-04-18 15-52-00\6L0008662.D
Sample Name: S1D0335-CCV4

```
    ======================================================================
    Acq. Operator   : JWR                          Seq. Line :  24
    Acq. Instrument : HPLC6                         Location :   1
    Injection Date  : 4/19/2021 4:00:32 PM               Inj :   1
                                                  Inj Volume : 100.000 µl
    Acq. Method     : C:\Chem32\1\Data\041821\041821 2021-04-18 15-52-00\8330.M
    Last changed    : 4/18/2021 3:52:00 PM by JWR
    Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
    Last changed    : 4/21/2021 1:43:59 PM by ECL
    Method Info     : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

    Sample Info     : 1 (500ppb)

    ======================================================================
```



Data File C:\CHEM32\1\DATA\041821\041821 2021-04-18 15-52-00\6L0008662.D
Sample Name: S1D0335-CCV4

```
    ======================================================================
    Acq. Operator   : JWR                          Seq. Line :  24
    Acq. Instrument : HPLC6                         Location :   1
    Injection Date  : 4/19/2021 4:00:32 PM               Inj :   1
                                                  Inj Volume : 100.000 µl
    Acq. Method     : C:\Chem32\1\Data\041821\041821 2021-04-18 15-52-00\8330.M
    Last changed    : 4/18/2021 3:52:00 PM by JWR
    Analysis Method : C:\CHEM32\1\METHODS\8330DATA.M
    Last changed    : 4/21/2021 1:43:59 PM by ECL
    Method Info     : OVD-SOP#HPLC02 : 8330 Calibration 03/31/2021

    Sample Info     : 1 (500ppb)

    ======================================================================

     ======================================================================
                           External Standard Report
     ======================================================================

     Sorted By             :      Signal
     Calib. Data Modified  :      4/21/2021 1:42:58 PM
     Multiplier            :      1.0000
     Dilution              :      1.0000
     Do not use Multiplier & Dilution Factor with ISTDs

     Signal 1: DAD1 B, Sig=254,16 Ref=360,100

     RetTime  Type     Area     Amt/Area    Amount   Grp   Name
      [min]          [mAU*s]                [ug/L]
     -------|------|----------|----------|----------|--|------------------
       7.863 BBA      88.05654    5.92198  521.46941    HMX
      11.623 BV       98.48451    5.52232  543.86348    RDX
      12.171 VB      207.42870    2.39837  497.49133    1,3,5-Trinitrobenzene
      13.876 BV      136.14705    3.78414  515.19927    1,2-Dinitrobenzene
      14.884 VV      302.04022    1.70931  516.28066    1,3-Dinitrobenzene
      15.823 VBA     196.62112    2.61063  513.30516    Nitrobenzene
      19.183 BV      197.33803    2.49659  492.67305    2,4,6-Trinitrotoluene
      19.688 VV      136.67758    3.29417  450.23957    Tetryl
      21.934 VV      136.52431    3.76892  514.54924    2,6-Dinitrotoluene
      23.242 VV      272.56848    1.89642  516.90517    2,4-Dinitrotoluene
      24.792 VB      116.60674    4.45658  519.66776    2-Nitrotoluene
      26.957 BB       96.65903    5.45251  527.03422    4-Nitrotoluene
      28.879 BV      133.72240    4.00436  535.47242    3-Nitrotoluene
      29.454 VB      116.13960    4.27192  496.13946    4-Amino-2,6-Dinitrotoluene
      32.008 BB      185.36891    2.79378  517.87971    2-Amino-4,6-Dinitrotoluene

     Totals :                             7678.16992


     1 Warnings or Errors :

     Warning : Calibration warnings (see calibration table listing)

     ======================================================================
                              *** End of Report ***
```

MICROBAC®

Analysis Class

Wet Chemistry

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

Wet Chemistry - Class Narrative and Notes

All test results meet the requirements of the QAPP and other applicable contract terms and conditions . Any exceptions are listed below in the sample and qc notes sections. Analytical results are reported on a 'as received' basis unless specified otherwise. Analytical results for solids with units ending in (dry) are reported on a dry weight basis. A statement of uncertainty for each analysis is available upon request.

MICROBAC Return to: 158 Starlite Drive Marietta Ohio 45750

CHAIN OF CUSTODY RECORD

Number
Instructions on back
TO BE COMPLETED BY MICROBAC

Lab Report Address	**Invoice Address**	**Turnaround Time**	**Temperature Upon Receipt (°C)**
Client Name:	**Client Name:**	[ ] Routine (5 to 7 business days) [ ] RUSH* (notify lab)	**Therm ID**
Address:	**Address:**		**Holding Time**
City, State, Zip:	**City, State, Zip:**	(needed by)	**Samples Received on Ice? Yes No N/A**
Contact:	**Contact:**	**Report Type**	**Custody Seals Intact? Yes No N/A**
Telephone No.:	**Telephone No.:**	[ ]Results Only [ ]Level 1 [ ]Level 2 [ ]Level3 [ ]Level 4 [ ]EDD	

Send Report via: [ ] Mail [ ] Fax [ ] e-mail (address) **Send Invoice via:** [ ] Mail [ ] Fax [ ] e-mail (address)

Project: LMAAP-29 **Location:** KARNACK, TX **PO No.:** **Compliance Monitoring?** [ ] Yes [ ] No ( ) Agency/Program

Sampled by (PRINT): JACOB MOORMAN **Sampler Signature:** J Moorman **Sampler Phone No.:**

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)

** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

REQUESTED ANALYSIS

Lab ID	Client Sample ID	Date Collected	Time Collected	No. of Containers	Matrix	Grab / Comp	Preservative Types **	Explosives	Additional Notes
	295B139 (11-12)	3/9/21	0840	1	SO	G		X	
	295B139 (15-16)	3/9/21	0845	1	SO	G		X	
	295B146 (3-4)	3/9/21	0920	1	SO	G		X	
	295B146 (7-8)	3/9/21	0925	1	SO	G		X	
	295B146 (11-12)	3/9/21	0930	1	SO	G		X	
	295B146 (15-16)	3/9/21	0935	1	SO	G		X	
	295B147 (3-4)	3/9/21	0955	1	SO	G		X	
	295B147 (7-8)	3/9/21	1000	1	SO	G		X	
	295B147 (11-12)	3/9/21	1005	1	SO	G		X	
	295B147 (15-16)	3/9/21	1010	1	SO	G		X	

Possible Hazard Identification [ ] Hazardous [ ] Non-Hazardous [ ] Radioactive **Sample Disposition** [ ] Dispose

M1C1288

Comments

10 DAY TAT

Relinquished By (signature)	**Date/Time**	**Receiv**	HDR Rec'd 03/12/2021 09:45 By Brenda Gregory Temp 2.5 (Signature)
J Moorman	03-11-2021 / 1430		
Relinquished By (signature)	**Date/Time**	**Received By (signature)**	**Date/Time**
Relinquished By (signature)	**Date/Time**	**Received By (signature)**	**Date/Time**
		Brenda Gregory	3/12/21 0945

Rev: 07/18/2018

MICROBAC Return to: 158 Starlite Drive Marietta Ohio 45750

CHAIN OF CUSTODY RECORD

Number
Instructions on back
TO BE COMPLETED BY MICROBAC

Lab Report Address	**Invoice Address**	**Turnaround Time**	**Temperature Upon Receipt (°C)**
Client Name:	**Client Name:**	[ ] Routine (5 to 7 business days) [ ] RUSH* (notify lab)	**Therm ID**
Address:	**Address:**		**Holding Time**
City, State, Zip:	**City, State, Zip:**	(needed by)	**Samples Received on Ice? Yes No N/A**
Contact:	**Contact:**	**Report Type**	**Custody Seals Intact? Yes No N/A**
Telephone No.:	**Telephone No.:**	[ ]Results Only [ ]Level 1 [ ]Level 2 [ ]Level3 [ ]Level 4 [ ]EDD	

Send Report via: [ ] Mail [ ] Fax [ ] e-mail (address) **Send Invoice via:** [ ] Mail [ ] Fax [ ] e-mail (address)

Project: LHAAP-29 **Location:** KARNACK, TX **PO No.:** **Compliance Monitoring?** [ ] Yes [ ] No ( ) Agency/Program

Sampled by (PRINT): JACOB MOORMAN **Sampler Signature:** [signature] **Sampler Phone No.:**

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)

** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

REQUESTED ANALYSIS

Lab ID	Client Sample ID	Date Collected	Time Collected	No. of Containers	Matrix	Grab / Comp	Preservative Types **	EXPLOSIVES	Additional Notes
	295B155(11-12)	3/9/21	1350	1	SO	G		X	
	295B155(15-16)	3/9/21	1400	1	SO	G		X	
	~~295B155(MS)~~ 295B165(3-4)	3/9/21	1100	1	SO	G		X	
	~~295B155(MSD)~~ 295B165(7-8)	3/9/21	1105	1	SO	G		X	
	295B165(11-12)	3/9/21	1110	1	SO	G		X	
	295B165(15-16)	3/9/21	1115	1	SO	G		X	
	295B134(5-6)	3/10/21	1150	1	SO	G		X	
	295B134(8-9)	3/10/21	1155	1	SO	G		X	
	295B134(12-13)	3/10/21	1200	1	SO	G		X	
	295B156(9-10)	3/10/21	0800	1	SO	G		X	

Possible Hazard Identification [ ] Hazardous [ ] Non-Hazardous [ ] Radioactive **Sample Disposition** [ ] Dispose as appropriate [ ] Return [ ] Archive

Comments

10 DAY TAT

Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
[signature]	03-11-2021/1430		
Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
		Brenda Gregory	3/12/21 0945

Rev: 07/18/2018

Page 10 of 10

MICROBAC®

Work Order # MIC1288

COOLER TEMP >6° C LOG

SAMPLE ID	Bottle 1 °C	Bottle 2 °C	Bottle 3 °C	Bottle 4 °C	Bottle 5 °C	Bottle 6 °C

BLG 3-12-21

pH Lot # NA

pH Exceptions

SAMPLE ID	Bottle 1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6

BLG 3-12-21

PRESERVATIVE EXCEPTIONS

X NONE

_AS NOTED

BLG 3-12-21

Document Control # 1957
Last 04-10-2019

Issued to: Document Master File

Microbac Laboratories Inc., - Marietta, OH

Level IV QA/QC Data Package

Laboratory Report Number:

M1C1317

Client Project ID:

Longhorn

For:

Lynn Lutz

HDR

9781 S. Meridian Blvd Suite 400

Englewood, CO 80112

Project State of Origin: Texas

All test results meet the requirements of the QAPP and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in the report. I certify that all test results meet all of the requirements of the accrediting authority listed within this report. Analytical results are reported on a 'as received' basis unless specified otherwise. Analytical results for solids with units ending in (dry) are reported on a dry weight basis. A statement of uncertainty for each analysis is available upon request. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories. The reported results are related only to the samples analyzed as received. ***The services were provided under and subject to Microbac's standard terms and conditions which can be located and reviewed at <https://www.microbac.com/standard-terms-conditions>.***

Laboratory Project Manager:

Stephanie Mossburg

Stephanie Mossburg
Customer Relations Manager
Stephanie.Mossburg@microbac.com

Authorized By:

Stephanie Mossburg

Stephanie Mossburg
Customer Relations Manager
Issued: 04/02/2021

MICROBAC®

Laboratory Report Number: M1C1317

Client Project ID: Longhorn

Microbac Laboratories Inc., - Marietta, OH

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 3.2°C

Cooler Inspection Checklist

Ice Present or not required?	Yes	Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes	Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes	Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes	Sample type identified on COC?	Yes
Correct type of Containers Received	Yes	Correct number of containers listed on COC?	Yes
Containers Intact?	Yes	COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes	Sample labels match COC (Name, Date & Time?)	Yes
Samples arrived within hold time?	Yes	Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes	Preservation checks meet method requirements?	Yes
VOA vials have zero headspace, or not recd.?	Yes		

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Sample Summary

MICROBAC®

Sample Summary

Laboratory Report Number: M1C1317

Client Project ID: Longhorn

Microbac Laboratories Inc., - Marietta, OH

Client Sample ID:	Lab Sample ID:	Sampled:
Soil IDW	M1C1317-01	03/11/21 10:00

Holding Time Summary

MICROBAC®

Specific Method: EPA 9045D **Hold Time**

Laboratory Report Number: M1C1317

Matrix: Solid

Client Project ID: Longhorn

Microbac Laboratories Inc., - Marietta, OH

Laboratory ID	Date Collected	Date Received	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
Soil IDW	03/11/21 10:00	03/12/21 09:45	03/23/21 14:13	12.18	7.00	*

* - Holding time exceeded.

MICROBAC®

Specific Method: EPA 8260B **Hold Time**

Laboratory Report Number: M1C1317

Matrix: Aqueous

Client Project ID: Longhorn

Microbac Laboratories Inc., - Marietta, OH

Laboratory ID	Date Collected	Date Leached	Days to Leach	Max Days to Leach	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
Soil IDW	03/11/21 10:00	03/16/21 14:42	5.20	14	03/19/21 18:09	3.14	14.00	03/19/21 18:09	8.34	14.00	

* - Holding time exceeded.

MICROBAC®

Specific Method: ASTM D2216-10 **Hold Time**

Laboratory Report Number: M1C1317

Matrix: Solid

Client Project ID: Longhorn

Microbac Laboratories Inc., - Marietta, OH

Laboratory ID	Date Collected	Date Received	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
Soil IDW	03/11/21 10:00	03/12/21 09:45	03/17/21 06:26	5.85	28.00	

* - Holding time exceeded.

Specific Method: EPA 7.3.3.2 **Hold Time**

Laboratory Report Number: M1C1317

Matrix: Solid

Client Project ID: Longhorn

Microbac Laboratories Inc., - Marietta, OH

Laboratory ID	Date Collected	Date Received	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
Soil IDW	03/11/21 10:00	03/12/21 09:45	03/25/21 15:08	14.21	28.00	

* - Holding time exceeded.

MICROBAC®

Specific Method: EPA 7.3.4.2 **Hold Time**

Laboratory Report Number: M1C1317

Matrix: Aqueous

Client Project ID: Longhorn

Microbac Laboratories Inc., - Marietta, OH

Laboratory ID	Date Collected	Date Received	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
Soil IDW	03/11/21 10:00	03/12/21 09:45	03/23/21 18:45	12.36	28.00	

* - Holding time exceeded.

MICROBAC®

Specific Method: EPA 7470A **Hold Time**

Laboratory Report Number: M1C1317

Matrix: Aqueous

Client Project ID: Longhorn

Microbac Laboratories Inc., - Marietta, OH

Laboratory ID	Date Collected	Date Leached	Days to Leach	Max Days to Leach	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
Soil IDW	03/11/21 10:00	03/16/21 14:42	5.20	14	03/18/21 06:01	1.64	28.00	03/18/21 12:09	7.09	28.00	

* - Holding time exceeded.

MICROBAC®

Specific Method: EPA 1030 **Hold Time**

Laboratory Report Number: M1C1317

Matrix: Solid

Client Project ID: Longhorn

Microbac Laboratories Inc., - Marietta, OH

Laboratory ID	Date Collected	Date Received	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
Soil IDW	03/11/21 10:00	03/12/21 09:45	03/18/21 11:30	7.06	180.00	

* - Holding time exceeded.

MICROBAC®

Specific Method: EPA 6010B **Hold Time**

Laboratory Report Number: M1C1317

Matrix: Aqueous

Client Project ID: Longhorn

Microbac Laboratories Inc., - Marietta, OH

Laboratory ID	Date Collected	Date Leached	Days to Leach	Max Days to Leach	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
Soil IDW	03/11/21 10:00	03/16/21 14:42	5.20	14	03/17/21 11:19	0.86	180.00	03/18/21 10:26	7.02	180.00	

* - Holding time exceeded.

MICROBAC®

Specific Method: EPA 8081A **Hold Time**

Laboratory Report Number: M1C1317

Matrix: Aqueous

Client Project ID: Longhorn

Microbac Laboratories Inc., - Marietta, OH

Laboratory ID	Date Collected	Date Leached	Days to Leach	Max Days to Leach	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
Soil IDW	03/11/21 10:00	03/16/21 14:42	5.20	14	03/19/21 11:00	2.85	14.00	03/24/21 00:54	4.58	40.00	

* - Holding time exceeded.

MICROBAC®

Specific Method: EPA 8151A **Hold Time**

Laboratory Report Number: M1C1317

Matrix: Aqueous

Client Project ID: Longhorn

Microbac Laboratories Inc., - Marietta, OH

Laboratory ID	Date Collected	Date Leached	Days to Leach	Max Days to Leach	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
Soil IDW	03/11/21 10:00	03/16/21 14:42	5.20	14	03/18/21 14:06	1.98	14.00	03/23/21 18:31	5.18	40.00	

* - Holding time exceeded.

MICROBAC®

Specific Method: EPA 8270C **Hold Time**

Laboratory Report Number: M1C1317

Matrix: Aqueous

Client Project ID: Longhorn

Microbac Laboratories Inc., - Marietta, OH

Laboratory ID	Date Collected	Date Leached	Days to Leach	Max Days to Leach	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
Soil IDW	03/11/21 10:00	03/16/21 14:42	5.20	14	03/17/21 13:30	0.95	14.00	03/18/21 18:00	1.19	40.00	

* - Holding time exceeded.

MICROBAC®

Analysis Class

GC Semivolatiles

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

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GC Semivolatiles - Class Narrative and Notes

All test results meet the requirements of the QAPP and other applicable contract terms and conditions . Any exceptions are listed below in the sample and qc notes sections. Analytical results are reported on a 'as received' basis unless specified otherwise. Analytical results for solids with units ending in (dry) are reported on a dry weight basis. A statement of uncertainty for each analysis is available upon request.

QC Sample Notes

Q7	**CCV recovery is above acceptance limits. However there is no impact on the reported value.**

EPA 8151A

2,4,5-TP (Silvex)

S1C0266-CCV1	Calibration Check

2,4-D

S1C0266-CCV1	Calibration Check

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GC Semivolatiles
EPA 8081A

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FORM I:
GC Semivolatiles
EPA 8081A
RESULTS SUMMARY

Microbac Laboratories, Inc.
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Laboratory Report Number: M1C1317

CERTIFICATE OF ANALYSIS
FORM I

Client Project ID: Longhorn

Microbac Laboratories Inc., - Marietta, OH

Pesticides TCLP by GC/ECD

Client ID:	Soil IDW			**Collection Date:**	03/11/2021 10:00
Laboratory ID:	M1C1317-01	**PrePrep Method:**	1311 EX	**Prep Date:**	03/19/2021 11:00
Matrix:	Solid	**Prep Method:**	EPA 3510C	**Analyzed:**	03/24/2021 00:54
Batch / Sequence:	B1C1145 / S1C0442	**Analytical Method:**	EPA 8081A	**Calibration:**	21C0020
Instrument:	HP15	**Units:**	ug/L	**File ID:**	15G81111.D
Analyst:	ECL	**Dilution:**	1	**% Solids:**	87.31

Analyte	CAS Number	Result	DL	LOD	LOQ	Flag	Qual
Chlordane (tech.) [2C]	57-74-9	3.00	3.00	3.00	10.0	U	
Endrin [2C]	72-20-8	0.100	0.100	0.100	0.500	U	
Heptachlor [2C]	76-44-8	0.100	0.100	0.100	0.500	U	
Methoxychlor [2C]	72-43-5	0.100	0.100	0.100	0.500	U	
Toxaphene [2C]	8001-35-2	3.00	3.00	3.00	10.0	U	

Surrogate	Recovery	Limits	Units	Q	Qualifier	
Decachlorobiphenyl (BZ-209) [2C]	59.3	25-140	% Rec			
2,4,5,6-Tetrachloro-m-xylene [2C]	87.6	20-130	% Rec			

Notes and Definitions

DL: Detection Limit
LOD: Limit of Detection
LOQ: Limit of Quantitation
U: The analyte was analyzed for but was not detected above the reported quantitation limit. The quantitation limit has been adjusted for any dilution or concentration of the sample.
ug/L: Micrograms per Liter

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FORM II:
GC Semivolatiles
EPA 8081A
SURROGATE SUMMARY

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

SURROGATE STANDARD RECOVERY
FORM IIC

Instrument: HP15 **Method:** EPA 8081A

Sequence: S1C0204 **Calibration:** 21C0020

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	Q
Initial Cal Check (S1C0204-ICV2)		Lab File ID: 15G80942.D	Analyzed: 03/10/21 21:32	
2,4,5,6-Tetrachloro-m-xylene	20.0	97.9	80 - 120	
2,4,5,6-Tetrachloro-m-xylene [2C]	20.0	96.1	80 - 120	
Decachlorobiphenyl (BZ-209)	20.0	94.8	80 - 120	
Decachlorobiphenyl (BZ-209) [2C]	20.0	91.1	80 - 120	
Aroclor Reference (S1C0204-ARC1)		Lab File ID: 15G80943.D	Analyzed: 03/10/21 21:58	
2,4,5,6-Tetrachloro-m-xylene	25.0	100		
2,4,5,6-Tetrachloro-m-xylene [2C]	25.0	100		
Decachlorobiphenyl (BZ-209)	25.0	100		
Decachlorobiphenyl (BZ-209) [2C]	25.0	100		
Calibration Check (S1C0204-CCV1)		Lab File ID: 15G80954.D	Analyzed: 03/11/21 02:44	
2,4,5,6-Tetrachloro-m-xylene	20.0	118	80 - 120	
2,4,5,6-Tetrachloro-m-xylene [2C]	20.0	115	80 - 120	
Decachlorobiphenyl (BZ-209)	20.0	115	80 - 120	
Decachlorobiphenyl (BZ-209) [2C]	20.0	113	80 - 120	

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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

SURROGATE STANDARD RECOVERY
FORM IIC

Instrument: HP15 **Method:** EPA 8081A
Sequence: S1C0442 **Calibration:** 21C0020

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	Q
Calibration Check (S1C0442-CCV1)	Lab File ID: 15G81092.D	Analyzed: 03/23/21 14:41		
2,4,5,6-Tetrachloro-m-xylene	20.0	94.6	80 - 120	
2,4,5,6-Tetrachloro-m-xylene [2C]	20.0	103	80 - 120	
Decachlorobiphenyl (BZ-209)	20.0	85.6	80 - 120	
Decachlorobiphenyl (BZ-209) [2C]	20.0	97.1	80 - 120	
Aroclor Reference (S1C0442-ARC1)	Lab File ID: 15G81094.D	Analyzed: 03/23/21 17:07		
2,4,5,6-Tetrachloro-m-xylene	25.0	88.0		
2,4,5,6-Tetrachloro-m-xylene [2C]	25.0	102		
Decachlorobiphenyl (BZ-209)	25.0	81.4		
Decachlorobiphenyl (BZ-209) [2C]	25.0	102		
Blank (B1C1145-BLK1)	Lab File ID: 15G81104.D	Analyzed: 03/23/21 21:27		
2,4,5,6-Tetrachloro-m-xylene	2.00	66.6	20 - 130	
2,4,5,6-Tetrachloro-m-xylene [2C]	2.00	77.1	20 - 130	
Decachlorobiphenyl (BZ-209)	2.00	27.3	25 - 140	
Decachlorobiphenyl (BZ-209) [2C]	2.00	30.2	25 - 140	
Calibration Check (S1C0442-CCV2)	Lab File ID: 15G81105.D	Analyzed: 03/23/21 21:53		
2,4,5,6-Tetrachloro-m-xylene	10.0	91.9	80 - 120	
2,4,5,6-Tetrachloro-m-xylene [2C]	10.0	108	80 - 120	
Decachlorobiphenyl (BZ-209)	10.0	91.1	80 - 120	
Decachlorobiphenyl (BZ-209) [2C]	10.0	102	80 - 120	
LCS (B1C1145-BS1)	Lab File ID: 15G81107.D	Analyzed: 03/23/21 22:45		
2,4,5,6-Tetrachloro-m-xylene	0.200	71.3	20 - 130	
2,4,5,6-Tetrachloro-m-xylene [2C]	0.200	83.9	20 - 130	
Decachlorobiphenyl (BZ-209)	0.200	66.4	25 - 140	
Decachlorobiphenyl (BZ-209) [2C]	0.200	80.9	25 - 140	
LCS Dup (B1C1145-BSD1)	Lab File ID: 15G81108.D	Analyzed: 03/23/21 23:11		
2,4,5,6-Tetrachloro-m-xylene	0.200	85.4	20 - 130	
2,4,5,6-Tetrachloro-m-xylene [2C]	0.200	96.3	20 - 130	
Decachlorobiphenyl (BZ-209)	0.200	40.1	25 - 140	
Decachlorobiphenyl (BZ-209) [2C]	0.200	48.3	25 - 140	
LCS (B1C1145-BS2)	Lab File ID: 15G81109.D	Analyzed: 03/23/21 23:36		
2,4,5,6-Tetrachloro-m-xylene	0.200	84.1	20 - 130	
2,4,5,6-Tetrachloro-m-xylene [2C]	0.200	93.0	20 - 130	
Decachlorobiphenyl (BZ-209)	0.200	55.6	25 - 140	
Decachlorobiphenyl (BZ-209) [2C]	0.200	62.9	25 - 140	

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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

SURROGATE STANDARD RECOVERY
FORM IIC

Instrument: HP15 **Method:** EPA 8081A
Sequence: S1C0442 **Calibration:** 21C0020

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	Q
Soil IDW (M1C1317-01)		Lab File ID: 15G81111.D	Analyzed: 03/24/21 00:54	
2,4,5,6-Tetrachloro-m-xylene [2C]	2.00	87.6	20 - 130	
Decachlorobiphenyl (BZ-209) [2C]	2.00	59.3	25 - 140	
Blank (B1C1145-BLK2)		Lab File ID: 15G81115.D	Analyzed: 03/24/21 02:12	
2,4,5,6-Tetrachloro-m-xylene	2.00	67.9	20 - 130	
2,4,5,6-Tetrachloro-m-xylene [2C]	2.00	79.0	20 - 130	
Decachlorobiphenyl (BZ-209)	2.00	53.6	25 - 140	
Decachlorobiphenyl (BZ-209) [2C]	2.00	60.7	25 - 140	
Blank (B1C1145-BLK3)		Lab File ID: 15G81116.D	Analyzed: 03/24/21 02:38	
2,4,5,6-Tetrachloro-m-xylene	2.00	71.9	20 - 130	
2,4,5,6-Tetrachloro-m-xylene [2C]	2.00	84.1	20 - 130	
Decachlorobiphenyl (BZ-209)	2.00	59.1	25 - 140	
Decachlorobiphenyl (BZ-209) [2C]	2.00	66.0	25 - 140	
Calibration Check (S1C0442-CCV3)		Lab File ID: 15G81117.D	Analyzed: 03/24/21 03:04	
2,4,5,6-Tetrachloro-m-xylene	20.0	95.5	80 - 120	
2,4,5,6-Tetrachloro-m-xylene [2C]	20.0	112	80 - 120	
Decachlorobiphenyl (BZ-209)	20.0	88.1	80 - 120	
Decachlorobiphenyl (BZ-209) [2C]	20.0	93.2	80 - 120	
Calibration Check (S1C0442-CCV4)		Lab File ID: 15G81126.D	Analyzed: 03/24/21 08:26	
2,4,5,6-Tetrachloro-m-xylene	10.0	96.3	80 - 120	
2,4,5,6-Tetrachloro-m-xylene [2C]	10.0	113	80 - 120	
Decachlorobiphenyl (BZ-209)	10.0	92.9	80 - 120	
Decachlorobiphenyl (BZ-209) [2C]	10.0	107	80 - 120	

* - Does not meet acceptance criteria.

MICROBAC®

FORM III:
GC Semivolatiles
EPA 8081A
BS/BSD, MS/MSD, DUP

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

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Laboratory Report Number: M1C1317

BLANK SPIKE / DUPLICATE (BS/BSD)

Client Project ID: Longhorn

FORM IIIB

Method:	EPA 8081A		**Blank Spike**	**Duplicate**
Batch:	B1C1145	**Spike ID:**	B1C1145-BS1	B1C1145-BSD1
Analyst:	ECL	**Prepared:**	03/19/21 11:00	03/19/21 11:00
Matrix:	Aqueous	**Analyzed:**	03/23/21 22:45	03/23/21 23:11
Units:	ug/L	**File ID:**	15G81107.D	15G81108.D
Instrument:	HP15	**Initial/Final:**	1000mL/10mL	1000mL/10mL
Calibration:	21C0020			

Analyte	BS Spiked	BS Found	BS %Rec	BSD Spiked	BSD Found	BSD %Rec	%RPD	%Rec Limts	RPD Limit	Q
Endrin	0.500	0.527	105	0.500	0.546	109	3.41	40 - 138	30	
Endrin [2C]	0.500	0.517	103	0.500	0.521	104	0.733	40 - 138	30	
Heptachlor	0.500	0.443	88.6	0.500	0.508	102	13.7	40 - 130	30	
Heptachlor [2C]	0.500	0.432	86.3	0.500	0.474	94.8	9.39	40 - 130	30	
Methoxychlor	0.500	0.482	96.4	0.500	0.496	99.2	2.80	40 - 150	30	
Methoxychlor [2C]	0.500	0.584	117	0.500	0.576	115	1.40	40 - 150	30	

Surrogate	BS Spiked	BS Found	BS %Rec	BSD Spiked	BSD Found	BSD %Rec	%RPD	%Rec Limts	RPD Limit	Q
2,4,5,6-Tetrachloro-m-xylene	0.200	0.143	71.3	0.200	0.171	85.4		20 - 130		
2,4,5,6-Tetrachloro-m-xylene [2C]	0.200	0.168	83.9	0.200	0.193	96.3		20 - 130		
Decachlorobiphenyl (BZ-209)	0.200	0.133	66.4	0.200	0.0802	40.1		25 - 140		
Decachlorobiphenyl (BZ-209) [2C]	0.200	0.162	80.9	0.200	0.0966	48.3		25 - 140		

* - Does not meet %Rec acceptance criteria.
\# - Does not meet RPD acceptance criteria.
NS - Analyte Not Spiked

MICROBAC®

Laboratory Report Number: M1C1317

BLANK SPIKE (BS)

Client Project ID: Longhorn

FORM IIIB

Method:	EPA 8081A		**Blank Spike**
Batch:	B1C1145	**Spike ID:**	B1C1145-BS2
Analyst:	ECL	**Prepared:**	03/19/21 11:00
Matrix:	Aqueous	**Analyzed:**	03/23/21 23:36
Units:	ug/L	**File ID:**	15G81109.D
Instrument:	HP15	**Initial/Final:**	1000mL/10mL
Calibration:	21C0020		

Analyte	BS Spiked	BS Found	BS %Rec	%Rec Limts	Q
Toxaphene	2.00	1.82	91.2	41 - 126	
Toxaphene [2C]	2.00	2.37	119	41 - 126	

Surrogate	BS Spiked	BS Found	BS %Rec	%Rec Limts	Q
2,4,5,6-Tetrachloro-m-xylene	0.200	0.168	84.1	20 - 130	
2,4,5,6-Tetrachloro-m-xylene [2C]	0.200	0.186	93.0	20 - 130	
Decachlorobiphenyl (BZ-209)	0.200	0.111	55.6	25 - 140	
Decachlorobiphenyl (BZ-209) [2C]	0.200	0.126	62.9	25 - 140	

* - Does not meet %Rec acceptance criteria.
\# - Does not meet RPD acceptance criteria.
NS - Analyte Not Spiked

MICROBAC®

FORM IV:
GC Semivolatiles
EPA 8081A
METHOD BLANK SUMMARY

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

METHOD BLANK SUMMARY
FORM IVA

Blank ID:	B1C1145-BLK1	**Batch:**	B1C1145
Blank File ID:	15G81104.D	**Instrument:**	HP15
Prepared:	03/19/2021 11:00	**Method:**	EPA 8081A
Analyzed:	03/23/2021 21:53	**Analyst:**	ECL

This Method Blank Applies To The Following Samples:

Client Sample ID	Laboratory Sample ID	Lab File ID	Time Analyzed
Blank	B1C1145-BLK1	15G81104.D	03/23/2021 21:27
Blank	B1C1145-BLK1	15G81104.D	03/23/2021 21:53
Blank	B1C1145-BLK1	15G81104.D	03/23/2021 21:53
Blank	B1C1145-BLK1	15G81104.D	03/23/2021 21:27
LCS	B1C1145-BS1	15G81107.D	03/23/2021 23:11
LCS	B1C1145-BS1	15G81107.D	03/23/2021 22:45
LCS	B1C1145-BS1	15G81107.D	03/23/2021 22:45
LCS	B1C1145-BS1	15G81107.D	03/23/2021 23:11
LCS Dup	B1C1145-BSD1	15G81108.D	03/23/2021 23:36
LCS Dup	B1C1145-BSD1	15G81108.D	03/23/2021 23:36
LCS Dup	B1C1145-BSD1	15G81108.D	03/23/2021 23:11
LCS Dup	B1C1145-BSD1	15G81108.D	03/23/2021 23:11
LCS	B1C1145-BS2	15G81109.D	03/23/2021 23:36
LCS	B1C1145-BS2	15G81109.D	03/24/2021 0:02
LCS	B1C1145-BS2	15G81109.D	03/23/2021 23:36
LCS	B1C1145-BS2	15G81109.D	03/24/2021 0:02
Soil IDW	M1C1317-01	15G81111.D	03/24/2021 0:54
Soil IDW	M1C1317-01	15G81111.D	03/24/2021 0:54
Blank	B1C1145-BLK2	15G81115.D	03/24/2021 2:38
Blank	B1C1145-BLK2	15G81115.D	03/24/2021 2:38
Blank	B1C1145-BLK2	15G81115.D	03/24/2021 2:12
Blank	B1C1145-BLK2	15G81115.D	03/24/2021 2:12
Blank	B1C1145-BLK3	15G81116.D	03/24/2021 2:38
Blank	B1C1145-BLK3	15G81116.D	03/24/2021 2:38
Blank	B1C1145-BLK3	15G81116.D	03/24/2021 3:04
Blank	B1C1145-BLK3	15G81116.D	03/24/2021 3:04

MICROBAC®

Laboratory Report Number: M1C1317
Client Project ID: Longhorn

METHOD BLANK SUMMARY
FORM IVA

Blank ID:	B1C1145-BLK2	**Batch:**	B1C1145
Blank File ID:	15G81115.D	**Instrument:**	HP15
Prepared:	03/19/2021 11:00	**Method:**	EPA 8081A
Analyzed:	03/24/2021 2:12	**Analyst:**	ECL

This Method Blank Applies To The Following Samples:

Client Sample ID	Laboratory Sample ID	Lab File ID	Time Analyzed
Blank	B1C1145-BLK1	15G81104.D	03/23/2021 21:27
Blank	B1C1145-BLK1	15G81104.D	03/23/2021 21:53
Blank	B1C1145-BLK1	15G81104.D	03/23/2021 21:53
Blank	B1C1145-BLK1	15G81104.D	03/23/2021 21:27
LCS	B1C1145-BS1	15G81107.D	03/23/2021 23:11
LCS	B1C1145-BS1	15G81107.D	03/23/2021 22:45
LCS	B1C1145-BS1	15G81107.D	03/23/2021 23:11
LCS	B1C1145-BS1	15G81107.D	03/23/2021 22:45
LCS Dup	B1C1145-BSD1	15G81108.D	03/23/2021 23:11
LCS Dup	B1C1145-BSD1	15G81108.D	03/23/2021 23:11
LCS Dup	B1C1145-BSD1	15G81108.D	03/23/2021 23:36
LCS Dup	B1C1145-BSD1	15G81108.D	03/23/2021 23:36
LCS	B1C1145-BS2	15G81109.D	03/23/2021 23:36
LCS	B1C1145-BS2	15G81109.D	03/24/2021 0:02
LCS	B1C1145-BS2	15G81109.D	03/24/2021 0:02
LCS	B1C1145-BS2	15G81109.D	03/23/2021 23:36
Soil IDW	M1C1317-01	15G81111.D	03/24/2021 0:54
Soil IDW	M1C1317-01	15G81111.D	03/24/2021 0:54
Blank	B1C1145-BLK2	15G81115.D	03/24/2021 2:38
Blank	B1C1145-BLK2	15G81115.D	03/24/2021 2:38
Blank	B1C1145-BLK2	15G81115.D	03/24/2021 2:12
Blank	B1C1145-BLK2	15G81115.D	03/24/2021 2:12
Blank	B1C1145-BLK3	15G81116.D	03/24/2021 2:38
Blank	B1C1145-BLK3	15G81116.D	03/24/2021 3:04
Blank	B1C1145-BLK3	15G81116.D	03/24/2021 3:04
Blank	B1C1145-BLK3	15G81116.D	03/24/2021 2:38

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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

METHOD BLANK SUMMARY
FORM IVA

Blank ID:	B1C1145-BLK3	**Batch:**	B1C1145
Blank File ID:	15G81116.D	**Instrument:**	HP15
Prepared:	03/19/2021 11:00	**Method:**	EPA 8081A
Analyzed:	03/24/2021 2:38	**Analyst:**	ECL

This Method Blank Applies To The Following Samples:

Client Sample ID	Laboratory Sample ID	Lab File ID	Time Analyzed
Blank	B1C1145-BLK1	15G81104.D	03/23/2021 21:53
Blank	B1C1145-BLK1	15G81104.D	03/23/2021 21:27
Blank	B1C1145-BLK1	15G81104.D	03/23/2021 21:53
Blank	B1C1145-BLK1	15G81104.D	03/23/2021 21:27
LCS	B1C1145-BS1	15G81107.D	03/23/2021 23:11
LCS	B1C1145-BS1	15G81107.D	03/23/2021 23:11
LCS	B1C1145-BS1	15G81107.D	03/23/2021 22:45
LCS	B1C1145-BS1	15G81107.D	03/23/2021 22:45
LCS Dup	B1C1145-BSD1	15G81108.D	03/23/2021 23:11
LCS Dup	B1C1145-BSD1	15G81108.D	03/23/2021 23:11
LCS Dup	B1C1145-BSD1	15G81108.D	03/23/2021 23:36
LCS Dup	B1C1145-BSD1	15G81108.D	03/23/2021 23:36
LCS	B1C1145-BS2	15G81109.D	03/23/2021 23:36
LCS	B1C1145-BS2	15G81109.D	03/24/2021 0:02
LCS	B1C1145-BS2	15G81109.D	03/23/2021 23:36
LCS	B1C1145-BS2	15G81109.D	03/24/2021 0:02
Soil IDW	M1C1317-01	15G81111.D	03/24/2021 0:54
Soil IDW	M1C1317-01	15G81111.D	03/24/2021 0:54
Blank	B1C1145-BLK2	15G81115.D	03/24/2021 2:38
Blank	B1C1145-BLK2	15G81115.D	03/24/2021 2:38
Blank	B1C1145-BLK2	15G81115.D	03/24/2021 2:12
Blank	B1C1145-BLK2	15G81115.D	03/24/2021 2:12
Blank	B1C1145-BLK3	15G81116.D	03/24/2021 3:04
Blank	B1C1145-BLK3	15G81116.D	03/24/2021 3:04
Blank	B1C1145-BLK3	15G81116.D	03/24/2021 2:38
Blank	B1C1145-BLK3	15G81116.D	03/24/2021 2:38

MICROBAC®

Laboratory Report Number: M1C1317

Client Project ID: Longhorn

METHOD BLANK
FORM IVB

Sample ID:	B1C1145-BLK1	**Prep Date:**	03/19/21 11:00	**Matrix:**	Aqueous
Instrument:	HP15	**Analyzed:**	03/23/21 21:27	**Method:**	EPA 8081A
File ID:	15G81104.D	**Sequence:**	S1C0442	**Analyst:**	ECL
Batch:	B1C1145	**Units:**	ug/L	**Calibration:**	21C0020

Analyte	Result	DL	LOD	LOQ	Dilution	Flag	Q
Chlordane (tech.)	3.00	3.00	3.00	10.0	1	U	
Chlordane (tech.) [2C]	3.00	3.00	3.00	10.0	1	U	
Endrin	0.100	0.100	0.100	0.500	1	U	
Endrin [2C]	0.100	0.100	0.100	0.500	1	U	
Heptachlor	0.100	0.100	0.100	0.500	1	U	
Heptachlor [2C]	0.100	0.100	0.100	0.500	1	U	
Methoxychlor	0.100	0.100	0.100	0.500	1	U	
Methoxychlor [2C]	0.100	0.100	0.100	0.500	1	U	
Toxaphene	3.00	3.00	3.00	10.0	1	U	
Toxaphene [2C]	3.00	3.00	3.00	10.0	1	U	

Surrogate	Recovery	Limits	PASS/FAIL
2,4,5,6-Tetrachloro-m-xylene	66.6	20 - 130	PASS
2,4,5,6-Tetrachloro-m-xylene [2C]	77.1	20 - 130	PASS
Decachlorobiphenyl (BZ-209)	27.3	25 - 140	PASS
Decachlorobiphenyl (BZ-209) [2C]	30.2	25 - 140	PASS

Notes and Definitions

* - Detected in the associated method Blank at a concentration >= RL

U: The analyte was analyzed for but was not detected above the reported quantitation limit. The quantitation limit has been adjusted for any dilution or concentration of the sample.

MICROBAC®

Laboratory Report Number: M1C1317

Client Project ID: Longhorn

METHOD BLANK
FORM IVB

Sample ID:	B1C1145-BLK2	**Prep Date:**	03/19/21 11:00	**Matrix:**	Aqueous
Instrument:	HP15	**Analyzed:**	03/24/21 02:12	**Method:**	EPA 8081A
File ID:	15G81115.D	**Sequence:**	S1C0442	**Analyst:**	ECL
Batch:	B1C1145	**Units:**	ug/L	**Calibration:**	21C0020

Analyte	Result	DL	LOD	LOQ	Dilution	Flag	Q
Chlordane (tech.)	3.00	3.00	3.00	10.0	1	U	
Chlordane (tech.) [2C]	3.00	3.00	3.00	10.0	1	U	
Endrin	0.100	0.100	0.100	0.500	1	U	
Endrin [2C]	0.100	0.100	0.100	0.500	1	U	
Heptachlor	0.100	0.100	0.100	0.500	1	U	
Heptachlor [2C]	0.100	0.100	0.100	0.500	1	U	
Methoxychlor	0.100	0.100	0.100	0.500	1	U	
Methoxychlor [2C]	0.100	0.100	0.100	0.500	1	U	
Toxaphene	3.00	3.00	3.00	10.0	1	U	
Toxaphene [2C]	3.00	3.00	3.00	10.0	1	U	

Surrogate	Recovery	Limits	PASS/FAIL
2,4,5,6-Tetrachloro-m-xylene	67.9	20 - 130	PASS
2,4,5,6-Tetrachloro-m-xylene [2C]	79.0	20 - 130	PASS
Decachlorobiphenyl (BZ-209)	53.6	25 - 140	PASS
Decachlorobiphenyl (BZ-209) [2C]	60.7	25 - 140	PASS

Notes and Definitions

* - Detected in the associated method Blank at a concentration >= RL

U: The analyte was analyzed for but was not detected above the reported quantitation limit. The quantitation limit has been adjusted for any dilution or concentration of the sample.

MICROBAC®

Laboratory Report Number: M1C1317

Client Project ID: Longhorn

METHOD BLANK
FORM IVB

Sample ID:	B1C1145-BLK3	**Prep Date:**	03/19/21 11:00	**Matrix:**	Aqueous
Instrument:	HP15	**Analyzed:**	03/24/21 02:38	**Method:**	EPA 8081A
File ID:	15G81116.D	**Sequence:**	S1C0442	**Analyst:**	ECL
Batch:	B1C1145	**Units:**	ug/L	**Calibration:**	21C0020

Analyte	Result	DL	LOD	LOQ	Dilution	Flag	Q
Chlordane (tech.)	3.00	3.00	3.00	10.0	1	U	
Chlordane (tech.) [2C]	3.00	3.00	3.00	10.0	1	U	
Endrin	0.100	0.100	0.100	0.500	1	U	
Endrin [2C]	0.100	0.100	0.100	0.500	1	U	
Heptachlor	0.100	0.100	0.100	0.500	1	U	
Heptachlor [2C]	0.100	0.100	0.100	0.500	1	U	
Methoxychlor	0.100	0.100	0.100	0.500	1	U	
Methoxychlor [2C]	0.100	0.100	0.100	0.500	1	U	
Toxaphene	3.00	3.00	3.00	10.0	1	U	
Toxaphene [2C]	3.00	3.00	3.00	10.0	1	U	

Surrogate	Recovery	Limits	PASS/FAIL
2,4,5,6-Tetrachloro-m-xylene	71.9	20 - 130	PASS
2,4,5,6-Tetrachloro-m-xylene [2C]	84.1	20 - 130	PASS
Decachlorobiphenyl (BZ-209)	59.1	25 - 140	PASS
Decachlorobiphenyl (BZ-209) [2C]	66.0	25 - 140	PASS

Notes and Definitions

* - Detected in the associated method Blank at a concentration >= RL

U: The analyte was analyzed for but was not detected above the reported quantitation limit. The quantitation limit has been adjusted for any dilution or concentration of the sample.

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FORM VII:
GC Semivolatiles
EPA 8081A
ICV/CCV

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

Initial Calibration Verification (ICV)
FORM VIIA

Sample ID: S1C0204-ICV1 **Analyzed:** 03/10/21 18:31 **Method:** EPA 8081A
Instrument: HP15 **Calibration:** 21C0020 **Sequence:** S1C0204
File ID: 15G80935.D **Units:** ug/L **Analyst:** ECL

Analyte	Response	Limit	Q	Expected	Found	% Drift / % Diff	UCL	Q
Toxaphene	211213.8			500	525	5.1	20	
Toxaphene [2C]	24350.44			500	472	-5.6	20	

Sample ID: S1C0204-ICV2 **Analyzed:** 03/10/21 21:32 **Method:** EPA 8081A
Instrument: HP15 **Calibration:** 21C0020 **Sequence:** S1C0204
File ID: 15G80942.D **Units:** ug/L **Analyst:** ECL

Analyte	Response	Limit	Q	Expected	Found	% Drift / % Diff	UCL	Q
2,4,5,6-Tetrachloro-m-xylene	19872730			20.0	19.6	-2.1	20	
2,4,5,6-Tetrachloro-m-xylene [2C]	2025704			20.0	19.2	-3.9	20	
Decachlorobiphenyl (BZ-209)	19584400			20.0	19.0	-5.2	20	
Decachlorobiphenyl (BZ-209) [2C]	2123030			20.0	18.2	-8.9	20	
Endrin	17092950			20.0	18.6	-7.0	20	
Endrin [2C]	1964061			20.0	18.4	-8.2	20	
Heptachlor	24490930			20.0	19.7	-1.7	20	
Heptachlor [2C]	2731035			20.0	19.4	-3.3	20	
Methoxychlor	8732110			20.0	19.9	-0.7	20	
Methoxychlor [2C]	1063101			20.0	18.5	-7.6	20	

* - Does not meet acceptance criteria.

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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

Continuing Calibration Verification (CCV)
FORM VIIB

Laboratory ID:	S1C0204-CCV1	**Analyzed:**	03/11/21 02:44	**Method:**	EPA 8081A
Instrument:	HP15	**Calibration:**	21C0020	**Sequence:**	S1C0204
File ID:	15G80954.D	**Units:**	ug/L	**Analyst:**	ECL

Analyte	Response	Limit	Q	Expected	Found	% Drift / % Diff	UCL	Q
2,4,5,6-Tetrachloro-m-xylene	2.400413E+07			20.0	23.7	18.3	20	
2,4,5,6-Tetrachloro-m-xylene [2C]	2428763			20.0	23.0	15.2	20	
Decachlorobiphenyl (BZ-209)	2.372401E+07			20.0	23.0	14.9	20	
Decachlorobiphenyl (BZ-209) [2C]	2637874			20.0	22.6	13.2	20	
Endrin	2.157378E+07			20.0	23.5	17.5	20	
Endrin [2C]	2346408			20.0	21.9	9.7	20	
Heptachlor	2.999909E+07			20.0	24.1	20.5	20	*
Heptachlor [2C]	3242361			20.0	23.0	14.9	20	
Methoxychlor	1.04773E+07			20.0	23.8	19.2	20	
Methoxychlor [2C]	1290281			20.0	22.4	12.2	20	

* - Does not meet acceptance criteria.

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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

Continuing Calibration Verification (CCV)
FORM VIIB

Laboratory ID:	S1C0204-CVT1	**Analyzed:**	03/11/21 03:10	**Method:**	EPA 8081A
Instrument:	HP15	**Calibration:**	21C0020	**Sequence:**	S1C0204
File ID:	15G80955.D	**Units:**	ug/L		

Analyte	Expected	Found	Recovery	LCL	UCL	Q
Toxaphene	500	553	111	80	120	
Toxaphene [2C]	500	502	100	80	120	

* - Does not meet acceptance criteria.

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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

Continuing Calibration Verification (CCV)
FORM VIIB

Laboratory ID:	S1C0442-CCV1	**Analyzed:**	03/23/21 14:41	**Method:**	EPA 8081A
Instrument:	HP15	**Calibration:**	21C0020	**Sequence:**	S1C0442
File ID:	15G81092.D	**Units:**	ug/L	**Analyst:**	ECL

Analyte	Response	Limit	Q	Expected	Found	% Drift / % Diff	UCL	Q
2,4,5,6-Tetrachloro-m-xylene	1.918609E+07			20.0	18.9	-5.5	20	
2,4,5,6-Tetrachloro-m-xylene [2C]	2160858			20.0	20.5	2.5	20	
Decachlorobiphenyl (BZ-209)	1.7671E+07			20.0	17.1	-14.5	20	
Decachlorobiphenyl (BZ-209) [2C]	2262032			20.0	19.4	-3.0	20	
Endrin	1.70324E+07			20.0	18.6	-7.3	20	
Endrin [2C]	2133806			20.0	19.9	-0.3	20	
Heptachlor	2.453886E+07			20.0	19.7	-1.5	20	
Heptachlor [2C]	2872824			20.0	20.4	1.8	20	
Methoxychlor	7856495			20.0	17.9	-10.7	20	
Methoxychlor [2C]	1178430			20.0	20.5	2.4	20	

* - Does not meet acceptance criteria.

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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

Continuing Calibration Verification (CCV)
FORM VIIB

Laboratory ID:	S1C0442-CCV2	**Analyzed:**	03/23/21 21:53	**Method:**	EPA 8081A
Instrument:	HP15	**Calibration:**	21C0020	**Sequence:**	S1C0442
File ID:	15G81105.D	**Units:**	ug/L	**Analyst:**	ECL

Analyte	Response	Limit	Q	Expected	Found	% Drift / % Diff	UCL	Q
2,4,5,6-Tetrachloro-m-xylene	1.8646E+07			10.0	9.19	-8.1	20	
2,4,5,6-Tetrachloro-m-xylene [2C]	2274468			10.0	10.8	7.9	20	
Decachlorobiphenyl (BZ-209)	1.881587E+07			10.0	9.11	-8.9	20	
Decachlorobiphenyl (BZ-209) [2C]	2377813			10.0	10.2	2.0	20	
Endrin	1.717239E+07			10.0	9.35	-6.5	20	
Endrin [2C]	2271080			10.0	10.6	6.1	20	
Heptachlor	2.320477E+07			10.0	9.32	-6.8	20	
Heptachlor [2C]	2991112			10.0	10.6	5.9	20	
Methoxychlor	7539370			10.0	8.57	-14.3	20	
Methoxychlor [2C]	1236907			10.0	10.8	7.5	20	

* - Does not meet acceptance criteria.

MICROBAC®

Laboratory Report Number: M1C1317
Client Project ID: Longhorn

Continuing Calibration Verification (CCV)
FORM VIIB

Laboratory ID:	S1C0442-CCV3	**Analyzed:**	03/24/21 03:04	**Method:**	EPA 8081A
Instrument:	HP15	**Calibration:**	21C0020	**Sequence:**	S1C0442
File ID:	15G81117.D	**Units:**	ug/L	**Analyst:**	ECL

Analyte	Response	Limit	Q	Expected	Found	% Drift / % Diff	UCL	Q
2,4,5,6-Tetrachloro-m-xylene	1.937357E+07			20.0	19.1	-4.6	20	
2,4,5,6-Tetrachloro-m-xylene [2C]	2369843			20.0	22.5	12.4	20	
Decachlorobiphenyl (BZ-209)	1.819339E+07			20.0	17.6	-12.0	20	
Decachlorobiphenyl (BZ-209) [2C]	2171823			20.0	18.6	-6.8	20	
Endrin	1.790603E+07			20.0	19.5	-2.5	20	
Endrin [2C]	2192333			20.0	20.5	2.5	20	
Heptachlor	2.460165E+07			20.0	19.8	-1.2	20	
Heptachlor [2C]	3082893			20.0	21.8	9.2	20	
Methoxychlor	7352510			20.0	16.7	-16.4	20	
Methoxychlor [2C]	1103002			20.0	19.2	-4.2	20	

* - Does not meet acceptance criteria.

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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

Continuing Calibration Verification (CCV)
FORM VIIB

Laboratory ID:	S1C0442-CCV4	**Analyzed:**	03/24/21 08:26	**Method:**	EPA 8081A
Instrument:	HP15	**Calibration:**	21C0020	**Sequence:**	S1C0442
File ID:	15G81126.D	**Units:**	ug/L	**Analyst:**	ECL

Analyte	Response	Limit	Q	Expected	Found	% Drift / % Diff	UCL	Q
2,4,5,6-Tetrachloro-m-xylene	1.954793E+07			10.0	9.63	-3.7	20	
2,4,5,6-Tetrachloro-m-xylene [2C]	2380800			10.0	11.3	12.9	20	
Decachlorobiphenyl (BZ-209)	1.920008E+07			10.0	9.29	-7.1	20	
Decachlorobiphenyl (BZ-209) [2C]	2503462			10.0	10.7	7.4	20	
Endrin	1.720236E+07			10.0	9.37	-6.3	20	
Endrin [2C]	2345534			10.0	11.0	9.6	20	
Heptachlor	2.362454E+07			10.0	9.49	-5.1	20	
Heptachlor [2C]	3080627			10.0	10.9	9.1	20	
Methoxychlor	6959556			10.0	7.91	-20.9	20	*
Methoxychlor [2C]	1253268			10.0	10.9	8.9	20	

* - Does not meet acceptance criteria.

MICROBAC®

Laboratory Report Number: M1C1317
Client Project ID: Longhorn

Continuing Calibration Verification (CCV)
FORM VIIB

Laboratory ID:	S1C0442-CVT1	**Analyzed:**	03/23/21 16:30	**Method:**	EPA 8081A
Instrument:	HP15	**Calibration:**	21C0020	**Sequence:**	S1C0442
File ID:	15G81093.D	**Units:**	ug/L		

Analyte	Expected	Found	Recovery	LCL	UCL	Q
Toxaphene	500	460	92.1	80	120	
Toxaphene [2C]	500	496	99.1	80	120	

* - Does not meet acceptance criteria.

MICROBAC®

Laboratory Report Number: M1C1317
Client Project ID: Longhorn

Continuing Calibration Verification (CCV)
FORM VIIB

Laboratory ID:	S1C0442-CVT2	**Analyzed:**	03/23/21 22:18	**Method:**	EPA 8081A
Instrument:	HP15	**Calibration:**	21C0020	**Sequence:**	S1C0442
File ID:	15G81106.D	**Units:**	ug/L		

Analyte	Expected	Found	Recovery	LCL	UCL	Q
Toxaphene	200	172	86.1	80	120	
Toxaphene [2C]	200	197	98.7	80	120	

* - Does not meet acceptance criteria.

MICROBAC®

Laboratory Report Number: M1C1317
Client Project ID: Longhorn

Continuing Calibration Verification (CCV)
FORM VIIB

Laboratory ID:	S1C0442-CVT3	**Analyzed:**	03/24/21 03:30	**Method:**	EPA 8081A
Instrument:	HP15	**Calibration:**	21C0020	**Sequence:**	S1C0442
File ID:	15G81118.D	**Units:**	ug/L		

Analyte	Expected	Found	Recovery	LCL	UCL	Q
Toxaphene	500	504	101	80	120	
Toxaphene [2C]	500	542	108	80	120	

* - Does not meet acceptance criteria.

MICROBAC®

Section A:
GC Semivolatiles
EPA 8081A
Batch / Sequence Raw Data

Microbac Laboratories, Inc.
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MICROBAC®

Laboratory Report Number: M1C1317

Client Project ID: Longhorn

BATCH LOG SUMMARY
SECTION A1

Batch: B1C1145
Matrix: Aqueous
Method: EPA 8081A
SOP: EXP01

Prepared: 3/19/2021 11:00:00AM
Prepared By: CPD
Preparation: EPA 3510C

Laboratory ID	Client / Source ID	Initial	Final	pH					Spike(s)
B1C1145-BLK1		100 mL	10.0 mL	N					
B1C1145-BS1		1000 mL	10.0 mL	N					0011535 250µL
B1C1145-BSD1		1000 mL	10.0 mL	N					0011535 250µL
B1C1145-BS2		1000 mL	10.0 mL	N					0012245 100µL
M1C1317-01	Soil IDW	100 mL	10.0 mL	N					
B1C1145-BLK2		100 mL	10.0 mL	N					
B1C1145-BLK3		100 mL	10.0 mL	N					

Standards used in the batch:

Standard ID	Description	Date Prepared	Prepared By
0010360	Technical Chlordane (working)	10/8/2020 2:19:00PM	Chris Hill
0011535	PEST SPK	11/12/2020 9:19:34AM	Chris Hill
0012245	TOXAPHENE SPK (WORKING)	12/8/2020 9:38:22PM	Justin Hesson

Reagents used in the batch:

Reagent ID	Description	Prepared	Prepared By
1000577	Hexane	12/2/2020 8:34:08AM	** Vendor **
1000578	Sodium Sulfate, Anhydrous, Granular	11/12/2020 8:39:49AM	** Vendor **
1000789	94:6 Hexane:Ether	1/27/2021 3:44:03PM	Amber Carmichael
1001480	Florosil Disposable Column	2/18/2021 9:25:09AM	chad.davis
1002236	50:50 Hexane:Ether	3/12/2021 3:53:59PM	Melissa Saunders
1002286	Methylene Chloride	3/12/2021 8:37:23AM	chad.davis

Surrogates used in the batch: **Surrogate Spiked 1:** 200.00 µL

Surrogate ID	Description	Prepared	Prepared By
1000559	PEST/PCB SURR Working	1/19/2021 2:25:50PM	Justin Hesson

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

SEQUENCE LOG SUMMARY
SECTION A2

Sequence: S1C0204
Instrument: HP15
Calibration: 21C0020
Column #1 ID: RTX-CLP
Column #2 ID: RTX-CLP2

Analyst 1: ECL
Method: EPA 8081A
SOP: GCS09

#	File ID	Laboratory ID	Client ID	Analyzed	Reference	Standard
1	15G80926.D	S1C0204-PEM1	Performance Mix	03/10/21 11:31		1001915
2	15G80929.D	S1C0204-CAL7	Cal Standard	03/10/21 15:55		1000972
3	15G80930.D	S1C0204-CAL8	Cal Standard	03/10/21 16:21		1000973
4	15G80931.D	S1C0204-CAL9	Cal Standard	03/10/21 16:46		1000974
5	15G80932.D	S1C0204-CALA	Cal Standard	03/10/21 17:13		1000975
6	15G80933.D	S1C0204-CALB	Cal Standard	03/10/21 17:39		1000976
7	15G80934.D	S1C0204-CALC	Cal Standard	03/10/21 18:04		1000977
8	15G80935.D	S1C0204-ICV1	Initial Cal Check	03/10/21 18:31		1000978
9	15G80936.D	S1C0204-CAL6	Cal Standard	03/10/21 18:56		0010097
10	15G80937.D	S1C0204-CAL5	Cal Standard	03/10/21 19:22		0010098
11	15G80938.D	S1C0204-CAL4	Cal Standard	03/10/21 19:48		0010099
12	15G80939.D	S1C0204-CAL3	Cal Standard	03/10/21 20:14		0010100
13	15G80940.D	S1C0204-CAL2	Cal Standard	03/10/21 20:40		0010101
14	15G80941.D	S1C0204-CAL1	Cal Standard	03/10/21 21:06		0010102
15	15G80942.D	S1C0204-ICV2	Initial Cal Check	03/10/21 21:32		1000971
16	15G80943.D	S1C0204-ARC1	Aroclor Reference	03/10/21 21:58		0012736
27	15G80954.D	S1C0204-CCV1	Calibration Check	03/11/21 02:44		0010099
28	15G80955.D	S1C0204-CVT1	Cal Check Toxaphene	03/11/21 03:10		1000974

Sequence Standards

Standard ID	Description	Prepared	PreparedBy	Expires
0010097	Pesticide CAL point 6	10/01/2020	Eric Lawson	04/01/2021
0010098	Pesticide Cal point 5	10/01/2020	Eric Lawson	04/01/2021
0010099	Pesticide Cal point 4	10/01/2020	Eric Lawson	04/01/2021
0010100	Pesticide Cal point 3	10/01/2020	Eric Lawson	04/01/2021
0010101	Pesticide Cal point 2	10/01/2020	Eric Lawson	04/01/2021
0010102	Pesticide Cal point 1	10/01/2020	Eric Lawson	04/01/2021
0012736	AROCLOR 1660 CAL 4	12/18/2020	Eric Lawson	06/18/2021
1000971	Pesticide ALT Mix @ 20 PPB	02/02/2021	Eric Lawson	08/02/2021
1000972	Toxaphene Cal point 6	02/02/2021	Eric Lawson	08/01/2021
1000973	Toxaphene Cal point 5	02/02/2021	Eric Lawson	08/01/2021
1000974	Toxaphene Cal point 4	02/02/2021	Eric Lawson	08/01/2021
1000975	Toxaphene Cal point 3	02/02/2021	Eric Lawson	08/01/2021
1000976	Toxaphene Cal point 2	02/02/2021	Eric Lawson	08/01/2021
1000977	Toxaphene Cal point 1	02/02/2021	Eric Lawson	08/01/2021
1000978	Toxaphene ALT Working @ 500 ppb	02/02/2021	Eric Lawson	08/01/2021
1001915	Endrin-DDT Breakdown Working	03/03/2021	Craig Smith	03/03/2022

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

SEQUENCE LOG SUMMARY
SECTION A2

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

SEQUENCE LOG SUMMARY
SECTION A2

Sequence: S1C0442
Instrument: HP15
Calibration: 21C0020
Column #1 ID: RTX-CLP
Column #2 ID: RTX-CLP2

Analyst 1: ECL
Method: EPA 8081A
SOP: GCS09

#	File ID	Laboratory ID	Client ID	Analyzed	Reference	Standard
1	15G81091.D	S1C0442-PEM1	Performance Mix	03/23/21 13:22		1001915
2	15G81092.D	S1C0442-CCV1	Calibration Check	03/23/21 14:41		0010099
3	15G81093.D	S1C0442-CVT1	Cal Check Toxaphene	03/23/21 16:30		1000974
4	15G81094.D	S1C0442-ARC1	Aroclor Reference	03/23/21 17:07		0012736
14	15G81104.D	B1C1145-BLK1	Blank	03/23/21 21:27		
15	15G81105.D	S1C0442-CCV2	Calibration Check	03/23/21 21:53		0010100
16	15G81106.D	S1C0442-CVT2	Cal Check Toxaphene	03/23/21 22:18		1000975
17	15G81107.D	B1C1145-BS1	LCS	03/23/21 22:45		
18	15G81108.D	B1C1145-BSD1	LCS Dup	03/23/21 23:11		
19	15G81109.D	B1C1145-BS2	LCS	03/23/21 23:36		
21	15G81111.D	M1C1317-01	Soil IDW	03/24/21 00:54		
25	15G81115.D	B1C1145-BLK2	Blank	03/24/21 02:12		
26	15G81116.D	B1C1145-BLK3	Blank	03/24/21 02:38		
27	15G81117.D	S1C0442-CCV3	Calibration Check	03/24/21 03:04		0010099
28	15G81118.D	S1C0442-CVT3	Cal Check Toxaphene	03/24/21 03:30		1000974
36	15G81126.D	S1C0442-CCV4	Calibration Check	03/24/21 08:26		0010100

Sequence Standards

Standard ID	Description	Prepared	PreparedBy	Expires
0010099	Pesticide Cal point 4	10/01/2020	Eric Lawson	04/01/2021
0010100	Pesticide Cal point 3	10/01/2020	Eric Lawson	04/01/2021
0012736	AROCLOR 1660 CAL 4	12/18/2020	Eric Lawson	06/18/2021
1000974	Toxaphene Cal point 4	02/02/2021	Eric Lawson	08/01/2021
1000975	Toxaphene Cal point 3	02/02/2021	Eric Lawson	08/01/2021
1001915	Endrin-DDT Breakdown Working	03/03/2021	Craig Smith	03/03/2022

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Section B:
GC Semivolatiles
EPA 8081A
Sample Raw Data

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81111.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 24 Mar 2021 00:28 (#1); 24 Mar 2021 00:54 (#2)
Operator : ECL
Sample : M1C1317-01
Misc : 1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 24 14:54:49 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Tue Mar 23 16:28:03 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

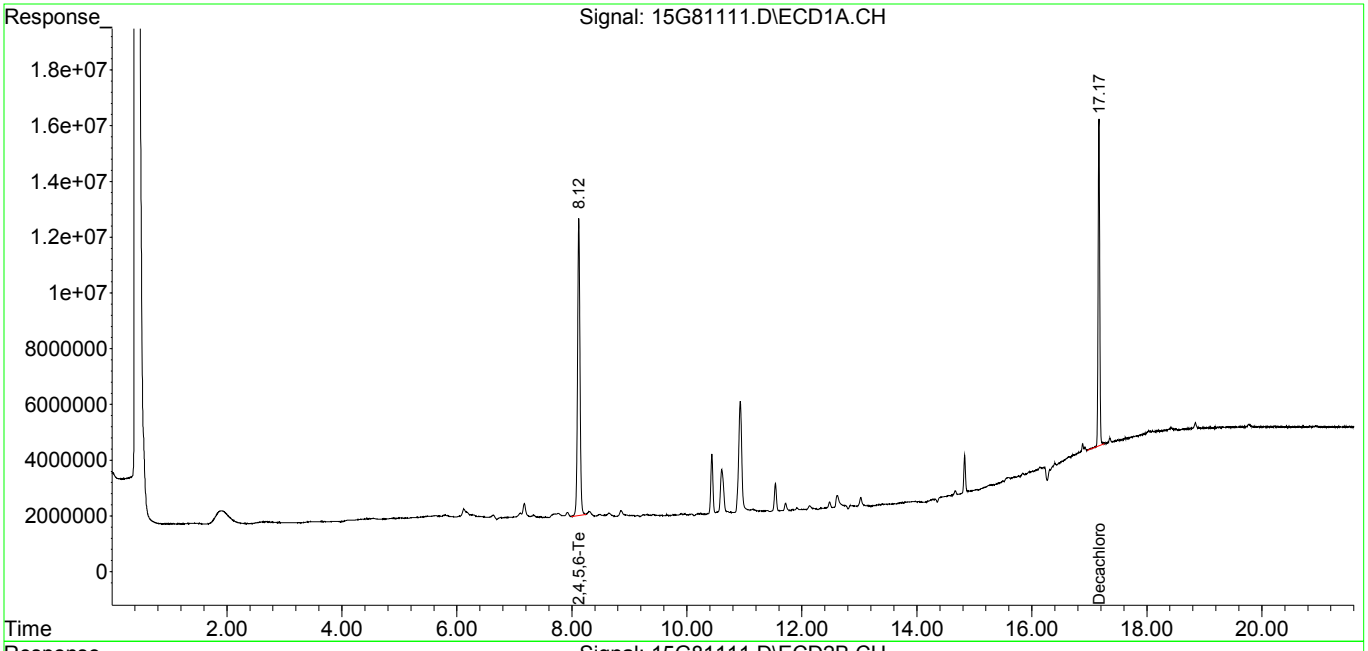
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1) S	2,4,5,6-Tetrachl	8.12	8.34	310.8E6	36937484	15.315	17.523
	Spiked Amount 20.000	Range 30 - 132		Recovery =		76.57%	87.61%
22) S	Decachlorobiphen	17.17	18.18	226.4E6	27627010	10.958	11.856
	Spiked Amount 20.000	Range 36 - 144		Recovery =		54.79%	59.28%
	Target Compounds						
2)	alpha-BHC	0.00	0.00	0	0	N.D.	N.D.
3)	gamma-BHC	0.00	0.00	0	0	N.D. d	N.D. d
4)	beta-BHC	0.00	0.00	0	0	N.D.	N.D.
5)	delta-BHC	0.00	0.00	0	0	N.D.	N.D.
6)	Heptachlor	0.00	0.00	0	0	N.D.	N.D.
7)	Aldrin	0.00	0.00	0	0	N.D.	N.D.
8)	Heptachlor Epoxi	0.00	0.00	0	0	N.D.	N.D.
9)	gamma-Chlordane	0.00	0.00	0	0	N.D.	N.D.
10)	alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.
11)	Endosulfan I	0.00	0.00	0	0	N.D. d	N.D. d
12)	4,4'-DDE	0.00	0.00	0	0	N.D.	N.D.
13)	Dieldrin	0.00	0.00	0	0	N.D.	N.D.
14)	Endrin	0.00	0.00	0	0	N.D.	N.D.
15)	4,4'-DDD	0.00	0.00	0	0	N.D.	N.D.
16)	Endosulfan II	0.00	0.00	0	0	N.D.	N.D.
17)	4,4'-DDT	0.00	0.00	0	0	N.D.	N.D.
18)	Endrin Aldehyde	0.00	0.00	0	0	N.D. d	N.D. d
19)	Endosulfan Sulfa	0.00	0.00	0	0	N.D.	N.D.
20)	Methoxychlor	0.00	0.00	0	0	N.D.	N.D.
21)	Endrin Ketone	0.00	0.00	0	0	N.D.	N.D.

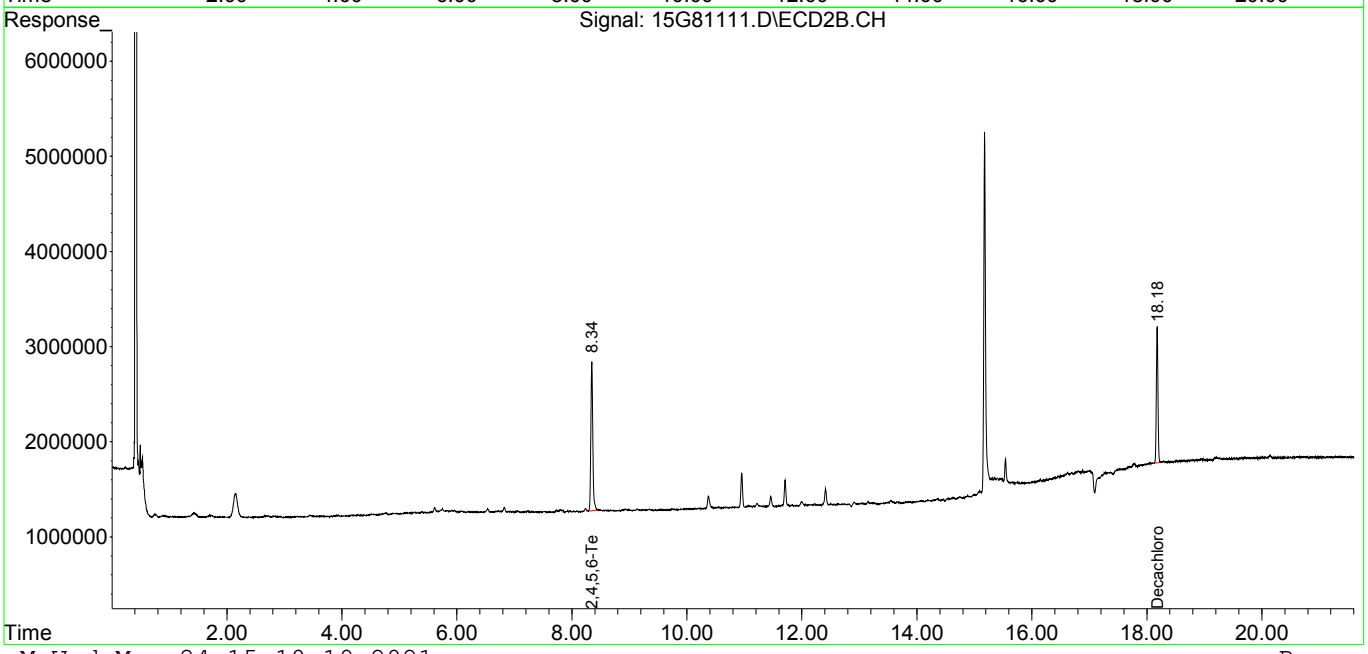
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81111.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 24 Mar 2021 00:28 (#1); 24 Mar 2021 00:54 (#2)
Operator : ECL
Sample : M1C1317-01
Misc : 1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 24 14:54:49 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Tue Mar 23 16:28:03 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15





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Section C:
GC Semivolatiles
EPA 8081A
QC Sample Raw Data

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81104.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 21:27 (#1); 23 Mar 2021 21:53 (#2)
Operator : ECL
Sample : B1C1145-BLK1
Misc : 1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 24 14:52:47 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Tue Mar 23 16:28:03 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

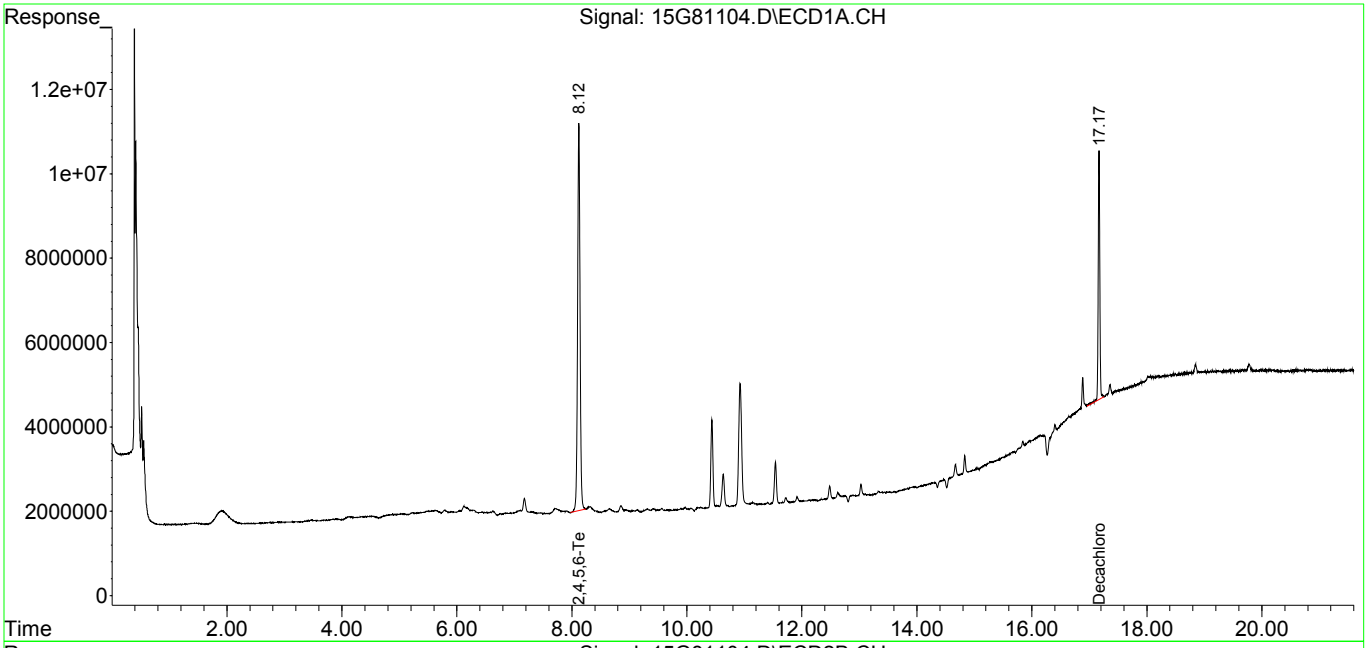
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1) S	2,4,5,6-Tetrachl	8.12	8.34	270.4E6	32492273	13.322	15.414
	Spiked Amount 20.000	Range 30 - 132		Recovery =		66.61%	77.07%
22) S	Decachlorobiphen	17.17	18.18	112.6E6	14072572	5.450	6.039
	Spiked Amount 20.000	Range 36 - 144		Recovery =		27.25%#	30.20%#
	Target Compounds						
2)	alpha-BHC	0.00	0.00	0	0	N.D.	N.D.
3)	gamma-BHC	0.00	0.00	0	0	N.D.	N.D.
4)	beta-BHC	0.00	0.00	0	0	N.D.	N.D.
5)	delta-BHC	0.00	0.00	0	0	N.D.	N.D.
6)	Heptachlor	0.00	0.00	0	0	N.D. d	N.D. d
7)	Aldrin	0.00	0.00	0	0	N.D.	N.D.
8)	Heptachlor Epoxi	0.00	0.00	0	0	N.D.	N.D.
9)	gamma-Chlordane	0.00	0.00	0	0	N.D.	N.D.
10)	alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.
11)	Endosulfan I	0.00	0.00	0	0	N.D. d	N.D. d
12)	4,4'-DDE	0.00	0.00	0	0	N.D.	N.D.
13)	Dieldrin	0.00	0.00	0	0	N.D.	N.D.
14)	Endrin	0.00	0.00	0	0	N.D.	N.D.
15)	4,4'-DDD	0.00	0.00	0	0	N.D.	N.D.
16)	Endosulfan II	0.00	0.00	0	0	N.D.	N.D.
17)	4,4'-DDT	0.00	0.00	0	0	N.D.	N.D.
18)	Endrin Aldehyde	0.00	0.00	0	0	N.D. d	N.D. d
19)	Endosulfan Sulfa	0.00	0.00	0	0	N.D.	N.D.
20)	Methoxychlor	0.00	0.00	0	0	N.D.	N.D.
21)	Endrin Ketone	0.00	0.00	0	0	N.D. d	N.D. d

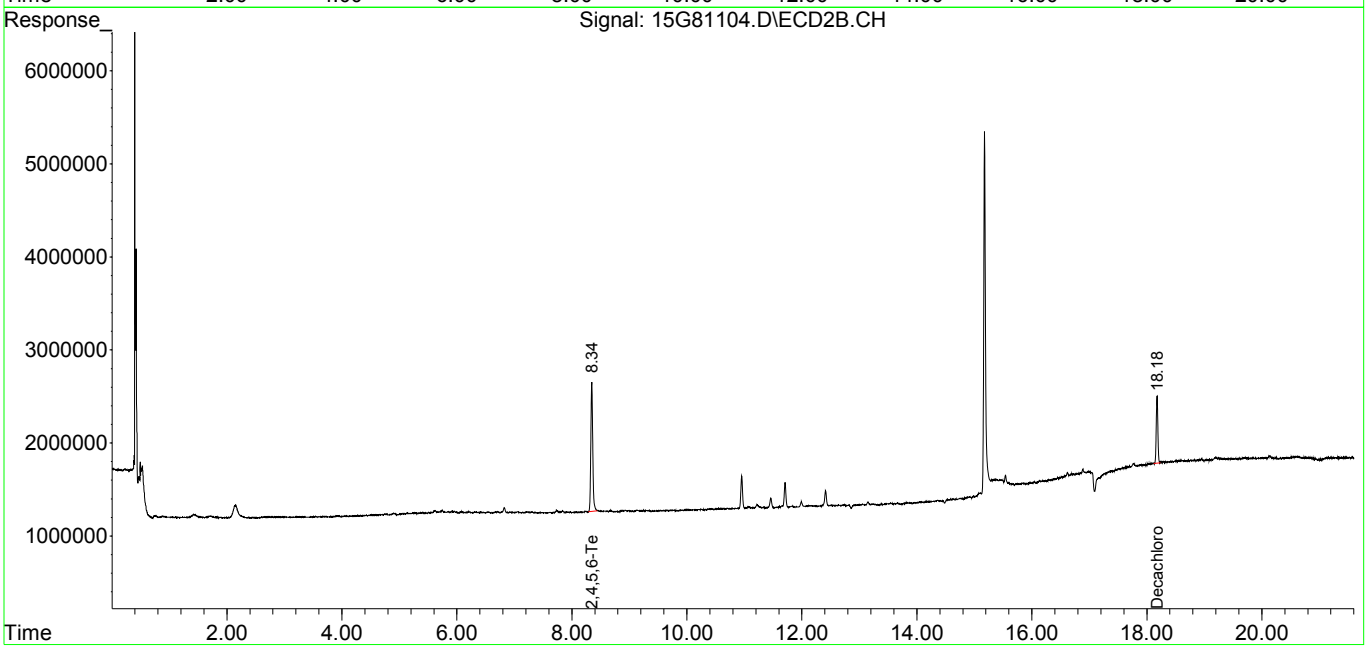
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81104.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 21:27 (#1); 23 Mar 2021 21:53 (#2)
Operator : ECL
Sample : B1C1145-BLK1
Misc : 1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 24 14:52:47 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Tue Mar 23 16:28:03 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15





Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81115.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 24 Mar 2021 2:12 (#1); 24 Mar 2021 2:38 (#2)
Operator : ECL
Sample : B1C1145-BLK2
Misc : 1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 24 14:58:50 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Tue Mar 23 16:28:03 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

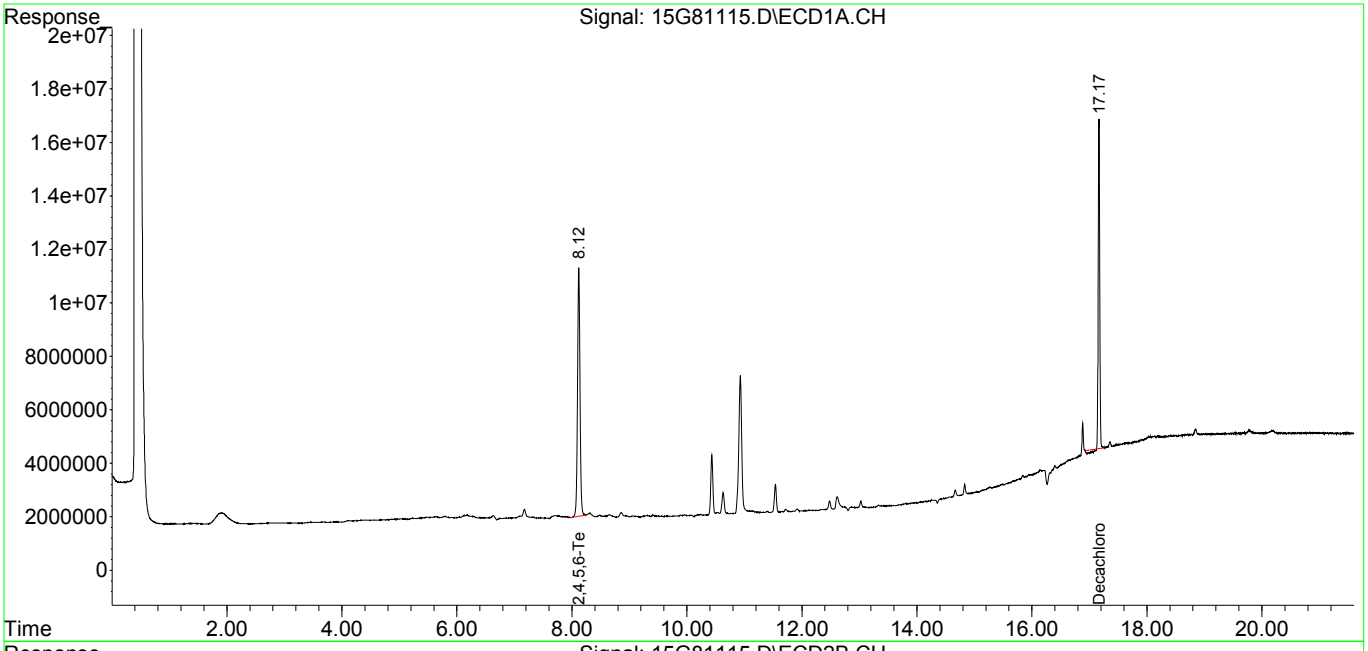
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1) S	2,4,5,6-Tetrachl	8.12	8.34	275.6E6	33290961	13.576	15.793
	Spiked Amount 20.000	Range 30 - 132		Recovery =		67.88%	78.97%
22) S	Decachlorobiphen	17.17	18.18	221.2E6	28282473	10.708	12.137
	Spiked Amount 20.000	Range 36 - 144		Recovery =		53.54%	60.69%
	Target Compounds						
2)	alpha-BHC	0.00	0.00	0	0	N.D.	N.D.
3)	gamma-BHC	0.00	0.00	0	0	N.D.	N.D.
4)	beta-BHC	0.00	0.00	0	0	N.D.	N.D.
5)	delta-BHC	0.00	0.00	0	0	N.D.	N.D.
6)	Heptachlor	0.00	0.00	0	0	N.D.	N.D.
7)	Aldrin	0.00	0.00	0	0	N.D.	N.D.
8)	Heptachlor Epoxi	0.00	0.00	0	0	N.D.	N.D.
9)	gamma-Chlordane	0.00	0.00	0	0	N.D.	N.D.
10)	alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.
11)	Endosulfan I	0.00	0.00	0	0	N.D. d	N.D. d
12)	4,4'-DDE	0.00	0.00	0	0	N.D.	N.D.
13)	Dieldrin	0.00	0.00	0	0	N.D.	N.D.
14)	Endrin	0.00	0.00	0	0	N.D.	N.D.
15)	4,4'-DDD	0.00	0.00	0	0	N.D.	N.D.
16)	Endosulfan II	0.00	0.00	0	0	N.D.	N.D.
17)	4,4'-DDT	0.00	0.00	0	0	N.D.	N.D.
18)	Endrin Aldehyde	0.00	0.00	0	0	N.D. d	N.D. d
19)	Endosulfan Sulfa	0.00	0.00	0	0	N.D.	N.D.
20)	Methoxychlor	0.00	0.00	0	0	N.D.	N.D.
21)	Endrin Ketone	0.00	0.00	0	0	N.D. d	N.D. d

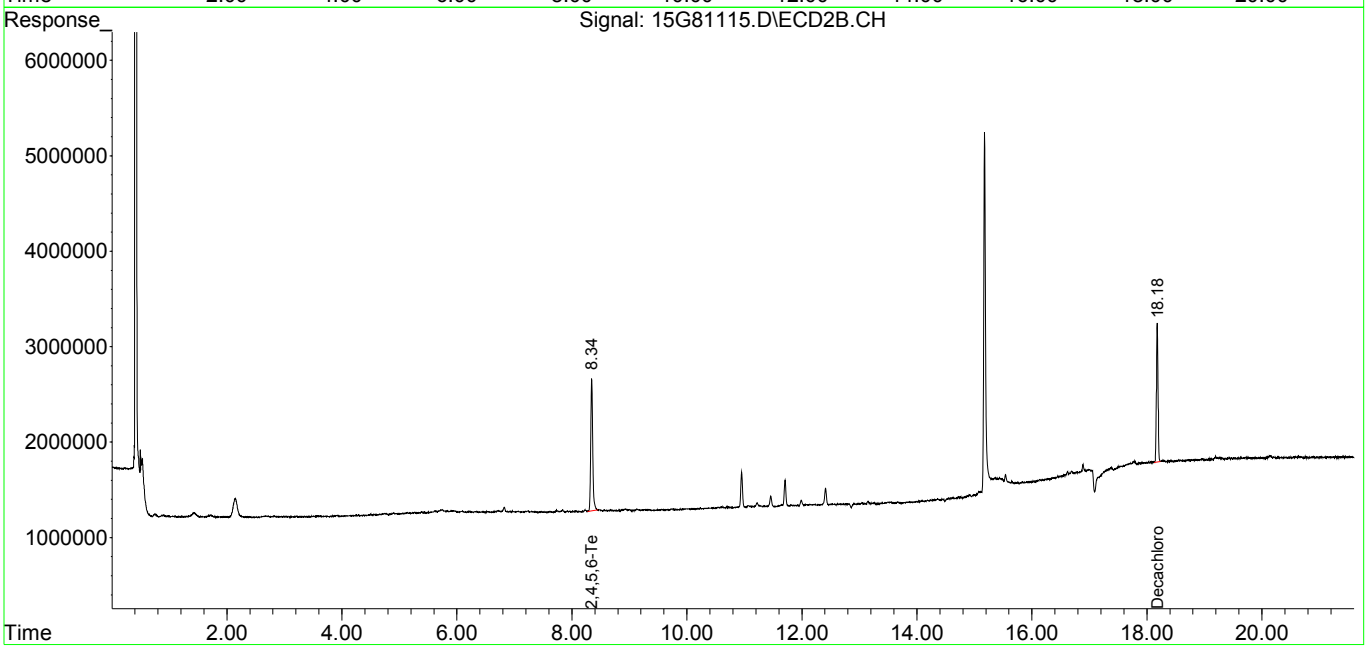
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81115.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 24 Mar 2021 2:12 (#1); 24 Mar 2021 2:38 (#2)
Operator : ECL
Sample : B1C1145-BLK2
Misc : 1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 24 14:58:50 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Tue Mar 23 16:28:03 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15





Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81116.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 24 Mar 2021 2:38 (#1); 24 Mar 2021 3:04 (#2)
Operator : ECL
Sample : B1C1145-BLK3
Misc : 1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 24 14:59:08 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Tue Mar 23 16:28:03 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

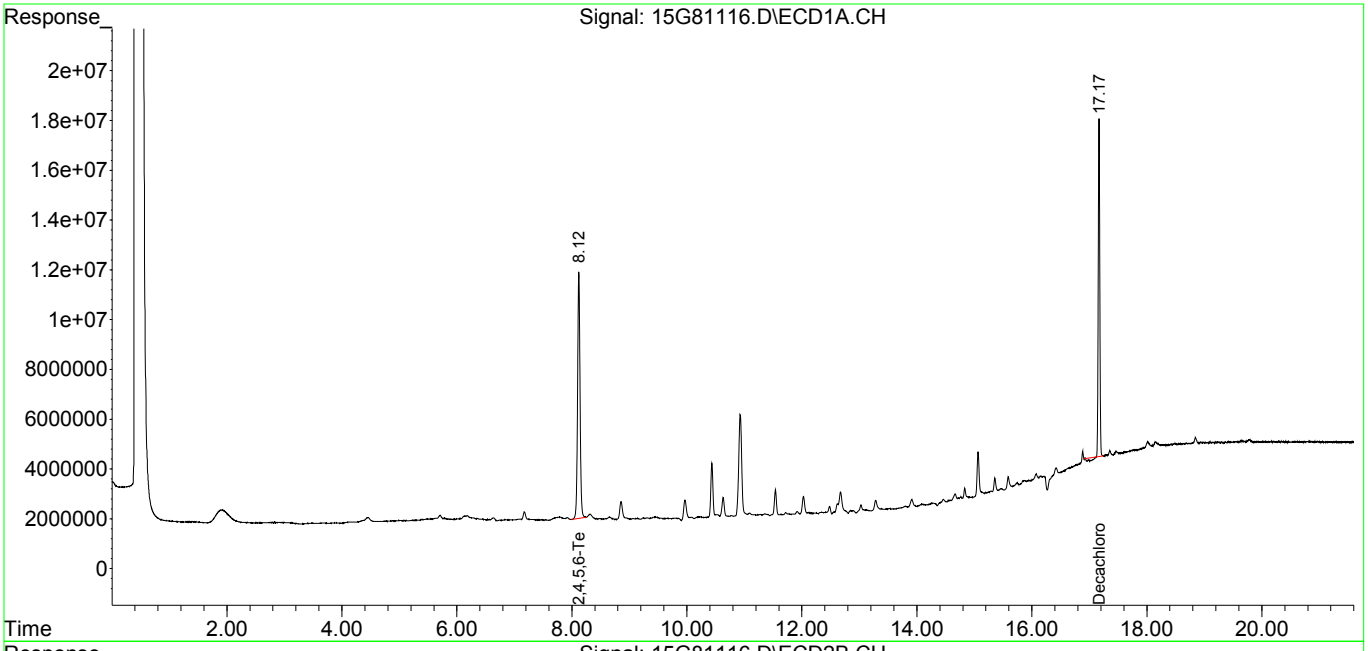
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1) S	2,4,5,6-Tetrachl	8.12	8.34	291.9E6	35425777	14.381	16.806
	Spiked Amount 20.000	Range 30 - 132		Recovery =		71.91%	84.03%
22) S	Decachlorobiphen	17.17	18.18	244.0E6	30760904	11.811	13.200
	Spiked Amount 20.000	Range 36 - 144		Recovery =		59.06%	66.00%
	Target Compounds						
2)	alpha-BHC	0.00	0.00	0	0	N.D.	N.D.
3)	gamma-BHC	0.00	0.00	0	0	N.D.	N.D.
4)	beta-BHC	0.00	0.00	0	0	N.D.	N.D.
5)	delta-BHC	0.00	0.00	0	0	N.D.	N.D.
6)	Heptachlor	0.00	0.00	0	0	N.D.	N.D.
7)	Aldrin	0.00	0.00	0	0	N.D.	N.D.
8)	Heptachlor Epoxi	0.00	0.00	0	0	N.D.	N.D.
9)	gamma-Chlordane	0.00	0.00	0	0	N.D.	N.D.
10)	alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.
11)	Endosulfan I	0.00	0.00	0	0	N.D. d	N.D. d
12)	4,4'-DDE	0.00	0.00	0	0	N.D.	N.D.
13)	Dieldrin	0.00	0.00	0	0	N.D.	N.D.
14)	Endrin	0.00	0.00	0	0	N.D.	N.D.
15)	4,4'-DDD	0.00	0.00	0	0	N.D.	N.D.
16)	Endosulfan II	0.00	15.08	0	660989	N.D.	N.D.
17)	4,4'-DDT	0.00	0.00	0	0	N.D.	N.D.
18)	Endrin Aldehyde	0.00	0.00	0	0	N.D. d	N.D. d
19)	Endosulfan Sulfa	0.00	0.00	0	0	N.D.	N.D.
20)	Methoxychlor	0.00	0.00	0	0	N.D. d	N.D. d
21)	Endrin Ketone	0.00	0.00	0	0	N.D.	N.D.

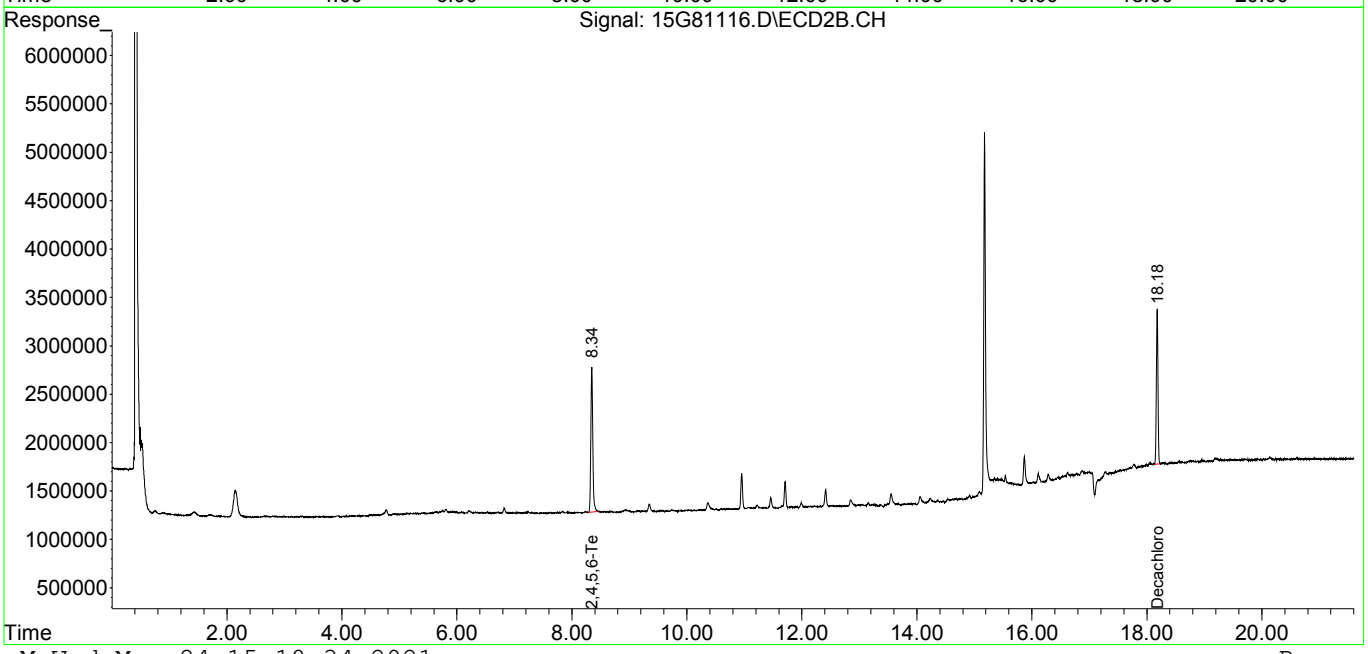
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81116.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 24 Mar 2021 2:38 (#1); 24 Mar 2021 3:04 (#2)
Operator : ECL
Sample : B1C1145-BLK3
Misc : 1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 24 14:59:08 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Tue Mar 23 16:28:03 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15





Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81107.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 22:45 (#1); 23 Mar 2021 23:11 (#2)
Operator : ECL
Sample : B1C1145-BS1
Misc : 1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 24 12:00:28 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Tue Mar 23 16:28:03 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

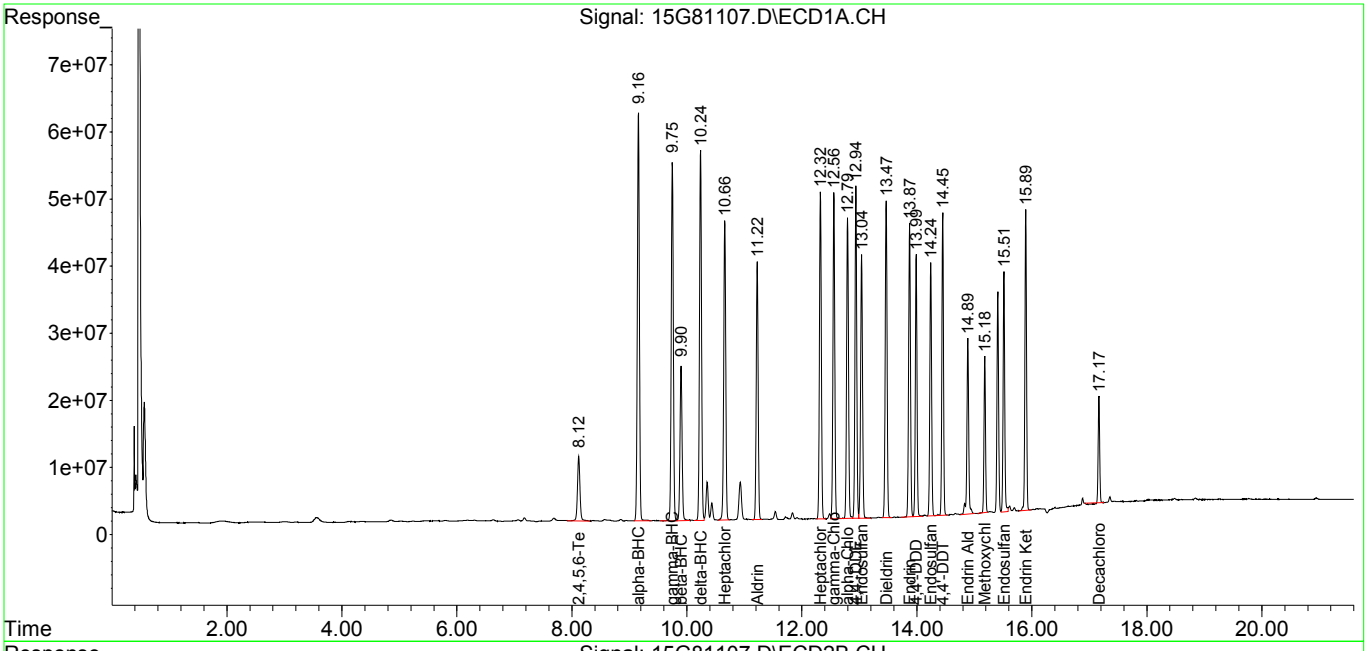
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1) S	2,4,5,6-Tetrachl	8.12	8.34	289.5E6	35366561	14.265	16.778
	Spiked Amount 20.000	Range 30 - 132		Recovery =		71.33%	83.89%
22) S	Decachlorobiphen	17.17	18.18	274.4E6	37672387	13.281	16.166
	Spiked Amount 20.000	Range 36 - 144		Recovery =		66.41%	80.83%
	Target Compounds						
2)	alpha-BHC	9.16	9.64	1512.5E6	156.1E6	44.366	59.994
3)	gamma-BHC	9.75	10.39	1347.3E6	151.0E6	44.457	60.405
4)	beta-BHC	9.90	10.54	583.6E6	71073867	51.613	53.998
5)	delta-BHC	10.24	11.16	1364.2E6	150.8E6	43.602	60.470
6)	Heptachlor	10.66	11.29	1102.6E6	121.8E6	44.280	43.151
7)	Aldrin	11.22	11.95	877.5E6	99823627	37.653	39.134
8)	Heptachlor Epoxi	12.32	13.05	1121.6E6	130.8E6	49.277	50.465
9)	gamma-Chlordane	12.56	13.40	1071.1E6	120.5E6	46.867	49.969
10)	alpha-Chlordane	12.79	13.68	1037.2E6	122.6E6	48.496	48.617
11)	Endosulfan I	13.04	13.79	900.8E6	99170692	43.595	43.580
12)	4,4'-DDE	12.94	13.96	1064.2E6	118.5E6	50.960	52.707
13)	Dieldrin	13.47	14.27	1068.3E6	118.9E6	48.279	49.890
14)	Endrin	13.87	14.77	968.3E6	110.6E6	52.716	51.674
15)	4,4'-DDD	13.99	14.90	785.4E6	90813660	51.101	49.557
16)	Endosulfan II	14.24	15.08	806.5E6	94769505	41.594	46.141
17)	4,4'-DDT	14.45	15.36	887.3E6	106.9E6	48.234	52.778
18)	Endrin Aldehyde	14.89	15.56	577.5E6	64223348	36.756	35.702
19)	Endosulfan Sulfa	15.51	15.92	699.1E6	88286368	40.830	43.015
20)	Methoxychlor	15.18	16.26	424.0E6	67163200	48.210	58.371
21)	Endrin Ketone	15.89	16.62	879.6E6	188.8E6	43.813	86.506 #

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81107.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 22:45 (#1); 23 Mar 2021 23:11 (#2)
Operator : ECL
Sample : B1C1145-BS1
Misc : 1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 24 12:00:28 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Tue Mar 23 16:28:03 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15



Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81109.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 23:36 (#1); 24 Mar 2021 00:02 (#2)
Operator : ECL
Sample : B1C1145-BS2
Misc : 1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 24 14:54:03 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Tue Mar 23 16:28:03 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

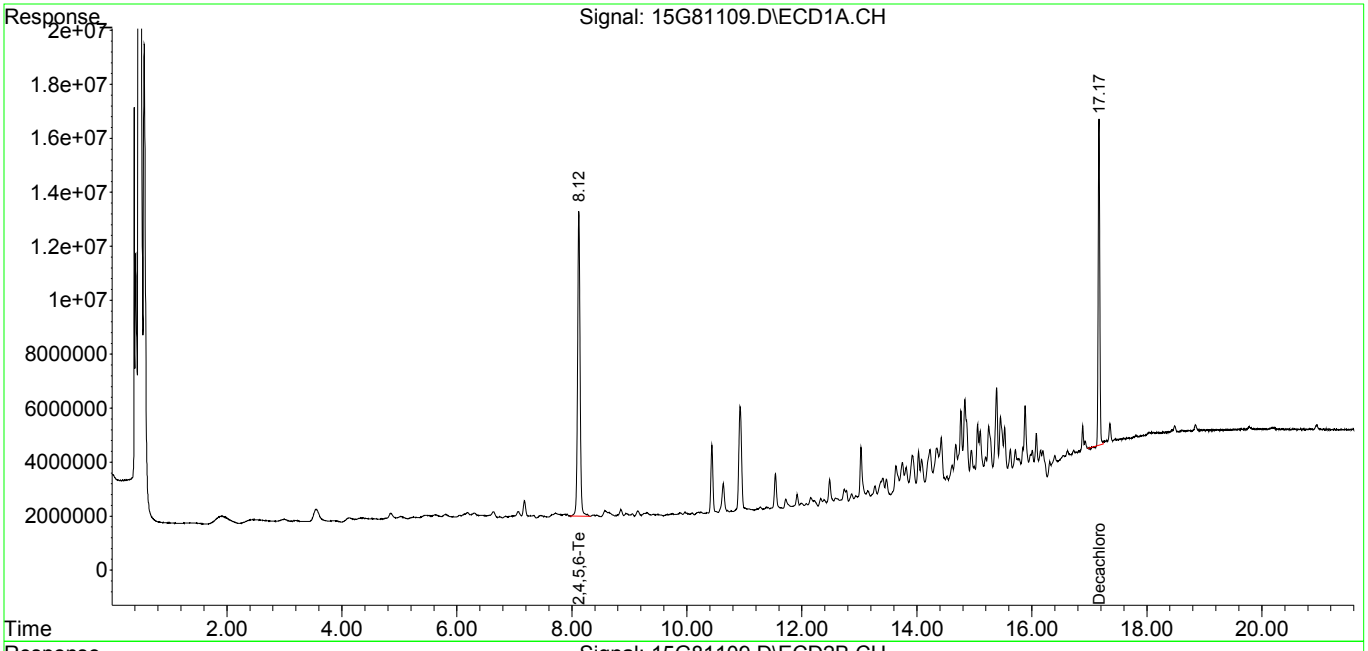
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1) S	2,4,5,6-Tetrachl	8.12	8.34	341.3E6	39185491	16.815	18.589
	Spiked Amount 20.000	Range 30 - 132		Recovery =		84.08%	92.94%
22) S	Decachlorobiphen	17.17	18.18	229.6E6	29323720	11.113	12.584
	Spiked Amount 20.000	Range 36 - 144		Recovery =		55.56%	62.92%
	Target Compounds						
2)	alpha-BHC	0.00	0.00	0	0	N.D.	N.D.
3)	gamma-BHC	0.00	0.00	0	0	N.D.	N.D.
4)	beta-BHC	0.00	0.00	0	0	N.D.	N.D.
5)	delta-BHC	0.00	0.00	0	0	N.D.	N.D.
6)	Heptachlor	0.00	0.00	0	0	N.D. d	N.D. d
7)	Aldrin	0.00	0.00	0	0	N.D.	N.D.
8)	Heptachlor Epoxi	0.00	0.00	0	0	N.D. d	N.D. d
9)	gamma-Chlordane	0.00	0.00	0	0	N.D.	N.D.
10)	alpha-Chlordane	0.00	0.00	0	0	N.D. d	N.D. d
11)	Endosulfan I	0.00	0.00	0	0	N.D. d	N.D. d
12)	4,4'-DDE	0.00	0.00	0	0	N.D.	N.D.
13)	Dieldrin	0.00	0.00	0	0	N.D. d	N.D. d
14)	Endrin	0.00	0.00	0	0	N.D.	N.D.
15)	4,4'-DDD	0.00	0.00	0	0	N.D. d	N.D. d
16)	Endosulfan II	0.00	0.00	0	0	N.D. d	N.D. d
17)	4,4'-DDT	0.00	0.00	0	0	N.D. d	N.D. d
18)	Endrin Aldehyde	0.00	0.00	0	0	N.D. d	N.D. d
19)	Endosulfan Sulfa	0.00	0.00	0	0	N.D. d	N.D. d
20)	Methoxychlor	0.00	0.00	0	0	N.D. d	N.D. d
21)	Endrin Ketone	0.00	0.00	0	0	N.D. d	N.D. d

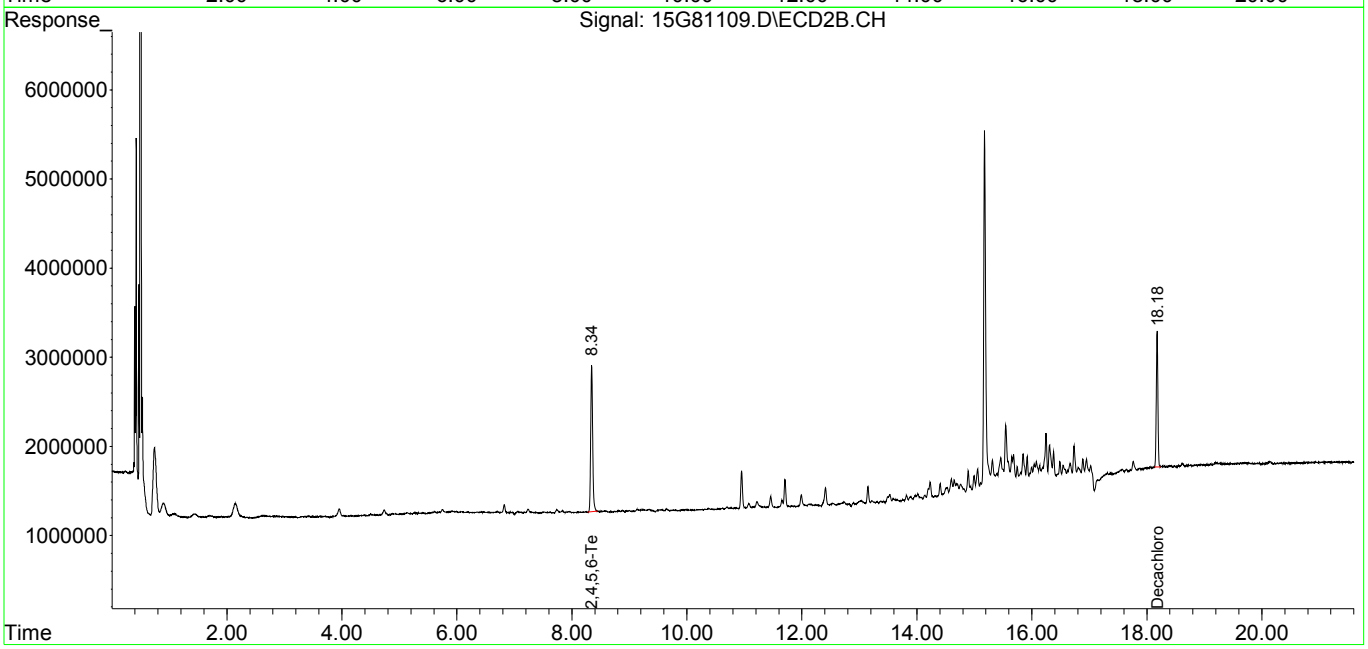
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81109.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 23:36 (#1); 24 Mar 2021 00:02 (#2)
Operator : ECL
Sample : B1C1145-BS2
Misc : 1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 24 14:54:03 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Tue Mar 23 16:28:03 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15





Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81109.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 23:36 (#1); 24 Mar 2021 00:02 (#2)
Operator : ECL
Sample : B1C1145-BS2
Misc : 1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Mar 24 15:06:53 2021
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX : March 10, 2021
QLast Update : Tue Mar 23 17:32:58 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

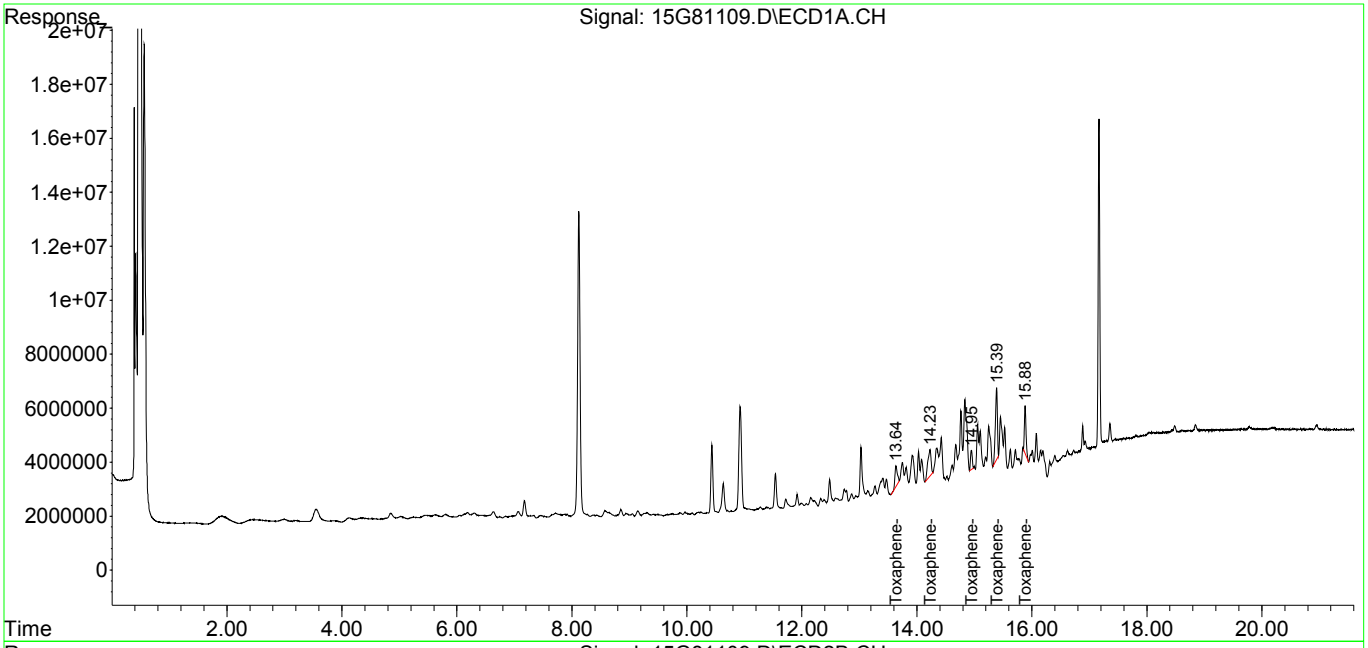
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L	
	Target Compounds							
1)	L1 Toxaphene-1	13.64	14.41	21680932	2331712	222.929	214.121	
2)	L1 Toxaphene-2	14.23	15.06	38883898	3551917	132.738	141.641	
3)	L1 Toxaphene-3	14.95	15.55	15025732	9545525	148.003	259.381	#
4)	L1 Toxaphene-4	15.39	16.25	65423045	8148140	185.758	196.287	
5)	L1 Toxaphene-5	15.88	16.73	35760004	5830137	222.540	374.532	#
	Sum Toxaphene-1			176.8E6	29407430	911.967	1185.961	
Average	Toxaphene-1					182.393	237.192	

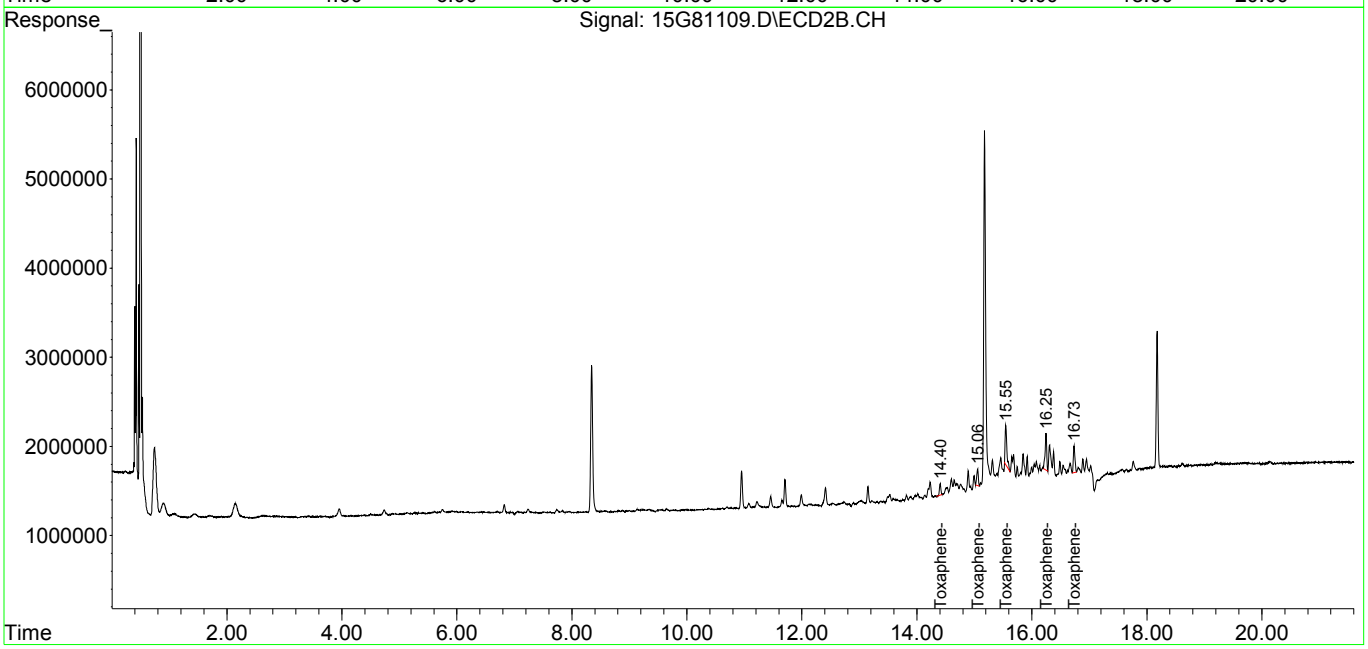
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81109.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 23:36 (#1); 24 Mar 2021 00:02 (#2)
Operator : ECL
Sample : B1C1145-BS2
Misc : 1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Mar 24 15:06:53 2021
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX : March 10, 2021
QLast Update : Tue Mar 23 17:32:58 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15





Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81108.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 23:11 (#1); 23 Mar 2021 23:36 (#2)
Operator : ECL
Sample : B1C1145-BSD1
Misc : 1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 24 12:00:35 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Tue Mar 23 16:28:03 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

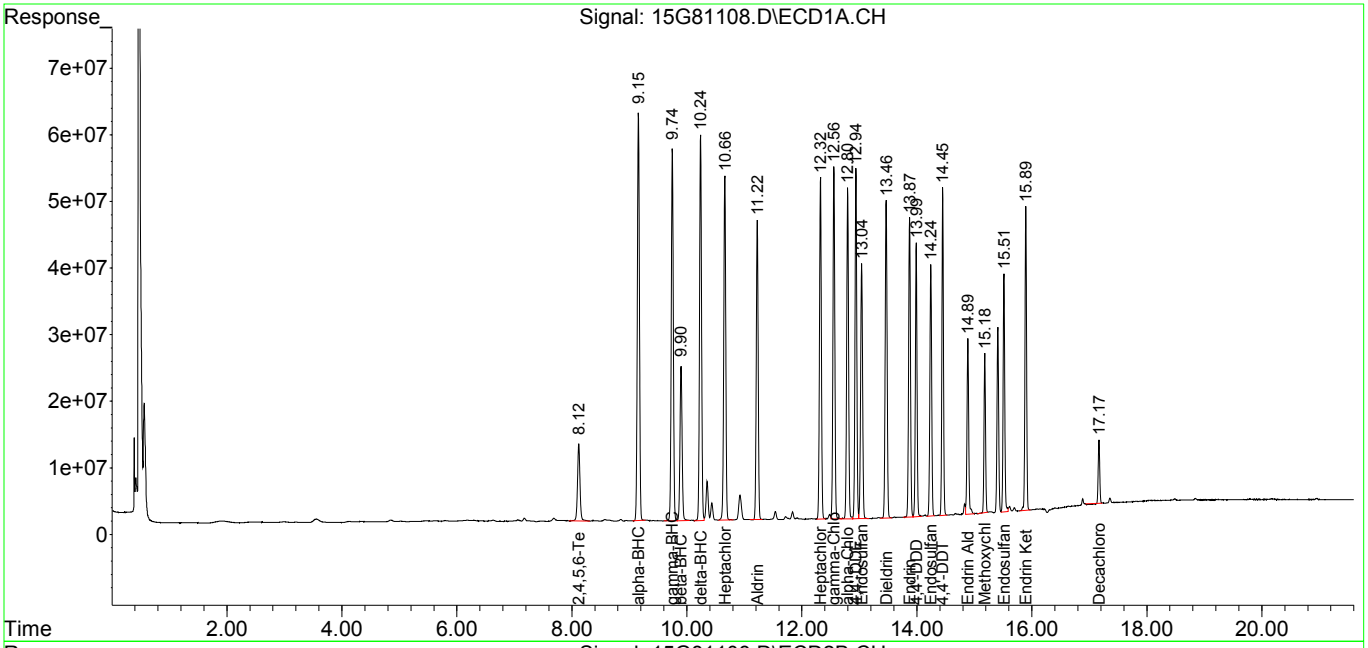
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L	
	System Monitoring Compounds							
1) S	2,4,5,6-Tetrachl	8.12	8.34	346.6E6	40580695	17.078	19.251	
	Spiked Amount 20.000	Range 30 - 132		Recovery =		85.39%	96.25%	
22) S	Decachlorobiphen	17.17	18.18	165.7E6	22501560	8.019	9.656	
	Spiked Amount 20.000	Range 36 - 144		Recovery =		40.10%	48.28%	
	Target Compounds							
2)	alpha-BHC	9.16	9.64	1546.1E6	155.7E6	45.334	59.837	
3)	gamma-BHC	9.75	10.39	1396.0E6	150.3E6	46.032	60.140	
4)	beta-BHC	9.90	10.54	598.7E6	70539774	52.948	53.592	
5)	delta-BHC	10.24	11.16	1408.1E6	148.9E6	44.924	59.722	
6)	Heptachlor	10.66	11.29	1264.1E6	133.8E6	50.767	47.401	
7)	Aldrin	11.22	11.95	1040.4E6	112.1E6	44.642	43.932	
8)	Heptachlor Epoxi	12.32	13.05	1167.9E6	132.0E6	51.311	50.948	
9)	gamma-Chlordane	12.56	13.40	1198.0E6	128.8E6	52.419	53.411	
10)	alpha-Chlordane	12.80	13.68	1124.6E6	127.0E6	52.581	50.341	
11)	Endosulfan I	13.04	13.79	910.7E6	98798704	44.070	43.417	
12)	4,4'-DDE	12.94	13.96	1134.4E6	121.8E6	54.325	54.164	
13)	Dieldrin	13.47	14.27	1107.1E6	119.3E6	50.033	50.056	
14)	Endrin	13.87	14.77	1002.0E6	111.4E6	54.553	52.045	
15)	4,4'-DDD	13.99	14.90	813.5E6	90435927	52.929	49.351	
16)	Endosulfan II	14.24	15.08	821.4E6	93554067	42.362	45.545	
17)	4,4'-DDT	14.45	15.36	925.1E6	107.4E6	50.292	53.064	
18)	Endrin Aldehyde	14.89	15.56	547.1E6	64006512	34.826	35.582	
19)	Endosulfan Sulfa	15.51	15.92	705.5E6	86272928	41.205	42.034	
20)	Methoxychlor	15.18	16.26	436.0E6	66234908	49.577	57.564	
21)	Endrin Ketone	15.89	16.62	892.2E6	174.8E6	44.439	80.036	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81108.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 23:11 (#1); 23 Mar 2021 23:36 (#2)
Operator : ECL
Sample : B1C1145-BSD1
Misc : 1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 24 12:00:35 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Tue Mar 23 16:28:03 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15



MICROBAC®

Section D:
GC Semivolatiles
EPA 8081A
Calibration Raw Data

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

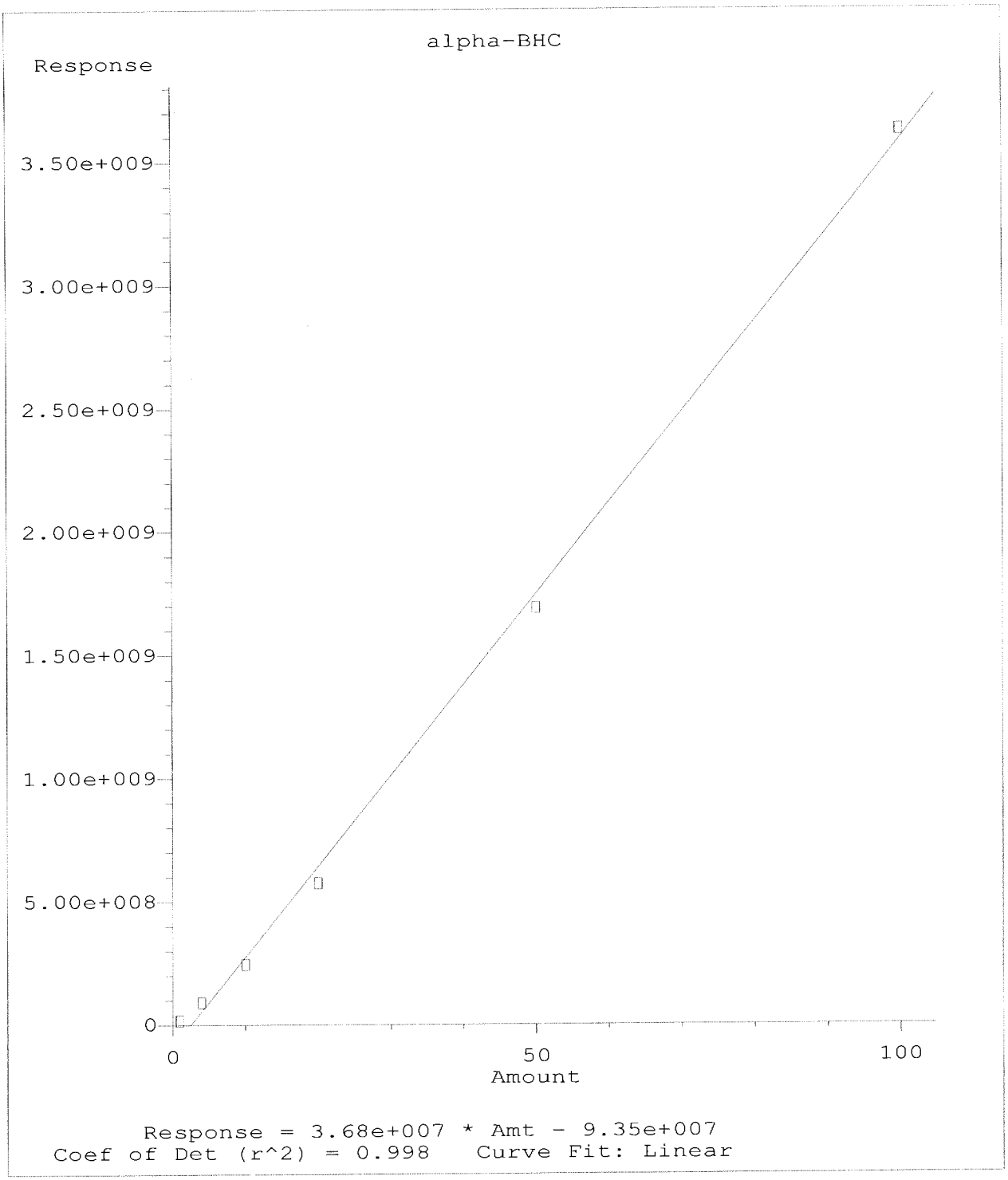
Method Path : C:\MSDCHEM\1\METHODS\
Method File : 8081.M
Title : 8081/608 CALIBRATION March 10, 2021
Last Update : Thu Mar 11 15:56:55 2021
Response Via : Initial Calibration
21C0020
Calibration Files
100 =15G80936.D 50 =15G80937.D 20 =15G80938.D
10 =15G80939.D 4 =15G80940.D 1 =15G80941.D

	Compound	100	50	20	10	4	1	Avg		%RSD	LR
1) S	2,4,5,6-Tetrachl	2.323	2.211	2.038	2.018	1.992	1.596	2.030	E7	12.25	
2)	alpha-BHC	3.630	3.381	2.874	2.453	2.269	1.720	2.721	E7	26.31	0.998
3)	gamma-BHC	3.197	3.003	2.593	2.418	2.140	1.602	2.492	E7	23.33	0.999
4)	beta-BHC	1.299	1.234	1.148	1.150	1.114	0.840	1.131	E7	13.93	
5)	delta-BHC	3.277	3.035	2.579	2.365	2.029	1.533	2.470	E7	26.04	0.998
6)	Heptachlor	2.963	2.825	2.519	2.422	2.280	1.930	2.490	E7	15.02	
7)	Aldrin	2.846	2.698	2.372	2.249	2.089	1.728	2.330	E7	17.48	
8)	Heptachlor Epoxi	2.595	2.503	2.288	2.251	2.179	1.840	2.276	E7	11.68	
9)	gamma-Chlordane	2.647	2.512	2.272	2.198	2.157	1.925	2.285	E7	11.35	
10)	alpha-Chlordane	2.512	2.387	2.159	2.043	2.019	1.713	2.139	E7	13.33	
11)	Endosulfan I	2.360	2.265	2.071	2.035	1.984	1.684	2.066	E7	11.45	
12)	4,4'-DDE	2.505	2.365	2.111	2.043	1.937	1.569	2.088	E7	15.81	
13)	Dieldrin	2.660	2.518	2.235	2.145	2.020	1.698	2.213	E7	15.66	
14)	Endrin	2.146	2.017	1.785	1.768	1.697	1.607	1.837	E7	11.10	
15)	4,4'-DDD	1.938	1.794	1.557	1.478	1.367	1.088	1.537	E7	19.77	
16)	Endosulfan II	2.189	2.086	1.907	1.951	1.923	1.577	1.939	E7	10.73	
17)	4,4'-DDT	2.154	2.019	1.804	1.795	1.737	1.528	1.840	E7	11.97	
18)	Endrin Aldehyde	1.645	1.580	1.492	1.525	1.630	1.555	1.571	E7	3.78	
19)	Endosulfan Sulfa	1.904	1.815	1.685	1.685	1.675	1.509	1.712	E7	7.90	
20)	Methoxychlor	9.800	9.408	8.975	9.112	9.697	5.774	8.794	E6	17.22	
21)	Endrin Ketone	2.258	2.177	2.003	1.975	1.928	1.705	2.008	E7	9.71	
22) S	Decachlorobiphen	2.034	2.031	2.015	2.106	2.213	1.996	2.066	E7	3.93	

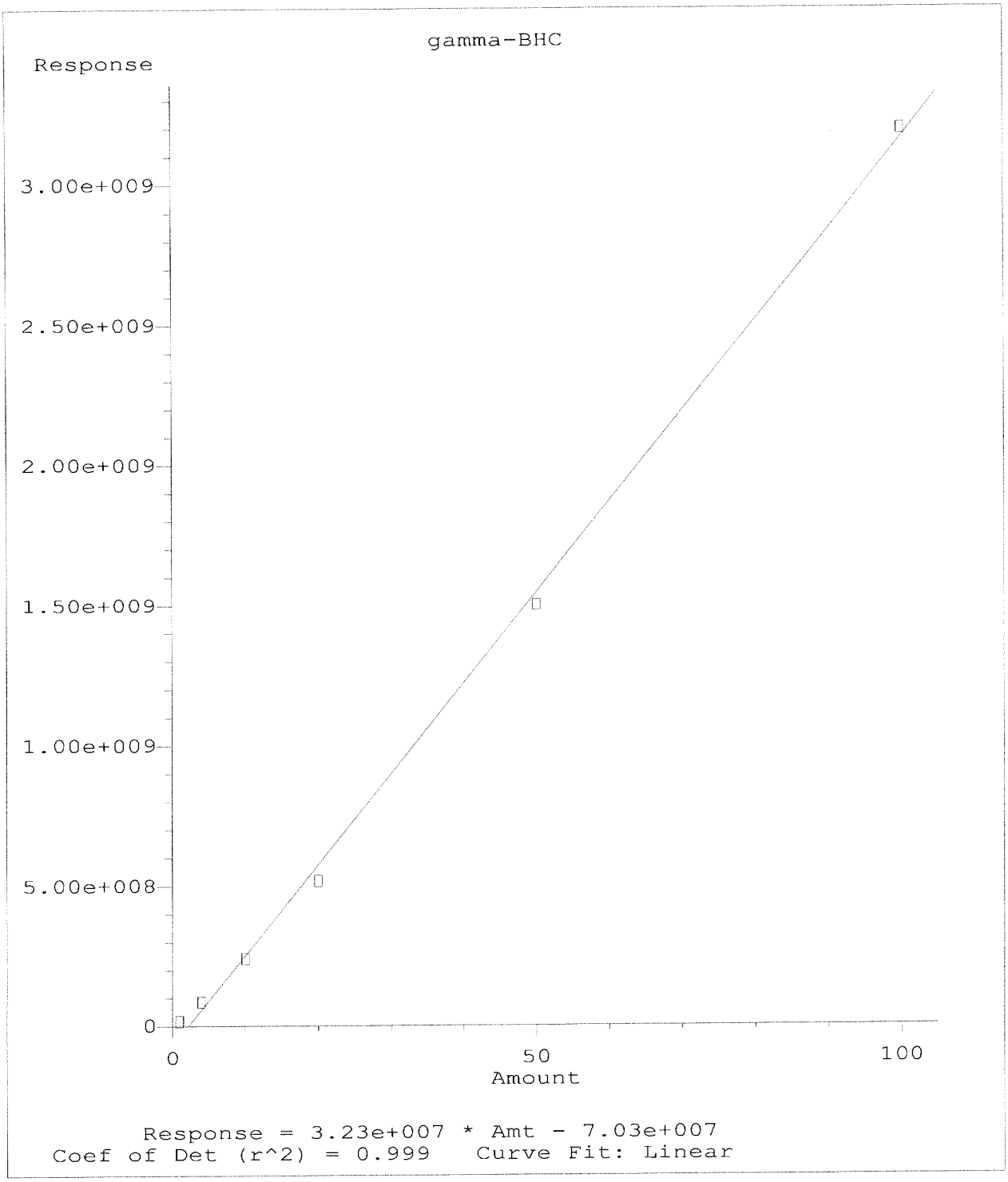
Signal #2 Calibration Files
100 =15G80936.D 50 =15G80937.D 20 =15G80938.D
10 =15G80939.D 4 =15G80940.D 1 =15G80941.D

	Compound	100	50	20	10	4	1	Avg		%RSD	LR
1) S	2,4,5,6-Tetrachl	2.170	2.065	2.121	2.191	2.086	2.015	2.108	E6	3.14	
2)	alpha-BHC	3.090	2.693	2.580	2.567	2.344	2.340	2.602	E6	10.64	
3)	gamma-BHC	2.885	2.574	2.538	2.543	2.431	2.027	2.500	E6	11.11	
4)	beta-BHC	1.289	1.235	1.327	1.388	1.383	1.275	1.316	E6	4.67	
5)	delta-BHC	2.951	2.577	2.497	2.529	2.185	2.220	2.493	E6	11.17	
6)	Heptachlor	2.885	2.655	2.765	2.924	2.813	2.898	2.823	E6	3.58	
7)	Aldrin	2.576	2.358	2.387	2.588	2.613	2.784	2.551	E6	6.18	
8)	Heptachlor Epoxi	2.464	2.338	2.452	2.739	2.692	2.865	2.592	E6	7.84	
9)	gamma-Chlordane	2.452	2.285	2.320	2.510	2.452	2.453	2.412	E6	3.67	
10)	alpha-Chlordane	2.397	2.255	2.314	2.486	2.995	2.687	2.522	E6	10.96	
11)	Endosulfan I	2.219	2.109	2.153	2.333	2.382	2.458	2.276	E6	6.03	
12)	4,4'-DDE	2.344	2.204	2.103	2.307	2.255	2.277	2.248	E6	3.81	
13)	Dieldrin	2.455	2.281	2.251	2.415	2.414	2.486	2.384	E6	3.99	
14)	Endrin	2.071	1.928	1.955	2.117	2.249	2.519	2.140	E6	10.25	
15)	4,4'-DDD	1.841	1.731	1.645	1.810	1.878	2.089	1.833	E6	8.24	
16)	Endosulfan II	2.062	1.991	2.017	2.233	2.424	3.284	2.335	E6	21.10	0.999
17)	4,4'-DDT	2.006	1.897	1.788	1.970	1.863	2.625	2.025	E6	15.01	
18)	Endrin Aldehyde	1.598	1.551	1.582	1.748	1.927	2.387	1.799	E6	17.82	
19)	Endosulfan Sulfa	1.915	1.860	1.847	2.067	2.159	2.465	2.052	E6	11.52	
20)	Methoxychlor	1.040	1.065	1.047	1.227	1.223	1.300	1.151	E6	9.80	
21)	Endrin Ketone	2.195	2.134	2.198	2.378	2.780	3.690	2.563	E6	23.44	1.000
22) S	Decachlorobiphen	2.032	2.137	2.088	2.500	2.593	2.631	2.330	E6	11.73	

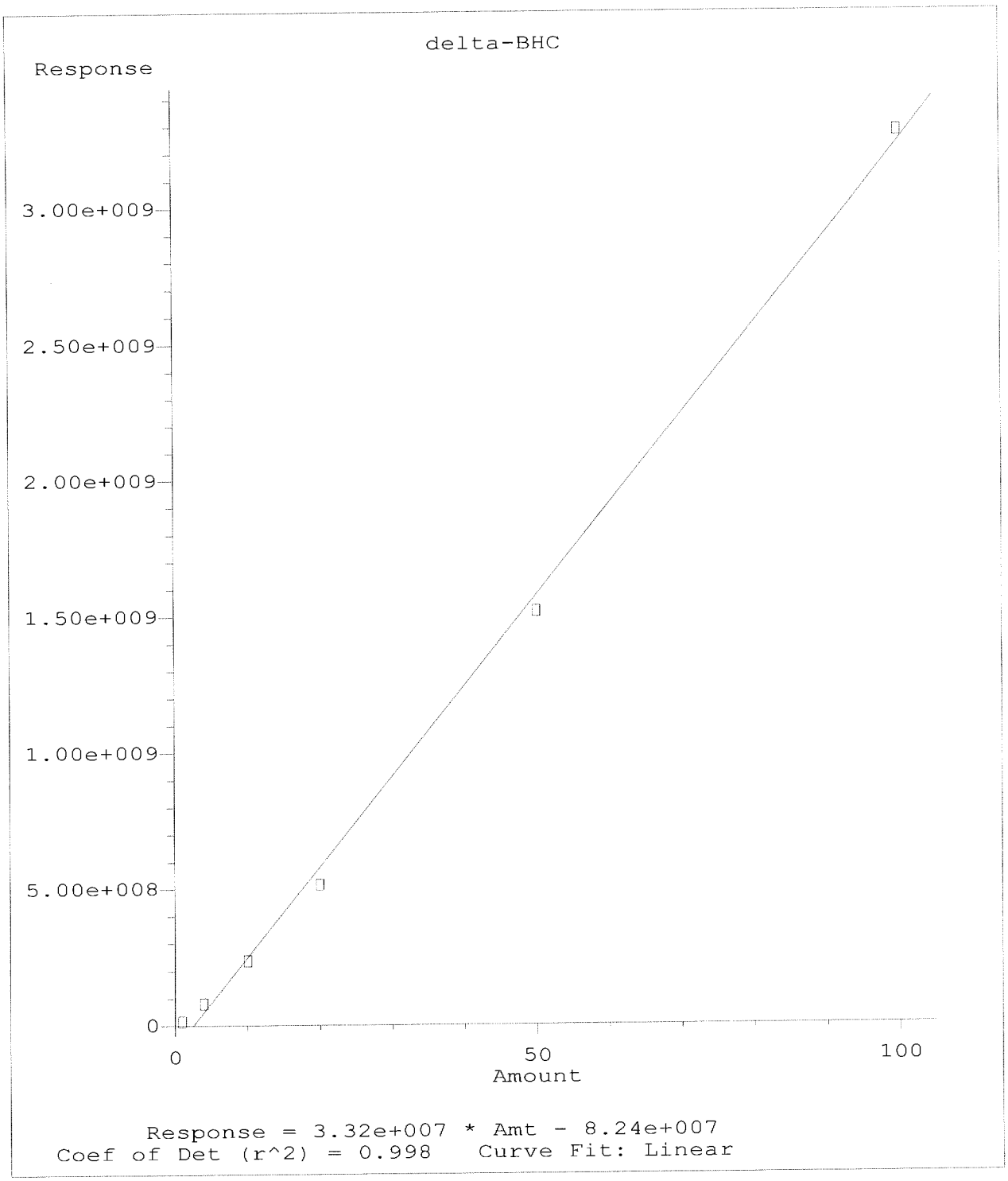
8081.M Fri Mar 12 10:50:02 2021



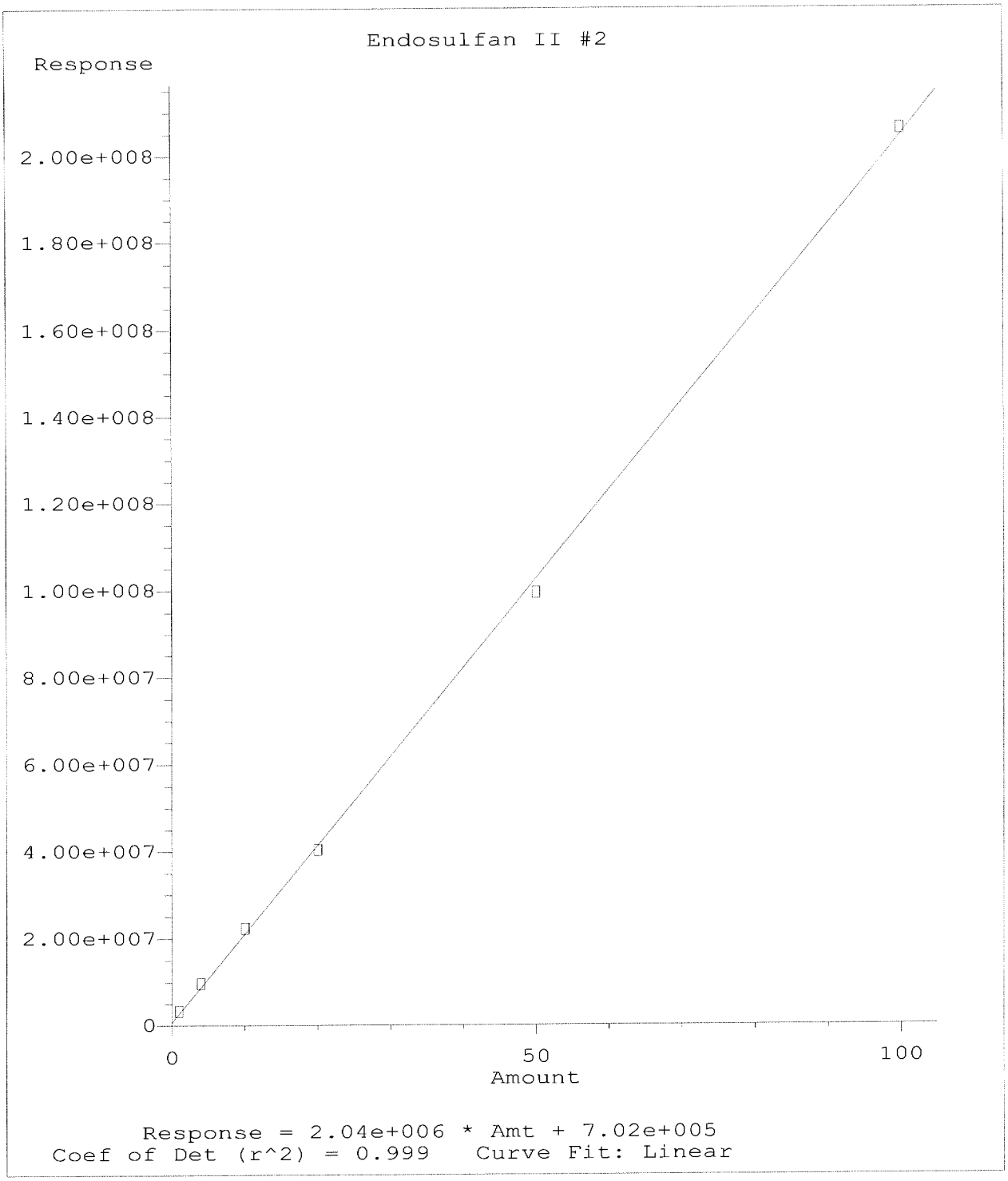
Method Name: C:\MSDCHEM\1\METHODS\8081.M
Calibration Table Last Updated: Thu Mar 11 11:31:50 2021



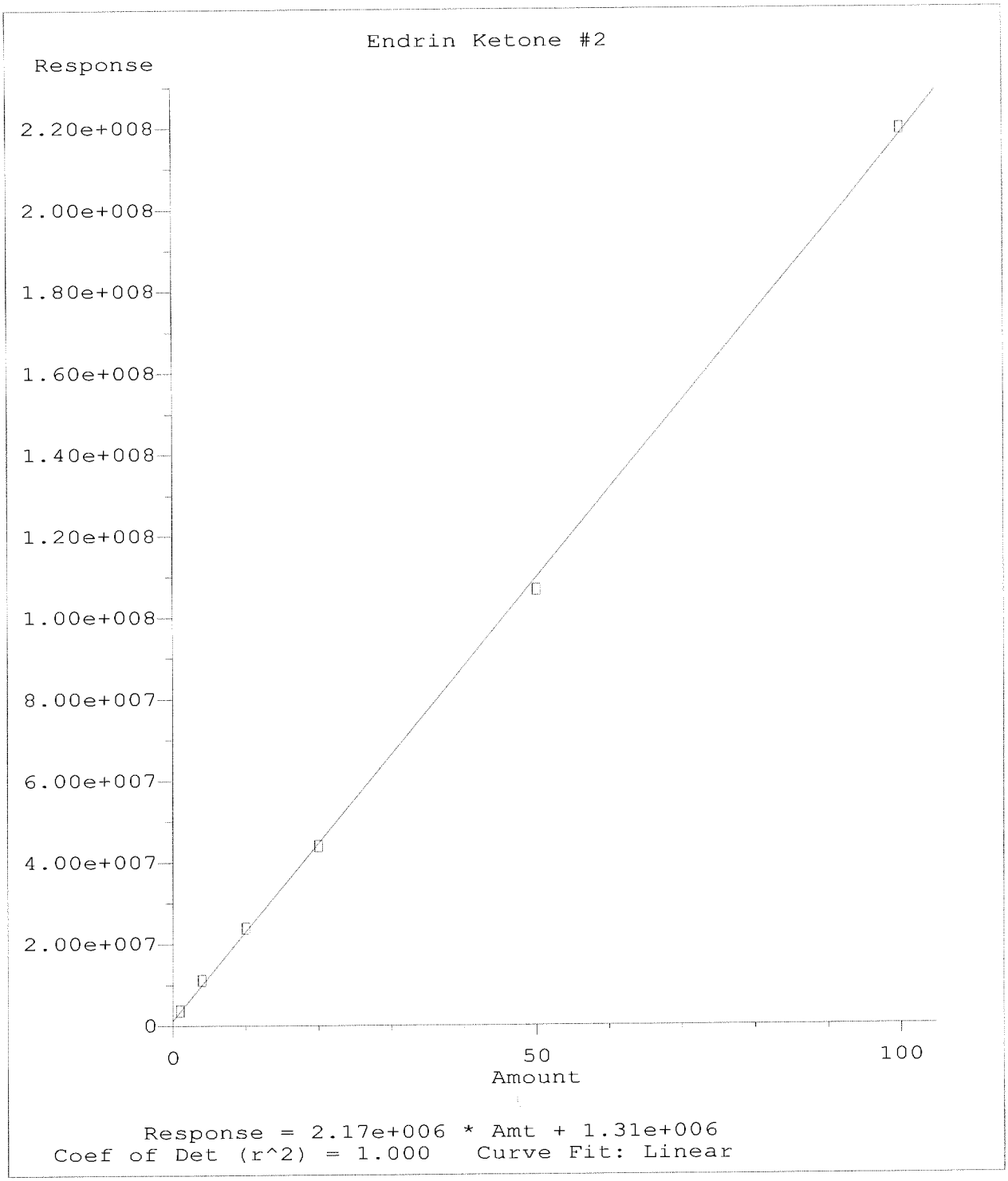
Method Name: C:\MSDCHEM\1\METHODS\8081.M
Calibration Table Last Updated: Thu Mar 11 11:33:08 2021



Method Name: C:\MSDCHEM\1\METHODS\8081.M
Calibration Table Last Updated: Thu Mar 11 11:33:17 2021



Method Name: C:\MSDCHEM\1\METHODS\8081.M
Calibration Table Last Updated: Thu Mar 11 11:33:29 2021



Method Name: C:\MSDCHEM\1\METHODS\8081.M
Calibration Table Last Updated: Thu Mar 11 11:34:04 2021

Method Path : C:\MSDCHEM\1\METHODS\
Method File : TOX.M
Title : HP15 CALIBRATION 8081 TOX : March 10, 2021
Last Update : Thu Mar 11 10:56:19 2021
Response Via : Initial Calibration
21C0020
Calibration Files
2000 =15G80929.D 1000 =15G80930.D 500 =15G80931.D
200 =15G80932.D 100 =15G80933.D 50 =15G80934.D

	Compound	2000	1000	500	200	100	50	Avg		%RSD
1) L1	Toxaphene-1	1.115	0.936	1.002	0.937	0.942	0.904	0.973	E5	7.89
2) L1	Toxaphene-2	3.318	2.777	2.971	2.770	2.794	2.947	2.929	E5	7.16
3) L1	Toxaphene-3	1.119	0.905	0.992	0.921	1.004	1.152	1.015	E5	9.97
4) L1	Toxaphene-4	3.966	3.393	3.699	3.324	3.291	3.459	3.522	E5	7.42
5) L1	Toxaphene-5	1.897	1.563	1.732	1.629	1.627	1.194	1.607	E5	14.55

Signal #2 Calibration Files
2000 =15G80929.D 1000 =15G80930.D 500 =15G80931.D
200 =15G80932.D 100 =15G80933.D 50 =15G80934.D

	Compound	2000	1000	500	200	100	50	Avg		%RSD
1) L1	Toxaphene-1	0.910	0.998	1.078	1.095	1.082	1.371	1.089	E4	14.25
2) L1	Toxaphene-2	2.165	2.303	2.494	2.412	2.574	3.098	2.508	E4	12.88
3) L1	Toxaphene-3	3.340	3.438	3.539	3.358	3.779	4.626	3.680	E4	13.33
4) L1	Toxaphene-4	3.911	3.961	4.207	4.095	4.347	4.387	4.151	E4	4.75
5) L1	Toxaphene-5	1.565	1.631	1.695	1.540	1.551	1.358	1.557	E4	7.30

(#) = Out of Range

TOX.M Fri Mar 12 10:56:35 2021

MICROBAC®

Section E:
GC Semivolatiles
EPA 8081A
Sequence QC Sample Raw Data

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80926.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 11:31 (#1); 10 Mar 2021 11:57 (#2)
Operator : ECL
Sample : S1C0204-PEM1
Misc : 1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 11 11:54:24 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Thu Mar 11 11:34:48 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

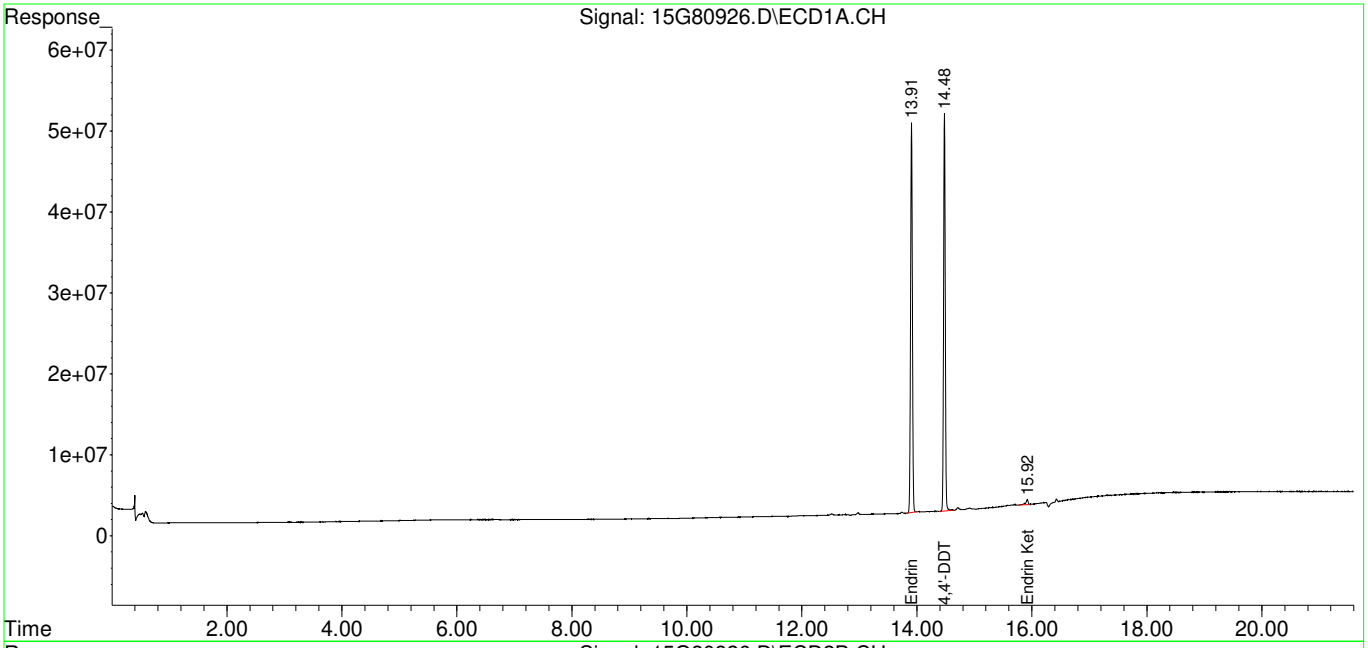
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1) S	2,4,5,6-Tetrachl	0.00	0.00	0	0	N.D.	N.D.
	Spiked Amount 20.000	Range 30 - 132		Recovery =		0.00%#	0.00%#
22) S	Decachlorobiphen	0.00	0.00	0	0	N.D.	N.D.
	Spiked Amount 20.000	Range 36 - 144		Recovery =		0.00%#	0.00%#
	Target Compounds						
2)	alpha-BHC	0.00	0.00	0	0	N.D.	N.D.
3)	gamma-BHC	0.00	0.00	0	0	N.D.	N.D.
4)	beta-BHC	0.00	0.00	0	0	N.D.	N.D.
5)	delta-BHC	0.00	0.00	0	0	N.D.	N.D.
6)	Heptachlor	0.00	0.00	0	0	N.D.	N.D.
7)	Aldrin	0.00	0.00	0	0	N.D.	N.D.
8)	Heptachlor Epoxi	0.00	0.00	0	0	N.D.	N.D.
9)	gamma-Chlordane	0.00	0.00	0	0	N.D.	N.D.
10)	alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.
11)	Endosulfan I	0.00	0.00	0	0	N.D.	N.D.
12)	4,4'-DDE	0.00	0.00	0	0	N.D.	N.D.
13)	Dieldrin	0.00	0.00	0	0	N.D.	N.D.
14)	Endrin	13.91	14.78	1062.8E6	116.8E6	57.860	54.572
15)	4,4'-DDD	0.00	0.00	0	0	N.D.	N.D.
16)	Endosulfan II	0.00	15.09	0	877888	N.D.	0.086 #
17)	4,4'-DDT	14.48	15.36	1004.0E6	112.4E6	54.577	55.518
18)	Endrin Aldehyde	0.00	0.00	0	0	N.D.	N.D.
19)	Endosulfan Sulfa	0.00	0.00	0	0	N.D.	N.D.
20)	Methoxychlor	0.00	0.00	0	0	N.D.	N.D.
21)	Endrin Ketone	15.92	16.63	18034612	5434718	0.898	1.903 #

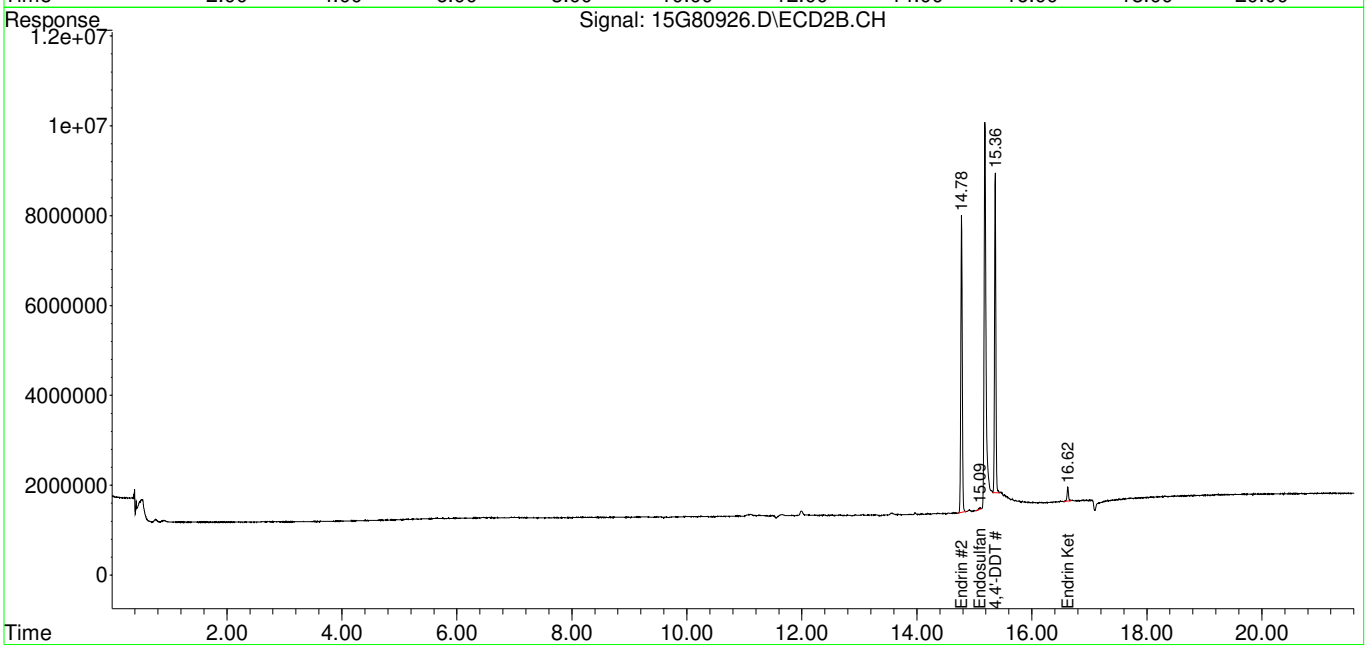
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80926.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 11:31 (#1); 10 Mar 2021 11:57 (#2)
Operator : ECL
Sample : S1C0204-PEM1
Misc : 1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 11 11:54:24 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Thu Mar 11 11:34:48 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15





4,4'-DDT/ENDRIN BREAKDOWN

INSTRUMENT HP15

COLUMN: RTx-CLP (FRONT)

Data File Name 15G80926.D

ENDRIN	ENDRIN KETONE	ENDRIN ALDEHYDE	ENDRIN BREAKDOWN
1062765989	18034612	0	1.67

4,4'-DDT	4,4'-DDD	4,4'DDE	4,4'-DDT BREAKDOWN
1003951116	0	0	0.00

COLUMN: RTx-CLP II (REAR)

Data File Name 15G80926.D

ENDRIN	ENDRIN KETONE	ENDRIN ALDEHYDE	ENDRIN BREAKDOWN
116778844	5434718	0	4.45

4,4'-DDT	4,4'-DDD	4,4'DDE	4,4'-DDT BREAKDOWN
112410160	0	0	0.00

Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80929.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 15:55 (#1); 10 Mar 2021 16:21 (#2)
Operator : ECL
Sample : S1C0204-CAL7
Misc : 1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Mar 11 10:54:42 2021
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX : March 10, 2021
QLast Update : Thu Mar 11 10:54:33 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

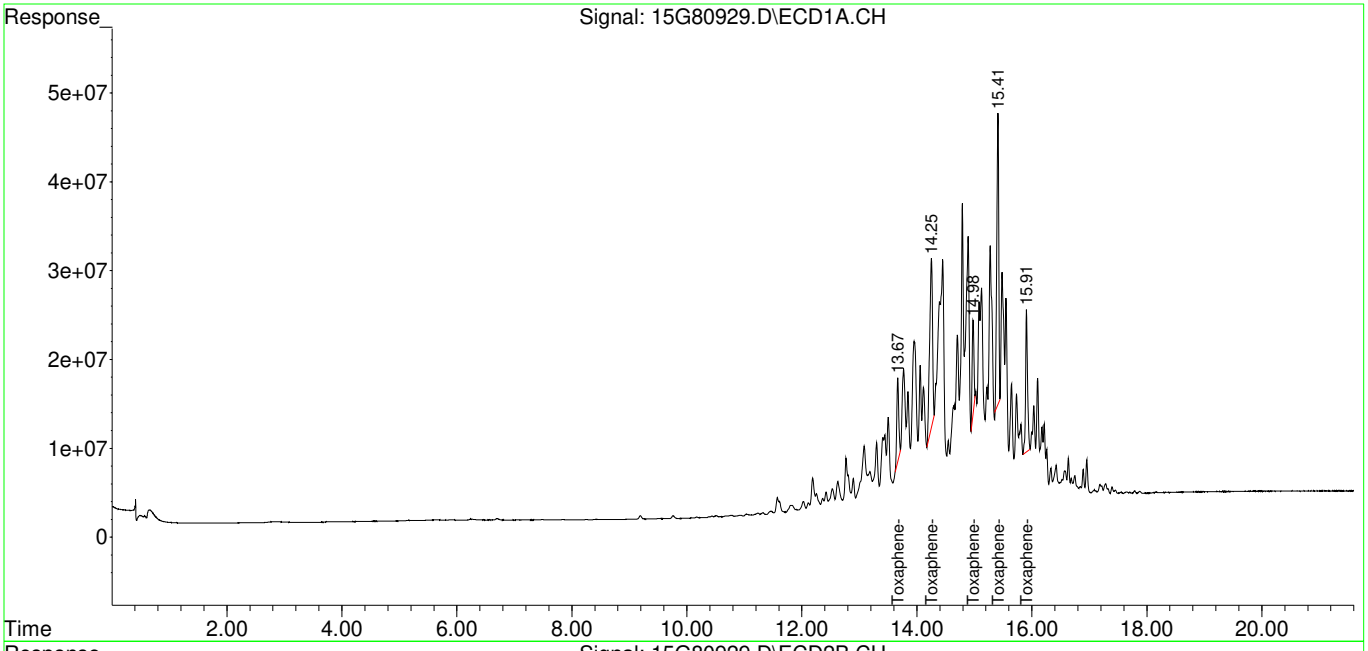
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	Target Compounds						
1)	L1 Toxaphene-1	13.67	14.41	223.0E6	18196697	2236.476	1743.557
2)	L1 Toxaphene-2	14.25	15.06	663.6E6	43307266	2330.831	1709.376
3)	L1 Toxaphene-3	14.98	15.55	223.8E6	66807519	2308.332	2092.908
4)	L1 Toxaphene-4	15.41	16.25	793.1E6	78218671	2327.842	1909.661
5)	L1 Toxaphene-5	15.91	16.74	379.4E6	31291656	2471.238	2028.864
	Sum Toxaphene-1			2283.0E6	237.8E6	11674.719	9484.366
Average	Toxaphene-1					2334.944	1896.873

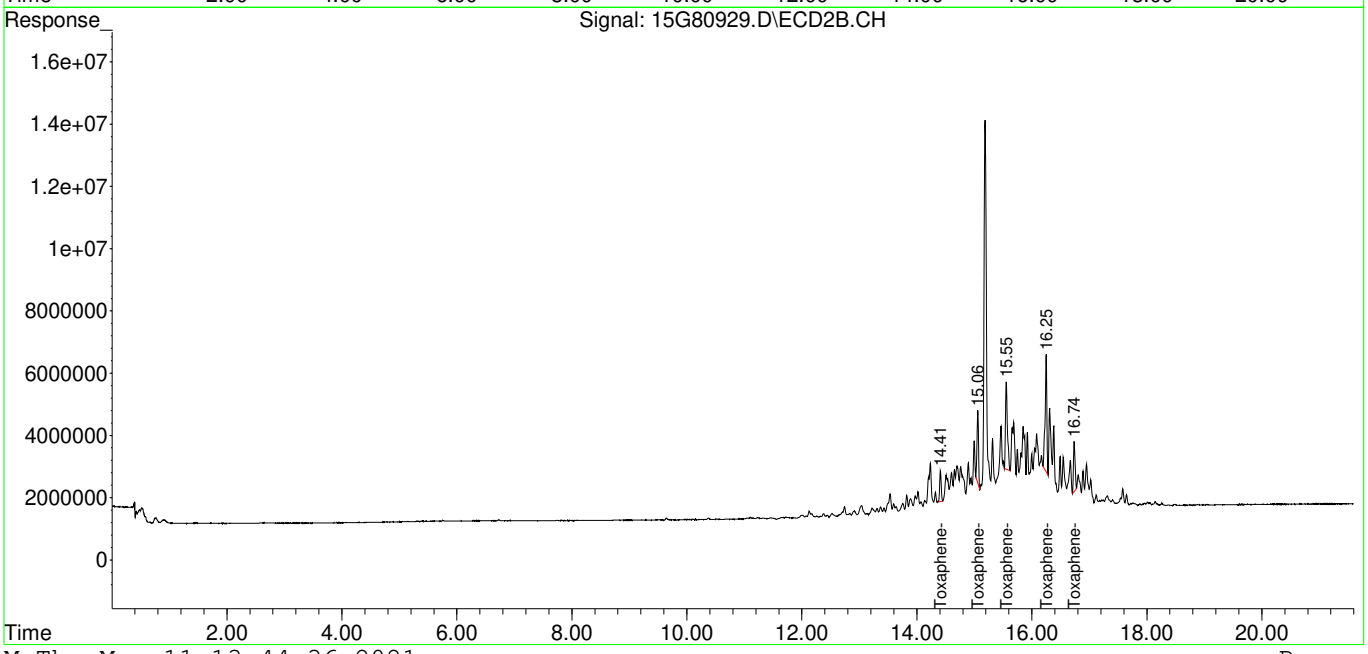
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80929.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 15:55 (#1); 10 Mar 2021 16:21 (#2)
Operator : ECL
Sample : S1C0204-CAL7
Misc : 1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Mar 11 10:54:42 2021
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX : March 10, 2021
QLast Update : Thu Mar 11 10:54:33 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15





Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80930.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 16:21 (#1); 10 Mar 2021 16:46 (#2)
Operator : ECL
Sample : S1C0204-CAL8
Misc : 1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Mar 11 10:55:07 2021
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX : March 10, 2021
QLast Update : Thu Mar 11 10:55:03 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

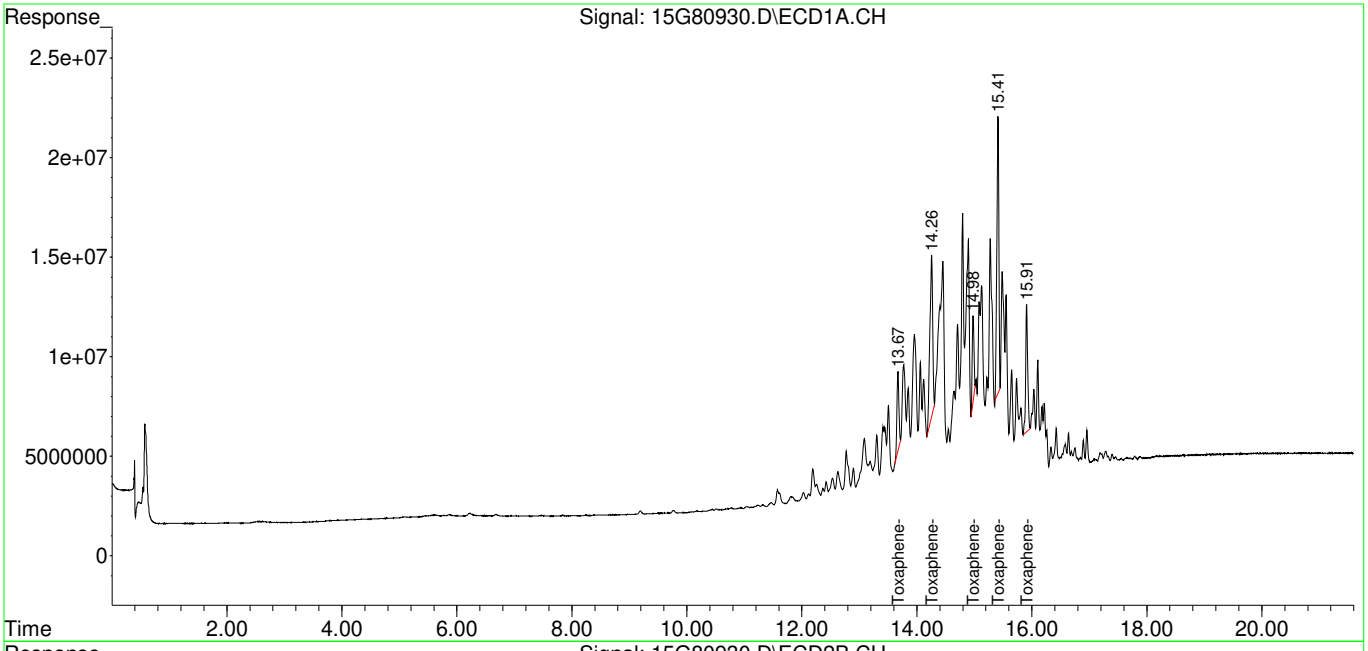
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	Target Compounds						
1)	L1 Toxaphene-1	13.67	14.41	93626036	9979792	945.005	956.236
2)	L1 Toxaphene-2	14.26	15.06	277.7E6	23028336	975.537	908.949
3)	L1 Toxaphene-3	14.98	15.56	90484519	34376425	933.161	1076.925
4)	L1 Toxaphene-4	15.41	16.25	339.3E6	39606769	995.976	966.975
5)	L1 Toxaphene-5	15.91	16.74	156.3E6	16314616	1017.983	1057.794
	Sum Toxaphene-1			957.5E6	123.3E6	4867.663	4966.879
Average	Toxaphene-1					973.533	993.376

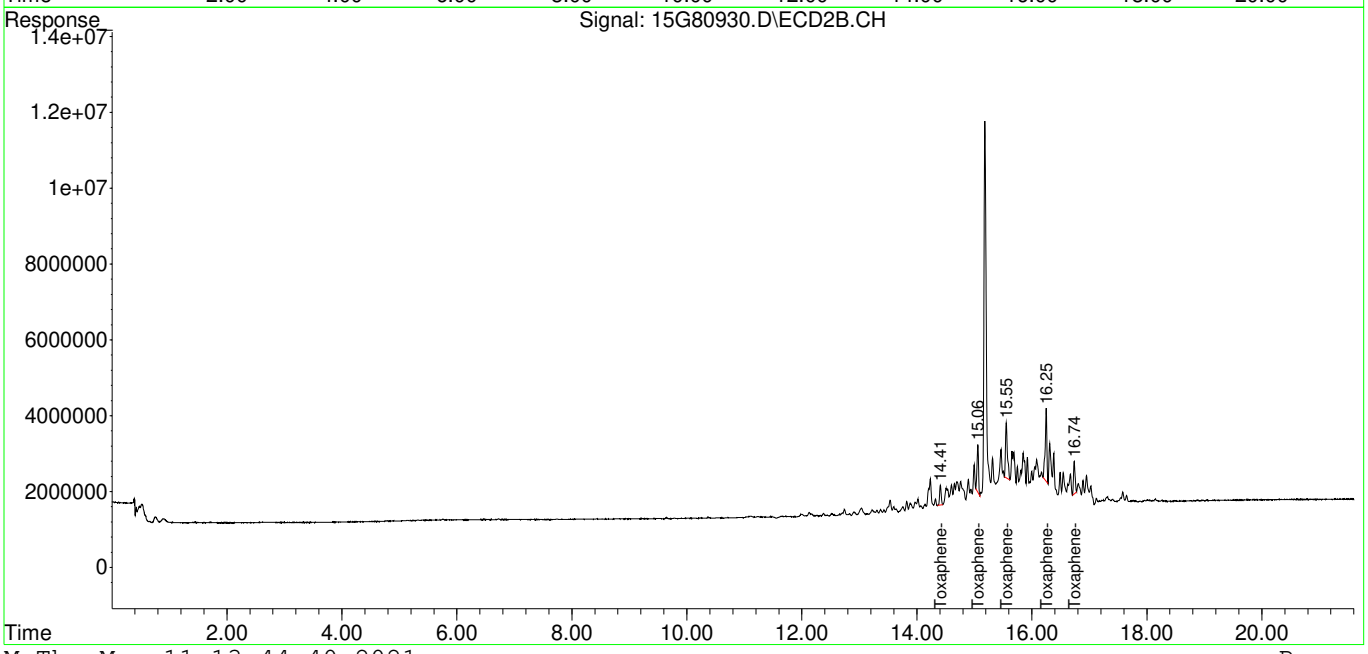
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80930.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 16:21 (#1); 10 Mar 2021 16:46 (#2)
Operator : ECL
Sample : S1C0204-CAL8
Misc : 1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Mar 11 10:55:07 2021
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX : March 10, 2021
QLast Update : Thu Mar 11 10:55:03 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15





Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80931.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 16:46 (#1); 10 Mar 2021 17:13 (#2)
Operator : ECL
Sample : S1C0204-CAL9
Misc : 1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Mar 11 10:55:26 2021
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX : March 10, 2021
QLast Update : Thu Mar 11 10:55:21 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

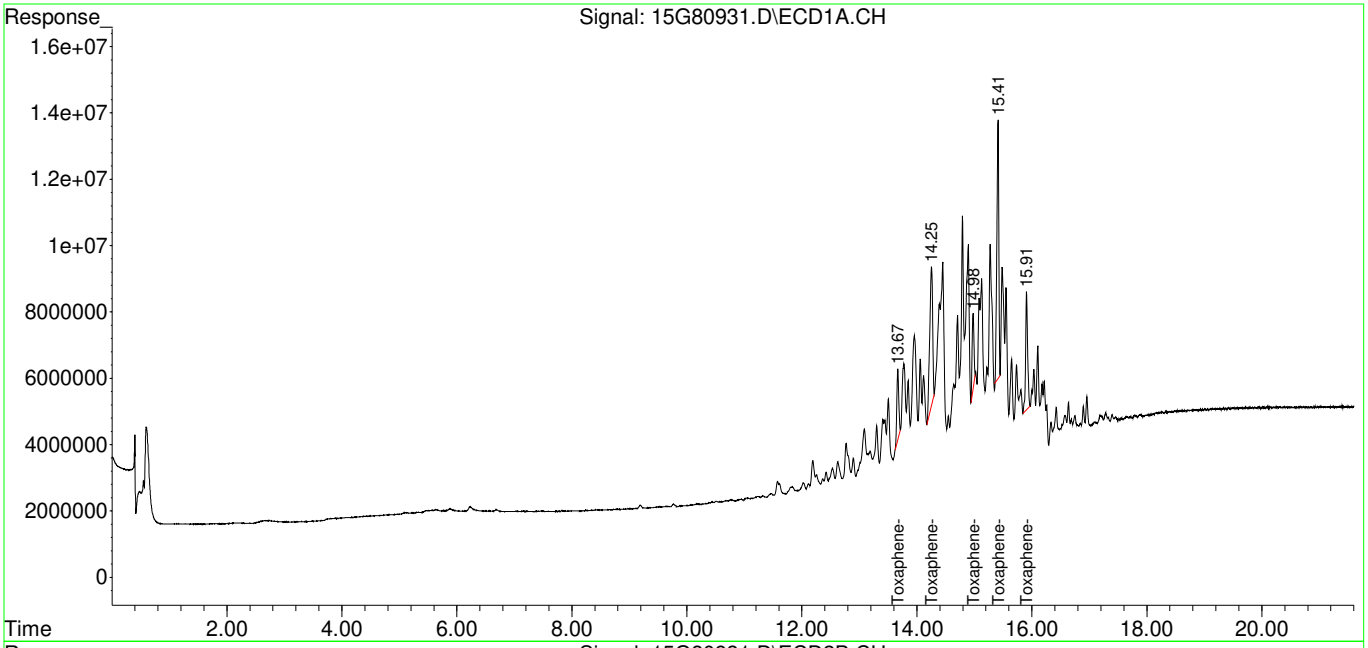
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	Target Compounds						
1)	L1 Toxaphene-1	13.67	14.41	50081775	5387834	510.199	516.247
2)	L1 Toxaphene-2	14.25	15.06	148.6E6	12469832	521.775	492.195
3)	L1 Toxaphene-3	14.98	15.55	49576631	17697272	511.281	554.410
4)	L1 Toxaphene-4	15.41	16.25	184.9E6	21033490	542.801	513.520
5)	L1 Toxaphene-5	15.91	16.74	86603871	8475811	564.104	549.548
	Sum Toxaphene-1			519.8E6	65064239	2650.159	2625.920
Average	Toxaphene-1					530.032	525.184

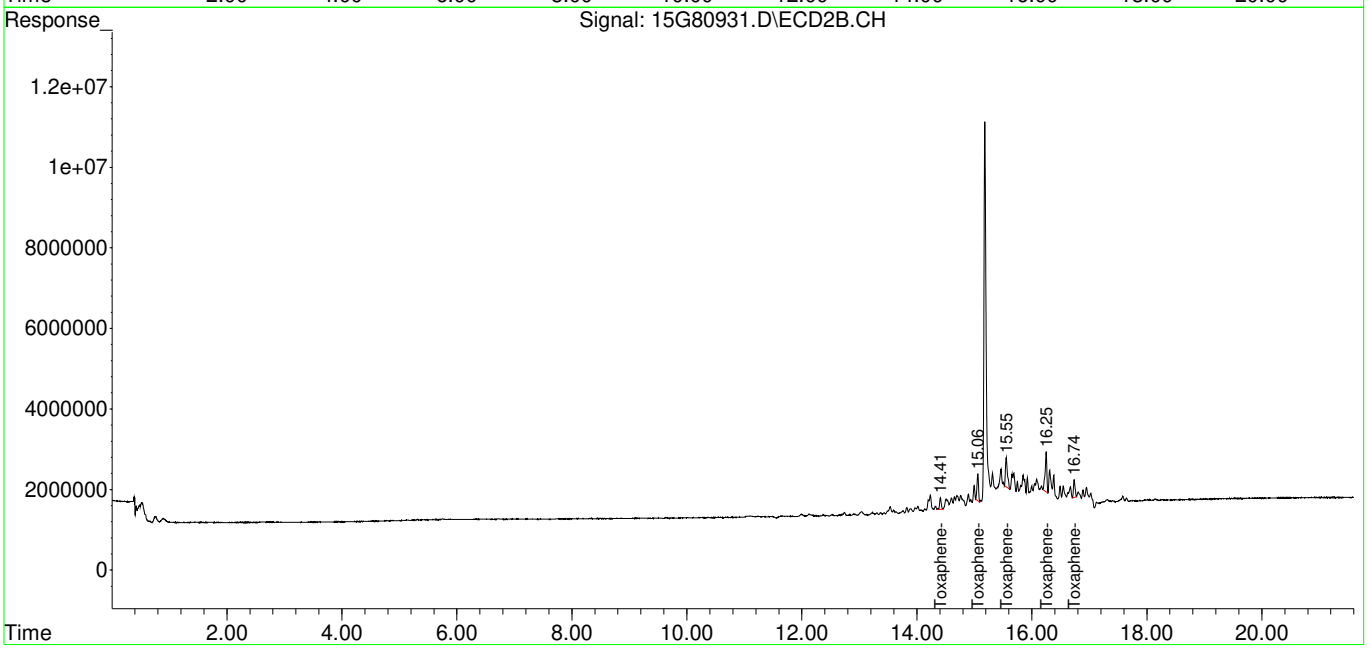
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80931.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 16:46 (#1); 10 Mar 2021 17:13 (#2)
Operator : ECL
Sample : S1C0204-CAL9
Misc : 1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Mar 11 10:55:26 2021
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX : March 10, 2021
QLast Update : Thu Mar 11 10:55:21 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15





Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80932.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 17:13 (#1); 10 Mar 2021 17:39 (#2)
Operator : ECL
Sample : S1C0204-CALA
Misc : 1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Mar 11 10:55:40 2021
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX : March 10, 2021
QLast Update : Thu Mar 11 10:55:35 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

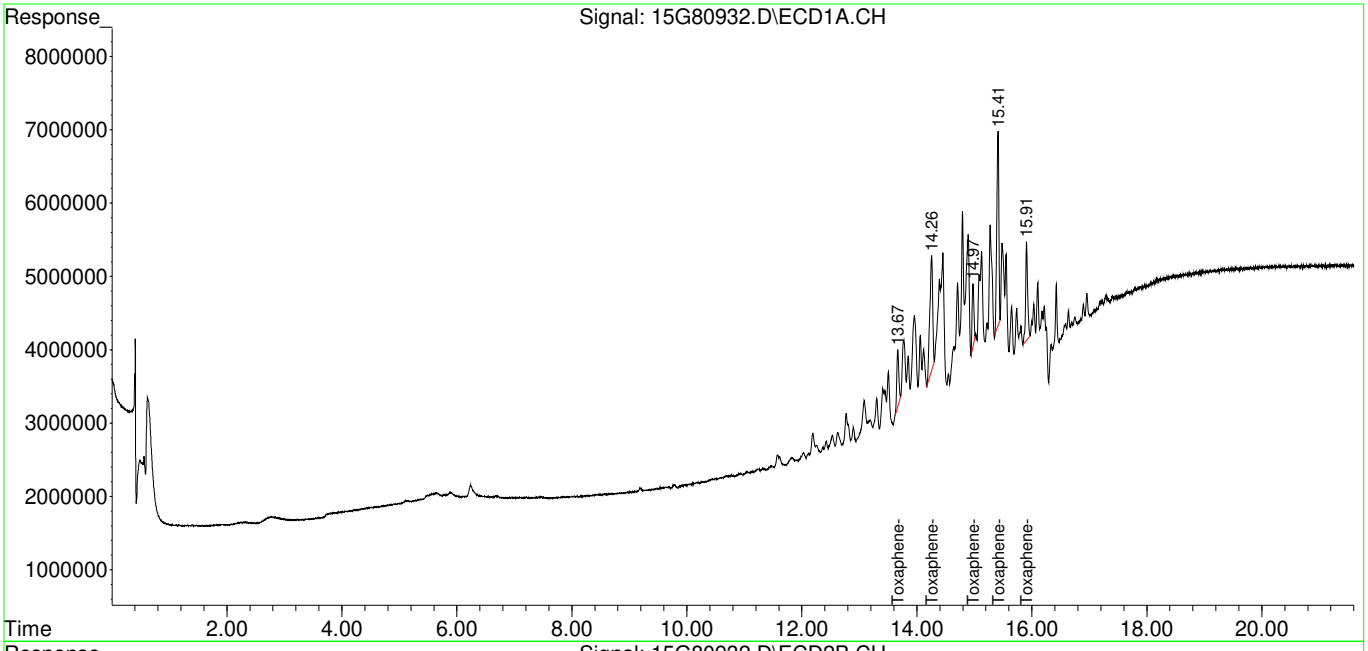
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	Target Compounds						
1)	L1 Toxaphene-1	13.67	14.41	18731798	2190891	193.635	209.925
2)	L1 Toxaphene-2	14.26	15.06	55391135	4823848	194.558	190.402
3)	L1 Toxaphene-3	14.98	15.55	18412600	6715702	189.888	210.386
4)	L1 Toxaphene-4	15.41	16.25	66478994	8189000	195.113	199.929
5)	L1 Toxaphene-5	15.91	16.74	32574837	3079367	212.180	199.658
	Sum Toxaphene-1			191.6E6	24998809	985.374	1010.299
Average	Toxaphene-1					197.075	202.060

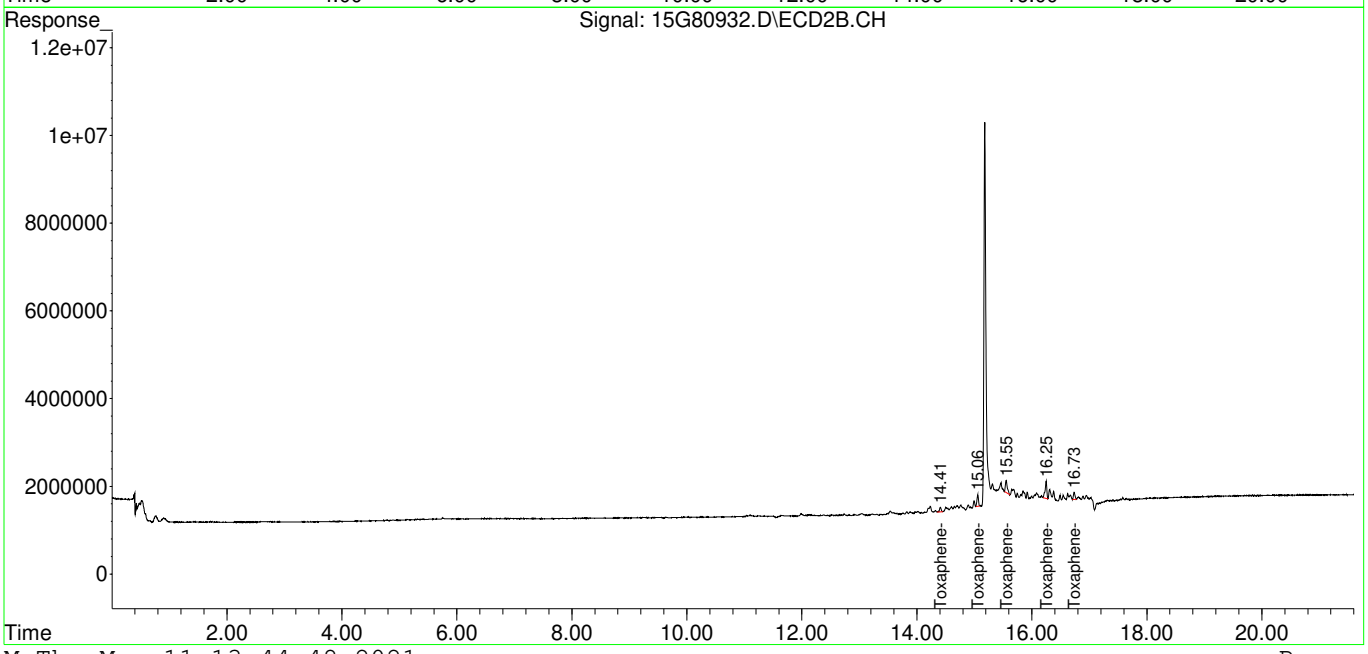
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80932.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 17:13 (#1); 10 Mar 2021 17:39 (#2)
Operator : ECL
Sample : S1C0204-CALA
Misc : 1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Mar 11 10:55:40 2021
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX : March 10, 2021
QLast Update : Thu Mar 11 10:55:35 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15





Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80933.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 17:39 (#1); 10 Mar 2021 18:04 (#2)
Operator : ECL
Sample : S1C0204-CALB
Misc : 1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Mar 11 10:55:55 2021
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX : March 10, 2021
QLast Update : Thu Mar 11 10:55:49 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

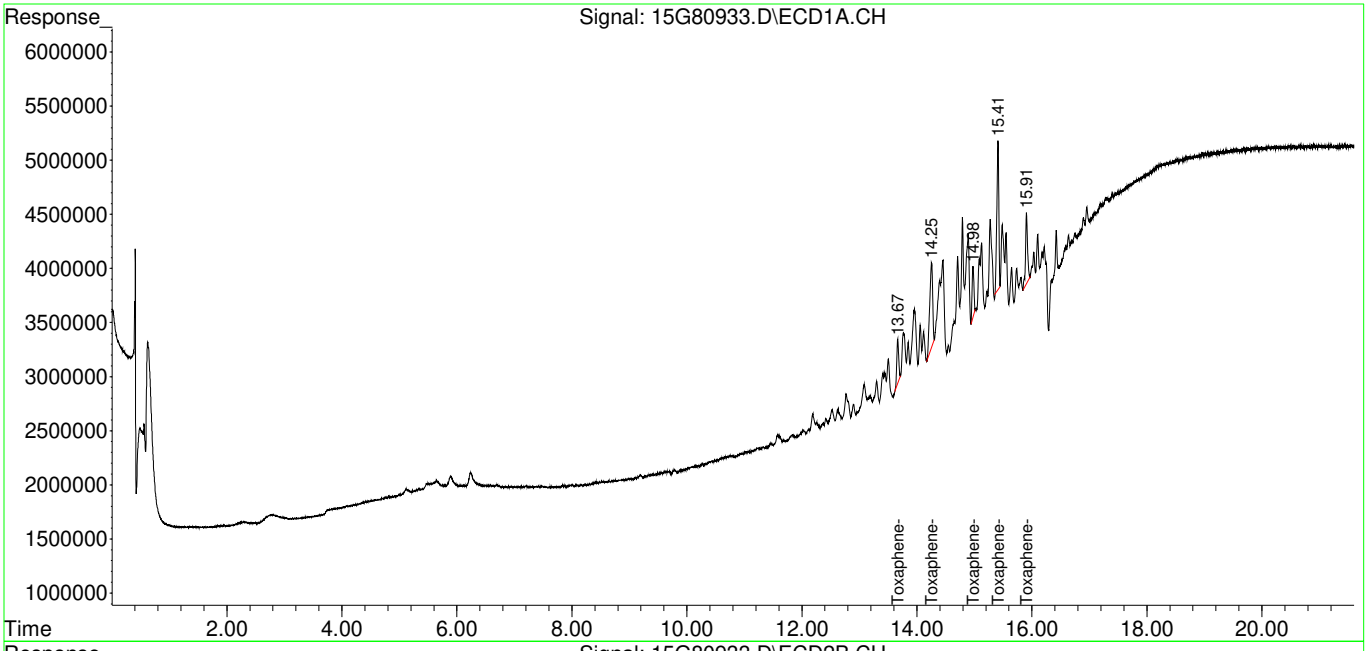
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	Target Compounds						
1)	L1 Toxaphene-1	13.67	14.41	9417536	1081515	99.254	103.628
2)	L1 Toxaphene-2	14.25	15.06	27937944	2574022	98.130	101.599
3)	L1 Toxaphene-3	14.98	15.55	10037104	3779421	103.512	118.400
4)	L1 Toxaphene-4	15.41	16.25	32905301	4347226	96.576	106.135
5)	L1 Toxaphene-5	15.91	16.74	16271000	1550633	105.983	100.539
	Sum Toxaphene-1			96568886	13332817	503.455	530.300
Average	Toxaphene-1					100.691	106.060

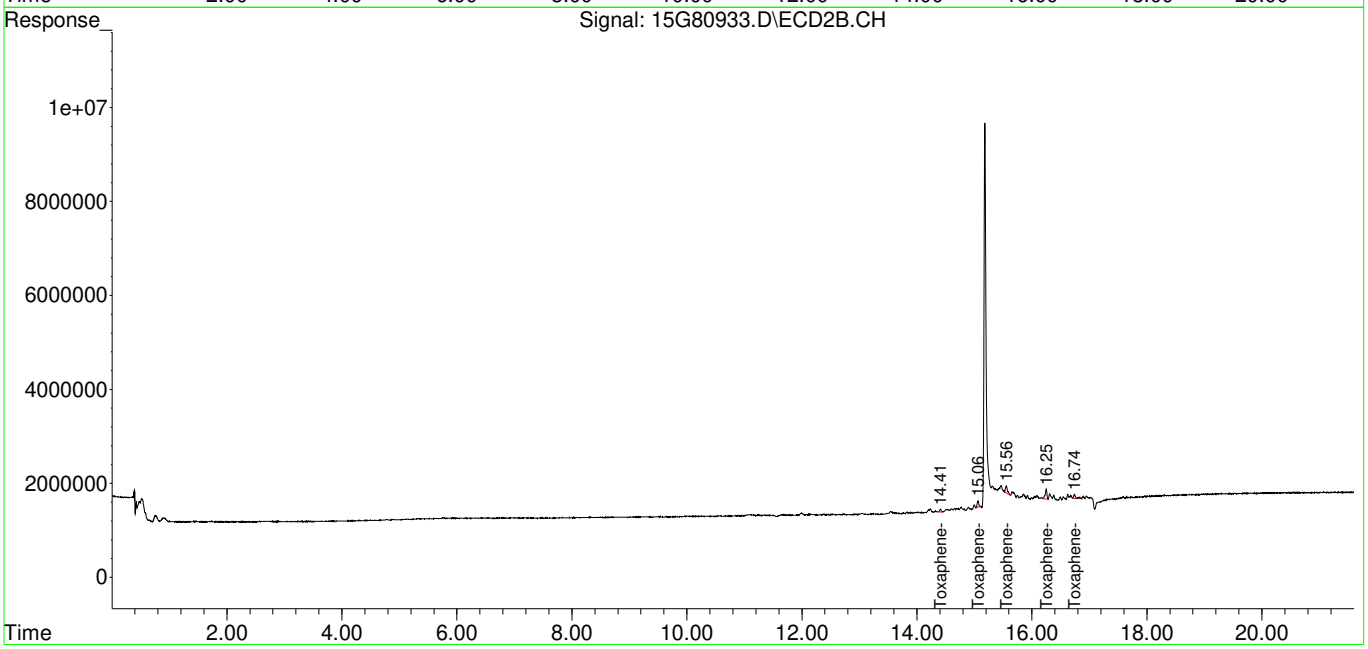
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80933.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 17:39 (#1); 10 Mar 2021 18:04 (#2)
Operator : ECL
Sample : S1C0204-CALB
Misc : 1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Mar 11 10:55:55 2021
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX : March 10, 2021
QLast Update : Thu Mar 11 10:55:49 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15





Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80934.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 18:04 (#1); 10 Mar 2021 18:31 (#2)
Operator : ECL
Sample : S1C0204-CALC
Misc : 1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Mar 11 10:56:10 2021
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX : March 10, 2021
QLast Update : Thu Mar 11 10:56:05 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

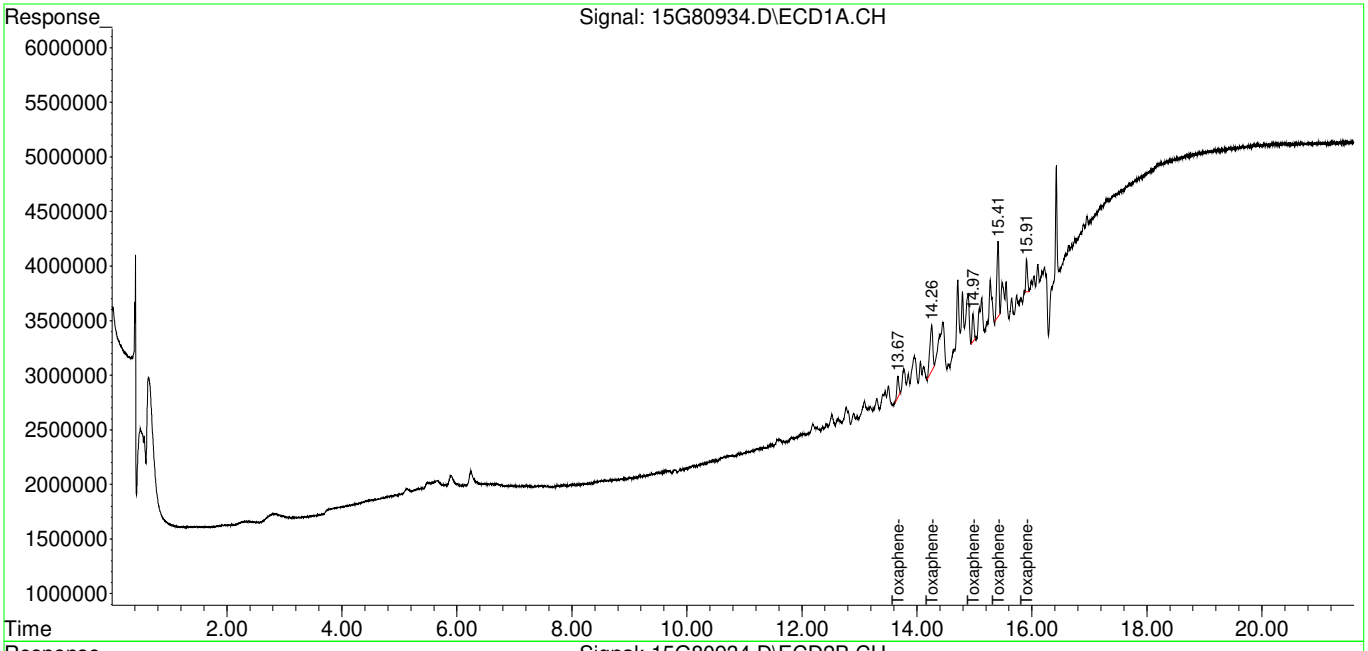
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	Target Compounds						
1)	L1 Toxaphene-1	13.67	14.41	4519536	685738	46.471	62.971
2)	L1 Toxaphene-2	14.26	15.07	14732765	1549007	50.293	61.770
3)	L1 Toxaphene-3	14.97	15.55	5757692	2312983	56.713	62.851
4)	L1 Toxaphene-4	15.41	16.25	17295893	2193406	49.109	52.839
5)	L1 Toxaphene-5	15.91	16.74	5968408	679181	37.142	43.631
	Sum Toxaphene-1			48274294	7420316	239.728	284.062
Average	Toxaphene-1					47.946	56.812

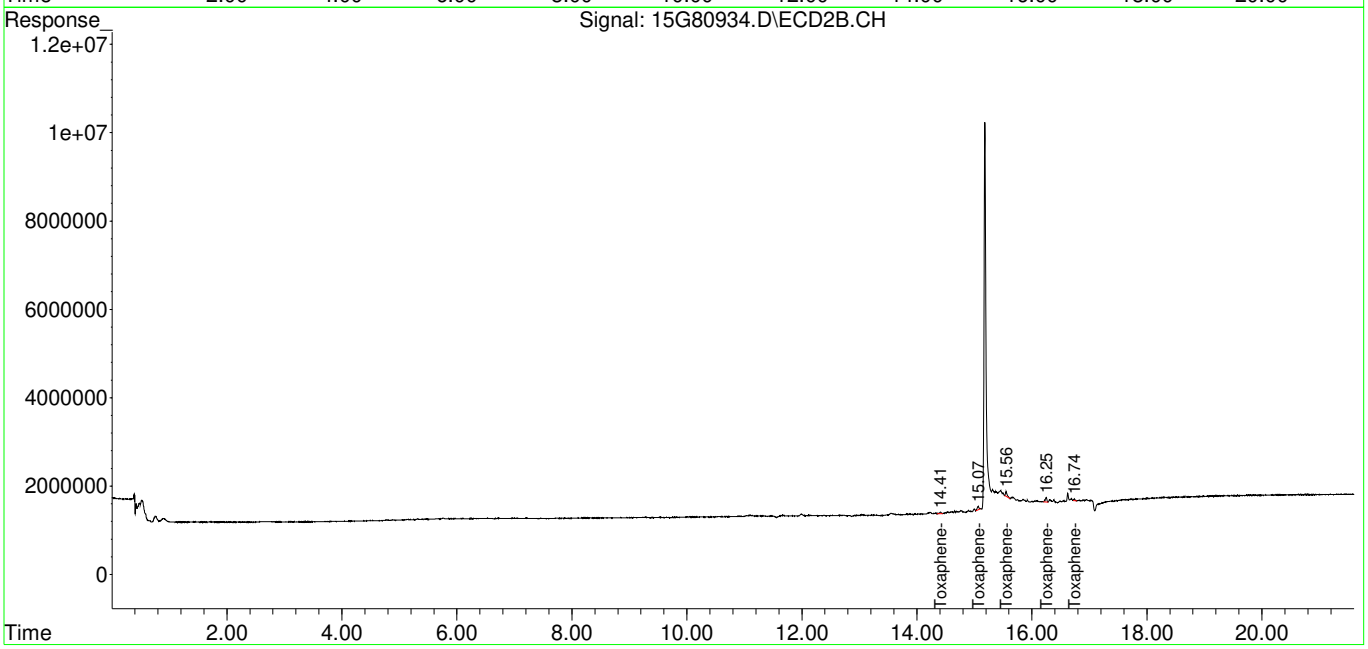
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80934.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 18:04 (#1); 10 Mar 2021 18:31 (#2)
Operator : ECL
Sample : S1C0204-CALC
Misc : 1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Mar 11 10:56:10 2021
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX : March 10, 2021
QLast Update : Thu Mar 11 10:56:05 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15





Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80935.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 18:31 (#1); 10 Mar 2021 18:56 (#2)
Operator : ECL
Sample : S1C0204-ICV1
Misc : 1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Mar 11 10:56:28 2021
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX : March 10, 2021
QLast Update : Thu Mar 11 10:56:19 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

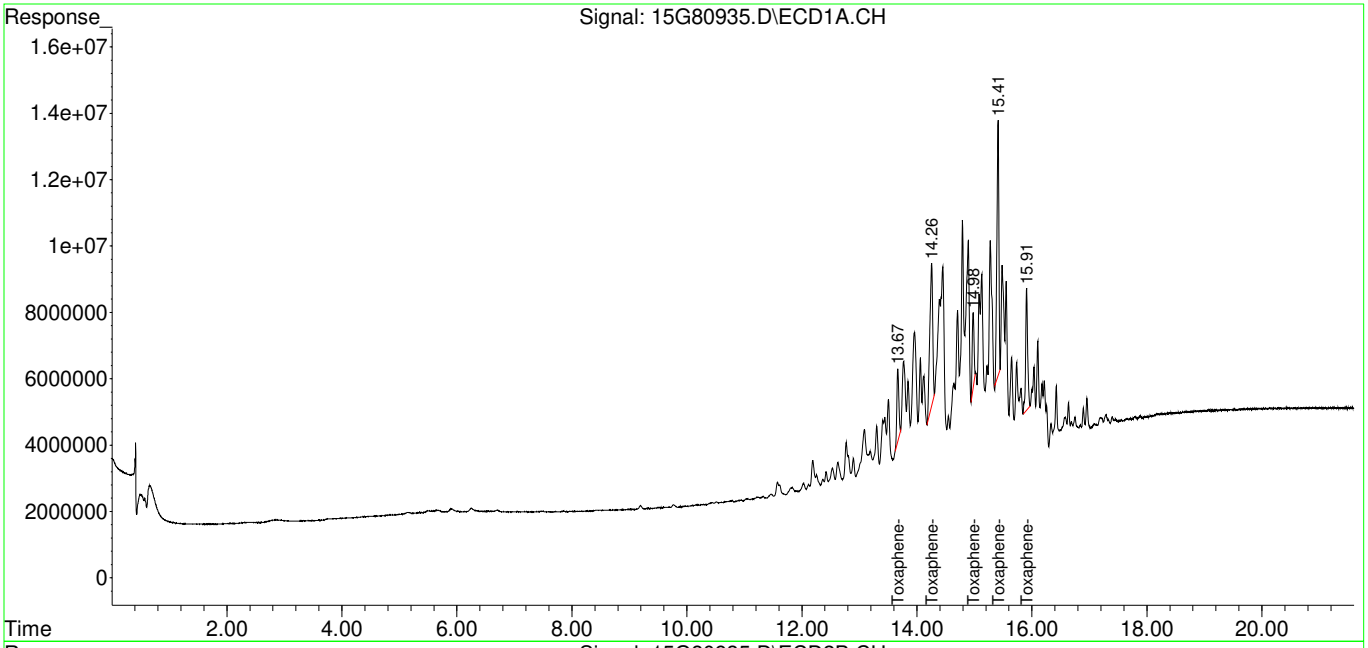
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	Target Compounds						
1)	L1 Toxaphene-1	13.67	14.41	52744429	4994215	542.333	458.618
2)	L1 Toxaphene-2	14.26	15.06	151.0E6	11441608	515.326	456.261
3)	L1 Toxaphene-3	14.98	15.56	49268792	16344087	485.295	444.118
4)	L1 Toxaphene-4	15.41	16.25	185.4E6	20020295	526.371	482.284
5)	L1 Toxaphene-5	15.91	16.74	89677448	8075911	558.075	518.802
	Sum Toxaphene-1			528.0E6	60876116	2627.400	2360.084
Average	Toxaphene-1					525.480	472.017

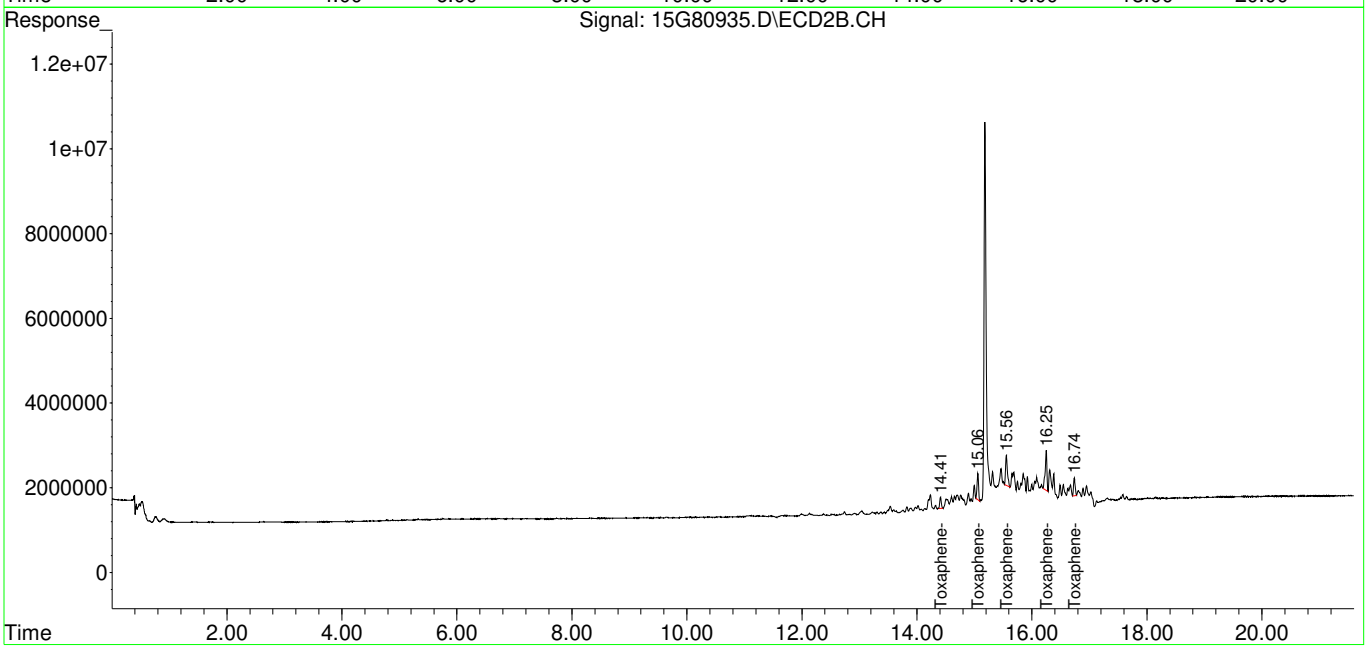
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80935.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 18:31 (#1); 10 Mar 2021 18:56 (#2)
Operator : ECL
Sample : S1C0204-ICV1
Misc : 1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Mar 11 10:56:28 2021
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX : March 10, 2021
QLast Update : Thu Mar 11 10:56:19 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15





Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80935.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 18:31 (#1); 10 Mar 2021 18:56 (#2)
Operator : ECL
Sample : S1C0204-ICV1
Misc : 1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Mar 11 10:56:28 2021
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX : March 10, 2021
QLast Update : Thu Mar 11 10:56:19 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF		%Dev	Area%	Dev(Min)
1 L1	Toxaphene-1	97.255	105.489	E3	-8.5	105	0.00
2 L1	Toxaphene-2	292.937	301.917	E3	-3.1	102	0.00
3 L1	Toxaphene-3	101.523	98.538	E3	2.9	99	0.00
4 L1	Toxaphene-4	352.195	370.771	E3	-5.3	100	0.00
5 L1	Toxaphene-5	160.691	179.355	E3	-11.6	104	0.00

Signal #2

1 L1	Toxaphene-1	10.890	9.988	E3	8.3	93	0.00
2 L1	Toxaphene-2	25.077	22.883	E3	8.7	92	0.00
3 L1	Toxaphene-3	36.801	32.688	E3	11.2	92	0.00
4 L1	Toxaphene-4	41.511	40.041	E3	3.5	95	0.00
5 L1	Toxaphene-5	15.566	16.152	E3	-3.8	95	0.00

Evaluate Continuing Calibration Report - Not Founds

Signal #2

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80936.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 18:56 (#1); 10 Mar 2021 19:22 (#2)
Operator : ECL
Sample : S1C0204-CAL6
Misc : 1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 11 11:34:58 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Thu Mar 11 11:34:48 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

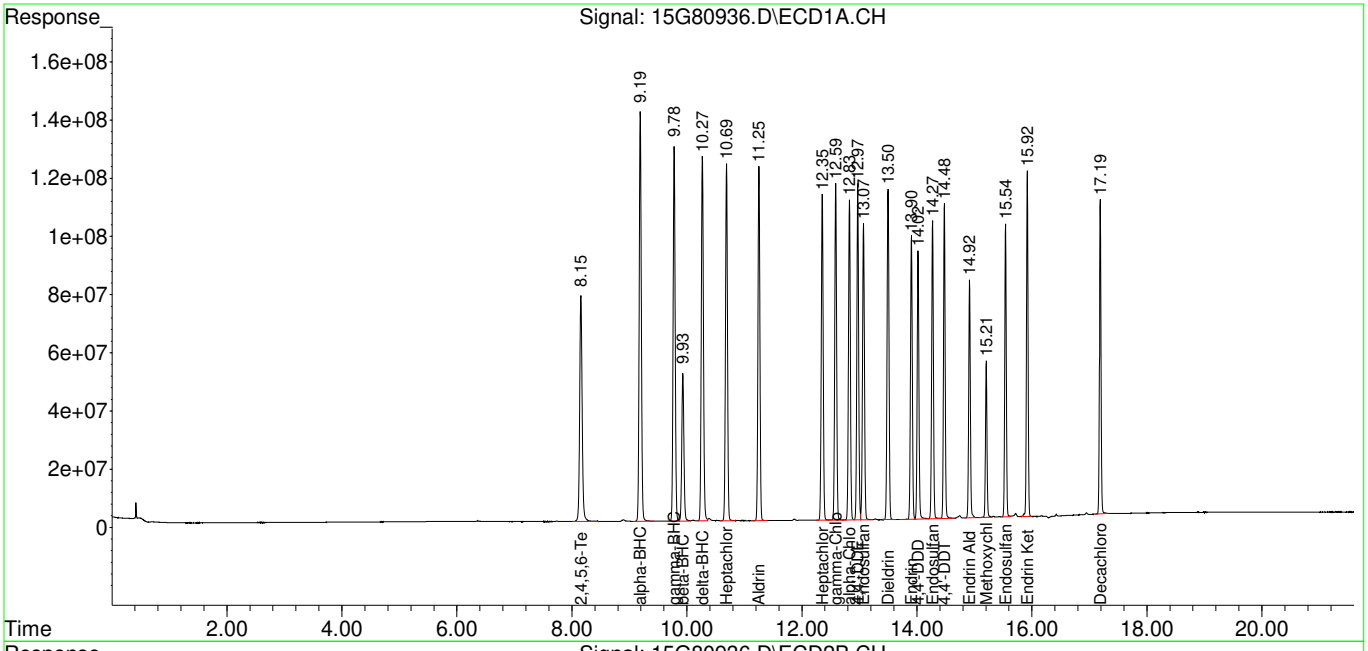
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1) S	2,4,5,6-Tetrachl	8.15	8.35	2323.2E6	217.0E6	114.463	102.942
	Spiked Amount 20.000	Range 30 - 132		Recovery =		572.31%#	514.71%#
22) S	Decachlorobiphen	17.19	18.18	2033.7E6	203.2E6	98.441	87.191
	Spiked Amount 20.000	Range 36 - 144		Recovery =		492.21%#	435.96%#
	Target Compounds						
2)	alpha-BHC	9.19	9.65	3629.8E6	309.0E6	101.154	118.726
3)	gamma-BHC	9.78	10.39	3197.1E6	288.5E6	101.037	115.404
4)	beta-BHC	9.93f	10.54	1298.6E6	128.9E6	114.854	97.957
5)	delta-BHC	10.27f	11.16	3277.4E6	295.1E6	101.268	118.370
6)	Heptachlor	10.69	11.30	2963.3E6	288.5E6	119.006	102.191
7)	Aldrin	11.25	11.95	2845.8E6	257.6E6	122.113	100.981
8)	Heptachlor Epoxi	12.35	13.05	2594.8E6	246.4E6	114.000	95.063
9)	gamma-Chlordane	12.59	13.41	2647.4E6	245.2E6	115.845	101.649
10)	alpha-Chlordane	12.83	13.68	2512.1E6	239.7E6	117.455	95.046
11)	Endosulfan I	13.07	13.80	2360.0E6	221.9E6	114.209	97.507
12)	4,4'-DDE	12.97	13.97	2505.1E6	234.4E6	119.963	104.244
13)	Dieldrin	13.50	14.28	2660.0E6	245.5E6	120.212	102.994
14)	Endrin	13.90	14.78	2146.1E6	207.1E6	116.843	96.786
15)	4,4'-DDD	14.02	14.90	1938.1E6	184.1E6	126.098	100.468
16)	Endosulfan II	14.27	15.09	2188.9E6	206.2E6	112.893	100.794
17)	4,4'-DDT	14.48	15.36	2154.4E6	200.6E6	117.120	99.072
18)	Endrin Aldehyde	14.92	15.56	1644.9E6	159.8E6	104.696	88.817
19)	Endosulfan Sulfa	15.54	15.92	1903.9E6	191.5E6	111.204	93.300
20)	Methoxychlor	15.21	16.26	980.0E6	104.0E6	111.432	90.422
21)	Endrin Ketone	15.92	16.63	2258.1E6	219.5E6	112.471	100.684

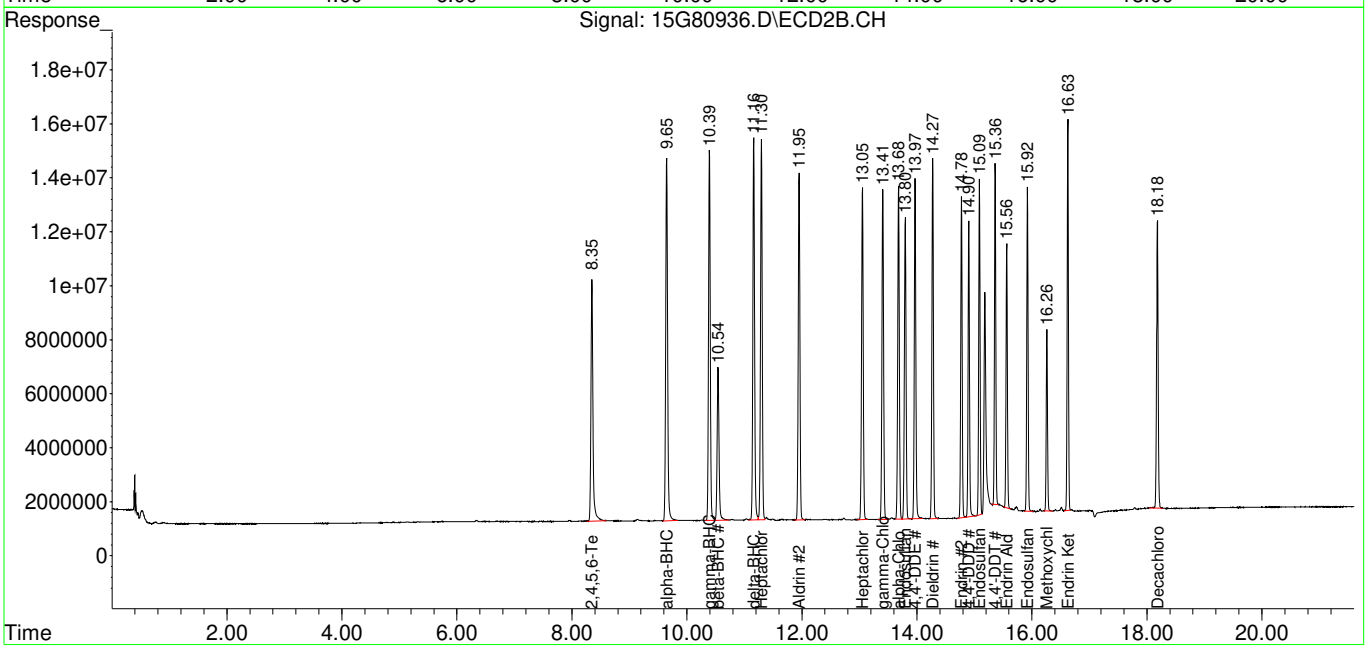
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80936.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 18:56 (#1); 10 Mar 2021 19:22 (#2)
Operator : ECL
Sample : S1C0204-CAL6
Misc : 1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 11 11:34:58 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Thu Mar 11 11:34:48 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15





Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80937.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 19:22 (#1); 10 Mar 2021 19:48 (#2)
Operator : ECL
Sample : S1C0204-CAL5
Misc : 1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 11 11:35:05 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Thu Mar 11 11:34:48 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

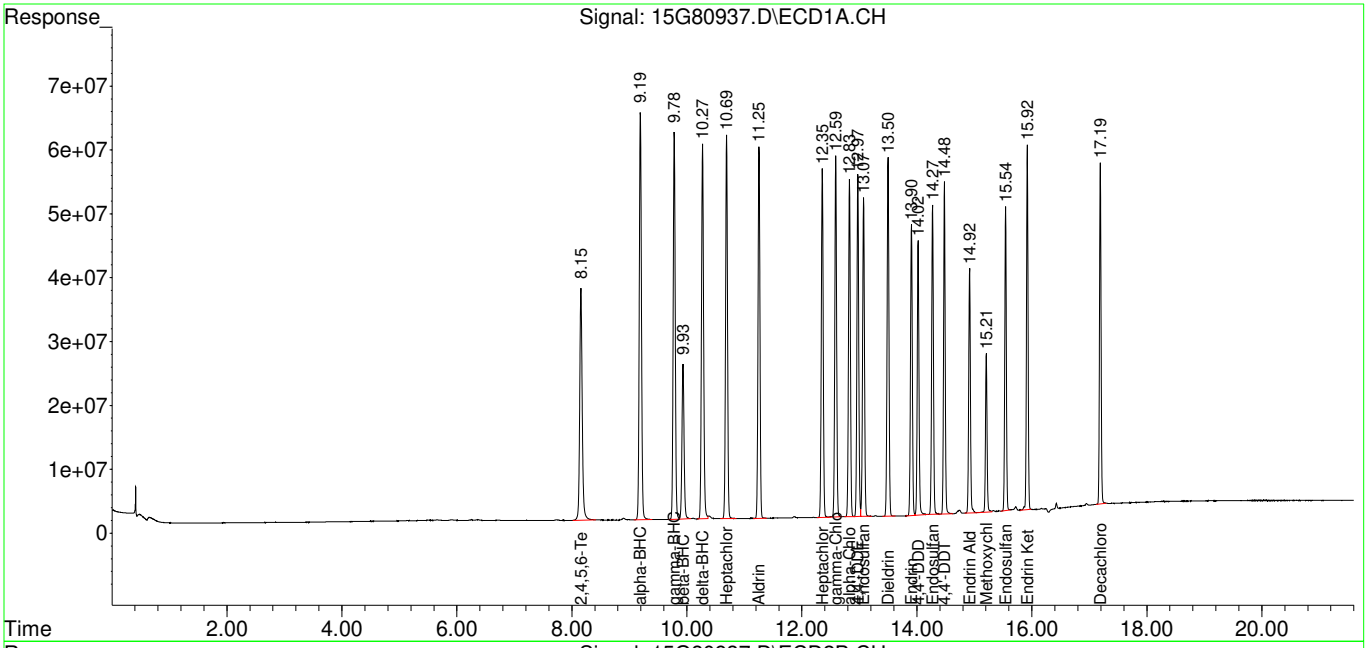
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1) S	2,4,5,6-Tetrachl	8.16	8.35	1105.7E6	103.2E6	54.474	48.977
	Spiked Amount 20.000	Range 30 - 132		Recovery =		272.37%#	244.88%#
22) S	Decachlorobiphen	17.19	18.18	1015.5E6	106.9E6	49.154	45.858
	Spiked Amount 20.000	Range 36 - 144		Recovery =		245.77%#	229.29%#
	Target Compounds						
2)	alpha-BHC	9.19	9.65	1690.4E6	134.7E6	48.466	51.751
3)	gamma-BHC	9.78	10.39	1501.7E6	128.7E6	48.612	51.493
4)	beta-BHC	9.93	10.54	617.0E6	61733106	54.569	46.901
5)	delta-BHC	10.27f	11.16	1517.4E6	128.8E6	48.218	51.678
6)	Heptachlor	10.69	11.30	1412.7E6	132.8E6	56.732	47.024
7)	Aldrin	11.25	11.95	1349.1E6	117.9E6	57.888	46.211
8)	Heptachlor Epoxi	12.35	13.05	1251.4E6	116.9E6	54.980	45.117
9)	gamma-Chlordane	12.59	13.41	1255.9E6	114.2E6	54.956	47.363
10)	alpha-Chlordane	12.83	13.68	1193.5E6	112.7E6	55.801	44.699
11)	Endosulfan I	13.07	13.80	1132.7E6	105.4E6	54.815	46.336
12)	4,4'-DDE	12.97	13.97	1182.3E6	110.2E6	56.618	49.005
13)	Dieldrin	13.50	14.27	1259.0E6	114.1E6	56.895	47.851
14)	Endrin	13.91	14.77	1008.6E6	96396541	54.910	45.047
15)	4,4'-DDD	14.02	14.90	897.0E6	86559342	58.361	47.236
16)	Endosulfan II	14.27	15.09	1043.1E6	99525257	53.796	48.474
17)	4,4'-DDT	14.48	15.36	1009.4E6	94858789	54.875	46.850
18)	Endrin Aldehyde	14.92	15.56	790.1E6	77564678	50.290	43.119
19)	Endosulfan Sulfa	15.54	15.92	907.7E6	93021624	53.017	45.323
20)	Methoxychlor	15.21	16.26	470.4E6	53269212	53.490	46.296
21)	Endrin Ketone	15.92	16.62	1088.3E6	106.7E6	54.205	48.641

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80937.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 19:22 (#1); 10 Mar 2021 19:48 (#2)
Operator : ECL
Sample : S1C0204-CAL5
Misc : 1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 11 11:35:05 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Thu Mar 11 11:34:48 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15



Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80938.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 19:48 (#1); 10 Mar 2021 20:14 (#2)
Operator : ECL
Sample : S1C0204-CAL4
Misc : 1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 11 11:35:11 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Thu Mar 11 11:34:48 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

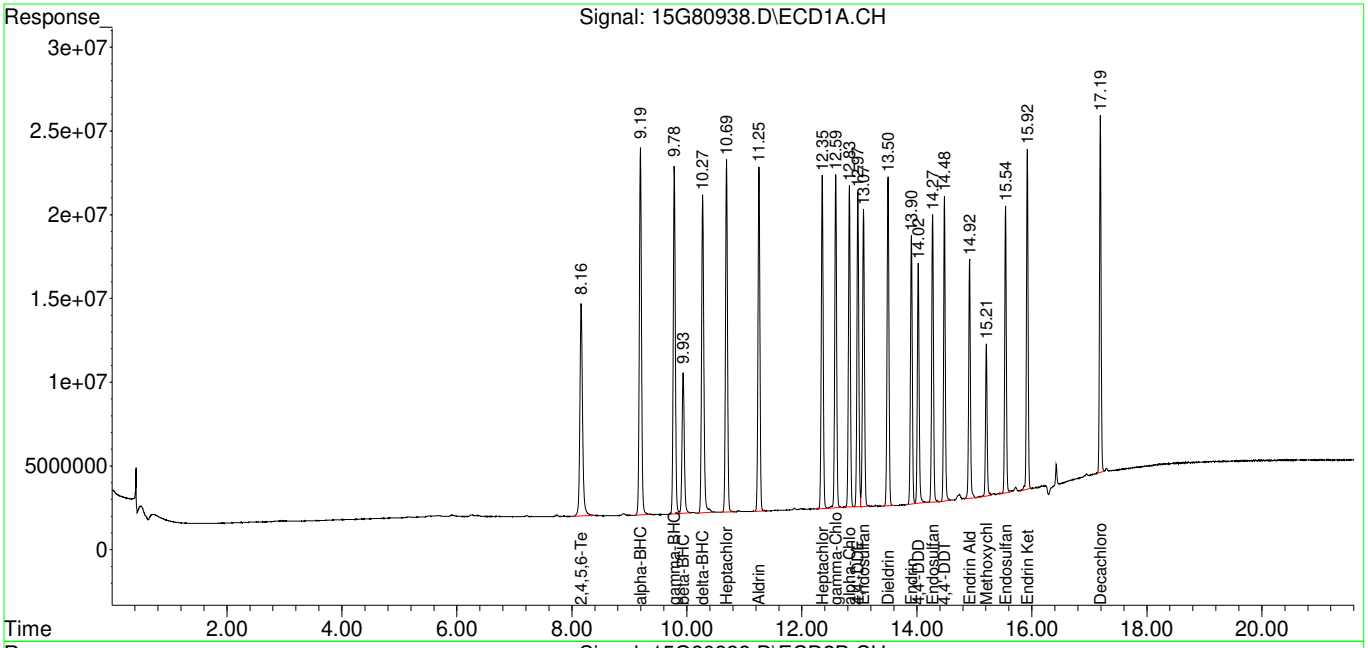
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1) S	2,4,5,6-Tetrachl	8.16	8.35	407.5E6	42422086	20.078	20.125
	Spiked Amount 20.000	Range 30 - 132		Recovery =		100.39%	100.63%
22) S	Decachlorobiphen	17.19	18.19	403.0E6	41756379	19.508	17.919
	Spiked Amount 20.000	Range 36 - 144		Recovery =		97.54%	89.59%
	Target Compounds						
2)	alpha-BHC	9.19	9.65	574.9E6	51591502	18.158	19.825
3)	gamma-BHC	9.78	10.39	518.6E6	50763460	18.211	20.309
4)	beta-BHC	9.93	10.54	229.6E6	26536782	20.302	20.161
5)	delta-BHC	10.27	11.16	515.8E6	49945033	18.029	20.032
6)	Heptachlor	10.69	11.30	503.9E6	55305098	20.235	19.588
7)	Aldrin	11.25	11.95	474.5E6	47733671	20.360	18.713
8)	Heptachlor Epoxi	12.35	13.05	457.7E6	49032788	20.108	18.920
9)	gamma-Chlordane	12.59	13.41	454.4E6	46393564	19.883	19.235
10)	alpha-Chlordane	12.83	13.68	431.9E6	46288372	20.192	18.351
11)	Endosulfan I	13.07	13.80	414.1E6	43054850	20.041	18.920
12)	4,4'-DDE	12.97	13.97	422.1E6	42059273	20.214	18.707
13)	Dieldrin	13.50	14.28	447.0E6	45028912	20.201	18.891
14)	Endrin	13.90	14.78	357.1E6	39100448	19.439	18.272
15)	4,4'-DDD	14.02	14.90	311.4E6	32903416	20.261	17.955
16)	Endosulfan II	14.27	15.09	381.3E6	40346680	19.666	19.446
17)	4,4'-DDT	14.48	15.36	360.8E6	35765145	19.615	17.664
18)	Endrin Aldehyde	14.92	15.56	298.4E6	31641228	18.994	17.590
19)	Endosulfan Sulfa	15.54	15.92	336.9E6	36949649	19.678	18.003
20)	Methoxychlor	15.21	16.26	179.5E6	20946225	20.412	18.204
21)	Endrin Ketone	15.92	16.63	400.7E6	43966950	19.956	19.683

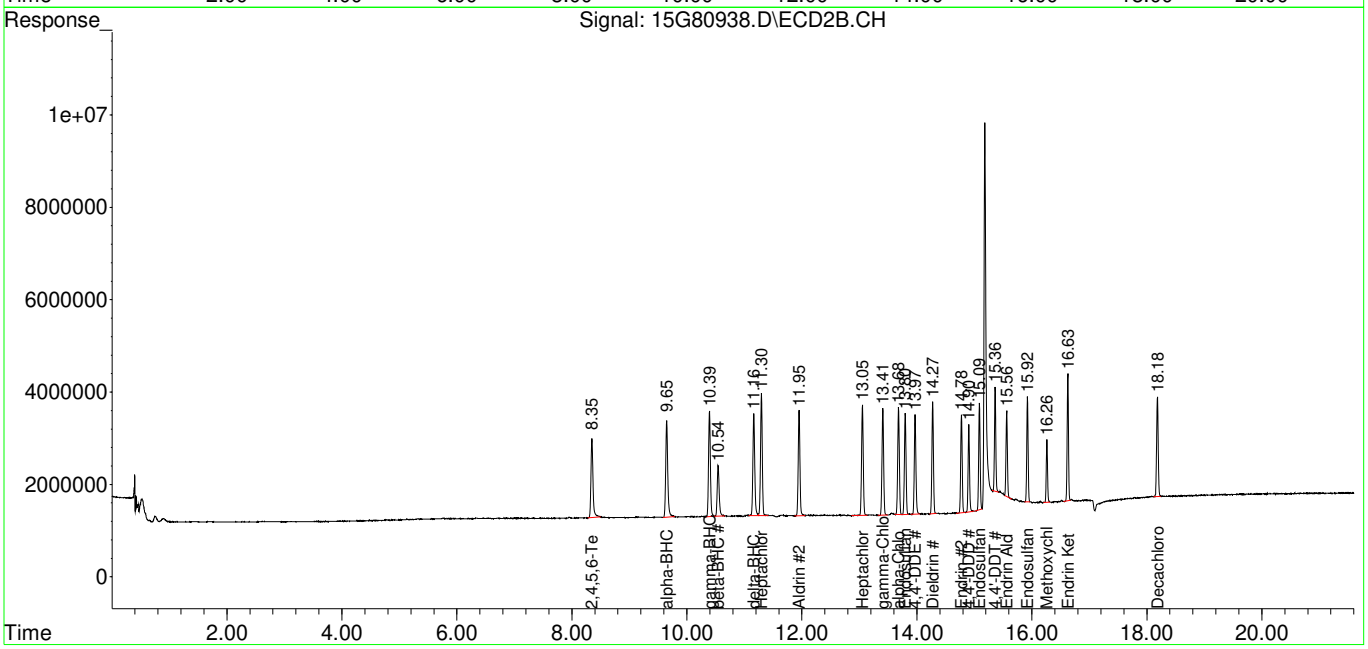
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80938.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 19:48 (#1); 10 Mar 2021 20:14 (#2)
Operator : ECL
Sample : S1C0204-CAL4
Misc : 1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 11 11:35:11 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Thu Mar 11 11:34:48 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15





Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80939.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 20:14 (#1); 10 Mar 2021 20:40 (#2)
Operator : ECL
Sample : S1C0204-CAL3
Misc : 1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 11 11:35:18 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Thu Mar 11 11:34:48 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

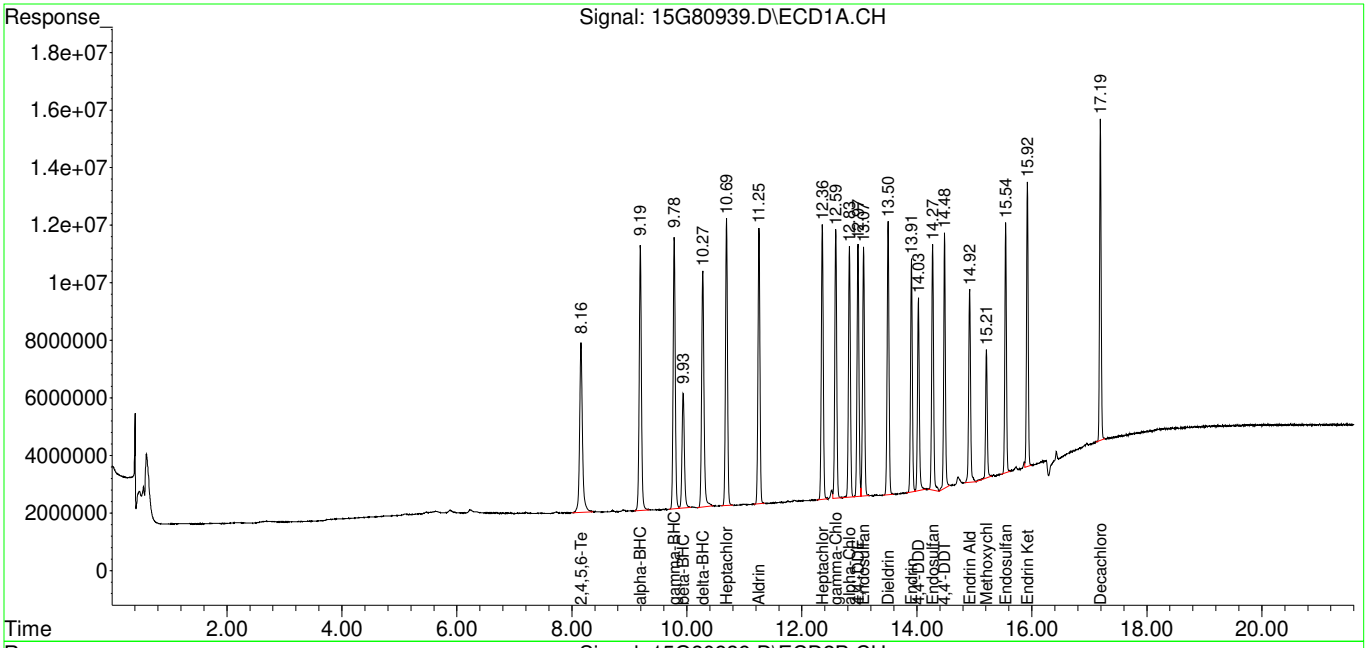
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1) S	2,4,5,6-Tetrachl	8.16	8.35	201.8E6	21908499	9.942	10.393
	Spiked Amount 20.000	Range 30 - 132		Recovery =		49.71%	51.97%
22) S	Decachlorobiphen	17.19	18.18	210.6E6	25000048	10.194	10.728
	Spiked Amount 20.000	Range 36 - 144		Recovery =		50.97%	53.64%
	Target Compounds						
2)	alpha-BHC	9.19	9.65	245.3E6	25673264	9.206	9.866
3)	gamma-BHC	9.78	10.39	241.8E6	25427612	9.651	10.173
4)	beta-BHC	9.93	10.54	115.0E6	13884984	10.167	10.549
5)	delta-BHC	10.28	11.16	236.5E6	25291057	9.612	10.144
6)	Heptachlor	10.69	11.29	242.2E6	29236799	9.727	10.355
7)	Aldrin	11.25	11.95	224.9E6	25880268	9.651	10.146
8)	Heptachlor Epoxi	12.36	13.05	225.1E6	27386063	9.891	10.567
9)	gamma-Chlordane	12.59	13.41	219.8E6	25103315	9.620	10.408
10)	alpha-Chlordane	12.83	13.68	204.3E6	24855171	9.550	9.854
11)	Endosulfan I	13.07	13.80	203.5E6	23329064	9.848	10.252
12)	4,4'-DDE	12.98	13.97	204.3E6	23071331	9.785	10.261
13)	Dieldrin	13.50	14.27	214.5E6	24146872	9.696	10.131
14)	Endrin	13.91	14.77	176.8E6	21167088	9.628	9.892
15)	4,4'-DDD	14.03	14.90	147.8E6	18103828	9.618	9.879
16)	Endosulfan II	14.27	15.09	195.1E6	22327244	10.064	10.607
17)	4,4'-DDT	14.48	15.36	179.5E6	19696581	9.756	9.728
18)	Endrin Aldehyde	14.92	15.56	152.5E6	17480365	9.706	9.718
19)	Endosulfan Sulfa	15.54	15.92	168.5E6	20673622	9.840	10.073
20)	Methoxychlor	15.21	16.26	91121220	12272697	10.361	10.666
21)	Endrin Ketone	15.92	16.62	197.5E6	23776811	9.835	10.367

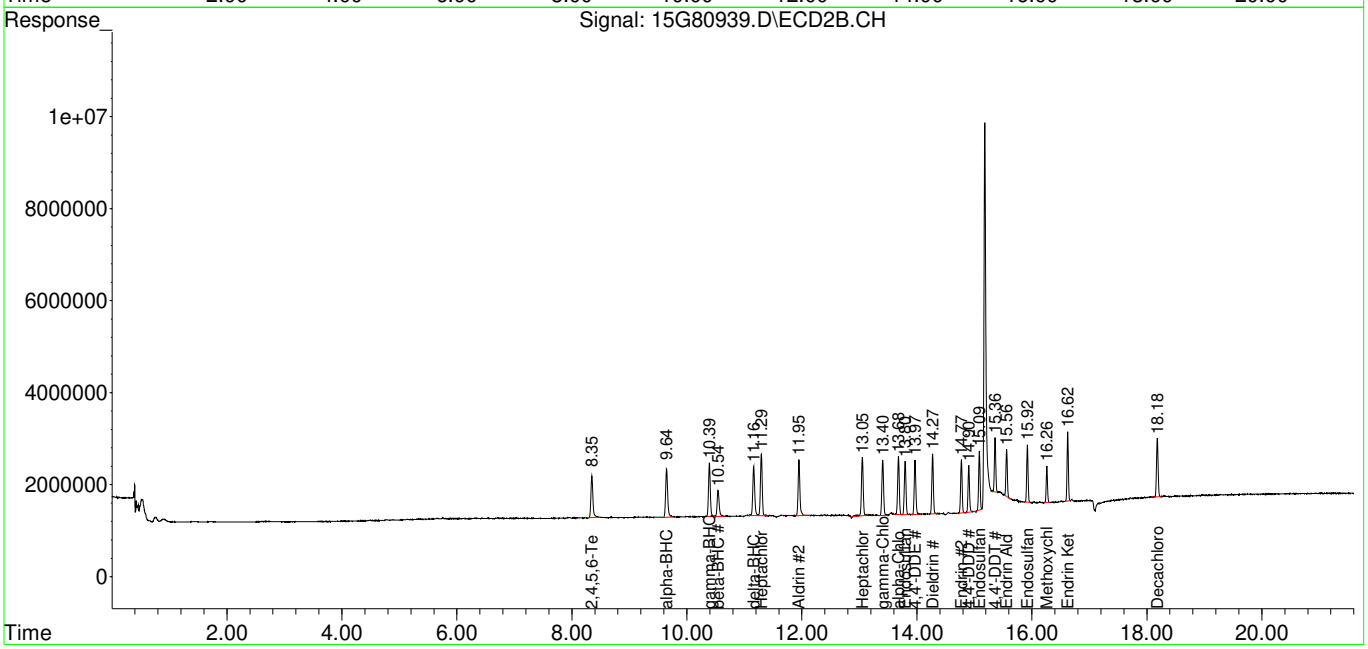
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80939.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 20:14 (#1); 10 Mar 2021 20:40 (#2)
Operator : ECL
Sample : S1C0204-CAL3
Misc : 1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 11 11:35:18 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Thu Mar 11 11:34:48 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15





Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80940.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 20:40 (#1); 10 Mar 2021 21:06 (#2)
Operator : ECL
Sample : S1C0204-CAL2
Misc : 1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 11 11:35:26 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Thu Mar 11 11:34:48 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

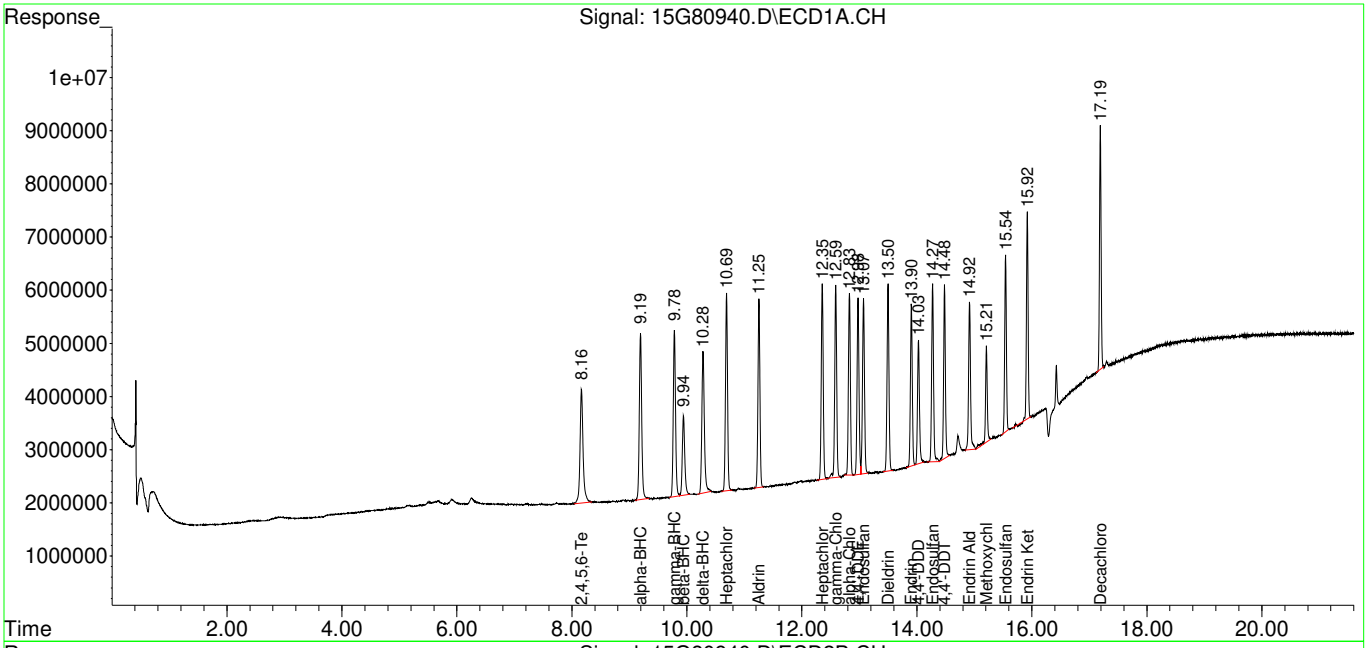
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1) S	2,4,5,6-Tetrachl	8.17	8.35	79688325	8343675	3.926	3.958
	Spiked Amount 20.000	Range 30 - 132		Recovery =		19.63%#	19.79%#
22) S	Decachlorobiphen	17.19	18.18	88527176	10373776	4.285	4.452
	Spiked Amount 20.000	Range 36 - 144		Recovery =		21.43%#	22.26%#
	Target Compounds						
2)	alpha-BHC	9.19	9.65	90764022	9375010	5.007	3.603
3)	gamma-BHC	9.78	10.39	85584512	9723727	4.820	3.890
4)	beta-BHC	9.94	10.54	44551008	5532637	3.940	4.203
5)	delta-BHC	10.28	11.16	81154778	8739003	4.929	3.505
6)	Heptachlor	10.69	11.30	91202107	11252013	3.663	3.985
7)	Aldrin	11.25	11.95	83558637	10452835	3.586	4.098
8)	Heptachlor Epoxi	12.35	13.05	87173523	10766504	3.830	4.154
9)	gamma-Chlordane	12.59	13.41	86271608	9808037	3.775	4.066
10)	alpha-Chlordane	12.83	13.68	80747390	11981107	3.775	4.750
11)	Endosulfan I	13.07	13.80	79341038	9528856	3.840	4.187
12)	4,4'-DDE	12.98	13.97	77467182	9021192	3.710	4.012
13)	Dieldrin	13.50	14.27	80806524	9654796	3.652	4.051
14)	Endrin	13.90	14.78	67864864	8996828	3.695	4.204
15)	4,4'-DDD	14.03	14.90	54665509	7511624	3.557	4.099
16)	Endosulfan II	14.27	15.09	76924868	9697295	3.967	4.412
17)	4,4'-DDT	14.48	15.36	69497568	7450732	3.778	3.680
18)	Endrin Aldehyde	14.92	15.56	65182244	7708622	4.149	4.285
19)	Endosulfan Sulfa	15.54	15.92	66987154	8637637	3.913	4.208
20)	Methoxychlor	15.21	16.26	38788360	4893475	4.411	4.253
21)	Endrin Ketone	15.92	16.63	77133644	11121028	3.842	4.527

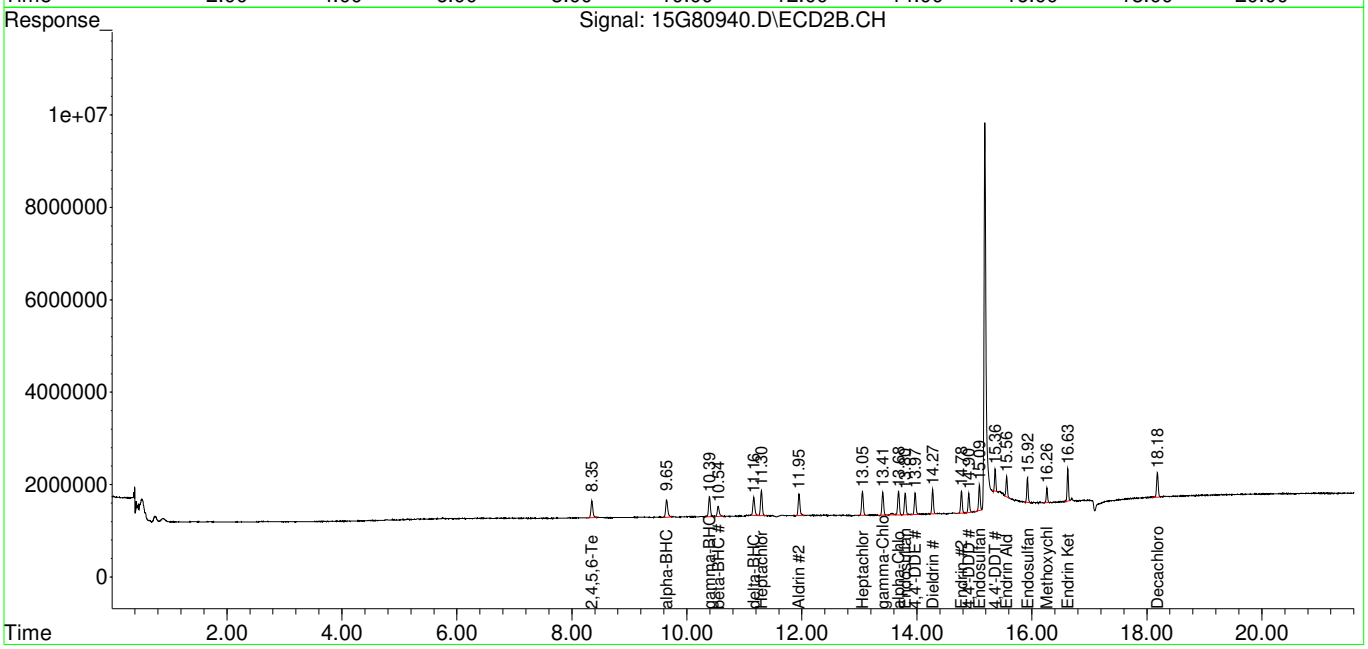
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80940.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 20:40 (#1); 10 Mar 2021 21:06 (#2)
Operator : ECL
Sample : S1C0204-CAL2
Misc : 1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 11 11:35:26 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Thu Mar 11 11:34:48 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15





Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80941.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 21:06 (#1); 10 Mar 2021 21:32 (#2)
Operator : ECL
Sample : S1C0204-CAL1
Misc : 1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 11 11:35:32 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Thu Mar 11 11:34:48 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

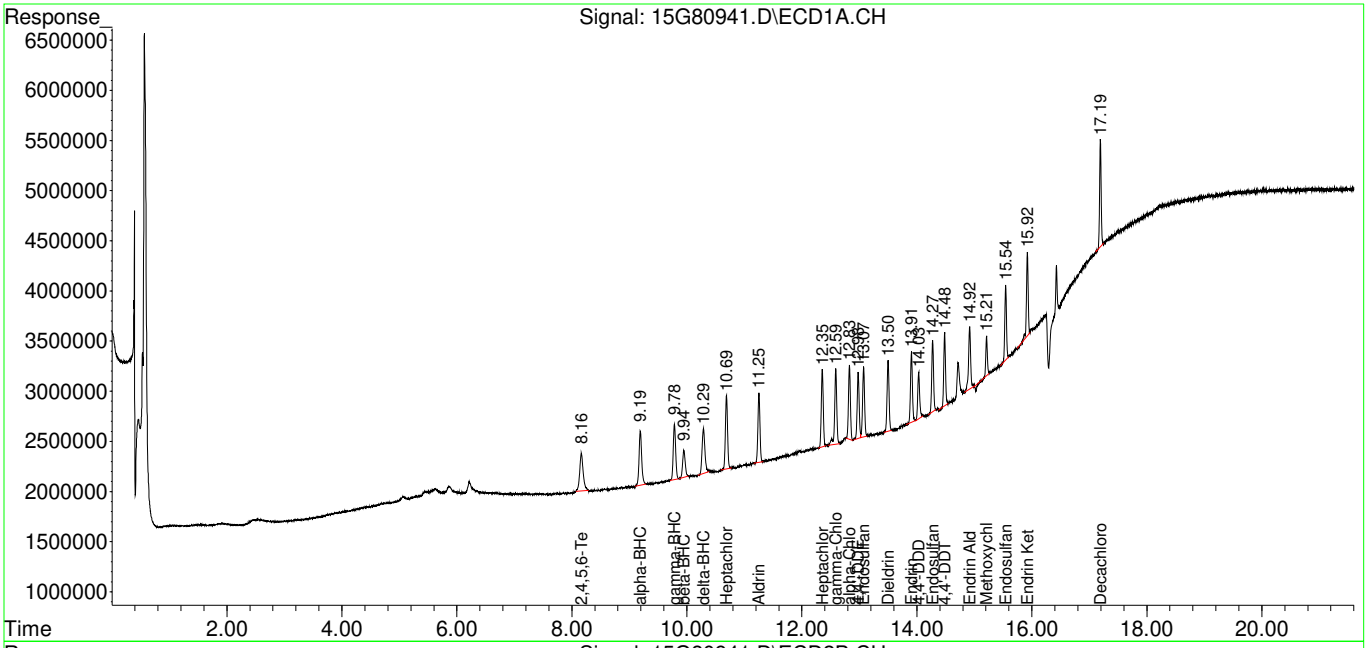
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1) S	2,4,5,6-Tetrachl	8.16	8.35	15958164	2015000	0.786	0.956
	Spiked Amount 20.000	Range 30 - 132		Recovery =		3.93%#	4.78%#
22) S	Decachlorobiphen	17.19	18.18	19963879	2631420	0.966	1.129
	Spiked Amount 20.000	Range 36 - 144		Recovery =		4.83%#	5.64%#
	Target Compounds						
2)	alpha-BHC	9.19	9.64	17197546	2340104	3.008	0.899 #
3)	gamma-BHC	9.78	10.39	16023394	2026720	2.669	0.811 #
4)	beta-BHC	9.95	10.54	8403689	1274939	0.743	0.969
5)	delta-BHC	10.29	11.16	15325429	2220068	2.945	0.890 #
6)	Heptachlor	10.69	11.29	19303147	2898232	0.775	1.026
7)	Aldrin	11.25	11.95	17283942	2783660	0.742	1.091 #
8)	Heptachlor Epoxi	12.35	13.05	18402028	2865342	0.808	1.106
9)	gamma-Chlordane	12.59	13.41	19254712	2453077	0.843	1.017
10)	alpha-Chlordane	12.83	13.68	17130586	2686550	0.801	1.065
11)	Endosulfan I	13.07	13.79	16838509	2458028	0.815	1.080
12)	4,4'-DDE	12.98	13.97	15690152	2277415	0.751	1.013
13)	Dieldrin	13.50	14.27	16981081	2485584	0.767	1.043
14)	Endrin	13.91	14.77	16070432	2519412	0.875	1.177
15)	4,4'-DDD	14.03	14.90	10878504	2089301	0.708	1.140 #
16)	Endosulfan II	14.27	15.09	15774918	3284048	0.814	1.266 #
17)	4,4'-DDT	14.48	15.36	15275840	2624752	0.830	1.296 #
18)	Endrin Aldehyde	14.92	15.56	15549452	2386872	0.990	1.327
19)	Endosulfan Sulfa	15.54	15.92	15093885	2464984	0.882	1.201
20)	Methoxychlor	15.21	16.26	5773562	1300045	0.657	1.130 #
21)	Endrin Ketone	15.92	16.63	17054947	3690098	0.849	1.098

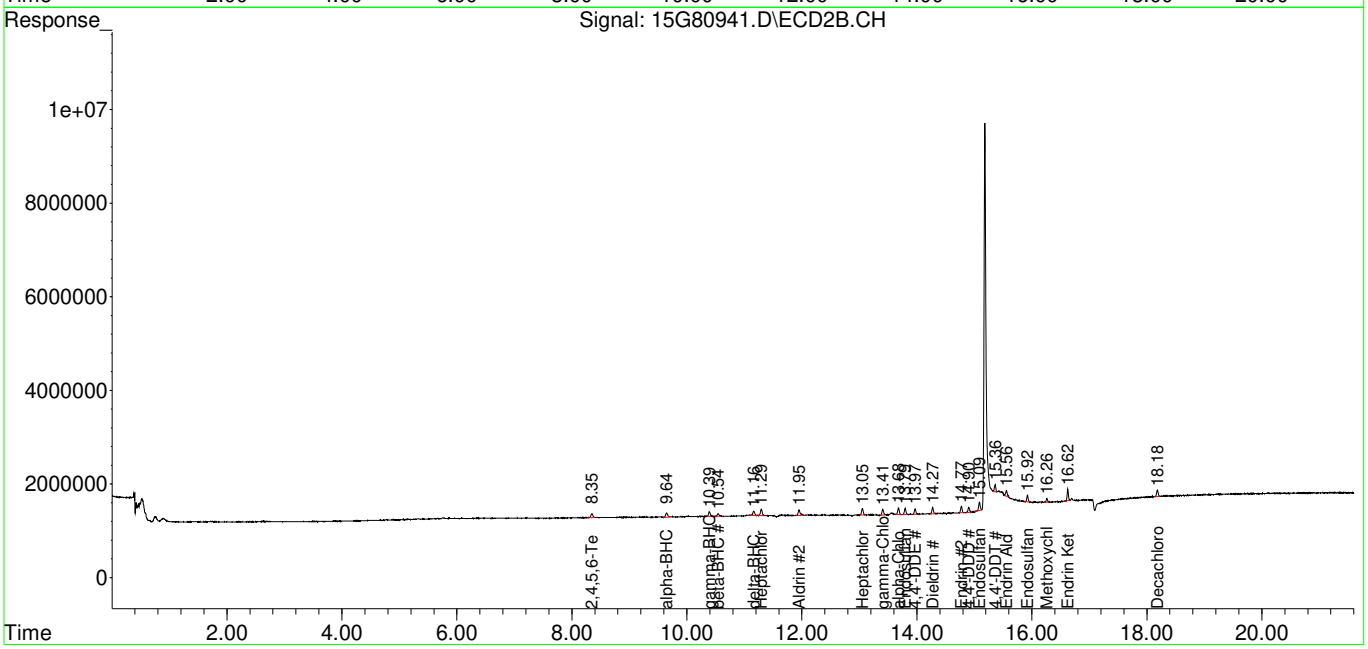
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80941.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 21:06 (#1); 10 Mar 2021 21:32 (#2)
Operator : ECL
Sample : S1C0204-CAL1
Misc : 1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 11 11:35:32 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Thu Mar 11 11:34:48 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15





Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80942.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 21:32 (#1); 10 Mar 2021 21:58 (#2)
Operator : ECL
Sample : S1C0204-ICV2
Misc : 1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 11 11:35:41 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Thu Mar 11 11:34:48 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

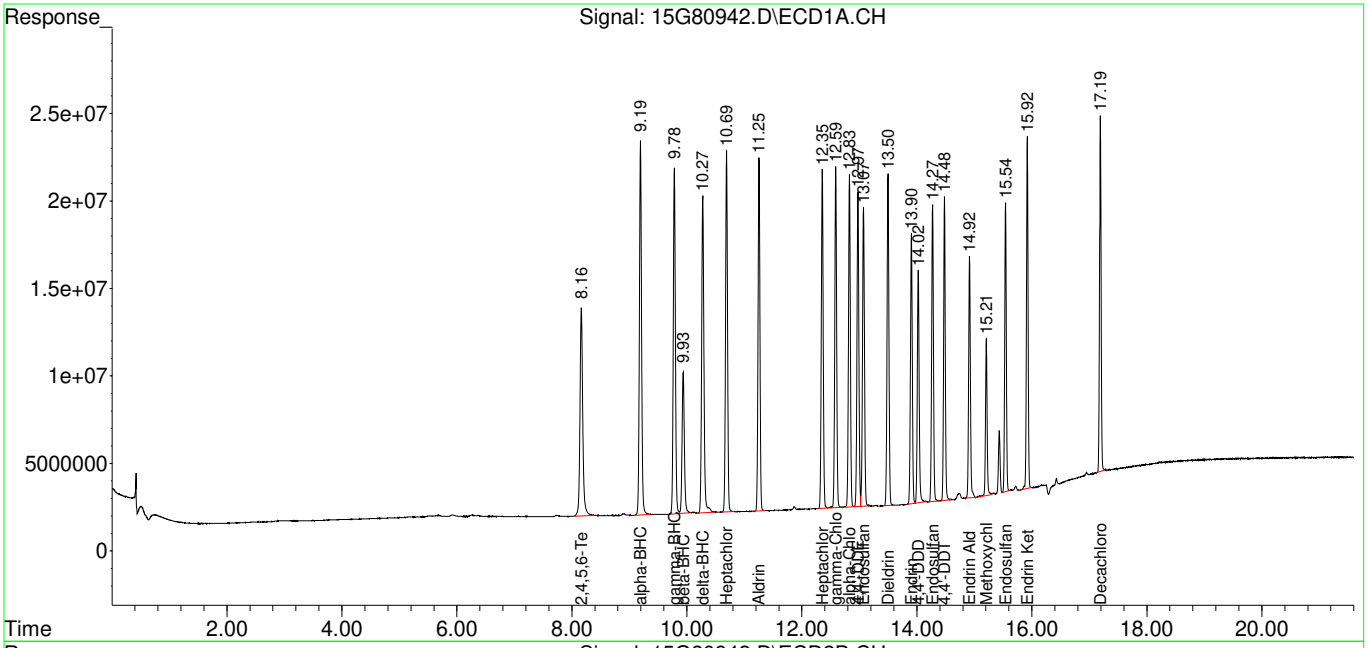
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1) S	2,4,5,6-Tetrachl	8.16	8.35	397.5E6	40514079	19.582	19.220
	Spiked Amount 20.000	Range 30 - 132		Recovery =		97.91%	96.10%
22) S	Decachlorobiphen	17.19	18.18	391.7E6	42460595	18.960	18.221
	Spiked Amount 20.000	Range 36 - 144		Recovery =		94.80%	91.11%
	Target Compounds						
2)	alpha-BHC	9.19	9.65	555.7E6	50356358	17.638	19.351
3)	gamma-BHC	9.78	10.39	505.2E6	49812003	17.796	19.928
4)	beta-BHC	9.93	10.54	223.5E6	25962402	19.764	19.725
5)	delta-BHC	10.27	11.16	495.8E6	48312260	17.427	19.378
6)	Heptachlor	10.69	11.30	489.8E6	54620688	19.671	19.345
7)	Aldrin	11.25	11.95	461.7E6	47755924	19.813	18.722
8)	Heptachlor Epoxi	12.35	13.05	442.7E6	49033200	19.447	18.920
9)	gamma-Chlordane	12.59	13.41	438.7E6	47219088	19.197	19.577
10)	alpha-Chlordane	12.83	13.68	425.4E6	48643764	19.888	19.285
11)	Endosulfan I	13.07	13.80	401.9E6	43694740	19.448	19.201
12)	4,4'-DDE	12.97	13.97	409.4E6	43511677	19.604	19.353
13)	Dieldrin	13.50	14.28	425.7E6	45004080	19.240	18.881
14)	Endrin	13.90	14.78	341.9E6	39281220	18.612	18.357
15)	4,4'-DDD	14.02	14.90	294.5E6	32646040	19.162	17.815
16)	Endosulfan II	14.27	15.09	370.1E6	41047510	19.087	19.790
17)	4,4'-DDT	14.48	15.36	346.5E6	35283065	18.834	17.426
18)	Endrin Aldehyde	14.92	15.56	292.0E6	31860003	18.588	17.711
19)	Endosulfan Sulfa	15.54	15.92	321.7E6	37900976	18.789	18.466
20)	Methoxychlor	15.21	16.26	174.6E6	21262007	19.858	18.479
21)	Endrin Ketone	15.92	16.63	385.3E6	51100488	19.190	22.975

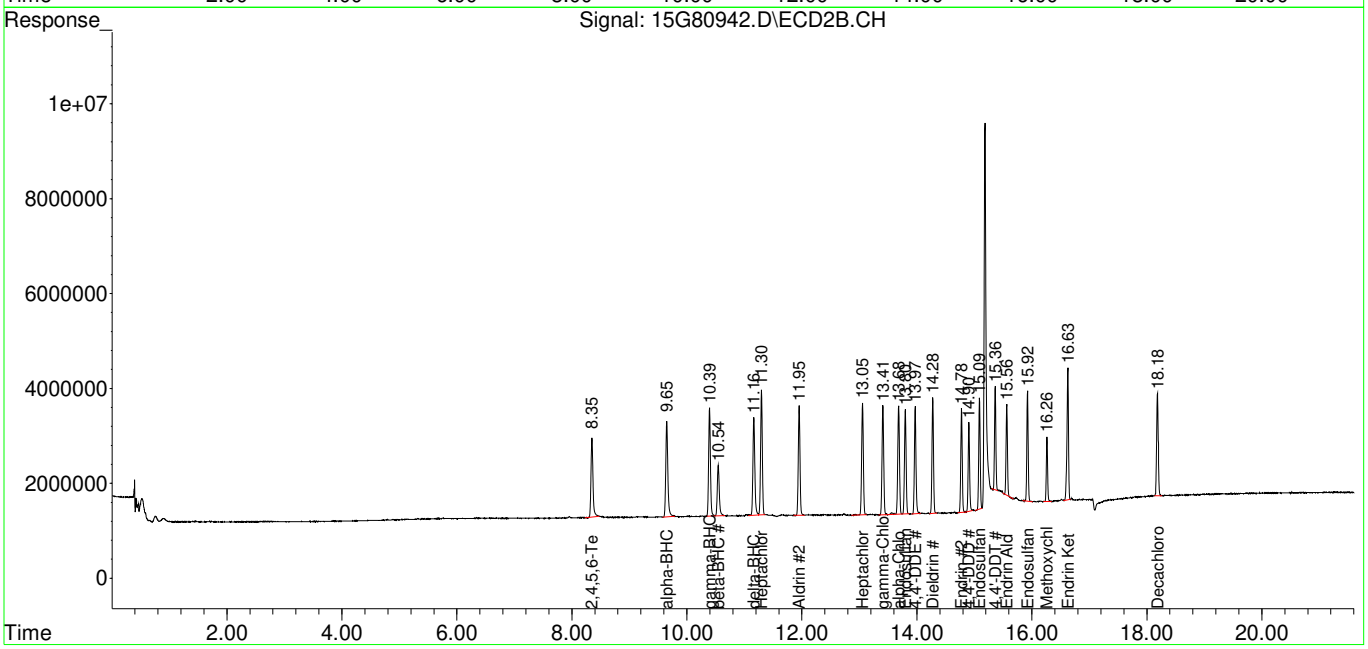
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80942.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 21:32 (#1); 10 Mar 2021 21:58 (#2)
Operator : ECL
Sample : S1C0204-ICV2
Misc : 1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 11 11:35:41 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Thu Mar 11 11:34:48 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15





Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80942.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 21:32 (#1); 10 Mar 2021 21:58 (#2)
Operator : ECL
Sample : S1C0204-ICV2
Misc : 1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 11 11:35:41 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Thu Mar 11 11:34:48 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1	S	2,4,5,6-Tetrachloro-M-Xylen	20.000	19.582	2.1	98	0.00
2		alpha-BHC	20.000	17.638	11.8	97	0.00
3		gamma-BHC	20.000	17.796	11.0	97	0.00
4		beta-BHC	20.000	19.764	1.2	97	0.00
5		delta-BHC	20.000	17.427	12.9	96	0.00
6		Heptachlor	20.000	19.671	1.6	97	0.00
7		Aldrin	20.000	19.813	0.9	97	0.00
8		Heptachlor Epoxide	20.000	19.447	2.8	97	0.00
9		gamma-Chlordane	20.000	19.197	4.0	97	0.00
10		alpha-Chlordane	20.000	19.888	0.6	98	0.00
11		Endosulfan I	20.000	19.448	2.8	97	0.00
12		4,4'-DDE	20.000	19.604	2.0	97	0.00
13		Dieldrin	20.000	19.240	3.8	95	0.00
14		Endrin	20.000	18.612	6.9	96	0.00
15		4,4'-DDD	20.000	19.162	4.2	95	0.00
16		Endosulfan II	20.000	19.087	4.6	97	0.00
17		4,4'-DDT	20.000	18.834	5.8	96	0.00
18		Endrin Aldehyde	20.000	18.588	7.1	98	0.00
19		Endosulfan Sulfate	20.000	18.789	6.1	95	0.00
20		Methoxychlor	20.000	19.858	0.7	97	0.00
21		Endrin Ketone	20.000	19.190	4.0	96	0.00
22	S	Decachlorobiphenyl	20.000	18.960	5.2	97	0.00

Signal #2

1	S	2,4,5,6-Tetrachloro-M-Xyl	20.000	19.220	3.9	96	0.00
2		alpha-BHC	20.000	19.351	3.2	98	0.00
3		gamma-BHC	20.000	19.928	0.4	98	0.00
4		beta-BHC	20.000	19.725	1.4	98	0.00
5		delta-BHC	20.000	19.378	3.1	97	0.00
6		Heptachlor	20.000	19.345	3.3	99	0.00
7		Aldrin	20.000	18.722	6.4	100	0.00
8		Heptachlor Epoxide	20.000	18.920	5.4	100	0.00
9		gamma-Chlordane	20.000	19.577	2.1	102	0.00
10		alpha-Chlordane	20.000	19.285	3.6	105	0.00
11		Endosulfan I	20.000	19.201	4.0	101	0.00
12		4,4'-DDE	20.000	19.353	3.2	103	0.00
13		Dieldrin	20.000	18.881	5.6	100	0.00
14		Endrin	20.000	18.357	8.2	100	0.00
15		4,4'-DDD	20.000	17.815	10.9	99	0.00
16		Endosulfan II	20.000	19.790	1.1	102	0.00

Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80942.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 21:32 (#1); 10 Mar 2021 21:58 (#2)
Operator : ECL
Sample : S1C0204-ICV2
Misc : 1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 11 11:35:41 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Thu Mar 11 11:34:48 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
17	4,4'-DDT	20.000	17.426	12.9	99	0.00
18	Endrin Aldehyde	20.000	17.711	11.4	101	0.00
19	Endosulfan Sulfate	20.000	18.466	7.7	103	0.00
20	Methoxychlor	20.000	18.479	7.6	102	0.00
21	Endrin Ketone	20.000	22.975	-14.9	116	0.00
22 S	Decachlorobiphenyl	20.000	18.221	8.9	102	0.00

Evaluate Continuing Calibration Report - Not Founds

Signal #2

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80943.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 21:58 (#1); 10 Mar 2021 22:24 (#2)
Operator : ECL
Sample : S1C0204-ARC1
Misc : 1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 11 11:44:35 2021
Quant Method : C:\MSDCHEM\1\METHODS\1660.M
Quant Title : HP15 1660 CALIBRATION March 10, 2021
QLast Update : Thu Mar 11 11:44:33 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

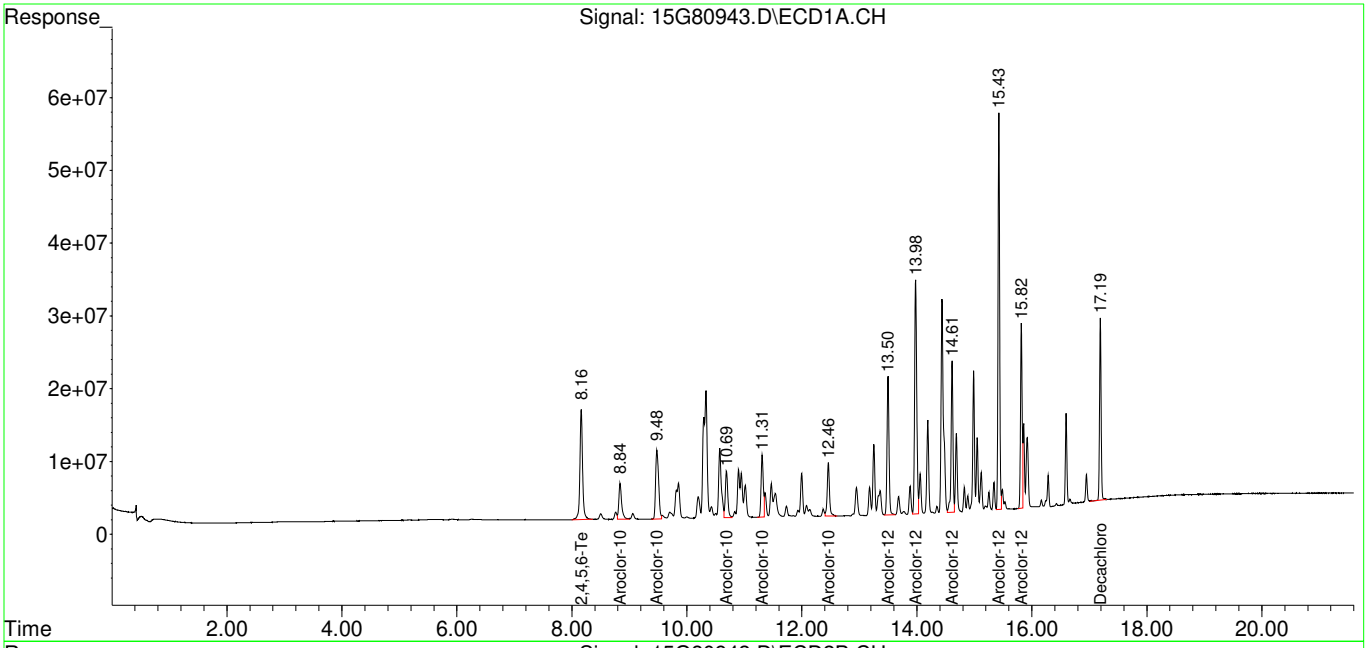
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1) S	2,4,5,6-Tetrachl	8.16	8.35	488.4E6	44693575	25.000	25.000
	Spiked Amount 20.000	Range 30 - 132		Recovery =		125.00%	125.00%
12) S	Decachlorobiphen	17.19	18.18	470.6E6	47842208	25.000	25.000
	Spiked Amount 20.000	Range 36 - 144		Recovery =		125.00%	125.00%
	Target Compounds						
2) L1	Aroclor-1016-1	8.84	9.37	170.0E6	15056164	500.000	500.000
3) L1	Aroclor-1016-2	9.48	10.18	343.8E6	39792965	500.000	500.000
4) L1	Aroclor-1016-3	10.69	11.35	191.8E6	30334679	500.000	500.000
5) L1	Aroclor-1016-4	11.31	11.81	224.1E6	18999640	500.000	500.000
6) L1	Aroclor-1016-5	12.46	12.25	201.9E6	26931336	500.000	500.000
	Sum Aroclor-1016-1			1131.6E6	131.1E6	2500.000	2500.000
Average	Aroclor-1016-1					500.000	500.000
7) L2	Aroclor-1260-1	13.50	14.53	458.8E6	58144702	500.000	500.000
8) L2	Aroclor-1260-2	13.98	14.82	822.3E6	68457322	500.000	500.000
9) L2	Aroclor-1260-3	14.61	15.48	466.4E6	54773513	500.000	500.000
10) L2	Aroclor-1260-4	15.43	15.89	1059.2E6	47831812	500.000	500.000
11) L2	Aroclor-1260-5	15.82	16.18	500.0E6	106.9E6	500.000	500.000
	Sum Aroclor-1260-1			3306.8E6	336.1E6	2500.000	2500.000
Average	Aroclor-1260-1					500.000	500.000

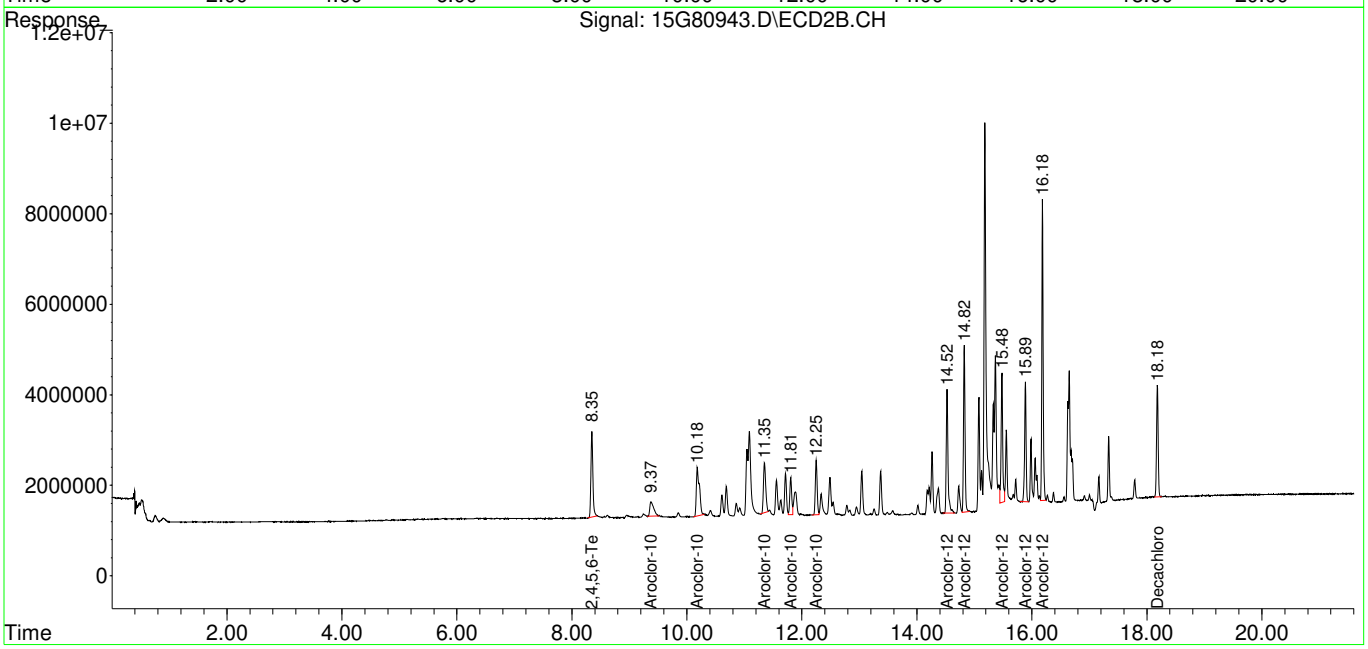
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80943.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Mar 2021 21:58 (#1); 10 Mar 2021 22:24 (#2)
Operator : ECL
Sample : S1C0204-ARC1
Misc : 1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 11 11:44:35 2021
Quant Method : C:\MSDCHEM\1\METHODS\1660.M
Quant Title : HP15 1660 CALIBRATION March 10, 2021
QLast Update : Thu Mar 11 11:44:33 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15





Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80954.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 Mar 2021 2:44 (#1); 11 Mar 2021 3:10 (#2)
Operator : ECL
Sample : S1C0204-CCV1
Misc : 1
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 11 11:41:55 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Thu Mar 11 11:40:39 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

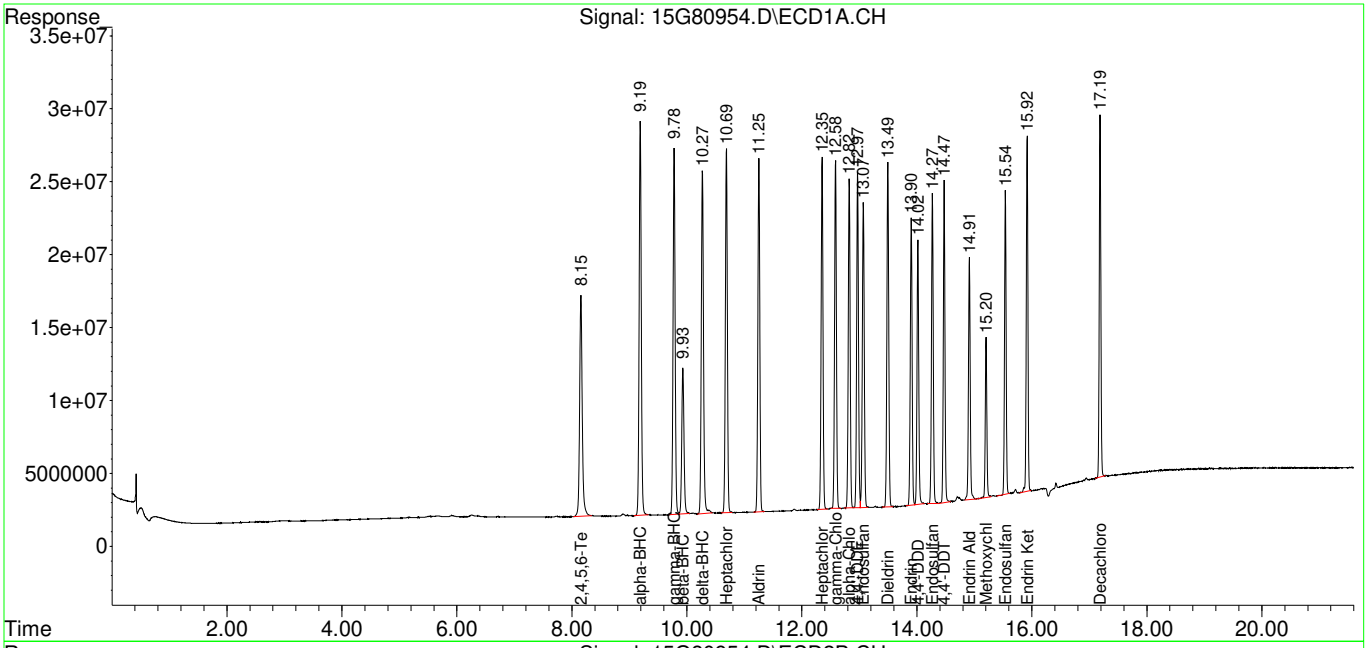
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1) S	2,4,5,6-Tetrachl	8.16	8.35	480.1E6	48575264	23.653	23.044
	Spiked Amount 20.000	Range 30 - 132		Recovery =		118.27%	115.22%
22) S	Decachlorobiphen	17.19	18.18	474.5E6	52757472	22.968	22.640
	Spiked Amount 20.000	Range 36 - 144		Recovery =		114.84%	113.20%
	Target Compounds						
2)	alpha-BHC	9.19	9.65	694.2E6	60494263	21.401	23.246
3)	gamma-BHC	9.78	10.39	626.0E6	60067257	21.532	22.442
4)	beta-BHC	9.93	10.54	271.2E6	30093456	23.986	22.863
5)	delta-BHC	10.27	11.16	627.8E6	58436434	21.407	23.438
6)	Heptachlor	10.69	11.30	600.0E6	64847206	24.095	22.967
7)	Aldrin	11.25	11.95	564.2E6	57394583	24.211	22.500
8)	Heptachlor Epoxi	12.35	13.05	541.6E6	59187793	23.795	22.839
9)	gamma-Chlordane	12.58	13.41	533.6E6	57540557	23.347	23.857
10)	alpha-Chlordane	12.82	13.68	509.7E6	56917436	23.832	22.565
11)	Endosulfan I	13.07	13.80	487.1E6	53092904	23.574	23.331
12)	4,4'-DDE	12.97	13.97	505.7E6	53417120	24.215	23.758
13)	Dieldrin	13.49	14.28	531.6E6	55895592	24.023	23.450
14)	Endrin	13.90	14.78	431.5E6	46928159	23.491	21.930
15)	4,4'-DDD	14.02	14.90	377.3E6	41597576	24.545	22.700
16)	Endosulfan II	14.27	15.09	455.5E6	49650032	23.490	23.941
17)	4,4'-DDT	14.47	15.36	428.0E6	42430041	23.267	20.956
18)	Endrin Aldehyde	14.91	15.56	349.0E6	39415167	22.211	21.911
19)	Endosulfan Sulfa	15.54	15.92	399.7E6	46718464	23.344	22.762
20)	Methoxychlor	15.20	16.26	209.5E6	25805616	23.827	22.427
21)	Endrin Ketone	15.92	16.63	481.2E6	52107670	23.965	23.440

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80954.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 Mar 2021 2:44 (#1); 11 Mar 2021 3:10 (#2)
Operator : ECL
Sample : S1C0204-CCV1
Misc : 1
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 11 11:41:55 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Thu Mar 11 11:40:39 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15



Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80954.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 Mar 2021 2:44 (#1); 11 Mar 2021 3:10 (#2)
Operator : ECL
Sample : S1C0204-CCV1
Misc : 1
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 11 11:41:55 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Thu Mar 11 11:40:39 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1	S	2,4,5,6-Tetrachloro-M-Xylen	20.000	23.653	-18.3	118	0.00
2		alpha-BHC	20.000	21.401	-7.0	121	0.00
3		gamma-BHC	20.000	21.532	-7.7	121	0.00
4		beta-BHC	20.000	23.986	-19.9	118	0.00
5		delta-BHC	20.000	21.407	-7.0	122	0.00
6		Heptachlor	20.000	24.095	-20.5#	119	0.00
7		Aldrin	20.000	24.211	-21.1#	119	0.00
8		Heptachlor Epoxide	20.000	23.795	-19.0	118	0.00
9		gamma-Chlordane	20.000	23.347	-16.7	117	0.00
10		alpha-Chlordane	20.000	23.832	-19.2	118	0.00
11		Endosulfan I	20.000	23.574	-17.9	118	0.00
12		4,4'-DDE	20.000	24.215	-21.1#	120	-0.01#
13		Dieldrin	20.000	24.023	-20.1#	119	0.00
14		Endrin	20.000	23.491	-17.5	121	0.00
15		4,4'-DDD	20.000	24.545	-22.7#	121	-0.01#
16		Endosulfan II	20.000	23.490	-17.4	119	0.00
17		4,4'-DDT	20.000	23.267	-16.3	119	0.00
18		Endrin Aldehyde	20.000	22.211	-11.1	117	0.00
19		Endosulfan Sulfate	20.000	23.344	-16.7	119	0.00
20		Methoxychlor	20.000	23.827	-19.1	117	0.00
21		Endrin Ketone	20.000	23.965	-19.8	120	0.00
22	S	Decachlorobiphenyl	20.000	22.968	-14.8	118	0.00

Signal #2

1	S	2,4,5,6-Tetrachloro-M-Xyl	20.000	23.044	-15.2	115	0.00
2		alpha-BHC	20.000	23.246	-16.2	117	0.00
3		gamma-BHC	20.000	22.442	-12.2	118	0.00
4		beta-BHC	20.000	22.863	-14.3	113	0.00
5		delta-BHC	20.000	23.438	-17.2	117	0.00
6		Heptachlor	20.000	22.967	-14.8	117	0.00
7		Aldrin	20.000	22.500	-12.5	120	0.00
8		Heptachlor Epoxide	20.000	22.839	-14.2	121	0.00
9		gamma-Chlordane	20.000	23.857	-19.3	124	0.00
10		alpha-Chlordane	20.000	22.565	-12.8	123	0.00
11		Endosulfan I	20.000	23.331	-16.7	123	0.00
12		4,4'-DDE	20.000	23.758	-18.8	127	0.00
13		Dieldrin	20.000	23.450	-17.2	124	0.00
14		Endrin	20.000	21.930	-9.6	120	0.00
15		4,4'-DDD	20.000	22.700	-13.5	126	0.00
16		Endosulfan II	20.000	23.941	-19.7	123	0.00

Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80954.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 Mar 2021 2:44 (#1); 11 Mar 2021 3:10 (#2)
Operator : ECL
Sample : S1C0204-CCV1
Misc : 1
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 11 11:41:55 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Thu Mar 11 11:40:39 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
17		4,4'-DDT	20.000	20.956	-4.8	119	0.00
18		Endrin Aldehyde	20.000	21.911	-9.6	125	0.00
19		Endosulfan Sulfate	20.000	22.762	-13.8	126	0.00
20		Methoxychlor	20.000	22.427	-12.1	123	0.00
21		Endrin Ketone	20.000	23.440	-17.2	119	0.00
22	S	Decachlorobiphenyl	20.000	22.640	-13.2	126	0.00

Evaluate Continuing Calibration Report - Not Founds

Signal #2

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80955.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 Mar 2021 3:10 (#1); 11 Mar 2021 3:36 (#2)
Operator : ECL
Sample : S1C0204-CVT1
Misc : 1
ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Mar 11 11:42:41 2021
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX : March 10, 2021
QLast Update : Thu Mar 11 10:56:19 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

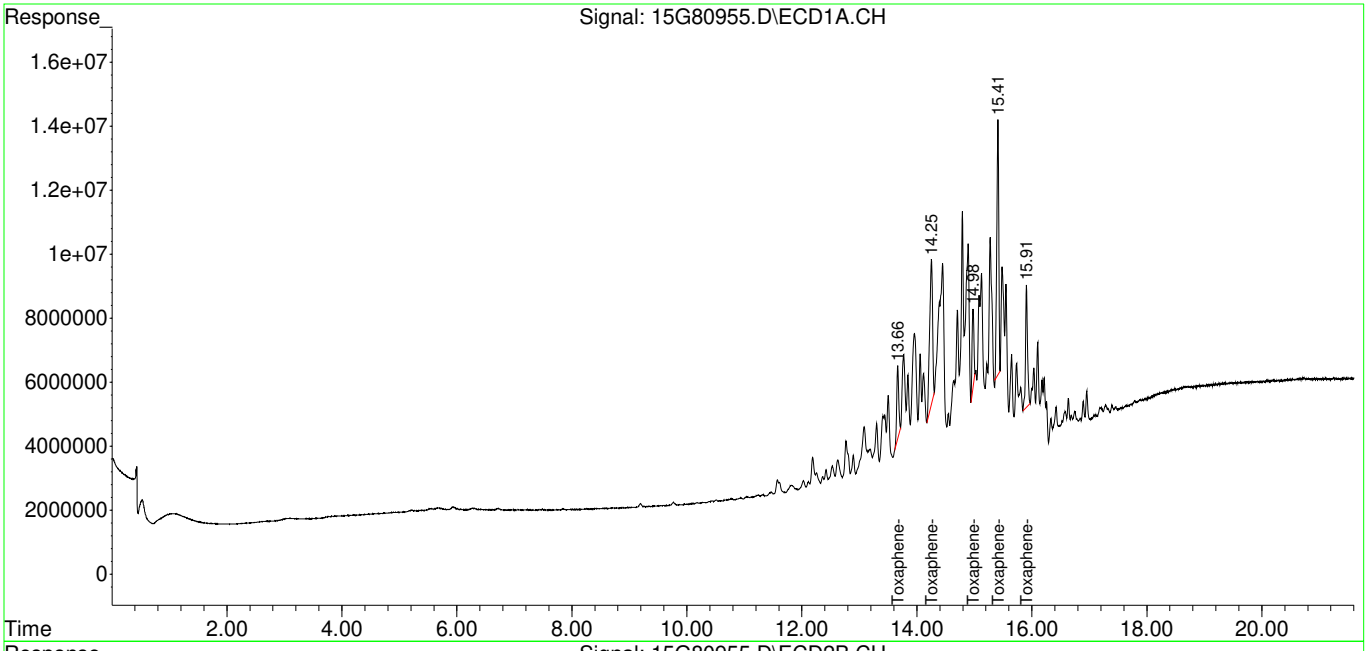
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	Target Compounds						
1)	L1 Toxaphene-1	13.67	14.41	54274585	5363473	558.066	492.527
2)	L1 Toxaphene-2	14.25	15.06	161.3E6	12132185	550.542	483.800
3)	L1 Toxaphene-3	14.98	15.55	54389128	17823154	535.730	484.309
4)	L1 Toxaphene-4	15.41	16.25	193.1E6	20922422	548.182	504.016
5)	L1 Toxaphene-5	15.91	16.74	92166003	8503998	573.562	546.302
	Sum Toxaphene-1			555.2E6	64745232	2766.082	2510.955
Average	Toxaphene-1					553.216	502.191

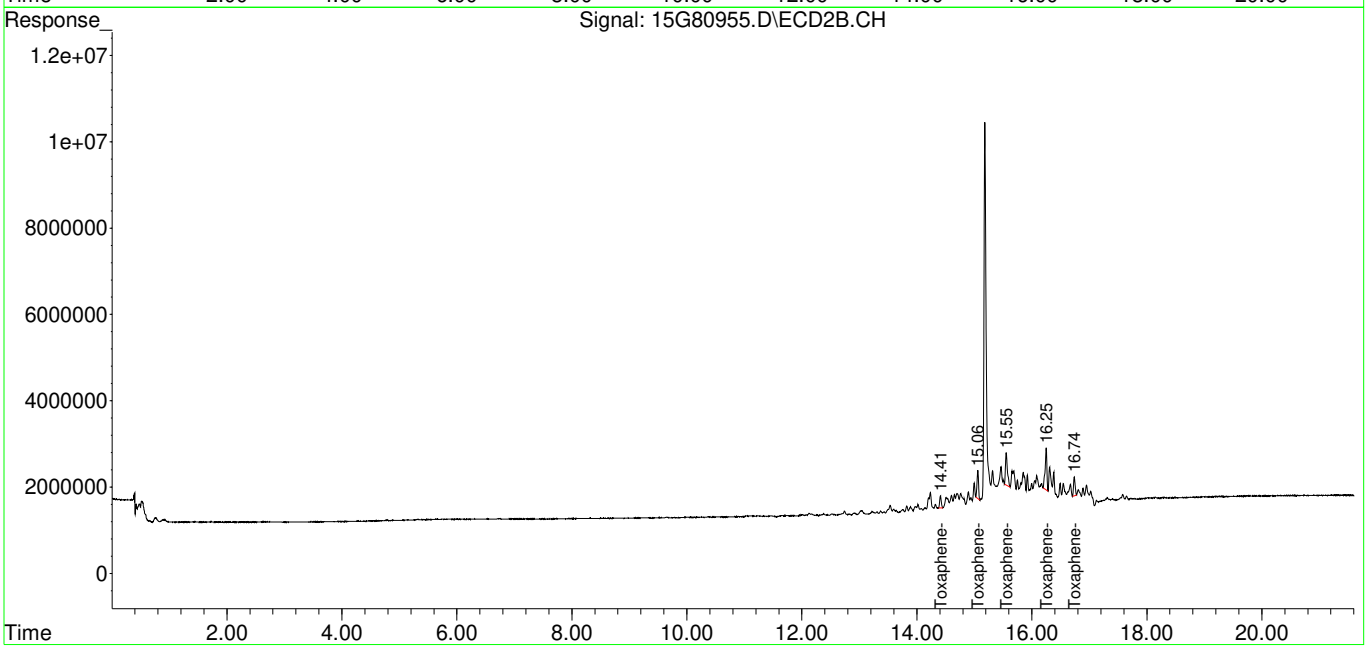
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80955.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 Mar 2021 3:10 (#1); 11 Mar 2021 3:36 (#2)
Operator : ECL
Sample : S1C0204-CVT1
Misc : 1
ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Mar 11 11:42:41 2021
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX : March 10, 2021
QLast Update : Thu Mar 11 10:56:19 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15





Data Path : C:\MSDCHEM\1\DATA\031021\
Data File : 15G80955.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 11 Mar 2021   3:10 (#1); 11 Mar 2021   3:36 (#2)
Operator : ECL
Sample   : S1C0204-CVT1
Misc   : 1
ALS Vial : 28   Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Mar 11 11:42:41 2021
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX : March 10, 2021
QLast Update : Thu Mar 11 10:56:19 2021
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :
InstName : HP15

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20%   Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1 L1	Toxaphene-1	97.255	108.549 E3	-11.6	108	0.00
2 L1	Toxaphene-2	292.937	322.549 E3	-10.1	109	0.00
3 L1	Toxaphene-3	101.523	108.778 E3	-7.1	110	0.00
4 L1	Toxaphene-4	352.195	386.134 E3	-9.6	104	0.00
5 L1	Toxaphene-5	160.691	184.332 E3	-14.7	106	0.00

Signal #2

1 L1	Toxaphene-1	10.890	10.727 E3	1.5	100	0.00
2 L1	Toxaphene-2	25.077	24.264 E3	3.2	97	0.00
3 L1	Toxaphene-3	36.801	35.646 E3	3.1	101	0.00
4 L1	Toxaphene-4	41.511	41.845 E3	-0.8	99	0.00
5 L1	Toxaphene-5	15.566	17.008 E3	-9.3	100	0.00

Evaluate Continuing Calibration Report - Not Founds

Signal #2

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81091.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 13:22 (#1); 23 Mar 2021 13:47 (#2)
Operator : ECL
Sample : S1C0442-PEM1
Misc : 1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 23 16:29:39 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Tue Mar 23 16:28:03 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

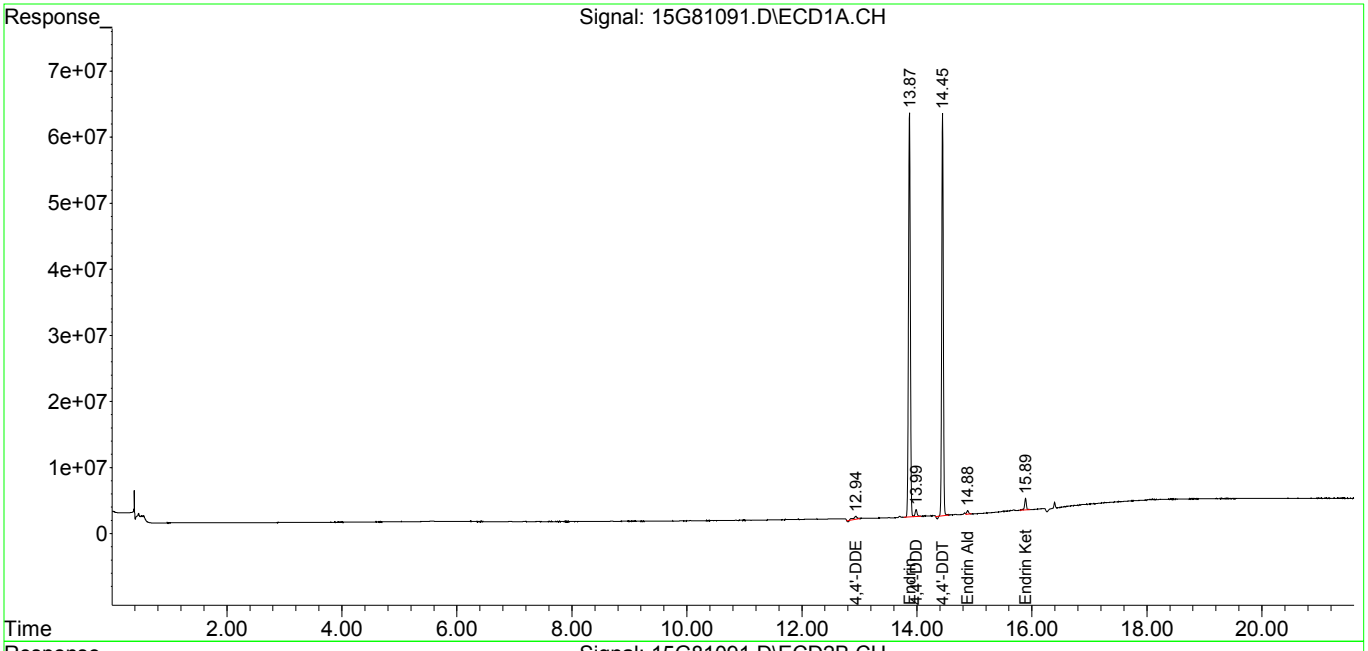
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1) S	2,4,5,6-Tetrachl	0.00	0.00	0	0	N.D.	N.D.
	Spiked Amount 20.000	Range 30 - 132		Recovery =		0.00%#	0.00%#
22) S	Decachlorobiphen	0.00	0.00	0	0	N.D.	N.D.
	Spiked Amount 20.000	Range 36 - 144		Recovery =		0.00%#	0.00%#
	Target Compounds						
2)	alpha-BHC	0.00	0.00	0	0	N.D.	N.D.
3)	gamma-BHC	0.00	0.00	0	0	N.D.	N.D.
4)	beta-BHC	0.00	0.00	0	0	N.D.	N.D.
5)	delta-BHC	0.00	0.00	0	0	N.D.	N.D.
6)	Heptachlor	0.00	0.00	0	0	N.D.	N.D.
7)	Aldrin	0.00	0.00	0	0	N.D.	N.D.
8)	Heptachlor Epoxi	0.00	0.00	0	0	N.D.	N.D.
9)	gamma-Chlordane	0.00	0.00	0	0	N.D.	N.D.
10)	alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.
11)	Endosulfan I	0.00	0.00	0	0	N.D.	N.D.
12)	4,4'-DDE	12.94	0.00	18117053	0	0.868	N.D. #
13)	Dieldrin	0.00	0.00	0	0	N.D.	N.D.
14)	Endrin	13.87	14.77	1355.7E6	147.0E6	73.807	68.713
15)	4,4'-DDD	13.99	0.00	25029137	0	1.628	N.D. #
16)	Endosulfan II	0.00	0.00	0	0	N.D.	N.D.
17)	4,4'-DDT	14.45	15.36	1202.2E6	128.3E6	65.352	63.375
18)	Endrin Aldehyde	14.88	0.00	12444262	0	0.792	N.D. #
19)	Endosulfan Sulfa	0.00	0.00	0	0	N.D.	N.D.
20)	Methoxychlor	0.00	0.00	0	0	N.D.	N.D.
21)	Endrin Ketone	15.89	16.62	37984404	5464368	1.892	1.917

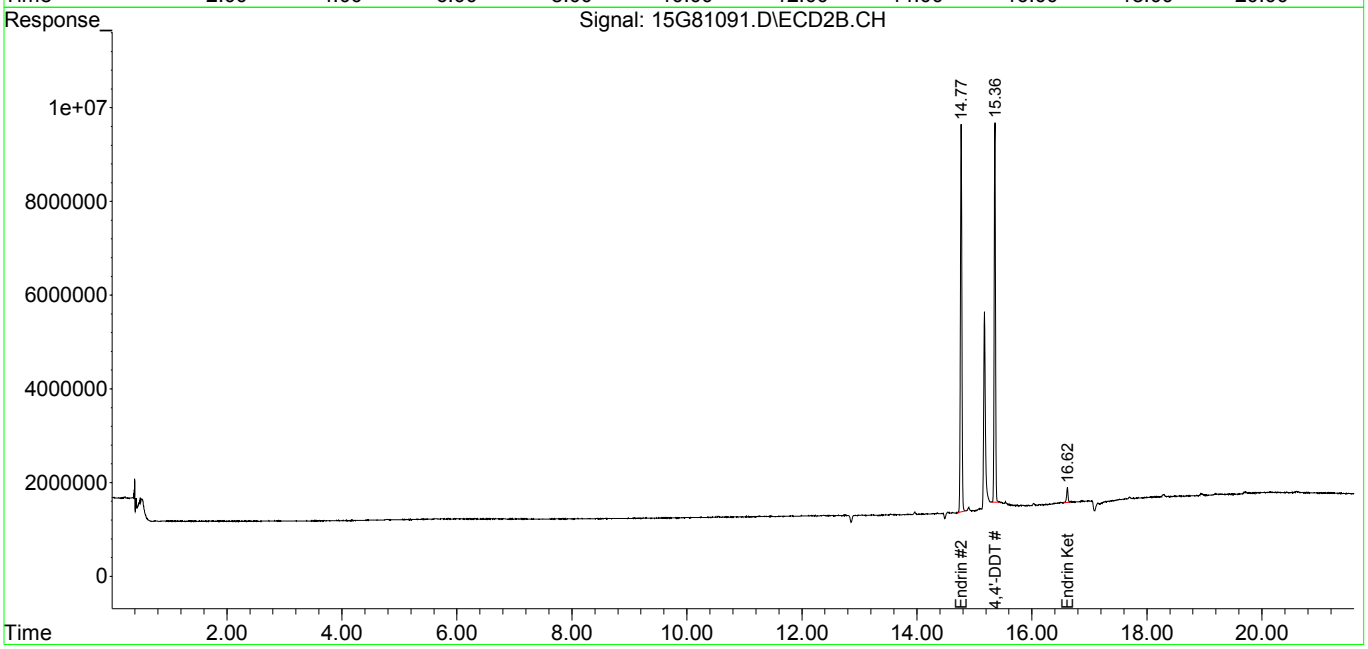
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81091.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 13:22 (#1); 23 Mar 2021 13:47 (#2)
Operator : ECL
Sample : S1C0442-PEM1
Misc : 1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 23 16:29:39 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Tue Mar 23 16:28:03 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15





4,4'-DDT/ENDRIN BREAKDOWN

INSTRUMENT HP15

COLUMN: RTx-CLP (FRONT)

Data File Name 15G81091.D

ENDRIN	ENDRIN KETONE	ENDRIN ALDEHYDE	ENDRIN BREAKDOWN
1355669202	37984404	12444262	3.59

4,4'-DDT	4,4'-DDD	4,4'DDE	4,4'-DDT BREAKDOWN
1202167689	25029137	18117054	3.46

COLUMN: RTx-CLP II (REAR)

Data File Name 15G81091.D

ENDRIN	ENDRIN KETONE	ENDRIN ALDEHYDE	ENDRIN BREAKDOWN
147038930	5464368	0	3.58

4,4'-DDT	4,4'-DDD	4,4'DDE	4,4'-DDT BREAKDOWN
128317552	0	0	0.00

Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81092.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 14:41 (#1); 23 Mar 2021 15:07 (#2)
Operator : ECL
Sample : S1C0442-CCV1
Misc : 1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 23 16:28:38 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Tue Mar 23 16:28:03 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

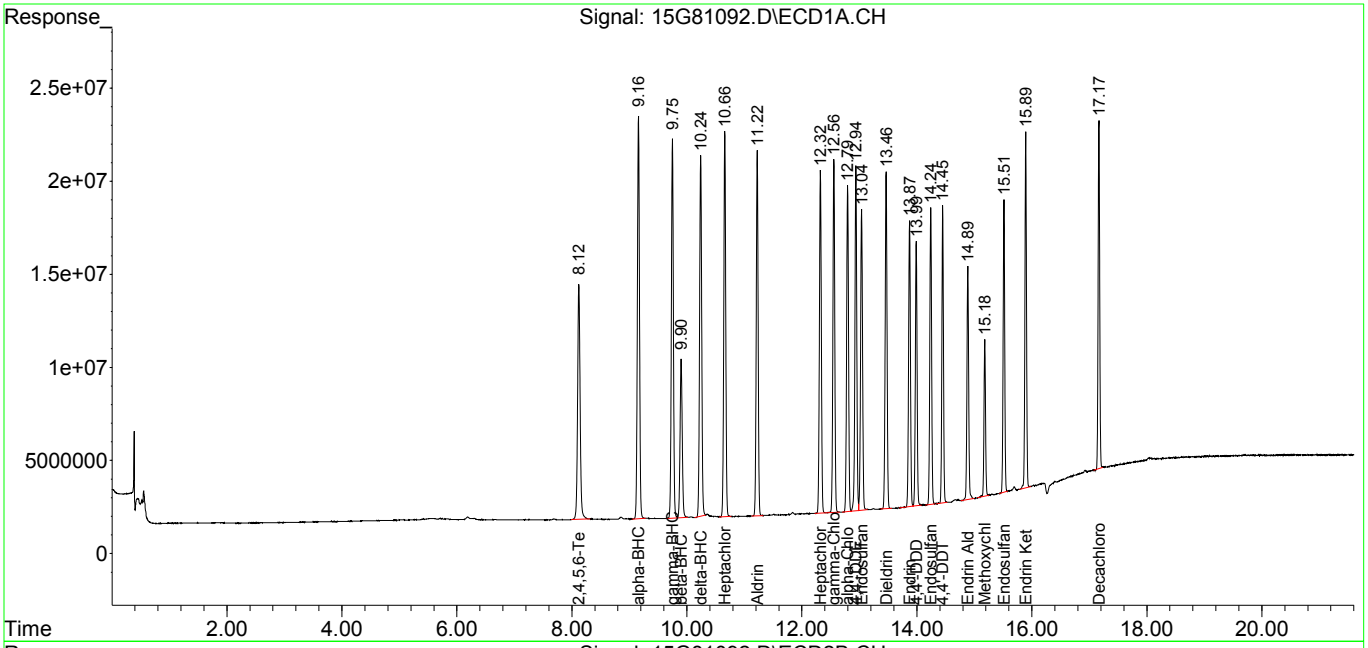
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1) S	2,4,5,6-Tetrachl	8.12	8.34	383.7E6	43217149	18.906	20.502
	Spiked Amount 20.000	Range 30 - 132		Recovery =		94.53%	102.51%
22) S	Decachlorobiphen	17.17	18.18	353.4E6	45240635	17.108	19.414
	Spiked Amount 20.000	Range 36 - 144		Recovery =		85.54%	97.07%
	Target Compounds						
2)	alpha-BHC	9.16	9.64	549.4E6	54685904	16.698	21.014
3)	gamma-BHC	9.75	10.39	500.0E6	53635896	17.005	21.458
4)	beta-BHC	9.90	10.54	223.0E6	27443396	19.719	20.850
5)	delta-BHC	10.24	11.16	493.9E6	53958185	17.368	21.642
6)	Heptachlor	10.66	11.29	490.8E6	57456485	19.709	20.349
7)	Aldrin	11.22	11.94	448.3E6	50056824	19.237	19.624
8)	Heptachlor Epoxi	12.32	13.05	429.1E6	51533332	18.851	19.885
9)	gamma-Chlordane	12.56	13.40	428.7E6	50432974	18.760	20.910
10)	alpha-Chlordane	12.79	13.68	404.0E6	49752912	18.888	19.725
11)	Endosulfan I	13.04	13.79	381.5E6	46212928	18.463	20.308
12)	4,4'-DDE	12.94	13.96	415.8E6	46305362	19.909	20.595
13)	Dieldrin	13.46	14.27	408.1E6	47993160	18.443	20.135
14)	Endrin	13.87	14.77	340.6E6	42676108	18.546	19.943
15)	4,4'-DDD	13.99	14.90	298.2E6	36143296	19.403	19.723
16)	Endosulfan II	14.24	15.08	345.8E6	43417295	17.833	20.952
17)	4,4'-DDT	14.45	15.36	309.1E6	39975341	16.805	19.743
18)	Endrin Aldehyde	14.89	15.56	260.2E6	34105338	16.559	18.960
19)	Endosulfan Sulfa	15.51	15.92	299.9E6	40939624	17.514	19.947
20)	Methoxychlor	15.18	16.26	157.1E6	23568596	17.867	20.483
21)	Endrin Ketone	15.89	16.62	362.7E6	45219846	18.063	20.261

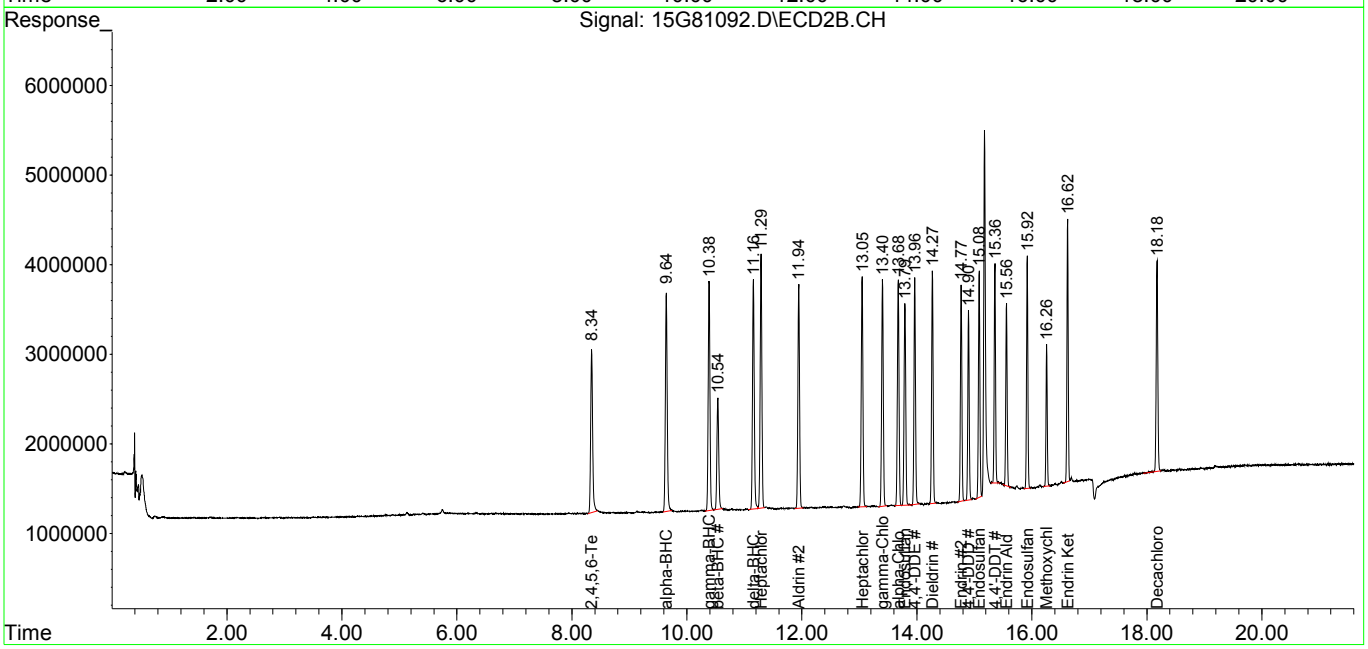
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81092.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 14:41 (#1); 23 Mar 2021 15:07 (#2)
Operator : ECL
Sample : S1C0442-CCV1
Misc : 1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 23 16:28:38 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Tue Mar 23 16:28:03 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15





Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81092.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 14:41 (#1); 23 Mar 2021 15:07 (#2)
Operator : ECL
Sample : S1C0442-CCV1
Misc : 1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 23 16:28:38 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Tue Mar 23 16:28:03 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1	S	2,4,5,6-Tetrachloro-M-Xylen	20.000	18.906	5.5	94	0.00
2		alpha-BHC	20.000	16.698	16.5	96	0.00
3		gamma-BHC	20.000	17.005	15.0	96	0.00
4		beta-BHC	20.000	19.719	1.4	97	0.00
5		delta-BHC	20.000	17.368	13.2	96	0.00
6		Heptachlor	20.000	19.709	1.5	97	0.00
7		Aldrin	20.000	19.237	3.8	94	0.00
8		Heptachlor Epoxide	20.000	18.851	5.7	94	0.00
9		gamma-Chlordane	20.000	18.760	6.2	94	0.00
10		alpha-Chlordane	20.000	18.888	5.6	94	0.00
11		Endosulfan I	20.000	18.463	7.7	92	0.00
12		4,4'-DDE	20.000	19.909	0.5	98	0.00
13		Dieldrin	20.000	18.443	7.8	91	0.00
14		Endrin	20.000	18.546	7.3	95	0.00
15		4,4'-DDD	20.000	19.403	3.0	96	0.00
16		Endosulfan II	20.000	17.833	10.8	91	0.00
17		4,4'-DDT	20.000	16.805	16.0	86	0.00
18		Endrin Aldehyde	20.000	16.559	17.2	87	0.00
19		Endosulfan Sulfate	20.000	17.514	12.4	89	0.00
20		Methoxychlor	20.000	17.867	10.7	88	0.00
21		Endrin Ketone	20.000	18.063	9.7	91	0.00
22	S	Decachlorobiphenyl	20.000	17.108	14.5	88	0.00

Signal #2

1	S	2,4,5,6-Tetrachloro-M-Xyl	20.000	20.502	-2.5	102	0.00
2		alpha-BHC	20.000	21.014	-5.1	106	0.00
3		gamma-BHC	20.000	21.458	-7.3	106	0.00
4		beta-BHC	20.000	20.850	-4.3	103	0.00
5		delta-BHC	20.000	21.642	-8.2	108	0.00
6		Heptachlor	20.000	20.349	-1.7	104	0.00
7		Aldrin	20.000	19.624	1.9	105	0.00
8		Heptachlor Epoxide	20.000	19.885	0.6	105	0.00
9		gamma-Chlordane	20.000	20.910	-4.6	109	0.00
10		alpha-Chlordane	20.000	19.725	1.4	107	0.00
11		Endosulfan I	20.000	20.308	-1.5	107	0.00
12		4,4'-DDE	20.000	20.595	-3.0	110	0.00
13		Dieldrin	20.000	20.135	-0.7	107	0.00
14		Endrin	20.000	19.943	0.3	109	0.00
15		4,4'-DDD	20.000	19.723	1.4	110	0.00
16		Endosulfan II	20.000	20.952	-4.8	108	0.00

Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81092.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 23 Mar 2021 14:41 (#1); 23 Mar 2021 15:07 (#2)
Operator : ECL
Sample   : S1C0442-CCV1
Misc   : 1
ALS Vial : 2   Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 23 16:28:38 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Tue Mar 23 16:28:03 2021
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :
InstName : HP15

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 20%   Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
17		4,4'-DDT	20.000	19.743	1.3	112	0.00
18		Endrin Aldehyde	20.000	18.960	5.2	108	0.00
19		Endosulfan Sulfate	20.000	19.947	0.3	111	0.00
20		Methoxychlor	20.000	20.483	-2.4	113	0.00
21		Endrin Ketone	20.000	20.261	-1.3	103	0.00
22	S	Decachlorobiphenyl	20.000	19.414	2.9	108	0.00

Evaluate Continuing Calibration Report - Not Founds

Signal #2

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81093.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 16:30 (#1); 23 Mar 2021 17:07 (#2)
Operator : ECL
Sample : S1C0442-CVT1
Misc : 1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Mar 24 11:41:30 2021
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX : March 10, 2021
QLast Update : Tue Mar 23 17:32:58 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

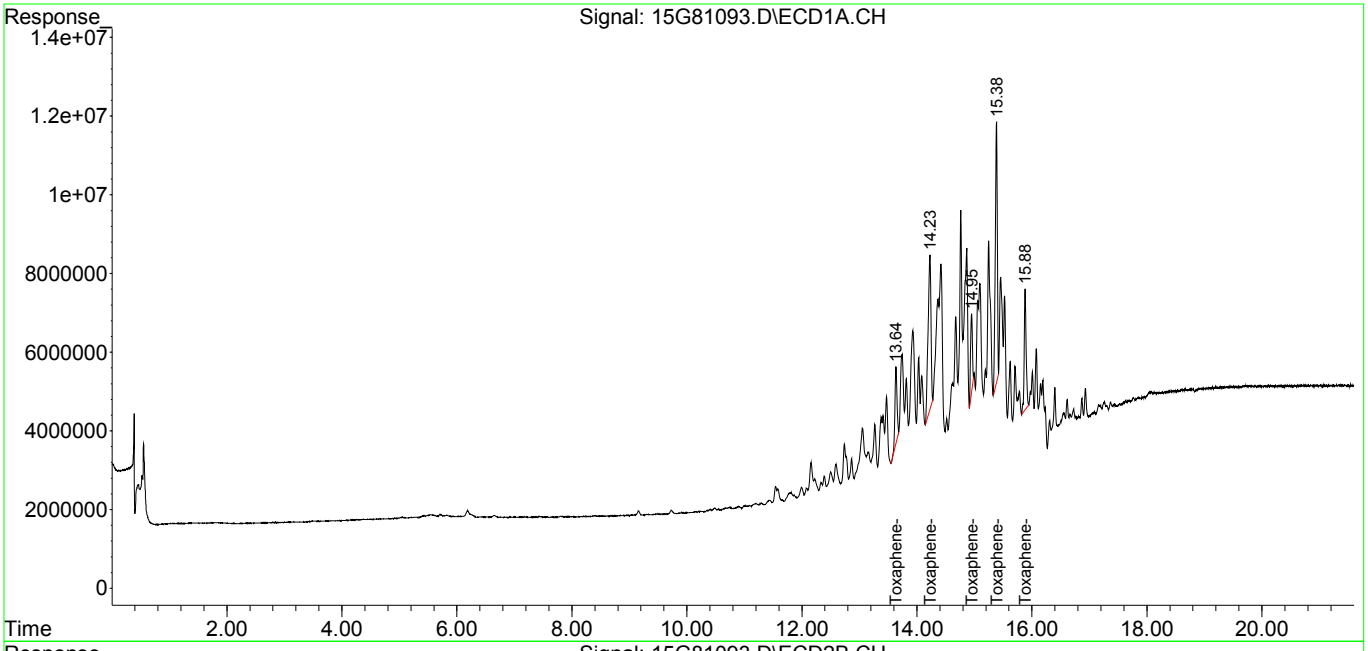
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	Target Compounds						
1)	L1 Toxaphene-1	13.64	14.40	48711622	5319000	500.866	488.443
2)	L1 Toxaphene-2	14.23	15.06	137.6E6	12747989	469.711	508.356
3)	L1 Toxaphene-3	14.95	15.55	43093272	16076632	424.467	436.851
4)	L1 Toxaphene-4	15.38	16.25	162.1E6	20694259	460.247	498.520
5)	L1 Toxaphene-5	15.88	16.73	71663111	8504786	445.970	546.353
	Sum Toxaphene-1			463.2E6	63342667	2301.260	2478.523
Average	Toxaphene-1					460.252	495.705

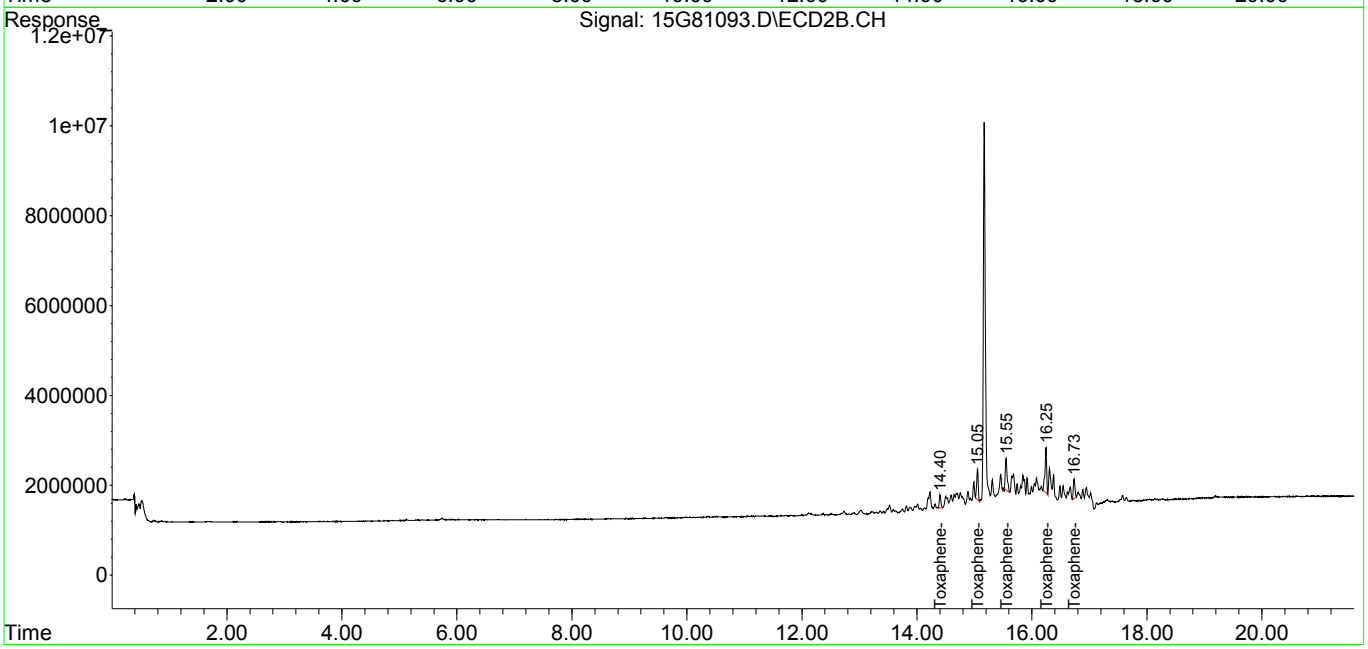
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81093.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 16:30 (#1); 23 Mar 2021 17:07 (#2)
Operator : ECL
Sample : S1C0442-CVT1
Misc : 1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Mar 24 11:41:30 2021
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX : March 10, 2021
QLast Update : Tue Mar 23 17:32:58 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15





Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81093.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 23 Mar 2021 16:30 (#1); 23 Mar 2021 17:07 (#2)
Operator : ECL
Sample   : S1C0442-CVT1
Misc   : 1
ALS Vial : 3   Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Mar 24 11:41:30 2021
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX : March 10, 2021
QLast Update : Tue Mar 23 17:32:58 2021
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :
InstName : HP15

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20%   Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1 L1	Toxaphene-1	97.255	97.423 E3	-0.2	97	0.00
2 L1	Toxaphene-2	292.937	275.192 E3	6.1	93	0.00
3 L1	Toxaphene-3	101.523	86.187 E3	15.1	87	0.00
4 L1	Toxaphene-4	352.195	324.194 E3	8.0	88	0.00
5 L1	Toxaphene-5	160.691	143.326 E3	10.8	83	0.00

Signal #2

1 L1	Toxaphene-1	10.890	10.638 E3	2.3	99	0.00
2 L1	Toxaphene-2	25.077	25.496 E3	-1.7	102	-0.01
3 L1	Toxaphene-3	36.801	32.153 E3	12.6	91	0.00
4 L1	Toxaphene-4	41.511	41.389 E3	0.3	98	0.00
5 L1	Toxaphene-5	15.566	17.010 E3	-9.3	100	0.00

Evaluate Continuing Calibration Report - Not Founds

Signal #2

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81094.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 17:07 (#1); 23 Mar 2021 17:33 (#2)
Operator : ECL
Sample : S1C0442-ARC1
Misc : 1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 24 11:44:21 2021
Quant Method : C:\MSDCHEM\1\METHODS\1660.M
Quant Title : HP15 1660 CALIBRATION March 10, 2021
QLast Update : Thu Mar 11 11:44:33 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

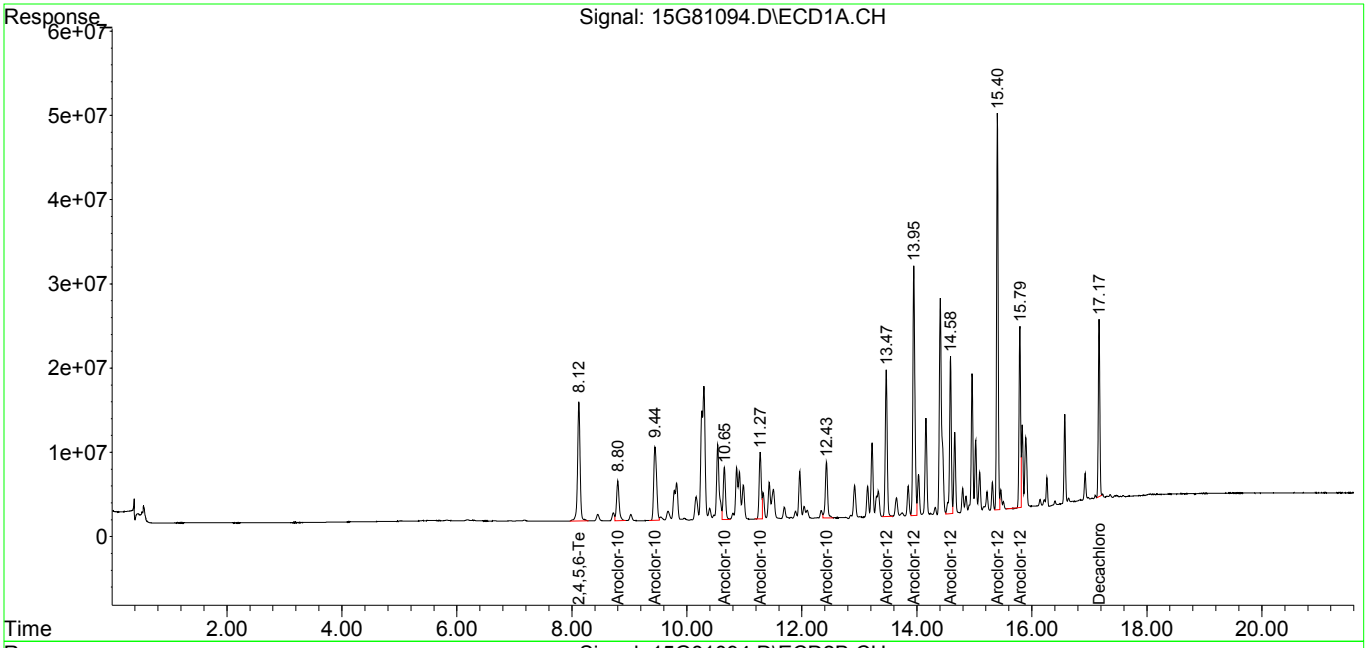
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1) S	2,4,5,6-Tetrachl	8.12	8.34	429.8E6	45562382	21.999	25.486
	Spiked Amount 20.000	Range 30 - 132		Recovery =		110.00%	127.43%
12) S	Decachlorobiphen	17.17	18.18	383.2E6	48830662	20.360	25.517
	Spiked Amount 20.000	Range 36 - 144		Recovery =		101.80%	127.58%
	Target Compounds						
2) L1	Aroclor-1016-1	8.80	9.36	145.5E6	16318614	427.970	541.925
3) L1	Aroclor-1016-2	9.44	10.17	304.2E6	28445011	442.387	357.413
4) L1	Aroclor-1016-3	10.65	11.34	171.5E6	33468661	447.265	551.657
5) L1	Aroclor-1016-4	11.27	11.80	206.5E6	19951990	460.649	525.062
6) L1	Aroclor-1016-5	12.43	12.24	182.9E6	27442379	452.984	509.488
	Sum Aroclor-1016-1			1010.6E6	125.6E6	2231.256	2485.544
Average	Aroclor-1016-1					446.251	497.109
7) L2	Aroclor-1260-1	13.47	14.52	406.3E6	55152160	442.766	474.266
8) L2	Aroclor-1260-2	13.95	14.82	722.6E6	70029284	439.396	511.481
9) L2	Aroclor-1260-3	14.58	15.47	401.6E6	50670082	430.483	462.542
10) L2	Aroclor-1260-4	15.40	15.88	888.9E6	49079645	419.596	513.044
11) L2	Aroclor-1260-5	15.79	16.18	414.2E6	109.9E6	414.190	513.928
	Sum Aroclor-1260-1			2833.6E6	334.8E6	2146.431	2475.262
Average	Aroclor-1260-1					429.286	495.052

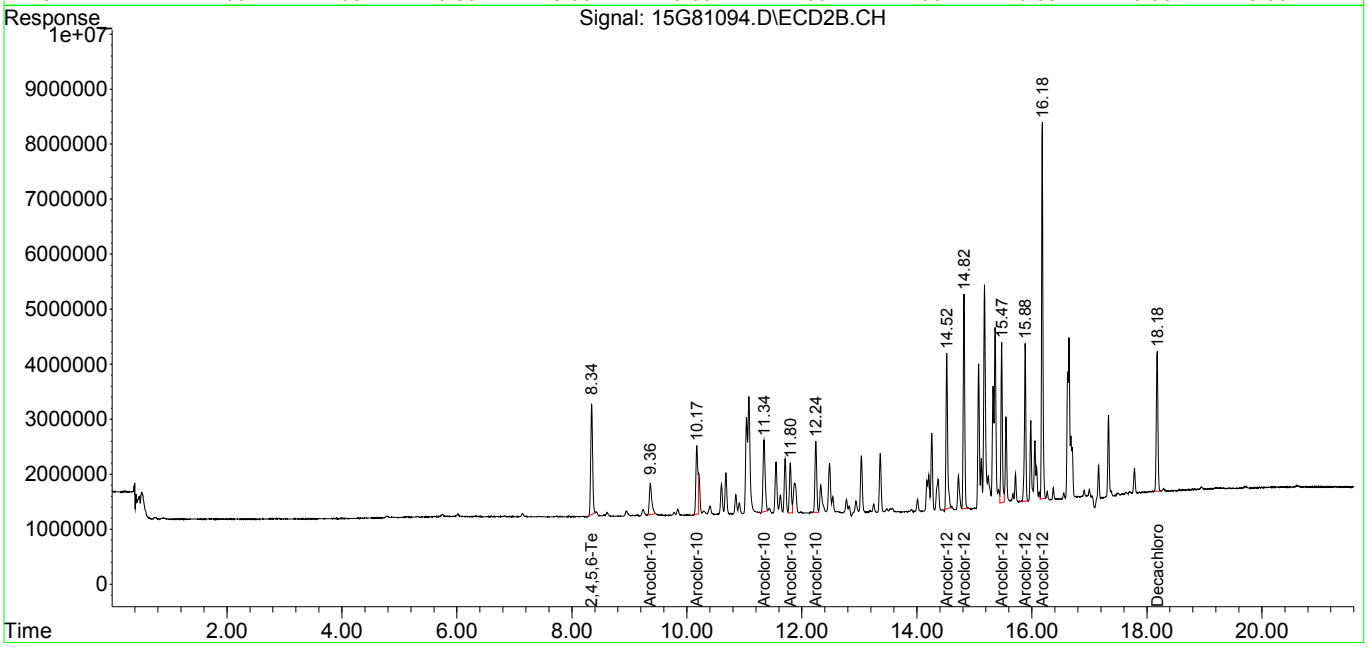
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81094.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 17:07 (#1); 23 Mar 2021 17:33 (#2)
Operator : ECL
Sample : S1C0442-ARC1
Misc : 1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 24 11:44:21 2021
Quant Method : C:\MSDCHEM\1\METHODS\1660.M
Quant Title : HP15 1660 CALIBRATION March 10, 2021
QLast Update : Thu Mar 11 11:44:33 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15





Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81105.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 21:53 (#1); 23 Mar 2021 22:18 (#2)
Operator : ECL
Sample : S1C0442-CCV2
Misc : 1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 24 08:21:26 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Wed Mar 24 08:18:44 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

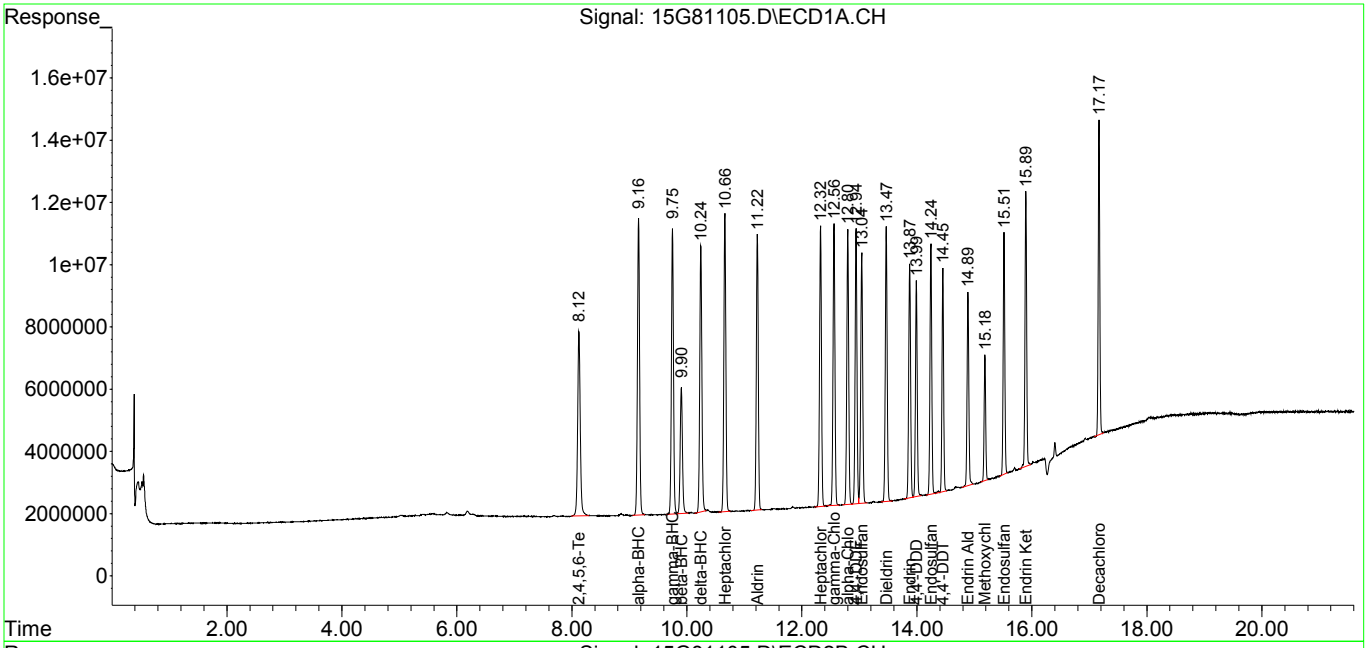
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1) S	2,4,5,6-Tetrachl	8.12	8.34	186.5E6	22744680	9.187	10.790
	Spiked Amount 20.000	Range 30 - 132		Recovery =		45.93%	53.95%
22) S	Decachlorobiphen	17.17	18.18	188.2E6	23778127	9.108	10.204
	Spiked Amount 20.000	Range 36 - 144		Recovery =		45.54%	51.02%
	Target Compounds						
2)	alpha-BHC	9.16	9.64	245.5E6	27215323	9.023	10.458
3)	gamma-BHC	9.75	10.39	228.8E6	27058550	8.222	10.825
4)	beta-BHC	9.90	10.54	110.8E6	14551606	9.801	11.055
5)	delta-BHC	10.24	11.16	219.7E6	26854464	9.106	10.771
6)	Heptachlor	10.66	11.29	232.0E6	29911121	9.319	10.594
7)	Aldrin	11.22	11.95	209.5E6	26005297	8.990	10.195
8)	Heptachlor Epoxi	12.32	13.05	210.6E6	27254754	9.254	10.517
9)	gamma-Chlordane	12.56	13.40	208.1E6	26692072	9.104	11.067
10)	alpha-Chlordane	12.80	13.68	201.5E6	26363683	9.420	10.452
11)	Endosulfan I	13.04	13.79	189.1E6	24517564	9.149	10.774
12)	4,4'-DDE	12.94	13.96	197.6E6	24145819	9.460	10.739
13)	Dieldrin	13.47	14.27	198.4E6	24926080	8.967	10.457
14)	Endrin	13.87	14.77	171.7E6	22710803	9.349	10.613
15)	4,4'-DDD	13.99	14.90	146.4E6	19177736	9.527	10.465
16)	Endosulfan II	14.24	15.08	173.3E6	22990225	8.938	10.933
17)	4,4'-DDT	14.45	15.36	140.8E6	19826170	7.656	9.792
18)	Endrin Aldehyde	14.89	15.56	131.6E6	18211677	8.374	10.124
19)	Endosulfan Sulfa	15.52	15.92	150.6E6	21970392	8.799	10.705
20)	Methoxychlor	15.18	16.26	75393696	12369072	8.573	10.750
21)	Endrin Ketone	15.90	16.62	178.5E6	24258331	8.889	10.589

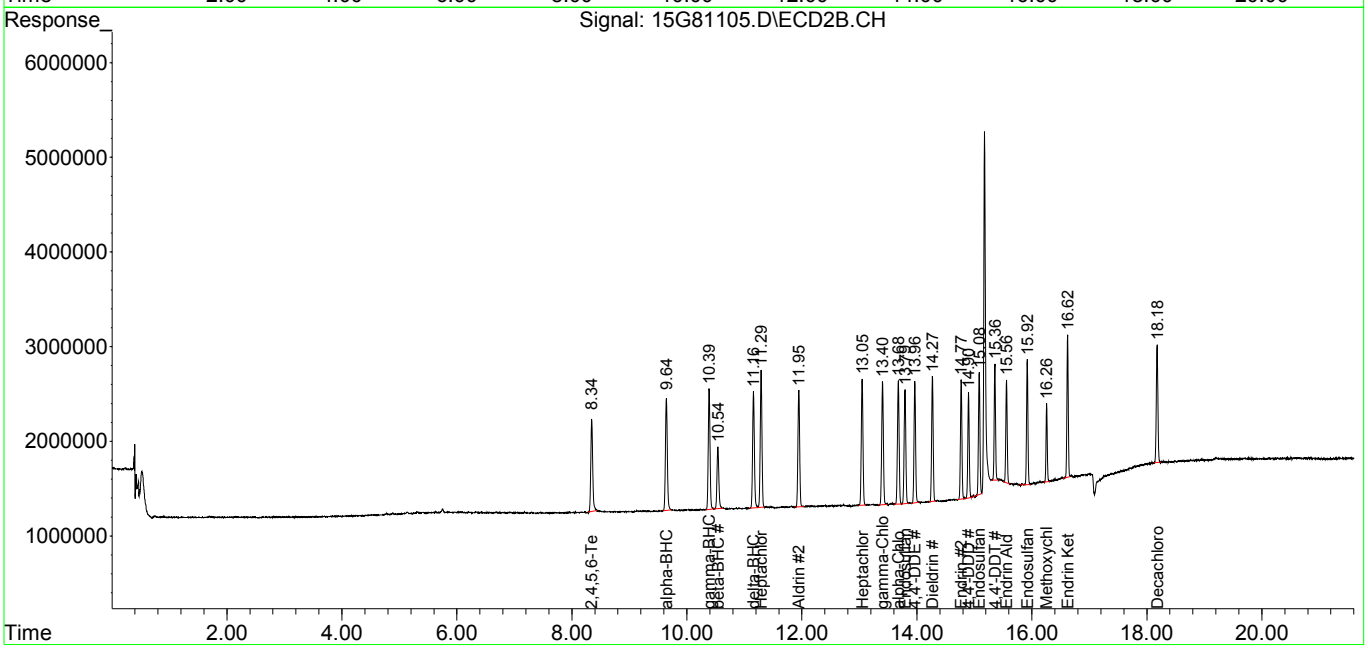
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81105.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 21:53 (#1); 23 Mar 2021 22:18 (#2)
Operator : ECL
Sample : S1C0442-CCV2
Misc : 1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 24 08:21:26 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Wed Mar 24 08:18:44 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15





Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81105.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 21:53 (#1); 23 Mar 2021 22:18 (#2)
Operator : ECL
Sample : S1C0442-CCV2
Misc : 1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 24 08:21:26 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Wed Mar 24 08:18:44 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1	S	2,4,5,6-Tetrachloro-M-Xylen	10.000	9.187	8.1	92	0.00
2		alpha-BHC	10.000	9.023	9.8	100	0.00
3		gamma-BHC	10.000	8.222	17.8	95	0.00
4		beta-BHC	10.000	9.801	2.0	96	0.00
5		delta-BHC	10.000	9.106	8.9	93	0.00
6		Heptachlor	10.000	9.319	6.8	96	0.00
7		Aldrin	10.000	8.990	10.1	93	0.00
8		Heptachlor Epoxide	10.000	9.254	7.5	94	0.00
9		gamma-Chlordane	10.000	9.104	9.0	95	0.00
10		alpha-Chlordane	10.000	9.420	5.8	99	0.00
11		Endosulfan I	10.000	9.149	8.5	93	0.00
12		4,4'-DDE	10.000	9.460	5.4	97	0.00
13		Dieldrin	10.000	8.967	10.3	92	0.00
14		Endrin	10.000	9.349	6.5	97	0.00
15		4,4'-DDD	10.000	9.527	4.7	99	0.00
16		Endosulfan II	10.000	8.938	10.6	89	0.00
17		4,4'-DDT	10.000	7.656	23.4#	78	0.00
18		Endrin Aldehyde	10.000	8.374	16.3	86	0.00
19		Endosulfan Sulfate	10.000	8.799	12.0	89	0.00
20		Methoxychlor	10.000	8.573	14.3	83	0.00
21		Endrin Ketone	10.000	8.889	11.1	90	0.00
22	S	Decachlorobiphenyl	10.000	9.108	8.9	89	0.00

Signal #2

1	S	2,4,5,6-Tetrachloro-M-Xyl	10.000	10.790	-7.9	104	0.00
2		alpha-BHC	10.000	10.458	-4.6	106	0.00
3		gamma-BHC	10.000	10.825	-8.2	106	0.00
4		beta-BHC	10.000	11.055	-10.5	105	0.00
5		delta-BHC	10.000	10.771	-7.7	106	0.00
6		Heptachlor	10.000	10.594	-5.9	102	0.00
7		Aldrin	10.000	10.195	-2.0	100	0.00
8		Heptachlor Epoxide	10.000	10.517	-5.2	100	0.00
9		gamma-Chlordane	10.000	11.067	-10.7	106	0.00
10		alpha-Chlordane	10.000	10.452	-4.5	106	0.00
11		Endosulfan I	10.000	10.774	-7.7	105	0.00
12		4,4'-DDE	10.000	10.739	-7.4	105	0.00
13		Dieldrin	10.000	10.457	-4.6	103	0.00
14		Endrin	10.000	10.613	-6.1	107	0.00
15		4,4'-DDD	10.000	10.465	-4.6	106	0.00
16		Endosulfan II	10.000	10.933	-9.3	103	0.00

Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81105.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 23 Mar 2021 21:53 (#1); 23 Mar 2021 22:18 (#2)
Operator : ECL
Sample   : S1C0442-CCV2
Misc   : 1
ALS Vial : 15   Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 24 08:21:26 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Wed Mar 24 08:18:44 2021
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :
InstName : HP15

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 20%   Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
17		4,4'-DDT	10.000	9.792	2.1	101	0.00
18		Endrin Aldehyde	10.000	10.124	-1.2	104	0.00
19		Endosulfan Sulfate	10.000	10.705	-7.1	106	0.00
20		Methoxychlor	10.000	10.750	-7.5	101	0.00
21		Endrin Ketone	10.000	10.589	-5.9	102	0.00
22	S	Decachlorobiphenyl	10.000	10.204	-2.0	95	0.00

Evaluate Continuing Calibration Report - Not Founds

Signal #2

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81106.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 22:18 (#1); 23 Mar 2021 22:45 (#2)
Operator : ECL
Sample : S1C0442-CVT2
Misc : 1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Mar 24 11:40:37 2021
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX : March 10, 2021
QLast Update : Tue Mar 23 17:32:58 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

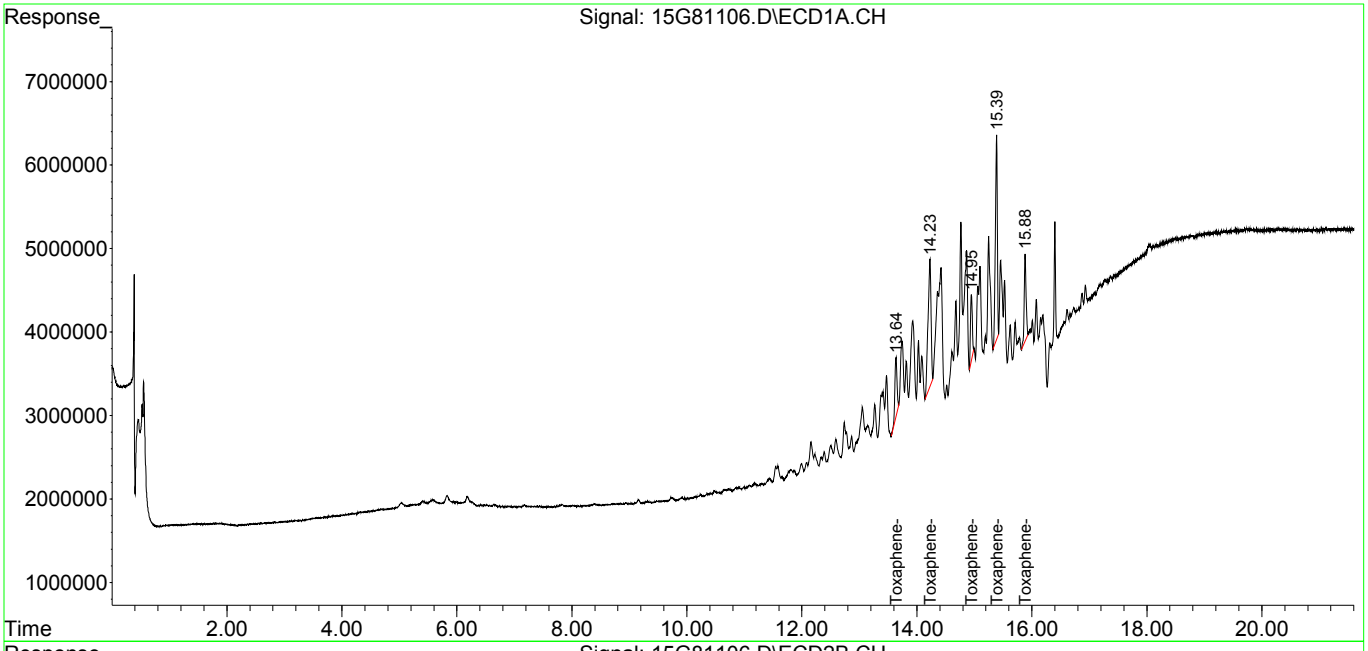
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L	
	Target Compounds							
1)	L1 Toxaphene-1	13.64	14.41	18278992	2090157	187.950	191.939	
2)	L1 Toxaphene-2	14.23	15.06	55499910	5093204	189.460	203.104	
3)	L1 Toxaphene-3	14.95	15.55	17359594	6563577	170.991	178.352	
4)	L1 Toxaphene-4	15.39	16.25	58142127	8323032	165.085	200.500	
5)	L1 Toxaphene-5	15.88	16.73	23761967	3311643	147.874	212.742	#
	Sum Toxaphene-1			173.0E6	25381614	861.360	986.637	
Average	Toxaphene-1					172.272	197.327	

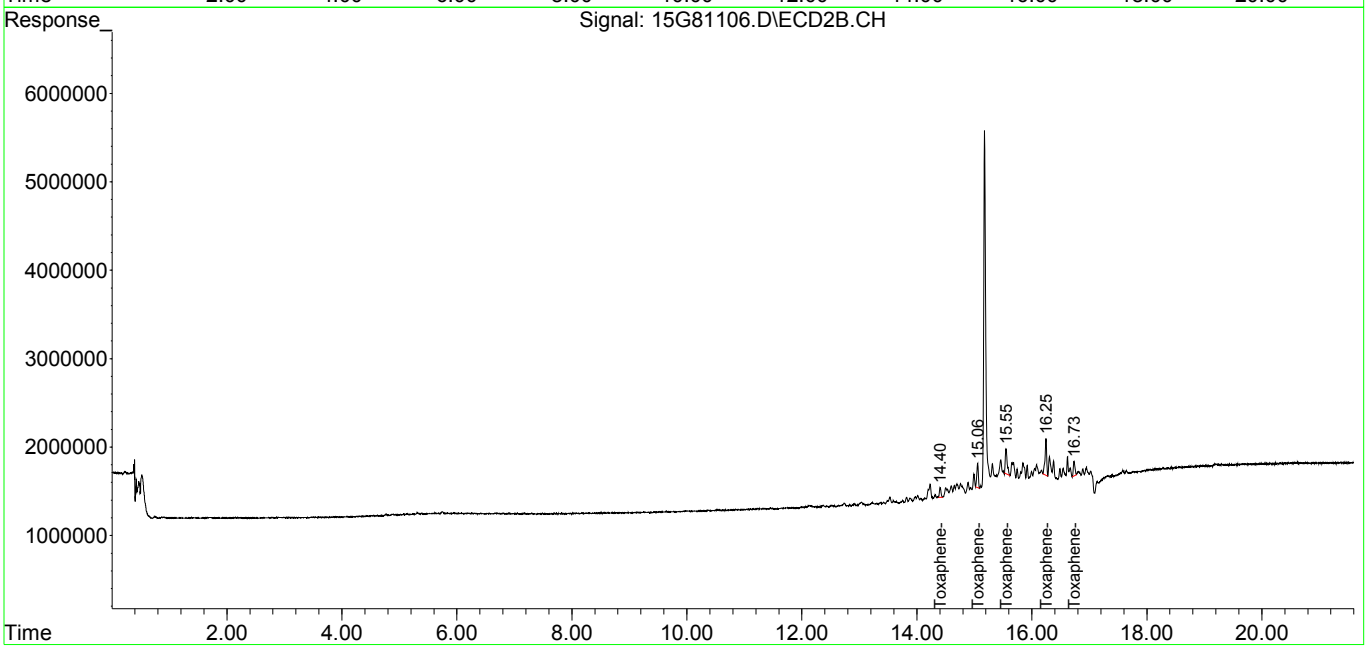
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81106.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 22:18 (#1); 23 Mar 2021 22:45 (#2)
Operator : ECL
Sample : S1C0442-CVT2
Misc : 1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Mar 24 11:40:37 2021
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX : March 10, 2021
QLast Update : Tue Mar 23 17:32:58 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15





Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81106.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 23 Mar 2021 22:18 (#1); 23 Mar 2021 22:45 (#2)
Operator : ECL
Sample   : S1C0442-CVT2
Misc   : 1
ALS Vial : 16   Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Mar 24 11:40:37 2021
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX : March 10, 2021
QLast Update : Tue Mar 23 17:32:58 2021
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :
InstName : HP15

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20%   Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1 L1	Toxaphene-1	97.255	91.395 E3	6.0	98	0.00
2 L1	Toxaphene-2	292.937	277.500 E3	5.3	100	0.00
3 L1	Toxaphene-3	101.523	86.798 E3	14.5	94	0.00
4 L1	Toxaphene-4	352.195	290.711 E3	17.5	87	0.00
5 L1	Toxaphene-5	160.691	118.810 E3	26.1#	73	0.00

Signal #2

1 L1	Toxaphene-1	10.890	10.451 E3	4.0	95	0.00
2 L1	Toxaphene-2	25.077	25.466 E3	-1.6	106	0.00
3 L1	Toxaphene-3	36.801	32.818 E3	10.8	98	0.00
4 L1	Toxaphene-4	41.511	41.615 E3	-0.3	102	0.00
5 L1	Toxaphene-5	15.566	16.558 E3	-6.4	108	0.00

Evaluate Continuing Calibration Report - Not Founds

Signal #2

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81117.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 24 Mar 2021 3:04 (#1); 24 Mar 2021 3:30 (#2)
Operator : ECL
Sample : S1C0442-CCV3
Misc : 1
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 24 10:34:03 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Wed Mar 24 08:18:44 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

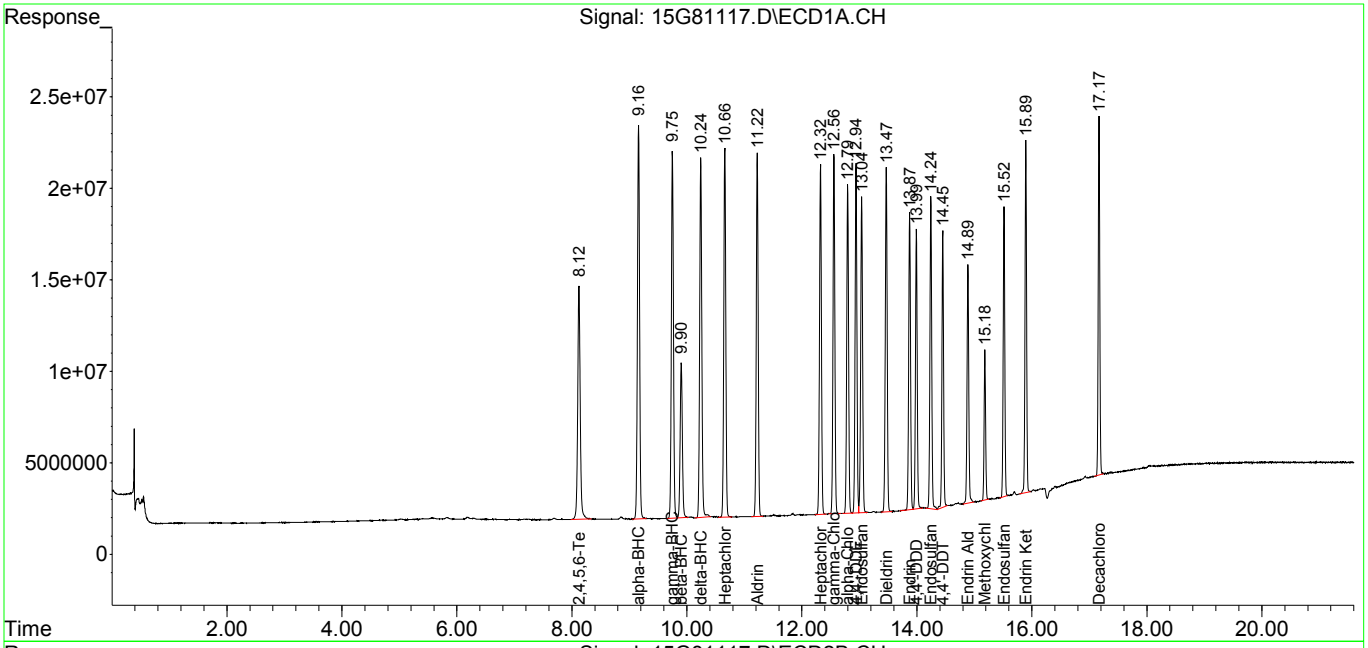
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	System Monitoring Compounds						
1) S	2,4,5,6-Tetrachl	8.12	8.34	387.5E6	47396864	19.090	22.485
	Spiked Amount 20.000	Range 30 - 132		Recovery =		95.45%	112.43%
22) S	Decachlorobiphen	17.17	18.18	363.9E6	43436463	17.613	18.640
	Spiked Amount 20.000	Range 36 - 144		Recovery =		88.06%	93.20%
	Target Compounds						
2)	alpha-BHC	9.16	9.64	554.2E6	60253468	20.365	23.154
3)	gamma-BHC	9.75	10.39	504.6E6	58691501	17.156	23.481
4)	beta-BHC	9.90	10.54	225.9E6	29450785	19.977	22.375
5)	delta-BHC	10.24	11.16	506.8E6	57178608	17.758	22.934
6)	Heptachlor	10.66	11.29	492.0E6	61657860	19.760	21.837
7)	Aldrin	11.22	11.95	458.4E6	53542016	19.671	20.990
8)	Heptachlor Epoxi	12.32	13.05	441.5E6	55192701	19.395	21.297
9)	gamma-Chlordane	12.56	13.40	441.1E6	52016540	19.302	21.567
10)	alpha-Chlordane	12.80	13.68	403.8E6	51122826	18.879	20.268
11)	Endosulfan I	13.04	13.79	395.9E6	47743444	19.157	20.981
12)	4,4'-DDE	12.94	13.96	419.3E6	46338435	20.078	20.610
13)	Dieldrin	13.47	14.27	427.0E6	49242068	19.297	20.659
14)	Endrin	13.87	14.77	358.1E6	43846648	19.497	20.490
15)	4,4'-DDD	13.99	14.90	317.9E6	35741784	20.685	19.504
16)	Endosulfan II	14.24	15.08	367.9E6	43556344	18.975	21.021
17)	4,4'-DDT	14.45	15.36	299.6E6	37570516	16.288	18.556
18)	Endrin Aldehyde	14.89	15.56	269.1E6	33948360	17.127	18.872
19)	Endosulfan Sulfa	15.52	15.92	305.3E6	40328592	17.833	19.649
20)	Methoxychlor	15.18	16.26	147.1E6	22060032	16.721	19.172
21)	Endrin Ketone	15.90	16.62	367.5E6	45081554	18.302	20.198

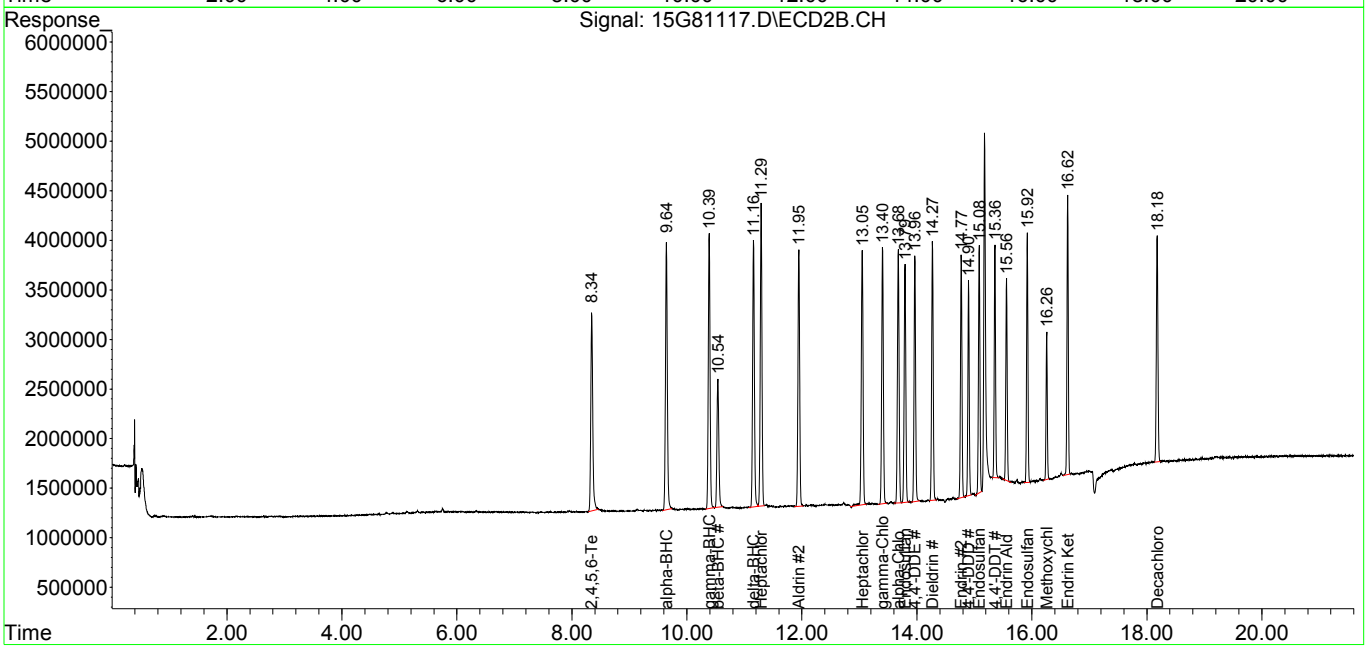
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81117.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 24 Mar 2021 3:04 (#1); 24 Mar 2021 3:30 (#2)
Operator : ECL
Sample : S1C0442-CCV3
Misc : 1
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 24 10:34:03 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Wed Mar 24 08:18:44 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15





Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81117.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 24 Mar 2021 3:04 (#1); 24 Mar 2021 3:30 (#2)
Operator : ECL
Sample : S1C0442-CCV3
Misc : 1
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 24 10:34:03 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Wed Mar 24 08:18:44 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1	S	2,4,5,6-Tetrachloro-M-Xylen	20.000	19.090	4.6	95	0.00
2		alpha-BHC	20.000	20.365	-1.8	96	0.00
3		gamma-BHC	20.000	17.156	14.2	97	0.00
4		beta-BHC	20.000	19.977	0.1	98	0.00
5		delta-BHC	20.000	17.758	11.2	98	0.00
6		Heptachlor	20.000	19.760	1.2	98	0.00
7		Aldrin	20.000	19.671	1.6	97	0.00
8		Heptachlor Epoxide	20.000	19.395	3.0	96	0.00
9		gamma-Chlordane	20.000	19.302	3.5	97	0.00
10		alpha-Chlordane	20.000	18.879	5.6	93	0.00
11		Endosulfan I	20.000	19.157	4.2	96	0.00
12		4,4'-DDE	20.000	20.078	-0.4	99	0.00
13		Dieldrin	20.000	19.297	3.5	96	0.00
14		Endrin	20.000	19.497	2.5	100	0.00
15		4,4'-DDD	20.000	20.685	-3.4	102	0.00
16		Endosulfan II	20.000	18.975	5.1	96	0.00
17		4,4'-DDT	20.000	16.288	18.6	83	0.00
18		Endrin Aldehyde	20.000	17.127	14.4	90	0.00
19		Endosulfan Sulfate	20.000	17.833	10.8	91	0.00
20		Methoxychlor	20.000	16.721	16.4	82	0.00
21		Endrin Ketone	20.000	18.302	8.5	92	0.00
22	S	Decachlorobiphenyl	20.000	17.613	11.9	90	0.00

Signal #2

1	S	2,4,5,6-Tetrachloro-M-Xyl	20.000	22.485	-12.4	112	0.00
2		alpha-BHC	20.000	23.154	-15.8	117	0.00
3		gamma-BHC	20.000	23.481	-17.4	116	0.00
4		beta-BHC	20.000	22.375	-11.9	111	0.00
5		delta-BHC	20.000	22.934	-14.7	114	0.00
6		Heptachlor	20.000	21.837	-9.2	111	0.00
7		Aldrin	20.000	20.990	-4.9	112	0.00
8		Heptachlor Epoxide	20.000	21.297	-6.5	113	0.00
9		gamma-Chlordane	20.000	21.567	-7.8	112	0.00
10		alpha-Chlordane	20.000	20.268	-1.3	110	0.00
11		Endosulfan I	20.000	20.981	-4.9	111	0.00
12		4,4'-DDE	20.000	20.610	-3.0	110	0.00
13		Dieldrin	20.000	20.659	-3.3	109	0.00
14		Endrin	20.000	20.490	-2.4	112	0.00
15		4,4'-DDD	20.000	19.504	2.5	109	0.00
16		Endosulfan II	20.000	21.021	-5.1	108	0.00

Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81117.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 24 Mar 2021   3:04 (#1); 24 Mar 2021   3:30 (#2)
Operator : ECL
Sample   : S1C0442-CCV3
Misc   : 1
ALS Vial : 27   Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 24 10:34:03 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Wed Mar 24 08:18:44 2021
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :
InstName : HP15

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 20%   Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
17		4,4'-DDT	20.000	18.556	7.2	105	0.00
18		Endrin Aldehyde	20.000	18.872	5.6	107	0.00
19		Endosulfan Sulfate	20.000	19.649	1.8	109	0.00
20		Methoxychlor	20.000	19.172	4.1	105	0.00
21		Endrin Ketone	20.000	20.198	-1.0	103	0.00
22	S	Decachlorobiphenyl	20.000	18.640	6.8	104	0.00

Evaluate Continuing Calibration Report - Not Founds

Signal #2

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81118.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 24 Mar 2021 3:30 (#1); 24 Mar 2021 3:56 (#2)
Operator : ECL
Sample : S1C0442-CVT3
Misc : 1
ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Mar 24 11:40:19 2021
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX : March 10, 2021
QLast Update : Tue Mar 23 17:32:58 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

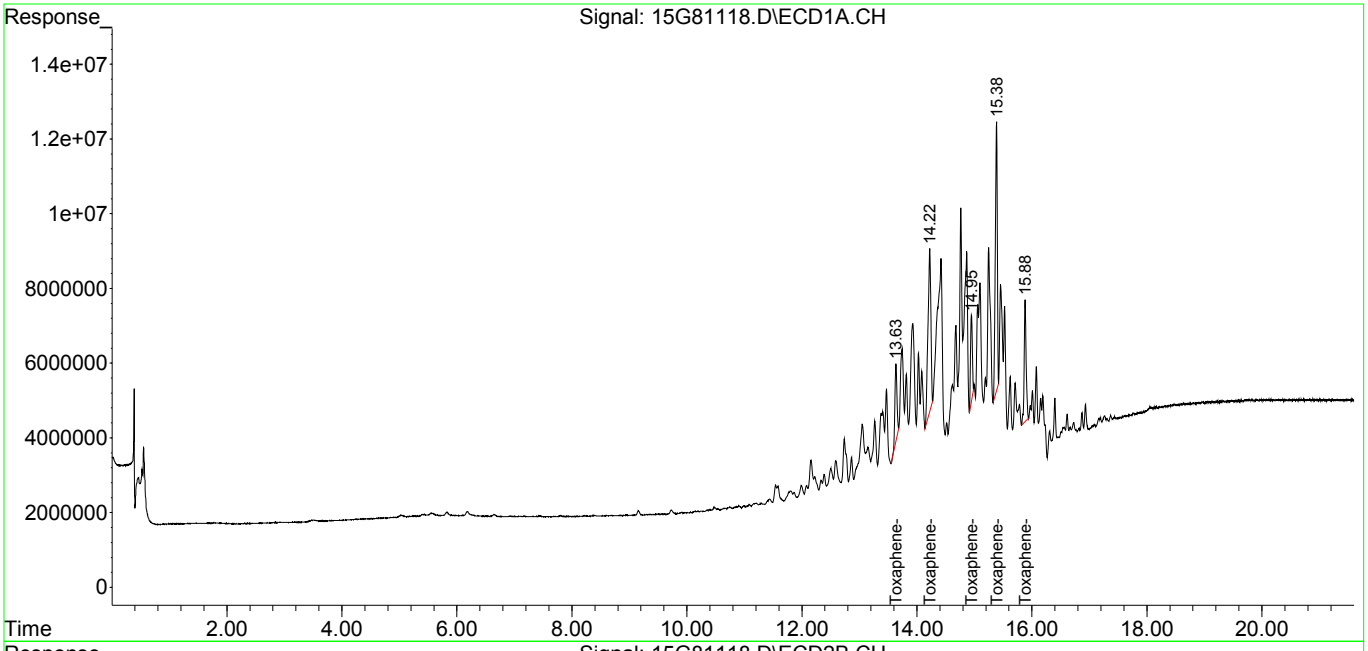
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L
	Target Compounds						
1)	L1 Toxaphene-1	13.64	14.41	51422994	5808976	528.746	533.438
2)	L1 Toxaphene-2	14.22	15.06	153.0E6	13415771	522.240	534.986
3)	L1 Toxaphene-3	14.95	15.55	50126616	19003176	493.745	516.374
4)	L1 Toxaphene-4	15.39	16.25	173.9E6	22580336	493.748	543.955
5)	L1 Toxaphene-5	15.88	16.73	77026240	9064676	479.345	582.320
	Sum Toxaphene-1			505.5E6	69872935	2517.823	2711.073
Average	Toxaphene-1					503.565	542.215

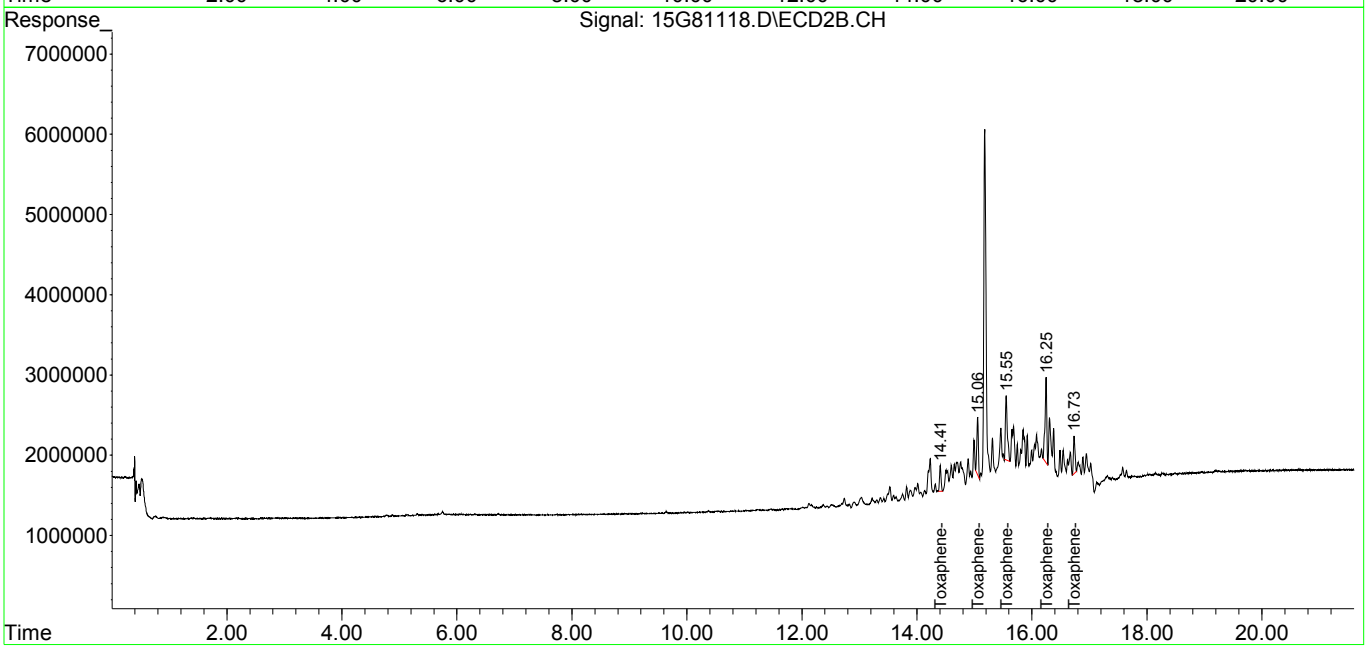
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81118.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 24 Mar 2021 3:30 (#1); 24 Mar 2021 3:56 (#2)
Operator : ECL
Sample : S1C0442-CVT3
Misc : 1
ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Mar 24 11:40:19 2021
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX : March 10, 2021
QLast Update : Tue Mar 23 17:32:58 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15





Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81118.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 24 Mar 2021   3:30 (#1); 24 Mar 2021   3:56 (#2)
Operator : ECL
Sample   : S1C0442-CVT3
Misc   : 1
ALS Vial : 28   Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Mar 24 11:40:19 2021
Quant Method : C:\MSDCHEM\1\METHODS\TOX.M
Quant Title : HP15 CALIBRATION 8081 TOX : March 10, 2021
QLast Update : Tue Mar 23 17:32:58 2021
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :
InstName : HP15

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20%   Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1 L1	Toxaphene-1	97.255	102.846 E3	-5.7	103	0.00
2 L1	Toxaphene-2	292.937	305.967 E3	-4.4	103	0.00
3 L1	Toxaphene-3	101.523	100.253 E3	1.3	101	0.00
4 L1	Toxaphene-4	352.195	347.791 E3	1.3	94	0.00
5 L1	Toxaphene-5	160.691	154.052 E3	4.1	89	0.00

Signal #2

1 L1	Toxaphene-1	10.890	11.618 E3	-6.7	108	0.00
2 L1	Toxaphene-2	25.077	26.832 E3	-7.0	108	0.00
3 L1	Toxaphene-3	36.801	38.006 E3	-3.3	107	0.00
4 L1	Toxaphene-4	41.511	45.161 E3	-8.8	107	0.00
5 L1	Toxaphene-5	15.566	18.129 E3	-16.5	107	0.00

Evaluate Continuing Calibration Report - Not Founds

Signal #2

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81126.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 24 Mar 2021 8:26 (#1); 24 Mar 2021 8:52 (#2)
Operator : ECL
Sample : S1C0442-CCV4
Misc : 1
ALS Vial : 36 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 24 10:34:28 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Wed Mar 24 08:18:44 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

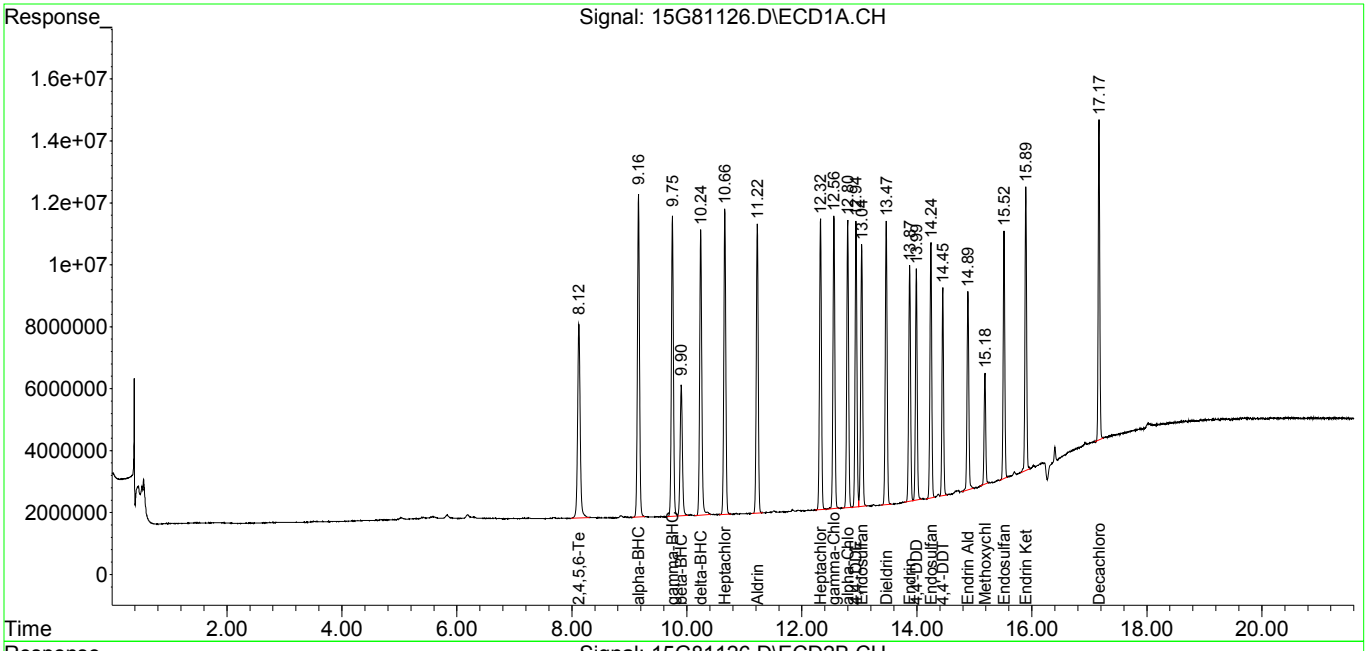
	Compound	RT#1	RT#2	Resp#1	Resp#2	UG/L	UG/L	
	System Monitoring Compounds							
1) S	2,4,5,6-Tetrachl	8.12	8.34	195.5E6	23808000	9.631	11.294	
	Spiked Amount 20.000	Range 30 - 132		Recovery =		48.16%	56.47%	
22) S	Decachlorobiphen	17.17	18.18	192.0E6	25034616	9.294	10.743	
	Spiked Amount 20.000	Range 36 - 144		Recovery =		46.47%	53.72%	
	Target Compounds							
2)	alpha-BHC	9.16	9.64	258.8E6	28552039	9.512	10.972	
3)	gamma-BHC	9.75	10.38	240.3E6	28266790	8.594	11.309	
4)	beta-BHC	9.90	10.54	115.4E6	14988916	10.208	11.388	
5)	delta-BHC	10.24	11.15	237.1E6	27341158	9.629	10.966	
6)	Heptachlor	10.66	11.29	236.2E6	30806272	9.488	10.911	
7)	Aldrin	11.22	11.94	220.8E6	26924448	9.476	10.555	
8)	Heptachlor Epoxi	12.32	13.05	220.3E6	28200450	9.677	10.882	
9)	gamma-Chlordane	12.56	13.40	218.4E6	27361974	9.555	11.345	
10)	alpha-Chlordane	12.80	13.67	209.4E6	27176941	9.790	10.774	
11)	Endosulfan I	13.04	13.79	198.0E6	25185512	9.582	11.068	
12)	4,4'-DDE	12.94	13.96	204.8E6	24913127	9.809	11.081	
13)	Dieldrin	13.47	14.27	207.7E6	25617048	9.387	10.747	
14)	Endrin	13.87	14.77	172.0E6	23455343	9.366	10.961	
15)	4,4'-DDD	13.99	14.90	155.9E6	19671296	10.144	10.735	
16)	Endosulfan II	14.24	15.08	179.8E6	23592459	9.273	11.228	
17)	4,4'-DDT	14.45	15.36	130.5E6	20304735	7.094	10.028	#
18)	Endrin Aldehyde	14.89	15.56	137.5E6	18943032	8.753	10.531	
19)	Endosulfan Sulfa	15.52	15.92	155.2E6	21885788	9.062	10.663	
20)	Methoxychlor	15.18	16.26	69595557	12532676	7.914	10.892	
21)	Endrin Ketone	15.89	16.62	183.0E6	24544196	9.113	10.721	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81126.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 24 Mar 2021 8:26 (#1); 24 Mar 2021 8:52 (#2)
Operator : ECL
Sample : S1C0442-CCV4
Misc : 1
ALS Vial : 36 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 24 10:34:28 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Wed Mar 24 08:18:44 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15



Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81126.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 24 Mar 2021 8:26 (#1); 24 Mar 2021 8:52 (#2)
Operator : ECL
Sample : S1C0442-CCV4
Misc : 1
ALS Vial : 36 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
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Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP15

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1	S	2,4,5,6-Tetrachloro-M-Xylen	10.000	9.631	3.7	97	0.00
2		alpha-BHC	10.000	9.512	4.9	106	0.00
3		gamma-BHC	10.000	8.594	14.1	99	0.00
4		beta-BHC	10.000	10.208	-2.1	100	0.00
5		delta-BHC	10.000	9.629	3.7	100	0.00
6		Heptachlor	10.000	9.488	5.1	98	0.00
7		Aldrin	10.000	9.476	5.2	98	0.00
8		Heptachlor Epoxide	10.000	9.677	3.2	98	0.00
9		gamma-Chlordane	10.000	9.555	4.5	99	0.00
10		alpha-Chlordane	10.000	9.790	2.1	103	0.00
11		Endosulfan I	10.000	9.582	4.2	97	0.00
12		4,4'-DDE	10.000	9.809	1.9	100	0.00
13		Dieldrin	10.000	9.387	6.1	97	0.00
14		Endrin	10.000	9.366	6.3	97	0.00
15		4,4'-DDD	10.000	10.144	-1.4	105	0.00
16		Endosulfan II	10.000	9.273	7.3	92	0.00
17		4,4'-DDT	10.000	7.094	29.1#	73	0.00
18		Endrin Aldehyde	10.000	8.753	12.5	90	0.00
19		Endosulfan Sulfate	10.000	9.062	9.4	92	0.00
20		Methoxychlor	10.000	7.914	20.9#	76	0.00
21		Endrin Ketone	10.000	9.113	8.9	93	0.00
22	S	Decachlorobiphenyl	10.000	9.294	7.1	91	0.00

Signal #2

1	S	2,4,5,6-Tetrachloro-M-Xyl	10.000	11.294	-12.9	109	0.00
2		alpha-BHC	10.000	10.972	-9.7	111	0.00
3		gamma-BHC	10.000	11.309	-13.1	111	0.00
4		beta-BHC	10.000	11.388	-13.9	108	0.00
5		delta-BHC	10.000	10.966	-9.7	108	0.00
6		Heptachlor	10.000	10.911	-9.1	105	0.00
7		Aldrin	10.000	10.555	-5.5	104	0.00
8		Heptachlor Epoxide	10.000	10.882	-8.8	103	0.00
9		gamma-Chlordane	10.000	11.345	-13.5	109	0.00
10		alpha-Chlordane	10.000	10.774	-7.7	109	0.00
11		Endosulfan I	10.000	11.068	-10.7	108	0.00
12		4,4'-DDE	10.000	11.081	-10.8	108	0.00
13		Dieldrin	10.000	10.747	-7.5	106	0.00
14		Endrin	10.000	10.961	-9.6	111	0.00
15		4,4'-DDD	10.000	10.735	-7.3	109	0.00
16		Endosulfan II	10.000	11.228	-12.3	106	0.00

Data Path : C:\MSDCHEM\1\DATA\032321\
Data File : 15G81126.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 24 Mar 2021   8:26 (#1); 24 Mar 2021   8:52 (#2)
Operator : ECL
Sample   : S1C0442-CCV4
Misc   : 1
ALS Vial : 36   Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: autoint2.e
Quant Time: Mar 24 10:34:28 2021
Quant Method : C:\MSDCHEM\1\METHODS\8081.M
Quant Title : 8081/608 CALIBRATION March 10, 2021
QLast Update : Wed Mar 24 08:18:44 2021
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :
InstName : HP15

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 20%   Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
17		4,4'-DDT	10.000	10.028	-0.3	103	0.00
18		Endrin Aldehyde	10.000	10.531	-5.3	108	0.00
19		Endosulfan Sulfate	10.000	10.663	-6.6	106	0.00
20		Methoxychlor	10.000	10.892	-8.9	102	0.00
21		Endrin Ketone	10.000	10.721	-7.2	103	0.00
22	S	Decachlorobiphenyl	10.000	10.743	-7.4	100	0.00

Evaluate Continuing Calibration Report - Not Founds

Signal #2

(#) = Out of Range SPCC's out = 0 CCC's out = 0

MICROBAC®

GC Semivolatiles
EPA 8151A

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

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FORM I:
GC Semivolatiles
EPA 8151A
RESULTS SUMMARY

Microbac Laboratories, Inc.
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Laboratory Report Number: M1C1317

CERTIFICATE OF ANALYSIS
FORM I

Client Project ID: Longhorn

Microbac Laboratories Inc., - Marietta, OH

Herbicides TCLP by GC/ECD

Client ID:	Soil IDW			**Collection Date:**	03/11/2021 10:00
Laboratory ID:	M1C1317-01	**PrePrep Method:**	1311 EX	**Prep Date:**	03/18/2021 14:06
Matrix:	Solid	**Prep Method:**	EPA 8151A	**Analyzed:**	03/23/2021 18:31
Batch / Sequence:	B1C1089 / S1C0441	**Analytical Method:**	EPA 8151A	**Calibration:**	21C0024
Instrument:	HP17	**Units:**	ug/L	**File ID:**	17G33705.D
Analyst:	ECL	**Dilution:**	1	**% Solids:**	87.31

Analyte	CAS Number	Result	DL	LOD	LOQ	Flag	Qual
2,4,5-TP (Silvex)	93-72-1	0.500	0.500	0.500	2.00	U	
2,4-D	94-75-7	5.00	5.00	5.00	20.0	U	

Surrogate	Recovery	Limits	Units	Q	Qualifier	
2,4-Dichlorophenylacetic acid	48.2	20-144	% Rec			

Notes and Definitions

DL: Detection Limit
LOD: Limit of Detection
LOQ: Limit of Quantitation
U: The analyte was analyzed for but was not detected above the reported quantitation limit. The quantitation limit has been adjusted for any dilution or concentration of the sample.
ug/L: Micrograms per Liter

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FORM II:
GC Semivolatiles
EPA 8151A
SURROGATE SUMMARY

Microbac Laboratories, Inc.
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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

SURROGATE STANDARD RECOVERY
FORM IIC

Instrument: HP17 **Method:** EPA 8151A

Sequence: S1C0266 **Calibration:** UNASSIGNED

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	Q
Initial Cal Check (S1C0266-ICV1)	Lab File ID: 17G33680.D	Analyzed: 03/13/21 14:54		
2,4-Dichlorophenylacetic acid	500	99.0	85 - 115	
2,4-Dichlorophenylacetic acid [2C]	500	99.4	85 - 115	
Calibration Check (S1C0266-CCV1)	Lab File ID: 17G33691.D	Analyzed: 03/13/21 19:41		
2,4-Dichlorophenylacetic acid	500	113	85 - 115	

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

SURROGATE STANDARD RECOVERY
FORM IIC

Instrument: HP17 **Method:** EPA 8151A

Sequence: S1C0441 **Calibration:** 21C0024

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	Q
Calibration Check (S1C0441-CCV1)	Lab File ID: 17G33700.D	Analyzed: 03/23/21 14:43		
2,4-Dichlorophenylacetic acid	500	96.7	85 - 115	
Blank (B1C1089-BLK1)	Lab File ID: 17G33701.D	Analyzed: 03/23/21 16:46		
2,4-Dichlorophenylacetic acid	50.0	48.3	20 - 144	
LCS (B1C1089-BS1)	Lab File ID: 17G33702.D	Analyzed: 03/23/21 17:12		
2,4-Dichlorophenylacetic acid	50.0	77.7	20 - 144	
LCS Dup (B1C1089-BSD1)	Lab File ID: 17G33703.D	Analyzed: 03/23/21 17:39		
2,4-Dichlorophenylacetic acid	50.0	79.2	20 - 144	
Soil IDW (M1C1317-01)	Lab File ID: 17G33705.D	Analyzed: 03/23/21 18:31		
2,4-Dichlorophenylacetic acid	50.0	48.2	20 - 144	
Blank (B1C1089-BLK2)	Lab File ID: 17G33707.D	Analyzed: 03/23/21 19:24		
2,4-Dichlorophenylacetic acid	50.0	54.3	20 - 144	
Blank (B1C1089-BLK3)	Lab File ID: 17G33708.D	Analyzed: 03/23/21 19:50		
2,4-Dichlorophenylacetic acid	50.0	51.0	20 - 144	
Calibration Check (S1C0441-CCV2)	Lab File ID: 17G33709.D	Analyzed: 03/23/21 20:16		
2,4-Dichlorophenylacetic acid	500	98.7	85 - 115	

* - Does not meet acceptance criteria.

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FORM III:
GC Semivolatiles
EPA 8151A
BS/BSD, MS/MSD, DUP

Microbac Laboratories, Inc.
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Laboratory Report Number: M1C1317

BLANK SPIKE / DUPLICATE (BS/BSD)

Client Project ID: Longhorn

FORM IIIB

Method:	EPA 8151A		**Blank Spike**	**Duplicate**
Batch:	B1C1089	**Spike ID:**	B1C1089-BS1	B1C1089-BSD1
Analyst:	ECL	**Prepared:**	03/18/21 14:06	03/18/21 14:06
Matrix:	Aqueous	**Analyzed:**	03/23/21 17:12	03/23/21 17:39
Units:	ug/L	**File ID:**	17G33702.D	17G33703.D
Instrument:	HP17	**Initial/Final:**	100mL/10mL	100mL/10mL
Calibration:	21C0024			

Analyte	BS Spiked	BS Found	BS %Rec	BSD Spiked	BSD Found	BSD %Rec	%RPD	%Rec Limts	RPD Limit	Q
2,4,5-TP (Silvex)	5.00	3.92	78.4	5.00	4.01	80.1	2.20	25 - 120	30	
2,4-D	50.0	50.5	101	50.0	48.6	97.1	3.98	20 - 110	30	

Surrogate	BS Spiked	BS Found	BS %Rec	BSD Spiked	BSD Found	BSD %Rec	%RPD	%Rec Limts	RPD Limit	Q
2,4-Dichlorophenylacetic acid	50.0	38.8	77.7	50.0	39.6	79.2		20 - 144		

* - Does not meet %Rec acceptance criteria.
\# - Does not meet RPD acceptance criteria.
NS - Analyte Not Spiked

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FORM IV:
GC Semivolatiles
EPA 8151A
METHOD BLANK SUMMARY

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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

METHOD BLANK SUMMARY
FORM IVA

Blank ID:	B1C1089-BLK1	**Batch:**	B1C1089
Blank File ID:	17G33701.D	**Instrument:**	HP17
Prepared:	03/18/2021 14:06	**Method:**	EPA 8151A
Analyzed:	03/23/2021 16:46	**Analyst:**	ECL

This Method Blank Applies To The Following Samples:

Client Sample ID	Laboratory Sample ID	Lab File ID	Time Analyzed
Blank	B1C1089-BLK1	17G33701.D	03/23/2021 16:46
LCS	B1C1089-BS1	17G33702.D	03/23/2021 17:12
LCS Dup	B1C1089-BSD1	17G33703.D	03/23/2021 17:39
Soil IDW	M1C1317-01	17G33705.D	03/23/2021 18:31
Blank	B1C1089-BLK2	17G33707.D	03/23/2021 19:24
Blank	B1C1089-BLK3	17G33708.D	03/23/2021 19:50

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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

METHOD BLANK SUMMARY
FORM IVA

Blank ID:	B1C1089-BLK2	**Batch:**	B1C1089
Blank File ID:	17G33707.D	**Instrument:**	HP17
Prepared:	03/18/2021 14:06	**Method:**	EPA 8151A
Analyzed:	03/23/2021 19:24	**Analyst:**	ECL

This Method Blank Applies To The Following Samples:

Client Sample ID	Laboratory Sample ID	Lab File ID	Time Analyzed
Blank	B1C1089-BLK1	17G33701.D	03/23/2021 16:46
LCS	B1C1089-BS1	17G33702.D	03/23/2021 17:12
LCS Dup	B1C1089-BSD1	17G33703.D	03/23/2021 17:39
Soil IDW	M1C1317-01	17G33705.D	03/23/2021 18:31
Blank	B1C1089-BLK2	17G33707.D	03/23/2021 19:24
Blank	B1C1089-BLK3	17G33708.D	03/23/2021 19:50

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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

METHOD BLANK SUMMARY
FORM IVA

Blank ID:	B1C1089-BLK3	**Batch:**	B1C1089
Blank File ID:	17G33708.D	**Instrument:**	HP17
Prepared:	03/18/2021 14:06	**Method:**	EPA 8151A
Analyzed:	03/23/2021 19:50	**Analyst:**	ECL

This Method Blank Applies To The Following Samples:

Client Sample ID	Laboratory Sample ID	Lab File ID	Time Analyzed
Blank	B1C1089-BLK1	17G33701.D	03/23/2021 16:46
LCS	B1C1089-BS1	17G33702.D	03/23/2021 17:12
LCS Dup	B1C1089-BSD1	17G33703.D	03/23/2021 17:39
Soil IDW	M1C1317-01	17G33705.D	03/23/2021 18:31
Blank	B1C1089-BLK2	17G33707.D	03/23/2021 19:24
Blank	B1C1089-BLK3	17G33708.D	03/23/2021 19:50

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

METHOD BLANK
FORM IVB

Sample ID:	B1C1089-BLK1	**Prep Date:**	03/18/21 14:06	**Matrix:**	Aqueous
Instrument:	HP17	**Analyzed:**	03/23/21 16:46	**Method:**	EPA 8151A
File ID:	17G33701.D	**Sequence:**	S1C0441	**Analyst:**	ECL
Batch:	B1C1089	**Units:**	ug/L	**Calibration:**	21C0024

Analyte	Result	DL	LOD	LOQ	Dilution	Flag	Q
2,4,5-TP (Silvex)	0.500	0.500	0.500	2.00	1	U	
2,4-D	5.00	5.00	5.00	20.0	1	U	

Surrogate	Recovery	Limits	PASS/FAIL
2,4-Dichlorophenylacetic acid	48.3	20 - 144	PASS

Notes and Definitions

* - Detected in the associated method Blank at a concentration >= RL

U: The analyte was analyzed for but was not detected above the reported quantitation limit. The quantitation limit has been adjusted for any dilution or concentration of the sample.

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

METHOD BLANK
FORM IVB

Sample ID:	B1C1089-BLK2	**Prep Date:**	03/18/21 14:06	**Matrix:**	Aqueous
Instrument:	HP17	**Analyzed:**	03/23/21 19:24	**Method:**	EPA 8151A
File ID:	17G33707.D	**Sequence:**	S1C0441	**Analyst:**	ECL
Batch:	B1C1089	**Units:**	ug/L	**Calibration:**	21C0024

Analyte	Result	DL	LOD	LOQ	Dilution	Flag	Q
2,4,5-TP (Silvex)	0.500	0.500	0.500	2.00	1	U	
2,4-D	5.00	5.00	5.00	20.0	1	U	

Surrogate	Recovery	Limits	PASS/FAIL
2,4-Dichlorophenylacetic acid	54.3	20 - 144	PASS

Notes and Definitions

* - Detected in the associated method Blank at a concentration >= RL

U: The analyte was analyzed for but was not detected above the reported quantitation limit. The quantitation limit has been adjusted for any dilution or concentration of the sample.

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

METHOD BLANK
FORM IVB

Sample ID:	B1C1089-BLK3	**Prep Date:**	03/18/21 14:06	**Matrix:**	Aqueous
Instrument:	HP17	**Analyzed:**	03/23/21 19:50	**Method:**	EPA 8151A
File ID:	17G33708.D	**Sequence:**	S1C0441	**Analyst:**	ECL
Batch:	B1C1089	**Units:**	ug/L	**Calibration:**	21C0024

Analyte	Result	DL	LOD	LOQ	Dilution	Flag	Q
2,4,5-TP (Silvex)	0.500	0.500	0.500	2.00	1	U	
2,4-D	5.00	5.00	5.00	20.0	1	U	

Surrogate	Recovery	Limits	PASS/FAIL
2,4-Dichlorophenylacetic acid	51.0	20 - 144	PASS

Notes and Definitions

* - Detected in the associated method Blank at a concentration >= RL

U: The analyte was analyzed for but was not detected above the reported quantitation limit. The quantitation limit has been adjusted for any dilution or concentration of the sample.

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FORM VII:
GC Semivolatiles
EPA 8151A
ICV/CCV

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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

Initial Calibration Verification (ICV)
FORM VIIA

Sample ID: S1C0266-ICV1 **Analyzed:** 03/13/21 14:54 **Method:** EPA 8151A
Instrument: HP17 **Calibration:** HP17 03/13/21 **Sequence:** S1C0266
File ID: 17G33680.D **Units:** ug/L **Analyst:** ECL

Analyte	Response	Limit	Q	Expected	Found	% Drift / % Diff	UCL	Q
2,4,5-TP (Silvex)	12525780			50.0	52.3	4.5	15	
2,4,5-TP (Silvex) [2C]	1863628			50.0	50.8	1.6	15	
2,4-D	2022174			500	570	14.0	15	
2,4-D [2C]	381284			500	490	-2.0	15	
2,4-Dichlorophenylacetic acid	1747853			500	495	-1.0	15	
2,4-Dichlorophenylacetic acid [2C]	338980.4			500	497	-0.6	15	

* - Does not meet acceptance criteria.

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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

Continuing Calibration Verification (CCV)
FORM VIIB

Laboratory ID:	S1C0266-CCV1	**Analyzed:**	03/13/21 19:41	**Method:**	EPA 8151A
Instrument:	HP17	**Calibration:**	UNASSIGNED	**Sequence:**	S1C0266
File ID:	17G33691.D	**Units:**	ug/L	**Analyst:**	ECL

Analyte	Response	Limit	Q	Expected	Found	% Drift / % Diff	UCL	Q
2,4,5-TP (Silvex)	1.411004E+07			50.0	58.9	17.7	15	*
2,4-D	2101072			500	592	18.5	15	*
2,4-Dichlorophenylacetic acid	1999049			500	566	13.2	15	

* - Does not meet acceptance criteria.

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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

Continuing Calibration Verification (CCV)
FORM VIIB

Laboratory ID:	S1C0441-CCV1	**Analyzed:**	03/23/21 14:43	**Method:**	EPA 8151A
Instrument:	HP17	**Calibration:**	21C0024	**Sequence:**	S1C0441
File ID:	17G33700.D	**Units:**	ug/L	**Analyst:**	ECL

Analyte	Response	Limit	Q	Expected	Found	% Drift / % Diff	UCL	Q
2,4,5-TP (Silvex)	1.238974E+07			50.0	51.7	3.4	15	
2,4-D	1811605			500	511	2.2	15	
2,4-Dichlorophenylacetic acid	1707348			500	483	-3.3	15	

* - Does not meet acceptance criteria.

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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

Continuing Calibration Verification (CCV)
FORM VIIB

Laboratory ID:	S1C0441-CCV2	**Analyzed:**	03/23/21 20:16	**Method:**	EPA 8151A
Instrument:	HP17	**Calibration:**	21C0024	**Sequence:**	S1C0441
File ID:	17G33709.D	**Units:**	ug/L	**Analyst:**	ECL

Analyte	Response	Limit	Q	Expected	Found	% Drift / % Diff	UCL	Q
2,4,5-TP (Silvex)	1.251299E+07			50.0	52.2	4.4	15	
2,4-D	1839132			500	519	3.7	15	
2,4-Dichlorophenylacetic acid	1743737			500	494	-1.3	15	

* - Does not meet acceptance criteria.

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Section A:
GC Semivolatiles
EPA 8151A
Batch / Sequence Raw Data

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

BATCH LOG SUMMARY
SECTION A1

Batch: B1C1089
Matrix: Aqueous
Method: EPA 8151A
SOP: EXH01

Prepared: 3/18/2021 2:06:00PM
Prepared By: CPD
Preparation: EPA 8151A

Laboratory ID	Client / Source ID	Initial	Final	pH					Spike(s)
B1C1089-BLK1		100 mL	10.0 mL						
B1C1089-BS1		100 mL	10.0 mL						1001783 1000µL
B1C1089-BSD1		100 mL	10.0 mL						1001783 1000µL
M1C1317-01	Soil IDW	100 mL	10.0 mL						
B1C1089-BLK2		100 mL	10.0 mL						
B1C1089-BLK3		100 mL	10.0 mL						

Standards used in the batch:

Standard ID	Description	Date Prepared	Prepared By
1001783	Herbicide Spike (working)	3/1/2021 4:12:42PM	Chris Hill

Reagents used in the batch:

Reagent ID	Description	Prepared	Prepared By
0008817	2,2,4-Trimethylpentane	8/25/2020 11:02:46AM	** Vendor **
0012547	6M NaOH	12/16/2020 2:49:12PM	Chris Hill
1000454	Sodium Chloride	1/15/2021 2:17:40PM	** Vendor **
1000575	Ether	11/3/2020 8:28:54AM	** Vendor **
1000577	Hexane	12/2/2020 8:34:08AM	** Vendor **
1001093	12N H2SO4	2/5/2021 8:30:29AM	chad.davis
1001520	Acidified Na2SO4	2/18/2021 11:11:45AM	chad.davis
1002286	Methylene Chloride	3/12/2021 8:37:23AM	chad.davis
1002396	Methanol	3/18/2021 3:35:24PM	** Vendor **
9003130	Silicic Acid n-Hydrate, Powder	4/6/2016 10:57:36AM	** Vendor **

Surrogates used in the batch: **Surrogate Spiked 1:** 1,000.00 µL

Surrogate ID	Description	Prepared	Prepared By
1001022	HERB SURROGATE (WORKING)	2/3/2021 1:10:36PM	Justin Hesson

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

SEQUENCE LOG SUMMARY
SECTION A2

Sequence: S1C0266
Instrument: HP17
Analyst 1: ECL
Method: EPA 8151A
SOP: GCS04
Column #1 ID: RTX-CLP
Column #2 ID: RTX-CLP2

#	File ID	Laboratory ID	Client ID	Analyzed	Reference	Standard
1	17G33675.D	S1C0266-CAL5	Cal Standard	03/13/21 12:43		0010181
2	17G33676.D	S1C0266-CAL4	Cal Standard	03/13/21 13:09		0010182
3	17G33677.D	S1C0266-CAL3	Cal Standard	03/13/21 13:35		0010183
4	17G33678.D	S1C0266-CAL2	Cal Standard	03/13/21 14:02		0010184
5	17G33679.D	S1C0266-CAL1	Cal Standard	03/13/21 14:28		0010185
6	17G33680.D	S1C0266-ICV1	Initial Cal Check	03/13/21 14:54		0011037
17	17G33691.D	S1C0266-CCV1	Calibration Check	03/13/21 19:41		0010183

Sequence Standards

Standard ID	Description	Prepared	PreparedBy	Expires
0010181	Herbicide Mix #5	10/05/2020	Eric Lawson	04/05/2021
0010182	Herbicide Mix #4	10/05/2020	Eric Lawson	04/05/2021
0010183	Herbicide Mix #3	10/05/2020	Eric Lawson	04/05/2021
0010184	Herbicide Mix #2	10/05/2020	Eric Lawson	04/05/2021
0010185	Herbicide Mix #1	10/05/2020	Eric Lawson	04/05/2021
0011037	Herbicide ALT midpoint	10/26/2020	Eric Lawson	04/26/2021

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

SEQUENCE LOG SUMMARY
SECTION A2

Sequence: S1C0441
Instrument: HP17
Calibration: 21C0024
Column #1 ID: RTX-CLP
Column #2 ID: RTX-CLP2

Analyst 1: ECL
Method: EPA 8151A
SOP: GCS04

#	File ID	Laboratory ID	Client ID	Analyzed	Reference	Standard
1	17G33700.D	S1C0441-CCV1	Calibration Check	03/23/21 14:43		0010183
2	17G33701.D	B1C1089-BLK1	Blank	03/23/21 16:46		
3	17G33702.D	B1C1089-BS1	LCS	03/23/21 17:12		
4	17G33703.D	B1C1089-BSD1	LCS Dup	03/23/21 17:39		
6	17G33705.D	M1C1317-01	Soil IDW	03/23/21 18:31		
8	17G33707.D	B1C1089-BLK2	Blank	03/23/21 19:24		
9	17G33708.D	B1C1089-BLK3	Blank	03/23/21 19:50		
10	17G33709.D	S1C0441-CCV2	Calibration Check	03/23/21 20:16		0010183

Sequence Standards

Standard ID	Description	Prepared	PreparedBy	Expires
0010183	Herbicide Mix #3	10/05/2020	Eric Lawson	04/05/2021

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Section B:
GC Semivolatiles
EPA 8151A
Sample Raw Data

Microbac Laboratories, Inc.
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Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\DATA\032321\
Data File : 17G33705.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 18:31 (#1); 23 Mar 2021 18:57 (#2)
Operator : ECL
Sample : M1C1317-01
Misc : 1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 24 16:09:22 2021
Quant Method : D:\MSDCHEM\1\METHODS\8151.M
Quant Title : HP17: 8151 CALIBRATION March 13, 2021
QLast Update : Tue Mar 23 16:31:48 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP17

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
2) S	2,4-Dichlorophen	9.67	10.36	425.5E6	81569291	240.893	239.270
	Spiked Amount 500.000			Recovery	=	48.18%	47.85%
	Target Compounds						
1)	Dalapon	0.00	0.00	0	0	N.D. d	N.D. d
3)	MCPA	0.00	0.00	0	0	N.D.	N.D.
4)	Dicamba	0.00	0.00	0	0	N.D.	N.D.
5)	MCPP	0.00	0.00	0	0	N.D.	N.D.
6)	Dichloroprop	0.00	0.00	0	0	N.D. d	N.D. d
7)	2,4-D	0.00	0.00	0	0	N.D. d	N.D. d
8)	Pentachloropheno	0.00	0.00	0	0	N.D.	N.D.
9)	Silvex	0.00	0.00	0	0	N.D.	N.D.
10)	2,4,5-T	0.00	0.00	0	0	N.D.	N.D.
11)	Dinoseb	0.00	0.00	0	0	N.D.	N.D.
12)	2,4-DB	0.00	0.00	0	0	N.D.	N.D.

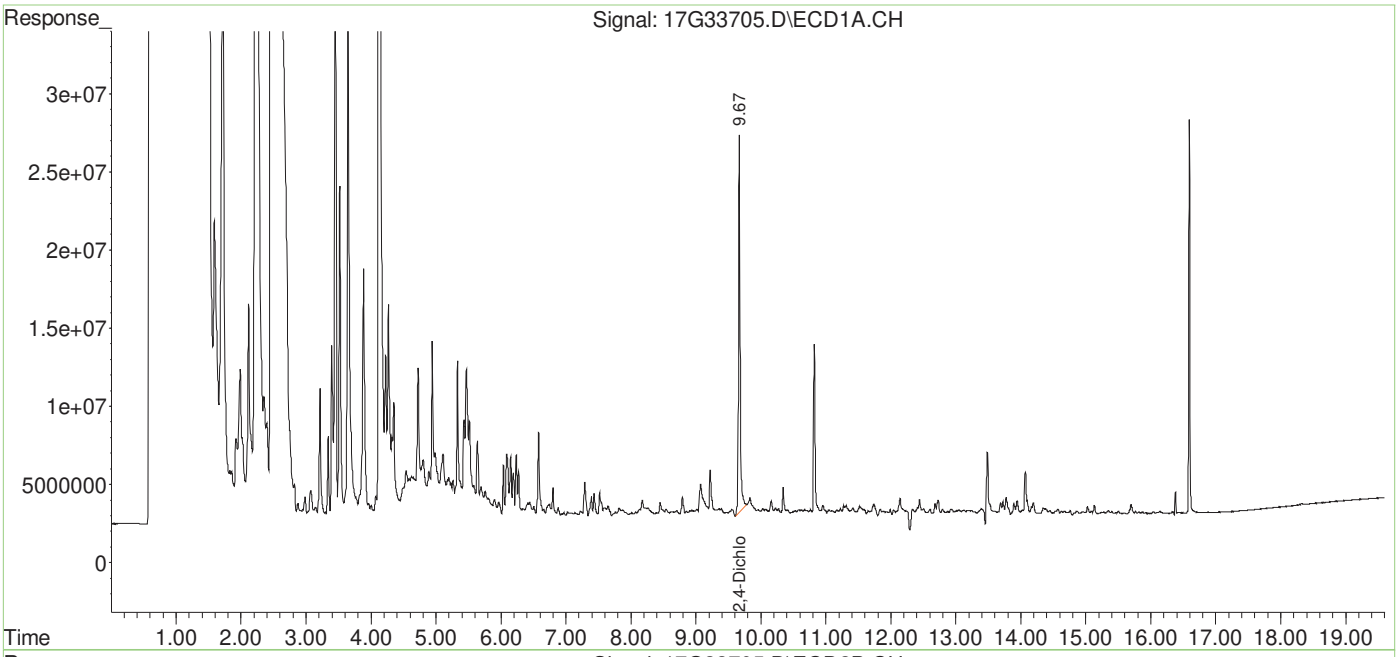
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

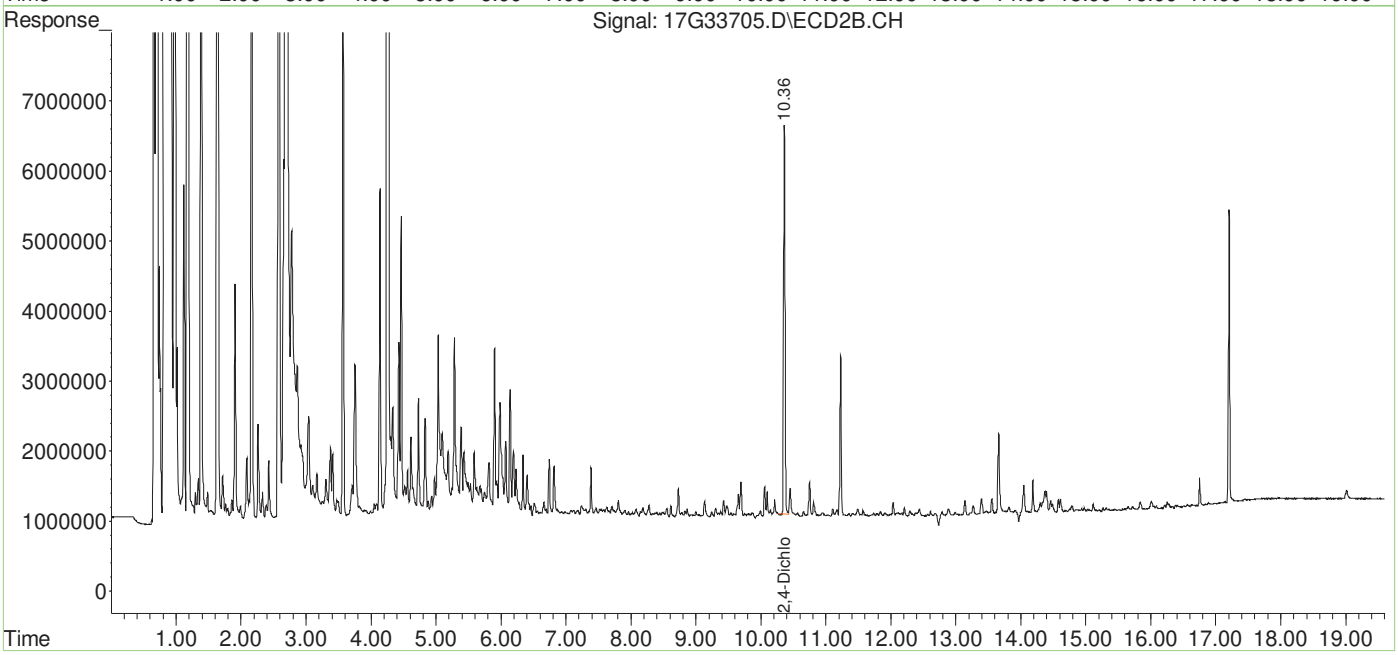
Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\DATA\032321\
Data File : 17G33705.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 18:31 (#1); 23 Mar 2021 18:57 (#2)
Operator : ECL
Sample : M1C1317-01
Misc : 1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 24 16:09:22 2021
Quant Method : D:\MSDCHEM\1\METHODS\8151.M
Quant Title : HP17: 8151 CALIBRATION March 13, 2021
QLast Update : Tue Mar 23 16:31:48 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP17





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Section C:
GC Semivolatiles
EPA 8151A
QC Sample Raw Data

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Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\DATA\032321\
Data File : 17G33701.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 16:46 (#1); 23 Mar 2021 17:12 (#2)
Operator : ECL
Sample : B1C1089-BLK1
Misc : 1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 24 16:08:18 2021
Quant Method : D:\MSDCHEM\1\METHODS\8151.M
Quant Title : HP17: 8151 CALIBRATION March 13, 2021
QLast Update : Tue Mar 23 16:31:48 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP17

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
2) S	2,4-Dichlorophen	9.67	10.36	426.1E6	87020988	241.268	255.261
	Spiked Amount 500.000			Recovery	=	48.25%	51.05%
	Target Compounds						
1)	Dalapon	0.00	0.00	0	0	N.D. d	N.D. d
3)	MCPA	0.00	0.00	0	0	N.D.	N.D.
4)	Dicamba	0.00	0.00	0	0	N.D.	N.D.
5)	MCPP	0.00	0.00	0	0	N.D.	N.D.
6)	Dichloroprop	0.00	0.00	0	0	N.D. d	N.D. d
7)	2,4-D	0.00	0.00	0	0	N.D. d	N.D. d
8)	Pentachloropheno	0.00	0.00	0	0	N.D.	N.D.
9)	Silvex	0.00	0.00	0	0	N.D.	N.D.
10)	2,4,5-T	0.00	0.00	0	0	N.D.	N.D.
11)	Dinoseb	0.00	0.00	0	0	N.D.	N.D.
12)	2,4-DB	0.00	0.00	0	0	N.D.	N.D.

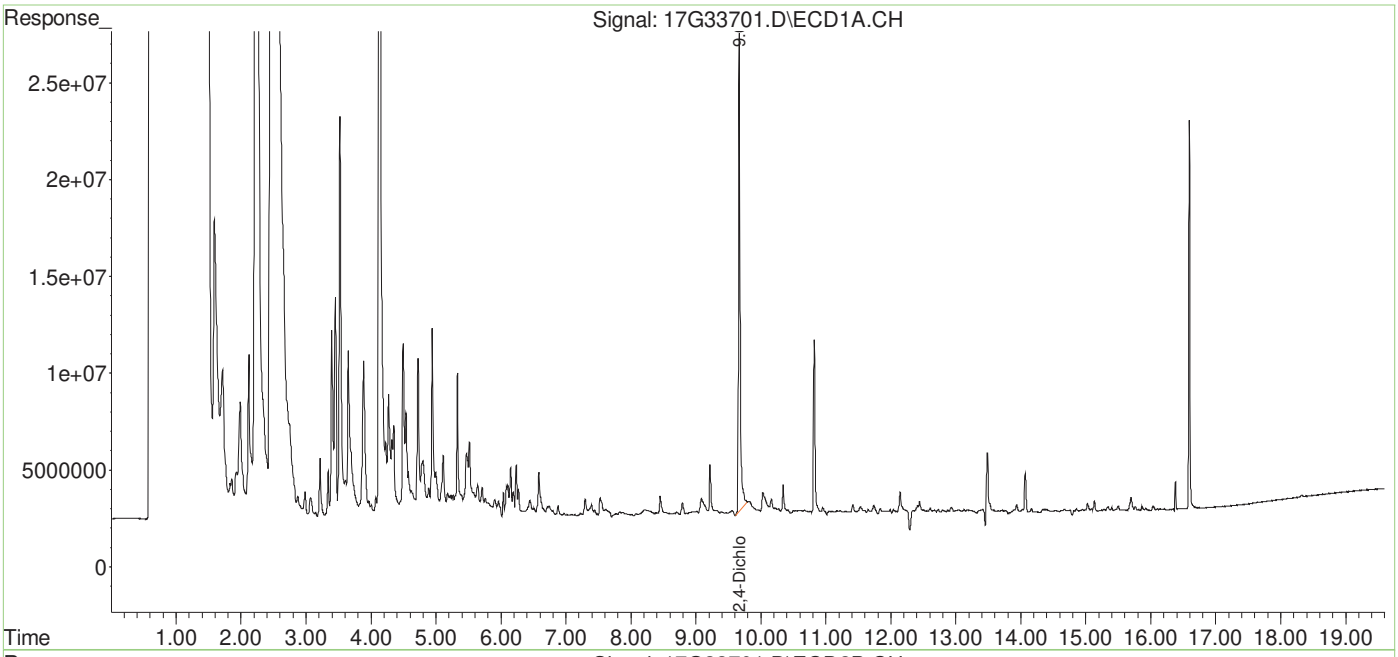
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

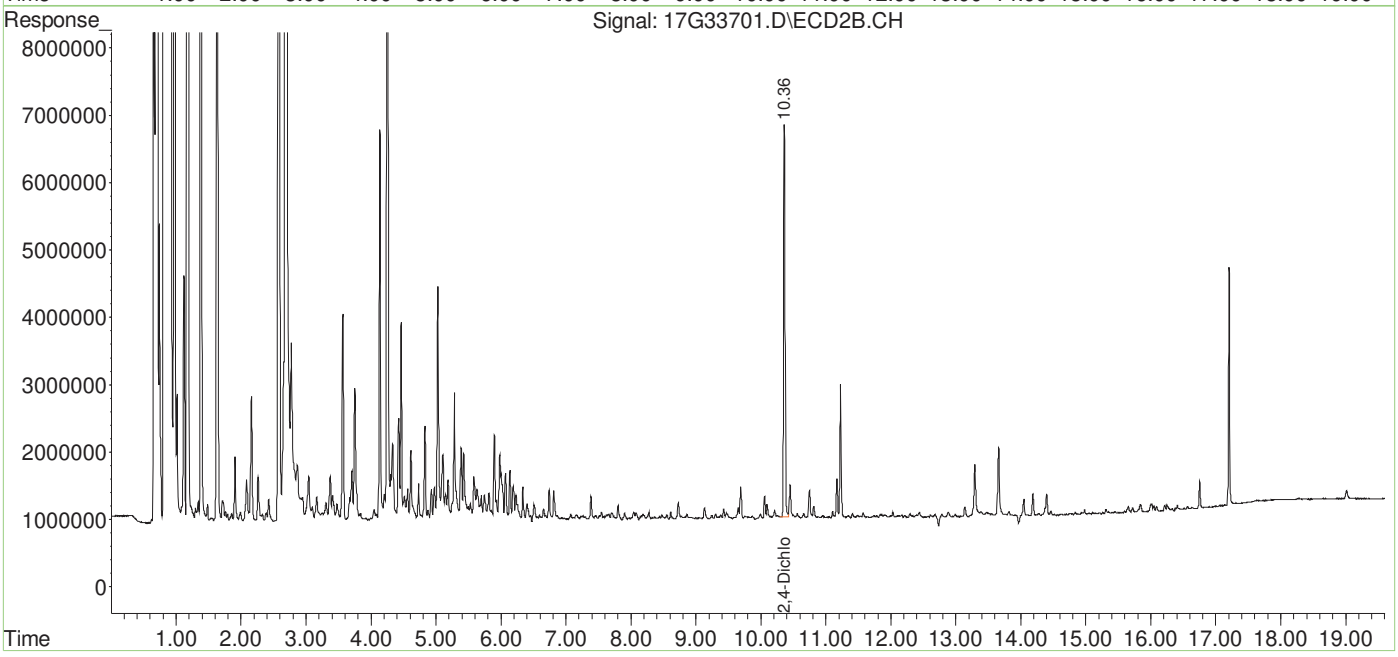
Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\DATA\032321\
Data File : 17G33701.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 16:46 (#1); 23 Mar 2021 17:12 (#2)
Operator : ECL
Sample : B1C1089-BLK1
Misc : 1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 24 16:08:18 2021
Quant Method : D:\MSDCHEM\1\METHODS\8151.M
Quant Title : HP17: 8151 CALIBRATION March 13, 2021
QLast Update : Tue Mar 23 16:31:48 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP17





Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\DATA\032321\
Data File : 17G33707.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 19:24 (#1); 23 Mar 2021 19:50 (#2)
Operator : ECL
Sample : B1C1089-BLK2
Misc : 1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 24 16:10:59 2021
Quant Method : D:\MSDCHEM\1\METHODS\8151.M
Quant Title : HP17: 8151 CALIBRATION March 13, 2021
QLast Update : Tue Mar 23 16:31:48 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP17

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
2) S	2,4-Dichlorophen	9.67	10.36	479.6E6	94045960	271.538	275.868
	Spiked Amount 500.000			Recovery	=	54.31%	55.17%
	Target Compounds						
1)	Dalapon	0.00	0.00	0	0	N.D. d	N.D. d
3)	MCPA	0.00	0.00	0	0	N.D.	N.D.
4)	Dicamba	0.00	0.00	0	0	N.D.	N.D.
5)	MCPP	0.00	0.00	0	0	N.D.	N.D.
6)	Dichloroprop	0.00	0.00	0	0	N.D. d	N.D. d
7)	2,4-D	0.00	0.00	0	0	N.D. d	N.D. d
8)	Pentachlorophenol	0.00	0.00	0	0	N.D.	N.D.
9)	Silvex	0.00	0.00	0	0	N.D.	N.D.
10)	2,4,5-T	0.00	0.00	0	0	N.D.	N.D.
11)	Dinoseb	0.00	0.00	0	0	N.D.	N.D.
12)	2,4-DB	0.00	0.00	0	0	N.D.	N.D.

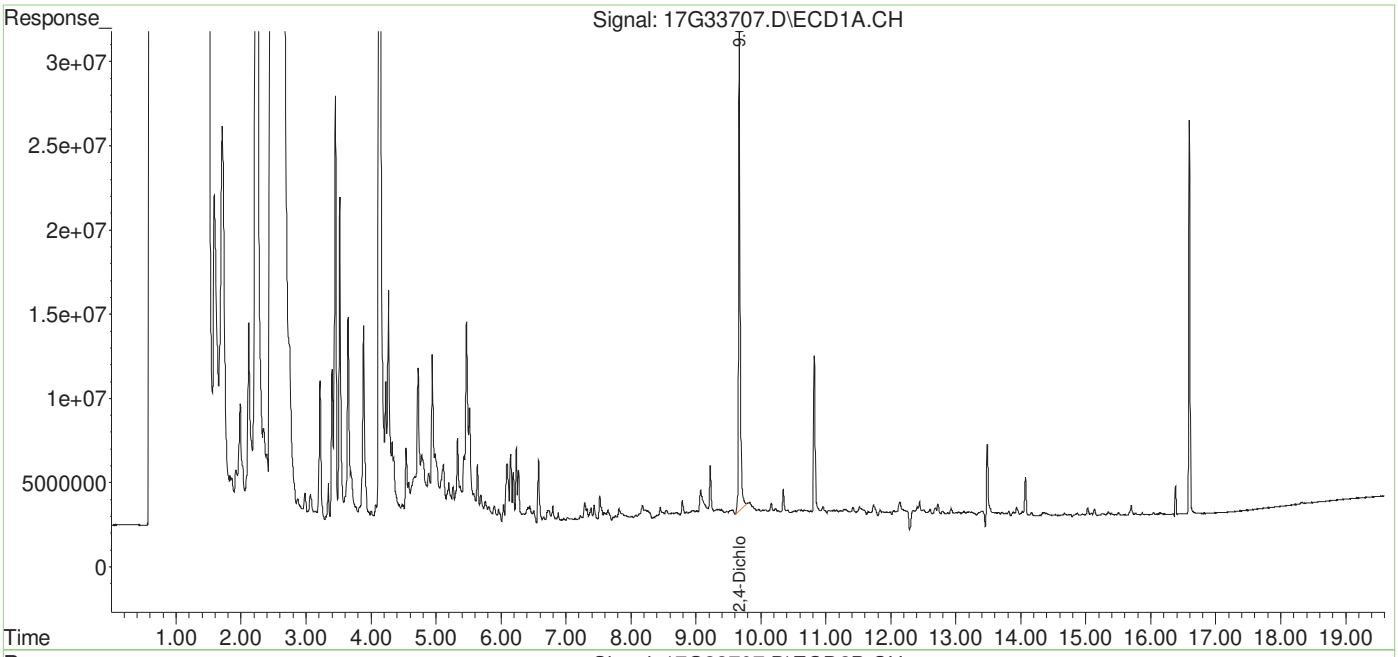
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

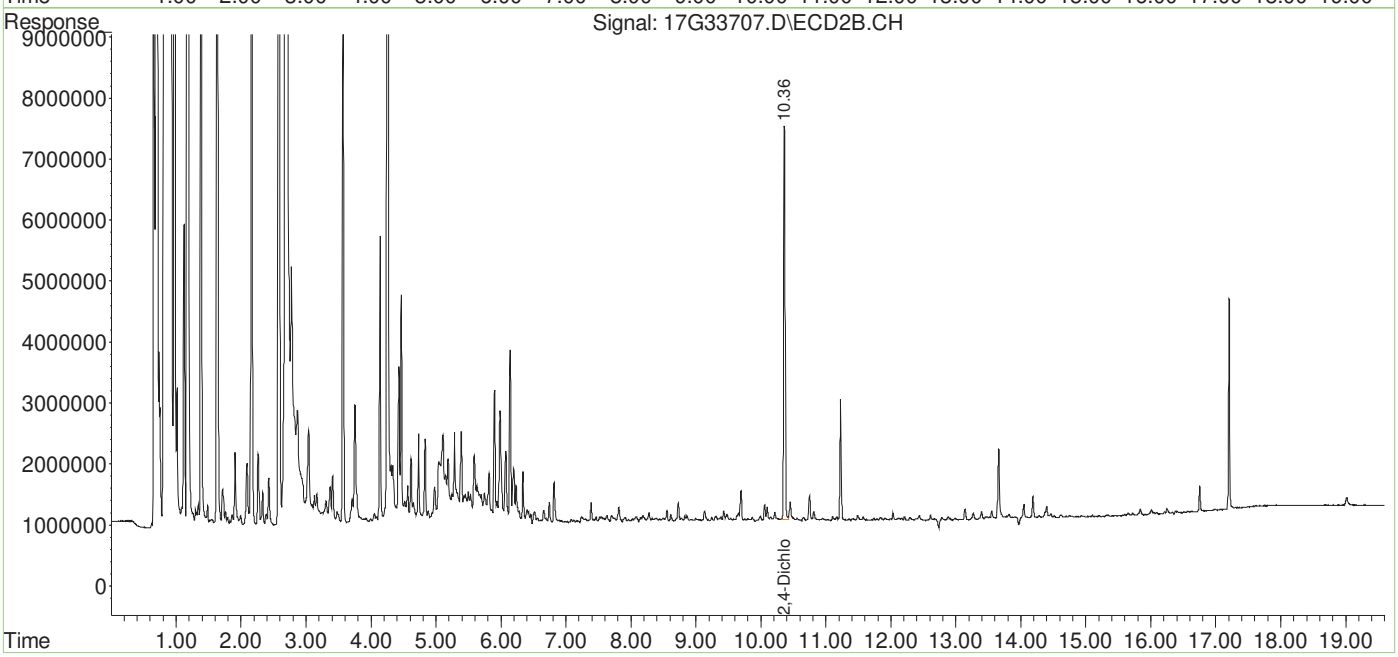
Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\DATA\032321\
Data File : 17G33707.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 19:24 (#1); 23 Mar 2021 19:50 (#2)
Operator : ECL
Sample : B1C1089-BLK2
Misc : 1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 24 16:10:59 2021
Quant Method : D:\MSDCHEM\1\METHODS\8151.M
Quant Title : HP17: 8151 CALIBRATION March 13, 2021
QLast Update : Tue Mar 23 16:31:48 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP17





Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\DATA\032321\
Data File : 17G33708.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 19:50 (#1); 23 Mar 2021 20:16 (#2)
Operator : ECL
Sample : B1C1089-BLK3
Misc : 1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 24 16:11:12 2021
Quant Method : D:\MSDCHEM\1\METHODS\8151.M
Quant Title : HP17: 8151 CALIBRATION March 13, 2021
QLast Update : Tue Mar 23 16:31:48 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP17

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
2) S	2,4-Dichlorophen	9.67	10.36	450.3E6	93456600	254.947	274.139
	Spiked Amount 500.000			Recovery	=	50.99%	54.83%
	Target Compounds						
1)	Dalapon	0.00	0.00	0	0	N.D. d	N.D. d
3)	MCPA	0.00	0.00	0	0	N.D.	N.D.
4)	Dicamba	0.00	0.00	0	0	N.D.	N.D.
5)	MCPP	0.00	0.00	0	0	N.D.	N.D.
6)	Dichloroprop	0.00	0.00	0	0	N.D. d	N.D. d
7)	2,4-D	0.00	0.00	0	0	N.D. d	N.D. d
8)	Pentachlorophenol	0.00	0.00	0	0	N.D.	N.D.
9)	Silvex	0.00	0.00	0	0	N.D.	N.D.
10)	2,4,5-T	0.00	0.00	0	0	N.D.	N.D.
11)	Dinoseb	0.00	0.00	0	0	N.D.	N.D.
12)	2,4-DB	0.00	0.00	0	0	N.D.	N.D.

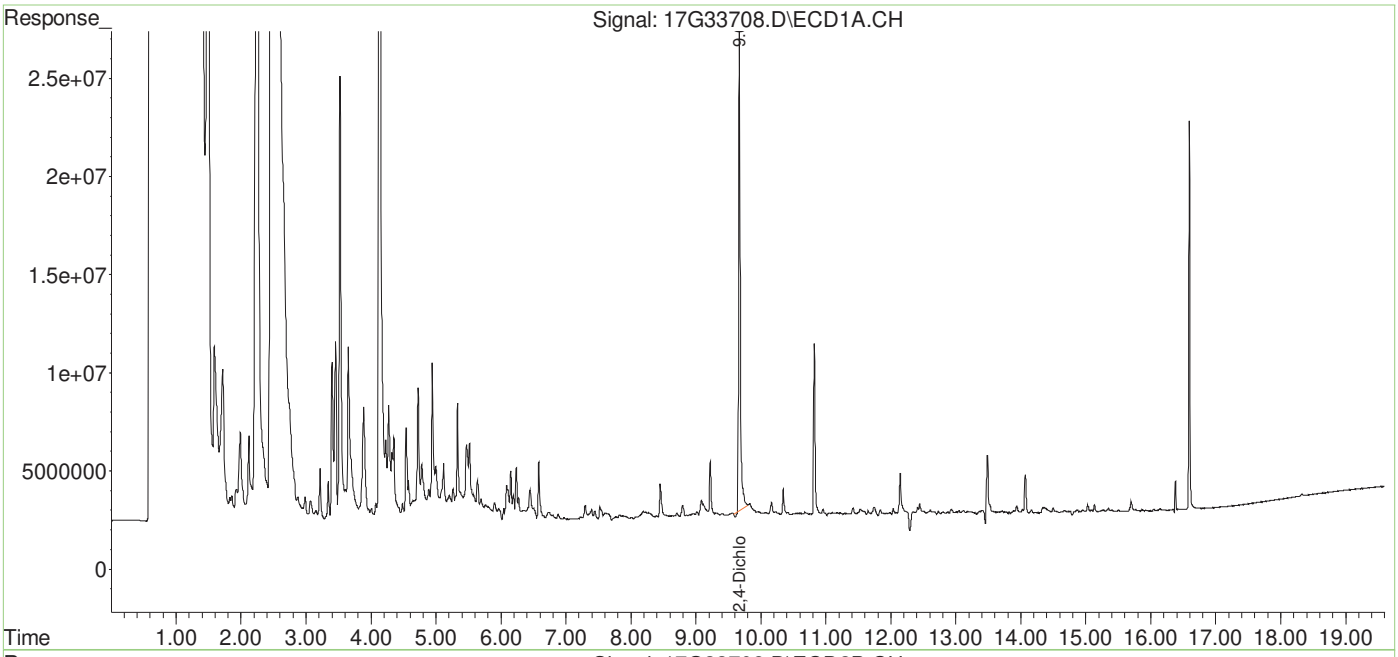
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

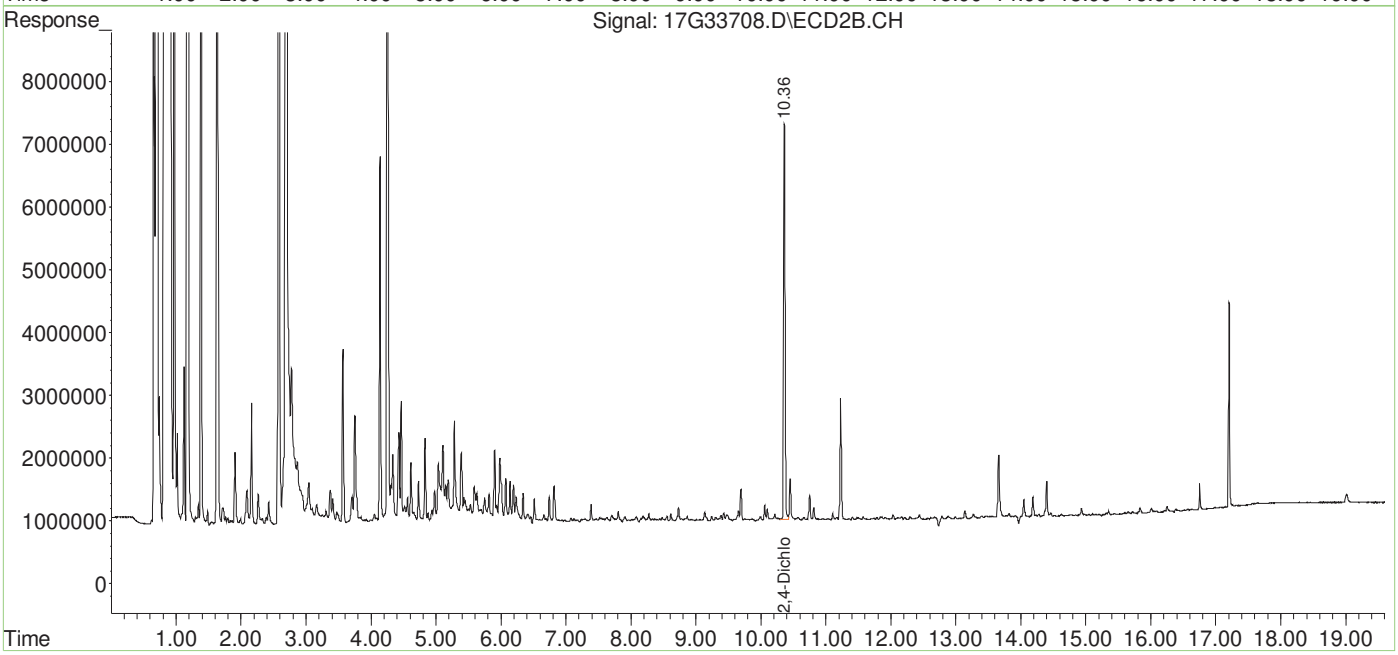
Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\DATA\032321\
Data File : 17G33708.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 19:50 (#1); 23 Mar 2021 20:16 (#2)
Operator : ECL
Sample : B1C1089-BLK3
Misc : 1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 24 16:11:12 2021
Quant Method : D:\MSDCHEM\1\METHODS\8151.M
Quant Title : HP17: 8151 CALIBRATION March 13, 2021
QLast Update : Tue Mar 23 16:31:48 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP17





Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\DATA\032321\
Data File : 17G33702.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 17:12 (#1); 23 Mar 2021 17:39 (#2)
Operator : ECL
Sample : B1C1089-BS1
Misc : 1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 24 15:19:06 2021
Quant Method : D:\MSDCHEM\1\METHODS\8151.M
Quant Title : HP17: 8151 CALIBRATION March 13, 2021
QLast Update : Tue Mar 23 16:31:48 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP17

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
2) S	2,4-Dichlorophen	9.67	10.36	685.7E6	129.5E6	388.263	379.998
	Spiked Amount 500.000			Recovery =		77.65%	76.00%
	Target Compounds						
1)	Dalapon	3.27	3.56	1356.6E6	253.3E6	655.883	697.856
3)	MCPA	10.23	10.91	257.5E6	64357921	37.489	38.463
4)	Dicamba	9.84	10.54	473.1E6	48451691	49.035	39.023
5)	MCPP	10.08	10.68	182.9E6	36932353	37.700	32.868
6)	Dichloroprop	10.58	11.23	617.1E6	128.5E6	353.434	411.773
7)	2,4-D	10.80	11.53	896.0E6	144.5E6	505.309	371.443
8)	Pentachloropheno	10.95	11.84	1088.1E6	175.6E6	41.472	44.316
9)	Silvex	11.55	12.24	469.7E6	77083291	39.191	42.037
10)	2,4,5-T	11.79	12.57	316.2E6	68463056	38.395	44.213
11)	Dinoseb	13.07	13.22	805.0E6	152.7E6	116.135	138.754
12)	2,4-DB	12.24	13.00	409.1E6	78404040	392.261	386.789

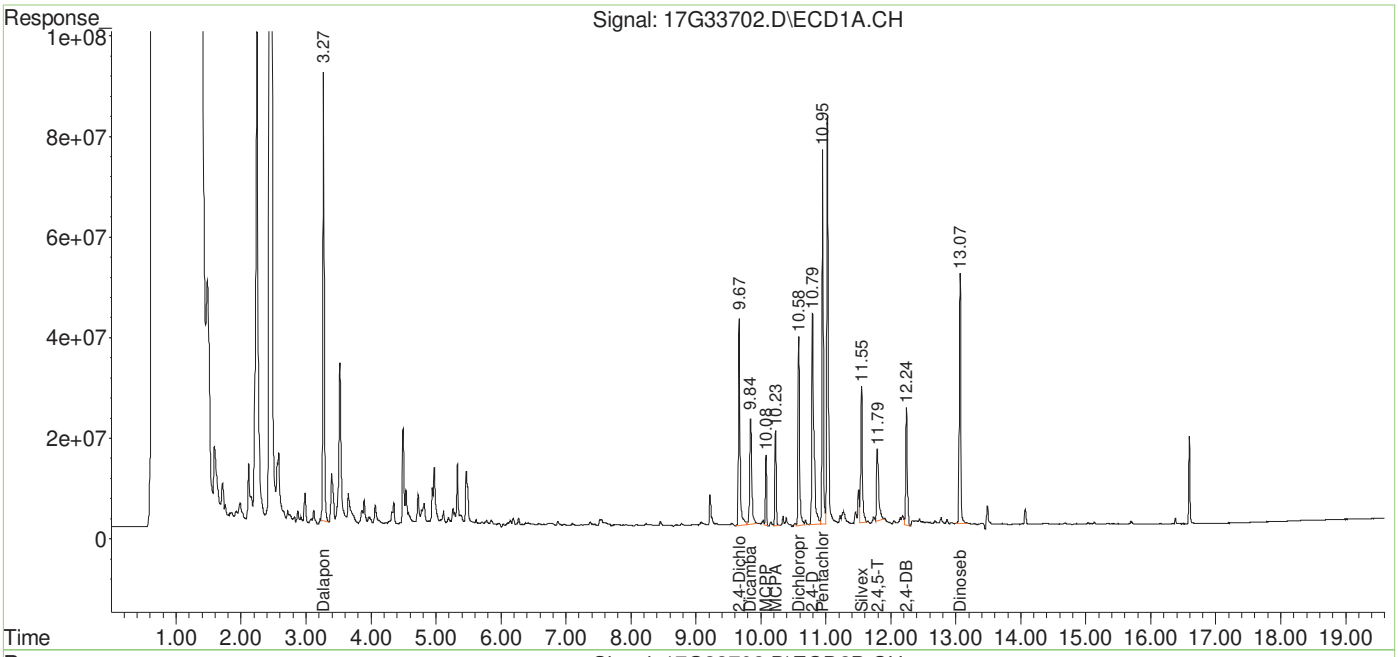
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

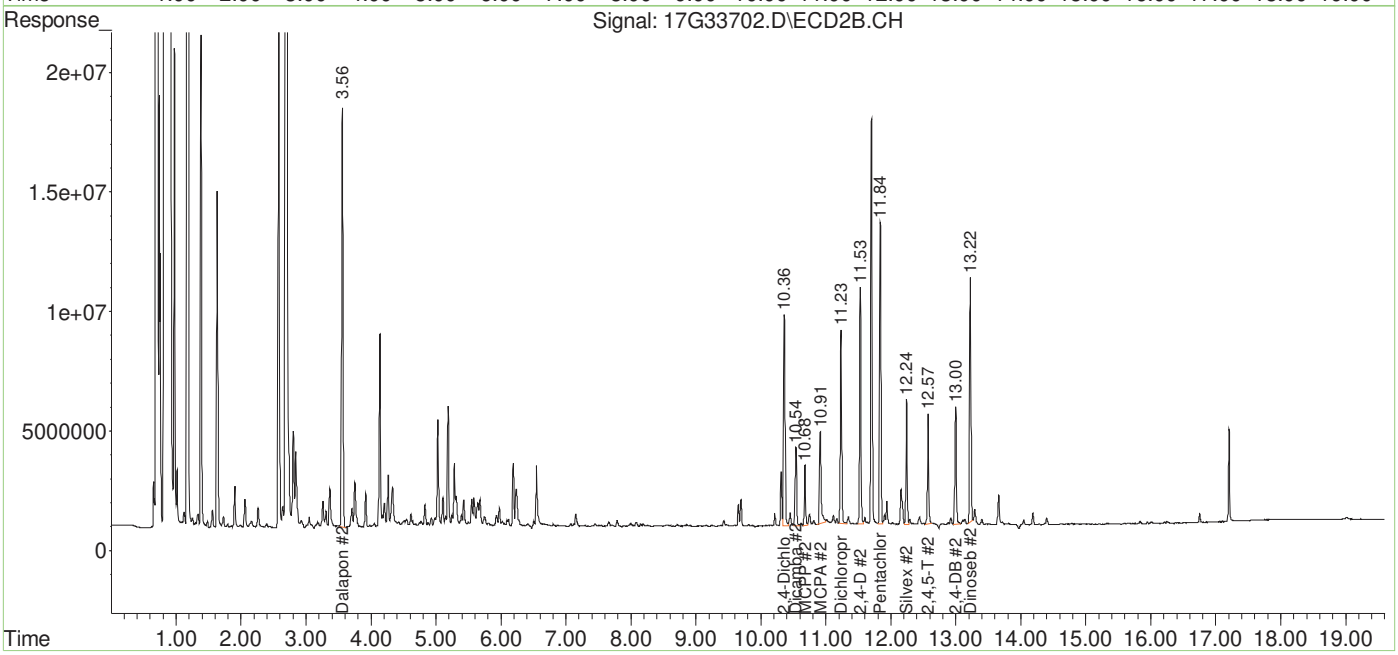
Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\DATA\032321\
Data File : 17G33702.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 17:12 (#1); 23 Mar 2021 17:39 (#2)
Operator : ECL
Sample : B1C1089-BS1
Misc : 1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 24 15:19:06 2021
Quant Method : D:\MSDCHEM\1\METHODS\8151.M
Quant Title : HP17: 8151 CALIBRATION March 13, 2021
QLast Update : Tue Mar 23 16:31:48 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP17





Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\DATA\032321\
Data File : 17G33703.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 17:39 (#1); 23 Mar 2021 18:05 (#2)
Operator : ECL
Sample : B1C1089-BSD1
Misc : 1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 24 15:19:12 2021
Quant Method : D:\MSDCHEM\1\METHODS\8151.M
Quant Title : HP17: 8151 CALIBRATION March 13, 2021
QLast Update : Tue Mar 23 16:31:48 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP17

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
2) S	2,4-Dichlorophen	9.67	10.36	699.8E6	134.5E6	396.208	394.451
	Spiked Amount 500.000			Recovery =		79.24%	78.89%
	Target Compounds						
1)	Dalapon	3.27	3.56	1238.1E6	241.8E6	598.575	666.189
3)	MCPA	10.23	10.91	259.3E6	66547170	37.747	40.053
4)	Dicamba	9.84	10.54	416.4E6	50172320	43.156	40.409
5)	MCPP	10.08	10.68	189.7E6	38868415	39.100	34.591
6)	Dichloroprop	10.58	11.23	613.8E6	131.4E6	351.540	421.220
7)	2,4-D	10.80	11.53	861.1E6	144.3E6	485.578	370.940
8)	Pentachloropheno	10.95	11.84	1155.7E6	189.3E6	44.047	47.783
9)	Silvex	11.55	12.24	480.1E6	81176386	40.059	44.269
10)	2,4,5-T	11.80	12.57	373.8E6	69686439	45.392	45.003
11)	Dinoseb	13.07	13.22	877.6E6	164.4E6	126.614	149.417
12)	2,4-DB	12.24	13.00	414.8E6	83638000	397.713	412.609

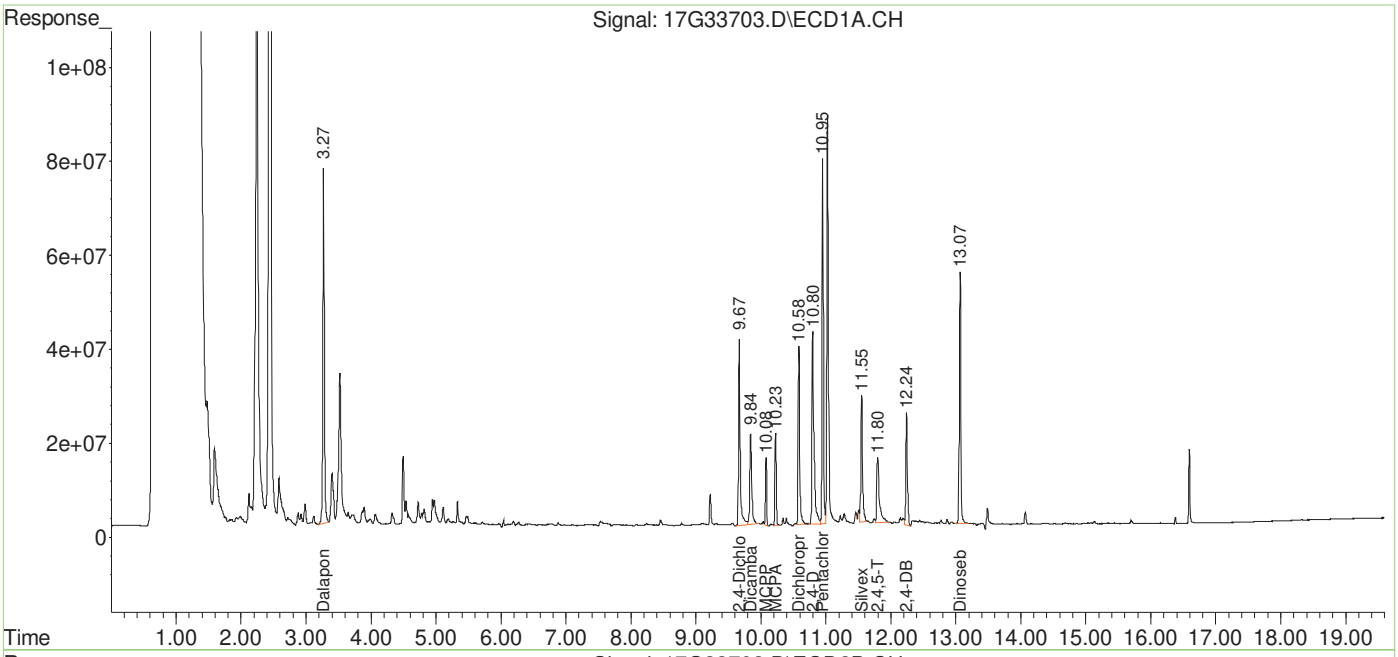
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

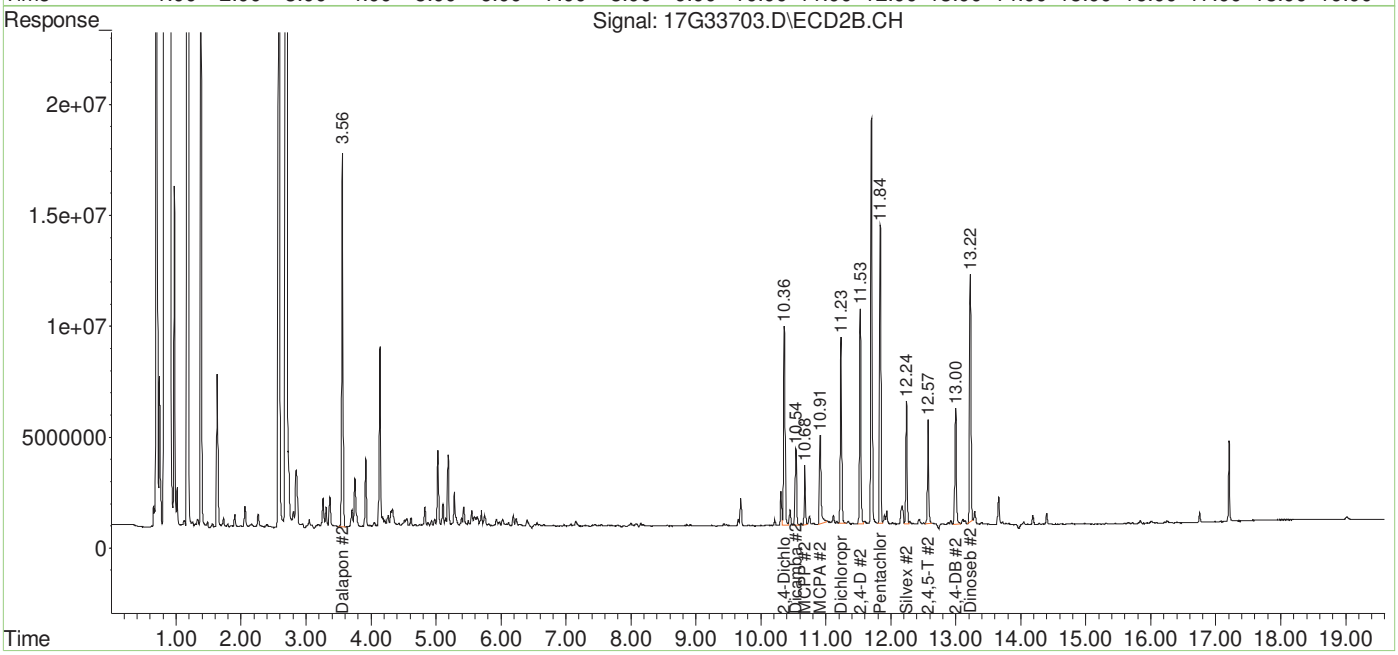
Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\DATA\032321\
Data File : 17G33703.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 17:39 (#1); 23 Mar 2021 18:05 (#2)
Operator : ECL
Sample : B1C1089-BSD1
Misc : 1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 24 15:19:12 2021
Quant Method : D:\MSDCHEM\1\METHODS\8151.M
Quant Title : HP17: 8151 CALIBRATION March 13, 2021
QLast Update : Tue Mar 23 16:31:48 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP17

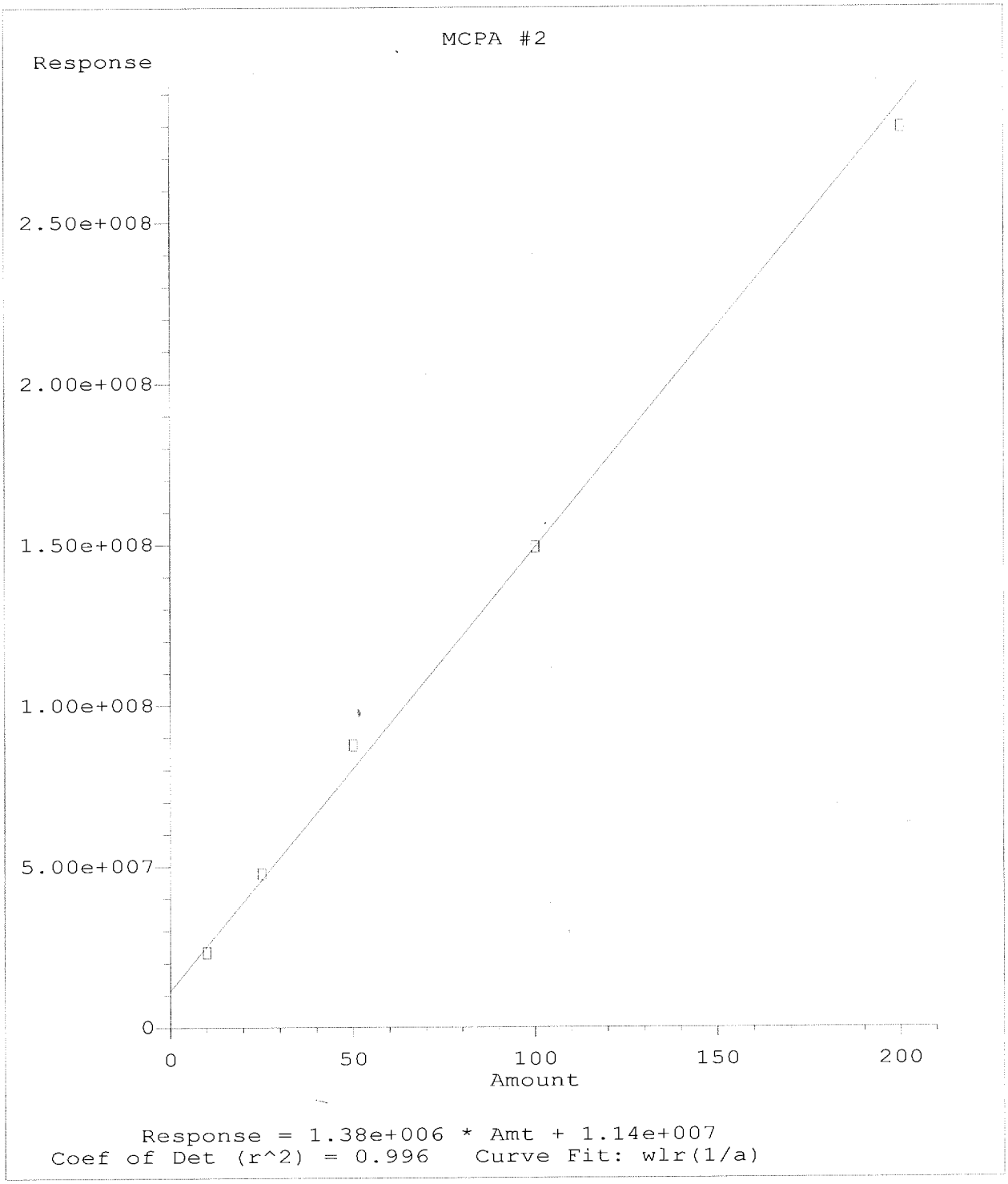




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Section D:
GC Semivolatiles
EPA 8151A
Calibration Raw Data

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com



Method Name: D:\MSDCHEM\1\METHODS\8151.M
Calibration Table Last Updated: Mon Mar 15 11:02:22 2021

Response Factor Report HP17

Method Path : D:\MSDCHEM\1\METHODS\
Method File : 8151.M
Title : HP17: 8151 CALIBRATION March 13, 2021
Last Update : Mon Mar 15 11:04:05 2021
Response Via : Initial Calibration
21C0024
Calibration Files
5 =17G33675.D 4 =17G33676.D 3 =17G33677.D
2 =17G33678.D 1 =17G33679.D

	Compound	5	4	3	2	1	Avg		%RSD
1)	Dalapon	1.934	1.944	2.096	2.128	2.239	2.068	E6	6.26
2) S	2,4-Dichlorophenylace	1.522	1.619	1.853	1.901	1.936	1.766	E6	10.42
3)	MCPA	6.692	6.781	7.122	6.843	6.910	6.870	E6	2.36
4)	Dicamba	0.763	0.864	1.038	0.994	1.166	0.965	E7	16.18
5)	MCPP	5.207	5.120	5.277	4.589	4.069	4.852	E6	10.61
6)	Dichloroprop	1.501	1.572	1.783	1.832	2.041	1.746	E6	12.36
7)	2,4-D	1.737	1.733	1.843	1.605	1.949	1.773	E6	7.30
8)	Pentachlorophenol	2.373	2.480	2.721	2.673	2.871	2.624	E7	7.55
9)	Silvex	1.103	1.169	1.273	1.246	1.202	1.199	E7	5.59
10)	2,4,5-T	9.192	9.093	9.180	7.907	5.803	8.235	E6	17.77
11)	Dinoseb	5.952	6.249	7.064	7.326	8.066	6.931	E6	12.26
12)	2,4-DB	1.071	1.065	1.108	1.137	0.834	1.043	E6	11.55

Signal #2 Calibration Files
5 =17G33675.D 4 =17G33676.D 3 =17G33677.D
2 =17G33678.D 1 =17G33679.D

	Compound	5	4	3	2	1	Avg		%RSD	LR
1)	Dalapon	3.301	3.617	3.762	3.528	3.943	3.630	E5	6.66	
2) S	2,4-Dichlorophenylace	2.851	3.074	3.520	3.604	3.996	3.409	E5	13.27	
3)	MCPA	1.397	1.491	1.753	1.911	2.327	1.776	E6	20.82	0.996
4)	Dicamba	1.103	1.164	1.304	1.280	1.358	1.242	E6	8.45	
5)	MCPP	1.026	1.069	1.144	1.221	1.158	1.124	E6	6.84	
6)	Dichloroprop	2.611	2.786	3.196	3.308	3.702	3.121	E5	13.88	
7)	2,4-D	3.307	3.480	4.049	4.077	4.531	3.889	E5	12.72	
8)	Pentachlorophenol	3.919	3.938	4.210	3.887	3.855	3.962	E6	3.59	
9)	Silvex	1.719	1.743	1.915	1.853	1.938	1.834	E6	5.41	
10)	2,4,5-T	1.416	1.489	1.645	1.577	1.615	1.548	E6	6.08	
11)	Dinoseb	0.971	1.025	1.155	1.139	1.211	1.100	E6	8.99	
12)	2,4-DB	1.841	1.902	2.075	2.062	2.255	2.027	E5	8.02	

(#) = Out of Range

8151.M Mon Mar 15 11:45:39 2021

MICROBAC®

Section E:
GC Semivolatiles
EPA 8151A
Sequence QC Sample Raw Data

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\DATA\031321\
Data File : 17G33675.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Mar 2021 12:43 (#1); 13 Mar 2021 13:09 (#2)
Operator : ECL
Sample : S1C0266-CAL5
Misc : 1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 15 11:00:02 2021
Quant Method : D:\MSDCHEM\1\METHODS\8151.M
Quant Title : HP17: 8151 CALIBRATION March 13, 2021
QLast Update : Mon Mar 15 08:41:26 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP17

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
2) S	2,4-Dichlorophen	9.65	10.35	3044.8E6	570.2E6	1833.631	2129.893
	Spiked Amount 500.000			Recovery	=	366.73%	425.98%
	Target Compounds						
1)	Dalapon	3.25	3.54	9670.8E6	1650.4E6	5245.130	5164.203
3)	MCPA	10.23	10.90	1338.4E6	279.4E6	202.570	176.696
4)	Dicamba	9.83	10.52	1526.2E6	220.6E6	170.503	210.877
5)	MCPP	10.08	10.67	1041.4E6	205.2E6	223.670	235.837
6)	Dichloroprop	10.57	11.22	3002.3E6	522.1E6	1816.578	2157.372
7)	2,4-D	10.78	11.51	3474.7E6	661.4E6	1938.057	2201.935
8)	Pentachloropheno	10.94	11.82	4746.6E6	783.9E6	195.490	250.888
9)	Silvex	11.54	12.23	2205.0E6	343.8E6	193.230	241.097
10)	2,4,5-T	11.78	12.56	1838.4E6	283.2E6	215.131	236.297
11)	Dinoseb	13.05	13.21	5951.5E6	971.1E6	896.088	1110.910
12)	2,4-DB	12.22	12.98	2141.8E6	368.1E6	2051.311	2445.289

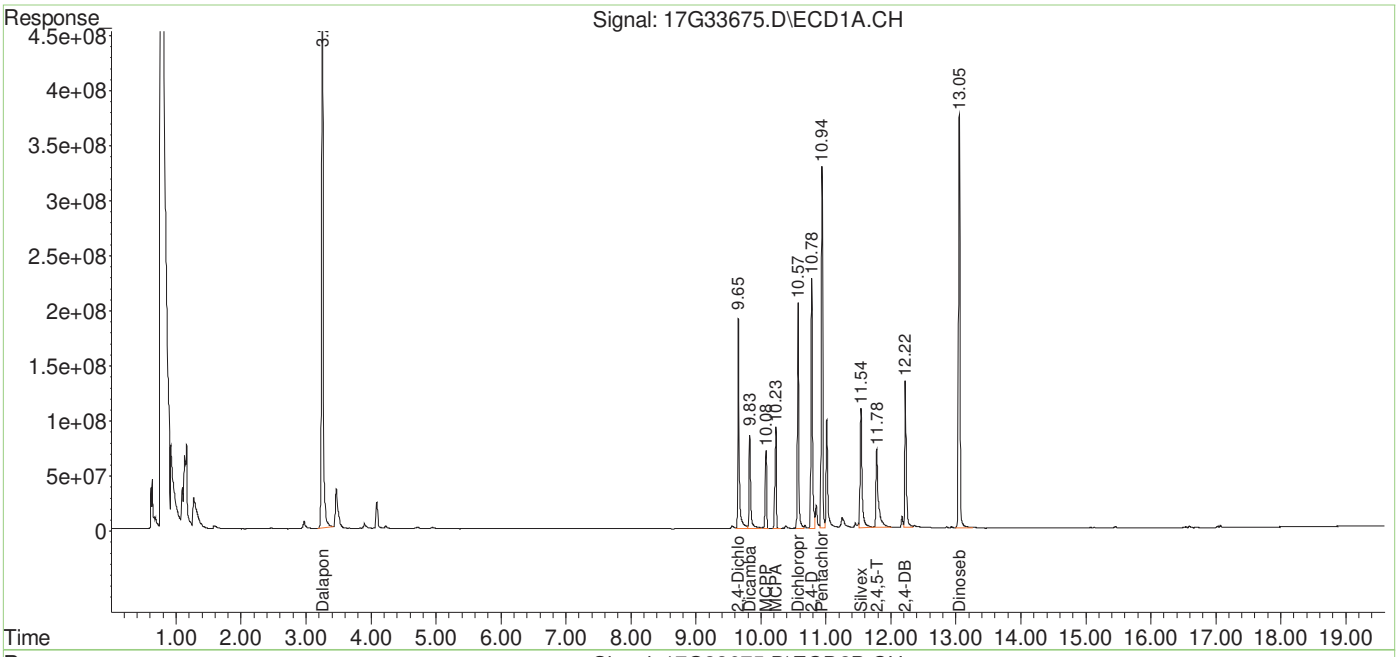
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

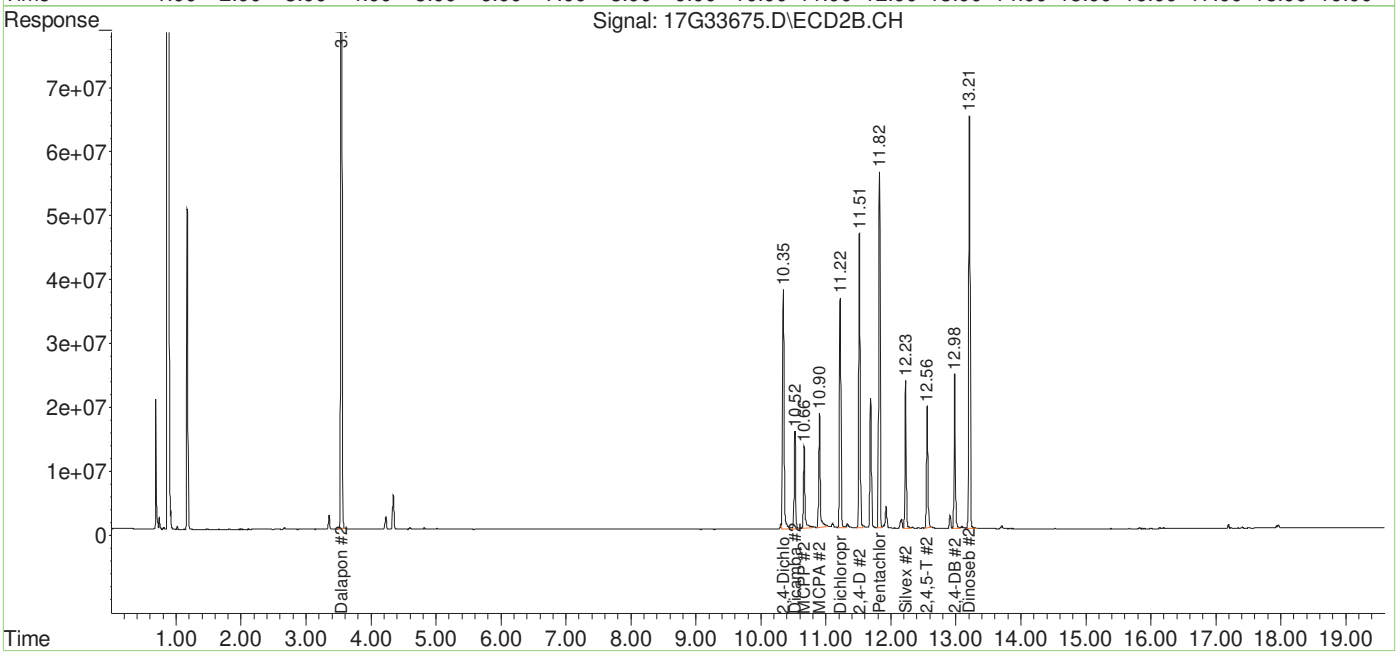
Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\DATA\031321\
Data File : 17G33675.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Mar 2021 12:43 (#1); 13 Mar 2021 13:09 (#2)
Operator : ECL
Sample : S1C0266-CAL5
Misc : 1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 15 11:00:02 2021
Quant Method : D:\MSDCHEM\1\METHODS\8151.M
Quant Title : HP17: 8151 CALIBRATION March 13, 2021
QLast Update : Mon Mar 15 08:41:26 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP17





Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\DATA\031321\
Data File : 17G33676.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Mar 2021 13:09 (#1); 13 Mar 2021 13:35 (#2)
Operator : ECL
Sample : S1C0266-CAL4
Misc : 1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 15 11:00:18 2021
Quant Method : D:\MSDCHEM\1\METHODS\8151.M
Quant Title : HP17: 8151 CALIBRATION March 13, 2021
QLast Update : Mon Mar 15 11:00:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP17

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
2) S	2,4-Dichlorophen	9.65	10.35	1618.8E6	307.4E6	964.769	1082.008
	Spiked Amount 500.000			Recovery =		192.95%	216.40%
	Target Compounds						
1)	Dalapon	3.25	3.54	4860.9E6	904.3E6	2578.608	2775.107
3)	MCPA	10.22	10.90	678.1E6	149.1E6	102.081	91.672
4)	Dicamba	9.83	10.52	863.7E6	116.4E6	95.050	106.469
5)	MCPP	10.07	10.66	512.0E6	106.9E6	109.006	115.398
6)	Dichloroprop	10.57	11.22	1572.2E6	278.6E6	941.281	1082.803
7)	2,4-D	10.78	11.51	1732.6E6	348.0E6	960.140	1087.579
8)	Pentachloropheno	10.94	11.82	2479.6E6	393.8E6	100.573	118.098
9)	Silvex	11.54	12.23	1168.8E6	174.3E6	101.194	113.805
10)	2,4,5-T	11.79	12.56	909.3E6	148.9E6	105.361	116.290
11)	Dinoseb	13.05	13.21	3124.3E6	512.6E6	467.332	554.190
12)	2,4-DB	12.23	12.98	1064.9E6	190.2E6	1012.666	1165.811

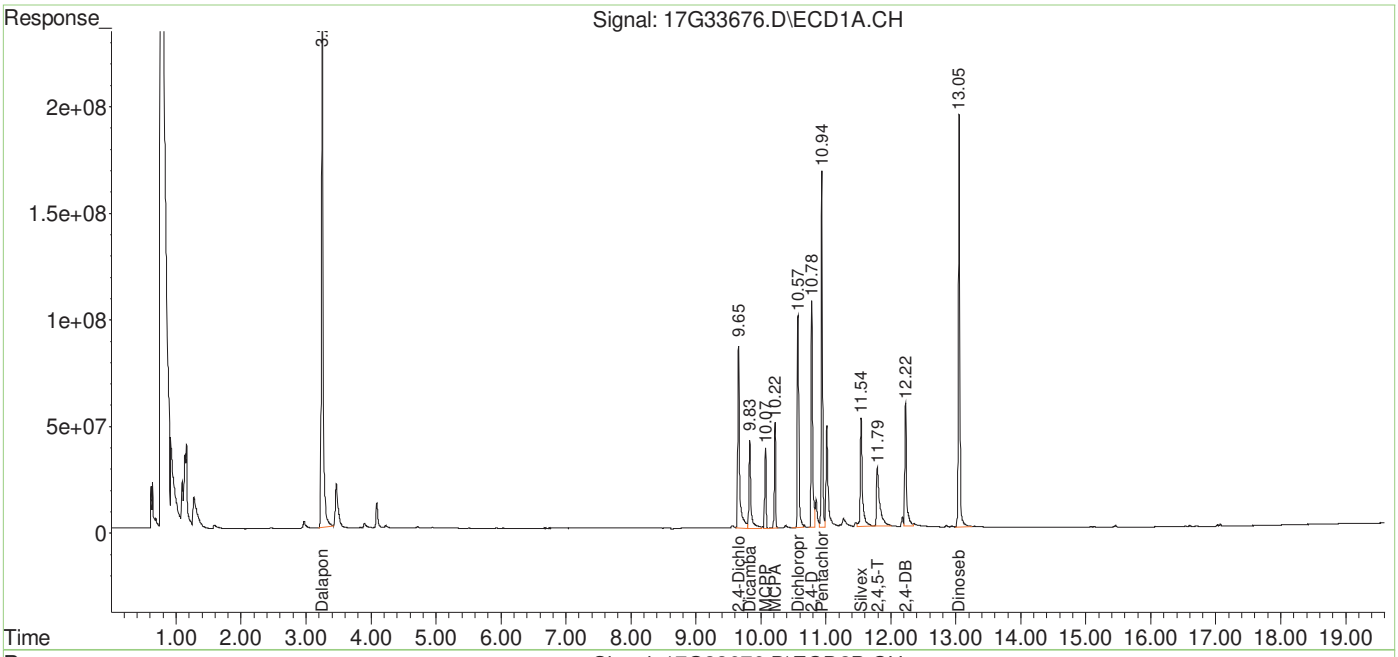
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

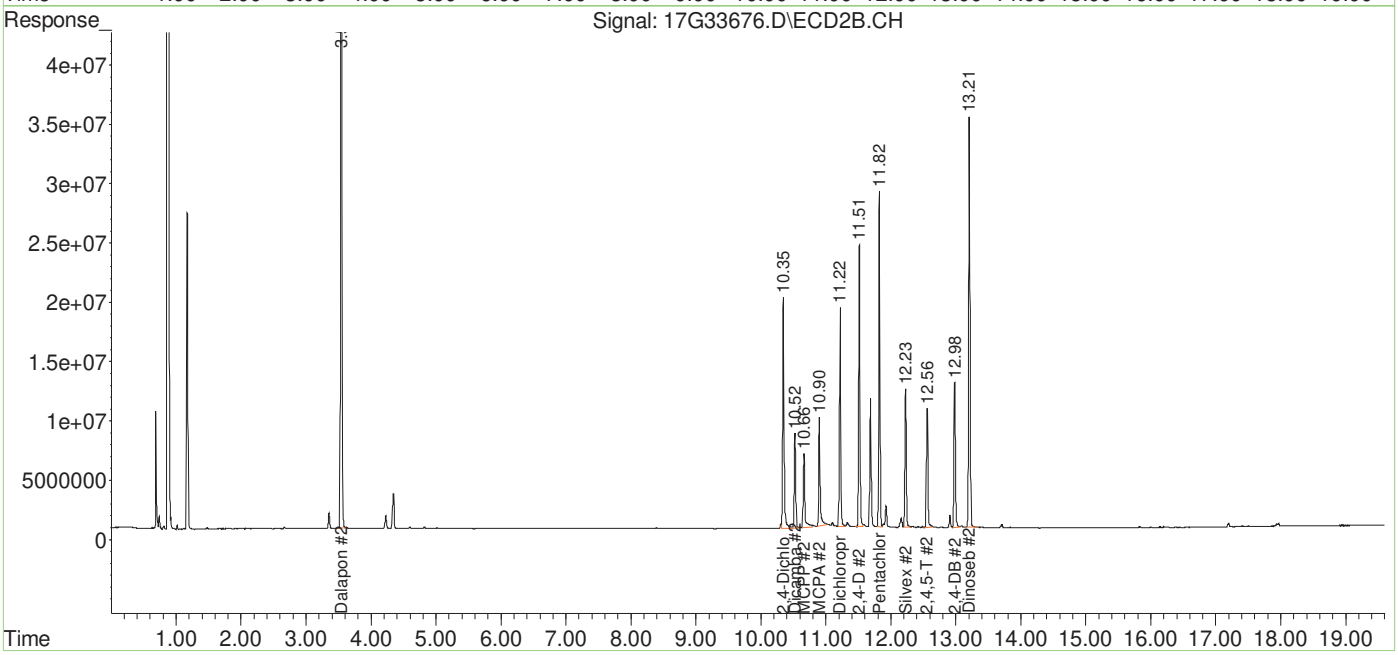
Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\DATA\031321\
Data File : 17G33676.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Mar 2021 13:09 (#1); 13 Mar 2021 13:35 (#2)
Operator : ECL
Sample : S1C0266-CAL4
Misc : 1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 15 11:00:18 2021
Quant Method : D:\MSDCHEM\1\METHODS\8151.M
Quant Title : HP17: 8151 CALIBRATION March 13, 2021
QLast Update : Mon Mar 15 11:00:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP17





Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\DATA\031321\
Data File : 17G33677.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Mar 2021 13:35 (#1); 13 Mar 2021 14:02 (#2)
Operator : ECL
Sample : S1C0266-CAL3
Misc : 1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 15 11:00:32 2021
Quant Method : D:\MSDCHEM\1\METHODS\8151.M
Quant Title : HP17: 8151 CALIBRATION March 13, 2021
QLast Update : Mon Mar 15 11:00:27 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP17

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
2) S	2,4-Dichlorophen	9.66	10.35	926.7E6	176.0E6	546.532	583.880
	Spiked Amount 500.000			Recovery =		109.31%	116.78%
	Target Compounds						
1)	Dalapon	3.25	3.55	2620.3E6	470.2E6	1361.120	1395.228
3)	MCPA	10.21	10.90	356.1E6	87632583	53.153	52.422
4)	Dicamba	9.83	10.52	519.0E6	65181460	56.040	57.270
5)	MCPP	10.07	10.66	263.8E6	57180655	55.760	57.878
6)	Dichloroprop	10.57	11.22	891.6E6	159.8E6	529.233	585.280
7)	2,4-D	10.78	11.51	921.5E6	202.5E6	511.375	596.259
8)	Pentachloropheno	10.94	11.82	1360.6E6	210.5E6	54.483	59.592
9)	Silvex	11.55	12.23	636.6E6	95756464	54.691	58.840
10)	2,4,5-T	11.81f	12.56	459.0E6	82231395	53.746	60.216
11)	Dinoseb	13.05	13.21	1765.9E6	288.8E6	263.147	295.554
12)	2,4-DB	12.23	12.98	553.9E6	103.8E6	527.526	591.917

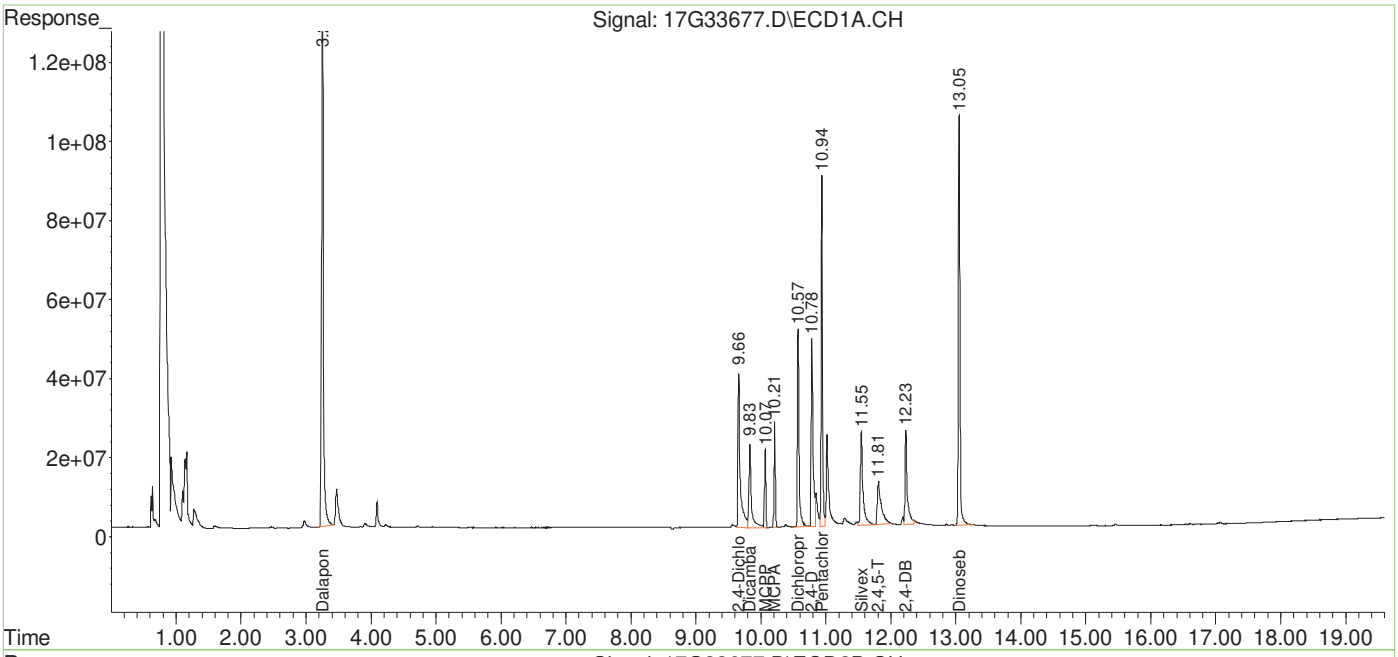
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

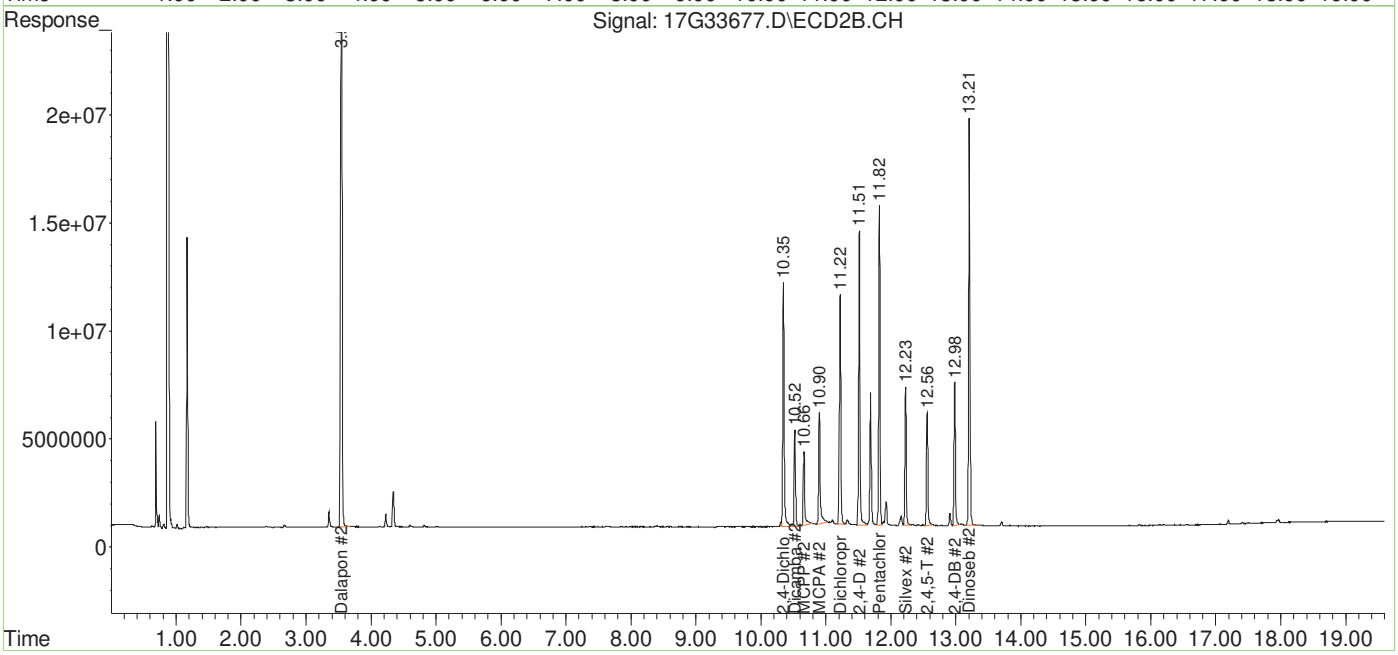
Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\DATA\031321\
Data File : 17G33677.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Mar 2021 13:35 (#1); 13 Mar 2021 14:02 (#2)
Operator : ECL
Sample : S1C0266-CAL3
Misc : 1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 15 11:00:32 2021
Quant Method : D:\MSDCHEM\1\METHODS\8151.M
Quant Title : HP17: 8151 CALIBRATION March 13, 2021
QLast Update : Mon Mar 15 11:00:27 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP17





Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\DATA\031321\
Data File : 17G33678.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Mar 2021 14:02 (#1); 13 Mar 2021 14:28 (#2)
Operator : ECL
Sample : S1C0266-CAL2
Misc : 1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 15 11:00:48 2021
Quant Method : D:\MSDCHEM\1\METHODS\8151.M
Quant Title : HP17: 8151 CALIBRATION March 13, 2021
QLast Update : Mon Mar 15 11:00:44 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP17

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
2) S	2,4-Dichlorophen	9.66	10.35	475.1E6	90103100	273.226	277.868
	Spiked Amount 500.000			Recovery	=	54.65%	55.57%
	Target Compounds						
1)	Dalapon	3.26	3.54	1330.0E6	220.5E6	668.180	621.533
3)	MCPA	10.21	10.90	171.1E6	47773207	25.139	27.476
4)	Dicamba	9.83	10.52	248.5E6	32004238	25.776	26.573
5)	MCPP	10.06	10.66	114.7E6	30532020	23.705	28.894
6)	Dichloroprop	10.57	11.22	458.0E6	82693918	266.031	280.722
7)	2,4-D	10.79	11.51	401.2E6	101.9E6	221.187	277.409
8)	Pentachloropheno	10.94	11.82	668.3E6	97164490	26.039	25.613
9)	Silvex	11.55	12.23	311.5E6	46332176	26.251	26.466
10)	2,4,5-T	11.84f	12.56	197.7E6	39426579	23.309	26.765
11)	Dinoseb	13.05	13.21	915.7E6	142.4E6	133.966	135.875
12)	2,4-DB	12.24	12.98	284.2E6	51555352	269.460	270.744

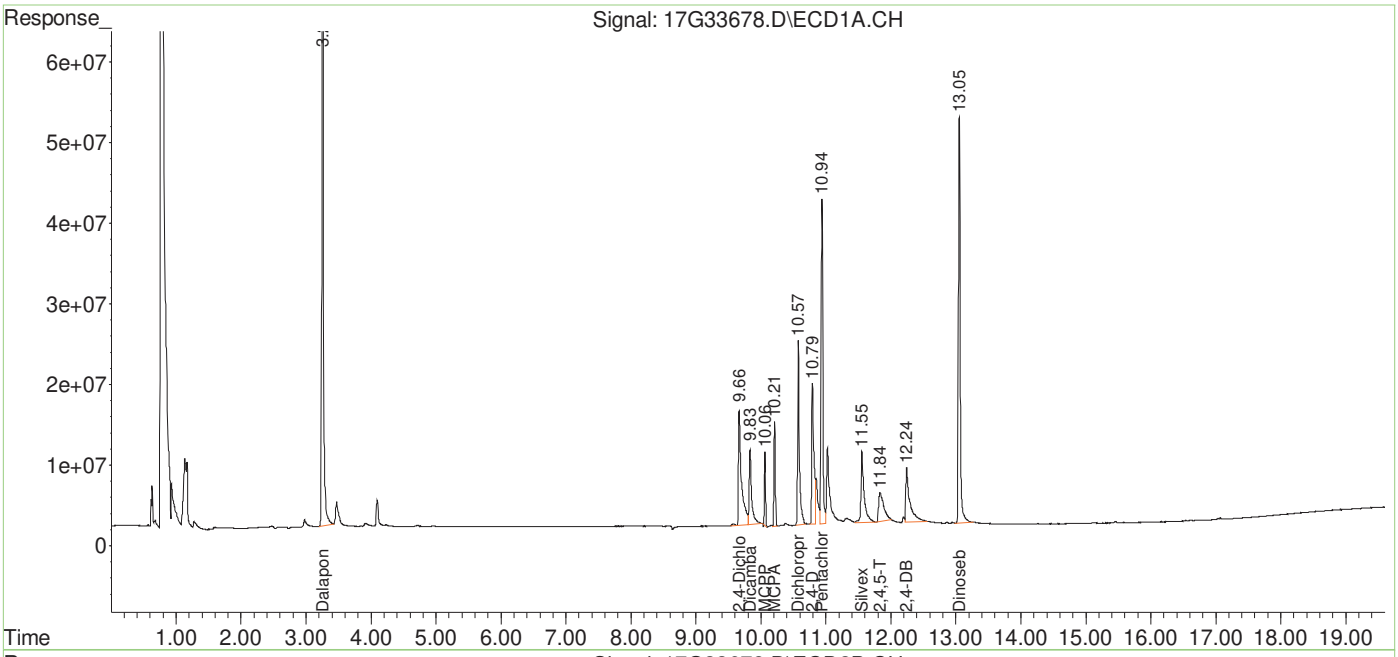
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

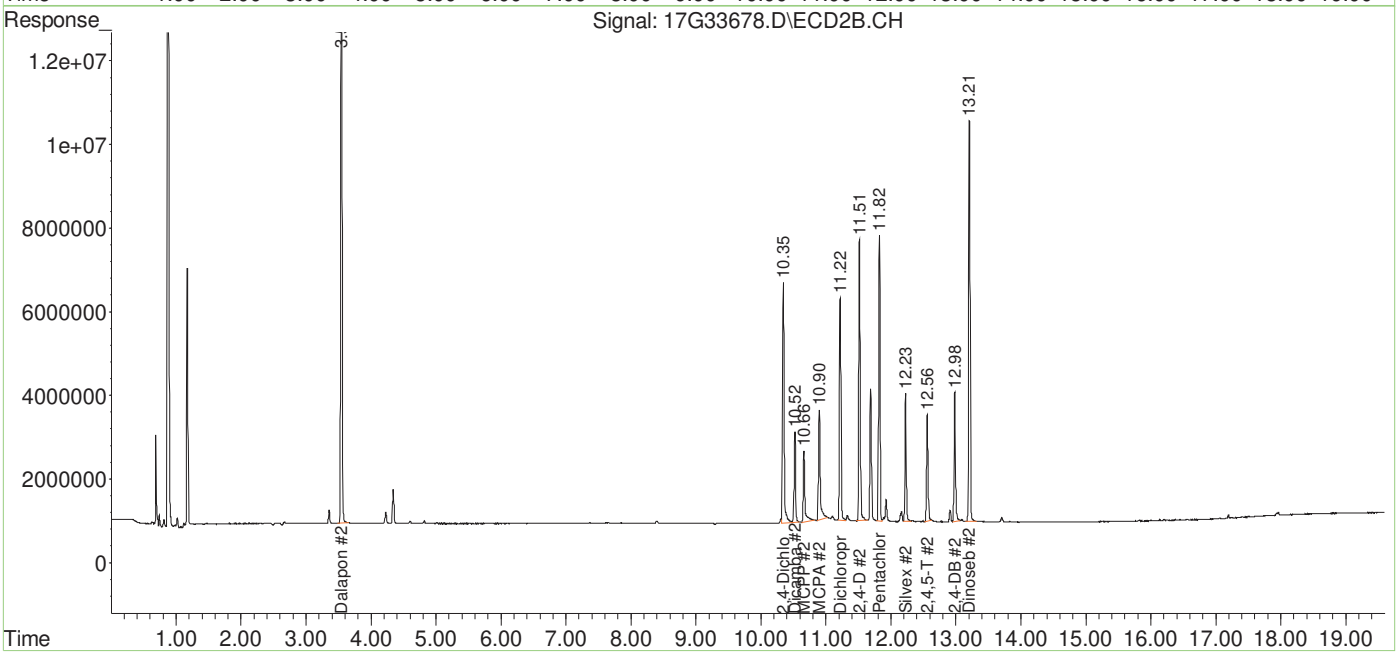
Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\DATA\031321\
Data File : 17G33678.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Mar 2021 14:02 (#1); 13 Mar 2021 14:28 (#2)
Operator : ECL
Sample : S1C0266-CAL2
Misc : 1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 15 11:00:48 2021
Quant Method : D:\MSDCHEM\1\METHODS\8151.M
Quant Title : HP17: 8151 CALIBRATION March 13, 2021
QLast Update : Mon Mar 15 11:00:44 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP17





Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\DATA\031321\
Data File : 17G33679.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Mar 2021 14:28 (#1); 13 Mar 2021 14:54 (#2)
Operator : ECL
Sample : S1C0266-CAL1
Misc : 1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 15 11:02:10 2021
Quant Method : D:\MSDCHEM\1\METHODS\8151.M
Quant Title : HP17: 8151 CALIBRATION March 13, 2021
QLast Update : Mon Mar 15 11:00:59 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP17

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
2)	S 2,4-Dichlorophen	9.69	10.35	193.6E6	39960851	109.594	117.218	
	Spiked Amount 500.000			Recovery	=	21.92%	23.44%	
	Target Compounds							
1)	Dalapon	3.26	3.55	559.8E6	98565336	270.662	271.528	
3)	MCPA	10.21	10.90	69104902	23265888	10.060	13.103	
4)	Dicamba	9.84	10.52	116.6E6	13575888	12.083	10.934	
5)	MCPP	10.06	10.66	40692017	11580138	8.386	10.306	
6)	Dichloroprop	10.58	11.22	204.1E6	37020369	116.914	118.633	
7)	2,4-D	10.82	11.52	194.9E6	45312346	109.893	116.514	
8)	Pentachloropheno	10.94	11.82	287.1E6	38547290	10.944	9.730	
9)	Silvex	11.57	12.23	120.2E6	19381034	10.029	10.569	
10)	2,4,5-T	11.89	12.56	58031583	16150896	7.047	10.430	#
11)	Dinoseb	13.05	13.21	403.3E6	60574945	58.190	55.048	
12)	2,4-DB	12.29	12.98	83386336	22548688	79.956	111.239	

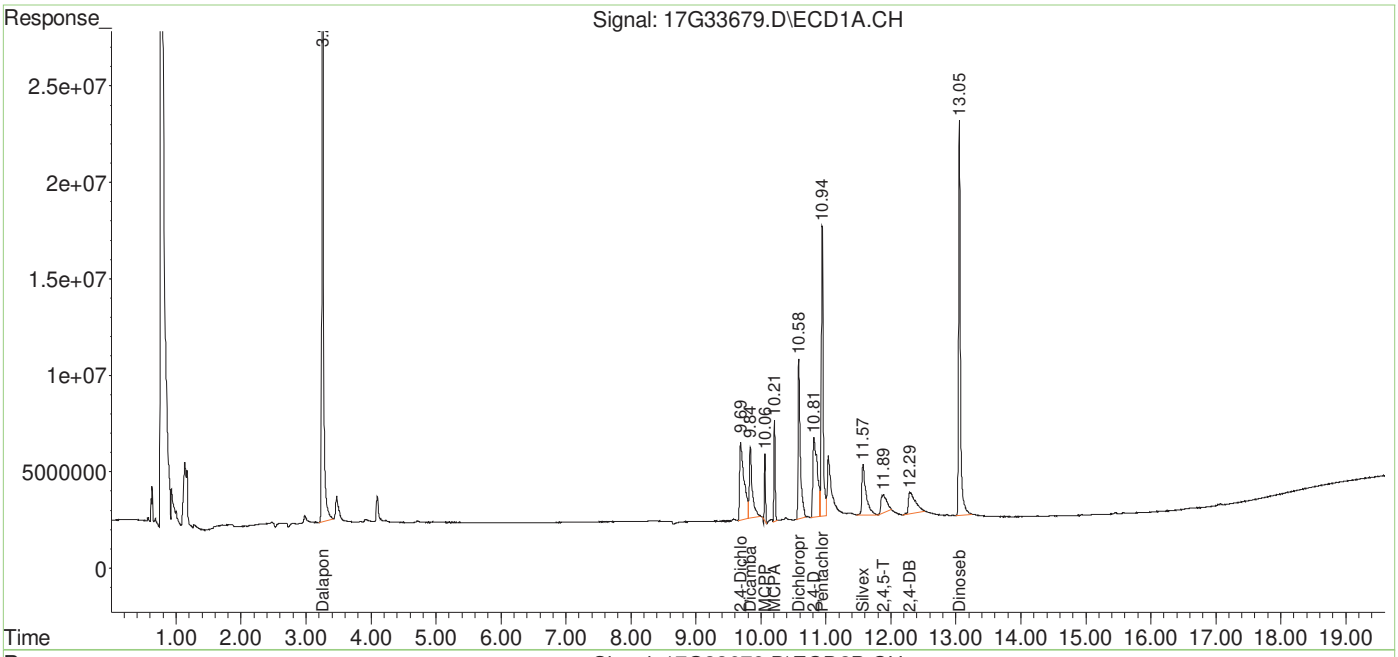
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

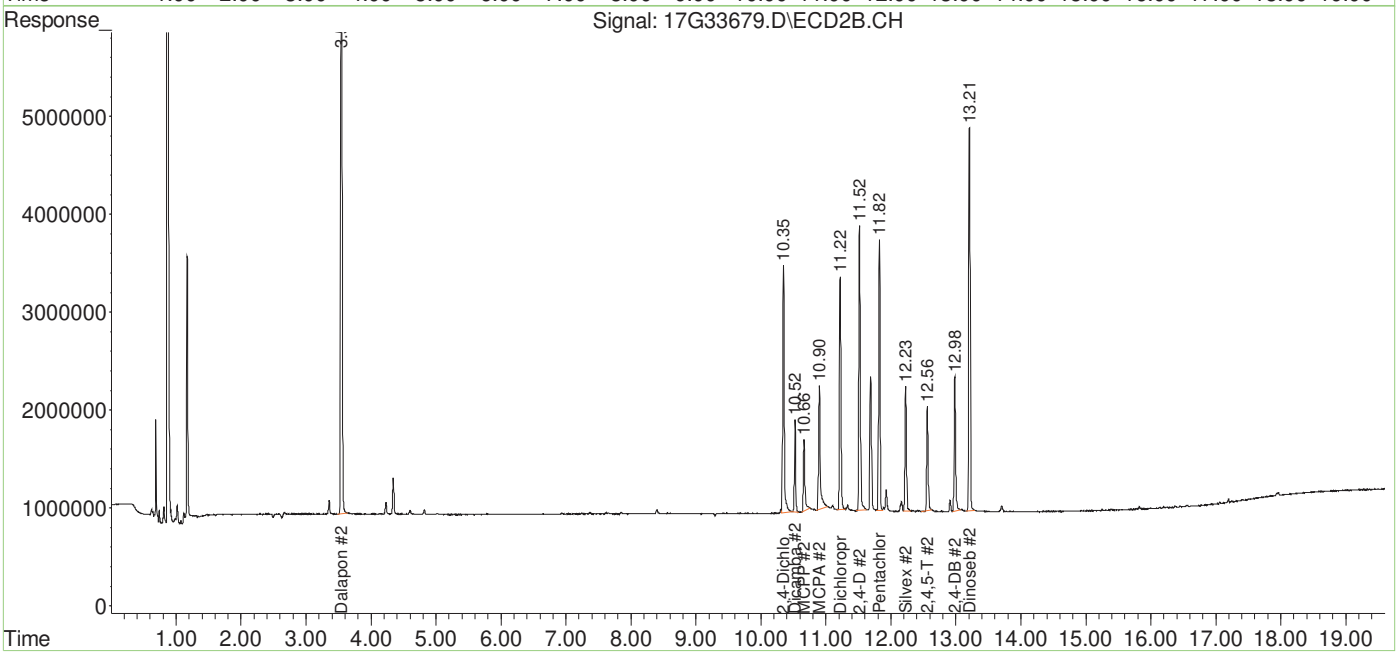
Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\DATA\031321\
Data File : 17G33679.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Mar 2021 14:28 (#1); 13 Mar 2021 14:54 (#2)
Operator : ECL
Sample : S1C0266-CAL1
Misc : 1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 15 11:02:10 2021
Quant Method : D:\MSDCHEM\1\METHODS\8151.M
Quant Title : HP17: 8151 CALIBRATION March 13, 2021
QLast Update : Mon Mar 15 11:00:59 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP17





Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\DATA\031321\
Data File : 17G33680.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Mar 2021 14:54 (#1); 13 Mar 2021 15:20 (#2)
Operator : ECL
Sample : S1C0266-ICV1
Misc : 1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 15 11:04:09 2021
Quant Method : D:\MSDCHEM\1\METHODS\8151.M
Quant Title : HP17: 8151 CALIBRATION March 13, 2021
QLast Update : Mon Mar 15 11:02:22 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP17

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
2) S	2,4-Dichlorophen	9.66	10.35	873.9E6	169.5E6	494.817	497.171
	Spiked Amount 500.000			Recovery =		98.96%	99.43%
	Target Compounds						
1)	Dalapon	3.25	3.55	2392.7E6	461.7E6	1156.787	1271.890
3)	MCPA	10.21	10.90	336.3E6	82816895	48.956	51.865
4)	Dicamba	9.83	10.52	460.5E6	60324069	47.723	48.585
5)	MCPP	10.07	10.66	244.3E6	55629689	50.349	49.508
6)	Dichloroprop	10.57	11.22	786.6E6	146.9E6	450.504	470.599
7)	2,4-D	10.79	11.51	1011.1E6	190.6E6	570.182	490.209
8)	Pentachloropheno	10.94	11.82	1248.6E6	199.4E6	47.590	50.333
9)	Silvex	11.55	12.23	626.3E6	93181384	52.256	50.816
10)	2,4,5-T	11.81	12.56	440.8E6	81227902	53.530	52.456
11)	Dinoseb	13.05	13.21	1677.8E6	280.8E6	242.063	255.193
12)	2,4-DB	12.23	12.98	533.4E6	99458983	511.421	490.658

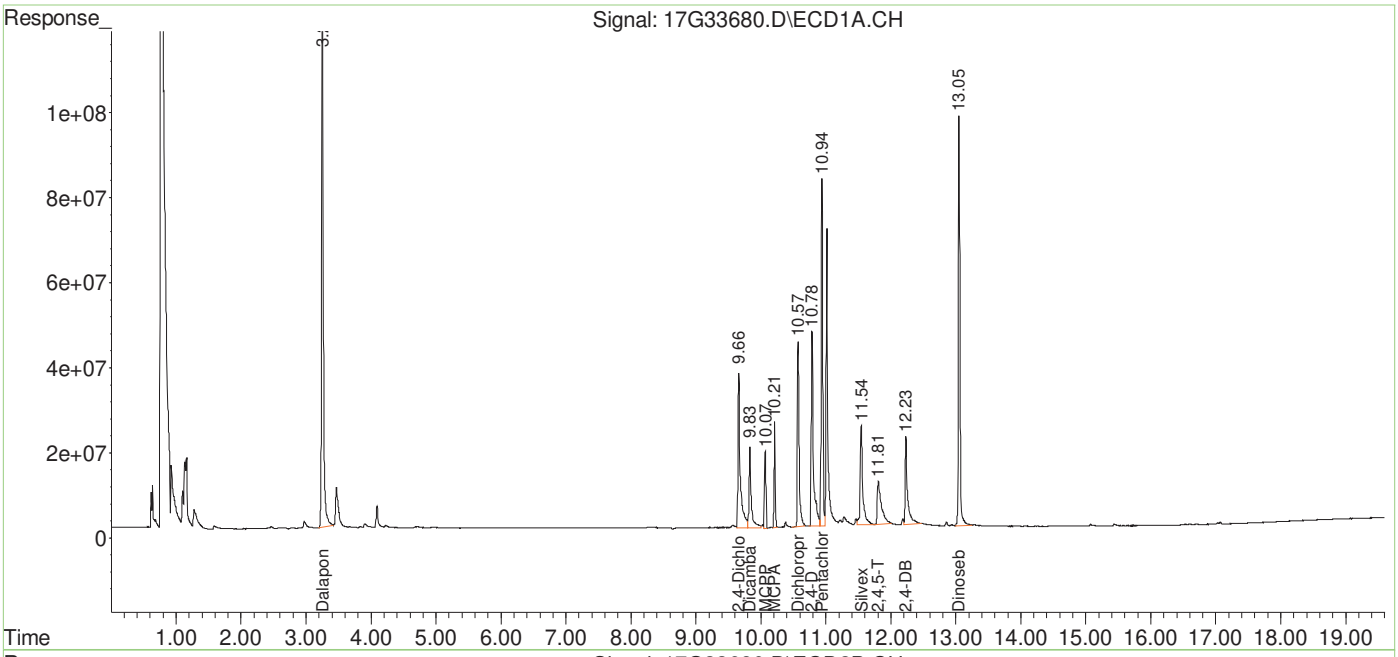
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

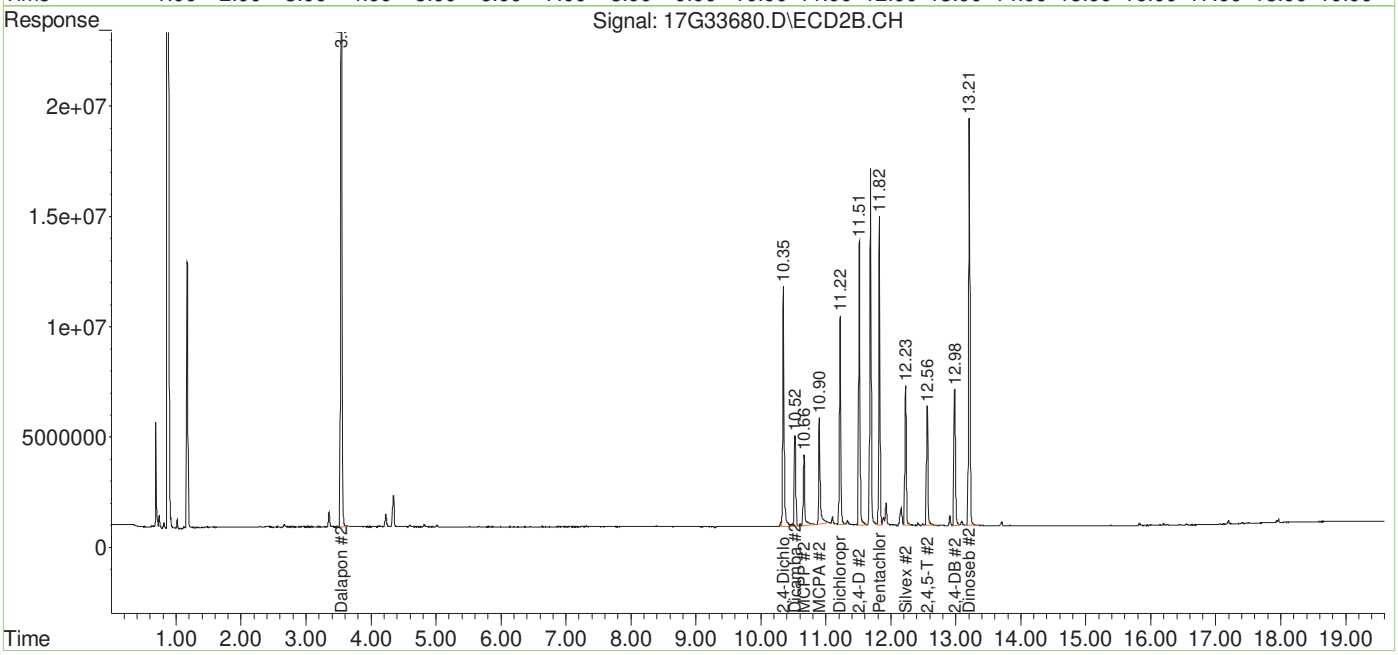
Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\DATA\031321\
Data File : 17G33680.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Mar 2021 14:54 (#1); 13 Mar 2021 15:20 (#2)
Operator : ECL
Sample : S1C0266-ICV1
Misc : 1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 15 11:04:09 2021
Quant Method : D:\MSDCHEM\1\METHODS\8151.M
Quant Title : HP17: 8151 CALIBRATION March 13, 2021
QLast Update : Mon Mar 15 11:02:22 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP17





Evaluate Continuing Calibration Report

Data Path : D:\MSDCHEM\1\DATA\031321\
Data File : 17G33680.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 13 Mar 2021 14:54 (#1); 13 Mar 2021 15:20 (#2)
Operator : ECL
Sample   : S1C0266-ICV1
Misc   : 1
ALS Vial : 6   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 15 11:04:09 2021
Quant Method : D:\MSDCHEM\1\METHODS\8151.M
Quant Title : HP17: 8151 CALIBRATION March 13, 2021
QLast Update : Mon Mar 15 11:02:22 2021
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :
InstName : HP17

Min. RRF   :   0.000 Min. Rel. Area : 10% Max. R.T. Dev 0.15min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1		Dalapon	1250.000	1156.787	7.5	91	0.00
2	S	2,4-Dichlorophenylacetic ac	500.000	494.817	1.0	94	0.00
3		MCPA	50.000	48.956	2.1	94	0.00
4		Dicamba	50.000	47.723	4.6	89	0.00
5		MCPP	50.000	50.349	-0.7	93	0.00
6		Dichloroprop	500.000	450.504	9.9	88	0.00
7		2,4-D	500.000	570.182	-14.0	110	0.00
8		Pentachlorophenol	50.000	47.590	4.8	92	0.00
9		Silvex	50.000	52.256	-4.5	98	0.00
10		2,4,5-T	50.000	53.530	-7.1	96	0.00
11		Dinoseb	250.000	242.063	3.2	95	0.00
12		2,4-DB	500.000	511.421	-2.3	96	0.00

Signal #2

1		Dalapon	1250.000	1271.890	-1.8	98	0.00
2	S	2,4-Dichlorophenylacetic	500.000	497.171	0.6	96	0.00
3		MCPA	50.000	51.865	-3.7	95	0.00
4		Dicamba	50.000	48.585	2.8	93	0.00
5		MCPP	50.000	49.508	1.0	97	0.00
6		Dichloroprop	500.000	470.599	5.9	92	0.00
7		2,4-D	500.000	490.209	2.0	94	0.00
8		Pentachlorophenol	50.000	50.333	-0.7	95	0.00
9		Silvex	50.000	50.816	-1.6	97	0.00
10		2,4,5-T	50.000	52.456	-4.9	99	0.00
11		Dinoseb	250.000	255.193	-2.1	97	0.00
12		2,4-DB	500.000	490.658	1.9	96	0.00

Evaluate Continuing Calibration Report - Not Founds

Signal #2

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\DATA\031321\
Data File : 17G33691.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Mar 2021 19:41 (#1); 13 Mar 2021 20:07 (#2)
Operator : ECL
Sample : S1C0266-CCV1
Misc : 1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 15 11:04:37 2021
Quant Method : D:\MSDCHEM\1\METHODS\8151.M
Quant Title : HP17: 8151 CALIBRATION March 13, 2021
QLast Update : Mon Mar 15 11:04:05 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP17

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
2) S	2,4-Dichlorophen	9.65	10.35	999.5E6	196.1E6	565.931	575.090
	Spiked Amount 500.000			Recovery =		113.19%	115.02%
	Target Compounds						
1)	Dalapon	3.25	3.54	2814.2E6	515.4E6	1360.543	1419.826
3)	MCPA	10.22	10.90	395.9E6	86405149	57.626	54.470
4)	Dicamba	9.83	10.52	529.7E6	74779920	54.900	60.227
5)	MCPP	10.07	10.66	288.0E6	54248704	59.355	48.279
6)	Dichloroprop	10.57	11.22	944.9E6	185.3E6	541.221	593.644
7)	2,4-D	10.78	11.51	1050.5E6	228.8E6	592.429	588.308
8)	Pentachloropheno	10.94	11.82	1448.2E6	236.8E6	55.196	59.765
9)	Silvex	11.54	12.23	705.5E6	115.8E6	58.865	63.147
10)	2,4,5-T	11.79f	12.56	558.5E6	100.3E6	67.815	64.772
11)	Dinoseb	13.05	13.21	1920.9E6	344.6E6	277.135	313.197
12)	2,4-DB	12.22	12.98	642.9E6	124.0E6	616.409	611.891

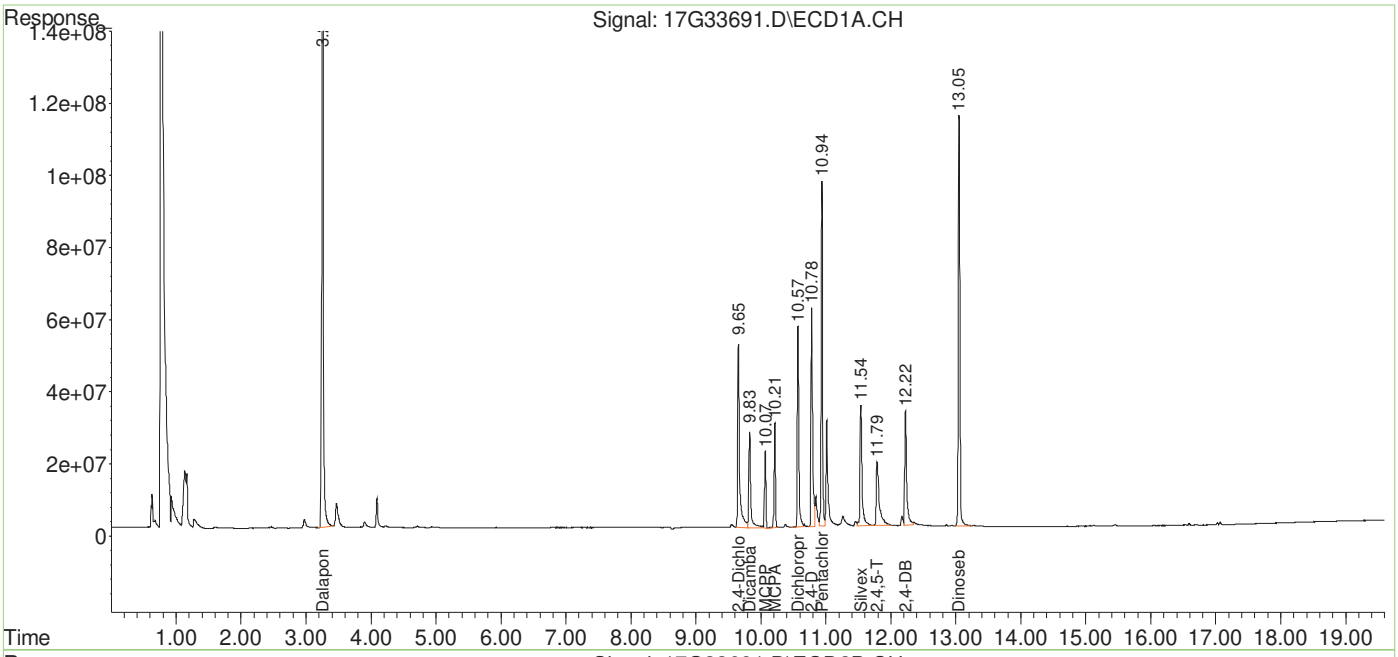
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

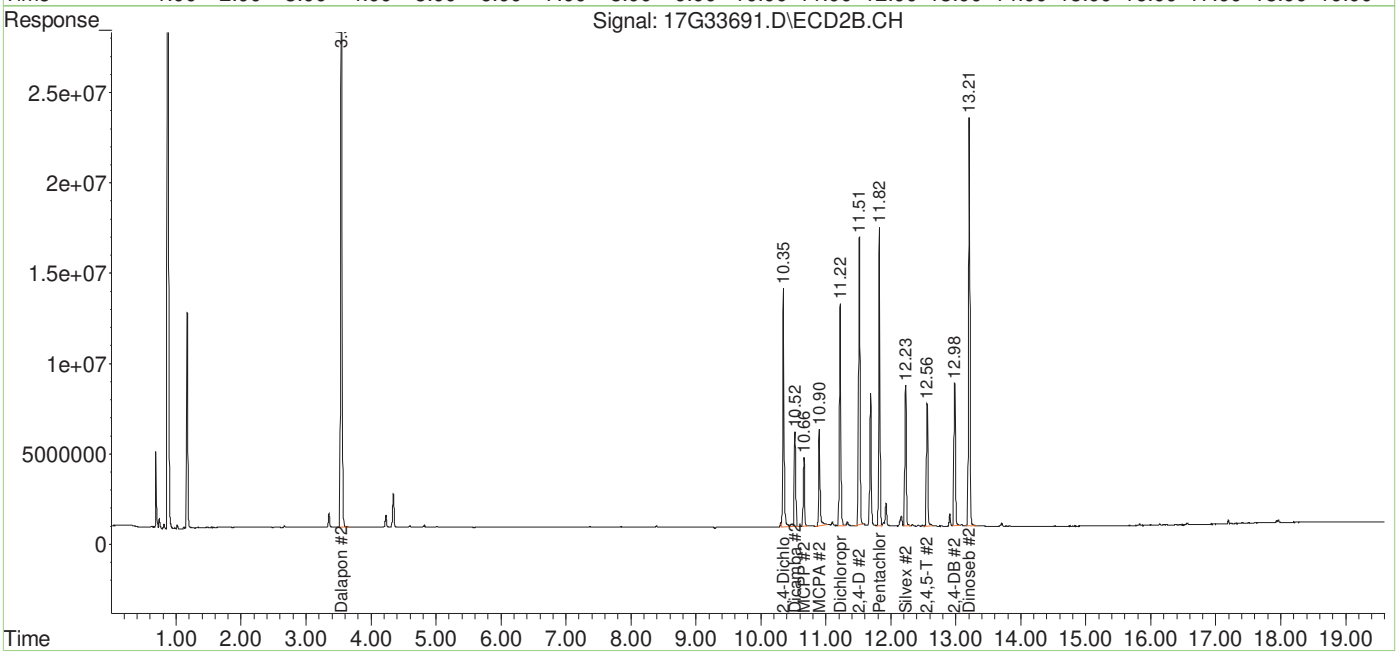
Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\DATA\031321\
Data File : 17G33691.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Mar 2021 19:41 (#1); 13 Mar 2021 20:07 (#2)
Operator : ECL
Sample : S1C0266-CCV1
Misc : 1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 15 11:04:37 2021
Quant Method : D:\MSDCHEM\1\METHODS\8151.M
Quant Title : HP17: 8151 CALIBRATION March 13, 2021
QLast Update : Mon Mar 15 11:04:05 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP17





Evaluate Continuing Calibration Report

Data Path : D:\MSDCHEM\1\DATA\031321\
Data File : 17G33691.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 13 Mar 2021 19:41 (#1); 13 Mar 2021 20:07 (#2)
Operator : ECL
Sample   : S1C0266-CCV1
Misc   : 1
ALS Vial : 17   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 15 11:04:37 2021
Quant Method : D:\MSDCHEM\1\METHODS\8151.M
Quant Title : HP17: 8151 CALIBRATION March 13, 2021
QLast Update : Mon Mar 15 11:04:05 2021
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :
InstName : HP17

Min. RRF   :   0.000 Min. Rel. Area : 10% Max. R.T. Dev 0.15min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1		Dalapon	1250.000	1360.543	-8.8	107	0.00
2	S	2,4-Dichlorophenylacetic ac	500.000	565.931	-13.2	108	0.00
3		MCPA	50.000	57.626	-15.3#	111	0.00
4		Dicamba	50.000	54.900	-9.8	102	-0.01
5		MCPP	50.000	59.355	-18.7#	109	0.00
6		Dichloroprop	500.000	541.221	-8.2	106	0.00
7		2,4-D	500.000	592.429	-18.5#	114	0.00
8		Pentachlorophenol	50.000	55.196	-10.4	106	0.00
9		Silvex	50.000	58.865	-17.7#	111	-0.01
10		2,4,5-T	50.000	67.815	-35.6#	122	-0.02
11		Dinoseb	250.000	277.135	-10.9	109	0.00
12		2,4-DB	500.000	616.409	-23.3#	116	0.00

Signal #2

1		Dalapon	1250.000	1419.826	-13.6	110	0.00
2	S	2,4-Dichlorophenylacetic	500.000	575.090	-15.0#	111	0.00
3		MCPA	50.000	54.470	-8.9	99	0.00
4		Dicamba	50.000	60.227	-20.5#	115	0.00
5		MCPP	50.000	48.279	3.4	95	0.00
6		Dichloroprop	500.000	593.644	-18.7#	116	0.00
7		2,4-D	500.000	588.308	-17.7#	113	0.00
8		Pentachlorophenol	50.000	59.765	-19.5#	112	0.00
9		Silvex	50.000	63.147	-26.3#	121	0.00
10		2,4,5-T	50.000	64.772	-29.5#	122	0.00
11		Dinoseb	250.000	313.197	-25.3#	119	0.00
12		2,4-DB	500.000	611.891	-22.4#	120	0.00

Evaluate Continuing Calibration Report - Not Founds

Signal #2

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\DATA\032321\
Data File : 17G33700.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 14:43 (#1); 23 Mar 2021 15:09 (#2)
Operator : ECL
Sample : S1C0441-CCV1
Misc : 1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 23 16:31:50 2021
Quant Method : D:\MSDCHEM\1\METHODS\8151.M
Quant Title : HP17: 8151 CALIBRATION March 13, 2021
QLast Update : Wed Mar 17 09:58:53 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP17

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
2) S	2,4-Dichlorophen	9.67	10.36	853.7E6	159.3E6	483.351	467.256
	Spiked Amount 500.000			Recovery =		96.67%	93.45%
	Target Compounds						
1)	Dalapon	3.27	3.56	2541.9E6	451.8E6	1228.921	1244.564
3)	MCPA	10.23	10.91	337.5E6	84334840	49.122	52.967
4)	Dicamba	9.84	10.54	425.2E6	64921455	44.066	52.288
5)	MCPP	10.08	10.68	243.0E6	45712509	50.089	40.682
6)	Dichloroprop	10.59	11.23	828.1E6	148.2E6	474.309	474.867
7)	2,4-D	10.80	11.53	905.8E6	182.4E6	510.809	468.962
8)	Pentachloropheno	10.95	11.84	1277.6E6	202.1E6	48.695	51.020
9)	Silvex	11.56	12.24	619.5E6	93559679	51.688	51.022
10)	2,4,5-T	11.81	12.57	443.9E6	77464542	53.905	50.026
11)	Dinoseb	13.07	13.22	1649.0E6	277.9E6	237.915	252.584
12)	2,4-DB	12.24	13.00	508.7E6	94839582	487.747	467.870

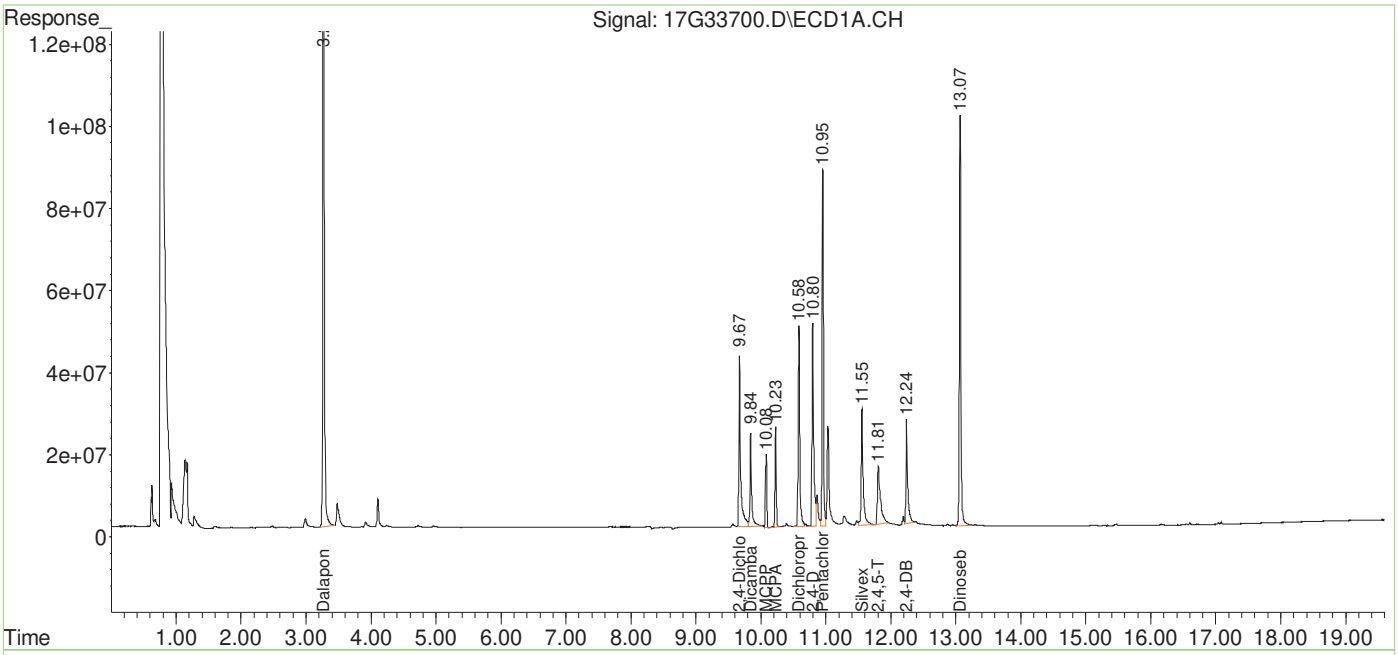
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

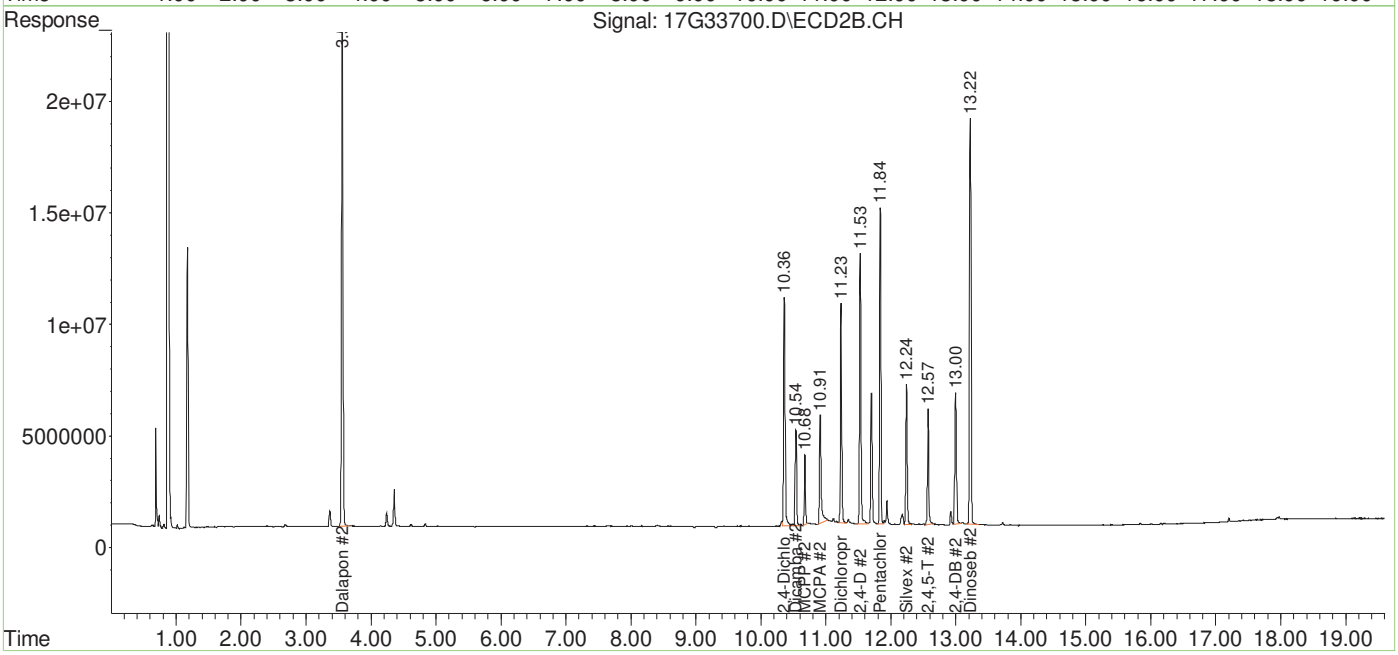
Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\DATA\032321\
Data File : 17G33700.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 14:43 (#1); 23 Mar 2021 15:09 (#2)
Operator : ECL
Sample : S1C0441-CCV1
Misc : 1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 23 16:31:50 2021
Quant Method : D:\MSDCHEM\1\METHODS\8151.M
Quant Title : HP17: 8151 CALIBRATION March 13, 2021
QLast Update : Wed Mar 17 09:58:53 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP17





Evaluate Continuing Calibration Report

Data Path : D:\MSDCHEM\1\DATA\032321\
Data File : 17G33700.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 23 Mar 2021 14:43 (#1); 23 Mar 2021 15:09 (#2)
Operator : ECL
Sample   : S1C0441-CCV1
Misc   : 1
ALS Vial : 1   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 23 16:31:50 2021
Quant Method : D:\MSDCHEM\1\METHODS\8151.M
Quant Title : HP17: 8151 CALIBRATION March 13, 2021
QLast Update : Wed Mar 17 09:58:53 2021
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :
InstName : HP17

Min. RRF   :   0.000 Min. Rel. Area : 10% Max. R.T. Dev 0.15min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1		Dalapon	1250.000	1228.921	1.7	97	0.00
2	S	2,4-Dichlorophenylacetic ac	500.000	483.351	3.3	92	0.00
3		MCPA	50.000	49.122	1.8	95	0.01
4		Dicamba	50.000	44.066	11.9	82	0.00
5		MCPP	50.000	50.089	-0.2	92	0.00
6		Dichloroprop	500.000	474.309	5.1	93	0.00
7		2,4-D	500.000	510.809	-2.2	98	0.00
8		Pentachlorophenol	50.000	48.695	2.6	94	0.00
9		Silvex	50.000	51.688	-3.4	97	0.00
10		2,4,5-T	50.000	53.905	-7.8	97	0.00
11		Dinoseb	250.000	237.915	4.8	93	0.00
12		2,4-DB	500.000	487.747	2.5	92	0.00

Signal #2

1		Dalapon	1250.000	1244.564	0.4	96	0.00
2	S	2,4-Dichlorophenylacetic	500.000	467.256	6.5	91	0.00
3		MCPA	50.000	52.967	-5.9	96	0.00
4		Dicamba	50.000	52.288	-4.6	100	0.00
5		MCPP	50.000	40.682	18.6#	80	0.00
6		Dichloroprop	500.000	474.867	5.0	93	0.00
7		2,4-D	500.000	468.962	6.2	90	0.00
8		Pentachlorophenol	50.000	51.020	-2.0	96	0.00
9		Silvex	50.000	51.022	-2.0	98	0.00
10		2,4,5-T	50.000	50.026	-0.1	94	0.00
11		Dinoseb	250.000	252.584	-1.0	96	0.00
12		2,4-DB	500.000	467.870	6.4	91	0.00

Evaluate Continuing Calibration Report - Not Founds

Signal #2

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\DATA\032321\
Data File : 17G33709.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 20:16 (#1); 23 Mar 2021 20:42 (#2)
Operator : ECL
Sample : S1C0441-CCV2
Misc : 1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 24 10:35:55 2021
Quant Method : D:\MSDCHEM\1\METHODS\8151.M
Quant Title : HP17: 8151 CALIBRATION March 13, 2021
QLast Update : Tue Mar 23 16:31:48 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP17

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
2) S	2,4-Dichlorophen	9.67	10.36	871.9E6	162.5E6	493.652	476.681
	Spiked Amount 500.000			Recovery =		98.73%	95.34%
	Target Compounds						
1)	Dalapon	3.27	3.56	2499.4E6	492.1E6	1208.379	1355.570
3)	MCPA	10.23	10.91	343.2E6	75857240	49.956	46.812
4)	Dicamba	9.84	10.54	424.5E6	64879494	43.996	52.254
5)	MCPP	10.08	10.68	246.0E6	46326204	50.694	41.228
6)	Dichloroprop	10.58	11.24	823.4E6	154.0E6	471.599	493.644
7)	2,4-D	10.80	11.53	919.6E6	191.5E6	518.571	492.336
8)	Pentachloropheno	10.95	11.84	1280.0E6	200.5E6	48.786	50.622
9)	Silvex	11.56	12.24	625.6E6	97329571	52.202	53.078
10)	2,4,5-T	11.81	12.57	459.2E6	83416542	55.765	53.869
11)	Dinoseb	13.07	13.22	1655.9E6	286.2E6	238.911	260.120
12)	2,4-DB	12.24	13.00	534.8E6	103.0E6	512.807	508.141

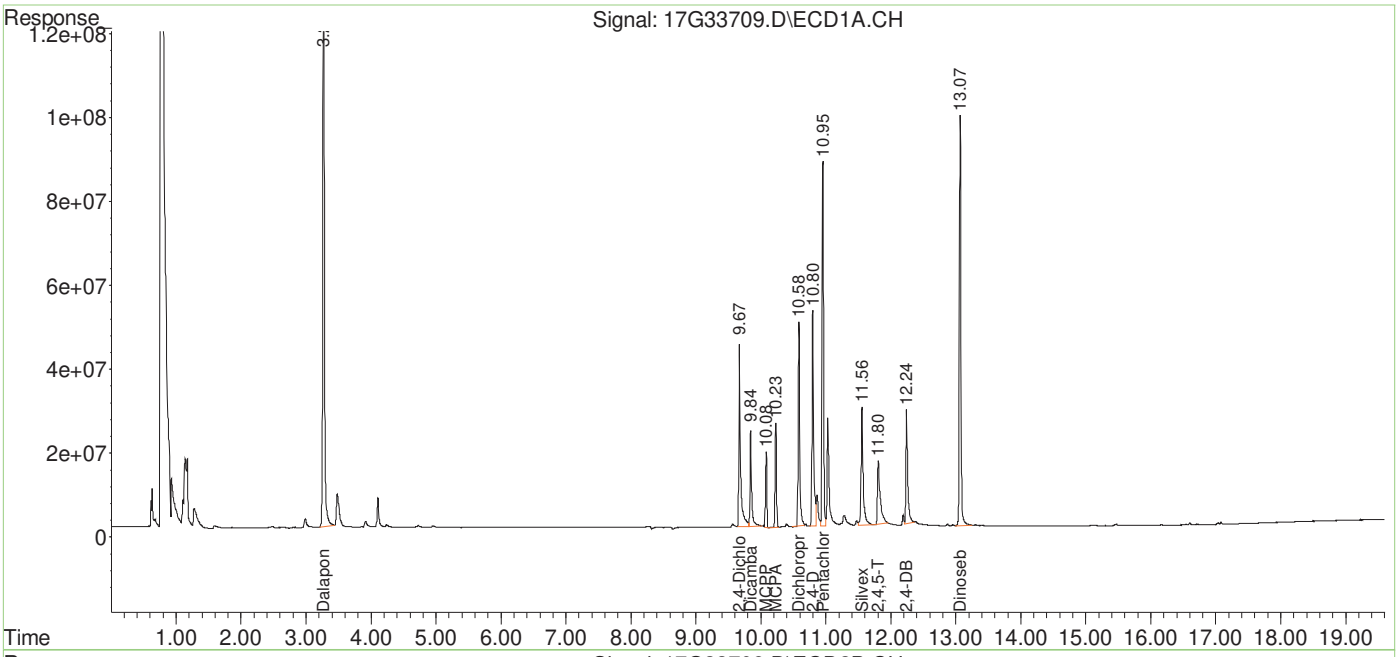
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

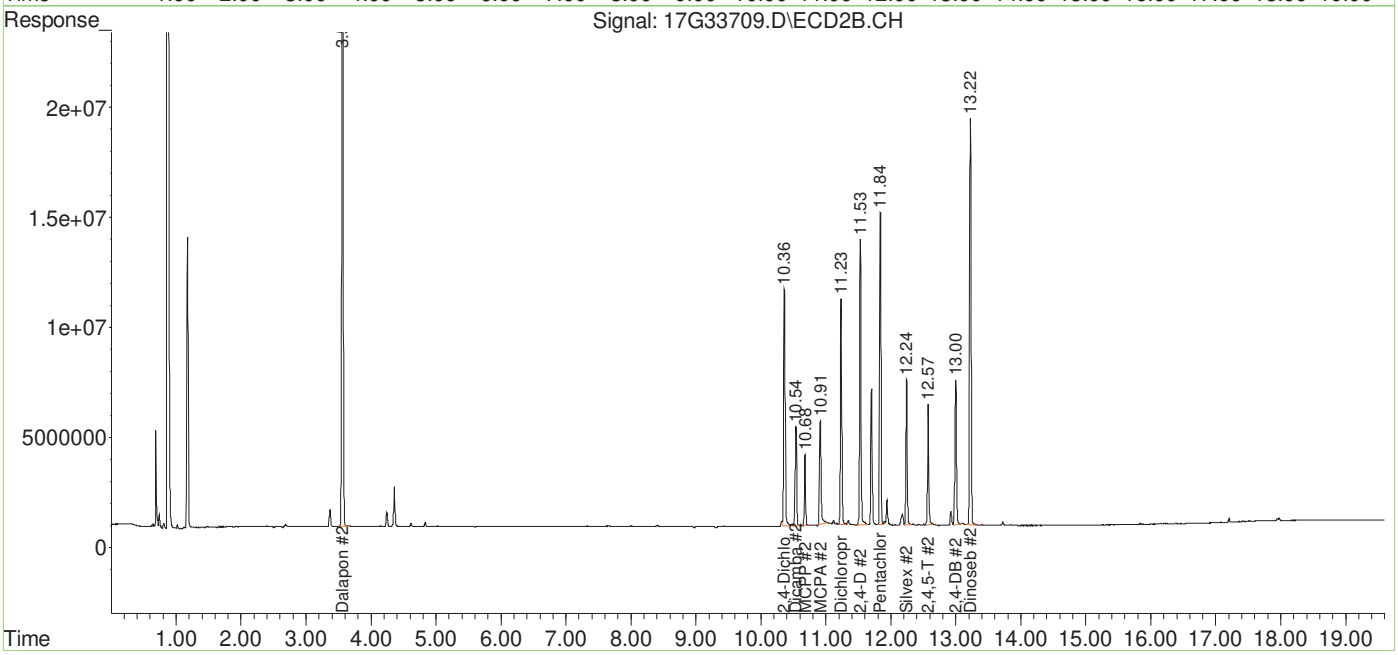
Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\DATA\032321\
Data File : 17G33709.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Mar 2021 20:16 (#1); 23 Mar 2021 20:42 (#2)
Operator : ECL
Sample : S1C0441-CCV2
Misc : 1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 24 10:35:55 2021
Quant Method : D:\MSDCHEM\1\METHODS\8151.M
Quant Title : HP17: 8151 CALIBRATION March 13, 2021
QLast Update : Tue Mar 23 16:31:48 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :
InstName : HP17





Evaluate Continuing Calibration Report

Data Path : D:\MSDCHEM\1\DATA\032321\
Data File : 17G33709.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 23 Mar 2021 20:16 (#1); 23 Mar 2021 20:42 (#2)
Operator : ECL
Sample   : S1C0441-CCV2
Misc   : 1
ALS Vial : 10   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 24 10:35:55 2021
Quant Method : D:\MSDCHEM\1\METHODS\8151.M
Quant Title : HP17: 8151 CALIBRATION March 13, 2021
QLast Update : Tue Mar 23 16:31:48 2021
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :
InstName : HP17

Min. RRF   :   0.000 Min. Rel. Area : 10% Max. R.T. Dev 0.15min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1		Dalapon	1250.000	1208.379	3.3	95	0.00
2	S	2,4-Dichlorophenylacetic ac	500.000	493.652	1.3	94	0.00
3		MCPA	50.000	49.956	0.1	96	0.01
4		Dicamba	50.000	43.996	12.0	82	0.00
5		MCPP	50.000	50.694	-1.4	93	0.00
6		Dichloroprop	500.000	471.599	5.7	92	0.00
7		2,4-D	500.000	518.571	-3.7	100	0.00
8		Pentachlorophenol	50.000	48.786	2.4	94	0.00
9		Silvex	50.000	52.202	-4.4	98	0.00
10		2,4,5-T	50.000	55.765	-11.5	100	0.00
11		Dinoseb	250.000	238.911	4.4	94	0.00
12		2,4-DB	500.000	512.807	-2.6	97	0.00

Signal #2

1		Dalapon	1250.000	1355.570	-8.4	105	0.00
2	S	2,4-Dichlorophenylacetic	500.000	476.681	4.7	92	0.00
3		MCPA	50.000	46.812	6.4	87	0.00
4		Dicamba	50.000	52.254	-4.5	100	0.00
5		MCPP	50.000	41.228	17.5#	81	0.00
6		Dichloroprop	500.000	493.644	1.3	96	0.00
7		2,4-D	500.000	492.336	1.5	95	0.00
8		Pentachlorophenol	50.000	50.622	-1.2	95	0.00
9		Silvex	50.000	53.078	-6.2	102	0.00
10		2,4,5-T	50.000	53.869	-7.7	101	0.00
11		Dinoseb	250.000	260.120	-4.0	99	0.00
12		2,4-DB	500.000	508.141	-1.6	99	0.00

Evaluate Continuing Calibration Report - Not Founds

Signal #2

(#) = Out of Range SPCC's out = 0 CCC's out = 0

MICROBAC®

Analysis Class

GCMS Semivolatiles

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

GCMS Semivolatiles - Class Narrative and Notes

All test results meet the requirements of the QAPP and other applicable contract terms and conditions . Any exceptions are listed below in the sample and qc notes sections. Analytical results are reported on a 'as received' basis unless specified otherwise. Analytical results for solids with units ending in (dry) are reported on a dry weight basis. A statement of uncertainty for each analysis is available upon request.

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GCMS Semivolatiles
EPA 8270C

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FORM I:
GCMS Semivolatiles
EPA 8270C
RESULTS SUMMARY

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

MICROBAC

Laboratory Report Number: M1C1317

CERTIFICATE OF ANALYSIS
FORM I

Client Project ID: Longhorn

Microbac Laboratories Inc., - Marietta, OH

Semivolatile Organic Compounds TCLP by GCMS

Client ID:	Soil IDW			**Collection Date:**	03/11/2021 10:00
Laboratory ID:	M1C1317-01	**PrePrep Method:**	1311 EX	**Prep Date:**	03/17/2021 13:30
Matrix:	Solid	**Prep Method:**	EPA 3510C	**Analyzed:**	03/18/2021 18:00
Batch / Sequence:	B1C1003 / S1C0352	**Analytical Method:**	EPA 8270C	**Calibration:**	21B0002
Instrument:	MSD12	**Units:**	ug/L	**File ID:**	12M81415.D
Analyst:	SCB	**Dilution:**	1	**% Solids:**	87.31

Analyte	CAS Number	Result	DL	LOD	LOQ	Flag	Qual
1,4-Dichlorobenzene	106-46-7	50.0	25.0	50.0	50.0	U	
2,4,5-Trichlorophenol	95-95-4	50.0	25.0	50.0	50.0	U	
2,4,6-Trichlorophenol	88-06-2	50.0	25.0	50.0	50.0	U	
2,4-Dinitrotoluene	121-14-2	50.0	25.0	50.0	50.0	U	
2-Methylphenol	95-48-7	50.0	25.0	50.0	50.0	U	
3-,4-Methylphenol	106-44-5	50.0	25.0	50.0	50.0	U	
Hexachlorobenzene	118-74-1	50.0	25.0	50.0	50.0	U	
Hexachlorobutadiene	87-68-3	50.0	25.0	50.0	50.0	U	
Hexachloroethane	67-72-1	50.0	25.0	50.0	50.0	U	
Nitrobenzene	98-95-3	50.0	25.0	50.0	50.0	U	
Pentachlorophenol	87-86-5	250	125	250	250	U	
Pyridine	110-86-1	250	125	250	250	U	

Surrogate	Recovery	Limits	Units	Q	Qualifier	
2,4,6-Tribromophenol	101	22-142	% Rec			
2-Fluorobiphenyl	82.3	43-116	% Rec			
2-Fluorophenol	48.7	19-119	% Rec			
Nitrobenzene-d5	76.4	35-114	% Rec			
Phenol-d5	31.6	10-120	% Rec			
p-Terphenyl-d14	106	10-130	% Rec			

Notes and Definitions

DL: Detection Limit
LOD: Limit of Detection
LOQ: Limit of Quantitation
U: The analyte was analyzed for but was not detected above the reported quantitation limit. The quantitation limit has been adjusted for any dilution or concentration of the sample.
ug/L: Micrograms per Liter
ug/mL: Micrograms per Milliliter

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FORM II:
GCMS Semivolatiles
EPA 8270C
SURROGATE SUMMARY

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

MICROBAC®

Laboratory Report Number: M1C1317

Client Project ID: Longhorn

SURROGATE STANDARD RECOVERY
FORM IIC

Instrument: MSD12 **Method:** EPA 8270C

Sequence: S1A0503 **Calibration:** 21B0002

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	Q
Initial Cal Check (S1A0503-ICV1)	Lab File ID: 12M80871.D		Analyzed: 01/29/21 13:51	
2-Fluorophenol	50.0	99.4	0 - 200	
Phenol-d5	50.0	97.9	0 - 200	
Nitrobenzene-d5	50.0	98.0	0 - 200	
2-Fluorobiphenyl	50.0	99.5	0 - 200	
2,4,6-Tribromophenol	50.0	102	0 - 200	
p-Terphenyl-d14	50.0	96.7	0 - 200	

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

SURROGATE STANDARD RECOVERY
FORM IIC

Instrument: MSD12 **Method:** EPA 8270C

Sequence: S1C0352 **Calibration:** 21B0002

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	Q
Calibration Check (S1C0352-CCV1)		Lab File ID: 12M81403.D	Analyzed: 03/18/21 12:05	
2-Fluorophenol	50.0	94.4	0 - 200	
Phenol-d5	50.0	101	0 - 200	
Nitrobenzene-d5	50.0	101	0 - 200	
2-Fluorobiphenyl	50.0	99.7	0 - 200	
2,4,6-Tribromophenol	50.0	98.7	0 - 200	
p-Terphenyl-d14	50.0	105	0 - 200	
Blank (B1C1003-BLK1)		Lab File ID: 12M81405.D	Analyzed: 03/18/21 13:13	
2-Fluorophenol	1000	49.3	19 - 119	
Phenol-d5	1000	31.4	10 - 120	
Nitrobenzene-d5	500	77.0	35 - 114	
2-Fluorobiphenyl	500	83.9	43 - 116	
2,4,6-Tribromophenol	1000	107	22 - 142	
p-Terphenyl-d14	500	104	10 - 130	
Blank (B1C1003-BLK2)		Lab File ID: 12M81406.D	Analyzed: 03/18/21 13:41	
2-Fluorophenol	1000	38.5	19 - 119	
Phenol-d5	1000	25.3	10 - 120	
Nitrobenzene-d5	500	62.5	35 - 114	
2-Fluorobiphenyl	500	68.5	43 - 116	
2,4,6-Tribromophenol	1000	95.0	22 - 142	
p-Terphenyl-d14	500	106	10 - 130	
Blank (B1C1003-BLK3)		Lab File ID: 12M81407.D	Analyzed: 03/18/21 14:10	
2-Fluorophenol	1000	46.0	19 - 119	
Phenol-d5	1000	29.3	10 - 120	
Nitrobenzene-d5	500	73.5	35 - 114	
2-Fluorobiphenyl	500	79.4	43 - 116	
2,4,6-Tribromophenol	1000	99.1	22 - 142	
p-Terphenyl-d14	500	107	10 - 130	
Blank (B1C1003-BLK4)		Lab File ID: 12M81408.D	Analyzed: 03/18/21 14:39	
2-Fluorophenol	1000	46.1	19 - 119	
Phenol-d5	1000	30.0	10 - 120	
Nitrobenzene-d5	500	77.1	35 - 114	
2-Fluorobiphenyl	500	83.3	43 - 116	
2,4,6-Tribromophenol	1000	94.9	22 - 142	
p-Terphenyl-d14	500	107	10 - 130	

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

SURROGATE STANDARD RECOVERY
FORM IIC

Instrument: MSD12 **Method:** EPA 8270C

Sequence: S1C0352 **Calibration:** 21B0002

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	Q
LCS (B1C1003-BS1)	Lab File ID: 12M81409.D	Analyzed: 03/18/21 15:07		
2-Fluorophenol	100	45.2	19 - 119	
Phenol-d5	100	33.8	10 - 120	
Nitrobenzene-d5	50.0	76.5	35 - 114	
2-Fluorobiphenyl	50.0	87.0	43 - 116	
2,4,6-Tribromophenol	100	106	22 - 142	
p-Terphenyl-d14	50.0	98.7	10 - 130	
LCS Dup (B1C1003-BSD1)	Lab File ID: 12M81410.D	Analyzed: 03/18/21 15:36		
2-Fluorophenol	100	45.4	19 - 119	
Phenol-d5	100	33.8	10 - 120	
Nitrobenzene-d5	50.0	74.7	35 - 114	
2-Fluorobiphenyl	50.0	87.6	43 - 116	
2,4,6-Tribromophenol	100	106	22 - 142	
p-Terphenyl-d14	50.0	104	10 - 130	
Soil IDW (M1C1317-01)	Lab File ID: 12M81415.D	Analyzed: 03/18/21 18:00		
2-Fluorophenol	1000	48.7	19 - 119	
Phenol-d5	1000	31.6	10 - 120	
Nitrobenzene-d5	500	76.4	35 - 114	
2-Fluorobiphenyl	500	82.3	43 - 116	
2,4,6-Tribromophenol	1000	101	22 - 142	
p-Terphenyl-d14	500	106	10 - 130	

* - Does not meet acceptance criteria.

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FORM III:
GCMS Semivolatiles
EPA 8270C
BS/BSD, MS/MSD, DUP

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Laboratory Report Number: M1C1317

BLANK SPIKE / DUPLICATE (BS/BSD)

Client Project ID: Longhorn

FORM IIIB

Method:	EPA 8270C		**Blank Spike**	**Duplicate**
Batch:	B1C1003	**Spike ID:**	B1C1003-BS1	B1C1003-BSD1
Analyst:	SCB	**Prepared:**	03/17/21 13:30	03/17/21 13:30
Matrix:	Aqueous	**Analyzed:**	03/18/21 15:07	03/18/21 15:36
Units:	ug/L	**File ID:**	12M81409.D	12M81410.D
Instrument:	MSD12	**Initial/Final:**	1000mL/1mL	1000mL/1mL
Calibration:	21B0002			

Analyte	BS Spiked	BS Found	BS %Rec	BSD Spiked	BSD Found	BSD %Rec	%RPD	%Rec Limts	RPD Limit	Q
1,4-Dichlorobenzene	50.0	34.9	69.8	50.0	34.1	68.1	2.43	29 - 112	30	
2,4,5-Trichlorophenol	50.0	48.7	97.3	50.0	49.9	99.7	2.43	53 - 123	30	
2,4,6-Trichlorophenol	50.0	47.4	94.8	50.0	49.4	98.8	4.11	50 - 135	30	
2,4-Dinitrotoluene	50.0	57.9	116	50.0	59.1	118	2.15	57 - 128	30	
2-Methylphenol	50.0	36.0	72.0	50.0	36.0	71.9	0.132	30 - 120	30	
3-,4-Methylphenol	50.0	32.5	64.9	50.0	32.8	65.6	1.00	20 - 130	30	
Hexachlorobenzene	50.0	54.4	109	50.0	55.1	110	1.22	53 - 125	30	
Hexachlorobutadiene	50.0	44.5	88.9	50.0	43.7	87.5	1.63	22 - 124	30	
Hexachloroethane	50.0	33.9	67.7	50.0	33.4	66.7	1.54	21 - 115	30	
Nitrobenzene	50.0	39.4	78.9	50.0	39.6	79.1	0.342	40 - 120	30	
Pentachlorophenol	50.0	62.4	125	50.0	64.4	129	3.04	35 - 138	30	
Pyridine	50.0	22.7	45.5	50.0	22.3	44.6	1.84	10 - 100	30	

Surrogate	BS Spiked	BS Found	BS %Rec	BSD Spiked	BSD Found	BSD %Rec	%RPD	%Rec Limts	RPD Limit	Q
2,4,6-Tribromophenol	100	106	106	100	106	106		22 - 142		
2-Fluorobiphenyl	50.0	43.5	87.0	50.0	43.8	87.6		43 - 116		
2-Fluorophenol	100	45.2	45.2	100	45.4	45.4		19 - 119		
Nitrobenzene-d5	50.0	38.2	76.5	50.0	37.4	74.7		35 - 114		
Phenol-d5	100	33.8	33.8	100	33.8	33.8		10 - 120		
p-Terphenyl-d14	50.0	49.3	98.7	50.0	52.0	104		10 - 130		

* - Does not meet %Rec acceptance criteria.
\# - Does not meet RPD acceptance criteria.
NS - Analyte Not Spiked

MICROBAC®

FORM IV:
GCMS Semivolatiles
EPA 8270C
METHOD BLANK SUMMARY

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

MICROBAC®

Laboratory Report Number: M1C1317
Client Project ID: Longhorn

METHOD BLANK SUMMARY
FORM IVA

Blank ID:	B1C1003-BLK1	**Batch:**	B1C1003
Blank File ID:	12M81405.D	**Instrument:**	MSD12
Prepared:	03/17/2021 13:30	**Method:**	EPA 8270C
Analyzed:	03/18/2021 13:13	**Analyst:**	SCB

This Method Blank Applies To The Following Samples:

Client Sample ID	Laboratory Sample ID	Lab File ID	Time Analyzed
Blank	B1C1003-BLK1	12M81405.D	03/18/2021 13:13
Blank	B1C1003-BLK2	12M81406.D	03/18/2021 13:41
Blank	B1C1003-BLK3	12M81407.D	03/18/2021 14:10
Blank	B1C1003-BLK4	12M81408.D	03/18/2021 14:39
LCS	B1C1003-BS1	12M81409.D	03/18/2021 15:07
LCS Dup	B1C1003-BSD1	12M81410.D	03/18/2021 15:36
Soil IDW	M1C1317-01	12M81415.D	03/18/2021 18:00

MICROBAC®

Laboratory Report Number: M1C1317
Client Project ID: Longhorn

METHOD BLANK SUMMARY
FORM IVA

Blank ID:	B1C1003-BLK2	**Batch:**	B1C1003
Blank File ID:	12M81406.D	**Instrument:**	MSD12
Prepared:	03/17/2021 13:30	**Method:**	EPA 8270C
Analyzed:	03/18/2021 13:41	**Analyst:**	SCB

This Method Blank Applies To The Following Samples:

Client Sample ID	Laboratory Sample ID	Lab File ID	Time Analyzed
Blank	B1C1003-BLK1	12M81405.D	03/18/2021 13:13
Blank	B1C1003-BLK2	12M81406.D	03/18/2021 13:41
Blank	B1C1003-BLK3	12M81407.D	03/18/2021 14:10
Blank	B1C1003-BLK4	12M81408.D	03/18/2021 14:39
LCS	B1C1003-BS1	12M81409.D	03/18/2021 15:07
LCS Dup	B1C1003-BSD1	12M81410.D	03/18/2021 15:36
Soil IDW	M1C1317-01	12M81415.D	03/18/2021 18:00

MICROBAC®

Laboratory Report Number: M1C1317
Client Project ID: Longhorn

METHOD BLANK SUMMARY
FORM IVA

Blank ID:	B1C1003-BLK3	**Batch:**	B1C1003
Blank File ID:	12M81407.D	**Instrument:**	MSD12
Prepared:	03/17/2021 13:30	**Method:**	EPA 8270C
Analyzed:	03/18/2021 14:10	**Analyst:**	SCB

This Method Blank Applies To The Following Samples:

Client Sample ID	Laboratory Sample ID	Lab File ID	Time Analyzed
Blank	B1C1003-BLK1	12M81405.D	03/18/2021 13:13
Blank	B1C1003-BLK2	12M81406.D	03/18/2021 13:41
Blank	B1C1003-BLK3	12M81407.D	03/18/2021 14:10
Blank	B1C1003-BLK4	12M81408.D	03/18/2021 14:39
LCS	B1C1003-BS1	12M81409.D	03/18/2021 15:07
LCS Dup	B1C1003-BSD1	12M81410.D	03/18/2021 15:36
Soil IDW	M1C1317-01	12M81415.D	03/18/2021 18:00

MICROBAC®

Laboratory Report Number: M1C1317
Client Project ID: Longhorn

METHOD BLANK SUMMARY
FORM IVA

Blank ID:	B1C1003-BLK4	**Batch:**	B1C1003
Blank File ID:	12M81408.D	**Instrument:**	MSD12
Prepared:	03/17/2021 13:30	**Method:**	EPA 8270C
Analyzed:	03/18/2021 14:39	**Analyst:**	SCB

This Method Blank Applies To The Following Samples:

Client Sample ID	Laboratory Sample ID	Lab File ID	Time Analyzed
Blank	B1C1003-BLK1	12M81405.D	03/18/2021 13:13
Blank	B1C1003-BLK2	12M81406.D	03/18/2021 13:41
Blank	B1C1003-BLK3	12M81407.D	03/18/2021 14:10
Blank	B1C1003-BLK4	12M81408.D	03/18/2021 14:39
LCS	B1C1003-BS1	12M81409.D	03/18/2021 15:07
LCS Dup	B1C1003-BSD1	12M81410.D	03/18/2021 15:36
Soil IDW	M1C1317-01	12M81415.D	03/18/2021 18:00

MICROBAC®

Laboratory Report Number: M1C1317

Client Project ID: Longhorn

METHOD BLANK
FORM IVB

Sample ID:	B1C1003-BLK1	**Prep Date:**	03/17/21 13:30	**Matrix:**	Aqueous
Instrument:	MSD12	**Analyzed:**	03/18/21 13:13	**Method:**	EPA 8270C
File ID:	12M81405.D	**Sequence:**	S1C0352	**Analyst:**	SCB
Batch:	B1C1003	**Units:**	ug/L	**Calibration:**	21B0002

Analyte	Result	DL	LOD	LOQ	Dilution	Flag	Q
1,4-Dichlorobenzene	50.0	25.0	50.0	50.0	1	U	
2,4,5-Trichlorophenol	50.0	25.0	50.0	50.0	1	U	
2,4,6-Trichlorophenol	50.0	25.0	50.0	50.0	1	U	
2,4-Dinitrotoluene	50.0	25.0	50.0	50.0	1	U	
2-Methylphenol	50.0	25.0	50.0	50.0	1	U	
3-,4-Methylphenol	50.0	25.0	50.0	50.0	1	U	
Hexachlorobenzene	50.0	25.0	50.0	50.0	1	U	
Hexachlorobutadiene	50.0	25.0	50.0	50.0	1	U	
Hexachloroethane	50.0	25.0	50.0	50.0	1	U	
Nitrobenzene	50.0	25.0	50.0	50.0	1	U	
Pentachlorophenol	250	125	250	250	1	U	
Pyridine	250	125	250	250	1	U	

Surrogate	Recovery	Limits	PASS/FAIL
2,4,6-Tribromophenol	107	22 - 142	PASS
2-Fluorobiphenyl	83.9	43 - 116	PASS
2-Fluorophenol	49.3	19 - 119	PASS
Nitrobenzene-d5	77.0	35 - 114	PASS
Phenol-d5	31.4	10 - 120	PASS
p-Terphenyl-d14	104	10 - 130	PASS

Notes and Definitions

* - Detected in the associated method Blank at a concentration >= RL

U: The analyte was analyzed for but was not detected above the reported quantitation limit. The quantitation limit has been adjusted for any dilution or concentration of the sample.

MICROBAC®

Laboratory Report Number: M1C1317

Client Project ID: Longhorn

METHOD BLANK
FORM IVB

Sample ID:	B1C1003-BLK2	**Prep Date:**	03/17/21 13:30	**Matrix:**	Aqueous
Instrument:	MSD12	**Analyzed:**	03/18/21 13:41	**Method:**	EPA 8270C
File ID:	12M81406.D	**Sequence:**	S1C0352	**Analyst:**	SCB
Batch:	B1C1003	**Units:**	ug/L	**Calibration:**	21B0002

Analyte	Result	DL	LOD	LOQ	Dilution	Flag	Q
1,4-Dichlorobenzene	50.0	25.0	50.0	50.0	1	U	
2,4,5-Trichlorophenol	50.0	25.0	50.0	50.0	1	U	
2,4,6-Trichlorophenol	50.0	25.0	50.0	50.0	1	U	
2,4-Dinitrotoluene	50.0	25.0	50.0	50.0	1	U	
2-Methylphenol	50.0	25.0	50.0	50.0	1	U	
3-,4-Methylphenol	50.0	25.0	50.0	50.0	1	U	
Hexachlorobenzene	50.0	25.0	50.0	50.0	1	U	
Hexachlorobutadiene	50.0	25.0	50.0	50.0	1	U	
Hexachloroethane	50.0	25.0	50.0	50.0	1	U	
Nitrobenzene	50.0	25.0	50.0	50.0	1	U	
Pentachlorophenol	250	125	250	250	1	U	
Pyridine	250	125	250	250	1	U	

Surrogate	Recovery	Limits	PASS/FAIL
2,4,6-Tribromophenol	95.0	22 - 142	PASS
2-Fluorobiphenyl	68.5	43 - 116	PASS
2-Fluorophenol	38.5	19 - 119	PASS
Nitrobenzene-d5	62.5	35 - 114	PASS
Phenol-d5	25.3	10 - 120	PASS
p-Terphenyl-d14	106	10 - 130	PASS

Notes and Definitions

* - Detected in the associated method Blank at a concentration >= RL

U: The analyte was analyzed for but was not detected above the reported quantitation limit. The quantitation limit has been adjusted for any dilution or concentration of the sample.

MICROBAC®

Laboratory Report Number: M1C1317

Client Project ID: Longhorn

METHOD BLANK
FORM IVB

Sample ID:	B1C1003-BLK3	**Prep Date:**	03/17/21 13:30	**Matrix:**	Aqueous
Instrument:	MSD12	**Analyzed:**	03/18/21 14:10	**Method:**	EPA 8270C
File ID:	12M81407.D	**Sequence:**	S1C0352	**Analyst:**	SCB
Batch:	B1C1003	**Units:**	ug/L	**Calibration:**	21B0002

Analyte	Result	DL	LOD	LOQ	Dilution	Flag	Q
1,4-Dichlorobenzene	50.0	25.0	50.0	50.0	1	U	
2,4,5-Trichlorophenol	50.0	25.0	50.0	50.0	1	U	
2,4,6-Trichlorophenol	50.0	25.0	50.0	50.0	1	U	
2,4-Dinitrotoluene	50.0	25.0	50.0	50.0	1	U	
2-Methylphenol	50.0	25.0	50.0	50.0	1	U	
3-,4-Methylphenol	50.0	25.0	50.0	50.0	1	U	
Hexachlorobenzene	50.0	25.0	50.0	50.0	1	U	
Hexachlorobutadiene	50.0	25.0	50.0	50.0	1	U	
Hexachloroethane	50.0	25.0	50.0	50.0	1	U	
Nitrobenzene	50.0	25.0	50.0	50.0	1	U	
Pentachlorophenol	250	125	250	250	1	U	
Pyridine	250	125	250	250	1	U	

Surrogate	Recovery	Limits	PASS/FAIL
2,4,6-Tribromophenol	99.1	22 - 142	PASS
2-Fluorobiphenyl	79.4	43 - 116	PASS
2-Fluorophenol	46.0	19 - 119	PASS
Nitrobenzene-d5	73.5	35 - 114	PASS
Phenol-d5	29.3	10 - 120	PASS
p-Terphenyl-d14	107	10 - 130	PASS

Notes and Definitions

* - Detected in the associated method Blank at a concentration >= RL

U: The analyte was analyzed for but was not detected above the reported quantitation limit. The quantitation limit has been adjusted for any dilution or concentration of the sample.

MICROBAC®

Laboratory Report Number: M1C1317

Client Project ID: Longhorn

METHOD BLANK
FORM IVB

Sample ID:	B1C1003-BLK4	**Prep Date:**	03/17/21 13:30	**Matrix:**	Aqueous
Instrument:	MSD12	**Analyzed:**	03/18/21 14:39	**Method:**	EPA 8270C
File ID:	12M81408.D	**Sequence:**	S1C0352	**Analyst:**	SCB
Batch:	B1C1003	**Units:**	ug/L	**Calibration:**	21B0002

Analyte	Result	DL	LOD	LOQ	Dilution	Flag	Q
1,4-Dichlorobenzene	50.0	25.0	50.0	50.0	1	U	
2,4,5-Trichlorophenol	50.0	25.0	50.0	50.0	1	U	
2,4,6-Trichlorophenol	50.0	25.0	50.0	50.0	1	U	
2,4-Dinitrotoluene	50.0	25.0	50.0	50.0	1	U	
2-Methylphenol	50.0	25.0	50.0	50.0	1	U	
3-,4-Methylphenol	50.0	25.0	50.0	50.0	1	U	
Hexachlorobenzene	50.0	25.0	50.0	50.0	1	U	
Hexachlorobutadiene	50.0	25.0	50.0	50.0	1	U	
Hexachloroethane	50.0	25.0	50.0	50.0	1	U	
Nitrobenzene	50.0	25.0	50.0	50.0	1	U	
Pentachlorophenol	250	125	250	250	1	U	
Pyridine	250	125	250	250	1	U	

Surrogate	Recovery	Limits	PASS/FAIL
2,4,6-Tribromophenol	94.9	22 - 142	PASS
2-Fluorobiphenyl	83.3	43 - 116	PASS
2-Fluorophenol	46.1	19 - 119	PASS
Nitrobenzene-d5	77.1	35 - 114	PASS
Phenol-d5	30.0	10 - 120	PASS
p-Terphenyl-d14	107	10 - 130	PASS

Notes and Definitions

* - Detected in the associated method Blank at a concentration >= RL

U: The analyte was analyzed for but was not detected above the reported quantitation limit. The quantitation limit has been adjusted for any dilution or concentration of the sample.

MICROBAC®

FORM V:
GCMS Semivolatiles
EPA 8270C
TUNE SUMMARY

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

MICROBAC®

Laboratory Report Number: M1C1317

Client Project ID: Longhorn

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK FORM V

Lab File ID:	12M80861.D	**Injection Date:**	01/29/21
Instrument ID:	MSD12	**Injection Time:**	08:50
Sequence:	S1A0503	**Lab Sample ID:**	S1A0503-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30 - 60% of 198	37.5	PASS
68	Less than 2% of 69	0	PASS
70	Less than 2% of 69	0.663	PASS
127	40 - 60% of 198	50.9	PASS
197	Less than 1% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.73	PASS
275	10 - 30% of 198	25.8	PASS
365	1 - 100% of 198	2.9	PASS
441	0.01 - 100% of 443	79.5	PASS
442	40 - 100% of 198	78.8	PASS
443	17 - 23% of 442	19.8	PASS
69	Less than 100% of 198	38.6	PASS

MICROBAC®

Laboratory Report Number: M1C1317

Client Project ID: Longhorn

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK FORM V

Laboratory ID	Client ID#	Run Date
S1A0503-TUN1	MS Tune	1/29/21 8:50
S1A0503-CAL4	Cal Standard	1/29/21 9:10
S1A0503-CAL9	Cal Standard	1/29/21 9:41
S1A0503-CAL8	Cal Standard	1/29/21 10:12
S1A0503-CAL7	Cal Standard	1/29/21 10:43
S1A0503-CAL6	Cal Standard	1/29/21 11:15
S1A0503-CAL5	Cal Standard	1/29/21 11:46
S1A0503-CAL3	Cal Standard	1/29/21 12:18
S1A0503-CAL2	Cal Standard	1/29/21 12:49
S1A0503-CAL1	Cal Standard	1/29/21 13:20
S1A0503-ICV1	Initial Cal Check	1/29/21 13:51
S1A0503-ICV2	Initial Cal Check	1/29/21 14:22
S1A0503-CALD	Cal Standard	1/29/21 14:53
S1A0503-CALG	Cal Standard	1/29/21 15:24
S1A0503-CALF	Cal Standard	1/29/21 15:56
S1A0503-CALE	Cal Standard	1/29/21 16:27
S1A0503-CALC	Cal Standard	1/29/21 16:58
S1A0503-CALB	Cal Standard	1/29/21 17:28
S1A0503-CALA	Cal Standard	1/29/21 17:58
S1A0503-ICV3	Initial Cal Check	1/29/21 18:28
S1A0503-TUN2	MS Tune	2/1/21 13:11
S1A0503-ICV4	Initial Cal Check	2/1/21 15:03

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK FORM V

Lab File ID:	12M80882.D	**Injection Date:**	02/01/21
Instrument ID:	MSD12	**Injection Time:**	13:11
Sequence:	S1A0503	**Lab Sample ID:**	S1A0503-TUN2

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30 - 60% of 198	35	PASS
68	Less than 2% of 69	0	PASS
70	Less than 2% of 69	0.343	PASS
127	40 - 60% of 198	49.4	PASS
197	Less than 1% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.75	PASS
275	10 - 30% of 198	27.4	PASS
365	1 - 100% of 198	3.05	PASS
441	0.01 - 100% of 443	76.2	PASS
442	40 - 100% of 198	96.4	PASS
443	17 - 23% of 442	19.1	PASS
69	Less than 100% of 198	34.1	PASS

MICROBAC®

Laboratory Report Number: M1C1317

Client Project ID: Longhorn

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK FORM V

Laboratory ID	Client ID#	Run Date
S1A0503-TUN1	MS Tune	1/29/21 8:50
S1A0503-CAL4	Cal Standard	1/29/21 9:10
S1A0503-CAL9	Cal Standard	1/29/21 9:41
S1A0503-CAL8	Cal Standard	1/29/21 10:12
S1A0503-CAL7	Cal Standard	1/29/21 10:43
S1A0503-CAL6	Cal Standard	1/29/21 11:15
S1A0503-CAL5	Cal Standard	1/29/21 11:46
S1A0503-CAL3	Cal Standard	1/29/21 12:18
S1A0503-CAL2	Cal Standard	1/29/21 12:49
S1A0503-CAL1	Cal Standard	1/29/21 13:20
S1A0503-ICV1	Initial Cal Check	1/29/21 13:51
S1A0503-ICV2	Initial Cal Check	1/29/21 14:22
S1A0503-CALD	Cal Standard	1/29/21 14:53
S1A0503-CALG	Cal Standard	1/29/21 15:24
S1A0503-CALF	Cal Standard	1/29/21 15:56
S1A0503-CALE	Cal Standard	1/29/21 16:27
S1A0503-CALC	Cal Standard	1/29/21 16:58
S1A0503-CALB	Cal Standard	1/29/21 17:28
S1A0503-CALA	Cal Standard	1/29/21 17:58
S1A0503-ICV3	Initial Cal Check	1/29/21 18:28
S1A0503-TUN2	MS Tune	2/1/21 13:11
S1A0503-ICV4	Initial Cal Check	2/1/21 15:03

MICROBAC®

Laboratory Report Number: M1C1317

Client Project ID: Longhorn

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK FORM V

Lab File ID:	12M81402.D	**Injection Date:**	03/18/21
Instrument ID:	MSD12	**Injection Time:**	11:46
Sequence:	S1C0352	**Lab Sample ID:**	S1C0352-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30 - 60% of 198	37.1	PASS
68	Less than 2% of 69	0	PASS
70	Less than 2% of 69	0.914	PASS
127	40 - 60% of 198	51.5	PASS
197	Less than 1% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.67	PASS
275	10 - 30% of 198	26.2	PASS
365	1 - 100% of 198	3.45	PASS
441	0.01 - 100% of 443	81.4	PASS
442	40 - 100% of 198	86.8	PASS
443	17 - 23% of 442	18.9	PASS
69	Less than 100% of 198	36.2	PASS

Laboratory ID	Client ID#	Run Date
S1C0352-TUN1	MS Tune	3/18/21 11:46
S1C0352-CCV1	Calibration Check	3/18/21 12:05
S1C0352-CCV2	Calibration Check	3/18/21 12:44
B1C1003-BLK1	Blank	3/18/21 13:13
B1C1003-BLK2	Blank	3/18/21 13:41
B1C1003-BLK3	Blank	3/18/21 14:10
B1C1003-BLK4	Blank	3/18/21 14:39
B1C1003-BS1	LCS	3/18/21 15:07
B1C1003-BSD1	LCS Dup	3/18/21 15:36
M1C1317-01	Soil IDW	3/18/21 18:00

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FORM VII:
GCMS Semivolatiles
EPA 8270C
ICV/CCV

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

MICROBAC®

Laboratory Report Number: M1C1317
Client Project ID: Longhorn

Initial Calibration Verification (ICV)
FORM VIIA

Sample ID: S1A0503-ICV1 **Analyzed:** 01/29/21 13:51 **Method:** EPA 8270C
Instrument: MSD12 **Calibration:** 21B0002 **Sequence:** S1A0503
File ID: 12M80871.D **Units:** ug/mL **Analyst:** SCB

Analyte	Response	Limit	Q	Expected	Found	% Drift / % Diff	UCL	Q
1,4-Dichlorobenzene	383.9513			50.0	51.5	3.1	30	
2,4,6-Trichlorophenol	85.6123			50.0	51.7	3.4	30	
Hexachlorobutadiene	44.97262			50.0	60.2	20.3	30	
Pentachlorophenol	40.04075			50.0	59.1	18.2	30	
2,4,5-Trichlorophenol	89.99559			50.0	50.9	1.7	30	
2,4,6-Tribromophenol	44.00137			50.0	51.2	2.5		
2,4-Dinitrotoluene	99.38403			50.0	53.5	7.0	30	
2-Fluorobiphenyl	312.6593			50.0	49.8	-0.5		
2-Fluorophenol	294.9845			50.0	49.7	-0.6		
2-Methylphenol	252.6169			50.0	50.0	0.09	30	
3-,4-Methylphenol	298.0175			50.0	48.7	-2.5	30	
Hexachlorobenzene	50.49739			50.0	51.5	2.9	30	
Hexachloroethane	127.7746			50.0	49.7	-0.6	30	
Nitrobenzene	74.03674			50.0	48.4	-3.3	30	
Nitrobenzene-d5	75.19646			50.0	49.0	-2.0		
Phenol-d5	336.5357			50.0	48.9	-2.1		
p-Terphenyl-d14	231.9064			50.0	48.4	-3.3		
Pyridine	337.8202			50.0	56.6	13.2	30	

Sample ID: S1A0503-ICV2 **Analyzed:** 01/29/21 14:22 **Method:** EPA 8270C
Instrument: MSD12 **Calibration:** 21B0002 **Sequence:** S1A0503
File ID: 12M80872.D **Units:** ug/mL **Analyst:** SCB

Analyte	Response	Limit	Q	Expected	Found	% Drift / % Diff	UCL	Q

Sample ID: S1A0503-ICV3 **Analyzed:** 01/29/21 18:28 **Method:** EPA 8270C
Instrument: MSD12 **Calibration:** 21B0002 **Sequence:** S1A0503
File ID: 12M80880.D **Units:** ug/mL **Analyst:** SCB

Analyte	Response	Limit	Q	Expected	Found	% Drift / % Diff	UCL	Q

Sample ID: S1A0503-ICV4 **Analyzed:** 02/01/21 15:03 **Method:** EPA 8270C
Instrument: MSD12 **Calibration:** 21B0002 **Sequence:** S1A0503
File ID: 12M80886.D **Units:** ug/mL **Analyst:** SCB

Analyte	Response	Limit	Q	Expected	Found	% Drift / % Diff	UCL	Q

* - Does not meet acceptance criteria.

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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

Continuing Calibration Verification (CCV)
FORM VIIB

Laboratory ID:	S1C0352-CCV1	**Analyzed:**	03/18/21 12:05	**Method:**	EPA 8270C
Instrument:	MSD12	**Calibration:**	21B0002	**Sequence:**	S1C0352
File ID:	12M81403.D	**Units:**	ug/mL	**Analyst:**	SCB

Analyte	Response	Limit	Q	Expected	Found	% Drift / % Diff	UCL	Q
1,4-Dichlorobenzene	352.4888			50.0	47.3	-5.4	20	
2,4,5-Trichlorophenol	82.47121			50.0	46.6	-6.8	40	
2,4,6-Tribromophenol	42.3942			50.0	49.4	-1.3		
2,4,6-Trichlorophenol	80.3988			50.0	48.6	-2.9	20	
2,4-Dinitrotoluene	95.67711			50.0	51.5	3.0	40	
2-Fluorobiphenyl	313.1131			50.0	49.8	-0.3		
2-Fluorophenol	280.1837			50.0	47.2	-5.6		
2-Methylphenol	234.9611			50.0	46.5	-6.9	40	
3-,4-Methylphenol	281.1763			50.0	46.0	-8.0	40	
Hexachlorobenzene	48.67527			50.0	49.6	-0.8	40	
Hexachlorobutadiene	38.12374			50.0	51.0	2.0	20	
Hexachloroethane	125.8468			50.0	49.0	-2.1	40	
Nitrobenzene	74.73214			50.0	48.8	-2.4	40	
Nitrobenzene-d5	77.26459			50.0	50.3	0.7		
Pentachlorophenol	31.2349			50.0	46.1	-7.8	20	
Phenol-d5	347.0363			50.0	50.5	0.9		
p-Terphenyl-d14	251.8963			50.0	52.5	5.0		
Pyridine	275.7066			50.0	46.2	-7.6	40	

* - Does not meet acceptance criteria.

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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

Continuing Calibration Verification (CCV)
FORM VIIB

Laboratory ID:	S1C0352-CCV2	**Analyzed:**	03/18/21 12:44	**Method:**	EPA 8270C
Instrument:	MSD12	**Calibration:**	21B0002	**Sequence:**	S1C0352
File ID:	12M81404.D	**Units:**	ug/mL	**Analyst:**	SCB

Analyte	Response	Limit	Q	Expected	Found	% Drift / % Diff	UCL	Q

* - Does not meet acceptance criteria.

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FORM VIII:
GCMS Semivolatiles
EPA 8270C
Internal Standard Area and RT

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

INTERNAL STANDARD AREA SUMMARY
FORM VIIIA

Laboratory:	Microbac Laboratories Inc., - Marietta, OH	**SDG:**	M1C1317
Client:	HDR	**Project:**	Longhorn AAP
Sequence:	S1A0503	**Instrument:**	MSD12
		Calibration:	21B0002

Initial Cal Check (S1A0503-ICV1)

Analyte	Resp	RT	RefResp	RefRT	Area%	ISAreaLimit	Flg	RTDiff	RTDiffLimit	Flg
1,4-Dichlorobenzene-d4	95285	6.629	98736	6.629	97	50 - 200		0.0000	+/-0.50	
Acenaphthene-d10	204230	9.637	208918	9.637	98	50 - 200		0.0000	+/-0.50	
Chrysene-d12	312031	14.493	300494	14.488	104	50 - 200		0.0050	+/-0.50	
Naphthalene-d8	362674	7.906	376888	7.901	96	50 - 200		0.0050	+/-0.50	
Perylene-d12	360204	16.982	351911	16.983	102	50 - 200		-0.0010	+/-0.50	
Phenanthrene-d10	367116	11.101	382309	11.101	96	50 - 200		0.0000	+/-0.50	

Initial Cal Check (S1A0503-ICV2)

Analyte	Resp	RT	RefResp	RefRT	Area%	ISAreaLimit	Flg	RTDiff	RTDiffLimit	Flg
1,4-Dichlorobenzene-d4	89017	6.629	98736	6.629	90	50 - 200		0.0000	+/-0.50	
Acenaphthene-d10	183906	9.637	208918	9.637	88	50 - 200		0.0000	+/-0.50	
Chrysene-d12	282239	14.488	300494	14.488	94	50 - 200		0.0000	+/-0.50	
Naphthalene-d8	342734	7.901	376888	7.901	91	50 - 200		0.0000	+/-0.50	
Perylene-d12	319952	16.982	351911	16.983	91	50 - 200		-0.0010	+/-0.50	
Phenanthrene-d10	334643	11.095	382309	11.101	88	50 - 200		-0.0060	+/-0.50	

Initial Cal Check (S1A0503-ICV3)

Analyte	Resp	RT	RefResp	RefRT	Area%	ISAreaLimit	Flg	RTDiff	RTDiffLimit	Flg
1,4-Dichlorobenzene-d4	81923	6.629	81923	6.629	100	50 - 200		0.0000	+/-0.50	
Acenaphthene-d10	170885	9.632	170885	9.632	100	50 - 200		0.0000	+/-0.50	
Chrysene-d12	243014	14.482	243014	14.482	100	50 - 200		0.0000	+/-0.50	
Naphthalene-d8	314816	7.901	314816	7.901	100	50 - 200		0.0000	+/-0.50	
Perylene-d12	286113	16.982	286113	16.982	100	50 - 200		0.0000	+/-0.50	
Phenanthrene-d10	314431	11.095	314431	11.095	100	50 - 200		0.0000	+/-0.50	

Initial Cal Check (S1A0503-ICV4)

Analyte	Resp	RT	RefResp	RefRT	Area%	ISAreaLimit	Flg	RTDiff	RTDiffLimit	Flg
1,4-Dichlorobenzene-d4	81173	6.629	81173	6.629	100	50 - 200		0.0000	+/-0.50	
Acenaphthene-d10	170278	9.632	170278	9.632	100	50 - 200		0.0000	+/-0.50	
Chrysene-d12	219372	14.488	219372	14.488	100	50 - 200		0.0000	+/-0.50	
Naphthalene-d8	312175	7.901	312175	7.901	100	50 - 200		0.0000	+/-0.50	
Perylene-d12	249281	16.977	249281	16.977	100	50 - 200		0.0000	+/-0.50	
Phenanthrene-d10	298234	11.095	298234	11.095	100	50 - 200		0.0000	+/-0.50	

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

INTERNAL STANDARD AREA SUMMARY
FORM VIIIA

Laboratory:	Microbac Laboratories Inc., - Marietta, OH	**SDG:**	M1C1317
Client:	HDR	**Project:**	Longhorn AAP
Sequence:	S1C0352	**Instrument:**	MSD12
		Calibration:	21B0002

Blank (B1C1003-BLK1)

Analyte	Resp	RT	RefResp	RefRT	Area%	ISAreaLimit	Flg	RTDiff	RTDiffLimit	Flg
1,4-Dichlorobenzene-d4	65788	6.64	69912	6.645	94	50 - 200		-0.0050	+/-0.50	
Acenaphthene-d10	133398	9.653	145435	9.653	92	50 - 200		0.0000	+/-0.50	
Chrysene-d12	187716	14.53	203849	14.536	92	50 - 200		-0.0060	+/-0.50	
Naphthalene-d8	242193	7.917	261328	7.917	93	50 - 200		0.0000	+/-0.50	
Perylene-d12	214267	17.036	228579	17.041	94	50 - 200		-0.0110	+/-0.50	
Phenanthrene-d10	238333	11.117	257827	11.122	92	50 - 200		-0.0050	+/-0.50	

Blank (B1C1003-BLK2)

Analyte	Resp	RT	RefResp	RefRT	Area%	ISAreaLimit	Flg	RTDiff	RTDiffLimit	Flg
1,4-Dichlorobenzene-d4	65193	6.64	69912	6.645	93	50 - 200		-0.0050	+/-0.50	
Acenaphthene-d10	134021	9.648	145435	9.653	92	50 - 200		-0.0050	+/-0.50	
Chrysene-d12	185853	14.525	203849	14.536	91	50 - 200		-0.0110	+/-0.50	
Naphthalene-d8	240316	7.917	261328	7.917	92	50 - 200		0.0000	+/-0.50	
Perylene-d12	216171	17.036	228579	17.041	95	50 - 200		-0.0110	+/-0.50	
Phenanthrene-d10	238885	11.117	257827	11.122	93	50 - 200		-0.0050	+/-0.50	

Blank (B1C1003-BLK3)

Analyte	Resp	RT	RefResp	RefRT	Area%	ISAreaLimit	Flg	RTDiff	RTDiffLimit	Flg
1,4-Dichlorobenzene-d4	63914	6.64	69912	6.645	91	50 - 200		-0.0050	+/-0.50	
Acenaphthene-d10	133779	9.647	145435	9.653	92	50 - 200		-0.0060	+/-0.50	
Chrysene-d12	183103	14.525	203849	14.536	90	50 - 200		-0.0110	+/-0.50	
Naphthalene-d8	240303	7.917	261328	7.917	92	50 - 200		0.0000	+/-0.50	
Perylene-d12	212885	17.036	228579	17.041	93	50 - 200		-0.0110	+/-0.50	
Phenanthrene-d10	238611	11.117	257827	11.122	93	50 - 200		-0.0050	+/-0.50	

Blank (B1C1003-BLK4)

Analyte	Resp	RT	RefResp	RefRT	Area%	ISAreaLimit	Flg	RTDiff	RTDiffLimit	Flg
1,4-Dichlorobenzene-d4	65730	6.64	69912	6.645	94	50 - 200		-0.0050	+/-0.50	
Acenaphthene-d10	134645	9.648	145435	9.653	93	50 - 200		-0.0050	+/-0.50	
Chrysene-d12	187173	14.525	203849	14.536	92	50 - 200		-0.0110	+/-0.50	
Naphthalene-d8	243200	7.917	261328	7.917	93	50 - 200		0.0000	+/-0.50	
Perylene-d12	213218	17.036	228579	17.041	93	50 - 200		-0.0110	+/-0.50	
Phenanthrene-d10	240004	11.117	257827	11.122	93	50 - 200		-0.0050	+/-0.50	

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

INTERNAL STANDARD AREA SUMMARY
FORM VIIIA

LCS (B1C1003-BS1)

Analyte	Resp	RT	RefResp	RefRT	Area%	ISAreaLimit	Flg	RTDiff	RTDiffLimit	Flg
1,4-Dichlorobenzene-d4	66123	6.64	69912	6.645	95	50 - 200		-0.0050	+/-0.50	
Acenaphthene-d10	137779	9.653	145435	9.653	95	50 - 200		0.0000	+/-0.50	
Chrysene-d12	197498	14.536	203849	14.536	97	50 - 200		0.0000	+/-0.50	
Naphthalene-d8	245890	7.917	261328	7.917	94	50 - 200		0.0000	+/-0.50	
Perylene-d12	218453	17.036	228579	17.041	96	50 - 200		-0.0110	+/-0.50	
Phenanthrene-d10	245896	11.117	257827	11.122	95	50 - 200		-0.0050	+/-0.50	

LCS Dup (B1C1003-BSD1)

Analyte	Resp	RT	RefResp	RefRT	Area%	ISAreaLimit	Flg	RTDiff	RTDiffLimit	Flg
1,4-Dichlorobenzene-d4	65462	6.64	69912	6.645	94	50 - 200		-0.0050	+/-0.50	
Acenaphthene-d10	134668	9.653	145435	9.653	93	50 - 200		0.0000	+/-0.50	
Chrysene-d12	191791	14.536	203849	14.536	94	50 - 200		0.0000	+/-0.50	
Naphthalene-d8	241412	7.917	261328	7.917	92	50 - 200		0.0000	+/-0.50	
Perylene-d12	213643	17.036	228579	17.041	93	50 - 200		-0.0110	+/-0.50	
Phenanthrene-d10	239018	11.122	257827	11.122	93	50 - 200		0.0000	+/-0.50	

Soil IDW (M1C1317-01)

Analyte	Resp	RT	RefResp	RefRT	Area%	ISAreaLimit	Flg	RTDiff	RTDiffLimit	Flg
1,4-Dichlorobenzene-d4	63501	6.64	69912	6.645	91	50 - 200		-0.0050	+/-0.50	
Acenaphthene-d10	130431	9.647	145435	9.653	90	50 - 200		-0.0060	+/-0.50	
Chrysene-d12	183762	14.525	203849	14.536	90	50 - 200		-0.0110	+/-0.50	
Naphthalene-d8	233295	7.917	261328	7.917	89	50 - 200		0.0000	+/-0.50	
Perylene-d12	209958	17.036	228579	17.041	92	50 - 200		-0.0110	+/-0.50	
Phenanthrene-d10	236368	11.117	257827	11.122	92	50 - 200		-0.0050	+/-0.50	

Calibration Check (S1C0352-CCV1)

Analyte	Resp	RT	RefResp	RefRT	Area%	ISAreaLimit	Flg	RTDiff	RTDiffLimit	Flg
1,4-Dichlorobenzene-d4	69912	6.645	69912	6.645	100	50 - 200		0.0000	+/-0.50	
Acenaphthene-d10	145435	9.653	145435	9.653	100	50 - 200		0.0000	+/-0.50	
Chrysene-d12	203849	14.536	203849	14.536	100	50 - 200		0.0000	+/-0.50	
Naphthalene-d8	261328	7.917	261328	7.917	100	50 - 200		0.0000	+/-0.50	
Perylene-d12	228579	17.041	228579	17.041	100	50 - 200		0.0000	+/-0.50	
Phenanthrene-d10	257827	11.122	257827	11.122	100	50 - 200		0.0000	+/-0.50	

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

INTERNAL STANDARD AREA SUMMARY
FORM VIIIA

Calibration Check (S1C0352-CCV2)

Analyte	Resp	RT	RefResp	RefRT	Area%	ISAreaLimit	Flg	RTDiff	RTDiffLimit	Flg
1,4-Dichlorobenzene-d4	88051	6.645	69912	6.645	126	50 - 200		0.0000	+/-0.50	
Acenaphthene-d10	180314	9.653	145435	9.653	124	50 - 200		0.0000	+/-0.50	
Chrysene-d12	254547	14.536	203849	14.536	125	50 - 200		0.0000	+/-0.50	
Naphthalene-d8	329121	7.917	261328	7.917	126	50 - 200		0.0000	+/-0.50	
Perylene-d12	284654	17.047	228579	17.041	125	50 - 200		0.0000	+/-0.50	
Phenanthrene-d10	330778	11.122	257827	11.122	128	50 - 200		0.0000	+/-0.50	

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Section A:
GCMS Semivolatiles
EPA 8270C
Batch / Sequence Raw Data

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

BATCH LOG SUMMARY
SECTION A1

Batch: B1C1003
Matrix: Aqueous
Method: EPA 8270C
SOP: EXB08

Prepared: 3/17/2021 1:30:00PM
Prepared By: CPD
Preparation: EPA 3510C

Laboratory ID	Client / Source ID	Initial	Final	pH					Spike(s)
B1C1003-BLK1		100 mL	1.00 mL	<2/>10					
B1C1003-BLK2		100 mL	1.00 mL	<2/>10					
B1C1003-BLK3		100 mL	1.00 mL	<2/>10					
B1C1003-BLK4		100 mL	1.00 mL	<2/>10					
B1C1003-BS1		1000 mL	1.00 mL	<2/>10					1000372 500µL
B1C1003-BSD1		1000 mL	1.00 mL	<2/>10					1000372 500µL
M1C1317-01	Soil IDW	100 mL	1.00 mL	<2/>10					

Standards used in the batch:

Standard ID	Description	Date Prepared	Prepared By
1000372	BNA Spike	12/10/2020 3:15:45PM	** Vendor **

Reagents used in the batch:

Reagent ID	Description	Prepared	Prepared By
1000578	Sodium Sulfate, Anhydrous, Granular	11/12/2020 8:39:49AM	** Vendor **
1001092	10N NaOH	2/5/2021 8:27:33AM	chad.davis
1001691	1:1 H2SO4	2/25/2021 4:50:29PM	chad.davis
1002286	Methylene Chloride	3/12/2021 8:37:23AM	chad.davis

Surrogates used in the batch: **Surrogate Spiked 1:** 500.00 µL

Surrogate ID	Description	Prepared	Prepared By
1000371	8270 Surrogate Solution	12/29/2020 3:12:47PM	** Vendor **

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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

SEQUENCE LOG SUMMARY
SECTION A2

Sequence: S1A0503
Instrument: MSD12
Calibration: 21B0002

Analyst 1: SCB
Method: EPA 8270C

#	File ID	Laboratory ID	Client ID	Analyzed	Reference	Standard
1	12M80861.D	S1A0503-TUN1	MS Tune	01/29/21 08:50		0008021
2	12M80862.D	S1A0503-CAL4	Cal Standard	01/29/21 09:10		0012168
3	12M80863.D	S1A0503-CAL9	Cal Standard	01/29/21 09:41		0012173
4	12M80864.D	S1A0503-CAL8	Cal Standard	01/29/21 10:12		0012172
5	12M80865.D	S1A0503-CAL7	Cal Standard	01/29/21 10:43		0012171
6	12M80866.D	S1A0503-CAL6	Cal Standard	01/29/21 11:15		0012170
7	12M80867.D	S1A0503-CAL5	Cal Standard	01/29/21 11:46		0012169
8	12M80868.D	S1A0503-CAL3	Cal Standard	01/29/21 12:18		0012167
9	12M80869.D	S1A0503-CAL2	Cal Standard	01/29/21 12:49		0012166
10	12M80870.D	S1A0503-CAL1	Cal Standard	01/29/21 13:20		0012165
11	12M80871.D	S1A0503-ICV1	Initial Cal Check	01/29/21 13:51		0008473
12	12M80872.D	S1A0503-ICV2	Initial Cal Check	01/29/21 14:22		0008475
13	12M80873.D	S1A0503-CALD	Cal Standard	01/29/21 14:53		0011064
14	12M80874.D	S1A0503-CALG	Cal Standard	01/29/21 15:24		0011067
15	12M80875.D	S1A0503-CALF	Cal Standard	01/29/21 15:56		0011066
16	12M80876.D	S1A0503-CALE	Cal Standard	01/29/21 16:27		0011065
17	12M80877.D	S1A0503-CALC	Cal Standard	01/29/21 16:58		0011062
18	12M80878.D	S1A0503-CALB	Cal Standard	01/29/21 17:28		0011060
19	12M80879.D	S1A0503-CALA	Cal Standard	01/29/21 17:58		0011058
20	12M80880.D	S1A0503-ICV3	Initial Cal Check	01/29/21 18:28		0012179
21	12M80882.D	S1A0503-TUN2	MS Tune	02/01/21 13:11		0008021
22	12M80886.D	S1A0503-ICV4	Initial Cal Check	02/01/21 15:03		1000920

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

SEQUENCE LOG SUMMARY
SECTION A2

Sequence Standards

Standard ID	Description	Prepared	PreparedBy	Expires
0008021	8270 50PPM DFTPP	08/04/2020	Sarah Bogolin	02/04/2021
0008473	8270 ICV1 50PPM	08/13/2020	Sarah Bogolin	02/13/2021
0008475	8270 MP,A9,BENZ ICV2 50PPM	08/13/2020	Sarah Bogolin	02/13/2021
0011058	8270 TCL CALA 120PPM	10/28/2020	Sarah Bogolin	02/28/2021
0011060	8270 TCL CALB 100PPM	10/28/2020	Sarah Bogolin	02/28/2021
0011062	8270 TCL CALC 80PPM	10/28/2020	Sarah Bogolin	02/28/2021
0011064	8270 TCL CALD 50PPM CCV	10/28/2020	Sarah Bogolin	02/28/2021
0011065	8270 TCL CALE 25PPM	10/28/2020	Sarah Bogolin	02/28/2021
0011066	8270 TCL CALF 10PPM	10/28/2020	Sarah Bogolin	02/28/2021
0011067	8270 TCL CALG 3PPM	10/28/2020	Sarah Bogolin	02/28/2021
0012165	8270 CAL1 120PPM	12/04/2020	Sarah Bogolin	06/04/2021
0012166	8270 CAL2 100 PPM	12/04/2020	Sarah Bogolin	06/04/2021
0012167	8270 CAL3 80 PPM	12/04/2020	Sarah Bogolin	06/04/2021
0012168	8270 CAL4 50PPM CCV	12/04/2020	Sarah Bogolin	06/04/2021
0012169	8270 CAL5 25 PPM	12/04/2020	Sarah Bogolin	06/04/2021
0012170	8270 CAL6 15PPM	12/04/2020	Sarah Bogolin	06/04/2021
0012171	8270 CAL7 10 PPM	12/04/2020	Sarah Bogolin	06/04/2021
0012172	8270 CAL8 3 PPM	12/04/2020	Sarah Bogolin	06/04/2021
0012173	8270 CAL9 1PPM	12/04/2020	Sarah Bogolin	06/04/2021
0012179	8270 TCL ICV3 STD 50PPM	12/04/2020	Sarah Bogolin	04/30/2021
1000920	8270 ICV4 1,4-Diox 50PPM	02/01/2021	Sarah Bogolin	08/01/2021

Sequence Internal Standard

Standard ID	Description	Prepared	PreparedBy	Expires
1000219	8270 Internal Standard 40PPM	01/11/2021	Sarah Bogolin	06/11/2021

MICROBAC®

Laboratory Report Number: M1C1317
Client Project ID: Longhorn

SEQUENCE LOG SUMMARY
SECTION A2

Sequence: S1C0352
Instrument: MSD12
Calibration: 21B0002

Analyst 1: SCB
Method: EPA 8270C

#	File ID	Laboratory ID	Client ID	Analyzed	Reference	Standard
1	12M81402.D	S1C0352-TUN1	MS Tune	03/18/21 11:46		1001056
2	12M81403.D	S1C0352-CCV1	Calibration Check	03/18/21 12:05		0012168
3	12M81404.D	S1C0352-CCV2	Calibration Check	03/18/21 12:44		1001939
4	12M81405.D	B1C1003-BLK1	Blank	03/18/21 13:13		
5	12M81406.D	B1C1003-BLK2	Blank	03/18/21 13:41		
6	12M81407.D	B1C1003-BLK3	Blank	03/18/21 14:10		
7	12M81408.D	B1C1003-BLK4	Blank	03/18/21 14:39		
8	12M81409.D	B1C1003-BS1	LCS	03/18/21 15:07		
9	12M81410.D	B1C1003-BSD1	LCS Dup	03/18/21 15:36		
14	12M81415.D	M1C1317-01	Soil IDW	03/18/21 18:00		

Sequence Standards

Standard ID	Description	Prepared	PreparedBy	Expires
0012168	8270 CAL4 50PPM CCV	12/04/2020	Sarah Bogolin	06/04/2021
1001056	8270 50PPM DFTPP	02/04/2021	Sarah Bogolin	08/04/2021
1001939	8270 TCL CALD 50PPM CCV	03/04/2021	Sarah Bogolin	09/04/2021

Sequence Internal Standard

Standard ID	Description	Prepared	PreparedBy	Expires
1001761	8270 Internal Standard 40PPM	03/01/2021	Sarah Bogolin	09/01/2021

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Section B:
GCMS Semivolatiles
EPA 8270C
Sample Raw Data

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\031821\12M81415.D Vial: 14
Acq On : 18 Mar 2021 6:00 pm Operator: SCB
Sample : M1C1317-01 Inst : MSD12
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 19 08:41:21 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Thu Mar 18 12:41:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.640	152	63501	40.0000	ug/ml	0.000
25) Naphthalene-d8	7.917	136	233295	40.0000	ug/ml	0.000
45) Acenaphthene-d10	9.647	164	130431	40.0000	ug/ml	0.000
73) Phenanthrene-d10	11.117	188	236368	40.0000	ug/ml	0.000
86) Chrysene-d12	14.525	240	183762	40.0000	ug/ml	-0.011
98) Perylene-d12	17.036	264	209958	40.0000	ug/ml	0.000
System Monitoring Compounds						
6) 2-Fluorophenol	5.438	112	91794	48.7093932	ug/ml	-0.02
Spiked Amount 100.000	Range 21 - 100		Recovery = 48.71%			
8) Phenol-d5	6.453	99	69052	31.6202263	ug/ml	-0.03
Spiked Amount 100.000	Range 10 - 94		Recovery = 31.62%			
26) Nitrobenzene-d5	7.201	82	68410	38.2167219	ug/ml	-0.01
Spiked Amount 50.000	Range 35 - 114		Recovery = 76.43%			
49) 2-Fluorobiphenyl	8.985	172	168742	41.1739332	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 82.35%			
72) 2,4,6-Tribromophenol	10.443	330	56764	101.3617358	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 101.36%			
89) p-Terphenyl-d14	12.938	244	234075	53.1192583	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 106.24%			

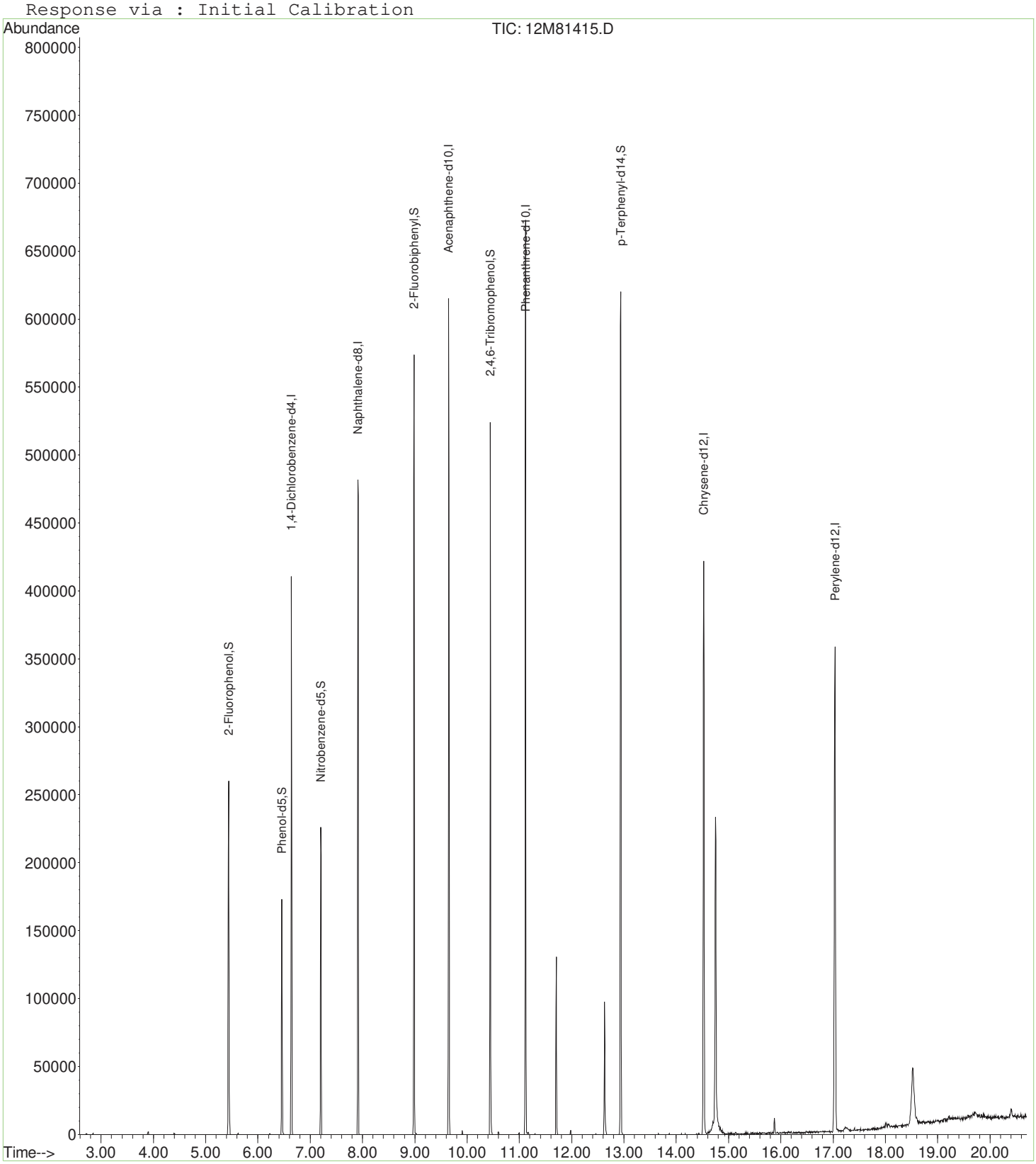
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\031821\12M81415.D Vial: 14
Acq On : 18 Mar 2021 6:00 pm Operator: SCB
Sample : M1C1317-01 Inst : MSD12
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 19 9:56 2021 Quant Results File: MEGAMIX.RES

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Thu Mar 18 12:41:39 2021
Response via : Initial Calibration



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Section C:
GCMS Semivolatiles
EPA 8270C
QC Sample Raw Data

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\031821\12M81405.D Vial: 4
Acq On : 18 Mar 2021 1:13 pm Operator: SCB
Sample : B1C1003-BLK1 Inst : MSD12
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 19 08:41:08 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Thu Mar 18 12:41:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.640	152	65788	40.0000	ug/ml	0.000
25) Naphthalene-d8	7.917	136	242193	40.0000	ug/ml	0.000
45) Acenaphthene-d10	9.653	164	133398	40.0000	ug/ml	0.000
73) Phenanthrene-d10	11.117	188	238333	40.0000	ug/ml	0.000
86) Chrysene-d12	14.530	240	187716	40.0000	ug/ml	0.000
98) Perylene-d12	17.036	264	214267	40.0000	ug/ml	0.000
System Monitoring Compounds						
6) 2-Fluorophenol	5.454	112	96327	49.3378636	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 49.34%			
8) Phenol-d5	6.474	99	70973	31.3700893	ug/ml	-0.01
Spiked Amount 100.000	Range 10 - 94		Recovery = 31.37%			
26) Nitrobenzene-d5	7.206	82	71510	38.4808329	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 76.96%			
49) 2-Fluorobiphenyl	8.985	172	175794	41.9406076	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 83.88%			
72) 2,4,6-Tribromophenol	10.449	330	61560	107.4808679	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 107.48%			
89) p-Terphenyl-d14	12.938	244	234915	52.1869765	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 104.37%			

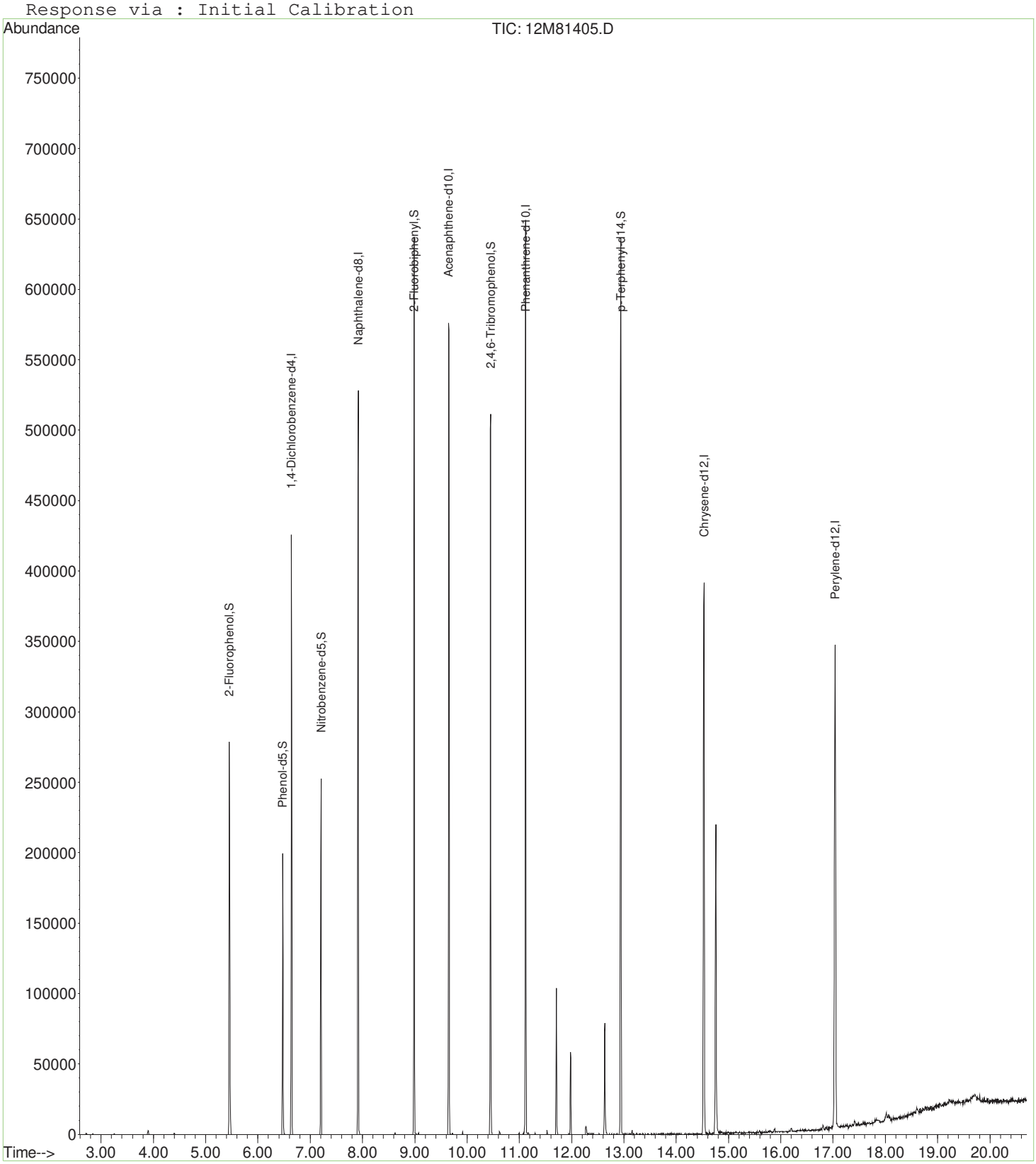
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\031821\12M81405.D Vial: 4
Acq On : 18 Mar 2021 1:13 pm Operator: SCB
Sample : B1C1003-BLK1 Inst : MSD12
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 19 9:53 2021 Quant Results File: MEGAMIX.RES

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Thu Mar 18 12:41:39 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\031821\12M81406.D Vial: 5
Acq On : 18 Mar 2021 1:41 pm Operator: SCB
Sample : B1C1003-BLK2 Inst : MSD12
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 19 08:41:10 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Thu Mar 18 12:41:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.640	152	65193	40.0000	ug/ml	0.000
25) Naphthalene-d8	7.917	136	240316	40.0000	ug/ml	0.000
45) Acenaphthene-d10	9.648	164	134021	40.0000	ug/ml	0.000
73) Phenanthrene-d10	11.117	188	238885	40.0000	ug/ml	0.000
86) Chrysene-d12	14.525	240	185853	40.0000	ug/ml	-0.011
98) Perylene-d12	17.036	264	216171	40.0000	ug/ml	0.000
System Monitoring Compounds						
6) 2-Fluorophenol	5.454	112	74532	38.5230618	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 38.52%			
8) Phenol-d5	6.469	99	56829	25.3476863	ug/ml	-0.02
Spiked Amount 100.000	Range 10 - 94		Recovery = 25.35%			
26) Nitrobenzene-d5	7.206	82	57618	31.2474632	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 62.49%			
49) 2-Fluorobiphenyl	8.985	172	144312	34.2696429	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 68.54%			
72) 2,4,6-Tribromophenol	10.449	330	54668	95.0040684	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 95.00%			
89) p-Terphenyl-d14	12.938	244	236043	52.9632015	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 105.93%			

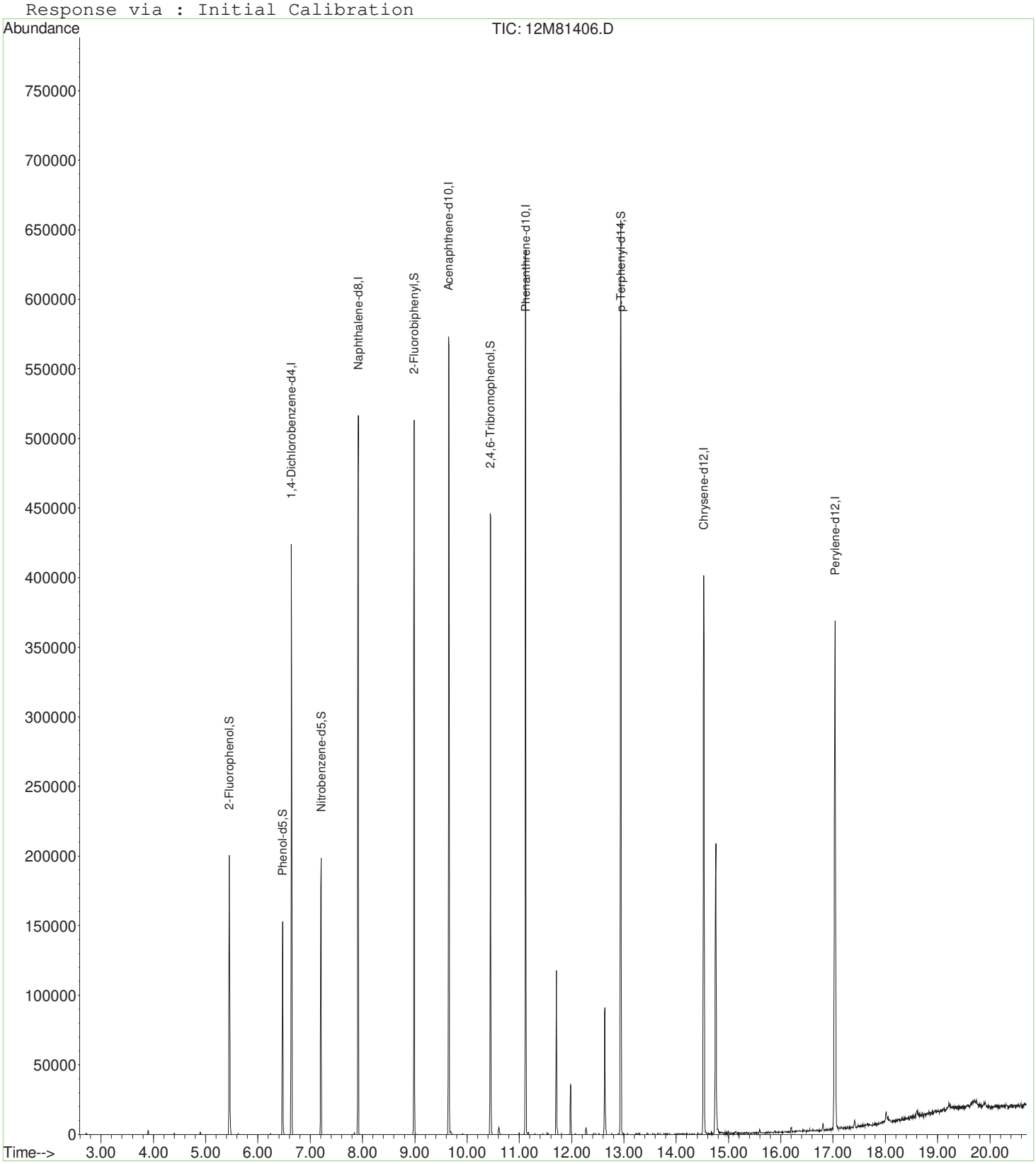
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\031821\12M81406.D Vial: 5
Acq On : 18 Mar 2021 1:41 pm Operator: SCB
Sample : B1C1003-BLK2 Inst : MSD12
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 19 9:53 2021 Quant Results File: MEGAMIX.RES

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Thu Mar 18 12:41:39 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\031821\12M81407.D Vial: 6
Acq On : 18 Mar 2021 2:10 pm Operator: SCB
Sample : B1C1003-BLK3 Inst : MSD12
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 19 08:41:11 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Thu Mar 18 12:41:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

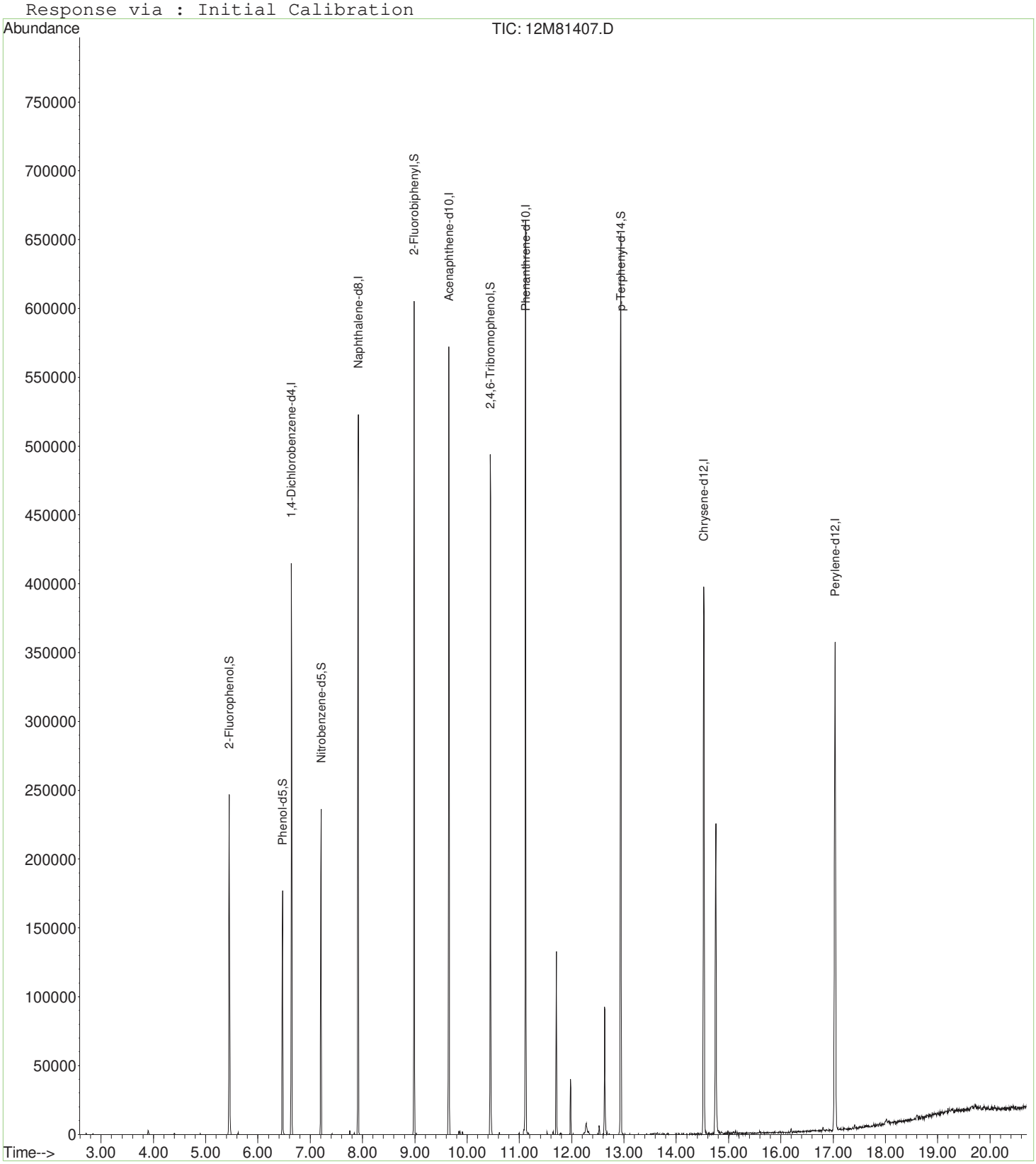
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.640	152	63914	40.0000	ug/ml	0.000
25) Naphthalene-d8	7.917	136	240303	40.0000	ug/ml	0.000
45) Acenaphthene-d10	9.647	164	133779	40.0000	ug/ml	0.000
73) Phenanthrene-d10	11.117	188	238611	40.0000	ug/ml	0.000
86) Chrysene-d12	14.525	240	183103	40.0000	ug/ml	-0.011
98) Perylene-d12	17.036	264	212885	40.0000	ug/ml	0.000
System Monitoring Compounds						
6) 2-Fluorophenol	5.448	112	87338	46.0453982	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 46.05%			
8) Phenol-d5	6.469	99	64348	29.2757703	ug/ml	-0.02
Spiked Amount 100.000	Range 10 - 94		Recovery = 29.28%			
26) Nitrobenzene-d5	7.206	82	67795	36.7686551	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 73.54%			
49) 2-Fluorobiphenyl	8.985	172	166870	39.6981536	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 79.40%			
72) 2,4,6-Tribromophenol	10.449	330	56903	99.0670179	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 99.07%			
89) p-Terphenyl-d14	12.938	244	235924	53.7315467	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 107.46%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\031821\12M81407.D Vial: 6
Acq On : 18 Mar 2021 2:10 pm Operator: SCB
Sample : B1C1003-BLK3 Inst : MSD12
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 19 9:54 2021 Quant Results File: MEGAMIX.RES

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Thu Mar 18 12:41:39 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\031821\12M81408.D Vial: 7
Acq On : 18 Mar 2021 2:39 pm Operator: SCB
Sample : B1C1003-BLK4 Inst : MSD12
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 19 08:41:13 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Thu Mar 18 12:41:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.640	152	65730	40.0000	ug/ml	0.000
25) Naphthalene-d8	7.917	136	243200	40.0000	ug/ml	0.000
45) Acenaphthene-d10	9.648	164	134645	40.0000	ug/ml	0.000
73) Phenanthrene-d10	11.117	188	240004	40.0000	ug/ml	0.000
86) Chrysene-d12	14.525	240	187173	40.0000	ug/ml	-0.011
98) Perylene-d12	17.036	264	213218	40.0000	ug/ml	0.000
System Monitoring Compounds						
6) 2-Fluorophenol	5.449	112	89938	46.1061207	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 46.11%			
8) Phenol-d5	6.464	99	67724	29.9604440	ug/ml	-0.02
Spiked Amount 100.000	Range 10 - 94		Recovery = 29.96%			
26) Nitrobenzene-d5	7.206	82	71912	38.5369260	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 77.07%			
49) 2-Fluorobiphenyl	8.985	172	176291	41.6696544	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 83.34%			
72) 2,4,6-Tribromophenol	10.449	330	54872	94.9166564	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 94.92%			
89) p-Terphenyl-d14	12.938	244	239161	53.2843704	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 106.57%			

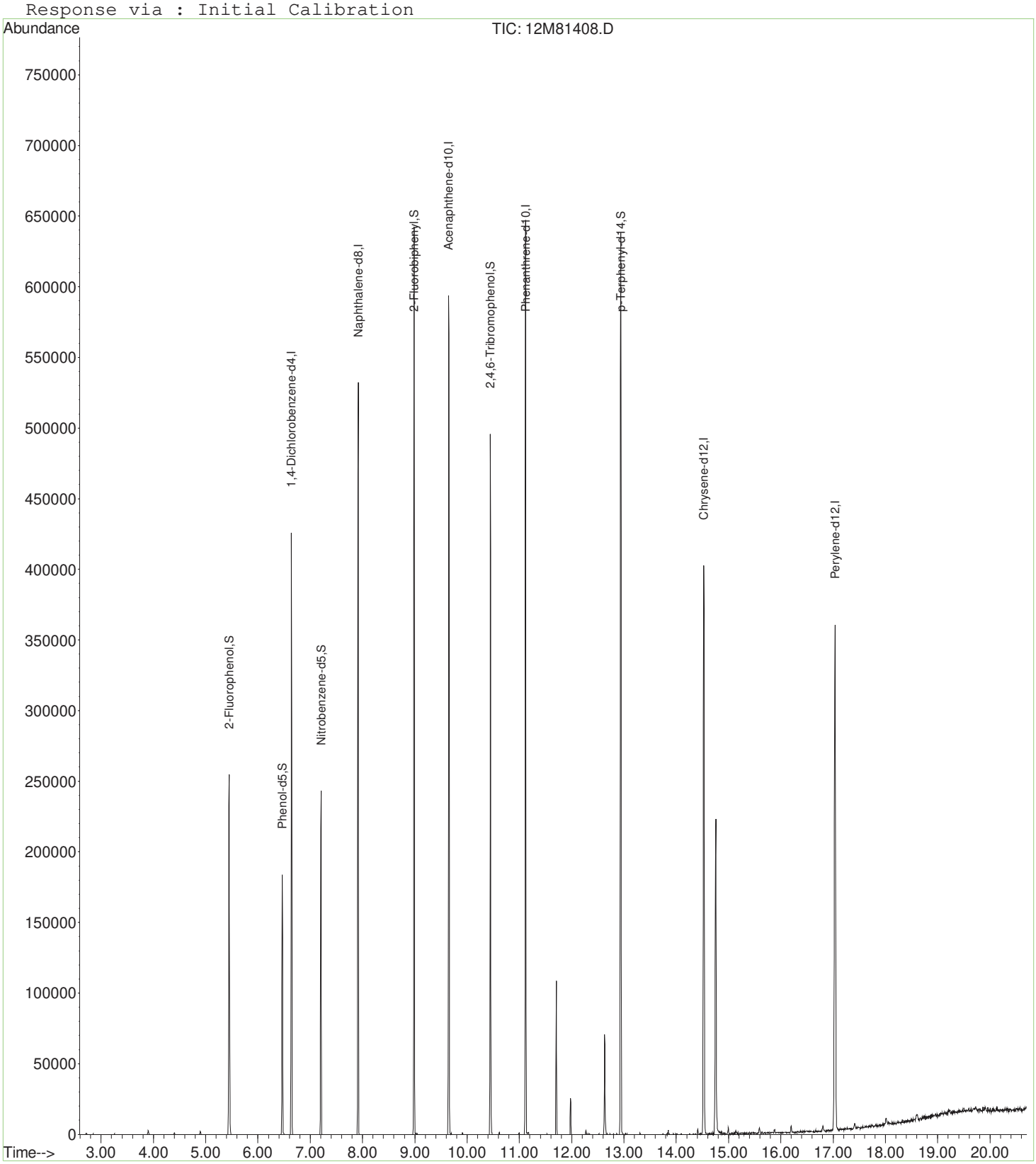
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\031821\12M81408.D Vial: 7
Acq On : 18 Mar 2021 2:39 pm Operator: SCB
Sample : B1C1003-BLK4 Inst : MSD12
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 19 9:54 2021 Quant Results File: MEGAMIX.RES

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Thu Mar 18 12:41:39 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\031821\12M81409.D Vial: 8
Acq On : 18 Mar 2021 3:07 pm Operator: SCB
Sample : B1C1003-BS1 Inst : MSD12
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 19 08:30:17 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Thu Mar 18 12:41:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.640	152	66123	40.0000	ug/ml	0.000
25) Naphthalene-d8	7.917	136	245890	40.0000	ug/ml	0.000
45) Acenaphthene-d10	9.653	164	137779	40.0000	ug/ml	0.000
73) Phenanthrene-d10	11.117	188	245896	40.0000	ug/ml	0.000
86) Chrysene-d12	14.536	240	197498	40.0000	ug/ml	0.000
98) Perylene-d12	17.036	264	218453	40.0000	ug/ml	0.000
System Monitoring Compounds						
6) 2-Fluorophenol	5.443	112	88718	45.2103826	ug/ml	-0.01
Spiked Amount 100.000	Range 21 - 100		Recovery = 45.21%			
8) Phenol-d5	6.464	99	76945	33.8374113	ug/ml	-0.02
Spiked Amount 100.000	Range 10 - 94		Recovery = 33.84%			
26) Nitrobenzene-d5	7.206	82	72142	38.2372441	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 76.47%			
49) 2-Fluorobiphenyl	8.985	172	188280	43.4911758	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 86.98%			
72) 2,4,6-Tribromophenol	10.449	330	62745	106.0664338	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 106.07%			
89) p-Terphenyl-d14	12.938	244	233614	49.3274702	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 98.66%			
Target Compounds						Qvalue
2) n-Nitrosodimethylamine	3.51	74	26433	22.3534	ug/ml	96
3) Pyridine	3.54	79	44856	22.7389	ug/ml	99
9) Phenol	6.48	94	38813	15.0352	ug/ml#	62
10) Aniline	6.34	93	92758	31.2823	ug/ml#	100
11) bis(2-Chloroethyl)ether	6.39	63	49549	36.2989	ug/ml	96
12) 2-Chlorophenol	6.50	128	82942	39.0421	ug/ml	99
13) 1,3-Dichlorobenzene	6.58	146	83806	35.3419	ug/ml	99
14) 1,4-Dichlorobenzene	6.66	146	85987	34.9138	ug/ml	99
15) Benzyl Alcohol	6.84	108	50827	36.6998	ug/ml	99
16) 1,2-Dichlorobenzene	6.81	146	82001	35.6386	ug/ml	99
17) 2-Methylphenol	7.01	107	60081	35.9991	ug/ml	88
18) bis(2-Chloroisopropyl)ethe	6.93	45	87966	36.6634	ug/ml#	96
19) 3-,4-Methylphenol	7.18	108	65632	32.4678	ug/ml	99
21) n-Nitrosodipropylamine	7.06	70	55446	42.2855	ug/ml	89
22) n-Nitrosomorpholine	7.06	56	3799	3.1759	ug/ml#	36
23) o-Toluidine	7.06	106	8028	2.4380	ug/ml#	1
24) Hexachloroethane	7.15	117	28787	33.8739	ug/ml	97
27) Nitrobenzene	7.23	77	74229	39.4382	ug/ml	98
29) Isophorone	7.46	82	110493	31.7878	ug/ml	99
30) 2-Nitrophenol	7.54	139	49098	44.1408	ug/ml	99
31) 2,4-Dimethylphenol	7.66	122	81398	44.6529	ug/ml	99
32) bis(2-Chloroethoxy)methane	7.69	93	90874	43.2659	ug/ml	96
33) Benzoic Acid	7.80	105	23298	19.4022	ug/ml	97
34) 2,4-Dichlorophenol	7.85	162	72541	44.3845	ug/ml	99
36) 1,2,4-Trichlorobenzene	7.86	180	69410	39.0419	ug/ml	99
37) Naphthalene	7.94	128	248556	40.9308	ug/ml	99
38) 4-Chloroaniline	8.02	65	23111	33.2068	ug/ml	83
39) Hexachlorobutadiene	8.06	225	40866	44.4683	ug/ml	100
41) p-Phenylenediamine	8.57	108	5428	2.4580	ug/ml#	1
42) 4-Chloro-3-Methylphenol	8.57	107	78031	46.3420	ug/ml	99
43) 2-Methylnaphthalene	8.62	142	172401	41.8633	ug/ml	100
44) 1-Methylnaphthalene	8.72	142	172161	45.0598	ug/ml	100
46) Hexachlorocyclopentadiene	8.77	237	27934	23.7357	ug/ml	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\031821\12M81409.D Vial: 8
Acq On : 18 Mar 2021 3:07 pm Operator: SCB
Sample : B1C1003-BS1 Inst : MSD12
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 19 08:30:17 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Thu Mar 18 12:41:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

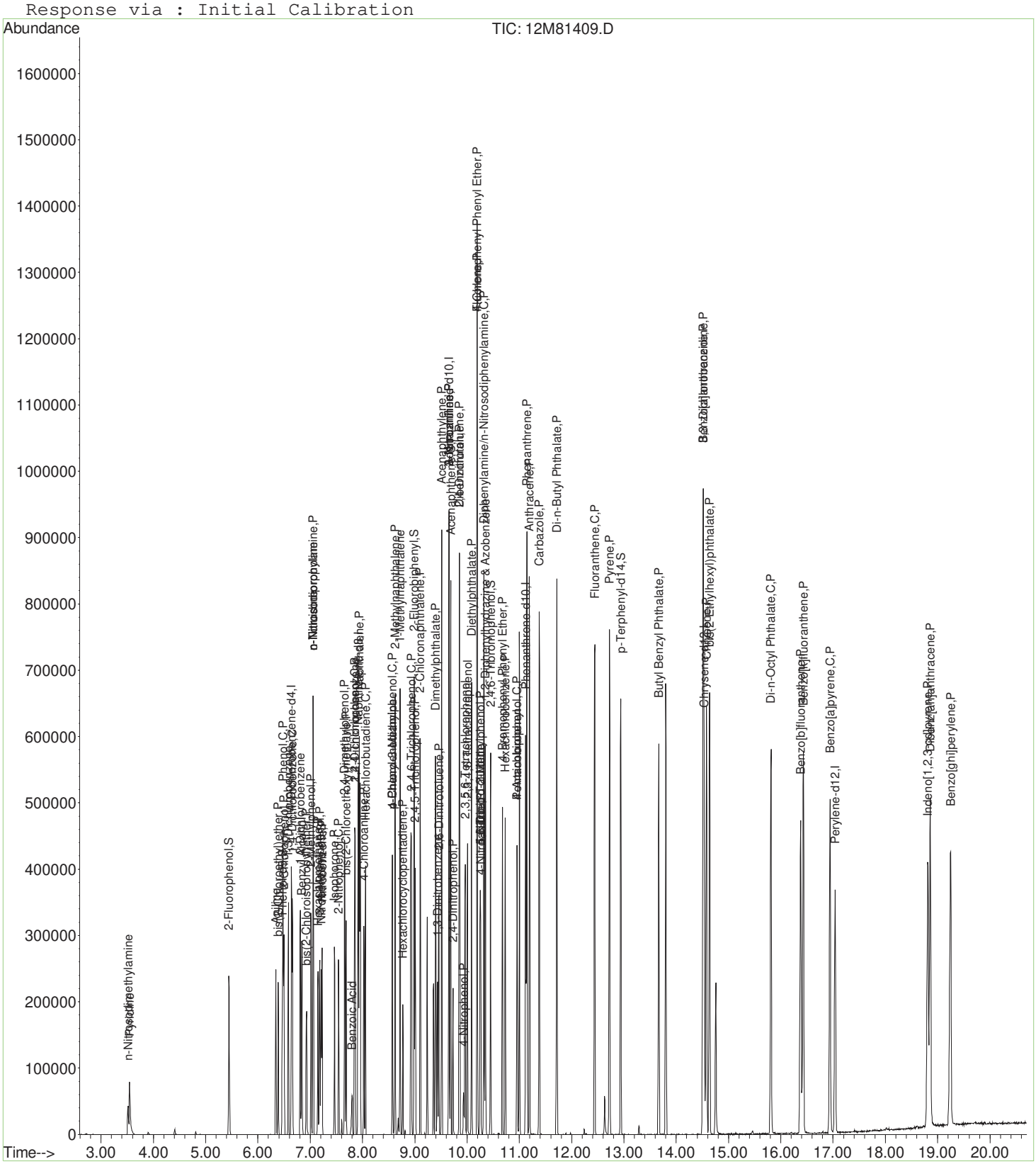
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
47)	2,4,6-Trichlorophenol	8.94	196	54041	47.3951 ug/ml	98
48)	2,4,5-Trichlorophenol	9.01	196	59318	48.6718 ug/ml	100
50)	2-Chloronaphthalene	9.10	162	160419	44.1249 ug/ml	99
51)	2-Nitroaniline	9.65	65	57738	46.4868 ug/ml	98
52)	Dimethylphthalate	9.40	163	218435	52.9340 ug/ml	100
53)	1,3-Dinitrobenzene	9.43	168	39563	53.9376 ug/ml	85
54)	2,6-Dinitrotoluene	9.46	165	52807	53.2580 ug/ml	98
55)	Acenaphthylene	9.51	152	283008	44.7334 ug/ml	99
56)	3-Nitroaniline	9.65	138	54438	46.7013 ug/ml#	96
57)	2,4-Dinitrophenol	9.73	184	33429	53.7596 ug/ml#	89
58)	Acenaphthene	9.69	154	175795	43.9218 ug/ml	97
59)	4-Nitrophenol	9.93	65	12218	16.6710 ug/ml	84
60)	2,4-Dinitrotoluene	9.85	165	74042	57.8562 ug/ml	97
61)	Dibenzofuran	9.86	168	258175	48.7841 ug/ml	99
62)	2,3,5,6-Tetrachlorophenol	9.96	232	52093	54.0830 ug/ml	99
63)	2,3,4,6-Tetrachlorophenol	10.01	232	51884	52.2027 ug/ml	99
66)	Diethylphthalate	10.09	149	223795	52.4306 ug/ml	99
67)	Fluorene	10.19	166	218392	50.6849 ug/ml	100
68)	4-Chlorophenyl Phenyl Ethe	10.19	204	98926	49.0006 ug/ml	99
69)	4-Nitroaniline	10.26	138	61679	48.1489 ug/ml	94
70)	5-Nitro-o-Toluidine	10.25	152	2081	1.5465 ug/ml#	1
71)	1,2-Diphenylhydrazine & Az	10.35	77	194076	51.6857 ug/ml	99
74)	4,6-Dinitro-2-Methylphenol	10.25	198	43000	57.8935 ug/ml	94
75)	Diphenylamine/n-Nitrosodip	10.32	169	201796	53.4386 ug/ml	98
76)	4-Bromophenyl Phenyl Ether	10.68	248	60370	54.1582 ug/ml	99
77)	Hexachlorobenzene	10.73	284	65677	54.4332 ug/ml	99
78)	4-Aminobiphenyl	10.96	169	6712	1.3159 ug/ml#	89
79)	Pentachlorophenol	10.96	266	52009	62.4256 ug/ml	98
80)	Phenanthrene	11.14	178	338685	52.9049 ug/ml	99
81)	Anthracene	11.19	178	340866	52.1678 ug/ml	99
82)	Carbazole	11.38	167	336770	58.2905 ug/ml	97
83)	Di-n-Butyl Phthalate	11.72	149	418394	60.3228 ug/ml	100
85)	Fluoranthene	12.44	202	355801	57.3071 ug/ml	98
88)	Pyrene	12.72	202	376200	59.5728 ug/ml	99
91)	Butyl Benzyl Phthalate	13.66	149	181549	58.1285 ug/ml	99
94)	bis(2-Ethylhexyl)phthalate	14.64	149	259976	61.9543 ug/ml	100
95)	3,3'-Dichlorobenzidine	14.51	252	117673	51.4380 ug/ml	100
96)	Benzo[a]anthracene	14.51	228	318994	54.8125 ug/ml	100
97)	Chrysene	14.58	228	331512	56.4100 ug/ml	99
99)	Di-n-Octyl Phthalate	15.81	149	434881	58.1340 ug/ml	99
100)	Benzo[b]fluoranthene	16.38	252	329833	60.7684 ug/ml	99
101)	Benzo[k]fluoranthene	16.43	252	348774	61.8684 ug/ml	99
102)	Benzo[a]pyrene	16.94	252	321532	66.1488 ug/ml	99
103)	Indeno[1,2,3-cd]pyrene	18.81	276	301437	59.9400 ug/ml	98
104)	Dibenz[ah]anthracene	18.86	278	347220	62.1392 ug/ml	99
105)	Benzo[ghi]perylene	19.25	276	316538	58.0257 ug/ml	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\031821\12M81409.D Vial: 8
Acq On : 18 Mar 2021 3:07 pm Operator: SCB
Sample : B1C1003-BS1 Inst : MSD12
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 19 8:30 2021 Quant Results File: MEGAMIX.RES

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Thu Mar 18 12:41:39 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\031821\12M81410.D Vial: 9
Acq On : 18 Mar 2021 3:36 pm Operator: SCB
Sample : B1C1003-BSD1 Inst : MSD12
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 19 08:30:18 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Thu Mar 18 12:41:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.640	152	65462	40.0000	ug/ml	0.000
25) Naphthalene-d8	7.917	136	241412	40.0000	ug/ml	0.000
45) Acenaphthene-d10	9.653	164	134668	40.0000	ug/ml	0.000
73) Phenanthrene-d10	11.122	188	239018	40.0000	ug/ml	0.000
86) Chrysene-d12	14.536	240	191791	40.0000	ug/ml	0.000
98) Perylene-d12	17.036	264	213643	40.0000	ug/ml	0.000
System Monitoring Compounds						
6) 2-Fluorophenol	5.443	112	88198	45.3992268	ug/ml	-0.01
Spiked Amount 100.000	Range 21 - 100		Recovery = 45.40%			
8) Phenol-d5	6.463	99	76048	33.7806345	ug/ml	-0.02
Spiked Amount 100.000	Range 10 - 94		Recovery = 33.78%			
26) Nitrobenzene-d5	7.206	82	69228	37.3733651	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 74.75%			
49) 2-Fluorobiphenyl	8.985	172	185290	43.7892552	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 87.58%			
72) 2,4,6-Tribromophenol	10.449	330	61288	105.9968382	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 106.00%			
89) p-Terphenyl-d14	12.938	244	238956	51.9568000	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 103.91%			
Target Compounds						Qvalue
2) n-Nitrosodimethylamine	3.51	74	26731	22.8336	ug/ml	96
3) Pyridine	3.54	79	43598	22.3243	ug/ml	98
9) Phenol	6.47	94	39006	15.2626	ug/ml	86
10) Aniline	6.34	93	97339	33.1587	ug/ml#	100
11) bis(2-Chloroethyl)ether	6.39	63	49225	36.4257	ug/ml	96
12) 2-Chlorophenol	6.50	128	80457	38.2548	ug/ml	99
13) 1,3-Dichlorobenzene	6.58	146	81959	34.9120	ug/ml	100
14) 1,4-Dichlorobenzene	6.66	146	83080	34.0741	ug/ml	100
15) Benzyl Alcohol	6.84	108	50526	36.8508	ug/ml	97
16) 1,2-Dichlorobenzene	6.81	146	80045	35.1397	ug/ml	99
17) 2-Methylphenol	7.01	107	59402	35.9516	ug/ml	88
18) bis(2-Chloroisopropyl)ethe	6.93	45	86451	36.3958	ug/ml#	98
19) 3-,4-Methylphenol	7.18	108	65632	32.7957	ug/ml	99
21) n-Nitrosodipropylamine	7.06	70	53606	41.2951	ug/ml	88
22) n-Nitrosomorpholine	7.06	56	3785	3.1962	ug/ml#	43
23) o-Toluidine	7.06	106	7616	2.3362	ug/ml#	1
24) Hexachloroethane	7.15	117	28064	33.3566	ug/ml	98
27) Nitrobenzene	7.23	77	73127	39.5734	ug/ml	98
29) Isophorone	7.46	82	108762	31.8702	ug/ml	97
30) 2-Nitrophenol	7.54	139	48864	44.7453	ug/ml	98
31) 2,4-Dimethylphenol	7.66	122	80028	44.7157	ug/ml	99
32) bis(2-Chloroethoxy)methane	7.69	93	88140	42.7427	ug/ml	97
33) Benzoic Acid	7.80	105	24792	20.8606	ug/ml	100
34) 2,4-Dichlorophenol	7.85	162	73268	45.6608	ug/ml	98
36) 1,2,4-Trichlorobenzene	7.86	180	68486	39.2367	ug/ml	99
37) Naphthalene	7.94	128	241216	40.4589	ug/ml	100
38) 4-Chloroaniline	8.02	65	25320	37.0556	ug/ml	87
39) Hexachlorobutadiene	8.06	225	39473	43.7492	ug/ml	99
41) p-Phenylenediamine	8.57	108	5805	2.6775	ug/ml#	1
42) 4-Chloro-3-Methylphenol	8.57	107	79698	48.2100	ug/ml	99
43) 2-Methylnaphthalene	8.62	142	169713	41.9750	ug/ml	100
44) 1-Methylnaphthalene	8.72	142	168488	44.9165	ug/ml	100
46) Hexachlorocyclopentadiene	8.77	237	27736	24.1119	ug/ml	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\031821\12M81410.D Vial: 9
Acq On : 18 Mar 2021 3:36 pm Operator: SCB
Sample : B1C1003-BSD1 Inst : MSD12
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 19 08:30:18 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Thu Mar 18 12:41:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

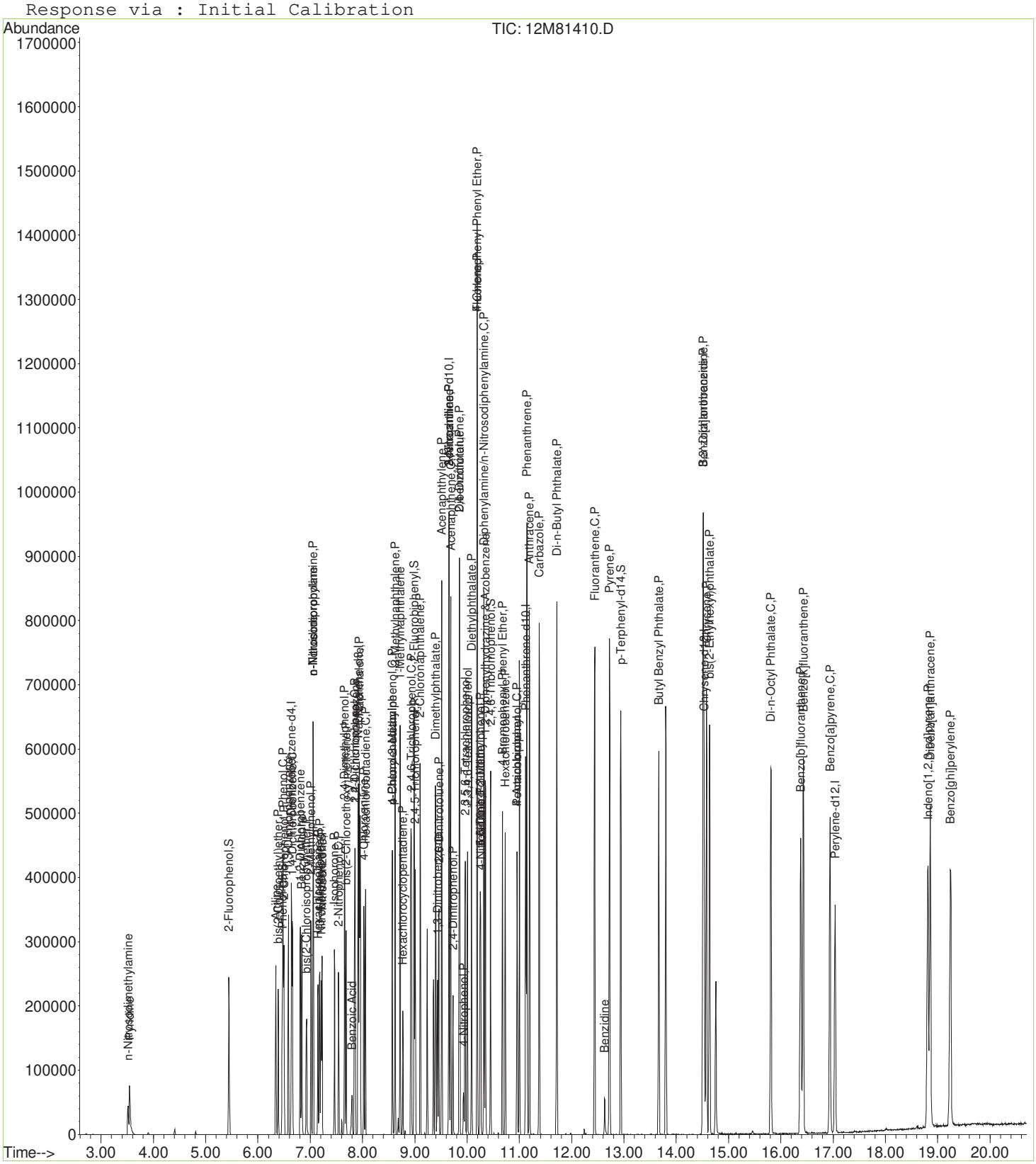
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47)	2,4,6-Trichlorophenol	8.94	196	55038	49.3845	ug/ml	98
48)	2,4,5-Trichlorophenol	9.01	196	59407	49.8709	ug/ml	100
50)	2-Chloronaphthalene	9.10	162	157510	44.3256	ug/ml	99
51)	2-Nitroaniline	9.65	65	59274	48.8260	ug/ml	98
52)	Dimethylphthalate	9.40	163	218248	54.1105	ug/ml	100
53)	1,3-Dinitrobenzene	9.43	168	39576	55.2018	ug/ml	85
54)	2,6-Dinitrotoluene	9.46	165	52323	53.9889	ug/ml	98
55)	Acenaphthylene	9.51	152	286180	46.2798	ug/ml	100
56)	3-Nitroaniline	9.65	138	57418	50.3957	ug/ml#	96
57)	2,4-Dinitrophenol	9.73	184	33754	55.2661	ug/ml#	88
58)	Acenaphthene	9.68	154	174235	44.5377	ug/ml	97
59)	4-Nitrophenol	9.93	65	12550	17.5196	ug/ml	83
60)	2,4-Dinitrotoluene	9.85	165	73943	59.1136	ug/ml	96
61)	Dibenzofuran	9.86	168	257172	49.7172	ug/ml	99
62)	2,3,5,6-Tetrachlorophenol	9.96	232	51613	54.8226	ug/ml	99
63)	2,3,4,6-Tetrachlorophenol	10.01	232	51538	53.0525	ug/ml	99
66)	Diethylphthalate	10.09	149	223814	53.6464	ug/ml	100
67)	Fluorene	10.19	166	220941	52.4611	ug/ml	100
68)	4-Chlorophenyl Phenyl Ethe	10.19	204	99157	50.2497	ug/ml	98
69)	4-Nitroaniline	10.26	138	61603	49.2005	ug/ml	94
70)	5-Nitro-o-Toluidine	10.25	152	2103	1.5989	ug/ml#	1
71)	1,2-Diphenylhydrazine & Az	10.35	77	192185	52.3645	ug/ml	99
74)	4,6-Dinitro-2-Methylphenol	10.25	198	42039	58.2284	ug/ml	94
75)	Diphenylamine/n-Nitrosodip	10.32	169	201789	54.9744	ug/ml	99
76)	4-Bromophenyl Phenyl Ether	10.68	248	61324	56.5972	ug/ml	99
77)	Hexachlorobenzene	10.73	284	64625	55.1026	ug/ml	100
78)	4-Aminobiphenyl	10.96	169	6855	1.3827	ug/ml#	89
79)	Pentachlorophenol	10.96	266	52117	64.3553	ug/ml	98
80)	Phenanthrene	11.14	178	337103	54.1730	ug/ml	99
81)	Anthracene	11.19	178	334723	52.7017	ug/ml	99
82)	Carbazole	11.38	167	334287	59.5257	ug/ml	98
83)	Di-n-Butyl Phthalate	11.71	149	420242	62.3328	ug/ml	100
85)	Fluoranthene	12.44	202	356375	59.0513	ug/ml	98
87)	Benzidine	12.63	184	5120	1.2130	ug/ml#	48
88)	Pyrene	12.72	202	378386	61.7020	ug/ml	99
91)	Butyl Benzyl Phthalate	13.66	149	182977	60.3290	ug/ml	98
94)	bis(2-Ethylhexyl)phthalate	14.64	149	262682	64.4618	ug/ml	100
95)	3,3'-Dichlorobenzidine	14.51	252	121956	54.8965	ug/ml	99
96)	Benzo[a]anthracene	14.51	228	323283	57.2024	ug/ml	100
97)	Chrysene	14.58	228	334778	58.6609	ug/ml	100
99)	Di-n-Octyl Phthalate	15.81	149	439509	60.0253	ug/ml	98
100)	Benzo[b]fluoranthene	16.38	252	342031	64.4345	ug/ml	99
101)	Benzo[k]fluoranthene	16.43	252	342142	62.0584	ug/ml	100
102)	Benzo[a]pyrene	16.94	252	319937	67.3026	ug/ml	99
103)	Indeno[1,2,3-cd]pyrene	18.81	276	304685	61.9499	ug/ml	98
104)	Dibenz[ah]anthracene	18.86	278	344096	62.9665	ug/ml	99
105)	Benzo[ghi]perylene	19.25	276	319677	59.9204	ug/ml	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\031821\12M81410.D Vial: 9
Acq On : 18 Mar 2021 3:36 pm Operator: SCB
Sample : B1C1003-BSD1 Inst : MSD12
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 19 8:30 2021 Quant Results File: MEGAMIX.RES

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Thu Mar 18 12:41:39 2021
Response via : Initial Calibration



MICROBAC®

Section D:
GCMS Semivolatiles
EPA 8270C
Calibration Raw Data

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

Calibration Table Report
Method: MEGAMIX.M MSD12
Title: OVD MSS01 8270/625 ICAL 01/29/21
Last Calibration: Mon Feb 01 09:46:39 2021
21B0002
Calibration Files

Compound	3 12M80864.D	10 12M80865.D	15 12M80866.D	25 12M80867.D	50 12M80862.D	80 12M80868.D	100 12M80869.D	120 12M80870.D	1 12M80863.D	Avg	%RSD	Linear	Quadtatic
1,4-Dichlorobenzene-d4	ISTD												
n-Nitrosodimethylamine		0.687	0.647	0.769	0.709	0.685	0.776	0.734		0.715	6.571		
Pyridine	0.924	1.203	1.168	1.312	1.203	1.170	1.314	1.252		1.193	10.302		
2-Picoline	1.161	1.425	1.290	1.470	1.359	1.292	1.438	1.378		1.352	7.462		
n-Nitrosomethylethylamine	0.261	0.485	0.520	0.506	0.559	0.537	0.604	0.573		0.506	20.919	0.998	
2-Fluorophenol	1.099	1.191	1.141	1.286	1.177	1.133	1.260	1.210		1.187	5.402		
n-Nitrosodiethylamine	0.509	0.626	0.577	0.657	0.601	0.572	0.642	0.610		0.599	7.817		
Phenol-d5	1.258	1.377	1.314	1.507	1.380	1.310	1.457	1.402		1.376	5.939		
Phenol	1.334	1.588	1.558	1.734	1.562	1.488	1.654	1.575		1.562	7.505		
Aniline	1.597	1.872	1.794	1.989	1.646	1.712	1.907	1.834		1.794	7.474		
bis(2-Chloroethyl)ether	0.769	0.850	0.812	0.905	0.816	0.784	0.857	0.815		0.826	5.272		
2-Chlorophenol	1.215	1.299	1.248	1.398	1.252	1.211	1.355	1.302		1.285	5.184		
1,3-Dichlorobenzene	1.301	1.487	1.423	1.583	1.385	1.349	1.515	1.432		1.434	6.400		
1,4-Dichlorobenzene	1.471	1.536	1.469	1.611	1.433	1.377	1.544	1.477		1.490	4.854		
Benzyl Alcohol	0.759	0.833	0.799	0.907	0.834	0.804	0.900	0.867		0.838	6.135		
1,2-Dichlorobenzene	1.362	1.415	1.359	1.507	1.344	1.300	1.455	1.394		1.392	4.741		
2-Methylphenol	0.919	1.024	0.964	1.094	0.998	0.961	1.076	1.040		1.010	5.959		
bis(2-Chloroisopropyl)ether	1.415	1.483	1.420	1.591	1.449	1.350	1.489	1.414		1.451	4.943		
3-,4-Methylphenol	1.094	1.234	1.174	1.323	1.173	1.154	1.296	1.334		1.223	7.176		
n-Nitrosopyrrolidine	0.562	0.629	0.592	0.669	0.605	0.594	0.664	0.640		0.619	6.058		
n-Nitrosodipropylamine	0.742	0.824	0.760	0.865	0.777	0.752	0.830	0.796		0.793	5.463		
n-Nitrosomorpholine	0.681	0.750	0.714	0.781	0.716	0.681	0.748	0.719		0.724	4.790		
o-Toluidine	1.883	2.075	1.942	2.183	1.944	1.865	2.084	1.961		1.992	5.550		
Hexachloroethane	0.454	0.530	0.496	0.554	0.506	0.491	0.550	0.531		0.514	6.520		
Naphthalene-d8	ISTD												
Nitrobenzene-d5	0.280	0.313	0.300	0.328	0.304	0.288	0.328	0.315		0.307	5.679		
Nitrobenzene	0.285	0.312	0.304	0.329	0.302	0.284	0.323	0.311		0.306	5.259		
n-Nitrosopiperidine	0.153	0.165	0.160	0.176	0.161	0.153	0.174	0.168		0.164	5.216		
Isophorone	0.499	0.587	0.556	0.614	0.558	0.531	0.601	0.577		0.565	6.718		
2-Nitrophenol	0.153	0.181	0.173	0.191	0.179	0.174	0.202	0.195		0.181	8.417		
2,4-Dimethylphenol	0.273	0.306	0.291	0.321	0.290	0.276	0.314	0.302		0.297	5.805		
bis(2-Chloroethoxy)methane	0.321	0.348	0.338	0.371	0.336	0.316	0.360	0.345		0.342	5.386		
Benzoic Acid		0.159	0.189	0.236	0.216	0.223	0.262	0.269		0.222	17.539		0.995
2,4-Dichlorophenol	0.240	0.271	0.261	0.285	0.260	0.250	0.284	0.277		0.266	6.100		
a,a-Dimethylphenethylamine	0.580	0.684	0.723	0.839	0.693	0.739	0.846	0.834		0.742	12.606		
1,2,4-Trichlorobenzene	0.260	0.297	0.289	0.311	0.277	0.274	0.308	0.299		0.289	6.154		
Naphthalene	0.966	1.030	0.974	1.072	0.954	0.915	1.022	0.969		0.988	5.070		
4-Chloroaniline	0.096	0.104	0.109	0.114	0.112	0.109	0.130	0.130		0.113	10.390		
Hexachlorobutadiene	0.132	0.151	0.148	0.165	0.151	0.145	0.166	0.159	0.129	0.149	8.815		
n-Nitrosodi-n-Butylamine	0.158	0.189	0.186	0.204	0.190	0.182	0.207	0.198		0.189	8.101		
p-Phenylenediamine		0.367	0.368	0.404	0.354	0.327	0.358	0.336		0.359	6.945		
4-Chloro-3-Methylphenol	0.235	0.272	0.267	0.294	0.272	0.266	0.3	0.286		0.274	7.421		
2-Methylnaphthalene	0.601	0.69	0.654	0.729	0.655	0.63	0.714	0.686		0.670	6.421		
1-Methylnaphthalene	0.572	0.636	0.615	0.673	0.602	0.584	0.661	0.628		0.622	5.678		
Acenaphthene-d10	ISTD												
Hexachlorocyclopentadiene	0.282	0.332	0.334	0.37	0.336	0.338	0.381	0.361		0.342	8.890		
2,4,6-Trichlorophenol	0.259	0.327	0.328	0.366	0.326	0.322	0.366	0.356		0.331	10.464		
2,4,5-Trichlorophenol	0.291	0.348	0.352	0.38	0.346	0.348	0.39	0.375		0.354	8.679		
2-Fluorobiphenyl	1.128	1.277	1.248	1.386	1.215	1.19	1.337	1.274		1.257	6.507		
2-Chloronaphthalene	0.977	1.083	1.029	1.148	1.026	1.005	1.105	1.07		1.055	5.356		
2-Nitroaniline		0.359	0.34	0.383	0.355	0.34	0.383	0.364		0.361	4.958		
Dimethylphthalate	1.056	1.218	1.19	1.305	1.174	1.142	1.279	1.22		1.198	6.552		
1,3-Dinitrobenzene	0.157	0.201	0.203	0.233	0.215	0.216	0.243	0.235		0.213	12.720		
2,6-Dinitrotoluene	0.22	0.289	0.288	0.316	0.282	0.286	0.317	0.305		0.288	10.633		
Acenaphthylene	1.618	1.893	1.819	2.034	1.797	1.742	1.937	1.855		1.837	6.865		
3-Nitroaniline		0.323	0.323	0.354	0.33	0.324	0.364	0.351		0.338	5.171		
2,4-Dinitrophenol		0.135	0.145	0.172	0.178	0.184	0.216	0.214		0.178	17.471		0.997
Acenaphthene	1.095	1.226	1.183	1.304	1.115	1.057	1.185	1.129		1.162	6.817		
4-Nitrophenol	0.168	0.201	0.204	0.233	0.219	0.211	0.238	0.229		0.213	10.591		
2,4-Dinitrotoluene	0.279	0.362	0.36	0.401	0.38	0.372	0.415	0.403		0.372	11.466		
Dibenzofuran	1.431	1.564	1.514	1.685	1.499	1.447	1.604	1.547		1.536	5.411		
2,3,5,6-Tetrachlorophenol	0.212	0.277	0.274	0.301	0.28	0.277	0.312	0.304		0.280	11.078		
2,3,4,6-Tetrachlorophenol	0.226	0.285	0.28	0.308	0.286	0.288	0.32	0.316		0.289	10.233		
1-Naphthylamine	1.09	1.242	1.21	1.334	1.199	1.162	1.294	1.238		1.221	6.189		
2-Naphthylamine	1.136	1.304	1.258	1.396	1.273	1.216	1.363	1.301		1.281	6.364		
Diethylphthalate	1.112	1.257	1.209	1.349	1.218	1.177	1.324	1.268		1.239	6.249		
Fluorene	1.119	1.258	1.233	1.352	1.226	1.2	1.331	1.288		1.251	5.956		
4-Chlorophenyl Phenyl Ether	0.538	0.591	0.572	0.64	0.569	0.556	0.624	0.6		0.586	5.849		
4-Nitroaniline		0.365	0.362	0.401	0.359	0.357	0.397	0.363		0.372	5.015		
5-Nitro-o-Toluidine	0.297	0.389	0.382	0.427	0.389	0.387	0.434	0.42		0.391	10.985		
1,2-Diphenylhydrazine & Azobenzer	0.974	1.109	1.074	1.193	1.078	1.033	1.153	1.108		1.090	6.250		
2,4,6-Tribromophenol	0.127	0.167	0.166	0.188	0.175	0.17	0.194	0.186		0.172	12.074		
Phenanthrene-d10	ISTD												
4,6-Dinitro-2-Methylphenol		0.097	0.104	0.124	0.12	0.123	0.139	0.139		0.121	13.053		
Diphenylamine/n-Nitrosodiphenylar	0.536	0.632	0.601	0.672	0.606	0.585	0.646	0.636		0.614	6.872		
4-Bromophenyl Phenyl Ether	0.157	0.174	0.175	0.2	0.182	0.175	0.195	0.193		0.181	7.828		
Hexachlorobenzene	0.176	0.197	0.188	0.214	0.193	0.188	0.208	0.206		0.196	6.463		
4-Aminobiphenyl	0.675	0.816	0.801	0.912	0.839	0.812	0.895	0.887		0.830	9.069		
Pentachlorophenol		0.122	0.119	0.141	0.137	0.132	0.149	0.148		0.136	8.669		
Phenanthrene	1.035	1.071	1.021	1.13	1.005	0.97	1.057	1.042		1.041	4.561		

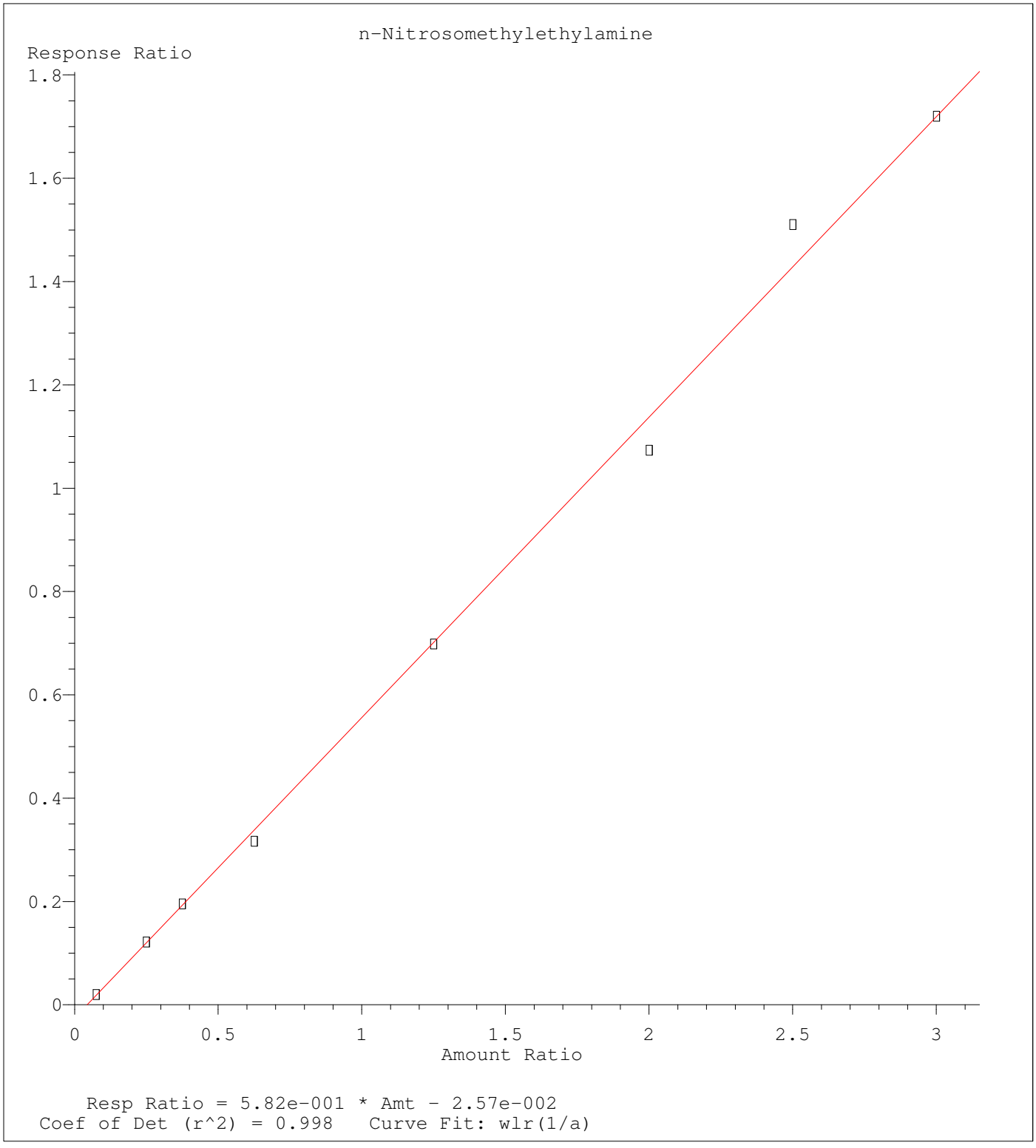
Anthracene	0.969	1.087	1.027	1.162	1.054	1.007	1.108	1.09		1.063	5.789	
Carbazole	0.838	0.932	0.916	1.023	0.936	0.899	0.993	0.981		0.940	6.260	
Di-n-Butyl Phthalate	0.919	1.099	1.079	1.234	1.161	1.111	1.224	1.2		1.128	9.091	
Methapyrilene	0.306	0.428	0.421	0.495	0.506	0.461	0.51	0.5		0.453	15.216	0.998
Fluoranthene	0.886	0.988	0.967	1.107	1.004	0.977	1.083	1.068		1.010	7.199	
Chrysene-d12	ISTD											
Benzidine	0.683	0.821	0.818	0.964	0.928	0.872	0.993	0.963		0.880	11.797	
Pyrene	1.118	1.303	1.249	1.397	1.264	1.211	1.369	1.32		1.279	6.990	
p-Terphenyl-d14	0.848	0.958	0.931	1.038	0.959	0.916	1.024	0.998		0.959	6.498	
p-(Dimethylamino)azobenzene	0.192	0.229	0.235	0.276	0.259	0.25	0.282	0.277		0.250	12.289	
Butyl Benzyl Phthalate	0.521	0.619	0.616	0.692	0.644	0.611	0.691	0.666		0.633	8.757	
3,3'-Dimethylbenzidine	0.694	0.879	0.876	1.005	0.947	0.901	1.021	0.989		0.914	11.529	
2-Acetylaminofluorene	0.328	0.472	0.49	0.574	0.567	0.541	0.626	0.605		0.525	18.203	0.996
bis(2-Ethylhexyl)phthalate	0.701	0.844	0.827	0.947	0.899	0.858	0.967	0.939	0.666	0.850	12.479	
3,3'-Dichlorobenzidine	0.362	0.427	0.435	0.501	0.479	0.46	0.528	0.515		0.463	11.783	
Benzo[a]anthracene	1.061	1.177	1.156	1.273	1.159	1.113	1.267	1.222		1.179	6.229	
Chrysene	1.135	1.205	1.17	1.295	1.154	1.112	1.245	1.206		1.190	5.066	
Perylene-d12	ISTD											
Di-n-Octyl Phthalate	0.883	1.099	1.158	1.363	1.353	1.285	1.457	1.404		1.250	15.343	0.997
Benzo[b]fluoranthene	0.799	0.894	0.94	1.07	1.034	0.998	1.122	1.094		0.994	11.085	
Benzo[k]fluoranthene	0.825	1.01	1.011	1.166	1.041	0.995	1.13	1.08		1.032	10.031	
Benzo[a]pyrene	0.697	0.817	0.852	0.971	0.922	0.888	1.004	0.968		0.890	11.296	
Indeno[1,2,3-cd]pyrene	0.716	0.812	0.846	0.981	0.959	0.932	1.063	1.058		0.921	13.209	
Dibenz[ah]anthracene	0.749	0.928	0.969	1.084	1.073	1.055	1.187	1.141		1.023	13.574	
Benzo[ghi]perylene	0.805	0.923	0.954	1.101	1.03	0.99	1.114	1.073		0.999	10.414	

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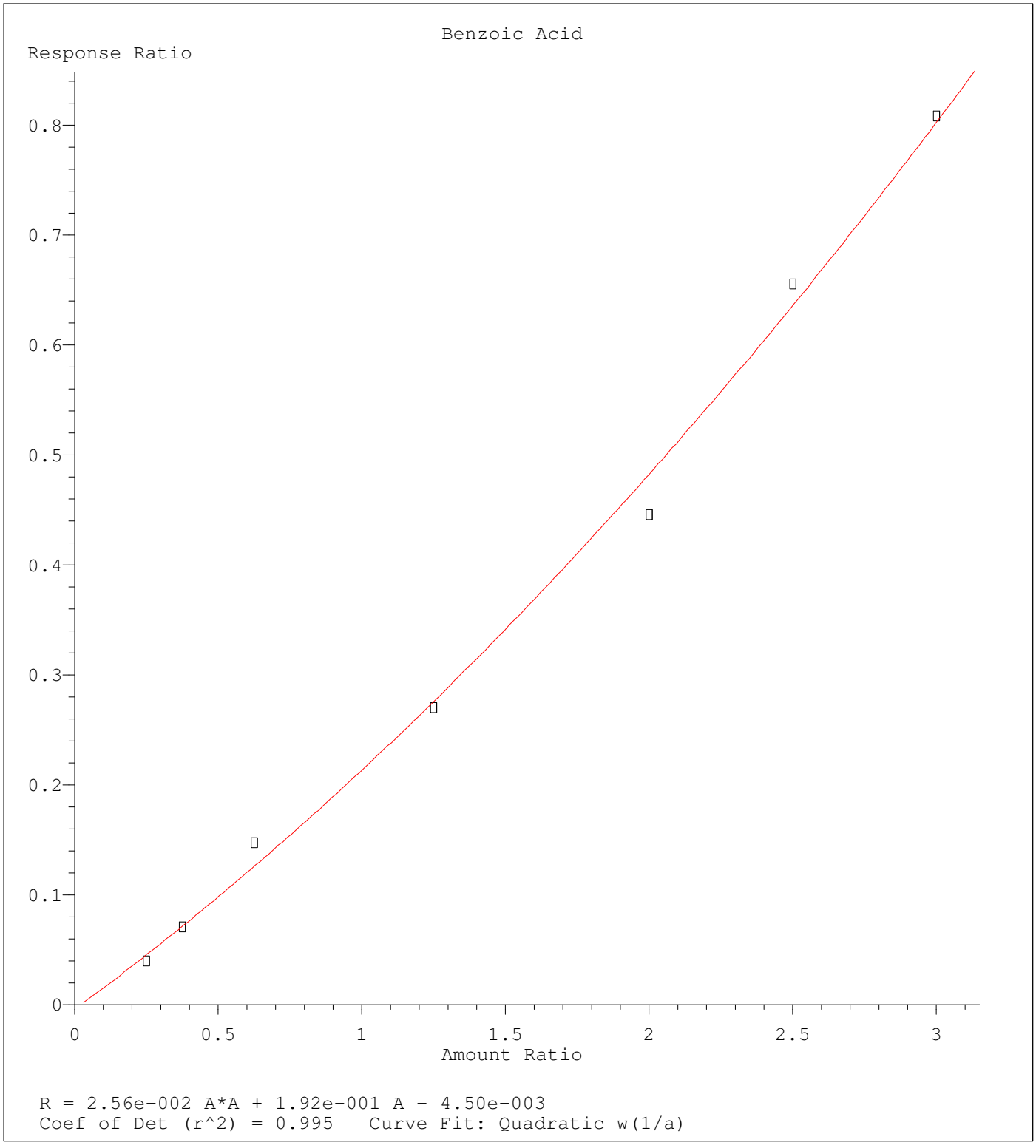
Calibration Table Report
Method: TCL.M MSD12
Title: OVD MSS01 8270/625 ICAL 01/29/21
Last Calibration: Mon Feb 01 11:35:42 2021
21B0002
Calibration Files

Compound	3 12M80874.D	10 12M80875.D	25 12M80876.D	50 12M80873.D	80 12M80877.D	100 12M80878.D	120 12M80879.D	Avg	%RSD	Linear
1,4-Dichlorobenzene-d4	ISTD									
1,4-Dioxane	0.473	0.516	0.552	0.520	0.613	0.514	0.527	0.531	8.143	
Methyl Methanesulfonate	0.581	0.656	0.678	0.656	0.762	0.649	0.652	0.662	8.094	
Ethyl Methanesulfonate	0.786	0.792	0.874	0.834	0.976	0.825	0.838	0.847	7.622	
Benzaldehyde	0.933	1.018	1.095	1.053	1.216	1.034	1.043	1.056	8.149	
Pentachloroethane	0.426	0.496	0.523	0.493	0.576	0.486	0.491	0.499	9.053	
Acetophenone	1.608	1.655	1.766	1.712	1.944	1.664	1.680	1.719	6.446	
Naphthalene-d8	ISTD									
0,0,0-Triethyl Phosphorothioate	0.138	0.156	0.165	0.161	0.186	0.159	0.161	0.161	8.794	
Alpha-Terpineol	0.249	0.250	0.264	0.253	0.294	0.247	0.244	0.257	6.661	
2,6-Dichlorophenol	0.247	0.261	0.272	0.271	0.302	0.259	0.262	0.268	6.478	
Hexachloropropene	0.177	0.191	0.204	0.201	0.235	0.200	0.203	0.202	8.649	
Caprolactam	0.098	0.108	0.113	0.113	0.131	0.117	0.120	0.115	8.886	
Safrole	0.221	0.246	0.269	0.264	0.304	0.258	0.263	0.261	9.605	
Acenaphthene-d10	ISTD									
1,2,4,5-Tetrachlorobenzene	0.483	0.496	0.539	0.511	0.620	0.513	0.514	0.525	8.630	
Isosafrole	0.426	0.450	0.487	0.471	0.564	0.474	0.474	0.478	8.945	
1,1'-Biphenyl	1.445	1.545	1.617	1.521	1.786	1.482	1.485	1.554	7.473	
1-Chloronaphthalene	1.059	1.101	1.150	1.090	1.286	1.081	1.085	1.122	6.919	
1,4-Naphthoquinone	0.341	0.431	0.501	0.510	0.606	0.512	0.528	0.490	17.036	0.994
Pentachlorobenzene	0.417	0.443	0.468	0.450	0.527	0.447	0.453	0.458	7.472	
Thionazin	0.150	0.180	0.207	0.206	0.238	0.205	0.210	0.199	13.869	
Phenanthrene-d10	ISTD									
Sulfotepp	0.102	0.105	0.124	0.122	0.146	0.122	0.122	0.121	11.858	
Sym-Trinitrobenzene	0.067	0.086	0.120	0.132	0.159	0.138	0.142	0.121	27.169	0.993
Diallate	0.179	0.209	0.225	0.214	0.254	0.212	0.209	0.214	10.495	
Phenacetin	0.250	0.310	0.360	0.348	0.410	0.340	0.346	0.338	14.412	
Phorate	0.315	0.374	0.404	0.380	0.446	0.371	0.371	0.380	10.415	
Dimethoate	0.201	0.239	0.275	0.259	0.295	0.244	0.242	0.251	11.862	
Atrazine	0.175	0.201	0.214	0.207	0.240	0.204	0.202	0.206	9.360	
Pentachloronitrobenzen	0.063	0.069	0.081	0.079	0.092	0.079	0.077	0.077	11.990	
Pronamide	0.260	0.297	0.337	0.325	0.378	0.317	0.318	0.319	11.337	
Disulfoton	0.425	0.376	0.378	0.348	0.399	0.334	0.332	0.370	9.335	
Parathion Methyl	0.142	0.176	0.234	0.240	0.276	0.235	0.238	0.220	20.622	0.994
Parathion Ethyl	0.075	0.100	0.125	0.127	0.150	0.127	0.128	0.119	20.229	0.994
4-Nitroquinoline 1-Oxide	0.033	0.057	0.098	0.113	0.134	0.116	0.119	0.096	38.530	0.992
Isodrin	0.093	0.108	0.122	0.118	0.138	0.117	0.118	0.116	11.831	
Chrysene-d12	ISTD									
Aramite	0.046	0.070	0.083	0.085	0.106	0.090	0.088	0.081	23.345	0.992
Chlorobenzilate	0.284	0.335	0.399	0.396	0.490	0.405	0.406	0.388	16.589	0.991
Famphur	0.390	0.475	0.552	0.552	0.665	0.550	0.546	0.533	15.756	0.991
Perylene-d12	ISTD									
7,12-Dimethylbenz[a]anthracene	0.362	0.384	0.464	0.459	0.575	0.479	0.491	0.459	15.364	0.992
Perylene	1.054	1.136	1.194	1.159	1.377	1.156	1.172	1.178	8.339	
3-Methylcholanthrene	0.451	0.509	0.594	0.613	0.714	0.596	0.607	0.583	14.297	

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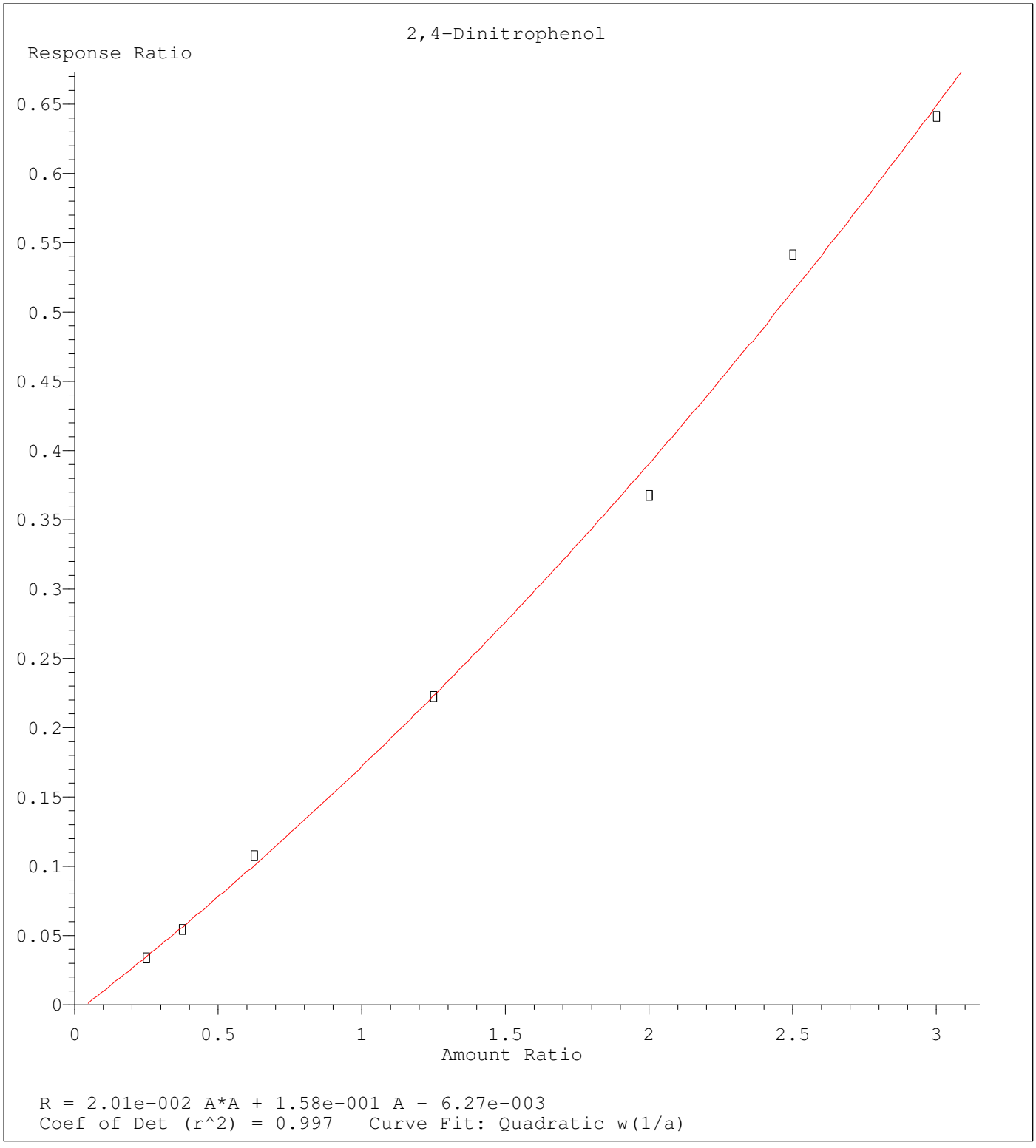


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Calibration Table Last Updated: Mon Feb 01 09:46:39 2021

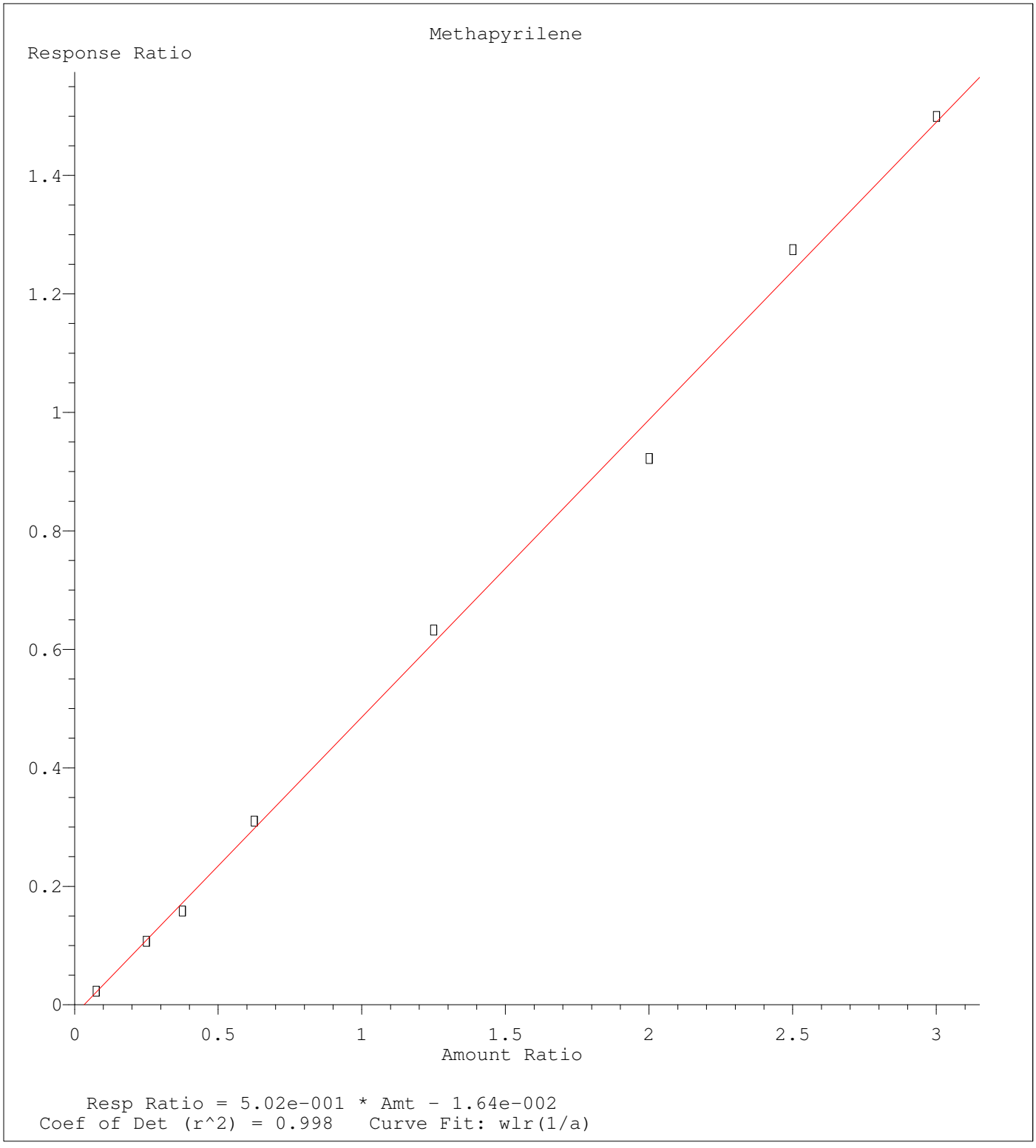


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Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w(1/a)

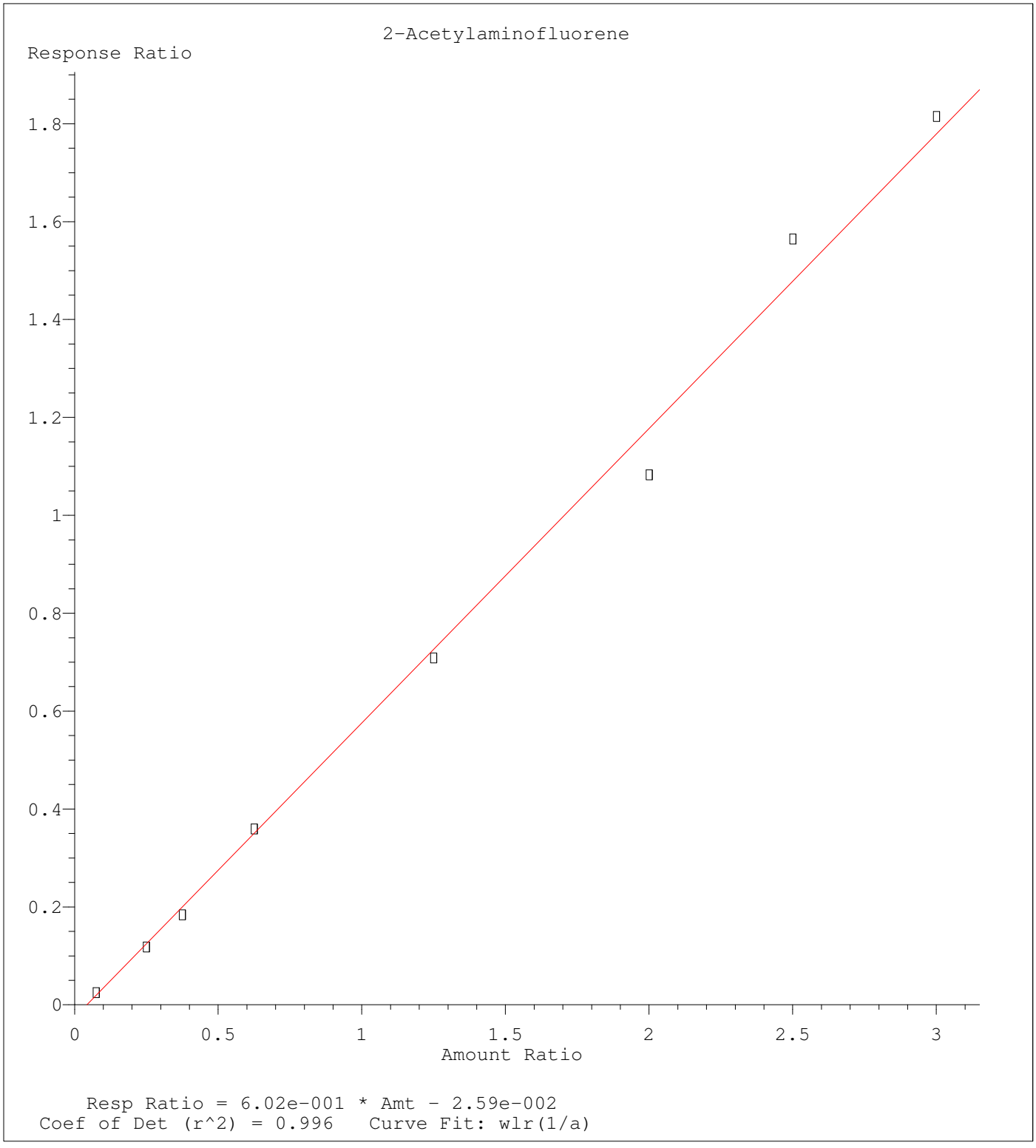
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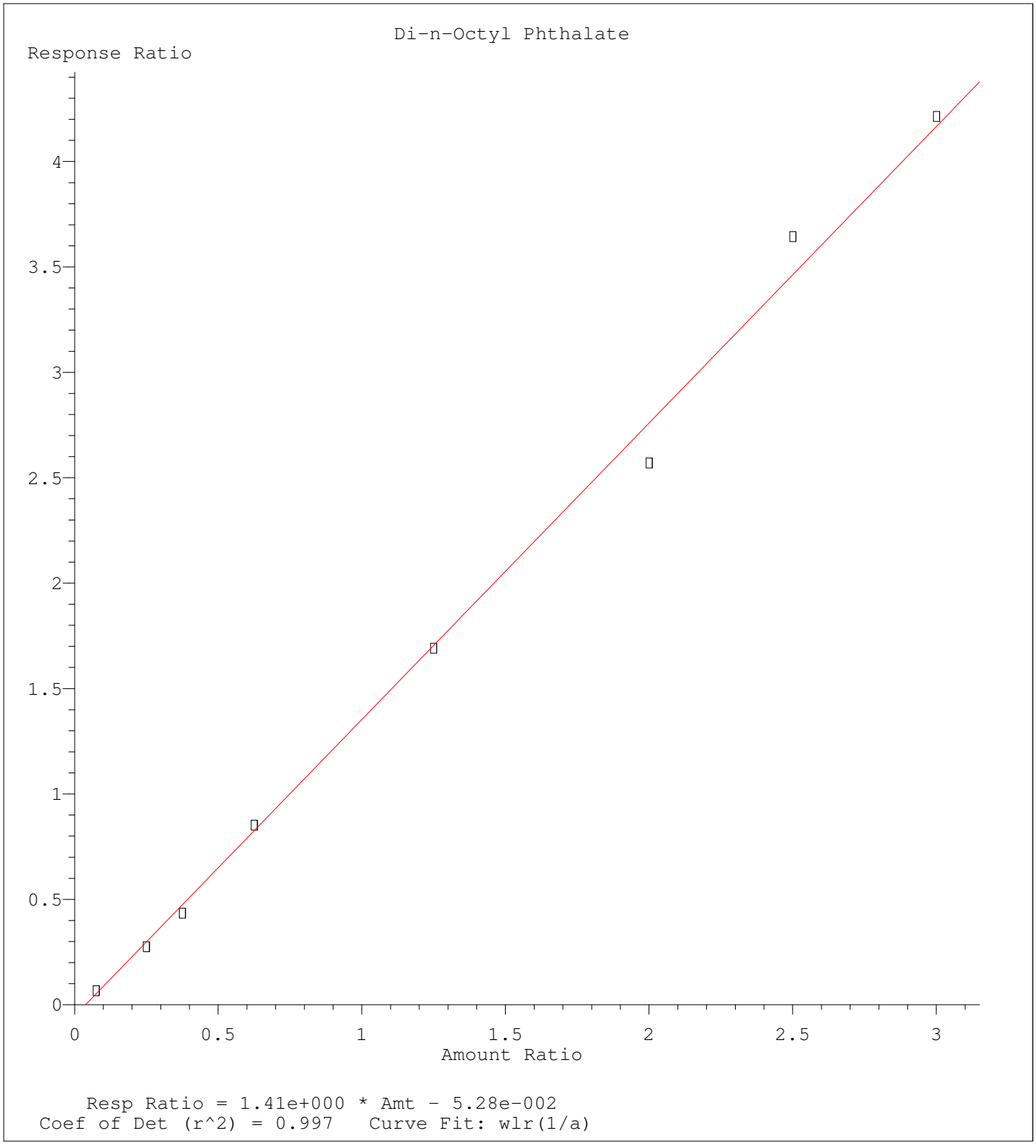
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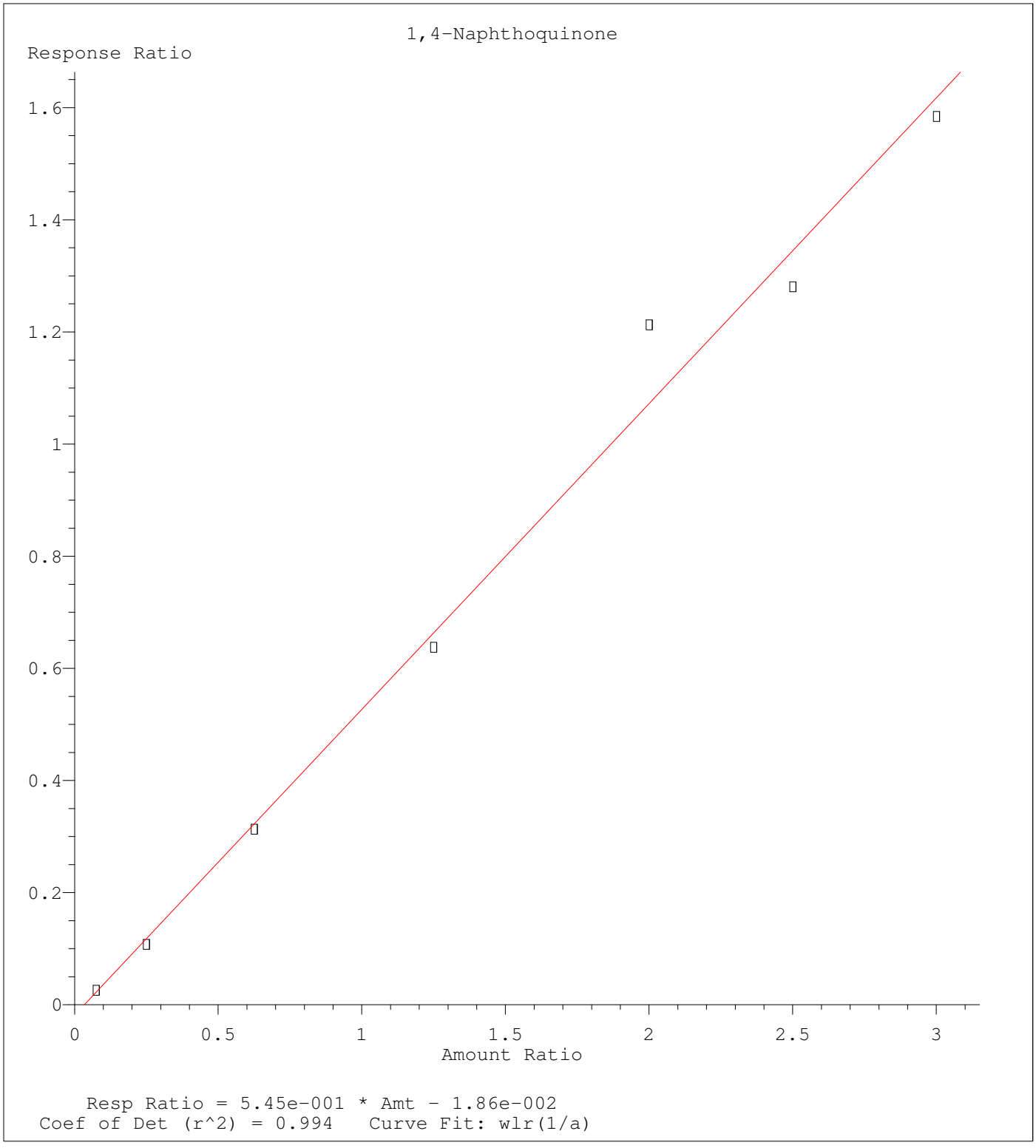
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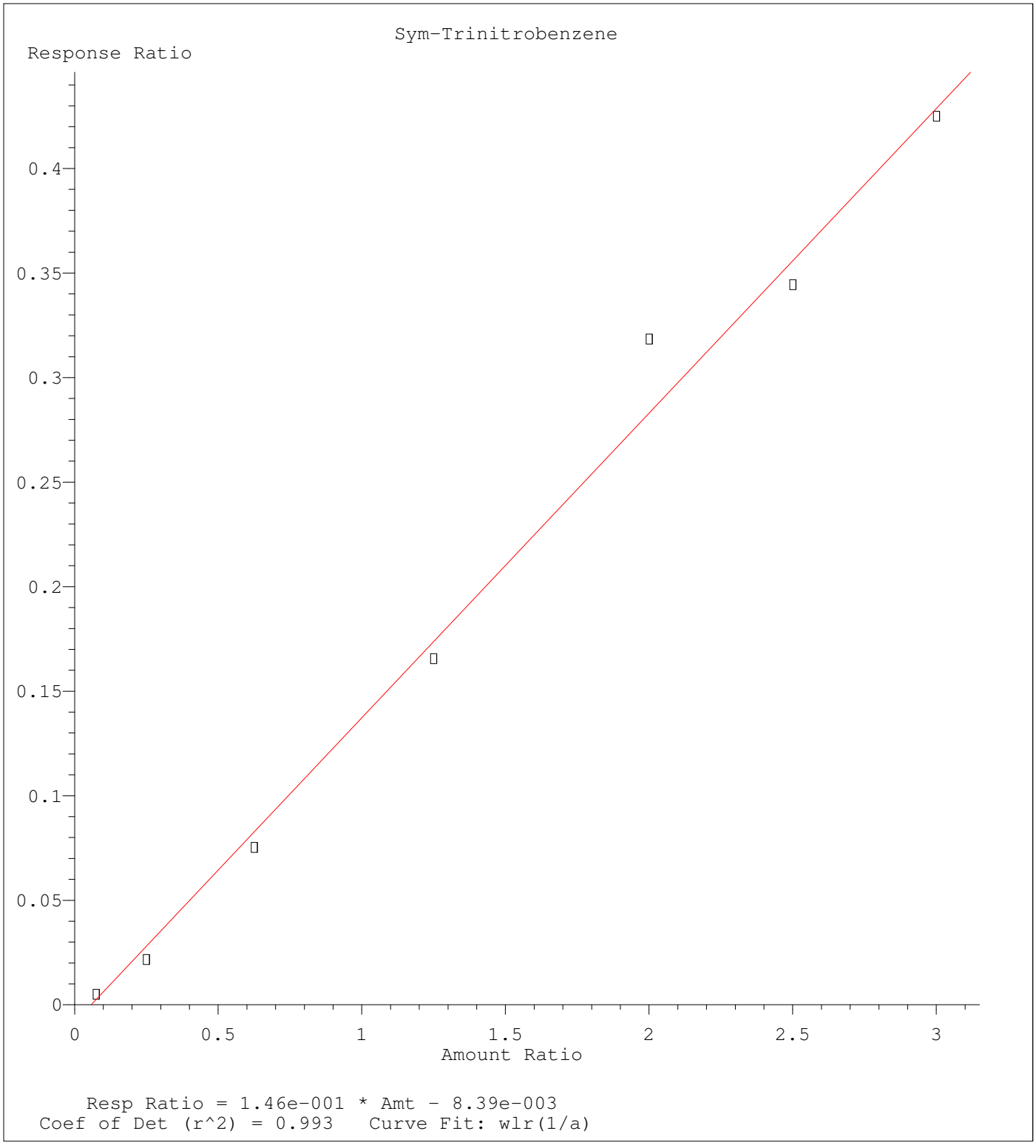
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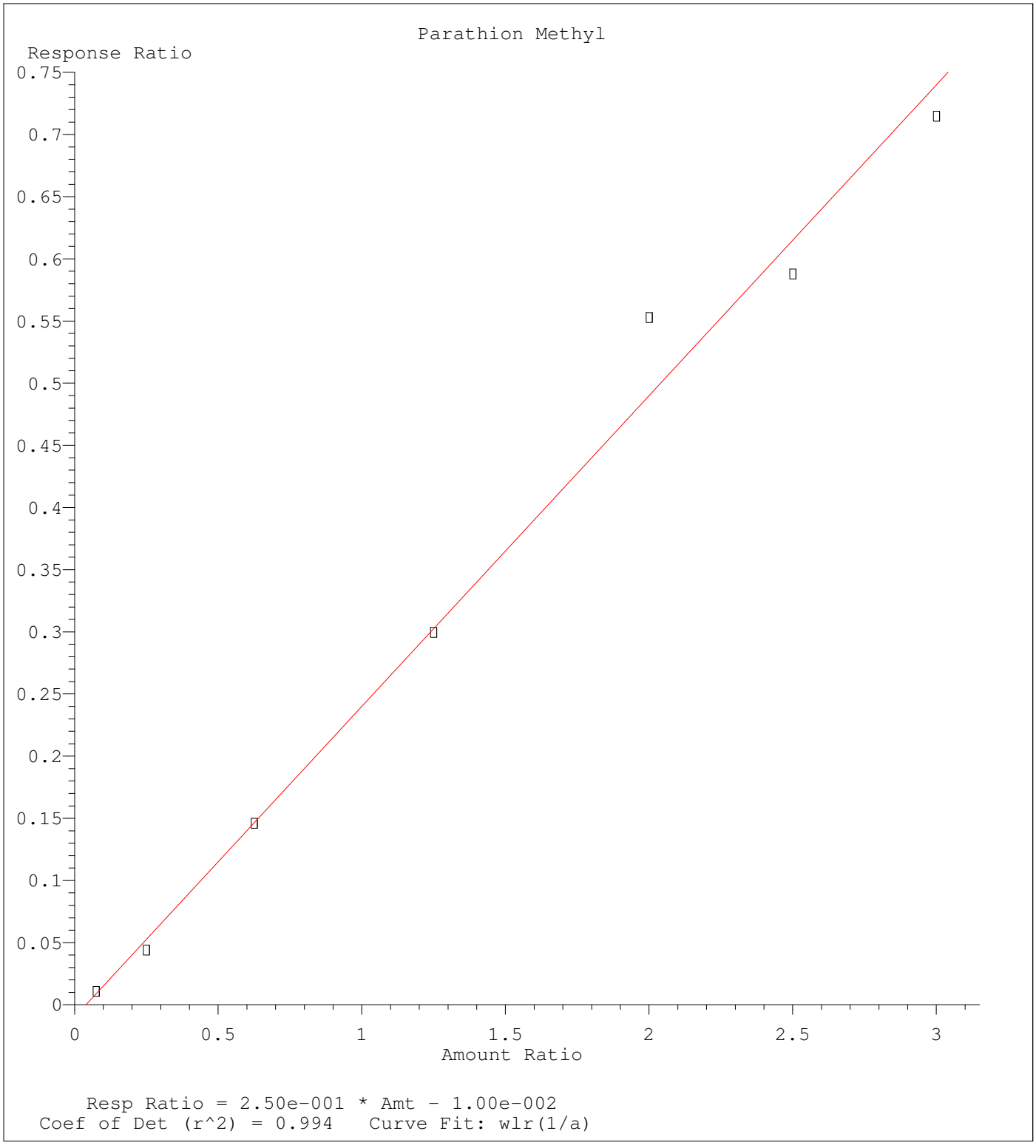
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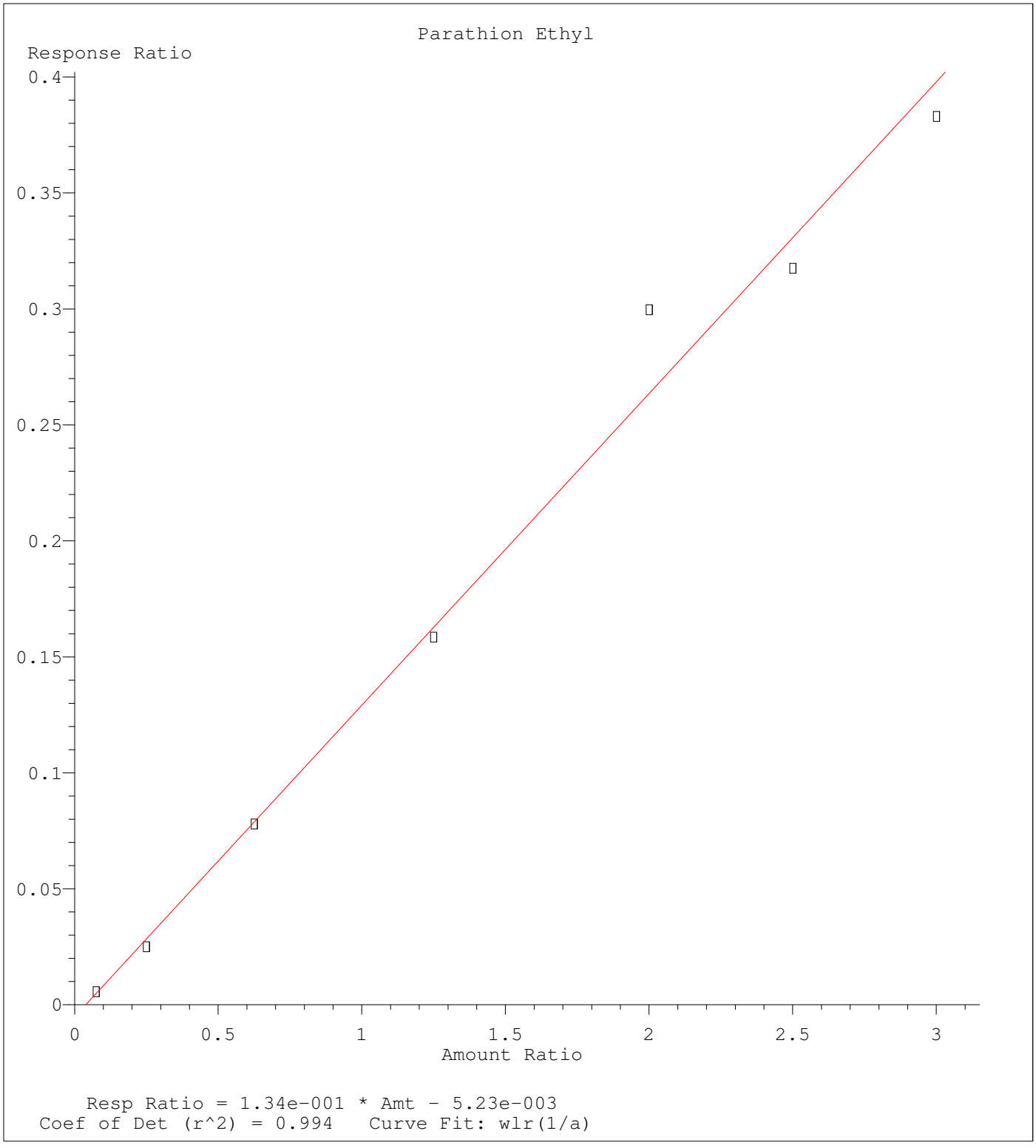
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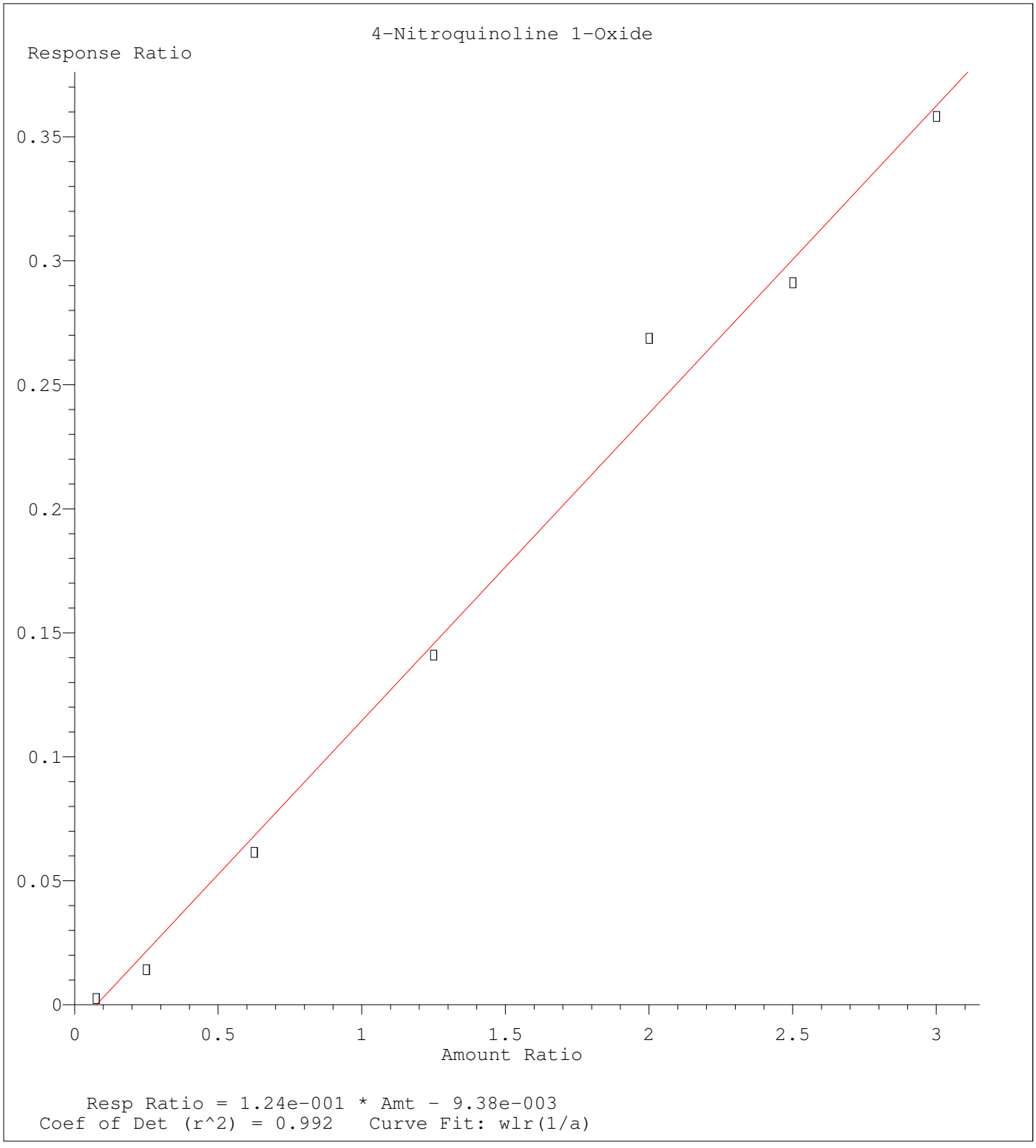
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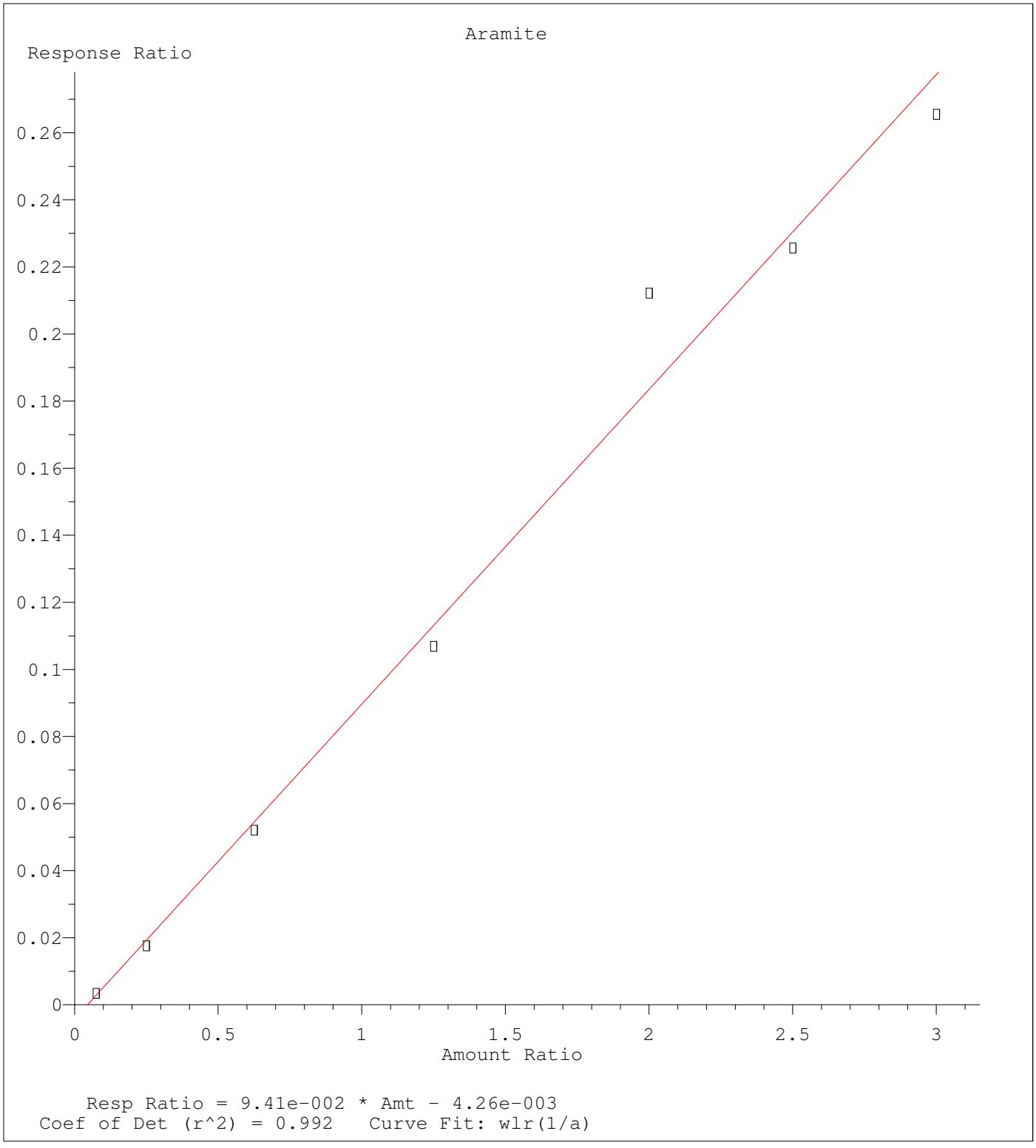
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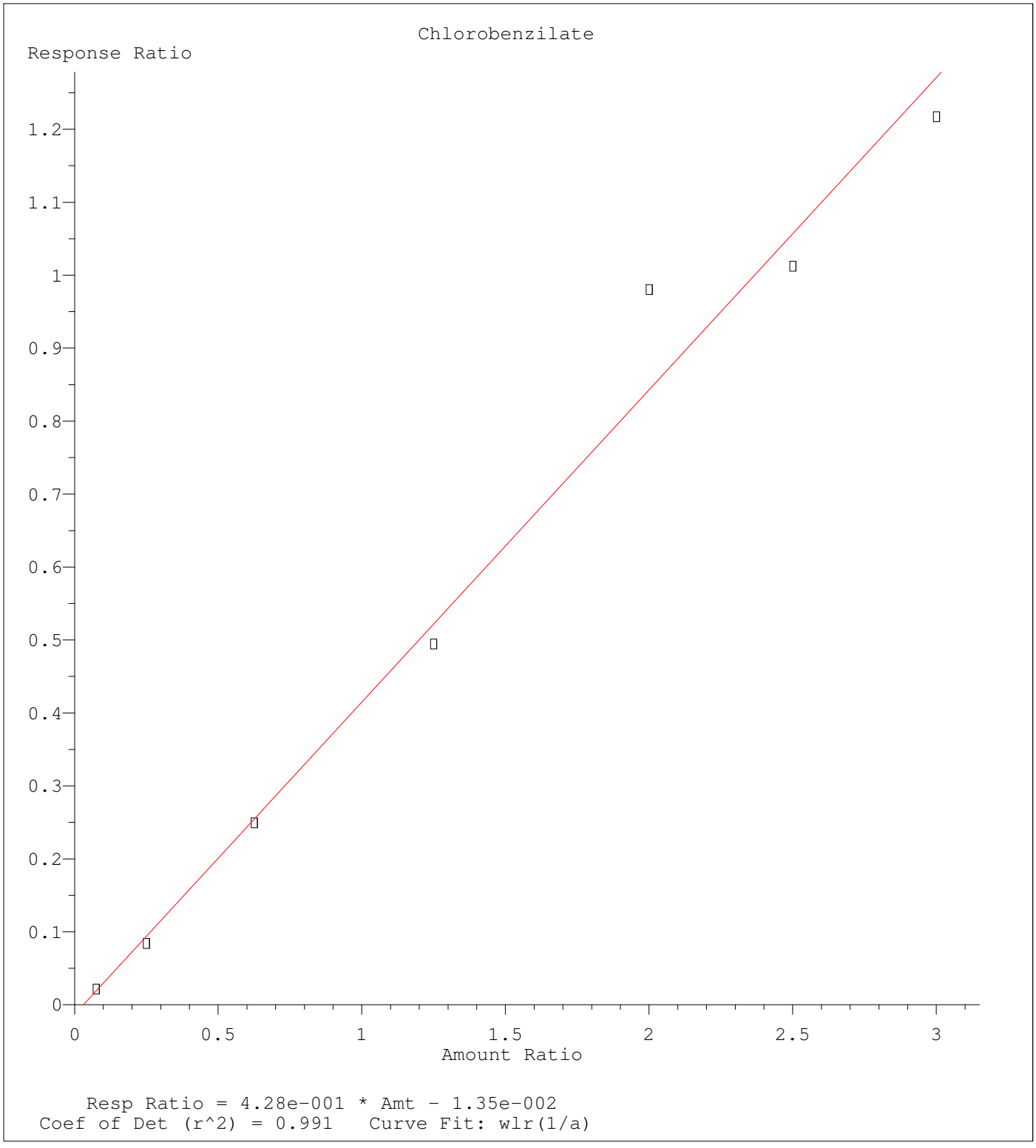
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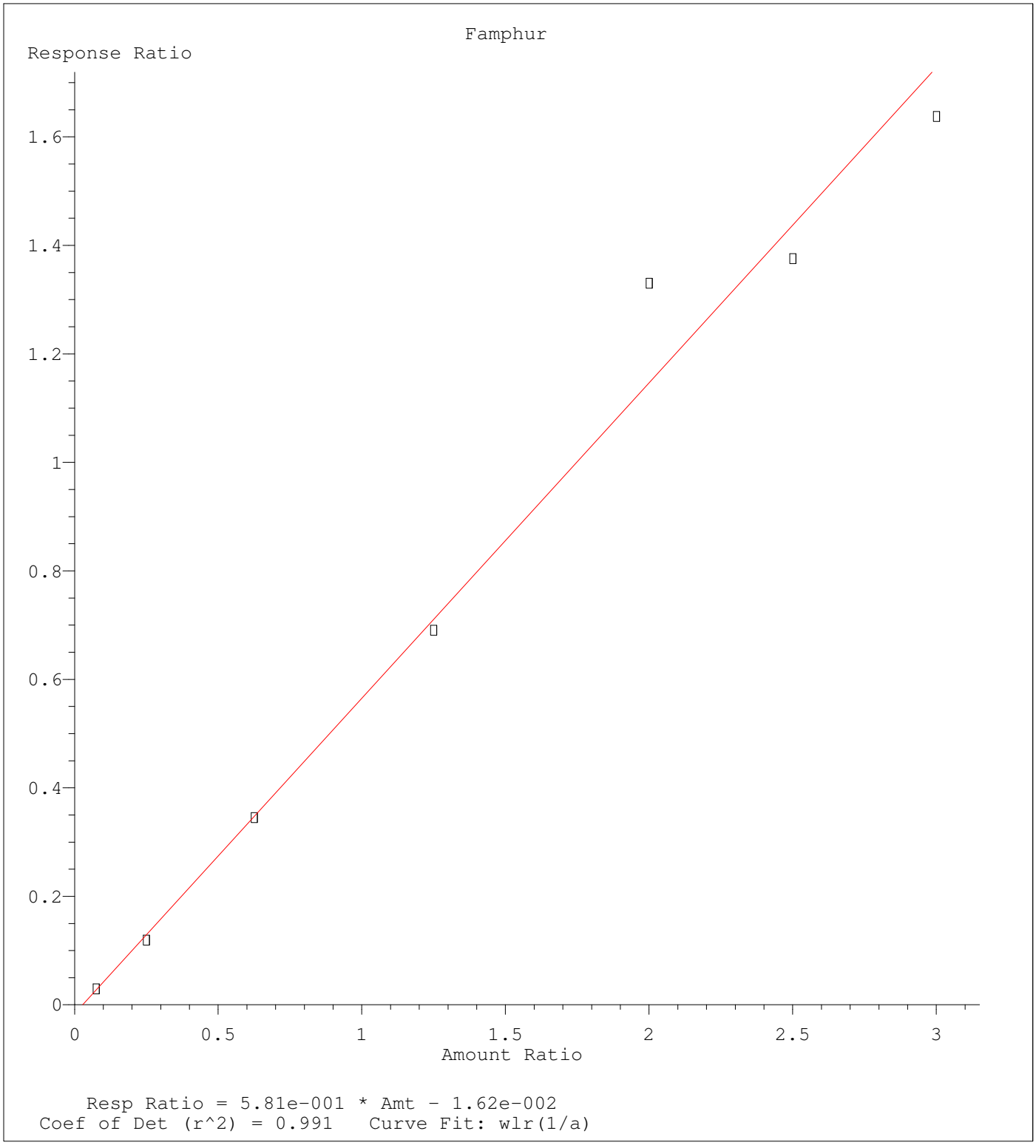
Method Name: I:\MSDCHEM\1\METHODS\TCL.M
Calibration Table Last Updated: Mon Feb 01 11:35:42 2021



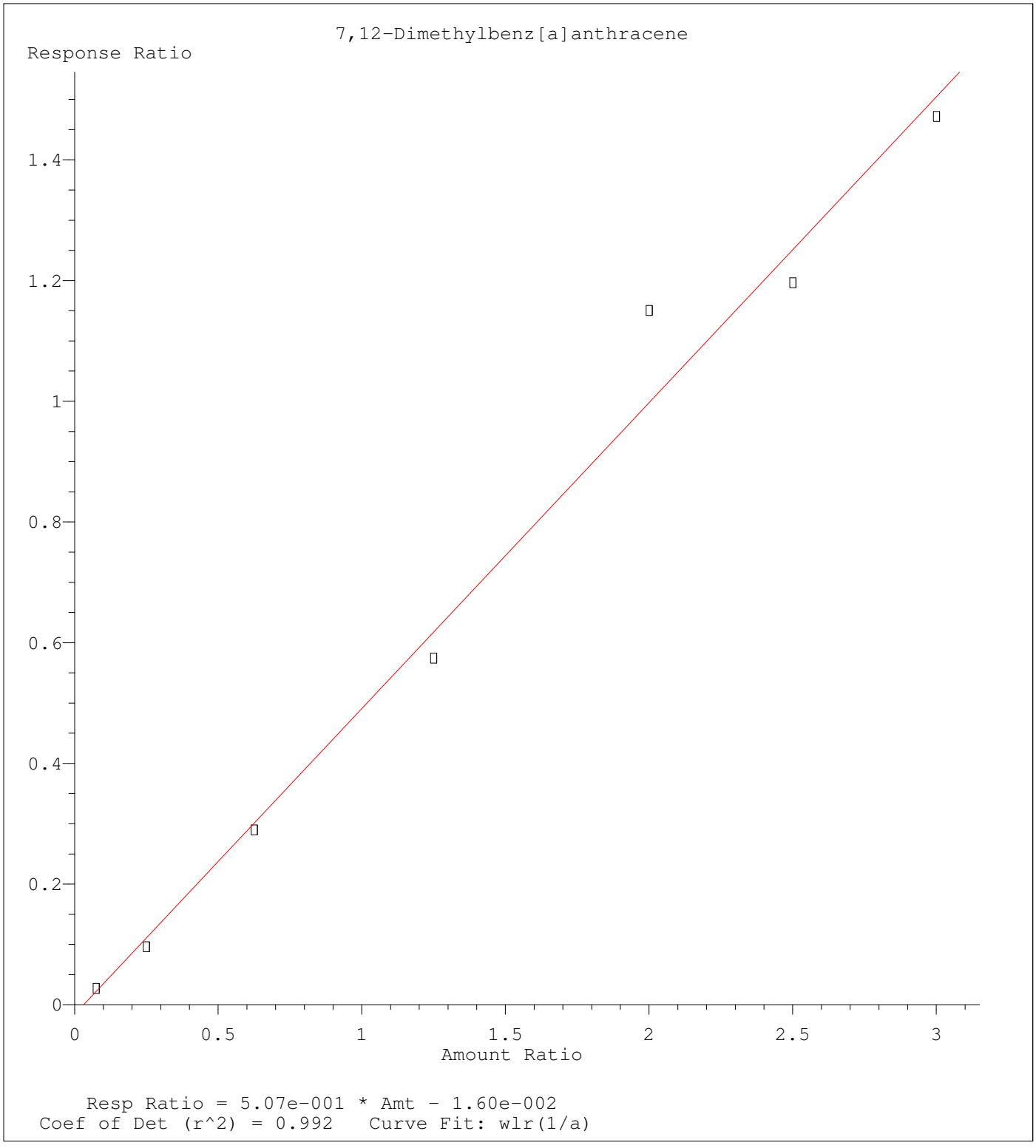
Method Name: I:\MSDCHEM\1\METHODS\TCL.M
Calibration Table Last Updated: Mon Feb 01 11:35:42 2021



Method Name: I:\MSDCHEM\1\METHODS\TCL.M
Calibration Table Last Updated: Mon Feb 01 11:35:42 2021



Method Name: I:\MSDCHEM\1\METHODS\TCL.M
Calibration Table Last Updated: Mon Feb 01 11:35:42 2021



Method Name: I:\MSDCHEM\1\METHODS\TCL.M
Calibration Table Last Updated: Mon Feb 01 11:35:42 2021

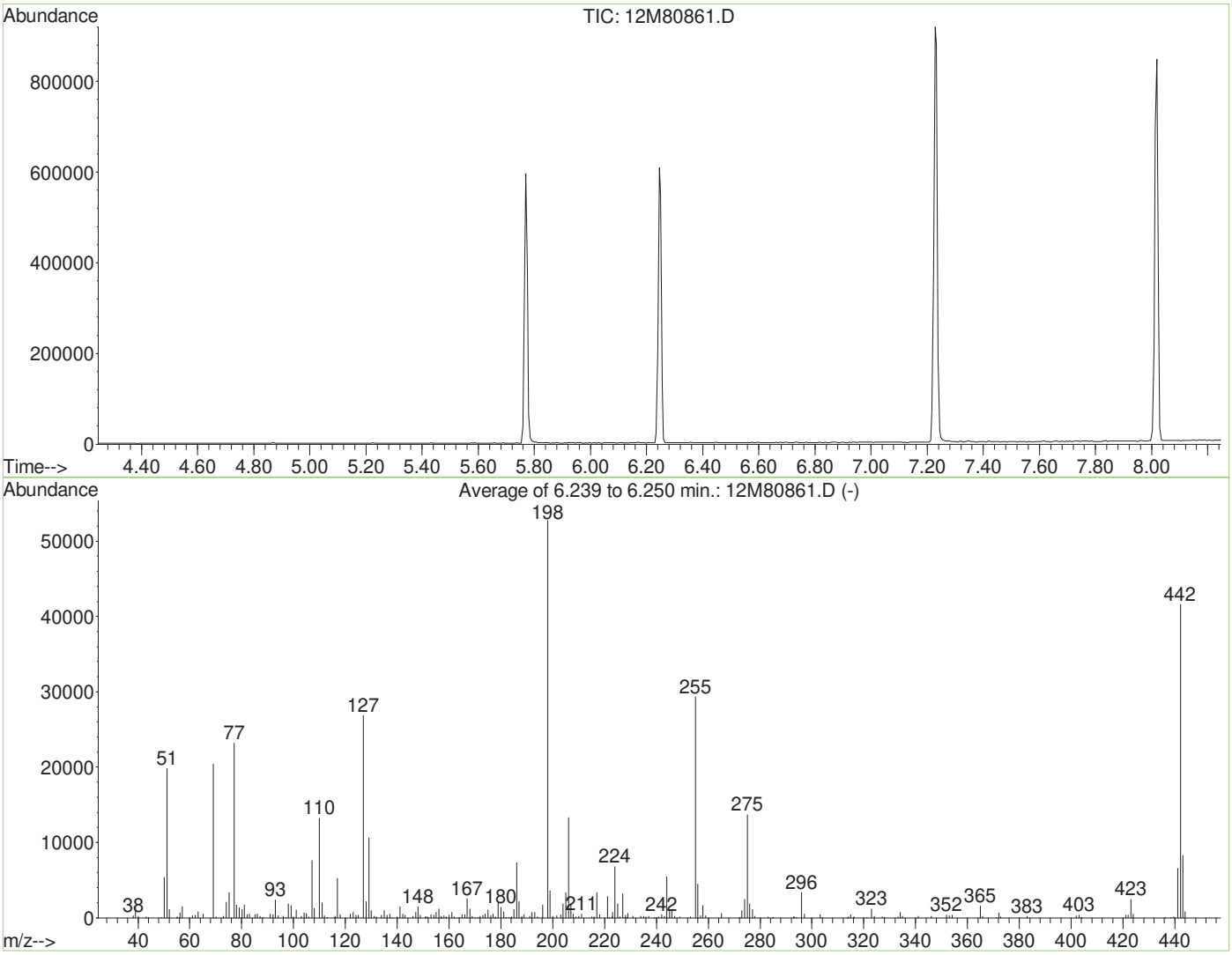
MICROBAC®

Section E:
GCMS Semivolatiles
EPA 8270C
Sequence QC Sample Raw Data

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

DFTPP

Data File : I:\MSDCHEM\1\DATA\012921\12M80861.D Vial: 1
Acq On : 29 Jan 2021 8:50 am Operator: SCB
Sample : S1A0503-TUN1 Inst : MSD12
Misc : 1,1 0008021 Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP



AutoFind: Scans 685, 686, 687; Background Corrected with Scan 681

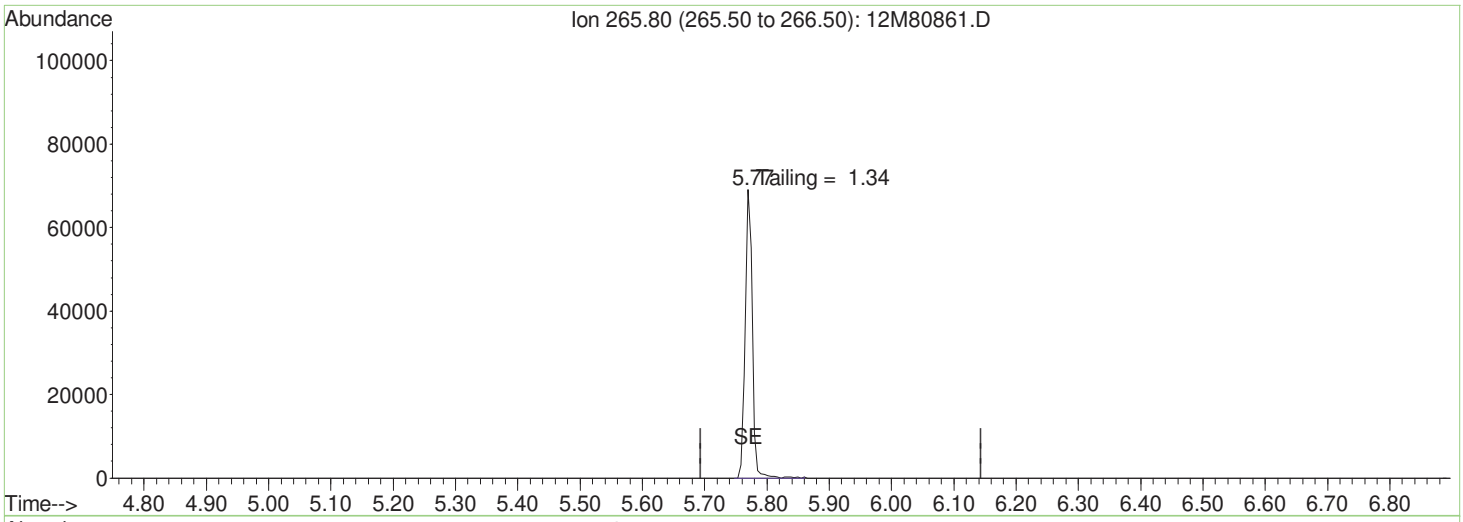
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	37.5	19797	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	38.6	20374	PASS
70	69	0.00	2	0.7	135	PASS
127	198	40	60	50.9	26870	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	52770	PASS
199	198	5	9	6.7	3550	PASS
275	198	10	30	25.8	13641	PASS
365	198	1	100	2.9	1529	PASS
441	443	0.01	100	79.5	6560	PASS
442	198	40	100	78.8	41572	PASS
443	442	17	23	19.8	8247	PASS

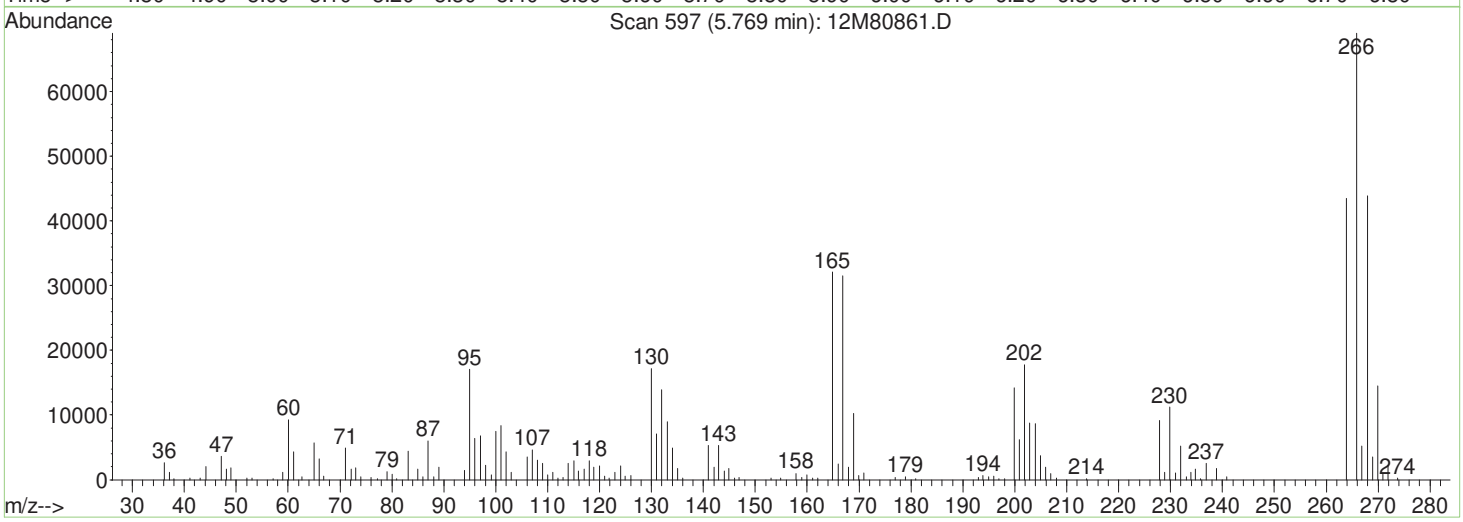
12M80861.D DFTPP.M Mon Feb 01 11:24:33 2021

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\012921\12M80861.D Vial: 1
Acq On : 29 Jan 2021 8:50 am Operator: SCB
Sample : S1A0503-TUN1 Inst : MSD12
Misc : 1,1 0008021 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 29 9:02 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Sat Jun 06 11:58:02 2020
Response via : Single Level Calibration





TIC: 12M80861.D

(1) Pentachlorophenol

5.77min 0.00ug/ml

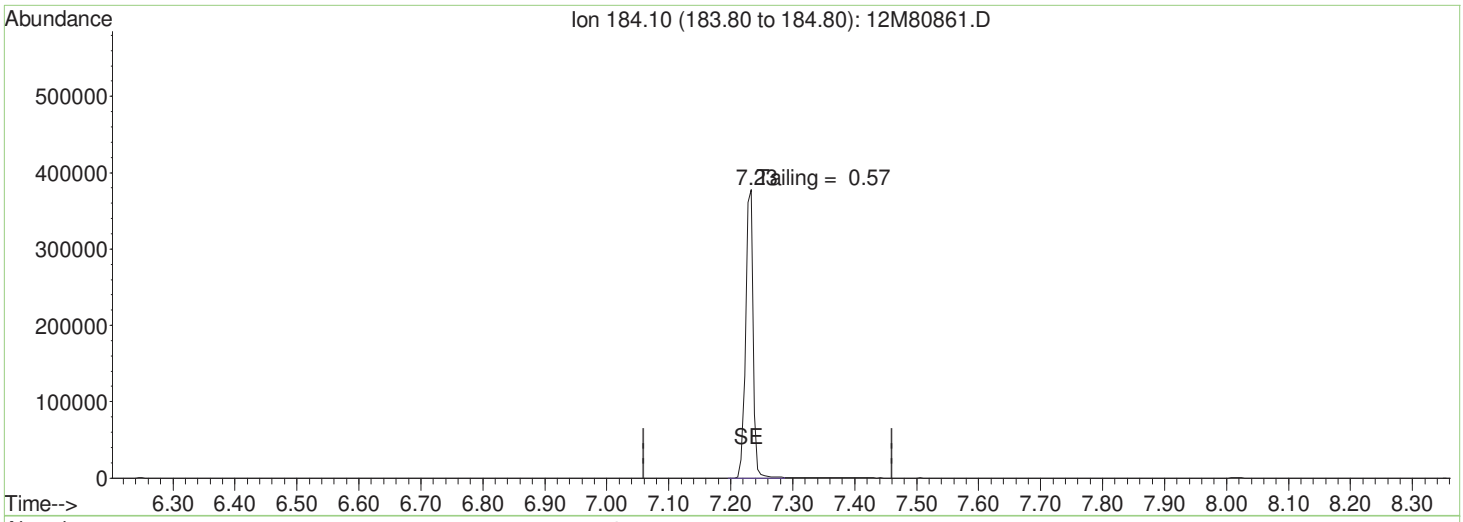
response 53889

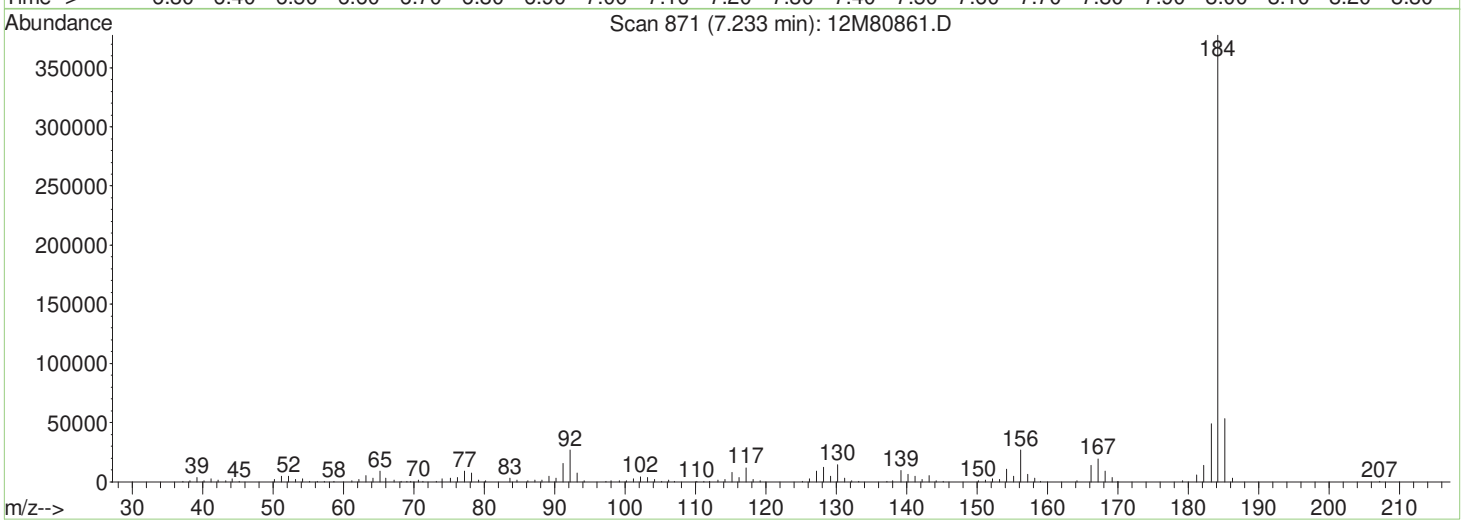
Ion	Exp%	Act%
265.80	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\012921\12M80861.D Vial: 1
Acq On : 29 Jan 2021 8:50 am Operator: SCB
Sample : S1A0503-TUN1 Inst : MSD12
Misc : 1,1 0008021 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 29 9:02 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Sat Jun 06 11:58:02 2020
Response via : Single Level Calibration





TIC: 12M80861.D

(2) Benzidine

7.23min 0.00ug/ml

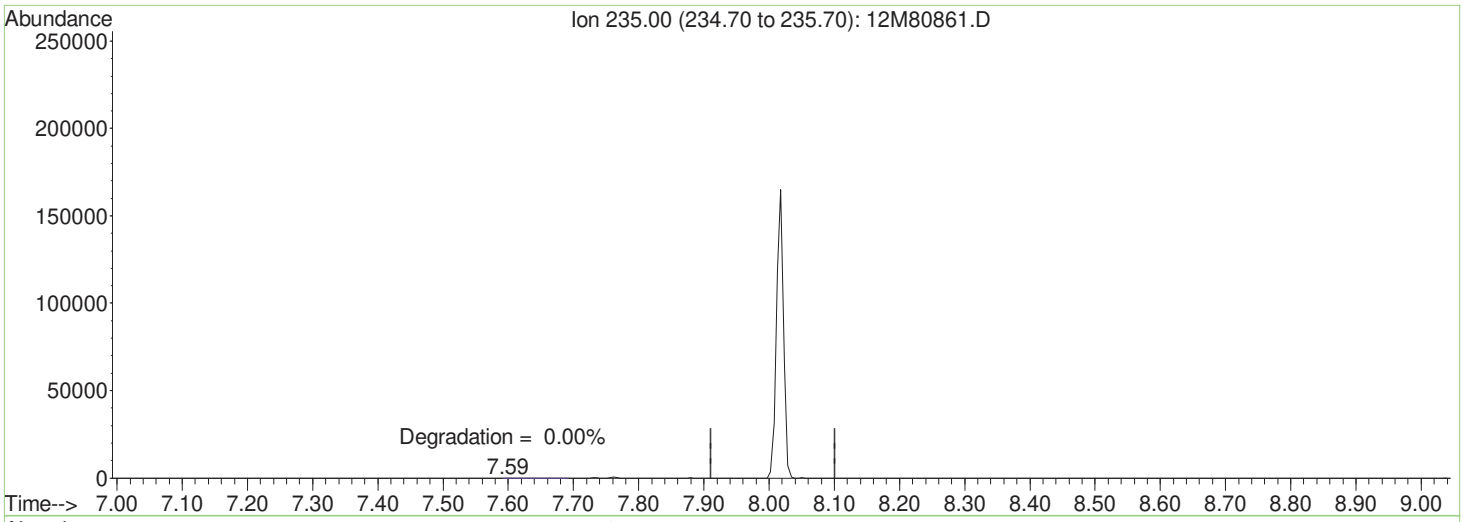
response 325372

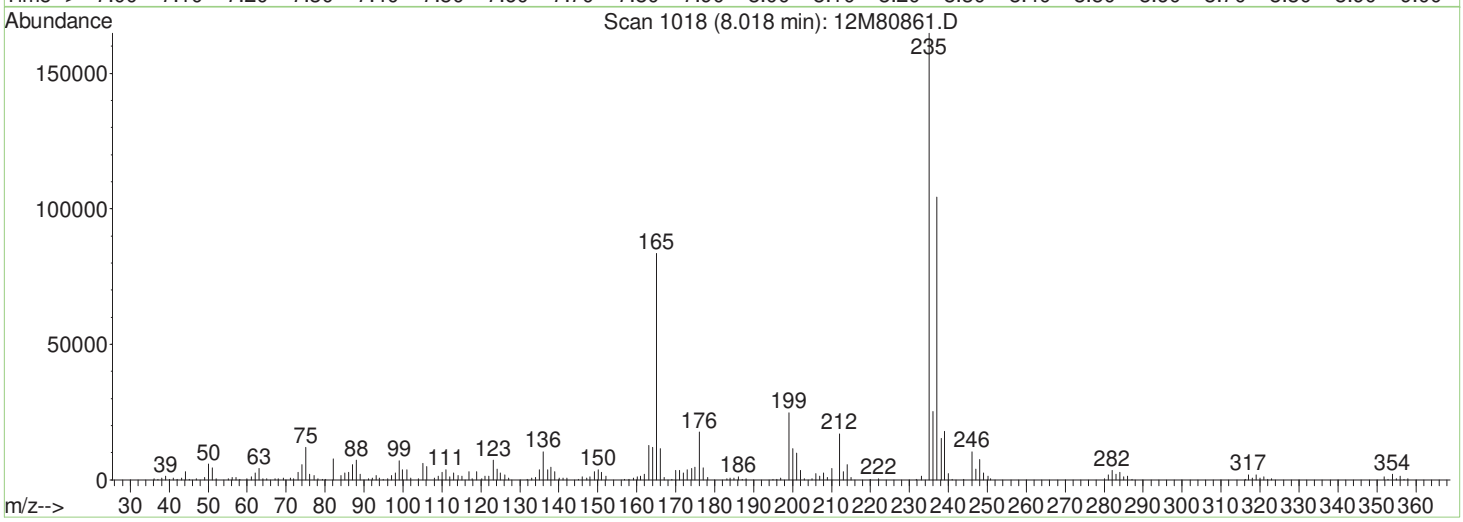
Ion	Exp%	Act%
184.10	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\012921\12M80861.D Vial: 1
Acq On : 29 Jan 2021 8:50 am Operator: SCB
Sample : S1A0503-TUN1 Inst : MSD12
Misc : 1,1 0008021 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 29 9:02 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Sat Jun 06 11:58:02 2020
Response via : Single Level Calibration





TIC: 12M80861.D

(3) DDT

8.02min 0.00ug/ml

response 125155

Ion	Exp%	Act%
235.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80862.D Vial: 2
Acq On : 29 Jan 2021 9:10 am Operator: SCB
Sample : S1A0503-CAL4 Inst : MSD12
Misc : 1,1 0012168 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 09:58:04 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.629	152	92243	40.0000	ug/ml	0.000
25) Naphthalene-d8	7.906	136	355391	40.0000	ug/ml	0.000
45) Acenaphthene-d10	9.637	164	199438	40.0000	ug/ml	0.000
73) Phenanthrene-d10	11.101	188	349798	40.0000	ug/ml	0.000
86) Chrysene-d12	14.493	240	289404	40.0000	ug/ml	0.000
98) Perylene-d12	16.988	264	322461	40.0000	ug/ml	0.000
System Monitoring Compounds						
6) 2-Fluorophenol	5.251	112	135668	49.5590523	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 49.56%			
8) Phenol-d5	6.261	99	159147	50.1688693	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 50.17%			
26) Nitrobenzene-d5	7.190	82	134926	49.4798635	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 98.96%			
49) 2-Fluorobiphenyl	8.974	172	302845	48.3272948	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 96.65%			
72) 2,4,6-Tribromophenol	10.411	330	43706	51.0405121	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 51.04%			
89) p-Terphenyl-d14	12.912	244	347021	50.0039033	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 100.01%			
Target Compounds						Qvalue
2) n-Nitrosodimethylamine	3.49	74	81729	49.5441	ug/ml	100
3) Pyridine	3.53	79	138731	50.4129	ug/ml	100
4) 2-Picoline	4.53	93	156738	50.2862	ug/ml	100
5) n-Nitrosomethylethylamine	4.70	88	64411	49.7977	ug/ml	100
7) n-Nitrosodiethylamine	5.51	102	69349	50.1854	ug/ml	100
9) Phenol	6.27	94	180117	50.0158	ug/ml	100
10) Aniline	6.29	93	209644	50.6814	ug/ml#	94
11) bis(2-Chloroethyl)ether	6.37	63	94047	49.3882	ug/ml	100
12) 2-Chlorophenol	6.41	128	144413	48.7286	ug/ml	100
13) 1,3-Dichlorobenzene	6.57	146	159725	48.2844	ug/ml	100
14) 1,4-Dichlorobenzene	6.65	146	165236	48.0937	ug/ml	100
15) Benzyl Alcohol	6.77	108	96140	49.7613	ug/ml	100
16) 1,2-Dichlorobenzene	6.80	146	154969	48.2797	ug/ml	100
17) 2-Methylphenol	6.89	107	115069	49.4233	ug/ml	100
18) bis(2-Chloroisopropyl)ethe	6.92	45	167073	49.9164	ug/ml#	100
19) 3-,4-Methylphenol	7.05	108	135278	47.9716	ug/ml	100
20) n-Nitrosopyrrolidine	7.02	100	69749	48.8402	ug/ml	100
21) n-Nitrosodipropylamine	7.05	70	89552	48.9571	ug/ml	100
22) n-Nitrosomorpholine	7.06	56	82587	49.4919	ug/ml	100
23) o-Toluidine	7.07	106	224107	48.7861	ug/ml	100
24) Hexachloroethane	7.14	117	58395	49.2565	ug/ml	100
27) Nitrobenzene	7.21	77	134047	49.2760	ug/ml	100
28) n-Nitrosopiperidine	7.36	114	71730	49.2982	ug/ml	100
29) Isophorone	7.45	82	247876	49.3394	ug/ml	100
30) 2-Nitrophenol	7.53	139	79508	49.4563	ug/ml	100
31) 2,4-Dimethylphenol	7.57	122	128677	48.8396	ug/ml	100
32) bis(2-Chloroethoxy)methane	7.67	93	149083	49.1099	ug/ml	100
33) Benzoic Acid	7.68	105	96001	49.1268	ug/ml	100
34) 2,4-Dichlorophenol	7.76	162	115494	48.8924	ug/ml	100
35) a,a-Dimethylphenethylamine	7.86	58	307649m	46.6515	ug/ml	
36) 1,2,4-Trichlorobenzene	7.85	180	123112	47.9119	ug/ml	100
37) Naphthalene	7.93	128	423715	48.2763	ug/ml	100
38) 4-Chloroaniline	7.98	65	49848	49.5553	ug/ml	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80862.D Vial: 2
Acq On : 29 Jan 2021 9:10 am Operator: SCB
Sample : S1A0503-CAL4 Inst : MSD12
Misc : 1,1 0012168 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 09:58:04 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39)	Hexachlorobutadiene	8.05	225	67068	50.4938	ug/ml	100
40)	n-Nitrosodi-n-Butylamine	8.32	84	84443	50.2493	ug/ml	100
41)	p-Phenylenediamine	8.34	108	157249	49.2688	ug/ml	100
42)	4-Chloro-3-Methylphenol	8.45	107	120779	49.6288	ug/ml	100
43)	2-Methylnaphthalene	8.61	142	290778	48.8528	ug/ml	100
44)	1-Methylnaphthalene	8.71	142	267569	48.4535	ug/ml	100
46)	Hexachlorocyclopentadiene	8.77	237	83802	49.1925	ug/ml	100
47)	2,4,6-Trichlorophenol	8.88	196	81217	49.2075	ug/ml	100
48)	2,4,5-Trichlorophenol	8.92	196	86295	48.9161	ug/ml	100
50)	2-Chloronaphthalene	9.09	162	255893	48.6252	ug/ml	100
51)	2-Nitroaniline	9.59	65	88415	49.1778	ug/ml	100
52)	Dimethylphthalate	9.38	163	292571	48.9800	ug/ml	100
53)	1,3-Dinitrobenzene	9.40	168	53717	50.5929	ug/ml	100
54)	2,6-Dinitrotoluene	9.43	165	70346	49.0126	ug/ml	100
55)	Acenaphthylene	9.50	152	448076	48.9283	ug/ml	100
56)	3-Nitroaniline	9.59	138	82370	48.8170	ug/ml	100
57)	2,4-Dinitrophenol	9.70	184	44362	49.9173	ug/ml	100
58)	Acenaphthene	9.67	154	278086	47.9985	ug/ml	100
59)	4-Nitrophenol	9.75	65	54515	51.3870	ug/ml	100
60)	2,4-Dinitrotoluene	9.83	165	94782	51.1650	ug/ml	100
61)	Dibenzofuran	9.84	168	373681	48.7798	ug/ml	100
62)	2,3,5,6-Tetrachlorophenol	9.91	232	69762	50.0352	ug/ml	100
63)	2,3,4,6-Tetrachlorophenol	9.96	232	71366	49.6051	ug/ml	100
64)	1-Naphthylamine	9.91	143	298825	49.0746	ug/ml	100
65)	2-Naphthylamine	9.99	143	317252	49.6810	ug/ml	100
66)	Diethylphthalate	10.07	149	303608	49.1386	ug/ml	100
67)	Fluorene	10.18	166	305755	49.0220	ug/ml	100
68)	4-Chlorophenyl Phenyl Ethe	10.18	204	141843	48.5371	ug/ml	100
69)	4-Nitroaniline	10.19	138	89553	48.2952	ug/ml	100
70)	5-Nitro-o-Toluidine	10.19	152	96930	49.7620	ug/ml	100
71)	1,2-Diphenylhydrazine & Az	10.34	77	268716	49.4387	ug/ml	100
74)	4,6-Dinitro-2-Methylphenol	10.22	198	52456	49.6468	ug/ml	100
75)	Diphenylamine/n-Nitrosodip	10.29	169	264947	49.3214	ug/ml	100
76)	4-Bromophenyl Phenyl Ether	10.66	248	79744	50.2893	ug/ml	100
77)	Hexachlorobenzene	10.72	284	84280	49.1031	ug/ml	100
78)	4-Aminobiphenyl	10.91	169	366912	50.5689	ug/ml	100
79)	Pentachlorophenol	10.91	266	59797	50.4542	ug/ml	100
80)	Phenanthrene	11.12	178	439436	48.2536	ug/ml	100
81)	Anthracene	11.18	178	460700	49.5645	ug/ml	100
82)	Carbazole	11.33	167	409163	49.7846	ug/ml	100
83)	Di-n-Butyl Phthalate	11.70	149	507447	51.4305	ug/ml	100
84)	Methapyrilene	12.02	58	221245	51.7059	ug/ml	100
85)	Fluoranthene	12.41	202	438964	49.7009	ug/ml	100
87)	Benzidine	12.59	184	335888	52.7352	ug/ml	100
88)	Pyrene	12.70	202	457320	49.4206	ug/ml	100
90)	p-(Dimethylamino)azobenzen	13.11	225	93856	51.8868	ug/ml	100
91)	Butyl Benzyl Phthalate	13.64	149	232795	50.8660	ug/ml	100
92)	3,3'-Dimethylbenzidine	13.61	212	684983	103.5962	ug/ml	100
93)	2-Acetylaminofluorene	13.99	181	205004	48.8137	ug/ml	100
94)	bis(2-Ethylhexyl)phthalate	14.63	149	325181	52.8836	ug/ml	100
95)	3,3'-Dichlorobenzidine	14.46	252	173225	51.6744	ug/ml	100
96)	Benzo[a]anthracene	14.48	228	419389	49.1782	ug/ml	100
97)	Chrysene	14.54	228	417412	48.4708	ug/ml	100
99)	Di-n-Octyl Phthalate	15.80	149	545209	49.6009	ug/ml	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80862.D Vial: 2
Acq On : 29 Jan 2021 9:10 am Operator: SCB
Sample : S1A0503-CAL4 Inst : MSD12
Misc : 1,1 0012168 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 09:58:04 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

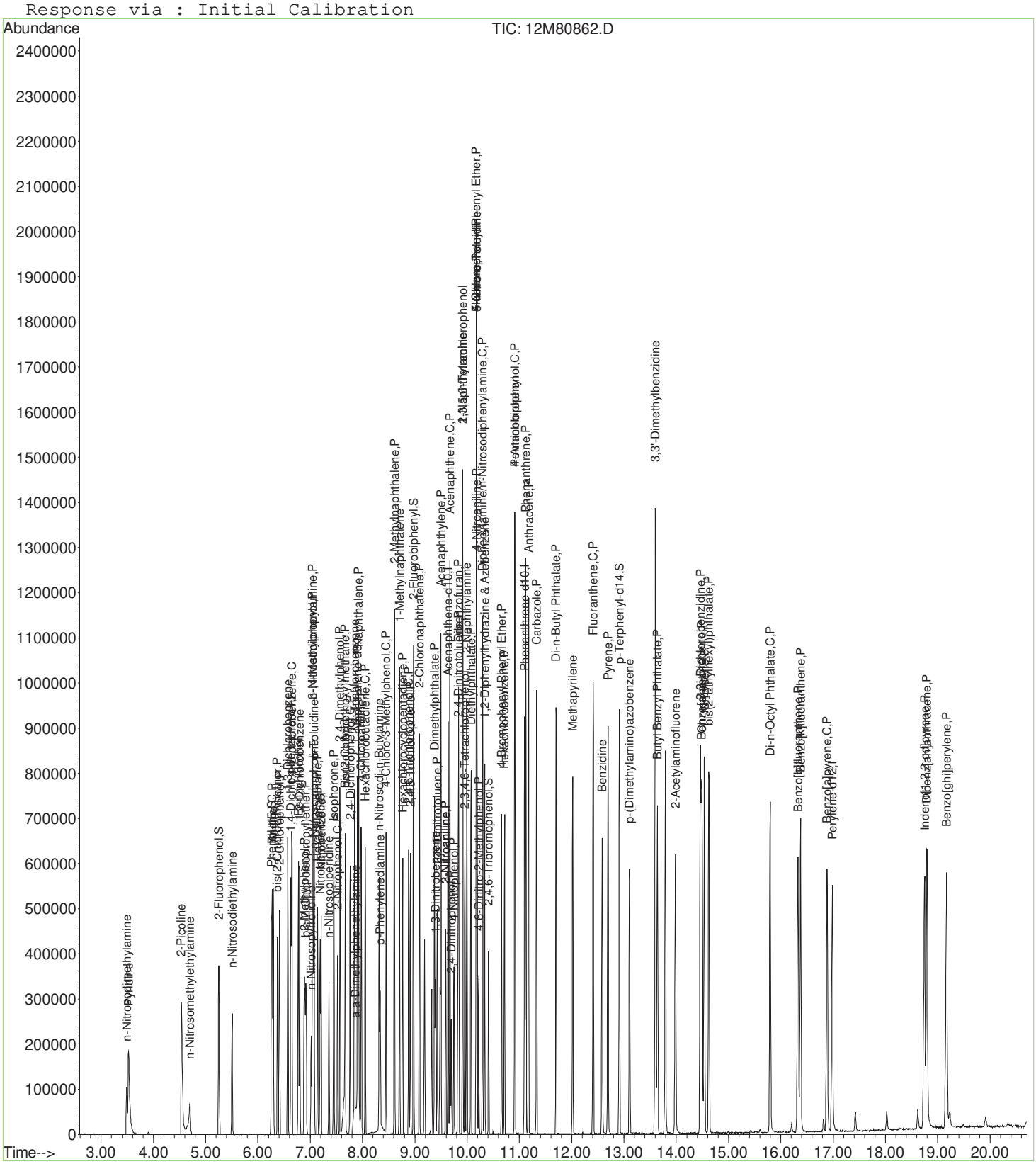
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
100) Benzo[b]fluoranthene	16.33	252	416860	52.0301	ug/ml	100
101) Benzo[k]fluoranthene	16.38	252	419561	50.4198	ug/ml	100
102) Benzo[a]pyrene	16.89	252	371818	51.8214	ug/ml	100
103) Indeno[1,2,3-cd]pyrene	18.75	276	386433	52.0565	ug/ml	100
104) Dibenz[ah]anthracene	18.80	278	432353	52.4179	ug/ml	100
105) Benzo[ghi]perylene	19.17	276	415309	51.5759	ug/ml	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80862.D Vial: 2
Acq On : 29 Jan 2021 9:10 am Operator: SCB
Sample : S1A0503-CAL4 Inst : MSD12
Misc : 1,1 0012168 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 9:59 2021 Quant Results File: MEGAMIX.RES

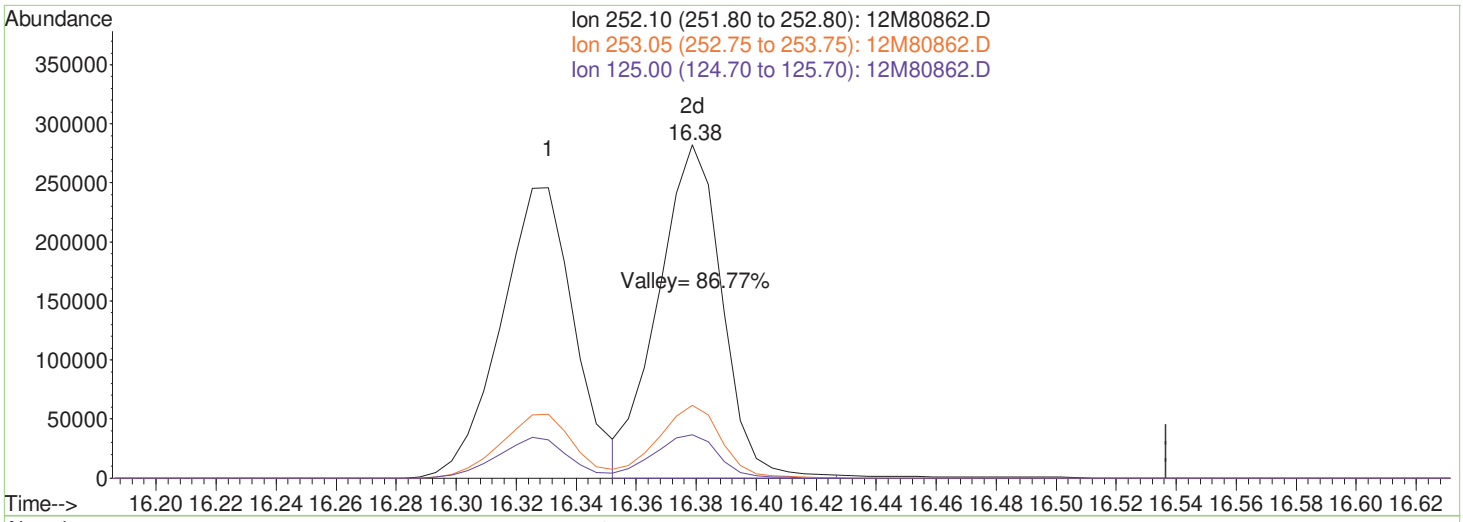
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration

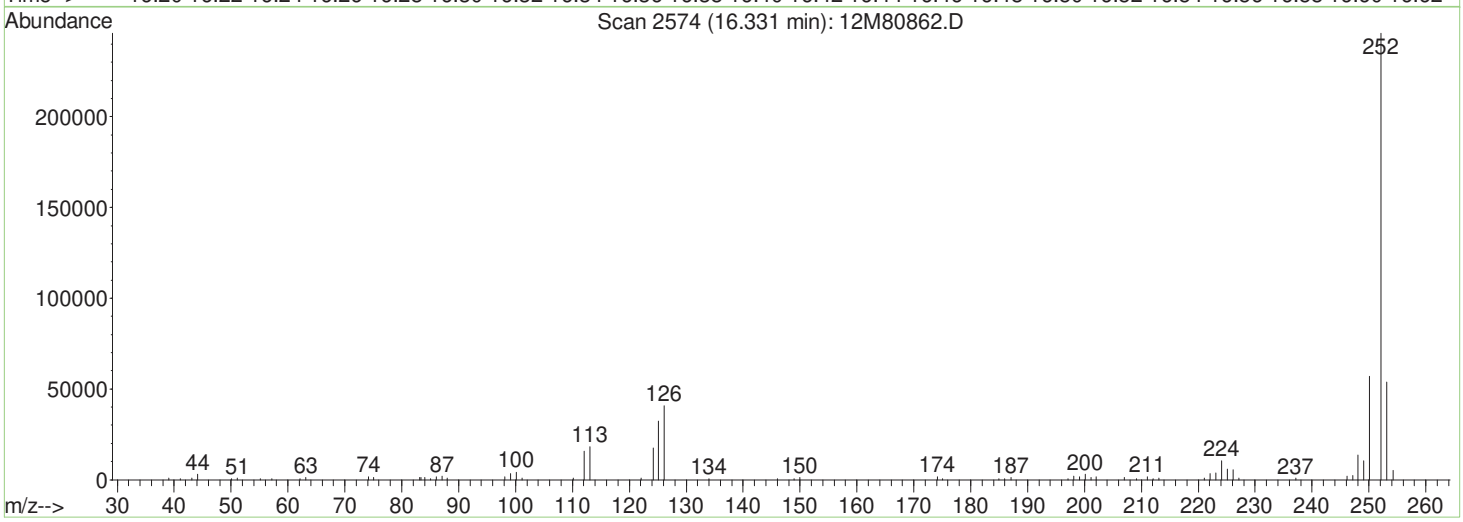


Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\012921\12M80862.D Vial: 2
Acq On : 29 Jan 2021 9:10 am Operator: SCB
Sample : S1A0503-CAL4 Inst : MSD12
Misc : 1,1 0012168 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 9:59 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration





TIC: 12M80862.D

(100) Benzo[b]fluoranthene (P)

16.33min 52.03ug/ml

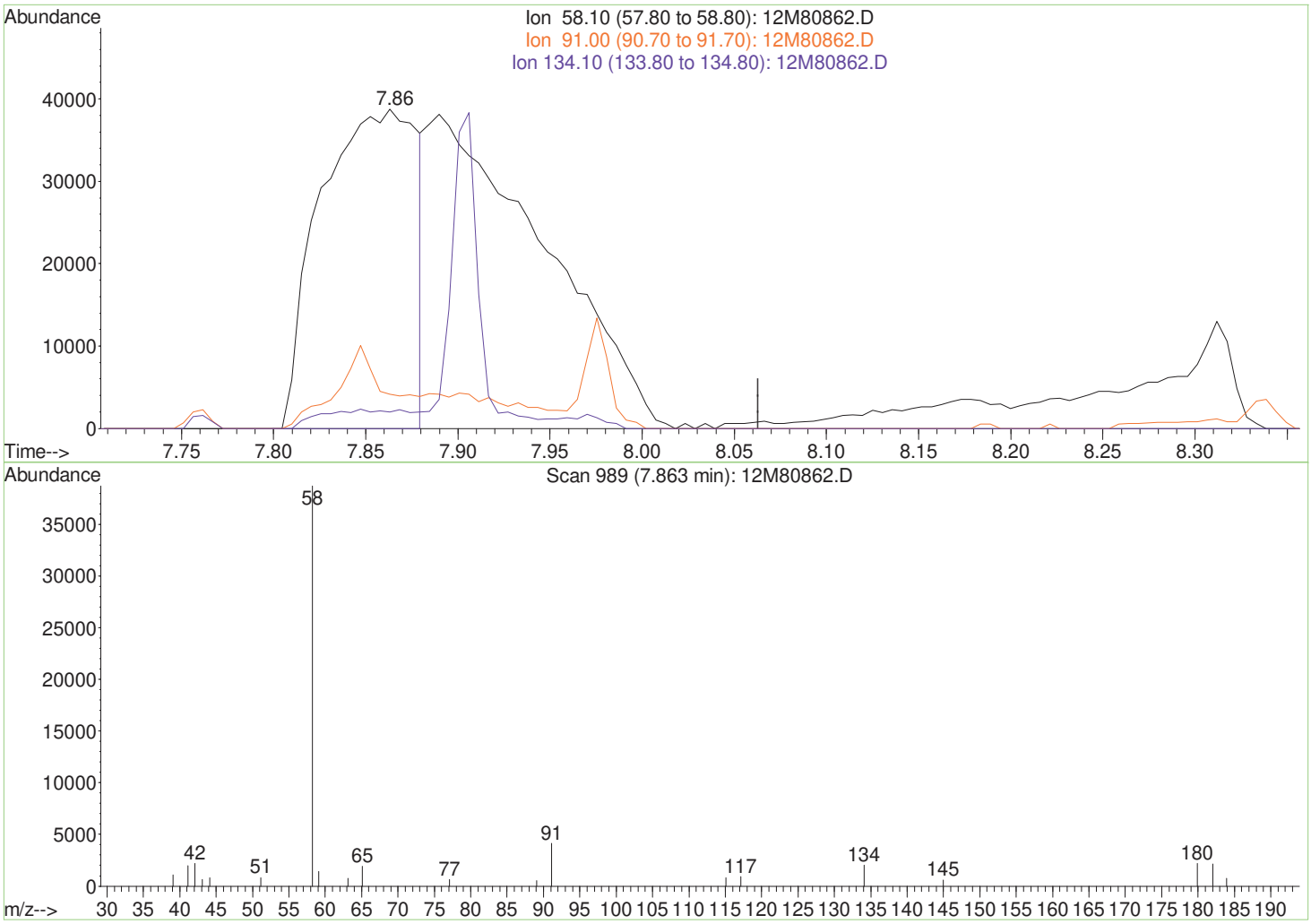
response 416860

Ion	Exp%	Act%
252.10	100	100
253.05	21.90	21.88
125.00	13.60	13.57
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\012921\12M80862.D Vial: 2
Acq On : 29 Jan 2021 9:10 am Operator: SCB
Sample : S1A0503-CAL4 Inst : MSD12
Misc : 1,1 0012168 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 9:58 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration



TIC: 12M80862.D

(35) a,a-Dimethylphenethylamine

7.86min 21.31ug/ml

response 140515

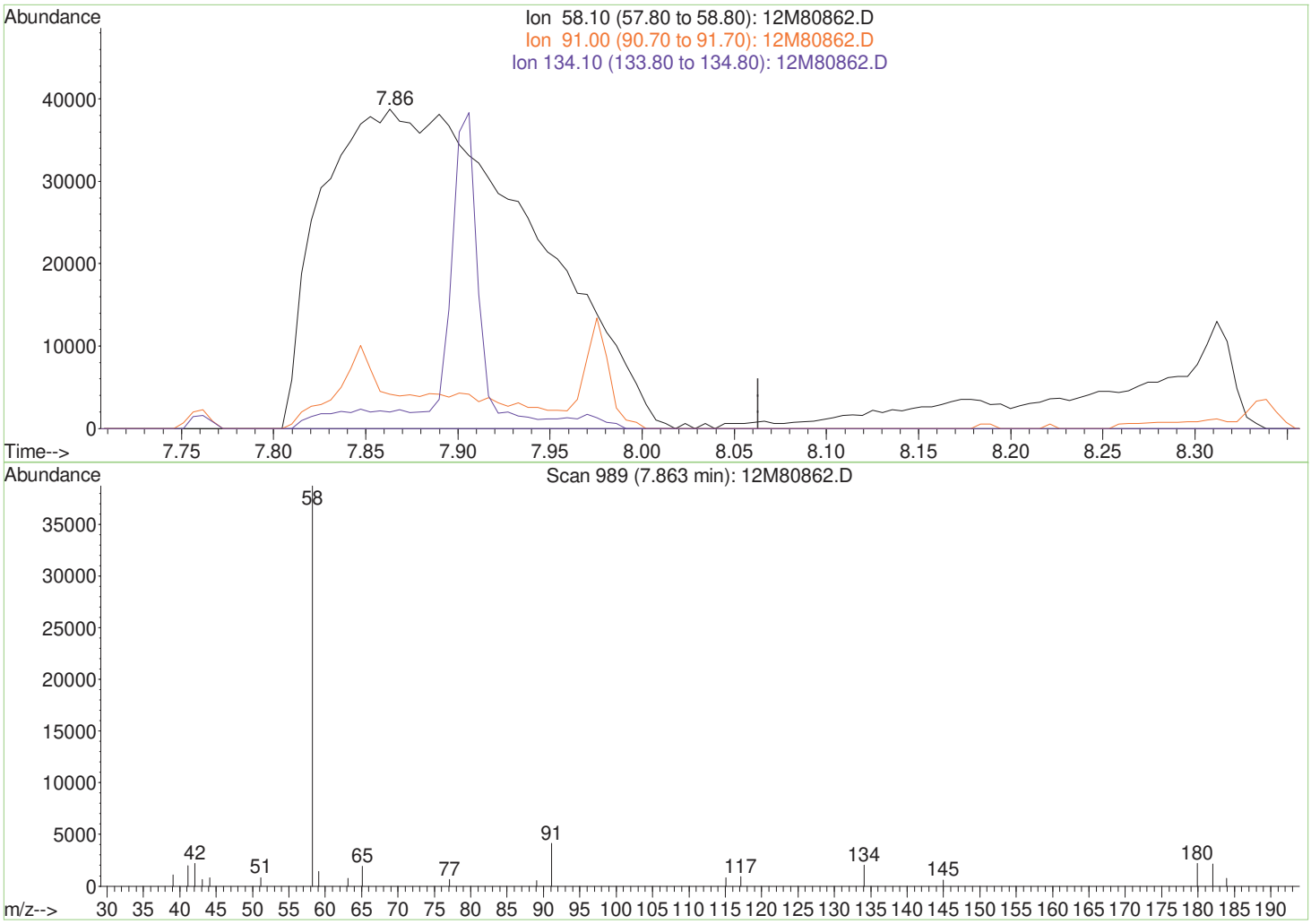
Ion	Exp%	Act%
58.10	100	100
91.00	6.40	14.03#
134.10	1.90	4.19#
0.00	0.00	0.00

12M80862.D MEGAMIX.M Mon Feb 01 09:59:07 2021

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\012921\12M80862.D Vial: 2
Acq On : 29 Jan 2021 9:10 am Operator: SCB
Sample : S1A0503-CAL4 Inst : MSD12
Misc : 1,1 0012168 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 9:59 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration



TIC: 12M80862.D

(35) a,a-Dimethylphenethylamine

7.86min 46.65ug/ml mint

response 307649

Ion	Exp%	Act%
58.10	100	100
91.00	6.40	6.41
134.10	1.90	1.91
0.00	0.00	0.00

Sarah Bogolin

Digitally signed by Sarah Bogolin
Reason: Data system splits the peak incorrectly or integrates a false peak as a rider peak
Date: 2021.02.01 13:54:09 -05'00'

12M80862.D MEGAMIX.M Mon Feb 01 09:59:13 2021

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80862.D Vial: 2
Acq On : 29 Jan 2021 9:10 am Operator: SCB
Sample : S1A0503-CAL4 Inst : MSD12
Misc : 1,1 0012168 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	100	0.00
2		n-Nitrosodimethylamine	0.715	0.709	0.8	100	0.00
3		Pyridine	1.193	1.203	-0.8	100	0.00
4		2-Picoline	1.352	1.359	-0.5	100	0.00
5		n-Nitrosomethylethylamine	0.506	0.559	-10.5	100	0.00
6	S	2-Fluorophenol	1.187	1.177	0.8	100	0.00
7		n-Nitrosodiethylamine	0.599	0.601	-0.3	100	0.00
8	S	Phenol-d5	1.376	1.380	-0.3	100	0.00
9	C,P	Phenol	1.562	1.562	0.0	100	0.00
10		Aniline	1.794	1.818	-1.3	110	0.00
11	P	bis(2-Chloroethyl)ether	0.826	0.816	1.2	100	0.00
12	P	2-Chlorophenol	1.285	1.252	2.6	100	0.00
13		1,3-Dichlorobenzene	1.434	1.385	3.4	100	0.00
14	C	1,4-Dichlorobenzene	1.490	1.433	3.8	100	0.00
15		Benzyl Alcohol	0.838	0.834	0.5	100	0.00
16		1,2-Dichlorobenzene	1.392	1.344	3.4	100	0.00
17	P	2-Methylphenol	1.010	0.998	1.2	100	0.00
18	P	bis(2-Chloroisopropyl)ether	1.451	1.449	0.1	100	0.00
19	P	3-,4-Methylphenol	1.223	1.173	4.1	100	0.00
20		n-Nitrosopyrrolidine	0.619	0.605	2.3	100	0.00
21	P	n-Nitrosodipropylamine	0.793	0.777	2.0	100	0.00
22		n-Nitrosomorpholine	0.724	0.716	1.1	100	0.00
23		o-Toluidine	1.992	1.944	2.4	100	0.00
24	P	Hexachloroethane	0.514	0.506	1.6	100	0.00
25	I	Naphthalene-d8	1.000	1.000	0.0	100	0.00
26	S	Nitrobenzene-d5	0.307	0.304	1.0	100	0.00
27	P	Nitrobenzene	0.306	0.302	1.3	100	0.00
28		n-Nitrosopiperidine	0.164	0.161	1.8	100	0.00
29	P	Isophorone	0.565	0.558	1.2	100	0.00
30	C,P	2-Nitrophenol	0.181	0.179	1.1	100	0.00
31	P	2,4-Dimethylphenol	0.297	0.290	2.4	100	0.00
32	P	bis(2-Chloroethoxy)methane	0.342	0.336	1.8	100	0.00
33		Benzoic Acid	0.222	0.216	2.7	100	0.00
34	C,P	2,4-Dichlorophenol	0.266	0.260	2.3	100	0.00
35		a,a-Dimethylphenethylamine	0.742	0.693	6.6	100	0.00
36		1,2,4-Trichlorobenzene	0.289	0.277	4.2	100	0.00
37	P	Naphthalene	0.988	0.954	3.4	100	0.00
38	P	4-Chloroaniline	0.113	0.112	0.9	100	0.00
39	C,P	Hexachlorobutadiene	0.149	0.151	-1.3	100	0.00
40		n-Nitrosodi-n-Butylamine	0.189	0.190	-0.5	100	0.00
41		p-Phenylenediamine	0.359	0.354	1.4	100	0.00
42	C,P	4-Chloro-3-Methylphenol	0.274	0.272	0.7	100	0.00
43	P	2-Methylnaphthalene	0.670	0.655	2.2	100	0.00
44		1-Methylnaphthalene	0.622	0.602	3.2	100	0.00
45	I	Acenaphthene-d10	1.000	1.000	0.0	100	0.00
46	P	Hexachlorocyclopentadiene	0.342	0.336	1.8	100	0.00
47	C,P	2,4,6-Trichlorophenol	0.331	0.326	1.5	100	0.00
48	P	2,4,5-Trichlorophenol	0.354	0.346	2.3	100	0.00
49	S	2-Fluorobiphenyl	1.257	1.215	3.3	100	0.00
50	P	2-Chloronaphthalene	1.055	1.026	2.7	100	0.00
51	P	2-Nitroaniline	0.361	0.355	1.7	100	0.00
52	P	Dimethylphthalate	1.198	1.174	2.0	100	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80862.D Vial: 2
Acq On : 29 Jan 2021 9:10 am Operator: SCB
Sample : S1A0503-CAL4 Inst : MSD12
Misc : 1,1 0012168 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
53		1,3-Dinitrobenzene	0.213	0.215	-0.9	100	0.00
54	P	2,6-Dinitrotoluene	0.288	0.282	2.1	100	0.00
55	P	Acenaphthylene	1.837	1.797	2.2	100	0.00
56	P	3-Nitroaniline	0.338	0.330	2.4	100	0.00
57	P	2,4-Dinitrophenol	0.178	0.178	0.0	100	0.00
58	C,P	Acenaphthene	1.162	1.115	4.0	100	0.00
59	P	4-Nitrophenol	0.213	0.219	-2.8	100	0.00
60	P	2,4-Dinitrotoluene	0.372	0.380	-2.2	100	0.00
61	P	Dibenzofuran	1.536	1.499	2.4	100	0.00
62		2,3,5,6-Tetrachlorophenol	0.280	0.280	0.0	100	0.00
63		2,3,4,6-Tetrachlorophenol	0.289	0.286	1.0	100	0.00
64		1-Naphthylamine	1.221	1.199	1.8	100	0.00
65		2-Naphthylamine	1.281	1.273	0.6	100	0.00
66	P	Diethylphthalate	1.239	1.218	1.7	100	0.00
67	P	Fluorene	1.251	1.226	2.0	100	0.00
68	P	4-Chlorophenyl Phenyl Ether	0.586	0.569	2.9	100	0.00
69	P	4-Nitroaniline	0.372	0.359	3.5	100	0.00
70		5-Nitro-o-Toluidine	0.391	0.389	0.5	100	0.00
71		1,2-Diphenylhydrazine & Azo	1.090	1.078	1.1	100	0.00
72	S	2,4,6-Tribromophenol	0.172	0.175	-1.7	100	0.00
73	I	Phenanthrene-d10	1.000	1.000	0.0	100	0.00
74	P	4,6-Dinitro-2-Methylphenol	0.121	0.120	0.8	100	0.00
75	C,P	Diphenylamine/n-Nitrosodiph	0.614	0.606	1.3	100	0.00
76	P	4-Bromophenyl Phenyl Ether	0.181	0.182	-0.6	100	0.00
77	P	Hexachlorobenzene	0.196	0.193	1.5	100	0.00
78		4-Aminobiphenyl	0.830	0.839	-1.1	100	0.00
79	C,P	Pentachlorophenol	0.136	0.137	-0.7	100	0.00
80	P	Phenanthrene	1.041	1.005	3.5	100	0.00
81	P	Anthracene	1.063	1.054	0.8	100	0.00
82	P	Carbazole	0.940	0.936	0.4	100	0.00
83	P	Di-n-Butyl Phthalate	1.128	1.161	-2.9	100	0.00
84		Methapyrilene	0.453	0.506	-11.7	100	0.00
85	C,P	Fluoranthene	1.010	1.004	0.6	100	0.00
86	I	Chrysene-d12	1.000	1.000	0.0	100	0.00
87		Benzidine	0.880	0.928	-5.5	100	0.00
88	P	Pyrene	1.279	1.264	1.2	100	0.00
89	S	p-Terphenyl-d14	0.959	0.959	0.0	100	0.00
90		p-(Dimethylamino)azobenzene	0.250	0.259	-3.6	100	0.00
91	P	Butyl Benzyl Phthalate	0.633	0.644	-1.7	100	0.00
92		3,3'-Dimethylbenzidine	0.914	0.947	-3.6	100	0.00
93		2-Acetylaminofluorene	0.525	0.567	-8.0	100	0.00
94	P	bis(2-Ethylhexyl)phthalate	0.850	0.899	-5.8	100	0.00
95	P	3,3'-Dichlorobenzidine	0.463	0.479	-3.5	100	0.00
96	P	Benzo[a]anthracene	1.179	1.159	1.7	100	0.00
97	P	Chrysene	1.190	1.154	3.0	100	0.00
98	I	Perylene-d12	1.000	1.000	0.0	100	0.00
99	C,P	Di-n-Octyl Phthalate	1.250	1.353	-8.2	100	0.00
100	P	Benzo[b]fluoranthene	0.994	1.034	-4.0	100	0.00
101	P	Benzo[k]fluoranthene	1.032	1.041	-0.9	100	0.00
102	C,P	Benzo[a]pyrene	0.890	0.922	-3.6	100	0.00
103	P	Indeno[1,2,3-cd]pyrene	0.921	0.959	-4.1	100	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80862.D Vial: 2
Acq On : 29 Jan 2021 9:10 am Operator: SCB
Sample : S1A0503-CAL4 Inst : MSD12
Misc : 1,1 0012168 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
104	P	Dibenz[ah]anthracene	1.023	1.073	-4.9	100	0.00
105	P	Benzo[ghi]perylene	0.999	1.030	-3.1	100	0.00

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80862.D Vial: 2
Acq On : 29 Jan 2021 9:10 am Operator: SCB
Sample : S1A0503-CAL4 Inst : MSD12
Misc : 1,1 0012168 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	100	0.00
2		n-Nitrosodimethylamine	50.000	49.544	0.9	100	0.00
3		Pyridine	50.000	50.413	-0.8	100	0.00
4		2-Picoline	50.000	50.286	-0.6	100	0.00
5		n-Nitrosomethylethylamine	50.000	49.798	0.4	100	0.00
6	S	2-Fluorophenol	50.000	49.559	0.9	100	0.00
7		n-Nitrosodiethylamine	50.000	50.185	-0.4	100	0.00
8	S	Phenol-d5	50.000	50.169	-0.3	100	0.00
9	C,P	Phenol	50.000	50.016	-0.0	100	0.00
10		Aniline	50.000	50.681	-1.4	110	0.00
11	P	bis(2-Chloroethyl)ether	50.000	49.388	1.2	100	0.00
12	P	2-Chlorophenol	50.000	48.729	2.5	100	0.00
13		1,3-Dichlorobenzene	50.000	48.284	3.4	100	0.00
14	C	1,4-Dichlorobenzene	50.000	48.094	3.8	100	0.00
15		Benzyl Alcohol	50.000	49.761	0.5	100	0.00
16		1,2-Dichlorobenzene	50.000	48.280	3.4	100	0.00
17	P	2-Methylphenol	50.000	49.423	1.2	100	0.00
18	P	bis(2-Chloroisopropyl)ether	50.000	49.916	0.2	100	0.00
19	P	3-,4-Methylphenol	50.000	47.972	4.1	100	0.00
20		n-Nitrosopyrrolidine	50.000	48.840	2.3	100	0.00
21	P	n-Nitrosodipropylamine	50.000	48.957	2.1	100	0.00
22		n-Nitrosomorpholine	50.000	49.492	1.0	100	0.00
23		o-Toluidine	50.000	48.786	2.4	100	0.00
24	P	Hexachloroethane	50.000	49.257	1.5	100	0.00
25	I	Naphthalene-d8	40.000	40.000	0.0	100	0.00
26	S	Nitrobenzene-d5	50.000	49.480	1.0	100	0.00
27	P	Nitrobenzene	50.000	49.276	1.4	100	0.00
28		n-Nitrosopiperidine	50.000	49.298	1.4	100	0.00
29	P	Isophorone	50.000	49.339	1.3	100	0.00
30	C,P	2-Nitrophenol	50.000	49.456	1.1	100	0.00
31	P	2,4-Dimethylphenol	50.000	48.840	2.3	100	0.00
32	P	bis(2-Chloroethoxy)methane	50.000	49.110	1.8	100	0.00
33		Benzoic Acid	50.000	49.127	1.7	100	0.00
34	C,P	2,4-Dichlorophenol	50.000	48.892	2.2	100	0.00
35		a,a-Dimethylphenethylamine	50.000	46.652	6.7	100	0.00
36		1,2,4-Trichlorobenzene	50.000	47.912	4.2	100	0.00
37	P	Naphthalene	50.000	48.276	3.4	100	0.00
38	P	4-Chloroaniline	50.000	49.555	0.9	100	0.00
39	C,P	Hexachlorobutadiene	50.000	50.494	-1.0	100	0.00
40		n-Nitrosodi-n-Butylamine	50.000	50.249	-0.5	100	0.00
41		p-Phenylenediamine	50.000	49.269	1.5	100	0.00
42	C,P	4-Chloro-3-Methylphenol	50.000	49.629	0.7	100	0.00
43	P	2-Methylnaphthalene	50.000	48.853	2.3	100	0.00
44		1-Methylnaphthalene	50.000	48.453	3.1	100	0.00
45	I	Acenaphthene-d10	40.000	40.000	0.0	100	0.00
46	P	Hexachlorocyclopentadiene	50.000	49.192	1.6	100	0.00
47	C,P	2,4,6-Trichlorophenol	50.000	49.208	1.6	100	0.00
48	P	2,4,5-Trichlorophenol	50.000	48.916	2.2	100	0.00
49	S	2-Fluorobiphenyl	50.000	48.327	3.3	100	0.00
50	P	2-Chloronaphthalene	50.000	48.625	2.8	100	0.00
51	P	2-Nitroaniline	50.000	49.178	1.6	100	0.00
52	P	Dimethylphthalate	50.000	48.980	2.0	100	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80862.D Vial: 2
Acq On : 29 Jan 2021 9:10 am Operator: SCB
Sample : S1A0503-CAL4 Inst : MSD12
Misc : 1,1 0012168 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
53		1,3-Dinitrobenzene	50.000	50.593	-1.2	100	0.00
54	P	2,6-Dinitrotoluene	50.000	49.013	2.0	100	0.00
55	P	Acenaphthylene	50.000	48.928	2.1	100	0.00
56	P	3-Nitroaniline	50.000	48.817	2.4	100	0.00
57	P	2,4-Dinitrophenol	50.000	49.917	0.2	100	0.00
58	C,P	Acenaphthene	50.000	47.999	4.0	100	0.00
59	P	4-Nitrophenol	50.000	51.387	-2.8	100	0.00
60	P	2,4-Dinitrotoluene	50.000	51.165	-2.3	100	0.00
61	P	Dibenzofuran	50.000	48.780	2.4	100	0.00
62		2,3,5,6-Tetrachlorophenol	50.000	50.035	-0.1	100	0.00
63		2,3,4,6-Tetrachlorophenol	50.000	49.605	0.8	100	0.00
64		1-Naphthylamine	50.000	49.075	1.8	100	0.00
65		2-Naphthylamine	50.000	49.681	0.6	100	0.00
66	P	Diethylphthalate	50.000	49.139	1.7	100	0.00
67	P	Fluorene	50.000	49.022	2.0	100	0.00
68	P	4-Chlorophenyl Phenyl Ether	50.000	48.537	2.9	100	0.00
69	P	4-Nitroaniline	50.000	48.295	3.4	100	0.00
70		5-Nitro-o-Toluidine	50.000	49.762	0.5	100	0.00
71		1,2-Diphenylhydrazine & Azo	50.000	49.439	1.1	100	0.00
72	S	2,4,6-Tribromophenol	50.000	51.041	-2.1	100	0.00
73	I	Phenanthrene-d10	40.000	40.000	0.0	100	0.00
74	P	4,6-Dinitro-2-Methylphenol	50.000	49.647	0.7	100	0.00
75	C,P	Diphenylamine/n-Nitrosodiph	50.000	49.321	1.4	100	0.00
76	P	4-Bromophenyl Phenyl Ether	50.000	50.289	-0.6	100	0.00
77	P	Hexachlorobenzene	50.000	49.103	1.8	100	0.00
78		4-Aminobiphenyl	50.000	50.569	-1.1	100	0.00
79	C,P	Pentachlorophenol	50.000	50.454	-0.9	100	0.00
80	P	Phenanthrene	50.000	48.254	3.5	100	0.00
81	P	Anthracene	50.000	49.565	0.9	100	0.00
82	P	Carbazole	50.000	49.785	0.4	100	0.00
83	P	Di-n-Butyl Phthalate	50.000	51.431	-2.9	100	0.00
84		Methapyrilene	50.000	51.706	-3.4	100	0.00
85	C,P	Fluoranthene	50.000	49.701	0.6	100	0.00
86	I	Chrysene-d12	40.000	40.000	0.0	100	0.00
87		Benzidine	50.000	52.735	-5.5	100	0.00
88	P	Pyrene	50.000	49.421	1.2	100	0.00
89	S	p-Terphenyl-d14	50.000	50.004	-0.0	100	0.00
90		p-(Dimethylamino)azobenzene	50.000	51.887	-3.8	100	0.00
91	P	Butyl Benzyl Phthalate	50.000	50.866	-1.7	100	0.00
92		3,3'-Dimethylbenzidine	100.000	103.596	-3.6	100	0.00
93		2-Acetylaminofluorene	50.000	48.814	2.4	100	0.00
94	P	bis(2-Ethylhexyl)phthalate	50.000	52.884	-5.8	100	0.00
95	P	3,3'-Dichlorobenzidine	50.000	51.674	-3.3	100	0.00
96	P	Benzo[a]anthracene	50.000	49.178	1.6	100	0.00
97	P	Chrysene	50.000	48.471	3.1	100	0.00
98	I	Perylene-d12	40.000	40.000	0.0	100	0.00
99	C,P	Di-n-Octyl Phthalate	50.000	49.601	0.8	100	0.00
100	P	Benzo[b]fluoranthene	50.000	52.030	-4.1	100	0.00
101	P	Benzo[k]fluoranthene	50.000	50.420	-0.8	100	0.00
102	C,P	Benzo[a]pyrene	50.000	51.821	-3.6	100	0.00
103	P	Indeno[1,2,3-cd]pyrene	50.000	52.057	-4.1	100	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80862.D Vial: 2
Acq On : 29 Jan 2021 9:10 am Operator: SCB
Sample : S1A0503-CAL4 Inst : MSD12
Misc : 1,1 0012168 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
104	P	Dibenz[ah]anthracene	50.000	52.418	-4.8	100	0.00
105	P	Benzo[ghi]perylene	50.000	51.576	-3.2	100	0.00

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80863.D Vial: 3
Acq On : 29 Jan 2021 9:41 am Operator: SCB
Sample : S1A0503-CAL9 Inst : MSD12
Misc : 1,1 0012173 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 09:58:05 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.629	152	90209	40.0000	ug/ml	0.000
25) Naphthalene-d8	7.901	136	348728	40.0000	ug/ml	0.000
45) Acenaphthene-d10	9.637	164	194382	40.0000	ug/ml	0.000
73) Phenanthrene-d10	11.095	188	339798	40.0000	ug/ml	0.000
86) Chrysene-d12	14.482	240	272223	40.0000	ug/ml	-0.011
98) Perylene-d12	16.982	264	317591	40.0000	ug/ml	0.000
System Monitoring Compounds						
6) 2-Fluorophenol	5.246	112	2218	0.8284965	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 0.83%#			
8) Phenol-d5	6.250	99	2870	0.9251269	ug/ml	-0.01
Spiked Amount 100.000	Range 10 - 94		Recovery = 0.93%#			
26) Nitrobenzene-d5	7.179	82	2412	0.9014253	ug/ml	-0.01
Spiked Amount 50.000	Range 35 - 114		Recovery = 1.80%#			
49) 2-Fluorobiphenyl	8.969	172	5378	0.8805312	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 1.76%#			
72) 2,4,6-Tribromophenol	10.406	330	448	0.5367893	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 0.54%#			
89) p-Terphenyl-d14	12.906	244	5628	0.8621483	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 1.72%#			
Target Compounds						Qvalue
2) n-Nitrosodimethylamine	3.51	74	573	0.3552	ug/ml#	19
3) Pyridine	3.58	79	603	0.2241	ug/ml#	70
4) 2-Picoline	4.56	93	2480	0.8136	ug/ml#	65
7) n-Nitrosodiethylamine	5.51	102	1012	0.7489	ug/ml#	64
9) Phenol	6.27	94	2866	0.8138	ug/ml	99
10) Aniline	6.29	93	3649	0.9020	ug/ml#	99
11) bis(2-Chloroethyl)ether	6.37	63	1540	0.8270	ug/ml	93
12) 2-Chlorophenol	6.40	128	2476	0.8543	ug/ml	92
13) 1,3-Dichlorobenzene	6.57	146	2882	0.8909	ug/ml	96
14) 1,4-Dichlorobenzene	6.65	146	3356	0.9988	ug/ml#	79
15) Benzyl Alcohol	6.77	108	1503	0.7955	ug/ml	96
16) 1,2-Dichlorobenzene	6.79	146	2974	0.9474	ug/ml	97
17) 2-Methylphenol	6.88	107	1890	0.8301	ug/ml#	84
18) bis(2-Chloroisopropyl)ethe	6.92	45	3314	1.0124	ug/ml#	95
19) 3-,4-Methylphenol	7.04	108	2444	0.8862	ug/ml	91
20) n-Nitrosopyrrolidine	7.00	100	1052	0.7532	ug/ml	93
21) n-Nitrosodipropylamine	7.04	70	1701	0.9509	ug/ml#	74
22) n-Nitrosomorpholine	7.05	56	1413	0.8659	ug/ml#	85
23) o-Toluidine	7.07	106	4377	0.9743	ug/ml#	93
24) Hexachloroethane	7.14	117	730	0.6296	ug/ml	93
27) Nitrobenzene	7.20	77	2295	0.8598	ug/ml#	93
28) n-Nitrosopiperidine	7.35	114	1057	0.7403	ug/ml	93
29) Isophorone	7.44	82	4270	0.8662	ug/ml#	92
30) 2-Nitrophenol	7.52	139	1080	0.6846	ug/ml#	76
31) 2,4-Dimethylphenol	7.56	122	1963	0.7593	ug/ml	96
32) bis(2-Chloroethoxy)methane	7.67	93	2752	0.9239	ug/ml#	88
34) 2,4-Dichlorophenol	7.76	162	1760	0.7593	ug/ml	97
35) a,a-Dimethylphenethylamine	7.74	58	5112	0.7900	ug/ml#	84
36) 1,2,4-Trichlorobenzene	7.85	180	2379	0.9435	ug/ml	91
37) Naphthalene	7.92	128	9008	1.0459	ug/ml	97
38) 4-Chloroaniline	7.97	65	625	0.6332	ug/ml#	39
39) Hexachlorobutadiene	8.05	225	1121	0.8601	ug/ml	89
40) n-Nitrosodi-n-Butylamine	8.31	84	1324	0.8029	ug/ml	88

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80863.D Vial: 3
Acq On : 29 Jan 2021 9:41 am Operator: SCB
Sample : S1A0503-CAL9 Inst : MSD12
Misc : 1,1 0012173 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 09:58:05 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
41)	p-Phenylenediamine	8.32	108	2560	0.8174	ug/ml	96
42)	4-Chloro-3-Methylphenol	8.45	107	1792	0.7504	ug/ml#	94
43)	2-Methylnaphthalene	8.61	142	5408	0.9259	ug/ml	99
44)	1-Methylnaphthalene	8.70	142	4681	0.8639	ug/ml	100
46)	Hexachlorocyclopentadiene	8.77	237	1337	0.8052	ug/ml#	85
47)	2,4,6-Trichlorophenol	8.88	196	1117	0.6944	ug/ml#	70
48)	2,4,5-Trichlorophenol	8.91	196	1338	0.7782	ug/ml#	84
50)	2-Chloronaphthalene	9.09	162	4472	0.8719	ug/ml	98
51)	2-Nitroaniline	9.58	65	1414	0.8069	ug/ml	92
52)	Dimethylphthalate	9.36	163	5115	0.8786	ug/ml#	89
53)	1,3-Dinitrobenzene	9.39	168	485	0.4687	ug/ml#	80
54)	2,6-Dinitrotoluene	9.42	165	920	0.6577	ug/ml	92
55)	Acenaphthylene	9.49	152	7354	0.8239	ug/ml	98
56)	3-Nitroaniline	9.58	138	1251	0.7607	ug/ml#	91
57)	2,4-Dinitrophenol	9.68	184	170	1.7950	ug/ml#	1
58)	Acenaphthene	9.66	154	5012	0.8876	ug/ml	95
59)	4-Nitrophenol	9.73	65	538	0.5203	ug/ml	84
60)	2,4-Dinitrotoluene	9.81	165	1073	0.5943	ug/ml#	76
61)	Dibenzofuran	9.83	168	7200	0.9643	ug/ml	93
62)	2,3,5,6-Tetrachlorophenol	9.91	232	898	0.6608	ug/ml#	84
63)	2,3,4,6-Tetrachlorophenol	9.95	232	946	0.6746	ug/ml#	83
64)	1-Naphthylamine	9.91	143	5260	0.8863	ug/ml	95
65)	2-Naphthylamine	9.98	143	5098	0.8191	ug/ml	97
66)	Diethylphthalate	10.06	149	5287	0.8780	ug/ml	97
67)	Fluorene	10.17	166	5387	0.8862	ug/ml	98
68)	4-Chlorophenyl Phenyl Ethe	10.18	204	2616	0.9185	ug/ml	92
69)	4-Nitroaniline	10.18	138	1130	0.6253	ug/ml	92
70)	5-Nitro-o-Toluidine	10.18	152	1269	0.6684	ug/ml#	75
71)	1,2-Diphenylhydrazine & Az	10.33	77	4358	0.8226	ug/ml	97
74)	4,6-Dinitro-2-Methylphenol	10.21	198	326	0.3176	ug/ml#	34
75)	Diphenylamine/n-Nitrosodip	10.29	169	4360	0.8355	ug/ml	98
76)	4-Bromophenyl Phenyl Ether	10.66	248	1364	0.8855	ug/ml	93
77)	Hexachlorobenzene	10.71	284	1350	0.8097	ug/ml#	80
78)	4-Aminobiphenyl	10.91	169	5515	0.7825	ug/ml	96
79)	Pentachlorophenol	10.90	266	649	0.5637	ug/ml#	38
80)	Phenanthrene	11.12	178	8839	0.9992	ug/ml	95
81)	Anthracene	11.16	178	7769	0.8604	ug/ml	97
82)	Carbazole	11.33	167	7016	0.8788	ug/ml	92
83)	Di-n-Butyl Phthalate	11.70	149	8154	0.8507	ug/ml#	91
84)	Methapyrilene	12.01	58	2329	1.8549	ug/ml#	82
85)	Fluoranthene	12.40	202	7363	0.8582	ug/ml	90
87)	Benzidine	12.58	184	4199	0.7009	ug/ml#	84
88)	Pyrene	12.69	202	7516	0.8635	ug/ml	92
90)	p-(Dimethylamino)azobenzen	13.10	225	963	0.5660	ug/ml	83
91)	Butyl Benzyl Phthalate	13.63	149	3296	0.7656	ug/ml	98
92)	3,3'-Dimethylbenzidine	13.59	212	8977	1.4434	ug/ml	96
93)	2-Acetylaminofluorene	13.96	181	1924	2.1891	ug/ml	99
94)	bis(2-Ethylhexyl)phthalate	14.62	149	4534	0.7839	ug/ml#	88
95)	3,3'-Dichlorobenzidine	14.44	252	2136	0.6774	ug/ml#	83
96)	Benzo[a]anthracene	14.53	228	7376	0.9195	ug/ml	96
97)	Chrysene	14.53	228	7376	0.9106	ug/ml	98
99)	Di-n-Octyl Phthalate	15.79	149	7394	2.1639	ug/ml#	47
100)	Benzo[b]fluoranthene	16.31	252	6304	0.7989	ug/ml#	85
101)	Benzo[k]fluoranthene	16.36	252	6399	0.7808	ug/ml	91

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80863.D Vial: 3
Acq On : 29 Jan 2021 9:41 am Operator: SCB
Sample : S1A0503-CAL9 Inst : MSD12
Misc : 1,1 0012173 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 09:58:05 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

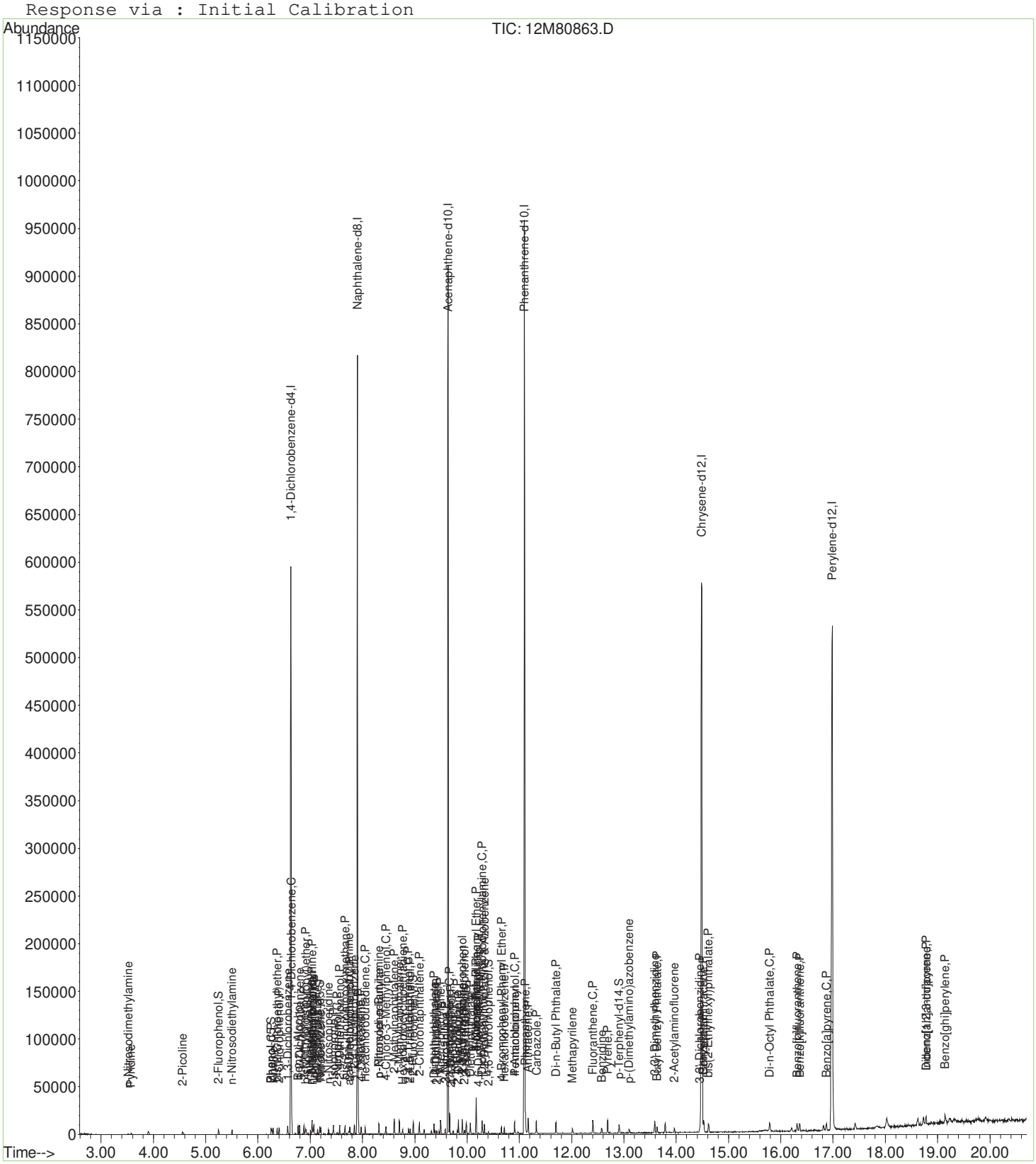
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
102) Benzo[a]pyrene	16.87	252	5147	0.7284	ug/ml#	84
103) Indeno[1,2,3-cd]pyrene	18.78	276	1698	0.2322	ug/ml#	61
104) Dibenz[ah]anthracene	18.78	278	5590	0.6881	ug/ml	89
105) Benzo[ghi]perylene	19.15	276	5828	0.7349	ug/ml	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80863.D Vial: 3
Acq On : 29 Jan 2021 9:41 am Operator: SCB
Sample : S1A0503-CAL9 Inst : MSD12
Misc : 1,1 0012173 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 9:58 2021 Quant Results File: MEGAMIX.RES

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80863.D Vial: 3
Acq On : 29 Jan 2021 9:41 am Operator: SCB
Sample : S1A0503-CAL9 Inst : MSD12
Misc : 1,1 0012173 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	100	0.00
2		n-Nitrosodimethylamine	0.715	0.000#	100.0#	100	0.03
3		Pyridine	1.193	0.000#	100.0#	100	0.05
4		2-Picoline	1.352	0.000#	100.0#	100	0.02
5		n-Nitrosomethylethylamine	0.506	0.000#	100.0#	0#	-4.70#
6	S	2-Fluorophenol	1.187	0.000#	100.0#	100	0.00
7		n-Nitrosodiethylamine	0.599	0.000#	100.0#	100	0.00
8	S	Phenol-d5	1.376	0.000#	100.0#	100	-0.01
9	C,P	Phenol	1.562	0.000#	100.0#	100	0.00
10		Aniline	1.794	0.000#	100.0#	100	0.00
11	P	bis(2-Chloroethyl)ether	0.826	0.000#	100.0#	100	0.00
12	P	2-Chlorophenol	1.285	0.000#	100.0#	100	0.00
13		1,3-Dichlorobenzene	1.434	0.000#	100.0#	100	0.00
14	C	1,4-Dichlorobenzene	1.490	0.000#	100.0#	100	0.00
15		Benzyl Alcohol	0.838	0.000#	100.0#	100	0.00
16		1,2-Dichlorobenzene	1.392	0.000#	100.0#	100	0.00
17	P	2-Methylphenol	1.010	0.000#	100.0#	100	0.00
18	P	bis(2-Chloroisopropyl)ether	1.451	0.000#	100.0#	100	0.00
19	P	3-,4-Methylphenol	1.223	0.000#	100.0#	100	-0.01
20		n-Nitrosopyrrolidine	0.619	0.000#	100.0#	100	-0.02
21	P	n-Nitrosodipropylamine	0.793	0.000#	100.0#	100	-0.02
22		n-Nitrosomorpholine	0.724	0.000#	100.0#	100	-0.01
23		o-Toluidine	1.992	0.000#	100.0#	100	0.00
24	P	Hexachloroethane	0.514	0.000#	100.0#	100	0.00
25	I	Naphthalene-d8	1.000	1.000	0.0	100	0.00
26	S	Nitrobenzene-d5	0.307	0.000#	100.0#	100	-0.01
27	P	Nitrobenzene	0.306	0.000#	100.0#	100	0.00
28		n-Nitrosopiperidine	0.164	0.000#	100.0#	100	-0.01
29	P	Isophorone	0.565	0.000#	100.0#	100	-0.01
30	C,P	2-Nitrophenol	0.181	0.000#	100.0#	100	0.00
31	P	2,4-Dimethylphenol	0.297	0.000#	100.0#	100	0.00
32	P	bis(2-Chloroethoxy)methane	0.342	0.000#	100.0#	100	0.00
33		Benzoic Acid	0.222	0.000#	100.0#	0#	-7.68#
34	C,P	2,4-Dichlorophenol	0.266	0.000#	100.0#	100	0.00
35		a,a-Dimethylphenethylamine	0.742	0.000#	100.0#	100	-0.12
36		1,2,4-Trichlorobenzene	0.289	0.000#	100.0#	100	0.00
37	P	Naphthalene	0.988	0.000#	100.0#	100	0.00
38	P	4-Chloroaniline	0.113	0.000#	100.0#	100	0.00
39	C,P	Hexachlorobutadiene	0.149	0.129	13.4	100	0.00
40		n-Nitrosodi-n-Butylamine	0.189	0.000#	100.0#	100	0.00
41		p-Phenylenediamine	0.359	0.000#	100.0#	100	-0.02
42	C,P	4-Chloro-3-Methylphenol	0.274	0.000#	100.0#	100	0.00
43	P	2-Methylnaphthalene	0.670	0.000#	100.0#	100	0.00
44		1-Methylnaphthalene	0.622	0.000#	100.0#	100	0.00
45	I	Acenaphthene-d10	1.000	1.000	0.0	100	0.00
46	P	Hexachlorocyclopentadiene	0.342	0.000#	100.0#	100	0.00
47	C,P	2,4,6-Trichlorophenol	0.331	0.000#	100.0#	100	0.00
48	P	2,4,5-Trichlorophenol	0.354	0.000#	100.0#	100	0.00
49	S	2-Fluorobiphenyl	1.257	0.000#	100.0#	100	0.00
50	P	2-Chloronaphthalene	1.055	0.000#	100.0#	100	0.00
51	P	2-Nitroaniline	0.361	0.000#	100.0#	100	0.00
52	P	Dimethylphthalate	1.198	0.000#	100.0#	100	-0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80863.D Vial: 3
Acq On : 29 Jan 2021 9:41 am Operator: SCB
Sample : S1A0503-CAL9 Inst : MSD12
Misc : 1,1 0012173 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
53		1,3-Dinitrobenzene	0.213	0.000#	100.0#	100	-0.01
54	P	2,6-Dinitrotoluene	0.288	0.000#	100.0#	100	-0.01
55	P	Acenaphthylene	1.837	0.000#	100.0#	100	0.00
56	P	3-Nitroaniline	0.338	0.000#	100.0#	100	-0.01
57	P	2,4-Dinitrophenol	0.178	0.000#	100.0#	100	-0.01
58	C,P	Acenaphthene	1.162	0.000#	100.0#	100	0.00
59	P	4-Nitrophenol	0.213	0.000#	100.0#	100	-0.02
60	P	2,4-Dinitrotoluene	0.372	0.000#	100.0#	100	-0.02
61	P	Dibenzofuran	1.536	0.000#	100.0#	100	0.00
62		2,3,5,6-Tetrachlorophenol	0.280	0.000#	100.0#	100	0.00
63		2,3,4,6-Tetrachlorophenol	0.289	0.000#	100.0#	100	0.00
64		1-Naphthylamine	1.221	0.000#	100.0#	100	0.00
65		2-Naphthylamine	1.281	0.000#	100.0#	100	-0.01
66	P	Diethylphthalate	1.239	0.000#	100.0#	100	-0.01
67	P	Fluorene	1.251	0.000#	100.0#	100	0.00
68	P	4-Chlorophenyl Phenyl Ether	0.586	0.000#	100.0#	100	0.00
69	P	4-Nitroaniline	0.372	0.000#	100.0#	100	-0.02
70		5-Nitro-o-Toluidine	0.391	0.000#	100.0#	100	-0.01
71		1,2-Diphenylhydrazine & Azo	1.090	0.000#	100.0#	100	-0.01
72	S	2,4,6-Tribromophenol	0.172	0.000#	100.0#	100	0.00
73	I	Phenanthrene-d10	1.000	1.000	0.0	100	0.00
74	P	4,6-Dinitro-2-Methylphenol	0.121	0.000#	100.0#	100	-0.01
75	C,P	Diphenylamine/n-Nitrosodiph	0.614	0.000#	100.0#	100	0.00
76	P	4-Bromophenyl Phenyl Ether	0.181	0.000#	100.0#	100	0.00
77	P	Hexachlorobenzene	0.196	0.000#	100.0#	100	0.00
78		4-Aminobiphenyl	0.830	0.000#	100.0#	100	0.00
79	C,P	Pentachlorophenol	0.136	0.000#	100.0#	100	0.00
80	P	Phenanthrene	1.041	0.000#	100.0#	100	0.00
81	P	Anthracene	1.063	0.000#	100.0#	100	-0.01
82	P	Carbazole	0.940	0.000#	100.0#	100	0.00
83	P	Di-n-Butyl Phthalate	1.128	0.000#	100.0#	100	0.00
84		Methapyrilene	0.453	0.000#	100.0#	100	0.00
85	C,P	Fluoranthene	1.010	0.000#	100.0#	100	0.00
86	I	Chrysene-d12	1.000	1.000	0.0	100	-0.01
87		Benzidine	0.880	0.000#	100.0#	100	-0.01
88	P	Pyrene	1.279	0.000#	100.0#	100	-0.01
89	S	p-Terphenyl-d14	0.959	0.000#	100.0#	100	0.00
90		p-(Dimethylamino)azobenzene	0.250	0.000#	100.0#	100	-0.01
91	P	Butyl Benzyl Phthalate	0.633	0.000#	100.0#	100	0.00
92		3,3'-Dimethylbenzidine	0.914	0.000#	100.0#	100	-0.02
93		2-Acetylaminofluorene	0.525	0.000#	100.0#	100	-0.02
94	P	bis(2-Ethylhexyl)phthalate	0.850	0.666	21.6	100	0.00
95	P	3,3'-Dichlorobenzidine	0.463	0.000#	100.0#	100	-0.01
96	P	Benzo[a]anthracene	1.179	0.000#	100.0#	100	0.05
97	P	Chrysene	1.190	0.000#	100.0#	100	-0.02
98	I	Perylene-d12	1.000	1.000	0.0	100	0.00
99	C,P	Di-n-Octyl Phthalate	1.250	0.000#	100.0#	100	-0.01
100	P	Benzo[b]fluoranthene	0.994	0.000#	100.0#	100	-0.02
101	P	Benzo[k]fluoranthene	1.032	0.000#	100.0#	100	-0.02
102	C,P	Benzo[a]pyrene	0.890	0.000#	100.0#	100	-0.02
103	P	Indeno[1,2,3-cd]pyrene	0.921	0.000#	100.0#	100	0.03

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80863.D Vial: 3
Acq On : 29 Jan 2021 9:41 am Operator: SCB
Sample : S1A0503-CAL9 Inst : MSD12
Misc : 1,1 0012173 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
104	P	Dibenz[ah]anthracene	1.023	0.000#	100.0#	100	-0.02
105	P	Benzo[ghi]perylene	0.999	0.000#	100.0#	100	-0.03

(#) = Out of Range SPCC's out = 58 CCC's out = 12

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80863.D Vial: 3
Acq On : 29 Jan 2021 9:41 am Operator: SCB
Sample : S1A0503-CAL9 Inst : MSD12
Misc : 1,1 0012173 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	100	0.00
2		n-Nitrosodimethylamine	-1.000	0.355	0.0	100	0.03
3		Pyridine	-1.000	0.224	0.0	100	0.05
4		2-Picoline	-1.000	0.814	0.0	100	0.02
5		n-Nitrosomethylethylamine	-1.000	0.000	0.0	0	-4.70#
6	S	2-Fluorophenol	-1.000	0.828	0.0	100	0.00
7		n-Nitrosodiethylamine	-1.000	0.749	0.0	100	0.00
8	S	Phenol-d5	-1.000	0.925	0.0	100	-0.01
9	C,P	Phenol	-1.000	0.814	0.0	100	0.00
10		Aniline	-1.000	0.902	0.0	100	0.00
11	P	bis(2-Chloroethyl)ether	-1.000	0.827	0.0	100	0.00
12	P	2-Chlorophenol	-1.000	0.854	0.0	100	0.00
13		1,3-Dichlorobenzene	-1.000	0.891	0.0	100	0.00
14	C	1,4-Dichlorobenzene	-1.000	0.999	0.0	100	0.00
15		Benzyl Alcohol	-1.000	0.795	0.0	100	0.00
16		1,2-Dichlorobenzene	-1.000	0.947	0.0	100	0.00
17	P	2-Methylphenol	-1.000	0.830	0.0	100	0.00
18	P	bis(2-Chloroisopropyl)ether	-1.000	1.012	0.0	100	0.00
19	P	3-,4-Methylphenol	-1.000	0.886	0.0	100	-0.01
20		n-Nitrosopyrrolidine	-1.000	0.753	0.0	100	-0.02
21	P	n-Nitrosodipropylamine	-1.000	0.951	0.0	100	-0.02
22		n-Nitrosomorpholine	-1.000	0.866	0.0	100	-0.01
23		o-Toluidine	-1.000	0.974	0.0	100	0.00
24	P	Hexachloroethane	-1.000	0.630	0.0	100	0.00
25	I	Naphthalene-d8	40.000	40.000	0.0	100	0.00
26	S	Nitrobenzene-d5	-1.000	0.901	0.0	100	-0.01
27	P	Nitrobenzene	-1.000	0.860	0.0	100	0.00
28		n-Nitrosopiperidine	-1.000	0.740	0.0	100	-0.01
29	P	Isophorone	-1.000	0.866	0.0	100	-0.01
30	C,P	2-Nitrophenol	-1.000	0.685	0.0	100	0.00
31	P	2,4-Dimethylphenol	-1.000	0.759	0.0	100	0.00
32	P	bis(2-Chloroethoxy)methane	-1.000	0.924	0.0	100	0.00
33		Benzoic Acid	-1.000	0.000	0.0	0	-7.68#
34	C,P	2,4-Dichlorophenol	-1.000	0.759	0.0	100	0.00
35		a,a-Dimethylphenethylamine	-1.000	0.790	0.0	100	-0.12
36		1,2,4-Trichlorobenzene	-1.000	0.944	0.0	100	0.00
37	P	Naphthalene	-1.000	1.046	0.0	100	0.00
38	P	4-Chloroaniline	-1.000	0.633	0.0	100	0.00
39	C,P	Hexachlorobutadiene	1.000	0.860	14.0	100	0.00
40		n-Nitrosodi-n-Butylamine	-1.000	0.803	0.0	100	0.00
41		p-Phenylenediamine	-1.000	0.817	0.0	100	-0.02
42	C,P	4-Chloro-3-Methylphenol	-1.000	0.750	0.0	100	0.00
43	P	2-Methylnaphthalene	-1.000	0.926	0.0	100	0.00
44		1-Methylnaphthalene	-1.000	0.864	0.0	100	0.00
45	I	Acenaphthene-d10	40.000	40.000	0.0	100	0.00
46	P	Hexachlorocyclopentadiene	-1.000	0.805	0.0	100	0.00
47	C,P	2,4,6-Trichlorophenol	-1.000	0.694	0.0	100	0.00
48	P	2,4,5-Trichlorophenol	-1.000	0.778	0.0	100	0.00
49	S	2-Fluorobiphenyl	-1.000	0.881	0.0	100	0.00
50	P	2-Chloronaphthalene	-1.000	0.872	0.0	100	0.00
51	P	2-Nitroaniline	-1.000	0.807	0.0	100	0.00
52	P	Dimethylphthalate	-1.000	0.879	0.0	100	-0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80863.D Vial: 3
Acq On : 29 Jan 2021 9:41 am Operator: SCB
Sample : S1A0503-CAL9 Inst : MSD12
Misc : 1,1 0012173 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
53		1,3-Dinitrobenzene	-1.000	0.469	0.0	100	-0.01
54	P	2,6-Dinitrotoluene	-1.000	0.658	0.0	100	-0.01
55	P	Acenaphthylene	-1.000	0.824	0.0	100	0.00
56	P	3-Nitroaniline	-1.000	0.761	0.0	100	-0.01
57	P	2,4-Dinitrophenol	-1.000	1.795	0.0	100	-0.01
58	C,P	Acenaphthene	-1.000	0.888	0.0	100	0.00
59	P	4-Nitrophenol	-1.000	0.520	0.0	100	-0.02
60	P	2,4-Dinitrotoluene	-1.000	0.594	0.0	100	-0.02
61	P	Dibenzofuran	-1.000	0.964	0.0	100	0.00
62		2,3,5,6-Tetrachlorophenol	-1.000	0.661	0.0	100	0.00
63		2,3,4,6-Tetrachlorophenol	-1.000	0.675	0.0	100	0.00
64		1-Naphthylamine	-1.000	0.886	0.0	100	0.00
65		2-Naphthylamine	-1.000	0.819	0.0	100	-0.01
66	P	Diethylphthalate	-1.000	0.878	0.0	100	-0.01
67	P	Fluorene	-1.000	0.886	0.0	100	0.00
68	P	4-Chlorophenyl Phenyl Ether	-1.000	0.918	0.0	100	0.00
69	P	4-Nitroaniline	-1.000	0.625	0.0	100	-0.02
70		5-Nitro-o-Toluidine	-1.000	0.668	0.0	100	-0.01
71		1,2-Diphenylhydrazine & Azo	-1.000	0.823	0.0	100	-0.01
72	S	2,4,6-Tribromophenol	-1.000	0.537	0.0	100	0.00
73	I	Phenanthrene-d10	40.000	40.000	0.0	100	0.00
74	P	4,6-Dinitro-2-Methylphenol	-1.000	0.318	0.0	100	-0.01
75	C,P	Diphenylamine/n-Nitrosodiph	-1.000	0.836	0.0	100	0.00
76	P	4-Bromophenyl Phenyl Ether	-1.000	0.885	0.0	100	0.00
77	P	Hexachlorobenzene	-1.000	0.810	0.0	100	0.00
78		4-Aminobiphenyl	-1.000	0.782	0.0	100	0.00
79	C,P	Pentachlorophenol	-1.000	0.564	0.0	100	0.00
80	P	Phenanthrene	-1.000	0.999	0.0	100	0.00
81	P	Anthracene	-1.000	0.860	0.0	100	-0.01
82	P	Carbazole	-1.000	0.879	0.0	100	0.00
83	P	Di-n-Butyl Phthalate	-1.000	0.851	0.0	100	0.00
84		Methapyrilene	-1.000	1.855	0.0	100	0.00
85	C,P	Fluoranthene	-1.000	0.858	0.0	100	0.00
86	I	Chrysene-d12	40.000	40.000	0.0	100	-0.01
87		Benzidine	-1.000	0.701	0.0	100	-0.01
88	P	Pyrene	-1.000	0.863	0.0	100	-0.01
89	S	p-Terphenyl-d14	-1.000	0.862	0.0	100	0.00
90		p-(Dimethylamino)azobenzene	-1.000	0.566	0.0	100	-0.01
91	P	Butyl Benzyl Phthalate	-1.000	0.766	0.0	100	0.00
92		3,3'-Dimethylbenzidine	-1.000	1.443	0.0	100	-0.02
93		2-Acetylaminofluorene	-1.000	2.189	0.0	100	-0.02
94	P	bis(2-Ethylhexyl)phthalate	1.000	0.784	21.6	100	0.00
95	P	3,3'-Dichlorobenzidine	-1.000	0.677	0.0	100	-0.01
96	P	Benzo[a]anthracene	-1.000	0.920	0.0	100	0.05
97	P	Chrysene	-1.000	0.911	0.0	100	-0.02
98	I	Perylene-d12	40.000	40.000	0.0	100	0.00
99	C,P	Di-n-Octyl Phthalate	-1.000	2.164	0.0	100	-0.01
100	P	Benzo[b]fluoranthene	-1.000	0.799	0.0	100	-0.02
101	P	Benzo[k]fluoranthene	-1.000	0.781	0.0	100	-0.02
102	C,P	Benzo[a]pyrene	-1.000	0.728	0.0	100	-0.02
103	P	Indeno[1,2,3-cd]pyrene	-1.000	0.232	0.0	100	0.03

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80863.D Vial: 3
Acq On : 29 Jan 2021 9:41 am Operator: SCB
Sample : S1A0503-CAL9 Inst : MSD12
Misc : 1,1 0012173 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
104	P	Dibenz[ah]anthracene	-1.000	0.688	0.0	100	-0.02
105	P	Benzo[ghi]perylene	-1.000	0.735	0.0	100	-0.03

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80864.D Vial: 4
Acq On : 29 Jan 2021 10:12 am Operator: SCB
Sample : S1A0503-CAL8 Inst : MSD12
Misc : 1,1 0012172 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 09:58:06 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.629	152	80587	40.0000	ug/ml	0.000
25) Naphthalene-d8	7.901	136	311900	40.0000	ug/ml	0.000
45) Acenaphthene-d10	9.637	164	173612	40.0000	ug/ml	0.000
73) Phenanthrene-d10	11.095	188	301604	40.0000	ug/ml	0.000
86) Chrysene-d12	14.488	240	242288	40.0000	ug/ml	0.000
98) Perylene-d12	16.977	264	293315	40.0000	ug/ml	-0.011
System Monitoring Compounds						
6) 2-Fluorophenol	5.245	112	6640	2.7764003	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 2.78%#			
8) Phenol-d5	6.250	99	7604	2.7437617	ug/ml	-0.01
Spiked Amount 100.000	Range 10 - 94		Recovery = 2.74%#			
26) Nitrobenzene-d5	7.179	82	6542	2.7335967	ug/ml	-0.01
Spiked Amount 50.000	Range 35 - 114		Recovery = 5.47%#			
49) 2-Fluorobiphenyl	8.969	172	14684	2.6918114	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 5.38%#			
72) 2,4,6-Tribromophenol	10.406	330	1656	2.2215826	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 2.22%#			
89) p-Terphenyl-d14	12.906	244	15401	2.6507556	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 5.30%#			
Target Compounds						Qvalue
2) n-Nitrosodimethylamine	3.50	74	3176	2.2038	ug/ml#	92
3) Pyridine	3.55	79	5587	2.3239	ug/ml#	85
4) 2-Picoline	4.55	93	7020	2.5780	ug/ml	95
5) n-Nitrosomethylethylamine	4.70	88	1580	3.1160	ug/ml#	88
7) n-Nitrosodiethylamine	5.50	102	3075	2.5471	ug/ml#	86
9) Phenol	6.27	94	8064	2.5631	ug/ml	99
10) Aniline	6.29	93	9650	2.6703	ug/ml#	99
11) bis(2-Chloroethyl)ether	6.37	63	4645	2.7921	ug/ml	97
12) 2-Chlorophenol	6.40	128	7344	2.8365	ug/ml	97
13) 1,3-Dichlorobenzene	6.57	146	7864	2.7211	ug/ml	99
14) 1,4-Dichlorobenzene	6.65	146	8890	2.9618	ug/ml	93
15) Benzyl Alcohol	6.77	108	4586	2.7170	ug/ml	97
16) 1,2-Dichlorobenzene	6.79	146	8230	2.9349	ug/ml	97
17) 2-Methylphenol	6.88	107	5555	2.7310	ug/ml	85
18) bis(2-Chloroisopropyl)ethe	6.92	45	8550	2.9240	ug/ml#	93
19) 3-,4-Methylphenol	7.04	108	6615	2.6851	ug/ml	98
20) n-Nitrosopyrrolidine	7.00	100	3396	2.7219	ug/ml	92
21) n-Nitrosodipropylamine	7.04	70	4484	2.8059	ug/ml	97
22) n-Nitrosomorpholine	7.05	56	4114	2.8220	ug/ml	95
23) o-Toluidine	7.07	106	11382	2.8361	ug/ml	99
24) Hexachloroethane	7.14	117	2745	2.6503	ug/ml	95
27) Nitrobenzene	7.20	77	6666	2.7921	ug/ml	99
28) n-Nitrosopiperidine	7.35	114	3587	2.8090	ug/ml	97
29) Isophorone	7.44	82	11663	2.6452	ug/ml	98
30) 2-Nitrophenol	7.52	139	3585	2.5409	ug/ml	94
31) 2,4-Dimethylphenol	7.56	122	6387	2.7622	ug/ml	97
32) bis(2-Chloroethoxy)methane	7.67	93	7506	2.8173	ug/ml	95
33) Benzoic Acid	7.60	105	1827	2.1393	ug/ml	93
34) 2,4-Dichlorophenol	7.76	162	5611	2.7065	ug/ml	96
35) a,a-Dimethylphenethylamine	7.76	58	13564	2.3436	ug/ml#	87
36) 1,2,4-Trichlorobenzene	7.85	180	6072	2.6926	ug/ml	97
37) Naphthalene	7.92	128	22600	2.9340	ug/ml	98
38) 4-Chloroaniline	7.97	65	2255	2.5543	ug/ml	84

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80864.D Vial: 4
Acq On : 29 Jan 2021 10:12 am Operator: SCB
Sample : S1A0503-CAL8 Inst : MSD12
Misc : 1,1 0012172 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 09:58:06 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39) Hexachlorobutadiene	8.05	225	3077	2.6396 ug/ml	93
40) n-Nitrosodi-n-Butylamine	8.31	84	3695	2.5054 ug/ml	97
41) p-Phenylenediamine	8.32	108	7181	2.5637 ug/ml	99
42) 4-Chloro-3-Methylphenol	8.45	107	5486	2.5686 ug/ml	98
43) 2-Methylnaphthalene	8.61	142	14056	2.6908 ug/ml	98
44) 1-Methylnaphthalene	8.70	142	13385	2.7618 ug/ml	98
46) Hexachlorocyclopentadiene	8.77	237	3668	2.4734 ug/ml#	95
47) 2,4,6-Trichlorophenol	8.88	196	3367	2.3435 ug/ml	91
48) 2,4,5-Trichlorophenol	8.91	196	3787	2.4660 ug/ml	93
50) 2-Chloronaphthalene	9.09	162	12717	2.7760 ug/ml	98
51) 2-Nitroaniline	9.58	65	4013	2.5641 ug/ml	91
52) Dimethylphthalate	9.36	163	13748	2.6440 ug/ml	95
53) 1,3-Dinitrobenzene	9.39	168	2045	2.2126 ug/ml#	83
54) 2,6-Dinitrotoluene	9.42	165	2867	2.2947 ug/ml	96
55) Acenaphthylene	9.49	152	21066	2.6425 ug/ml	99
56) 3-Nitroaniline	9.58	138	3301	2.2474 ug/ml#	93
57) 2,4-Dinitrophenol	9.68	184	1176	3.2626 ug/ml#	73
58) Acenaphthene	9.66	154	14263	2.8281 ug/ml	99
59) 4-Nitrophenol	9.73	65	2187	2.3682 ug/ml	87
60) 2,4-Dinitrotoluene	9.81	165	3627	2.2492 ug/ml	86
61) Dibenzofuran	9.83	168	18637	2.7948 ug/ml	99
62) 2,3,5,6-Tetrachlorophenol	9.91	232	2762	2.2757 ug/ml	95
63) 2,3,4,6-Tetrachlorophenol	9.95	232	2939	2.3467 ug/ml	97
64) 1-Naphthylamine	9.91	143	14197	2.6783 ug/ml	98
65) 2-Naphthylamine	9.98	143	14794	2.6613 ug/ml	99
66) Diethylphthalate	10.06	149	14474	2.6911 ug/ml	98
67) Fluorene	10.17	166	14576	2.6846 ug/ml	100
68) 4-Chlorophenyl Phenyl Ethe	10.18	204	7005	2.7536 ug/ml	99
69) 4-Nitroaniline	10.18	138	3778	2.3405 ug/ml	94
70) 5-Nitro-o-Toluidine	10.18	152	3870	2.2823 ug/ml	84
71) 1,2-Diphenylhydrazine & Az	10.33	77	12679	2.6797 ug/ml	97
74) 4,6-Dinitro-2-Methylphenol	10.21	198	1602	1.7585 ug/ml	83
75) Diphenylamine/n-Nitrosodip	10.29	169	12115	2.6157 ug/ml	98
76) 4-Bromophenyl Phenyl Ether	10.66	248	3545	2.5928 ug/ml	98
77) Hexachlorobenzene	10.71	284	3974	2.6853 ug/ml	93
78) 4-Aminobiphenyl	10.91	169	15274	2.4415 ug/ml	98
79) Pentachlorophenol	10.90	266	1928	1.8867 ug/ml	95
80) Phenanthrene	11.12	178	23422	2.9829 ug/ml	98
81) Anthracene	11.17	178	21916	2.7346 ug/ml	98
82) Carbazole	11.32	167	18954	2.6747 ug/ml	98
83) Di-n-Butyl Phthalate	11.70	149	20793	2.4441 ug/ml	98
84) Methapyrilene	12.01	58	6920	3.1369 ug/ml	93
85) Fluoranthene	12.40	202	20043	2.6320 ug/ml	97
87) Benzidine	12.58	184	12406	2.3265 ug/ml	94
88) Pyrene	12.69	202	20319	2.6228 ug/ml	99
90) p-(Dimethylamino)azobenzen	13.10	225	3484	2.3006 ug/ml	99
91) Butyl Benzyl Phthalate	13.63	149	9473	2.4724 ug/ml	96
92) 3,3'-Dimethylbenzidine	13.59	212	25210	4.5542 ug/ml	99
93) 2-Acetylaminofluorene	13.96	181	5953	3.3527 ug/ml	98
94) bis(2-Ethylhexyl)phthalate	14.62	149	12744	2.4756 ug/ml#	95
95) 3,3'-Dichlorobenzidine	14.44	252	6576	2.3431 ug/ml	98
96) Benzo[a]anthracene	14.47	228	19276	2.6999 ug/ml	96
97) Chrysene	14.52	228	20623	2.8605 ug/ml	98
99) Di-n-Octyl Phthalate	15.79	149	19420	3.3851 ug/ml#	92

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80864.D Vial: 4
Acq On : 29 Jan 2021 10:12 am Operator: SCB
Sample : S1A0503-CAL8 Inst : MSD12
Misc : 1,1 0012172 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 09:58:06 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

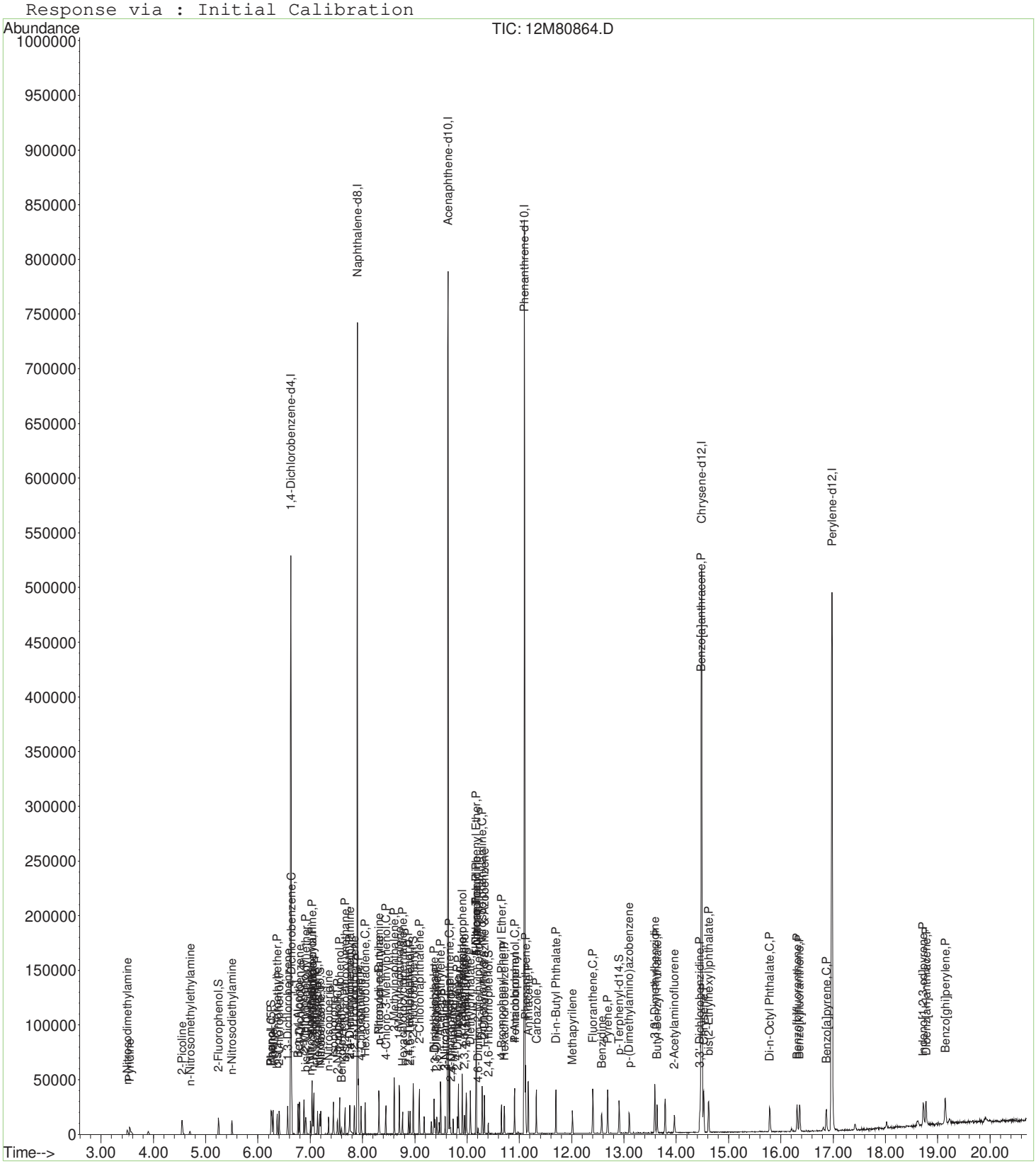
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
100) Benzo[b]fluoranthene	16.31	252	17569	2.4108	ug/ml	98
101) Benzo[k]fluoranthene	16.36	252	18148	2.3976	ug/ml	99
102) Benzo[a]pyrene	16.87	252	15332	2.3492	ug/ml	94
103) Indeno[1,2,3-cd]pyrene	18.72	276	15754	2.3331	ug/ml	96
104) Dibenz[ah]anthracene	18.78	278	16479	2.1964	ug/ml	96
105) Benzo[ghi]perylene	19.15	276	17702	2.4168	ug/ml	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80864.D Vial: 4
Acq On : 29 Jan 2021 10:12 am Operator: SCB
Sample : S1A0503-CAL8 Inst : MSD12
Misc : 1,1 0012172 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 9:58 2021 Quant Results File: MEGAMIX.RES

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80864.D Vial: 4
Acq On : 29 Jan 2021 10:12 am Operator: SCB
Sample : S1A0503-CAL8 Inst : MSD12
Misc : 1,1 0012172 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	100	0.00
2		n-Nitrosodimethylamine	0.715	0.000#	100.0#	100	0.01
3		Pyridine	1.193	0.924	22.5	100	0.02
4		2-Picoline	1.352	1.161	14.1	100	0.01
5		n-Nitrosomethylethylamine	0.506	0.261	48.4#	100	0.00
6	S	2-Fluorophenol	1.187	1.099	7.4	100	0.00
7		n-Nitrosodiethylamine	0.599	0.509	15.0	100	0.00
8	S	Phenol-d5	1.376	1.258	8.6	100	-0.01
9	C,P	Phenol	1.562	1.334	14.6	100	0.00
10		Aniline	1.794	1.597	11.0	100	0.00
11	P	bis(2-Chloroethyl)ether	0.826	0.769	6.9	100	0.00
12	P	2-Chlorophenol	1.285	1.215	5.4	100	0.00
13		1,3-Dichlorobenzene	1.434	1.301	9.3	100	0.00
14	C	1,4-Dichlorobenzene	1.490	1.471	1.3	100	0.00
15		Benzyl Alcohol	0.838	0.759	9.4	100	0.00
16		1,2-Dichlorobenzene	1.392	1.362	2.2	100	0.00
17	P	2-Methylphenol	1.010	0.919	9.0	100	0.00
18	P	bis(2-Chloroisopropyl)ether	1.451	1.415	2.5	100	0.00
19	P	3-,4-Methylphenol	1.223	1.094	10.5	100	-0.01
20		n-Nitrosopyrrolidine	0.619	0.562	9.2	100	-0.02
21	P	n-Nitrosodipropylamine	0.793	0.742	6.4	100	-0.02
22		n-Nitrosomorpholine	0.724	0.681	5.9	100	-0.01
23		o-Toluidine	1.992	1.883	5.5	100	0.00
24	P	Hexachloroethane	0.514	0.454	11.7	100	0.00
25	I	Naphthalene-d8	1.000	1.000	0.0	100	0.00
26	S	Nitrobenzene-d5	0.307	0.280	8.8	100	-0.01
27	P	Nitrobenzene	0.306	0.285	6.9	100	0.00
28		n-Nitrosopiperidine	0.164	0.153	6.7	100	-0.01
29	P	Isophorone	0.565	0.499	11.7	100	-0.01
30	C,P	2-Nitrophenol	0.181	0.153	15.5	100	0.00
31	P	2,4-Dimethylphenol	0.297	0.273	8.1	100	0.00
32	P	bis(2-Chloroethoxy)methane	0.342	0.321	6.1	100	0.00
33		Benzoic Acid	0.222	0.000#	100.0#	100	-0.07
34	C,P	2,4-Dichlorophenol	0.266	0.240	9.8	100	0.00
35		a,a-Dimethylphenethylamine	0.742	0.580	21.8	100	-0.10
36		1,2,4-Trichlorobenzene	0.289	0.260	10.0	100	0.00
37	P	Naphthalene	0.988	0.966	2.2	100	0.00
38	P	4-Chloroaniline	0.113	0.096	15.0	100	0.00
39	C,P	Hexachlorobutadiene	0.149	0.132	11.4	100	0.00
40		n-Nitrosodi-n-Butylamine	0.189	0.158	16.4	100	0.00
41		p-Phenylenediamine	0.359	0.000#	100.0#	100	-0.02
42	C,P	4-Chloro-3-Methylphenol	0.274	0.235	14.2	100	0.00
43	P	2-Methylnaphthalene	0.670	0.601	10.3	100	0.00
44		1-Methylnaphthalene	0.622	0.572	8.0	100	0.00
45	I	Acenaphthene-d10	1.000	1.000	0.0	100	0.00
46	P	Hexachlorocyclopentadiene	0.342	0.282	17.5	100	0.00
47	C,P	2,4,6-Trichlorophenol	0.331	0.259	21.8#	100	0.00
48	P	2,4,5-Trichlorophenol	0.354	0.291	17.8	100	0.00
49	S	2-Fluorobiphenyl	1.257	1.128	10.3	100	0.00
50	P	2-Chloronaphthalene	1.055	0.977	7.4	100	0.00
51	P	2-Nitroaniline	0.361	0.000#	100.0#	100	0.00
52	P	Dimethylphthalate	1.198	1.056	11.9	100	-0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80864.D Vial: 4
Acq On : 29 Jan 2021 10:12 am Operator: SCB
Sample : S1A0503-CAL8 Inst : MSD12
Misc : 1,1 0012172 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
53		1,3-Dinitrobenzene	0.213	0.157	26.3	100	-0.01
54	P	2,6-Dinitrotoluene	0.288	0.220	23.6	100	0.00
55	P	Acenaphthylene	1.837	1.618	11.9	100	0.00
56	P	3-Nitroaniline	0.338	0.000#	100.0#	100	-0.01
57	P	2,4-Dinitrophenol	0.178	0.000#	100.0#	100	-0.01
58	C,P	Acenaphthene	1.162	1.095	5.8	100	0.00
59	P	4-Nitrophenol	0.213	0.168	21.1	100	-0.02
60	P	2,4-Dinitrotoluene	0.372	0.279	25.0	100	-0.02
61	P	Dibenzofuran	1.536	1.431	6.8	100	0.00
62		2,3,5,6-Tetrachlorophenol	0.280	0.212	24.3	100	0.00
63		2,3,4,6-Tetrachlorophenol	0.289	0.226	21.8	100	0.00
64		1-Naphthylamine	1.221	1.090	10.7	100	0.00
65		2-Naphthylamine	1.281	1.136	11.3	100	-0.01
66	P	Diethylphthalate	1.239	1.112	10.3	100	-0.01
67	P	Fluorene	1.251	1.119	10.6	100	0.00
68	P	4-Chlorophenyl Phenyl Ether	0.586	0.538	8.2	100	0.00
69	P	4-Nitroaniline	0.372	0.000#	100.0#	100	-0.02
70		5-Nitro-o-Toluidine	0.391	0.297	24.0	100	-0.01
71		1,2-Diphenylhydrazine & Azo	1.090	0.974	10.6	100	0.00
72	S	2,4,6-Tribromophenol	0.172	0.127	26.2	100	0.00
73	I	Phenanthrene-d10	1.000	1.000	0.0	100	0.00
74	P	4,6-Dinitro-2-Methylphenol	0.121	0.000#	100.0#	100	-0.02
75	C,P	Diphenylamine/n-Nitrosodiph	0.614	0.536	12.7	100	0.00
76	P	4-Bromophenyl Phenyl Ether	0.181	0.157	13.3	100	0.00
77	P	Hexachlorobenzene	0.196	0.176	10.2	100	0.00
78		4-Aminobiphenyl	0.830	0.675	18.7	100	0.00
79	C,P	Pentachlorophenol	0.136	0.000#	100.0#	100	0.00
80	P	Phenanthrene	1.041	1.035	0.6	100	0.00
81	P	Anthracene	1.063	0.969	8.8	100	0.00
82	P	Carbazole	0.940	0.838	10.9	100	0.00
83	P	Di-n-Butyl Phthalate	1.128	0.919	18.5	100	0.00
84		Methapyrilene	0.453	0.306	32.5	100	0.00
85	C,P	Fluoranthene	1.010	0.886	12.3	100	0.00
86	I	Chrysene-d12	1.000	1.000	0.0	100	0.00
87		Benzidine	0.880	0.683	22.4	100	-0.01
88	P	Pyrene	1.279	1.118	12.6	100	-0.01
89	S	p-Terphenyl-d14	0.959	0.848	11.6	100	0.00
90		p-(Dimethylamino)azobenzene	0.250	0.192	23.2	100	0.00
91	P	Butyl Benzyl Phthalate	0.633	0.521	17.7	100	0.00
92		3,3'-Dimethylbenzidine	0.914	0.694	24.1	100	-0.02
93		2-Acetylaminofluorene	0.525	0.328	37.5	100	-0.02
94	P	bis(2-Ethylhexyl)phthalate	0.850	0.701	17.5	100	0.00
95	P	3,3'-Dichlorobenzidine	0.463	0.362	21.8	100	-0.01
96	P	Benzo[a]anthracene	1.179	1.061	10.0	100	0.00
97	P	Chrysene	1.190	1.135	4.6	100	-0.02
98	I	Perylene-d12	1.000	1.000	0.0	100	-0.01
99	C,P	Di-n-Octyl Phthalate	1.250	0.883	29.4#	100	-0.01
100	P	Benzo[b]fluoranthene	0.994	0.799	19.6	100	-0.02
101	P	Benzo[k]fluoranthene	1.032	0.825	20.1	100	-0.02
102	C,P	Benzo[a]pyrene	0.890	0.697#	21.7#	100	-0.02
103	P	Indeno[1,2,3-cd]pyrene	0.921	0.716	22.3	100	-0.03

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80864.D Vial: 4
Acq On : 29 Jan 2021 10:12 am Operator: SCB
Sample : S1A0503-CAL8 Inst : MSD12
Misc : 1,1 0012172 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
104	P	Dibenz[ah]anthracene	1.023	0.749	26.8	100	-0.02
105	P	Benzo[ghi]perylene	0.999	0.805	19.4	100	-0.03

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80864.D Vial: 4
Acq On : 29 Jan 2021 10:12 am Operator: SCB
Sample : S1A0503-CAL8 Inst : MSD12
Misc : 1,1 0012172 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	100	0.00
2		n-Nitrosodimethylamine	-1.000	2.204	0.0	100	0.01
3		Pyridine	3.000	2.324	22.5	100	0.02
4		2-Picoline	3.000	2.578	14.1	100	0.01
5		n-Nitrosomethylethylamine	3.000	3.116	-3.9	100	0.00
6	S	2-Fluorophenol	3.000	2.776	7.5	100	0.00
7		n-Nitrosodiethylamine	3.000	2.547	15.1	100	0.00
8	S	Phenol-d5	3.000	2.744	8.5	100	-0.01
9	C,P	Phenol	3.000	2.563	14.6	100	0.00
10		Aniline	3.000	2.670	11.0	100	0.00
11	P	bis(2-Chloroethyl)ether	3.000	2.792	6.9	100	0.00
12	P	2-Chlorophenol	3.000	2.836	5.5	100	0.00
13		1,3-Dichlorobenzene	3.000	2.721	9.3	100	0.00
14	C	1,4-Dichlorobenzene	3.000	2.962	1.3	100	0.00
15		Benzyl Alcohol	3.000	2.717	9.4	100	0.00
16		1,2-Dichlorobenzene	3.000	2.935	2.2	100	0.00
17	P	2-Methylphenol	3.000	2.731	9.0	100	0.00
18	P	bis(2-Chloroisopropyl)ether	3.000	2.924	2.5	100	0.00
19	P	3-,4-Methylphenol	3.000	2.685	10.5	100	-0.01
20		n-Nitrosopyrrolidine	3.000	2.722	9.3	100	-0.02
21	P	n-Nitrosodipropylamine	3.000	2.806	6.5	100	-0.02
22		n-Nitrosomorpholine	3.000	2.822	5.9	100	-0.01
23		o-Toluidine	3.000	2.836	5.5	100	0.00
24	P	Hexachloroethane	3.000	2.650	11.7	100	0.00
25	I	Naphthalene-d8	40.000	40.000	0.0	100	0.00
26	S	Nitrobenzene-d5	3.000	2.734	8.9	100	-0.01
27	P	Nitrobenzene	3.000	2.792	6.9	100	0.00
28		n-Nitrosopiperidine	3.000	2.809	6.4	100	-0.01
29	P	Isophorone	3.000	2.645	11.8	100	-0.01
30	C,P	2-Nitrophenol	3.000	2.541	15.3	100	0.00
31	P	2,4-Dimethylphenol	3.000	2.762	7.9	100	0.00
32	P	bis(2-Chloroethoxy)methane	3.000	2.817	6.1	100	0.00
33		Benzoic Acid	-1.000	2.139	0.0	100	-0.07
34	C,P	2,4-Dichlorophenol	3.000	2.707	9.8	100	0.00
35		a,a-Dimethylphenethylamine	3.000	2.344	21.9	100	-0.10
36		1,2,4-Trichlorobenzene	3.000	2.693	10.2	100	0.00
37	P	Naphthalene	3.000	2.934	2.2	100	0.00
38	P	4-Chloroaniline	3.000	2.554	14.9	100	0.00
39	C,P	Hexachlorobutadiene	3.000	2.640	12.0	100	0.00
40		n-Nitrosodi-n-Butylamine	3.000	2.505	16.5	100	0.00
41		p-Phenylenediamine	-1.000	2.564	0.0	100	-0.02
42	C,P	4-Chloro-3-Methylphenol	3.000	2.569	14.4	100	0.00
43	P	2-Methylnaphthalene	3.000	2.691	10.3	100	0.00
44		1-Methylnaphthalene	3.000	2.762	7.9	100	0.00
45	I	Acenaphthene-d10	40.000	40.000	0.0	100	0.00
46	P	Hexachlorocyclopentadiene	3.000	2.473	17.6	100	0.00
47	C,P	2,4,6-Trichlorophenol	3.000	2.343	21.9#	100	0.00
48	P	2,4,5-Trichlorophenol	3.000	2.466	17.8	100	0.00
49	S	2-Fluorobiphenyl	3.000	2.692	10.3	100	0.00
50	P	2-Chloronaphthalene	3.000	2.776	7.5	100	0.00
51	P	2-Nitroaniline	-1.000	2.564	0.0	100	0.00
52	P	Dimethylphthalate	3.000	2.644	11.9	100	-0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80864.D Vial: 4
Acq On : 29 Jan 2021 10:12 am Operator: SCB
Sample : S1A0503-CAL8 Inst : MSD12
Misc : 1,1 0012172 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
53		1,3-Dinitrobenzene	3.000	2.213	26.2	100	-0.01
54	P	2,6-Dinitrotoluene	3.000	2.295	23.5	100	0.00
55	P	Acenaphthylene	3.000	2.643	11.9	100	0.00
56	P	3-Nitroaniline	-1.000	2.247	0.0	100	-0.01
57	P	2,4-Dinitrophenol	-1.000	3.263	0.0	100	-0.01
58	C,P	Acenaphthene	3.000	2.828	5.7	100	0.00
59	P	4-Nitrophenol	3.000	2.368	21.1	100	-0.02
60	P	2,4-Dinitrotoluene	3.000	2.249	25.0	100	-0.02
61	P	Dibenzofuran	3.000	2.795	6.8	100	0.00
62		2,3,5,6-Tetrachlorophenol	3.000	2.276	24.1	100	0.00
63		2,3,4,6-Tetrachlorophenol	3.000	2.347	21.8	100	0.00
64		1-Naphthylamine	3.000	2.678	10.7	100	0.00
65		2-Naphthylamine	3.000	2.661	11.3	100	-0.01
66	P	Diethylphthalate	3.000	2.691	10.3	100	-0.01
67	P	Fluorene	3.000	2.685	10.5	100	0.00
68	P	4-Chlorophenyl Phenyl Ether	3.000	2.754	8.2	100	0.00
69	P	4-Nitroaniline	-1.000	2.341	0.0	100	-0.02
70		5-Nitro-o-Toluidine	3.000	2.282	23.9	100	-0.01
71		1,2-Diphenylhydrazine & Azo	3.000	2.680	10.7	100	0.00
72	S	2,4,6-Tribromophenol	3.000	2.222	25.9	100	0.00
73	I	Phenanthrene-d10	40.000	40.000	0.0	100	0.00
74	P	4,6-Dinitro-2-Methylphenol	-1.000	1.758	0.0	100	-0.02
75	C,P	Diphenylamine/n-Nitrosodiph	3.000	2.616	12.8	100	0.00
76	P	4-Bromophenyl Phenyl Ether	3.000	2.593	13.6	100	0.00
77	P	Hexachlorobenzene	3.000	2.685	10.5	100	0.00
78		4-Aminobiphenyl	3.000	2.441	18.6	100	0.00
79	C,P	Pentachlorophenol	-1.000	1.887	0.0	100	0.00
80	P	Phenanthrene	3.000	2.983	0.6	100	0.00
81	P	Anthracene	3.000	2.735	8.8	100	0.00
82	P	Carbazole	3.000	2.675	10.8	100	0.00
83	P	Di-n-Butyl Phthalate	3.000	2.444	18.5	100	0.00
84		Methapyrilene	3.000	3.137	-4.6	100	0.00
85	C,P	Fluoranthene	3.000	2.632	12.3	100	0.00
86	I	Chrysene-d12	40.000	40.000	0.0	100	0.00
87		Benzidine	3.000	2.327	22.4	100	-0.01
88	P	Pyrene	3.000	2.623	12.6	100	-0.01
89	S	p-Terphenyl-d14	3.000	2.651	11.6	100	0.00
90		p-(Dimethylamino)azobenzene	3.000	2.301	23.3	100	0.00
91	P	Butyl Benzyl Phthalate	3.000	2.472	17.6	100	0.00
92		3,3'-Dimethylbenzidine	6.000	4.554	24.1	100	-0.02
93		2-Acetylaminofluorene	3.000	3.353	-11.8	100	-0.02
94	P	bis(2-Ethylhexyl)phthalate	3.000	2.476	17.5	100	0.00
95	P	3,3'-Dichlorobenzidine	3.000	2.343	21.9	100	-0.01
96	P	Benzo[a]anthracene	3.000	2.700	10.0	100	0.00
97	P	Chrysene	3.000	2.860	4.7	100	-0.02
98	I	Perylene-d12	40.000	40.000	0.0	100	-0.01
99	C,P	Di-n-Octyl Phthalate	3.000	3.385	-12.8	100	-0.01
100	P	Benzo[b]fluoranthene	3.000	2.411	19.6	100	-0.02
101	P	Benzo[k]fluoranthene	3.000	2.398	20.1	100	-0.02
102	C,P	Benzo[a]pyrene	3.000	2.349	21.7#	100	-0.02
103	P	Indeno[1,2,3-cd]pyrene	3.000	2.333	22.2	100	-0.03

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80864.D Vial: 4
Acq On : 29 Jan 2021 10:12 am Operator: SCB
Sample : S1A0503-CAL8 Inst : MSD12
Misc : 1,1 0012172 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
104	P	Dibenz[ah]anthracene	3.000	2.196	26.8	100	-0.02
105	P	Benzo[ghi]perylene	3.000	2.417	19.4	100	-0.03

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80865.D Vial: 5
Acq On : 29 Jan 2021 10:43 am Operator: SCB
Sample : S1A0503-CAL7 Inst : MSD12
Misc : 1,1 0012171 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 09:58:06 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.629	152	86831	40.0000	ug/ml	0.000
25) Naphthalene-d8	7.900	136	328407	40.0000	ug/ml	0.000
45) Acenaphthene-d10	9.637	164	184857	40.0000	ug/ml	0.000
73) Phenanthrene-d10	11.095	188	322586	40.0000	ug/ml	0.000
86) Chrysene-d12	14.487	240	265667	40.0000	ug/ml	0.000
98) Perylene-d12	16.982	264	315080	40.0000	ug/ml	0.000
System Monitoring Compounds						
6) 2-Fluorophenol	5.251	112	25858	10.0345781	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 10.03%#			
8) Phenol-d5	6.255	99	29885	10.0080101	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 10.01%			
26) Nitrobenzene-d5	7.185	82	25737	10.2137398	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 20.43%#			
49) 2-Fluorobiphenyl	8.969	172	59013	10.1599549	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 20.32%#			
72) 2,4,6-Tribromophenol	10.406	330	7739	9.7505883	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 9.75%#			
89) p-Terphenyl-d14	12.906	244	63634	9.9885924	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 19.98%#			
Target Compounds						Qvalue
2) n-Nitrosodimethylamine	3.49	74	14916	9.6056	ug/ml	96
3) Pyridine	3.53	79	26114	10.0809	ug/ml	99
4) 2-Picoline	4.54	93	30936	10.5438	ug/ml	97
5) n-Nitrosomethylethylamine	4.70	88	10519	10.1002	ug/ml	91
7) n-Nitrosodiethylamine	5.50	102	13586	10.4445	ug/ml	97
9) Phenol	6.27	94	34477	10.1705	ug/ml	97
10) Aniline	6.29	93	40639	10.4368	ug/ml#	100
11) bis(2-Chloroethyl)ether	6.37	63	18441	10.2878	ug/ml	98
12) 2-Chlorophenol	6.41	128	28208	10.1113	ug/ml	99
13) 1,3-Dichlorobenzene	6.57	146	32288	10.3689	ug/ml	98
14) 1,4-Dichlorobenzene	6.64	146	33338	10.3082	ug/ml	99
15) Benzyl Alcohol	6.77	108	18077	9.9397	ug/ml	99
16) 1,2-Dichlorobenzene	6.79	146	30720	10.1672	ug/ml	99
17) 2-Methylphenol	6.89	107	22230	10.1431	ug/ml	88
18) bis(2-Chloroisopropyl)ethe	6.92	45	32194	10.2181	ug/ml#	100
19) 3-,4-Methylphenol	7.03	108	26796	10.0945	ug/ml	98
20) n-Nitrosopyrrolidine	7.01	100	13657	10.1591	ug/ml	97
21) n-Nitrosodipropylamine	7.04	70	17879	10.3835	ug/ml	97
22) n-Nitrosomorpholine	7.05	56	16291	10.3712	ug/ml	98
23) o-Toluidine	7.07	106	45033	10.4143	ug/ml	99
24) Hexachloroethane	7.14	117	11510	10.3139	ug/ml	99
27) Nitrobenzene	7.20	77	25579	10.1755	ug/ml	98
28) n-Nitrosopiperidine	7.35	114	13520	10.0554	ug/ml	98
29) Isophorone	7.44	82	48197	10.3818	ug/ml	99
30) 2-Nitrophenol	7.52	139	14882	10.0176	ug/ml	99
31) 2,4-Dimethylphenol	7.56	122	25113	10.3149	ug/ml	99
32) bis(2-Chloroethoxy)methane	7.67	93	28571	10.1850	ug/ml	97
33) Benzoic Acid	7.62	105	13085	8.9605	ug/ml	98
34) 2,4-Dichlorophenol	7.76	162	22210	10.1748	ug/ml	97
35) a,a-Dimethylphenethylamine	7.81	58	55615m	9.1263	ug/ml	
36) 1,2,4-Trichlorobenzene	7.85	180	24391	10.2723	ug/ml	99
37) Naphthalene	7.92	128	84580	10.4285	ug/ml	99
38) 4-Chloroaniline	7.98	65	8563	9.2122	ug/ml	81

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80865.D Vial: 5
Acq On : 29 Jan 2021 10:43 am Operator: SCB
Sample : S1A0503-CAL7 Inst : MSD12
Misc : 1,1 0012171 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 09:58:06 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39) Hexachlorobutadiene	8.05	225	12391	10.0954 ug/ml	97
40) n-Nitrosodi-n-Butylamine	8.31	84	15480	9.9685 ug/ml	99
41) p-Phenylenediamine	8.32	108	30116	10.2112 ug/ml	97
42) 4-Chloro-3-Methylphenol	8.45	107	22303	9.9174 ug/ml	99
43) 2-Methylnaphthalene	8.61	142	56683	10.3056 ug/ml	100
44) 1-Methylnaphthalene	8.71	142	52200	10.2295 ug/ml	99
46) Hexachlorocyclopentadiene	8.77	237	15357	9.7257 ug/ml	99
47) 2,4,6-Trichlorophenol	8.88	196	15111	9.8776 ug/ml	96
48) 2,4,5-Trichlorophenol	8.91	196	16080	9.8339 ug/ml	100
50) 2-Chloronaphthalene	9.09	162	50039	10.2585 ug/ml	99
51) 2-Nitroaniline	9.58	65	16609	9.9669 ug/ml	96
52) Dimethylphthalate	9.37	163	56283	10.1657 ug/ml	99
53) 1,3-Dinitrobenzene	9.39	168	9303	9.4531 ug/ml	98
54) 2,6-Dinitrotoluene	9.42	165	13338	10.0261 ug/ml	97
55) Acenaphthylene	9.49	152	87468	10.3046 ug/ml	100
56) 3-Nitroaniline	9.58	138	14905	9.5303 ug/ml	98
57) 2,4-Dinitrophenol	9.68	184	6239	9.8106 ug/ml#	1
58) Acenaphthene	9.67	154	56662	10.5515 ug/ml	97
59) 4-Nitrophenol	9.73	65	9296	9.4538 ug/ml	97
60) 2,4-Dinitrotoluene	9.82	165	16733	9.7452 ug/ml	98
61) Dibenzofuran	9.83	168	72277	10.1791 ug/ml	100
62) 2,3,5,6-Tetrachlorophenol	9.91	232	12810	9.9124 ug/ml	99
63) 2,3,4,6-Tetrachlorophenol	9.95	232	13189	9.8905 ug/ml	97
64) 1-Naphthylamine	9.91	143	57415	10.1727 ug/ml	99
65) 2-Naphthylamine	9.99	143	60258	10.1806 ug/ml	99
66) Diethylphthalate	10.06	149	58095	10.1443 ug/ml	99
67) Fluorene	10.17	166	58151	10.0588 ug/ml	100
68) 4-Chlorophenyl Phenyl Ethe	10.18	204	27298	10.0779 ug/ml	99
69) 4-Nitroaniline	10.18	138	16862	9.8108 ug/ml	98
70) 5-Nitro-o-Toluidine	10.18	152	17982	9.9598 ug/ml	98
71) 1,2-Diphenylhydrazine & Az	10.33	77	51252	10.1732 ug/ml	98
74) 4,6-Dinitro-2-Methylphenol	10.21	198	7823	8.0286 ug/ml	99
75) Diphenylamine/n-Nitrosodip	10.29	169	50981	10.2910 ug/ml	98
76) 4-Bromophenyl Phenyl Ether	10.66	248	14031	9.5948 ug/ml	99
77) Hexachlorobenzene	10.71	284	15886	10.0362 ug/ml	98
78) 4-Aminobiphenyl	10.91	169	65845	9.8405 ug/ml	99
79) Pentachlorophenol	10.90	266	9818	8.9828 ug/ml	98
80) Phenanthrene	11.12	178	86375	10.2848 ug/ml	99
81) Anthracene	11.17	178	87677	10.2285 ug/ml	99
82) Carbazole	11.32	167	75190	9.9204 ug/ml	99
83) Di-n-Butyl Phthalate	11.70	149	88654	9.7432 ug/ml	99
84) Methapyrilene	12.01	58	34555	9.8440 ug/ml	99
85) Fluoranthene	12.40	202	79659	9.7801 ug/ml	99
87) Benzidine	12.57	184	54540	9.3280 ug/ml	100
88) Pyrene	12.69	202	86559	10.1898 ug/ml	99
90) p-(Dimethylamino)azobenzen	13.10	225	15218	9.1647 ug/ml	98
91) Butyl Benzyl Phthalate	13.63	149	41134	9.7909 ug/ml	99
92) 3,3'-Dimethylbenzidine	13.59	212	116773	19.2386 ug/ml	99
93) 2-Acetylaminofluorene	13.97	181	31328	9.5591 ug/ml	99
94) bis(2-Ethylhexyl)phthalate	14.62	149	56083	9.9356 ug/ml	98
95) 3,3'-Dichlorobenzidine	14.45	252	28390	9.2257 ug/ml	99
96) Benzo[a]anthracene	14.47	228	78172	9.9856 ug/ml	99
97) Chrysene	14.52	228	80000	10.1198 ug/ml	100
99) Di-n-Octyl Phthalate	15.79	149	86533	9.3145 ug/ml	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80865.D Vial: 5
Acq On : 29 Jan 2021 10:43 am Operator: SCB
Sample : S1A0503-CAL7 Inst : MSD12
Misc : 1,1 0012171 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 09:58:06 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

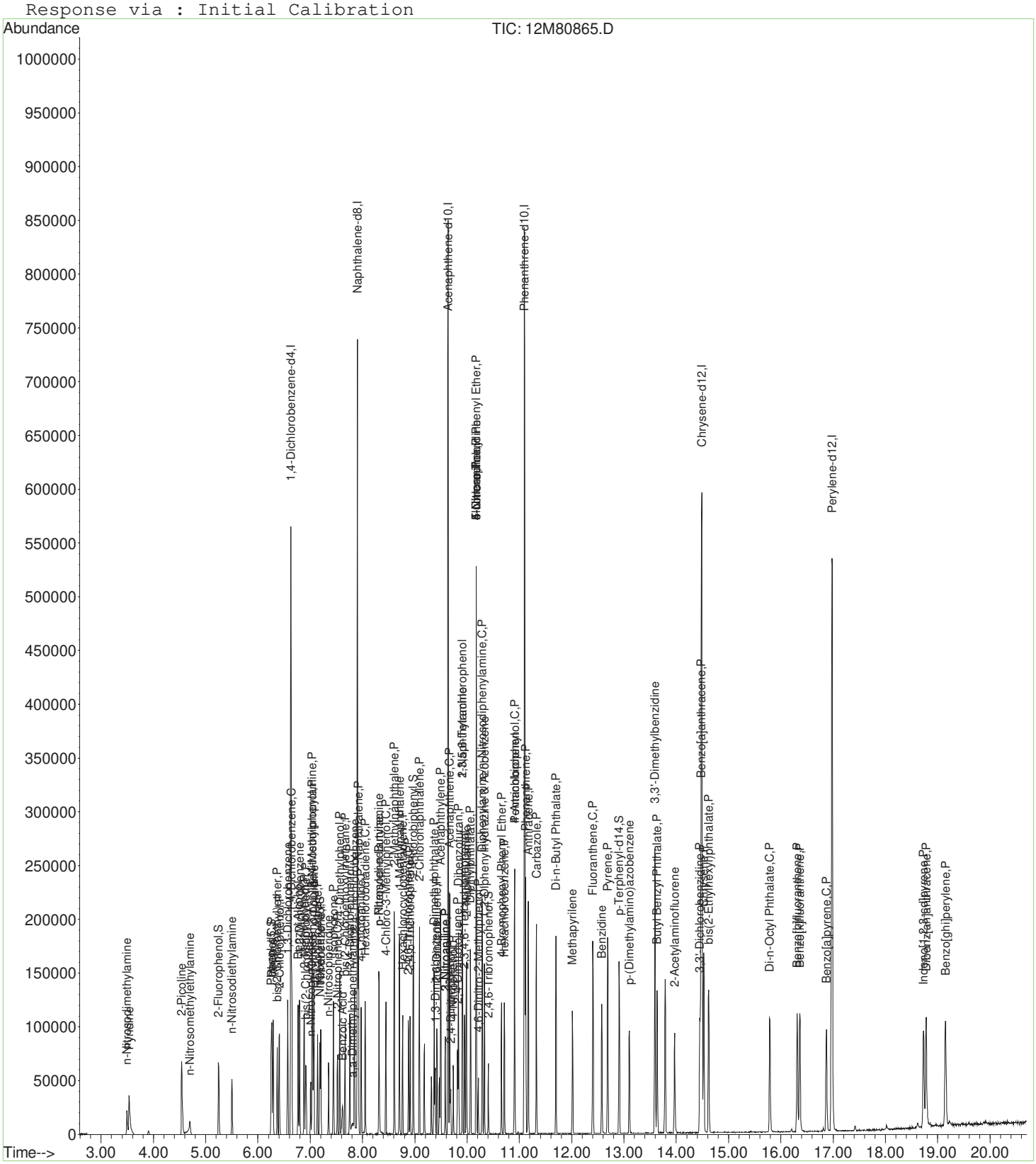
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
100) Benzo[b]fluoranthene	16.31	252	70399	8.9926	ug/ml	100
101) Benzo[k]fluoranthene	16.36	252	79556	9.7844	ug/ml	99
102) Benzo[a]pyrene	16.87	252	64394	9.1850	ug/ml	98
103) Indeno[1,2,3-cd]pyrene	18.73	276	63988	8.8218	ug/ml	99
104) Dibenz[ah]anthracene	18.78	278	73094	9.0694	ug/ml	99
105) Benzo[ghi]perylene	19.15	276	72732	9.2439	ug/ml	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80865.D Vial: 5
Acq On : 29 Jan 2021 10:43 am Operator: SCB
Sample : S1A0503-CAL7 Inst : MSD12
Misc : 1,1 0012171 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 10:37 2021 Quant Results File: MEGAMIX.RES

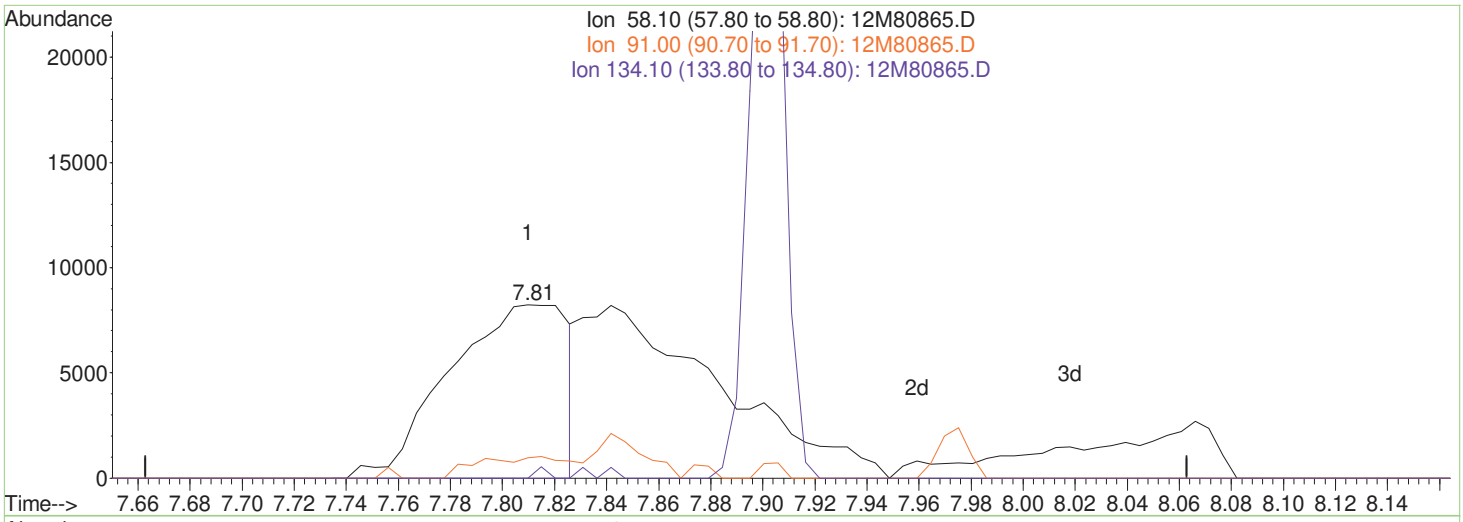
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration

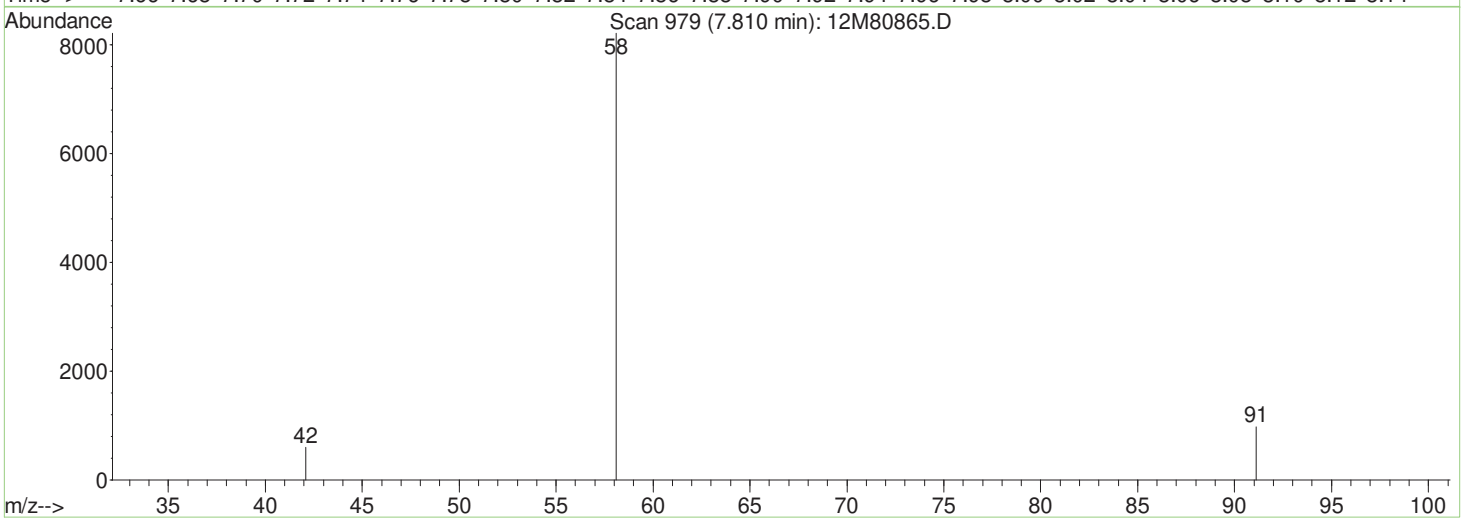


Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\012921\12M80865.D Vial: 5
Acq On : 29 Jan 2021 10:43 am Operator: SCB
Sample : S1A0503-CAL7 Inst : MSD12
Misc : 1,1 0012171 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 9:58 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration





TIC: 12M80865.D

(35) a,a-Dimethylphenethylamine

7.81min 4.25ug/ml

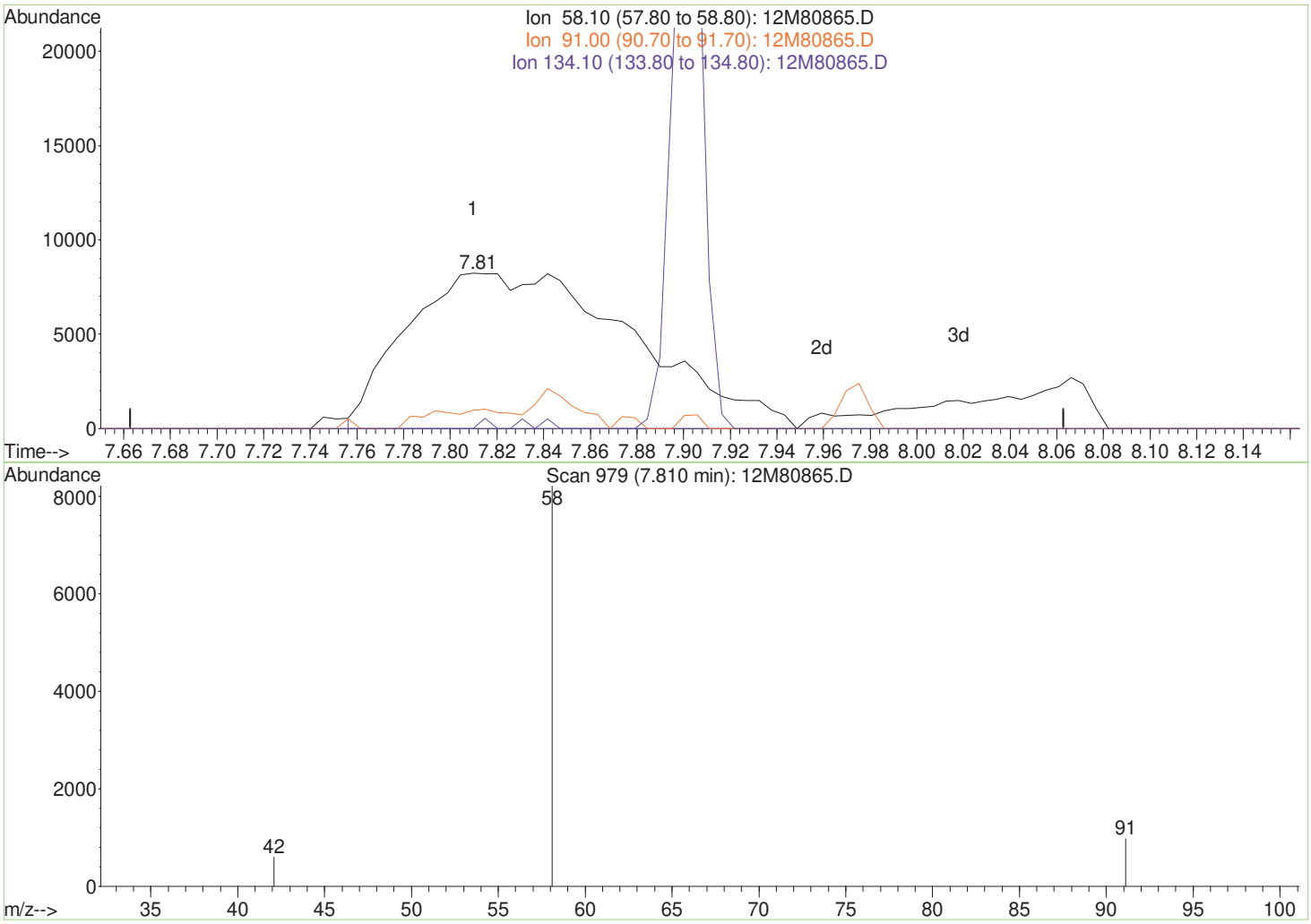
response 25914

Ion	Exp%	Act%
58.10	100	100
91.00	6.40	10.05#
134.10	1.90	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\012921\12M80865.D Vial: 5
Acq On : 29 Jan 2021 10:43 am Operator: SCB
Sample : S1A0503-CAL7 Inst : MSD12
Misc : 1,1 0012171 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 10:37 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration



TIC: 12M80865.D

(35) a,a-Dimethylphenethylamine

7.81min 9.13ug/ml mint

response 55615

Ion	Exp%	Act%
58.10	100	100
91.00	6.40	4.68#
134.10	1.90	0.00#
0.00	0.00	0.00

Sarah Bogolin

Digitally signed by Sarah Bogolin
Reason: Data system splits the peak incorrectly or integrates a false peak as a rider peak
Date: 2021.02.01 13:54:59 -05'00'

12M80865.D MEGAMIX.M Mon Feb 01 10:37:07 2021

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80865.D Vial: 5
Acq On : 29 Jan 2021 10:43 am Operator: SCB
Sample : S1A0503-CAL7 Inst : MSD12
Misc : 1,1 0012171 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	100	0.00
2		n-Nitrosodimethylamine	0.715	0.687	3.9	100	0.00
3		Pyridine	1.193	1.203	-0.8	100	0.00
4		2-Picoline	1.352	1.425	-5.4	100	0.00
5		n-Nitrosomethylethylamine	0.506	0.485	4.2	100	0.00
6	S	2-Fluorophenol	1.187	1.191	-0.3	100	0.00
7		n-Nitrosodiethylamine	0.599	0.626	-4.5	100	0.00
8	S	Phenol-d5	1.376	1.377	-0.1	100	0.00
9	C,P	Phenol	1.562	1.588	-1.7	100	0.00
10		Aniline	1.794	1.872	-4.3	100	0.00
11	P	bis(2-Chloroethyl)ether	0.826	0.850	-2.9	100	0.00
12	P	2-Chlorophenol	1.285	1.299	-1.1	100	0.00
13		1,3-Dichlorobenzene	1.434	1.487	-3.7	100	0.00
14	C	1,4-Dichlorobenzene	1.490	1.536	-3.1	100	0.00
15		Benzyl Alcohol	0.838	0.833	0.6	100	0.00
16		1,2-Dichlorobenzene	1.392	1.415	-1.7	100	0.00
17	P	2-Methylphenol	1.010	1.024	-1.4	100	0.00
18	P	bis(2-Chloroisopropyl)ether	1.451	1.483	-2.2	100	0.00
19	P	3-,4-Methylphenol	1.223	1.234	-0.9	100	-0.01
20		n-Nitrosopyrrolidine	0.619	0.629	-1.6	100	-0.01
21	P	n-Nitrosodipropylamine	0.793	0.824	-3.9	100	-0.01
22		n-Nitrosomorpholine	0.724	0.750	-3.6	100	-0.01
23		o-Toluidine	1.992	2.075	-4.2	100	0.00
24	P	Hexachloroethane	0.514	0.530	-3.1	100	0.00
25	I	Naphthalene-d8	1.000	1.000	0.0	100	0.00
26	S	Nitrobenzene-d5	0.307	0.313	-2.0	100	0.00
27	P	Nitrobenzene	0.306	0.312	-2.0	100	0.00
28		n-Nitrosopiperidine	0.164	0.165	-0.6	100	-0.01
29	P	Isophorone	0.565	0.587	-3.9	100	-0.01
30	C,P	2-Nitrophenol	0.181	0.181	0.0	100	0.00
31	P	2,4-Dimethylphenol	0.297	0.306	-3.0	100	0.00
32	P	bis(2-Chloroethoxy)methane	0.342	0.348	-1.8	100	0.00
33		Benzoic Acid	0.222	0.159	28.4	100	-0.06
34	C,P	2,4-Dichlorophenol	0.266	0.271	-1.9	100	0.00
35		a,a-Dimethylphenethylamine	0.742	0.677	8.8	99	-0.05
36		1,2,4-Trichlorobenzene	0.289	0.297	-2.8	100	0.00
37	P	Naphthalene	0.988	1.030	-4.3	100	0.00
38	P	4-Chloroaniline	0.113	0.104	8.0	100	0.00
39	C,P	Hexachlorobutadiene	0.149	0.151	-1.3	100	0.00
40		n-Nitrosodi-n-Butylamine	0.189	0.189	0.0	100	0.00
41		p-Phenylenediamine	0.359	0.367	-2.2	100	-0.02
42	C,P	4-Chloro-3-Methylphenol	0.274	0.272	0.7	100	0.00
43	P	2-Methylnaphthalene	0.670	0.690	-3.0	100	0.00
44		1-Methylnaphthalene	0.622	0.636	-2.3	100	0.00
45	I	Acenaphthene-d10	1.000	1.000	0.0	100	0.00
46	P	Hexachlorocyclopentadiene	0.342	0.332	2.9	100	0.00
47	C,P	2,4,6-Trichlorophenol	0.331	0.327	1.2	100	0.00
48	P	2,4,5-Trichlorophenol	0.354	0.348	1.7	100	0.00
49	S	2-Fluorobiphenyl	1.257	1.277	-1.6	100	0.00
50	P	2-Chloronaphthalene	1.055	1.083	-2.7	100	0.00
51	P	2-Nitroaniline	0.361	0.359	0.6	100	0.00
52	P	Dimethylphthalate	1.198	1.218	-1.7	100	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80865.D Vial: 5
Acq On : 29 Jan 2021 10:43 am Operator: SCB
Sample : S1A0503-CAL7 Inst : MSD12
Misc : 1,1 0012171 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
53		1,3-Dinitrobenzene	0.213	0.201	5.6	100	0.00
54	P	2,6-Dinitrotoluene	0.288	0.289	-0.3	100	0.00
55	P	Acenaphthylene	1.837	1.893	-3.0	100	0.00
56	P	3-Nitroaniline	0.338	0.323	4.4	100	-0.01
57	P	2,4-Dinitrophenol	0.178	0.135	24.2	100	-0.01
58	C,P	Acenaphthene	1.162	1.226	-5.5	100	0.00
59	P	4-Nitrophenol	0.213	0.201	5.6	100	-0.02
60	P	2,4-Dinitrotoluene	0.372	0.362	2.7	100	-0.01
61	P	Dibenzofuran	1.536	1.564	-1.8	100	0.00
62		2,3,5,6-Tetrachlorophenol	0.280	0.277	1.1	100	0.00
63		2,3,4,6-Tetrachlorophenol	0.289	0.285	1.4	100	0.00
64		1-Naphthylamine	1.221	1.242	-1.7	100	0.00
65		2-Naphthylamine	1.281	1.304	-1.8	100	0.00
66	P	Diethylphthalate	1.239	1.257	-1.5	100	-0.01
67	P	Fluorene	1.251	1.258	-0.6	100	0.00
68	P	4-Chlorophenyl Phenyl Ether	0.586	0.591	-0.9	100	0.00
69	P	4-Nitroaniline	0.372	0.365	1.9	100	-0.01
70		5-Nitro-o-Toluidine	0.391	0.389	0.5	100	-0.01
71		1,2-Diphenylhydrazine & Azo	1.090	1.109	-1.7	100	0.00
72	S	2,4,6-Tribromophenol	0.172	0.167	2.9	100	0.00
73	I	Phenanthrene-d10	1.000	1.000	0.0	100	0.00
74	P	4,6-Dinitro-2-Methylphenol	0.121	0.097	19.8	100	-0.01
75	C,P	Diphenylamine/n-Nitrosodiph	0.614	0.632	-2.9	100	0.00
76	P	4-Bromophenyl Phenyl Ether	0.181	0.174	3.9	100	0.00
77	P	Hexachlorobenzene	0.196	0.197	-0.5	100	0.00
78		4-Aminobiphenyl	0.830	0.816	1.7	100	0.00
79	C,P	Pentachlorophenol	0.136	0.122	10.3	100	0.00
80	P	Phenanthrene	1.041	1.071	-2.9	100	0.00
81	P	Anthracene	1.063	1.087	-2.3	100	0.00
82	P	Carbazole	0.940	0.932	0.9	100	0.00
83	P	Di-n-Butyl Phthalate	1.128	1.099	2.6	100	0.00
84		Methapyrilene	0.453	0.428	5.5	100	0.00
85	C,P	Fluoranthene	1.010	0.988	2.2	100	0.00
86	I	Chrysene-d12	1.000	1.000	0.0	100	0.00
87		Benzidine	0.880	0.821	6.7	100	-0.01
88	P	Pyrene	1.279	1.303	-1.9	100	-0.01
89	S	p-Terphenyl-d14	0.959	0.958	0.1	100	0.00
90		p-(Dimethylamino)azobenzene	0.250	0.229	8.4	100	0.00
91	P	Butyl Benzyl Phthalate	0.633	0.619	2.2	100	0.00
92		3,3'-Dimethylbenzidine	0.914	0.879	3.8	100	-0.02
93		2-Acetylaminofluorene	0.525	0.472	10.1	100	-0.02
94	P	bis(2-Ethylhexyl)phthalate	0.850	0.844	0.7	100	0.00
95	P	3,3'-Dichlorobenzidine	0.463	0.427	7.8	100	0.00
96	P	Benzo[a]anthracene	1.179	1.177	0.2	100	-0.01
97	P	Chrysene	1.190	1.205	-1.3	100	-0.02
98	I	Perylene-d12	1.000	1.000	0.0	100	0.00
99	C,P	Di-n-Octyl Phthalate	1.250	1.099	12.1	100	-0.01
100	P	Benzo[b]fluoranthene	0.994	0.894	10.1	100	-0.02
101	P	Benzo[k]fluoranthene	1.032	1.010	2.1	100	-0.02
102	C,P	Benzo[a]pyrene	0.890	0.817	8.2	100	-0.02
103	P	Indeno[1,2,3-cd]pyrene	0.921	0.812	11.8	100	-0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80865.D Vial: 5
Acq On : 29 Jan 2021 10:43 am Operator: SCB
Sample : S1A0503-CAL7 Inst : MSD12
Misc : 1,1 0012171 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
104	P	Dibenz[ah]anthracene	1.023	0.928	9.3	100	-0.02
105	P	Benzo[ghi]perylene	0.999	0.923	7.6	100	-0.02

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80865.D Vial: 5
Acq On : 29 Jan 2021 10:43 am Operator: SCB
Sample : S1A0503-CAL7 Inst : MSD12
Misc : 1,1 0012171 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	100	0.00
2		n-Nitrosodimethylamine	10.000	9.606	3.9	100	0.00
3		Pyridine	10.000	10.081	-0.8	100	0.00
4		2-Picoline	10.000	10.544	-5.4	100	0.00
5		n-Nitrosomethylethylamine	10.000	10.100	-1.0	100	0.00
6	S	2-Fluorophenol	10.000	10.035	-0.4	100	0.00
7		n-Nitrosodiethylamine	10.000	10.445	-4.5	100	0.00
8	S	Phenol-d5	10.000	10.008	-0.1	100	0.00
9	C,P	Phenol	10.000	10.170	-1.7	100	0.00
10		Aniline	10.000	10.437	-4.4	100	0.00
11	P	bis(2-Chloroethyl)ether	10.000	10.288	-2.9	100	0.00
12	P	2-Chlorophenol	10.000	10.111	-1.1	100	0.00
13		1,3-Dichlorobenzene	10.000	10.369	-3.7	100	0.00
14	C	1,4-Dichlorobenzene	10.000	10.308	-3.1	100	0.00
15		Benzyl Alcohol	10.000	9.940	0.6	100	0.00
16		1,2-Dichlorobenzene	10.000	10.167	-1.7	100	0.00
17	P	2-Methylphenol	10.000	10.143	-1.4	100	0.00
18	P	bis(2-Chloroisopropyl)ether	10.000	10.218	-2.2	100	0.00
19	P	3-,4-Methylphenol	10.000	10.095	-1.0	100	-0.01
20		n-Nitrosopyrrolidine	10.000	10.159	-1.6	100	-0.01
21	P	n-Nitrosodipropylamine	10.000	10.383	-3.8	100	-0.01
22		n-Nitrosomorpholine	10.000	10.371	-3.7	100	-0.01
23		o-Toluidine	10.000	10.414	-4.1	100	0.00
24	P	Hexachloroethane	10.000	10.314	-3.1	100	0.00
25	I	Naphthalene-d8	40.000	40.000	0.0	100	0.00
26	S	Nitrobenzene-d5	10.000	10.214	-2.1	100	0.00
27	P	Nitrobenzene	10.000	10.175	-1.8	100	0.00
28		n-Nitrosopiperidine	10.000	10.055	-0.5	100	-0.01
29	P	Isophorone	10.000	10.382	-3.8	100	-0.01
30	C,P	2-Nitrophenol	10.000	10.018	-0.2	100	0.00
31	P	2,4-Dimethylphenol	10.000	10.315	-3.1	100	0.00
32	P	bis(2-Chloroethoxy)methane	10.000	10.185	-1.9	100	0.00
33		Benzoic Acid	10.000	8.960	10.4	100	-0.06
34	C,P	2,4-Dichlorophenol	10.000	10.175	-1.8	100	0.00
35		a,a-Dimethylphenethylamine	10.000	9.126	8.7	99	-0.05
36		1,2,4-Trichlorobenzene	10.000	10.272	-2.7	100	0.00
37	P	Naphthalene	10.000	10.429	-4.3	100	0.00
38	P	4-Chloroaniline	10.000	9.212	7.9	100	0.00
39	C,P	Hexachlorobutadiene	10.000	10.095	-1.0	100	0.00
40		n-Nitrosodi-n-Butylamine	10.000	9.969	0.3	100	0.00
41		p-Phenylenediamine	10.000	10.211	-2.1	100	-0.02
42	C,P	4-Chloro-3-Methylphenol	10.000	9.917	0.8	100	0.00
43	P	2-Methylnaphthalene	10.000	10.306	-3.1	100	0.00
44		1-Methylnaphthalene	10.000	10.229	-2.3	100	0.00
45	I	Acenaphthene-d10	40.000	40.000	0.0	100	0.00
46	P	Hexachlorocyclopentadiene	10.000	9.726	2.7	100	0.00
47	C,P	2,4,6-Trichlorophenol	10.000	9.878	1.2	100	0.00
48	P	2,4,5-Trichlorophenol	10.000	9.834	1.7	100	0.00
49	S	2-Fluorobiphenyl	10.000	10.160	-1.6	100	0.00
50	P	2-Chloronaphthalene	10.000	10.258	-2.6	100	0.00
51	P	2-Nitroaniline	10.000	9.967	0.3	100	0.00
52	P	Dimethylphthalate	10.000	10.166	-1.7	100	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80865.D Vial: 5
Acq On : 29 Jan 2021 10:43 am Operator: SCB
Sample : S1A0503-CAL7 Inst : MSD12
Misc : 1,1 0012171 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
53		1,3-Dinitrobenzene	10.000	9.453	5.5	100	0.00
54	P	2,6-Dinitrotoluene	10.000	10.026	-0.3	100	0.00
55	P	Acenaphthylene	10.000	10.305	-3.0	100	0.00
56	P	3-Nitroaniline	10.000	9.530	4.7	100	-0.01
57	P	2,4-Dinitrophenol	10.000	9.811	1.9	100	-0.01
58	C,P	Acenaphthene	10.000	10.551	-5.5	100	0.00
59	P	4-Nitrophenol	10.000	9.454	5.5	100	-0.02
60	P	2,4-Dinitrotoluene	10.000	9.745	2.6	100	-0.01
61	P	Dibenzofuran	10.000	10.179	-1.8	100	0.00
62		2,3,5,6-Tetrachlorophenol	10.000	9.912	0.9	100	0.00
63		2,3,4,6-Tetrachlorophenol	10.000	9.891	1.1	100	0.00
64		1-Naphthylamine	10.000	10.173	-1.7	100	0.00
65		2-Naphthylamine	10.000	10.181	-1.8	100	0.00
66	P	Diethylphthalate	10.000	10.144	-1.4	100	-0.01
67	P	Fluorene	10.000	10.059	-0.6	100	0.00
68	P	4-Chlorophenyl Phenyl Ether	10.000	10.078	-0.8	100	0.00
69	P	4-Nitroaniline	10.000	9.811	1.9	100	-0.01
70		5-Nitro-o-Toluidine	10.000	9.960	0.4	100	-0.01
71		1,2-Diphenylhydrazine & Azo	10.000	10.173	-1.7	100	0.00
72	S	2,4,6-Tribromophenol	10.000	9.751	2.5	100	0.00
73	I	Phenanthrene-d10	40.000	40.000	0.0	100	0.00
74	P	4,6-Dinitro-2-Methylphenol	10.000	8.029	19.7	100	-0.01
75	C,P	Diphenylamine/n-Nitrosodiph	10.000	10.291	-2.9	100	0.00
76	P	4-Bromophenyl Phenyl Ether	10.000	9.595	4.0	100	0.00
77	P	Hexachlorobenzene	10.000	10.036	-0.4	100	0.00
78		4-Aminobiphenyl	10.000	9.840	1.6	100	0.00
79	C,P	Pentachlorophenol	10.000	8.983	10.2	100	0.00
80	P	Phenanthrene	10.000	10.285	-2.9	100	0.00
81	P	Anthracene	10.000	10.228	-2.3	100	0.00
82	P	Carbazole	10.000	9.920	0.8	100	0.00
83	P	Di-n-Butyl Phthalate	10.000	9.743	2.6	100	0.00
84		Methapyrilene	10.000	9.844	1.6	100	0.00
85	C,P	Fluoranthene	10.000	9.780	2.2	100	0.00
86	I	Chrysene-d12	40.000	40.000	0.0	100	0.00
87		Benzidine	10.000	9.328	6.7	100	-0.01
88	P	Pyrene	10.000	10.190	-1.9	100	-0.01
89	S	p-Terphenyl-d14	10.000	9.989	0.1	100	0.00
90		p-(Dimethylamino)azobenzene	10.000	9.165	8.4	100	0.00
91	P	Butyl Benzyl Phthalate	10.000	9.791	2.1	100	0.00
92		3,3'-Dimethylbenzidine	20.000	19.239	3.8	100	-0.02
93		2-Acetylaminofluorene	10.000	9.559	4.4	100	-0.02
94	P	bis(2-Ethylhexyl)phthalate	10.000	9.936	0.6	100	0.00
95	P	3,3'-Dichlorobenzidine	10.000	9.226	7.7	100	0.00
96	P	Benzo[a]anthracene	10.000	9.986	0.1	100	-0.01
97	P	Chrysene	10.000	10.120	-1.2	100	-0.02
98	I	Perylene-d12	40.000	40.000	0.0	100	0.00
99	C,P	Di-n-Octyl Phthalate	10.000	9.315	6.9	100	-0.01
100	P	Benzo[b]fluoranthene	10.000	8.993	10.1	100	-0.02
101	P	Benzo[k]fluoranthene	10.000	9.784	2.2	100	-0.02
102	C,P	Benzo[a]pyrene	10.000	9.185	8.1	100	-0.02
103	P	Indeno[1,2,3-cd]pyrene	10.000	8.822	11.8	100	-0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80865.D Vial: 5
Acq On : 29 Jan 2021 10:43 am Operator: SCB
Sample : S1A0503-CAL7 Inst : MSD12
Misc : 1,1 0012171 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
104	P	Dibenz[ah]anthracene	10.000	9.069	9.3	100	-0.02
105	P	Benzo[ghi]perylene	10.000	9.244	7.6	100	-0.02

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80866.D Vial: 6
Acq On : 29 Jan 2021 11:15 am Operator: SCB
Sample : S1A0503-CAL6 Inst : MSD12
Misc : 1,1 0012170 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 09:58:07 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.629	152	93149	40.0000	ug/ml	0.000
25) Naphthalene-d8	7.900	136	351175	40.0000	ug/ml	0.000
45) Acenaphthene-d10	9.637	164	196174	40.0000	ug/ml	0.000
73) Phenanthrene-d10	11.095	188	348839	40.0000	ug/ml	0.000
86) Chrysene-d12	14.487	240	287501	40.0000	ug/ml	0.000
98) Perylene-d12	16.982	264	332157	40.0000	ug/ml	0.000
System Monitoring Compounds						
6) 2-Fluorophenol	5.251	112	39860	14.4190978	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 14.42%#			
8) Phenol-d5	6.255	99	45890	14.3254785	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 14.33%			
26) Nitrobenzene-d5	7.185	82	39534	14.6719027	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 29.34%#			
49) 2-Fluorobiphenyl	8.969	172	91778	14.8893977	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 29.78%#			
72) 2,4,6-Tribromophenol	10.406	330	12211	14.4974512	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 14.50%			
89) p-Terphenyl-d14	12.906	244	100415	14.5650477	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 29.13%#			
Target Compounds						Qvalue
2) n-Nitrosodimethylamine	3.49	74	22613	13.5747	ug/ml	97
3) Pyridine	3.53	79	40800	14.6819	ug/ml	100
4) 2-Picoline	4.54	93	45053	14.3138	ug/ml	100
5) n-Nitrosomethylethylamine	4.70	88	18180	15.1921	ug/ml	91
7) n-Nitrosodiethylamine	5.50	102	20167	14.4522	ug/ml	99
9) Phenol	6.27	94	54416	14.9635	ug/ml	95
10) Aniline	6.29	93	62672	15.0036	ug/ml#	99
11) bis(2-Chloroethyl)ether	6.37	63	28351	14.7435	ug/ml	100
12) 2-Chlorophenol	6.41	128	43603	14.5697	ug/ml	99
13) 1,3-Dichlorobenzene	6.57	146	49700	14.8780	ug/ml	98
14) 1,4-Dichlorobenzene	6.65	146	51321	14.7922	ug/ml	98
15) Benzyl Alcohol	6.77	108	27906	14.3034	ug/ml	97
16) 1,2-Dichlorobenzene	6.79	146	47481	14.6486	ug/ml	99
17) 2-Methylphenol	6.89	107	33689	14.3290	ug/ml	88
18) bis(2-Chloroisopropyl)ethe	6.92	45	49613	14.6787	ug/ml#	100
19) 3-,4-Methylphenol	7.04	108	41020	14.4048	ug/ml	98
20) n-Nitrosopyrrolidine	7.01	100	20685	14.3433	ug/ml	97
21) n-Nitrosodipropylamine	7.04	70	26555	14.3761	ug/ml	98
22) n-Nitrosomorpholine	7.05	56	24925	14.7915	ug/ml	98
23) o-Toluidine	7.07	106	67852	14.6271	ug/ml	99
24) Hexachloroethane	7.14	117	17329	14.4749	ug/ml	99
27) Nitrobenzene	7.20	77	39996	14.8791	ug/ml	99
28) n-Nitrosopiperidine	7.36	114	21018	14.6186	ug/ml	98
29) Isophorone	7.45	82	73213	14.7479	ug/ml	99
30) 2-Nitrophenol	7.52	139	22735	14.3116	ug/ml	99
31) 2,4-Dimethylphenol	7.56	122	38364	14.7359	ug/ml	100
32) bis(2-Chloroethoxy)methane	7.67	93	44478	14.8275	ug/ml	97
33) Benzoic Acid	7.63	105	24884	14.9399	ug/ml	97
34) 2,4-Dichlorophenol	7.76	162	34355	14.7182	ug/ml	98
35) a,a-Dimethylphenethylamine	7.84	58	95262	14.6188	ug/ml#	99
36) 1,2,4-Trichlorobenzene	7.85	180	38011	14.9705	ug/ml	97
37) Naphthalene	7.92	128	128247	14.7873	ug/ml	99
38) 4-Chloroaniline	7.97	65	14388	14.4752	ug/ml	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80866.D Vial: 6
Acq On : 29 Jan 2021 11:15 am Operator: SCB
Sample : S1A0503-CAL6 Inst : MSD12
Misc : 1,1 0012170 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 09:58:07 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39) Hexachlorobutadiene	8.05	225	19501	14.8581 ug/ml	98
40) n-Nitrosodi-n-Butylamine	8.31	84	24523	14.7680 ug/ml	99
41) p-Phenylenediamine	8.32	108	48502	15.3789 ug/ml	96
42) 4-Chloro-3-Methylphenol	8.45	107	35170	14.6251 ug/ml	99
43) 2-Methylnaphthalene	8.61	142	86129	14.6440 ug/ml	100
44) 1-Methylnaphthalene	8.71	142	81049	14.8532 ug/ml	99
46) Hexachlorocyclopentadiene	8.77	237	24593	14.6765 ug/ml	98
47) 2,4,6-Trichlorophenol	8.88	196	24103	14.8464 ug/ml	98
48) 2,4,5-Trichlorophenol	8.91	196	25863	14.9043 ug/ml	99
50) 2-Chloronaphthalene	9.09	162	75688	14.6217 ug/ml	99
51) 2-Nitroaniline	9.58	65	25028	14.1526 ug/ml	98
52) Dimethylphthalate	9.37	163	87550	14.9008 ug/ml	100
53) 1,3-Dinitrobenzene	9.39	168	14949	14.3138 ug/ml	96
54) 2,6-Dinitrotoluene	9.42	165	21193	15.0116 ug/ml	99
55) Acenaphthylene	9.49	152	133783	14.8517 ug/ml	100
56) 3-Nitroaniline	9.58	138	23728	14.2965 ug/ml	97
57) 2,4-Dinitrophenol	9.69	184	10641	14.6186 ug/ml#	68
58) Acenaphthene	9.67	154	87038	15.2730 ug/ml	97
59) 4-Nitrophenol	9.74	65	14997	14.3717 ug/ml	99
60) 2,4-Dinitrotoluene	9.82	165	26486	14.5355 ug/ml	99
61) Dibenzofuran	9.83	168	111392	14.7829 ug/ml	100
62) 2,3,5,6-Tetrachlorophenol	9.91	232	20160	14.6999 ug/ml	99
63) 2,3,4,6-Tetrachlorophenol	9.95	232	20616	14.5682 ug/ml	99
64) 1-Naphthylamine	9.91	143	89027	14.8637 ug/ml	99
65) 2-Naphthylamine	9.99	143	92534	14.7317 ug/ml	99
66) Diethylphthalate	10.07	149	88966	14.6386 ug/ml	100
67) Fluorene	10.18	166	90704	14.7846 ug/ml	99
68) 4-Chlorophenyl Phenyl Ethe	10.18	204	42101	14.6462 ug/ml	99
69) 4-Nitroaniline	10.18	138	26644	14.6080 ug/ml	99
70) 5-Nitro-o-Toluidine	10.18	152	28109	14.6707 ug/ml	99
71) 1,2-Diphenylhydrazine & Az	10.33	77	79005	14.7773 ug/ml	99
74) 4,6-Dinitro-2-Methylphenol	10.21	198	13665	12.9687 ug/ml	98
75) Diphenylamine/n-Nitrosodip	10.29	169	78600	14.6721 ug/ml	100
76) 4-Bromophenyl Phenyl Ether	10.66	248	22895	14.4781 ug/ml	99
77) Hexachlorobenzene	10.72	284	24604	14.3742 ug/ml	100
78) 4-Aminobiphenyl	10.91	169	104745	14.4759 ug/ml	99
79) Pentachlorophenol	10.90	266	15632	13.2259 ug/ml	98
80) Phenanthrene	11.12	178	133533	14.7033 ug/ml	100
81) Anthracene	11.17	178	134346	14.4934 ug/ml	99
82) Carbazole	11.32	167	119885	14.6270 ug/ml	99
83) Di-n-Butyl Phthalate	11.70	149	141135	14.3436 ug/ml	99
84) Methapyrilene	12.01	58	55117	13.8983 ug/ml	98
85) Fluoranthene	12.41	202	126465	14.3581 ug/ml	98
87) Benzidine	12.57	184	88181	13.9363 ug/ml	100
88) Pyrene	12.69	202	134641	14.6464 ug/ml	100
90) p-(Dimethylamino)azobenzen	13.10	225	25291	14.0743 ug/ml	100
91) Butyl Benzyl Phthalate	13.64	149	66426	14.6102 ug/ml	98
92) 3,3'-Dimethylbenzidine	13.60	212	188946	28.7652 ug/ml	100
93) 2-Acetylaminofluorene	13.97	181	52829	13.9357 ug/ml	99
94) bis(2-Ethylhexyl)phthalate	14.62	149	89153	14.5948 ug/ml	99
95) 3,3'-Dichlorobenzidine	14.45	252	46886	14.0791 ug/ml	99
96) Benzo[a]anthracene	14.47	228	124672	14.7160 ug/ml	99
97) Chrysene	14.53	228	126156	14.7465 ug/ml	99
99) Di-n-Octyl Phthalate	15.79	149	144232	13.8546 ug/ml	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80866.D Vial: 6
Acq On : 29 Jan 2021 11:15 am Operator: SCB
Sample : S1A0503-CAL6 Inst : MSD12
Misc : 1,1 0012170 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 09:58:07 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

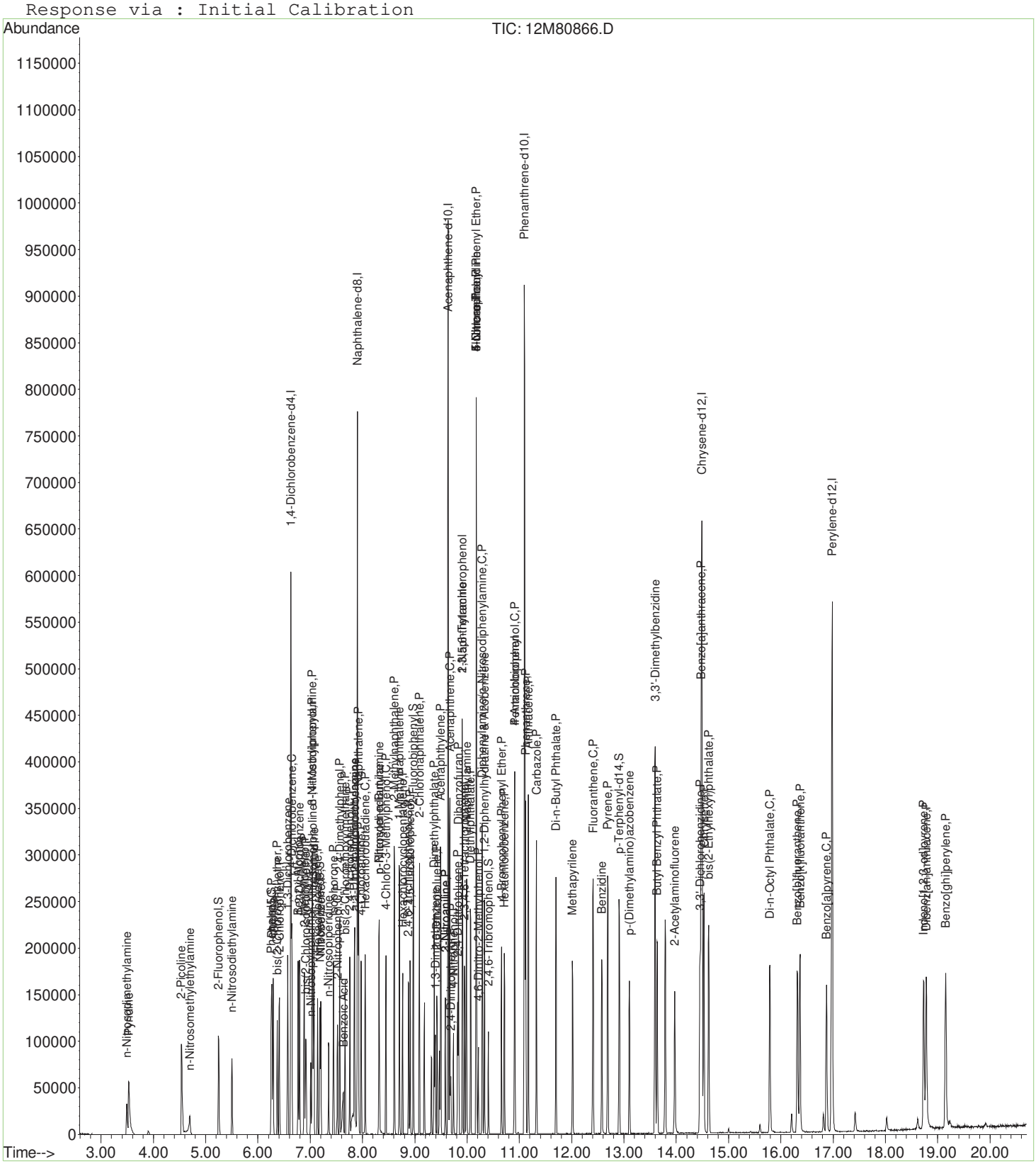
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
100) Benzo[b]fluoranthene	16.31	252	117048	14.1828	ug/ml	100
101) Benzo[k]fluoranthene	16.37	252	125933	14.6919	ug/ml	100
102) Benzo[a]pyrene	16.88	252	106106	14.3566	ug/ml	98
103) Indeno[1,2,3-cd]pyrene	18.73	276	105324	13.7741	ug/ml	99
104) Dibenz[ah]anthracene	18.78	278	120674	14.2033	ug/ml	99
105) Benzo[ghi]perylene	19.16	276	118868	14.3309	ug/ml	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80866.D Vial: 6
Acq On : 29 Jan 2021 11:15 am Operator: SCB
Sample : S1A0503-CAL6 Inst : MSD12
Misc : 1,1 0012170 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 9:58 2021 Quant Results File: MEGAMIX.RES

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80866.D Vial: 6
Acq On : 29 Jan 2021 11:15 am Operator: SCB
Sample : S1A0503-CAL6 Inst : MSD12
Misc : 1,1 0012170 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	100	0.00
2		n-Nitrosodimethylamine	0.715	0.647	9.5	100	0.00
3		Pyridine	1.193	1.168	2.1	100	0.00
4		2-Picoline	1.352	1.290	4.6	100	0.00
5		n-Nitrosomethylethylamine	0.506	0.520	-2.8	100	0.00
6	S	2-Fluorophenol	1.187	1.141	3.9	100	0.00
7		n-Nitrosodiethylamine	0.599	0.577	3.7	100	0.00
8	S	Phenol-d5	1.376	1.314	4.5	100	0.00
9	C,P	Phenol	1.562	1.558	0.3	100	0.00
10		Aniline	1.794	1.794	0.0	100	0.00
11	P	bis(2-Chloroethyl)ether	0.826	0.812	1.7	100	0.00
12	P	2-Chlorophenol	1.285	1.248	2.9	100	0.00
13		1,3-Dichlorobenzene	1.434	1.423	0.8	100	0.00
14	C	1,4-Dichlorobenzene	1.490	1.469	1.4	100	0.00
15		Benzyl Alcohol	0.838	0.799	4.7	100	0.00
16		1,2-Dichlorobenzene	1.392	1.359	2.4	100	0.00
17	P	2-Methylphenol	1.010	0.964	4.6	100	0.00
18	P	bis(2-Chloroisopropyl)ether	1.451	1.420	2.1	100	0.00
19	P	3-,4-Methylphenol	1.223	1.174	4.0	100	-0.01
20		n-Nitrosopyrrolidine	0.619	0.592	4.4	100	-0.01
21	P	n-Nitrosodipropylamine	0.793	0.760	4.2	100	-0.01
22		n-Nitrosomorpholine	0.724	0.714	1.4	100	-0.01
23		o-Toluidine	1.992	1.942	2.5	100	0.00
24	P	Hexachloroethane	0.514	0.496	3.5	100	0.00
25	I	Naphthalene-d8	1.000	1.000	0.0	100	0.00
26	S	Nitrobenzene-d5	0.307	0.300	2.3	100	0.00
27	P	Nitrobenzene	0.306	0.304	0.7	100	0.00
28		n-Nitrosopiperidine	0.164	0.160	2.4	100	0.00
29	P	Isophorone	0.565	0.556	1.6	100	0.00
30	C,P	2-Nitrophenol	0.181	0.173	4.4	100	0.00
31	P	2,4-Dimethylphenol	0.297	0.291	2.0	100	0.00
32	P	bis(2-Chloroethoxy)methane	0.342	0.338	1.2	100	0.00
33		Benzoic Acid	0.222	0.189	14.9	100	-0.04
34	C,P	2,4-Dichlorophenol	0.266	0.261	1.9	100	0.00
35		a,a-Dimethylphenethylamine	0.742	0.723	2.6	100	-0.03
36		1,2,4-Trichlorobenzene	0.289	0.289	0.0	100	0.00
37	P	Naphthalene	0.988	0.974	1.4	100	0.00
38	P	4-Chloroaniline	0.113	0.109	3.5	100	0.00
39	C,P	Hexachlorobutadiene	0.149	0.148	0.7	100	0.00
40		n-Nitrosodi-n-Butylamine	0.189	0.186	1.6	100	0.00
41		p-Phenylenediamine	0.359	0.368	-2.5	100	-0.02
42	C,P	4-Chloro-3-Methylphenol	0.274	0.267	2.6	100	0.00
43	P	2-Methylnaphthalene	0.670	0.654	2.4	100	0.00
44		1-Methylnaphthalene	0.622	0.615	1.1	100	0.00
45	I	Acenaphthene-d10	1.000	1.000	0.0	100	0.00
46	P	Hexachlorocyclopentadiene	0.342	0.334	2.3	100	0.00
47	C,P	2,4,6-Trichlorophenol	0.331	0.328	0.9	100	0.00
48	P	2,4,5-Trichlorophenol	0.354	0.352	0.6	100	0.00
49	S	2-Fluorobiphenyl	1.257	1.248	0.7	100	0.00
50	P	2-Chloronaphthalene	1.055	1.029	2.5	100	0.00
51	P	2-Nitroaniline	0.361	0.340	5.8	100	0.00
52	P	Dimethylphthalate	1.198	1.190	0.7	100	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80866.D Vial: 6
Acq On : 29 Jan 2021 11:15 am Operator: SCB
Sample : S1A0503-CAL6 Inst : MSD12
Misc : 1,1 0012170 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
53		1,3-Dinitrobenzene	0.213	0.203	4.7	100	0.00
54	P	2,6-Dinitrotoluene	0.288	0.288	0.0	100	0.00
55	P	Acenaphthylene	1.837	1.819	1.0	100	0.00
56	P	3-Nitroaniline	0.338	0.323	4.4	100	-0.01
57	P	2,4-Dinitrophenol	0.178	0.145	18.5	100	0.00
58	C,P	Acenaphthene	1.162	1.183	-1.8	100	0.00
59	P	4-Nitrophenol	0.213	0.204	4.2	100	-0.01
60	P	2,4-Dinitrotoluene	0.372	0.360	3.2	100	-0.01
61	P	Dibenzofuran	1.536	1.514	1.4	100	0.00
62		2,3,5,6-Tetrachlorophenol	0.280	0.274	2.1	100	0.00
63		2,3,4,6-Tetrachlorophenol	0.289	0.280	3.1	100	0.00
64		1-Naphthylamine	1.221	1.210	0.9	100	0.00
65		2-Naphthylamine	1.281	1.258	1.8	100	0.00
66	P	Diethylphthalate	1.239	1.209	2.4	100	0.00
67	P	Fluorene	1.251	1.233	1.4	100	0.00
68	P	4-Chlorophenyl Phenyl Ether	0.586	0.572	2.4	100	0.00
69	P	4-Nitroaniline	0.372	0.362	2.7	100	-0.01
70		5-Nitro-o-Toluidine	0.391	0.382	2.3	100	-0.01
71		1,2-Diphenylhydrazine & Azo	1.090	1.074	1.5	100	0.00
72	S	2,4,6-Tribromophenol	0.172	0.166	3.5	100	0.00
73	I	Phenanthrene-d10	1.000	1.000	0.0	100	0.00
74	P	4,6-Dinitro-2-Methylphenol	0.121	0.104	14.0	100	-0.01
75	C,P	Diphenylamine/n-Nitrosodiph	0.614	0.601	2.1	100	0.00
76	P	4-Bromophenyl Phenyl Ether	0.181	0.175	3.3	100	0.00
77	P	Hexachlorobenzene	0.196	0.188	4.1	100	0.00
78		4-Aminobiphenyl	0.830	0.801	3.5	100	0.00
79	C,P	Pentachlorophenol	0.136	0.119	12.5	100	0.00
80	P	Phenanthrene	1.041	1.021	1.9	100	0.00
81	P	Anthracene	1.063	1.027	3.4	100	0.00
82	P	Carbazole	0.940	0.916	2.6	100	0.00
83	P	Di-n-Butyl Phthalate	1.128	1.079	4.3	100	0.00
84		Methapyrilene	0.453	0.421	7.1	100	0.00
85	C,P	Fluoranthene	1.010	0.967	4.3	100	0.00
86	I	Chrysene-d12	1.000	1.000	0.0	100	0.00
87		Benzidine	0.880	0.818	7.0	100	-0.01
88	P	Pyrene	1.279	1.249	2.3	100	-0.01
89	S	p-Terphenyl-d14	0.959	0.931	2.9	100	0.00
90		p-(Dimethylamino)azobenzene	0.250	0.235	6.0	100	0.00
91	P	Butyl Benzyl Phthalate	0.633	0.616	2.7	100	0.00
92		3,3'-Dimethylbenzidine	0.914	0.876	4.2	100	-0.01
93		2-Acetylaminofluorene	0.525	0.490	6.7	100	-0.01
94	P	bis(2-Ethylhexyl)phthalate	0.850	0.827	2.7	100	0.00
95	P	3,3'-Dichlorobenzidine	0.463	0.435	6.0	100	0.00
96	P	Benzo[a]anthracene	1.179	1.156	2.0	100	0.00
97	P	Chrysene	1.190	1.170	1.7	100	-0.01
98	I	Perylene-d12	1.000	1.000	0.0	100	0.00
99	C,P	Di-n-Octyl Phthalate	1.250	1.158	7.4	100	0.00
100	P	Benzo[b]fluoranthene	0.994	0.940	5.4	100	-0.02
101	P	Benzo[k]fluoranthene	1.032	1.011	2.0	100	-0.01
102	C,P	Benzo[a]pyrene	0.890	0.852	4.3	100	-0.01
103	P	Indeno[1,2,3-cd]pyrene	0.921	0.846	8.1	100	-0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80866.D Vial: 6
Acq On : 29 Jan 2021 11:15 am Operator: SCB
Sample : S1A0503-CAL6 Inst : MSD12
Misc : 1,1 0012170 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
104	P	Dibenz[ah]anthracene	1.023	0.969	5.3	100	-0.02
105	P	Benzo[ghi]perylene	0.999	0.954	4.5	100	-0.02

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80866.D Vial: 6
Acq On : 29 Jan 2021 11:15 am Operator: SCB
Sample : S1A0503-CAL6 Inst : MSD12
Misc : 1,1 0012170 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	100	0.00
2		n-Nitrosodimethylamine	15.000	13.575	9.5	100	0.00
3		Pyridine	15.000	14.682	2.1	100	0.00
4		2-Picoline	15.000	14.314	4.6	100	0.00
5		n-Nitrosomethylethylamine	15.000	15.192	-1.3	100	0.00
6	S	2-Fluorophenol	15.000	14.419	3.9	100	0.00
7		n-Nitrosodiethylamine	15.000	14.452	3.7	100	0.00
8	S	Phenol-d5	15.000	14.325	4.5	100	0.00
9	C,P	Phenol	15.000	14.964	0.2	100	0.00
10		Aniline	15.000	15.004	-0.0	100	0.00
11	P	bis(2-Chloroethyl)ether	15.000	14.744	1.7	100	0.00
12	P	2-Chlorophenol	15.000	14.570	2.9	100	0.00
13		1,3-Dichlorobenzene	15.000	14.878	0.8	100	0.00
14	C	1,4-Dichlorobenzene	15.000	14.792	1.4	100	0.00
15		Benzyl Alcohol	15.000	14.303	4.6	100	0.00
16		1,2-Dichlorobenzene	15.000	14.649	2.3	100	0.00
17	P	2-Methylphenol	15.000	14.329	4.5	100	0.00
18	P	bis(2-Chloroisopropyl)ether	15.000	14.679	2.1	100	0.00
19	P	3-,4-Methylphenol	15.000	14.405	4.0	100	-0.01
20		n-Nitrosopyrrolidine	15.000	14.343	4.4	100	-0.01
21	P	n-Nitrosodipropylamine	15.000	14.376	4.2	100	-0.01
22		n-Nitrosomorpholine	15.000	14.792	1.4	100	-0.01
23		o-Toluidine	15.000	14.627	2.5	100	0.00
24	P	Hexachloroethane	15.000	14.475	3.5	100	0.00
25	I	Naphthalene-d8	40.000	40.000	0.0	100	0.00
26	S	Nitrobenzene-d5	15.000	14.672	2.2	100	0.00
27	P	Nitrobenzene	15.000	14.879	0.8	100	0.00
28		n-Nitrosopiperidine	15.000	14.619	2.5	100	0.00
29	P	Isophorone	15.000	14.748	1.7	100	0.00
30	C,P	2-Nitrophenol	15.000	14.312	4.6	100	0.00
31	P	2,4-Dimethylphenol	15.000	14.736	1.8	100	0.00
32	P	bis(2-Chloroethoxy)methane	15.000	14.828	1.1	100	0.00
33		Benzoic Acid	15.000	14.940	0.4	100	-0.04
34	C,P	2,4-Dichlorophenol	15.000	14.718	1.9	100	0.00
35		a,a-Dimethylphenethylamine	15.000	14.619	2.5	100	-0.03
36		1,2,4-Trichlorobenzene	15.000	14.970	0.2	100	0.00
37	P	Naphthalene	15.000	14.787	1.4	100	0.00
38	P	4-Chloroaniline	15.000	14.475	3.5	100	0.00
39	C,P	Hexachlorobutadiene	15.000	14.858	0.9	100	0.00
40		n-Nitrosodi-n-Butylamine	15.000	14.768	1.5	100	0.00
41		p-Phenylenediamine	15.000	15.379	-2.5	100	-0.02
42	C,P	4-Chloro-3-Methylphenol	15.000	14.625	2.5	100	0.00
43	P	2-Methylnaphthalene	15.000	14.644	2.4	100	0.00
44		1-Methylnaphthalene	15.000	14.853	1.0	100	0.00
45	I	Acenaphthene-d10	40.000	40.000	0.0	100	0.00
46	P	Hexachlorocyclopentadiene	15.000	14.676	2.2	100	0.00
47	C,P	2,4,6-Trichlorophenol	15.000	14.846	1.0	100	0.00
48	P	2,4,5-Trichlorophenol	15.000	14.904	0.6	100	0.00
49	S	2-Fluorobiphenyl	15.000	14.889	0.7	100	0.00
50	P	2-Chloronaphthalene	15.000	14.622	2.5	100	0.00
51	P	2-Nitroaniline	15.000	14.153	5.6	100	0.00
52	P	Dimethylphthalate	15.000	14.901	0.7	100	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80866.D Vial: 6
Acq On : 29 Jan 2021 11:15 am Operator: SCB
Sample : S1A0503-CAL6 Inst : MSD12
Misc : 1,1 0012170 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
53		1,3-Dinitrobenzene	15.000	14.314	4.6	100	0.00
54	P	2,6-Dinitrotoluene	15.000	15.012	-0.1	100	0.00
55	P	Acenaphthylene	15.000	14.852	1.0	100	0.00
56	P	3-Nitroaniline	15.000	14.296	4.7	100	-0.01
57	P	2,4-Dinitrophenol	15.000	14.619	2.5	100	0.00
58	C,P	Acenaphthene	15.000	15.273	-1.8	100	0.00
59	P	4-Nitrophenol	15.000	14.372	4.2	100	-0.01
60	P	2,4-Dinitrotoluene	15.000	14.535	3.1	100	-0.01
61	P	Dibenzofuran	15.000	14.783	1.4	100	0.00
62		2,3,5,6-Tetrachlorophenol	15.000	14.700	2.0	100	0.00
63		2,3,4,6-Tetrachlorophenol	15.000	14.568	2.9	100	0.00
64		1-Naphthylamine	15.000	14.864	0.9	100	0.00
65		2-Naphthylamine	15.000	14.732	1.8	100	0.00
66	P	Diethylphthalate	15.000	14.639	2.4	100	0.00
67	P	Fluorene	15.000	14.785	1.4	100	0.00
68	P	4-Chlorophenyl Phenyl Ether	15.000	14.646	2.4	100	0.00
69	P	4-Nitroaniline	15.000	14.608	2.6	100	-0.01
70		5-Nitro-o-Toluidine	15.000	14.671	2.2	100	-0.01
71		1,2-Diphenylhydrazine & Azo	15.000	14.777	1.5	100	0.00
72	S	2,4,6-Tribromophenol	15.000	14.497	3.4	100	0.00
73	I	Phenanthrene-d10	40.000	40.000	0.0	100	0.00
74	P	4,6-Dinitro-2-Methylphenol	15.000	12.969	13.5	100	-0.01
75	C,P	Diphenylamine/n-Nitrosodiph	15.000	14.672	2.2	100	0.00
76	P	4-Bromophenyl Phenyl Ether	15.000	14.478	3.5	100	0.00
77	P	Hexachlorobenzene	15.000	14.374	4.2	100	0.00
78		4-Aminobiphenyl	15.000	14.476	3.5	100	0.00
79	C,P	Pentachlorophenol	15.000	13.226	11.8	100	0.00
80	P	Phenanthrene	15.000	14.703	2.0	100	0.00
81	P	Anthracene	15.000	14.493	3.4	100	0.00
82	P	Carbazole	15.000	14.627	2.5	100	0.00
83	P	Di-n-Butyl Phthalate	15.000	14.344	4.4	100	0.00
84		Methapyrilene	15.000	13.898	7.3	100	0.00
85	C,P	Fluoranthene	15.000	14.358	4.3	100	0.00
86	I	Chrysene-d12	40.000	40.000	0.0	100	0.00
87		Benzidine	15.000	13.936	7.1	100	-0.01
88	P	Pyrene	15.000	14.646	2.4	100	-0.01
89	S	p-Terphenyl-d14	15.000	14.565	2.9	100	0.00
90		p-(Dimethylamino)azobenzene	15.000	14.074	6.2	100	0.00
91	P	Butyl Benzyl Phthalate	15.000	14.610	2.6	100	0.00
92		3,3'-Dimethylbenzidine	30.000	28.765	4.1	100	-0.01
93		2-Acetylaminofluorene	15.000	13.936	7.1	100	-0.01
94	P	bis(2-Ethylhexyl)phthalate	15.000	14.595	2.7	100	0.00
95	P	3,3'-Dichlorobenzidine	15.000	14.079	6.1	100	0.00
96	P	Benzo[a]anthracene	15.000	14.716	1.9	100	0.00
97	P	Chrysene	15.000	14.746	1.7	100	-0.01
98	I	Perylene-d12	40.000	40.000	0.0	100	0.00
99	C,P	Di-n-Octyl Phthalate	15.000	13.855	7.6	100	0.00
100	P	Benzo[b]fluoranthene	15.000	14.183	5.4	100	-0.02
101	P	Benzo[k]fluoranthene	15.000	14.692	2.1	100	-0.01
102	C,P	Benzo[a]pyrene	15.000	14.357	4.3	100	-0.01
103	P	Indeno[1,2,3-cd]pyrene	15.000	13.774	8.2	100	-0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80866.D Vial: 6
Acq On : 29 Jan 2021 11:15 am Operator: SCB
Sample : S1A0503-CAL6 Inst : MSD12
Misc : 1,1 0012170 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
104	P	Dibenz[ah]anthracene	15.000	14.203	5.3	100	-0.02
105	P	Benzo[ghi]perylene	15.000	14.331	4.5	100	-0.02

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80867.D Vial: 7
Acq On : 29 Jan 2021 11:46 am Operator: SCB
Sample : S1A0503-CAL5 Inst : MSD12
Misc : 1,1 0012169 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 09:58:08 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.629	152	74983	40.0000	ug/ml	0.000
25) Naphthalene-d8	7.901	136	289069	40.0000	ug/ml	0.000
45) Acenaphthene-d10	9.637	164	160178	40.0000	ug/ml	0.000
73) Phenanthrene-d10	11.095	188	281104	40.0000	ug/ml	0.000
86) Chrysene-d12	14.488	240	232120	40.0000	ug/ml	0.000
98) Perylene-d12	16.977	264	261242	40.0000	ug/ml	-0.011
System Monitoring Compounds						
6) 2-Fluorophenol	5.251	112	60288	27.0923735	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 27.09%			
8) Phenol-d5	6.255	99	70636	27.3925562	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 27.39%			
26) Nitrobenzene-d5	7.185	82	59198	26.6897673	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 53.38%			
49) 2-Fluorobiphenyl	8.974	172	138793	27.5768517	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 55.15%			
72) 2,4,6-Tribromophenol	10.411	330	18825	27.3724701	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 27.37%			
89) p-Terphenyl-d14	12.912	244	150660	27.0668727	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 54.13%			
Target Compounds						Qvalue
2) n-Nitrosodimethylamine	3.49	74	36022	26.8630	ug/ml	99
3) Pyridine	3.53	79	61465	27.4768	ug/ml	99
4) 2-Picoline	4.54	93	68895	27.1915	ug/ml	99
5) n-Nitrosomethylethylamine	4.70	88	23717	23.5238	ug/ml#	84
7) n-Nitrosodiethylamine	5.50	102	30773	27.3954	ug/ml	97
9) Phenol	6.27	94	81255	27.7570	ug/ml	96
10) Aniline	6.29	93	93191	27.7148	ug/ml#	100
11) bis(2-Chloroethyl)ether	6.37	63	42415	27.4011	ug/ml	100
12) 2-Chlorophenol	6.41	128	65529	27.2008	ug/ml	100
13) 1,3-Dichlorobenzene	6.57	146	74170	27.5825	ug/ml	98
14) 1,4-Dichlorobenzene	6.65	146	75495	27.0317	ug/ml	99
15) Benzyl Alcohol	6.77	108	42528	27.0790	ug/ml	99
16) 1,2-Dichlorobenzene	6.80	146	70608	27.0610	ug/ml	100
17) 2-Methylphenol	6.89	107	51271	27.0904	ug/ml	88
18) bis(2-Chloroisopropyl)ethe	6.92	45	74568	27.4069	ug/ml#	99
19) 3-,4-Methylphenol	7.04	108	61979	27.0378	ug/ml	99
20) n-Nitrosopyrrolidine	7.01	100	31350	27.0052	ug/ml	97
21) n-Nitrosodipropylamine	7.05	70	40526	27.2549	ug/ml	99
22) n-Nitrosomorpholine	7.06	56	36578	26.9658	ug/ml	98
23) o-Toluidine	7.07	106	102302	27.3965	ug/ml	98
24) Hexachloroethane	7.14	117	25940	26.9171	ug/ml	98
27) Nitrobenzene	7.21	77	59430	26.8589	ug/ml	98
28) n-Nitrosopiperidine	7.36	114	31768	26.8426	ug/ml	98
29) Isophorone	7.45	82	111011	27.1663	ug/ml	99
30) 2-Nitrophenol	7.52	139	34591	26.4532	ug/ml	99
31) 2,4-Dimethylphenol	7.57	122	57920	27.0274	ug/ml	100
32) bis(2-Chloroethoxy)methane	7.67	93	66974	27.1239	ug/ml	99
33) Benzoic Acid	7.64	105	42601	28.8398	ug/ml	98
34) 2,4-Dichlorophenol	7.76	162	51448	26.7766	ug/ml	99
35) a,a-Dimethylphenethylamine	7.83	58	151402m	28.2258	ug/ml	
36) 1,2,4-Trichlorobenzene	7.85	180	56130	26.8561	ug/ml	99
37) Naphthalene	7.92	128	193759	27.1411	ug/ml	100
38) 4-Chloroaniline	7.98	65	20650	25.2387	ug/ml	89

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80867.D Vial: 7
Acq On : 29 Jan 2021 11:46 am Operator: SCB
Sample : S1A0503-CAL5 Inst : MSD12
Misc : 1,1 0012169 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 09:58:08 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39) Hexachlorobutadiene	8.05	225	29755	27.5415 ug/ml	99
40) n-Nitrosodi-n-Butylamine	8.31	84	36901	26.9966 ug/ml	100
41) p-Phenylenediamine	8.32	108	72979	28.1117 ug/ml	99
42) 4-Chloro-3-Methylphenol	8.45	107	53151	26.8509 ug/ml	99
43) 2-Methylnaphthalene	8.61	142	131747	27.2128 ug/ml	100
44) 1-Methylnaphthalene	8.71	142	121563	27.0642 ug/ml	99
46) Hexachlorocyclopentadiene	8.77	237	37016	27.0545 ug/ml	99
47) 2,4,6-Trichlorophenol	8.88	196	36624	27.6284 ug/ml	99
48) 2,4,5-Trichlorophenol	8.92	196	38060	26.8621 ug/ml	99
50) 2-Chloronaphthalene	9.09	162	114971	27.2017 ug/ml	99
51) 2-Nitroaniline	9.58	65	38386	26.5841 ug/ml	99
52) Dimethylphthalate	9.37	163	130689	27.2416 ug/ml	100
53) 1,3-Dinitrobenzene	9.39	168	23304	27.3283 ug/ml#	68
54) 2,6-Dinitrotoluene	9.43	165	31642	27.4497 ug/ml	98
55) Acenaphthylene	9.50	152	203655	27.6891 ug/ml	99
56) 3-Nitroaniline	9.59	138	35424	26.1399 ug/ml	99
57) 2,4-Dinitrophenol	9.69	184	17233	26.5472 ug/ml#	71
58) Acenaphthene	9.67	154	130552	28.0567 ug/ml	96
59) 4-Nitrophenol	9.74	65	23319	27.3686 ug/ml	100
60) 2,4-Dinitrotoluene	9.82	165	40172	27.0007 ug/ml	98
61) Dibenzofuran	9.83	168	168670	27.4146 ug/ml	100
62) 2,3,5,6-Tetrachlorophenol	9.91	232	30148	26.9228 ug/ml	98
63) 2,3,4,6-Tetrachlorophenol	9.95	232	30807	26.6618 ug/ml	99
64) 1-Naphthylamine	9.91	143	133566	27.3112 ug/ml	100
65) 2-Naphthylamine	9.99	143	139706	27.2400 ug/ml	100
66) Diethylphthalate	10.07	149	135074	27.2199 ug/ml	99
67) Fluorene	10.18	166	135319	27.0135 ug/ml	100
68) 4-Chlorophenyl Phenyl Ethe	10.18	204	64027	27.2794 ug/ml	99
69) 4-Nitroaniline	10.19	138	40102	26.9274 ug/ml	99
70) 5-Nitro-o-Toluidine	10.18	152	42795	27.3550 ug/ml	99
71) 1,2-Diphenylhydrazine & Az	10.33	77	119436	27.3599 ug/ml	99
74) 4,6-Dinitro-2-Methylphenol	10.22	198	21724	25.5850 ug/ml	98
75) Diphenylamine/n-Nitrosodip	10.29	169	118134	27.3654 ug/ml	100
76) 4-Bromophenyl Phenyl Ether	10.66	248	35088	27.5351 ug/ml	99
77) Hexachlorobenzene	10.72	284	37678	27.3164 ug/ml	99
78) 4-Aminobiphenyl	10.91	169	160281	27.4887 ug/ml	99
79) Pentachlorophenol	10.90	266	24826	26.0661 ug/ml	98
80) Phenanthrene	11.12	178	198468	27.1191 ug/ml	99
81) Anthracene	11.17	178	204118	27.3265 ug/ml	100
82) Carbazole	11.32	167	179809	27.2245 ug/ml	100
83) Di-n-Butyl Phthalate	11.70	149	216760	27.3376 ug/ml	100
84) Methapyrilene	12.01	58	87049	25.9831 ug/ml	100
85) Fluoranthene	12.41	202	194504	27.4040 ug/ml	99
87) Benzidine	12.58	184	139913	27.3877 ug/ml	99
88) Pyrene	12.69	202	202621	27.3001 ug/ml	100
90) p-(Dimethylamino)azobenzen	13.10	225	40084	27.6286 ug/ml	98
91) Butyl Benzyl Phthalate	13.64	149	100334	27.3334 ug/ml	99
92) 3,3'-Dimethylbenzidine	13.60	212	291570	54.9793 ug/ml	100
93) 2-Acetylaminofluorene	13.97	181	83322	25.5841 ug/ml	99
94) bis(2-Ethylhexyl)phthalate	14.62	149	137420	27.8637 ug/ml	99
95) 3,3'-Dichlorobenzidine	14.45	252	72639	27.0164 ug/ml	100
96) Benzo[a]anthracene	14.47	228	184753	27.0109 ug/ml	99
97) Chrysene	14.53	228	187916	27.2064 ug/ml	99
99) Di-n-Octyl Phthalate	15.79	149	222468	25.7274 ug/ml	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80867.D Vial: 7
Acq On : 29 Jan 2021 11:46 am Operator: SCB
Sample : S1A0503-CAL5 Inst : MSD12
Misc : 1,1 0012169 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 09:58:08 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

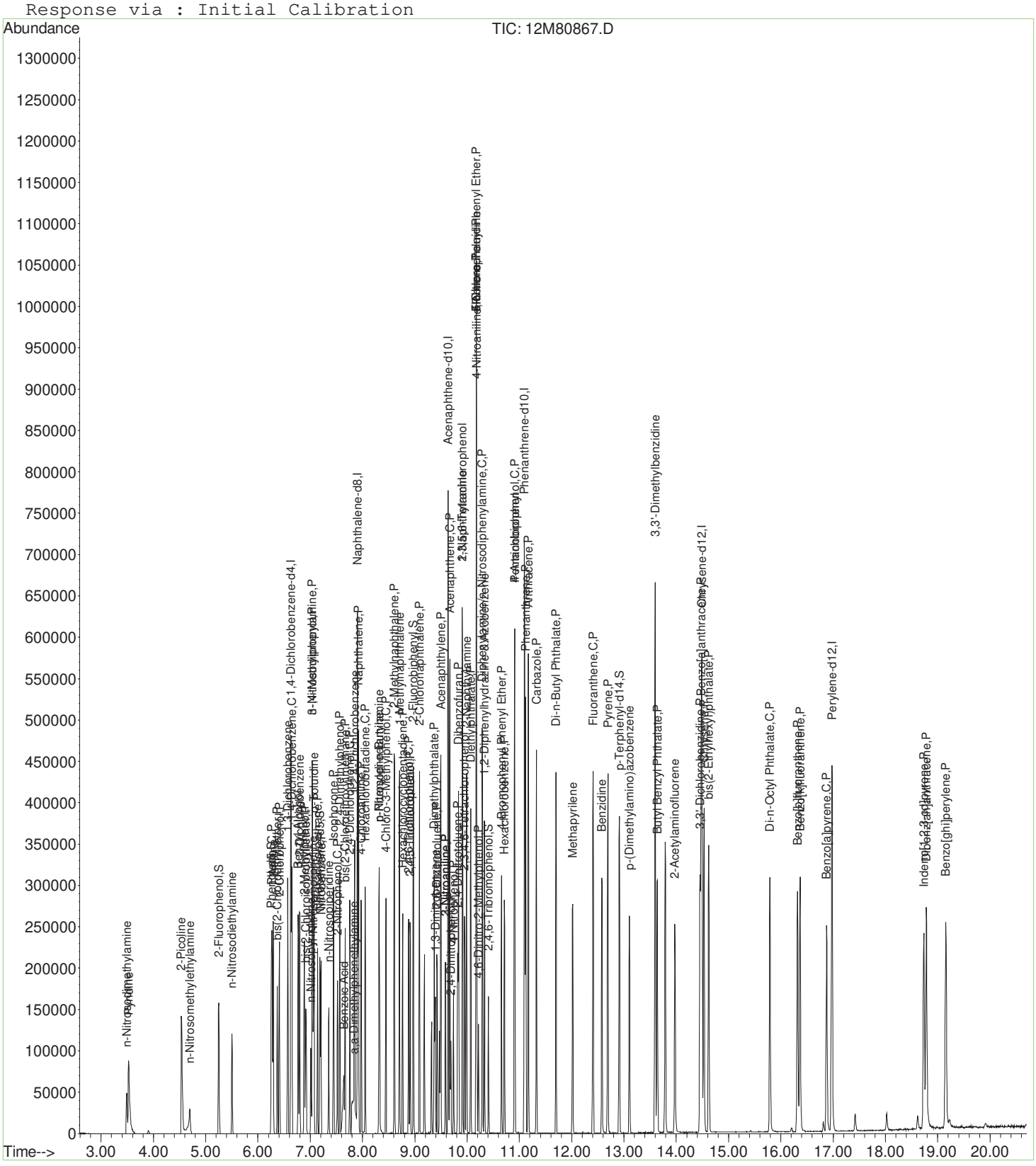
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
100) Benzo[b]fluoranthene	16.32	252	174785	26.9279	ug/ml	99
101) Benzo[k]fluoranthene	16.37	252	190347	28.2349	ug/ml	100
102) Benzo[a]pyrene	16.88	252	158465	27.2613	ug/ml	99
103) Indeno[1,2,3-cd]pyrene	18.73	276	160198	26.6374	ug/ml	99
104) Dibenz[ah]anthracene	18.78	278	176985	26.4857	ug/ml	98
105) Benzo[ghi]perylene	19.16	276	179848	27.5686	ug/ml	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80867.D Vial: 7
Acq On : 29 Jan 2021 11:46 am Operator: SCB
Sample : S1A0503-CAL5 Inst : MSD12
Misc : 1,1 0012169 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 10:41 2021 Quant Results File: MEGAMIX.RES

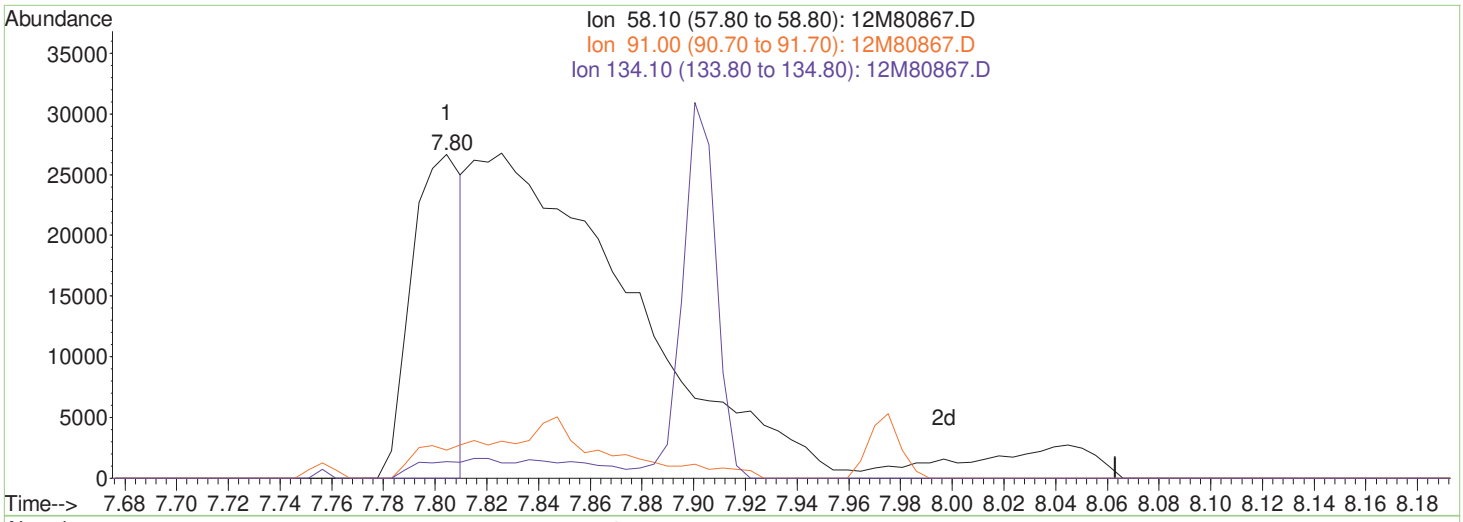
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration

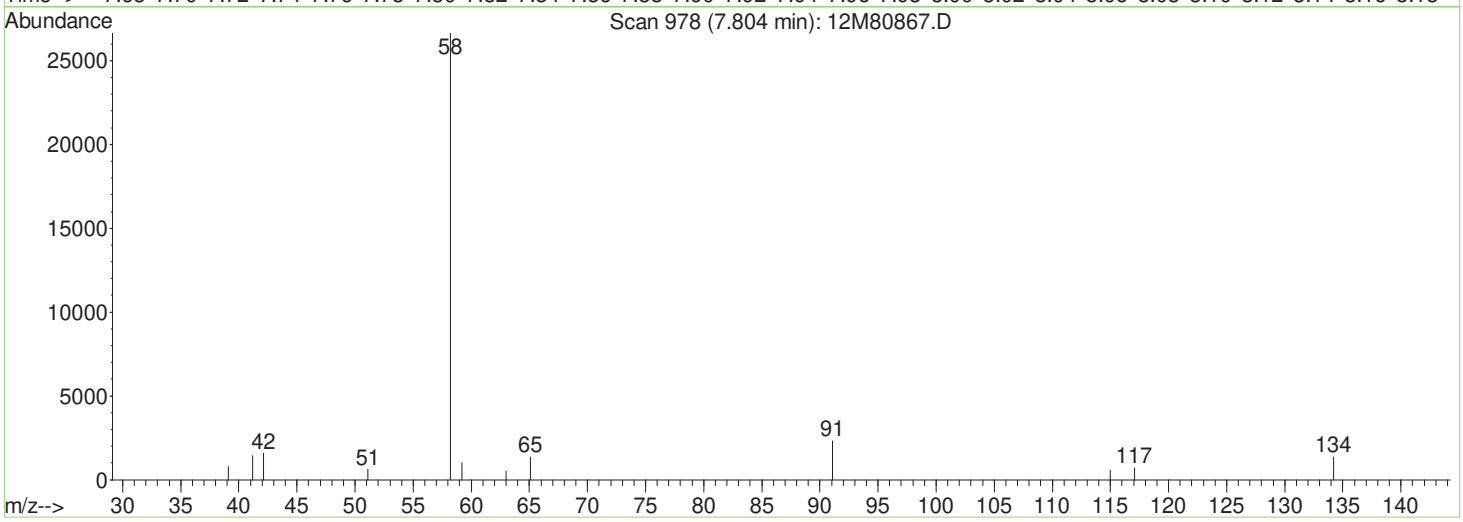


Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\012921\12M80867.D Vial: 7
Acq On : 29 Jan 2021 11:46 am Operator: SCB
Sample : S1A0503-CAL5 Inst : MSD12
Misc : 1,1 0012169 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 9:58 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration





TIC: 12M80867.D

(35) a,a-Dimethylphenethylamine

7.80min 6.82ug/ml

response 36584

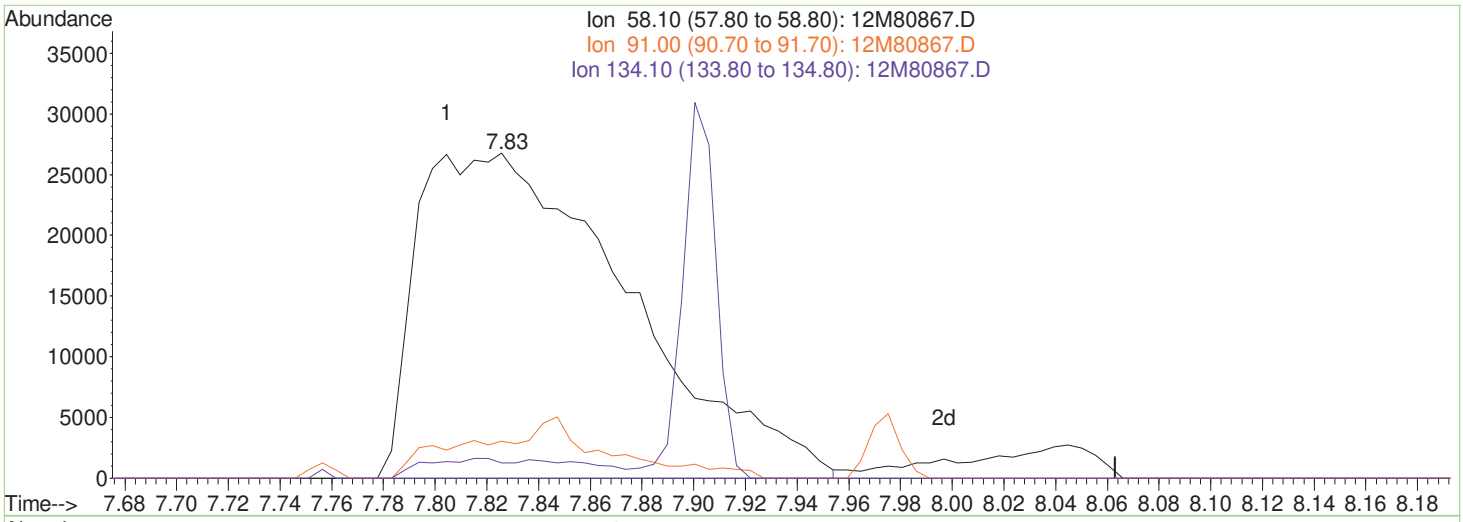
Ion	Exp%	Act%
58.10	100	100
91.00	6.40	14.98#
134.10	1.90	10.14#
0.00	0.00	0.00

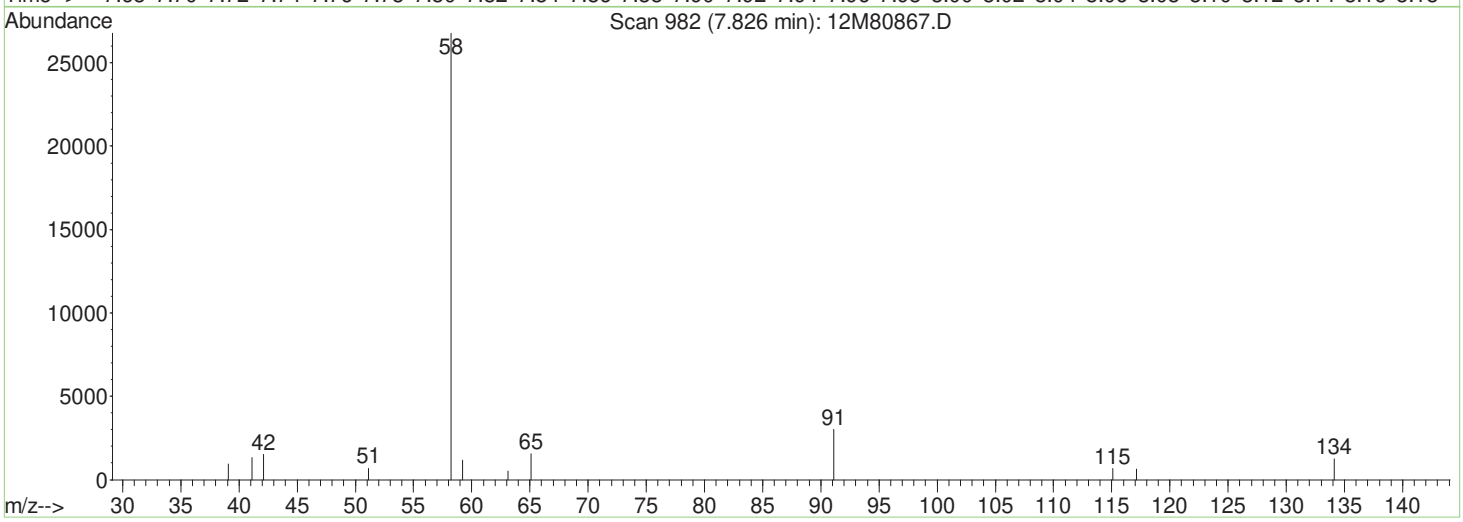
12M80867.D MEGAMIX.M Mon Feb 01 10:41:51 2021

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\012921\12M80867.D Vial: 7
Acq On : 29 Jan 2021 11:46 am Operator: SCB
Sample : S1A0503-CAL5 Inst : MSD12
Misc : 1,1 0012169 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 10:41 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration





TIC: 12M80867.D

(35) a,a-Dimethylphenethylamine

7.83min 28.23ug/ml mint

response 151402

Ion	Exp%	Act%
58.10	100	100
91.00	6.40	3.62#
134.10	1.90	2.45#
0.00	0.00	0.00

Sarah Bogolin

Digitally signed by Sarah Bogolin
Reason: Data system splits the peak incorrectly or integrates a false peak as a rider peak
Date: 2021.02.01 13:56:32 -05'00'

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80867.D Vial: 7
Acq On : 29 Jan 2021 11:46 am Operator: SCB
Sample : S1A0503-CAL5 Inst : MSD12
Misc : 1,1 0012169 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	100	0.00
2		n-Nitrosodimethylamine	0.715	0.769	-7.6	100	0.00
3		Pyridine	1.193	1.312	-10.0	100	0.00
4		2-Picoline	1.352	1.470	-8.7	100	0.00
5		n-Nitrosomethylethylamine	0.506	0.506	0.0	100	0.00
6	S	2-Fluorophenol	1.187	1.286	-8.3	100	0.00
7		n-Nitrosodiethylamine	0.599	0.657	-9.7	100	0.00
8	S	Phenol-d5	1.376	1.507	-9.5	100	0.00
9	C,P	Phenol	1.562	1.734	-11.0	100	0.00
10		Aniline	1.794	1.989	-10.9	100	0.00
11	P	bis(2-Chloroethyl)ether	0.826	0.905	-9.6	100	0.00
12	P	2-Chlorophenol	1.285	1.398	-8.8	100	0.00
13		1,3-Dichlorobenzene	1.434	1.583	-10.4	100	0.00
14	C	1,4-Dichlorobenzene	1.490	1.611	-8.1	100	0.00
15		Benzyl Alcohol	0.838	0.907	-8.2	100	0.00
16		1,2-Dichlorobenzene	1.392	1.507	-8.3	100	0.00
17	P	2-Methylphenol	1.010	1.094	-8.3	100	0.00
18	P	bis(2-Chloroisopropyl)ether	1.451	1.591	-9.6	100	0.00
19	P	3-,4-Methylphenol	1.223	1.323	-8.2	100	0.00
20		n-Nitrosopyrrolidine	0.619	0.669	-8.1	100	0.00
21	P	n-Nitrosodipropylamine	0.793	0.865	-9.1	100	0.00
22		n-Nitrosomorpholine	0.724	0.781	-7.9	100	0.00
23		o-Toluidine	1.992	2.183	-9.6	100	0.00
24	P	Hexachloroethane	0.514	0.554	-7.8	100	0.00
25	I	Naphthalene-d8	1.000	1.000	0.0	100	0.00
26	S	Nitrobenzene-d5	0.307	0.328	-6.8	100	0.00
27	P	Nitrobenzene	0.306	0.329	-7.5	100	0.00
28		n-Nitrosopiperidine	0.164	0.176	-7.3	100	0.00
29	P	Isophorone	0.565	0.614	-8.7	100	0.00
30	C,P	2-Nitrophenol	0.181	0.191	-5.5	100	0.00
31	P	2,4-Dimethylphenol	0.297	0.321	-8.1	100	0.00
32	P	bis(2-Chloroethoxy)methane	0.342	0.371	-8.5	100	0.00
33		Benzoic Acid	0.222	0.236	-6.3	100	-0.03
34	C,P	2,4-Dichlorophenol	0.266	0.285	-7.1	100	0.00
35		a,a-Dimethylphenethylamine	0.742	0.838	-12.9	100	-0.04
36		1,2,4-Trichlorobenzene	0.289	0.311	-7.6	100	0.00
37	P	Naphthalene	0.988	1.072	-8.5	100	0.00
38	P	4-Chloroaniline	0.113	0.114	-0.9	100	0.00
39	C,P	Hexachlorobutadiene	0.149	0.165	-10.7	100	0.00
40		n-Nitrosodi-n-Butylamine	0.189	0.204	-7.9	100	0.00
41		p-Phenylenediamine	0.359	0.404	-12.5	100	-0.02
42	C,P	4-Chloro-3-Methylphenol	0.274	0.294	-7.3	100	0.00
43	P	2-Methylnaphthalene	0.670	0.729	-8.8	100	0.00
44		1-Methylnaphthalene	0.622	0.673	-8.2	100	0.00
45	I	Acenaphthene-d10	1.000	1.000	0.0	100	0.00
46	P	Hexachlorocyclopentadiene	0.342	0.370	-8.2	100	0.00
47	C,P	2,4,6-Trichlorophenol	0.331	0.366	-10.6	100	0.00
48	P	2,4,5-Trichlorophenol	0.354	0.380	-7.3	100	0.00
49	S	2-Fluorobiphenyl	1.257	1.386	-10.3	100	0.00
50	P	2-Chloronaphthalene	1.055	1.148	-8.8	100	0.00
51	P	2-Nitroaniline	0.361	0.383	-6.1	100	0.00
52	P	Dimethylphthalate	1.198	1.305	-8.9	100	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80867.D Vial: 7
Acq On : 29 Jan 2021 11:46 am Operator: SCB
Sample : S1A0503-CAL5 Inst : MSD12
Misc : 1,1 0012169 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
53		1,3-Dinitrobenzene	0.213	0.233	-9.4	100	0.00
54	P	2,6-Dinitrotoluene	0.288	0.316	-9.7	100	0.00
55	P	Acenaphthylene	1.837	2.034	-10.7	100	0.00
56	P	3-Nitroaniline	0.338	0.354	-4.7	100	0.00
57	P	2,4-Dinitrophenol	0.178	0.172	3.4	100	0.00
58	C,P	Acenaphthene	1.162	1.304	-12.2	100	0.00
59	P	4-Nitrophenol	0.213	0.233	-9.4	100	-0.01
60	P	2,4-Dinitrotoluene	0.372	0.401	-7.8	100	-0.01
61	P	Dibenzofuran	1.536	1.685	-9.7	100	0.00
62		2,3,5,6-Tetrachlorophenol	0.280	0.301	-7.5	100	0.00
63		2,3,4,6-Tetrachlorophenol	0.289	0.308	-6.6	100	0.00
64		1-Naphthylamine	1.221	1.334	-9.3	100	0.00
65		2-Naphthylamine	1.281	1.396	-9.0	100	0.00
66	P	Diethylphthalate	1.239	1.349	-8.9	100	0.00
67	P	Fluorene	1.251	1.352	-8.1	100	0.00
68	P	4-Chlorophenyl Phenyl Ether	0.586	0.640	-9.2	100	0.00
69	P	4-Nitroaniline	0.372	0.401	-7.8	100	0.00
70		5-Nitro-o-Toluidine	0.391	0.427	-9.2	100	0.00
71		1,2-Diphenylhydrazine & Azo	1.090	1.193	-9.4	100	0.00
72	S	2,4,6-Tribromophenol	0.172	0.188	-9.3	100	0.00
73	I	Phenanthrene-d10	1.000	1.000	0.0	100	0.00
74	P	4,6-Dinitro-2-Methylphenol	0.121	0.124	-2.5	100	0.00
75	C,P	Diphenylamine/n-Nitrosodiph	0.614	0.672	-9.4	100	0.00
76	P	4-Bromophenyl Phenyl Ether	0.181	0.200	-10.5	100	0.00
77	P	Hexachlorobenzene	0.196	0.214	-9.2	100	0.00
78		4-Aminobiphenyl	0.830	0.912	-9.9	100	0.00
79	C,P	Pentachlorophenol	0.136	0.141	-3.7	100	0.00
80	P	Phenanthrene	1.041	1.130	-8.5	100	0.00
81	P	Anthracene	1.063	1.162	-9.3	100	0.00
82	P	Carbazole	0.940	1.023	-8.8	100	0.00
83	P	Di-n-Butyl Phthalate	1.128	1.234	-9.4	100	0.00
84		Methapyrilene	0.453	0.495	-9.3	100	0.00
85	C,P	Fluoranthene	1.010	1.107	-9.6	100	0.00
86	I	Chrysene-d12	1.000	1.000	0.0	100	0.00
87		Benzidine	0.880	0.964	-9.5	100	0.00
88	P	Pyrene	1.279	1.397	-9.2	100	0.00
89	S	p-Terphenyl-d14	0.959	1.038	-8.2	100	0.00
90		p-(Dimethylamino)azobenzene	0.250	0.276	-10.4	100	0.00
91	P	Butyl Benzyl Phthalate	0.633	0.692	-9.3	100	0.00
92		3,3'-Dimethylbenzidine	0.914	1.005	-10.0	100	-0.01
93		2-Acetylaminofluorene	0.525	0.574	-9.3	100	-0.01
94	P	bis(2-Ethylhexyl)phthalate	0.850	0.947	-11.4	100	0.00
95	P	3,3'-Dichlorobenzidine	0.463	0.501	-8.2	100	0.00
96	P	Benzo[a]anthracene	1.179	1.273	-8.0	100	0.00
97	P	Chrysene	1.190	1.295	-8.8	100	-0.01
98	I	Perylene-d12	1.000	1.000	0.0	100	-0.01
99	C,P	Di-n-Octyl Phthalate	1.250	1.363	-9.0	100	0.00
100	P	Benzo[b]fluoranthene	0.994	1.070	-7.6	100	-0.01
101	P	Benzo[k]fluoranthene	1.032	1.166	-13.0	100	-0.01
102	C,P	Benzo[a]pyrene	0.890	0.971	-9.1	100	-0.01
103	P	Indeno[1,2,3-cd]pyrene	0.921	0.981	-6.5	100	-0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80867.D Vial: 7
Acq On : 29 Jan 2021 11:46 am Operator: SCB
Sample : S1A0503-CAL5 Inst : MSD12
Misc : 1,1 0012169 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
104	P	Dibenz[ah]anthracene	1.023	1.084	-6.0	100	-0.02
105	P	Benzo[ghi]perylene	0.999	1.101	-10.2	100	-0.02

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80867.D Vial: 7
Acq On : 29 Jan 2021 11:46 am Operator: SCB
Sample : S1A0503-CAL5 Inst : MSD12
Misc : 1,1 0012169 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	100	0.00
2		n-Nitrosodimethylamine	25.000	26.863	-7.5	100	0.00
3		Pyridine	25.000	27.477	-9.9	100	0.00
4		2-Picoline	25.000	27.191	-8.8	100	0.00
5		n-Nitrosomethylethylamine	25.000	23.524	5.9	100	0.00
6	S	2-Fluorophenol	25.000	27.092	-8.4	100	0.00
7		n-Nitrosodiethylamine	25.000	27.395	-9.6	100	0.00
8	S	Phenol-d5	25.000	27.393	-9.6	100	0.00
9	C,P	Phenol	25.000	27.757	-11.0	100	0.00
10		Aniline	25.000	27.715	-10.9	100	0.00
11	P	bis(2-Chloroethyl)ether	25.000	27.401	-9.6	100	0.00
12	P	2-Chlorophenol	25.000	27.201	-8.8	100	0.00
13		1,3-Dichlorobenzene	25.000	27.582	-10.3	100	0.00
14	C	1,4-Dichlorobenzene	25.000	27.032	-8.1	100	0.00
15		Benzyl Alcohol	25.000	27.079	-8.3	100	0.00
16		1,2-Dichlorobenzene	25.000	27.061	-8.2	100	0.00
17	P	2-Methylphenol	25.000	27.090	-8.4	100	0.00
18	P	bis(2-Chloroisopropyl)ether	25.000	27.407	-9.6	100	0.00
19	P	3-,4-Methylphenol	25.000	27.038	-8.2	100	0.00
20		n-Nitrosopyrrolidine	25.000	27.005	-8.0	100	0.00
21	P	n-Nitrosodipropylamine	25.000	27.255	-9.0	100	0.00
22		n-Nitrosomorpholine	25.000	26.966	-7.9	100	0.00
23		o-Toluidine	25.000	27.397	-9.6	100	0.00
24	P	Hexachloroethane	25.000	26.917	-7.7	100	0.00
25	I	Naphthalene-d8	40.000	40.000	0.0	100	0.00
26	S	Nitrobenzene-d5	25.000	26.690	-6.8	100	0.00
27	P	Nitrobenzene	25.000	26.859	-7.4	100	0.00
28		n-Nitrosopiperidine	25.000	26.843	-7.4	100	0.00
29	P	Isophorone	25.000	27.166	-8.7	100	0.00
30	C,P	2-Nitrophenol	25.000	26.453	-5.8	100	0.00
31	P	2,4-Dimethylphenol	25.000	27.027	-8.1	100	0.00
32	P	bis(2-Chloroethoxy)methane	25.000	27.124	-8.5	100	0.00
33		Benzoic Acid	25.000	28.840	-15.4	100	-0.03
34	C,P	2,4-Dichlorophenol	25.000	26.777	-7.1	100	0.00
35		a,a-Dimethylphenethylamine	25.000	28.226	-12.9	100	-0.04
36		1,2,4-Trichlorobenzene	25.000	26.856	-7.4	100	0.00
37	P	Naphthalene	25.000	27.141	-8.6	100	0.00
38	P	4-Chloroaniline	25.000	25.239	-1.0	100	0.00
39	C,P	Hexachlorobutadiene	25.000	27.541	-10.2	100	0.00
40		n-Nitrosodi-n-Butylamine	25.000	26.997	-8.0	100	0.00
41		p-Phenylenediamine	25.000	28.112	-12.4	100	-0.02
42	C,P	4-Chloro-3-Methylphenol	25.000	26.851	-7.4	100	0.00
43	P	2-Methylnaphthalene	25.000	27.213	-8.9	100	0.00
44		1-Methylnaphthalene	25.000	27.064	-8.3	100	0.00
45	I	Acenaphthene-d10	40.000	40.000	0.0	100	0.00
46	P	Hexachlorocyclopentadiene	25.000	27.054	-8.2	100	0.00
47	C,P	2,4,6-Trichlorophenol	25.000	27.628	-10.5	100	0.00
48	P	2,4,5-Trichlorophenol	25.000	26.862	-7.4	100	0.00
49	S	2-Fluorobiphenyl	25.000	27.577	-10.3	100	0.00
50	P	2-Chloronaphthalene	25.000	27.202	-8.8	100	0.00
51	P	2-Nitroaniline	25.000	26.584	-6.3	100	0.00
52	P	Dimethylphthalate	25.000	27.242	-9.0	100	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80867.D Vial: 7
Acq On : 29 Jan 2021 11:46 am Operator: SCB
Sample : S1A0503-CAL5 Inst : MSD12
Misc : 1,1 0012169 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
53		1,3-Dinitrobenzene	25.000	27.328	-9.3	100	0.00
54	P	2,6-Dinitrotoluene	25.000	27.450	-9.8	100	0.00
55	P	Acenaphthylene	25.000	27.689	-10.8	100	0.00
56	P	3-Nitroaniline	25.000	26.140	-4.6	100	0.00
57	P	2,4-Dinitrophenol	25.000	26.547	-6.2	100	0.00
58	C,P	Acenaphthene	25.000	28.057	-12.2	100	0.00
59	P	4-Nitrophenol	25.000	27.369	-9.5	100	-0.01
60	P	2,4-Dinitrotoluene	25.000	27.001	-8.0	100	-0.01
61	P	Dibenzofuran	25.000	27.415	-9.7	100	0.00
62		2,3,5,6-Tetrachlorophenol	25.000	26.923	-7.7	100	0.00
63		2,3,4,6-Tetrachlorophenol	25.000	26.662	-6.6	100	0.00
64		1-Naphthylamine	25.000	27.311	-9.2	100	0.00
65		2-Naphthylamine	25.000	27.240	-9.0	100	0.00
66	P	Diethylphthalate	25.000	27.220	-8.9	100	0.00
67	P	Fluorene	25.000	27.014	-8.1	100	0.00
68	P	4-Chlorophenyl Phenyl Ether	25.000	27.279	-9.1	100	0.00
69	P	4-Nitroaniline	25.000	26.927	-7.7	100	0.00
70		5-Nitro-o-Toluidine	25.000	27.355	-9.4	100	0.00
71		1,2-Diphenylhydrazine & Azo	25.000	27.360	-9.4	100	0.00
72	S	2,4,6-Tribromophenol	25.000	27.372	-9.5	100	0.00
73	I	Phenanthrene-d10	40.000	40.000	0.0	100	0.00
74	P	4,6-Dinitro-2-Methylphenol	25.000	25.585	-2.3	100	0.00
75	C,P	Diphenylamine/n-Nitrosodiph	25.000	27.365	-9.5	100	0.00
76	P	4-Bromophenyl Phenyl Ether	25.000	27.535	-10.1	100	0.00
77	P	Hexachlorobenzene	25.000	27.316	-9.3	100	0.00
78		4-Aminobiphenyl	25.000	27.489	-10.0	100	0.00
79	C,P	Pentachlorophenol	25.000	26.066	-4.3	100	0.00
80	P	Phenanthrene	25.000	27.119	-8.5	100	0.00
81	P	Anthracene	25.000	27.327	-9.3	100	0.00
82	P	Carbazole	25.000	27.225	-8.9	100	0.00
83	P	Di-n-Butyl Phthalate	25.000	27.338	-9.4	100	0.00
84		Methapyrilene	25.000	25.983	-3.9	100	0.00
85	C,P	Fluoranthene	25.000	27.404	-9.6	100	0.00
86	I	Chrysene-d12	40.000	40.000	0.0	100	0.00
87		Benzidine	25.000	27.388	-9.6	100	0.00
88	P	Pyrene	25.000	27.300	-9.2	100	0.00
89	S	p-Terphenyl-d14	25.000	27.067	-8.3	100	0.00
90		p-(Dimethylamino)azobenzene	25.000	27.629	-10.5	100	0.00
91	P	Butyl Benzyl Phthalate	25.000	27.333	-9.3	100	0.00
92		3,3'-Dimethylbenzidine	50.000	54.979	-10.0	100	-0.01
93		2-Acetylaminofluorene	25.000	25.584	-2.3	100	-0.01
94	P	bis(2-Ethylhexyl)phthalate	25.000	27.864	-11.5	100	0.00
95	P	3,3'-Dichlorobenzidine	25.000	27.016	-8.1	100	0.00
96	P	Benzo[a]anthracene	25.000	27.011	-8.0	100	0.00
97	P	Chrysene	25.000	27.206	-8.8	100	-0.01
98	I	Perylene-d12	40.000	40.000	0.0	100	-0.01
99	C,P	Di-n-Octyl Phthalate	25.000	25.727	-2.9	100	0.00
100	P	Benzo[b]fluoranthene	25.000	26.928	-7.7	100	-0.01
101	P	Benzo[k]fluoranthene	25.000	28.235	-12.9	100	-0.01
102	C,P	Benzo[a]pyrene	25.000	27.261	-9.0	100	-0.01
103	P	Indeno[1,2,3-cd]pyrene	25.000	26.637	-6.5	100	-0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80867.D Vial: 7
Acq On : 29 Jan 2021 11:46 am Operator: SCB
Sample : S1A0503-CAL5 Inst : MSD12
Misc : 1,1 0012169 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
104	P	Dibenz[ah]anthracene	25.000	26.486	-5.9	100	-0.02
105	P	Benzo[ghi]perylene	25.000	27.569	-10.3	100	-0.02

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80868.D Vial: 8
Acq On : 29 Jan 2021 12:18 pm Operator: SCB
Sample : S1A0503-CAL3 Inst : MSD12
Misc : 1,1 0012167 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 09:58:09 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.629	152	86628	40.0000	ug/ml	0.000
25) Naphthalene-d8	7.906	136	336578	40.0000	ug/ml	0.000
45) Acenaphthene-d10	9.637	164	187404	40.0000	ug/ml	0.000
73) Phenanthrene-d10	11.100	188	332867	40.0000	ug/ml	0.000
86) Chrysene-d12	14.498	240	277095	40.0000	ug/ml	0.000
98) Perylene-d12	16.988	264	307547	40.0000	ug/ml	0.000
System Monitoring Compounds						
6) 2-Fluorophenol	5.256	112	196244	76.3338362	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 76.33%			
8) Phenol-d5	6.266	99	226903	76.1642598	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 76.16%			
26) Nitrobenzene-d5	7.190	82	193849	75.0614781	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 150.12%#			
49) 2-Fluorobiphenyl	8.974	172	446138	75.7653000	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 151.53%#			
72) 2,4,6-Tribromophenol	10.417	330	63707	79.1753825	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 79.18%			
89) p-Terphenyl-d14	12.917	244	507604	76.3922014	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 152.78%#			
Target Compounds						Qvalue
2) n-Nitrosodimethylamine	3.49	74	118682	76.6083	ug/ml	100
3) Pyridine	3.53	79	202726	78.4427	ug/ml	99
4) 2-Picoline	4.53	93	223767	76.4444	ug/ml	99
5) n-Nitrosomethylethylamine	4.70	88	92977	75.5929	ug/ml	96
7) n-Nitrosodiethylamine	5.51	102	99069	76.3397	ug/ml	97
9) Phenol	6.28	94	257855	76.2435	ug/ml#	78
10) Aniline	6.30	93	296581	76.3458	ug/ml#	98
11) bis(2-Chloroethyl)ether	6.37	63	135843	75.9609	ug/ml	99
12) 2-Chlorophenol	6.42	128	209756	75.3646	ug/ml	99
13) 1,3-Dichlorobenzene	6.57	146	233695	75.2244	ug/ml	99
14) 1,4-Dichlorobenzene	6.65	146	238605	73.9500	ug/ml	100
15) Benzyl Alcohol	6.78	108	139288	76.7674	ug/ml	99
16) 1,2-Dichlorobenzene	6.80	146	225149	74.6905	ug/ml	99
17) 2-Methylphenol	6.89	107	166554	76.1734	ug/ml#	62
18) bis(2-Chloroisopropyl)ethe	6.92	45	233836	74.3915	ug/ml#	98
19) 3-,4-Methylphenol	7.05	108	199866	75.4694	ug/ml	99
20) n-Nitrosopyrrolidine	7.03	100	102842	76.6805	ug/ml	96
21) n-Nitrosodipropylamine	7.06	70	130254	75.8240	ug/ml	97
22) n-Nitrosomorpholine	7.07	56	117935	75.2559	ug/ml	99
23) o-Toluidine	7.08	106	323058	74.8852	ug/ml	99
24) Hexachloroethane	7.14	117	85142	76.4728	ug/ml	99
27) Nitrobenzene	7.21	77	191327	74.2634	ug/ml	98
28) n-Nitrosopiperidine	7.37	114	103086	74.8085	ug/ml	99
29) Isophorone	7.45	82	357431	75.1229	ug/ml	99
30) 2-Nitrophenol	7.53	139	116833	76.7356	ug/ml	98
31) 2,4-Dimethylphenol	7.57	122	185531	74.3546	ug/ml	99
32) bis(2-Chloroethoxy)methane	7.67	93	212562	73.9345	ug/ml	99
33) Benzoic Acid	7.70	105	150058	75.0095	ug/ml	99
34) 2,4-Dichlorophenol	7.76	162	168022	75.1050	ug/ml	99
35) a,a-Dimethylphenethylamine	7.84	58	496847m	79.5525	ug/ml	
36) 1,2,4-Trichlorobenzene	7.85	180	184468	75.8028	ug/ml	98
37) Naphthalene	7.93	128	616035	74.1116	ug/ml	100
38) 4-Chloroaniline	7.98	65	73411	77.0592	ug/ml	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80868.D Vial: 8
Acq On : 29 Jan 2021 12:18 pm Operator: SCB
Sample : S1A0503-CAL3 Inst : MSD12
Misc : 1,1 0012167 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 09:58:09 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39) Hexachlorobutadiene	8.06	225	97749	77.7062 ug/ml	99
40) n-Nitrosodi-n-Butylamine	8.32	84	122359	76.8817 ug/ml	99
41) p-Phenylenediamine	8.34	108	220245	72.8636 ug/ml	98
42) 4-Chloro-3-Methylphenol	8.45	107	179171	77.7376 ug/ml	99
43) 2-Methylnaphthalene	8.61	142	424285	75.2673 ug/ml	100
44) 1-Methylnaphthalene	8.71	142	393078	75.1603 ug/ml	99
46) Hexachlorocyclopentadiene	8.77	237	126579	79.0742 ug/ml	99
47) 2,4,6-Trichlorophenol	8.88	196	120720	77.8382 ug/ml	99
48) 2,4,5-Trichlorophenol	8.92	196	130453	78.6954 ug/ml	99
50) 2-Chloronaphthalene	9.09	162	376762	76.1902 ug/ml	100
51) 2-Nitroaniline	9.59	65	127332	75.3720 ug/ml	99
52) Dimethylphthalate	9.38	163	427855	76.2278 ug/ml	100
53) 1,3-Dinitrobenzene	9.40	168	80970	81.1579 ug/ml	96
54) 2,6-Dinitrotoluene	9.43	165	107063	79.3847 ug/ml	97
55) Acenaphthylene	9.50	152	652819	75.8631 ug/ml	100
56) 3-Nitroaniline	9.59	138	121513	76.6397 ug/ml	98
57) 2,4-Dinitrophenol	9.70	184	68881	76.1320 ug/ml	93
58) Acenaphthene	9.67	154	396254	72.7866 ug/ml	98
59) 4-Nitrophenol	9.75	65	79030	79.2790 ug/ml	99
60) 2,4-Dinitrotoluene	9.83	165	139524	80.1540 ug/ml	98
61) Dibenzofuran	9.84	168	542448	75.3575 ug/ml	99
62) 2,3,5,6-Tetrachlorophenol	9.92	232	103694	79.1479 ug/ml	99
63) 2,3,4,6-Tetrachlorophenol	9.96	232	107841	79.7715 ug/ml	99
64) 1-Naphthylamine	9.92	143	435691	76.1460 ug/ml	99
65) 2-Naphthylamine	10.00	143	455865	75.9716 ug/ml	99
66) Diethylphthalate	10.07	149	441021	75.9623 ug/ml	100
67) Fluorene	10.18	166	449662	76.7242 ug/ml	99
68) 4-Chlorophenyl Phenyl Ethe	10.18	204	208262	75.8412 ug/ml	99
69) 4-Nitroaniline	10.20	138	133674	76.7184 ug/ml	98
70) 5-Nitro-o-Toluidine	10.19	152	145030	79.2367 ug/ml	97
71) 1,2-Diphenylhydrazine & Az	10.34	77	387035	75.7798 ug/ml	99
74) 4,6-Dinitro-2-Methylphenol	10.23	198	81996	81.5521 ug/ml	97
75) Diphenylamine/n-Nitrosodip	10.30	169	389551	76.2057 ug/ml	100
76) 4-Bromophenyl Phenyl Ether	10.66	248	116255	77.0435 ug/ml	100
77) Hexachlorobenzene	10.72	284	125412	76.7840 ug/ml	99
78) 4-Aminobiphenyl	10.91	169	540493	78.2813 ug/ml	99
79) Pentachlorophenol	10.91	266	88138	78.1498 ug/ml	100
80) Phenanthrene	11.13	178	645799	74.5209 ug/ml	99
81) Anthracene	11.18	178	670220	75.7734 ug/ml	99
82) Carbazole	11.33	167	598220	76.4902 ug/ml	100
83) Di-n-Butyl Phthalate	11.70	149	739661	78.7788 ug/ml	100
84) Methapyrilene	12.02	58	306942	74.7830 ug/ml	99
85) Fluoranthene	12.41	202	650390	77.3849 ug/ml	99
87) Benzidine	12.59	184	483134	79.2227 ug/ml	99
88) Pyrene	12.70	202	671102	75.7446 ug/ml	100
90) p-(Dimethylamino)azobenzen	13.11	225	138470	79.9515 ug/ml	98
91) Butyl Benzyl Phthalate	13.64	149	338613	77.2739 ug/ml	97
92) 3,3'-Dimethylbenzidine	13.61	212	998332	157.6939 ug/ml	99
93) 2-Acetylaminofluorene	13.99	181	299928	73.6808 ug/ml	99
94) bis(2-Ethylhexyl)phthalate	14.62	149	475459	80.7579 ug/ml	100
95) 3,3'-Dichlorobenzidine	14.46	252	254966	79.4371 ug/ml	99
96) Benzo[a]anthracene	14.48	228	617078	75.5738 ug/ml	100
97) Chrysene	14.54	228	616226	74.7362 ug/ml	99
99) Di-n-Octyl Phthalate	15.80	149	790304	74.6046 ug/ml	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80868.D Vial: 8
Acq On : 29 Jan 2021 12:18 pm Operator: SCB
Sample : S1A0503-CAL3 Inst : MSD12
Misc : 1,1 0012167 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 09:58:09 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

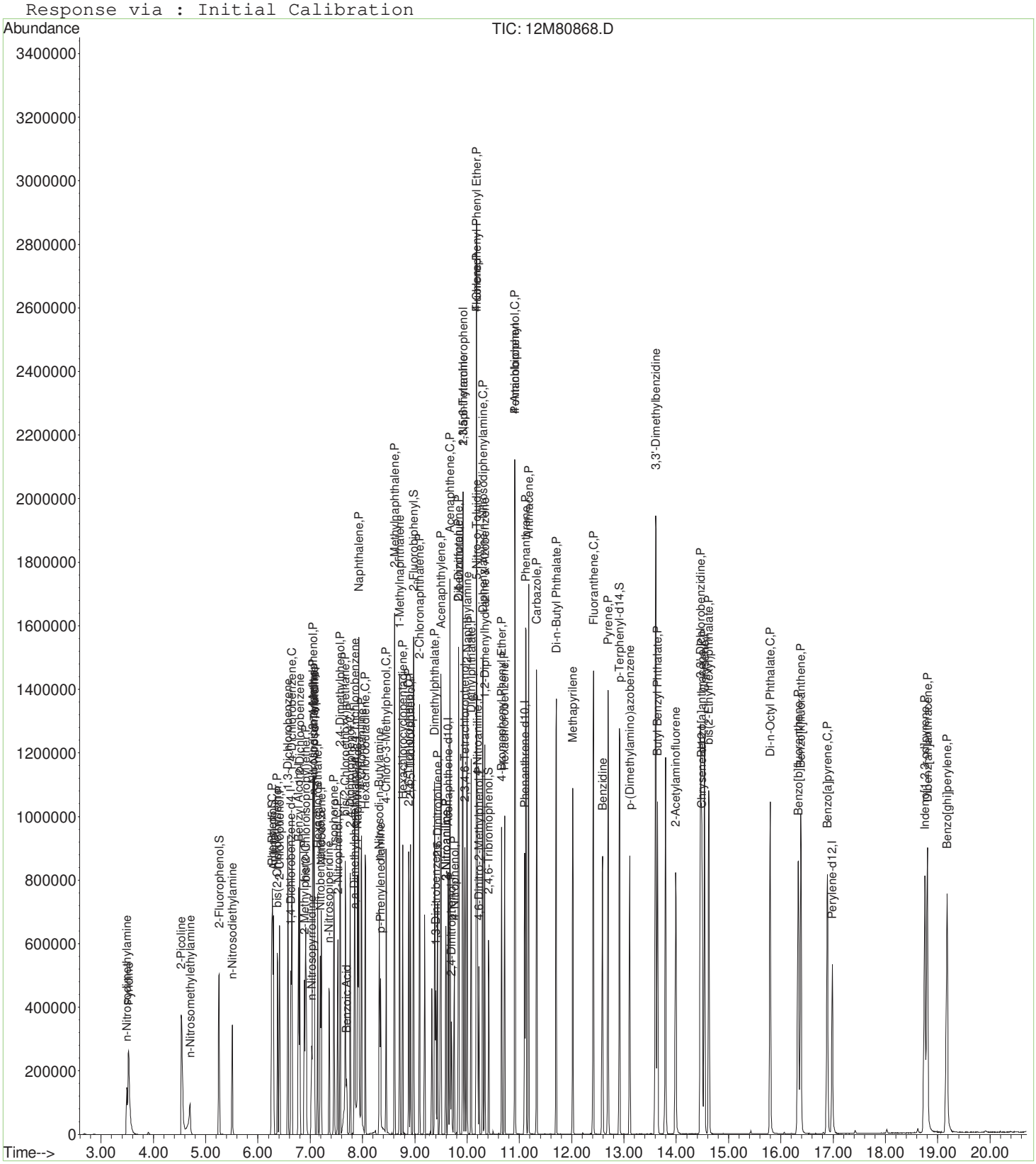
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
100) Benzo[b]fluoranthene	16.34	252	614111	80.3669	ug/ml	99
101) Benzo[k]fluoranthene	16.38	252	612137	77.1294	ug/ml	99
102) Benzo[a]pyrene	16.89	252	546304	79.8323	ug/ml	100
103) Indeno[1,2,3-cd]pyrene	18.76	276	573128	80.9502	ug/ml	99
104) Dibenz[ah]anthracene	18.80	278	648869	82.4829	ug/ml	99
105) Benzo[ghi]perylene	19.18	276	608817	79.2734	ug/ml	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80868.D Vial: 8
Acq On : 29 Jan 2021 12:18 pm Operator: SCB
Sample : S1A0503-CAL3 Inst : MSD12
Misc : 1,1 0012167 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 10:44 2021 Quant Results File: MEGAMIX.RES

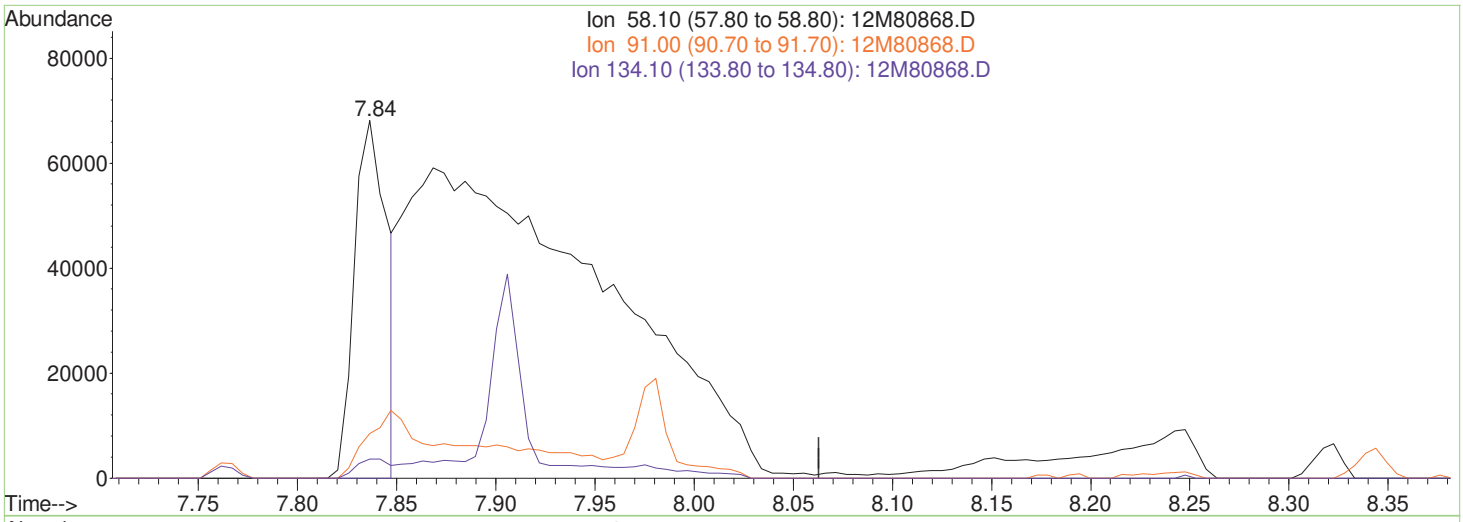
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration

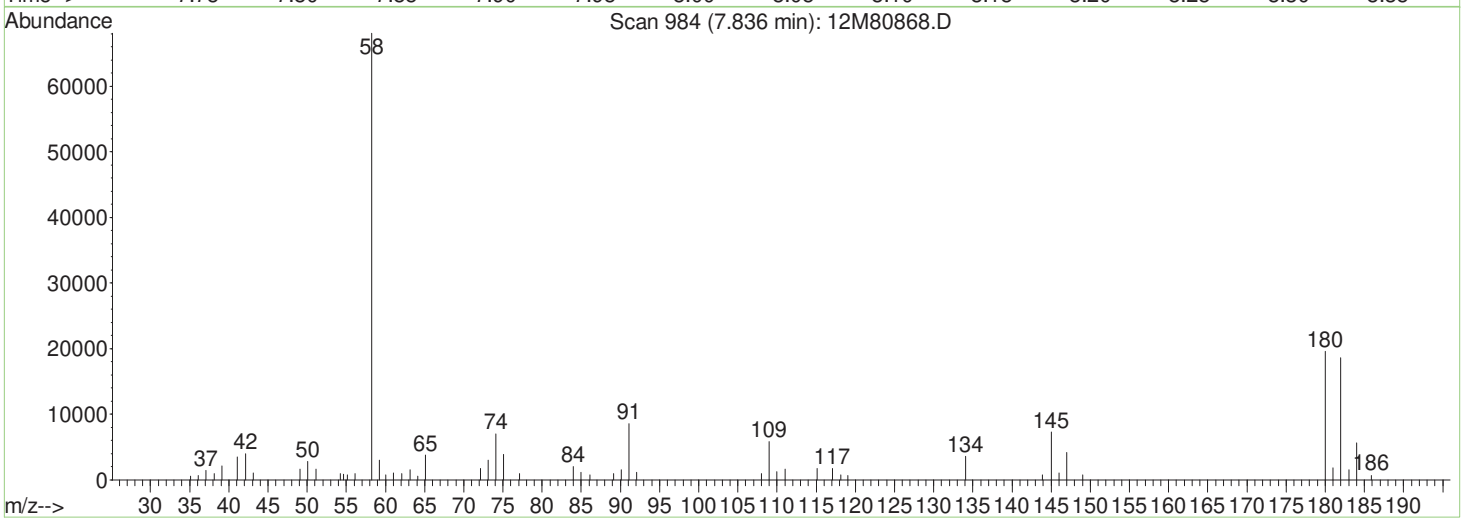


Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\012921\12M80868.D Vial: 8
Acq On : 29 Jan 2021 12:18 pm Operator: SCB
Sample : S1A0503-CAL3 Inst : MSD12
Misc : 1,1 0012167 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 9:58 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration





TIC: 12M80868.D

(35) a,a-Dimethylphenethylamine

7.84min 12.69ug/ml

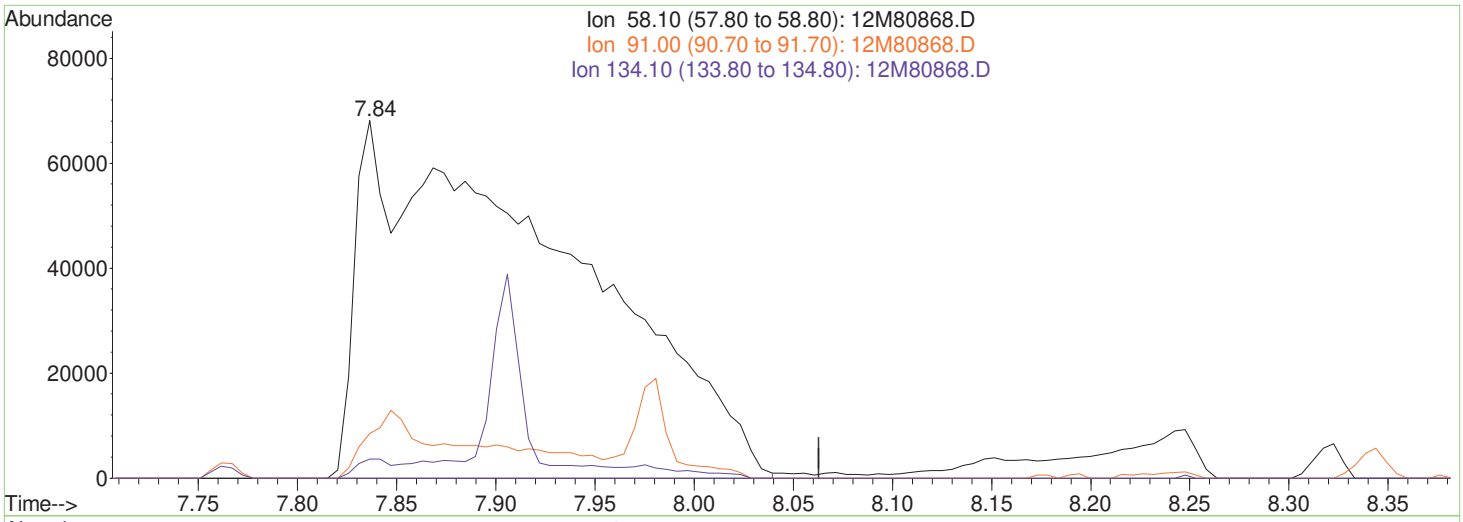
response 79230

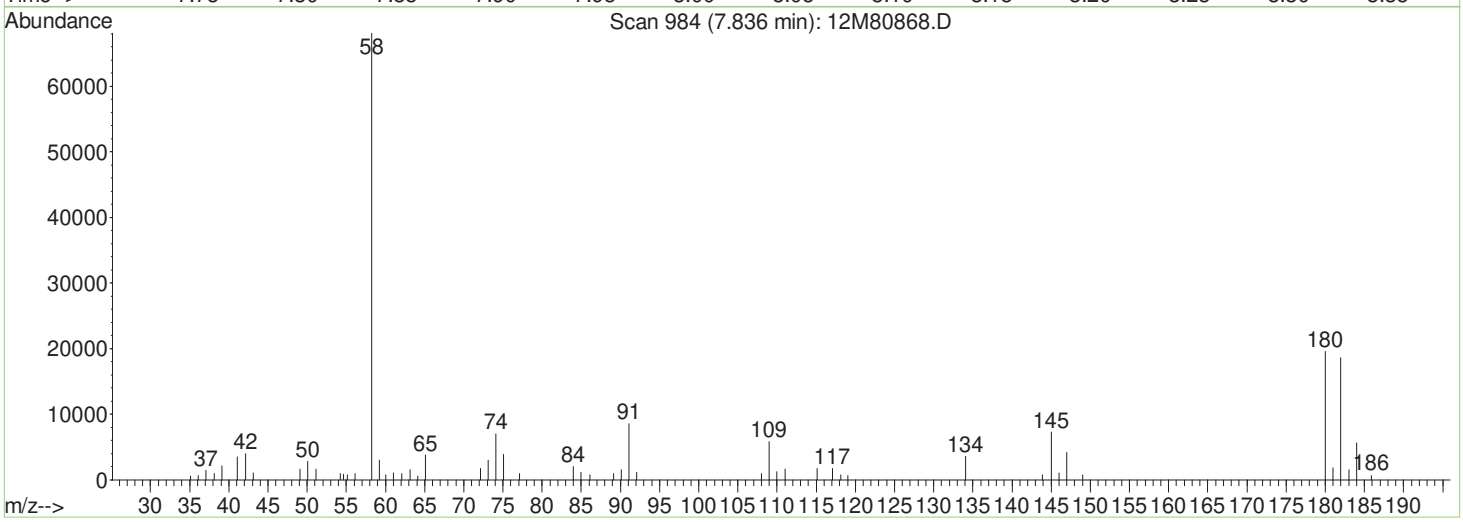
Ion	Exp%	Act%
58.10	100	100
91.00	6.40	28.41#
134.10	1.90	6.40#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\012921\12M80868.D Vial: 8
Acq On : 29 Jan 2021 12:18 pm Operator: SCB
Sample : S1A0503-CAL3 Inst : MSD12
Misc : 1,1 0012167 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 10:44 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration





TIC: 12M80868.D

(35) a,a-Dimethylphenethylamine

7.84min 79.55ug/ml mint

response 496847

Ion	Exp%	Act%
58.10	100	100
91.00	6.40	4.53#
134.10	1.90	1.02#
0.00	0.00	0.00

Sarah Bogolin

Digitally signed by Sarah Bogolin
Reason: Data system splits the peak incorrectly or integrates a false peak as a rider peak
Date: 2021.02.01 13:57:12 -05'00'

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80868.D Vial: 8
Acq On : 29 Jan 2021 12:18 pm Operator: SCB
Sample : S1A0503-CAL3 Inst : MSD12
Misc : 1,1 0012167 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	100	0.00
2		n-Nitrosodimethylamine	0.715	0.685	4.2	100	0.00
3		Pyridine	1.193	1.170	1.9	100	0.00
4		2-Picoline	1.352	1.292	4.4	100	0.00
5		n-Nitrosomethylethylamine	0.506	0.537	-6.1	100	0.00
6	S	2-Fluorophenol	1.187	1.133	4.5	100	0.00
7		n-Nitrosodiethylamine	0.599	0.572	4.5	100	0.00
8	S	Phenol-d5	1.376	1.310	4.8	100	0.00
9	C,P	Phenol	1.562	1.488	4.7	100	0.00
10		Aniline	1.794	1.712	4.6	100	0.00
11	P	bis(2-Chloroethyl)ether	0.826	0.784	5.1	100	0.00
12	P	2-Chlorophenol	1.285	1.211	5.8	100	0.00
13		1,3-Dichlorobenzene	1.434	1.349	5.9	100	0.00
14	C	1,4-Dichlorobenzene	1.490	1.377	7.6	100	0.00
15		Benzyl Alcohol	0.838	0.804	4.1	100	0.00
16		1,2-Dichlorobenzene	1.392	1.300	6.6	100	0.00
17	P	2-Methylphenol	1.010	0.961	4.9	100	0.00
18	P	bis(2-Chloroisopropyl)ether	1.451	1.350	7.0	100	0.00
19	P	3-,4-Methylphenol	1.223	1.154	5.6	100	0.00
20		n-Nitrosopyrrolidine	0.619	0.594	4.0	100	0.01
21	P	n-Nitrosodipropylamine	0.793	0.752	5.2	100	0.01
22		n-Nitrosomorpholine	0.724	0.681	5.9	100	0.00
23		o-Toluidine	1.992	1.865	6.4	100	0.00
24	P	Hexachloroethane	0.514	0.491	4.5	100	0.00
25	I	Naphthalene-d8	1.000	1.000	0.0	100	0.00
26	S	Nitrobenzene-d5	0.307	0.288	6.2	100	0.00
27	P	Nitrobenzene	0.306	0.284	7.2	100	0.00
28		n-Nitrosopiperidine	0.164	0.153	6.7	100	0.00
29	P	Isophorone	0.565	0.531	6.0	100	0.00
30	C,P	2-Nitrophenol	0.181	0.174	3.9	100	0.00
31	P	2,4-Dimethylphenol	0.297	0.276	7.1	100	0.00
32	P	bis(2-Chloroethoxy)methane	0.342	0.316	7.6	100	0.00
33		Benzoic Acid	0.222	0.223	-0.5	100	0.02
34	C,P	2,4-Dichlorophenol	0.266	0.250	6.0	100	0.00
35		a,a-Dimethylphenethylamine	0.742	0.738	0.5	100	-0.03
36		1,2,4-Trichlorobenzene	0.289	0.274	5.2	100	0.00
37	P	Naphthalene	0.988	0.915	7.4	100	0.00
38	P	4-Chloroaniline	0.113	0.109	3.5	100	0.00
39	C,P	Hexachlorobutadiene	0.149	0.145	2.7	100	0.00
40		n-Nitrosodi-n-Butylamine	0.189	0.182	3.7	100	0.00
41		p-Phenylenediamine	0.359	0.327	8.9	100	0.00
42	C,P	4-Chloro-3-Methylphenol	0.274	0.266	2.9	100	0.00
43	P	2-Methylnaphthalene	0.670	0.630	6.0	100	0.00
44		1-Methylnaphthalene	0.622	0.584	6.1	100	0.00
45	I	Acenaphthene-d10	1.000	1.000	0.0	100	0.00
46	P	Hexachlorocyclopentadiene	0.342	0.338	1.2	100	0.00
47	C,P	2,4,6-Trichlorophenol	0.331	0.322	2.7	100	0.00
48	P	2,4,5-Trichlorophenol	0.354	0.348	1.7	100	0.00
49	S	2-Fluorobiphenyl	1.257	1.190	5.3	100	0.00
50	P	2-Chloronaphthalene	1.055	1.005	4.7	100	0.00
51	P	2-Nitroaniline	0.361	0.340	5.8	100	0.00
52	P	Dimethylphthalate	1.198	1.142	4.7	100	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80868.D Vial: 8
Acq On : 29 Jan 2021 12:18 pm Operator: SCB
Sample : S1A0503-CAL3 Inst : MSD12
Misc : 1,1 0012167 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
53		1,3-Dinitrobenzene	0.213	0.216	-1.4	100	0.00
54	P	2,6-Dinitrotoluene	0.288	0.286	0.7	100	0.00
55	P	Acenaphthylene	1.837	1.742	5.2	100	0.00
56	P	3-Nitroaniline	0.338	0.324	4.1	100	0.00
57	P	2,4-Dinitrophenol	0.178	0.184	-3.4	100	0.00
58	C,P	Acenaphthene	1.162	1.057	9.0	100	0.00
59	P	4-Nitrophenol	0.213	0.211	0.9	100	0.00
60	P	2,4-Dinitrotoluene	0.372	0.372	0.0	100	0.00
61	P	Dibenzofuran	1.536	1.447	5.8	100	0.00
62		2,3,5,6-Tetrachlorophenol	0.280	0.277	1.1	100	0.00
63		2,3,4,6-Tetrachlorophenol	0.289	0.288	0.3	100	0.00
64		1-Naphthylamine	1.221	1.162	4.8	100	0.00
65		2-Naphthylamine	1.281	1.216	5.1	100	0.00
66	P	Diethylphthalate	1.239	1.177	5.0	100	0.00
67	P	Fluorene	1.251	1.200	4.1	100	0.00
68	P	4-Chlorophenyl Phenyl Ether	0.586	0.556	5.1	100	0.00
69	P	4-Nitroaniline	0.372	0.357	4.0	100	0.01
70		5-Nitro-o-Toluidine	0.391	0.387	1.0	100	0.00
71		1,2-Diphenylhydrazine & Azo	1.090	1.033	5.2	100	0.00
72	S	2,4,6-Tribromophenol	0.172	0.170	1.2	100	0.00
73	I	Phenanthrene-d10	1.000	1.000	0.0	100	0.00
74	P	4,6-Dinitro-2-Methylphenol	0.121	0.123	-1.7	100	0.00
75	C,P	Diphenylamine/n-Nitrosodiph	0.614	0.585	4.7	100	0.00
76	P	4-Bromophenyl Phenyl Ether	0.181	0.175	3.3	100	0.00
77	P	Hexachlorobenzene	0.196	0.188	4.1	100	0.00
78		4-Aminobiphenyl	0.830	0.812	2.2	100	0.00
79	C,P	Pentachlorophenol	0.136	0.132	2.9	100	0.00
80	P	Phenanthrene	1.041	0.970	6.8	100	0.00
81	P	Anthracene	1.063	1.007	5.3	100	0.00
82	P	Carbazole	0.940	0.899	4.4	100	0.00
83	P	Di-n-Butyl Phthalate	1.128	1.111	1.5	100	0.00
84		Methapyrilene	0.453	0.461	-1.8	100	0.00
85	C,P	Fluoranthene	1.010	0.977	3.3	100	0.00
86	I	Chrysene-d12	1.000	1.000	0.0	100	0.00
87		Benzidine	0.880	0.872	0.9	100	0.00
88	P	Pyrene	1.279	1.211	5.3	100	0.00
89	S	p-Terphenyl-d14	0.959	0.916	4.5	100	0.00
90		p-(Dimethylamino)azobenzene	0.250	0.250	0.0	100	0.00
91	P	Butyl Benzyl Phthalate	0.633	0.611	3.5	100	0.00
92		3,3'-Dimethylbenzidine	0.914	0.901	1.4	100	0.00
93		2-Acetylaminofluorene	0.525	0.541	-3.0	100	0.00
94	P	bis(2-Ethylhexyl)phthalate	0.850	0.858	-0.9	100	0.00
95	P	3,3'-Dichlorobenzidine	0.463	0.460	0.6	100	0.00
96	P	Benzo[a]anthracene	1.179	1.113	5.6	100	0.00
97	P	Chrysene	1.190	1.112	6.6	100	0.00
98	I	Perylene-d12	1.000	1.000	0.0	100	0.00
99	C,P	Di-n-Octyl Phthalate	1.250	1.285	-2.8	100	0.00
100	P	Benzo[b]fluoranthene	0.994	0.998	-0.4	100	0.00
101	P	Benzo[k]fluoranthene	1.032	0.995	3.6	100	0.00
102	C,P	Benzo[a]pyrene	0.890	0.888	0.2	100	0.00
103	P	Indeno[1,2,3-cd]pyrene	0.921	0.932	-1.2	100	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80868.D Vial: 8
Acq On : 29 Jan 2021 12:18 pm Operator: SCB
Sample : S1A0503-CAL3 Inst : MSD12
Misc : 1,1 0012167 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
104	P	Dibenz[ah]anthracene	1.023	1.055	-3.1	100	0.00
105	P	Benzo[ghi]perylene	0.999	0.990	0.9	100	0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80868.D Vial: 8
Acq On : 29 Jan 2021 12:18 pm Operator: SCB
Sample : S1A0503-CAL3 Inst : MSD12
Misc : 1,1 0012167 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	100	0.00
2		n-Nitrosodimethylamine	80.000	76.608	4.2	100	0.00
3		Pyridine	80.000	78.443	1.9	100	0.00
4		2-Picoline	80.000	76.444	4.4	100	0.00
5		n-Nitrosomethylethylamine	80.000	75.593	5.5	100	0.00
6	S	2-Fluorophenol	80.000	76.334	4.6	100	0.00
7		n-Nitrosodiethylamine	80.000	76.340	4.6	100	0.00
8	S	Phenol-d5	80.000	76.164	4.8	100	0.00
9	C,P	Phenol	80.000	76.244	4.7	100	0.00
10		Aniline	80.000	76.346	4.6	100	0.00
11	P	bis(2-Chloroethyl)ether	80.000	75.961	5.0	100	0.00
12	P	2-Chlorophenol	80.000	75.365	5.8	100	0.00
13		1,3-Dichlorobenzene	80.000	75.224	6.0	100	0.00
14	C	1,4-Dichlorobenzene	80.000	73.950	7.6	100	0.00
15		Benzyl Alcohol	80.000	76.767	4.0	100	0.00
16		1,2-Dichlorobenzene	80.000	74.690	6.6	100	0.00
17	P	2-Methylphenol	80.000	76.173	4.8	100	0.00
18	P	bis(2-Chloroisopropyl)ether	80.000	74.391	7.0	100	0.00
19	P	3-,4-Methylphenol	80.000	75.469	5.7	100	0.00
20		n-Nitrosopyrrolidine	80.000	76.681	4.1	100	0.01
21	P	n-Nitrosodipropylamine	80.000	75.824	5.2	100	0.01
22		n-Nitrosomorpholine	80.000	75.256	5.9	100	0.00
23		o-Toluidine	80.000	74.885	6.4	100	0.00
24	P	Hexachloroethane	80.000	76.473	4.4	100	0.00
25	I	Naphthalene-d8	40.000	40.000	0.0	100	0.00
26	S	Nitrobenzene-d5	80.000	75.061	6.2	100	0.00
27	P	Nitrobenzene	80.000	74.263	7.2	100	0.00
28		n-Nitrosopiperidine	80.000	74.809	6.5	100	0.00
29	P	Isophorone	80.000	75.123	6.1	100	0.00
30	C,P	2-Nitrophenol	80.000	76.736	4.1	100	0.00
31	P	2,4-Dimethylphenol	80.000	74.355	7.1	100	0.00
32	P	bis(2-Chloroethoxy)methane	80.000	73.935	7.6	100	0.00
33		Benzoic Acid	80.000	75.009	6.2	100	0.02
34	C,P	2,4-Dichlorophenol	80.000	75.105	6.1	100	0.00
35		a,a-Dimethylphenethylamine	80.000	79.553	0.6	100	-0.03
36		1,2,4-Trichlorobenzene	80.000	75.803	5.2	100	0.00
37	P	Naphthalene	80.000	74.112	7.4	100	0.00
38	P	4-Chloroaniline	80.000	77.059	3.7	100	0.00
39	C,P	Hexachlorobutadiene	80.000	77.706	2.9	100	0.00
40		n-Nitrosodi-n-Butylamine	80.000	76.882	3.9	100	0.00
41		p-Phenylenediamine	80.000	72.864	8.9	100	0.00
42	C,P	4-Chloro-3-Methylphenol	80.000	77.738	2.8	100	0.00
43	P	2-Methylnaphthalene	80.000	75.267	5.9	100	0.00
44		1-Methylnaphthalene	80.000	75.160	6.1	100	0.00
45	I	Acenaphthene-d10	40.000	40.000	0.0	100	0.00
46	P	Hexachlorocyclopentadiene	80.000	79.074	1.2	100	0.00
47	C,P	2,4,6-Trichlorophenol	80.000	77.838	2.7	100	0.00
48	P	2,4,5-Trichlorophenol	80.000	78.695	1.6	100	0.00
49	S	2-Fluorobiphenyl	80.000	75.765	5.3	100	0.00
50	P	2-Chloronaphthalene	80.000	76.190	4.8	100	0.00
51	P	2-Nitroaniline	80.000	75.372	5.8	100	0.00
52	P	Dimethylphthalate	80.000	76.228	4.7	100	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80868.D Vial: 8
Acq On : 29 Jan 2021 12:18 pm Operator: SCB
Sample : S1A0503-CAL3 Inst : MSD12
Misc : 1,1 0012167 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
53		1,3-Dinitrobenzene	80.000	81.158	-1.4	100	0.00
54	P	2,6-Dinitrotoluene	80.000	79.385	0.8	100	0.00
55	P	Acenaphthylene	80.000	75.863	5.2	100	0.00
56	P	3-Nitroaniline	80.000	76.640	4.2	100	0.00
57	P	2,4-Dinitrophenol	80.000	76.132	4.8	100	0.00
58	C,P	Acenaphthene	80.000	72.787	9.0	100	0.00
59	P	4-Nitrophenol	80.000	79.279	0.9	100	0.00
60	P	2,4-Dinitrotoluene	80.000	80.154	-0.2	100	0.00
61	P	Dibenzofuran	80.000	75.357	5.8	100	0.00
62		2,3,5,6-Tetrachlorophenol	80.000	79.148	1.1	100	0.00
63		2,3,4,6-Tetrachlorophenol	80.000	79.772	0.3	100	0.00
64		1-Naphthylamine	80.000	76.146	4.8	100	0.00
65		2-Naphthylamine	80.000	75.972	5.0	100	0.00
66	P	Diethylphthalate	80.000	75.962	5.0	100	0.00
67	P	Fluorene	80.000	76.724	4.1	100	0.00
68	P	4-Chlorophenyl Phenyl Ether	80.000	75.841	5.2	100	0.00
69	P	4-Nitroaniline	80.000	76.718	4.1	100	0.01
70		5-Nitro-o-Toluidine	80.000	79.237	1.0	100	0.00
71		1,2-Diphenylhydrazine & Azo	80.000	75.780	5.3	100	0.00
72	S	2,4,6-Tribromophenol	80.000	79.175	1.0	100	0.00
73	I	Phenanthrene-d10	40.000	40.000	0.0	100	0.00
74	P	4,6-Dinitro-2-Methylphenol	80.000	81.552	-1.9	100	0.00
75	C,P	Diphenylamine/n-Nitrosodiph	80.000	76.206	4.7	100	0.00
76	P	4-Bromophenyl Phenyl Ether	80.000	77.043	3.7	100	0.00
77	P	Hexachlorobenzene	80.000	76.784	4.0	100	0.00
78		4-Aminobiphenyl	80.000	78.281	2.1	100	0.00
79	C,P	Pentachlorophenol	80.000	78.150	2.3	100	0.00
80	P	Phenanthrene	80.000	74.521	6.8	100	0.00
81	P	Anthracene	80.000	75.773	5.3	100	0.00
82	P	Carbazole	80.000	76.490	4.4	100	0.00
83	P	Di-n-Butyl Phthalate	80.000	78.779	1.5	100	0.00
84		Methapyrilene	80.000	74.783	6.5	100	0.00
85	C,P	Fluoranthene	80.000	77.385	3.3	100	0.00
86	I	Chrysene-d12	40.000	40.000	0.0	100	0.00
87		Benzidine	80.000	79.223	1.0	100	0.00
88	P	Pyrene	80.000	75.745	5.3	100	0.00
89	S	p-Terphenyl-d14	80.000	76.392	4.5	100	0.00
90		p-(Dimethylamino)azobenzene	80.000	79.952	0.1	100	0.00
91	P	Butyl Benzyl Phthalate	80.000	77.274	3.4	100	0.00
92		3,3'-Dimethylbenzidine	160.000	157.694	1.4	100	0.00
93		2-Acetylaminofluorene	80.000	73.681	7.9	100	0.00
94	P	bis(2-Ethylhexyl)phthalate	80.000	80.758	-0.9	100	0.00
95	P	3,3'-Dichlorobenzidine	80.000	79.437	0.7	100	0.00
96	P	Benzo[a]anthracene	80.000	75.574	5.5	100	0.00
97	P	Chrysene	80.000	74.736	6.6	100	0.00
98	I	Perylene-d12	40.000	40.000	0.0	100	0.00
99	C,P	Di-n-Octyl Phthalate	80.000	74.605	6.7	100	0.00
100	P	Benzo[b]fluoranthene	80.000	80.367	-0.5	100	0.00
101	P	Benzo[k]fluoranthene	80.000	77.129	3.6	100	0.00
102	C,P	Benzo[a]pyrene	80.000	79.832	0.2	100	0.00
103	P	Indeno[1,2,3-cd]pyrene	80.000	80.950	-1.2	100	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80868.D Vial: 8
Acq On : 29 Jan 2021 12:18 pm Operator: SCB
Sample : S1A0503-CAL3 Inst : MSD12
Misc : 1,1 0012167 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
104	P	Dibenz[ah]anthracene	80.000	82.483	-3.1	100	0.00
105	P	Benzo[ghi]perylene	80.000	79.273	0.9	100	0.01

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80869.D Vial: 9
Acq On : 29 Jan 2021 12:49 pm Operator: SCB
Sample : S1A0503-CAL2 Inst : MSD12
Misc : 1,1 0012166 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 09:58:09 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.634	152	86083	40.0000	ug/ml	0.000
25) Naphthalene-d8	7.906	136	330349	40.0000	ug/ml	0.000
45) Acenaphthene-d10	9.642	164	187038	40.0000	ug/ml	0.000
73) Phenanthrene-d10	11.101	188	337074	40.0000	ug/ml	0.000
86) Chrysene-d12	14.504	240	275931	40.0000	ug/ml	0.011
98) Perylene-d12	16.988	264	310673	40.0000	ug/ml	0.000
System Monitoring Compounds						
6) 2-Fluorophenol	5.256	112	271260	106.1811324	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 106.18%#			
8) Phenol-d5	6.271	99	313652	105.9497517	ug/ml	0.01
Spiked Amount 100.000	Range 10 - 94		Recovery = 105.95%#			
26) Nitrobenzene-d5	7.195	82	270624	106.7659048	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 213.53%#			
49) 2-Fluorobiphenyl	8.980	172	625033	106.3538180	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 212.71%#			
72) 2,4,6-Tribromophenol	10.417	330	90486	112.6765166	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 112.68%			
89) p-Terphenyl-d14	12.917	244	706650	106.7963838	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 213.59%#			
Target Compounds						Qvalue
2) n-Nitrosodimethylamine	3.50	74	166981	108.4673	ug/ml	97
3) Pyridine	3.53	79	282883	110.1516	ug/ml	98
4) 2-Picoline	4.54	93	309448	106.3845	ug/ml	99
5) n-Nitrosomethylethylamine	4.70	88	129979	105.6265	ug/ml	96
7) n-Nitrosodiethylamine	5.51	102	138127	107.1105	ug/ml	95
9) Phenol	6.28	94	355931	105.9093	ug/ml#	46
10) Aniline	6.30	93	410331	106.2960	ug/ml#	51
11) bis(2-Chloroethyl)ether	6.38	63	184420	103.7772	ug/ml	98
12) 2-Chlorophenol	6.42	128	291645	105.4504	ug/ml	99
13) 1,3-Dichlorobenzene	6.58	146	326133	105.6441	ug/ml	99
14) 1,4-Dichlorobenzene	6.65	146	332370	103.6625	ug/ml	99
15) Benzyl Alcohol	6.78	108	193633	107.3948	ug/ml	99
16) 1,2-Dichlorobenzene	6.80	146	313106	104.5268	ug/ml	100
17) 2-Methylphenol	6.89	107	230333m	106.0097	ug/ml	
18) bis(2-Chloroisopropyl)ethe	6.92	45	320518	102.6136	ug/ml#	97
19) 3-,4-Methylphenol	7.06	108	278957	106.0010	ug/ml	96
20) n-Nitrosopyrrolidine	7.04	100	142803	107.1502	ug/ml	97
21) n-Nitrosodipropylamine	7.07	70	178705	104.6872	ug/ml	95
22) n-Nitrosomorpholine	7.08	56	160940	103.3482	ug/ml	98
23) o-Toluidine	7.08	106	448471	104.6142	ug/ml	94
24) Hexachloroethane	7.14	117	118321	106.9464	ug/ml	98
27) Nitrobenzene	7.22	77	266791	105.5073	ug/ml	98
28) n-Nitrosopiperidine	7.37	114	143461	106.0713	ug/ml	98
29) Isophorone	7.46	82	496643	106.3500	ug/ml	99
30) 2-Nitrophenol	7.53	139	166507	111.4234	ug/ml	98
31) 2,4-Dimethylphenol	7.58	122	259549	105.9799	ug/ml	99
32) bis(2-Chloroethoxy)methane	7.68	93	296950	105.2344	ug/ml	99
33) Benzoic Acid	7.72	105	216559	102.4563	ug/ml	99
34) 2,4-Dichlorophenol	7.77	162	234612	106.8478	ug/ml	99
35) a,a-Dimethylphenethylamine	7.85	58	698376m	113.9287	ug/ml	
36) 1,2,4-Trichlorobenzene	7.85	180	254341	106.4862	ug/ml	99
37) Naphthalene	7.93	128	843887	103.4375	ug/ml	99
38) 4-Chloroaniline	7.98	65	107687	115.1700	ug/ml	92

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80869.D Vial: 9
Acq On : 29 Jan 2021 12:49 pm Operator: SCB
Sample : S1A0503-CAL2 Inst : MSD12
Misc : 1,1 0012166 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 09:58:09 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39) Hexachlorobutadiene	8.06	225	137220	111.1408	ug/ml	99
40) n-Nitrosodi-n-Butylamine	8.33	84	170642	109.2410	ug/ml	99
41) p-Phenylenediamine	8.35	108	295994	99.7701	ug/ml	97
42) 4-Chloro-3-Methylphenol	8.46	107	247483	109.4010	ug/ml	100
43) 2-Methylnaphthalene	8.61	142	589515	106.5506	ug/ml	99
44) 1-Methylnaphthalene	8.71	142	546106	106.3897	ug/ml	100
46) Hexachlorocyclopentadiene	8.77	237	177987	111.4065	ug/ml	98
47) 2,4,6-Trichlorophenol	8.89	196	170926	110.4259	ug/ml	99
48) 2,4,5-Trichlorophenol	8.92	196	182578	110.3552	ug/ml	99
50) 2-Chloronaphthalene	9.09	162	516848	104.7234	ug/ml	99
51) 2-Nitroaniline	9.60	65	179054	106.1954	ug/ml	99
52) Dimethylphthalate	9.39	163	598249	106.7943	ug/ml	100
53) 1,3-Dinitrobenzene	9.41	168	113459	113.9448	ug/ml	96
54) 2,6-Dinitrotoluene	9.44	165	148183	110.0892	ug/ml	97
55) Acenaphthylene	9.50	152	905636	105.4485	ug/ml	99
56) 3-Nitroaniline	9.60	138	170301	107.6210	ug/ml	97
57) 2,4-Dinitrophenol	9.71	184	101213	104.0644	ug/ml	93
58) Acenaphthene	9.67	154	554196	101.9976	ug/ml	99
59) 4-Nitrophenol	9.76	65	111179	111.7475	ug/ml	98
60) 2,4-Dinitrotoluene	9.84	165	194063	111.7038	ug/ml	98
61) Dibenzofuran	9.85	168	750155	104.4163	ug/ml	99
62) 2,3,5,6-Tetrachlorophenol	9.92	232	146011	111.6658	ug/ml	99
63) 2,3,4,6-Tetrachlorophenol	9.96	232	149459	110.7733	ug/ml	99
64) 1-Naphthylamine	9.93	143	605033	105.9489	ug/ml	99
65) 2-Naphthylamine	10.01	143	637277	106.4125	ug/ml	100
66) Diethylphthalate	10.08	149	619080	106.8402	ug/ml	99
67) Fluorene	10.18	166	622550	106.4313	ug/ml	99
68) 4-Chlorophenyl Phenyl Ethe	10.18	204	291743	106.4498	ug/ml	98
69) 4-Nitroaniline	10.21	138	185736	106.8065	ug/ml	99
70) 5-Nitro-o-Toluidine	10.20	152	202731	110.9782	ug/ml	97
71) 1,2-Diphenylhydrazine & Az	10.34	77	539220	105.7835	ug/ml	99
74) 4,6-Dinitro-2-Methylphenol	10.24	198	116955	114.8700	ug/ml	96
75) Diphenylamine/n-Nitrosodip	10.30	169	544405	105.1697	ug/ml	100
76) 4-Bromophenyl Phenyl Ether	10.66	248	164082	107.3818	ug/ml	99
77) Hexachlorobenzene	10.72	284	175376	106.0345	ug/ml	100
78) 4-Aminobiphenyl	10.92	169	754089	107.8539	ug/ml	99
79) Pentachlorophenol	10.91	266	125144	109.5773	ug/ml	100
80) Phenanthrene	11.13	178	890835	101.5134	ug/ml	100
81) Anthracene	11.18	178	933624	104.2358	ug/ml	99
82) Carbazole	11.34	167	836959	105.6805	ug/ml	100
83) Di-n-Butyl Phthalate	11.70	149	1031108	108.4492	ug/ml	99
84) Methapyrilene	12.02	58	429599	102.8606	ug/ml	98
85) Fluoranthene	12.42	202	912805	107.2521	ug/ml	99
87) Benzidine	12.59	184	685340	112.8538	ug/ml	99
88) Pyrene	12.70	202	944697	107.0740	ug/ml	99
90) p-(Dimethylamino)azobenzen	13.11	225	194652	112.8647	ug/ml	99
91) Butyl Benzyl Phthalate	13.64	149	476839	109.2772	ug/ml	97
92) 3,3'-Dimethylbenzidine	13.62	212	1408064	223.3524	ug/ml	98
93) 2-Acetylaminofluorene	14.00	181	431672	105.7270	ug/ml	99
94) bis(2-Ethylhexyl)phthalate	14.63	149	667277	113.8168	ug/ml	99
95) 3,3'-Dichlorobenzidine	14.47	252	364101	113.9176	ug/ml	100
96) Benzo[a]anthracene	14.48	228	874266	107.5234	ug/ml	100
97) Chrysene	14.55	228	859131	104.6354	ug/ml	99
99) Di-n-Octyl Phthalate	15.80	149	1131958	105.1540	ug/ml	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80869.D Vial: 9
Acq On : 29 Jan 2021 12:49 pm Operator: SCB
Sample : S1A0503-CAL2 Inst : MSD12
Misc : 1,1 0012166 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 09:58:09 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

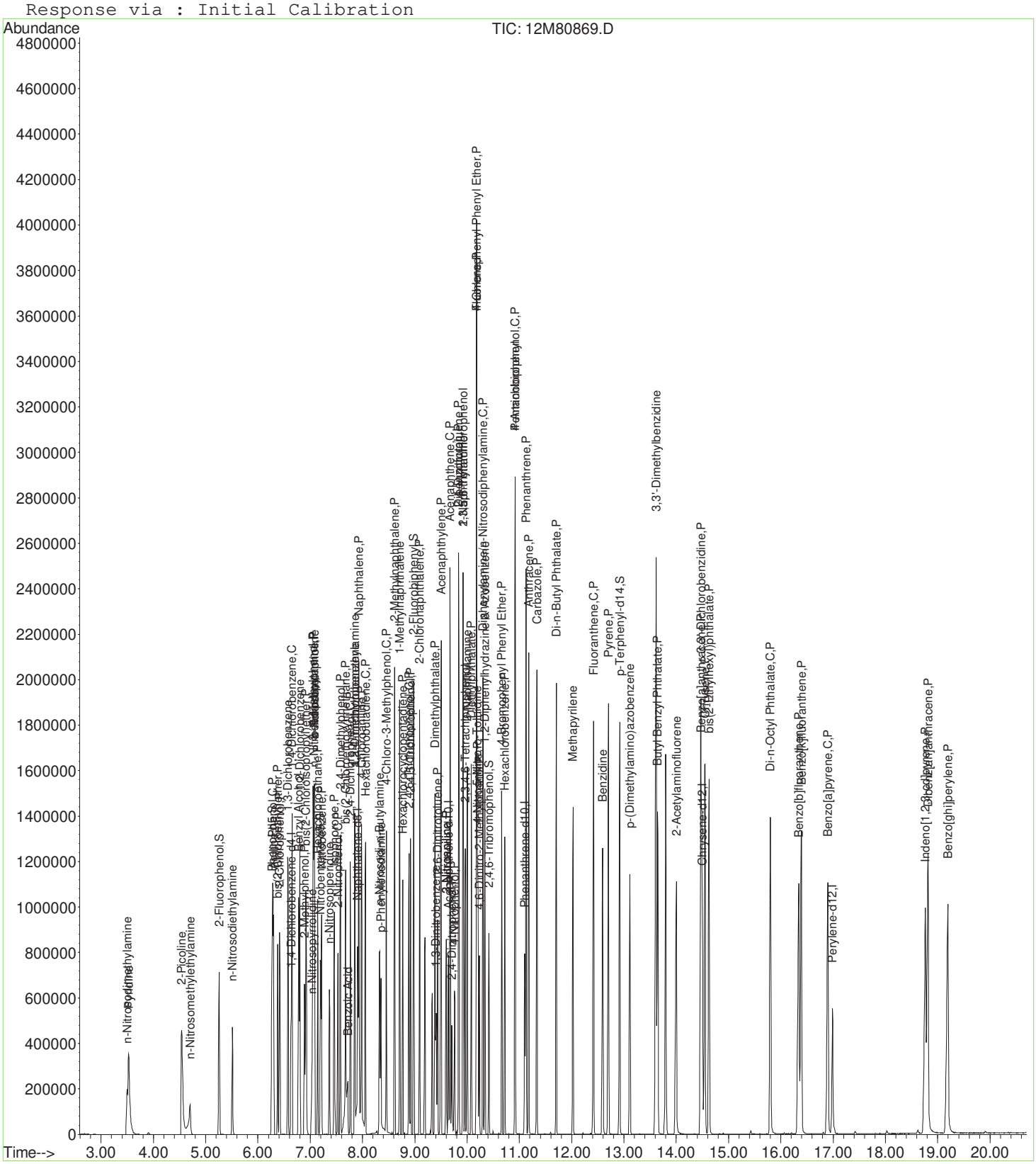
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
100) Benzo[b]fluoranthene	16.34	252	871503	112.9034	ug/ml	100
101) Benzo[k]fluoranthene	16.39	252	877761	109.4852	ug/ml	99
102) Benzo[a]pyrene	16.90	252	780069	112.8458	ug/ml	99
103) Indeno[1,2,3-cd]pyrene	18.77	276	825971	115.4887	ug/ml	99
104) Dibenz[ah]anthracene	18.81	278	922105	116.0367	ug/ml	99
105) Benzo[ghi]perylene	19.19	276	865256	111.5304	ug/ml	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80869.D Vial: 9
Acq On : 29 Jan 2021 12:49 pm Operator: SCB
Sample : S1A0503-CAL2 Inst : MSD12
Misc : 1,1 0012166 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 10:47 2021 Quant Results File: MEGAMIX.RES

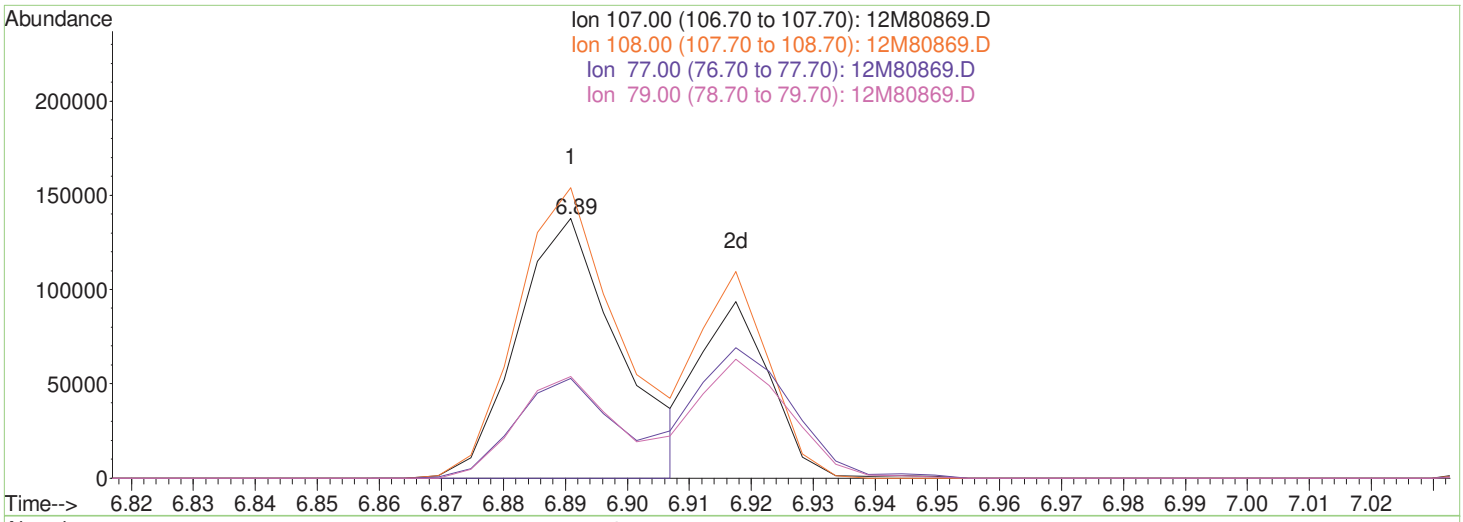
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration

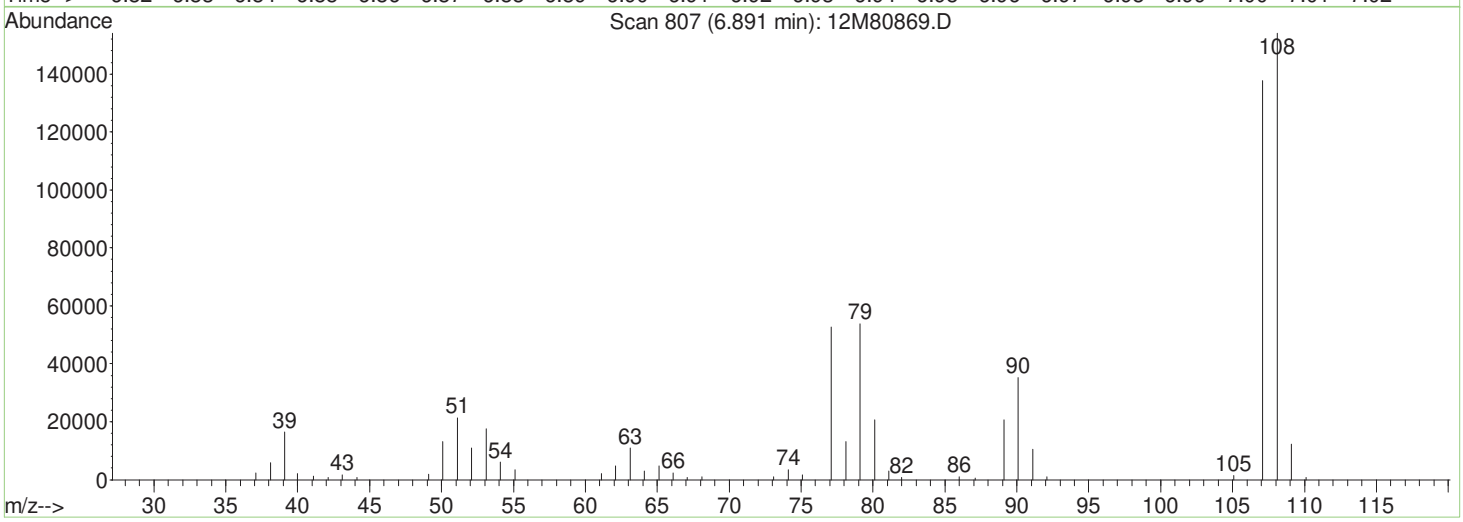


Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\012921\12M80869.D Vial: 9
Acq On : 29 Jan 2021 12:49 pm Operator: SCB
Sample : S1A0503-CAL2 Inst : MSD12
Misc : 1,1 0012166 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 9:58 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration





TIC: 12M80869.D

(17) 2-Methylphenol (P)

6.89min 72.39ug/ml

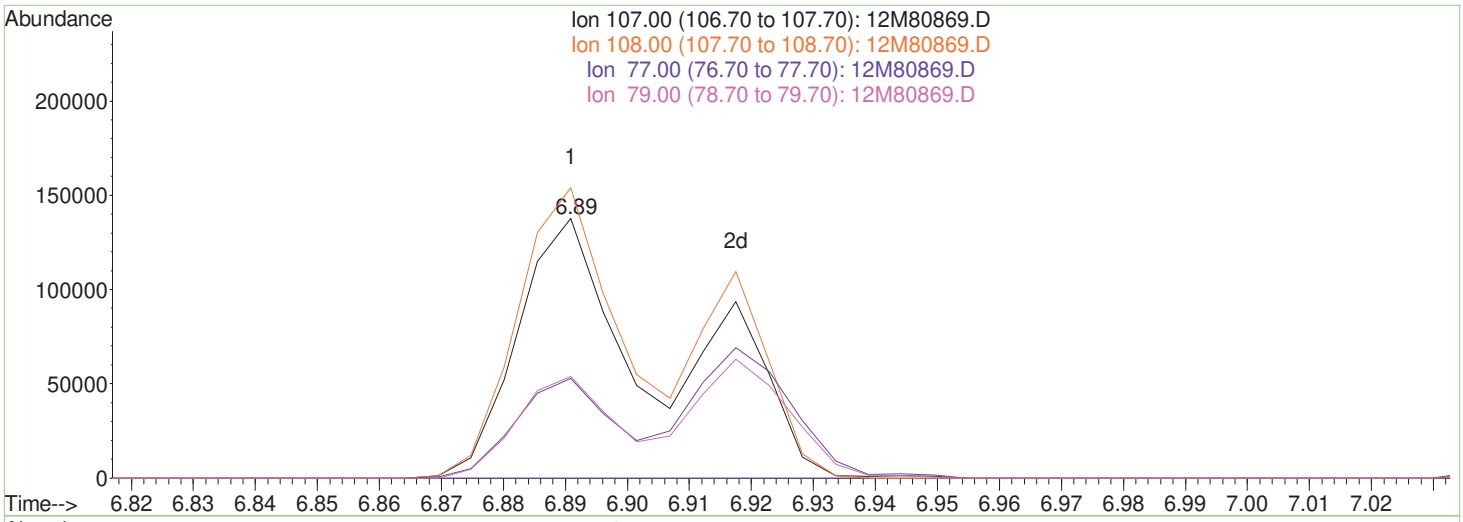
response 157279

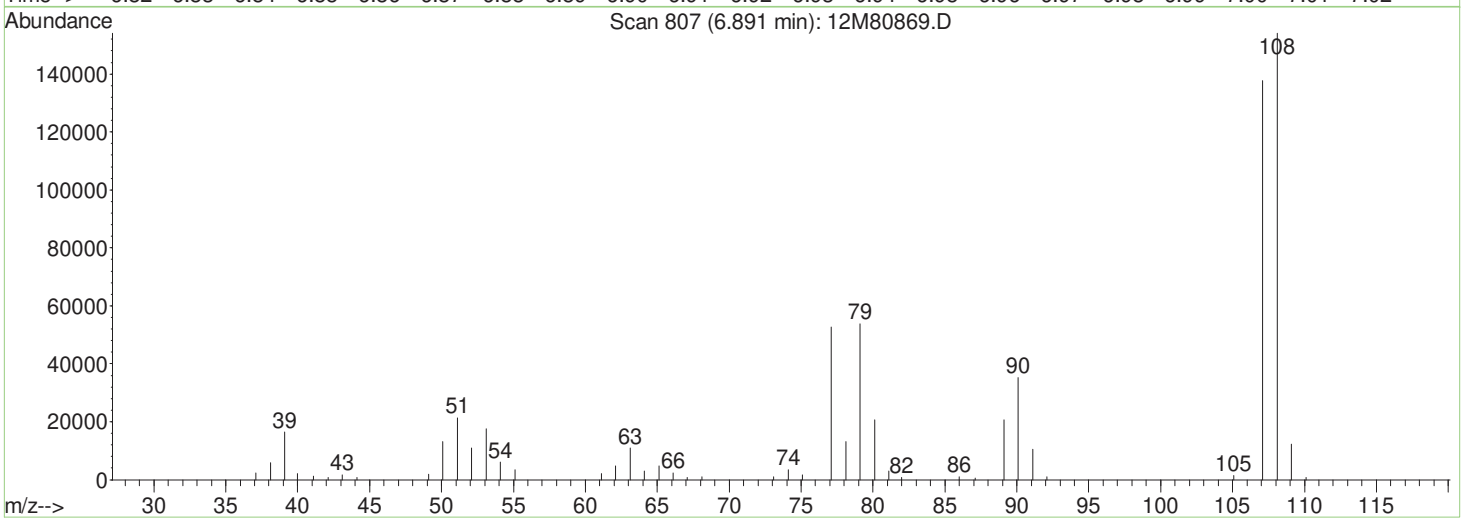
Ion	Exp%	Act%
107.00	100	100
108.00	112.30	112.36
77.00	59.00	36.60
79.00	54.40	36.79

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\012921\12M80869.D Vial: 9
Acq On : 29 Jan 2021 12:49 pm Operator: SCB
Sample : S1A0503-CAL2 Inst : MSD12
Misc : 1,1 0012166 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 10:46 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration





TIC: 12M80869.D

(17) 2-Methylphenol (P)

6.89min 106.01ug/ml mint

response 230333

Ion	Exp%	Act%
107.00	100	100
108.00	112.30	76.72
77.00	59.00	24.99#
79.00	54.40	25.12#

Sarah Bogolin

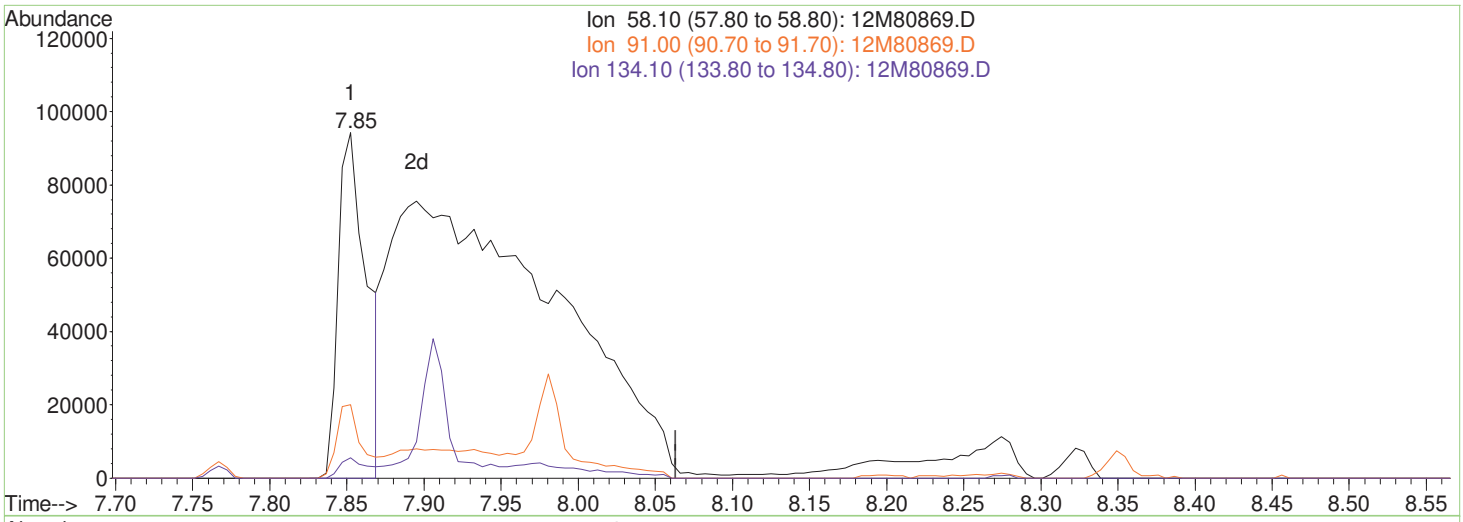
Digitally signed by Sarah Bogolin
Reason: Data system splits the peak incorrectly or integrates a false peak as a rider peak
Date: 2021.02.01 13:57:53 -05'00'

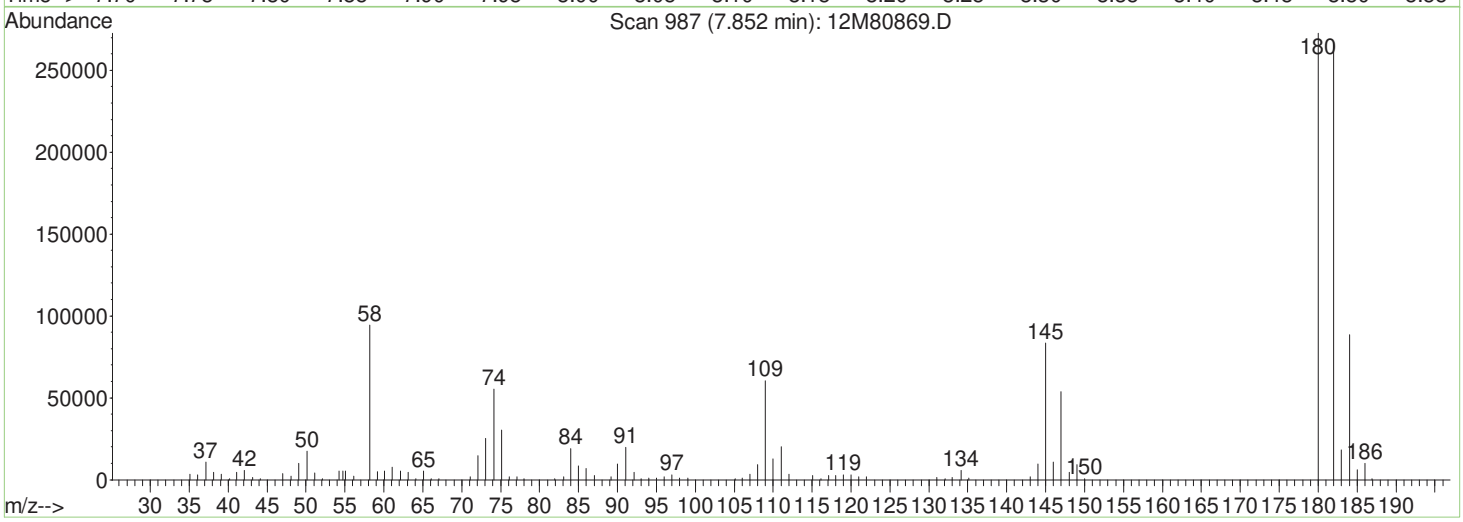
12M80869.D MEGAMIX.M Mon Feb 01 10:46:47 2021

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\012921\12M80869.D Vial: 9
Acq On : 29 Jan 2021 12:49 pm Operator: SCB
Sample : S1A0503-CAL2 Inst : MSD12
Misc : 1,1 0012166 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 10:46 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration





TIC: 12M80869.D

(35) a,a-Dimethylphenethylamine

7.85min 19.59ug/ml

response 120085

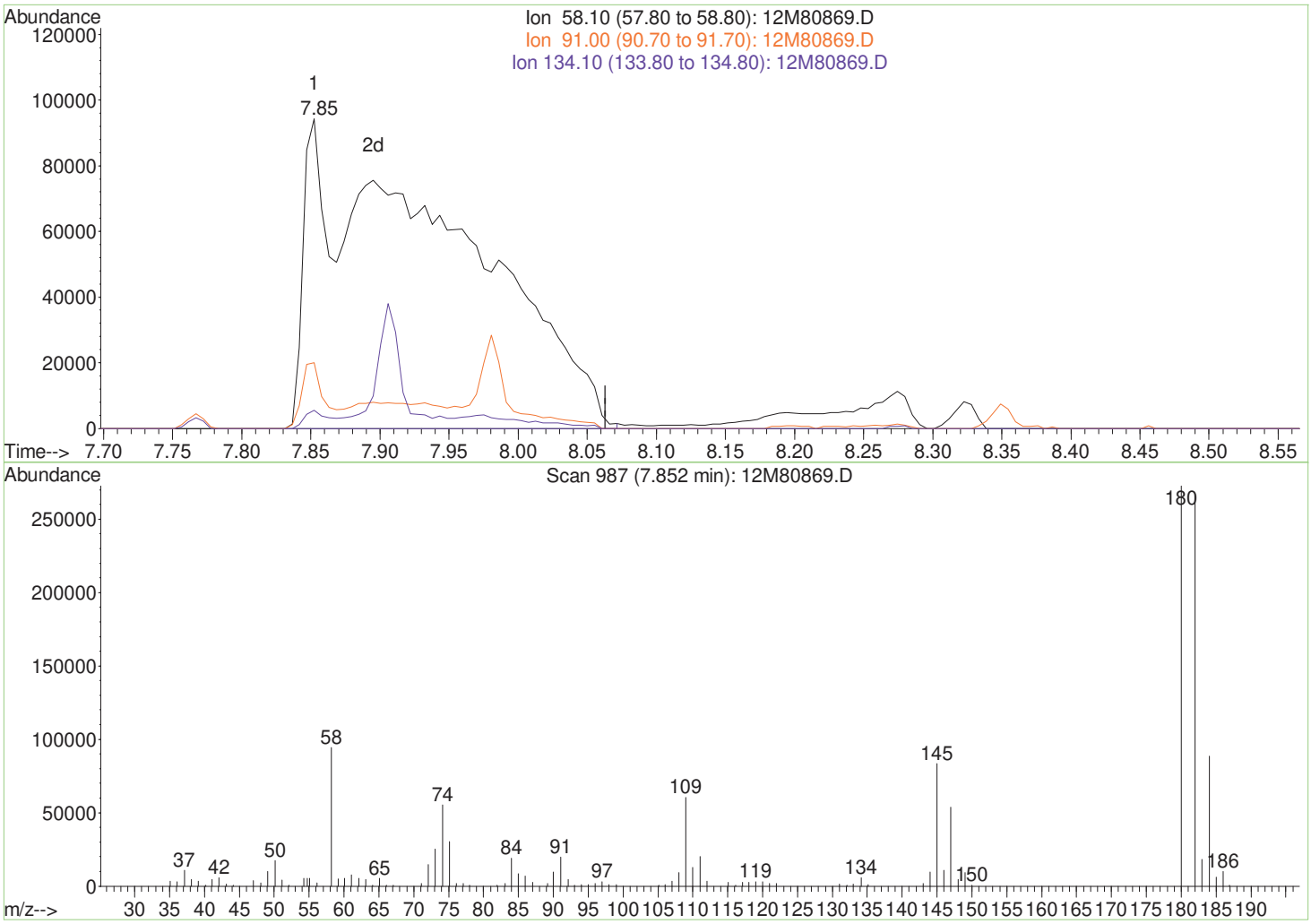
Ion	Exp%	Act%
58.10	100	100
91.00	6.40	18.40#
134.10	1.90	5.61#
0.00	0.00	0.00

12M80869.D MEGAMIX.M Mon Feb 01 10:47:06 2021

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\012921\12M80869.D Vial: 9
Acq On : 29 Jan 2021 12:49 pm Operator: SCB
Sample : S1A0503-CAL2 Inst : MSD12
Misc : 1,1 0012166 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 10:47 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration



TIC: 12M80869.D

(35) a,a-Dimethylphenethylamine

7.85min 113.93ug/ml mint

response 698376

Ion	Exp%	Act%
58.10	100	100
91.00	6.40	3.16#
134.10	1.90	0.96#
0.00	0.00	0.00

Sarah Bogolin

Digitally signed by Sarah Bogolin
Reason: Data system splits the peak incorrectly or integrates a false peak as a rider peak
Date: 2021.02.01 13:58:23 -05'00'

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80869.D Vial: 9
Acq On : 29 Jan 2021 12:49 pm Operator: SCB
Sample : S1A0503-CAL2 Inst : MSD12
Misc : 1,1 0012166 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	100	0.00
2		n-Nitrosodimethylamine	0.715	0.776	-8.5	100	0.01
3		Pyridine	1.193	1.314	-10.1	100	0.00
4		2-Picoline	1.352	1.438	-6.4	100	0.00
5		n-Nitrosomethylethylamine	0.506	0.604	-19.4	100	0.00
6	S	2-Fluorophenol	1.187	1.260	-6.1	100	0.00
7		n-Nitrosodiethylamine	0.599	0.642	-7.2	100	0.00
8	S	Phenol-d5	1.376	1.457	-5.9	100	0.01
9	C,P	Phenol	1.562	1.654	-5.9	100	0.01
10		Aniline	1.794	1.907	-6.3	100	0.00
11	P	bis(2-Chloroethyl)ether	0.826	0.857	-3.8	100	0.00
12	P	2-Chlorophenol	1.285	1.355	-5.4	100	0.00
13		1,3-Dichlorobenzene	1.434	1.515	-5.6	100	0.00
14	C	1,4-Dichlorobenzene	1.490	1.544	-3.6	100	0.00
15		Benzyl Alcohol	0.838	0.900	-7.4	100	0.00
16		1,2-Dichlorobenzene	1.392	1.455	-4.5	100	0.00
17	P	2-Methylphenol	1.010	1.070	-5.9	100	0.00
18	P	bis(2-Chloroisopropyl)ether	1.451	1.489	-2.6	100	0.00
19	P	3-,4-Methylphenol	1.223	1.296	-6.0	100	0.01
20		n-Nitrosopyrrolidine	0.619	0.664	-7.3	100	0.02
21	P	n-Nitrosodipropylamine	0.793	0.830	-4.7	100	0.02
22		n-Nitrosomorpholine	0.724	0.748	-3.3	100	0.02
23		o-Toluidine	1.992	2.084	-4.6	100	0.01
24	P	Hexachloroethane	0.514	0.550	-7.0	100	0.00
25	I	Naphthalene-d8	1.000	1.000	0.0	100	0.00
26	S	Nitrobenzene-d5	0.307	0.328	-6.8	100	0.00
27	P	Nitrobenzene	0.306	0.323	-5.6	100	0.01
28		n-Nitrosopiperidine	0.164	0.174	-6.1	100	0.00
29	P	Isophorone	0.565	0.601	-6.4	100	0.00
30	C,P	2-Nitrophenol	0.181	0.202	-11.6	100	0.00
31	P	2,4-Dimethylphenol	0.297	0.314	-5.7	100	0.01
32	P	bis(2-Chloroethoxy)methane	0.342	0.360	-5.3	100	0.00
33		Benzoic Acid	0.222	0.262	-18.0	100	0.04
34	C,P	2,4-Dichlorophenol	0.266	0.284	-6.8	100	0.00
35		a,a-Dimethylphenethylamine	0.742	0.846	-14.0	100	-0.01
36		1,2,4-Trichlorobenzene	0.289	0.308	-6.6	100	0.00
37	P	Naphthalene	0.988	1.022	-3.4	100	0.00
38	P	4-Chloroaniline	0.113	0.130	-15.0	100	0.00
39	C,P	Hexachlorobutadiene	0.149	0.166	-11.4	100	0.00
40		n-Nitrosodi-n-Butylamine	0.189	0.207	-9.5	100	0.01
41		p-Phenylenediamine	0.359	0.358	0.3	100	0.01
42	C,P	4-Chloro-3-Methylphenol	0.274	0.300	-9.5	100	0.00
43	P	2-Methylnaphthalene	0.670	0.714	-6.6	100	0.00
44		1-Methylnaphthalene	0.622	0.661	-6.3	100	0.00
45	I	Acenaphthene-d10	1.000	1.000	0.0	100	0.00
46	P	Hexachlorocyclopentadiene	0.342	0.381	-11.4	100	0.00
47	C,P	2,4,6-Trichlorophenol	0.331	0.366	-10.6	100	0.00
48	P	2,4,5-Trichlorophenol	0.354	0.390	-10.2	100	0.00
49	S	2-Fluorobiphenyl	1.257	1.337	-6.4	100	0.00
50	P	2-Chloronaphthalene	1.055	1.105	-4.7	100	0.00
51	P	2-Nitroaniline	0.361	0.383	-6.1	100	0.01
52	P	Dimethylphthalate	1.198	1.279	-6.8	100	0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80869.D Vial: 9
Acq On : 29 Jan 2021 12:49 pm Operator: SCB
Sample : S1A0503-CAL2 Inst : MSD12
Misc : 1,1 0012166 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
53		1,3-Dinitrobenzene	0.213	0.243	-14.1	100	0.01
54	P	2,6-Dinitrotoluene	0.288	0.317	-10.1	100	0.01
55	P	Acenaphthylene	1.837	1.937	-5.4	100	0.00
56	P	3-Nitroaniline	0.338	0.364	-7.7	100	0.00
57	P	2,4-Dinitrophenol	0.178	0.216	-21.3	100	0.01
58	C,P	Acenaphthene	1.162	1.185	-2.0	100	0.00
59	P	4-Nitrophenol	0.213	0.238	-11.7	100	0.01
60	P	2,4-Dinitrotoluene	0.372	0.415	-11.6	100	0.01
61	P	Dibenzofuran	1.536	1.604	-4.4	100	0.00
62		2,3,5,6-Tetrachlorophenol	0.280	0.312	-11.4	100	0.00
63		2,3,4,6-Tetrachlorophenol	0.289	0.320	-10.7	100	0.00
64		1-Naphthylamine	1.221	1.294	-6.0	100	0.01
65		2-Naphthylamine	1.281	1.363	-6.4	100	0.01
66	P	Diethylphthalate	1.239	1.324	-6.9	100	0.00
67	P	Fluorene	1.251	1.331	-6.4	100	0.00
68	P	4-Chlorophenyl Phenyl Ether	0.586	0.624	-6.5	100	0.00
69	P	4-Nitroaniline	0.372	0.397	-6.7	100	0.02
70		5-Nitro-o-Toluidine	0.391	0.434	-11.0	100	0.01
71		1,2-Diphenylhydrazine & Azo	1.090	1.153	-5.8	100	0.00
72	S	2,4,6-Tribromophenol	0.172	0.194	-12.8	100	0.00
73	I	Phenanthrene-d10	1.000	1.000	0.0	100	0.00
74	P	4,6-Dinitro-2-Methylphenol	0.121	0.139	-14.9	100	0.01
75	C,P	Diphenylamine/n-Nitrosodiph	0.614	0.646	-5.2	100	0.00
76	P	4-Bromophenyl Phenyl Ether	0.181	0.195	-7.7	100	0.00
77	P	Hexachlorobenzene	0.196	0.208	-6.1	100	0.00
78		4-Aminobiphenyl	0.830	0.895	-7.8	100	0.00
79	C,P	Pentachlorophenol	0.136	0.149	-9.6	100	0.00
80	P	Phenanthrene	1.041	1.057	-1.5	100	0.00
81	P	Anthracene	1.063	1.108	-4.2	100	0.00
82	P	Carbazole	0.940	0.993	-5.6	100	0.00
83	P	Di-n-Butyl Phthalate	1.128	1.224	-8.5	100	0.00
84		Methapyrilene	0.453	0.510	-12.6	100	0.00
85	C,P	Fluoranthene	1.010	1.083	-7.2	100	0.01
86	I	Chrysene-d12	1.000	1.000	0.0	100	0.01
87		Benzidine	0.880	0.993	-12.8	100	0.00
88	P	Pyrene	1.279	1.369	-7.0	100	0.00
89	S	p-Terphenyl-d14	0.959	1.024	-6.8	100	0.00
90		p-(Dimethylamino)azobenzene	0.250	0.282	-12.8	100	0.00
91	P	Butyl Benzyl Phthalate	0.633	0.691	-9.2	100	0.00
92		3,3'-Dimethylbenzidine	0.914	1.021	-11.7	100	0.01
93		2-Acetylaminofluorene	0.525	0.626	-19.2	100	0.02
94	P	bis(2-Ethylhexyl)phthalate	0.850	0.967	-13.8	100	0.00
95	P	3,3'-Dichlorobenzidine	0.463	0.528	-14.0	100	0.01
96	P	Benzo[a]anthracene	1.179	1.267	-7.5	100	0.00
97	P	Chrysene	1.190	1.245	-4.6	100	0.01
98	I	Perylene-d12	1.000	1.000	0.0	100	0.00
99	C,P	Di-n-Octyl Phthalate	1.250	1.457	-16.6	100	0.00
100	P	Benzo[b]fluoranthene	0.994	1.122	-12.9	100	0.01
101	P	Benzo[k]fluoranthene	1.032	1.130	-9.5	100	0.02
102	C,P	Benzo[a]pyrene	0.890	1.004	-12.8	100	0.01
103	P	Indeno[1,2,3-cd]pyrene	0.921	1.063	-15.4	100	0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80869.D Vial: 9
Acq On : 29 Jan 2021 12:49 pm Operator: SCB
Sample : S1A0503-CAL2 Inst : MSD12
Misc : 1,1 0012166 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
104	P	Dibenz[ah]anthracene	1.023	1.187	-16.0	100	0.02
105	P	Benzo[ghi]perylene	0.999	1.114	-11.5	100	0.02

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80869.D Vial: 9
Acq On : 29 Jan 2021 12:49 pm Operator: SCB
Sample : S1A0503-CAL2 Inst : MSD12
Misc : 1,1 0012166 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	100	0.00
2		n-Nitrosodimethylamine	100.000	108.467	-8.5	100	0.01
3		Pyridine	100.000	110.152	-10.2	100	0.00
4		2-Picoline	100.000	106.384	-6.4	100	0.00
5		n-Nitrosomethylethylamine	100.000	105.627	-5.6	100	0.00
6	S	2-Fluorophenol	100.000	106.181	-6.2	100	0.00
7		n-Nitrosodiethylamine	100.000	107.111	-7.1	100	0.00
8	S	Phenol-d5	100.000	105.950	-6.0	100	0.01
9	C,P	Phenol	100.000	105.909	-5.9	100	0.01
10		Aniline	100.000	106.296	-6.3	100	0.00
11	P	bis(2-Chloroethyl)ether	100.000	103.777	-3.8	100	0.00
12	P	2-Chlorophenol	100.000	105.450	-5.5	100	0.00
13		1,3-Dichlorobenzene	100.000	105.644	-5.6	100	0.00
14	C	1,4-Dichlorobenzene	100.000	103.662	-3.7	100	0.00
15		Benzyl Alcohol	100.000	107.395	-7.4	100	0.00
16		1,2-Dichlorobenzene	100.000	104.527	-4.5	100	0.00
17	P	2-Methylphenol	100.000	106.010	-6.0	100	0.00
18	P	bis(2-Chloroisopropyl)ether	100.000	102.614	-2.6	100	0.00
19	P	3-,4-Methylphenol	100.000	106.001	-6.0	100	0.01
20		n-Nitrosopyrrolidine	100.000	107.150	-7.2	100	0.02
21	P	n-Nitrosodipropylamine	100.000	104.687	-4.7	100	0.02
22		n-Nitrosomorpholine	100.000	103.348	-3.3	100	0.02
23		o-Toluidine	100.000	104.614	-4.6	100	0.01
24	P	Hexachloroethane	100.000	106.946	-6.9	100	0.00
25	I	Naphthalene-d8	40.000	40.000	0.0	100	0.00
26	S	Nitrobenzene-d5	100.000	106.766	-6.8	100	0.00
27	P	Nitrobenzene	100.000	105.507	-5.5	100	0.01
28		n-Nitrosopiperidine	100.000	106.071	-6.1	100	0.00
29	P	Isophorone	100.000	106.350	-6.3	100	0.00
30	C,P	2-Nitrophenol	100.000	111.423	-11.4	100	0.00
31	P	2,4-Dimethylphenol	100.000	105.980	-6.0	100	0.01
32	P	bis(2-Chloroethoxy)methane	100.000	105.234	-5.2	100	0.00
33		Benzoic Acid	100.000	102.456	-2.5	100	0.04
34	C,P	2,4-Dichlorophenol	100.000	106.848	-6.8	100	0.00
35		a,a-Dimethylphenethylamine	100.000	113.929	-13.9	100	-0.01
36		1,2,4-Trichlorobenzene	100.000	106.486	-6.5	100	0.00
37	P	Naphthalene	100.000	103.437	-3.4	100	0.00
38	P	4-Chloroaniline	100.000	115.170	-15.2	100	0.00
39	C,P	Hexachlorobutadiene	100.000	111.141	-11.1	100	0.00
40		n-Nitrosodi-n-Butylamine	100.000	109.241	-9.2	100	0.01
41		p-Phenylenediamine	100.000	99.770	0.2	100	0.01
42	C,P	4-Chloro-3-Methylphenol	100.000	109.401	-9.4	100	0.00
43	P	2-Methylnaphthalene	100.000	106.551	-6.6	100	0.00
44		1-Methylnaphthalene	100.000	106.390	-6.4	100	0.00
45	I	Acenaphthene-d10	40.000	40.000	0.0	100	0.00
46	P	Hexachlorocyclopentadiene	100.000	111.407	-11.4	100	0.00
47	C,P	2,4,6-Trichlorophenol	100.000	110.426	-10.4	100	0.00
48	P	2,4,5-Trichlorophenol	100.000	110.355	-10.4	100	0.00
49	S	2-Fluorobiphenyl	100.000	106.354	-6.4	100	0.00
50	P	2-Chloronaphthalene	100.000	104.723	-4.7	100	0.00
51	P	2-Nitroaniline	100.000	106.195	-6.2	100	0.01
52	P	Dimethylphthalate	100.000	106.794	-6.8	100	0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80869.D Vial: 9
Acq On : 29 Jan 2021 12:49 pm Operator: SCB
Sample : S1A0503-CAL2 Inst : MSD12
Misc : 1,1 0012166 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
53		1,3-Dinitrobenzene	100.000	113.945	-13.9	100	0.01
54	P	2,6-Dinitrotoluene	100.000	110.089	-10.1	100	0.01
55	P	Acenaphthylene	100.000	105.449	-5.4	100	0.00
56	P	3-Nitroaniline	100.000	107.621	-7.6	100	0.00
57	P	2,4-Dinitrophenol	100.000	104.064	-4.1	100	0.01
58	C,P	Acenaphthene	100.000	101.998	-2.0	100	0.00
59	P	4-Nitrophenol	100.000	111.747	-11.7	100	0.01
60	P	2,4-Dinitrotoluene	100.000	111.704	-11.7	100	0.01
61	P	Dibenzofuran	100.000	104.416	-4.4	100	0.00
62		2,3,5,6-Tetrachlorophenol	100.000	111.666	-11.7	100	0.00
63		2,3,4,6-Tetrachlorophenol	100.000	110.773	-10.8	100	0.00
64		1-Naphthylamine	100.000	105.949	-5.9	100	0.01
65		2-Naphthylamine	100.000	106.412	-6.4	100	0.01
66	P	Diethylphthalate	100.000	106.840	-6.8	100	0.00
67	P	Fluorene	100.000	106.431	-6.4	100	0.00
68	P	4-Chlorophenyl Phenyl Ether	100.000	106.450	-6.5	100	0.00
69	P	4-Nitroaniline	100.000	106.807	-6.8	100	0.02
70		5-Nitro-o-Toluidine	100.000	110.978	-11.0	100	0.01
71		1,2-Diphenylhydrazine & Azo	100.000	105.784	-5.8	100	0.00
72	S	2,4,6-Tribromophenol	100.000	112.677	-12.7	100	0.00
73	I	Phenanthrene-d10	40.000	40.000	0.0	100	0.00
74	P	4,6-Dinitro-2-Methylphenol	100.000	114.870	-14.9	100	0.01
75	C,P	Diphenylamine/n-Nitrosodiph	100.000	105.170	-5.2	100	0.00
76	P	4-Bromophenyl Phenyl Ether	100.000	107.382	-7.4	100	0.00
77	P	Hexachlorobenzene	100.000	106.034	-6.0	100	0.00
78		4-Aminobiphenyl	100.000	107.854	-7.9	100	0.00
79	C,P	Pentachlorophenol	100.000	109.577	-9.6	100	0.00
80	P	Phenanthrene	100.000	101.513	-1.5	100	0.00
81	P	Anthracene	100.000	104.236	-4.2	100	0.00
82	P	Carbazole	100.000	105.680	-5.7	100	0.00
83	P	Di-n-Butyl Phthalate	100.000	108.449	-8.4	100	0.00
84		Methapyrilene	100.000	102.861	-2.9	100	0.00
85	C,P	Fluoranthene	100.000	107.252	-7.3	100	0.01
86	I	Chrysene-d12	40.000	40.000	0.0	100	0.01
87		Benzidine	100.000	112.854	-12.9	100	0.00
88	P	Pyrene	100.000	107.074	-7.1	100	0.00
89	S	p-Terphenyl-d14	100.000	106.796	-6.8	100	0.00
90		p-(Dimethylamino)azobenzene	100.000	112.865	-12.9	100	0.00
91	P	Butyl Benzyl Phthalate	100.000	109.277	-9.3	100	0.00
92		3,3'-Dimethylbenzidine	200.000	223.352	-11.7	100	0.01
93		2-Acetylaminofluorene	100.000	105.727	-5.7	100	0.02
94	P	bis(2-Ethylhexyl)phthalate	100.000	113.817	-13.8	100	0.00
95	P	3,3'-Dichlorobenzidine	100.000	113.918	-13.9	100	0.01
96	P	Benzo[a]anthracene	100.000	107.523	-7.5	100	0.00
97	P	Chrysene	100.000	104.635	-4.6	100	0.01
98	I	Perylene-d12	40.000	40.000	0.0	100	0.00
99	C,P	Di-n-Octyl Phthalate	100.000	105.154	-5.2	100	0.00
100	P	Benzo[b]fluoranthene	100.000	112.903	-12.9	100	0.01
101	P	Benzo[k]fluoranthene	100.000	109.485	-9.5	100	0.02
102	C,P	Benzo[a]pyrene	100.000	112.846	-12.8	100	0.01
103	P	Indeno[1,2,3-cd]pyrene	100.000	115.489	-15.5	100	0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80869.D Vial: 9
Acq On : 29 Jan 2021 12:49 pm Operator: SCB
Sample : S1A0503-CAL2 Inst : MSD12
Misc : 1,1 0012166 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
104	P	Dibenz[ah]anthracene	100.000	116.037	-16.0	100	0.02
105	P	Benzo[ghi]perylene	100.000	111.530	-11.5	100	0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0
12M80869.D MEGAMIX.M Mon Feb 01 10:48:19 2021 Page 3

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80870.D Vial: 10
Acq On : 29 Jan 2021 1:20 pm Operator: SCB
Sample : S1A0503-CAL1 Inst : MSD12
Misc : 1,1 0012165 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 09:58:10 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.635	152	95738	40.0000	ug/ml	0.000
25) Naphthalene-d8	7.906	136	368554	40.0000	ug/ml	0.000
45) Acenaphthene-d10	9.642	164	208967	40.0000	ug/ml	0.000
73) Phenanthrene-d10	11.101	188	367601	40.0000	ug/ml	0.000
86) Chrysene-d12	14.509	240	307099	40.0000	ug/ml	0.016
98) Perylene-d12	16.993	264	344866	40.0000	ug/ml	0.000
System Monitoring Compounds						
6) 2-Fluorophenol	5.256	112	347405	122.2730381	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 122.27%#			
8) Phenol-d5	6.271	99	402577	122.2739338	ug/ml	0.01
Spiked Amount 100.000	Range 10 - 94		Recovery = 122.27%#			
26) Nitrobenzene-d5	7.201	82	348232	123.1421752	ug/ml	0.01
Spiked Amount 50.000	Range 35 - 114		Recovery = 246.28%#			
49) 2-Fluorobiphenyl	8.980	172	798853	121.6659776	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 243.33%#			
72) 2,4,6-Tribromophenol	10.422	330	116898	130.2900483	ug/ml	0.01
Spiked Amount 100.000	Range 10 - 123		Recovery = 130.29%#			
89) p-Terphenyl-d14	12.922	244	919877	124.9119640	ug/ml	0.01
Spiked Amount 50.000	Range 33 - 141		Recovery = 249.82%#			
Target Compounds						Qvalue
2) n-Nitrosodimethylamine	3.50	74	210957	123.2136	ug/ml	98
3) Pyridine	3.53	79	359569	125.8923	ug/ml	98
4) 2-Picoline	4.54	93	395678	122.3110	ug/ml	99
5) n-Nitrosomethylethylamine	4.70	88	164634	120.0509	ug/ml	95
7) n-Nitrosodiethylamine	5.52	102	175229	122.1779	ug/ml	95
9) Phenol	6.29	94	452228	120.9926	ug/ml#	46
10) Aniline	6.30	93	526721	122.6863	ug/ml#	51
11) bis(2-Chloroethyl)ether	6.38	63	233972	118.3834	ug/ml	97
12) 2-Chlorophenol	6.42	128	373869	121.5476	ug/ml	98
13) 1,3-Dichlorobenzene	6.58	146	411369	119.8160	ug/ml	100
14) 1,4-Dichlorobenzene	6.65	146	424324	118.9955	ug/ml	99
15) Benzyl Alcohol	6.78	108	249018	124.1846	ug/ml	98
16) 1,2-Dichlorobenzene	6.80	146	400367	120.1787	ug/ml	100
17) 2-Methylphenol	6.89	107	298241m	123.4212	ug/ml	
18) bis(2-Chloroisopropyl)ethe	6.92	45	406162	116.9190	ug/ml#	96
19) 3-,4-Methylphenol	7.06	108	383137	130.9061	ug/ml	95
20) n-Nitrosopyrrolidine	7.05	100	183832	124.0251	ug/ml#	69
21) n-Nitrosodipropylamine	7.07	70	228714	120.4710	ug/ml#	74
22) n-Nitrosomorpholine	7.08	56	206472	119.2156	ug/ml	98
23) o-Toluidine	7.08	106	563122	118.1114	ug/ml	87
24) Hexachloroethane	7.14	117	152524	123.9582	ug/ml	97
27) Nitrobenzene	7.22	77	344136	121.9870	ug/ml	98
28) n-Nitrosopiperidine	7.37	114	186150	123.3670	ug/ml	96
29) Isophorone	7.46	82	638267	122.5088	ug/ml	99
30) 2-Nitrophenol	7.53	139	215362	129.1769	ug/ml	98
31) 2,4-Dimethylphenol	7.58	122	333859	122.1910	ug/ml	100
32) bis(2-Chloroethoxy)methane	7.68	93	381631	121.2244	ug/ml	99
33) Benzoic Acid	7.74	105	297883	120.6987	ug/ml	98
34) 2,4-Dichlorophenol	7.77	162	306584	125.1517	ug/ml	99
35) a,a-Dimethylphenethylamine	7.86	58	922102m	134.8326	ug/ml	
36) 1,2,4-Trichlorobenzene	7.85	180	330107	123.8806	ug/ml	99
37) Naphthalene	7.93	128	1071906	117.7666	ug/ml	99
38) 4-Chloroaniline	7.98	65	143546	137.6065	ug/ml	88

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80870.D Vial: 10
Acq On : 29 Jan 2021 1:20 pm Operator: SCB
Sample : S1A0503-CAL1 Inst : MSD12
Misc : 1,1 0012165 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 09:58:10 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39) Hexachlorobutadiene	8.06	225	176149	127.8816	ug/ml	99
40) n-Nitrosodi-n-Butylamine	8.33	84	218580	125.4244	ug/ml	96
41) p-Phenylenediamine	8.35	108	371479	112.2338	ug/ml	100
42) 4-Chloro-3-Methylphenol	8.46	107	316399	125.3669	ug/ml	99
43) 2-Methylnaphthalene	8.62	142	758727	122.9189	ug/ml	100
44) 1-Methylnaphthalene	8.71	142	694891	121.3420	ug/ml	99
46) Hexachlorocyclopentadiene	8.77	237	226187	126.7191	ug/ml	98
47) 2,4,6-Trichlorophenol	8.89	196	223047	128.9767	ug/ml	99
48) 2,4,5-Trichlorophenol	8.92	196	235331	127.3138	ug/ml	100
50) 2-Chloronaphthalene	9.09	162	670854	121.6637	ug/ml	99
51) 2-Nitroaniline	9.60	65	228037	121.0540	ug/ml	98
52) Dimethylphthalate	9.39	163	765059	122.2399	ug/ml	99
53) 1,3-Dinitrobenzene	9.41	168	147381	132.4797	ug/ml#	87
54) 2,6-Dinitrotoluene	9.44	165	191339	127.2337	ug/ml	96
55) Acenaphthylene	9.50	152	1162592	121.1620	ug/ml	99
56) 3-Nitroaniline	9.60	138	220157	124.5273	ug/ml	98
57) 2,4-Dinitrophenol	9.71	184	133965	118.8711	ug/ml	92
58) Acenaphthene	9.68	154	708001	116.6306	ug/ml	98
59) 4-Nitrophenol	9.77	65	143548	129.1410	ug/ml	98
60) 2,4-Dinitrotoluene	9.85	165	252583	130.1312	ug/ml	97
61) Dibenzofuran	9.85	168	969605	120.7993	ug/ml	100
62) 2,3,5,6-Tetrachlorophenol	9.93	232	190485	130.3910	ug/ml	99
63) 2,3,4,6-Tetrachlorophenol	9.96	232	197902	131.2851	ug/ml	99
64) 1-Naphthylamine	9.93	143	776170	121.6540	ug/ml	99
65) 2-Naphthylamine	10.01	143	815531	121.8869	ug/ml	99
66) Diethylphthalate	10.09	149	794833	122.7767	ug/ml	99
67) Fluorene	10.18	166	807156	123.5108	ug/ml	99
68) 4-Chlorophenyl Phenyl Ethe	10.18	204	376072	122.8196	ug/ml	99
69) 4-Nitroaniline	10.21	138	227319m	117.0010	ug/ml	
70) 5-Nitro-o-Toluidine	10.20	152	263408	129.0620	ug/ml	96
71) 1,2-Diphenylhydrazine & Az	10.34	77	694366	121.9249	ug/ml	99
74) 4,6-Dinitro-2-Methylphenol	10.24	198	152979	137.7743	ug/ml	97
75) Diphenylamine/n-Nitrosodip	10.30	169	701523	124.2680	ug/ml	99
76) 4-Bromophenyl Phenyl Ether	10.67	248	213364	128.0381	ug/ml	99
77) Hexachlorobenzene	10.72	284	226868	125.7763	ug/ml	99
78) 4-Aminobiphenyl	10.92	169	978206	128.2898	ug/ml	99
79) Pentachlorophenol	10.91	266	163750	131.4741	ug/ml	99
80) Phenanthrene	11.13	178	1149041	120.0633	ug/ml	99
81) Anthracene	11.18	178	1202074	123.0622	ug/ml	99
82) Carbazole	11.34	167	1081669	125.2372	ug/ml	100
83) Di-n-Butyl Phthalate	11.70	149	1323131	127.6067	ug/ml	99
84) Methapyrilene	12.02	58	551214	120.7882	ug/ml	98
85) Fluoranthene	12.42	202	1177785	126.8943	ug/ml	100
87) Benzidine	12.60	184	886944	131.2285	ug/ml	99
88) Pyrene	12.70	202	1216472	123.8842	ug/ml	99
90) p-(Dimethylamino)azobenzen	13.11	225	255084	132.8937	ug/ml	96
91) Butyl Benzyl Phthalate	13.65	149	613909	126.4107	ug/ml	97
92) 3,3'-Dimethylbenzidine	13.62	212	1822513	259.7532	ug/ml	98
93) 2-Acetylaminofluorene	14.01	181	557202	122.3468	ug/ml	99
94) bis(2-Ethylhexyl)phthalate	14.63	149	864827	132.5414	ug/ml	99
95) 3,3'-Dichlorobenzidine	14.48	252	474460	133.3800	ug/ml	100
96) Benzo[a]anthracene	14.49	228	1125571	124.3811	ug/ml	99
97) Chrysene	14.56	228	1111052	121.5838	ug/ml	99
99) Di-n-Octyl Phthalate	15.80	149	1452990	121.3590	ug/ml	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80870.D Vial: 10
Acq On : 29 Jan 2021 1:20 pm Operator: SCB
Sample : S1A0503-CAL1 Inst : MSD12
Misc : 1,1 0012165 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 09:58:10 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

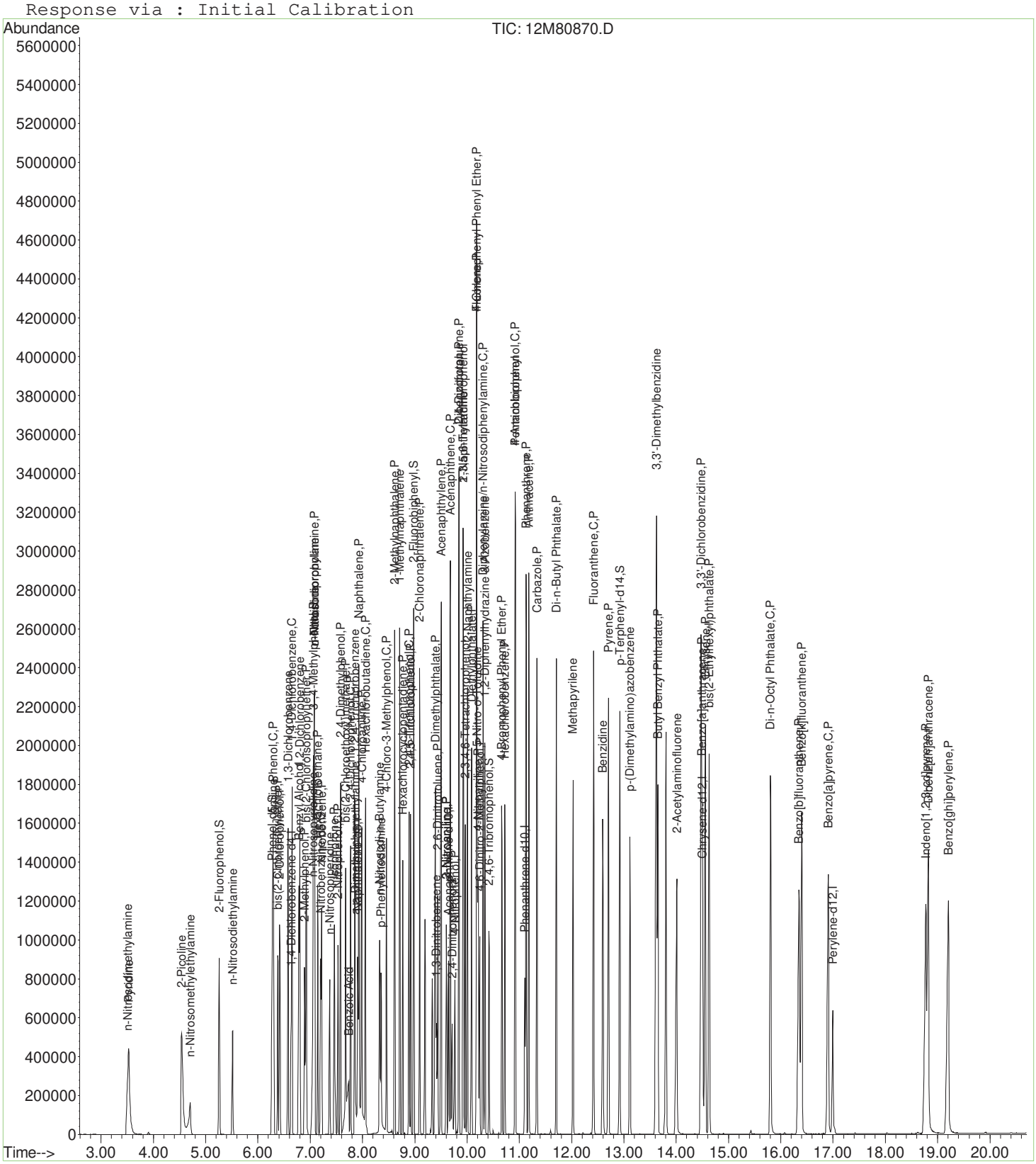
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
100) Benzo[b]fluoranthene	16.35	252	1131349	132.0346	ug/ml	100
101) Benzo[k]fluoranthene	16.40	252	1117214	125.5362	ug/ml	99
102) Benzo[a]pyrene	16.91	252	1001931	130.5699	ug/ml	100
103) Indeno[1,2,3-cd]pyrene	18.77	276	1094130	137.8150	ug/ml	99
104) Dibenz[ah]anthracene	18.82	278	1180119	133.7809	ug/ml	98
105) Benzo[ghi]perylene	19.20	276	1110033	128.8955	ug/ml	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80870.D Vial: 10
Acq On : 29 Jan 2021 1:20 pm Operator: SCB
Sample : S1A0503-CAL1 Inst : MSD12
Misc : 1,1 0012165 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 10:52 2021 Quant Results File: MEGAMIX.RES

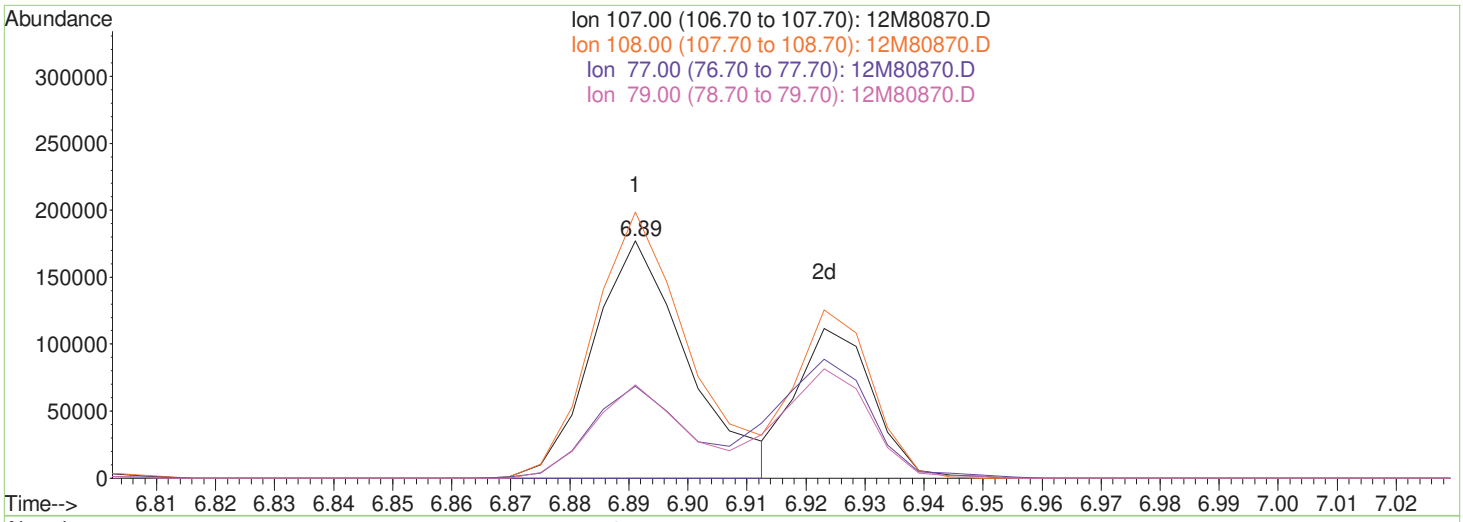
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration

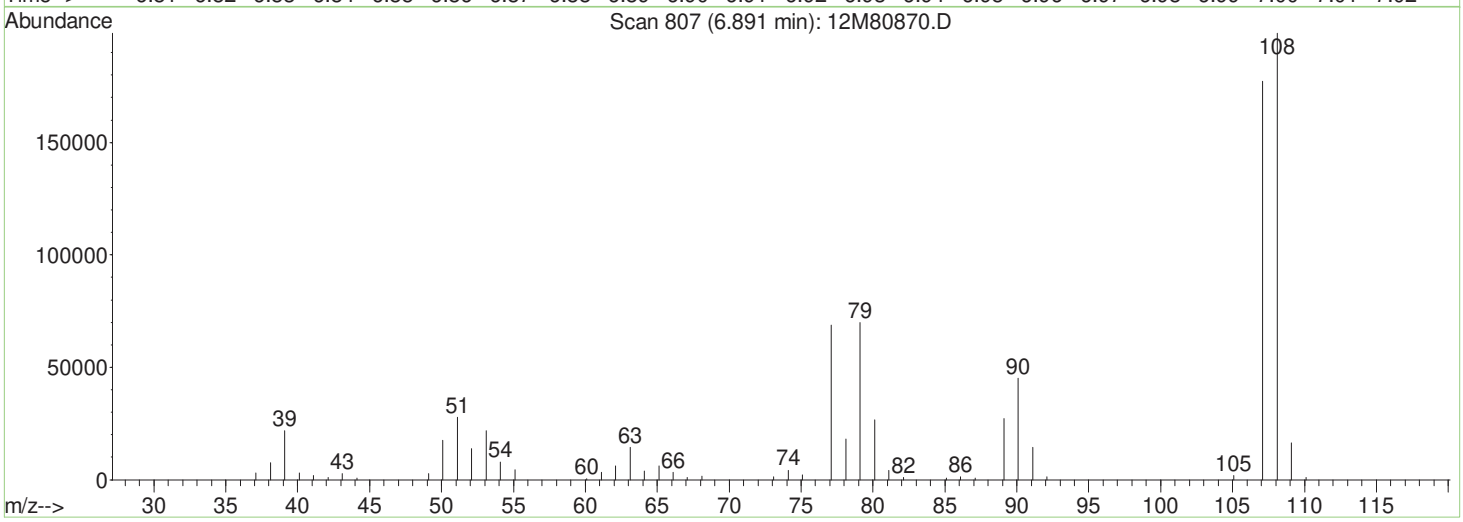


Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\012921\12M80870.D Vial: 10
Acq On : 29 Jan 2021 1:20 pm Operator: SCB
Sample : S1A0503-CAL1 Inst : MSD12
Misc : 1,1 0012165 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 9:58 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration





TIC: 12M80870.D

(17) 2-Methylphenol (P)

6.89min 82.32ug/ml

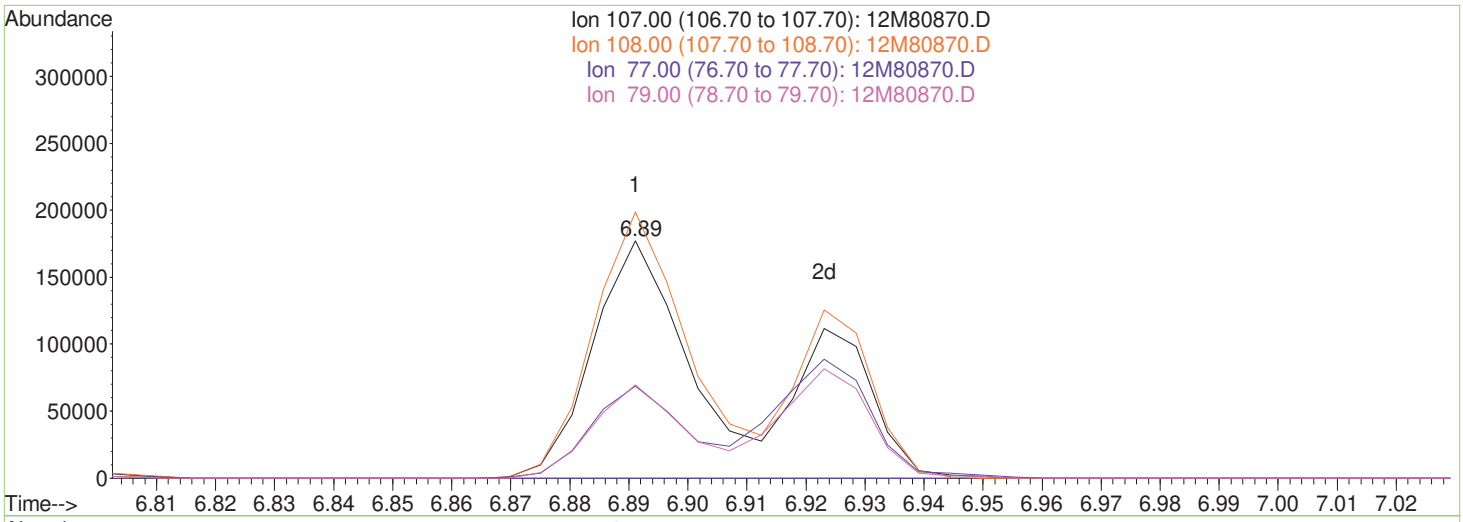
response 198917

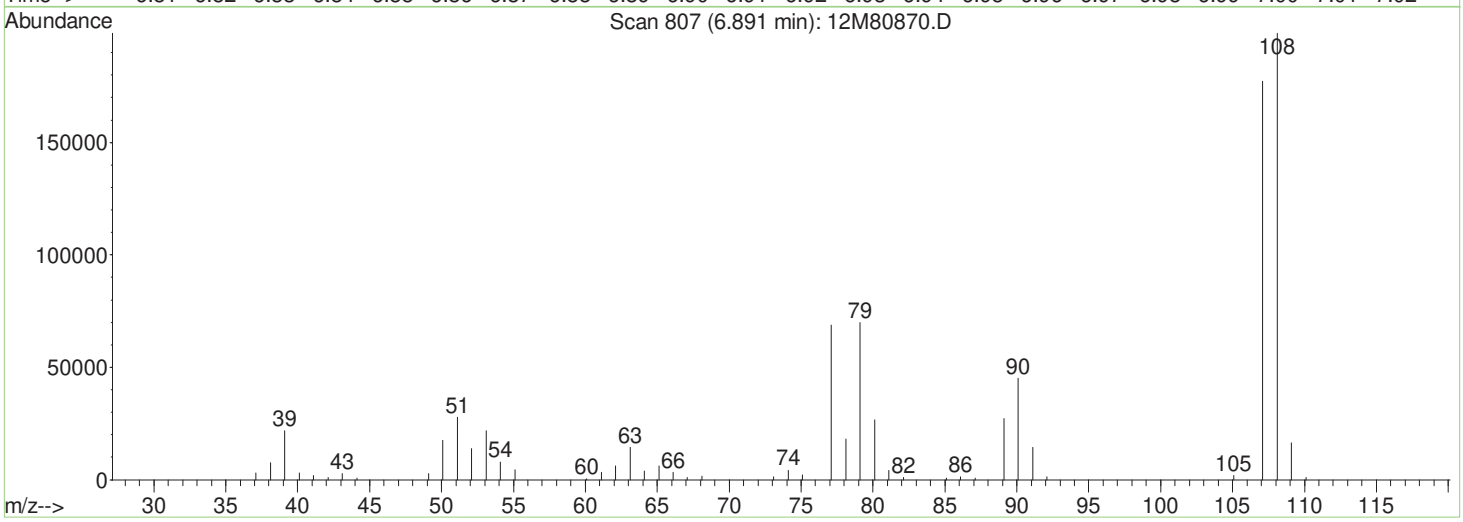
Ion	Exp%	Act%
107.00	100	100
108.00	112.30	112.37
77.00	59.00	39.57
79.00	54.40	38.58

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\012921\12M80870.D Vial: 10
Acq On : 29 Jan 2021 1:20 pm Operator: SCB
Sample : S1A0503-CAL1 Inst : MSD12
Misc : 1,1 0012165 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 10:51 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration





TIC: 12M80870.D

(17) 2-Methylphenol (P)

6.89min 123.42ug/ml mint

response 298241

Ion	Exp%	Act%
107.00	100	100
108.00	112.30	74.95
77.00	59.00	26.39#
79.00	54.40	25.73#

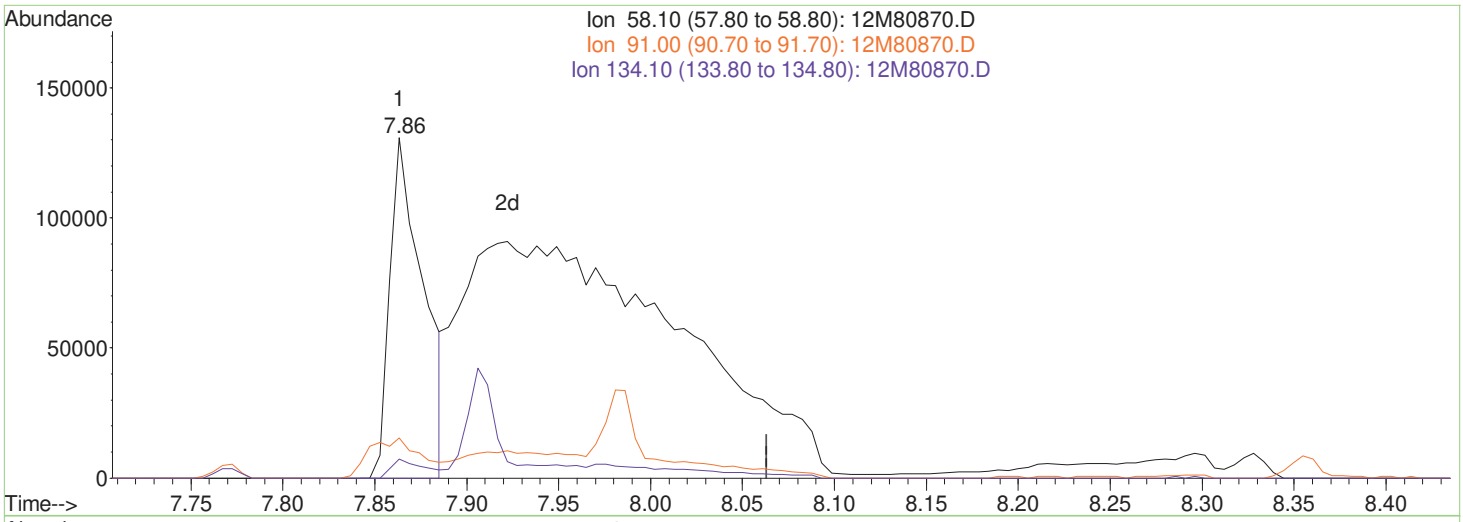
Sarah Bogolin

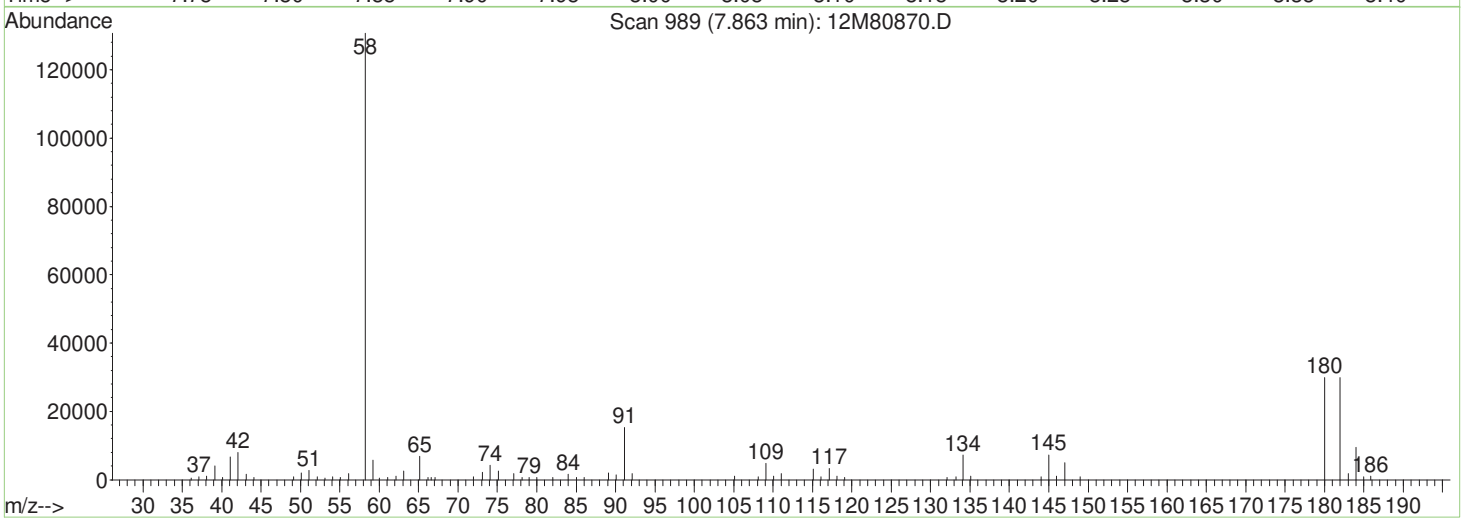
Digitally signed by Sarah Bogolin
Reason: Data system splits the peak incorrectly or integrates a false peak as a rider peak
Date: 2021.02.01 13:59:07 -05'00'

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\012921\12M80870.D Vial: 10
Acq On : 29 Jan 2021 1:20 pm Operator: SCB
Sample : S1A0503-CAL1 Inst : MSD12
Misc : 1,1 0012165 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 10:51 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration





TIC: 12M80870.D

(35) a,a-Dimethylphenethylamine

7.86min 24.26ug/ml

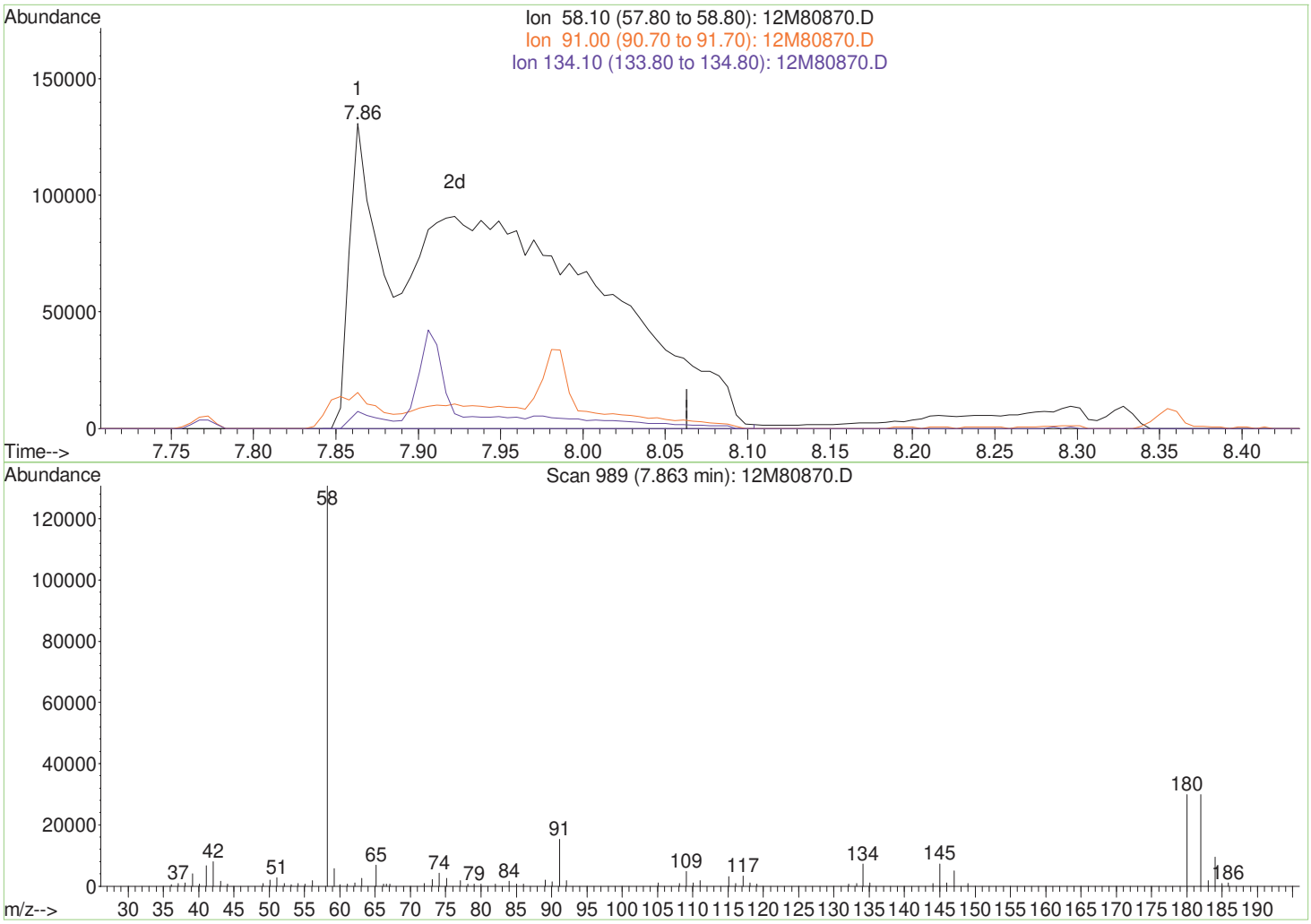
response 165893

Ion	Exp%	Act%
58.10	100	100
91.00	6.40	17.92#
134.10	1.90	5.41#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\012921\12M80870.D Vial: 10
Acq On : 29 Jan 2021 1:20 pm Operator: SCB
Sample : S1A0503-CAL1 Inst : MSD12
Misc : 1,1 0012165 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 10:52 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration



TIC: 12M80870.D

(35) a,a-Dimethylphenethylamine

7.86min 134.83ug/ml mint

response 922102

Ion	Exp%	Act%
58.10	100	100
91.00	6.40	3.22#
134.10	1.90	0.97#
0.00	0.00	0.00

Sarah Bogolin

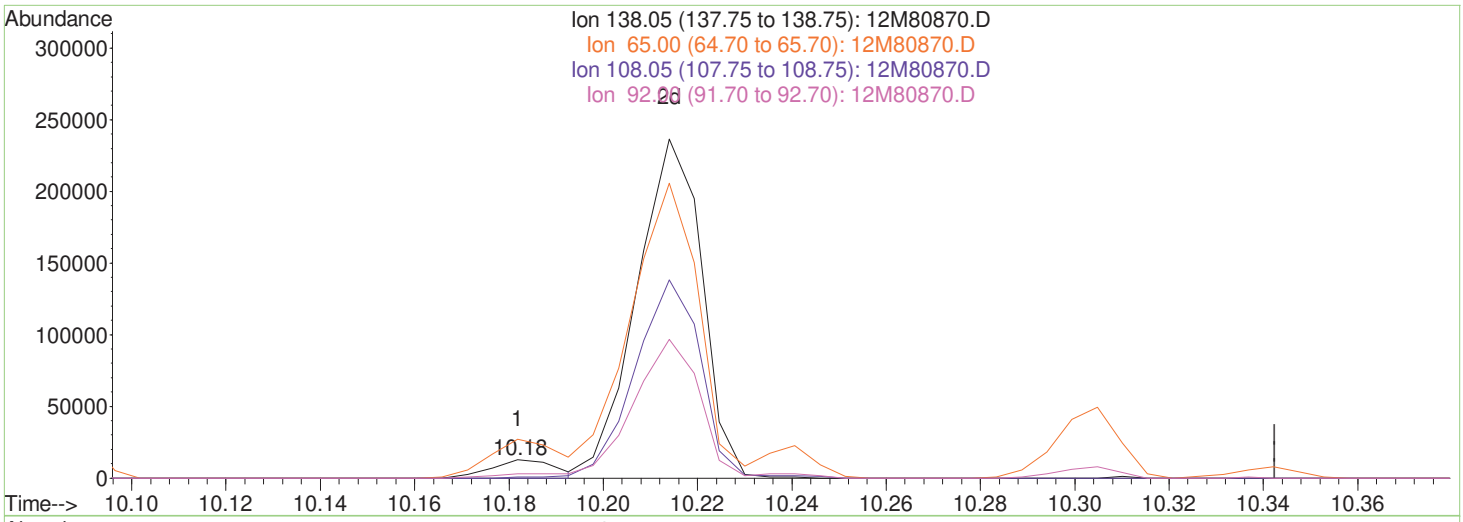
Digitally signed by Sarah Bogolin
Reason: Data system splits the peak incorrectly or integrates a false peak as a rider peak
Date: 2021.02.01 13:59:40 -05'00'

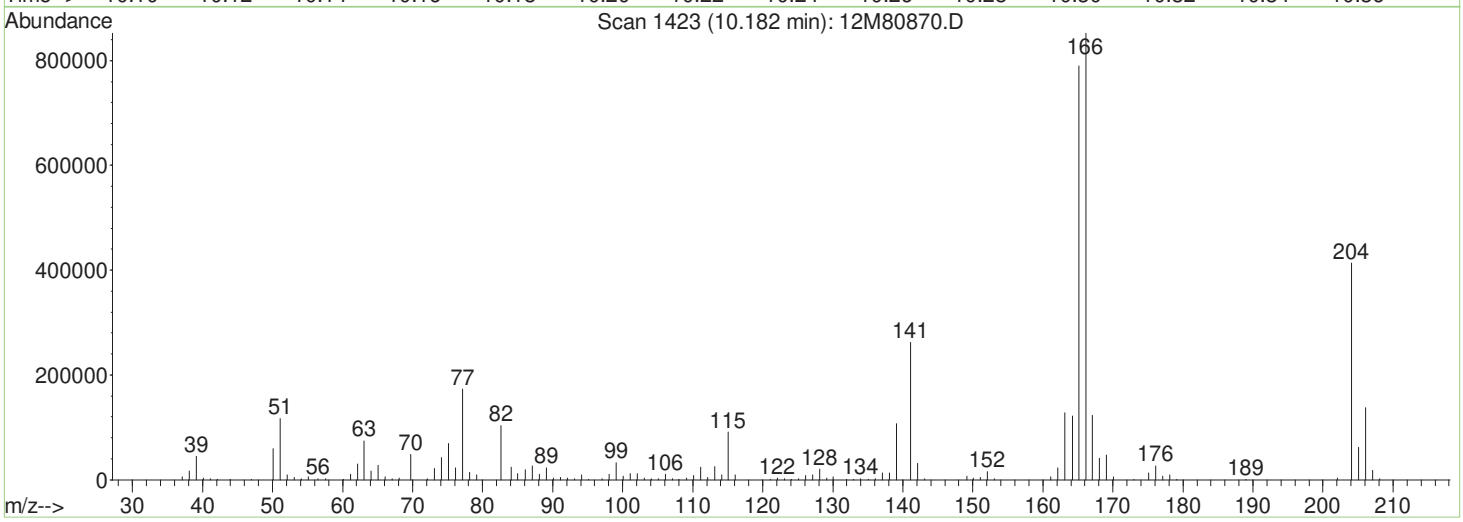
12M80870.D MEGAMIX.M Mon Feb 01 10:52:03 2021

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\012921\12M80870.D Vial: 10
Acq On : 29 Jan 2021 1:20 pm Operator: SCB
Sample : S1A0503-CAL1 Inst : MSD12
Misc : 1,1 0012165 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 10:52 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration





TIC: 12M80870.D

(69) 4-Nitroaniline (P)

10.18min 6.18ug/ml

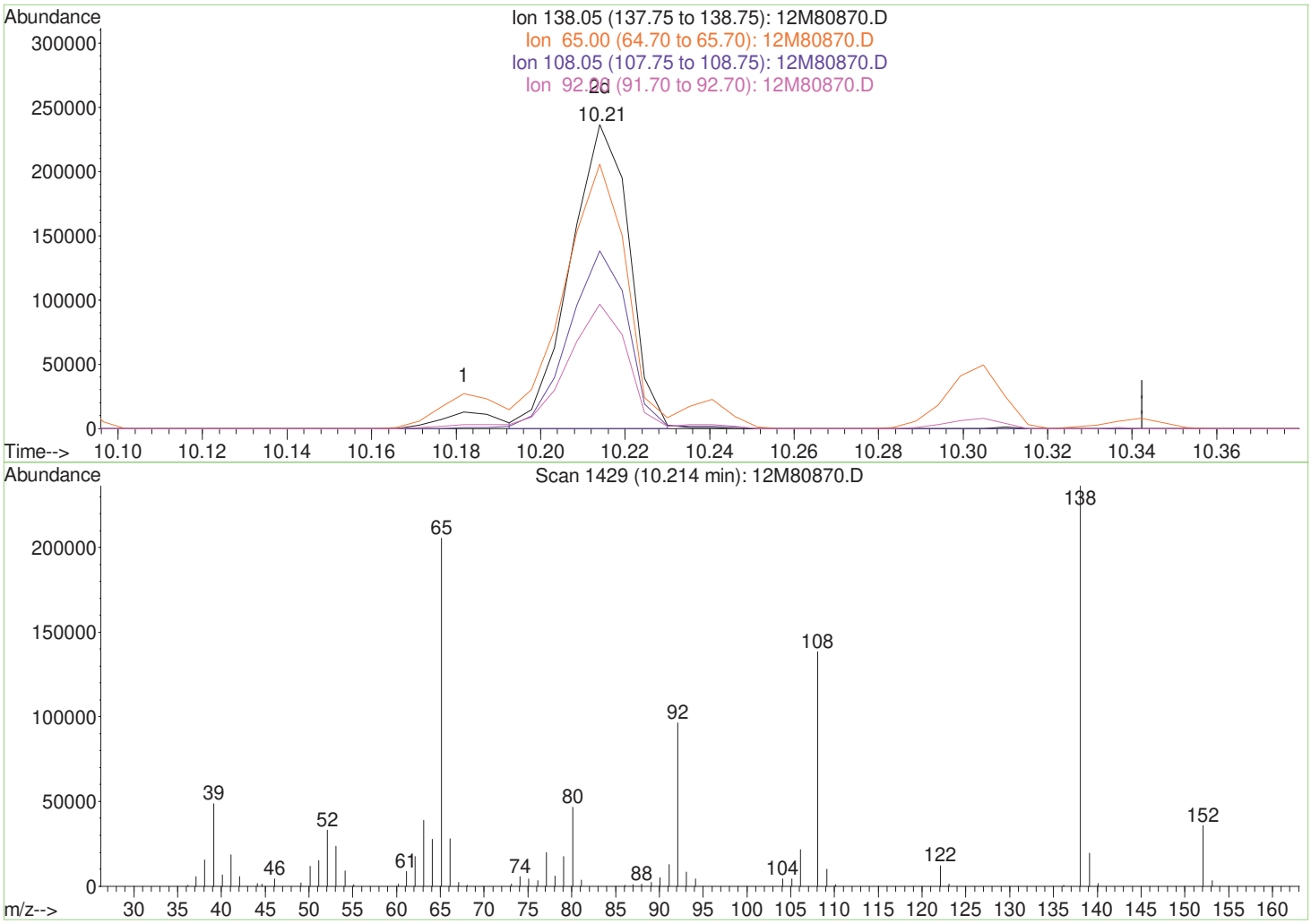
response 12006

Ion	Exp%	Act%
138.05	100	100
65.00	100.60	235.44#
108.05	55.80	0.00#
92.00	41.50	0.00#

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\012921\12M80870.D Vial: 10
Acq On : 29 Jan 2021 1:20 pm Operator: SCB
Sample : S1A0503-CAL1 Inst : MSD12
Misc : 1,1 0012165 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 10:52 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration



TIC: 12M80870.D

(69) 4-Nitroaniline (P)

10.21min 117.00ug/ml mint

response 227319

Ion	Exp%	Act%
138.05	100	100
65.00	100.60	12.43#
108.05	55.80	0.00#
92.00	41.50	0.00#

Digitally signed by Sarah Bogolin
Reason: Data system fails to select correct peak
Date: 2021.02.01 14:00:26 -05'00'

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80870.D Vial: 10
Acq On : 29 Jan 2021 1:20 pm Operator: SCB
Sample : S1A0503-CAL1 Inst : MSD12
Misc : 1,1 0012165 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	100	0.00
2		n-Nitrosodimethylamine	0.715	0.734	-2.7	100	0.02
3		Pyridine	1.193	1.252	-4.9	100	0.00
4		2-Picoline	1.352	1.378	-1.9	100	0.00
5		n-Nitrosomethylethylamine	0.506	0.573	-13.2	100	0.00
6	S	2-Fluorophenol	1.187	1.210	-1.9	100	0.00
7		n-Nitrosodiethylamine	0.599	0.610	-1.8	100	0.01
8	S	Phenol-d5	1.376	1.402	-1.9	100	0.01
9	C,P	Phenol	1.562	1.575	-0.8	100	0.02
10		Aniline	1.794	1.834	-2.2	100	0.00
11	P	bis(2-Chloroethyl)ether	0.826	0.815	1.3	100	0.00
12	P	2-Chlorophenol	1.285	1.302	-1.3	100	0.00
13		1,3-Dichlorobenzene	1.434	1.432	0.1	100	0.00
14	C	1,4-Dichlorobenzene	1.490	1.477	0.9	100	0.00
15		Benzyl Alcohol	0.838	0.867	-3.5	100	0.01
16		1,2-Dichlorobenzene	1.392	1.394	-0.1	100	0.00
17	P	2-Methylphenol	1.010	1.038	-2.8	100	0.00
18	P	bis(2-Chloroisopropyl)ether	1.451	1.414	2.5	100	0.00
19	P	3-,4-Methylphenol	1.223	1.334	-9.1	100	0.01
20		n-Nitrosopyrrolidine	0.619	0.640	-3.4	100	0.03
21	P	n-Nitrosodipropylamine	0.793	0.796	-0.4	100	0.02
22		n-Nitrosomorpholine	0.724	0.719	0.7	100	0.02
23		o-Toluidine	1.992	1.961	1.6	100	0.01
24	P	Hexachloroethane	0.514	0.531	-3.3	100	0.00
25	I	Naphthalene-d8	1.000	1.000	0.0	100	0.00
26	S	Nitrobenzene-d5	0.307	0.315	-2.6	100	0.01
27	P	Nitrobenzene	0.306	0.311	-1.6	100	0.01
28		n-Nitrosopiperidine	0.164	0.168	-2.4	100	0.01
29	P	Isophorone	0.565	0.577	-2.1	100	0.01
30	C,P	2-Nitrophenol	0.181	0.195	-7.7	100	0.00
31	P	2,4-Dimethylphenol	0.297	0.302	-1.7	100	0.01
32	P	bis(2-Chloroethoxy)methane	0.342	0.345	-0.9	100	0.00
33		Benzoic Acid	0.222	0.269	-21.2	100	0.06
34	C,P	2,4-Dichlorophenol	0.266	0.277	-4.1	100	0.01
35		a,a-Dimethylphenethylamine	0.742	0.834	-12.4	100	0.00
36		1,2,4-Trichlorobenzene	0.289	0.299	-3.5	100	0.00
37	P	Naphthalene	0.988	0.969	1.9	100	0.00
38	P	4-Chloroaniline	0.113	0.130	-15.0	100	0.00
39	C,P	Hexachlorobutadiene	0.149	0.159	-6.7	100	0.00
40		n-Nitrosodi-n-Butylamine	0.189	0.198	-4.8	100	0.01
41		p-Phenylenediamine	0.359	0.336	6.4	100	0.02
42	C,P	4-Chloro-3-Methylphenol	0.274	0.286	-4.4	100	0.00
43	P	2-Methylnaphthalene	0.670	0.686	-2.4	100	0.00
44		1-Methylnaphthalene	0.622	0.628	-1.0	100	0.00
45	I	Acenaphthene-d10	1.000	1.000	0.0	100	0.00
46	P	Hexachlorocyclopentadiene	0.342	0.361	-5.6	100	0.00
47	C,P	2,4,6-Trichlorophenol	0.331	0.356	-7.6	100	0.00
48	P	2,4,5-Trichlorophenol	0.354	0.375	-5.9	100	0.00
49	S	2-Fluorobiphenyl	1.257	1.274	-1.4	100	0.00
50	P	2-Chloronaphthalene	1.055	1.070	-1.4	100	0.00
51	P	2-Nitroaniline	0.361	0.364	-0.8	100	0.02
52	P	Dimethylphthalate	1.198	1.220	-1.8	100	0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80870.D Vial: 10
Acq On : 29 Jan 2021 1:20 pm Operator: SCB
Sample : S1A0503-CAL1 Inst : MSD12
Misc : 1,1 0012165 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
53		1,3-Dinitrobenzene	0.213	0.235	-10.3	100	0.02
54	P	2,6-Dinitrotoluene	0.288	0.305	-5.9	100	0.01
55	P	Acenaphthylene	1.837	1.855	-1.0	100	0.00
56	P	3-Nitroaniline	0.338	0.351	-3.8	100	0.01
57	P	2,4-Dinitrophenol	0.178	0.214	-20.2	100	0.02
58	C,P	Acenaphthene	1.162	1.129	2.8	100	0.01
59	P	4-Nitrophenol	0.213	0.229	-7.5	100	0.02
60	P	2,4-Dinitrotoluene	0.372	0.403	-8.3	100	0.02
61	P	Dibenzofuran	1.536	1.547	-0.7	100	0.00
62		2,3,5,6-Tetrachlorophenol	0.280	0.304	-8.6	100	0.01
63		2,3,4,6-Tetrachlorophenol	0.289	0.316	-9.3	100	0.00
64		1-Naphthylamine	1.221	1.238	-1.4	100	0.02
65		2-Naphthylamine	1.281	1.301	-1.6	100	0.01
66	P	Diethylphthalate	1.239	1.268	-2.3	100	0.01
67	P	Fluorene	1.251	1.288	-3.0	100	0.00
68	P	4-Chlorophenyl Phenyl Ether	0.586	0.600	-2.4	100	0.00
69	P	4-Nitroaniline	0.372	0.363	2.4	100	0.02
70		5-Nitro-o-Toluidine	0.391	0.420	-7.4	100	0.01
71		1,2-Diphenylhydrazine & Azo	1.090	1.108	-1.7	100	0.00
72	S	2,4,6-Tribromophenol	0.172	0.186	-8.1	100	0.01
73	I	Phenanthrene-d10	1.000	1.000	0.0	100	0.00
74	P	4,6-Dinitro-2-Methylphenol	0.121	0.139	-14.9	100	0.02
75	C,P	Diphenylamine/n-Nitrosodiph	0.614	0.636	-3.6	100	0.01
76	P	4-Bromophenyl Phenyl Ether	0.181	0.193	-6.6	100	0.00
77	P	Hexachlorobenzene	0.196	0.206	-5.1	100	0.00
78		4-Aminobiphenyl	0.830	0.887	-6.9	100	0.01
79	C,P	Pentachlorophenol	0.136	0.148	-8.8	100	0.00
80	P	Phenanthrene	1.041	1.042	-0.1	100	0.00
81	P	Anthracene	1.063	1.090	-2.5	100	0.00
82	P	Carbazole	0.940	0.981	-4.4	100	0.00
83	P	Di-n-Butyl Phthalate	1.128	1.200	-6.4	100	0.00
84		Methapyrilene	0.453	0.500	-10.4	100	0.00
85	C,P	Fluoranthene	1.010	1.068	-5.7	100	0.01
86	I	Chrysene-d12	1.000	1.000	0.0	100	0.02
87		Benzidine	0.880	0.963	-9.4	100	0.01
88	P	Pyrene	1.279	1.320	-3.2	100	0.00
89	S	p-Terphenyl-d14	0.959	0.998	-4.1	100	0.01
90		p-(Dimethylamino)azobenzene	0.250	0.277	-10.8	100	0.00
91	P	Butyl Benzyl Phthalate	0.633	0.666	-5.2	100	0.01
92		3,3'-Dimethylbenzidine	0.914	0.989	-8.2	100	0.02
93		2-Acetylaminofluorene	0.525	0.605	-15.2	100	0.03
94	P	bis(2-Ethylhexyl)phthalate	0.850	0.939	-10.5	100	0.00
95	P	3,3'-Dichlorobenzidine	0.463	0.515	-11.2	100	0.02
96	P	Benzo[a]anthracene	1.179	1.222	-3.6	100	0.02
97	P	Chrysene	1.190	1.206	-1.3	100	0.02
98	I	Perylene-d12	1.000	1.000	0.0	100	0.00
99	C,P	Di-n-Octyl Phthalate	1.250	1.404	-12.3	100	0.00
100	P	Benzo[b]fluoranthene	0.994	1.094	-10.1	100	0.02
101	P	Benzo[k]fluoranthene	1.032	1.080	-4.7	100	0.02
102	C,P	Benzo[a]pyrene	0.890	0.968	-8.8	100	0.02
103	P	Indeno[1,2,3-cd]pyrene	0.921	1.058	-14.9	100	0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80870.D Vial: 10
Acq On : 29 Jan 2021 1:20 pm Operator: SCB
Sample : S1A0503-CAL1 Inst : MSD12
Misc : 1,1 0012165 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
104	P	Dibenz[ah]anthracene	1.023	1.141	-11.5	100	0.02
105	P	Benzo[ghi]perylene	0.999	1.073	-7.4	100	0.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80870.D Vial: 10
Acq On : 29 Jan 2021 1:20 pm Operator: SCB
Sample : S1A0503-CAL1 Inst : MSD12
Misc : 1,1 0012165 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	100	0.00
2		n-Nitrosodimethylamine	120.000	123.214	-2.7	100	0.02
3		Pyridine	120.000	125.892	-4.9	100	0.00
4		2-Picoline	120.000	122.311	-1.9	100	0.00
5		n-Nitrosomethylethylamine	120.000	120.051	-0.0	100	0.00
6	S	2-Fluorophenol	120.000	122.273	-1.9	100	0.00
7		n-Nitrosodiethylamine	120.000	122.178	-1.8	100	0.01
8	S	Phenol-d5	120.000	122.274	-1.9	100	0.01
9	C,P	Phenol	120.000	120.993	-0.8	100	0.02
10		Aniline	120.000	122.686	-2.2	100	0.00
11	P	bis(2-Chloroethyl)ether	120.000	118.383	1.3	100	0.00
12	P	2-Chlorophenol	120.000	121.548	-1.3	100	0.00
13		1,3-Dichlorobenzene	120.000	119.816	0.2	100	0.00
14	C	1,4-Dichlorobenzene	120.000	118.995	0.8	100	0.00
15		Benzyl Alcohol	120.000	124.185	-3.5	100	0.01
16		1,2-Dichlorobenzene	120.000	120.179	-0.1	100	0.00
17	P	2-Methylphenol	120.000	123.421	-2.9	100	0.00
18	P	bis(2-Chloroisopropyl)ether	120.000	116.919	2.6	100	0.00
19	P	3-,4-Methylphenol	120.000	130.906	-9.1	100	0.01
20		n-Nitrosopyrrolidine	120.000	124.025	-3.4	100	0.03
21	P	n-Nitrosodipropylamine	120.000	120.471	-0.4	100	0.02
22		n-Nitrosomorpholine	120.000	119.216	0.7	100	0.02
23		o-Toluidine	120.000	118.111	1.6	100	0.01
24	P	Hexachloroethane	120.000	123.958	-3.3	100	0.00
25	I	Naphthalene-d8	40.000	40.000	0.0	100	0.00
26	S	Nitrobenzene-d5	120.000	123.142	-2.6	100	0.01
27	P	Nitrobenzene	120.000	121.987	-1.7	100	0.01
28		n-Nitrosopiperidine	120.000	123.367	-2.8	100	0.01
29	P	Isophorone	120.000	122.509	-2.1	100	0.01
30	C,P	2-Nitrophenol	120.000	129.177	-7.6	100	0.00
31	P	2,4-Dimethylphenol	120.000	122.191	-1.8	100	0.01
32	P	bis(2-Chloroethoxy)methane	120.000	121.224	-1.0	100	0.00
33		Benzoic Acid	120.000	120.699	-0.6	100	0.06
34	C,P	2,4-Dichlorophenol	120.000	125.152	-4.3	100	0.01
35		a,a-Dimethylphenethylamine	120.000	134.833	-12.4	100	0.00
36		1,2,4-Trichlorobenzene	120.000	123.881	-3.2	100	0.00
37	P	Naphthalene	120.000	117.767	1.9	100	0.00
38	P	4-Chloroaniline	120.000	137.607	-14.7	100	0.00
39	C,P	Hexachlorobutadiene	120.000	127.882	-6.6	100	0.00
40		n-Nitrosodi-n-Butylamine	120.000	125.424	-4.5	100	0.01
41		p-Phenylenediamine	120.000	112.234	6.5	100	0.02
42	C,P	4-Chloro-3-Methylphenol	120.000	125.367	-4.5	100	0.00
43	P	2-Methylnaphthalene	120.000	122.919	-2.4	100	0.00
44		1-Methylnaphthalene	120.000	121.342	-1.1	100	0.00
45	I	Acenaphthene-d10	40.000	40.000	0.0	100	0.00
46	P	Hexachlorocyclopentadiene	120.000	126.719	-5.6	100	0.00
47	C,P	2,4,6-Trichlorophenol	120.000	128.977	-7.5	100	0.00
48	P	2,4,5-Trichlorophenol	120.000	127.314	-6.1	100	0.00
49	S	2-Fluorobiphenyl	120.000	121.666	-1.4	100	0.00
50	P	2-Chloronaphthalene	120.000	121.664	-1.4	100	0.00
51	P	2-Nitroaniline	120.000	121.054	-0.9	100	0.02
52	P	Dimethylphthalate	120.000	122.240	-1.9	100	0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80870.D Vial: 10
Acq On : 29 Jan 2021 1:20 pm Operator: SCB
Sample : S1A0503-CAL1 Inst : MSD12
Misc : 1,1 0012165 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
53		1,3-Dinitrobenzene	120.000	132.480	-10.4	100	0.02
54	P	2,6-Dinitrotoluene	120.000	127.234	-6.0	100	0.01
55	P	Acenaphthylene	120.000	121.162	-1.0	100	0.00
56	P	3-Nitroaniline	120.000	124.527	-3.8	100	0.01
57	P	2,4-Dinitrophenol	120.000	118.871	0.9	100	0.02
58	C,P	Acenaphthene	120.000	116.631	2.8	100	0.01
59	P	4-Nitrophenol	120.000	129.141	-7.6	100	0.02
60	P	2,4-Dinitrotoluene	120.000	130.131	-8.4	100	0.02
61	P	Dibenzofuran	120.000	120.799	-0.7	100	0.00
62		2,3,5,6-Tetrachlorophenol	120.000	130.391	-8.7	100	0.01
63		2,3,4,6-Tetrachlorophenol	120.000	131.285	-9.4	100	0.00
64		1-Naphthylamine	120.000	121.654	-1.4	100	0.02
65		2-Naphthylamine	120.000	121.887	-1.6	100	0.01
66	P	Diethylphthalate	120.000	122.777	-2.3	100	0.01
67	P	Fluorene	120.000	123.511	-2.9	100	0.00
68	P	4-Chlorophenyl Phenyl Ether	120.000	122.820	-2.3	100	0.00
69	P	4-Nitroaniline	120.000	117.001	2.5	100	0.02
70		5-Nitro-o-Toluidine	120.000	129.062	-7.6	100	0.01
71		1,2-Diphenylhydrazine & Azo	120.000	121.925	-1.6	100	0.00
72	S	2,4,6-Tribromophenol	120.000	130.290	-8.6	100	0.01
73	I	Phenanthrene-d10	40.000	40.000	0.0	100	0.00
74	P	4,6-Dinitro-2-Methylphenol	120.000	137.774	-14.8	100	0.02
75	C,P	Diphenylamine/n-Nitrosodiph	120.000	124.268	-3.6	100	0.01
76	P	4-Bromophenyl Phenyl Ether	120.000	128.038	-6.7	100	0.00
77	P	Hexachlorobenzene	120.000	125.776	-4.8	100	0.00
78		4-Aminobiphenyl	120.000	128.290	-6.9	100	0.01
79	C,P	Pentachlorophenol	120.000	131.474	-9.6	100	0.00
80	P	Phenanthrene	120.000	120.063	-0.1	100	0.00
81	P	Anthracene	120.000	123.062	-2.6	100	0.00
82	P	Carbazole	120.000	125.237	-4.4	100	0.00
83	P	Di-n-Butyl Phthalate	120.000	127.607	-6.3	100	0.00
84		Methapyrilene	120.000	120.788	-0.7	100	0.00
85	C,P	Fluoranthene	120.000	126.894	-5.7	100	0.01
86	I	Chrysene-d12	40.000	40.000	0.0	100	0.02
87		Benzidine	120.000	131.229	-9.4	100	0.01
88	P	Pyrene	120.000	123.884	-3.2	100	0.00
89	S	p-Terphenyl-d14	120.000	124.912	-4.1	100	0.01
90		p-(Dimethylamino)azobenzene	120.000	132.894	-10.7	100	0.00
91	P	Butyl Benzyl Phthalate	120.000	126.411	-5.3	100	0.01
92		3,3'-Dimethylbenzidine	240.000	259.753	-8.2	100	0.02
93		2-Acetylaminofluorene	120.000	122.347	-2.0	100	0.03
94	P	bis(2-Ethylhexyl)phthalate	120.000	132.541	-10.5	100	0.00
95	P	3,3'-Dichlorobenzidine	120.000	133.380	-11.1	100	0.02
96	P	Benzo[a]anthracene	120.000	124.381	-3.7	100	0.02
97	P	Chrysene	120.000	121.584	-1.3	100	0.02
98	I	Perylene-d12	40.000	40.000	0.0	100	0.00
99	C,P	Di-n-Octyl Phthalate	120.000	121.359	-1.1	100	0.00
100	P	Benzo[b]fluoranthene	120.000	132.035	-10.0	100	0.02
101	P	Benzo[k]fluoranthene	120.000	125.536	-4.6	100	0.02
102	C,P	Benzo[a]pyrene	120.000	130.570	-8.8	100	0.02
103	P	Indeno[1,2,3-cd]pyrene	120.000	137.815	-14.8	100	0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80870.D Vial: 10
Acq On : 29 Jan 2021 1:20 pm Operator: SCB
Sample : S1A0503-CAL1 Inst : MSD12
Misc : 1,1 0012165 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
104	P	Dibenz[ah]anthracene	120.000	133.781	-11.5	100	0.02
105	P	Benzo[ghi]perylene	120.000	128.896	-7.4	100	0.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80871.D Vial: 11
Acq On : 29 Jan 2021 1:51 pm Operator: SCB
Sample : S1A0503-ICV1 Inst : MSD12
Misc : 1,1 0008473 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 09:58:10 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.629	152	95285	40.0000	ug/ml	0.000
25) Naphthalene-d8	7.906	136	362674	40.0000	ug/ml	0.000
45) Acenaphthene-d10	9.637	164	204230	40.0000	ug/ml	0.000
73) Phenanthrene-d10	11.101	188	367116	40.0000	ug/ml	0.000
86) Chrysene-d12	14.493	240	312031	40.0000	ug/ml	0.000
98) Perylene-d12	16.982	264	360204	40.0000	ug/ml	0.000
System Monitoring Compounds						
6) 2-Fluorophenol	5.251	112	140538	49.6990651	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 49.70%			
8) Phenol-d5	6.260	99	160334	48.9294535	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 48.93%			
26) Nitrobenzene-d5	7.190	82	136359	49.0011935	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 98.00%			
49) 2-Fluorobiphenyl	8.974	172	319272	49.7532303	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 99.51%			
72) 2,4,6-Tribromophenol	10.411	330	44932	51.2410576	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 51.24%			
89) p-Terphenyl-d14	12.912	244	361810	48.3543447	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 96.71%			
Target Compounds						Qvalue
2) n-Nitrosodimethylamine	3.49	74	85709	50.2980	ug/ml	96
3) Pyridine	3.53	79	160946	56.6183	ug/ml	99
9) Phenol	6.28	94	192106	51.6419	ug/ml	99
10) Aniline	6.29	93	218798	51.2057	ug/ml#	96
11) bis(2-Chloroethyl)ether	6.37	63	95714	48.6589	ug/ml	98
12) 2-Chlorophenol	6.41	128	155974	50.9494	ug/ml	99
13) 1,3-Dichlorobenzene	6.57	146	179816	52.6225	ug/ml	100
14) 1,4-Dichlorobenzene	6.65	146	182924	51.5422	ug/ml	99
15) Benzyl Alcohol	6.77	108	106812	53.5201	ug/ml	99
16) 1,2-Dichlorobenzene	6.80	146	174001	52.4784	ug/ml	99
17) 2-Methylphenol	6.89	107	120353	50.0425	ug/ml	88
18) bis(2-Chloroisopropyl)ethe	6.92	45	165849	47.9687	ug/ml#	96
19) 3-,4-Methylphenol	7.04	108	141983	48.7418	ug/ml	99
21) n-Nitrosodipropylamine	7.05	70	96061	50.8390	ug/ml	88
22) n-Nitrosomorpholine	7.05	56	6830	3.9623	ug/ml#	45
24) Hexachloroethane	7.14	117	60875	49.7091	ug/ml	98
27) Nitrobenzene	7.21	77	134256	48.3617	ug/ml	99
29) Isophorone	7.45	82	213271	41.5989	ug/ml	99
30) 2-Nitrophenol	7.52	139	87387	53.2657	ug/ml	98
31) 2,4-Dimethylphenol	7.57	122	139040	51.7131	ug/ml	100
32) bis(2-Chloroethoxy)methane	7.67	93	160925	51.9463	ug/ml	98
33) Benzoic Acid	7.68	105	121062	58.8769	ug/ml	99
34) 2,4-Dichlorophenol	7.76	162	123325	51.1591	ug/ml	98
36) 1,2,4-Trichlorobenzene	7.85	180	140934	53.7464	ug/ml	98
37) Naphthalene	7.93	128	460281	51.3894	ug/ml	100
38) 4-Chloroaniline	7.98	65	49202	47.9309	ug/ml	86
39) Hexachlorobutadiene	8.05	225	81552	60.1655	ug/ml	99
41) p-Phenylenediamine	8.45	108	10424	3.2004	ug/ml#	1
42) 4-Chloro-3-Methylphenol	8.45	107	126941	51.1134	ug/ml	99
43) 2-Methylnaphthalene	8.61	142	311267	51.2449	ug/ml	100
44) 1-Methylnaphthalene	8.71	142	311569	55.2883	ug/ml	100
46) Hexachlorocyclopentadiene	8.77	237	80811	46.3237	ug/ml	98
47) 2,4,6-Trichlorophenol	8.88	196	87423	51.7248	ug/ml	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80871.D Vial: 11
Acq On : 29 Jan 2021 1:51 pm Operator: SCB
Sample : S1A0503-ICV1 Inst : MSD12
Misc : 1,1 0008473 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 09:58:10 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

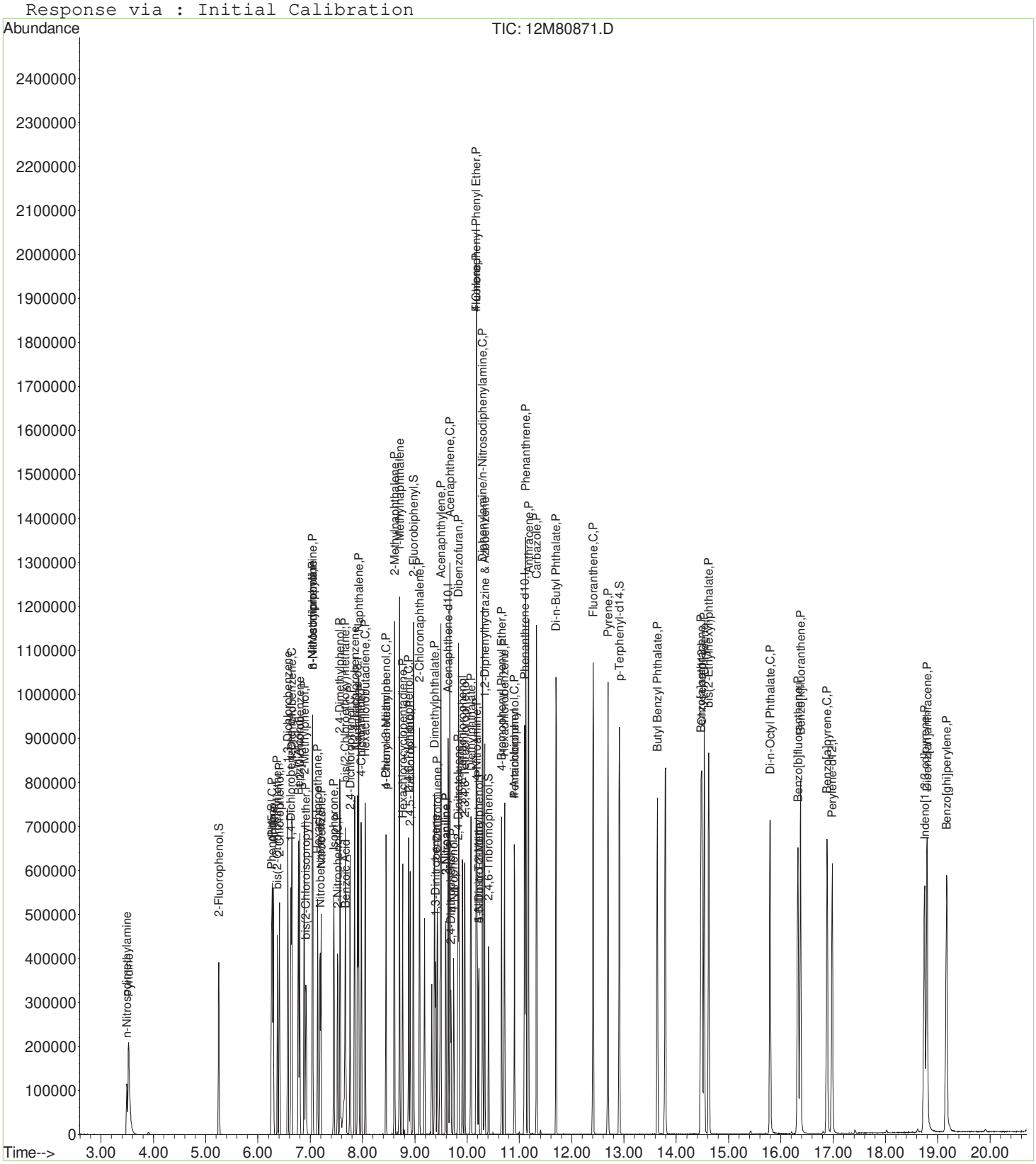
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
48)	2,4,5-Trichlorophenol	8.92	196	91899	50.8704	ug/ml	100
50)	2-Chloronaphthalene	9.09	162	276030	51.2209	ug/ml	99
51)	2-Nitroaniline	9.59	65	95091	51.6501	ug/ml	98
52)	Dimethylphthalate	9.38	163	316505	51.7436	ug/ml	100
53)	1,3-Dinitrobenzene	9.40	168	59613	54.8286	ug/ml#	71
54)	2,6-Dinitrotoluene	9.43	165	78278	53.2594	ug/ml	97
55)	Acenaphthylene	9.50	152	484280	51.6409	ug/ml	100
56)	3-Nitroaniline	9.59	138	90554	52.4080	ug/ml	97
57)	2,4-Dinitrophenol	9.69	184	49472	53.6858	ug/ml#	72
58)	Acenaphthene	9.67	154	309513	52.1694	ug/ml	96
59)	4-Nitrophenol	9.74	65	56705	52.1971	ug/ml	97
60)	2,4-Dinitrotoluene	9.82	165	101486	53.4985	ug/ml	99
61)	Dibenzofuran	9.84	168	412626	52.5998	ug/ml	100
62)	2,3,5,6-Tetrachlorophenol	9.91	232	80934	56.6860	ug/ml	99
63)	2,3,4,6-Tetrachlorophenol	9.96	232	77457	52.5756	ug/ml	99
66)	Diethylphthalate	10.07	149	315789	49.9109	ug/ml	100
67)	Fluorene	10.18	166	329299	51.5580	ug/ml	99
68)	4-Chlorophenyl Phenyl Ethe	10.18	204	149613	49.9947	ug/ml	99
69)	4-Nitroaniline	10.19	138	98543	51.8965	ug/ml	95
70)	5-Nitro-o-Toluidine	10.22	152	2692	1.3496	ug/ml#	1
71)	1,2-Diphenylhydrazine & Az	10.34	77	296014	53.1832	ug/ml	99
74)	4,6-Dinitro-2-Methylphenol	10.22	198	60265	54.3469	ug/ml	98
75)	Diphenylamine/n-Nitrosodip	10.29	169	297793	52.8208	ug/ml	99
76)	4-Bromophenyl Phenyl Ether	10.66	248	86741	52.1214	ug/ml	99
77)	Hexachlorobenzene	10.72	284	92692	51.4566	ug/ml	99
78)	4-Aminobiphenyl	10.90	169	10266	1.3481	ug/ml#	91
79)	Pentachlorophenol	10.91	266	73498	59.0892	ug/ml	99
80)	Phenanthrene	11.12	178	474034	49.5972	ug/ml	100
81)	Anthracene	11.18	178	475685	48.7625	ug/ml	99
82)	Carbazole	11.33	167	469440	54.4243	ug/ml	100
83)	Di-n-Butyl Phthalate	11.70	149	554646	53.5624	ug/ml	100
85)	Fluoranthene	12.41	202	479755	51.7570	ug/ml	99
88)	Pyrene	12.69	202	506985	50.8147	ug/ml	100
91)	Butyl Benzyl Phthalate	13.64	149	240303	48.6990	ug/ml	100
94)	bis(2-Ethylhexyl)phthalate	14.62	149	345627	52.1327	ug/ml	99
96)	Benzo[a]anthracene	14.47	228	423346	46.0424	ug/ml	100
97)	Chrysene	14.54	228	454447	48.9446	ug/ml	99
99)	Di-n-Octyl Phthalate	15.80	149	573652	46.8073	ug/ml	98
100)	Benzo[b]fluoranthene	16.33	252	452992	50.6155	ug/ml	100
101)	Benzo[k]fluoranthene	16.38	252	472571	50.8395	ug/ml	99
102)	Benzo[a]pyrene	16.89	252	442204	55.1734	ug/ml	100
103)	Indeno[1,2,3-cd]pyrene	18.75	276	408698	49.2870	ug/ml	100
104)	Dibenz[ah]anthracene	18.80	278	468761	50.8770	ug/ml	99
105)	Benzo[ghi]perylene	19.17	276	451782	50.2265	ug/ml	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80871.D Vial: 11
Acq On : 29 Jan 2021 1:51 pm Operator: SCB
Sample : S1A0503-ICV1 Inst : MSD12
Misc : 1,1 0008473 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 9:58 2021 Quant Results File: MEGAMIX.RES

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80871.D Vial: 11
Acq On : 29 Jan 2021 1:51 pm Operator: SCB
Sample : S1A0503-ICV1 Inst : MSD12
Misc : 1,1 0008473 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	103	0.00
2		n-Nitrosodimethylamine	0.715	0.720	-0.7	105	0.00
3		Pyridine	1.193	1.351	-13.2	116	0.00
4		2-Picoline	1.352	0.000#	100.0#	0#	-4.53#
5		n-Nitrosomethylethylamine	0.506	0.000#	100.0#	0#	-4.70#
6	S	2-Fluorophenol	1.187	1.180	0.6	104	0.00
7		n-Nitrosodiethylamine	0.599	0.000#	100.0#	0#	-5.51#
8	S	Phenol-d5	1.376	1.346	2.2	101	0.00
9	C,P	Phenol	1.562	1.613	-3.3	107	0.00
10		Aniline	1.794	1.837	-2.4	115	0.00
11	P	bis(2-Chloroethyl)ether	0.826	0.804	2.7	102	0.00
12	P	2-Chlorophenol	1.285	1.310	-1.9	108	0.00
13		1,3-Dichlorobenzene	1.434	1.510	-5.3	113	0.00
14	C	1,4-Dichlorobenzene	1.490	1.536	-3.1	111	0.00
15		Benzyl Alcohol	0.838	0.897	-7.0	111	0.00
16		1,2-Dichlorobenzene	1.392	1.461	-5.0	112	0.00
17	P	2-Methylphenol	1.010	1.010	0.0	105	0.00
18	P	bis(2-Chloroisopropyl)ether	1.451	1.392	4.1	99	0.00
19	P	3-,4-Methylphenol	1.223	1.192	2.5	105	0.00
20		n-Nitrosopyrrolidine	0.619	0.000#	100.0#	0#	-7.02#
21	P	n-Nitrosodipropylamine	0.793	0.807	-1.8	107	0.00
22		n-Nitrosomorpholine	0.724	0.057	92.1#	8	-0.01
23		o-Toluidine	1.992	0.000#	100.0#	0#	-7.07#
24	P	Hexachloroethane	0.514	0.511	0.6	104	0.00
25	I	Naphthalene-d8	1.000	1.000	0.0	102	0.00
26	S	Nitrobenzene-d5	0.307	0.301	2.0	101	0.00
27	P	Nitrobenzene	0.306	0.296	3.3	100	0.00
28		n-Nitrosopiperidine	0.164	0.000#	100.0#	0#	-7.36#
29	P	Isophorone	0.565	0.470	16.8	86	0.00
30	C,P	2-Nitrophenol	0.181	0.193	-6.6	110	0.00
31	P	2,4-Dimethylphenol	0.297	0.307	-3.4	108	0.00
32	P	bis(2-Chloroethoxy)methane	0.342	0.355	-3.8	108	0.00
33		Benzoic Acid	0.222	0.267	-20.3	126	0.00
34	C,P	2,4-Dichlorophenol	0.266	0.272	-2.3	107	0.00
35		a,a-Dimethylphenethylamine	0.742	0.003#	99.6#	0#	0.03
36		1,2,4-Trichlorobenzene	0.289	0.311	-7.6	114	0.00
37	P	Naphthalene	0.988	1.015	-2.7	109	0.00
38	P	4-Chloroaniline	0.113	0.109	3.5	99	0.00
39	C,P	Hexachlorobutadiene	0.149	0.180	-20.8#	122	0.00
40		n-Nitrosodi-n-Butylamine	0.189	0.001#	99.5#	1#	0.13
41		p-Phenylenediamine	0.359	0.023#	93.6#	7	0.11
42	C,P	4-Chloro-3-Methylphenol	0.274	0.280	-2.2	105	0.00
43	P	2-Methylnaphthalene	0.670	0.687	-2.5	107	0.00
44		1-Methylnaphthalene	0.622	0.687	-10.5	116	0.00
45	I	Acenaphthene-d10	1.000	1.000	0.0	102	0.00
46	P	Hexachlorocyclopentadiene	0.342	0.317	7.3	96	0.00
47	C,P	2,4,6-Trichlorophenol	0.331	0.342	-3.3	108	0.00
48	P	2,4,5-Trichlorophenol	0.354	0.360	-1.7	106	0.00
49	S	2-Fluorobiphenyl	1.257	1.251	0.5	105	0.00
50	P	2-Chloronaphthalene	1.055	1.081	-2.5	108	0.00
51	P	2-Nitroaniline	0.361	0.372	-3.0	108	0.00
52	P	Dimethylphthalate	1.198	1.240	-3.5	108	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80871.D Vial: 11
Acq On : 29 Jan 2021 1:51 pm Operator: SCB
Sample : S1A0503-ICV1 Inst : MSD12
Misc : 1,1 0008473 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
53		1,3-Dinitrobenzene	0.213	0.234	-9.9	111	0.00
54	P	2,6-Dinitrotoluene	0.288	0.307	-6.6	111	0.00
55	P	Acenaphthylene	1.837	1.897	-3.3	108	0.00
56	P	3-Nitroaniline	0.338	0.355	-5.0	110	0.00
57	P	2,4-Dinitrophenol	0.178	0.194	-9.0	112	0.00
58	C,P	Acenaphthene	1.162	1.212	-4.3	111	0.00
59	P	4-Nitrophenol	0.213	0.222	-4.2	104	0.00
60	P	2,4-Dinitrotoluene	0.372	0.398	-7.0	107	0.00
61	P	Dibenzofuran	1.536	1.616	-5.2	110	0.00
62		2,3,5,6-Tetrachlorophenol	0.280	0.317	-13.2	116	0.00
63		2,3,4,6-Tetrachlorophenol	0.289	0.303	-4.8	109	0.00
64		1-Naphthylamine	1.221	0.007#	99.4#	1#	0.00
65		2-Naphthylamine	1.281	0.008#	99.4#	1#	-0.04
66	P	Diethylphthalate	1.239	1.237	0.2	104	0.00
67	P	Fluorene	1.251	1.290	-3.1	108	0.00
68	P	4-Chlorophenyl Phenyl Ether	0.586	0.586	0.0	105	0.00
69	P	4-Nitroaniline	0.372	0.386	-3.8	110	0.00
70		5-Nitro-o-Toluidine	0.391	0.011#	97.2#	3	0.04
71		1,2-Diphenylhydrazine & Azo	1.090	1.160	-6.4	110	0.00
72	S	2,4,6-Tribromophenol	0.172	0.176	-2.3	103	0.00
73	I	Phenanthrene-d10	1.000	1.000	0.0	105	0.00
74	P	4,6-Dinitro-2-Methylphenol	0.121	0.131	-8.3	115	0.00
75	C,P	Diphenylamine/n-Nitrosodiph	0.614	0.649	-5.7	112	0.00
76	P	4-Bromophenyl Phenyl Ether	0.181	0.189	-4.4	109	0.00
77	P	Hexachlorobenzene	0.196	0.202	-3.1	110	0.00
78		4-Aminobiphenyl	0.830	0.022#	97.3#	3	-0.01
79	C,P	Pentachlorophenol	0.136	0.160	-17.6	123	0.00
80	P	Phenanthrene	1.041	1.033	0.8	108	0.00
81	P	Anthracene	1.063	1.037	2.4	103	0.00
82	P	Carbazole	0.940	1.023	-8.8	115	0.00
83	P	Di-n-Butyl Phthalate	1.128	1.209	-7.2	109	0.00
84		Methapyrilene	0.453	0.000#	100.0#	0#	-12.02#
85	C,P	Fluoranthene	1.010	1.045	-3.5	109	0.00
86	I	Chrysene-d12	1.000	1.000	0.0	108	0.00
87		Benzidine	0.880	0.000#	100.0#	0#	-12.59#
88	P	Pyrene	1.279	1.300	-1.6	111	0.00
89	S	p-Terphenyl-d14	0.959	0.928	3.2	104	0.00
90		p-(Dimethylamino)azobenzene	0.250	0.000#	100.0#	0#	-13.11#
91	P	Butyl Benzyl Phthalate	0.633	0.616	2.7	103	0.00
92		3,3'-Dimethylbenzidine	0.914	0.000#	100.0#	0#	-13.61#
93		2-Acetylaminofluorene	0.525	0.000#	100.0#	0#	-13.98#
94	P	bis(2-Ethylhexyl)phthalate	0.850	0.886	-4.2	106	0.00
95	P	3,3'-Dichlorobenzidine	0.463	0.000#	100.0#	0#	-14.46#
96	P	Benzo[a]anthracene	1.179	1.085	8.0	101	0.00
97	P	Chrysene	1.190	1.165	2.1	109	0.00
98	I	Perylene-d12	1.000	1.000	0.0	112	0.00
99	C,P	Di-n-Octyl Phthalate	1.250	1.274	-1.9	105	0.00
100	P	Benzo[b]fluoranthene	0.994	1.006	-1.2	109	0.00
101	P	Benzo[k]fluoranthene	1.032	1.050	-1.7	113	0.00
102	C,P	Benzo[a]pyrene	0.890	0.982	-10.3	119	0.00
103	P	Indeno[1,2,3-cd]pyrene	0.921	0.908	1.4	106	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80871.D Vial: 11
Acq On : 29 Jan 2021 1:51 pm Operator: SCB
Sample : S1A0503-ICV1 Inst : MSD12
Misc : 1,1 0008473 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
104	P	Dibenz[ah]anthracene	1.023	1.041	-1.8	108	0.00
105	P	Benzo[ghi]perylene	0.999	1.003	-0.4	109	0.00

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80871.D Vial: 11
Acq On : 29 Jan 2021 1:51 pm Operator: SCB
Sample : S1A0503-ICV1 Inst : MSD12
Misc : 1,1 0008473 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	103	0.00
2		n-Nitrosodimethylamine	50.000	50.298	-0.6	105	0.00
3		Pyridine	50.000	56.618	-13.2	116	0.00
4		2-Picoline	50.000	0.000	100.0#	0	-4.53#
5		n-Nitrosomethylethylamine	50.000	0.000	100.0#	0	-4.70#
6	S	2-Fluorophenol	50.000	49.699	0.6	104	0.00
7		n-Nitrosodiethylamine	50.000	0.000	100.0#	0	-5.51#
8	S	Phenol-d5	50.000	48.929	2.1	101	0.00
9	C,P	Phenol	50.000	51.642	-3.3	107	0.00
10		Aniline	50.000	51.206	-2.4	115	0.00
11	P	bis(2-Chloroethyl)ether	50.000	48.659	2.7	102	0.00
12	P	2-Chlorophenol	50.000	50.949	-1.9	108	0.00
13		1,3-Dichlorobenzene	50.000	52.623	-5.2	113	0.00
14	C	1,4-Dichlorobenzene	50.000	51.542	-3.1	111	0.00
15		Benzyl Alcohol	50.000	53.520	-7.0	111	0.00
16		1,2-Dichlorobenzene	50.000	52.478	-5.0	112	0.00
17	P	2-Methylphenol	50.000	50.043	-0.1	105	0.00
18	P	bis(2-Chloroisopropyl)ether	50.000	47.969	4.1	99	0.00
19	P	3-,4-Methylphenol	50.000	48.742	2.5	105	0.00
20		n-Nitrosopyrrolidine	50.000	0.000	100.0#	0	-7.02#
21	P	n-Nitrosodipropylamine	50.000	50.839	-1.7	107	0.00
22		n-Nitrosomorpholine	50.000	3.962	92.1#	8	-0.01
23		o-Toluidine	50.000	0.000	100.0#	0	-7.07#
24	P	Hexachloroethane	50.000	49.709	0.6	104	0.00
25	I	Naphthalene-d8	40.000	40.000	0.0	102	0.00
26	S	Nitrobenzene-d5	50.000	49.001	2.0	101	0.00
27	P	Nitrobenzene	50.000	48.362	3.3	100	0.00
28		n-Nitrosopiperidine	50.000	0.000	100.0#	0	-7.36#
29	P	Isophorone	50.000	41.599	16.8	86	0.00
30	C,P	2-Nitrophenol	50.000	53.266	-6.5	110	0.00
31	P	2,4-Dimethylphenol	50.000	51.713	-3.4	108	0.00
32	P	bis(2-Chloroethoxy)methane	50.000	51.946	-3.9	108	0.00
33		Benzoic Acid	50.000	58.877	-17.8	126	0.00
34	C,P	2,4-Dichlorophenol	50.000	51.159	-2.3	107	0.00
35		a,a-Dimethylphenethylamine	50.000	0.201	99.6#	0	0.03
36		1,2,4-Trichlorobenzene	50.000	53.746	-7.5	114	0.00
37	P	Naphthalene	50.000	51.389	-2.8	109	0.00
38	P	4-Chloroaniline	50.000	47.931	4.1	99	0.00
39	C,P	Hexachlorobutadiene	50.000	60.165	-20.3#	122	0.00
40		n-Nitrosodi-n-Butylamine	50.000	0.325	99.3#	1	0.13
41		p-Phenylenediamine	50.000	3.200	93.6#	7	0.11
42	C,P	4-Chloro-3-Methylphenol	50.000	51.113	-2.2	105	0.00
43	P	2-Methylnaphthalene	50.000	51.245	-2.5	107	0.00
44		1-Methylnaphthalene	50.000	55.288	-10.6	116	0.00
45	I	Acenaphthene-d10	40.000	40.000	0.0	102	0.00
46	P	Hexachlorocyclopentadiene	50.000	46.324	7.4	96	0.00
47	C,P	2,4,6-Trichlorophenol	50.000	51.725	-3.5	108	0.00
48	P	2,4,5-Trichlorophenol	50.000	50.870	-1.7	106	0.00
49	S	2-Fluorobiphenyl	50.000	49.753	0.5	105	0.00
50	P	2-Chloronaphthalene	50.000	51.221	-2.4	108	0.00
51	P	2-Nitroaniline	50.000	51.650	-3.3	108	0.00
52	P	Dimethylphthalate	50.000	51.744	-3.5	108	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80871.D Vial: 11
Acq On : 29 Jan 2021 1:51 pm Operator: SCB
Sample : S1A0503-ICV1 Inst : MSD12
Misc : 1,1 0008473 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
53		1,3-Dinitrobenzene	50.000	54.829	-9.7	111	0.00
54	P	2,6-Dinitrotoluene	50.000	53.259	-6.5	111	0.00
55	P	Acenaphthylene	50.000	51.641	-3.3	108	0.00
56	P	3-Nitroaniline	50.000	52.408	-4.8	110	0.00
57	P	2,4-Dinitrophenol	50.000	53.686	-7.4	112	0.00
58	C,P	Acenaphthene	50.000	52.169	-4.3	111	0.00
59	P	4-Nitrophenol	50.000	52.197	-4.4	104	0.00
60	P	2,4-Dinitrotoluene	50.000	53.498	-7.0	107	0.00
61	P	Dibenzofuran	50.000	52.600	-5.2	110	0.00
62		2,3,5,6-Tetrachlorophenol	50.000	56.686	-13.4	116	0.00
63		2,3,4,6-Tetrachlorophenol	50.000	52.576	-5.2	109	0.00
64		1-Naphthylamine	50.000	0.271	99.5#	1	0.00
65		2-Naphthylamine	50.000	0.311	99.4#	1	-0.04
66	P	Diethylphthalate	50.000	49.911	0.2	104	0.00
67	P	Fluorene	50.000	51.558	-3.1	108	0.00
68	P	4-Chlorophenyl Phenyl Ether	50.000	49.995	0.0	105	0.00
69	P	4-Nitroaniline	50.000	51.896	-3.8	110	0.00
70		5-Nitro-o-Toluidine	50.000	1.350	97.3#	3	0.04
71		1,2-Diphenylhydrazine & Azo	50.000	53.183	-6.4	110	0.00
72	S	2,4,6-Tribromophenol	50.000	51.241	-2.5	103	0.00
73	I	Phenanthrene-d10	40.000	40.000	0.0	105	0.00
74	P	4,6-Dinitro-2-Methylphenol	50.000	54.347	-8.7	115	0.00
75	C,P	Diphenylamine/n-Nitrosodiph	50.000	52.821	-5.6	112	0.00
76	P	4-Bromophenyl Phenyl Ether	50.000	52.121	-4.2	109	0.00
77	P	Hexachlorobenzene	50.000	51.457	-2.9	110	0.00
78		4-Aminobiphenyl	50.000	1.348	97.3#	3	-0.01
79	C,P	Pentachlorophenol	50.000	59.089	-18.2	123	0.00
80	P	Phenanthrene	50.000	49.597	0.8	108	0.00
81	P	Anthracene	50.000	48.763	2.5	103	0.00
82	P	Carbazole	50.000	54.424	-8.8	115	0.00
83	P	Di-n-Butyl Phthalate	50.000	53.562	-7.1	109	0.00
84		Methapyrilene	50.000	0.000	100.0#	0	-12.02#
85	C,P	Fluoranthene	50.000	51.757	-3.5	109	0.00
86	I	Chrysene-d12	40.000	40.000	0.0	108	0.00
87		Benzidine	50.000	0.000	100.0#	0	-12.59#
88	P	Pyrene	50.000	50.815	-1.6	111	0.00
89	S	p-Terphenyl-d14	50.000	48.354	3.3	104	0.00
90		p-(Dimethylamino)azobenzene	50.000	0.000	100.0#	0	-13.11#
91	P	Butyl Benzyl Phthalate	50.000	48.699	2.6	103	0.00
92		3,3'-Dimethylbenzidine	100.000	0.000	100.0#	0	-13.61#
93		2-Acetylaminofluorene	50.000	0.000	100.0#	0	-13.98#
94	P	bis(2-Ethylhexyl)phthalate	50.000	52.133	-4.3	106	0.00
95	P	3,3'-Dichlorobenzidine	50.000	0.000	100.0#	0	-14.46#
96	P	Benzo[a]anthracene	50.000	46.042	7.9	101	0.00
97	P	Chrysene	50.000	48.945	2.1	109	0.00
98	I	Perylene-d12	40.000	40.000	0.0	112	0.00
99	C,P	Di-n-Octyl Phthalate	50.000	46.807	6.4	105	0.00
100	P	Benzo[b]fluoranthene	50.000	50.616	-1.2	109	0.00
101	P	Benzo[k]fluoranthene	50.000	50.840	-1.7	113	0.00
102	C,P	Benzo[a]pyrene	50.000	55.173	-10.3	119	0.00
103	P	Indeno[1,2,3-cd]pyrene	50.000	49.287	1.4	106	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80871.D Vial: 11
Acq On : 29 Jan 2021 1:51 pm Operator: SCB
Sample : S1A0503-ICV1 Inst : MSD12
Misc : 1,1 0008473 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
104	P	Dibenz[ah]anthracene	50.000	50.877	-1.8	108	0.00
105	P	Benzo[ghi]perylene	50.000	50.226	-0.5	109	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 1

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80872.D Vial: 12
Acq On : 29 Jan 2021 2:22 pm Operator: SCB
Sample : S1A0503-ICV2 Inst : MSD12
Misc : 1,1 0008475 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 09:58:11 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

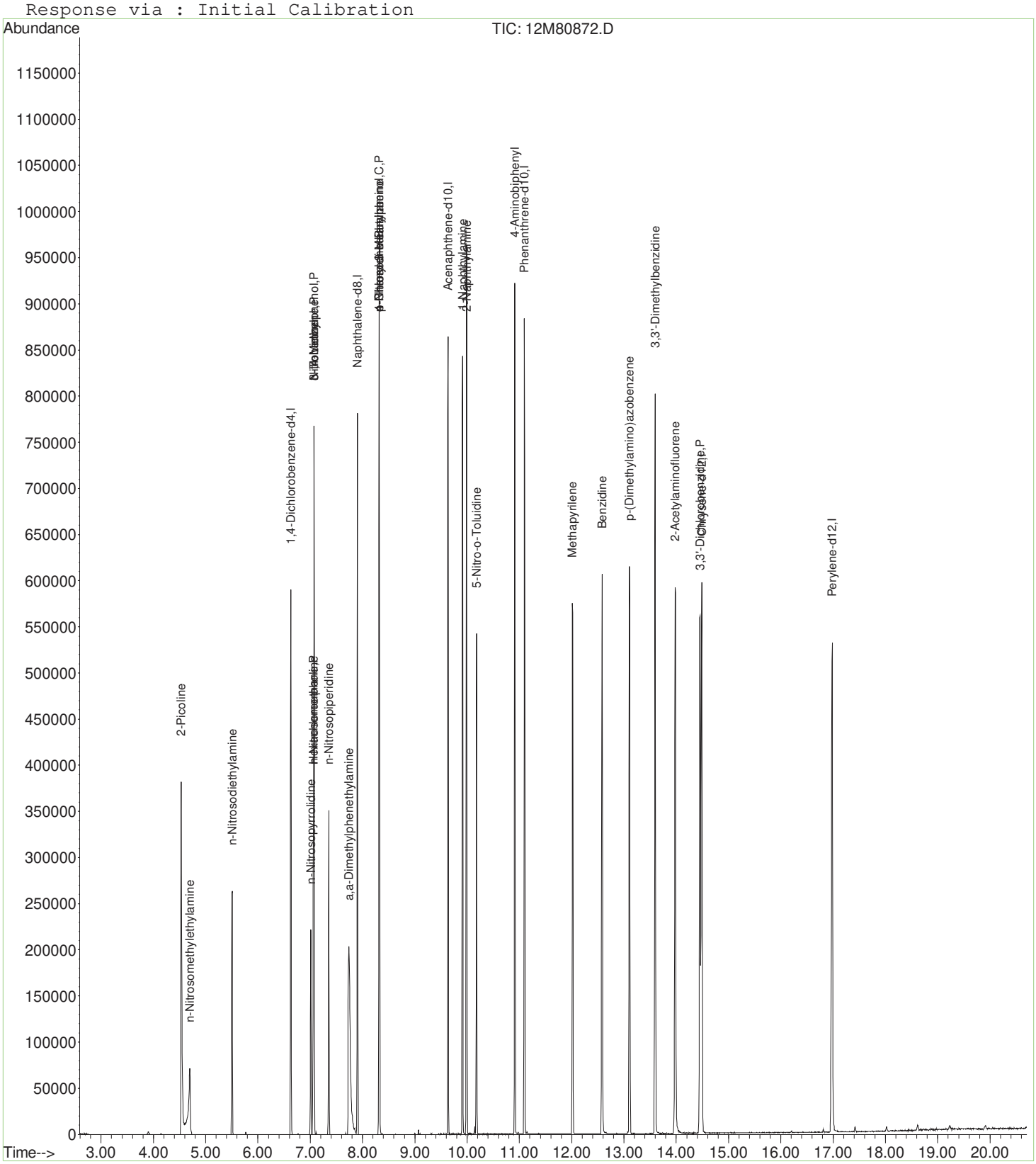
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.629	152	89017	40.0000	ug/ml	0.000
25) Naphthalene-d8	7.901	136	342734	40.0000	ug/ml	0.000
45) Acenaphthene-d10	9.637	164	183906	40.0000	ug/ml	0.000
73) Phenanthrene-d10	11.095	188	334643	40.0000	ug/ml	0.000
86) Chrysene-d12	14.488	240	282239	40.0000	ug/ml	0.000
98) Perylene-d12	16.982	264	319952	40.0000	ug/ml	0.000
System Monitoring Compounds						
6) 2-Fluorophenol	0.000	112	0	0.0000000	ug/ml	
Spiked Amount 100.000	Range 21 - 100		Recovery =	0.00%#		
8) Phenol-d5	0.000	99	0	0.0000000	ug/ml	
Spiked Amount 100.000	Range 10 - 94		Recovery =	0.00%#		
26) Nitrobenzene-d5	0.000	82	0	0.0000000	ug/ml	
Spiked Amount 50.000	Range 35 - 114		Recovery =	0.00%#		
49) 2-Fluorobiphenyl	0.000	172	0	0.0000000	ug/ml	
Spiked Amount 50.000	Range 43 - 116		Recovery =	0.00%#		
72) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ug/ml	
Spiked Amount 100.000	Range 10 - 123		Recovery =	0.00%#		
89) p-Terphenyl-d14	0.000	244	0	0.0000000	ug/ml	
Spiked Amount 50.000	Range 33 - 141		Recovery =	0.00%#		
Target Compounds						Qvalue
4) 2-Picoline	4.53	93	157847	52.4773	ug/ml	100
5) n-Nitrosomethylethylamine	4.70	88	64920	51.9317	ug/ml	89
7) n-Nitrosodiethylamine	5.51	102	70970	53.2197	ug/ml	95
19) 3-,4-Methylphenol	7.07	108	13987	5.1397	ug/ml#	1
20) n-Nitrosopyrrolidine	7.01	100	72017	52.2559	ug/ml	95
22) n-Nitrosomorpholine	7.06	56	76753	47.6627	ug/ml	94
23) o-Toluidine	7.07	106	234549	52.9096	ug/ml	99
24) Hexachloroethane	7.06	117	1542	1.3478	ug/ml#	13
27) Nitrobenzene	7.07	77	23728	9.0446	ug/ml#	36
28) n-Nitrosopiperidine	7.36	114	70349	50.1346	ug/ml	96
35) a,a-Dimethylphenethylamine	7.74	58	364026	57.2390	ug/ml#	88
40) n-Nitrosodi-n-Butylamine	8.32	84	86073	53.1108	ug/ml	98
41) p-Phenylenediamine	8.32	108	195912	63.6494	ug/ml	100
42) 4-Chloro-3-Methylphenol	8.32	107	49601	21.1340	ug/ml#	16
64) 1-Naphthylamine	9.91	143	299743	53.3827	ug/ml	98
65) 2-Naphthylamine	9.99	143	316941	53.8241	ug/ml	99
70) 5-Nitro-o-Toluidine	10.18	152	90620	50.4517	ug/ml#	68
78) 4-Aminobiphenyl	10.91	169	324074	46.6875	ug/ml	99
84) Methapyrilene	12.01	58	177964	43.6828	ug/ml	98
87) Benzidine	12.58	184	300052	48.3048	ug/ml	100
90) p-(Dimethylamino)azobenzen	13.11	225	98947	56.0900	ug/ml	98
92) 3,3'-Dimethylbenzidine	13.60	212	337536	52.3446	ug/ml	100
93) 2-Acetylaminofluorene	13.99	181	204586	49.9108	ug/ml	99
95) 3,3'-Dichlorobenzidine	14.46	252	176583	54.0134	ug/ml	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80872.D Vial: 12
Acq On : 29 Jan 2021 2:22 pm Operator: SCB
Sample : S1A0503-ICV2 Inst : MSD12
Misc : 1,1 0008475 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 9:58 2021 Quant Results File: MEGAMIX.RES

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80872.D Vial: 12
Acq On : 29 Jan 2021 2:22 pm Operator: SCB
Sample : S1A0503-ICV2 Inst : MSD12
Misc : 1,1 0008475 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	97	0.00
2		n-Nitrosodimethylamine	0.715	0.000#	100.0#	0#	-3.49#
3		Pyridine	1.193	0.000#	100.0#	0#	-3.53#
4		2-Picoline	1.352	1.419	-5.0	101	0.00
5		n-Nitrosomethylethylamine	0.506	0.583	-15.2	101	0.00
6	S	2-Fluorophenol	1.187	0.000#	100.0#	0#	-5.25#
7		n-Nitrosodiethylamine	0.599	0.638	-6.5	102	0.00
8	S	Phenol-d5	1.376	0.000#	100.0#	0#	-6.26#
9	C,P	Phenol	1.562	0.000#	100.0#	0#	-6.27#
10		Aniline	1.794	0.000#	100.0#	0#	-6.29#
11	P	bis(2-Chloroethyl)ether	0.826	0.000#	100.0#	0#	-6.37#
12	P	2-Chlorophenol	1.285	0.000#	100.0#	0#	-6.41#
13		1,3-Dichlorobenzene	1.434	0.000#	100.0#	0#	-6.57#
14	C	1,4-Dichlorobenzene	1.490	0.000#	100.0#	0#	-6.65#
15		Benzyl Alcohol	0.838	0.000#	100.0#	0#	-6.77#
16		1,2-Dichlorobenzene	1.392	0.000#	100.0#	0#	-6.80#
17	P	2-Methylphenol	1.010	0.000#	100.0#	0#	-6.89#
18	P	bis(2-Chloroisopropyl)ether	1.451	0.000#	100.0#	0#	-6.92#
19	P	3-,4-Methylphenol	1.223	0.126#	89.7#	10	0.03
20		n-Nitrosopyrrolidine	0.619	0.647	-4.5	103	0.00
21	P	n-Nitrosodipropylamine	0.793	0.009#	98.9#	1	-0.04
22		n-Nitrosomorpholine	0.724	0.690	4.7	93	0.00
23		o-Toluidine	1.992	2.108	-5.8	105	0.00
24	P	Hexachloroethane	0.514	0.014#	97.3#	3	-0.09
25	I	Naphthalene-d8	1.000	1.000	0.0	96	0.00
26	S	Nitrobenzene-d5	0.307	0.000#	100.0#	0#	-7.19#
27	P	Nitrobenzene	0.306	0.055#	82.0#	18	-0.13
28		n-Nitrosopiperidine	0.164	0.164	0.0	98	0.00
29	P	Isophorone	0.565	0.008#	98.6#	1	-0.10
30	C,P	2-Nitrophenol	0.181	0.000#	100.0#	0#	-7.53#
31	P	2,4-Dimethylphenol	0.297	0.000#	100.0#	0#	-7.57#
32	P	bis(2-Chloroethoxy)methane	0.342	0.000#	100.0#	0#	-7.67#
33		Benzoic Acid	0.222	0.000#	100.0#	0#	-7.68#
34	C,P	2,4-Dichlorophenol	0.266	0.000#	100.0#	0#	-7.76#
35		a,a-Dimethylphenethylamine	0.742	0.850	-14.6	118	-0.12
36		1,2,4-Trichlorobenzene	0.289	0.000#	100.0#	0#	-7.85#
37	P	Naphthalene	0.988	0.000#	100.0#	0#	-7.93#
38	P	4-Chloroaniline	0.113	0.000#	100.0#	0#	-0.07
39	C,P	Hexachlorobutadiene	0.149	0.000#	100.0#	0#	-8.05#
40		n-Nitrosodi-n-Butylamine	0.189	0.201	-6.3	102	0.00
41		p-Phenylenediamine	0.359	0.457	-27.3	125	-0.02
42	C,P	4-Chloro-3-Methylphenol	0.274	0.116#	57.7#	41	-0.13
43	P	2-Methylnaphthalene	0.670	0.000#	100.0#	0#	-8.61#
44		1-Methylnaphthalene	0.622	0.000#	100.0#	0#	-8.71#
45	I	Acenaphthene-d10	1.000	1.000	0.0	92	0.00
46	P	Hexachlorocyclopentadiene	0.342	0.000#	100.0#	0#	-8.77#
47	C,P	2,4,6-Trichlorophenol	0.331	0.000#	100.0#	0#	-8.88#
48	P	2,4,5-Trichlorophenol	0.354	0.000#	100.0#	0#	-8.92#
49	S	2-Fluorobiphenyl	1.257	0.000#	100.0#	0#	-8.97#
50	P	2-Chloronaphthalene	1.055	0.000#	100.0#	0#	-9.09#
51	P	2-Nitroaniline	0.361	0.000#	100.0#	0#	-9.59#
52	P	Dimethylphthalate	1.198	0.000#	100.0#	0#	-9.38#

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80872.D Vial: 12
Acq On : 29 Jan 2021 2:22 pm Operator: SCB
Sample : S1A0503-ICV2 Inst : MSD12
Misc : 1,1 0008475 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
53		1,3-Dinitrobenzene	0.213	0.000#	100.0#	0#	-9.40#
54	P	2,6-Dinitrotoluene	0.288	0.000#	100.0#	0#	-9.43#
55	P	Acenaphthylene	1.837	0.000#	100.0#	0#	-9.50#
56	P	3-Nitroaniline	0.338	0.000#	100.0#	0#	-9.59#
57	P	2,4-Dinitrophenol	0.178	0.000#	100.0#	0#	-9.70#
58	C,P	Acenaphthene	1.162	0.002#	99.8#	0#	-0.03
59	P	4-Nitrophenol	0.213	0.000#	100.0#	0#	-9.75#
60	P	2,4-Dinitrotoluene	0.372	0.000#	100.0#	0#	-9.83#
61	P	Dibenzofuran	1.536	0.000#	100.0#	0#	-9.84#
62		2,3,5,6-Tetrachlorophenol	0.280	0.000#	100.0#	0#	-9.91#
63		2,3,4,6-Tetrachlorophenol	0.289	0.000#	100.0#	0#	-9.96#
64		1-Naphthylamine	1.221	1.304	-6.8	100	0.00
65		2-Naphthylamine	1.281	1.379	-7.7	100	0.00
66	P	Diethylphthalate	1.239	0.001#	99.9#	0#	-0.01
67	P	Fluorene	1.251	0.000#	100.0#	0#	-10.18#
68	P	4-Chlorophenyl Phenyl Ether	0.586	0.000#	100.0#	0#	-10.18#
69	P	4-Nitroaniline	0.372	0.000#	100.0#	0#	-10.19#
70		5-Nitro-o-Toluidine	0.391	0.394	-0.8	93	0.00
71		1,2-Diphenylhydrazine & Azo	1.090	0.000#	100.0#	0#	-10.34#
72	S	2,4,6-Tribromophenol	0.172	0.000#	100.0#	0#	-10.41#
73	I	Phenanthrene-d10	1.000	1.000	0.0	96	0.00
74	P	4,6-Dinitro-2-Methylphenol	0.121	0.000#	100.0#	0#	-10.22#
75	C,P	Diphenylamine/n-Nitrosodiph	0.614	0.000#	100.0#	0#	-10.29#
76	P	4-Bromophenyl Phenyl Ether	0.181	0.000#	100.0#	0#	-10.66#
77	P	Hexachlorobenzene	0.196	0.000#	100.0#	0#	-10.72#
78		4-Aminobiphenyl	0.830	0.775	6.6	88	0.00
79	C,P	Pentachlorophenol	0.136	0.000#	100.0#	0#	-10.91#
80	P	Phenanthrene	1.041	0.000#	100.0#	0#	-11.12#
81	P	Anthracene	1.063	0.000#	100.0#	0#	-11.18#
82	P	Carbazole	0.940	0.000#	100.0#	0#	-11.33#
83	P	Di-n-Butyl Phthalate	1.128	0.000#	100.0#	0#	-11.70#
84		Methapyrilene	0.453	0.425	6.2	80	0.00
85	C,P	Fluoranthene	1.010	0.000#	100.0#	0#	-12.41#
86	I	Chrysene-d12	1.000	1.000	0.0	98	0.00
87		Benzidine	0.880	0.850	3.4	89	0.00
88	P	Pyrene	1.279	0.000#	100.0#	0#	-12.70#
89	S	p-Terphenyl-d14	0.959	0.000#	100.0#	0#	-12.91#
90		p-(Dimethylamino)azobenzene	0.250	0.280	-12.0	105	0.00
91	P	Butyl Benzyl Phthalate	0.633	0.000#	100.0#	0#	-13.64#
92		3,3'-Dimethylbenzidine	0.914	0.478	47.7#	49	-0.01
93		2-Acetylaminofluorene	0.525	0.580	-10.5	100	0.00
94	P	bis(2-Ethylhexyl)phthalate	0.850	0.000#	100.0#	0#	-14.63#
95	P	3,3'-Dichlorobenzidine	0.463	0.501	-8.2	102	0.00
96	P	Benzo[a]anthracene	1.179	0.000#	100.0#	0#	0.01
97	P	Chrysene	1.190	0.000#	100.0#	0#	-0.05
98	I	Perylene-d12	1.000	1.000	0.0	99	0.00
99	C,P	Di-n-Octyl Phthalate	1.250	0.000#	100.0#	0#	-15.80#
100	P	Benzo[b]fluoranthene	0.994	0.000#	100.0#	0#	-16.33#
101	P	Benzo[k]fluoranthene	1.032	0.000#	100.0#	0#	-16.38#
102	C,P	Benzo[a]pyrene	0.890	0.001#	99.9#	0#	0.09
103	P	Indeno[1,2,3-cd]pyrene	0.921	0.000#	100.0#	0#	-18.75#

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80872.D Vial: 12
Acq On : 29 Jan 2021 2:22 pm Operator: SCB
Sample : S1A0503-ICV2 Inst : MSD12
Misc : 1,1 0008475 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev Area%	Dev(min)
104	P	Dibenz[ah]anthracene	1.023	0.000#	100.0#	0# -18.80#
105	P	Benzo[ghi]perylene	0.999	0.000#	100.0#	0# -19.17#

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80872.D Vial: 12
Acq On : 29 Jan 2021 2:22 pm Operator: SCB
Sample : S1A0503-ICV2 Inst : MSD12
Misc : 1,1 0008475 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	97	0.00
2		n-Nitrosodimethylamine	50.000	0.000	100.0#	0	-3.49#
3		Pyridine	50.000	0.000	100.0#	0	-3.53#
4		2-Picoline	50.000	52.477	-5.0	101	0.00
5		n-Nitrosomethylethylamine	50.000	51.932	-3.9	101	0.00
6	S	2-Fluorophenol	50.000	0.000	100.0#	0	-5.25#
7		n-Nitrosodiethylamine	50.000	53.220	-6.4	102	0.00
8	S	Phenol-d5	50.000	0.000	100.0#	0	-6.26#
9	C,P	Phenol	50.000	0.000	100.0#	0	-6.27#
10		Aniline	50.000	0.000	100.0#	0	-6.29#
11	P	bis(2-Chloroethyl)ether	50.000	0.000	100.0#	0	-6.37#
12	P	2-Chlorophenol	50.000	0.000	100.0#	0	-6.41#
13		1,3-Dichlorobenzene	50.000	0.000	100.0#	0	-6.57#
14	C	1,4-Dichlorobenzene	50.000	0.000	100.0#	0	-6.65#
15		Benzyl Alcohol	50.000	0.000	100.0#	0	-6.77#
16		1,2-Dichlorobenzene	50.000	0.000	100.0#	0	-6.80#
17	P	2-Methylphenol	50.000	0.000	100.0#	0	-6.89#
18	P	bis(2-Chloroisopropyl)ether	50.000	0.000	100.0#	0	-6.92#
19	P	3-,4-Methylphenol	50.000	5.140	89.7#	10	0.03
20		n-Nitrosopyrrolidine	50.000	52.256	-4.5	103	0.00
21	P	n-Nitrosodipropylamine	50.000	0.567	98.9#	1	-0.04
22		n-Nitrosomorpholine	50.000	47.663	4.7	93	0.00
23		o-Toluidine	50.000	52.910	-5.8	105	0.00
24	P	Hexachloroethane	50.000	1.348	97.3#	3	-0.09
25	I	Naphthalene-d8	40.000	40.000	0.0	96	0.00
26	S	Nitrobenzene-d5	50.000	0.000	100.0#	0	-7.19#
27	P	Nitrobenzene	50.000	9.045	81.9#	18	-0.13
28		n-Nitrosopiperidine	50.000	50.135	-0.3	98	0.00
29	P	Isophorone	50.000	0.720	98.6#	1	-0.10
30	C,P	2-Nitrophenol	50.000	0.000	100.0#	0	-7.53#
31	P	2,4-Dimethylphenol	50.000	0.000	100.0#	0	-7.57#
32	P	bis(2-Chloroethoxy)methane	50.000	0.000	100.0#	0	-7.67#
33		Benzoic Acid	50.000	0.000	100.0#	0	-7.68#
34	C,P	2,4-Dichlorophenol	50.000	0.000	100.0#	0	-7.76#
35		a,a-Dimethylphenethylamine	50.000	57.239	-14.5	118	-0.12
36		1,2,4-Trichlorobenzene	50.000	0.000	100.0#	0	-7.85#
37	P	Naphthalene	50.000	0.000	100.0#	0	-7.93#
38	P	4-Chloroaniline	50.000	0.203	99.6#	0	-0.07
39	C,P	Hexachlorobutadiene	50.000	0.000	100.0#	0	-8.05#
40		n-Nitrosodi-n-Butylamine	50.000	53.111	-6.2	102	0.00
41		p-Phenylenediamine	50.000	63.649	-27.3	125	-0.02
42	C,P	4-Chloro-3-Methylphenol	50.000	21.134	57.7#	41	-0.13
43	P	2-Methylnaphthalene	50.000	0.000	100.0#	0	-8.61#
44		1-Methylnaphthalene	50.000	0.000	100.0#	0	-8.71#
45	I	Acenaphthene-d10	40.000	40.000	0.0	92	0.00
46	P	Hexachlorocyclopentadiene	50.000	0.000	100.0#	0	-8.77#
47	C,P	2,4,6-Trichlorophenol	50.000	0.000	100.0#	0	-8.88#
48	P	2,4,5-Trichlorophenol	50.000	0.000	100.0#	0	-8.92#
49	S	2-Fluorobiphenyl	50.000	0.000	100.0#	0	-8.97#
50	P	2-Chloronaphthalene	50.000	0.000	100.0#	0	-9.09#
51	P	2-Nitroaniline	50.000	0.000	100.0#	0	-9.59#
52	P	Dimethylphthalate	50.000	0.000	100.0#	0	-9.38#

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80872.D Vial: 12
Acq On : 29 Jan 2021 2:22 pm Operator: SCB
Sample : S1A0503-ICV2 Inst : MSD12
Misc : 1,1 0008475 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
53		1,3-Dinitrobenzene	50.000	0.000	100.0#	0	-9.40#
54	P	2,6-Dinitrotoluene	50.000	0.000	100.0#	0	-9.43#
55	P	Acenaphthylene	50.000	0.000	100.0#	0	-9.50#
56	P	3-Nitroaniline	50.000	0.000	100.0#	0	-9.59#
57	P	2,4-Dinitrophenol	50.000	0.000	100.0#	0	-9.70#
58	C,P	Acenaphthene	50.000	0.098	99.8#	0	-0.03
59	P	4-Nitrophenol	50.000	0.000	100.0#	0	-9.75#
60	P	2,4-Dinitrotoluene	50.000	0.000	100.0#	0	-9.83#
61	P	Dibenzofuran	50.000	0.000	100.0#	0	-9.84#
62		2,3,5,6-Tetrachlorophenol	50.000	0.000	100.0#	0	-9.91#
63		2,3,4,6-Tetrachlorophenol	50.000	0.000	100.0#	0	-9.96#
64		1-Naphthylamine	50.000	53.383	-6.8	100	0.00
65		2-Naphthylamine	50.000	53.824	-7.6	100	0.00
66	P	Diethylphthalate	50.000	0.030	99.9#	0	-0.01
67	P	Fluorene	50.000	0.000	100.0#	0	-10.18#
68	P	4-Chlorophenyl Phenyl Ether	50.000	0.000	100.0#	0	-10.18#
69	P	4-Nitroaniline	50.000	0.000	100.0#	0	-10.19#
70		5-Nitro-o-Toluidine	50.000	50.452	-0.9	93	0.00
71		1,2-Diphenylhydrazine & Azo	50.000	0.000	100.0#	0	-10.34#
72	S	2,4,6-Tribromophenol	50.000	0.000	100.0#	0	-10.41#
73	I	Phenanthrene-d10	40.000	40.000	0.0	96	0.00
74	P	4,6-Dinitro-2-Methylphenol	50.000	0.000	100.0#	0	-10.22#
75	C,P	Diphenylamine/n-Nitrosodiph	50.000	0.000	100.0#	0	-10.29#
76	P	4-Bromophenyl Phenyl Ether	50.000	0.000	100.0#	0	-10.66#
77	P	Hexachlorobenzene	50.000	0.000	100.0#	0	-10.72#
78		4-Aminobiphenyl	50.000	46.688	6.6	88	0.00
79	C,P	Pentachlorophenol	50.000	0.000	100.0#	0	-10.91#
80	P	Phenanthrene	50.000	0.000	100.0#	0	-11.12#
81	P	Anthracene	50.000	0.000	100.0#	0	-11.18#
82	P	Carbazole	50.000	0.000	100.0#	0	-11.33#
83	P	Di-n-Butyl Phthalate	50.000	0.000	100.0#	0	-11.70#
84		Methapyrilene	50.000	43.683	12.6	80	0.00
85	C,P	Fluoranthene	50.000	0.000	100.0#	0	-12.41#
86	I	Chrysene-d12	40.000	40.000	0.0	98	0.00
87		Benzidine	50.000	48.305	3.4	89	0.00
88	P	Pyrene	50.000	0.000	100.0#	0	-12.70#
89	S	p-Terphenyl-d14	50.000	0.000	100.0#	0	-12.91#
90		p-(Dimethylamino)azobenzene	50.000	56.090	-12.2	105	0.00
91	P	Butyl Benzyl Phthalate	50.000	0.000	100.0#	0	-13.64#
92		3,3'-Dimethylbenzidine	100.000	52.345	47.7#	49	-0.01
93		2-Acetylaminofluorene	50.000	49.911	0.2	100	0.00
94	P	bis(2-Ethylhexyl)phthalate	50.000	0.000	100.0#	0	-14.63#
95	P	3,3'-Dichlorobenzidine	50.000	54.013	-8.0	102	0.00
96	P	Benzo[a]anthracene	50.000	0.020	100.0#	0	0.01
97	P	Chrysene	50.000	0.020	100.0#	0	-0.05
98	I	Perylene-d12	40.000	40.000	0.0	99	0.00
99	C,P	Di-n-Octyl Phthalate	50.000	0.000	100.0#	0	-15.80#
100	P	Benzo[b]fluoranthene	50.000	0.000	100.0#	0	-16.33#
101	P	Benzo[k]fluoranthene	50.000	0.000	100.0#	0	-16.38#
102	C,P	Benzo[a]pyrene	50.000	0.067	99.9#	0	0.09
103	P	Indeno[1,2,3-cd]pyrene	50.000	0.000	100.0#	0	-18.75#

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80872.D Vial: 12
Acq On : 29 Jan 2021 2:22 pm Operator: SCB
Sample : S1A0503-ICV2 Inst : MSD12
Misc : 1,1 0008475 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 09:46:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
104	P	Dibenz[ah]anthracene	50.000	0.000	100.0#	0	-18.80#
105	P	Benzo[ghi]perylene	50.000	0.000	100.0#	0	-19.17#

(#) = Out of Range SPCC's out = 0 CCC's out = 13

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80873.D Vial: 13
Acq On : 29 Jan 2021 2:53 pm Operator: SCB
Sample : S1A0503-CALD Inst : MSD12
Misc : 1,1 0011064 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 13:17:51 2021 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.629	152	98736	40.0000	ug/ml	0.000
8) Naphthalene-d8	7.901	136	376888	40.0000	ug/ml	0.000
15) Acenaphthene-d10	9.637	164	208918	40.0000	ug/ml	0.000
23) Phenanthrene-d10	11.101	188	382309	40.0000	ug/ml	0.000
38) Chrysene-d12	14.488	240	300494	40.0000	ug/ml	0.000
42) Perylene-d12	16.983	264	351911	40.0000	ug/ml	0.000

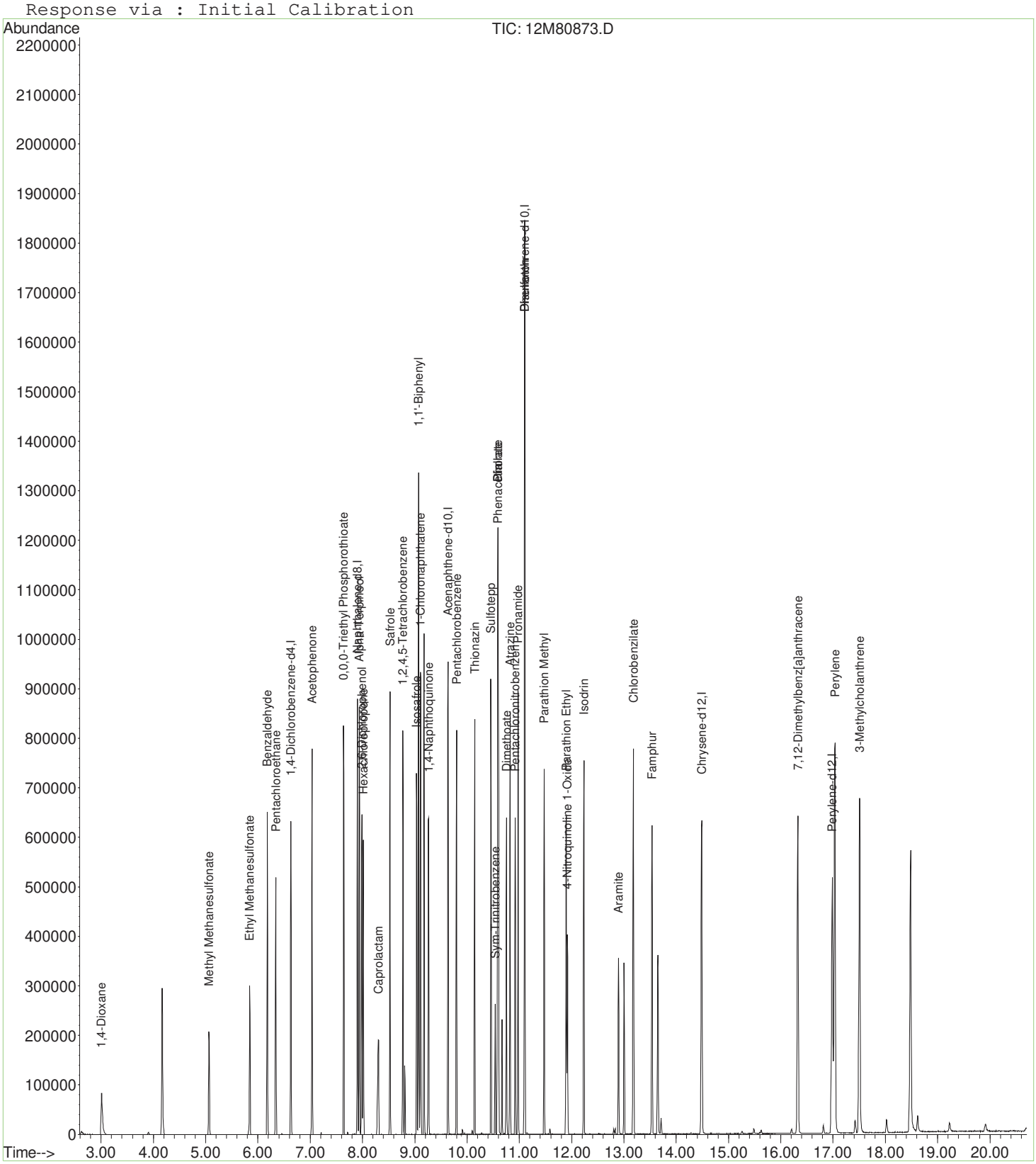
Target Compounds						Qvalue
2) 1,4-Dioxane	3.01	88	64220	49.0161	ug/ml	100
3) Methyl Methanesulfonate	5.06	80	80953	49.5460	ug/ml	100
4) Ethyl Methanesulfonate	5.84	79	102986	49.2868	ug/ml	100
5) Benzaldehyde	6.18	105	129971	49.8644	ug/ml	100
6) Pentachloroethane	6.34	167	60888	49.4482	ug/ml	100
7) Acetophenone	7.04	105	211340	49.8178	ug/ml	100
9) 0,0,0-Triethyl Phosphoroth	7.64	198	76032	50.2292	ug/ml	100
10) Alpha-Terpineol	7.94	59	119394	49.2221	ug/ml	100
11) 2,6-Dichlorophenol	7.99	162	127641	50.5965	ug/ml	100
12) Hexachloropropene	8.01	213	94611	49.7614	ug/ml	100
13) Caprolactam	8.30	55	53242	49.3477	ug/ml	100
14) Safrole	8.53	162	124356	50.5979	ug/ml	100
16) 1,2,4,5-Tetrachlorobenzene	8.77	216	133528	48.6766	ug/ml	100
17) Isosafrole	9.04	162	123067	49.2750	ug/ml	100
18) 1,1'-Biphenyl	9.07	154	397233	48.9317	ug/ml	100
19) 1-Chloronaphthalene	9.11	162	284647	48.5903	ug/ml	100
20) 1,4-Naphthoquinone	9.26	158	133137	48.0973	ug/ml	100
21) Pentachlorobenzene	9.80	250	117438	49.1226	ug/ml	100
22) Thionazin	10.14	107	53827	51.7015	ug/ml	100
24) Sulfotepp	10.46	322	58443	50.7270	ug/ml	100
25) Sym-Trinitrobenzene	10.53	75	63268	47.7168	ug/ml	100
26) Diallate	10.58	86	102126	49.8592	ug/ml	100
27) Phenacetin	10.60	108	166320	51.4965	ug/ml	100
28) Phorate	10.59	75	181543	49.9683	ug/ml#	100
29) Dimethoate	10.75	87	123558	51.6020	ug/ml	100
30) Atrazine	10.82	200	98925	50.1959	ug/ml	100
31) Pentachloronitrobenzen	10.92	237	37924	51.4467	ug/ml	100
32) Pronamide	10.98	173	155111	50.8890	ug/ml	100
33) Disulfoton	11.10	88	166493	47.0379	ug/ml	100
34) Parathion Methyl	11.47	109	114495	49.5126	ug/ml	100
35) Parathion Ethyl	11.89	97	60601	48.7351	ug/ml	100
36) 4-Nitroquinoline 1-Oxide	11.92	190	53890	48.5002	ug/ml	100
37) Isodrin	12.23	193	56554	50.9486	ug/ml	100
39) Aramite	12.90	185	32114	47.2310	ug/ml	100
40) Chlorobenzilate	13.18	251	148609	47.4668	ug/ml	100
41) Famphur	13.54	218	207419	48.6025	ug/ml	100
43) 7,12-Dimethylbenz[a]anthra	16.33	256	201964	46.5421	ug/ml	100
44) Perylene	17.04	252	511138	49.2999	ug/ml	100
45) 3-Methylcholanthrene	17.51	268	269562	52.5152	ug/ml	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80873.D Vial: 13
Acq On : 29 Jan 2021 2:53 pm Operator: SCB
Sample : S1A0503-CALD Inst : MSD12
Misc : 1,1 0011064 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 13:17 2021 Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80873.D Vial: 13
Acq On : 29 Jan 2021 2:53 pm Operator: SCB
Sample : S1A0503-CALD Inst : MSD12
Misc : 1,1 0011064 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	100	0.00
2		1,4-Dioxane	0.531	0.520	2.1	100	0.00
3		Methyl Methanesulfonate	0.662	0.656	0.9	100	0.00
4		Ethyl Methanesulfonate	0.847	0.834	1.5	100	0.00
5		Benzaldehyde	1.056	1.053	0.3	100	0.00
6		Pentachloroethane	0.499	0.493	1.2	100	0.00
7		Acetophenone	1.719	1.712	0.4	100	0.00
8	I	Naphthalene-d8	1.000	1.000	0.0	100	0.00
9		0,0,0-Triethyl Phosphorothi	0.161	0.161	0.0	100	0.00
10		Alpha-Terpineol	0.257	0.253	1.6	100	0.00
11		2,6-Dichlorophenol	0.268	0.271	-1.1	100	0.00
12		Hexachloropropene	0.202	0.201	0.5	100	0.00
13		Caprolactam	0.115	0.113	1.7	100	0.00
14		Safrole	0.261	0.264	-1.1	100	0.00
15	I	Acenaphthene-d10	1.000	1.000	0.0	100	0.00
16		1,2,4,5-Tetrachlorobenzene	0.525	0.511	2.7	100	0.00
17		Isosafrole	0.478	0.471	1.5	100	0.00
18		1,1'-Biphenyl	1.554	1.521	2.1	100	0.00
19		1-Chloronaphthalene	1.122	1.090	2.9	100	0.00
20		1,4-Naphthoquinone	0.490	0.510	-4.1	100	0.00
21		Pentachlorobenzene	0.458	0.450	1.7	100	0.00
22		Thionazin	0.199	0.206	-3.5	100	0.00
23	I	Phenanthrene-d10	1.000	1.000	0.0	100	0.00
24		Sulfotepp	0.121	0.122	-0.8	100	0.00
25		Sym-Trinitrobenzene	0.121	0.132	-9.1	100	0.00
26		Diallate	0.214	0.214	0.0	100	0.00
27		Phenacetin	0.338	0.348	-3.0	100	0.00
28		Phorate	0.380	0.380	0.0	100	0.00
29		Dimethoate	0.251	0.259	-3.2	100	0.00
30		Atrazine	0.206	0.207	-0.5	100	0.00
31		Pentachloronitrobenzen	0.077	0.079	-2.6	100	0.00
32		Pronamide	0.319	0.325	-1.9	100	0.00
33		Disulfoton	0.370	0.348	5.9	100	0.00
34		Parathion Methyl	0.220	0.240	-9.1	100	0.00
35		Parathion Ethyl	0.119	0.127	-6.7	100	0.00
36		4-Nitroquinoline 1-Oxide	0.096	0.113	-17.7	100	0.00
37		Isodrin	0.116	0.118	-1.7	100	0.00
38	I	Chrysene-d12	1.000	1.000	0.0	100	0.00
39		Aramite	0.081	0.085	-4.9	100	0.00
40		Chlorobenzilate	0.388	0.396	-2.1	100	0.00
41		Famphur	0.533	0.552	-3.6	100	0.00
42	I	Perylene-d12	1.000	1.000	0.0	100	0.00
43		7,12-Dimethylbenz[a]anthrac	0.459	0.459	0.0	100	0.00
44		Perylene	1.178	1.162	1.4	100	0.00
45		3-Methylcholanthrene	0.583	0.613	-5.1	100	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80873.D Vial: 13
Acq On : 29 Jan 2021 2:53 pm Operator: SCB
Sample : S1A0503-CALD Inst : MSD12
Misc : 1,1 0011064 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	100	0.00
2		1,4-Dioxane	50.000	49.016	2.0	100	0.00
3		Methyl Methanesulfonate	50.000	49.546	0.9	100	0.00
4		Ethyl Methanesulfonate	50.000	49.287	1.4	100	0.00
5		Benzaldehyde	50.000	49.864	0.3	100	0.00
6		Pentachloroethane	50.000	49.448	1.1	100	0.00
7		Acetophenone	50.000	49.818	0.4	100	0.00
8	I	Naphthalene-d8	40.000	40.000	0.0	100	0.00
9		0,0,0-Triethyl Phosphorothi	50.000	50.229	-0.5	100	0.00
10		Alpha-Terpineol	50.000	49.222	1.6	100	0.00
11		2,6-Dichlorophenol	50.000	50.596	-1.2	100	0.00
12		Hexachloropropene	50.000	49.761	0.5	100	0.00
13		Caprolactam	50.000	49.348	1.3	100	0.00
14		Safrole	50.000	50.598	-1.2	100	0.00
15	I	Acenaphthene-d10	40.000	40.000	0.0	100	0.00
16		1,2,4,5-Tetrachlorobenzene	50.000	48.677	2.6	100	0.00
17		Isosafrole	50.000	49.275	1.5	100	0.00
18		1,1'-Biphenyl	50.000	48.932	2.1	100	0.00
19		1-Chloronaphthalene	50.000	48.590	2.8	100	0.00
20		1,4-Naphthoquinone	50.000	48.097	3.8	100	0.00
21		Pentachlorobenzene	50.000	49.123	1.8	100	0.00
22		Thionazin	50.000	51.701	-3.4	100	0.00
23	I	Phenanthrene-d10	40.000	40.000	0.0	100	0.00
24		Sulfotepp	50.000	50.727	-1.5	100	0.00
25		Sym-Trinitrobenzene	50.000	47.717	4.6	100	0.00
26		Diallate	50.000	49.859	0.3	100	0.00
27		Phenacetin	50.000	51.497	-3.0	100	0.00
28		Phorate	50.000	49.968	0.1	100	0.00
29		Dimethoate	50.000	51.602	-3.2	100	0.00
30		Atrazine	50.000	50.196	-0.4	100	0.00
31		Pentachloronitrobenzen	50.000	51.447	-2.9	100	0.00
32		Pronamide	50.000	50.889	-1.8	100	0.00
33		Disulfoton	50.000	47.038	5.9	100	0.00
34		Parathion Methyl	50.000	49.513	1.0	100	0.00
35		Parathion Ethyl	50.000	48.735	2.5	100	0.00
36		4-Nitroquinoline 1-Oxide	50.000	48.500	3.0	100	0.00
37		Isodrin	50.000	50.949	-1.9	100	0.00
38	I	Chrysene-d12	40.000	40.000	0.0	100	0.00
39		Aramite	50.000	47.231	5.5	100	0.00
40		Chlorobenzilate	50.000	47.467	5.1	100	0.00
41		Famphur	50.000	48.602	2.8	100	0.00
42	I	Perylene-d12	40.000	40.000	0.0	100	0.00
43		7,12-Dimethylbenz[a]anthrac	50.000	46.542	6.9	100	0.00
44		Perylene	50.000	49.300	1.4	100	0.00
45		3-Methylcholanthrene	50.000	52.515	-5.0	100	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80874.D Vial: 14
Acq On : 29 Jan 2021 3:24 pm Operator: SCB
Sample : S1A0503-CALG Inst : MSD12
Misc : 1,1 0011067 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 13:17:52 2021 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.629	152	87033	40.0000	ug/ml	0.000
8) Naphthalene-d8	7.901	136	331815	40.0000	ug/ml	0.000
15) Acenaphthene-d10	9.632	164	180669	40.0000	ug/ml	0.000
23) Phenanthrene-d10	11.095	188	321846	40.0000	ug/ml	0.000
38) Chrysene-d12	14.482	240	250904	40.0000	ug/ml	0.000
42) Perylene-d12	16.977	264	296459	40.0000	ug/ml	0.000

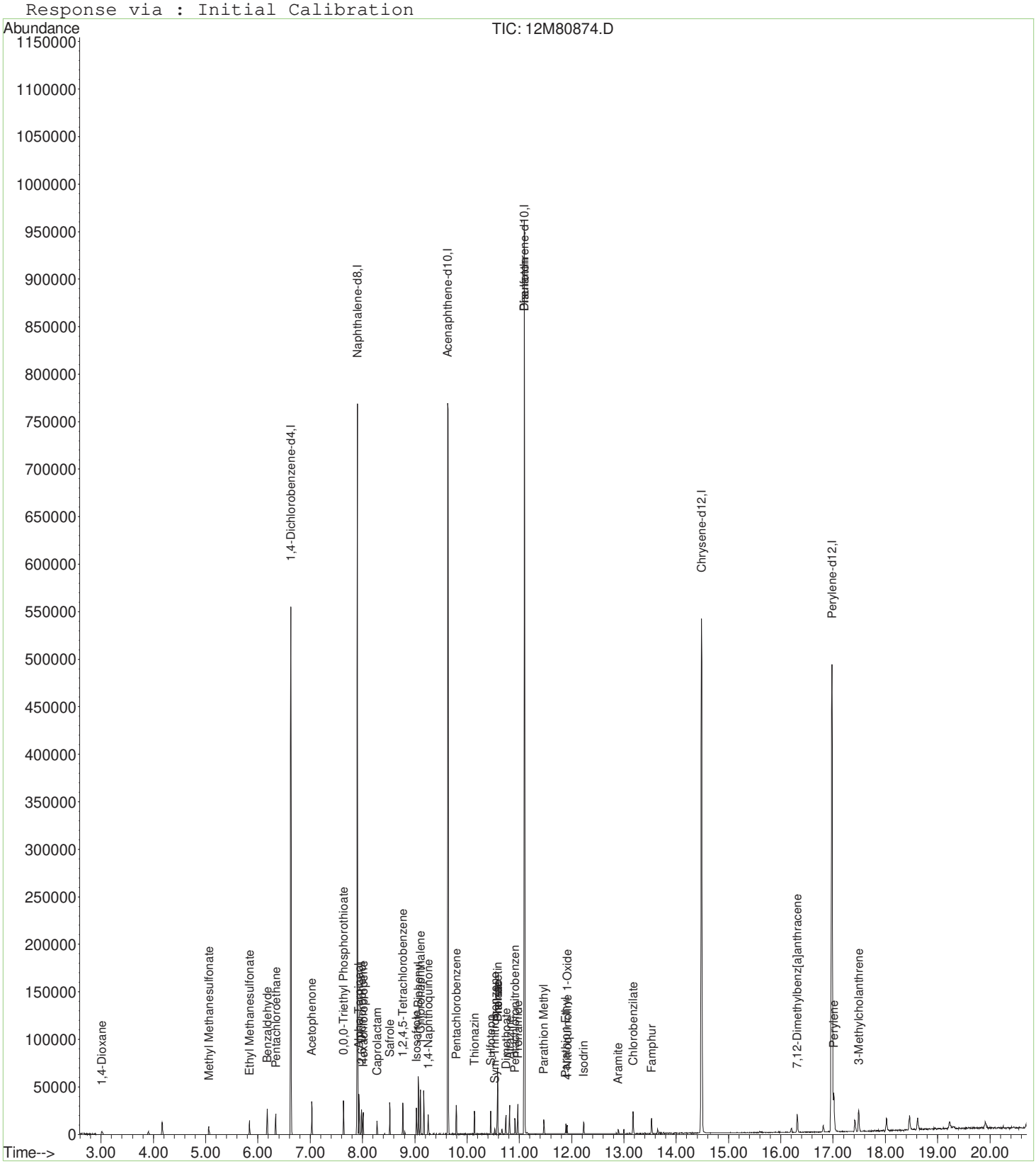
Target Compounds						Qvalue
2) 1,4-Dioxane	3.01	88	3088	2.6738	ug/ml	90
3) Methyl Methanesulfonate	5.06	80	3792	2.6329	ug/ml#	95
4) Ethyl Methanesulfonate	5.84	79	5128	2.7841	ug/ml	96
5) Benzaldehyde	6.18	105	6089	2.6502	ug/ml	98
6) Pentachloroethane	6.34	167	2778	2.5594	ug/ml	92
7) Acetophenone	7.03	105	10498	2.8074	ug/ml	99
9) 0,0,0-Triethyl Phosphoroth	7.64	198	3424	2.5693	ug/ml	99
10) Alpha-Terpineol	7.93	59	6204	2.9051	ug/ml	97
11) 2,6-Dichlorophenol	7.98	162	6146	2.7672	ug/ml	97
12) Hexachloropropene	8.01	213	4415	2.6375	ug/ml	98
13) Caprolactam	8.28	55	2449	2.5782	ug/ml	96
14) Safrole	8.52	162	5503	2.5432	ug/ml	97
16) 1,2,4,5-Tetrachlorobenzene	8.77	216	6540	2.7569	ug/ml	98
17) Isosafrole	9.03	162	5777	2.6747	ug/ml	97
18) 1,1'-Biphenyl	9.07	154	19574	2.7882	ug/ml	98
19) 1-Chloronaphthalene	9.11	162	14345	2.8316	ug/ml	95
20) 1,4-Naphthoquinone	9.26	158	4615	3.2357	ug/ml	94
21) Pentachlorobenzene	9.79	250	5649	2.7324	ug/ml	97
22) Thionazin	10.14	107	2027	2.2514	ug/ml	86
24) Sulfotepp	10.45	322	2474	2.5508	ug/ml	91
25) Sym-Trinitrobenzene	10.53	75	1612	3.6763	ug/ml#	85
26) Diallate	10.58	86	4309	2.4989	ug/ml	95
27) Phenacetin	10.58	108	6043	2.2226	ug/ml	95
28) Phorate	10.58	75	7597	2.4838	ug/ml#	99
29) Dimethoate	10.74	87	4852	2.4070	ug/ml	97
30) Atrazine	10.81	200	4229	2.5490	ug/ml	94
31) Pentachloronitrobenzen	10.91	237	1522	2.4526	ug/ml#	75
32) Pronamide	10.97	173	6272	2.4443	ug/ml	93
33) Disulfoton	11.10	88	10255	3.4415	ug/ml#	86
34) Parathion Methyl	11.47	109	3425	3.3020	ug/ml	98
35) Parathion Ethyl	11.89	97	1813	3.2333	ug/ml#	91
36) 4-Nitroquinoline 1-Oxide	11.91	190	807	3.8348	ug/ml#	74
37) Isodrin	12.23	193	2233	2.3896	ug/ml	97
39) Aramite	12.90	185	857	3.2631	ug/ml#	69
40) Chlorobenzilate	13.17	251	5340	3.2472	ug/ml	99
41) Famphur	13.53	218	7344	3.1261	ug/ml	98
43) 7,12-Dimethylbenz[a]anthra	16.31	256	8053	3.4037	ug/ml	98
44) Perylene	17.01	252	23444	2.6842	ug/ml	98
45) 3-Methylcholanthrene	17.49	268	10034	2.3204	ug/ml	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80874.D Vial: 14
Acq On : 29 Jan 2021 3:24 pm Operator: SCB
Sample : S1A0503-CALG Inst : MSD12
Misc : 1,1 0011067 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 13:17 2021 Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80874.D Vial: 14
Acq On : 29 Jan 2021 3:24 pm Operator: SCB
Sample : S1A0503-CALG Inst : MSD12
Misc : 1,1 0011067 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	100	0.00
2		1,4-Dioxane	0.531	0.473	10.9	100	0.00
3		Methyl Methanesulfonate	0.662	0.581	12.2	100	0.00
4		Ethyl Methanesulfonate	0.847	0.786	7.2	100	0.00
5		Benzaldehyde	1.056	0.933	11.6	100	0.00
6		Pentachloroethane	0.499	0.426	14.6	100	0.00
7		Acetophenone	1.719	1.608	6.5	100	0.00
8	I	Naphthalene-d8	1.000	1.000	0.0	100	0.00
9		0,0,0-Triethyl Phosphorothi	0.161	0.138	14.3	100	0.00
10		Alpha-Terpineol	0.257	0.249	3.1	100	0.00
11		2,6-Dichlorophenol	0.268	0.247	7.8	100	0.00
12		Hexachloropropene	0.202	0.177	12.4	100	0.00
13		Caprolactam	0.115	0.098	14.8	100	-0.02
14		Safrole	0.261	0.221	15.3	100	0.00
15	I	Acenaphthene-d10	1.000	1.000	0.0	100	0.00
16		1,2,4,5-Tetrachlorobenzene	0.525	0.483	8.0	100	0.00
17		Isosafrole	0.478	0.426	10.9	100	0.00
18		1,1'-Biphenyl	1.554	1.445	7.0	100	0.00
19		1-Chloronaphthalene	1.122	1.059	5.6	100	0.00
20		1,4-Naphthoquinone	0.490	0.341	30.4	100	0.00
21		Pentachlorobenzene	0.458	0.417	9.0	100	0.00
22		Thionazin	0.199	0.150	24.6	100	0.00
23	I	Phenanthrene-d10	1.000	1.000	0.0	100	0.00
24		Sulfotepp	0.121	0.102	15.7	100	0.00
25		Sym-Trinitrobenzene	0.121	0.067	44.6#	100	0.00
26		Diallate	0.214	0.179	16.4	100	0.00
27		Phenacetin	0.338	0.250	26.0	100	-0.02
28		Phorate	0.380	0.315	17.1	100	0.00
29		Dimethoate	0.251	0.201	19.9	100	-0.01
30		Atrazine	0.206	0.175	15.0	100	-0.01
31		Pentachloronitrobenzen	0.077	0.063	18.2	100	0.00
32		Pronamide	0.319	0.260	18.5	100	-0.01
33		Disulfoton	0.370	0.425	-14.9	100	0.00
34		Parathion Methyl	0.220	0.142	35.5	100	0.00
35		Parathion Ethyl	0.119	0.075	37.0	100	0.00
36		4-Nitroquinoline 1-Oxide	0.096	0.033#	65.6#	100	-0.01
37		Isodrin	0.116	0.093	19.8	100	0.00
38	I	Chrysene-d12	1.000	1.000	0.0	100	0.00
39		Aramite	0.081	0.046#	43.2#	100	0.00
40		Chlorobenzilate	0.388	0.284	26.8	100	0.00
41		Famphur	0.533	0.390	26.8	100	0.00
42	I	Perylene-d12	1.000	1.000	0.0	100	0.00
43		7,12-Dimethylbenz[a]anthrac	0.459	0.362	21.1	100	-0.01
44		Perylene	1.178	1.054	10.5	100	-0.02
45		3-Methylcholanthrene	0.583	0.451	22.6	100	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80874.D Vial: 14
Acq On : 29 Jan 2021 3:24 pm Operator: SCB
Sample : S1A0503-CALG Inst : MSD12
Misc : 1,1 0011067 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	100	0.00
2		1,4-Dioxane	3.000	2.674	10.9	100	0.00
3		Methyl Methanesulfonate	3.000	2.633	12.2	100	0.00
4		Ethyl Methanesulfonate	3.000	2.784	7.2	100	0.00
5		Benzaldehyde	3.000	2.650	11.7	100	0.00
6		Pentachloroethane	3.000	2.559	14.7	100	0.00
7		Acetophenone	3.000	2.807	6.4	100	0.00
8	I	Naphthalene-d8	40.000	40.000	0.0	100	0.00
9		0,0,0-Triethyl Phosphorothi	3.000	2.569	14.4	100	0.00
10		Alpha-Terpineol	3.000	2.905	3.2	100	0.00
11		2,6-Dichlorophenol	3.000	2.767	7.8	100	0.00
12		Hexachloropropene	3.000	2.638	12.1	100	0.00
13		Caprolactam	3.000	2.578	14.1	100	-0.02
14		Safrole	3.000	2.543	15.2	100	0.00
15	I	Acenaphthene-d10	40.000	40.000	0.0	100	0.00
16		1,2,4,5-Tetrachlorobenzene	3.000	2.757	8.1	100	0.00
17		Isosafrole	3.000	2.675	10.8	100	0.00
18		1,1'-Biphenyl	3.000	2.788	7.1	100	0.00
19		1-Chloronaphthalene	3.000	2.832	5.6	100	0.00
20		1,4-Naphthoquinone	3.000	3.236	-7.9	100	0.00
21		Pentachlorobenzene	3.000	2.732	8.9	100	0.00
22		Thionazin	3.000	2.251	25.0	100	0.00
23	I	Phenanthrene-d10	40.000	40.000	0.0	100	0.00
24		Sulfotepp	3.000	2.551	15.0	100	0.00
25		Sym-Trinitrobenzene	3.000	3.676	-22.5	100	0.00
26		Diallate	3.000	2.499	16.7	100	0.00
27		Phenacetin	3.000	2.223	25.9	100	-0.02
28		Phorate	3.000	2.484	17.2	100	0.00
29		Dimethoate	3.000	2.407	19.8	100	-0.01
30		Atrazine	3.000	2.549	15.0	100	-0.01
31		Pentachloronitrobenzen	3.000	2.453	18.2	100	0.00
32		Pronamide	3.000	2.444	18.5	100	-0.01
33		Disulfoton	3.000	3.442	-14.7	100	0.00
34		Parathion Methyl	3.000	3.302	-10.1	100	0.00
35		Parathion Ethyl	3.000	3.233	-7.8	100	0.00
36		4-Nitroquinoline 1-Oxide	3.000	3.835	-27.8	100	-0.01
37		Isodrin	3.000	2.390	20.3	100	0.00
38	I	Chrysene-d12	40.000	40.000	0.0	100	0.00
39		Aramite	3.000	3.263	-8.8	100	0.00
40		Chlorobenzilate	3.000	3.247	-8.2	100	0.00
41		Famphur	3.000	3.126	-4.2	100	0.00
42	I	Perylene-d12	40.000	40.000	0.0	100	0.00
43		7,12-Dimethylbenz[a]anthrac	3.000	3.404	-13.5	100	-0.01
44		Perylene	3.000	2.684	10.5	100	-0.02
45		3-Methylcholanthrene	3.000	2.320	22.7	100	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80875.D Vial: 15
Acq On : 29 Jan 2021 3:56 pm Operator: SCB
Sample : S1A0503-CALF Inst : MSD12
Misc : 1,1 0011066 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 13:17:52 2021 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.629	152	78686	40.0000	ug/ml	0.000
8) Naphthalene-d8	7.901	136	301094	40.0000	ug/ml	0.000
15) Acenaphthene-d10	9.637	164	165843	40.0000	ug/ml	0.000
23) Phenanthrene-d10	11.095	188	299158	40.0000	ug/ml	0.000
38) Chrysene-d12	14.482	240	229907	40.0000	ug/ml	0.000
42) Perylene-d12	16.977	264	270091	40.0000	ug/ml	0.000

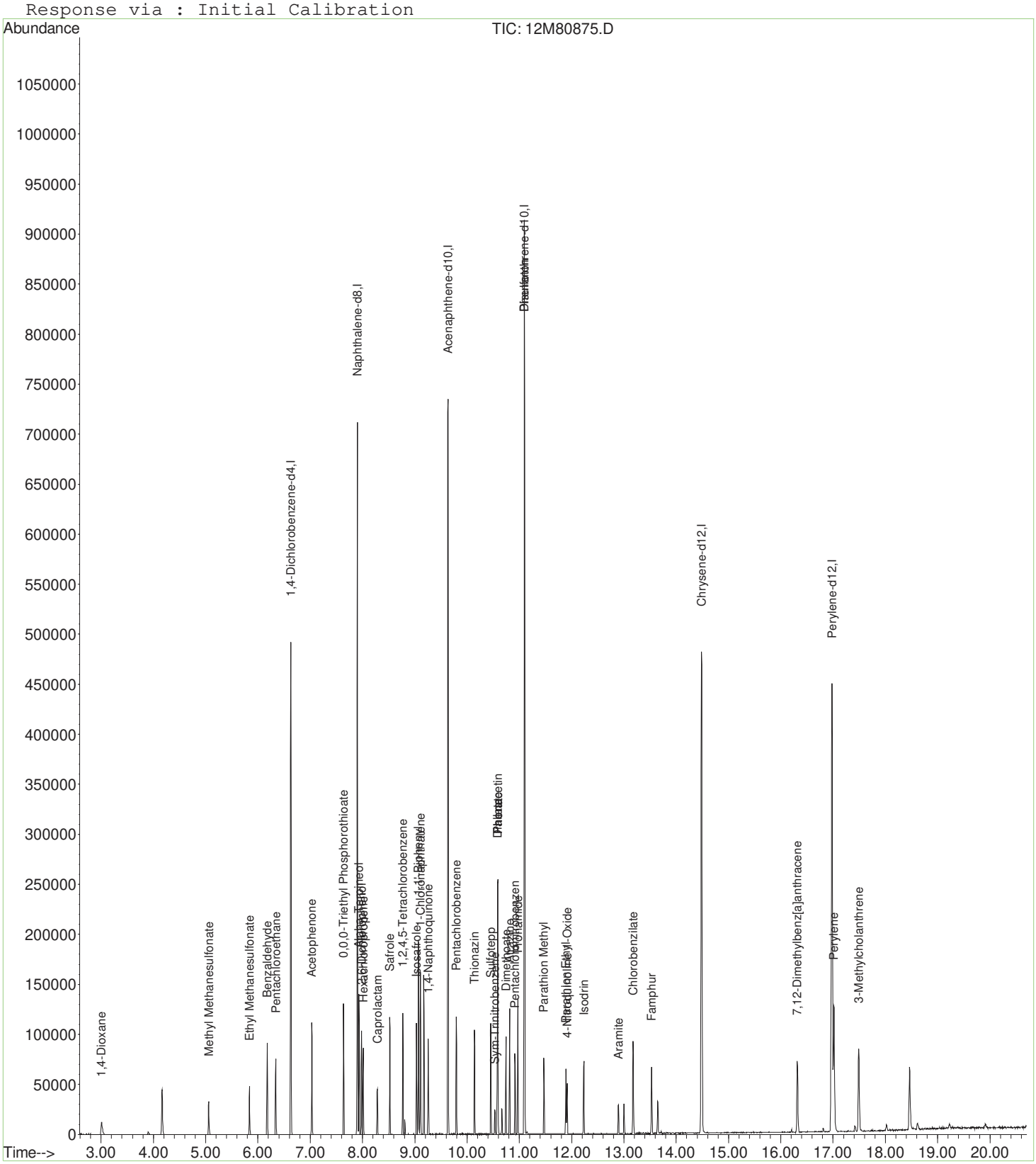
Target Compounds						Qvalue
2) 1,4-Dioxane	3.01	88	10155	9.7258	ug/ml	98
3) Methyl Methanesulfonate	5.06	80	12906	9.9116	ug/ml	96
4) Ethyl Methanesulfonate	5.84	79	15576	9.3538	ug/ml	99
5) Benzaldehyde	6.18	105	20024	9.6399	ug/ml	99
6) Pentachloroethane	6.34	167	9758	9.9439	ug/ml	96
7) Acetophenone	7.03	105	32558	9.6303	ug/ml	99
9) 0,0,0-Triethyl Phosphoroth	7.64	198	11710	9.6834	ug/ml	99
10) Alpha-Terpineol	7.93	59	18817	9.7104	ug/ml	98
11) 2,6-Dichlorophenol	7.98	162	19618	9.7341	ug/ml	99
12) Hexachloropropene	8.01	213	14386	9.4711	ug/ml	98
13) Caprolactam	8.29	55	8158	9.4647	ug/ml	99
14) Safrole	8.53	162	18544	9.4445	ug/ml	98
16) 1,2,4,5-Tetrachlorobenzene	8.77	216	20573	9.4477	ug/ml	99
17) Isosafrole	9.03	162	18663	9.4134	ug/ml	99
18) 1,1'-Biphenyl	9.07	154	64051	9.9392	ug/ml	99
19) 1-Chloronaphthalene	9.11	162	45651	9.8169	ug/ml	98
20) 1,4-Naphthoquinone	9.26	158	17872	9.2654	ug/ml	98
21) Pentachlorobenzene	9.79	250	18356	9.6723	ug/ml	100
22) Thionazin	10.14	107	7467	9.0350	ug/ml	98
24) Sulfotepp	10.45	322	7833	8.6886	ug/ml	97
25) Sym-Trinitrobenzene	10.53	75	6450	8.2186	ug/ml	95
26) Diallate	10.58	86	15634	9.7542	ug/ml	99
27) Phenacetin	10.59	108	23222	9.1886	ug/ml	98
28) Phorate	10.59	75	27961	9.8352	ug/ml#	98
29) Dimethoate	10.74	87	17851	9.5274	ug/ml	98
30) Atrazine	10.81	200	15034	9.7488	ug/ml	98
31) Pentachloronitrobenzen	10.91	237	5139	8.9091	ug/ml	98
32) Pronamide	10.97	173	22217	9.3150	ug/ml	100
33) Disulfoton	11.10	88	28150	10.1635	ug/ml	95
34) Parathion Methyl	11.47	109	13150	8.6319	ug/ml	95
35) Parathion Ethyl	11.89	97	7489	9.0075	ug/ml	96
36) 4-Nitroquinoline 1-Oxide	11.91	190	4232	7.5896	ug/ml#	80
37) Isodrin	12.23	193	8058	9.2770	ug/ml	100
39) Aramite	12.90	185	4045	9.2889	ug/ml	93
40) Chlorobenzilate	13.17	251	19275	9.0921	ug/ml	99
41) Famphur	13.53	218	27320	9.2879	ug/ml	98
43) 7,12-Dimethylbenz[a]anthra	16.31	256	25947	8.8403	ug/ml	99
44) Perylene	17.02	252	76681	9.6365	ug/ml	98
45) 3-Methylcholanthrene	17.49	268	34353	8.7200	ug/ml	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80875.D Vial: 15
Acq On : 29 Jan 2021 3:56 pm Operator: SCB
Sample : S1A0503-CALF Inst : MSD12
Misc : 1,1 0011066 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 13:17 2021 Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80875.D Vial: 15
Acq On : 29 Jan 2021 3:56 pm Operator: SCB
Sample : S1A0503-CALF Inst : MSD12
Misc : 1,1 0011066 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	100	0.00
2		1,4-Dioxane	0.531	0.516	2.8	100	0.00
3		Methyl Methanesulfonate	0.662	0.656	0.9	100	0.00
4		Ethyl Methanesulfonate	0.847	0.792	6.5	100	0.00
5		Benzaldehyde	1.056	1.018	3.6	100	0.00
6		Pentachloroethane	0.499	0.496	0.6	100	0.00
7		Acetophenone	1.719	1.655	3.7	100	0.00
8	I	Naphthalene-d8	1.000	1.000	0.0	100	0.00
9		0,0,0-Triethyl Phosphorothi	0.161	0.156	3.1	100	0.00
10		Alpha-Terpineol	0.257	0.250	2.7	100	0.00
11		2,6-Dichlorophenol	0.268	0.261	2.6	100	0.00
12		Hexachloropropene	0.202	0.191	5.4	100	0.00
13		Caprolactam	0.115	0.108	6.1	100	-0.02
14		Safrole	0.261	0.246	5.7	100	0.00
15	I	Acenaphthene-d10	1.000	1.000	0.0	100	0.00
16		1,2,4,5-Tetrachlorobenzene	0.525	0.496	5.5	100	0.00
17		Isosafrole	0.478	0.450	5.9	100	0.00
18		1,1'-Biphenyl	1.554	1.545	0.6	100	0.00
19		1-Chloronaphthalene	1.122	1.101	1.9	100	0.00
20		1,4-Naphthoquinone	0.490	0.431	12.0	100	0.00
21		Pentachlorobenzene	0.458	0.443	3.3	100	0.00
22		Thionazin	0.199	0.180	9.5	100	0.00
23	I	Phenanthrene-d10	1.000	1.000	0.0	100	0.00
24		Sulfotepp	0.121	0.105	13.2	100	0.00
25		Sym-Trinitrobenzene	0.121	0.086	28.9	100	0.00
26		Diallate	0.214	0.209	2.3	100	0.00
27		Phenacetin	0.338	0.310	8.3	100	-0.01
28		Phorate	0.380	0.374	1.6	100	0.00
29		Dimethoate	0.251	0.239	4.8	100	-0.01
30		Atrazine	0.206	0.201	2.4	100	-0.01
31		Pentachloronitrobenzen	0.077	0.069	10.4	100	0.00
32		Pronamide	0.319	0.297	6.9	100	-0.01
33		Disulfoton	0.370	0.376	-1.6	100	0.00
34		Parathion Methyl	0.220	0.176	20.0	100	0.00
35		Parathion Ethyl	0.119	0.100	16.0	100	0.00
36		4-Nitroquinoline 1-Oxide	0.096	0.057	40.6#	100	-0.01
37		Isodrin	0.116	0.108	6.9	100	0.00
38	I	Chrysene-d12	1.000	1.000	0.0	100	0.00
39		Aramite	0.081	0.070	13.6	100	0.00
40		Chlorobenzilate	0.388	0.335	13.7	100	0.00
41		Famphur	0.533	0.475	10.9	100	0.00
42	I	Perylene-d12	1.000	1.000	0.0	100	0.00
43		7,12-Dimethylbenz[a]anthrac	0.459	0.384	16.3	100	-0.01
44		Perylene	1.178	1.136	3.6	100	-0.02
45		3-Methylcholanthrene	0.583	0.509	12.7	100	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80875.D Vial: 15
Acq On : 29 Jan 2021 3:56 pm Operator: SCB
Sample : S1A0503-CALF Inst : MSD12
Misc : 1,1 0011066 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	100	0.00
2		1,4-Dioxane	10.000	9.726	2.7	100	0.00
3		Methyl Methanesulfonate	10.000	9.912	0.9	100	0.00
4		Ethyl Methanesulfonate	10.000	9.354	6.5	100	0.00
5		Benzaldehyde	10.000	9.640	3.6	100	0.00
6		Pentachloroethane	10.000	9.944	0.6	100	0.00
7		Acetophenone	10.000	9.630	3.7	100	0.00
8	I	Naphthalene-d8	40.000	40.000	0.0	100	0.00
9		0,0,0-Triethyl Phosphorothi	10.000	9.683	3.2	100	0.00
10		Alpha-Terpineol	10.000	9.710	2.9	100	0.00
11		2,6-Dichlorophenol	10.000	9.734	2.7	100	0.00
12		Hexachloropropene	10.000	9.471	5.3	100	0.00
13		Caprolactam	10.000	9.465	5.4	100	-0.02
14		Safrole	10.000	9.445	5.5	100	0.00
15	I	Acenaphthene-d10	40.000	40.000	0.0	100	0.00
16		1,2,4,5-Tetrachlorobenzene	10.000	9.448	5.5	100	0.00
17		Isosafrole	10.000	9.413	5.9	100	0.00
18		1,1'-Biphenyl	10.000	9.939	0.6	100	0.00
19		1-Chloronaphthalene	10.000	9.817	1.8	100	0.00
20		1,4-Naphthoquinone	10.000	9.265	7.3	100	0.00
21		Pentachlorobenzene	10.000	9.672	3.3	100	0.00
22		Thionazin	10.000	9.035	9.6	100	0.00
23	I	Phenanthrene-d10	40.000	40.000	0.0	100	0.00
24		Sulfotepp	10.000	8.689	13.1	100	0.00
25		Sym-Trinitrobenzene	10.000	8.219	17.8	100	0.00
26		Diallate	10.000	9.754	2.5	100	0.00
27		Phenacetin	10.000	9.189	8.1	100	-0.01
28		Phorate	10.000	9.835	1.6	100	0.00
29		Dimethoate	10.000	9.527	4.7	100	-0.01
30		Atrazine	10.000	9.749	2.5	100	-0.01
31		Pentachloronitrobenzen	10.000	8.909	10.9	100	0.00
32		Pronamide	10.000	9.315	6.9	100	-0.01
33		Disulfoton	10.000	10.164	-1.6	100	0.00
34		Parathion Methyl	10.000	8.632	13.7	100	0.00
35		Parathion Ethyl	10.000	9.007	9.9	100	0.00
36		4-Nitroquinoline 1-Oxide	10.000	7.590	24.1	100	-0.01
37		Isodrin	10.000	9.277	7.2	100	0.00
38	I	Chrysene-d12	40.000	40.000	0.0	100	0.00
39		Aramite	10.000	9.289	7.1	100	0.00
40		Chlorobenzilate	10.000	9.092	9.1	100	0.00
41		Famphur	10.000	9.288	7.1	100	0.00
42	I	Perylene-d12	40.000	40.000	0.0	100	0.00
43		7,12-Dimethylbenz[a]anthrac	10.000	8.840	11.6	100	-0.01
44		Perylene	10.000	9.636	3.6	100	-0.02
45		3-Methylcholanthrene	10.000	8.720	12.8	100	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80876.D Vial: 16
Acq On : 29 Jan 2021 4:27 pm Operator: SCB
Sample : S1A0503-CALE Inst : MSD12
Misc : 1,1 0011065 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 13:17:53 2021 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.629	152	91209	40.0000	ug/ml	0.000
8) Naphthalene-d8	7.901	136	349770	40.0000	ug/ml	0.000
15) Acenaphthene-d10	9.637	164	189515	40.0000	ug/ml	0.000
23) Phenanthrene-d10	11.095	188	339759	40.0000	ug/ml	0.000
38) Chrysene-d12	14.482	240	265635	40.0000	ug/ml	0.000
42) Perylene-d12	16.977	264	310147	40.0000	ug/ml	0.000

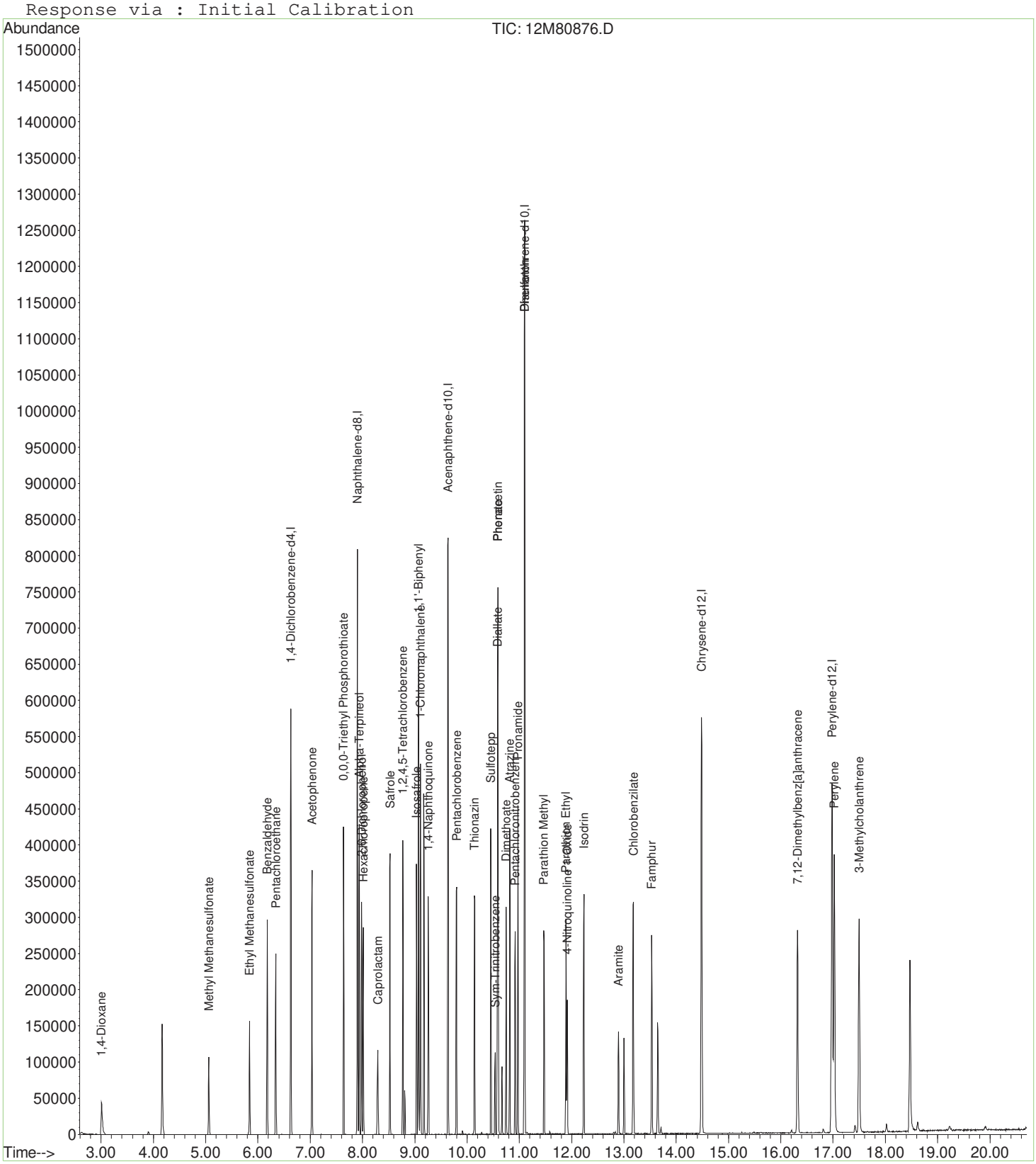
Target Compounds						Qvalue
2) 1,4-Dioxane	3.01	88	31477	26.0075	ug/ml	98
3) Methyl Methanesulfonate	5.06	80	38658	25.6125	ug/ml	98
4) Ethyl Methanesulfonate	5.84	79	49812	25.8062	ug/ml	98
5) Benzaldehyde	6.18	105	62426	25.9267	ug/ml	100
6) Pentachloroethane	6.34	167	29834	26.2282	ug/ml	98
7) Acetophenone	7.04	105	100663	25.6868	ug/ml	99
9) 0,0,0-Triethyl Phosphoroth	7.64	198	35984	25.6153	ug/ml	99
10) Alpha-Terpineol	7.94	59	57726	25.6436	ug/ml	99
11) 2,6-Dichlorophenol	7.98	162	59546	25.4339	ug/ml	99
12) Hexachloropropene	8.01	213	44681	25.3223	ug/ml	99
13) Caprolactam	8.29	55	24786	24.7542	ug/ml	97
14) Safrole	8.53	162	58874	25.8119	ug/ml	99
16) 1,2,4,5-Tetrachlorobenzene	8.77	216	63883	25.6724	ug/ml	99
17) Isosafrole	9.03	162	57733	25.4824	ug/ml	99
18) 1,1'-Biphenyl	9.07	154	191500	26.0044	ug/ml	100
19) 1-Chloronaphthalene	9.11	162	136253	25.6402	ug/ml	99
20) 1,4-Naphthoquinone	9.26	158	59284	24.3034	ug/ml	98
21) Pentachlorobenzene	9.80	250	55418	25.5538	ug/ml	99
22) Thionazin	10.14	107	24507	25.9493	ug/ml	98
24) Sulfotepp	10.45	322	26359	25.7442	ug/ml	99
25) Sym-Trinitrobenzene	10.53	75	25563	22.9495	ug/ml	97
26) Diallate	10.58	86	47675	26.1905	ug/ml	98
27) Phenacetin	10.59	108	76529	26.6626	ug/ml	99
28) Phorate	10.59	75	85795	26.5718	ug/ml#	100
29) Dimethoate	10.75	87	58300	27.3973	ug/ml	100
30) Atrazine	10.82	200	45513	25.9861	ug/ml	99
31) Pentachloronitrobenzen	10.92	237	17105	26.1102	ug/ml	99
32) Pronamide	10.97	173	71651	26.4513	ug/ml	99
33) Disulfoton	11.10	88	80203	25.4968	ug/ml	99
34) Parathion Methyl	11.47	109	49587	24.9491	ug/ml	99
35) Parathion Ethyl	11.89	97	26468	24.7428	ug/ml	97
36) 4-Nitroquinoline 1-Oxide	11.92	190	20872	22.8442	ug/ml	96
37) Isodrin	12.23	193	25897	26.2520	ug/ml	98
39) Aramite	12.90	185	13822	23.9256	ug/ml	98
40) Chlorobenzilate	13.18	251	66232	24.5552	ug/ml	99
41) Famphur	13.53	218	91633	24.8456	ug/ml	98
43) 7,12-Dimethylbenz[a]anthra	16.32	256	89867	24.1224	ug/ml	100
44) Perylene	17.03	252	231537	25.3392	ug/ml	100
45) 3-Methylcholanthrene	17.50	268	115139	25.4516	ug/ml	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80876.D Vial: 16
Acq On : 29 Jan 2021 4:27 pm Operator: SCB
Sample : S1A0503-CALE Inst : MSD12
Misc : 1,1 0011065 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 13:17 2021 Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80876.D Vial: 16
Acq On : 29 Jan 2021 4:27 pm Operator: SCB
Sample : S1A0503-CALE Inst : MSD12
Misc : 1,1 0011065 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	100	0.00
2		1,4-Dioxane	0.531	0.552	-4.0	100	0.00
3		Methyl Methanesulfonate	0.662	0.678	-2.4	100	0.00
4		Ethyl Methanesulfonate	0.847	0.874	-3.2	100	0.00
5		Benzaldehyde	1.056	1.095	-3.7	100	0.00
6		Pentachloroethane	0.499	0.523	-4.8	100	0.00
7		Acetophenone	1.719	1.766	-2.7	100	0.00
8	I	Naphthalene-d8	1.000	1.000	0.0	100	0.00
9		0,0,0-Triethyl Phosphorothi	0.161	0.165	-2.5	100	0.00
10		Alpha-Terpineol	0.257	0.264	-2.7	100	0.00
11		2,6-Dichlorophenol	0.268	0.272	-1.5	100	0.00
12		Hexachloropropene	0.202	0.204	-1.0	100	0.00
13		Caprolactam	0.115	0.113	1.7	100	-0.01
14		Safrole	0.261	0.269	-3.1	100	0.00
15	I	Acenaphthene-d10	1.000	1.000	0.0	100	0.00
16		1,2,4,5-Tetrachlorobenzene	0.525	0.539	-2.7	100	0.00
17		Isosafrole	0.478	0.487	-1.9	100	0.00
18		1,1'-Biphenyl	1.554	1.617	-4.1	100	0.00
19		1-Chloronaphthalene	1.122	1.150	-2.5	100	0.00
20		1,4-Naphthoquinone	0.490	0.501	-2.2	100	0.00
21		Pentachlorobenzene	0.458	0.468	-2.2	100	0.00
22		Thionazin	0.199	0.207	-4.0	100	0.00
23	I	Phenanthrene-d10	1.000	1.000	0.0	100	0.00
24		Sulfotepp	0.121	0.124	-2.5	100	0.00
25		Sym-Trinitrobenzene	0.121	0.120	0.8	100	0.00
26		Diallate	0.214	0.225	-5.1	100	0.00
27		Phenacetin	0.338	0.360	-6.5	100	0.00
28		Phorate	0.380	0.404	-6.3	100	0.00
29		Dimethoate	0.251	0.275	-9.6	100	0.00
30		Atrazine	0.206	0.214	-3.9	100	0.00
31		Pentachloronitrobenzen	0.077	0.081	-5.2	100	0.00
32		Pronamide	0.319	0.337	-5.6	100	0.00
33		Disulfoton	0.370	0.378	-2.2	100	0.00
34		Parathion Methyl	0.220	0.234	-6.4	100	0.00
35		Parathion Ethyl	0.119	0.125	-5.0	100	0.00
36		4-Nitroquinoline 1-Oxide	0.096	0.098	-2.1	100	0.00
37		Isodrin	0.116	0.122	-5.2	100	0.00
38	I	Chrysene-d12	1.000	1.000	0.0	100	0.00
39		Aramite	0.081	0.083	-2.5	100	0.00
40		Chlorobenzilate	0.388	0.399	-2.8	100	0.00
41		Famphur	0.533	0.552	-3.6	100	0.00
42	I	Perylene-d12	1.000	1.000	0.0	100	0.00
43		7,12-Dimethylbenz[a]anthrac	0.459	0.464	-1.1	100	0.00
44		Perylene	1.178	1.194	-1.4	100	-0.01
45		3-Methylcholanthrene	0.583	0.594	-1.9	100	-0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80876.D Vial: 16
Acq On : 29 Jan 2021 4:27 pm Operator: SCB
Sample : S1A0503-CALE Inst : MSD12
Misc : 1,1 0011065 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	100	0.00
2		1,4-Dioxane	25.000	26.008	-4.0	100	0.00
3		Methyl Methanesulfonate	25.000	25.613	-2.5	100	0.00
4		Ethyl Methanesulfonate	25.000	25.806	-3.2	100	0.00
5		Benzaldehyde	25.000	25.927	-3.7	100	0.00
6		Pentachloroethane	25.000	26.228	-4.9	100	0.00
7		Acetophenone	25.000	25.687	-2.7	100	0.00
8	I	Naphthalene-d8	40.000	40.000	0.0	100	0.00
9		0,0,0-Triethyl Phosphorothi	25.000	25.615	-2.5	100	0.00
10		Alpha-Terpineol	25.000	25.644	-2.6	100	0.00
11		2,6-Dichlorophenol	25.000	25.434	-1.7	100	0.00
12		Hexachloropropene	25.000	25.322	-1.3	100	0.00
13		Caprolactam	25.000	24.754	1.0	100	-0.01
14		Safrole	25.000	25.812	-3.2	100	0.00
15	I	Acenaphthene-d10	40.000	40.000	0.0	100	0.00
16		1,2,4,5-Tetrachlorobenzene	25.000	25.672	-2.7	100	0.00
17		Isosafrole	25.000	25.482	-1.9	100	0.00
18		1,1'-Biphenyl	25.000	26.004	-4.0	100	0.00
19		1-Chloronaphthalene	25.000	25.640	-2.6	100	0.00
20		1,4-Naphthoquinone	25.000	24.303	2.8	100	0.00
21		Pentachlorobenzene	25.000	25.554	-2.2	100	0.00
22		Thionazin	25.000	25.949	-3.8	100	0.00
23	I	Phenanthrene-d10	40.000	40.000	0.0	100	0.00
24		Sulfotepp	25.000	25.744	-3.0	100	0.00
25		Sym-Trinitrobenzene	25.000	22.949	8.2	100	0.00
26		Diallate	25.000	26.190	-4.8	100	0.00
27		Phenacetin	25.000	26.663	-6.7	100	0.00
28		Phorate	25.000	26.572	-6.3	100	0.00
29		Dimethoate	25.000	27.397	-9.6	100	0.00
30		Atrazine	25.000	25.986	-3.9	100	0.00
31		Pentachloronitrobenzen	25.000	26.110	-4.4	100	0.00
32		Pronamide	25.000	26.451	-5.8	100	0.00
33		Disulfoton	25.000	25.497	-2.0	100	0.00
34		Parathion Methyl	25.000	24.949	0.2	100	0.00
35		Parathion Ethyl	25.000	24.743	1.0	100	0.00
36		4-Nitroquinoline 1-Oxide	25.000	22.844	8.6	100	0.00
37		Isodrin	25.000	26.252	-5.0	100	0.00
38	I	Chrysene-d12	40.000	40.000	0.0	100	0.00
39		Aramite	25.000	23.926	4.3	100	0.00
40		Chlorobenzilate	25.000	24.555	1.8	100	0.00
41		Famphur	25.000	24.846	0.6	100	0.00
42	I	Perylene-d12	40.000	40.000	0.0	100	0.00
43		7,12-Dimethylbenz[a]anthrac	25.000	24.122	3.5	100	0.00
44		Perylene	25.000	25.339	-1.4	100	-0.01
45		3-Methylcholanthrene	25.000	25.452	-1.8	100	-0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80877.D Vial: 17
Acq On : 29 Jan 2021 4:58 pm Operator: SCB
Sample : S1A0503-CALC Inst : MSD12
Misc : 1,1 0011062 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 13:17:53 2021 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.629	152	79664	40.0000	ug/ml	0.000
8) Naphthalene-d8	7.901	136	299818	40.0000	ug/ml	0.000
15) Acenaphthene-d10	9.632	164	159956	40.0000	ug/ml	0.000
23) Phenanthrene-d10	11.101	188	287451	40.0000	ug/ml	0.000
38) Chrysene-d12	14.482	240	214241	40.0000	ug/ml	0.000
42) Perylene-d12	16.982	264	246566	40.0000	ug/ml	0.000

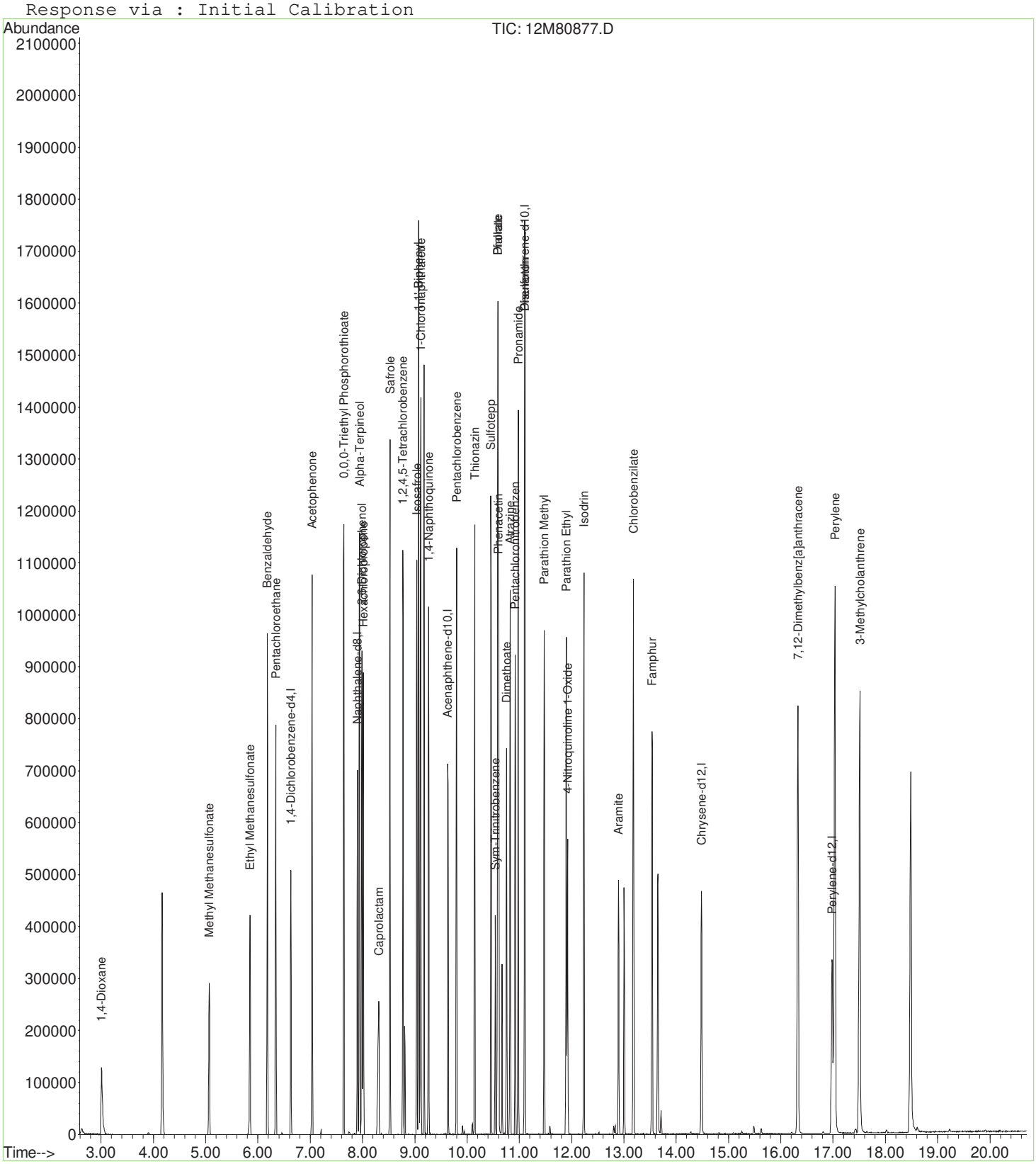
Target Compounds						Qvalue
2) 1,4-Dioxane	3.01	88	97704	92.4259	ug/ml	99
3) Methyl Methanesulfonate	5.07	80	121432	92.1132	ug/ml	99
4) Ethyl Methanesulfonate	5.85	79	155567	92.2748	ug/ml	99
5) Benzaldehyde	6.18	105	193744	92.1268	ug/ml	99
6) Pentachloroethane	6.34	167	91832	92.4328	ug/ml	99
7) Acetophenone	7.04	105	309721	90.4872	ug/ml	99
9) 0,0,0-Triethyl Phosphoroth	7.64	198	111281	92.4136	ug/ml	96
10) Alpha-Terpineol	7.94	59	176058	91.2406	ug/ml	99
11) 2,6-Dichlorophenol	7.99	162	181171	90.2763	ug/ml	100
12) Hexachloropropene	8.01	213	140948	93.1890	ug/ml	98
13) Caprolactam	8.31	55	78746	91.7478	ug/ml	99
14) Safrole	8.53	162	182462	93.3239	ug/ml	99
16) 1,2,4,5-Tetrachlorobenzene	8.77	216	198378	94.4533	ug/ml	99
17) Isosafrole	9.04	162	180380	94.3297	ug/ml	98
18) 1,1'-Biphenyl	9.08	154	571405	91.9315	ug/ml	100
19) 1-Chloronaphthalene	9.11	162	411287	91.6988	ug/ml	99
20) 1,4-Naphthoquinone	9.26	158	193968	90.2923	ug/ml	99
21) Pentachlorobenzene	9.80	250	168646	92.1349	ug/ml	99
22) Thionazin	10.14	107	76142	95.5218	ug/ml	99
24) Sulfotepp	10.46	322	83709	96.6339	ug/ml	99
25) Sym-Trinitrobenzene	10.54	75	91532	89.6872	ug/ml	99
26) Diallate	10.58	86	146074	94.8490	ug/ml	98
27) Phenacetin	10.60	108	235429	96.9492	ug/ml	99
28) Phorate	10.59	75	256477	93.8889	ug/ml#	99
29) Dimethoate	10.75	87	169427	94.1086	ug/ml	100
30) Atrazine	10.83	200	138086	93.1885	ug/ml	99
31) Pentachloronitrobenzen	10.92	237	52925	95.4893	ug/ml	99
32) Pronamide	10.98	173	217341	94.8361	ug/ml	100
33) Disulfoton	11.11	88	229468	86.2233	ug/ml	99
34) Parathion Methyl	11.47	109	158897	90.0365	ug/ml	99
35) Parathion Ethyl	11.90	97	86117	90.7235	ug/ml	98
36) 4-Nitroquinoline 1-Oxide	11.92	190	77246	89.7189	ug/ml	100
37) Isodrin	12.23	193	79122	94.8018	ug/ml	99
39) Aramite	12.90	185	45444	91.9598	ug/ml	99
40) Chlorobenzilate	13.18	251	209981	92.8356	ug/ml	99
41) Famphur	13.54	218	284943	92.6176	ug/ml	100
43) 7,12-Dimethylbenz[a]anthra	16.33	256	283639	92.0244	ug/ml	100
44) Perylene	17.04	252	679214	93.5006	ug/ml	100
45) 3-Methylcholanthrene	17.51	268	351991	97.8719	ug/ml	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80877.D Vial: 17
Acq On : 29 Jan 2021 4:58 pm Operator: SCB
Sample : S1A0503-CALC Inst : MSD12
Misc : 1,1 0011062 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 13:17 2021 Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80877.D Vial: 17
Acq On : 29 Jan 2021 4:58 pm Operator: SCB
Sample : S1A0503-CALC Inst : MSD12
Misc : 1,1 0011062 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	100	0.00
2		1,4-Dioxane	0.531	0.613	-15.4	100	0.00
3		Methyl Methanesulfonate	0.662	0.762	-15.1	100	0.00
4		Ethyl Methanesulfonate	0.847	0.976	-15.2	100	0.00
5		Benzaldehyde	1.056	1.216	-15.2	100	0.00
6		Pentachloroethane	0.499	0.576	-15.4	100	0.00
7		Acetophenone	1.719	1.944	-13.1	100	0.00
8	I	Naphthalene-d8	1.000	1.000	0.0	100	0.00
9		0,0,0-Triethyl Phosphorothi	0.161	0.186	-15.5	100	0.00
10		Alpha-Terpineol	0.257	0.294	-14.4	100	0.00
11		2,6-Dichlorophenol	0.268	0.302	-12.7	100	0.00
12		Hexachloropropene	0.202	0.235	-16.3	100	0.00
13		Caprolactam	0.115	0.131	-13.9	100	0.01
14		Safrole	0.261	0.304	-16.5	100	0.00
15	I	Acenaphthene-d10	1.000	1.000	0.0	100	0.00
16		1,2,4,5-Tetrachlorobenzene	0.525	0.620	-18.1	100	0.00
17		Isosafrole	0.478	0.564	-18.0	100	0.00
18		1,1'-Biphenyl	1.554	1.786	-14.9	100	0.00
19		1-Chloronaphthalene	1.122	1.286	-14.6	100	0.00
20		1,4-Naphthoquinone	0.490	0.606	-23.7	100	0.00
21		Pentachlorobenzene	0.458	0.527	-15.1	100	0.00
22		Thionazin	0.199	0.238	-19.6	100	0.00
23	I	Phenanthrene-d10	1.000	1.000	0.0	100	0.00
24		Sulfotepp	0.121	0.146	-20.7	100	0.00
25		Sym-Trinitrobenzene	0.121	0.159	-31.4	100	0.00
26		Diallate	0.214	0.254	-18.7	100	0.00
27		Phenacetin	0.338	0.410	-21.3	100	0.00
28		Phorate	0.380	0.446	-17.4	100	0.00
29		Dimethoate	0.251	0.295	-17.5	100	0.00
30		Atrazine	0.206	0.240	-16.5	100	0.00
31		Pentachloronitrobenzen	0.077	0.092	-19.5	100	0.00
32		Pronamide	0.319	0.378	-18.5	100	0.00
33		Disulfoton	0.370	0.399	-7.8	100	0.00
34		Parathion Methyl	0.220	0.276	-25.5	100	0.00
35		Parathion Ethyl	0.119	0.150	-26.1	100	0.00
36		4-Nitroquinoline 1-Oxide	0.096	0.134	-39.6	100	0.00
37		Isodrin	0.116	0.138	-19.0	100	0.00
38	I	Chrysene-d12	1.000	1.000	0.0	100	0.00
39		Aramite	0.081	0.106	-30.9	100	0.00
40		Chlorobenzilate	0.388	0.490	-26.3	100	0.00
41		Famphur	0.533	0.665	-24.8	100	0.00
42	I	Perylene-d12	1.000	1.000	0.0	100	0.00
43		7,12-Dimethylbenz[a]anthrac	0.459	0.575	-25.3	100	0.00
44		Perylene	1.178	1.377	-16.9	100	0.00
45		3-Methylcholanthrene	0.583	0.714	-22.5	100	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80877.D Vial: 17
Acq On : 29 Jan 2021 4:58 pm Operator: SCB
Sample : S1A0503-CALC Inst : MSD12
Misc : 1,1 0011062 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	100	0.00
2		1,4-Dioxane	80.000	92.426	-15.5	100	0.00
3		Methyl Methanesulfonate	80.000	92.113	-15.1	100	0.00
4		Ethyl Methanesulfonate	80.000	92.275	-15.3	100	0.00
5		Benzaldehyde	80.000	92.127	-15.2	100	0.00
6		Pentachloroethane	80.000	92.433	-15.5	100	0.00
7		Acetophenone	80.000	90.487	-13.1	100	0.00
8	I	Naphthalene-d8	40.000	40.000	0.0	100	0.00
9		0,0,0-Triethyl Phosphorothi	80.000	92.414	-15.5	100	0.00
10		Alpha-Terpineol	80.000	91.241	-14.1	100	0.00
11		2,6-Dichlorophenol	80.000	90.276	-12.8	100	0.00
12		Hexachloropropene	80.000	93.189	-16.5	100	0.00
13		Caprolactam	80.000	91.748	-14.7	100	0.01
14		Safrole	80.000	93.324	-16.7	100	0.00
15	I	Acenaphthene-d10	40.000	40.000	0.0	100	0.00
16		1,2,4,5-Tetrachlorobenzene	80.000	94.453	-18.1	100	0.00
17		Isosafrole	80.000	94.330	-17.9	100	0.00
18		1,1'-Biphenyl	80.000	91.931	-14.9	100	0.00
19		1-Chloronaphthalene	80.000	91.699	-14.6	100	0.00
20		1,4-Naphthoquinone	80.000	90.292	-12.9	100	0.00
21		Pentachlorobenzene	80.000	92.135	-15.2	100	0.00
22		Thionazin	80.000	95.522	-19.4	100	0.00
23	I	Phenanthrene-d10	40.000	40.000	0.0	100	0.00
24		Sulfotepp	80.000	96.634	-20.8	100	0.00
25		Sym-Trinitrobenzene	80.000	89.687	-12.1	100	0.00
26		Diallate	80.000	94.849	-18.6	100	0.00
27		Phenacetin	80.000	96.949	-21.2	100	0.00
28		Phorate	80.000	93.889	-17.4	100	0.00
29		Dimethoate	80.000	94.109	-17.6	100	0.00
30		Atrazine	80.000	93.188	-16.5	100	0.00
31		Pentachloronitrobenzen	80.000	95.489	-19.4	100	0.00
32		Pronamide	80.000	94.836	-18.5	100	0.00
33		Disulfoton	80.000	86.223	-7.8	100	0.00
34		Parathion Methyl	80.000	90.036	-12.5	100	0.00
35		Parathion Ethyl	80.000	90.724	-13.4	100	0.00
36		4-Nitroquinoline 1-Oxide	80.000	89.719	-12.1	100	0.00
37		Isodrin	80.000	94.802	-18.5	100	0.00
38	I	Chrysene-d12	40.000	40.000	0.0	100	0.00
39		Aramite	80.000	91.960	-14.9	100	0.00
40		Chlorobenzilate	80.000	92.836	-16.0	100	0.00
41		Famphur	80.000	92.618	-15.8	100	0.00
42	I	Perylene-d12	40.000	40.000	0.0	100	0.00
43		7,12-Dimethylbenz[a]anthrac	80.000	92.024	-15.0	100	0.00
44		Perylene	80.000	93.501	-16.9	100	0.00
45		3-Methylcholanthrene	80.000	97.872	-22.3	100	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80878.D Vial: 18
Acq On : 29 Jan 2021 5:28 pm Operator: SCB
Sample : S1A0503-CALB Inst : MSD12
Misc : 1,1 0011060 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 13:17:53 2021 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.629	152	93734	40.0000	ug/ml	0.000
8) Naphthalene-d8	7.901	136	356880	40.0000	ug/ml	0.000
15) Acenaphthene-d10	9.637	164	194786	40.0000	ug/ml	0.000
23) Phenanthrene-d10	11.101	188	354666	40.0000	ug/ml	0.000
38) Chrysene-d12	14.482	240	268448	40.0000	ug/ml	0.000
42) Perylene-d12	16.982	264	307458	40.0000	ug/ml	0.000

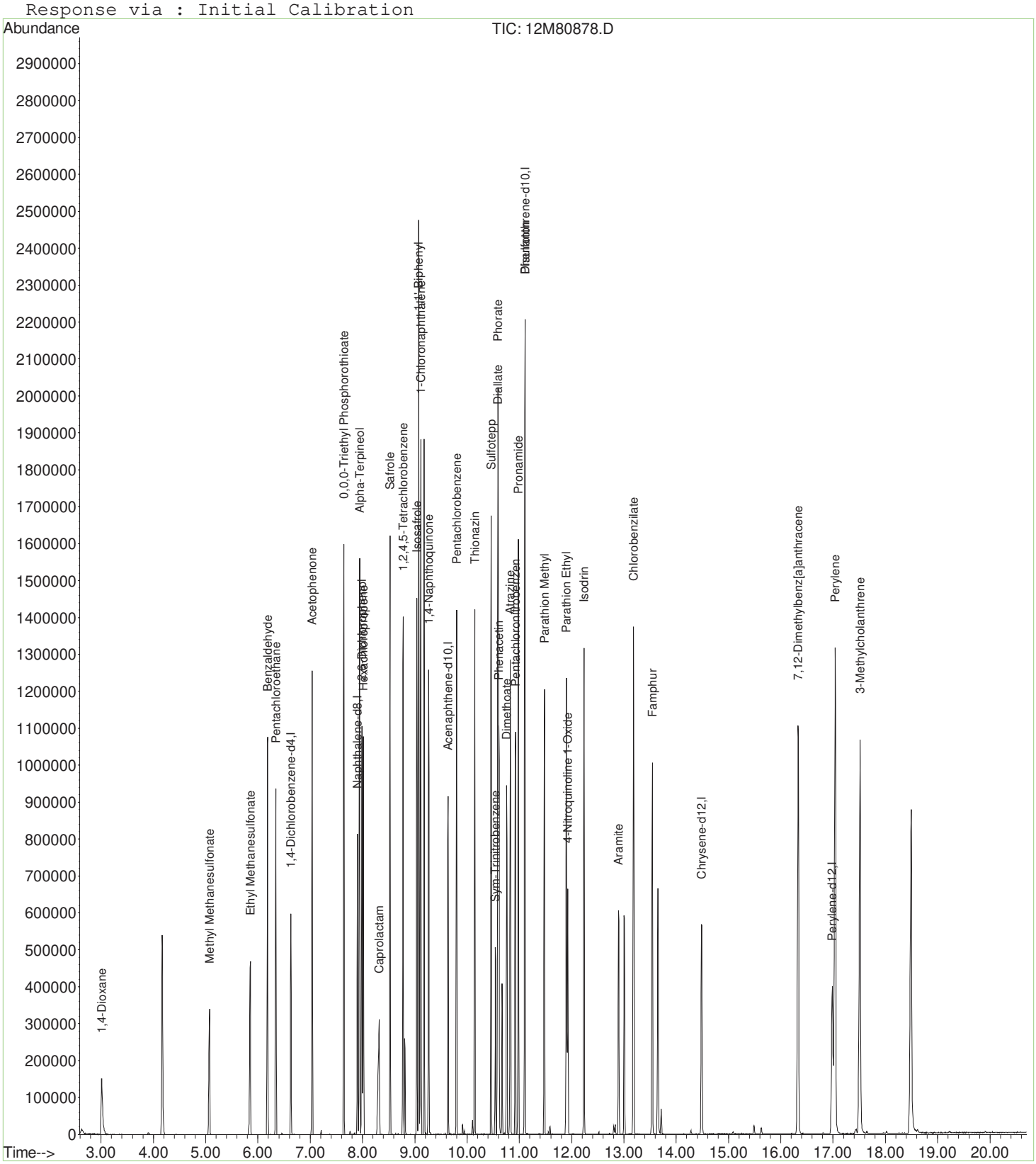
Target Compounds						Qvalue
2) 1,4-Dioxane	3.01	88	120425	96.8196	ug/ml	98
3) Methyl Methanesulfonate	5.07	80	152023	98.0083	ug/ml	98
4) Ethyl Methanesulfonate	5.85	79	193424	97.5081	ug/ml	99
5) Benzaldehyde	6.19	105	242250	97.9008	ug/ml	99
6) Pentachloroethane	6.34	167	113971	97.4970	ug/ml	100
7) Acetophenone	7.04	105	390038	96.8475	ug/ml	99
9) 0,0,0-Triethyl Phosphoroth	7.64	198	142062	99.1124	ug/ml	99
10) Alpha-Terpineol	7.94	59	220717	96.0956	ug/ml	99
11) 2,6-Dichlorophenol	7.99	162	231082	96.7356	ug/ml	99
12) Hexachloropropene	8.01	213	178730	99.2747	ug/ml	98
13) Caprolactam	8.32	55	104221	102.0135	ug/ml	100
14) Safrole	8.53	162	230403	99.0021	ug/ml	99
16) 1,2,4,5-Tetrachlorobenzene	8.78	216	249729	97.6417	ug/ml	99
17) Isosafrole	9.04	162	231060	99.2265	ug/ml	99
18) 1,1'-Biphenyl	9.08	154	721445	95.3161	ug/ml	100
19) 1-Chloronaphthalene	9.11	162	526175	96.3367	ug/ml	100
20) 1,4-Naphthoquinone	9.26	158	249409	95.2640	ug/ml	99
21) Pentachlorobenzene	9.80	250	217792	97.7086	ug/ml	99
22) Thionazin	10.14	107	99602	102.6098	ug/ml	99
24) Sulfotepp	10.46	322	108528	101.5415	ug/ml	99
25) Sym-Trinitrobenzene	10.54	75	122148	96.8159	ug/ml	98
26) Diallate	10.58	86	187724	98.7925	ug/ml#	80
27) Phenacetin	10.61	108	301775	100.7191	ug/ml	99
28) Phorate	10.59	75	328906	97.5847	ug/ml#	99
29) Dimethoate	10.76	87	216570	97.4965	ug/ml	99
30) Atrazine	10.83	200	180700	98.8360	ug/ml	100
31) Pentachloronitrobenzen	10.92	237	70265	102.7489	ug/ml	99
32) Pronamide	10.98	173	281371	99.5074	ug/ml	100
33) Disulfoton	11.11	88	295829	90.0923	ug/ml	99
34) Parathion Methyl	11.48	109	208473	95.6394	ug/ml	98
35) Parathion Ethyl	11.90	97	112580	96.0324	ug/ml	98
36) 4-Nitroquinoline 1-Oxide	11.93	190	103252	96.9444	ug/ml	99
37) Isodrin	12.23	193	103776	100.7768	ug/ml	100
39) Aramite	12.90	185	60570	97.7032	ug/ml	99
40) Chlorobenzilate	13.18	251	271674	95.8163	ug/ml	98
41) Famphur	13.54	218	369211	95.7372	ug/ml	100
43) 7,12-Dimethylbenz[a]anthra	16.34	256	367810	95.6488	ug/ml	99
44) Perylene	17.04	252	888789	98.1191	ug/ml	99
45) 3-Methylcholanthrene	17.52	268	458115	102.1523	ug/ml	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80878.D Vial: 18
Acq On : 29 Jan 2021 5:28 pm Operator: SCB
Sample : S1A0503-CALB Inst : MSD12
Misc : 1,1 0011060 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 13:17 2021 Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80878.D Vial: 18
Acq On : 29 Jan 2021 5:28 pm Operator: SCB
Sample : S1A0503-CALB Inst : MSD12
Misc : 1,1 0011060 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	100	0.00
2		1,4-Dioxane	0.531	0.514	3.2	100	0.00
3		Methyl Methanesulfonate	0.662	0.649	2.0	100	0.01
4		Ethyl Methanesulfonate	0.847	0.825	2.6	100	0.01
5		Benzaldehyde	1.056	1.034	2.1	100	0.00
6		Pentachloroethane	0.499	0.486	2.6	100	0.00
7		Acetophenone	1.719	1.664	3.2	100	0.00
8	I	Naphthalene-d8	1.000	1.000	0.0	100	0.00
9		0,0,0-Triethyl Phosphorothi	0.161	0.159	1.2	100	0.00
10		Alpha-Terpineol	0.257	0.247	3.9	100	0.00
11		2,6-Dichlorophenol	0.268	0.259	3.4	100	0.00
12		Hexachloropropene	0.202	0.200	1.0	100	0.00
13		Caprolactam	0.115	0.117	-1.7	100	0.02
14		Safrole	0.261	0.258	1.1	100	0.00
15	I	Acenaphthene-d10	1.000	1.000	0.0	100	0.00
16		1,2,4,5-Tetrachlorobenzene	0.525	0.513	2.3	100	0.00
17		Isosafrole	0.478	0.474	0.8	100	0.00
18		1,1'-Biphenyl	1.554	1.482	4.6	100	0.00
19		1-Chloronaphthalene	1.122	1.081	3.7	100	0.00
20		1,4-Naphthoquinone	0.490	0.512	-4.5	100	0.00
21		Pentachlorobenzene	0.458	0.447	2.4	100	0.00
22		Thionazin	0.199	0.205	-3.0	100	0.00
23	I	Phenanthrene-d10	1.000	1.000	0.0	100	0.00
24		Sulfotepp	0.121	0.122	-0.8	100	0.00
25		Sym-Trinitrobenzene	0.121	0.138	-14.0	100	0.00
26		Diallate	0.214	0.212	0.9	100	0.00
27		Phenacetin	0.338	0.340	-0.6	100	0.01
28		Phorate	0.380	0.371	2.4	100	0.00
29		Dimethoate	0.251	0.244	2.8	100	0.00
30		Atrazine	0.206	0.204	1.0	100	0.00
31		Pentachloronitrobenzen	0.077	0.079	-2.6	100	0.00
32		Pronamide	0.319	0.317	0.6	100	0.00
33		Disulfoton	0.370	0.334	9.7	100	0.00
34		Parathion Methyl	0.220	0.235	-6.8	100	0.00
35		Parathion Ethyl	0.119	0.127	-6.7	100	0.00
36		4-Nitroquinoline 1-Oxide	0.096	0.116	-20.8	100	0.00
37		Isodrin	0.116	0.117	-0.9	100	0.00
38	I	Chrysene-d12	1.000	1.000	0.0	100	0.00
39		Aramite	0.081	0.090	-11.1	100	0.00
40		Chlorobenzilate	0.388	0.405	-4.4	100	0.00
41		Famphur	0.533	0.550	-3.2	100	0.00
42	I	Perylene-d12	1.000	1.000	0.0	100	0.00
43		7,12-Dimethylbenz[a]anthrac	0.459	0.479	-4.4	100	0.01
44		Perylene	1.178	1.156	1.9	100	0.00
45		3-Methylcholanthrene	0.583	0.596	-2.2	100	0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80878.D Vial: 18
Acq On : 29 Jan 2021 5:28 pm Operator: SCB
Sample : S1A0503-CALB Inst : MSD12
Misc : 1,1 0011060 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	100	0.00
2		1,4-Dioxane	100.000	96.820	3.2	100	0.00
3		Methyl Methanesulfonate	100.000	98.008	2.0	100	0.01
4		Ethyl Methanesulfonate	100.000	97.508	2.5	100	0.01
5		Benzaldehyde	100.000	97.901	2.1	100	0.00
6		Pentachloroethane	100.000	97.497	2.5	100	0.00
7		Acetophenone	100.000	96.847	3.2	100	0.00
8	I	Naphthalene-d8	40.000	40.000	0.0	100	0.00
9		0,0,0-Triethyl Phosphorothi	100.000	99.112	0.9	100	0.00
10		Alpha-Terpineol	100.000	96.096	3.9	100	0.00
11		2,6-Dichlorophenol	100.000	96.736	3.3	100	0.00
12		Hexachloropropene	100.000	99.275	0.7	100	0.00
13		Caprolactam	100.000	102.014	-2.0	100	0.02
14		Safrole	100.000	99.002	1.0	100	0.00
15	I	Acenaphthene-d10	40.000	40.000	0.0	100	0.00
16		1,2,4,5-Tetrachlorobenzene	100.000	97.642	2.4	100	0.00
17		Isosafrole	100.000	99.226	0.8	100	0.00
18		1,1'-Biphenyl	100.000	95.316	4.7	100	0.00
19		1-Chloronaphthalene	100.000	96.337	3.7	100	0.00
20		1,4-Naphthoquinone	100.000	95.264	4.7	100	0.00
21		Pentachlorobenzene	100.000	97.709	2.3	100	0.00
22		Thionazin	100.000	102.610	-2.6	100	0.00
23	I	Phenanthrene-d10	40.000	40.000	0.0	100	0.00
24		Sulfotepp	100.000	101.542	-1.5	100	0.00
25		Sym-Trinitrobenzene	100.000	96.816	3.2	100	0.00
26		Diallate	100.000	98.793	1.2	100	0.00
27		Phenacetin	100.000	100.719	-0.7	100	0.01
28		Phorate	100.000	97.585	2.4	100	0.00
29		Dimethoate	100.000	97.497	2.5	100	0.00
30		Atrazine	100.000	98.836	1.2	100	0.00
31		Pentachloronitrobenzen	100.000	102.749	-2.7	100	0.00
32		Pronamide	100.000	99.507	0.5	100	0.00
33		Disulfoton	100.000	90.092	9.9	100	0.00
34		Parathion Methyl	100.000	95.639	4.4	100	0.00
35		Parathion Ethyl	100.000	96.032	4.0	100	0.00
36		4-Nitroquinoline 1-Oxide	100.000	96.944	3.1	100	0.00
37		Isodrin	100.000	100.777	-0.8	100	0.00
38	I	Chrysene-d12	40.000	40.000	0.0	100	0.00
39		Aramite	100.000	97.703	2.3	100	0.00
40		Chlorobenzilate	100.000	95.816	4.2	100	0.00
41		Famphur	100.000	95.737	4.3	100	0.00
42	I	Perylene-d12	40.000	40.000	0.0	100	0.00
43		7,12-Dimethylbenz[a]anthrac	100.000	95.649	4.4	100	0.01
44		Perylene	100.000	98.119	1.9	100	0.00
45		3-Methylcholanthrene	100.000	102.152	-2.2	100	0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80879.D Vial: 19
Acq On : 29 Jan 2021 5:58 pm Operator: SCB
Sample : S1A0503-CALA Inst : MSD12
Misc : 1,1 0011058 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 13:17:54 2021 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.629	152	82190	40.0000	ug/ml	0.000
8) Naphthalene-d8	7.900	136	314254	40.0000	ug/ml	0.000
15) Acenaphthene-d10	9.637	164	173597	40.0000	ug/ml	0.000
23) Phenanthrene-d10	11.100	188	326280	40.0000	ug/ml	0.000
38) Chrysene-d12	14.482	240	249624	40.0000	ug/ml	0.000
42) Perylene-d12	16.982	264	286257	40.0000	ug/ml	0.000

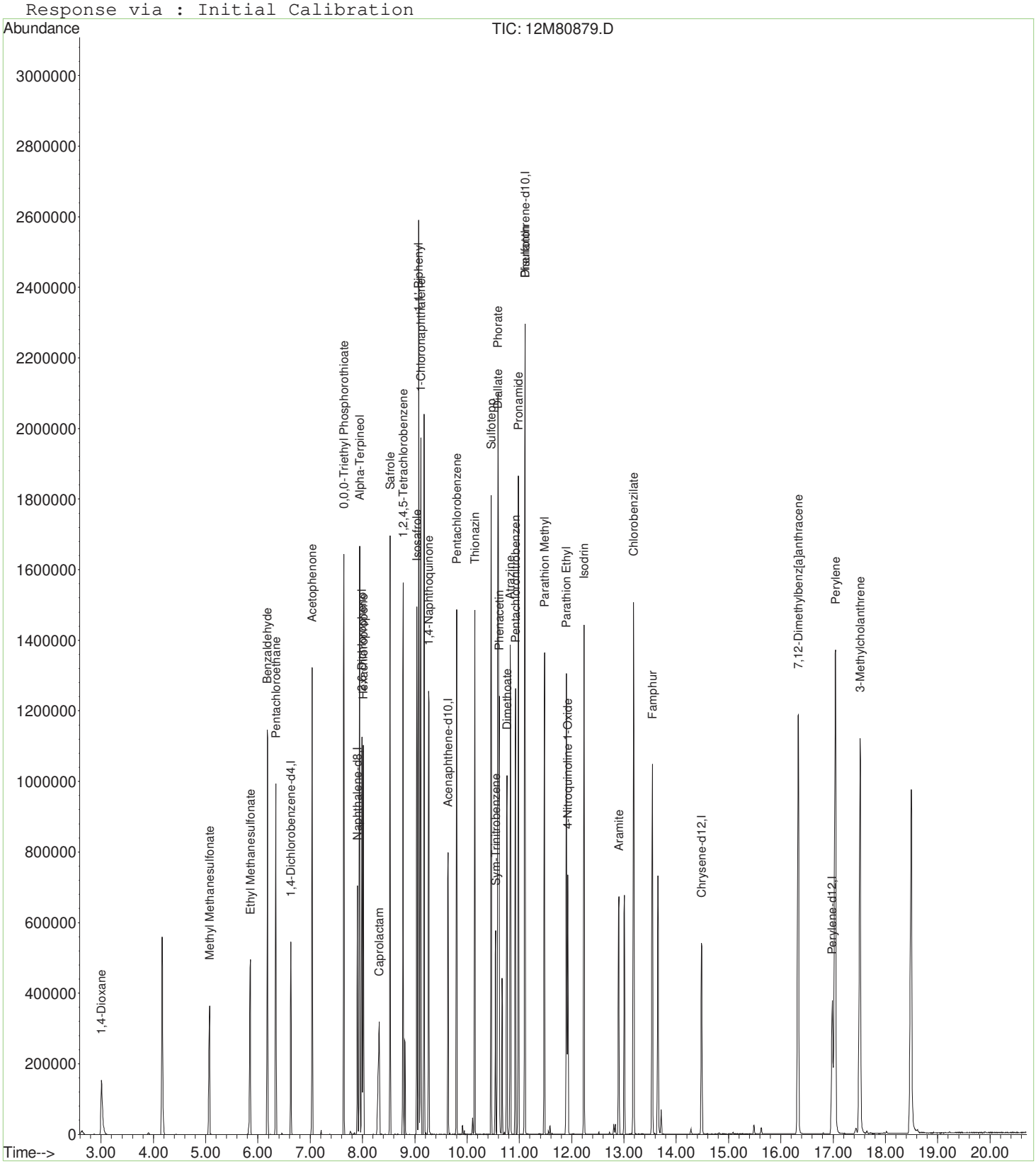
Target Compounds						Qvalue
2) 1,4-Dioxane	3.01	88	129827	119.0391	ug/ml	100
3) Methyl Methanesulfonate	5.07	80	160646	118.1141	ug/ml	99
4) Ethyl Methanesulfonate	5.85	79	206653	118.8093	ug/ml	99
5) Benzaldehyde	6.19	105	257149	118.5183	ug/ml	99
6) Pentachloroethane	6.34	167	121032	118.0797	ug/ml	99
7) Acetophenone	7.04	105	414347	117.3340	ug/ml	100
9) 0,0,0-Triethyl Phosphoroth	7.64	198	151419	119.9698	ug/ml	99
10) Alpha-Terpineol	7.94	59	230307	113.8718	ug/ml	97
11) 2,6-Dichlorophenol	7.99	162	247142	117.4920	ug/ml	99
12) Hexachloropropene	8.01	213	191756	120.9572	ug/ml	98
13) Caprolactam	8.32	55	113354	126.0030	ug/ml	99
14) Safrole	8.53	162	247589	120.8172	ug/ml	100
16) 1,2,4,5-Tetrachlorobenzene	8.78	216	267717	117.4513	ug/ml	99
17) Isosafrole	9.04	162	246772	118.9088	ug/ml	99
18) 1,1'-Biphenyl	9.08	154	773522	114.6704	ug/ml	99
19) 1-Chloronaphthalene	9.11	162	565093	116.0906	ug/ml	100
20) 1,4-Naphthoquinone	9.27	158	275013	117.5419	ug/ml	99
21) Pentachlorobenzene	9.80	250	235668	118.6334	ug/ml	99
22) Thionazin	10.14	107	109409	126.4705	ug/ml	100
24) Sulfotepp	10.46	322	119553	121.5882	ug/ml	99
25) Sym-Trinitrobenzene	10.54	75	138671	118.9357	ug/ml	99
26) Diallate	10.58	86	204163	116.7913	ug/ml#	79
27) Phenacetin	10.61	108	338971	122.9760	ug/ml	100
28) Phorate	10.59	75	363468	117.2210	ug/ml#	100
29) Dimethoate	10.76	87	236803	115.8796	ug/ml	98
30) Atrazine	10.83	200	197573	117.4664	ug/ml	98
31) Pentachloronitrobenzen	10.92	237	75276	119.6531	ug/ml	99
32) Pronamide	10.98	173	311342	119.6859	ug/ml	99
33) Disulfoton	11.11	88	325204	107.6544	ug/ml	99
34) Parathion Methyl	11.48	109	233166	115.9286	ug/ml	99
35) Parathion Ethyl	11.90	97	124939	115.5255	ug/ml	99
36) 4-Nitroquinoline 1-Oxide	11.93	190	116858	118.5679	ug/ml	99
37) Isodrin	12.24	193	115264	121.6708	ug/ml	99
39) Aramite	12.90	185	66264	114.6286	ug/ml	98
40) Chlorobenzilate	13.18	251	303840	114.9867	ug/ml	98
41) Famphur	13.54	218	408796	113.7830	ug/ml	100
43) 7,12-Dimethylbenz[a]anthra	16.34	256	421311	117.3859	ug/ml	99
44) Perylene	17.05	252	1006347	119.3253	ug/ml	100
45) 3-Methylcholanthrene	17.52	268	521333	124.8586	ug/ml	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80879.D Vial: 19
Acq On : 29 Jan 2021 5:58 pm Operator: SCB
Sample : S1A0503-CALA Inst : MSD12
Misc : 1,1 0011058 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 13:17 2021 Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80879.D Vial: 19
Acq On : 29 Jan 2021 5:58 pm Operator: SCB
Sample : S1A0503-CALA Inst : MSD12
Misc : 1,1 0011058 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	100	0.00
2		1,4-Dioxane	0.531	0.527	0.8	100	0.00
3		Methyl Methanesulfonate	0.662	0.652	1.5	100	0.01
4		Ethyl Methanesulfonate	0.847	0.838	1.1	100	0.01
5		Benzaldehyde	1.056	1.043	1.2	100	0.00
6		Pentachloroethane	0.499	0.491	1.6	100	0.00
7		Acetophenone	1.719	1.680	2.3	100	0.00
8	I	Naphthalene-d8	1.000	1.000	0.0	100	0.00
9		0,0,0-Triethyl Phosphorothi	0.161	0.161	0.0	100	0.00
10		Alpha-Terpineol	0.257	0.244	5.1	100	0.00
11		2,6-Dichlorophenol	0.268	0.262	2.2	100	0.00
12		Hexachloropropene	0.202	0.203	-0.5	100	0.00
13		Caprolactam	0.115	0.120	-4.3	100	0.02
14		Safrole	0.261	0.263	-0.8	100	0.00
15	I	Acenaphthene-d10	1.000	1.000	0.0	100	0.00
16		1,2,4,5-Tetrachlorobenzene	0.525	0.514	2.1	100	0.00
17		Isosafrole	0.478	0.474	0.8	100	0.00
18		1,1'-Biphenyl	1.554	1.485	4.4	100	0.00
19		1-Chloronaphthalene	1.122	1.085	3.3	100	0.00
20		1,4-Naphthoquinone	0.490	0.528	-7.8	100	0.00
21		Pentachlorobenzene	0.458	0.453	1.1	100	0.00
22		Thionazin	0.199	0.210	-5.5	100	0.00
23	I	Phenanthrene-d10	1.000	1.000	0.0	100	0.00
24		Sulfotepp	0.121	0.122	-0.8	100	0.00
25		Sym-Trinitrobenzene	0.121	0.142	-17.4	100	0.01
26		Diallate	0.214	0.209	2.3	100	0.00
27		Phenacetin	0.338	0.346	-2.4	100	0.02
28		Phorate	0.380	0.371	2.4	100	0.00
29		Dimethoate	0.251	0.242	3.6	100	0.01
30		Atrazine	0.206	0.202	1.9	100	0.00
31		Pentachloronitrobenzen	0.077	0.077	0.0	100	0.00
32		Pronamide	0.319	0.318	0.3	100	0.00
33		Disulfoton	0.370	0.332	10.3	100	0.00
34		Parathion Methyl	0.220	0.238	-8.2	100	0.00
35		Parathion Ethyl	0.119	0.128	-7.6	100	0.00
36		4-Nitroquinoline 1-Oxide	0.096	0.119	-24.0	100	0.00
37		Isodrin	0.116	0.118	-1.7	100	0.00
38	I	Chrysene-d12	1.000	1.000	0.0	100	0.00
39		Aramite	0.081	0.088	-8.6	100	0.00
40		Chlorobenzilate	0.388	0.406	-4.6	100	0.00
41		Famphur	0.533	0.546	-2.4	100	0.00
42	I	Perylene-d12	1.000	1.000	0.0	100	0.00
43		7,12-Dimethylbenz[a]anthrac	0.459	0.491	-7.0	100	0.01
44		Perylene	1.178	1.172	0.5	100	0.01
45		3-Methylcholanthrene	0.583	0.607	-4.1	100	0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80879.D Vial: 19
Acq On : 29 Jan 2021 5:58 pm Operator: SCB
Sample : S1A0503-CALA Inst : MSD12
Misc : 1,1 0011058 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	100	0.00
2		1,4-Dioxane	120.000	119.039	0.8	100	0.00
3		Methyl Methanesulfonate	120.000	118.114	1.6	100	0.01
4		Ethyl Methanesulfonate	120.000	118.809	1.0	100	0.01
5		Benzaldehyde	120.000	118.518	1.2	100	0.00
6		Pentachloroethane	120.000	118.080	1.6	100	0.00
7		Acetophenone	120.000	117.334	2.2	100	0.00
8	I	Naphthalene-d8	40.000	40.000	0.0	100	0.00
9		0,0,0-Triethyl Phosphorothi	120.000	119.970	0.0	100	0.00
10		Alpha-Terpineol	120.000	113.872	5.1	100	0.00
11		2,6-Dichlorophenol	120.000	117.492	2.1	100	0.00
12		Hexachloropropene	120.000	120.957	-0.8	100	0.00
13		Caprolactam	120.000	126.003	-5.0	100	0.02
14		Safrole	120.000	120.817	-0.7	100	0.00
15	I	Acenaphthene-d10	40.000	40.000	0.0	100	0.00
16		1,2,4,5-Tetrachlorobenzene	120.000	117.451	2.1	100	0.00
17		Isosafrole	120.000	118.909	0.9	100	0.00
18		1,1'-Biphenyl	120.000	114.670	4.4	100	0.00
19		1-Chloronaphthalene	120.000	116.091	3.3	100	0.00
20		1,4-Naphthoquinone	120.000	117.542	2.0	100	0.00
21		Pentachlorobenzene	120.000	118.633	1.1	100	0.00
22		Thionazin	120.000	126.471	-5.4	100	0.00
23	I	Phenanthrene-d10	40.000	40.000	0.0	100	0.00
24		Sulfotepp	120.000	121.588	-1.3	100	0.00
25		Sym-Trinitrobenzene	120.000	118.936	0.9	100	0.01
26		Diallate	120.000	116.791	2.7	100	0.00
27		Phenacetin	120.000	122.976	-2.5	100	0.02
28		Phorate	120.000	117.221	2.3	100	0.00
29		Dimethoate	120.000	115.880	3.4	100	0.01
30		Atrazine	120.000	117.466	2.1	100	0.00
31		Pentachloronitrobenzen	120.000	119.653	0.3	100	0.00
32		Pronamide	120.000	119.686	0.3	100	0.00
33		Disulfoton	120.000	107.654	10.3	100	0.00
34		Parathion Methyl	120.000	115.929	3.4	100	0.00
35		Parathion Ethyl	120.000	115.525	3.7	100	0.00
36		4-Nitroquinoline 1-Oxide	120.000	118.568	1.2	100	0.00
37		Isodrin	120.000	121.671	-1.4	100	0.00
38	I	Chrysene-d12	40.000	40.000	0.0	100	0.00
39		Aramite	120.000	114.629	4.5	100	0.00
40		Chlorobenzilate	120.000	114.987	4.2	100	0.00
41		Famphur	120.000	113.783	5.2	100	0.00
42	I	Perylene-d12	40.000	40.000	0.0	100	0.00
43		7,12-Dimethylbenz[a]anthrac	120.000	117.386	2.2	100	0.01
44		Perylene	120.000	119.325	0.6	100	0.01
45		3-Methylcholanthrene	120.000	124.859	-4.0	100	0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80880.D Vial: 20
Acq On : 29 Jan 2021 6:28 pm Operator: SCB
Sample : S1A0503-ICV3 Inst : MSD12
Misc : 1,1 0012179 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 13:17:54 2021 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

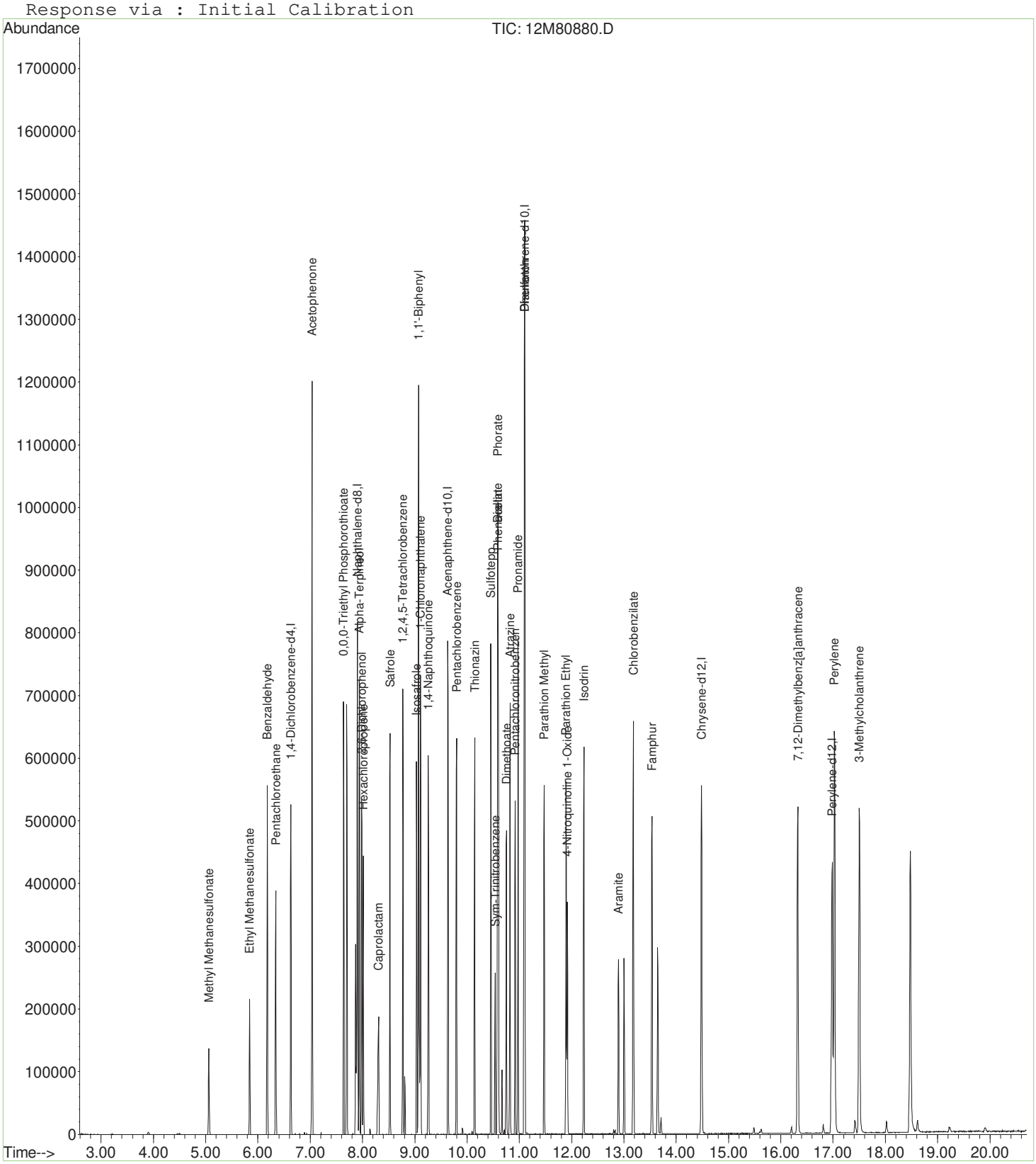
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.629	152	81923	40.0000	ug/ml	0.000
8) Naphthalene-d8	7.901	136	314816	40.0000	ug/ml	0.000
15) Acenaphthene-d10	9.632	164	170885	40.0000	ug/ml	0.000
23) Phenanthrene-d10	11.095	188	314431	40.0000	ug/ml	0.000
38) Chrysene-d12	14.482	240	243014	40.0000	ug/ml	0.000
42) Perylene-d12	16.982	264	286113	40.0000	ug/ml	0.000
Target Compounds						Qvalue
3) Methyl Methanesulfonate	5.06	80	53153	39.2078	ug/ml	99
4) Ethyl Methanesulfonate	5.84	79	73458	42.3702	ug/ml	97
5) Benzaldehyde	6.18	105	114344	52.8722	ug/ml	100
6) Pentachloroethane	6.34	167	46028	45.0516	ug/ml	99
7) Acetophenone	7.04	105	340163	96.6407	ug/ml	100
9) 0,0,0-Triethyl Phosphoroth	7.64	198	59801	47.2960	ug/ml	98
10) Alpha-Terpineol	7.94	59	98079	48.4071	ug/ml	100
11) 2,6-Dichlorophenol	7.99	162	111055	52.7016	ug/ml	100
12) Hexachloropropene	8.01	213	67651	42.5972	ug/ml	97
13) Caprolactam	8.31	55	48000	53.2610	ug/ml	98
14) Safrole	8.53	162	93451	45.5203	ug/ml	99
16) 1,2,4,5-Tetrachlorobenzene	8.77	216	116358	51.8581	ug/ml	100
17) Isosafrole	9.03	162	92669	45.3619	ug/ml	99
18) 1,1'-Biphenyl	9.07	154	338919	51.0403	ug/ml	99
19) 1-Chloronaphthalene	9.11	162	239494	49.9816	ug/ml	95
20) 1,4-Naphthoquinone	9.26	158	111768	49.3282	ug/ml	98
21) Pentachlorobenzene	9.80	250	100070	51.1739	ug/ml	99
22) Thionazin	10.14	107	41621	48.8750	ug/ml	98
24) Sulfotepp	10.45	322	47738	50.3802	ug/ml	100
25) Sym-Trinitrobenzene	10.53	75	54109	49.5270	ug/ml	97
26) Diallate	10.58	86	86823	51.5387	ug/ml	99
27) Phenacetin	10.60	108	140291	52.8144	ug/ml	99
28) Phorate	10.59	75	141757	47.4404	ug/ml#	100
29) Dimethoate	10.75	87	103134	52.3705	ug/ml	100
30) Atrazine	10.82	200	81652	50.3753	ug/ml	99
31) Pentachloronitrobenzen	10.92	237	30878	50.9309	ug/ml	99
32) Pronamide	10.97	173	130817	52.1837	ug/ml	100
33) Disulfoton	11.10	88	128152	44.0217	ug/ml#	92
34) Parathion Methyl	11.47	109	95321	50.0999	ug/ml	99
35) Parathion Ethyl	11.89	97	50046	48.9287	ug/ml	98
36) 4-Nitroquinoline 1-Oxide	11.92	190	45863	50.0813	ug/ml	98
37) Isodrin	12.23	193	46408	50.8336	ug/ml	98
39) Aramite	12.90	185	26949	48.9412	ug/ml	99
40) Chlorobenzilate	13.18	251	128959	50.8413	ug/ml	98
41) Famphur	13.54	218	174869	50.6200	ug/ml	99
43) 7,12-Dimethylbenz[a]anthra	16.33	256	164378	46.5906	ug/ml	99
44) Perylene	17.03	252	392382	46.5492	ug/ml	100
45) 3-Methylcholanthrene	17.50	268	214574	51.4161	ug/ml	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\012921\12M80880.D Vial: 20
Acq On : 29 Jan 2021 6:28 pm Operator: SCB
Sample : S1A0503-ICV3 Inst : MSD12
Misc : 1,1 0012179 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 13:17 2021 Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80880.D Vial: 20
Acq On : 29 Jan 2021 6:28 pm Operator: SCB
Sample : S1A0503-ICV3 Inst : MSD12
Misc : 1,1 0012179 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	83	0.00
2		1,4-Dioxane	0.531	0.000#	100.0#	0#	-3.01#
3		Methyl Methanesulfonate	0.662	0.519	21.6	66	0.00
4		Ethyl Methanesulfonate	0.847	0.717	15.3	71	0.00
5		Benzaldehyde	1.056	1.117	-5.8	88	0.00
6		Pentachloroethane	0.499	0.449	10.0	76	0.00
7		Acetophenone	1.719	3.322	-93.3#	161	0.00
8	I	Naphthalene-d8	1.000	1.000	0.0	84	0.00
9		0,0,0-Triethyl Phosphorothi	0.161	0.152	5.6	79	0.00
10		Alpha-Terpineol	0.257	0.249	3.1	82	0.00
11		2,6-Dichlorophenol	0.268	0.282	-5.2	87	0.00
12		Hexachloropropene	0.202	0.172	14.9	72	0.00
13		Caprolactam	0.115	0.122	-6.1	90	0.00
14		Safrole	0.261	0.237	9.2	75	0.00
15	I	Acenaphthene-d10	1.000	1.000	0.0	82	0.00
16		1,2,4,5-Tetrachlorobenzene	0.525	0.545	-3.8	87	0.00
17		Isosafrole	0.478	0.434	9.2	75	0.00
18		1,1'-Biphenyl	1.554	1.587	-2.1	85	0.00
19		1-Chloronaphthalene	1.122	1.121	0.1	84	0.00
20		1,4-Naphthoquinone	0.490	0.523	-6.7	84	0.00
21		Pentachlorobenzene	0.458	0.468	-2.2	85	0.00
22		Thionazin	0.199	0.195	2.0	77	0.00
23	I	Phenanthrene-d10	1.000	1.000	0.0	82	0.00
24		Sulfotepp	0.121	0.121	0.0	82	0.00
25		Sym-Trinitrobenzene	0.121	0.138	-14.0	86	0.00
26		Diallate	0.214	0.221	-3.3	85	0.00
27		Phenacetin	0.338	0.357	-5.6	84	0.00
28		Phorate	0.380	0.361	5.0	78	0.00
29		Dimethoate	0.251	0.262	-4.4	83	0.00
30		Atrazine	0.206	0.208	-1.0	83	0.00
31		Pentachloronitrobenzen	0.077	0.079	-2.6	81	0.00
32		Pronamide	0.319	0.333	-4.4	84	0.00
33		Disulfoton	0.370	0.326	11.9	77	0.00
34		Parathion Methyl	0.220	0.243	-10.5	83	0.00
35		Parathion Ethyl	0.119	0.127	-6.7	83	0.00
36		4-Nitroquinoline 1-Oxide	0.096	0.117	-21.9	85	0.00
37		Isodrin	0.116	0.118	-1.7	82	0.00
38	I	Chrysene-d12	1.000	1.000	0.0	81	0.00
39		Aramite	0.081	0.089	-9.9	84	0.00
40		Chlorobenzilate	0.388	0.425	-9.5	87	0.00
41		Famphur	0.533	0.576	-8.1	84	0.00
42	I	Perylene-d12	1.000	1.000	0.0	81	0.00
43		7,12-Dimethylbenz[a]anthrac	0.459	0.460	-0.2	81	0.00
44		Perylene	1.178	1.097	6.9	77	-0.01
45		3-Methylcholanthrene	0.583	0.600	-2.9	80	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\012921\12M80880.D Vial: 20
Acq On : 29 Jan 2021 6:28 pm Operator: SCB
Sample : S1A0503-ICV3 Inst : MSD12
Misc : 1,1 0012179 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Multiple Level Calibration

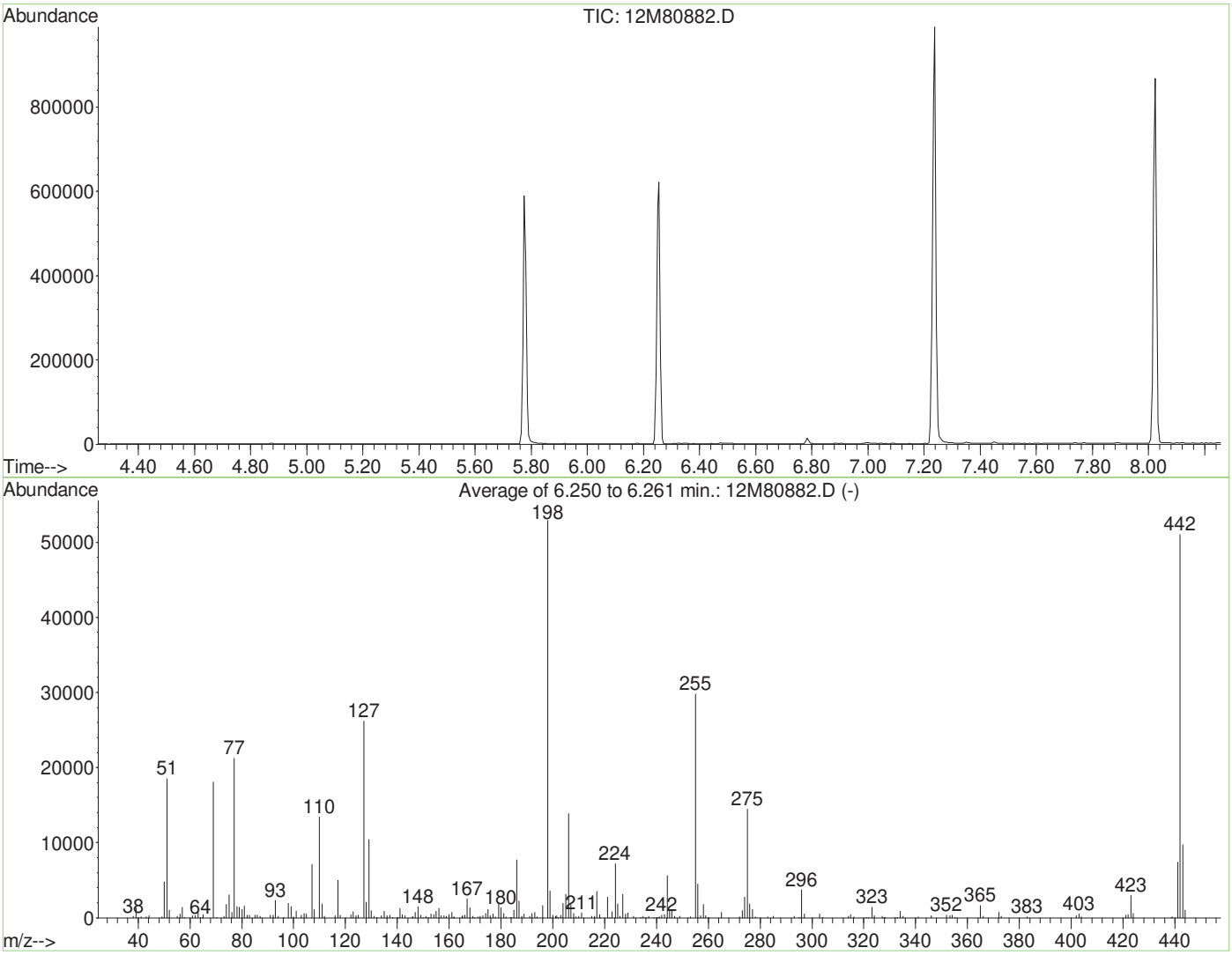
Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	83	0.00
2		1,4-Dioxane	50.000	0.000	100.0#	0	-3.01#
3		Methyl Methanesulfonate	50.000	39.208	21.6	66	0.00
4		Ethyl Methanesulfonate	50.000	42.370	15.3	71	0.00
5		Benzaldehyde	50.000	52.872	-5.7	88	0.00
6		Pentachloroethane	50.000	45.052	9.9	76	0.00
7		Acetophenone	50.000	96.641	-93.3#	161	0.00
8	I	Naphthalene-d8	40.000	40.000	0.0	84	0.00
9		0,0,0-Triethyl Phosphorothi	50.000	47.296	5.4	79	0.00
10		Alpha-Terpineol	50.000	48.407	3.2	82	0.00
11		2,6-Dichlorophenol	50.000	52.702	-5.4	87	0.00
12		Hexachloropropene	50.000	42.597	14.8	72	0.00
13		Caprolactam	50.000	53.261	-6.5	90	0.00
14		Safrole	50.000	45.520	9.0	75	0.00
15	I	Acenaphthene-d10	40.000	40.000	0.0	82	0.00
16		1,2,4,5-Tetrachlorobenzene	50.000	51.858	-3.7	87	0.00
17		Isosafrole	50.000	45.362	9.3	75	0.00
18		1,1'-Biphenyl	50.000	51.040	-2.1	85	0.00
19		1-Chloronaphthalene	50.000	49.982	0.0	84	0.00
20		1,4-Naphthoquinone	50.000	49.328	1.3	84	0.00
21		Pentachlorobenzene	50.000	51.174	-2.3	85	0.00
22		Thionazin	50.000	48.875	2.3	77	0.00
23	I	Phenanthrene-d10	40.000	40.000	0.0	82	0.00
24		Sulfotepp	50.000	50.380	-0.8	82	0.00
25		Sym-Trinitrobenzene	50.000	49.527	0.9	86	0.00
26		Diallate	50.000	51.539	-3.1	85	0.00
27		Phenacetin	50.000	52.814	-5.6	84	0.00
28		Phorate	50.000	47.440	5.1	78	0.00
29		Dimethoate	50.000	52.371	-4.7	83	0.00
30		Atrazine	50.000	50.375	-0.8	83	0.00
31		Pentachloronitrobenzen	50.000	50.931	-1.9	81	0.00
32		Pronamide	50.000	52.184	-4.4	84	0.00
33		Disulfoton	50.000	44.022	12.0	77	0.00
34		Parathion Methyl	50.000	50.100	-0.2	83	0.00
35		Parathion Ethyl	50.000	48.929	2.1	83	0.00
36		4-Nitroquinoline 1-Oxide	50.000	50.081	-0.2	85	0.00
37		Isodrin	50.000	50.834	-1.7	82	0.00
38	I	Chrysene-d12	40.000	40.000	0.0	81	0.00
39		Aramite	50.000	48.941	2.1	84	0.00
40		Chlorobenzilate	50.000	50.841	-1.7	87	0.00
41		Famphur	50.000	50.620	-1.2	84	0.00
42	I	Perylene-d12	40.000	40.000	0.0	81	0.00
43		7,12-Dimethylbenz[a]anthrac	50.000	46.591	6.8	81	0.00
44		Perylene	50.000	46.549	6.9	77	-0.01
45		3-Methylcholanthrene	50.000	51.416	-2.8	80	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

DFTPP

Data File : I:\MSDCHEM\1\DATA\020121\12M80882.D Vial: 1
Acq On : 1 Feb 2021 1:11 pm Operator: SCB
Sample : S1B0011-TUN1 Inst : MSD12
Misc : 1,1 0008021 S1A0503-TUN2 Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP



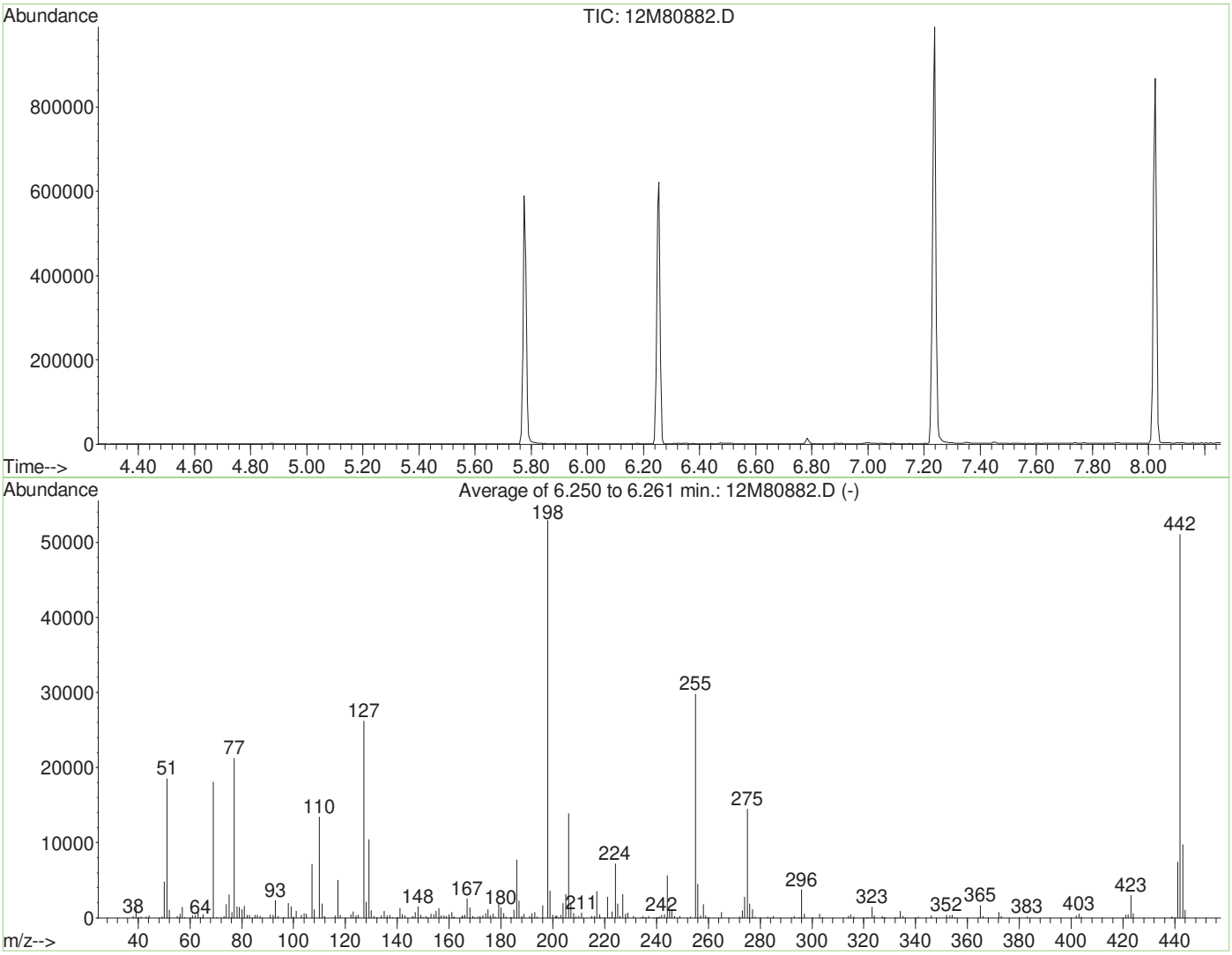
AutoFind: Scans 687, 688, 689; Background Corrected with Scan 682

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	35.0	18546	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	34.1	18066	PASS
70	69	0.00	2	0.3	62	PASS
127	198	40	60	49.4	26161	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	52920	PASS
199	198	5	9	6.8	3573	PASS
275	198	10	30	27.4	14481	PASS
365	198	1	100	3.1	1616	PASS
441	443	0.01	100	76.2	7432	PASS
442	198	40	100	96.4	51029	PASS
443	442	17	23	19.1	9754	PASS

12M80882.D DFTPP.M Tue Feb 02 08:24:05 2021

DFTPP

Data File : I:\MSDCHEM\1\DATA\020121\12M80882.D Vial: 1
Acq On : 1 Feb 2021 1:11 pm Operator: SCB
Sample : S1B0011-TUN1 Inst : MSD12
Misc : 1,1 0008021 S1A0503-TUN2 Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP



AutoFind: Scans 687, 688, 689; Background Corrected with Scan 682

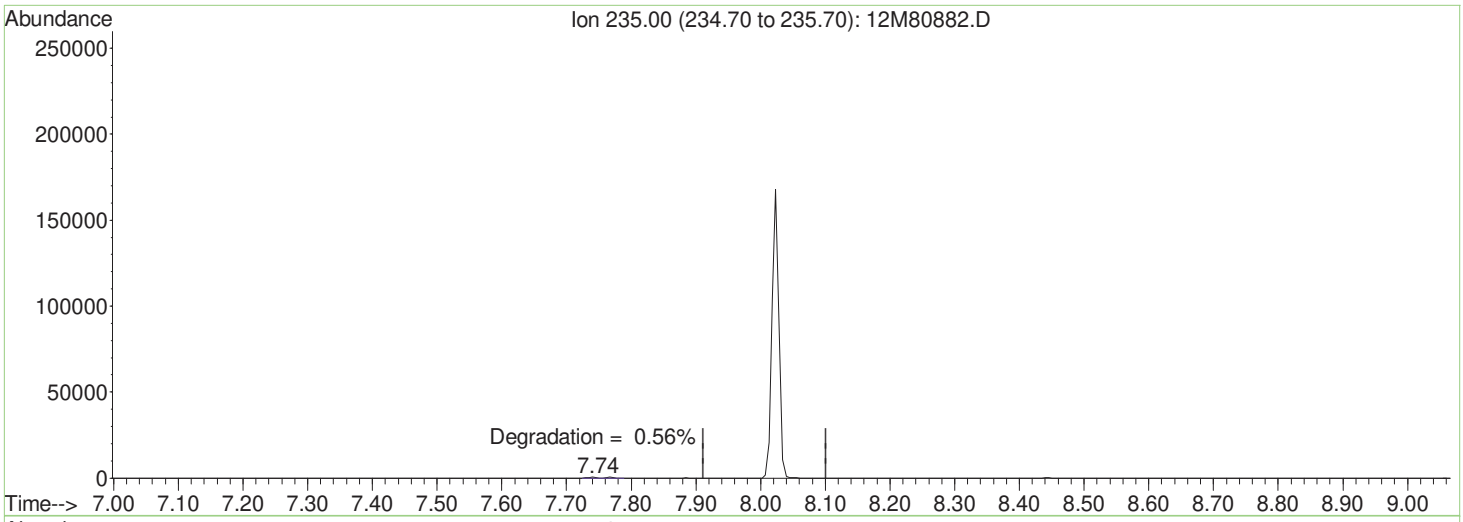
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	35.0	18546	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	34.1	18066	PASS
70	69	0.00	2	0.3	62	PASS
127	198	40	60	49.4	26161	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	52920	PASS
199	198	5	9	6.8	3573	PASS
275	198	10	30	27.4	14481	PASS
365	198	1	100	3.1	1616	PASS
441	443	0.01	100	76.2	7432	PASS
442	198	40	100	96.4	51029	PASS
443	442	17	23	19.1	9754	PASS

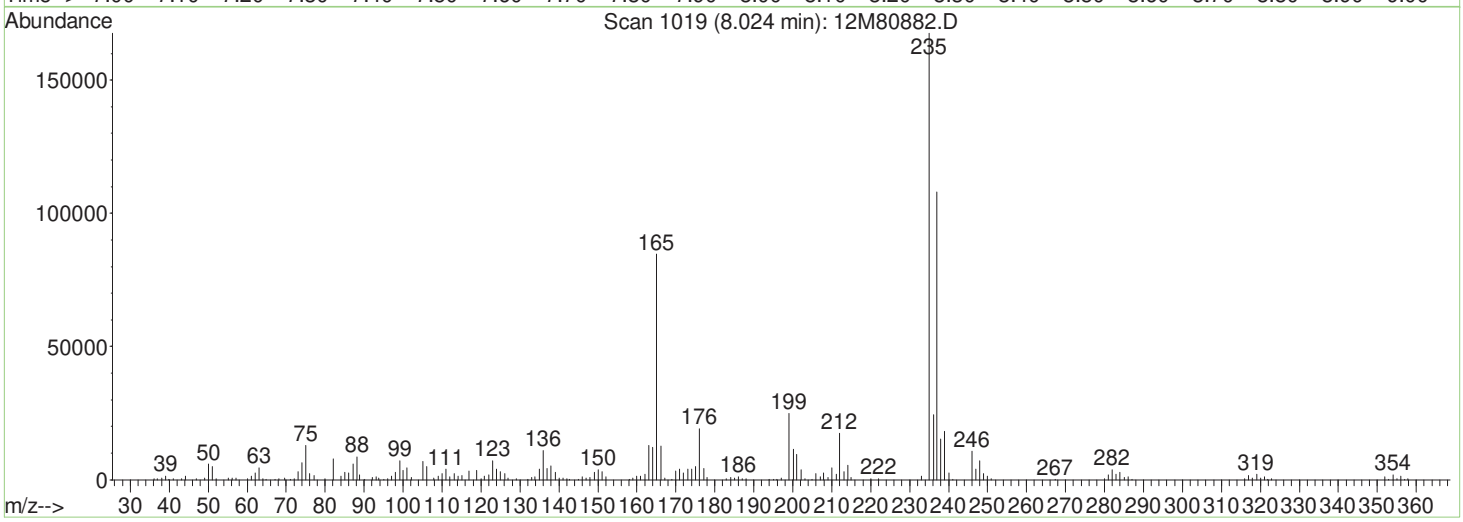
12M80882.D DFTPP.M Tue Feb 02 08:24:05 2021

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\020121\12M80882.D Vial: 1
Acq On : 1 Feb 2021 1:11 pm Operator: SCB
Sample : S1B0011-TUN1 Inst : MSD12
Misc : 1,1 0008021 S1A0503-TUN2 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 2 8:23 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Sat Jun 06 11:58:02 2020
Response via : Single Level Calibration





TIC: 12M80882.D

(3) DDT

8.02min 0.00ug/ml

response 124290

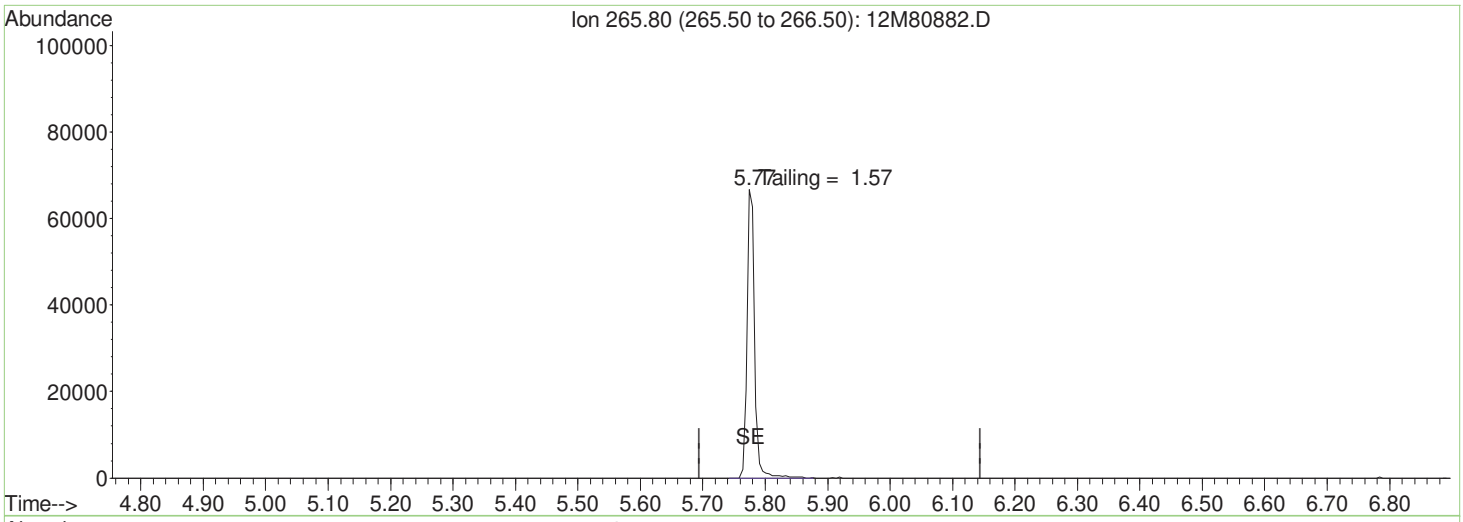
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0.00	0.00	0.00
0.00	0.00	0.00

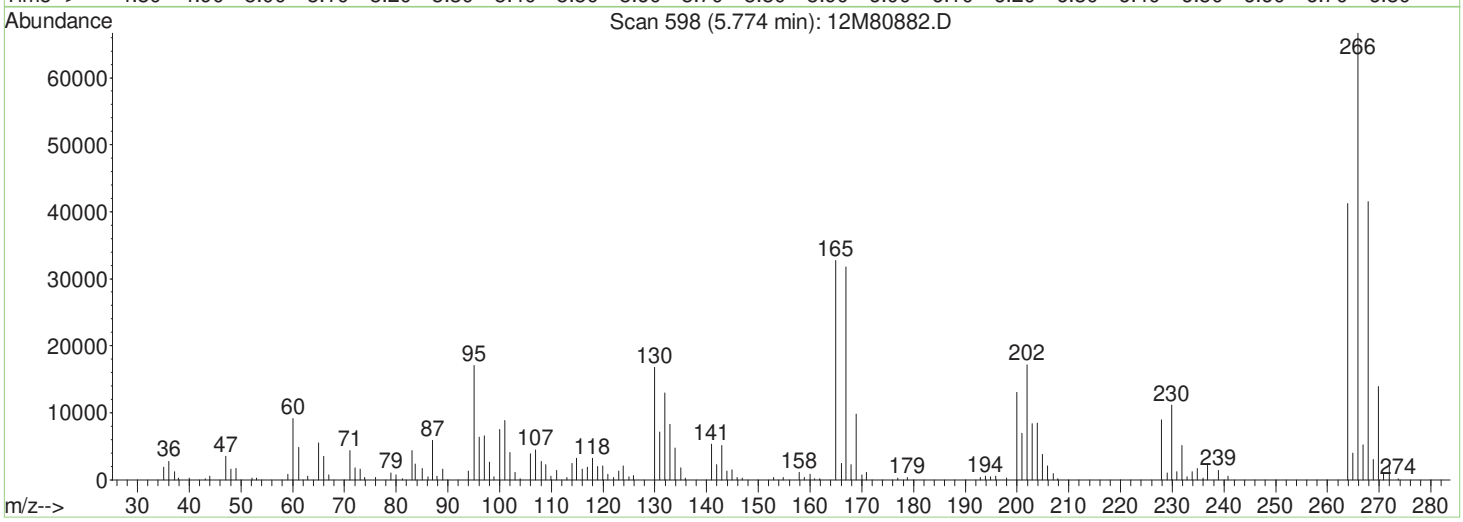
12M80882.D DFTPP.M Tue Feb 02 08:24:43 2021

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\020121\12M80882.D Vial: 1
Acq On : 1 Feb 2021 1:11 pm Operator: SCB
Sample : S1B0011-TUN1 Inst : MSD12
Misc : 1,1 0008021 S1A0503-TUN2 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 2 8:23 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Sat Jun 06 11:58:02 2020
Response via : Single Level Calibration





TIC: 12M80882.D

(1) Pentachlorophenol

5.77min 0.00ug/ml

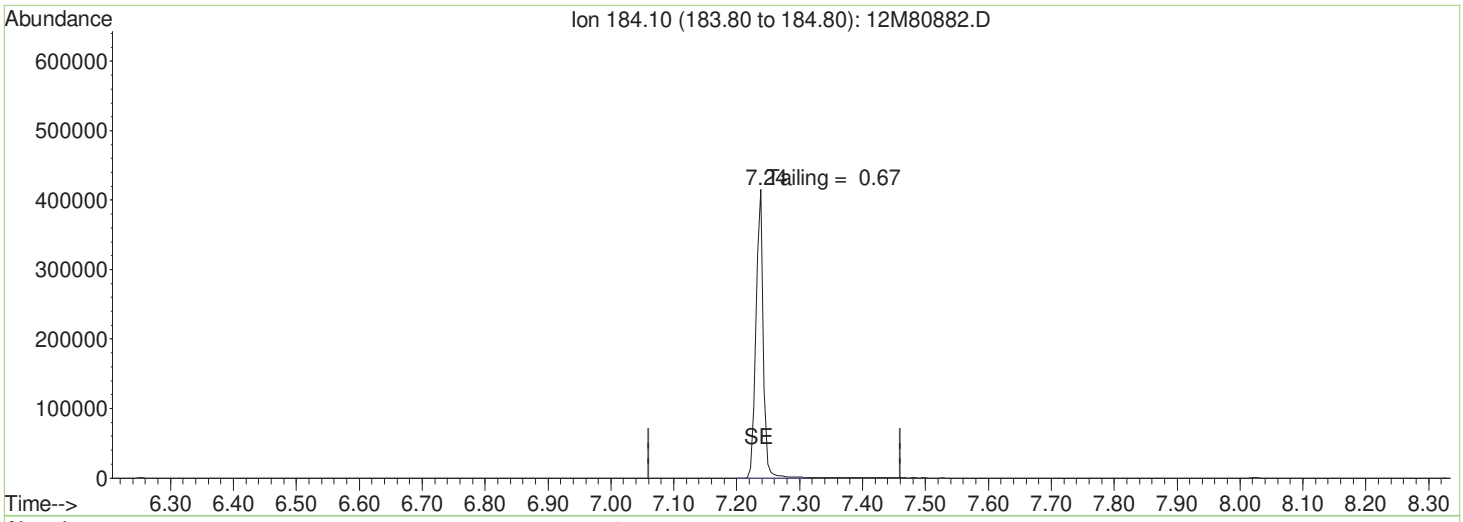
response 57369

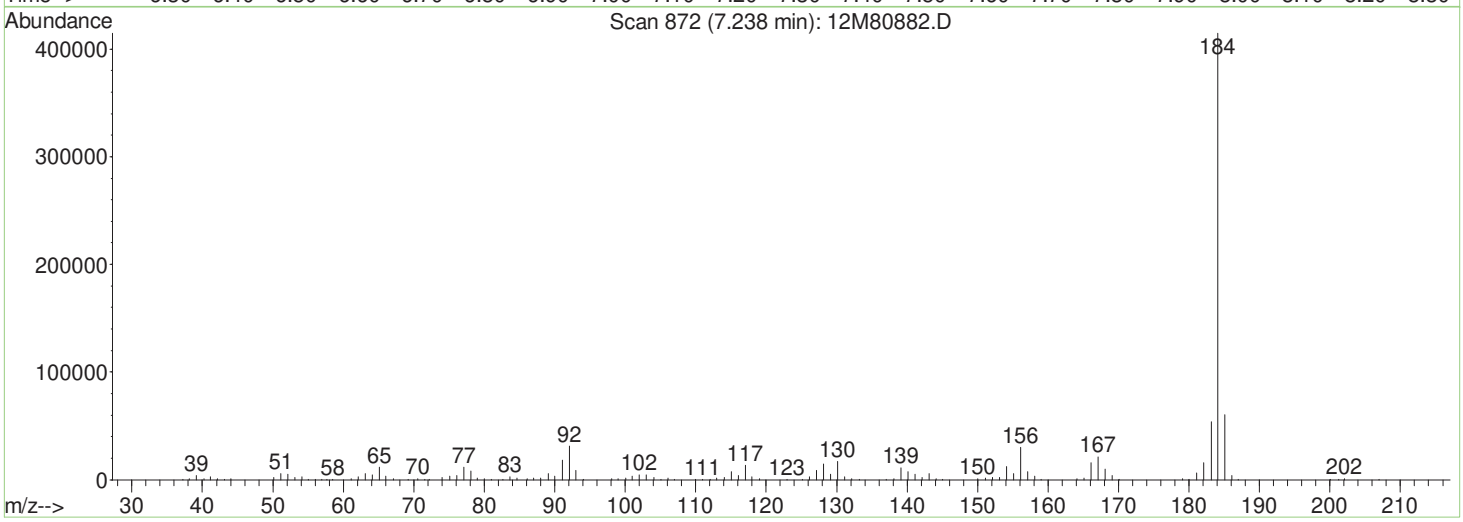
Ion	Exp%	Act%
265.80	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\020121\12M80882.D Vial: 1
Acq On : 1 Feb 2021 1:11 pm Operator: SCB
Sample : S1B0011-TUN1 Inst : MSD12
Misc : 1,1 0008021 S1A0503-TUN2 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 2 8:23 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Sat Jun 06 11:58:02 2020
Response via : Single Level Calibration





TIC: 12M80882.D

(2) Benzidine

7.24min 0.00ug/ml

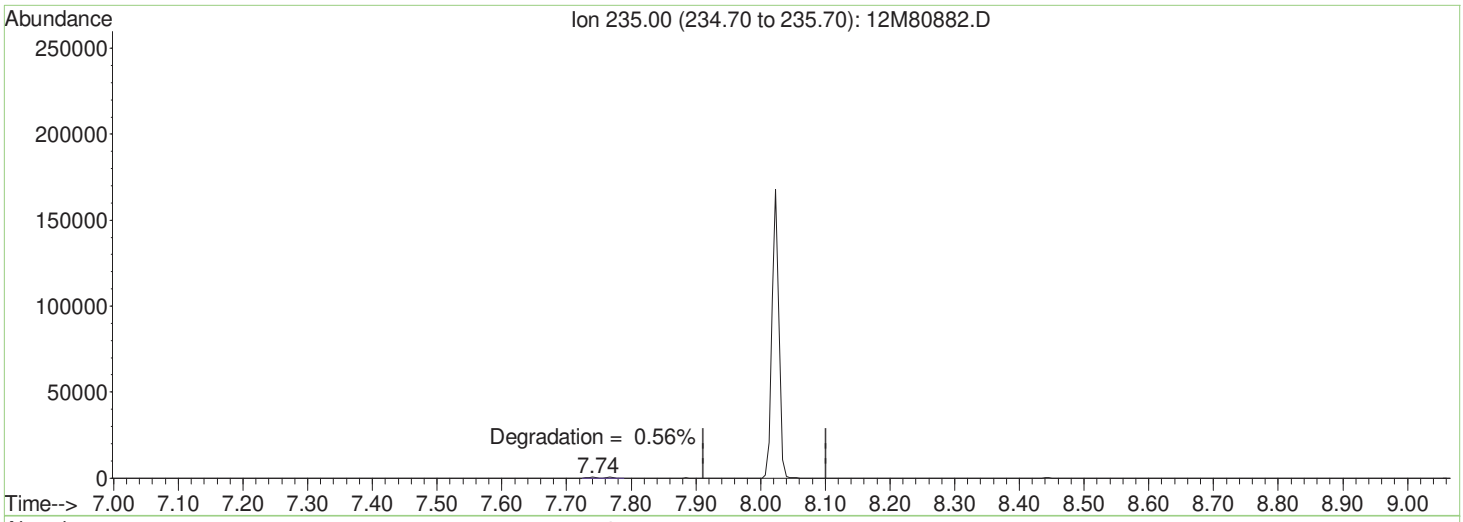
response 332419

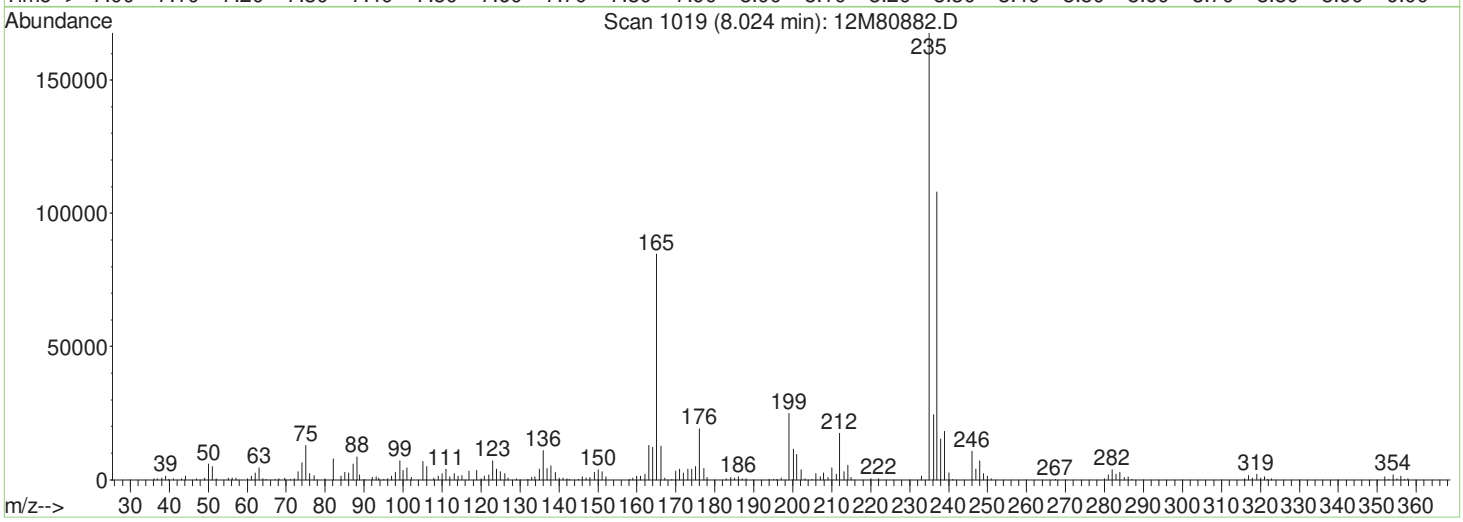
Ion	Exp%	Act%
184.10	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\020121\12M80882.D Vial: 1
Acq On : 1 Feb 2021 1:11 pm Operator: SCB
Sample : S1B0011-TUN1 Inst : MSD12
Misc : 1,1 0008021 S1A0503-TUN2 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 2 8:23 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Sat Jun 06 11:58:02 2020
Response via : Single Level Calibration





TIC: 12M80882.D

(3) DDT

8.02min 0.00ug/ml

response 124290

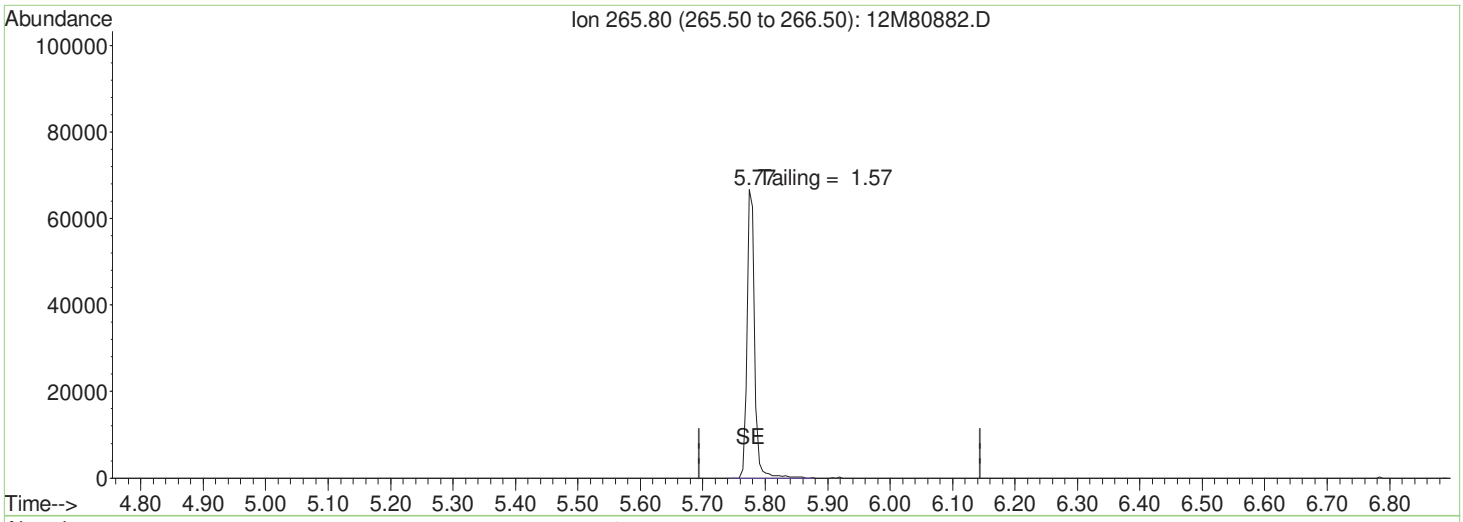
Ion	Exp%	Act%
235.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

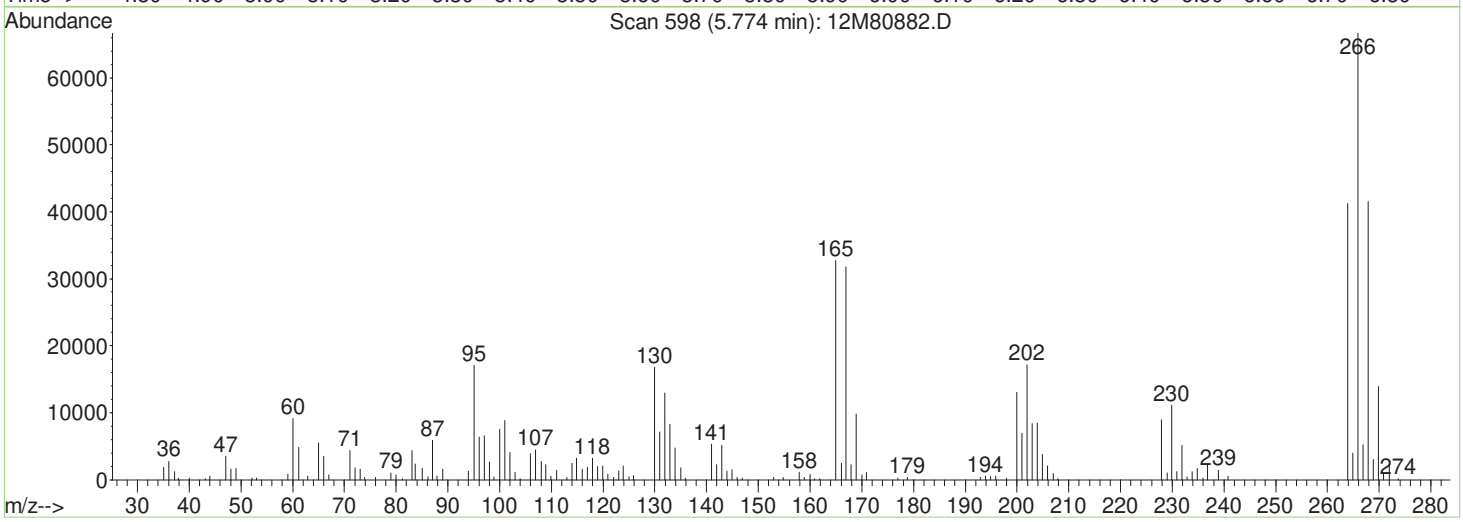
12M80882.D DFTPP.M Tue Feb 02 08:24:43 2021

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\020121\12M80882.D Vial: 1
Acq On : 1 Feb 2021 1:11 pm Operator: SCB
Sample : S1B0011-TUN1 Inst : MSD12
Misc : 1,1 0008021 S1A0503-TUN2 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 2 8:23 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Sat Jun 06 11:58:02 2020
Response via : Single Level Calibration





TIC: 12M80882.D

(1) Pentachlorophenol

5.77min 0.00ug/ml

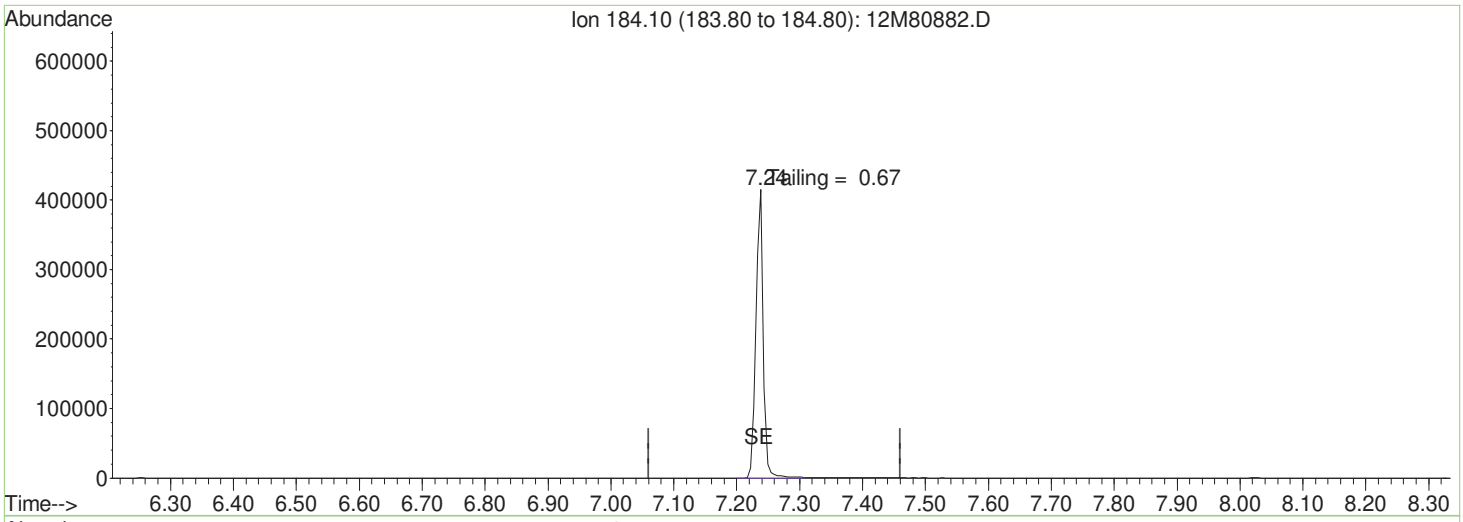
response 57369

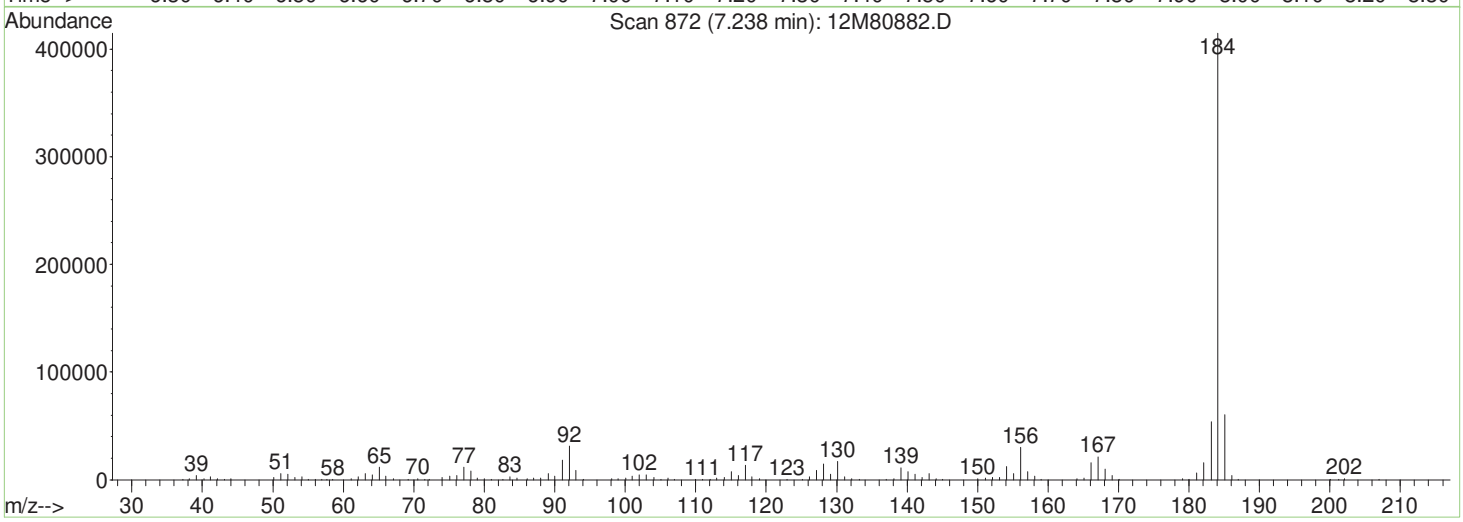
Ion	Exp%	Act%
265.80	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\020121\12M80882.D Vial: 1
Acq On : 1 Feb 2021 1:11 pm Operator: SCB
Sample : S1B0011-TUN1 Inst : MSD12
Misc : 1,1 0008021 S1A0503-TUN2 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 2 8:23 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Sat Jun 06 11:58:02 2020
Response via : Single Level Calibration





TIC: 12M80882.D

(2) Benzidine

7.24min 0.00ug/ml

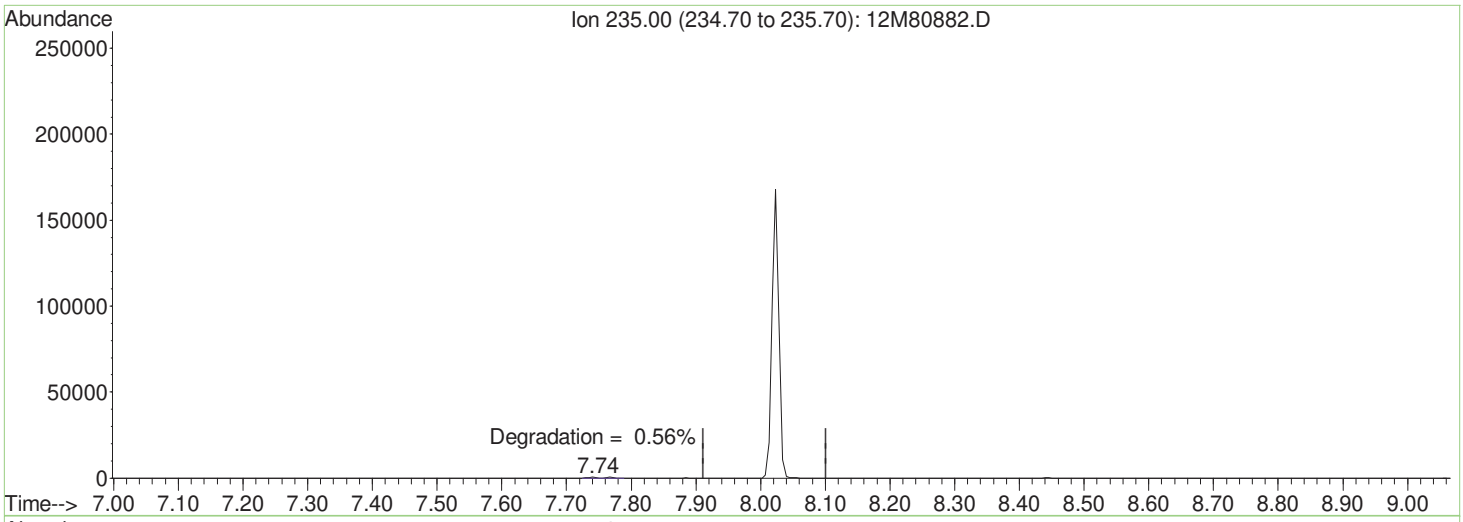
response 332419

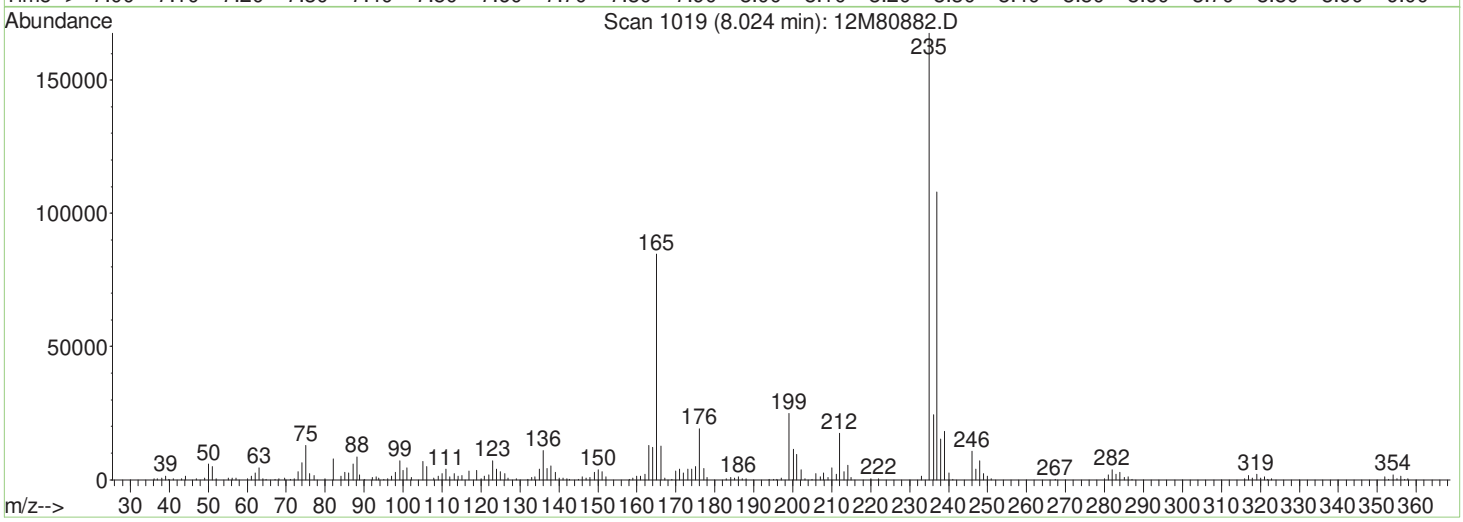
Ion	Exp%	Act%
184.10	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\020121\12M80882.D Vial: 1
Acq On : 1 Feb 2021 1:11 pm Operator: SCB
Sample : S1B0011-TUN1 Inst : MSD12
Misc : 1,1 0008021 S1A0503-TUN2 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 2 8:23 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Sat Jun 06 11:58:02 2020
Response via : Single Level Calibration





TIC: 12M80882.D

(3) DDT

8.02min 0.00ug/ml

response 124290

Ion	Exp%	Act%
235.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\020121\12M80886.D Vial: 5
Acq On : 1 Feb 2021 3:03 pm Operator: SCB
Sample : S1A0503-ICV4 Inst : MSD12
Misc : 1,1 1000920 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 01 15:49:58 2021 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.629	152	81173	40.0000	ug/ml	0.000
8) Naphthalene-d8	7.901	136	312175	40.0000	ug/ml	0.000
15) Acenaphthene-d10	9.632	164	170278	40.0000	ug/ml	0.000
23) Phenanthrene-d10	11.095	188	298234	40.0000	ug/ml	0.000
38) Chrysene-d12	14.488	240	219372	40.0000	ug/ml	0.000
42) Perylene-d12	16.977	264	249281	40.0000	ug/ml	0.000

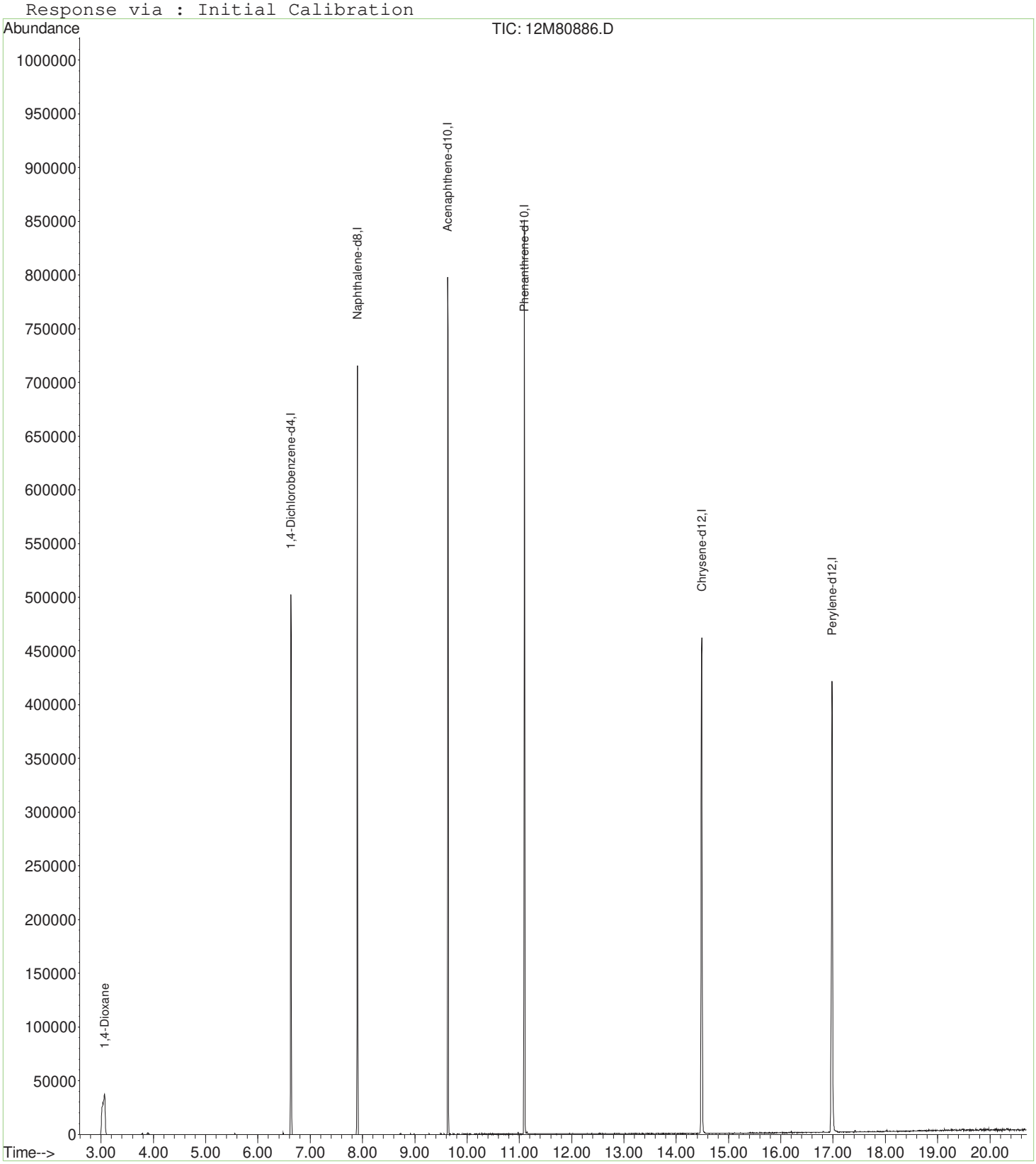
Target Compounds						Qvalue
2) 1,4-Dioxane	3.07	88	53782	49.9309	ug/ml	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\020121\12M80886.D Vial: 5
Acq On : 1 Feb 2021 3:03 pm Operator: SCB
Sample : S1A0503-ICV4 Inst : MSD12
Misc : 1,1 1000920 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 1 15:49 2021 Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\020121\12M80886.D Vial: 5
Acq On : 1 Feb 2021 3:03 pm Operator: SCB
Sample : S1A0503-ICV4 Inst : MSD12
Misc : 1,1 1000920 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	82	0.00
2		1,4-Dioxane	0.531	0.530	0.2	84	0.06
3		Methyl Methanesulfonate	0.662	0.000#	100.0#	0#	-5.06#
4		Ethyl Methanesulfonate	0.847	0.000#	100.0#	0#	-5.84#
5		Benzaldehyde	1.056	0.000#	100.0#	0#	-6.18#
6		Pentachloroethane	0.499	0.000#	100.0#	0#	-6.34#
7		Acetophenone	1.719	0.000#	100.0#	0#	-7.04#
8	I	Naphthalene-d8	1.000	1.000	0.0	83	0.00
9		0,0,0-Triethyl Phosphorothi	0.161	0.000#	100.0#	0#	-7.64#
10		Alpha-Terpineol	0.257	0.000#	100.0#	0#	-7.94#
11		2,6-Dichlorophenol	0.268	0.000#	100.0#	0#	-7.99#
12		Hexachloropropene	0.202	0.000#	100.0#	0#	-8.01#
13		Caprolactam	0.115	0.000#	100.0#	0#	-8.30#
14		Safrole	0.261	0.000#	100.0#	0#	-8.53#
15	I	Acenaphthene-d10	1.000	1.000	0.0	82	0.00
16		1,2,4,5-Tetrachlorobenzene	0.525	0.000#	100.0#	0#	-8.77#
17		Isosafrole	0.478	0.000#	100.0#	0#	-9.04#
18		1,1'-Biphenyl	1.554	0.000#	100.0#	0#	-9.07#
19		1-Chloronaphthalene	1.122	0.000#	100.0#	0#	-9.11#
20		1,4-Naphthoquinone	0.490	0.000#	100.0#	0#	-9.26#
21		Pentachlorobenzene	0.458	0.000#	100.0#	0#	-9.80#
22		Thionazin	0.199	0.000#	100.0#	0#	-10.14#
23	I	Phenanthrene-d10	1.000	1.000	0.0	78	0.00
24		Sulfotepp	0.121	0.000#	100.0#	0#	-10.46#
25		Sym-Trinitrobenzene	0.121	0.000#	100.0#	0#	-10.53#
26		Diallate	0.214	0.000#	100.0#	0#	-10.58#
27		Phenacetin	0.338	0.000#	100.0#	0#	-10.60#
28		Phorate	0.380	0.000#	100.0#	0#	-10.59#
29		Dimethoate	0.251	0.000#	100.0#	0#	-10.75#
30		Atrazine	0.206	0.000#	100.0#	0#	-10.82#
31		Pentachloronitrobenzen	0.077	0.000#	100.0#	0#	-10.92#
32		Pronamide	0.319	0.000#	100.0#	0#	-10.98#
33		Disulfoton	0.370	0.006#	98.4#	1	0.00
34		Parathion Methyl	0.220	0.000#	100.0#	0#	-11.47#
35		Parathion Ethyl	0.119	0.000#	100.0#	0#	-11.89#
36		4-Nitroquinoline 1-Oxide	0.096	0.000#	100.0#	0#	-11.92#
37		Isodrin	0.116	0.000#	100.0#	0#	-12.23#
38	I	Chrysene-d12	1.000	1.000	0.0	73	0.00
39		Aramite	0.081	0.000#	100.0#	0#	-12.90#
40		Chlorobenzilate	0.388	0.000#	100.0#	0#	-13.18#
41		Famphur	0.533	0.000#	100.0#	0#	-13.54#
42	I	Perylene-d12	1.000	1.000	0.0	71	0.00
43		7,12-Dimethylbenz[a]anthrac	0.459	0.000#	100.0#	0#	-16.32#
44		Perylene	1.178	0.001#	99.9#	0#	-0.05
45		3-Methylcholanthrene	0.583	0.000#	100.0#	0#	-17.51#

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\020121\12M80886.D Vial: 5
Acq On : 1 Feb 2021 3:03 pm Operator: SCB
Sample : S1A0503-ICV4 Inst : MSD12
Misc : 1,1 1000920 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	82	0.00
2		1,4-Dioxane	50.000	49.931	0.1	84	0.06
3		Methyl Methanesulfonate	50.000	0.000	100.0#	0	-5.06#
4		Ethyl Methanesulfonate	50.000	0.000	100.0#	0	-5.84#
5		Benzaldehyde	50.000	0.000	100.0#	0	-6.18#
6		Pentachloroethane	50.000	0.000	100.0#	0	-6.34#
7		Acetophenone	50.000	0.000	100.0#	0	-7.04#
8	I	Naphthalene-d8	40.000	40.000	0.0	83	0.00
9		0,0,0-Triethyl Phosphorothi	50.000	0.000	100.0#	0	-7.64#
10		Alpha-Terpineol	50.000	0.000	100.0#	0	-7.94#
11		2,6-Dichlorophenol	50.000	0.000	100.0#	0	-7.99#
12		Hexachloropropene	50.000	0.000	100.0#	0	-8.01#
13		Caprolactam	50.000	0.000	100.0#	0	-8.30#
14		Safrole	50.000	0.000	100.0#	0	-8.53#
15	I	Acenaphthene-d10	40.000	40.000	0.0	82	0.00
16		1,2,4,5-Tetrachlorobenzene	50.000	0.000	100.0#	0	-8.77#
17		Isosafrole	50.000	0.000	100.0#	0	-9.04#
18		1,1'-Biphenyl	50.000	0.000	100.0#	0	-9.07#
19		1-Chloronaphthalene	50.000	0.000	100.0#	0	-9.11#
20		1,4-Naphthoquinone	50.000	0.000	100.0#	0	-9.26#
21		Pentachlorobenzene	50.000	0.000	100.0#	0	-9.80#
22		Thionazin	50.000	0.000	100.0#	0	-10.14#
23	I	Phenanthrene-d10	40.000	40.000	0.0	78	0.00
24		Sulfotepp	50.000	0.000	100.0#	0	-10.46#
25		Sym-Trinitrobenzene	50.000	0.000	100.0#	0	-10.53#
26		Diallate	50.000	0.000	100.0#	0	-10.58#
27		Phenacetin	50.000	0.000	100.0#	0	-10.60#
28		Phorate	50.000	0.000	100.0#	0	-10.59#
29		Dimethoate	50.000	0.000	100.0#	0	-10.75#
30		Atrazine	50.000	0.000	100.0#	0	-10.82#
31		Pentachloronitrobenzen	50.000	0.000	100.0#	0	-10.92#
32		Pronamide	50.000	0.000	100.0#	0	-10.98#
33		Disulfoton	50.000	0.861	98.3#	1	0.00
34		Parathion Methyl	50.000	0.000	100.0#	0	-11.47#
35		Parathion Ethyl	50.000	0.000	100.0#	0	-11.89#
36		4-Nitroquinoline 1-Oxide	50.000	0.000	100.0#	0	-11.92#
37		Isodrin	50.000	0.000	100.0#	0	-12.23#
38	I	Chrysene-d12	40.000	40.000	0.0	73	0.00
39		Aramite	50.000	0.000	100.0#	0	-12.90#
40		Chlorobenzilate	50.000	0.000	100.0#	0	-13.18#
41		Famphur	50.000	0.000	100.0#	0	-13.54#
42	I	Perylene-d12	40.000	40.000	0.0	71	0.00
43		7,12-Dimethylbenz[a]anthrac	50.000	0.000	100.0#	0	-16.32#
44		Perylene	50.000	0.051	99.9#	0	-0.05
45		3-Methylcholanthrene	50.000	0.000	100.0#	0	-17.51#

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\020121\12M80886.D Vial: 5
Acq On : 1 Feb 2021 3:03 pm Operator: SCB
Sample : S1A0503-ICV4 Inst : MSD12
Misc : 1,1 1000920 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Mon Feb 01 11:35:42 2021
Response via : Multiple Level Calibration

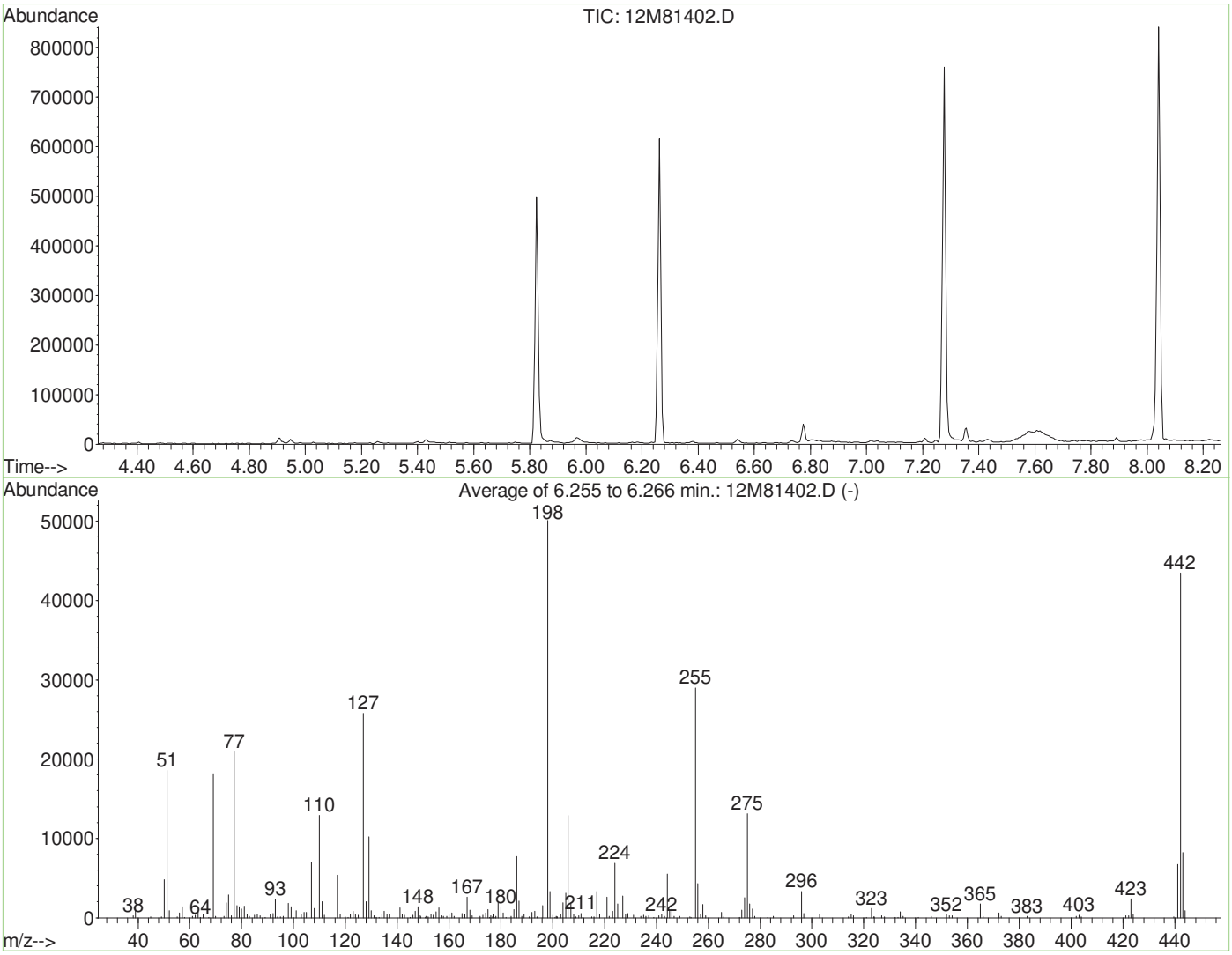
Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	82	0.00
2		1,4-Dioxane	0.531	0.530	0.2	84	0.06
3		Methyl Methanesulfonate	0.662	0.000#	100.0#	0#	-5.06#
4		Ethyl Methanesulfonate	0.847	0.000#	100.0#	0#	-5.84#
5		Benzaldehyde	1.056	0.000#	100.0#	0#	-6.18#
6		Pentachloroethane	0.499	0.000#	100.0#	0#	-6.34#
7		Acetophenone	1.719	0.000#	100.0#	0#	-7.04#
8	I	Naphthalene-d8	1.000	1.000	0.0	83	0.00
9		0,0,0-Triethyl Phosphorothi	0.161	0.000#	100.0#	0#	-7.64#
10		Alpha-Terpineol	0.257	0.000#	100.0#	0#	-7.94#
11		2,6-Dichlorophenol	0.268	0.000#	100.0#	0#	-7.99#
12		Hexachloropropene	0.202	0.000#	100.0#	0#	-8.01#
13		Caprolactam	0.115	0.000#	100.0#	0#	-8.30#
14		Safrole	0.261	0.000#	100.0#	0#	-8.53#
15	I	Acenaphthene-d10	1.000	1.000	0.0	82	0.00
16		1,2,4,5-Tetrachlorobenzene	0.525	0.000#	100.0#	0#	-8.77#
17		Isosafrole	0.478	0.000#	100.0#	0#	-9.04#
18		1,1'-Biphenyl	1.554	0.000#	100.0#	0#	-9.07#
19		1-Chloronaphthalene	1.122	0.000#	100.0#	0#	-9.11#
20		1,4-Naphthoquinone	0.490	0.000#	100.0#	0#	-9.26#
21		Pentachlorobenzene	0.458	0.000#	100.0#	0#	-9.80#
22		Thionazin	0.199	0.000#	100.0#	0#	-10.14#
23	I	Phenanthrene-d10	1.000	1.000	0.0	78	0.00
24		Sulfotepp	0.121	0.000#	100.0#	0#	-10.46#
25		Sym-Trinitrobenzene	0.121	0.000#	100.0#	0#	-10.53#
26		Diallate	0.214	0.000#	100.0#	0#	-10.58#
27		Phenacetin	0.338	0.000#	100.0#	0#	-10.60#
28		Phorate	0.380	0.000#	100.0#	0#	-10.59#
29		Dimethoate	0.251	0.000#	100.0#	0#	-10.75#
30		Atrazine	0.206	0.000#	100.0#	0#	-10.82#
31		Pentachloronitrobenzen	0.077	0.000#	100.0#	0#	-10.92#
32		Pronamide	0.319	0.000#	100.0#	0#	-10.98#
33		Disulfoton	0.370	0.006#	98.4#	1	0.00
34		Parathion Methyl	0.220	0.000#	100.0#	0#	-11.47#
35		Parathion Ethyl	0.119	0.000#	100.0#	0#	-11.89#
36		4-Nitroquinoline 1-Oxide	0.096	0.000#	100.0#	0#	-11.92#
37		Isodrin	0.116	0.000#	100.0#	0#	-12.23#
38	I	Chrysene-d12	1.000	1.000	0.0	73	0.00
39		Aramite	0.081	0.000#	100.0#	0#	-12.90#
40		Chlorobenzilate	0.388	0.000#	100.0#	0#	-13.18#
41		Famphur	0.533	0.000#	100.0#	0#	-13.54#
42	I	Perylene-d12	1.000	1.000	0.0	71	0.00
43		7,12-Dimethylbenz[a]anthrac	0.459	0.000#	100.0#	0#	-16.32#
44		Perylene	1.178	0.001#	99.9#	0#	-0.05
45		3-Methylcholanthrene	0.583	0.000#	100.0#	0#	-17.51#

(#) = Out of Range SPCC's out = 0 CCC's out = 0

DFTPP

Data File : I:\MSDCHEM\1\DATA\031821\12M81402.D Vial: 1
Acq On : 18 Mar 2021 11:46 am Operator: SCB
Sample : S1C0352-TUN1 Inst : MSD12
Misc : 1,1 1001056 Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP



AutoFind: Scans 688, 689, 690; Background Corrected with Scan 683

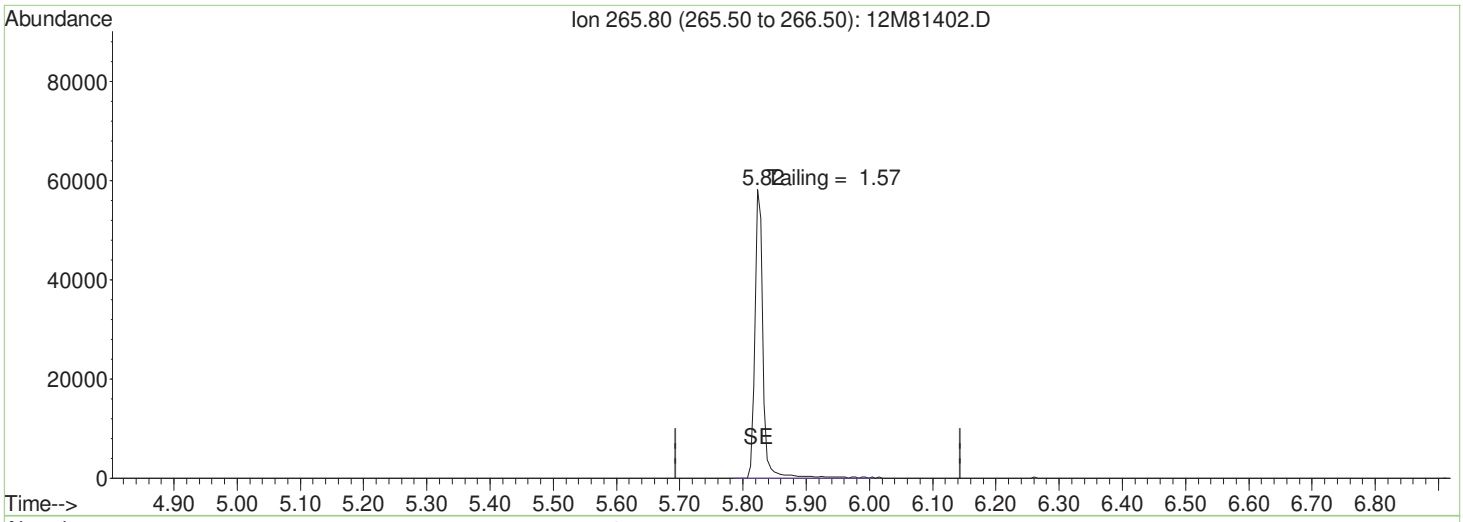
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	37.1	18604	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	36.2	18155	PASS
70	69	0.00	2	0.9	166	PASS
127	198	40	60	51.5	25797	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	50109	PASS
199	198	5	9	6.7	3342	PASS
275	198	10	30	26.2	13129	PASS
365	198	1	100	3.5	1730	PASS
441	443	0.01	100	81.4	6698	PASS
442	198	40	100	86.8	43506	PASS
443	442	17	23	18.9	8229	PASS

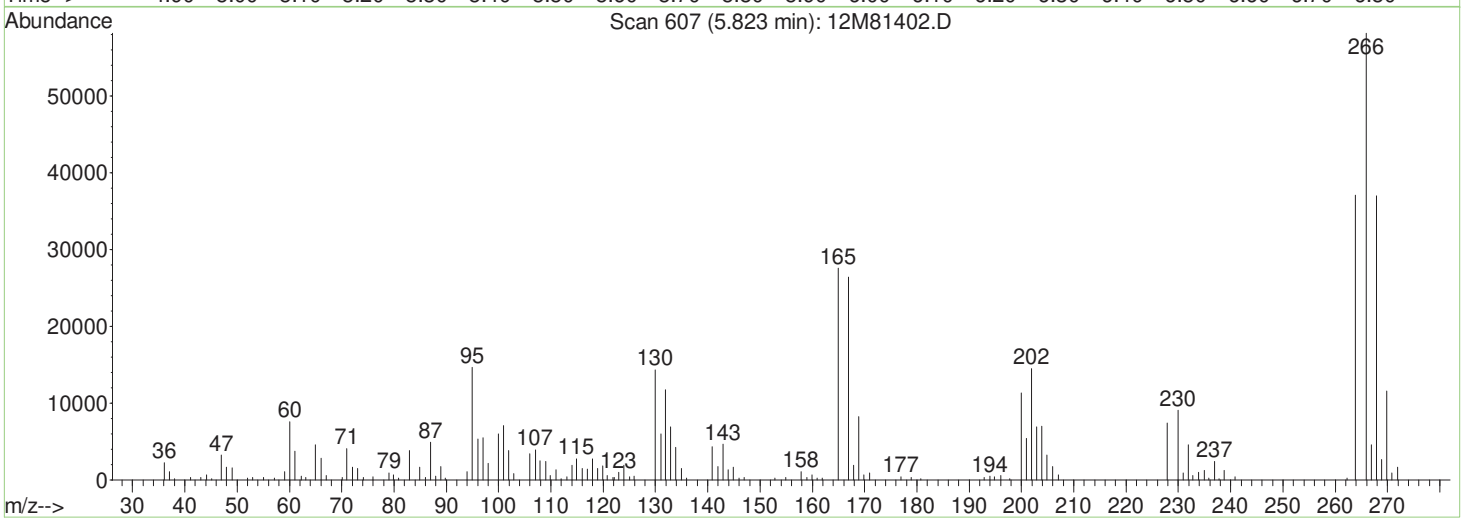
12M81402.D DFTPP.M Fri Mar 19 08:24:54 2021

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\031821\12M81402.D Vial: 1
Acq On : 18 Mar 2021 11:46 am Operator: SCB
Sample : S1C0352-TUN1 Inst : MSD12
Misc : 1,1 1001056 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 18 11:58 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Sat Jun 06 11:58:02 2020
Response via : Single Level Calibration





TIC: 12M81402.D

(1) Pentachlorophenol

5.82min 0.00ug/ml

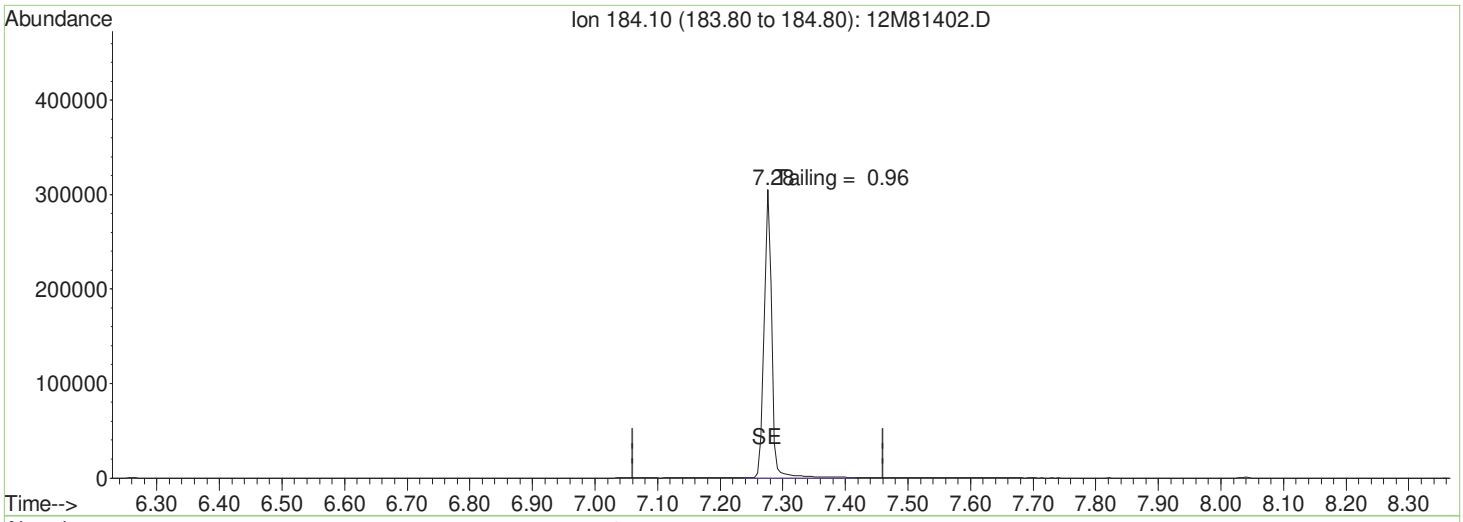
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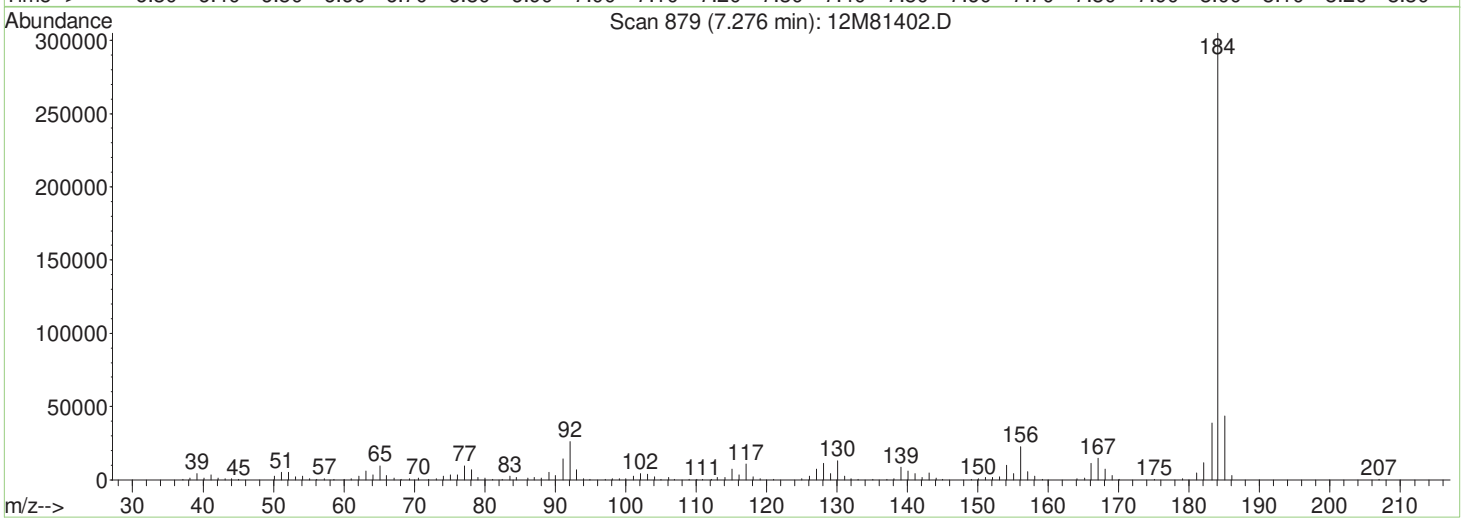
Ion	Exp%	Act%
265.80	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\031821\12M81402.D Vial: 1
Acq On : 18 Mar 2021 11:46 am Operator: SCB
Sample : S1C0352-TUN1 Inst : MSD12
Misc : 1,1 1001056 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 18 11:58 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Sat Jun 06 11:58:02 2020
Response via : Single Level Calibration





TIC: 12M81402.D

(2) Benzidine

7.28min 0.00ug/ml

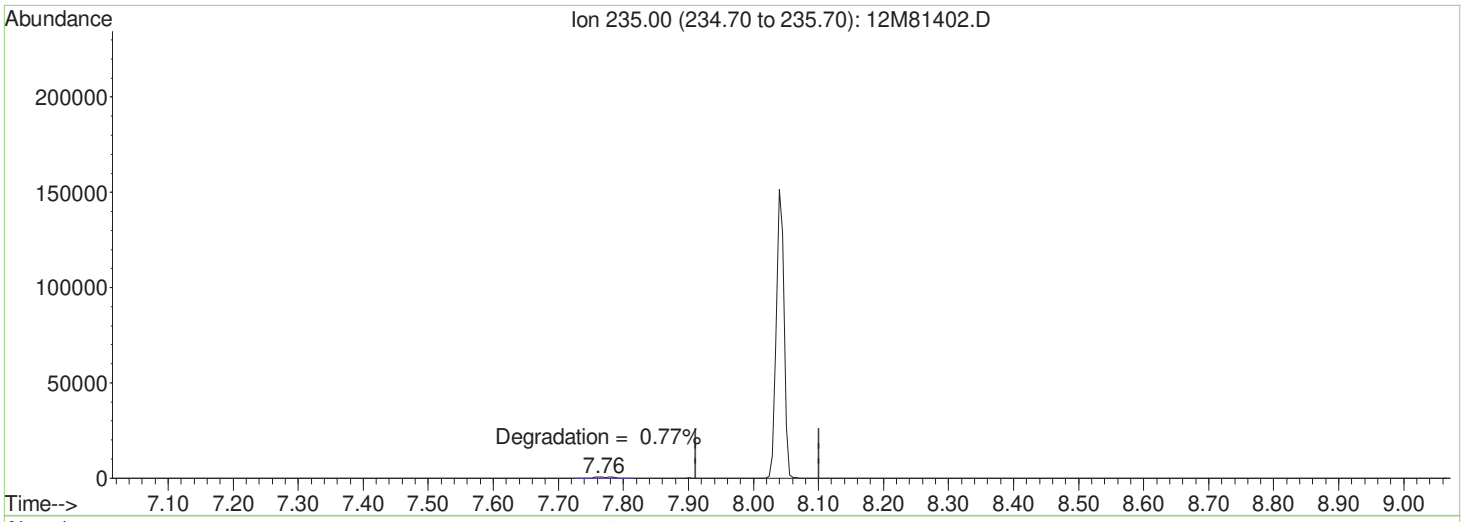
response 254651

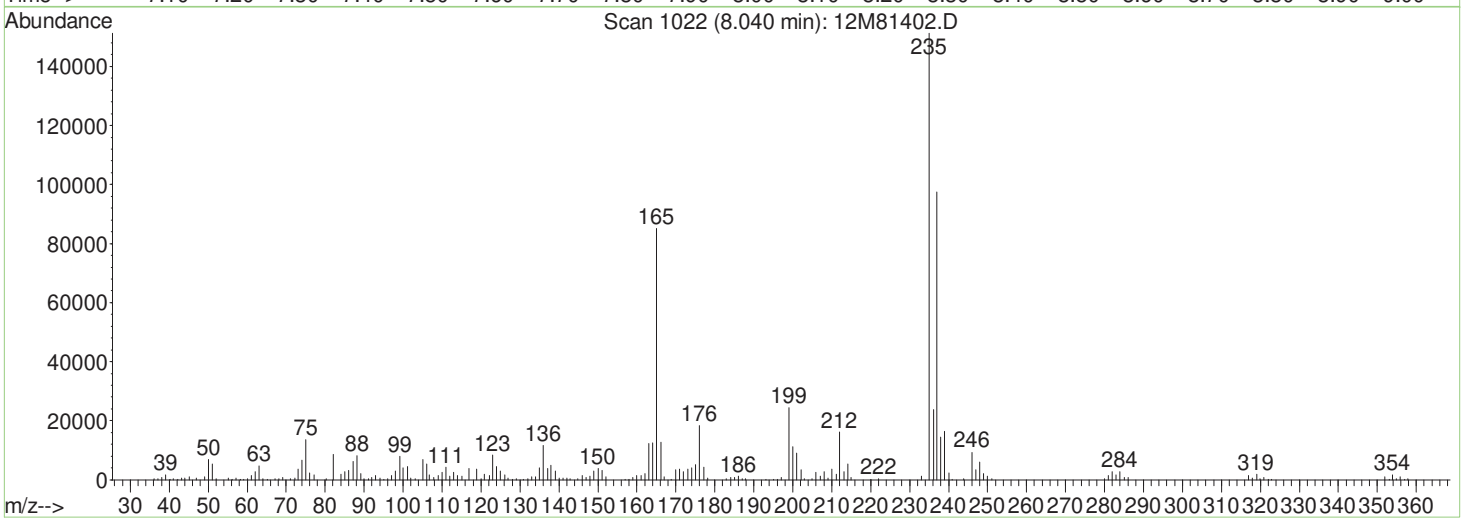
Ion	Exp%	Act%
184.10	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\031821\12M81402.D Vial: 1
Acq On : 18 Mar 2021 11:46 am Operator: SCB
Sample : S1C0352-TUN1 Inst : MSD12
Misc : 1,1 1001056 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 18 11:58 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Sat Jun 06 11:58:02 2020
Response via : Single Level Calibration





TIC: 12M81402.D

(3) DDT

8.04min 0.00ug/ml

response 124326

Ion	Exp%	Act%
235.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\031821\12M81403.D Vial: 2
Acq On : 18 Mar 2021 12:05 pm Operator: SCB
Sample : S1C0352-CCV1 Inst : MSD12
Misc : 1,1 0012168 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 18 12:41:47 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Thu Mar 18 12:41:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.645	152	69912	40.0000	ug/ml	0.000
25) Naphthalene-d8	7.917	136	261328	40.0000	ug/ml	0.000
45) Acenaphthene-d10	9.653	164	145435	40.0000	ug/ml	0.000
73) Phenanthrene-d10	11.122	188	257827	40.0000	ug/ml	0.000
86) Chrysene-d12	14.536	240	203849	40.0000	ug/ml	0.000
98) Perylene-d12	17.041	264	228579	40.0000	ug/ml	0.000
System Monitoring Compounds						
6) 2-Fluorophenol	5.454	112	97941	47.2054125	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 47.21%			
8) Phenol-d5	6.485	99	121310	50.4561550	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 50.46%			
26) Nitrobenzene-d5	7.212	82	100957	50.3488743	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 100.70%			
49) 2-Fluorobiphenyl	8.985	172	227688	49.8254460	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 99.65%			
72) 2,4,6-Tribromophenol	10.449	330	30828	49.3694498	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 49.37%			
89) p-Terphenyl-d14	12.938	244	256744	52.5223799	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 105.04%			
Target Compounds						Qvalue
2) n-Nitrosodimethylamine	3.52	74	56028	44.8128	ug/ml	92
3) Pyridine	3.54	79	96376	46.2082	ug/ml	100
4) 2-Picoline	4.56	93	110982	46.9795	ug/ml	99
5) n-Nitrosomethylethylamine	4.72	88	46397	47.4160	ug/ml	93
7) n-Nitrosodiethylamine	5.53	102	51136	48.8254	ug/ml	99
9) Phenol	6.50	94	116883	42.8238	ug/ml#	84
10) Aniline	6.35	93	132097	42.1348	ug/ml#	99
11) bis(2-Chloroethyl)ether	6.39	63	65682	45.5099	ug/ml	96
12) 2-Chlorophenol	6.51	128	108235	48.1867	ug/ml	97
13) 1,3-Dichlorobenzene	6.58	146	121905	48.6225	ug/ml	99
14) 1,4-Dichlorobenzene	6.66	146	123216	47.3187	ug/ml	99
15) Benzyl Alcohol	6.85	108	68186	46.5656	ug/ml	99
16) 1,2-Dichlorobenzene	6.81	146	116080	47.7155	ug/ml	99
17) 2-Methylphenol	7.03	107	82133	46.5450	ug/ml	89
18) bis(2-Chloroisopropyl)ethe	6.93	45	118703	46.7929	ug/ml#	99
19) 3-,4-Methylphenol	7.19	108	98288	45.9874	ug/ml	100
20) n-Nitrosopyrrolidine	7.05	100	51665	47.7329	ug/ml#	16
21) n-Nitrosodipropylamine	7.07	70	65848	47.4969	ug/ml	81
22) n-Nitrosomorpholine	7.09	56	55584	43.9495	ug/ml	97
23) o-Toluidine	7.12	106	153179	43.9968	ug/ml	100
24) Hexachloroethane	7.15	117	43991	48.9591	ug/ml	98
27) Nitrobenzene	7.23	77	97648	48.8160	ug/ml	99
28) n-Nitrosopiperidine	7.38	114	52134	48.7273	ug/ml	98
29) Isophorone	7.47	82	178626	48.3532	ug/ml	98
30) 2-Nitrophenol	7.55	139	59902	50.6725	ug/ml	98
31) 2,4-Dimethylphenol	7.67	122	92964	47.9851	ug/ml	98
32) bis(2-Chloroethoxy)methane	7.69	93	108475	48.5949	ug/ml	95
33) Benzoic Acid	7.82	105	49080	35.7669	ug/ml	99
34) 2,4-Dichlorophenol	7.86	162	84029	48.3762	ug/ml	98
35) a,a-Dimethylphenethylamine	7.93	58	188683	38.9102	ug/ml#	83
36) 1,2,4-Trichlorobenzene	7.86	180	93007	49.2243	ug/ml	99
37) Naphthalene	7.94	128	313712	48.6085	ug/ml	100
38) 4-Chloroaniline	8.03	65	33782	45.6718	ug/ml	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\031821\12M81403.D Vial: 2
Acq On : 18 Mar 2021 12:05 pm Operator: SCB
Sample : S1C0352-CCV1 Inst : MSD12
Misc : 1,1 0012168 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 18 12:41:47 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Thu Mar 18 12:41:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39)	Hexachlorobutadiene	8.06	225	49814	51.0029	ug/ml	98
40)	n-Nitrosodi-n-Butylamine	8.33	84	62854	50.8651	ug/ml	97
41)	p-Phenylenediamine	8.40	108	54933	23.4066	ug/ml	99
42)	4-Chloro-3-Methylphenol	8.58	107	86518	48.3470	ug/ml	98
43)	2-Methylnaphthalene	8.62	142	220561	50.3938	ug/ml	100
44)	1-Methylnaphthalene	8.72	142	202005	49.7476	ug/ml	100
46)	Hexachlorocyclopentadiene	8.77	237	46118	37.1239	ug/ml	99
47)	2,4,6-Trichlorophenol	8.94	196	58464	48.5749	ug/ml	99
48)	2,4,5-Trichlorophenol	9.02	196	59971	46.6172	ug/ml	99
50)	2-Chloronaphthalene	9.11	162	189142	49.2867	ug/ml	99
51)	2-Nitroaniline	9.66	65	60786	46.3645	ug/ml	100
52)	Dimethylphthalate	9.40	163	216557	49.7163	ug/ml	100
53)	1,3-Dinitrobenzene	9.43	168	40356	52.1224	ug/ml	87
54)	2,6-Dinitrotoluene	9.46	165	52451	50.1142	ug/ml	99
55)	Acenaphthylene	9.51	152	333813	49.9863	ug/ml	100
56)	3-Nitroaniline	9.66	138	56643	46.0349	ug/ml#	98
57)	2,4-Dinitrophenol	9.74	184	33644	51.6192	ug/ml#	89
58)	Acenaphthene	9.68	154	200967	47.5677	ug/ml	97
59)	4-Nitrophenol	9.94	65	42840	55.3765	ug/ml	78
60)	2,4-Dinitrotoluene	9.86	165	69574	51.5031	ug/ml	99
61)	Dibenzofuran	9.86	168	275511	49.3193	ug/ml	99
62)	2,3,5,6-Tetrachlorophenol	9.97	232	50401	49.5718	ug/ml	99
63)	2,3,4,6-Tetrachlorophenol	10.01	232	51181	48.7846	ug/ml	99
64)	1-Naphthylamine	9.95	143	200117	45.0674	ug/ml	100
65)	2-Naphthylamine	10.03	143	176454	37.8928	ug/ml	97
66)	Diethylphthalate	10.09	149	226112	50.1848	ug/ml	99
67)	Fluorene	10.20	166	230405	50.6580	ug/ml	99
68)	4-Chlorophenyl Phenyl Ethe	10.19	204	105954	49.7190	ug/ml	99
69)	4-Nitroaniline	10.27	138	58366	43.1641	ug/ml	95
70)	5-Nitro-o-Toluidine	10.24	152	69393	48.8533	ug/ml#	70
71)	1,2-Diphenylhydrazine & Az	10.35	77	193117	48.7229	ug/ml	99
74)	4,6-Dinitro-2-Methylphenol	10.26	198	40385	51.8567	ug/ml#	67
75)	Diphenylamine/n-Nitrosodip	10.32	169	197105	49.7809	ug/ml	100
76)	4-Bromophenyl Phenyl Ether	10.68	248	59530	50.9334	ug/ml	99
77)	Hexachlorobenzene	10.73	284	62749	49.5999	ug/ml	99
78)	4-Aminobiphenyl	10.95	169	206333	38.5815	ug/ml	99
79)	Pentachlorophenol	10.96	266	40266	46.0941	ug/ml	98
80)	Phenanthrene	11.14	178	326449	48.6338	ug/ml	99
81)	Anthracene	11.20	178	338311	49.3808	ug/ml	100
82)	Carbazole	11.38	167	297159	49.0542	ug/ml	98
83)	Di-n-Butyl Phthalate	11.72	149	374652	51.5166	ug/ml	100
84)	Methapyrilene	12.04	58	156159	49.5689	ug/ml	98
85)	Fluoranthene	12.44	202	328902	50.5232	ug/ml	98
87)	Benzidine	12.63	184	205727	45.8557	ug/ml	98
88)	Pyrene	12.72	202	336360	51.6045	ug/ml	100
90)	p-(Dimethylamino)azobenzen	13.14	225	66619	52.2864	ug/ml	99
91)	Butyl Benzyl Phthalate	13.67	149	166887	51.7693	ug/ml	98
92)	3,3'-Dimethylbenzidine	13.65	212	410431	88.1252	ug/ml	99
93)	2-Acetylaminofluorene	14.05	181	152175	51.3496	ug/ml	99
94)	bis(2-Ethylhexyl)phthalate	14.64	149	235582	54.3919	ug/ml	99
95)	3,3'-Dichlorobenzidine	14.52	252	112689	47.7246	ug/ml	99
96)	Benzo[a]anthracene	14.52	228	297165	49.4708	ug/ml	99
97)	Chrysene	14.58	228	296835	48.9357	ug/ml	100
99)	Di-n-Octyl Phthalate	15.81	149	401325	51.4490	ug/ml	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\031821\12M81403.D Vial: 2
Acq On : 18 Mar 2021 12:05 pm Operator: SCB
Sample : S1C0352-CCV1 Inst : MSD12
Misc : 1,1 0012168 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 18 12:41:47 2021 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Thu Mar 18 12:41:39 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

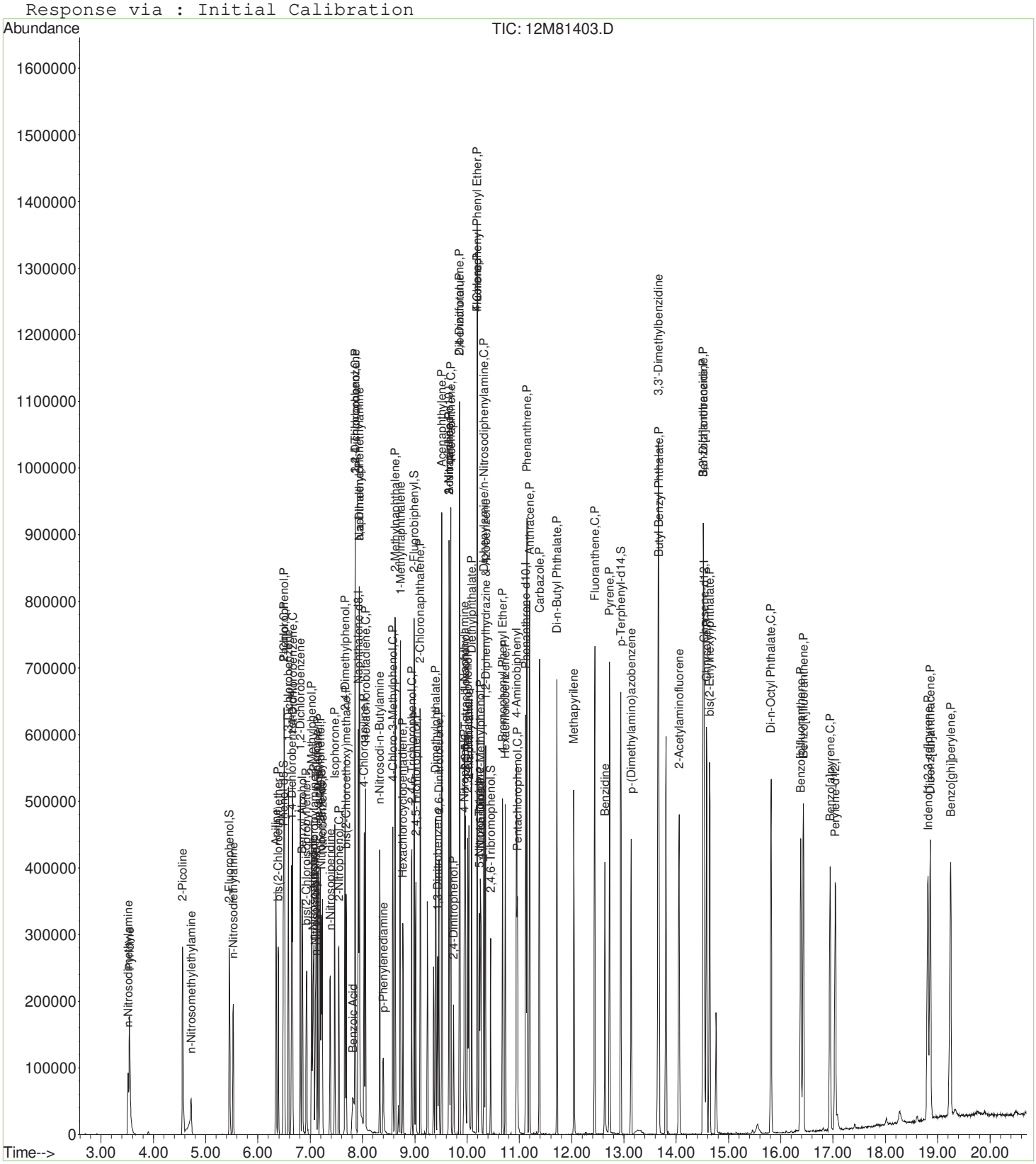
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
100) Benzo[b]fluoranthene	16.38	252	297133	52.3186	ug/ml	99
101) Benzo[k]fluoranthene	16.43	252	289638	49.1023	ug/ml	99
102) Benzo[a]pyrene	16.95	252	264089	51.9242	ug/ml	99
103) Indeno[1,2,3-cd]pyrene	18.81	276	269145	51.1479	ug/ml	99
104) Dibenz[ah]anthracene	18.86	278	287825	49.2278	ug/ml	99
105) Benzo[ghi]perylene	19.25	276	277128	48.5508	ug/ml	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\031821\12M81403.D Vial: 2
Acq On : 18 Mar 2021 12:05 pm Operator: SCB
Sample : S1C0352-CCV1 Inst : MSD12
Misc : 1,1 0012168 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 18 12:41 2021 Quant Results File: MEGAMIX.RES

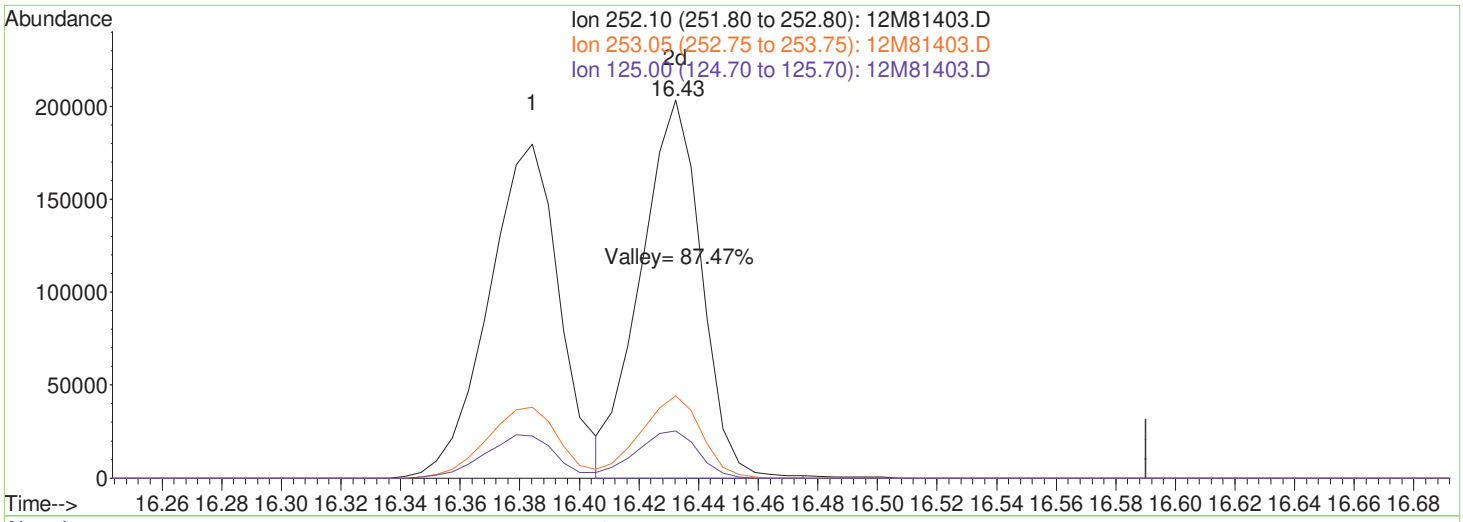
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Thu Mar 18 12:41:39 2021
Response via : Initial Calibration

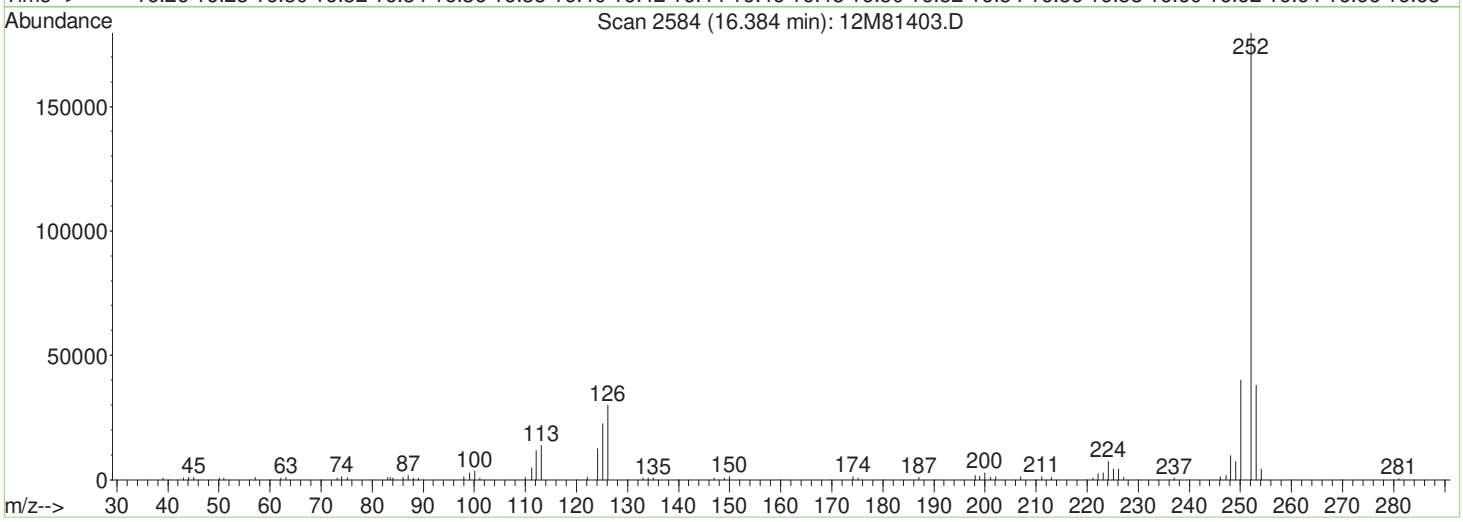


Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\031821\12M81403.D Vial: 2
Acq On : 18 Mar 2021 12:05 pm Operator: SCB
Sample : S1C0352-CCV1 Inst : MSD12
Misc : 1,1 0012168 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 18 12:41 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Thu Mar 18 12:41:39 2021
Response via : Multiple Level Calibration





TIC: 12M81403.D

(100) Benzo[b]fluoranthene (P)

16.38min 52.32ug/ml

response 297133

Ion	Exp%	Act%
252.10	100	100
253.05	21.90	21.68
125.00	13.60	13.09
0.00	0.00	0.00

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\031821\12M81403.D Vial: 2
Acq On : 18 Mar 2021 12:05 pm Operator: SCB
Sample : S1C0352-CCV1 Inst : MSD12
Misc : 1,1 0012168 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Thu Mar 18 12:41:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	76	0.00
2		n-Nitrosodimethylamine	0.715	0.641	10.3	69	0.00
3		Pyridine	1.193	1.103	7.5	69	0.00
4		2-Picoline	1.352	1.270	6.1	71	0.00
5		n-Nitrosomethylethylamine	0.506	0.531	-4.9	72	0.00
6	S	2-Fluorophenol	1.187	1.121	5.6	72	0.00
7		n-Nitrosodiethylamine	0.599	0.585	2.3	74	0.00
8	S	Phenol-d5	1.376	1.388	-0.9	76	0.00
9	C,P	Phenol	1.562	1.337	14.4	65	0.00
10		Aniline	1.794	1.512	15.7	70	0.00
11	P	bis(2-Chloroethyl)ether	0.826	0.752	9.0	70	0.00
12	P	2-Chlorophenol	1.285	1.239	3.6	75	0.00
13		1,3-Dichlorobenzene	1.434	1.395	2.7	76	0.00
14	C	1,4-Dichlorobenzene	1.490	1.410	5.4	75	0.00
15		Benzyl Alcohol	0.838	0.780	6.9	71	0.00
16		1,2-Dichlorobenzene	1.392	1.328	4.6	75	0.00
17	P	2-Methylphenol	1.010	0.940	6.9	71	0.00
18	P	bis(2-Chloroisopropyl)ether	1.451	1.358	6.4	71	0.00
19	P	3-,4-Methylphenol	1.223	1.125	8.0	73	0.00
20		n-Nitrosopyrrolidine	0.619	0.591	4.5	74	0.00
21	P	n-Nitrosodipropylamine	0.793	0.753	5.0	74	0.00
22		n-Nitrosomorpholine	0.724	0.636	12.2	67	0.00
23		o-Toluidine	1.992	1.753	12.0	68	0.00
24	P	Hexachloroethane	0.514	0.503	2.1	75	0.00
25	I	Naphthalene-d8	1.000	1.000	0.0	74	0.00
26	S	Nitrobenzene-d5	0.307	0.309	-0.7	75	0.00
27	P	Nitrobenzene	0.306	0.299	2.3	73	0.00
28		n-Nitrosopiperidine	0.164	0.160	2.4	73	0.00
29	P	Isophorone	0.565	0.547	3.2	72	0.00
30	C,P	2-Nitrophenol	0.181	0.183	-1.1	75	0.00
31	P	2,4-Dimethylphenol	0.297	0.285	4.0	72	0.00
32	P	bis(2-Chloroethoxy)methane	0.342	0.332	2.9	73	0.00
33		Benzoic Acid	0.222	0.150	32.4	51	0.00
34	C,P	2,4-Dichlorophenol	0.266	0.257	3.4	73	0.00
35		a,a-Dimethylphenethylamine	0.742	0.578	22.1	61	0.00
36		1,2,4-Trichlorobenzene	0.289	0.285	1.4	76	0.00
37	P	Naphthalene	0.988	0.960	2.8	74	0.00
38	P	4-Chloroaniline	0.113	0.103	8.8	68	0.00
39	C,P	Hexachlorobutadiene	0.149	0.152	-2.0	74	0.00
40		n-Nitrosodi-n-Butylamine	0.189	0.192	-1.6	74	0.00
41		p-Phenylenediamine	0.359	0.168	53.2#	35	0.00
42	C,P	4-Chloro-3-Methylphenol	0.274	0.265	3.3	72	0.00
43	P	2-Methylnaphthalene	0.670	0.675	-0.7	76	0.00
44		1-Methylnaphthalene	0.622	0.618	0.6	75	0.00
45	I	Acenaphthene-d10	1.000	1.000	0.0	73	0.00
46	P	Hexachlorocyclopentadiene	0.342	0.254	25.7	55	0.00
47	C,P	2,4,6-Trichlorophenol	0.331	0.322	2.7	72	0.00
48	P	2,4,5-Trichlorophenol	0.354	0.330	6.8	69	0.00
49	S	2-Fluorobiphenyl	1.257	1.252	0.4	75	0.00
50	P	2-Chloronaphthalene	1.055	1.040	1.4	74	0.00
51	P	2-Nitroaniline	0.361	0.334	7.5	69	0.00
52	P	Dimethylphthalate	1.198	1.191	0.6	74	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\031821\12M81403.D Vial: 2
Acq On : 18 Mar 2021 12:05 pm Operator: SCB
Sample : S1C0352-CCV1 Inst : MSD12
Misc : 1,1 0012168 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Thu Mar 18 12:41:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
53		1,3-Dinitrobenzene	0.213	0.222	-4.2	75	0.00
54	P	2,6-Dinitrotoluene	0.288	0.289	-0.3	75	0.00
55	P	Acenaphthylene	1.837	1.836	0.1	74	0.00
56	P	3-Nitroaniline	0.338	0.312	7.7	69	0.00
57	P	2,4-Dinitrophenol	0.178	0.185	-3.9	76	0.00
58	C,P	Acenaphthene	1.162	1.105	4.9	72	0.00
59	P	4-Nitrophenol	0.213	0.236	-10.8	79	0.00
60	P	2,4-Dinitrotoluene	0.372	0.383	-3.0	73	0.00
61	P	Dibenzofuran	1.536	1.516	1.3	74	0.00
62		2,3,5,6-Tetrachlorophenol	0.280	0.277	1.1	72	0.00
63		2,3,4,6-Tetrachlorophenol	0.289	0.282	2.4	72	0.00
64		1-Naphthylamine	1.221	1.101	9.8	67	0.00
65		2-Naphthylamine	1.281	0.971	24.2	56	0.00
66	P	Diethylphthalate	1.239	1.244	-0.4	74	0.00
67	P	Fluorene	1.251	1.267	-1.3	75	0.00
68	P	4-Chlorophenyl Phenyl Ether	0.586	0.583	0.5	75	0.00
69	P	4-Nitroaniline	0.372	0.321	13.7	65	0.00
70		5-Nitro-o-Toluidine	0.391	0.382	2.3	72	0.00
71		1,2-Diphenylhydrazine & Azo	1.090	1.062	2.6	72	0.00
72	S	2,4,6-Tribromophenol	0.172	0.170	1.2	71	0.00
73	I	Phenanthrene-d10	1.000	1.000	0.0	74	0.00
74	P	4,6-Dinitro-2-Methylphenol	0.121	0.125	-3.3	77	0.00
75	C,P	Diphenylamine/n-Nitrosodiph	0.614	0.612	0.3	74	0.00
76	P	4-Bromophenyl Phenyl Ether	0.181	0.185	-2.2	75	0.00
77	P	Hexachlorobenzene	0.196	0.195	0.5	74	0.00
78		4-Aminobiphenyl	0.830	0.640	22.9	56	0.00
79	C,P	Pentachlorophenol	0.136	0.125	8.1	67	0.00
80	P	Phenanthrene	1.041	1.013	2.7	74	0.00
81	P	Anthracene	1.063	1.050	1.2	73	0.00
82	P	Carbazole	0.940	0.922	1.9	73	0.00
83	P	Di-n-Butyl Phthalate	1.128	1.162	-3.0	74	0.00
84		Methapyrilene	0.453	0.485	-7.1	71	0.00
85	C,P	Fluoranthene	1.010	1.021	-1.1	75	0.00
86	I	Chrysene-d12	1.000	1.000	0.0	70	0.00
87		Benzidine	0.880	0.807	8.3	61	0.00
88	P	Pyrene	1.279	1.320	-3.2	74	0.00
89	S	p-Terphenyl-d14	0.959	1.008	-5.1	74	0.00
90		p-(Dimethylamino)azobenzene	0.250	0.261	-4.4	71	0.00
91	P	Butyl Benzyl Phthalate	0.633	0.655	-3.5	72	0.00
92		3,3'-Dimethylbenzidine	0.914	0.805	11.9	60	0.00
93		2-Acetylaminofluorene	0.525	0.597	-13.7	74	0.00
94	P	bis(2-Ethylhexyl)phthalate	0.850	0.925	-8.8	72	0.00
95	P	3,3'-Dichlorobenzidine	0.463	0.442	4.5	65	0.00
96	P	Benzo[a]anthracene	1.179	1.166	1.1	71	0.00
97	P	Chrysene	1.190	1.165	2.1	71	0.00
98	I	Perylene-d12	1.000	1.000	0.0	71	0.00
99	C,P	Di-n-Octyl Phthalate	1.250	1.405	-12.4	74	0.00
100	P	Benzo[b]fluoranthene	0.994	1.040	-4.6	71	0.00
101	P	Benzo[k]fluoranthene	1.032	1.014	1.7	69	0.00
102	C,P	Benzo[a]pyrene	0.890	0.924	-3.8	71	0.00
103	P	Indeno[1,2,3-cd]pyrene	0.921	0.942	-2.3	70	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\031821\12M81403.D Vial: 2
Acq On : 18 Mar 2021 12:05 pm Operator: SCB
Sample : S1C0352-CCV1 Inst : MSD12
Misc : 1,1 0012168 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Thu Mar 18 12:41:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
104	P	Dibenz[ah]anthracene	1.023	1.007	1.6	67	0.00
105	P	Benzo[ghi]perylene	0.999	0.970	2.9	67	0.00

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\031821\12M81403.D Vial: 2
Acq On : 18 Mar 2021 12:05 pm Operator: SCB
Sample : S1C0352-CCV1 Inst : MSD12
Misc : 1,1 0012168 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Thu Mar 18 12:41:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	76	0.00
2		n-Nitrosodimethylamine	50.000	44.813	10.4	69	0.00
3		Pyridine	50.000	46.208	7.6	69	0.00
4		2-Picoline	50.000	46.980	6.0	71	0.00
5		n-Nitrosomethylethylamine	50.000	47.416	5.2	72	0.00
6	S	2-Fluorophenol	50.000	47.205	5.6	72	0.00
7		n-Nitrosodiethylamine	50.000	48.825	2.3	74	0.00
8	S	Phenol-d5	50.000	50.456	-0.9	76	0.00
9	C,P	Phenol	50.000	42.824	14.4	65	0.00
10		Aniline	50.000	42.135	15.7	70	0.00
11	P	bis(2-Chloroethyl)ether	50.000	45.510	9.0	70	0.00
12	P	2-Chlorophenol	50.000	48.187	3.6	75	0.00
13		1,3-Dichlorobenzene	50.000	48.623	2.8	76	0.00
14	C	1,4-Dichlorobenzene	50.000	47.319	5.4	75	0.00
15		Benzyl Alcohol	50.000	46.566	6.9	71	0.00
16		1,2-Dichlorobenzene	50.000	47.715	4.6	75	0.00
17	P	2-Methylphenol	50.000	46.545	6.9	71	0.00
18	P	bis(2-Chloroisopropyl)ether	50.000	46.793	6.4	71	0.00
19	P	3-,4-Methylphenol	50.000	45.987	8.0	73	0.00
20		n-Nitrosopyrrolidine	50.000	47.733	4.5	74	0.00
21	P	n-Nitrosodipropylamine	50.000	47.497	5.0	74	0.00
22		n-Nitrosomorpholine	50.000	43.950	12.1	67	0.00
23		o-Toluidine	50.000	43.997	12.0	68	0.00
24	P	Hexachloroethane	50.000	48.959	2.1	75	0.00
25	I	Naphthalene-d8	40.000	40.000	0.0	74	0.00
26	S	Nitrobenzene-d5	50.000	50.349	-0.7	75	0.00
27	P	Nitrobenzene	50.000	48.816	2.4	73	0.00
28		n-Nitrosopiperidine	50.000	48.727	2.5	73	0.00
29	P	Isophorone	50.000	48.353	3.3	72	0.00
30	C,P	2-Nitrophenol	50.000	50.672	-1.3	75	0.00
31	P	2,4-Dimethylphenol	50.000	47.985	4.0	72	0.00
32	P	bis(2-Chloroethoxy)methane	50.000	48.595	2.8	73	0.00
33		Benzoic Acid	50.000	35.767	28.5	51	0.00
34	C,P	2,4-Dichlorophenol	50.000	48.376	3.2	73	0.00
35		a,a-Dimethylphenethylamine	50.000	38.910	22.2	61	0.00
36		1,2,4-Trichlorobenzene	50.000	49.224	1.6	76	0.00
37	P	Naphthalene	50.000	48.608	2.8	74	0.00
38	P	4-Chloroaniline	50.000	45.672	8.7	68	0.00
39	C,P	Hexachlorobutadiene	50.000	51.003	-2.0	74	0.00
40		n-Nitrosodi-n-Butylamine	50.000	50.865	-1.7	74	0.00
41		p-Phenylenediamine	50.000	23.407	53.2#	35	0.00
42	C,P	4-Chloro-3-Methylphenol	50.000	48.347	3.3	72	0.00
43	P	2-Methylnaphthalene	50.000	50.394	-0.8	76	0.00
44		1-Methylnaphthalene	50.000	49.748	0.5	75	0.00
45	I	Acenaphthene-d10	40.000	40.000	0.0	73	0.00
46	P	Hexachlorocyclopentadiene	50.000	37.124	25.8	55	0.00
47	C,P	2,4,6-Trichlorophenol	50.000	48.575	2.8	72	0.00
48	P	2,4,5-Trichlorophenol	50.000	46.617	6.8	69	0.00
49	S	2-Fluorobiphenyl	50.000	49.825	0.3	75	0.00
50	P	2-Chloronaphthalene	50.000	49.287	1.4	74	0.00
51	P	2-Nitroaniline	50.000	46.365	7.3	69	0.00
52	P	Dimethylphthalate	50.000	49.716	0.6	74	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\031821\12M81403.D Vial: 2
Acq On : 18 Mar 2021 12:05 pm Operator: SCB
Sample : S1C0352-CCV1 Inst : MSD12
Misc : 1,1 0012168 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Thu Mar 18 12:41:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
53		1,3-Dinitrobenzene	50.000	52.122	-4.2	75	0.00
54	P	2,6-Dinitrotoluene	50.000	50.114	-0.2	75	0.00
55	P	Acenaphthylene	50.000	49.986	0.0	74	0.00
56	P	3-Nitroaniline	50.000	46.035	7.9	69	0.00
57	P	2,4-Dinitrophenol	50.000	51.619	-3.2	76	0.00
58	C,P	Acenaphthene	50.000	47.568	4.9	72	0.00
59	P	4-Nitrophenol	50.000	55.376	-10.8	79	0.00
60	P	2,4-Dinitrotoluene	50.000	51.503	-3.0	73	0.00
61	P	Dibenzofuran	50.000	49.319	1.4	74	0.00
62		2,3,5,6-Tetrachlorophenol	50.000	49.572	0.9	72	0.00
63		2,3,4,6-Tetrachlorophenol	50.000	48.785	2.4	72	0.00
64		1-Naphthylamine	50.000	45.067	9.9	67	0.00
65		2-Naphthylamine	50.000	37.893	24.2	56	0.00
66	P	Diethylphthalate	50.000	50.185	-0.4	74	0.00
67	P	Fluorene	50.000	50.658	-1.3	75	0.00
68	P	4-Chlorophenyl Phenyl Ether	50.000	49.719	0.6	75	0.00
69	P	4-Nitroaniline	50.000	43.164	13.7	65	0.00
70		5-Nitro-o-Toluidine	50.000	48.853	2.3	72	0.00
71		1,2-Diphenylhydrazine & Azo	50.000	48.723	2.6	72	0.00
72	S	2,4,6-Tribromophenol	50.000	49.369	1.3	71	0.00
73	I	Phenanthrene-d10	40.000	40.000	0.0	74	0.00
74	P	4,6-Dinitro-2-Methylphenol	50.000	51.857	-3.7	77	0.00
75	C,P	Diphenylamine/n-Nitrosodiph	50.000	49.781	0.4	74	0.00
76	P	4-Bromophenyl Phenyl Ether	50.000	50.933	-1.9	75	0.00
77	P	Hexachlorobenzene	50.000	49.600	0.8	74	0.00
78		4-Aminobiphenyl	50.000	38.581	22.8	56	0.00
79	C,P	Pentachlorophenol	50.000	46.094	7.8	67	0.00
80	P	Phenanthrene	50.000	48.634	2.7	74	0.00
81	P	Anthracene	50.000	49.381	1.2	73	0.00
82	P	Carbazole	50.000	49.054	1.9	73	0.00
83	P	Di-n-Butyl Phthalate	50.000	51.517	-3.0	74	0.00
84		Methapyrilene	50.000	49.569	0.9	71	0.00
85	C,P	Fluoranthene	50.000	50.523	-1.0	75	0.00
86	I	Chrysene-d12	40.000	40.000	0.0	70	0.00
87		Benzidine	50.000	45.856	8.3	61	0.00
88	P	Pyrene	50.000	51.605	-3.2	74	0.00
89	S	p-Terphenyl-d14	50.000	52.522	-5.0	74	0.00
90		p-(Dimethylamino)azobenzene	50.000	52.286	-4.6	71	0.00
91	P	Butyl Benzyl Phthalate	50.000	51.769	-3.5	72	0.00
92		3,3'-Dimethylbenzidine	100.000	88.125	11.9	60	0.00
93		2-Acetylaminofluorene	50.000	51.350	-2.7	74	0.00
94	P	bis(2-Ethylhexyl)phthalate	50.000	54.392	-8.8	72	0.00
95	P	3,3'-Dichlorobenzidine	50.000	47.725	4.5	65	0.00
96	P	Benzo[a]anthracene	50.000	49.471	1.1	71	0.00
97	P	Chrysene	50.000	48.936	2.1	71	0.00
98	I	Perylene-d12	40.000	40.000	0.0	71	0.00
99	C,P	Di-n-Octyl Phthalate	50.000	51.449	-2.9	74	0.00
100	P	Benzo[b]fluoranthene	50.000	52.319	-4.6	71	0.00
101	P	Benzo[k]fluoranthene	50.000	49.102	1.8	69	0.00
102	C,P	Benzo[a]pyrene	50.000	51.924	-3.8	71	0.00
103	P	Indeno[1,2,3-cd]pyrene	50.000	51.148	-2.3	70	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\031821\12M81403.D Vial: 2
Acq On : 18 Mar 2021 12:05 pm Operator: SCB
Sample : S1C0352-CCV1 Inst : MSD12
Misc : 1,1 0012168 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Thu Mar 18 12:41:39 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
104	P	Dibenz[ah]anthracene	50.000	49.228	1.5	67	0.00
105	P	Benzo[ghi]perylene	50.000	48.551	2.9	67	0.00

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\031821\12M81404.D Vial: 3
Acq On : 18 Mar 2021 12:44 pm Operator: SCB
Sample : S1C0352-CCV2 Inst : MSD12
Misc : 1,1 1001939 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 19 08:28:30 2021 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Fri Mar 19 08:28:22 2021
Response via : Initial Calibration
DataAcq Meth : BNARUN

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.645	152	88051	40.0000	ug/ml	0.000
8) Naphthalene-d8	7.917	136	329121	40.0000	ug/ml	0.000
15) Acenaphthene-d10	9.653	164	180314	40.0000	ug/ml	0.000
23) Phenanthrene-d10	11.122	188	330778	40.0000	ug/ml	0.000
38) Chrysene-d12	14.536	240	254547	40.0000	ug/ml	0.000
42) Perylene-d12	17.047	264	284654	40.0000	ug/ml	0.000

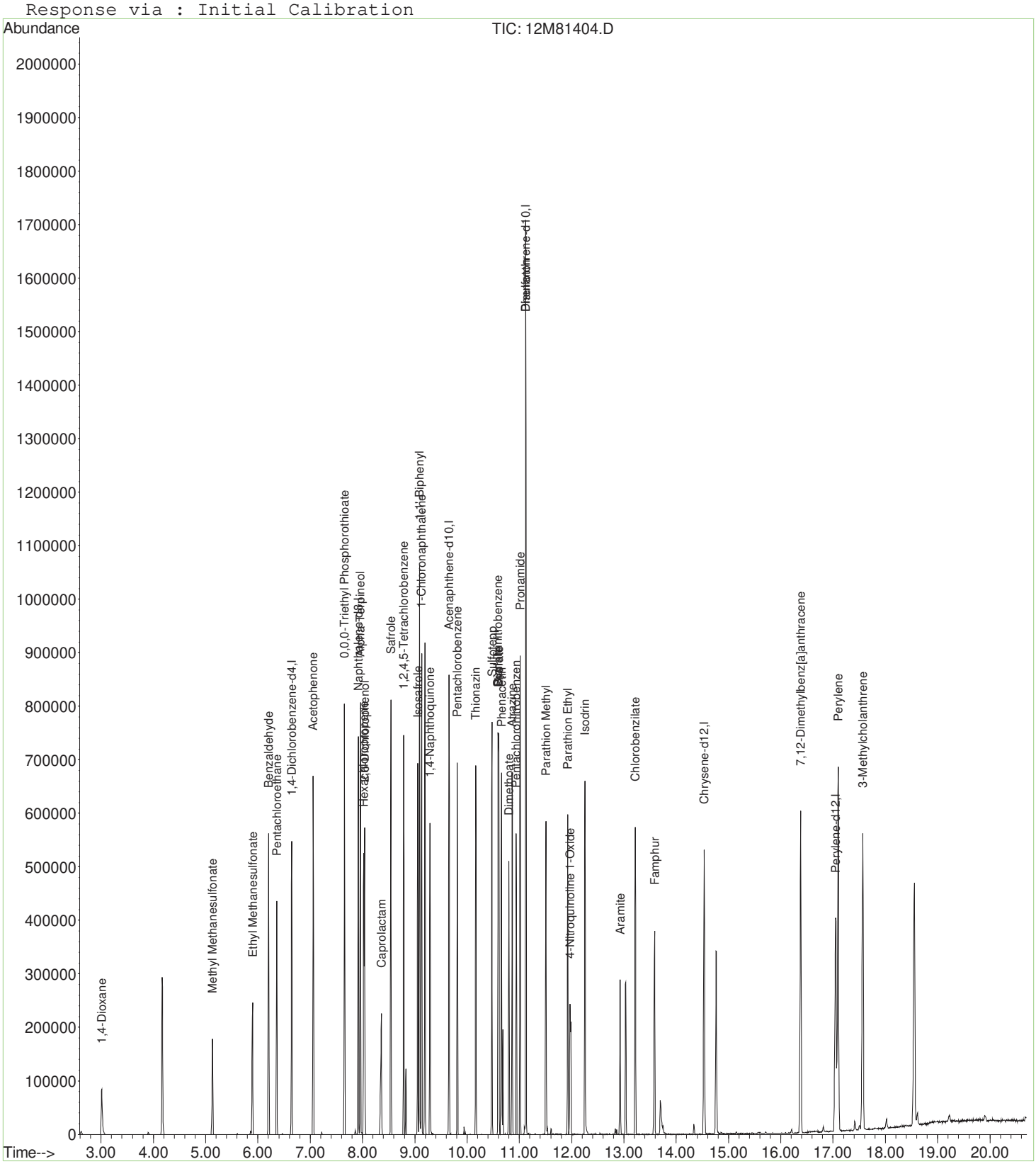
Target Compounds						Qvalue
2) 1,4-Dioxane	3.01	88	52686	45.0925	ug/ml	99
3) Methyl Methanesulfonate	5.13	80	71759	49.2485	ug/ml	96
4) Ethyl Methanesulfonate	5.90	79	88723	47.6134	ug/ml	98
5) Benzaldehyde	6.20	105	113669	48.9021	ug/ml	100
6) Pentachloroethane	6.36	167	55733	50.7542	ug/ml	98
7) Acetophenone	7.06	105	181837	48.0647	ug/ml	99
9) 0,0,0-Triethyl Phosphoroth	7.65	198	66772	50.5139	ug/ml	99
10) Alpha-Terpineol	7.96	59	105649	49.8769	ug/ml	98
11) 2,6-Dichlorophenol	8.04	162	111556	50.6384	ug/ml	99
12) Hexachloropropene	8.02	213	86884	52.3296	ug/ml	99
13) Caprolactam	8.36	55	54746	58.1061	ug/ml	98
14) Safrole	8.54	162	109127	50.8458	ug/ml	98
16) 1,2,4,5-Tetrachlorobenzene	8.79	216	118878	50.2107	ug/ml	100
17) Isosafrole	9.05	162	110015	51.0367	ug/ml	99
18) 1,1'-Biphenyl	9.09	154	347728	49.6285	ug/ml	100
19) 1-Chloronaphthalene	9.13	162	246042	48.6630	ug/ml	98
20) 1,4-Naphthoquinone	9.29	158	110013	46.1062	ug/ml	98
21) Pentachlorobenzene	9.81	250	102320	49.5883	ug/ml	99
22) Thionazin	10.17	107	46620	51.8826	ug/ml	98
24) Sulfotepp	10.48	322	51807	51.9724	ug/ml	99
25) Sym-Trinitrobenzene	10.59	75	73320m	63.1315	ug/ml	
26) Diallate	10.59	86	88049	49.6834	ug/ml#	76
27) Phenacetin	10.66	108	143558	51.3735	ug/ml	93
28) Phorate	10.61	75	140008m	44.5395	ug/ml	
29) Dimethoate	10.80	87	102974	49.7051	ug/ml	96
30) Atrazine	10.87	200	86654	50.8193	ug/ml	99
31) Pentachloronitrobenzen	10.94	237	33988	53.2901	ug/ml	98
32) Pronamide	11.02	173	135714	51.4617	ug/ml	100
33) Disulfoton	11.12	88	139666	45.6058	ug/ml	98
34) Parathion Methyl	11.51	109	98286	49.1371	ug/ml	97
35) Parathion Ethyl	11.92	97	55377	51.3844	ug/ml	98
36) 4-Nitroquinoline 1-Oxide	11.97	190	33296	35.4993	ug/ml	94
37) Isodrin	12.25	193	48189	50.1758	ug/ml	99
39) Aramite	12.93	185	29403	50.9031	ug/ml	97
40) Chlorobenzilate	13.22	251	112097	42.4054	ug/ml	100
41) Famphur	13.58	218	135955	37.8590	ug/ml	99
43) 7,12-Dimethylbenz[a]anthra	16.38	256	189542	53.7979	ug/ml	98
44) Perylene	17.10	252	412076	49.1361	ug/ml	99
45) 3-Methylcholanthrene	17.57	268	219937	52.9713	ug/ml	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\031821\12M81404.D Vial: 3
Acq On : 18 Mar 2021 12:44 pm Operator: SCB
Sample : S1C0352-CCV2 Inst : MSD12
Misc : 1,1 1001939 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 19 8:29 2021 Quant Results File: TCL.RES

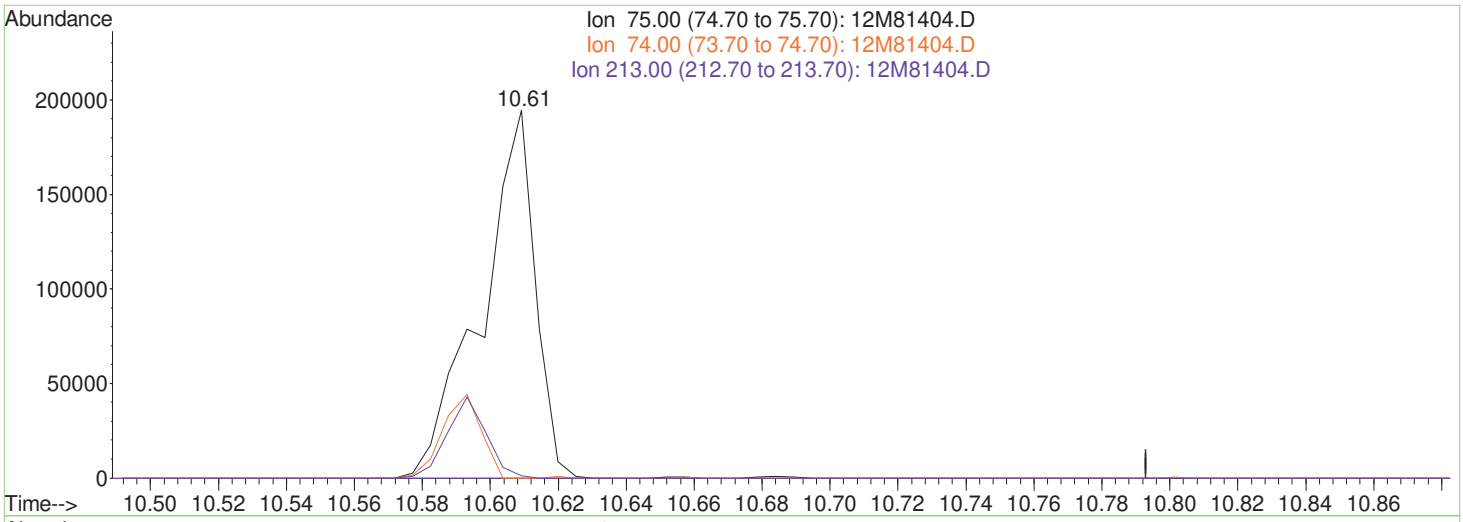
Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Fri Mar 19 08:28:22 2021
Response via : Initial Calibration

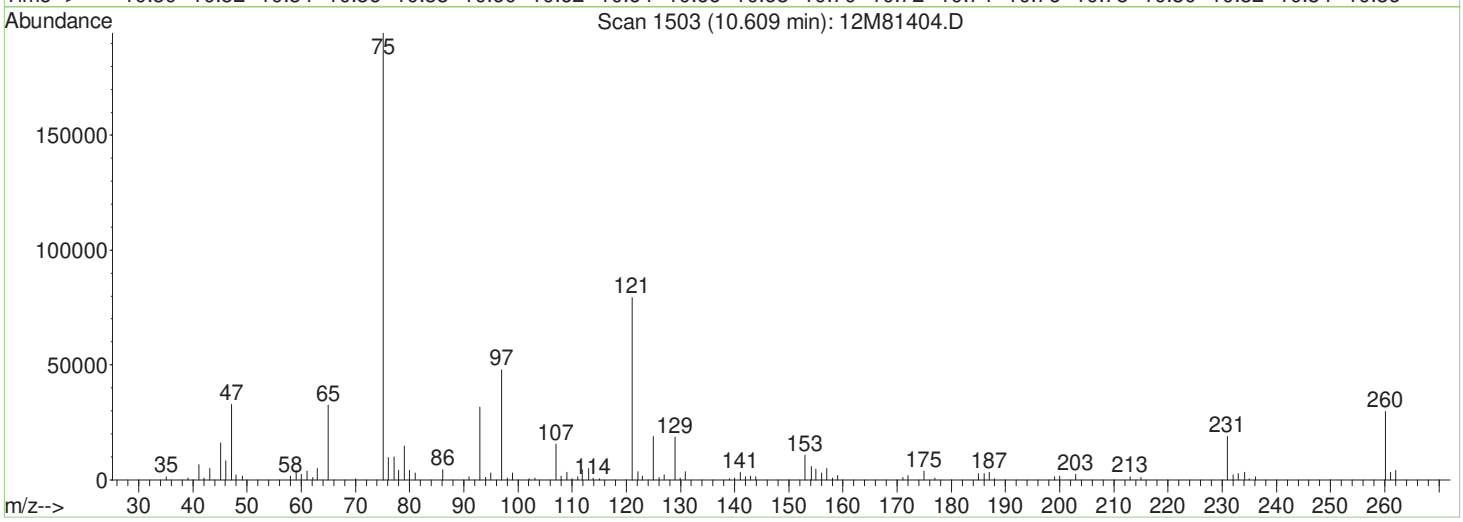


Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\031821\12M81404.D Vial: 3
Acq On : 18 Mar 2021 12:44 pm Operator: SCB
Sample : S1C0352-CCV2 Inst : MSD12
Misc : 1,1 1001939 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 19 8:28 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Fri Mar 19 08:28:22 2021
Response via : Multiple Level Calibration





TIC: 12M81404.D

(25) Sym-Trinitrobenzene

10.61min 179.29ug/ml

response 213330

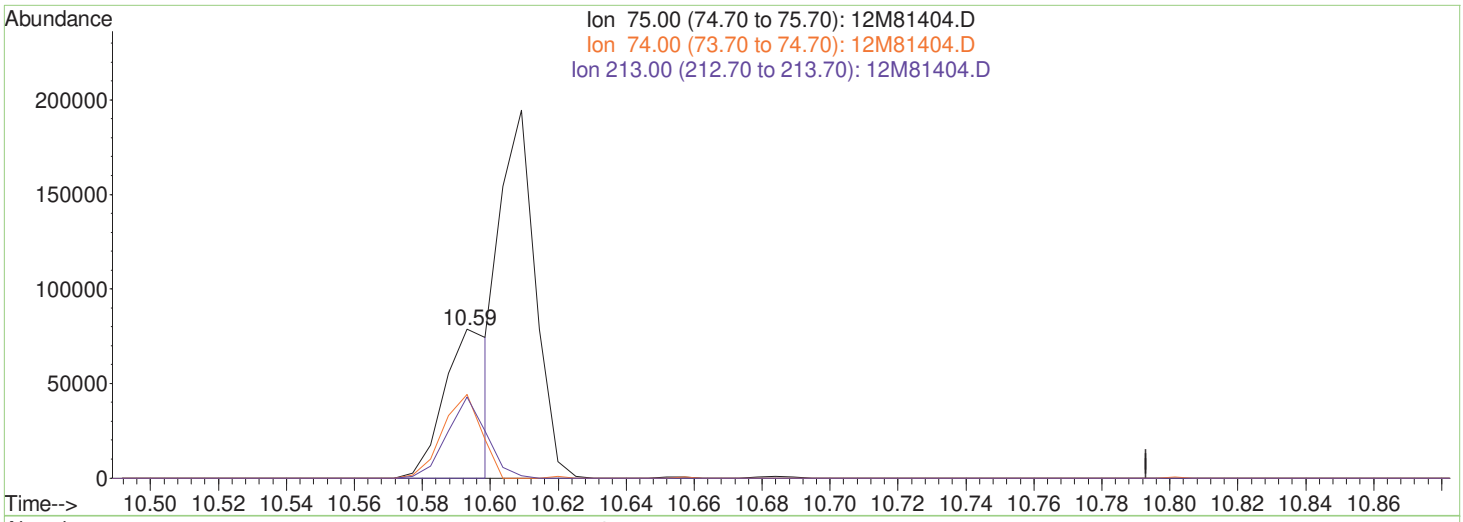
Ion	Exp%	Act%
75.00	100	100
74.00	59.80	16.46#
213.00	58.40	15.97#
0.00	0.00	0.00

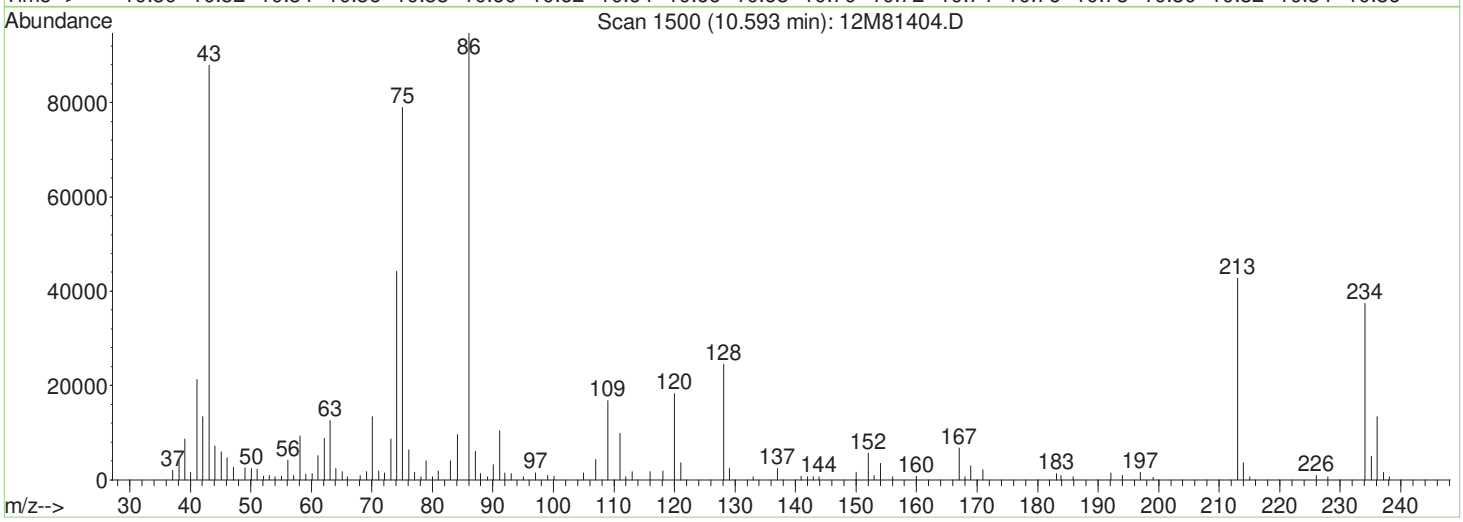
12M81404.D TCL.M Fri Mar 19 08:28:48 2021

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\031821\12M81404.D Vial: 3
Acq On : 18 Mar 2021 12:44 pm Operator: SCB
Sample : S1C0352-CCV2 Inst : MSD12
Misc : 1,1 1001939 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 19 8:28 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Fri Mar 19 08:28:22 2021
Response via : Multiple Level Calibration





TIC: 12M81404.D

(25) Sym-Trinitrobenzene

10.59min 63.13ug/ml mint

response 73320

Ion	Exp%	Act%
75.00	100	100
74.00	59.80	47.88
213.00	58.40	46.48#
0.00	0.00	0.00

Sarah Bogolin

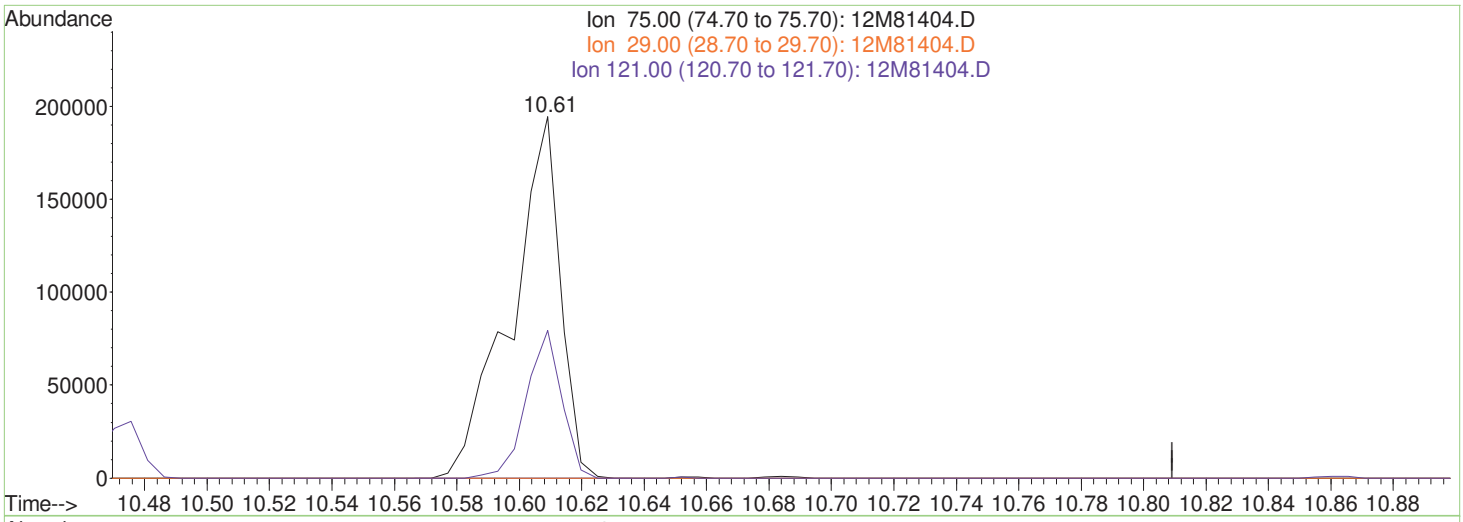
Digitally signed by Sarah Bogolin
Reason: Improperly integrated isomers and/or coeluting compounds
Date: 2021.03.19 10:48:37 -04'00'

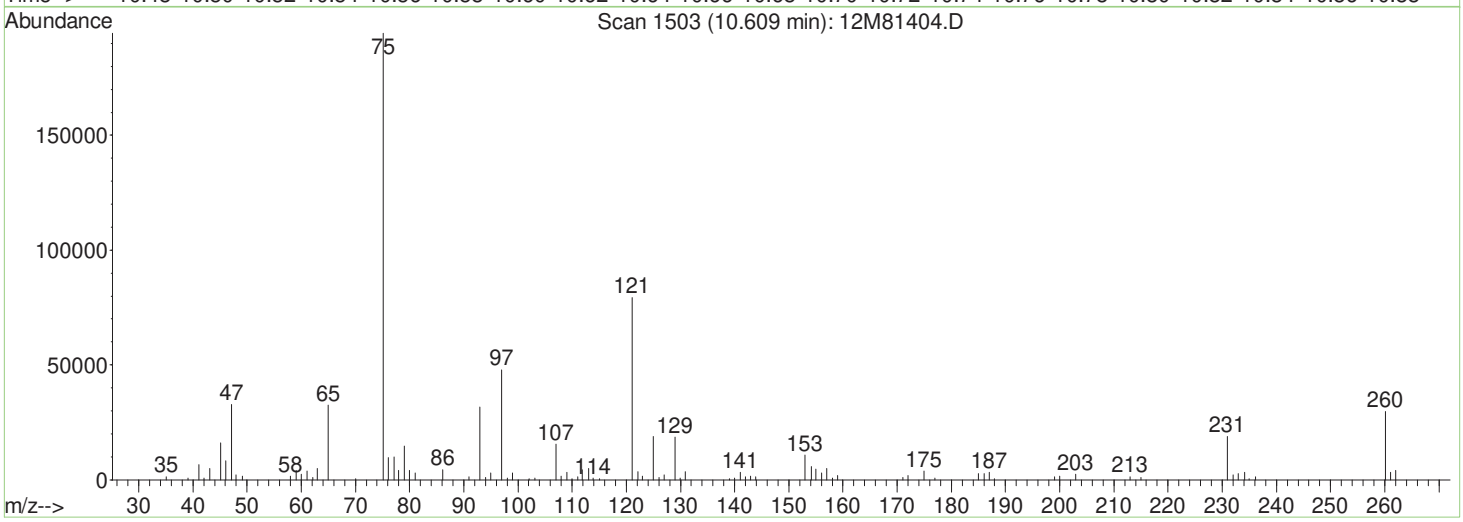
12M81404.D TCL.M Fri Mar 19 08:28:54 2021

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\031821\12M81404.D Vial: 3
Acq On : 18 Mar 2021 12:44 pm Operator: SCB
Sample : S1C0352-CCV2 Inst : MSD12
Misc : 1,1 1001939 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 19 8:28 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Fri Mar 19 08:28:22 2021
Response via : Multiple Level Calibration





TIC: 12M81404.D

(28) Phorate

10.61min 67.86ug/ml

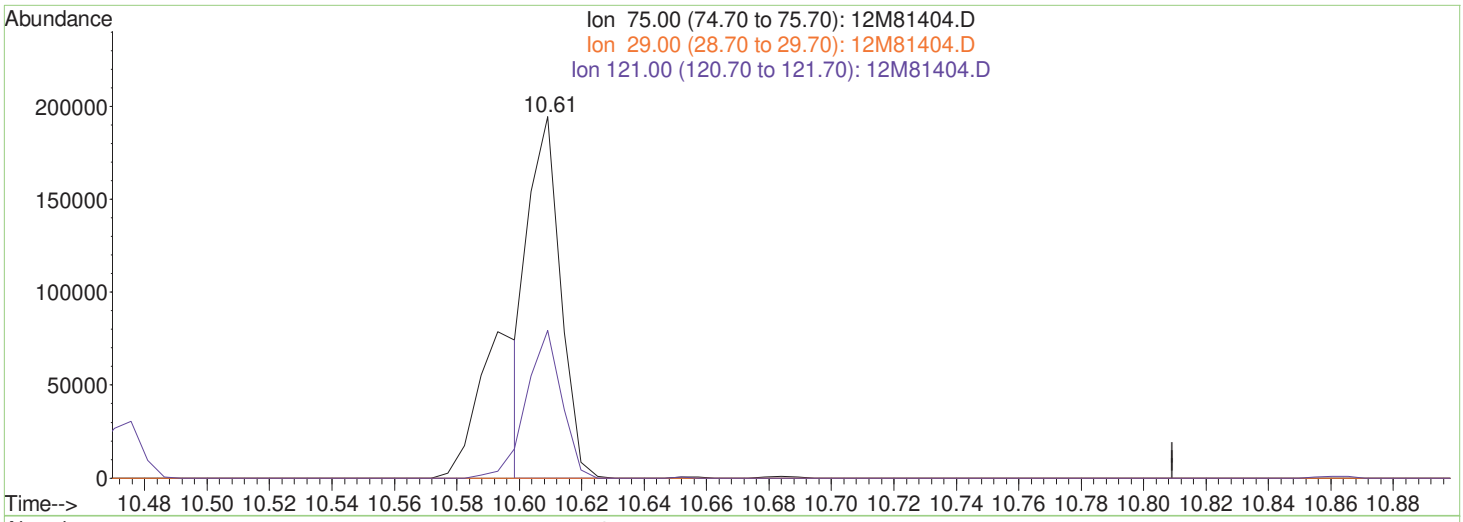
response 213330

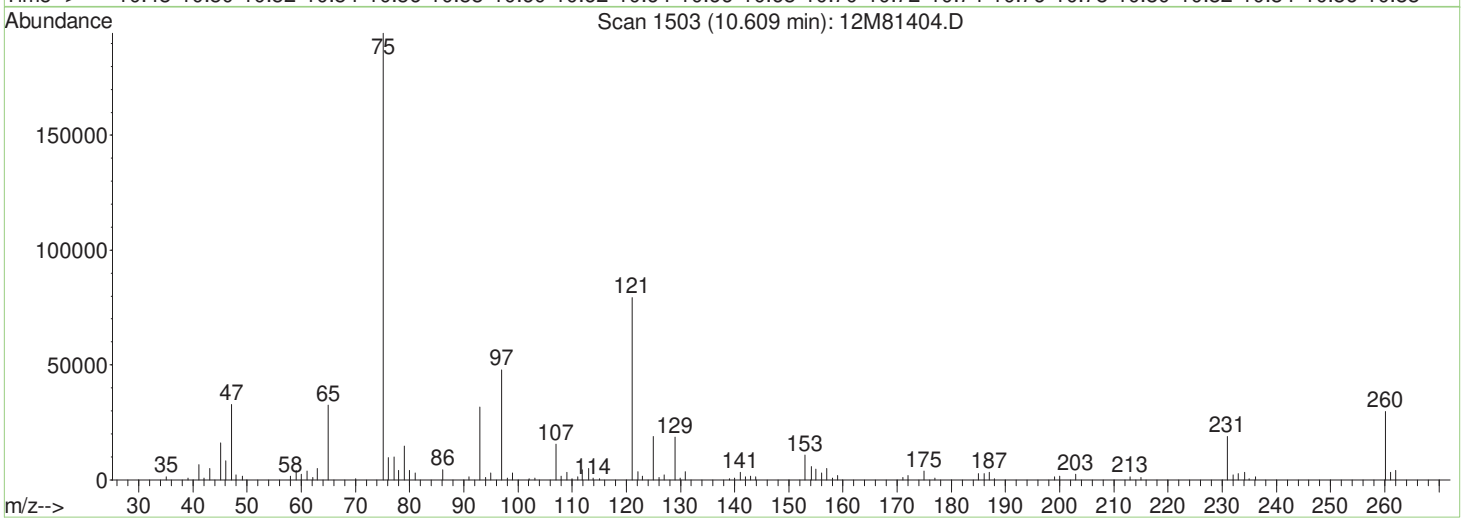
Ion	Exp%	Act%
75.00	100	100
29.00	0.00	0.00
121.00	39.40	29.49
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\031821\12M81404.D Vial: 3
Acq On : 18 Mar 2021 12:44 pm Operator: SCB
Sample : S1C0352-CCV2 Inst : MSD12
Misc : 1,1 1001939 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 19 8:29 2021 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Fri Mar 19 08:28:22 2021
Response via : Multiple Level Calibration





TIC: 12M81404.D

(28) Phorate

10.61min 44.54ug/ml mint

response 140008

Ion	Exp%	Act%
75.00	100	100
29.00	0.00	0.00
121.00	39.40	44.93
0.00	0.00	0.00

Sarah Bogolin

Digitally signed by Sarah Bogolin
Reason: Improperly integrated isomers and/or coeluting compounds
Date: 2021.03.19 10:49:09 -04'00'

12M81404.D TCL.M Fri Mar 19 08:29:16 2021

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\031821\12M81404.D Vial: 3
Acq On : 18 Mar 2021 12:44 pm Operator: SCB
Sample : S1C0352-CCV2 Inst : MSD12
Misc : 1,1 1001939 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Fri Mar 19 08:28:22 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	89	0.00
2		1,4-Dioxane	0.531	0.479	9.8	82	0.00
3		Methyl Methanesulfonate	0.662	0.652	1.5	89	0.00
4		Ethyl Methanesulfonate	0.847	0.806	4.8	86	0.00
5		Benzaldehyde	1.056	1.033	2.2	87	0.00
6		Pentachloroethane	0.499	0.506	-1.4	92	0.00
7		Acetophenone	1.719	1.652	3.9	86	0.00
8	I	Naphthalene-d8	1.000	1.000	0.0	87	0.00
9		0,0,0-Triethyl Phosphorothi	0.161	0.162	-0.6	88	0.00
10		Alpha-Terpineol	0.257	0.257	0.0	88	0.00
11		2,6-Dichlorophenol	0.268	0.271	-1.1	87	0.00
12		Hexachloropropene	0.202	0.211	-4.5	92	0.00
13		Caprolactam	0.115	0.133	-15.7	103	0.00
14		Safrole	0.261	0.265	-1.5	88	0.00
15	I	Acenaphthene-d10	1.000	1.000	0.0	86	0.00
16		1,2,4,5-Tetrachlorobenzene	0.525	0.527	-0.4	89	0.00
17		Isosafrole	0.478	0.488	-2.1	89	0.00
18		1,1'-Biphenyl	1.554	1.543	0.7	88	0.00
19		1-Chloronaphthalene	1.122	1.092	2.7	86	0.00
20		1,4-Naphthoquinone	0.490	0.488	0.4	83	0.00
21		Pentachlorobenzene	0.458	0.454	0.9	87	0.00
22		Thionazin	0.199	0.207	-4.0	87	0.00
23	I	Phenanthrene-d10	1.000	1.000	0.0	87	0.00
24		Sulfotepp	0.121	0.125	-3.3	89	0.00
25		Sym-Trinitrobenzene	0.121	0.177	-46.3#	116	0.00
26		Diallate	0.214	0.213	0.5	86	0.00
27		Phenacetin	0.338	0.347	-2.7	86	0.00
28		Phorate	0.380	0.339	10.8	77	0.00
29		Dimethoate	0.251	0.249	0.8	83	0.00
30		Atrazine	0.206	0.210	-1.9	88	0.00
31		Pentachloronitrobenzen	0.077	0.082	-6.5	90	0.00
32		Pronamide	0.319	0.328	-2.8	87	0.00
33		Disulfoton	0.370	0.338	8.6	84	0.00
34		Parathion Methyl	0.220	0.238	-8.2	86	0.00
35		Parathion Ethyl	0.119	0.134	-12.6	91	0.00
36		4-Nitroquinoline 1-Oxide	0.096	0.081	15.6	62	0.00
37		Isodrin	0.116	0.117	-0.9	85	0.00
38	I	Chrysene-d12	1.000	1.000	0.0	85	0.00
39		Aramite	0.081	0.092	-13.6	92	0.00
40		Chlorobenzilate	0.388	0.352	9.3	75	0.00
41		Famphur	0.533	0.427	19.9	66	0.00
42	I	Perylene-d12	1.000	1.000	0.0	81	0.00
43		7,12-Dimethylbenz[a]anthrac	0.459	0.533	-16.1	94	0.00
44		Perylene	1.178	1.158	1.7	81	0.00
45		3-Methylcholanthrene	0.583	0.618	-6.0	82	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

Data File : I:\MSDCHEM\1\DATA\031821\12M81404.D Vial: 3
Acq On : 18 Mar 2021 12:44 pm Operator: SCB
Sample : S1C0352-CCV2 Inst : MSD12
Misc : 1,1 1001939 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 8270/625 ICAL 01/29/21
Last Update : Fri Mar 19 08:28:22 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 40% Max. Rel. Area : 500%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	89	0.00
2		1,4-Dioxane	50.000	45.093	9.8	82	0.00
3		Methyl Methanesulfonate	50.000	49.248	1.5	89	0.00
4		Ethyl Methanesulfonate	50.000	47.613	4.8	86	0.00
5		Benzaldehyde	50.000	48.902	2.2	87	0.00
6		Pentachloroethane	50.000	50.754	-1.5	92	0.00
7		Acetophenone	50.000	48.065	3.9	86	0.00
8	I	Naphthalene-d8	40.000	40.000	0.0	87	0.00
9		0,0,0-Triethyl Phosphorothi	50.000	50.514	-1.0	88	0.00
10		Alpha-Terpineol	50.000	49.877	0.2	88	0.00
11		2,6-Dichlorophenol	50.000	50.638	-1.3	87	0.00
12		Hexachloropropene	50.000	52.330	-4.7	92	0.00
13		Caprolactam	50.000	58.106	-16.2	103	0.00
14		Safrole	50.000	50.846	-1.7	88	0.00
15	I	Acenaphthene-d10	40.000	40.000	0.0	86	0.00
16		1,2,4,5-Tetrachlorobenzene	50.000	50.211	-0.4	89	0.00
17		Isosafrole	50.000	51.037	-2.1	89	0.00
18		1,1'-Biphenyl	50.000	49.628	0.7	88	0.00
19		1-Chloronaphthalene	50.000	48.663	2.7	86	0.00
20		1,4-Naphthoquinone	50.000	46.106	7.8	83	0.00
21		Pentachlorobenzene	50.000	49.588	0.8	87	0.00
22		Thionazin	50.000	51.883	-3.8	87	0.00
23	I	Phenanthrene-d10	40.000	40.000	0.0	87	0.00
24		Sulfotepp	50.000	51.972	-3.9	89	0.00
25		Sym-Trinitrobenzene	50.000	63.131	-26.3	116	0.00
26		Diallate	50.000	49.683	0.6	86	0.00
27		Phenacetin	50.000	51.373	-2.7	86	0.00
28		Phorate	50.000	44.540	10.9	77	0.00
29		Dimethoate	50.000	49.705	0.6	83	0.00
30		Atrazine	50.000	50.819	-1.6	88	0.00
31		Pentachloronitrobenzen	50.000	53.290	-6.6	90	0.00
32		Pronamide	50.000	51.462	-2.9	87	0.00
33		Disulfoton	50.000	45.606	8.8	84	0.00
34		Parathion Methyl	50.000	49.137	1.7	86	0.00
35		Parathion Ethyl	50.000	51.384	-2.8	91	0.00
36		4-Nitroquinoline 1-Oxide	50.000	35.499	29.0	62	0.00
37		Isodrin	50.000	50.176	-0.4	85	0.00
38	I	Chrysene-d12	40.000	40.000	0.0	85	0.00
39		Aramite	50.000	50.903	-1.8	92	0.00
40		Chlorobenzilate	50.000	42.405	15.2	75	0.00
41		Famphur	50.000	37.859	24.3	66	0.00
42	I	Perylene-d12	40.000	40.000	0.0	81	0.00
43		7,12-Dimethylbenz[a]anthrac	50.000	53.798	-7.6	94	0.00
44		Perylene	50.000	49.136	1.7	81	0.00
45		3-Methylcholanthrene	50.000	52.971	-5.9	82	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

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GCMS Volatiles - Class Narrative and Notes

All test results meet the requirements of the QAPP and other applicable contract terms and conditions . Any exceptions are listed below in the sample and qc notes sections. Analytical results are reported on a 'as received' basis unless specified otherwise. Analytical results for solids with units ending in (dry) are reported on a dry weight basis. A statement of uncertainty for each analysis is available upon request.

Sample Notes

EPA 8260B

S1 **Surrogate recovery is above acceptance limits.**

Toluene-d8

M1C1317-01 Soil IDW

QC Sample Notes

S1 **Surrogate recovery is above acceptance limits.**

EPA 8260B

Toluene-d8

B1C1187-BLK2 Blank

U **The analyte was analyzed for but was not detected above the reported quantitation limit. The quantitation limit has been adjusted for any dilution or concentration of the sample.**

EPA 8260B

2-Butanone

S1B0345-CAL1 Cal Standard

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GCMS Volatiles
EPA 8260B

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FORM I:
GCMS Volatiles
EPA 8260B
RESULTS SUMMARY

Microbac Laboratories, Inc.
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Laboratory Report Number: M1C1317

CERTIFICATE OF ANALYSIS
FORM I

Client Project ID: Longhorn

Microbac Laboratories Inc., - Marietta, OH

Volatile Organic Compounds TCLP by GCMS

Client ID:	Soil IDW			**Collection Date:**	03/11/2021 10:00
Laboratory ID:	M1C1317-01	**PrePrep Method:**	1311 ZHE	**Prep Date:**	03/19/2021 18:09
Matrix:	Solid	**Prep Method:**	EPA 5030C	**Analyzed:**	03/19/2021 18:09
Batch / Sequence:	B1C1187 / S1C0383	**Analytical Method:**	EPA 8260B	**Calibration:**	21B0038
Instrument:	HPMS11	**Units:**	ug/L	**File ID:**	11M43418.D
Analyst:	CIM	**Dilution:**	10	**% Solids:**	87.31

Analyte	CAS Number	Result	DL	LOD	LOQ	Flag	Qual
1,1-Dichloroethene	75-35-4	50.0	5.00	50.0	50.0	U	
1,2-Dichloroethane	107-06-2	50.0	2.50	50.0	50.0	U	
2-Butanone	78-93-3	100	25.0	100	100	U	
Benzene	71-43-2	50.0	1.25	50.0	50.0	U	
Carbon tetrachloride	56-23-5	50.0	2.50	50.0	50.0	U	
Chlorobenzene	108-90-7	50.0	1.25	50.0	50.0	U	
Chloroform	67-66-3	50.0	1.25	50.0	50.0	U	
Tetrachloroethene	127-18-4	50.0	2.50	50.0	50.0	U	
Trichloroethene	79-01-6	50.0	2.50	50.0	50.0	U	
Vinyl chloride	75-01-4	100	2.50	100	100	U	

Surrogate	Recovery	Limits	Units	Q	Qualifier	
Toluene-d8	114	88-110	% Rec	*	S1	
Dibromofluoromethane	101	86-118	% Rec			
4-Bromofluorobenzene	106	86-115	% Rec			
1,2-Dichloroethane-d4	99.3	80-120	% Rec			

Notes and Definitions

DL: Detection Limit
LOD: Limit of Detection
LOQ: Limit of Quantitation
S1: Surrogate recovery is above acceptance limits.
U: The analyte was analyzed for but was not detected above the reported quantitation limit. The quantitation limit has been adjusted for any dilution or concentration of the sample.
ug/L: Micrograms per Liter

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FORM II:
GCMS Volatiles
EPA 8260B
SURROGATE SUMMARY

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

BLANK SPIKE / DUPLICATE (BS/BSD)

FORM IIIB

Method:	EPA 8260B		**Blank Spike**	**Duplicate**
Batch:	B1C1187	**Spike ID:**	B1C1187-BS1	B1C1187-BSD1
Analyst:	CIM	**Prepared:**	03/19/21 16:14	03/19/21 16:43
Matrix:	Aqueous	**Analyzed:**	03/19/21 16:14	03/19/21 16:43
Units:	ug/L	**File ID:**	11M43414.D	11M43415.D
Instrument:	HPMS11	**Initial/Final:**	10mL/10mL	10mL/10mL
Calibration:	21B0038			

Analyte	BS Spiked	BS Found	BS %Rec	BSD Spiked	BSD Found	BSD %Rec	%RPD	%Rec Limts	RPD Limit	Q
1,1-Dichloroethene	20.0	21.1	106	20.0	21.7	109	2.89	80 - 132	20	
1,2-Dichloroethane	20.0	21.1	106	20.0	21.0	105	0.483	80 - 129	20	
2-Butanone	20.0	20.2	101	20.0	20.3	102	0.556	10 - 170	20	
Benzene	20.0	20.8	104	20.0	21.0	105	1.18	80 - 121	20	
Carbon tetrachloride	20.0	20.8	104	20.0	20.8	104	0.232	65 - 140	20	
Chlorobenzene	20.0	20.0	99.8	20.0	19.5	97.7	2.12	80 - 120	20	
Chloroform	20.0	20.1	101	20.0	20.4	102	1.48	80 - 125	20	
Tetrachloroethene	20.0	19.4	96.8	20.0	20.4	102	5.31	80 - 124	20	
Trichloroethene	20.0	19.5	97.5	20.0	20.2	101	3.47	80 - 122	20	
Vinyl chloride	20.0	19.6	98.0	20.0	21.6	108	9.66	50 - 170	20	

Surrogate	BS Spiked	BS Found	BS %Rec	BSD Spiked	BSD Found	BSD %Rec	%RPD	%Rec Limts	RPD Limit	Q
1,2-Dichloroethane-d4	25.0	25.1	100	25.0	25.7	103		80 - 120		
4-Bromofluorobenzene	25.0	25.1	100	25.0	26.6	106		86 - 115		
Dibromofluoromethane	25.0	24.0	95.9	25.0	25.5	102		86 - 118		
Toluene-d8	25.0	25.2	101	25.0	25.9	104		88 - 110		

* - Does not meet %Rec acceptance criteria.
\# - Does not meet RPD acceptance criteria.
NS - Analyte Not Spiked

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FORM III:
GCMS Volatiles
EPA 8260B
BS/BSD, MS/MSD, DUP

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

BLANK SPIKE / DUPLICATE (BS/BSD)

FORM IIIB

Method:	EPA 8260B		**Blank Spike**	**Duplicate**
Batch:	B1C1187	**Spike ID:**	B1C1187-BS1	B1C1187-BSD1
Analyst:	CIM	**Prepared:**	03/19/21 16:14	03/19/21 16:43
Matrix:	Aqueous	**Analyzed:**	03/19/21 16:14	03/19/21 16:43
Units:	ug/L	**File ID:**	11M43414.D	11M43415.D
Instrument:	HPMS11	**Initial/Final:**	10mL/10mL	10mL/10mL
Calibration:	21B0038			

Analyte	BS Spiked	BS Found	BS %Rec	BSD Spiked	BSD Found	BSD %Rec	%RPD	%Rec Limts	RPD Limit	Q
1,1-Dichloroethene	20.0	21.1	106	20.0	21.7	109	2.89	80 - 132	20	
1,2-Dichloroethane	20.0	21.1	106	20.0	21.0	105	0.483	80 - 129	20	
2-Butanone	20.0	20.2	101	20.0	20.3	102	0.556	10 - 170	20	
Benzene	20.0	20.8	104	20.0	21.0	105	1.18	80 - 121	20	
Carbon tetrachloride	20.0	20.8	104	20.0	20.8	104	0.232	65 - 140	20	
Chlorobenzene	20.0	20.0	99.8	20.0	19.5	97.7	2.12	80 - 120	20	
Chloroform	20.0	20.1	101	20.0	20.4	102	1.48	80 - 125	20	
Tetrachloroethene	20.0	19.4	96.8	20.0	20.4	102	5.31	80 - 124	20	
Trichloroethene	20.0	19.5	97.5	20.0	20.2	101	3.47	80 - 122	20	
Vinyl chloride	20.0	19.6	98.0	20.0	21.6	108	9.66	50 - 170	20	

Surrogate	BS Spiked	BS Found	BS %Rec	BSD Spiked	BSD Found	BSD %Rec	%RPD	%Rec Limts	RPD Limit	Q
1,2-Dichloroethane-d4	25.0	25.1	100	25.0	25.7	103		80 - 120		
4-Bromofluorobenzene	25.0	25.1	100	25.0	26.6	106		86 - 115		
Dibromofluoromethane	25.0	24.0	95.9	25.0	25.5	102		86 - 118		
Toluene-d8	25.0	25.2	101	25.0	25.9	104		88 - 110		

* - Does not meet %Rec acceptance criteria.
\# - Does not meet RPD acceptance criteria.
NS - Analyte Not Spiked

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FORM IV:
GCMS Volatiles
EPA 8260B
METHOD BLANK SUMMARY

Microbac Laboratories, Inc.
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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

METHOD BLANK SUMMARY
FORM IVA

Blank ID:	B1C1187-BLK1	**Batch:**	B1C1187
Blank File ID:	11M43410.D	**Instrument:**	HPMS11
Prepared:	03/19/2021 14:17	**Method:**	EPA 8260B
Analyzed:	03/19/2021 14:17	**Analyst:**	CIM

This Method Blank Applies To The Following Samples:

Client Sample ID	Laboratory Sample ID	Lab File ID	Time Analyzed
Blank	B1C1187-BLK1	11M43410.D	03/19/2021 14:17
Blank	B1C1187-BLK2	11M43411.D	03/19/2021 14:46
LCS	B1C1187-BS1	11M43414.D	03/19/2021 16:14
LCS Dup	B1C1187-BSD1	11M43415.D	03/19/2021 16:43
Soil IDW	M1C1317-01	11M43418.D	03/19/2021 18:09

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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

METHOD BLANK SUMMARY
FORM IVA

Blank ID:	B1C1187-BLK2	**Batch:**	B1C1187
Blank File ID:	11M43411.D	**Instrument:**	HPMS11
Prepared:	03/19/2021 14:46	**Method:**	EPA 8260B
Analyzed:	03/19/2021 14:46	**Analyst:**	CIM

This Method Blank Applies To The Following Samples:

Client Sample ID	Laboratory Sample ID	Lab File ID	Time Analyzed
Blank	B1C1187-BLK1	11M43410.D	03/19/2021 14:17
Blank	B1C1187-BLK2	11M43411.D	03/19/2021 14:46
LCS	B1C1187-BS1	11M43414.D	03/19/2021 16:14
LCS Dup	B1C1187-BSD1	11M43415.D	03/19/2021 16:43
Soil IDW	M1C1317-01	11M43418.D	03/19/2021 18:09

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

METHOD BLANK
FORM IVB

Sample ID:	B1C1187-BLK1	**Prep Date:**	03/19/21 14:17	**Matrix:**	Aqueous
Instrument:	HPMS11	**Analyzed:**	03/19/21 14:17	**Method:**	EPA 8260B
File ID:	11M43410.D	**Sequence:**	S1C0383	**Analyst:**	CIM
Batch:	B1C1187	**Units:**	ug/L	**Calibration:**	21B0038

Analyte	Result	DL	LOD	LOQ	Dilution	Flag	Q
1,1-Dichloroethene	50.0	5.00	50.0	50.0	10	U	
1,2-Dichloroethane	50.0	2.50	50.0	50.0	10	U	
2-Butanone	100	25.0	100	100	10	U	
Benzene	50.0	1.25	50.0	50.0	10	U	
Carbon tetrachloride	50.0	2.50	50.0	50.0	10	U	
Chlorobenzene	50.0	1.25	50.0	50.0	10	U	
Chloroform	50.0	1.25	50.0	50.0	10	U	
Tetrachloroethene	50.0	2.50	50.0	50.0	10	U	
Trichloroethene	50.0	2.50	50.0	50.0	10	U	
Vinyl chloride	100	2.50	100	100	10	U	

Surrogate	Recovery	Limits	PASS/FAIL
1,2-Dichloroethane-d4	104	80 - 120	PASS
4-Bromofluorobenzene	107	86 - 115	PASS
Dibromofluoromethane	101	86 - 118	PASS
Toluene-d8	108	88 - 110	PASS

Notes and Definitions

* - Detected in the associated method Blank at a concentration >= RL

U: The analyte was analyzed for but was not detected above the reported quantitation limit. The quantitation limit has been adjusted for any dilution or concentration of the sample.

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

METHOD BLANK
FORM IVB

Sample ID:	B1C1187-BLK2	**Prep Date:**	03/19/21 14:46	**Matrix:**	Aqueous
Instrument:	HPMS11	**Analyzed:**	03/19/21 14:46	**Method:**	EPA 8260B
File ID:	11M43411.D	**Sequence:**	S1C0383	**Analyst:**	CIM
Batch:	B1C1187	**Units:**	ug/L	**Calibration:**	21B0038

Analyte	Result	DL	LOD	LOQ	Dilution	Flag	Q
1,1-Dichloroethene	50.0	5.00	50.0	50.0	10	U	
1,2-Dichloroethane	50.0	2.50	50.0	50.0	10	U	
2-Butanone	100	25.0	100	100	10	U	
Benzene	50.0	1.25	50.0	50.0	10	U	
Carbon tetrachloride	50.0	2.50	50.0	50.0	10	U	
Chlorobenzene	50.0	1.25	50.0	50.0	10	U	
Chloroform	50.0	1.25	50.0	50.0	10	U	
Tetrachloroethene	50.0	2.50	50.0	50.0	10	U	
Trichloroethene	50.0	2.50	50.0	50.0	10	U	
Vinyl chloride	100	2.50	100	100	10	U	

Surrogate	Recovery	Limits	PASS/FAIL
1,2-Dichloroethane-d4	106	80 - 120	PASS
4-Bromofluorobenzene	107	86 - 115	PASS
Dibromofluoromethane	106	86 - 118	PASS
Toluene-d8	113	88 - 110	FAIL

Notes and Definitions

* - Detected in the associated method Blank at a concentration >= RL

S1: Surrogate recovery is above acceptance limits.
U: The analyte was analyzed for but was not detected above the reported quantitation limit. The quantitation limit has been adjusted for any dilution or concentration of the sample.

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FORM V:
GCMS Volatiles
EPA 8260B
TUNE SUMMARY

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK FORM V

Lab File ID:	11M42846.D	**Injection Date:**	02/22/21
Instrument ID:	HPMS11	**Injection Time:**	17:34
Sequence:	S1B0345	**Lab Sample ID:**	S1B0345-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	23.6	PASS
75	30 - 60% of 95	51.3	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.57	PASS
173	Less than 2% of 174	0	PASS
174	50 - 100% of 95	81.7	PASS
175	5 - 9% of 174	7.14	PASS
176	95 - 101% of 174	95.8	PASS
177	5 - 9% of 176	6.88	PASS

Laboratory ID	Client ID#	Run Date
S1B0345-TUN1	MS Tune	2/22/21 17:34
S1B0345-CAL1	Cal Standard	2/22/21 18:27
S1B0345-CAL2	Cal Standard	2/22/21 18:56
S1B0345-CAL3	Cal Standard	2/22/21 19:25
S1B0345-CAL4	Cal Standard	2/22/21 19:55
S1B0345-CAL5	Cal Standard	2/22/21 20:25
S1B0345-CAL6	Cal Standard	2/22/21 20:55
S1B0345-CAL7	Cal Standard	2/22/21 21:25
S1B0345-CAL8	Cal Standard	2/22/21 21:55
S1B0345-ICV1	Initial Cal Check	2/22/21 22:55
S1B0345-CAL9	Cal Standard	
S1B0345-CALA	Cal Standard	
S1B0345-CALB	Cal Standard	
S1B0345-CALC	Cal Standard	
S1B0345-CALD	Cal Standard	
S1B0345-CALE	Cal Standard	
S1B0345-CALF	Cal Standard	
S1B0345-CALG	Cal Standard	
S1B0345-ICV2	Initial Cal Check	

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK FORM V

Lab File ID:	11M43406.D	**Injection Date:**	03/19/21
Instrument ID:	HPMS11	**Injection Time:**	12:09
Sequence:	S1C0383	**Lab Sample ID:**	S1C0383-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	25.5	PASS
75	30 - 60% of 95	55.2	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.47	PASS
173	Less than 2% of 174	0.545	PASS
174	50 - 100% of 95	95.1	PASS
175	5 - 9% of 174	7.72	PASS
176	95 - 101% of 174	95.4	PASS
177	5 - 9% of 176	6.65	PASS

Laboratory ID	Client ID#	Run Date
S1C0383-TUN1	MS Tune	3/19/21 12:09
S1C0383-CCV1	Calibration Check	3/19/21 12:34
B1C1187-BLK1	Blank	3/19/21 14:17
B1C1187-BLK2	Blank	3/19/21 14:46
B1C1187-BS1	LCS	3/19/21 16:14
B1C1187-BSD1	LCS Dup	3/19/21 16:43
M1C1317-01	Soil IDW	3/19/21 18:09
S1C0383-LCV1	Low Cal Check	3/19/21 23:27

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FORM VII:
GCMS Volatiles
EPA 8260B
ICV/CCV

Microbac Laboratories, Inc.
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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

Initial Calibration Verification (ICV)
FORM VIIA

Sample ID: S1B0345-ICV1 **Analyzed:** 02/22/21 22:55 **Method:** EPA 8260B
Instrument: HPMS11 **Calibration:** 21B0038 **Sequence:** S1B0345
File ID: 11M42857.D **Units:** ug/L **Analyst:** CIM/EEA

Analyte	Response	Limit	Q	Expected	Found	% Drift / % Diff	UCL	Q
1,1-Dichloroethene	0.43704			50.0	50.9	1.8	30	
Chloroform	0.5076889			50.0	50.2	0.4	30	
Vinyl chloride	0.2480672			50.0	41.0	-18.0	30	
Chlorobenzene	1.004786	0.30		50.0	49.1	-1.8	30	
1,2-Dichloroethane	0.4039866			50.0	51.0	2.1	30	
1,2-Dichloroethane-d4			RRO		24.5			
2-Butanone	0.1311032			50.0	48.3	-3.4	30	
4-Bromofluorobenzene			RRO		24.8			
Benzene	1.076955			50.0	50.5	1.0	30	
Carbon tetrachloride	0.4179306			50.0	50.6	1.3	30	
Dibromofluoromethane			RRO		25.4			
Tetrachloroethene	0.2518401			50.0	50.4	0.8	30	
Toluene-d8			RRO		24.8			
Trichloroethene	0.3195632			50.0	51.8	3.5	30	

* - Does not meet acceptance criteria.

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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

Continuing Calibration Verification (CCV)
FORM VIIB

Laboratory ID:	S1C0383-CCV1	**Analyzed:**	03/19/21 12:34	**Method:**	EPA 8260B
Instrument:	HPMS11	**Calibration:**	21B0038	**Sequence:**	S1C0383
File ID:	11M43407.D	**Units:**	ug/L	**Analyst:**	CIM

Analyte	Response	Limit	Q	Expected	Found	% Drift / % Diff	UCL	Q
1,1-Dichloroethene	0.4345163			50.0	50.6	1.2	20	
1,2-Dichloroethane	0.3843887			50.0	48.6	-2.9	40	
1,2-Dichloroethane-d4	0.2920827			25.0	24.0	-3.9		
2-Butanone	0.1094768			50.0	40.3	-19.3	40	
4-Bromofluorobenzene	0.3447778			25.0	23.9	-4.5		
Benzene	1.060521			50.0	49.7	-0.5	40	
Carbon tetrachloride	0.4257546			50.0	51.6	3.2	40	
Chlorobenzene	0.9783645	0.30		50.0	47.8	-4.4	40	
Chloroform	0.4829513			50.0	47.8	-4.5	20	
Dibromofluoromethane	0.2726116			25.0	24.8	-0.6		
Tetrachloroethene	0.2379676			50.0	48.7	-2.6	40	
Toluene-d8	0.9488375			25.0	25.1	0.3		
Trichloroethene	0.2868379			50.0	46.5	-7.1	40	
Vinyl chloride	0.3334364			50.0	55.1	10.3	20	

* - Does not meet acceptance criteria.

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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

Continuing Calibration Verification (CCV)
FORM VIIB

Laboratory ID:	S1C0383-LCV1	**Analyzed:**	03/19/21 23:27	**Method:**	EPA 8260B
Instrument:	HPMS11	**Calibration:**	21B0038	**Sequence:**	S1C0383
File ID:	11M43429.D	**Units:**	ug/L		

Analyte	Expected	Found	Recovery	LCL	UCL	Q
1,1-Dichloroethene	50.0	55.6	111	0	200	
1,2-Dichloroethane	50.0	53.3	107	0	200	
1,2-Dichloroethane-d4	25.0	25.6	103	0	200	
2-Butanone	50.0	48.3	96.6	0	200	
4-Bromofluorobenzene	25.0	26.3	105	0	200	
Benzene	50.0	55.9	112	0	200	
Carbon tetrachloride	50.0	55.6	111	0	200	
Chlorobenzene	50.0	54.1	108	0	200	
Chloroform	50.0	52.3	105	0	200	
Dibromofluoromethane	25.0	25.7	103	0	200	
Tetrachloroethene	50.0	52.0	104	0	200	
Toluene-d8	25.0	26.6	107	0	200	
Trichloroethene	50.0	56.8	114	0	200	
Vinyl chloride	50.0	62.5	125	0	200	

* - Does not meet acceptance criteria.

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FORM VIII:
GCMS Volatiles
EPA 8260B
Internal Standard Area and RT

Microbac Laboratories, Inc.
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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

INTERNAL STANDARD AREA SUMMARY
FORM VIIIA

Laboratory:	Microbac Laboratories Inc., - Marietta, OH	**SDG:**	M1C1317
Client:	HDR	**Project:**	Longhorn AAP
Sequence:	S1B0345	**Instrument:**	HPMS11
		Calibration:	21B0038

Initial Cal Check (S1B0345-ICV1)

Analyte	Resp	RT	RefResp	RefRT	Area%	ISAreaLimit	Flg	RTDiff	RTDiffLimit	Flg
1,4-Dichlorobenzene-d4	221395	16.6882	221395	16.6882	100	50 - 200		0.0000	+/-0.50	
Chlorobenzene-d5	395772	13.8759	395772	13.8759	100	50 - 200		0.0000	+/-0.50	
Fluorobenzene	507028	10.2467	507028	10.2467	100	50 - 200		0.0000	+/-0.50	

Laboratory:	Microbac Laboratories Inc., - Marietta, OH	**SDG:**	M1C1317
Client:	HDR	**Project:**	Longhorn AAP
Sequence:	S1C0383	**Instrument:**	HPMS11
		Calibration:	21B0038

Blank (B1C1187-BLK1)

Analyte	Resp	RT	RefResp	RefRT	Area%	ISAreaLimit	Flg	RTDiff	RTDiffLimit	Flg
1,4-Dichlorobenzene-d4	126827	16.6779	154812	16.678	82	50 - 200		-0.0001	+/-0.50	
Chlorobenzene-d5	240973	13.8759	281412	13.876	86	50 - 200		-0.0001	+/-0.50	
Fluorobenzene	329004	10.2467	368649	10.2468	89	50 - 200		-0.0001	+/-0.50	

Blank (B1C1187-BLK2)

Analyte	Resp	RT	RefResp	RefRT	Area%	ISAreaLimit	Flg	RTDiff	RTDiffLimit	Flg
1,4-Dichlorobenzene-d4	123132	16.6778	154812	16.678	80	50 - 200		-0.0002	+/-0.50	
Chlorobenzene-d5	226790	13.8758	281412	13.876	81	50 - 200		-0.0002	+/-0.50	
Fluorobenzene	309198	10.2466	368649	10.2468	84	50 - 200		-0.0002	+/-0.50	

LCS (B1C1187-BS1)

Analyte	Resp	RT	RefResp	RefRT	Area%	ISAreaLimit	Flg	RTDiff	RTDiffLimit	Flg
1,4-Dichlorobenzene-d4	140971	16.6779	154812	16.678	91	50 - 200		-0.0001	+/-0.50	
Chlorobenzene-d5	270351	13.8759	281412	13.876	96	50 - 200		-0.0001	+/-0.50	
Fluorobenzene	359111	10.2467	368649	10.2468	97	50 - 200		-0.0001	+/-0.50	

LCS Dup (B1C1187-BSD1)

Analyte	Resp	RT	RefResp	RefRT	Area%	ISAreaLimit	Flg	RTDiff	RTDiffLimit	Flg
1,4-Dichlorobenzene-d4	142589	16.6778	154812	16.678	92	50 - 200		-0.0002	+/-0.50	
Chlorobenzene-d5	278122	13.8758	281412	13.876	99	50 - 200		-0.0002	+/-0.50	
Fluorobenzene	369939	10.2466	368649	10.2468	100	50 - 200		-0.0002	+/-0.50	

Soil IDW (M1C1317-01)

Analyte	Resp	RT	RefResp	RefRT	Area%	ISAreaLimit	Flg	RTDiff	RTDiffLimit	Flg

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

INTERNAL STANDARD AREA SUMMARY
FORM VIIIA

Soil IDW (M1C1317-01)

Analyte	Resp	RT	RefResp	RefRT	Area%	ISAreaLimit	Flg	RTDiff	RTDiffLimit	Flg
1,4-Dichlorobenzene-d4	126089	16.6778	154812	16.678	81	50 - 200		-0.0002	+/-0.50	
Chlorobenzene-d5	221266	13.8758	281412	13.876	79	50 - 200		-0.0002	+/-0.50	
Fluorobenzene	309730	10.2466	368649	10.2468	84	50 - 200		-0.0002	+/-0.50	

Calibration Check (S1C0383-CCV1)

Analyte	Resp	RT	RefResp	RefRT	Area%	ISAreaLimit	Flg	RTDiff	RTDiffLimit	Flg
1,4-Dichlorobenzene-d4	154812	16.678	154812	16.678	100	50 - 200		0.0000	+/-0.50	
Chlorobenzene-d5	281412	13.876	281412	13.876	100	50 - 200		0.0000	+/-0.50	
Fluorobenzene	368649	10.2468	368649	10.2468	100	50 - 200		0.0000	+/-0.50	

Low Cal Check (S1C0383-LCV1)

Analyte	Resp	RT	RefResp	RefRT	Area%	ISAreaLimit	Flg	RTDiff	RTDiffLimit	Flg
1,4-Dichlorobenzene-d4	121145	16.678	154812	16.678	78	50 - 200		0.0000	+/-0.50	
Chlorobenzene-d5	236342	13.8657	281412	13.876	84	50 - 200		-0.0103	+/-0.50	
Fluorobenzene	307535	10.2365	368649	10.2468	83	50 - 200		-0.0103	+/-0.50	

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Section A:
GCMS Volatiles
EPA 8260B
Batch / Sequence Raw Data

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

BATCH LOG SUMMARY
SECTION A1

Batch: B1C1187
Matrix: Aqueous
Method: EPA 8260B
SOP: PAT01

Prepared: 3/19/2021 2:17:00PM
Prepared By: CIM
Preparation: EPA 5030C

Laboratory ID	Client / Source ID	Initial	Final						Spike(s)
B1C1187-BLK1		10.0 mL	10.0 mL						
B1C1187-BLK2		10.0 mL	10.0 mL						
B1C1187-BS1		10.0 mL	10.0 mL						1002308 10µL
B1C1187-BSD1		10.0 mL	10.0 mL						1002308 10µL
M1C1317-01	Soil IDW	10.0 mL	10.0 mL						

Standards used in the batch:

Standard ID	Description	Date Prepared	Prepared By
1002308	DAILY 8260 LCS	3/16/2021 2:42:20PM	Emily Allen

Reagents used in the batch:

Reagent ID	Description	Prepared	Prepared By
0007093	Purge and trap grade methanol	1/31/2020 8:49:19AM	Emily Allen

Surrogates used in the batch: **Surrogate Spiked 1:** 1.00 µL

Surrogate ID	Description	Prepared	Prepared By
1001724	MS11 working surrogate	2/22/2021 5:06:00PM	Emily Allen

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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

SEQUENCE LOG SUMMARY
SECTION A2

Sequence: S1B0345
Instrument: HPMS11
Calibration: 21B0038
Column #1 ID: Rtx-502.2
Column #2 ID: NA

Analyst 1: CIM/EEA
Method: EPA 8260B

#	File ID	Laboratory ID	Client ID	Analyzed	Reference	Standard
1	11M42846.D	S1B0345-TUN1	MS Tune	02/22/21 17:34		1001214
2	11M42848.D	S1B0345-CAL1	Cal Standard	02/22/21 18:27		1001958
3	11M42849.D	S1B0345-CAL2	Cal Standard	02/22/21 18:56		1001959
4	11M42850.D	S1B0345-CAL3	Cal Standard	02/22/21 19:25		1001960
5	11M42851.D	S1B0345-CAL4	Cal Standard	02/22/21 19:55		1001961
6	11M42852.D	S1B0345-CAL5	Cal Standard	02/22/21 20:25		1001962
7	11M42853.D	S1B0345-CAL6	Cal Standard	02/22/21 20:55		1001957
8	11M42854.D	S1B0345-CAL7	Cal Standard	02/22/21 21:25		1001963
9	11M42855.D	S1B0345-CAL8	Cal Standard	02/22/21 21:55		1001964
10	11M42857.D	S1B0345-ICV1	Initial Cal Check	02/22/21 22:55		1001965

Sequence Reagents

Reagent ID	Description	Prepared	PreparedBy
0007093	Purge and trap grade methanol	1/31/2020 8:49:19AM	Emily Allen

Sequence Standards

Standard ID	Description	Prepared	PreparedBy	Expires
1001214	Intermediate BFB	02/09/2021	Jared Smith	03/11/2021
1001957	8260 CAL 6	02/22/2021	Cecelia Morgenstern	03/24/2021
1001958	8260 CAL 1	02/22/2021	Cecelia Morgenstern	03/24/2021
1001959	8260 CAL 2	02/22/2021	Cecelia Morgenstern	03/24/2021
1001960	8260 CAL 3	02/22/2021	Cecelia Morgenstern	03/24/2021
1001961	8260 CAL 4	02/22/2021	Cecelia Morgenstern	03/24/2021
1001962	8260 CAL 5	02/22/2021	Cecelia Morgenstern	03/24/2021
1001963	8260 CAL 7	02/22/2021	Cecelia Morgenstern	03/24/2021
1001964	8260 CAL 8	02/22/2021	Cecelia Morgenstern	03/24/2021
1001965	8260 ICV1	02/22/2021	Cecelia Morgenstern	03/24/2021
1001966	8260 A9 CAL9	02/22/2021	Cecelia Morgenstern	03/24/2021
1001967	8260 A9 CALA	02/22/2021	Cecelia Morgenstern	03/24/2021
1001968	8260 A9 CALB	02/22/2021	Cecelia Morgenstern	03/24/2021
1001969	8260 A9 CALC	02/22/2021	Cecelia Morgenstern	03/24/2021
1001970	8260 A9 CALD	02/22/2021	Cecelia Morgenstern	03/24/2021
1001971	8260 A9 CALE	02/22/2021	Cecelia Morgenstern	03/24/2021
1001972	8260 A9 CALF	02/22/2021	Cecelia Morgenstern	03/24/2021
1001973	8260 A9 CALG	02/22/2021	Cecelia Morgenstern	03/24/2021
1001974	8260 A9 ICV2	02/22/2021	Cecelia Morgenstern	03/24/2021

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

SEQUENCE LOG SUMMARY
SECTION A2

Sequence Internal Standard

Standard ID	Description	Prepared	PreparedBy	Expires
1001722	MS11 working INTERNAL	02/26/2021	Cecelia Morgenstern	03/24/2021

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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

SEQUENCE LOG SUMMARY
SECTION A2

Sequence: S1C0383
Instrument: HPMS11
Calibration: 21B0038
Column #1 ID: Rtx-502.2
Column #2 ID: NA

Analyst 1: CIM
Method: EPA 8260B

#	File ID	Laboratory ID	Client ID	Analyzed	Reference	Standard
1	11M43406.D	S1C0383-TUN1	MS Tune	03/19/21 12:09		1002187
2	11M43407.D	S1C0383-CCV1	Calibration Check	03/19/21 12:34		1001976
4	11M43410.D	B1C1187-BLK1	Blank	03/19/21 14:17		
5	11M43411.D	B1C1187-BLK2	Blank	03/19/21 14:46		
8	11M43414.D	B1C1187-BS1	LCS	03/19/21 16:14		
9	11M43415.D	B1C1187-BSD1	LCS Dup	03/19/21 16:43		
11	11M43418.D	M1C1317-01	Soil IDW	03/19/21 18:09		
22	11M43429.D	S1C0383-LCV1	Low Cal Check	03/19/21 23:27		1001976

Sequence Reagents

Reagent ID	Description	Prepared	PreparedBy
0007093	Purge and trap grade methanol	1/31/2020 8:49:19AM	Emily Allen

Sequence Standards

Standard ID	Description	Prepared	PreparedBy	Expires
1001976	8260 CCV-Working (10 ml purge)	03/04/2021	Emily Allen	03/31/2021
1002187	Intermediate BFB	03/11/2021	Emily Allen	04/10/2021

Sequence Internal Standard

Standard ID	Description	Prepared	PreparedBy	Expires
1001722	MS11 working INTERNAL	02/26/2021	Cecelia Morgenstern	03/24/2021

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Section B:
GCMS Volatiles
EPA 8260B
Sample Raw Data

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Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\031921\11M43418.D Vial: 12
Acq On : 19 Mar 2021 18:09 Operator: CIM
Sample : M1C1317-01 Inst : hpms11
Misc : 10, TCLP Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 22 11:39:05 2021 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 21B0038 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration
DataAcq Meth : 8260WTR

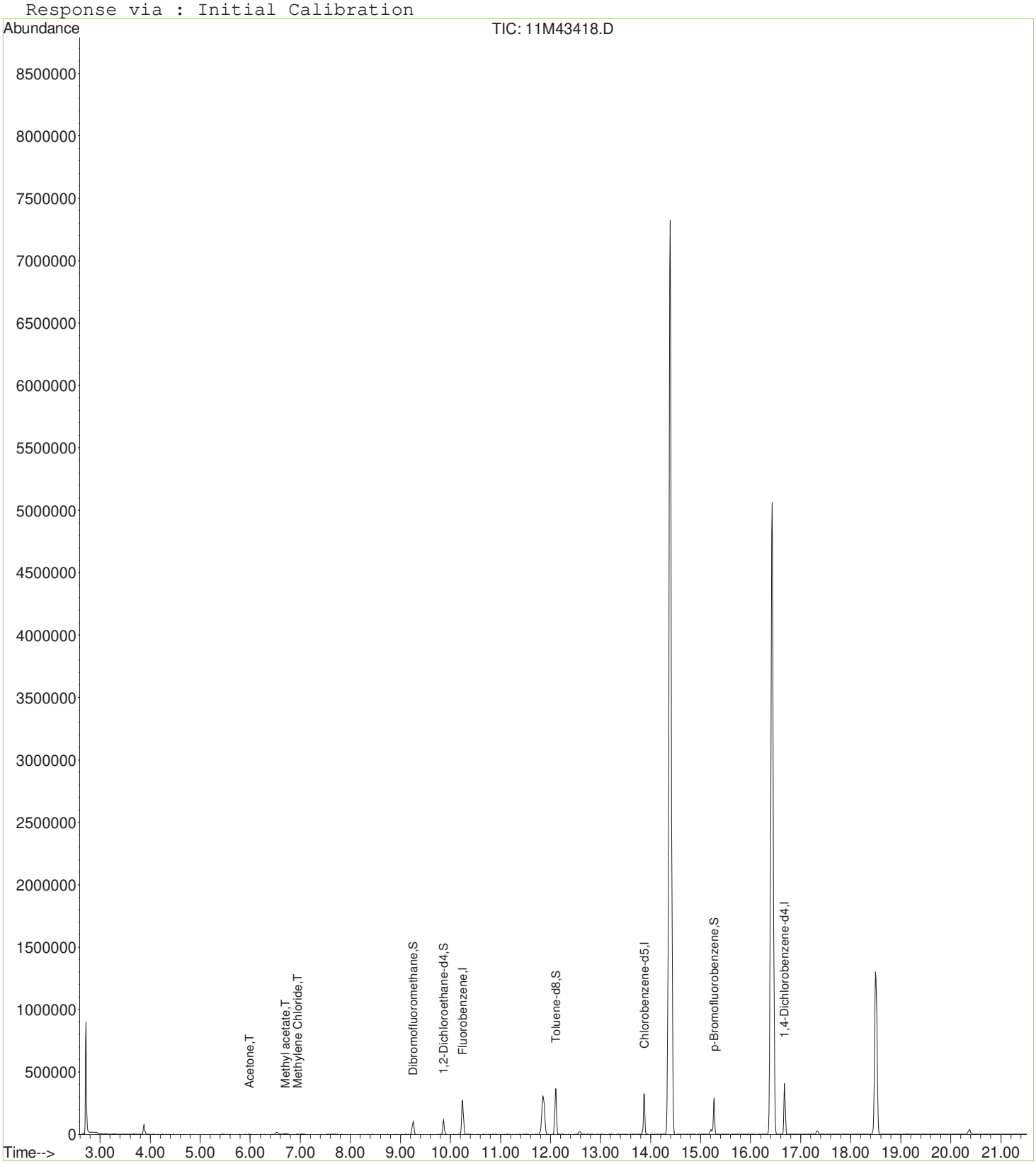
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.2466	96	309730	25.0000	ug/L	0.0000
56) Chlorobenzene-d5	13.8758	117	221266	25.0000	ug/L	0.0000
76) 1,4-Dichlorobenzene-d4	16.6778	152	126089	25.0000	ug/L	-0.0105
System Monitoring Compounds						
37) Dibromofluoromethane	9.2540	111	85785	25.2436	ug/L	0.0000
Spiked Amount 25.0000	Range 86 - 118		Recovery = 100.9744%			
43) 1,2-Dichloroethane-d4	9.8640	65	93538	24.8322	ug/L	0.0000
Spiked Amount 25.0000	Range 80 - 120		Recovery = 99.3288%			
57) Toluene-d8	12.1077	98	311624	28.4048	ug/L	0.0000
Spiked Amount 25.0000	Range 88 - 110		Recovery = 113.6192%#			
78) p-Bromofluorobenzene	15.2716	95	114635	26.4352	ug/L	0.0000
Spiked Amount 25.0000	Range 86 - 115		Recovery = 105.7408%			
Target Compounds						Qvalue
13) Acetone	5.9867	43	3525	3.5805	ug/L #	73
18) Methyl acetate	6.7001	43	11304	4.7194	ug/L #	57
19) Methylene Chloride	6.9483	84	2453	0.7458	ug/L	99

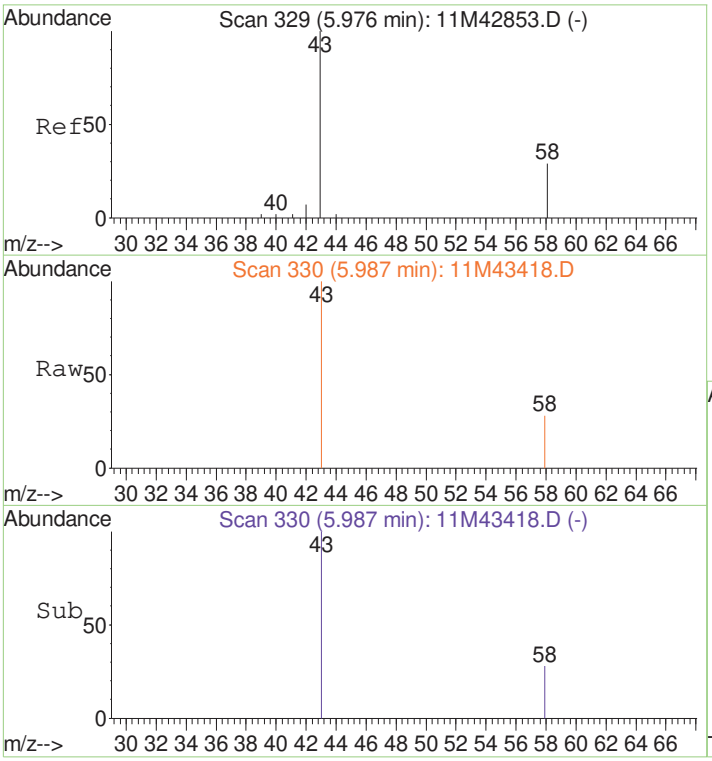
(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\031921\11M43418.D Vial: 12
Acq On : 19 Mar 2021 18:09 Operator: CIM
Sample : M1C1317-01 Inst : hpms11
Misc : 10, TCLP Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 22 13:42 2021 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 21B0038 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration

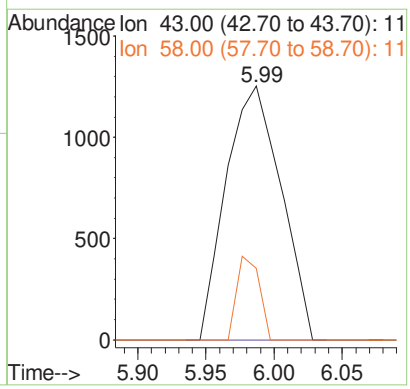


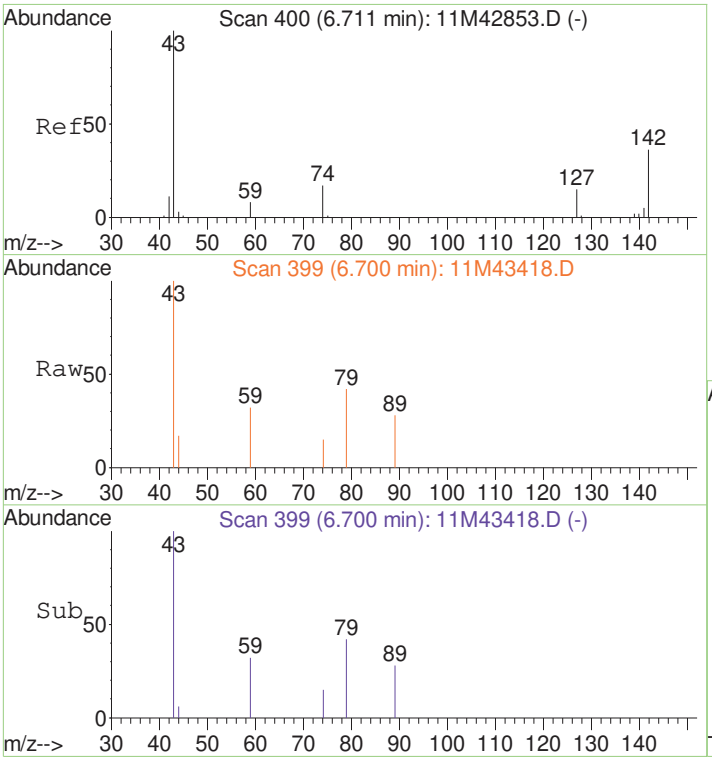


#13
Acetone
Concen: 3.5805 ug/L
RT: 5.99 min Scan# 330
Delta R.T. 0.01 min
Lab File: 11M43418.D
Acq: 19 Mar 2021 18:09

Tgt Ion: 43 Resp: 3525

Ion	Ratio	Lower	Upper
43	100		
58	13.4	16.4	38.2#

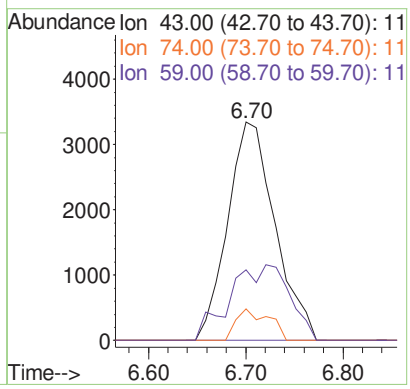


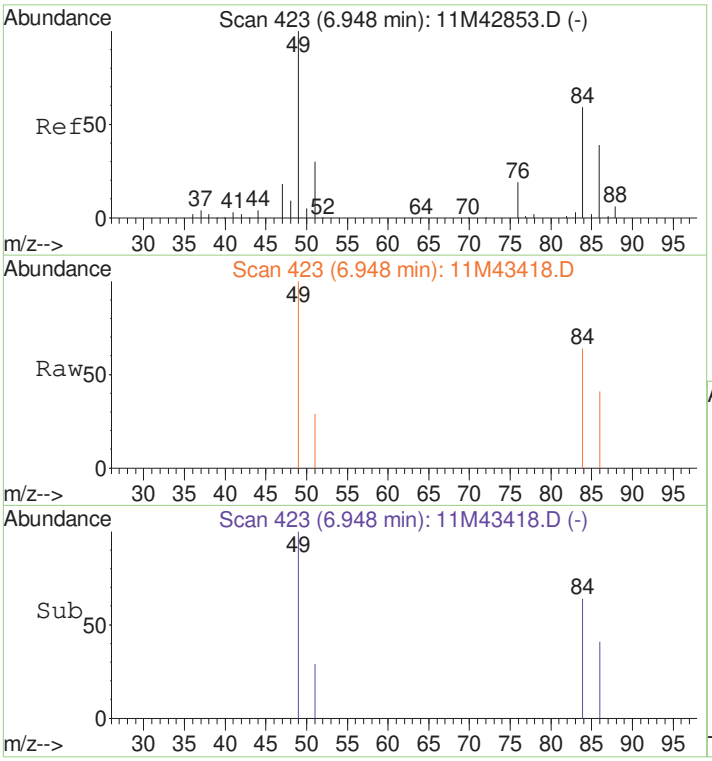


#18
Methyl acetate
Concen: 4.7194 ug/L
RT: 6.70 min Scan# 399
Delta R.T. -0.01 min
Lab File: 11M43418.D
Acq: 19 Mar 2021 18:09

Tgt Ion: 43 Resp: 11304

Ion	Ratio	Lower	Upper
43	100		
74	10.0	9.5	22.1
59	43.7	4.5	10.5#

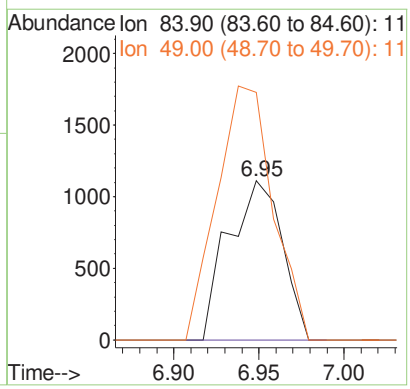




#19
Methylene Chloride
Concen: 0.7458 ug/L
RT: 6.95 min Scan# 423
Delta R.T. -0.00 min
Lab File: 11M43418.D
Acq: 19 Mar 2021 18:09

Tgt Ion: 84 Resp: 2453

Ion	Ratio	Lower	Upper
84	100		
49	165.4	100.1	233.5



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Section C:
GCMS Volatiles
EPA 8260B
QC Sample Raw Data

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Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\031921\11M43410.D Vial: 4
Acq On : 19 Mar 2021 14:17 Operator: CIM
Sample : B1C1187-BLK1 Inst : hpms11
Misc : 10, 1021-BLK Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 22 11:38:55 2021 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 21B0038 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration
DataAcq Meth : 8260WTR

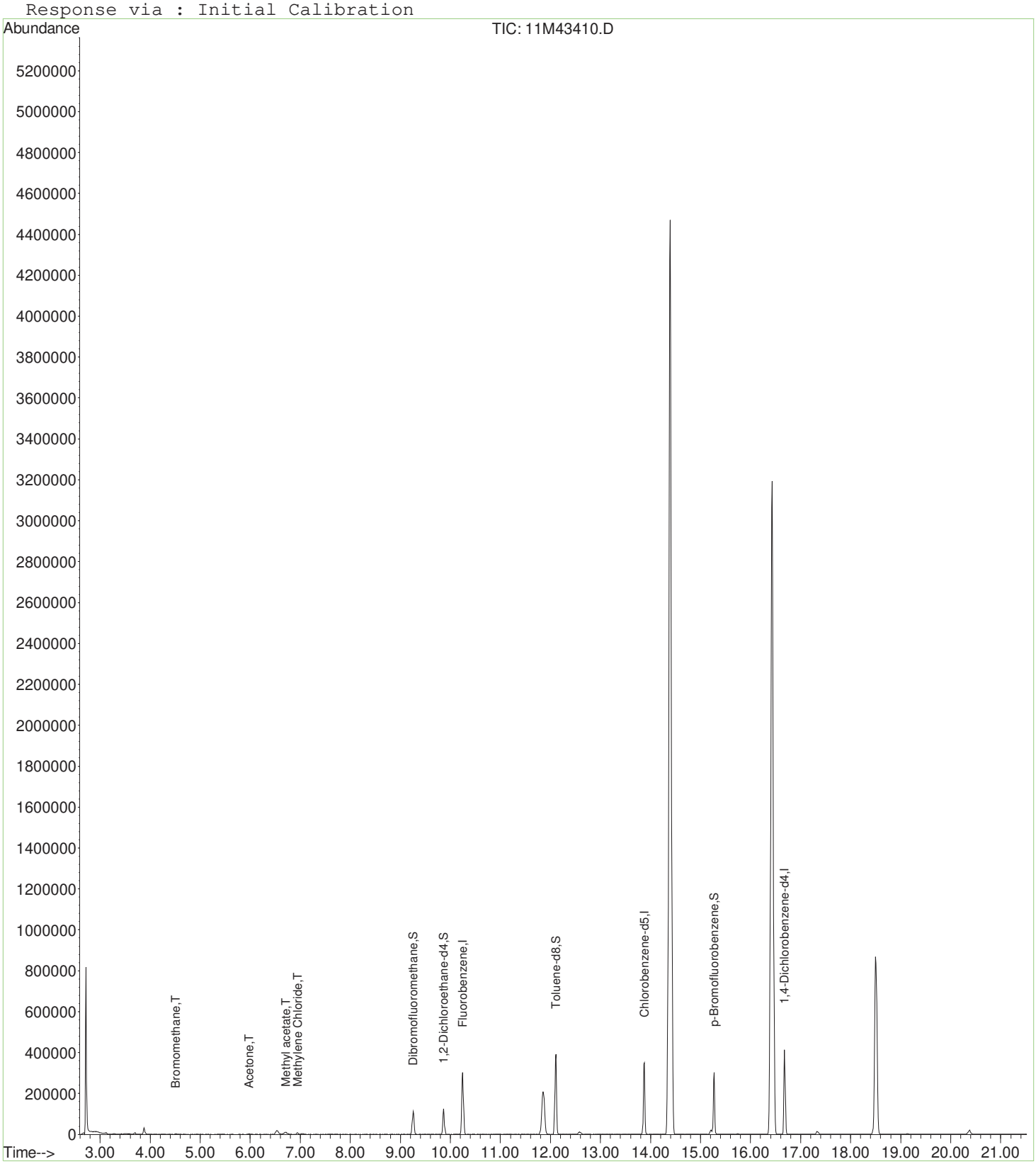
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.2467	96	329004	25.0000	ug/L	0.0000
56) Chlorobenzene-d5	13.8759	117	240973	25.0000	ug/L	0.0000
76) 1,4-Dichlorobenzene-d4	16.6779	152	126827	25.0000	ug/L	-0.0103
System Monitoring Compounds						
37) Dibromofluoromethane	9.2541	111	91333	25.3017	ug/L	0.0000
Spiked Amount 25.0000	Range 86 - 118		Recovery = 101.2068%			
43) 1,2-Dichloroethane-d4	9.8642	65	103816	25.9462	ug/L	0.0000
Spiked Amount 25.0000	Range 80 - 120		Recovery = 103.7848%			
57) Toluene-d8	12.1078	98	321824	26.9355	ug/L	0.0000
Spiked Amount 25.0000	Range 88 - 110		Recovery = 107.7420%			
78) p-Bromofluorobenzene	15.2718	95	116448	26.6970	ug/L	0.0000
Spiked Amount 25.0000	Range 86 - 115		Recovery = 106.7880%			
Target Compounds						Qvalue
6) Bromomethane	4.5083	94	2748	0.8603	ug/L	99
13) Acetone	5.9765	43	3405	3.2560	ug/L #	59
18) Methyl acetate	6.7106	43	9529	3.7453	ug/L #	49
19) Methylene Chloride	6.9484	84	4326	1.2382	ug/L	81

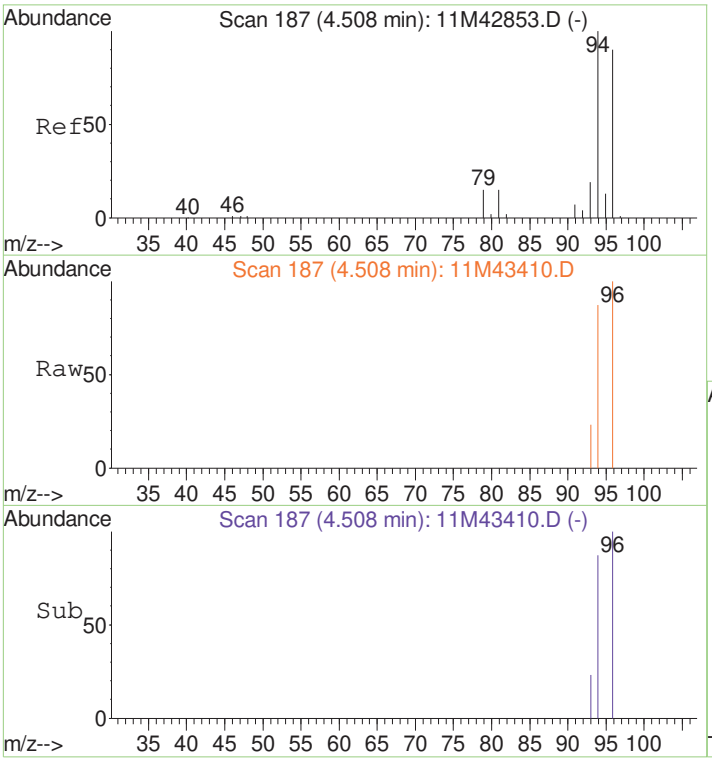
(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\031921\11M43410.D Vial: 4
Acq On : 19 Mar 2021 14:17 Operator: CIM
Sample : B1C1187-BLK1 Inst : hpms11
Misc : 10, 1021-BLK Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 22 13:40 2021 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 21B0038 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration

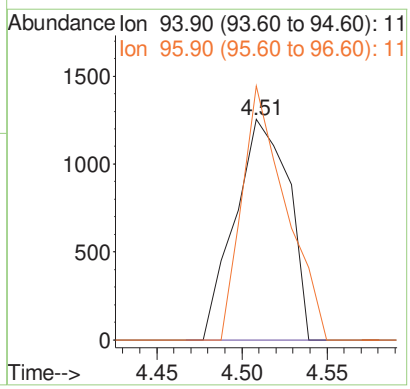


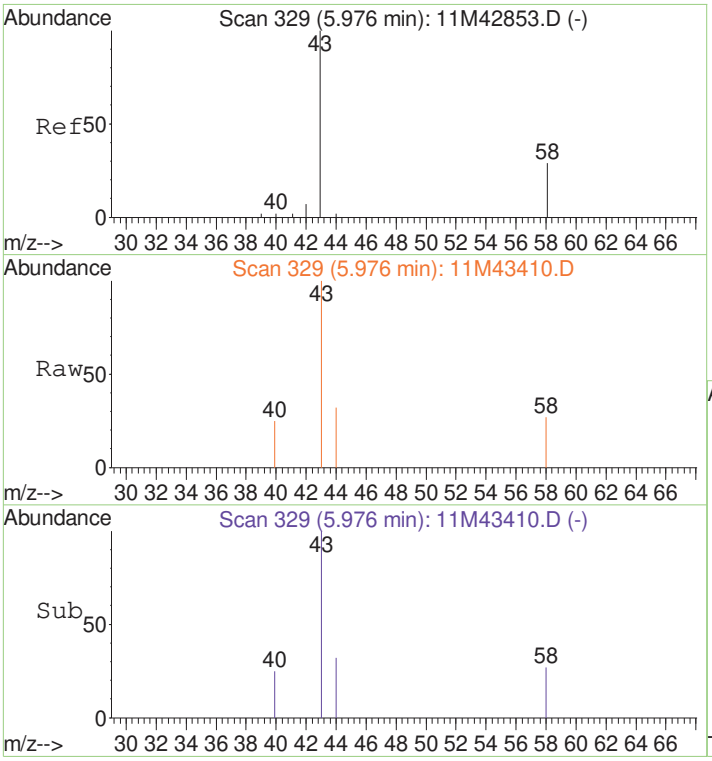


#6
Bromomethane
Concen: 0.8603 ug/L
RT: 4.51 min Scan# 187
Delta R.T. 0.00 min
Lab File: 11M43410.D
Acq: 19 Mar 2021 14:17

Tgt Ion: 94 Resp: 2748

Ion	Ratio	Lower	Upper
94	100		
96	94.2	56.0	130.6

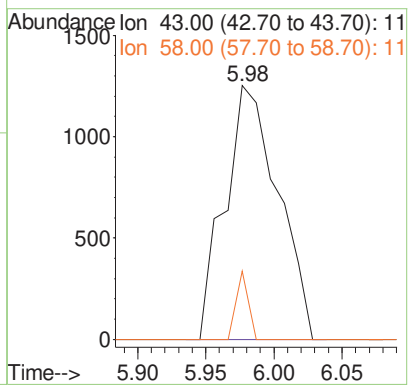


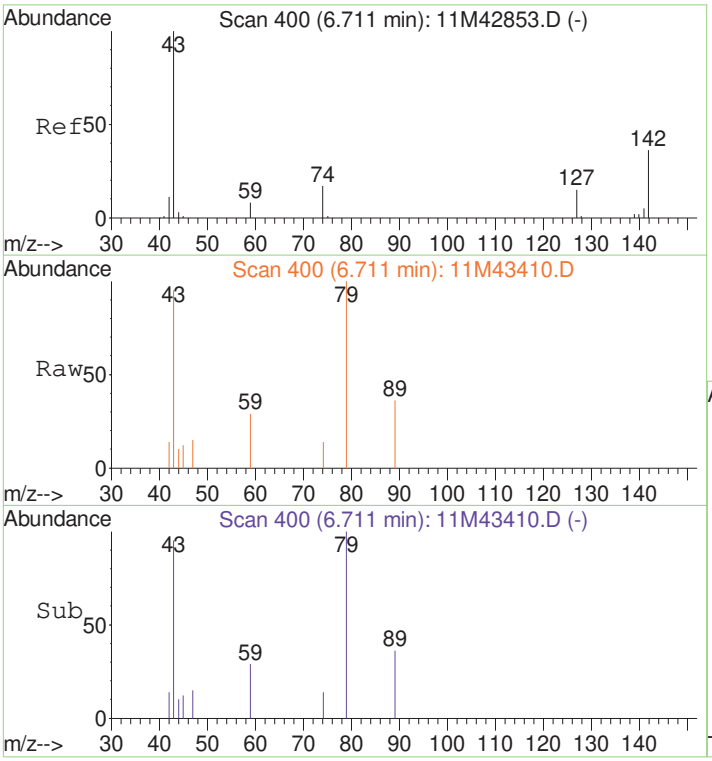


#13
Acetone
Concen: 3.2560 ug/L
RT: 5.98 min Scan# 329
Delta R.T. 0.00 min
Lab File: 11M43410.D
Acq: 19 Mar 2021 14:17

Tgt Ion: 43 Resp: 3405

Ion	Ratio	Lower	Upper
43	100		
58	6.1	16.4	38.2#

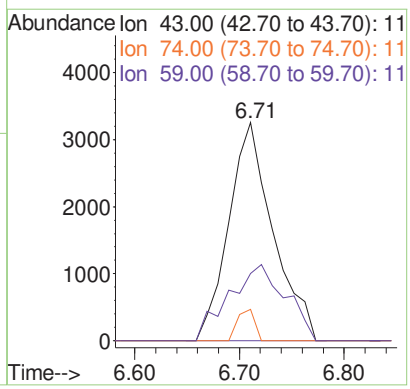


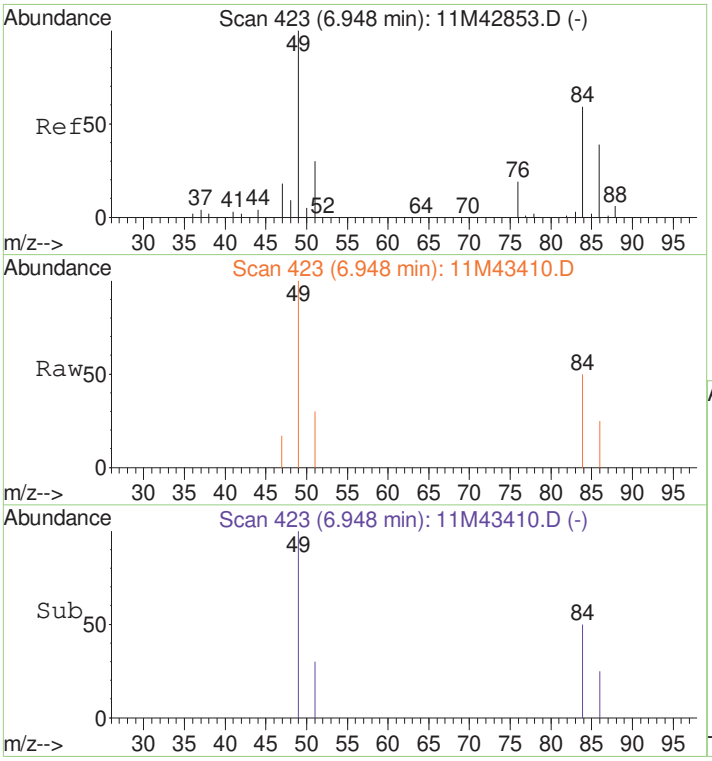


#18
Methyl acetate
Concen: 3.7453 ug/L
RT: 6.71 min Scan# 400
Delta R.T. 0.00 min
Lab File: 11M43410.D
Acq: 19 Mar 2021 14:17

Tgt Ion: 43 Resp: 9529

Ion	Ratio	Lower	Upper
43	100		
74	5.6	9.5	22.1#
59	44.7	4.5	10.5#

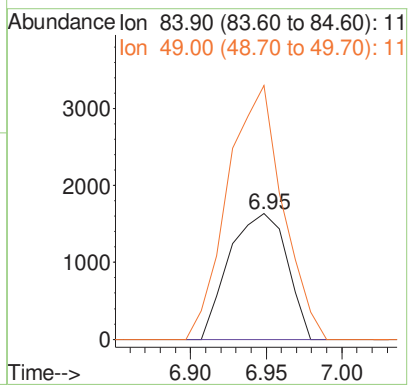




#19
Methylene Chloride
Concen: 1.2382 ug/L
RT: 6.95 min Scan# 423
Delta R.T. 0.00 min
Lab File: 11M43410.D
Acq: 19 Mar 2021 14:17

Tgt Ion: 84 Resp: 4326

Ion	Ratio	Lower	Upper
84	100		
49	192.6	100.1	233.5



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\031921\11M43411.D Vial: 5
Acq On : 19 Mar 2021 14:46 Operator: CIM
Sample : B1C1187-BLK2 Inst : hpms11
Misc : 10, 0938-BLK Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 22 11:38:56 2021 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 21B0038 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration
DataAcq Meth : 8260WTR

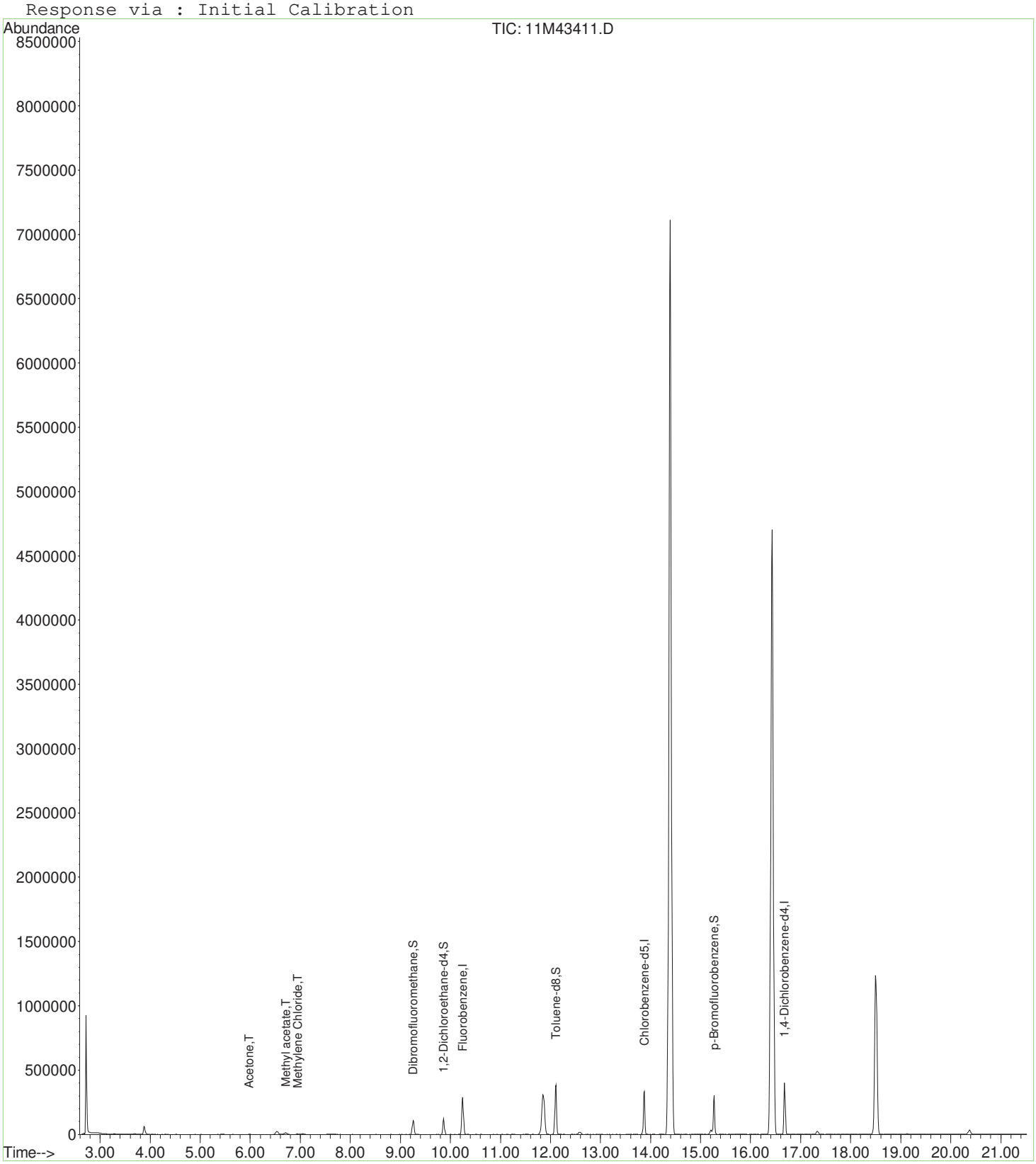
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.2466	96	309198	25.0000	ug/L	0.0000
56) Chlorobenzene-d5	13.8758	117	226790	25.0000	ug/L	0.0000
76) 1,4-Dichlorobenzene-d4	16.6778	152	123132	25.0000	ug/L	-0.0105
System Monitoring Compounds						
37) Dibromofluoromethane	9.2540	111	90308	26.6203	ug/L	0.0000
Spiked Amount 25.0000	Range 86 - 118		Recovery = 106.4812%			
43) 1,2-Dichloroethane-d4	9.8640	65	99696	26.5126	ug/L	0.0000
Spiked Amount 25.0000	Range 80 - 120		Recovery = 106.0504%			
57) Toluene-d8	12.1077	98	317636	28.2476	ug/L	0.0000
Spiked Amount 25.0000	Range 88 - 110		Recovery = 112.9904%#			
78) p-Bromofluorobenzene	15.2716	95	113795	26.8717	ug/L	0.0000
Spiked Amount 25.0000	Range 86 - 115		Recovery = 107.4868%			
Target Compounds						Qvalue
13) Acetone	5.9764	43	3067	3.1206	ug/L #	61
18) Methyl acetate	6.7105	43	10456	4.3729	ug/L #	56
19) Methylene Chloride	6.9483	84	2308	0.7029	ug/L	85

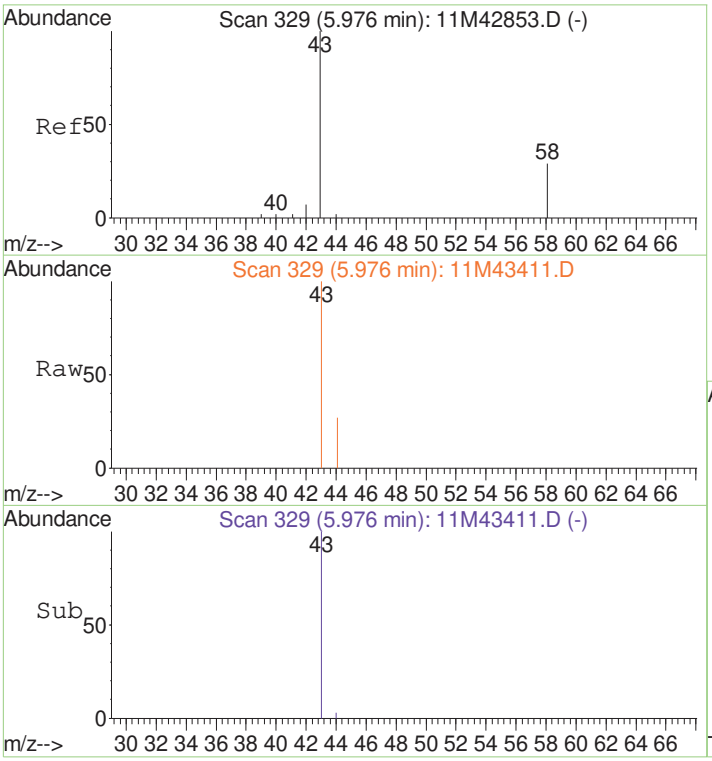
(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\031921\11M43411.D Vial: 5
Acq On : 19 Mar 2021 14:46 Operator: CIM
Sample : B1C1187-BLK2 Inst : hpms11
Misc : 10, 0938-BLK Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 22 13:41 2021 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 21B0038 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration

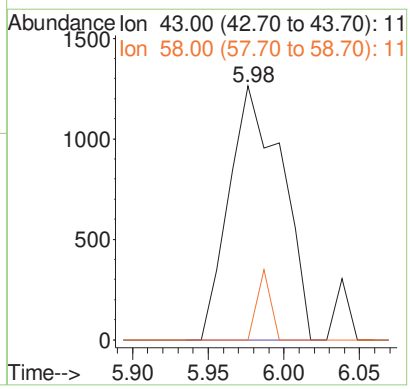


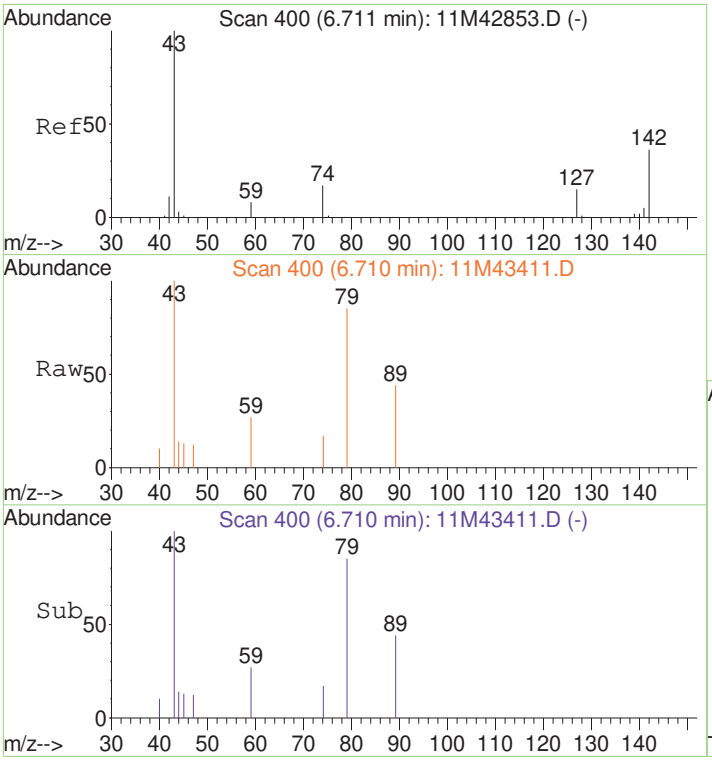


#13
Acetone
Concen: 3.1206 ug/L
RT: 5.98 min Scan# 329
Delta R.T. -0.00 min
Lab File: 11M43411.D
Acq: 19 Mar 2021 14:46

Tgt Ion: 43 Resp: 3067

Ion	Ratio	Lower	Upper
43	100		
58	7.0	16.4	38.2#

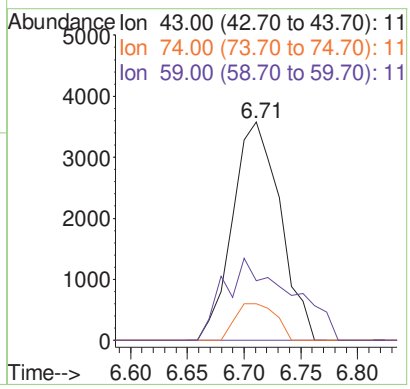


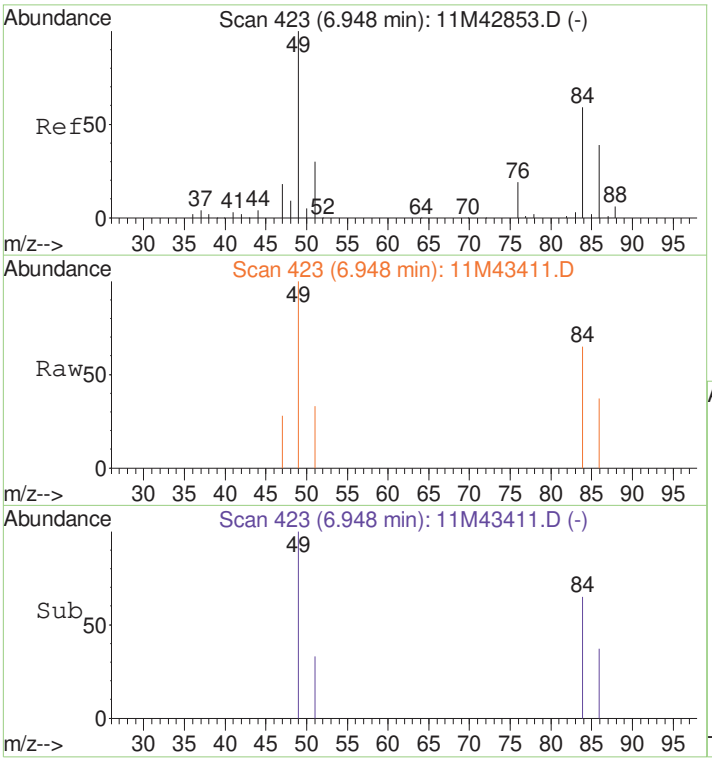


#18
Methyl acetate
Concen: 4.3729 ug/L
RT: 6.71 min Scan# 400
Delta R.T. -0.00 min
Lab File: 11M43411.D
Acq: 19 Mar 2021 14:46

Tgt Ion: 43 Resp: 10456

Ion	Ratio	Lower	Upper
43	100		
74	14.4	9.5	22.1
59	52.8	4.5	10.5#

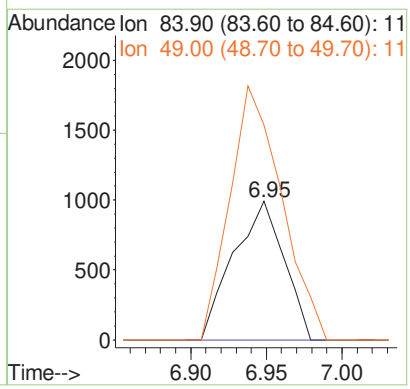




#19
Methylene Chloride
Concen: 0.7029 ug/L
RT: 6.95 min Scan# 423
Delta R.T. -0.00 min
Lab File: 11M43411.D
Acq: 19 Mar 2021 14:46

Tgt Ion: 84 Resp: 2308

Ion	Ratio	Lower	Upper
84	100		
49	187.1	100.1	233.5



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\031921\11M43414.D Vial: 8
Acq On : 19 Mar 2021 16:14 Operator: CIM
Sample : B1C1187-BS1 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 22 11:39:00 2021 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 21B0038 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.2467	96	359111	25.0000	ug/L	0.0000
56) Chlorobenzene-d5	13.8759	117	270351	25.0000	ug/L	0.0000
76) 1,4-Dichlorobenzene-d4	16.6779	152	140971	25.0000	ug/L	-0.0103
System Monitoring Compounds						
37) Dibromofluoromethane	9.2541	111	94455	23.9729	ug/L	0.0000
Spiked Amount 25.0000	Range 86 - 118		Recovery = 95.8916%			
43) 1,2-Dichloroethane-d4	9.8642	65	109705	25.1193	ug/L	0.0000
Spiked Amount 25.0000	Range 80 - 120		Recovery = 100.4772%			
57) Toluene-d8	12.1078	98	337804	25.2007	ug/L	0.0000
Spiked Amount 25.0000	Range 88 - 110		Recovery = 100.8028%			
78) p-Bromofluorobenzene	15.2718	95	121753	25.1126	ug/L	0.0000
Spiked Amount 25.0000	Range 86 - 115		Recovery = 100.4504%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.0090	85	104884	22.7327	ug/L	99
3) Chloromethane	3.4329	50	112844	22.1724	ug/L	100
4) Vinyl Chloride	3.6501	62	85161	19.6061	ug/L	95
5) 1,3-Butadiene	3.6915	54	74709	18.0128	ug/L	91
6) Bromomethane	4.4979	94	67089	19.2433	ug/L	99
7) Chloroethane	4.6530	64	58435	22.0829	ug/L	97
8) Trichlorofluoromethane	5.1183	101	128441	19.7065	ug/L	97
9) Diethyl ether	5.6353	59	326715	99.9111	ug/L	96
10) Isoprene	5.6663	67	109381	24.3392	ug/L	100
11) Acrolein	5.8628	56	64110	158.0033	ug/L	97
12) 1,1,2-Trichloro-1,2,2-Trif	5.8731	101	76844	23.1250	ug/L	99
13) Acetone	5.9661	43	23487	20.5760	ug/L	95
14) 1,1-Dichloroethene	6.1833	61	130232	21.1241	ug/L	99
15) Tert-Butyl Alcohol	6.2970	59	72203	215.7067	ug/L	97
16) Dimethyl Sulfide	6.4314	62	94822	32.7413	ug/L	94
17) Iodomethane	6.6796	142	74889	31.9606	ug/L	100
18) Methyl acetate	6.7003	43	67614	24.3471	ug/L	97
19) Methylene Chloride	6.9381	84	77228	20.2519	ug/L	88
20) Carbon Disulfide	6.9691	76	197808	20.5525	ug/L	99
21) Acrylonitrile	7.1242	53	30648	21.3296	ug/L	98
22) Methyl Tert Butyl Ether	7.1449	73	188311	19.4730	ug/L	99
23) trans-1,2-Dichloroethene	7.3723	96	75176	20.6618	ug/L	98
24) n-Hexane	7.4447	57	112874	26.0041	ug/L	100
25) Diisopropyl ether	7.7859	45	1733176	112.4310	ug/L	97
26) Vinyl Acetate	7.9513	43	164847	20.5612	ug/L	98
27) 1,1-Dichloroethane	7.9720	63	155607	21.0762	ug/L	97
28) Ethyl-Tert-Butyl ether	8.3339	59	1313119	104.7983	ug/L	99
29) 2-Butanone	8.5200	43	39423	20.2293	ug/L	95
30) Propionitrile	8.6131	54	55028	102.9296	ug/L	98
31) 2,2-Dichloropropane	8.7165	77	115918	20.9107	ug/L	98
32) cis-1,2-Dichloroethene	8.7785	96	82535	19.3622	ug/L	92
33) Chloroform	8.9750	83	146019	20.1025	ug/L	99
34) 1-Bromopropane	9.1094	122	18205	21.9207	ug/L	100
35) Bromochloromethane	9.2024	130	47109	19.7550	ug/L	91
36) Tetrahydrofuran	9.2231	42	132473	105.5308	ug/L	98
38) 1,1,1-Trichloroethane	9.4816	97	126640	19.8757	ug/L	95
39) Cyclohexane	9.5126	56	139736	19.9188	ug/L	99
40) 1,1-Dichloropropene	9.6677	75	110147	20.9087	ug/L	99
41) Carbon Tetrachloride	9.8021	117	123349	20.8098	ug/L	97
42) Tert-Amyl-Methyl ether	9.7711	73	1031975	103.2086	ug/L	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\031921\11M43414.D Vial: 8
Acq On : 19 Mar 2021 16:14 Operator: CIM
Sample : B1C1187-BS1 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 22 11:39:00 2021 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 21B0038 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration
DataAcq Meth : 8260WTR

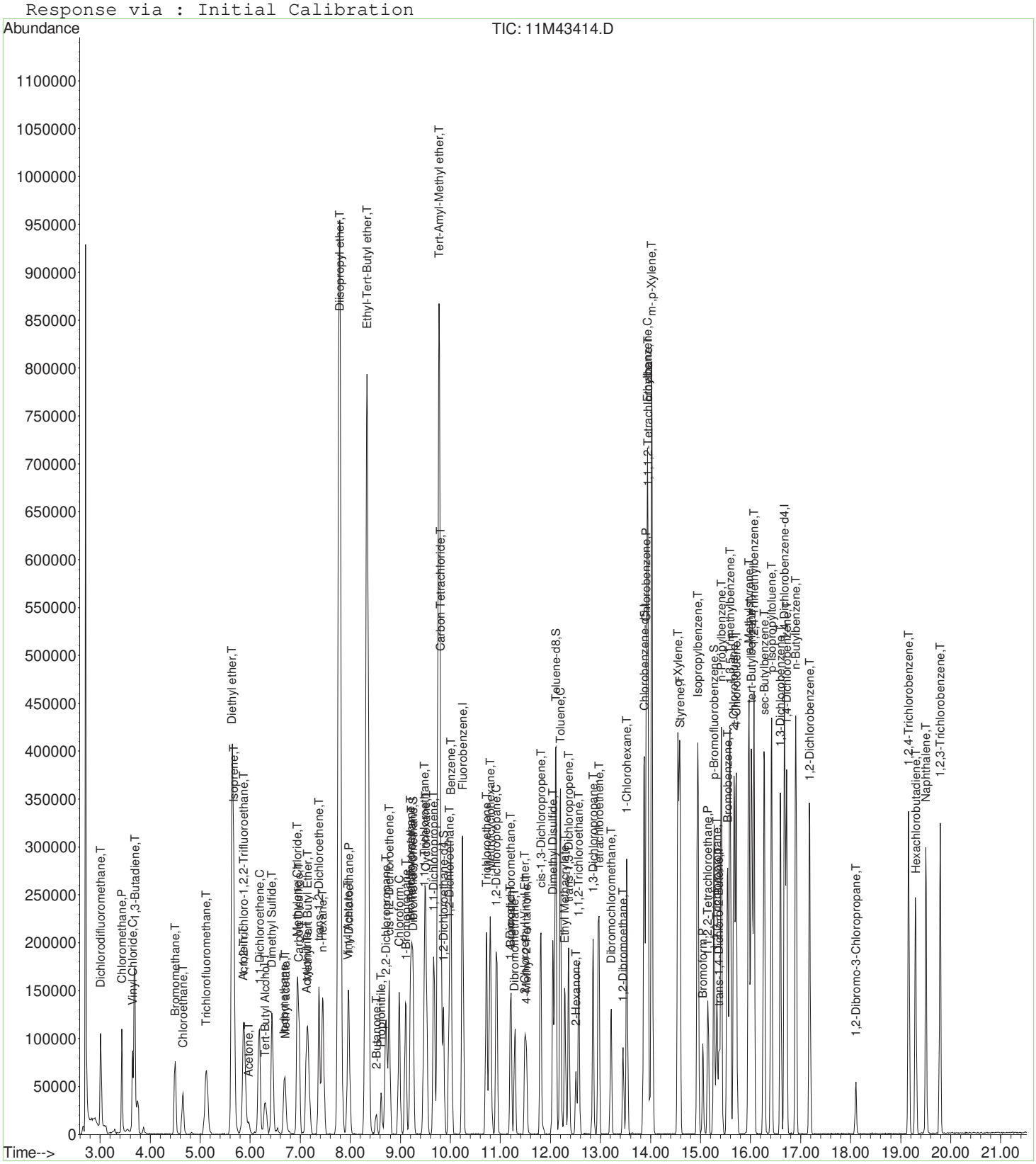
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
44)	1,2-Dichloroethane	9.9779	62	120136	21.1287	ug/L		97
45)	Benzene	10.0089	78	318581	20.8000	ug/L		99
46)	Trichloroethene	10.7224	130	86480	19.5025	ug/L		99
47)	Methylcyclohexane	10.7947	83	122973	20.4693	ug/L		98
48)	1,2-Dichloropropane	10.9188	63	91538	21.3223	ug/L		97
49)	1,4-Dioxane	11.1980	88	6244	217.2334	ug/L		82
50)	Bromodichloromethane	11.2083	83	108342	19.5143	ug/L		99
51)	Dibromomethane	11.2807	93	47776	21.2636	ug/L		99
52)	2-Chloroethyl Vinyl Ether	11.4875	63	39153	19.4385	ug/L		99
53)	4-Methyl-2-Pentanone	11.5185	58	29692	20.7634	ug/L		95
54)	cis-1,3-Dichloropropene	11.8080	75	132241	21.1658	ug/L		98
55)	Dimethyl Disulfide	12.0458	79	65930	20.0261	ug/L		97
58)	Toluene	12.2009	91	326490	20.8126	ug/L		98
59)	Ethyl Methacrylate	12.2836	69	93788	22.3038	ug/L		94
60)	trans-1,3-Dichloropropene	12.3664	75	110687	20.8778	ug/L		100
61)	1,1,2-Trichloroethane	12.5628	97	67468	21.2943	ug/L		99
62)	2-Hexanone	12.5111	43	62395	23.3533	ug/L		95
63)	1,3-Dichloropropane	12.8523	76	119284	21.7646	ug/L		93
64)	Tetrachloroethene	12.9660	164	67039	19.3697	ug/L		98
65)	Dibromochloromethane	13.2142	129	81376	19.8373	ug/L		98
66)	1,2-Dibromoethane	13.4520	107	70529	20.8633	ug/L		98
67)	1-Chlorohexane	13.5244	91	100894	20.1218	ug/L		95
68)	Chlorobenzene	13.9173	112	220950	19.9590	ug/L		99
69)	1,1,1,2-Tetrachloroethane	13.9483	131	83678	20.4803	ug/L		96
70)	Ethylbenzene	13.9380	106	119685	20.5121	ug/L		96
71)	m-,p-Xylene	14.0207	106	286639	41.3792	ug/L		94
72)	o-Xylene	14.5480	106	141184	20.5649	ug/L		97
73)	Styrene	14.5894	104	234499	21.4543	ug/L		99
74)	Bromoform	15.0443	173	54118	19.3223	ug/L		97
75)	Isopropylbenzene	14.9409	105	360275	20.8511	ug/L		99
77)	1,1,2,2-Tetrachloroethane	15.1477	83	84244	23.8142	ug/L		98
79)	1,2,3-Trichloropropane	15.3235	110	27284	21.3895	ug/L		90
80)	trans-1,4-Dichloro-2-Buten	15.3648	53	26267	19.9170	ug/L	#	8
81)	n-Propylbenzene	15.4165	91	432866	22.2343	ug/L		98
82)	Bromobenzene	15.5406	156	97531	20.6598	ug/L		97
83)	1,3,5-Trimethylbenzene	15.5923	105	305549	21.6690	ug/L		99
84)	2-Chlorotoluene	15.6647	91	247350	19.3190	ug/L		90
85)	4-Chlorotoluene	15.7164	91	261935	23.3273	ug/L		88
86)	a-Methylstyrene	15.9645	118	165233	22.9780	ug/L		99
87)	tert-Butylbenzene	16.0162	134	72212	22.0070	ug/L		88
88)	1,2,4-Trimethylbenzene	16.0679	105	312102	21.8836	ug/L		100
89)	sec-Butylbenzene	16.2747	105	386355	21.2180	ug/L		98
90)	p-Isopropyltoluene	16.4195	119	329360	21.4818	ug/L		99
91)	1,3-Dichlorobenzene	16.5952	146	175897	19.7116	ug/L		97
92)	1,4-Dichlorobenzene	16.7193	146	178473	19.8412	ug/L		99
93)	n-Butylbenzene	16.9054	91	306275	22.9914	ug/L		98
94)	1,2-Dichlorobenzene	17.1846	146	175320	21.0373	ug/L		100
95)	1,2-Dibromo-3-Chloropropan	18.1048	75	15367	19.8061	ug/L		95
96)	1,2,4-Trichlorobenzene	19.1595	180	123140	19.8383	ug/L		100
97)	Hexachlorobutadiene	19.3042	225	62003	20.0810	ug/L		98
98)	Naphthalene	19.5007	128	279385	21.7578	ug/L		99
99)	1,2,3-Trichlorobenzene	19.7902	180	119133	20.2415	ug/L		100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\031921\11M43414.D Vial: 8
Acq On : 19 Mar 2021 16:14 Operator: CIM
Sample : B1C1187-BS1 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 22 11:39 2021 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 21B0038 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\031921\11M43415.D Vial: 9
Acq On : 19 Mar 2021 16:43 Operator: CIM
Sample : B1C1187-BSD1 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 22 11:39:02 2021 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 21B0038 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.2466	96	369939	25.0000	ug/L	0.0000
56) Chlorobenzene-d5	13.8758	117	278122	25.0000	ug/L	0.0000
76) 1,4-Dichlorobenzene-d4	16.6778	152	142589	25.0000	ug/L	-0.0105
System Monitoring Compounds						
37) Dibromofluoromethane	9.2540	111	103489	25.4969	ug/L	0.0000
Spiked Amount 25.0000	Range 86 - 118		Recovery = 101.9876%			
43) 1,2-Dichloroethane-d4	9.8640	65	115833	25.7462	ug/L	0.0000
Spiked Amount 25.0000	Range 80 - 120		Recovery = 102.9848%			
57) Toluene-d8	12.0974	98	357291	25.9097	ug/L	-0.0105
Spiked Amount 25.0000	Range 88 - 110		Recovery = 103.6388%			
78) p-Bromofluorobenzene	15.2716	95	130478	26.6069	ug/L	0.0000
Spiked Amount 25.0000	Range 86 - 115		Recovery = 106.4276%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.0192	85	110264	23.1993	ug/L	95
3) Chloromethane	3.4432	50	115233	21.9791	ug/L	99
4) Vinyl Chloride	3.6499	62	96637	21.5970	ug/L	95
5) 1,3-Butadiene	3.6913	54	76611	17.9307	ug/L	92
6) Bromomethane	4.4978	94	71598	19.9355	ug/L	100
7) Chloroethane	4.6529	64	61119	22.4211	ug/L	97
8) Trichlorofluoromethane	5.1285	101	133839	19.9337	ug/L	98
9) Diethyl ether	5.6455	59	333315	98.9459	ug/L	96
10) Isoprene	5.6765	67	115309	24.9073	ug/L	99
11) Acrolein	5.8626	56	62857	150.3809	ug/L	99
12) 1,1,2-Trichloro-1,2,2-Trif	5.8730	101	79238	23.1475	ug/L	97
13) Acetone	5.9763	43	25925	22.0471	ug/L	93
14) 1,1-Dichloroethene	6.1831	61	138099	21.7445	ug/L	98
15) Tert-Butyl Alcohol	6.2969	59	77797	225.6160	ug/L	98
16) Dimethyl Sulfide	6.4416	62	98886	33.1452	ug/L	92
17) Iodomethane	6.6794	142	79085	32.7394	ug/L	100
18) Methyl acetate	6.7001	43	69261	24.2101	ug/L	98
19) Methylene Chloride	6.9379	84	81970	20.8662	ug/L	93
20) Carbon Disulfide	6.9793	76	208818	21.0614	ug/L	100
21) Acrylonitrile	7.1240	53	32173	21.7356	ug/L	99
22) Methyl Tert Butyl Ether	7.1447	73	197603	19.8358	ug/L	99
23) trans-1,2-Dichloroethene	7.3722	96	78066	20.8281	ug/L	99
24) n-Hexane	7.4446	57	115249	25.7741	ug/L	99
25) Diisopropyl ether	7.7858	45	1805215	113.6766	ug/L	98
26) Vinyl Acetate	7.9512	43	160575	19.4422	ug/L	98
27) 1,1-Dichloroethane	7.9719	63	161390	21.2196	ug/L	100
28) Ethyl-Tert-Butyl ether	8.3338	59	1367729	105.9617	ug/L	98
29) 2-Butanone	8.5199	43	40838	20.3420	ug/L	94
30) Propionitrile	8.6129	54	57664	104.7032	ug/L	96
31) 2,2-Dichloropropane	8.7163	77	116992	20.4867	ug/L	100
32) cis-1,2-Dichloroethene	8.7784	96	87743	19.9814	ug/L	97
33) Chloroform	8.9748	83	152658	20.4013	ug/L	100
34) 1-Bromopropane	9.1092	122	18312	21.4041	ug/L	97
35) Bromochloromethane	9.2023	130	48710	19.8285	ug/L	90
36) Tetrahydrofuran	9.2230	42	138478	107.0856	ug/L	96
38) 1,1,1-Trichloroethane	9.4815	97	137938	21.0152	ug/L	99
39) Cyclohexane	9.5125	56	147378	20.3932	ug/L	98
40) 1,1-Dichloropropene	9.6676	75	114960	21.1836	ug/L	99
41) Carbon Tetrachloride	9.8020	117	126773	20.7615	ug/L	99
42) Tert-Amyl-Methyl ether	9.7710	73	1063149	103.2142	ug/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\031921\11M43415.D Vial: 9
Acq On : 19 Mar 2021 16:43 Operator: CIM
Sample : B1C1187-BSD1 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 22 11:39:02 2021 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 21B0038 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration
DataAcq Meth : 8260WTR

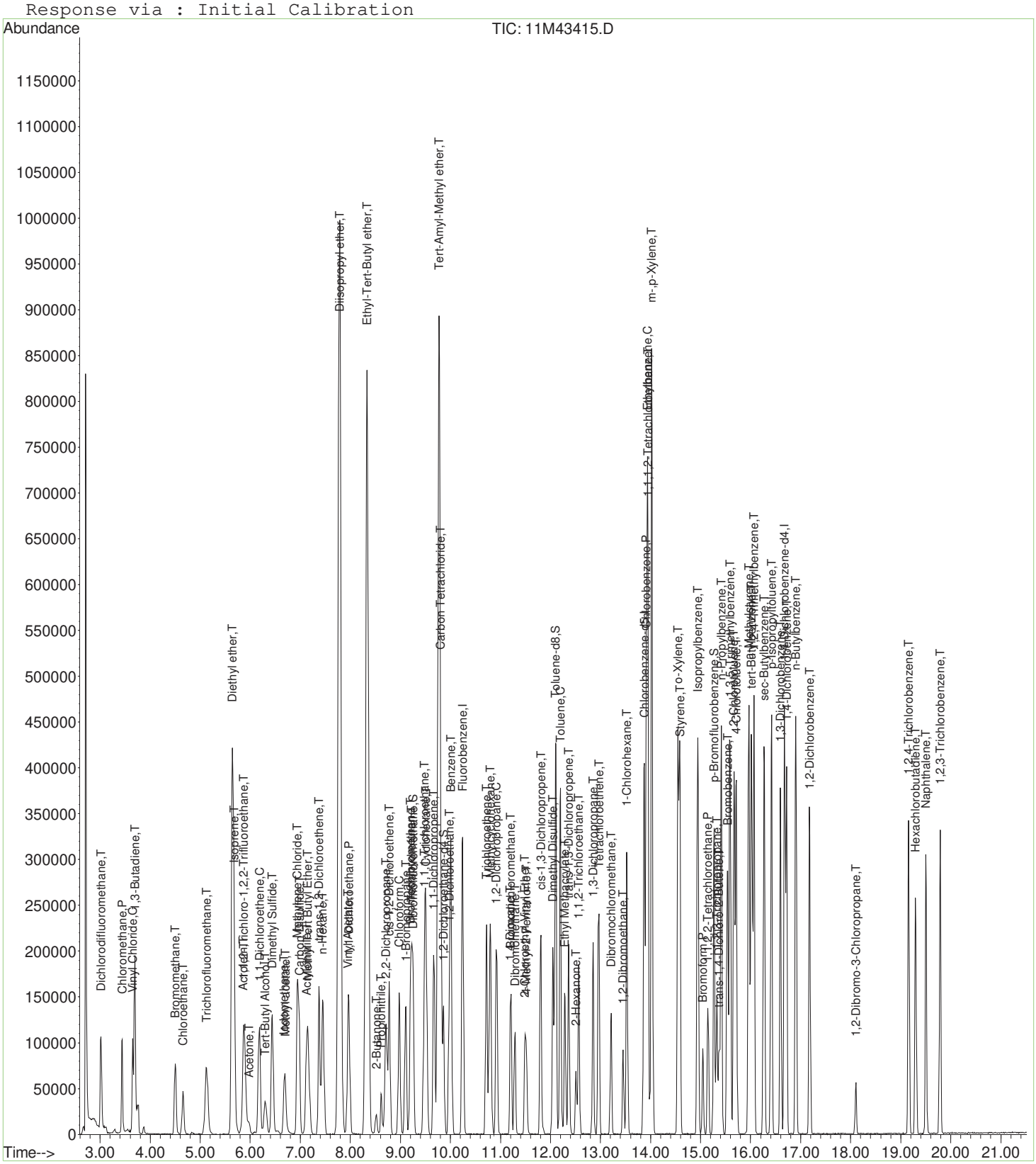
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44)	1,2-Dichloroethane	9.9778	62	123162	21.0269	ug/L	98
45)	Benzene	10.0088	78	332097	21.0478	ug/L	99
46)	Trichloroethene	10.7222	130	92237	20.1920	ug/L	99
47)	Methylcyclohexane	10.7946	83	128093	20.6974	ug/L	98
48)	1,2-Dichloropropane	10.9187	63	94792	21.4340	ug/L	98
49)	1,4-Dioxane	11.1978	88	6238	210.6724	ug/L	88
50)	Bromodichloromethane	11.2082	83	112011	19.5846	ug/L	99
51)	Dibromomethane	11.2909	93	51584	22.2864	ug/L	94
52)	2-Chloroethyl Vinyl Ether	11.4873	63	39727	19.1614	ug/L	98
53)	4-Methyl-2-Pentanone	11.5080	58	29253	19.8577	ug/L	96
54)	cis-1,3-Dichloropropene	11.8079	75	138585	21.5319	ug/L	97
55)	Dimethyl Disulfide	12.0457	79	64889	19.1330	ug/L	93
58)	Toluene	12.2008	91	339206	21.0190	ug/L	99
59)	Ethyl Methacrylate	12.2835	69	95447	22.0641	ug/L	96
60)	trans-1,3-Dichloropropene	12.3662	75	116114	21.2895	ug/L	99
61)	1,1,2-Trichloroethane	12.5627	97	67556	20.7263	ug/L	96
62)	2-Hexanone	12.5109	43	64839	23.5900	ug/L	93
63)	1,3-Dichloropropane	12.8522	76	124116	22.0135	ug/L	94
64)	Tetrachloroethene	12.9659	164	72728	20.4263	ug/L	96
65)	Dibromochloromethane	13.2141	129	84537	20.0320	ug/L	98
66)	1,2-Dibromoethane	13.4519	107	70883	20.3821	ug/L	99
67)	1-Chlorohexane	13.5242	91	107328	20.8069	ug/L	94
68)	Chlorobenzene	13.9171	112	222530	19.5400	ug/L	100
69)	1,1,1,2-Tetrachloroethane	13.9482	131	89858	21.3784	ug/L	100
70)	Ethylbenzene	13.9378	106	125622	20.9280	ug/L	99
71)	m-,p-Xylene	14.0205	106	307408	43.1374	ug/L	94
72)	o-Xylene	14.5479	106	147201	20.8422	ug/L	97
73)	Styrene	14.5892	104	245476	21.8310	ug/L	99
74)	Bromoform	15.0442	173	54279	18.8383	ug/L	98
75)	Isopropylbenzene	14.9408	105	376314	21.1709	ug/L	99
77)	1,1,2,2-Tetrachloroethane	15.1476	83	85562	23.9123	ug/L	98
79)	1,2,3-Trichloropropane	15.3233	110	27309	21.1662	ug/L	95
80)	trans-1,4-Dichloro-2-Buten	15.3647	53	28250	21.1776	ug/L	98
81)	n-Propylbenzene	15.4164	91	453897	23.0500	ug/L	98
82)	Bromobenzene	15.5405	156	100853	21.1211	ug/L	95
83)	1,3,5-Trimethylbenzene	15.5922	105	320925	22.5012	ug/L	99
84)	2-Chlorotoluene	15.6645	91	262608	20.2780	ug/L	89
85)	4-Chlorotoluene	15.7162	91	269584	23.7361	ug/L	88
86)	a-Methylstyrene	15.9644	118	173810	23.8965	ug/L	99
87)	tert-Butylbenzene	16.0161	134	72354	21.8001	ug/L	88
88)	1,2,4-Trimethylbenzene	16.0678	105	328471	22.7700	ug/L	99
89)	sec-Butylbenzene	16.2642	105	405917	22.0393	ug/L	99
90)	p-Isopropyltoluene	16.4193	119	343276	22.1353	ug/L	99
91)	1,3-Dichlorobenzene	16.5951	146	185321	20.5321	ug/L	100
92)	1,4-Dichlorobenzene	16.7192	146	185684	20.4086	ug/L	100
93)	n-Butylbenzene	16.9053	91	321086	23.8298	ug/L	97
94)	1,2-Dichlorobenzene	17.1844	146	183069	21.7178	ug/L	99
95)	1,2-Dibromo-3-Chloropropan	18.1047	75	17592	22.4166	ug/L	89
96)	1,2,4-Trichlorobenzene	19.1593	180	130239	20.7439	ug/L	99
97)	Hexachlorobutadiene	19.2937	225	66334	21.2399	ug/L	99
98)	Naphthalene	19.5005	128	288041	22.1773	ug/L	99
99)	1,2,3-Trichlorobenzene	19.7900	180	124091	20.8447	ug/L	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\031921\11M43415.D Vial: 9
Acq On : 19 Mar 2021 16:43 Operator: CIM
Sample : B1C1187-BSD1 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 22 11:39 2021 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 21B0038 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration



MICROBAC®

Section D:
GCMS Volatiles
EPA 8260B
Calibration Raw Data

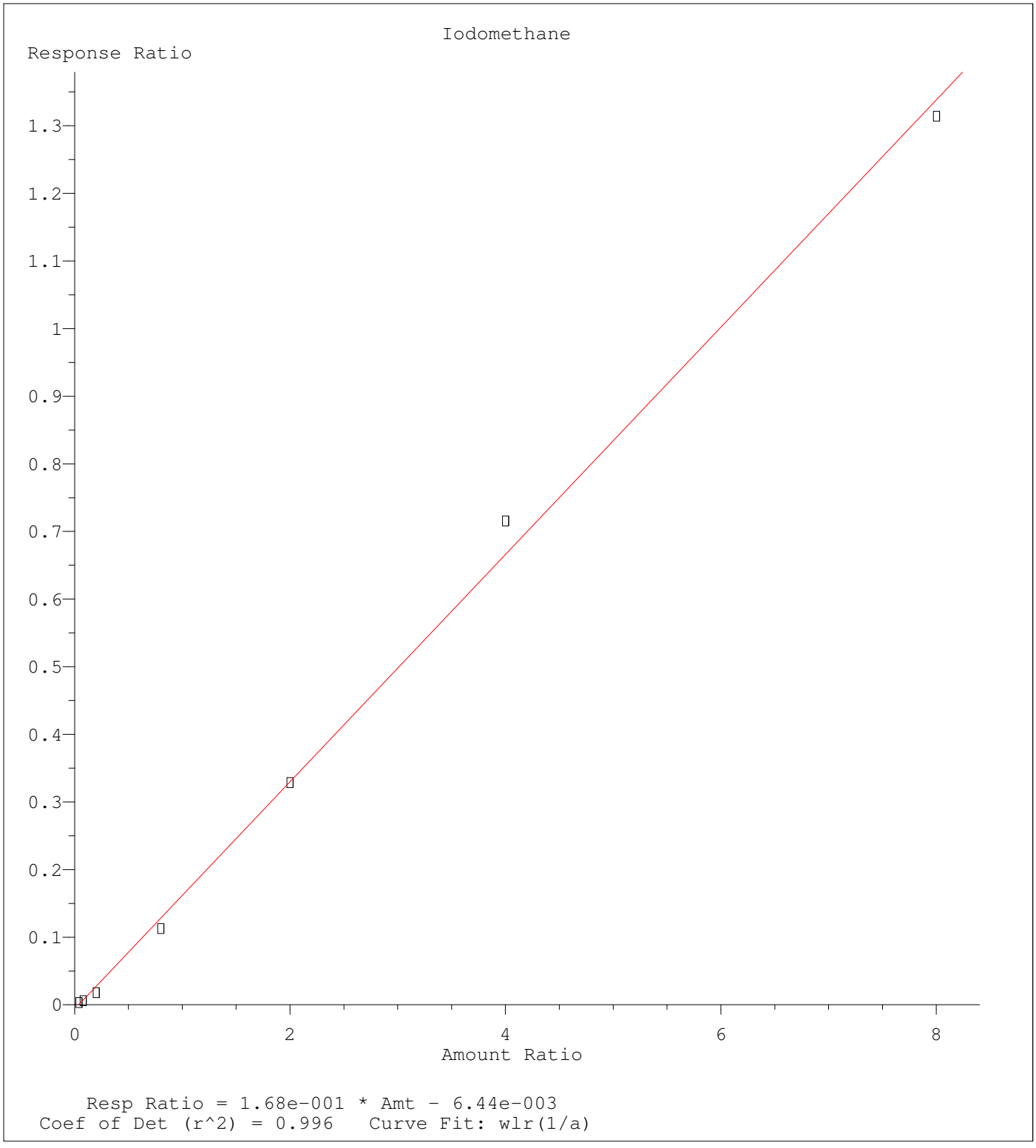
Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

Calibration Table Report
Method: 8260WTR.M
Title: 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Calibration: Thu Feb 25 14:04:08 2021
21B0038
Calibration Files

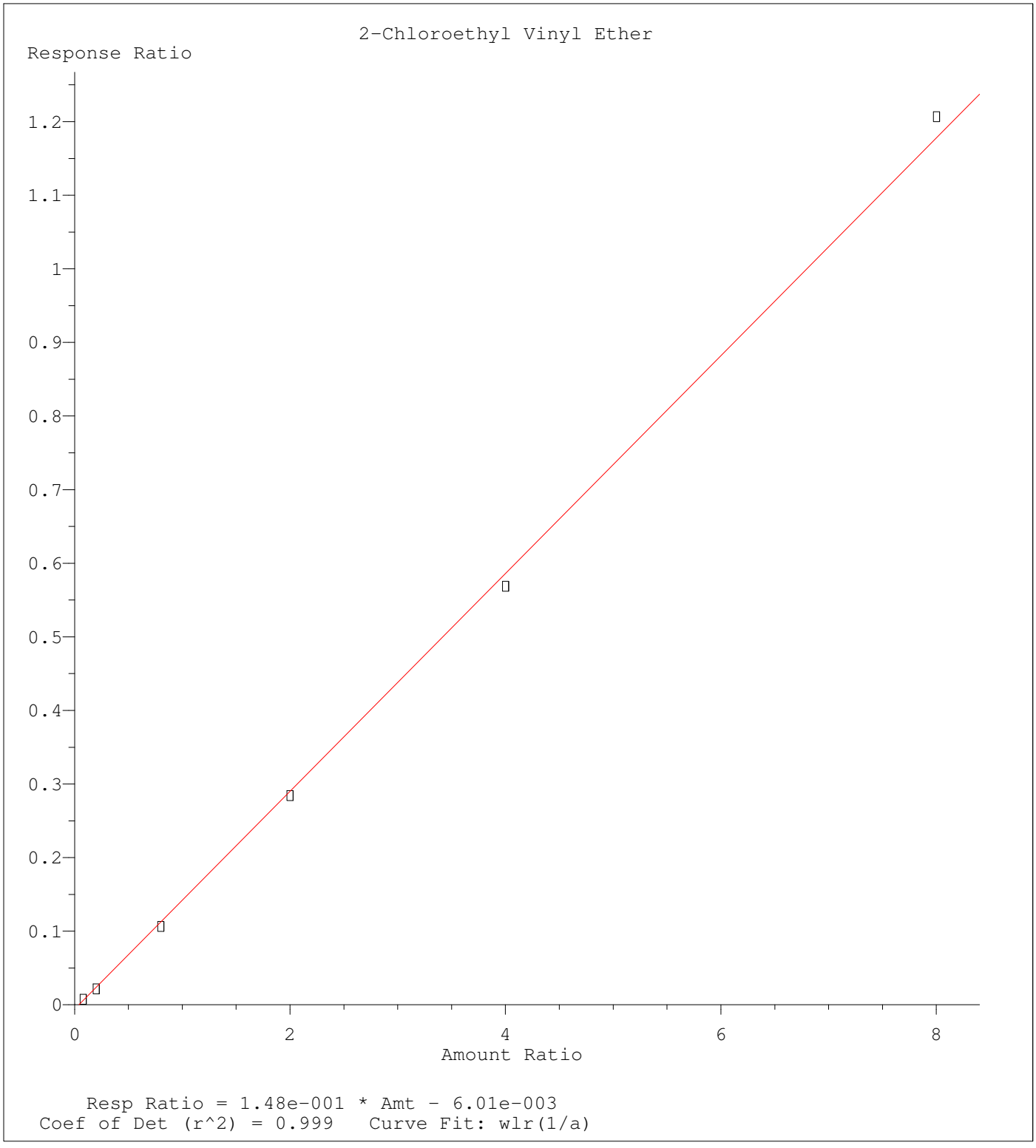
Compound		0.5 11M42848.D	1 11M42849.D	2 11M42850.D	5 11M42851.D	20 11M42852.D	50 11M42853.D	100 11M42854.D	200 11M42855.D	Avg	%RSD	Avg	%RSD	r^2 Linear	r^2 Quadratic
Fluorobenzene	ISTD														
Dichlorodifluoromethane			0.278	0.271	0.295	0.356	0.361	0.348	0.339			0.321	11.964		
Chloromethane			0.390	0.337	0.329	0.356	0.352	0.352	0.365			0.354	5.529		
Vinyl Chloride		0.338	0.309	0.263	0.280	0.337	0.337	0.279	0.275			0.302	10.470		
1,3-Butadiene		0.296	0.291	0.295	0.292	0.313	0.288	0.276	0.259			0.289	5.437		
Bromomethane			0.276	0.251	0.237	0.235	0.232	0.232	0.235			0.243	6.689		
Chloroethane			0.171	0.172	0.184	0.194	0.187	0.190	0.192			0.184	5.080		
Trichlorofluoromethane			0.425	0.444	0.450	0.485	0.470	0.451	0.450			0.454	4.211		
Diethyl ether			0.219	0.230	0.235	0.231	0.231	0.225	0.222			0.228	2.530		
Isoprene			0.276	0.292	0.323	0.325	0.326	0.325	0.323			0.313	6.547		
Acrolein				0.027	0.029	0.029	0.028	0.028	0.028			0.028	3.553		
1,1,2-Trichloro-1,2,2-Trifluoroet			0.196	0.221	0.232	0.243	0.245	0.241	0.242			0.231	7.696		
Acetone					0.075	0.084	0.082	0.076	0.080			0.079	4.636		
1,1-Dichloroethene			0.406	0.392	0.422	0.447	0.448	0.443	0.447			0.429	5.338		
Tert-Butyl Alcohol				0.022	0.023	0.023	0.023	0.023	0.026			0.023	5.740		
Dimethyl Sulfide		0.184	0.192	0.180	0.207	0.217	0.210	0.214	0.209			0.202	7.009		
Iodomethane			0.078	0.075	0.089	0.141	0.164	0.179	0.164			0.127	35.522	0.996	
Methyl acetate				0.173	0.177	0.203	0.205	0.199	0.202			0.193	7.423		
Methylene Chloride			0.257	0.256	0.264	0.278	0.270	0.266	0.268			0.265	2.813		
Carbon Disulfide			0.639	0.662	0.634	0.687	0.687	0.698	0.684			0.670	3.797		
Acrylonitrile			0.084	0.095	0.099	0.099	0.106	0.107	0.111			0.100	9.082		
Methyl Tert Butyl Ether		0.656	0.574	0.634	0.684	0.716	0.717	0.698	0.706			0.673	7.396		
trans-1,2-Dichloroethene		0.215	0.244	0.239	0.251	0.273	0.270	0.266	0.269			0.253	8.011		
n-Hexane				0.276	0.287	0.315	0.314	0.310	0.312			0.302	5.490		
Diisopropyl ether			1.042	1.114	1.130	1.097	1.090	1.048	0.991			1.073	4.548		
Vinyl Acetate				0.477	0.545	0.514	0.606	0.611	0.596			0.558	9.875		
1,1-Dichloroethane		0.441	0.517	0.520	0.531	0.553	0.547	0.522	0.481			0.514	7.110		
Ethyl-Tert-Butyl ether			0.825	0.899	0.904	0.888	0.888	0.865	0.837			0.872	3.542		
2-Butanone					0.124	0.139	0.140	0.134	0.141			0.136	5.077		
Propionitrile				0.036	0.037	0.036	0.038	0.037	0.040			0.037	3.985		
2,2-Dichloropropane			0.367	0.364	0.380	0.403	0.399	0.394	0.393			0.386	4.086		
cis-1,2-Dichloroethene		0.281	0.292	0.288	0.289	0.310	0.309	0.302	0.302			0.297	3.570		
Chloroform		0.496	0.521	0.486	0.512	0.522	0.516	0.505	0.487			0.506	2.866		
1-Bromopropane				0.050	0.055	0.063	0.059	0.060	0.060			0.058	8.382		
Bromochloromethane			0.160	0.167	0.164	0.176	0.169	0.162	0.164			0.166	3.151		
Tetrahydrofuran			0.082	0.084	0.087	0.090	0.091	0.089	0.090			0.087	3.851		
Dibromofluoromethane		0.271	0.272	0.276	0.283	0.279	0.277	0.279	0.257			0.274	2.877		
1,1,1-Trichloroethane		0.435	0.407	0.425	0.425	0.469	0.463	0.463	0.462			0.444	5.273		
Cyclohexane			0.487	0.463	0.483	0.496	0.494	0.497	0.498			0.488	2.546		
1,1-Dichloropropene		0.358	0.339	0.351	0.367	0.385	0.382	0.376	0.374			0.367	4.398		
Carbon Tetrachloride			0.360	0.358	0.402	0.441	0.445	0.440	0.443			0.413	9.616		
Tert-Amyl-Methyl ether			0.649	0.703	0.717	0.714	0.711	0.702	0.678			0.6961	3.5093		
1,2-Dichloroethane-d4		0.306	0.298	0.306	0.31	0.301	0.304	0.309	0.298			0.304	1.5104		
1,2-Dichloroethane		0.377	0.392	0.392	0.373	0.423	0.406	0.401	0.403			0.3958	4.0724		
Benzene		1.066	1.007	1.083	1.082	1.125	1.11	1.067	0.991			1.0663	4.3506		
Trichloroethene		0.284	0.329	0.281	0.3	0.332	0.322	0.313	0.309			0.3087	6.2819		
Methylcyclohexane		0.433	0.408	0.385	0.407	0.433	0.431	0.425	0.424			0.4182	4.0534		
1,2-Dichloropropane		0.281	0.263	0.296	0.3	0.318	0.316	0.308	0.31			0.2989	6.3167		
1,4-Dioxane					0.002	0.002	0.002	0.002	0.002			0.002	7.987		
Bromodichloromethane			0.35	0.357	0.376	0.4	0.411	0.406	0.405			0.3865	6.4822		
Dibromomethane		0.123	0.14	0.156	0.161	0.169	0.171	0.169	0.163			0.1564	10.858		
2-Chloroethyl Vinyl Ether				0.094	0.108	0.133	0.142	0.142	0.151			0.1283	17.509	0.999	
4-Methyl-2-Pentanone					0.082	0.099	0.105	0.103	0.11			0.0996	10.851		
cis-1,3-Dichloropropene			0.401	0.393	0.414	0.456	0.463	0.461	0.455			0.435	7.0173		
Dimethyl Disulfide					0.186	0.222	0.239	0.248	0.251			0.2292	11.696		
Chlorobenzene-d5	ISTD														
Toluene-d8		1.254	1.227	1.243	1.235	1.267	1.214	1.258	1.218			1.2396	1.5669		
Toluene		1.576	1.449	1.443	1.434	1.555	1.458	1.418	1.273			1.4506	6.3493		
Ethyl Methacrylate				0.313	0.353	0.413	0.408	0.426	0.419			0.3888	11.651		
trans-1,3-Dichloropropene			0.393	0.454	0.468	0.532	0.529	0.533	0.523			0.4903	10.962		
1,1,2-Trichloroethane		0.236	0.304	0.293	0.308	0.312	0.3	0.299	0.292			0.293	8.1534		
2-Hexanone				0.187	0.217	0.268	0.269	0.265	0.278			0.2471	14.842		
1,3-Dichloropropane		0.441	0.485	0.5	0.501	0.557	0.529	0.53	0.512			0.5068	6.84		
Tetrachloroethene		0.321	0.33	0.31	0.312	0.334	0.321	0.318	0.315			0.32	2.5839		
Dibromochloromethane			0.36	0.336	0.344	0.407	0.398	0.405	0.405			0.3793	8.3356		
1,2-Dibromoethane			0.276	0.293	0.303	0.327	0.329	0.332	0.328			0.3126	7.0828		
1-Chlorohexane			0.419	0.44	0.429	0.489	0.489	0.501	0.479			0.4637	7.1976		
Chlorobenzene		1.086	1.048	1.014	0.987	1.071	1.031	1.01	0.944			1.0237	4.4848		
1,1,1,2-Tetrachloroethane		0.307	0.387	0.342	0.366	0.411	0.402	0.408	0.399			0.3778	9.8022		
Ethylbenzene		0.467	0.574	0.505	0.527	0.58	0.559	0.561	0.543			0.5396	7.1234		
m-,p-Xylene		0.645	0.629	0.619	0.626	0.689	0.667	0.655	0.595			0.6406	4.6372		
o-Xylene		0.614	0.602	0.595	0.625	0.661	0.666	0.668	0.648			0.6349	4.6452		
Styrene		0.826	0.907	0.944	1.012	1.144	1.114	1.105	1.034			1.0107	11.062		
Bromoform			0.213	0.241	0.222	0.274	0.284	0.287	0.291			0.259	12.652		
Isopropylbenzene		1.487	1.506	1.587	1.602	1.749	1.714	1.661	1.476			1.5978	6.5287		
1,4-Dichlorobenzene-d4	ISTD														
1,1,2,2-Tetrachloroethane		0.538	0.559	0.572	0.595	0.673	0.705	0.69	0.687			0.6274	10.848		
p-Bromofluorobenzene		0.849	0.842	0.859	0.846	0.868	0.859	0.876	0.88			0.8598	1.6136		
1,2,3-Trichloropropane				0.245	0.208	0.242	0.227	0.216	0.22			0.2262	6.4687		
trans-1,4-Dichloro-2-Butene					0.2	0.237	0.24	0.245	0.247			0.2339	8.2121		

n-Propylbenzene	3.471	3.302	3.448	3.474	3.866	3.705	3.443	2.912	3.4526	8.119
Bromobenzene	0.867	0.821	0.803	0.809	0.882	0.863	0.843	0.81	0.8372	3.6568
1,3,5-Trimethylbenzene	2.31	2.301	2.511	2.501	2.793	2.702	2.579	2.308	2.5007	7.4908
2-Chlorotoluene	2.239	2.251	2.314	2.215	2.472	2.402	2.263	2.008	2.2706	6.0707
4-Chlorotoluene	2.006	2.041	1.998	1.931	2.12	2.06	1.98	1.794	1.9913	4.8946
a-Methylstyrene			1.168	1.199	1.356	1.335	1.333	1.26	1.2753	6.176
tert-Butylbenzene	0.596	0.536	0.563	0.548	0.631	0.617	0.591	0.573	0.5819	5.6593
1,2,4-Trimethylbenzene	2.427	2.44	2.528	2.531	2.795	2.703	2.539	2.27	2.5292	6.4572
sec-Butylbenzene	3.195	3.055	3.257	3.278	3.565	3.468	3.232	2.784	3.2292	7.4261
p-Isopropyltoluene	2.63	2.573	2.623	2.742	3.034	2.956	2.768	2.427	2.719	7.3843
1,3-Dichlorobenzene	1.716	1.456	1.608	1.523	1.67	1.641	1.574	1.472	1.5825	5.9106
1,4-Dichlorobenzene	1.758	1.537	1.603	1.536	1.674	1.626	1.564	1.463	1.5952	5.7606
n-Butylbenzene	2.316	2.146	2.219	2.384	2.64	2.587	2.439	2.169	2.3624	7.8614
1,2-Dichlorobenzene	1.426	1.414	1.47	1.461	1.609	1.556	1.501	1.388	1.4779	5.0451
1,2-Dibromo-3-Chloropropane			0.118	0.121	0.144	0.145	0.146	0.152	0.1376	10.486
1,2,4-Trichlorobenzene		1.058	1.029	1.063	1.184	1.162	1.111	1.098	1.1008	5.1384
Hexachlorobutadiene		0.551	0.514	0.527	0.574	0.564	0.548	0.553	0.5476	3.7736
Naphthalene	2.084	2.06	2.307	2.23	2.559	2.49	2.319	2.168	2.2772	7.8923
1,2,3-Trichlorobenzene		1.065	0.989	0.976	1.113	1.076	1.042	1.045	1.0438	4.6083

Thu Feb 25 14:20:10 2021



Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Thu Feb 25 14:04:08 2021



Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Thu Feb 25 14:04:08 2021

Calibration Table Report
Method: A9FOOWTR.M
Title: Appendix IX(SOP:OVL MSV01)WTR 022221_21B0038 MS11
Last Calibration: Fri Mar 05 16:06:16 2021
21B0038
Calibration Files

Compound	5 11M42858.D	20 11M42859.D	50 11M42860.D	100 11M42861.D	200 11M42862.D	300 11M42863.D	400 11M42864.D	500 11M42865.D	Avg	%RSD
Fluorobenzene	ISTD									
Acetonitrile		0.033	0.035	0.035	0.036	0.036	0.036	0.038	0.036	3.982
3-Chloro-1-propene	0.505	0.498	0.511	0.513	0.469	0.445	0.427		0.481	7.150
2-Chloro-1,3-butadiene	0.454	0.458	0.478	0.479	0.471	0.458	0.451	0.441	0.461	2.918
Methacrylonitrile	0.187	0.198	0.202	0.204	0.204	0.199	0.200	0.202	0.200	2.743
Isobutyl Alcohol			0.013	0.011	0.012	0.013	0.013	0.014	0.013	7.582
1-Butanol									0.000	0.000
Cyclohexanone			0.006	0.006	0.007	0.007	0.008	0.009	0.007	12.796
2-Nitropropane			0.067	0.074	0.078	0.078	0.081	0.083	0.077	7.748
Ethyl Acetate	0.249	0.266	0.281	0.283	0.281	0.269	0.269	0.272	0.271	4.092
Methyl methacrylate	0.220	0.247	0.259	0.266	0.265	0.256	0.256	0.258	0.254	5.769
Chlorobenzene-d5	ISTD									
1,4-Dichlorobenzene-d4	ISTD									

Mon Mar 08 16:11:04 2021

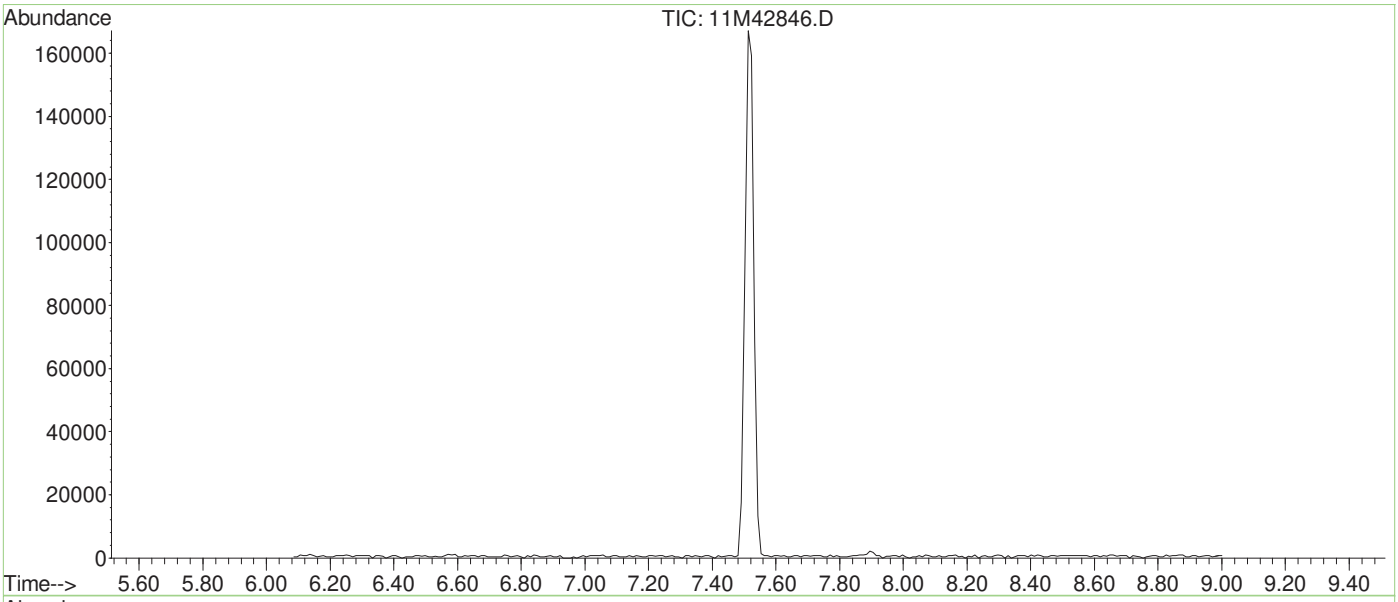
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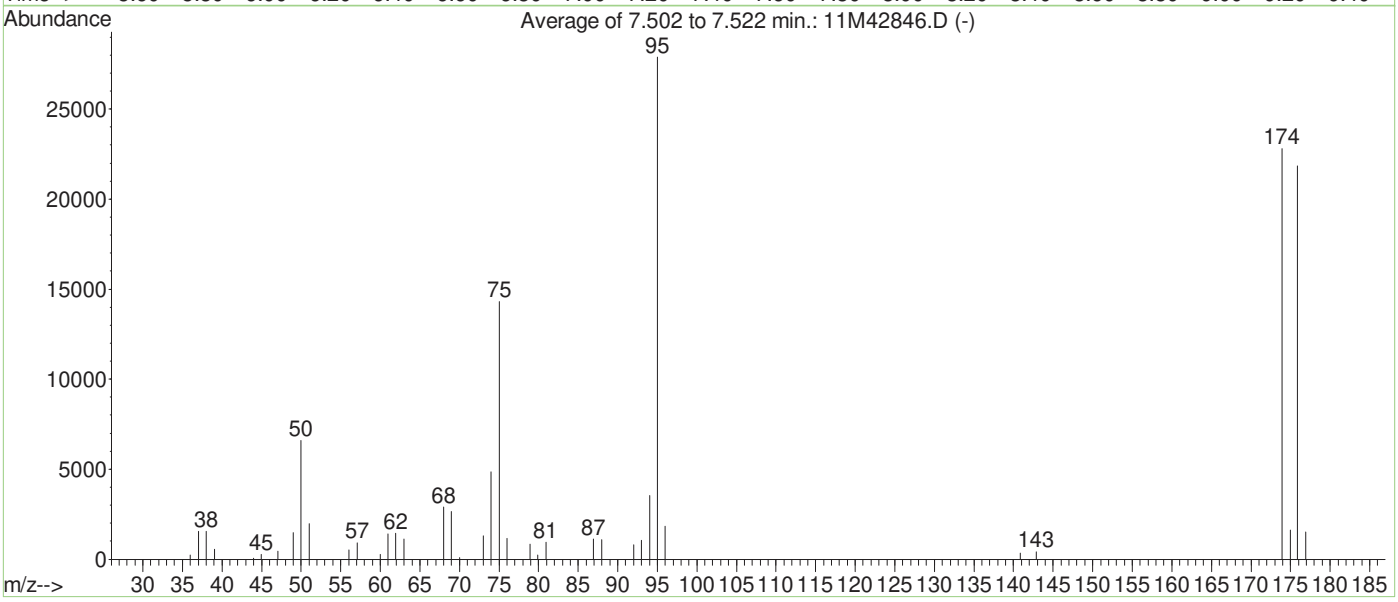
Section E:
GCMS Volatiles
EPA 8260B
Sequence QC Sample Raw Data

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

BFB

Data File : C:\MSDCHEM\1\DATA\022221\11M42846.D Vial: 1
Acq On : 22 Feb 2021 17:34 Operator: CIM/EEA
Sample : S1B0345-TUN1 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11





AutoFind: Scans 138, 139, 140; Background Corrected with Scan 133

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.6	6596	PASS
75	95	30	60	51.3	14301	PASS
95	95	100	100	100.0	27893	PASS
96	95	5	9	6.6	1833	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	81.7	22786	PASS
175	174	5	9	7.1	1628	PASS
176	174	95	101	95.8	21831	PASS
177	176	5	9	6.9	1502	PASS

11M42846.D 8260WTR.M Thu Feb 25 14:19:37 2021

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\022221\11M42848.D Vial: 2
Acq On : 22 Feb 2021 18:27 Operator: CIM/EEA
Sample : S1B0345-CAL1 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 25 14:05:17 2021 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	10.2466	96	491681	25.0000	ug/L		0.0000
56) Chlorobenzene-d5	13.8758	117	374295	25.0000	ug/L		0.0000
76) 1,4-Dichlorobenzene-d4	16.6881	152	198863	25.0000	ug/L		0.0000
System Monitoring Compounds							
37) Dibromofluoromethane	9.2643	111	133005	24.6552	ug/L		0.0102
Spiked Amount 25.0000	Range 86 - 118		Recovery = 98.6208%				
43) 1,2-Dichloroethane-d4	9.8640	65	150450	25.1605	ug/L		0.0000
Spiked Amount 25.0000	Range 80 - 120		Recovery = 100.6420%				
57) Toluene-d8	12.1077	98	469440	25.2954	ug/L		0.0000
Spiked Amount 25.0000	Range 88 - 110		Recovery = 101.1816%				
78) p-Bromofluorobenzene	15.2716	95	168929	24.6998	ug/L		0.0000
Spiked Amount 25.0000	Range 86 - 115		Recovery = 98.7992%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.0192	85	2409	0.3814	ug/L	#	66
3) Chloromethane	3.4431	50	3986	0.5720	ug/L		95
4) Vinyl Chloride	3.6603	62	3326	0.5593	ug/L	#	56
5) 1,3-Butadiene	3.7016	54	2913	0.5130	ug/L	#	70
6) Bromomethane	4.5288	94	2324	0.4869	ug/L		88
7) Chloroethane	4.6735	64	1299	0.3585	ug/L	#	43
8) Trichlorofluoromethane	5.1285	101	4666	0.5229	ug/L		85
10) Isoprene	5.6765	67	2550	0.4144	ug/L		92
12) 1,1,2-Trichloro-1,2,2-Trif	5.8936	101	1371	0.3013	ug/L		96
13) Acetone	5.9970	43	745	0.4767	ug/L	#	48
14) 1,1-Dichloroethene	6.1935	61	4266	0.5054	ug/L		88
16) Dimethyl Sulfide	6.4520	62	1805	0.4552	ug/L		92
17) Iodomethane	6.6794	142	675	1.1609	ug/L	#	33
18) Methyl acetate	6.7104	43	1262	0.3319	ug/L	#	68
19) Methylene Chloride	6.9482	84	2433	0.4660	ug/L		98
20) Carbon Disulfide	6.9793	76	7902	0.5997	ug/L	#	75
22) Methyl Tert Butyl Ether	7.1654	73	6452	0.4873	ug/L	#	67
23) trans-1,2-Dichloroethene	7.3825	96	2110	0.4236	ug/L		92
24) n-Hexane	7.4549	57	2329	0.3919	ug/L	#	70
26) Vinyl Acetate	7.9615	43	3627	0.3304	ug/L	#	78
27) 1,1-Dichloroethane	7.9822	63	4339	0.4292	ug/L	#	86
31) 2,2-Dichloropropane	8.7266	77	3205	0.4223	ug/L		91
32) cis-1,2-Dichloroethene	8.7887	96	2762	0.4732	ug/L		82
33) Chloroform	8.9748	83	4879	0.4906	ug/L		93
35) Bromochloromethane	9.2230	130	1590	0.4870	ug/L		89
38) 1,1,1-Trichloroethane	9.4815	97	4280	0.4906	ug/L	#	72
39) Cyclohexane	9.5125	56	4361	0.4540	ug/L		91
40) 1,1-Dichloropropene	9.6779	75	3525	0.4887	ug/L		91
41) Carbon Tetrachloride	9.8123	117	3128	0.3854	ug/L	#	77
44) 1,2-Dichloroethane	9.9778	62	3708	0.4763	ug/L		92
45) Benzene	10.0191	78	10483	0.4999	ug/L		88
46) Trichloroethene	10.7222	130	2788	0.4592	ug/L		95
47) Methylcyclohexane	10.7946	83	4254	0.5172	ug/L		91
48) 1,2-Dichloropropane	10.9187	63	2766	0.4706	ug/L		78
50) Bromodichloromethane	11.2082	83	3612	0.4752	ug/L	#	81
51) Dibromomethane	11.2909	93	1205	0.3917	ug/L		93
52) 2-Chloroethyl Vinyl Ether	11.5080	63	611	1.2250	ug/L	#	49
54) cis-1,3-Dichloropropene	11.8182	75	3475	0.4062	ug/L		99
55) Dimethyl Disulfide	12.0457	79	984	0.2183	ug/L	#	1
58) Toluene	12.2007	91	11795	0.5431	ug/L		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\022221\11M42848.D Vial: 2
Acq On : 22 Feb 2021 18:27 Operator: CIM/EEA
Sample : S1B0345-CAL1 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 25 14:05:17 2021 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration
DataAcq Meth : 8260WTR

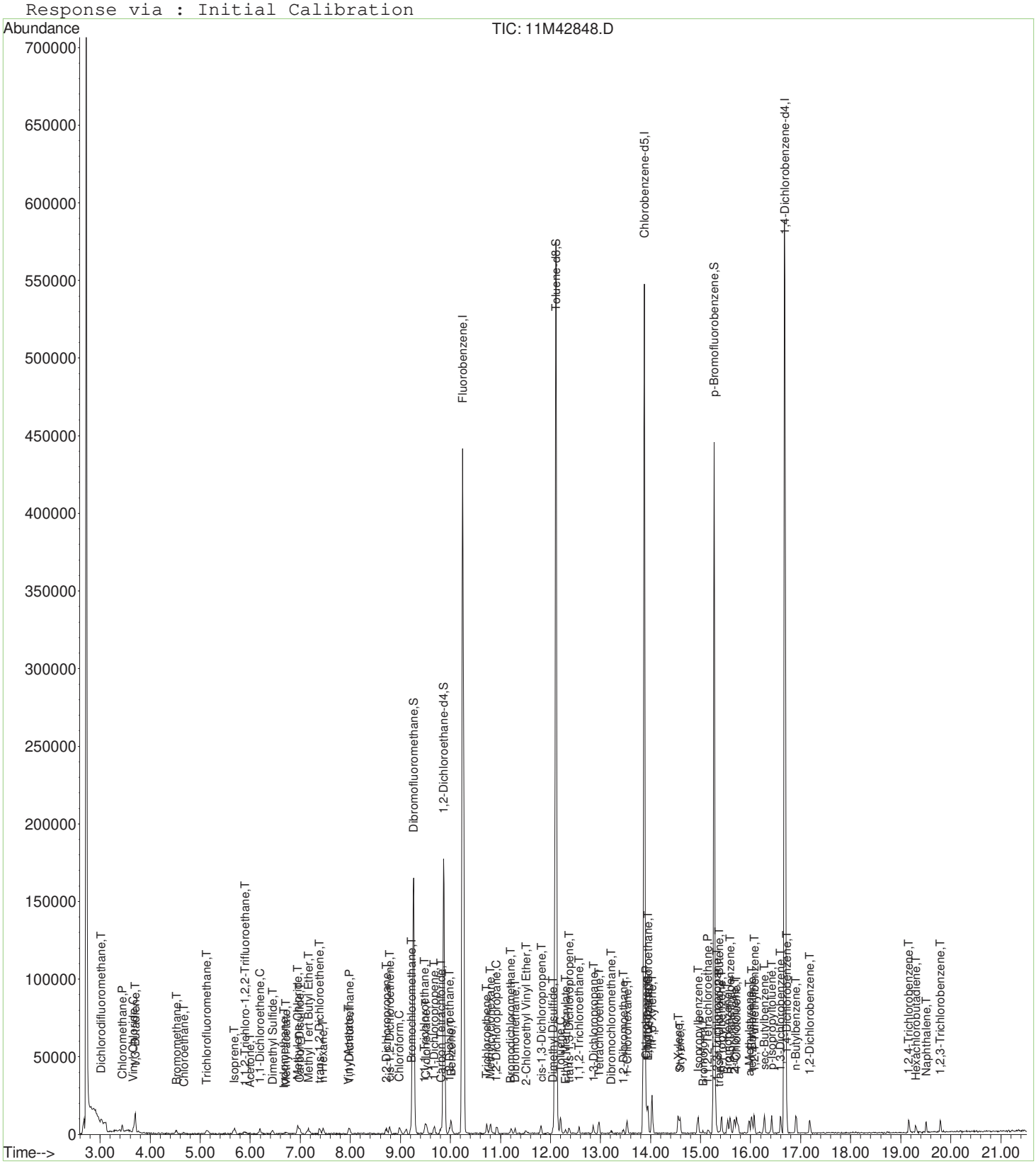
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
59)	Ethyl Methacrylate	12.3042	69	1770	0.3040	ug/L		87
60)	trans-1,3-Dichloropropene	12.3765	75	2598	0.3539	ug/L	#	67
61)	1,1,2-Trichloroethane	12.5730	97	1769	0.4033	ug/L		93
63)	1,3-Dichloropropane	12.8625	76	3302	0.4352	ug/L		85
64)	Tetrachloroethene	12.9659	164	2400	0.5009	ug/L		100
65)	Dibromochloromethane	13.2140	129	2402	0.4229	ug/L		97
66)	1,2-Dibromoethane	13.4622	107	2041	0.4361	ug/L		94
67)	1-Chlorohexane	13.5346	91	2753	0.3966	ug/L		79
68)	Chlorobenzene	13.9171	112	8128	0.5303	ug/L		89
69)	1,1,1,2-Tetrachloroethane	13.9482	131	2298	0.4062	ug/L		91
70)	Ethylbenzene	13.9482	106	3498	0.4330	ug/L		66
71)	m-,p-Xylene	14.0309	106	9655	1.0067	ug/L		94
72)	o-Xylene	14.5582	106	4599	0.4839	ug/L		96
73)	Styrene	14.5892	104	6181	0.4085	ug/L		88
74)	Bromoform	15.0545	173	1405	0.3623	ug/L		98
75)	Isopropylbenzene	14.9511	105	11132	0.4654	ug/L		92
77)	1,1,2,2-Tetrachloroethane	15.1475	83	2140	0.4288	ug/L		95
79)	1,2,3-Trichloropropane	15.3233	110	290	0.1612	ug/L	#	29
80)	trans-1,4-Dichloro-2-Buten	15.3750	53	558	0.2999	ug/L	#	1
81)	n-Propylbenzene	15.4164	91	13804	0.5026	ug/L		95
82)	Bromobenzene	15.5404	156	3449	0.5179	ug/L		75
83)	1,3,5-Trimethylbenzene	15.5921	105	9189	0.4620	ug/L		100
84)	2-Chlorotoluene	15.6748	91	8906	0.4931	ug/L		95
85)	4-Chlorotoluene	15.7162	91	7977	0.5036	ug/L		94
86)	a-Methylstyrene	15.9747	118	3694	0.3642	ug/L		98
87)	tert-Butylbenzene	16.0264	134	2372	0.5124	ug/L		81
88)	1,2,4-Trimethylbenzene	16.0781	105	9654	0.4798	ug/L		98
89)	sec-Butylbenzene	16.2746	105	12708	0.4947	ug/L		100
90)	p-Isopropyltoluene	16.4193	119	10462	0.4837	ug/L		91
91)	1,3-Dichlorobenzene	16.5951	146	6824	0.5421	ug/L		100
92)	1,4-Dichlorobenzene	16.7191	146	6991	0.5509	ug/L		94
93)	n-Butylbenzene	16.9053	91	9210	0.4901	ug/L	#	94
94)	1,2-Dichlorobenzene	17.1844	146	5670	0.4823	ug/L		96
96)	1,2,4-Trichlorobenzene	19.1593	180	4422	0.5050	ug/L		95
97)	Hexachlorobutadiene	19.3041	225	1999	0.4589	ug/L		87
98)	Naphthalene	19.5108	128	8289	0.4576	ug/L	#	96
99)	1,2,3-Trichlorobenzene	19.7900	180	4334	0.5220	ug/L		92

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\022221\11M42848.D Vial: 2
Acq On : 22 Feb 2021 18:27 Operator: CIM/EEA
Sample : S1B0345-CAL1 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 25 14:05 2021 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\022221\11M42848.D Vial: 2
Acq On : 22 Feb 2021 18:27 Operator: CIM/EEA
Sample : S1B0345-CAL1 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	25.000	25.000	0.0	100	0.00
2	T	Dichlorodifluoromethane	-1.000	0.381	0.0	100	0.00
3	P	Chloromethane	-1.000	0.572	0.0	100	0.00
4	C	Vinyl Chloride	0.500	0.559	-11.8	100	0.00
5	T	1,3-Butadiene	0.500	0.513	-2.6	100	0.00
6	T	Bromomethane	-1.000	0.487	0.0	100	0.02
7	T	Chloroethane	-1.000	0.359	0.0	0	0.01
8	T	Trichlorofluoromethane	-1.000	0.523	0.0	100	-0.01
9	T	Diethyl ether	-1.000	0.000	0.0	0	-5.65#
10	T	Isoprene	-1.000	0.414	0.0	100	0.00
11	T	Acrolein	-1.000	0.000	0.0	0	-5.88#
12	T	1,1,2-Trichloro-1,2,2-Trifl	-1.000	0.301	0.0	100	0.00
13	T	Acetone	-1.000	0.477	0.0	100	0.02
14	C	1,1-Dichloroethene	-1.000	0.505	0.0	100	0.01
15	T	Tert-Butyl Alcohol	-1.000	0.000	0.0	0	-6.30#
16	T	Dimethyl Sulfide	0.500	0.455	9.0	100	0.01
17	T	Iodomethane	-1.000	1.161	0.0	100	0.00
18	T	Methyl acetate	-1.000	0.332	0.0	100	0.00
19	T	Methylene Chloride	-1.000	0.466	0.0	100	0.00
20	T	Carbon Disulfide	-1.000	0.600	0.0	100	0.00
21	T	Acrylonitrile	-1.000	0.000	0.0	0	-7.12#
22	T	Methyl Tert Butyl Ether	0.500	0.487	2.6	100	0.01
23	T	trans-1,2-Dichloroethene	0.500	0.424	15.2	100	0.00
24	T	n-Hexane	-1.000	0.392	0.0	100	0.00
25	T	Diisopropyl ether	-1.000	0.000	0.0	0	-7.79#
26	T	Vinyl Acetate	-1.000	0.330	0.0	100	0.01
27	P	1,1-Dichloroethane	0.500	0.429	14.2	100	0.00
28	T	Ethyl-Tert-Butyl ether	-1.000	0.000	0.0	0	-8.33#
29	T	2-Butanone	-1.000	0.000	0.0	0	-8.52#
30	T	Propionitrile	-1.000	0.000	0.0	0	-8.62#
31	T	2,2-Dichloropropane	-1.000	0.422	0.0	100	0.01
32	T	cis-1,2-Dichloroethene	0.500	0.473	5.4	100	0.00
33	C	Chloroform	0.500	0.491	1.8	100	-0.01
34	T	1-Bromopropane	-1.000	0.000	0.0	0	-9.11#
35	T	Bromochloromethane	-1.000	0.487	0.0	100	0.02
36	T	Tetrahydrofuran	-1.000	0.000	0.0	0	-9.23#
37	S	Dibromofluoromethane	25.000	24.655	1.4	100	0.01
38	T	1,1,1-Trichloroethane	0.500	0.491	1.8	100	-0.01
39	T	Cyclohexane	-1.000	0.454	0.0	100	0.00
40	T	1,1-Dichloropropene	0.500	0.489	2.2	100	0.00
41	T	Carbon Tetrachloride	-1.000	0.385	0.0	100	0.00
42	T	Tert-Amyl-Methyl ether	-1.000	0.000	0.0	0	-9.77#
43	S	1,2-Dichloroethane-d4	25.000	25.161	-0.6	100	0.00
44	T	1,2-Dichloroethane	0.500	0.476	4.8	100	0.00
45	T	Benzene	0.500	0.500	0.0	100	0.01
46	T	Trichloroethene	0.500	0.459	8.2	100	0.00
47	T	Methylcyclohexane	0.500	0.517	-3.4	100	0.00
48	C	1,2-Dichloropropane	0.500	0.471	5.8	100	-0.01
49	T	1,4-Dioxane	-1.000	0.000	0.0	0	-11.21#
50	T	Bromodichloromethane	-1.000	0.475	0.0	100	0.00
51	T	Dibromomethane	0.500	0.392	21.6	100	0.00
52	T	2-Chloroethyl Vinyl Ether	-1.000	1.225	0.0	100	0.02
53	T	4-Methyl-2-Pentanone	-1.000	0.000	0.0	0	-11.52#
54	T	cis-1,3-Dichloropropene	-1.000	0.406	0.0	100	0.01
55	T	Dimethyl Disulfide	-1.000	0.218	0.0	0	-0.01
56	I	Chlorobenzene-d5	25.000	25.000	0.0	100	0.00
57	S	Toluene-d8	25.000	25.295	-1.2	100	0.00

58	C	Toluene	0.500	0.543	-8.6	100	0.00	
59	T	Ethyl Methacrylate	-1.000	0.304	0.0	100	0.01	
60	T	trans-1,3-Dichloropropene	-1.000	0.354	0.0	100	0.01	
61	T	1,1,2-Trichloroethane	0.500	0.403	19.4	100	0.00	
62	T	2-Hexanone	-1.000	0.067	0.0	100	0.03	
63	T	1,3-Dichloropropane	0.500	0.435	13.0	100	0.01	
64	T	Tetrachloroethene	0.500	0.501	-0.2	100	0.00	
65	T	Dibromochloromethane	-1.000	0.423	0.0	100	0.00	
66	T	1,2-Dibromoethane	-1.000	0.436	0.0	100	0.01	
67	T	1-Chlorohexane	-1.000	0.397	0.0	100	0.00	
68	P	Chlorobenzene	0.500	0.530	-6.0	100	0.00	
69	T	1,1,1,2-Tetrachloroethane	0.500	0.406	18.8	100	0.00	
70	C	Ethylbenzene	0.500	0.433	13.4	100	0.00	
71	T	m-,p-Xylene	1.000	1.007	-0.7	100	0.00	
72	T	o-Xylene	0.500	0.484	3.2	100	0.01	
73	T	Styrene	0.500	0.408	18.4	100	0.00	
74	P	Bromoform	-1.000	0.362	0.0	0	0.00	
75	T	Isopropylbenzene	0.500	0.465	7.0	100	0.00	
76	I	1,4-Dichlorobenzene-d4	25.000	25.000	0.0	100	0.00	
77	P	1,1,2,2-Tetrachloroethane	0.500	0.429	14.2	100	0.00	
78	S	p-Bromofluorobenzene	25.000	24.700	1.2	100	0.00	
79	T	1,2,3-Trichloropropane	-1.000	0.161	0.0	100	-0.01	
80	T	trans-1,4-Dichloro-2-Butene	-1.000	0.300	0.0	100	0.00	
81	T	n-Propylbenzene	0.500	0.503	-0.6	100	0.00	
82	T	Bromobenzene	0.500	0.518	-3.6	100	0.00	
83	T	1,3,5-Trimethylbenzene	0.500	0.462	7.6	100	0.00	
84	T	2-Chlorotoluene	0.500	0.493	1.4	100	0.00	
85	T	4-Chlorotoluene	0.500	0.504	-0.8	100	0.00	
86	T	a-Methylstyrene	-1.000	0.364	0.0	100	0.01	
87	T	tert-Butylbenzene	0.500	0.512	-2.4	100	0.00	
88	T	1,2,4-Trimethylbenzene	0.500	0.480	4.0	100	0.01	
89	T	sec-Butylbenzene	0.500	0.495	1.0	100	0.00	
90	T	p-Isopropyltoluene	0.500	0.484	3.2	100	0.00	
91	T	1,3-Dichlorobenzene	0.500	0.542	-8.4	100	-0.01	
92	T	1,4-Dichlorobenzene	0.500	0.551	-10.2	100	0.00	
93	T	n-Butylbenzene	0.500	0.490	2.0	100	0.00	
94	T	1,2-Dichlorobenzene	0.500	0.482	3.6	100	0.00	
95	T	1,2-Dibromo-3-Chloropropane	-1.000	0.000	0.0	0	-18.10#	
96	T	1,2,4-Trichlorobenzene	-1.000	0.505	0.0	100	0.00	
97	T	Hexachlorobutadiene	-1.000	0.459	0.0	100	0.00	
98	T	Naphthalene	0.500	0.458	8.4	100	0.00	
99	T	1,2,3-Trichlorobenzene	-1.000	0.522	0.0	100	0.00	

(#) = Out of Range SPCC's out = 0 CCC's out = 0
11M42848.D 8260WTR.M Thu Feb 25 14:06:23 2021

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\022221\11M42849.D Vial: 3
Acq On : 22 Feb 2021 18:56 Operator: CIM/EEA
Sample : S1B0345-CAL2 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 25 14:05:18 2021 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	10.2466	96	486122	25.0000	ug/L		0.0000
56) Chlorobenzene-d5	13.8758	117	369779	25.0000	ug/L		0.0000
76) 1,4-Dichlorobenzene-d4	16.6882	152	198872	25.0000	ug/L		0.0000
System Monitoring Compounds							
37) Dibromofluoromethane	9.2540	111	132457	24.8344	ug/L		0.0000
Spiked Amount 25.0000	Range 86 - 118		Recovery = 99.3376%				
43) 1,2-Dichloroethane-d4	9.8640	65	144938	24.5159	ug/L		0.0000
Spiked Amount 25.0000	Range 80 - 120		Recovery = 98.0636%				
57) Toluene-d8	12.1077	98	453731	24.7475	ug/L		0.0000
Spiked Amount 25.0000	Range 88 - 110		Recovery = 98.9900%				
78) p-Bromofluorobenzene	15.2716	95	167443	24.4814	ug/L		0.0000
Spiked Amount 25.0000	Range 86 - 115		Recovery = 97.9256%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.0192	85	5408	0.8659	ug/L		97
3) Chloromethane	3.4328	50	7576	1.0997	ug/L		97
4) Vinyl Chloride	3.6499	62	6003	1.0209	ug/L	#	58
5) 1,3-Butadiene	3.6913	54	5658	1.0078	ug/L		82
6) Bromomethane	4.5081	94	5375	1.1389	ug/L		89
7) Chloroethane	4.6632	64	3330	0.9296	ug/L	#	54
8) Trichlorofluoromethane	5.1182	101	8272	0.9376	ug/L		93
9) Diethyl ether	5.6351	59	21330	4.8186	ug/L		99
10) Isoprene	5.6662	67	5359	0.8809	ug/L		91
11) Acrolein	5.8730	56	966	1.7587	ug/L	#	66
12) 1,1,2-Trichloro-1,2,2-Trif	5.8833	101	3808	0.8465	ug/L		83
13) Acetone	5.9763	43	1703	1.1021	ug/L	#	48
14) 1,1-Dichloroethene	6.1728	61	7890	0.9454	ug/L		97
15) Tert-Butyl Alcohol	6.3072	59	3627	8.0046	ug/L	#	65
16) Dimethyl Sulfide	6.4313	62	3737	0.9532	ug/L		87
17) Iodomethane	6.6898	142	1514	1.4198	ug/L	#	57
18) Methyl acetate	6.7104	43	2910	0.7741	ug/L	#	68
19) Methylene Chloride	6.9379	84	5005	0.9696	ug/L		96
20) Carbon Disulfide	6.9793	76	12420	0.9533	ug/L		96
21) Acrylonitrile	7.1344	53	4069	2.0920	ug/L		86
22) Methyl Tert Butyl Ether	7.1654	73	11156	0.8522	ug/L		100
23) trans-1,2-Dichloroethene	7.3825	96	4741	0.9626	ug/L		94
24) n-Hexane	7.4652	57	6178	1.0514	ug/L	#	70
25) Diisopropyl ether	7.7858	45	101273	4.8531	ug/L		99
26) Vinyl Acetate	7.9615	43	7573	0.6978	ug/L	#	78
27) 1,1-Dichloroethane	7.9719	63	10047	1.0053	ug/L		91
28) Ethyl-Tert-Butyl ether	8.3338	59	80178	4.7270	ug/L		99
29) 2-Butanone	8.5405	43	1709	0.6478	ug/L	#	59
30) Propionitrile	8.6336	54	2291	3.1657	ug/L	#	60
31) 2,2-Dichloropropane	8.7163	77	7130	0.9501	ug/L	#	74
32) cis-1,2-Dichloroethene	8.7887	96	5685	0.9852	ug/L		88
33) Chloroform	8.9748	83	10128	1.0300	ug/L		98
34) 1-Bromopropane	9.1092	122	1003	0.8922	ug/L		75
35) Bromochloromethane	9.2126	130	3109	0.9631	ug/L		94
36) Tetrahydrofuran	9.2333	42	7954	4.6808	ug/L		94
38) 1,1,1-Trichloroethane	9.4918	97	7907	0.9167	ug/L	#	90
39) Cyclohexane	9.5021	56	9461	0.9963	ug/L		94
40) 1,1-Dichloropropene	9.6676	75	6595	0.9248	ug/L		93
41) Carbon Tetrachloride	9.8123	117	6995	0.8718	ug/L		99
42) Tert-Amyl-Methyl ether	9.7710	73	63089	4.6611	ug/L	#	94

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\022221\11M42849.D Vial: 3
Acq On : 22 Feb 2021 18:56 Operator: CIM/EEA
Sample : S1B0345-CAL2 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 25 14:05:18 2021 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration
DataAcq Meth : 8260WTR

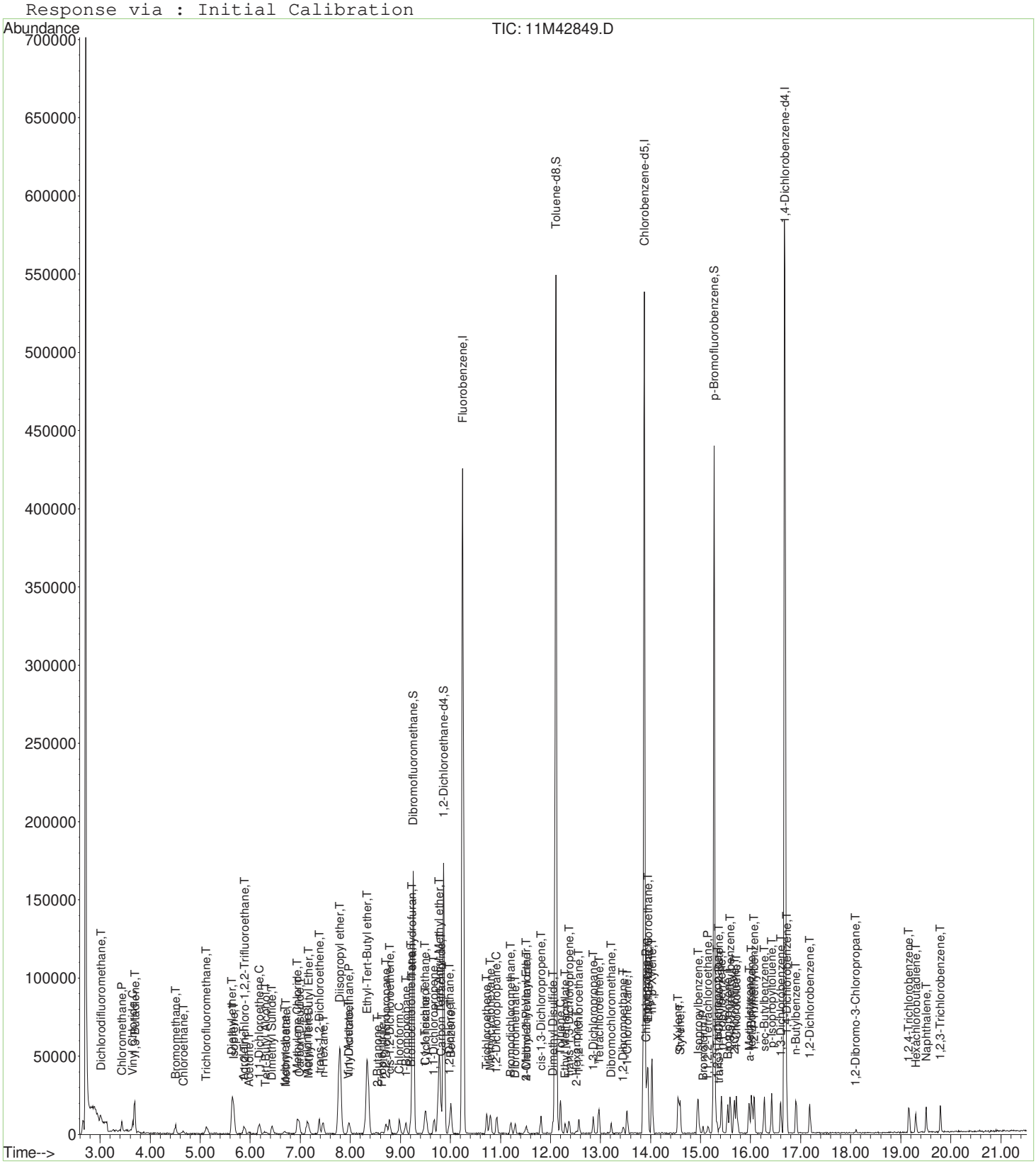
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
44)	1,2-Dichloroethane	9.9778	62	7622	0.9903	ug/L		95
45)	Benzene	10.0088	78	19577	0.9442	ug/L		100
46)	Trichloroethene	10.7222	130	6405	1.0670	ug/L		90
47)	Methylcyclohexane	10.7946	83	7941	0.9765	ug/L		93
48)	1,2-Dichloropropane	10.9187	63	5108	0.8790	ug/L		95
50)	Bromodichloromethane	11.2082	83	6810	0.9061	ug/L	#	93
51)	Dibromomethane	11.2909	93	2723	0.8953	ug/L		94
52)	2-Chloroethyl Vinyl Ether	11.5080	63	1349	1.4839	ug/L	#	49
53)	4-Methyl-2-Pentanone	11.5184	58	1145	0.5915	ug/L	#	71
54)	cis-1,3-Dichloropropene	11.8079	75	7806	0.9230	ug/L		95
55)	Dimethyl Disulfide	12.0457	79	2956	0.6633	ug/L		97
58)	Toluene	12.2008	91	21432	0.9989	ug/L		99
59)	Ethyl Methacrylate	12.2938	69	4451	0.7739	ug/L		91
60)	trans-1,3-Dichloropropene	12.3765	75	5815	0.8019	ug/L		97
61)	1,1,2-Trichloroethane	12.5627	97	4491	1.0363	ug/L		86
62)	2-Hexanone	12.5213	43	2222	0.6080	ug/L	#	70
63)	1,3-Dichloropropane	12.8522	76	7170	0.9565	ug/L		99
64)	Tetrachloroethene	12.9659	164	4875	1.0298	ug/L		88
65)	Dibromochloromethane	13.2141	129	5322	0.9485	ug/L		96
66)	1,2-Dibromoethane	13.4519	107	4075	0.8813	ug/L		91
67)	1-Chlorohexane	13.5346	91	6194	0.9031	ug/L		87
68)	Chlorobenzene	13.9171	112	15502	1.0238	ug/L		96
69)	1,1,1,2-Tetrachloroethane	13.9482	131	5729	1.0252	ug/L		89
70)	Ethylbenzene	13.9482	106	8497	1.0647	ug/L		88
71)	m-,p-Xylene	14.0309	106	18622	1.9654	ug/L		100
72)	o-Xylene	14.5479	106	8908	0.9487	ug/L		92
73)	Styrene	14.5892	104	13411	0.8971	ug/L		100
74)	Bromoform	15.0545	173	3156	0.8238	ug/L		80
75)	Isopropylbenzene	14.9511	105	22281	0.9428	ug/L		99
77)	1,1,2,2-Tetrachloroethane	15.1476	83	4443	0.8903	ug/L		91
79)	1,2,3-Trichloropropane	15.3337	110	1790	0.9947	ug/L		76
80)	trans-1,4-Dichloro-2-Buten	15.3647	53	1032	0.5547	ug/L	#	1
81)	n-Propylbenzene	15.4164	91	26268	0.9564	ug/L		97
82)	Bromobenzene	15.5405	156	6528	0.9802	ug/L		76
83)	1,3,5-Trimethylbenzene	15.5922	105	18302	0.9201	ug/L		95
84)	2-Chlorotoluene	15.6749	91	17908	0.9915	ug/L		97
85)	4-Chlorotoluene	15.7162	91	16239	1.0251	ug/L		93
86)	a-Methylstyrene	15.9747	118	8583	0.8461	ug/L		83
87)	tert-Butylbenzene	16.0161	134	4265	0.9214	ug/L		97
88)	1,2,4-Trimethylbenzene	16.0678	105	19408	0.9646	ug/L		98
89)	sec-Butylbenzene	16.2746	105	24299	0.9459	ug/L		93
90)	p-Isopropyltoluene	16.4193	119	20464	0.9461	ug/L		99
91)	1,3-Dichlorobenzene	16.6054	146	11583	0.9201	ug/L		97
92)	1,4-Dichlorobenzene	16.7192	146	12223	0.9632	ug/L	#	67
93)	n-Butylbenzene	16.9053	91	17068	0.9082	ug/L		99
94)	1,2-Dichlorobenzene	17.1844	146	11246	0.9566	ug/L		94
95)	1,2-Dibromo-3-Chloropropan	18.0943	75	858	0.7839	ug/L		99
96)	1,2,4-Trichlorobenzene	19.1593	180	8417	0.9612	ug/L		98
97)	Hexachlorobutadiene	19.3041	225	4383	1.0062	ug/L		86
98)	Naphthalene	19.5109	128	16384	0.9045	ug/L		99
99)	1,2,3-Trichlorobenzene	19.7900	180	8470	1.0201	ug/L		95

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\022221\11M42849.D Vial: 3
Acq On : 22 Feb 2021 18:56 Operator: CIM/EEA
Sample : S1B0345-CAL2 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 25 14:05 2021 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\022221\11M42849.D Vial: 3
Acq On : 22 Feb 2021 18:56 Operator: CIM/EEA
Sample : S1B0345-CAL2 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	25.000	25.000	0.0	100	0.00
2	T	Dichlorodifluoromethane	1.000	0.866	13.4	100	0.00
3	P	Chloromethane	1.000	1.100	-10.0	100	-0.01
4	C	Vinyl Chloride	1.000	1.021	-2.1	100	-0.01
5	T	1,3-Butadiene	1.000	1.008	-0.8	100	-0.01
6	T	Bromomethane	1.000	1.139	-13.9	100	0.00
7	T	Chloroethane	1.000	0.930	7.0	100	0.00
8	T	Trichlorofluoromethane	1.000	0.938	6.2	100	-0.02
9	T	Diethyl ether	5.000	4.819	3.6	100	-0.01
10	T	Isoprene	1.000	0.881	11.9	100	-0.01
11	T	Acrolein	-1.000	1.759	0.0	100	-0.01
12	T	1,1,2-Trichloro-1,2,2-Trifl	1.000	0.847	15.3	100	-0.01
13	T	Acetone	-1.000	1.102	0.0	100	0.00
14	C	1,1-Dichloroethene	1.000	0.945	5.5	100	-0.01
15	T	Tert-Butyl Alcohol	-1.000	8.005	0.0	100	0.01
16	T	Dimethyl Sulfide	1.000	0.953	4.7	100	-0.01
17	T	Iodomethane	1.000	1.420	-42.0#	100	0.00
18	T	Methyl acetate	-1.000	0.774	0.0	100	0.00
19	T	Methylene Chloride	1.000	0.970	3.0	100	-0.01
20	T	Carbon Disulfide	1.000	0.953	4.7	100	0.00
21	T	Acrylonitrile	2.500	2.092	16.3	100	0.01
22	T	Methyl Tert Butyl Ether	1.000	0.852	14.8	100	0.01
23	T	trans-1,2-Dichloroethene	1.000	0.963	3.7	100	0.00
24	T	n-Hexane	-1.000	1.051	0.0	100	0.01
25	T	Diisopropyl ether	5.000	4.853	2.9	100	0.00
26	T	Vinyl Acetate	-1.000	0.698	0.0	100	0.01
27	P	1,1-Dichloroethane	1.000	1.005	-0.5	100	-0.01
28	T	Ethyl-Tert-Butyl ether	5.000	4.727	5.5	100	0.00
29	T	2-Butanone	-1.000	0.648	0.0	100	0.02
30	T	Propionitrile	-1.000	3.166	0.0	0	0.01
31	T	2,2-Dichloropropane	1.000	0.950	5.0	100	0.00
32	T	cis-1,2-Dichloroethene	1.000	0.985	1.5	100	0.00
33	C	Chloroform	1.000	1.030	-3.0	100	-0.01
34	T	1-Bromopropane	-1.000	0.892	0.0	100	0.00
35	T	Bromochloromethane	1.000	0.963	3.7	100	0.01
36	T	Tetrahydrofuran	5.000	4.681	6.4	100	0.00
37	S	Dibromofluoromethane	25.000	24.834	0.7	100	0.00
38	T	1,1,1-Trichloroethane	1.000	0.917	8.3	100	0.00
39	T	Cyclohexane	1.000	0.996	0.4	100	-0.01
40	T	1,1-Dichloropropene	1.000	0.925	7.5	100	-0.01
41	T	Carbon Tetrachloride	1.000	0.872	12.8	100	0.00
42	T	Tert-Amyl-Methyl ether	5.000	4.661	6.8	100	0.00
43	S	1,2-Dichloroethane-d4	25.000	24.516	1.9	100	0.00
44	T	1,2-Dichloroethane	1.000	0.990	1.0	100	0.00
45	T	Benzene	1.000	0.944	5.6	100	0.00
46	T	Trichloroethene	1.000	1.067	-6.7	100	0.00
47	T	Methylcyclohexane	1.000	0.976	2.4	100	0.00
48	C	1,2-Dichloropropane	1.000	0.879	12.1	100	-0.01
49	T	1,4-Dioxane	-1.000	0.000	0.0	0	-11.21#
50	T	Bromodichloromethane	1.000	0.906	9.4	100	0.00
51	T	Dibromomethane	1.000	0.895	10.5	100	0.00
52	T	2-Chloroethyl Vinyl Ether	-1.000	1.484	0.0	100	0.02
53	T	4-Methyl-2-Pentanone	-1.000	0.591	0.0	100	0.00
54	T	cis-1,3-Dichloropropene	1.000	0.923	7.7	100	0.00
55	T	Dimethyl Disulfide	-1.000	0.663	0.0	0	-0.01
56	I	Chlorobenzene-d5	25.000	25.000	0.0	100	0.00
57	S	Toluene-d8	25.000	24.748	1.0	100	0.00

58	C	Toluene	1.000	0.999	0.1	100	0.00
59	T	Ethyl Methacrylate	-1.000	0.774	0.0	100	0.00
60	T	trans-1,3-Dichloropropene	1.000	0.802	19.8	100	0.01
61	T	1,1,2-Trichloroethane	1.000	1.036	-3.6	100	-0.01
62	T	2-Hexanone	-1.000	0.608	0.0	100	0.01
63	T	1,3-Dichloropropane	1.000	0.956	4.4	100	0.00
64	T	Tetrachloroethene	1.000	1.030	-3.0	100	0.00
65	T	Dibromochloromethane	1.000	0.949	5.1	100	0.00
66	T	1,2-Dibromoethane	1.000	0.881	11.9	100	0.00
67	T	1-Chlorohexane	1.000	0.903	9.7	100	0.00
68	P	Chlorobenzene	1.000	1.024	-2.4	100	0.00
69	T	1,1,1,2-Tetrachloroethane	1.000	1.025	-2.5	100	0.00
70	C	Ethylbenzene	1.000	1.065	-6.5	100	0.00
71	T	m-,p-Xylene	2.000	1.965	1.7	100	0.00
72	T	o-Xylene	1.000	0.949	5.1	100	0.00
73	T	Styrene	1.000	0.897	10.3	100	0.00
74	P	Bromoform	1.000	0.824	17.6	100	0.00
75	T	Isopropylbenzene	1.000	0.943	5.7	100	0.00
76	I	1,4-Dichlorobenzene-d4	25.000	25.000	0.0	100	0.00
77	P	1,1,2,2-Tetrachloroethane	1.000	0.890	11.0	100	0.00
78	S	p-Bromofluorobenzene	25.000	24.481	2.1	100	0.00
79	T	1,2,3-Trichloropropane	-1.000	0.995	0.0	100	0.00
80	T	trans-1,4-Dichloro-2-Butene	-1.000	0.555	0.0	100	-0.01
81	T	n-Propylbenzene	1.000	0.956	4.4	100	0.00
82	T	Bromobenzene	1.000	0.980	2.0	100	0.00
83	T	1,3,5-Trimethylbenzene	1.000	0.920	8.0	100	0.00
84	T	2-Chlorotoluene	1.000	0.991	0.9	100	0.00
85	T	4-Chlorotoluene	1.000	1.025	-2.5	100	0.00
86	T	a-Methylstyrene	-1.000	0.846	0.0	100	0.01
87	T	tert-Butylbenzene	1.000	0.921	7.9	100	-0.01
88	T	1,2,4-Trimethylbenzene	1.000	0.965	3.5	100	0.00
89	T	sec-Butylbenzene	1.000	0.946	5.4	100	0.00
90	T	p-Isopropyltoluene	1.000	0.946	5.4	100	0.00
91	T	1,3-Dichlorobenzene	1.000	0.920	8.0	100	0.00
92	T	1,4-Dichlorobenzene	1.000	0.963	3.7	100	0.00
93	T	n-Butylbenzene	1.000	0.908	9.2	100	0.00
94	T	1,2-Dichlorobenzene	1.000	0.957	4.3	100	0.00
95	T	1,2-Dibromo-3-Chloropropane	-1.000	0.784	0.0	100	-0.01
96	T	1,2,4-Trichlorobenzene	1.000	0.961	3.9	100	0.00
97	T	Hexachlorobutadiene	1.000	1.006	-0.6	100	0.00
98	T	Naphthalene	1.000	0.904	9.6	100	0.00
99	T	1,2,3-Trichlorobenzene	1.000	1.020	-2.0	100	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

11M42849.D 8260WTR.M Thu Feb 25 14:07:09 2021

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\022221\11M42850.D Vial: 4
Acq On : 22 Feb 2021 19:25 Operator: CIM/EEA
Sample : S1B0345-CAL3 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 25 14:05:18 2021 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	10.2468	96	485507	25.0000	ug/L		0.0000
56) Chlorobenzene-d5	13.8760	117	369487	25.0000	ug/L		0.0000
76) 1,4-Dichlorobenzene-d4	16.6883	152	192082	25.0000	ug/L		0.0000
System Monitoring Compounds							
37) Dibromofluoromethane	9.2542	111	134010	25.1574	ug/L		0.0000
Spiked Amount 25.0000	Range 86 - 118		Recovery = 100.6296%				
43) 1,2-Dichloroethane-d4	9.8642	65	148579	25.1636	ug/L		0.0000
Spiked Amount 25.0000	Range 80 - 120		Recovery = 100.6544%				
57) Toluene-d8	12.1079	98	459098	25.0601	ug/L		0.0000
Spiked Amount 25.0000	Range 88 - 110		Recovery = 100.2404%				
78) p-Bromofluorobenzene	15.2718	95	164910	24.9633	ug/L		0.0000
Spiked Amount 25.0000	Range 86 - 115		Recovery = 99.8532%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.0194	85	10525	1.6873	ug/L		99
3) Chloromethane	3.4330	50	13078	1.9007	ug/L		97
4) Vinyl Chloride	3.6501	62	10231	1.7422	ug/L		79
5) 1,3-Butadiene	3.6915	54	11449	2.0418	ug/L		89
6) Bromomethane	4.5083	94	9754	2.0694	ug/L		96
7) Chloroethane	4.6634	64	6666	1.8633	ug/L		98
8) Trichlorofluoromethane	5.1287	101	17249	1.9575	ug/L		94
9) Diethyl ether	5.6457	59	89344	20.2089	ug/L		98
10) Isoprene	5.6767	67	11337	1.8659	ug/L		98
11) Acrolein	5.8731	56	5203	9.4848	ug/L		84
12) 1,1,2-Trichloro-1,2,2-Trif	5.8835	101	8574	1.9085	ug/L		94
13) Acetone	5.9869	43	3303	2.1403	ug/L	#	58
14) 1,1-Dichloroethene	6.1833	61	15229	1.8271	ug/L		99
15) Tert-Butyl Alcohol	6.2867	59	16800	37.1237	ug/L	#	96
16) Dimethyl Sulfide	6.4418	62	7007	1.7896	ug/L		93
17) Iodomethane	6.6796	142	2899	1.8445	ug/L		77
18) Methyl acetate	6.7106	43	6730	1.7925	ug/L	#	83
19) Methylene Chloride	6.9485	84	9926	1.9253	ug/L		99
20) Carbon Disulfide	6.9795	76	25704	1.9754	ug/L		99
21) Acrylonitrile	7.1242	53	18408	9.4759	ug/L		97
22) Methyl Tert Butyl Ether	7.1552	73	24615	1.8827	ug/L		97
23) trans-1,2-Dichloroethene	7.3827	96	9277	1.8860	ug/L		96
24) n-Hexane	7.4551	57	10701	1.8235	ug/L	#	78
25) Diisopropyl ether	7.7859	45	432622	20.7580	ug/L		98
26) Vinyl Acetate	7.9617	43	18527	1.7093	ug/L		98
27) 1,1-Dichloroethane	7.9721	63	20199	2.0236	ug/L		96
28) Ethyl-Tert-Butyl ether	8.3339	59	349159	20.6114	ug/L		99
29) 2-Butanone	8.5304	43	4022	1.5265	ug/L	#	70
30) Propionitrile	8.6235	54	13830	19.1343	ug/L		95
31) 2,2-Dichloropropane	8.7165	77	14144	1.8872	ug/L		98
32) cis-1,2-Dichloroethene	8.7889	96	11191	1.9419	ug/L		97
33) Chloroform	8.9854	83	18891	1.9237	ug/L		96
34) 1-Bromopropane	9.1198	122	1924	1.7136	ug/L		97
35) Bromochloromethane	9.1921	130	6477	2.0090	ug/L		98
36) Tetrahydrofuran	9.2335	42	32630	19.2266	ug/L		99
38) 1,1,1-Trichloroethane	9.4817	97	16520	1.9178	ug/L		98
39) Cyclohexane	9.5127	56	17999	1.8977	ug/L		97
40) 1,1-Dichloropropene	9.6781	75	13629	1.9136	ug/L		95
41) Carbon Tetrachloride	9.8125	117	13892	1.7335	ug/L		86
42) Tert-Amyl-Methyl ether	9.7712	73	273037	20.1977	ug/L		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\022221\11M42850.D Vial: 4
Acq On : 22 Feb 2021 19:25 Operator: CIM/EEA
Sample : S1B0345-CAL3 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 25 14:05:18 2021 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration
DataAcq Meth : 8260WTR

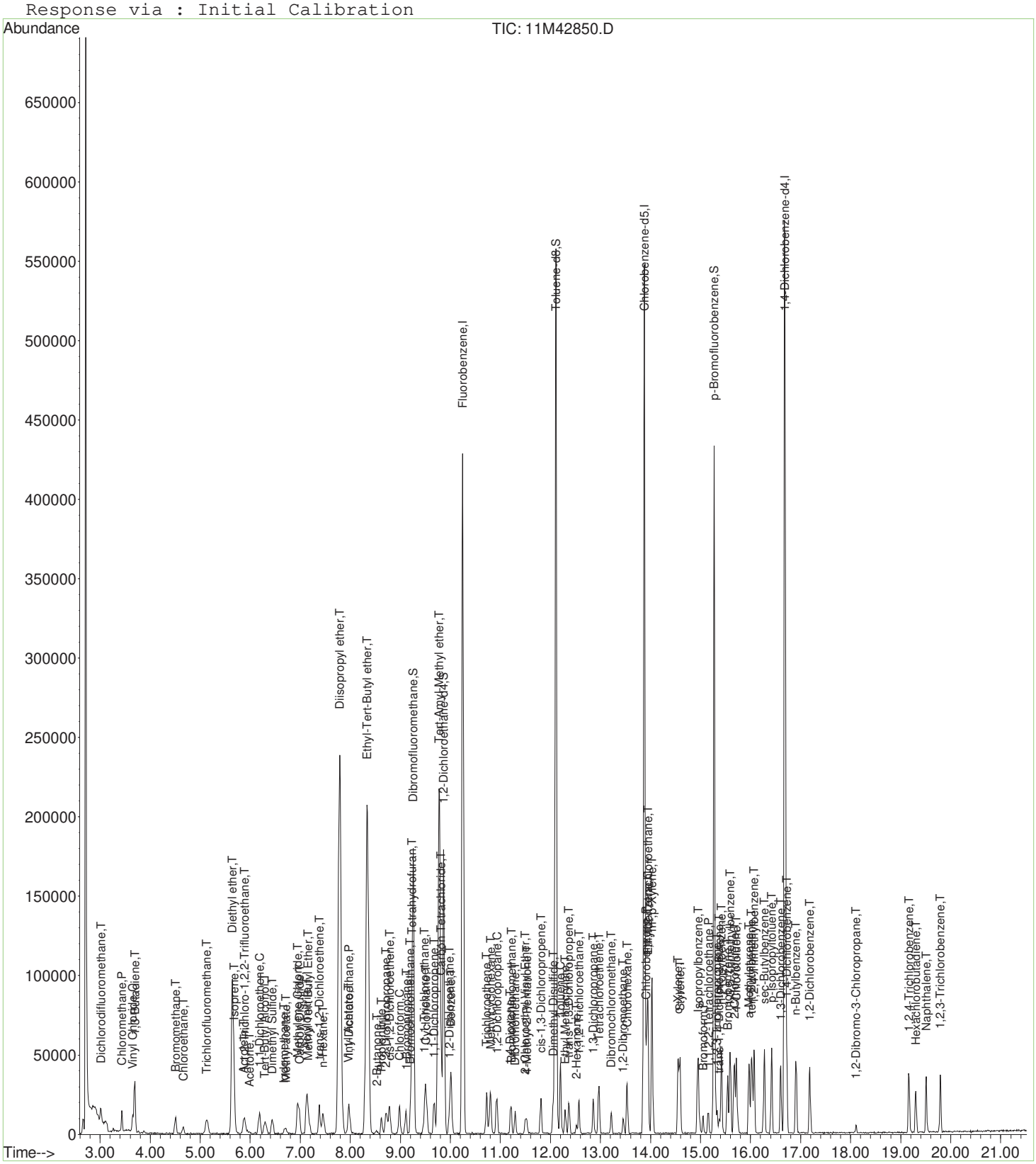
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
44)	1,2-Dichloroethane	9.9779	62	15229	1.9811	ug/L		94
45)	Benzene	10.0090	78	42065	2.0314	ug/L		97
46)	Trichloroethene	10.7224	130	10923	1.8220	ug/L		93
47)	Methylcyclohexane	10.8051	83	14942	1.8396	ug/L		94
48)	1,2-Dichloropropane	10.9292	63	11480	1.9779	ug/L		82
49)	1,4-Dioxane	11.1980	88	1326	34.1225	ug/L		84
50)	Bromodichloromethane	11.2187	83	13875	1.8485	ug/L		97
51)	Dibromomethane	11.2911	93	6051	1.9920	ug/L		98
52)	2-Chloroethyl Vinyl Ether	11.4979	63	3632	2.2791	ug/L		88
53)	4-Methyl-2-Pentanone	11.5289	58	2984	1.5434	ug/L		87
54)	cis-1,3-Dichloropropene	11.8081	75	15281	1.8091	ug/L		95
55)	Dimethyl Disulfide	12.0562	79	6613	1.4857	ug/L		90
58)	Toluene	12.2010	91	42648	1.9892	ug/L		97
59)	Ethyl Methacrylate	12.2940	69	9266	1.6123	ug/L		98
60)	trans-1,3-Dichloropropene	12.3664	75	13422	1.8524	ug/L		94
61)	1,1,2-Trichloroethane	12.5732	97	8663	2.0006	ug/L		91
62)	2-Hexanone	12.5215	43	5513	1.5098	ug/L	#	47
63)	1,3-Dichloropropane	12.8523	76	14792	1.9748	ug/L		97
64)	Tetrachloroethene	12.9661	164	9172	1.9390	ug/L		96
65)	Dibromochloromethane	13.2142	129	9936	1.7723	ug/L		96
66)	1,2-Dibromoethane	13.4521	107	8662	1.8748	ug/L		99
67)	1-Chlorohexane	13.5348	91	13008	1.8982	ug/L		99
68)	Chlorobenzene	13.9173	112	29962	1.9804	ug/L		98
69)	1,1,1,2-Tetrachloroethane	13.9484	131	10113	1.8111	ug/L		92
70)	Ethylbenzene	13.9484	106	14913	1.8701	ug/L		93
71)	m-,p-Xylene	14.0311	106	36578	3.8636	ug/L		94
72)	o-Xylene	14.5480	106	17585	1.8742	ug/L		97
73)	Styrene	14.5894	104	27895	1.8674	ug/L		99
74)	Bromoform	15.0547	173	7123	1.8608	ug/L		94
75)	Isopropylbenzene	14.9513	105	46907	1.9864	ug/L		99
77)	1,1,2,2-Tetrachloroethane	15.1581	83	8790	1.8236	ug/L		100
79)	1,2,3-Trichloropropane	15.3235	110	3759	2.1628	ug/L		89
80)	trans-1,4-Dichloro-2-Buten	15.3752	53	2984	1.6606	ug/L	#	36
81)	n-Propylbenzene	15.4166	91	52983	1.9973	ug/L		99
82)	Bromobenzene	15.5406	156	12343	1.9189	ug/L		68
83)	1,3,5-Trimethylbenzene	15.5923	105	38580	2.0080	ug/L		99
84)	2-Chlorotoluene	15.6751	91	35555	2.0381	ug/L		96
85)	4-Chlorotoluene	15.7164	91	30701	2.0066	ug/L		97
86)	a-Methylstyrene	15.9646	118	17950	1.8320	ug/L		98
87)	tert-Butylbenzene	16.0163	134	8650	1.9347	ug/L		94
88)	1,2,4-Trimethylbenzene	16.0680	105	38847	1.9990	ug/L		99
89)	sec-Butylbenzene	16.2748	105	50047	2.0172	ug/L		98
90)	p-Isopropyltoluene	16.4195	119	40299	1.9290	ug/L		97
91)	1,3-Dichlorobenzene	16.6056	146	24712	2.0324	ug/L		93
92)	1,4-Dichlorobenzene	16.7193	146	24639	2.0103	ug/L		83
93)	n-Butylbenzene	16.9055	91	34098	1.8786	ug/L		97
94)	1,2-Dichlorobenzene	17.1846	146	22596	1.9899	ug/L		100
95)	1,2-Dibromo-3-Chloropropan	18.1048	75	1811	1.7131	ug/L		77
96)	1,2,4-Trichlorobenzene	19.1698	180	15819	1.8704	ug/L		94
97)	Hexachlorobutadiene	19.3043	225	7904	1.8787	ug/L		94
98)	Naphthalene	19.5110	128	35453	2.0263	ug/L		98
99)	1,2,3-Trichlorobenzene	19.7902	180	15192	1.8944	ug/L		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\022221\11M42850.D Vial: 4
Acq On : 22 Feb 2021 19:25 Operator: CIM/EEA
Sample : S1B0345-CAL3 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 25 14:05 2021 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\022221\11M42850.D Vial: 4
Acq On : 22 Feb 2021 19:25 Operator: CIM/EEA
Sample : S1B0345-CAL3 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	25.000	25.000	0.0	100	0.00
2	T	Dichlorodifluoromethane	2.000	1.687	15.6	100	0.00
3	P	Chloromethane	2.000	1.901	4.9	100	-0.01
4	C	Vinyl Chloride	2.000	1.742	12.9	100	-0.01
5	T	1,3-Butadiene	2.000	2.042	-2.1	100	-0.01
6	T	Bromomethane	2.000	2.069	-3.4	100	0.00
7	T	Chloroethane	2.000	1.863	6.9	100	0.00
8	T	Trichlorofluoromethane	2.000	1.958	2.1	100	-0.01
9	T	Diethyl ether	20.000	20.209	-1.0	100	0.00
10	T	Isoprene	2.000	1.866	6.7	100	0.00
11	T	Acrolein	10.000	9.485	5.2	100	-0.01
12	T	1,1,2-Trichloro-1,2,2-Trifl	2.000	1.908	4.6	100	-0.01
13	T	Acetone	-1.000	2.140	0.0	100	0.01
14	C	1,1-Dichloroethene	2.000	1.827	8.7	100	0.00
15	T	Tert-Butyl Alcohol	40.000	37.124	7.2	100	-0.01
16	T	Dimethyl Sulfide	2.000	1.790	10.5	100	0.00
17	T	Iodomethane	2.000	1.844	7.8	100	0.00
18	T	Methyl acetate	2.000	1.792	10.4	100	0.00
19	T	Methylene Chloride	2.000	1.925	3.7	100	0.00
20	T	Carbon Disulfide	2.000	1.975	1.2	100	0.00
21	T	Acrylonitrile	10.000	9.476	5.2	100	0.00
22	T	Methyl Tert Butyl Ether	2.000	1.883	5.8	100	0.00
23	T	trans-1,2-Dichloroethene	2.000	1.886	5.7	100	0.00
24	T	n-Hexane	2.000	1.823	8.9	100	0.00
25	T	Diisopropyl ether	20.000	20.758	-3.8	100	0.00
26	T	Vinyl Acetate	2.000	1.709	14.5	100	0.01
27	P	1,1-Dichloroethane	2.000	2.024	-1.2	100	-0.01
28	T	Ethyl-Tert-Butyl ether	20.000	20.611	-3.1	100	0.00
29	T	2-Butanone	-1.000	1.527	0.0	100	0.01
30	T	Propionitrile	20.000	19.134	4.3	100	0.00
31	T	2,2-Dichloropropane	2.000	1.887	5.6	100	0.00
32	T	cis-1,2-Dichloroethene	2.000	1.942	2.9	100	0.00
33	C	Chloroform	2.000	1.924	3.8	100	0.00
34	T	1-Bromopropane	2.000	1.714	14.3	100	0.01
35	T	Bromochloromethane	2.000	2.009	-0.4	100	-0.01
36	T	Tetrahydrofuran	20.000	19.227	3.9	100	0.00
37	S	Dibromofluoromethane	25.000	25.157	-0.6	100	0.00
38	T	1,1,1-Trichloroethane	2.000	1.918	4.1	100	-0.01
39	T	Cyclohexane	2.000	1.898	5.1	100	0.00
40	T	1,1-Dichloropropene	2.000	1.914	4.3	100	0.00
41	T	Carbon Tetrachloride	2.000	1.734	13.3	100	0.00
42	T	Tert-Amyl-Methyl ether	20.000	20.198	-1.0	100	0.00
43	S	1,2-Dichloroethane-d4	25.000	25.164	-0.7	100	0.00
44	T	1,2-Dichloroethane	2.000	1.981	0.9	100	0.00
45	T	Benzene	2.000	2.031	-1.6	100	0.00
46	T	Trichloroethene	2.000	1.822	8.9	100	0.00
47	T	Methylcyclohexane	2.000	1.840	8.0	100	0.01
48	C	1,2-Dichloropropane	2.000	1.978	1.1	100	0.00
49	T	1,4-Dioxane	-1.000	34.122	0.0	100	-0.01
50	T	Bromodichloromethane	2.000	1.849	7.6	100	0.01
51	T	Dibromomethane	2.000	1.992	0.4	100	0.00
52	T	2-Chloroethyl Vinyl Ether	2.000	2.279	-13.9	100	0.01
53	T	4-Methyl-2-Pentanone	-1.000	1.543	0.0	100	0.01
54	T	cis-1,3-Dichloropropene	2.000	1.809	9.6	100	0.00
55	T	Dimethyl Disulfide	-1.000	1.486	0.0	0	0.00
56	I	Chlorobenzene-d5	25.000	25.000	0.0	100	0.00
57	S	Toluene-d8	25.000	25.060	-0.2	100	0.00

58	C	Toluene	2.000	1.989	0.5	100	0.00
59	T	Ethyl Methacrylate	2.000	1.612	19.4	100	0.00
60	T	trans-1,3-Dichloropropene	2.000	1.852	7.4	100	0.00
61	T	1,1,2-Trichloroethane	2.000	2.001	-0.0	100	0.00
62	T	2-Hexanone	2.000	1.510	24.5	100	0.01
63	T	1,3-Dichloropropane	2.000	1.975	1.2	100	0.00
64	T	Tetrachloroethene	2.000	1.939	3.0	100	0.00
65	T	Dibromochloromethane	2.000	1.772	11.4	100	0.00
66	T	1,2-Dibromoethane	2.000	1.875	6.3	100	0.00
67	T	1-Chlorohexane	2.000	1.898	5.1	100	0.00
68	P	Chlorobenzene	2.000	1.980	1.0	100	0.00
69	T	1,1,1,2-Tetrachloroethane	2.000	1.811	9.5	100	0.00
70	C	Ethylbenzene	2.000	1.870	6.5	100	0.00
71	T	m-,p-Xylene	4.000	3.864	3.4	100	0.00
72	T	o-Xylene	2.000	1.874	6.3	100	0.00
73	T	Styrene	2.000	1.867	6.7	100	0.00
74	P	Bromoform	2.000	1.861	7.0	100	0.00
75	T	Isopropylbenzene	2.000	1.986	0.7	100	0.00
76	I	1,4-Dichlorobenzene-d4	25.000	25.000	0.0	100	0.00
77	P	1,1,2,2-Tetrachloroethane	2.000	1.824	8.8	100	0.01
78	S	p-Bromofluorobenzene	25.000	24.963	0.1	100	0.00
79	T	1,2,3-Trichloropropane	2.000	2.163	-8.1	100	-0.01
80	T	trans-1,4-Dichloro-2-Butene	-1.000	1.661	0.0	100	0.00
81	T	n-Propylbenzene	2.000	1.997	0.1	100	0.00
82	T	Bromobenzene	2.000	1.919	4.0	100	0.00
83	T	1,3,5-Trimethylbenzene	2.000	2.008	-0.4	100	0.00
84	T	2-Chlorotoluene	2.000	2.038	-1.9	100	0.00
85	T	4-Chlorotoluene	2.000	2.007	-0.4	100	0.00
86	T	a-Methylstyrene	2.000	1.832	8.4	100	0.00
87	T	tert-Butylbenzene	2.000	1.935	3.2	100	-0.01
88	T	1,2,4-Trimethylbenzene	2.000	1.999	0.0	100	0.00
89	T	sec-Butylbenzene	2.000	2.017	-0.8	100	0.00
90	T	p-Isopropyltoluene	2.000	1.929	3.5	100	0.00
91	T	1,3-Dichlorobenzene	2.000	2.032	-1.6	100	0.00
92	T	1,4-Dichlorobenzene	2.000	2.010	-0.5	100	0.00
93	T	n-Butylbenzene	2.000	1.879	6.0	100	0.00
94	T	1,2-Dichlorobenzene	2.000	1.990	0.5	100	0.00
95	T	1,2-Dibromo-3-Chloropropane	2.000	1.713	14.3	100	0.00
96	T	1,2,4-Trichlorobenzene	2.000	1.870	6.5	100	0.01
97	T	Hexachlorobutadiene	2.000	1.879	6.0	100	0.00
98	T	Naphthalene	2.000	2.026	-1.3	100	0.00
99	T	1,2,3-Trichlorobenzene	2.000	1.894	5.3	100	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
11M42850.D 8260WTR.M Thu Feb 25 14:07:46 2021

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\022221\11M42851.D Vial: 5
Acq On : 22 Feb 2021 19:55 Operator: CIM/EEA
Sample : S1B0345-CAL4 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 25 14:05:19 2021 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.2467	96	474579	25.0000	ug/L	0.0000
56) Chlorobenzene-d5	13.8759	117	369749	25.0000	ug/L	0.0000
76) 1,4-Dichlorobenzene-d4	16.6882	152	200702	25.0000	ug/L	0.0000
System Monitoring Compounds						
37) Dibromofluoromethane	9.2541	111	134072	25.7486	ug/L	0.0000
Spiked Amount 25.0000	Range 86 - 118		Recovery = 102.9944%			
43) 1,2-Dichloroethane-d4	9.8641	65	147127	25.4914	ug/L	0.0000
Spiked Amount 25.0000	Range 80 - 120		Recovery = 101.9656%			
57) Toluene-d8	12.1078	98	456674	24.9101	ug/L	0.0000
Spiked Amount 25.0000	Range 88 - 110		Recovery = 99.6404%			
78) p-Bromofluorobenzene	15.2717	95	169752	24.5927	ug/L	0.0000
Spiked Amount 25.0000	Range 86 - 115		Recovery = 98.3708%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.0193	85	28034	4.5978	ug/L	98
3) Chloromethane	3.4432	50	31257	4.6473	ug/L	97
4) Vinyl Chloride	3.6500	62	26606	4.6350	ug/L	82
5) 1,3-Butadiene	3.6914	54	27736	5.0602	ug/L	93
6) Bromomethane	4.5186	94	22473	4.8776	ug/L	98
7) Chloroethane	4.6633	64	17456	4.9917	ug/L	98
8) Trichlorofluoromethane	5.1286	101	42711	4.9587	ug/L	99
9) Diethyl ether	5.6456	59	223388	51.6921	ug/L	99
10) Isoprene	5.6766	67	30614	5.1547	ug/L	95
11) Acrolein	5.8730	56	13945	26.0063	ug/L	95
12) 1,1,2-Trichloro-1,2,2-Trif	5.8937	101	22019	5.0141	ug/L	97
13) Acetone	5.9868	43	7133	4.7285	ug/L	96
14) 1,1-Dichloroethene	6.1832	61	40039	4.9143	ug/L	99
15) Tert-Butyl Alcohol	6.2969	59	43423	98.1631	ug/L	100
16) Dimethyl Sulfide	6.4417	62	19627	5.1282	ug/L	99
17) Iodomethane	6.6795	142	8474	3.6114	ug/L	99
18) Methyl acetate	6.7105	43	16779	4.5719	ug/L #	95
19) Methylene Chloride	6.9483	84	25070	4.9747	ug/L	100
20) Carbon Disulfide	6.9794	76	60172	4.7308	ug/L	99
21) Acrylonitrile	7.1241	53	46815	24.6539	ug/L	96
22) Methyl Tert Butyl Ether	7.1551	73	64962	5.0832	ug/L	100
23) trans-1,2-Dichloroethene	7.3826	96	23818	4.9535	ug/L	99
24) n-Hexane	7.4550	57	27270	4.7539	ug/L	98
25) Diisopropyl ether	7.7858	45	1073003	52.6702	ug/L	99
26) Vinyl Acetate	7.9616	43	51724	4.8818	ug/L	97
27) 1,1-Dichloroethane	7.9823	63	50374	5.1628	ug/L	99
28) Ethyl-Tert-Butyl ether	8.3339	59	858216	51.8283	ug/L	100
29) 2-Butanone	8.5200	43	11801	4.5822	ug/L	95
30) Propionitrile	8.6234	54	35273	49.9251	ug/L	95
31) 2,2-Dichloropropane	8.7164	77	36081	4.9251	ug/L	99
32) cis-1,2-Dichloroethene	8.7888	96	27462	4.8749	ug/L	100
33) Chloroform	8.9853	83	48585	5.0613	ug/L	97
34) 1-Bromopropane	9.1197	122	5201	4.7388	ug/L	89
35) Bromochloromethane	9.2024	130	15606	4.9521	ug/L	96
36) Tetrahydrofuran	9.2334	42	82352	49.6416	ug/L	96
38) 1,1,1-Trichloroethane	9.4919	97	40335	4.7902	ug/L	99
39) Cyclohexane	9.5126	56	45823	4.9426	ug/L	97
40) 1,1-Dichloropropene	9.6780	75	34829	5.0028	ug/L	100
41) Carbon Tetrachloride	9.8124	117	38175	4.8734	ug/L	98
42) Tert-Amyl-Methyl ether	9.7711	73	680090	51.4675	ug/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\022221\11M42851.D Vial: 5
Acq On : 22 Feb 2021 19:55 Operator: CIM/EEA
Sample : S1B0345-CAL4 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 25 14:05:19 2021 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration
DataAcq Meth : 8260WTR

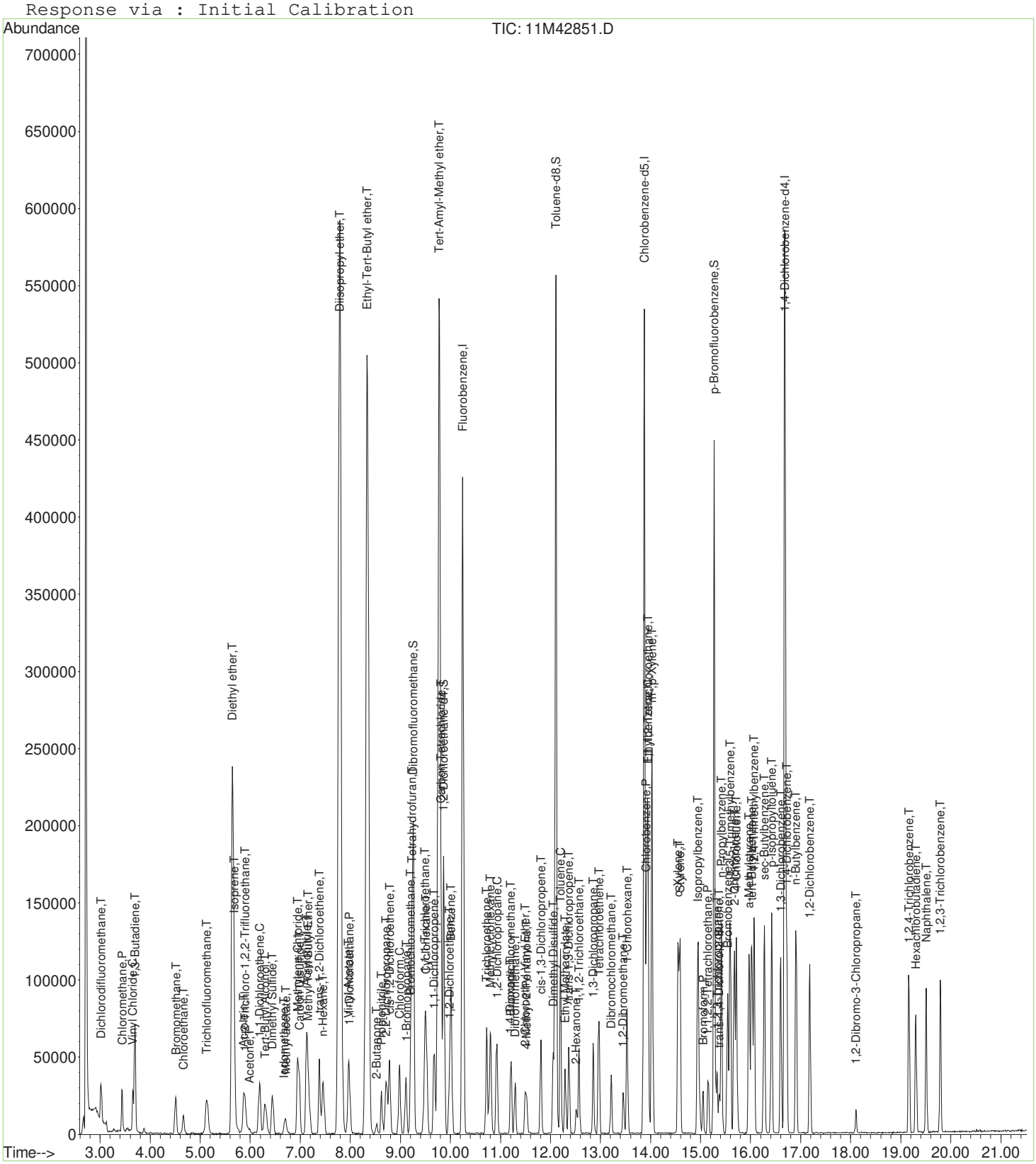
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
44)	1,2-Dichloroethane	9.9779	62	35392	4.7101	ug/L		99
45)	Benzene	10.0089	78	102675	5.0726	ug/L		99
46)	Trichloroethene	10.7223	130	28464	4.8573	ug/L		97
47)	Methylcyclohexane	10.7947	83	38626	4.8651	ug/L		96
48)	1,2-Dichloropropane	10.9291	63	28439	5.0126	ug/L		97
49)	1,4-Dioxane	11.1979	88	4147	109.1737	ug/L		97
50)	Bromodichloromethane	11.2083	83	35728	4.8695	ug/L		95
51)	Dibromomethane	11.2910	93	15246	5.1346	ug/L		98
52)	2-Chloroethyl Vinyl Ether	11.4978	63	10276	4.6739	ug/L		99
53)	4-Methyl-2-Pentanone	11.5185	58	7737	4.0940	ug/L		92
54)	cis-1,3-Dichloropropene	11.8080	75	39341	4.7647	ug/L		99
55)	Dimethyl Disulfide	12.0561	79	17622	4.0503	ug/L		96
58)	Toluene	12.2009	91	106016	4.9414	ug/L		98
59)	Ethyl Methacrylate	12.2939	69	26091	4.5367	ug/L		95
60)	trans-1,3-Dichloropropene	12.3663	75	34618	4.7743	ug/L		98
61)	1,1,2-Trichloroethane	12.5731	97	22766	5.2538	ug/L		95
62)	2-Hexanone	12.5110	43	16043	4.3904	ug/L		92
63)	1,3-Dichloropropane	12.8523	76	37046	4.9423	ug/L		100
64)	Tetrachloroethene	12.9660	164	23062	4.8721	ug/L		97
65)	Dibromochloromethane	13.2141	129	25408	4.5287	ug/L		99
66)	1,2-Dibromoethane	13.4520	107	22443	4.8542	ug/L		96
67)	1-Chlorohexane	13.5347	91	31711	4.6242	ug/L		97
68)	Chlorobenzene	13.9172	112	72960	4.8189	ug/L		97
69)	1,1,1,2-Tetrachloroethane	13.9483	131	27043	4.8395	ug/L		99
70)	Ethylbenzene	13.9483	106	38943	4.8800	ug/L		96
71)	m-,p-Xylene	14.0310	106	92577	9.7717	ug/L		94
72)	o-Xylene	14.5479	106	46196	4.9200	ug/L		99
73)	Styrene	14.5893	104	74862	5.0079	ug/L		99
74)	Bromoform	15.0546	173	16427	4.2884	ug/L		95
75)	Isopropylbenzene	14.9408	105	118456	5.0127	ug/L		98
77)	1,1,2,2-Tetrachloroethane	15.1476	83	23887	4.7428	ug/L		98
79)	1,2,3-Trichloropropane	15.3338	110	8341	4.5929	ug/L		92
80)	trans-1,4-Dichloro-2-Buten	15.3751	53	8039	4.2815	ug/L	#	12
81)	n-Propylbenzene	15.4165	91	139439	5.0307	ug/L		97
82)	Bromobenzene	15.5405	156	32464	4.8302	ug/L		95
83)	1,3,5-Trimethylbenzene	15.5922	105	100392	5.0007	ug/L		99
84)	2-Chlorotoluene	15.6750	91	88899	4.8769	ug/L		99
85)	4-Chlorotoluene	15.7163	91	77512	4.8486	ug/L		99
86)	a-Methylstyrene	15.9645	118	48122	4.7004	ug/L		96
87)	tert-Butylbenzene	16.0265	134	22003	4.7099	ug/L		93
88)	1,2,4-Trimethylbenzene	16.0679	105	101603	5.0039	ug/L		100
89)	sec-Butylbenzene	16.2747	105	131591	5.0760	ug/L		98
90)	p-Isopropyltoluene	16.4194	119	110055	5.0418	ug/L		99
91)	1,3-Dichlorobenzene	16.6055	146	61142	4.8126	ug/L		97
92)	1,4-Dichlorobenzene	16.7192	146	61660	4.8148	ug/L		93
93)	n-Butylbenzene	16.9054	91	95681	5.0450	ug/L		97
94)	1,2-Dichlorobenzene	17.1845	146	58638	4.9421	ug/L		98
95)	1,2-Dibromo-3-Chloropropan	18.1047	75	4849	4.3898	ug/L		94
96)	1,2,4-Trichlorobenzene	19.1697	180	42652	4.8264	ug/L		99
97)	Hexachlorobutadiene	19.3042	225	21168	4.8154	ug/L		96
98)	Naphthalene	19.5109	128	89518	4.8967	ug/L		100
99)	1,2,3-Trichlorobenzene	19.7901	180	39197	4.6778	ug/L		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\022221\11M42851.D Vial: 5
Acq On : 22 Feb 2021 19:55 Operator: CIM/EEA
Sample : S1B0345-CAL4 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 25 14:05 2021 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\022221\11M42851.D Vial: 5
Acq On : 22 Feb 2021 19:55 Operator: CIM/EEA
Sample : S1B0345-CAL4 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	25.000	25.000	0.0	100	0.00
2	T	Dichlorodifluoromethane	5.000	4.598	8.0	100	0.00
3	P	Chloromethane	5.000	4.647	7.1	100	0.00
4	C	Vinyl Chloride	5.000	4.635	7.3	100	-0.01
5	T	1,3-Butadiene	5.000	5.060	-1.2	100	-0.01
6	T	Bromomethane	5.000	4.878	2.4	100	0.01
7	T	Chloroethane	5.000	4.992	0.2	100	0.00
8	T	Trichlorofluoromethane	5.000	4.959	0.8	100	-0.01
9	T	Diethyl ether	50.000	51.692	-3.4	100	0.00
10	T	Isoprene	5.000	5.155	-3.1	100	0.00
11	T	Acrolein	25.000	26.006	-4.0	100	-0.01
12	T	1,1,2-Trichloro-1,2,2-Trifl	5.000	5.014	-0.3	100	0.00
13	T	Acetone	5.000	4.729	5.4	100	0.01
14	C	1,1-Dichloroethene	5.000	4.914	1.7	100	0.00
15	T	Tert-Butyl Alcohol	100.000	98.163	1.8	100	0.00
16	T	Dimethyl Sulfide	5.000	5.128	-2.6	100	0.00
17	T	Iodomethane	5.000	3.611	27.8#	100	0.00
18	T	Methyl acetate	5.000	4.572	8.6	100	0.00
19	T	Methylene Chloride	5.000	4.975	0.5	100	0.00
20	T	Carbon Disulfide	5.000	4.731	5.4	100	0.00
21	T	Acrylonitrile	25.000	24.654	1.4	100	0.00
22	T	Methyl Tert Butyl Ether	5.000	5.083	-1.7	100	0.00
23	T	trans-1,2-Dichloroethene	5.000	4.954	0.9	100	0.00
24	T	n-Hexane	5.000	4.754	4.9	100	0.00
25	T	Diisopropyl ether	50.000	52.670	-5.3	100	0.00
26	T	Vinyl Acetate	5.000	4.882	2.4	100	0.01
27	P	1,1-Dichloroethane	5.000	5.163	-3.3	100	0.00
28	T	Ethyl-Tert-Butyl ether	50.000	51.828	-3.7	100	0.00
29	T	2-Butanone	5.000	4.582	8.4	100	0.00
30	T	Propionitrile	50.000	49.925	0.2	100	0.00
31	T	2,2-Dichloropropane	5.000	4.925	1.5	100	0.00
32	T	cis-1,2-Dichloroethene	5.000	4.875	2.5	100	0.00
33	C	Chloroform	5.000	5.061	-1.2	100	0.00
34	T	1-Bromopropane	5.000	4.739	5.2	100	0.01
35	T	Bromochloromethane	5.000	4.952	1.0	100	0.00
36	T	Tetrahydrofuran	50.000	49.642	0.7	100	0.00
37	S	Dibromofluoromethane	25.000	25.749	-3.0	100	0.00
38	T	1,1,1-Trichloroethane	5.000	4.790	4.2	100	0.00
39	T	Cyclohexane	5.000	4.943	1.1	100	0.00
40	T	1,1-Dichloropropene	5.000	5.003	-0.1	100	0.00
41	T	Carbon Tetrachloride	5.000	4.873	2.5	100	0.00
42	T	Tert-Amyl-Methyl ether	50.000	51.468	-2.9	100	0.00
43	S	1,2-Dichloroethane-d4	25.000	25.491	-2.0	100	0.00
44	T	1,2-Dichloroethane	5.000	4.710	5.8	100	0.00
45	T	Benzene	5.000	5.073	-1.5	100	0.00
46	T	Trichloroethene	5.000	4.857	2.9	100	0.00
47	T	Methylcyclohexane	5.000	4.865	2.7	100	0.00
48	C	1,2-Dichloropropane	5.000	5.013	-0.3	100	0.00
49	T	1,4-Dioxane	100.000	109.174	-9.2	100	-0.01
50	T	Bromodichloromethane	5.000	4.870	2.6	100	0.00
51	T	Dibromomethane	5.000	5.135	-2.7	100	0.00
52	T	2-Chloroethyl Vinyl Ether	5.000	4.674	6.5	100	0.01
53	T	4-Methyl-2-Pentanone	5.000	4.094	18.1	100	0.00
54	T	cis-1,3-Dichloropropene	5.000	4.765	4.7	100	0.00
55	T	Dimethyl Disulfide	5.000	4.050	19.0	100	0.00
56	I	Chlorobenzene-d5	25.000	25.000	0.0	100	0.00
57	S	Toluene-d8	25.000	24.910	0.4	100	0.00

58	C	Toluene	5.000	4.941	1.2	100	0.00
59	T	Ethyl Methacrylate	5.000	4.537	9.3	100	0.00
60	T	trans-1,3-Dichloropropene	5.000	4.774	4.5	100	0.00
61	T	1,1,2-Trichloroethane	5.000	5.254	-5.1	100	0.00
62	T	2-Hexanone	5.000	4.390	12.2	100	0.00
63	T	1,3-Dichloropropane	5.000	4.942	1.2	100	0.00
64	T	Tetrachloroethene	5.000	4.872	2.6	100	0.00
65	T	Dibromochloromethane	5.000	4.529	9.4	100	0.00
66	T	1,2-Dibromoethane	5.000	4.854	2.9	100	0.00
67	T	1-Chlorohexane	5.000	4.624	7.5	100	0.00
68	P	Chlorobenzene	5.000	4.819	3.6	100	0.00
69	T	1,1,1,2-Tetrachloroethane	5.000	4.840	3.2	100	0.00
70	C	Ethylbenzene	5.000	4.880	2.4	100	0.00
71	T	m-,p-Xylene	10.000	9.772	2.3	100	0.00
72	T	o-Xylene	5.000	4.920	1.6	100	0.00
73	T	Styrene	5.000	5.008	-0.2	100	0.00
74	P	Bromoform	5.000	4.288	14.2	100	0.00
75	T	Isopropylbenzene	5.000	5.013	-0.3	100	-0.01
76	I	1,4-Dichlorobenzene-d4	25.000	25.000	0.0	100	0.00
77	P	1,1,2,2-Tetrachloroethane	5.000	4.743	5.1	100	0.00
78	S	p-Bromofluorobenzene	25.000	24.593	1.6	100	0.00
79	T	1,2,3-Trichloropropane	5.000	4.593	8.1	100	0.00
80	T	trans-1,4-Dichloro-2-Butene	5.000	4.281	14.4	100	0.00
81	T	n-Propylbenzene	5.000	5.031	-0.6	100	0.00
82	T	Bromobenzene	5.000	4.830	3.4	100	0.00
83	T	1,3,5-Trimethylbenzene	5.000	5.001	-0.0	100	0.00
84	T	2-Chlorotoluene	5.000	4.877	2.5	100	0.00
85	T	4-Chlorotoluene	5.000	4.849	3.0	100	0.00
86	T	a-Methylstyrene	5.000	4.700	6.0	100	0.00
87	T	tert-Butylbenzene	5.000	4.710	5.8	100	0.00
88	T	1,2,4-Trimethylbenzene	5.000	5.004	-0.1	100	0.00
89	T	sec-Butylbenzene	5.000	5.076	-1.5	100	0.00
90	T	p-Isopropyltoluene	5.000	5.042	-0.8	100	0.00
91	T	1,3-Dichlorobenzene	5.000	4.813	3.7	100	0.00
92	T	1,4-Dichlorobenzene	5.000	4.815	3.7	100	0.00
93	T	n-Butylbenzene	5.000	5.045	-0.9	100	0.00
94	T	1,2-Dichlorobenzene	5.000	4.942	1.2	100	0.00
95	T	1,2-Dibromo-3-Chloropropane	5.000	4.390	12.2	100	0.00
96	T	1,2,4-Trichlorobenzene	5.000	4.826	3.5	100	0.01
97	T	Hexachlorobutadiene	5.000	4.815	3.7	100	0.00
98	T	Naphthalene	5.000	4.897	2.1	100	0.00
99	T	1,2,3-Trichlorobenzene	5.000	4.678	6.4	100	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
11M42851.D 8260WTR.M Thu Feb 25 14:09:15 2021

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\022221\11M42852.D Vial: 6
Acq On : 22 Feb 2021 20:25 Operator: CIM/EEA
Sample : S1B0345-CAL5 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 25 14:05:19 2021 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.2468	96	486452	25.0000	ug/L	0.0000
56) Chlorobenzene-d5	13.8760	117	374839	25.0000	ug/L	0.0000
76) 1,4-Dichlorobenzene-d4	16.6883	152	200819	25.0000	ug/L	0.0000
System Monitoring Compounds						
37) Dibromofluoromethane	9.2542	111	135829	25.4493	ug/L	0.0000
Spiked Amount 25.0000	Range 86 - 118		Recovery = 101.7972%			
43) 1,2-Dichloroethane-d4	9.8642	65	146348	24.7376	ug/L	0.0000
Spiked Amount 25.0000	Range 80 - 120		Recovery = 98.9504%			
57) Toluene-d8	12.1079	98	474997	25.5577	ug/L	0.0000
Spiked Amount 25.0000	Range 88 - 110		Recovery = 102.2308%			
78) p-Bromofluorobenzene	15.2718	95	174340	25.2426	ug/L	0.0000
Spiked Amount 25.0000	Range 86 - 115		Recovery = 100.9704%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.0194	85	138580	22.1734	ug/L	99
3) Chloromethane	3.4433	50	138517	20.0921	ug/L	99
4) Vinyl Chloride	3.6605	62	131224	22.3025	ug/L	97
5) 1,3-Butadiene	3.7018	54	121768	21.6735	ug/L	100
6) Bromomethane	4.5083	94	91550	19.3854	ug/L	97
7) Chloroethane	4.6634	64	75684	21.1142	ug/L	97
8) Trichlorofluoromethane	5.1287	101	188895	21.3952	ug/L	99
9) Diethyl ether	5.6457	59	359770	81.2191	ug/L	99
10) Isoprene	5.6767	67	126669	20.8077	ug/L	99
11) Acrolein	5.8731	56	22776	41.4388	ug/L	95
12) 1,1,2-Trichloro-1,2,2-Trif	5.8835	101	94528	21.0001	ug/L	99
13) Acetone	5.9765	43	32560	21.0575	ug/L	99
14) 1,1-Dichloroethene	6.1833	61	173847	20.8169	ug/L	99
15) Tert-Butyl Alcohol	6.3074	59	71718	158.1704	ug/L	98
16) Dimethyl Sulfide	6.4418	62	84284	21.4843	ug/L	99
17) Iodomethane	6.6899	142	54765	17.6942	ug/L	96
18) Methyl acetate	6.7106	43	79071	21.0192	ug/L	96
19) Methylene Chloride	6.9485	84	108002	20.9079	ug/L	98
20) Carbon Disulfide	6.9795	76	267460	20.5149	ug/L	100
21) Acrylonitrile	7.1242	53	77387	39.7592	ug/L	97
22) Methyl Tert Butyl Ether	7.1552	73	278522	21.2621	ug/L	98
23) trans-1,2-Dichloroethene	7.3827	96	106185	21.5448	ug/L	98
24) n-Hexane	7.4551	57	122482	20.8309	ug/L	99
25) Diisopropyl ether	7.7859	45	1708312	81.8087	ug/L	100
26) Vinyl Acetate	7.9514	43	200103	18.4251	ug/L	99
27) 1,1-Dichloroethane	7.9824	63	215060	21.5036	ug/L	100
28) Ethyl-Tert-Butyl ether	8.3339	59	1381589	81.3988	ug/L	99
29) 2-Butanone	8.5201	43	54205	20.5333	ug/L	98
30) Propionitrile	8.6235	54	55846	77.1148	ug/L	98
31) 2,2-Dichloropropane	8.7165	77	157006	20.9084	ug/L	98
32) cis-1,2-Dichloroethene	8.7889	96	120566	20.8799	ug/L	99
33) Chloroform	8.9854	83	203305	20.6622	ug/L	100
34) 1-Bromopropane	9.1094	122	24462	21.7442	ug/L	99
35) Bromochloromethane	9.2025	130	68365	21.1639	ug/L	98
36) Tetrahydrofuran	9.2335	42	139726	82.1708	ug/L	98
38) 1,1,1-Trichloroethane	9.4817	97	182445	21.1384	ug/L	99
39) Cyclohexane	9.5127	56	193152	20.3255	ug/L	99
40) 1,1-Dichloropropene	9.6781	75	149954	21.0136	ug/L	99
41) Carbon Tetrachloride	9.8125	117	171516	21.3612	ug/L	99
42) Tert-Amyl-Methyl ether	9.7712	73	1111047	82.0291	ug/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\022221\11M42852.D Vial: 6
Acq On : 22 Feb 2021 20:25 Operator: CIM/EEA
Sample : S1B0345-CAL5 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 25 14:05:19 2021 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration
DataAcq Meth : 8260WTR

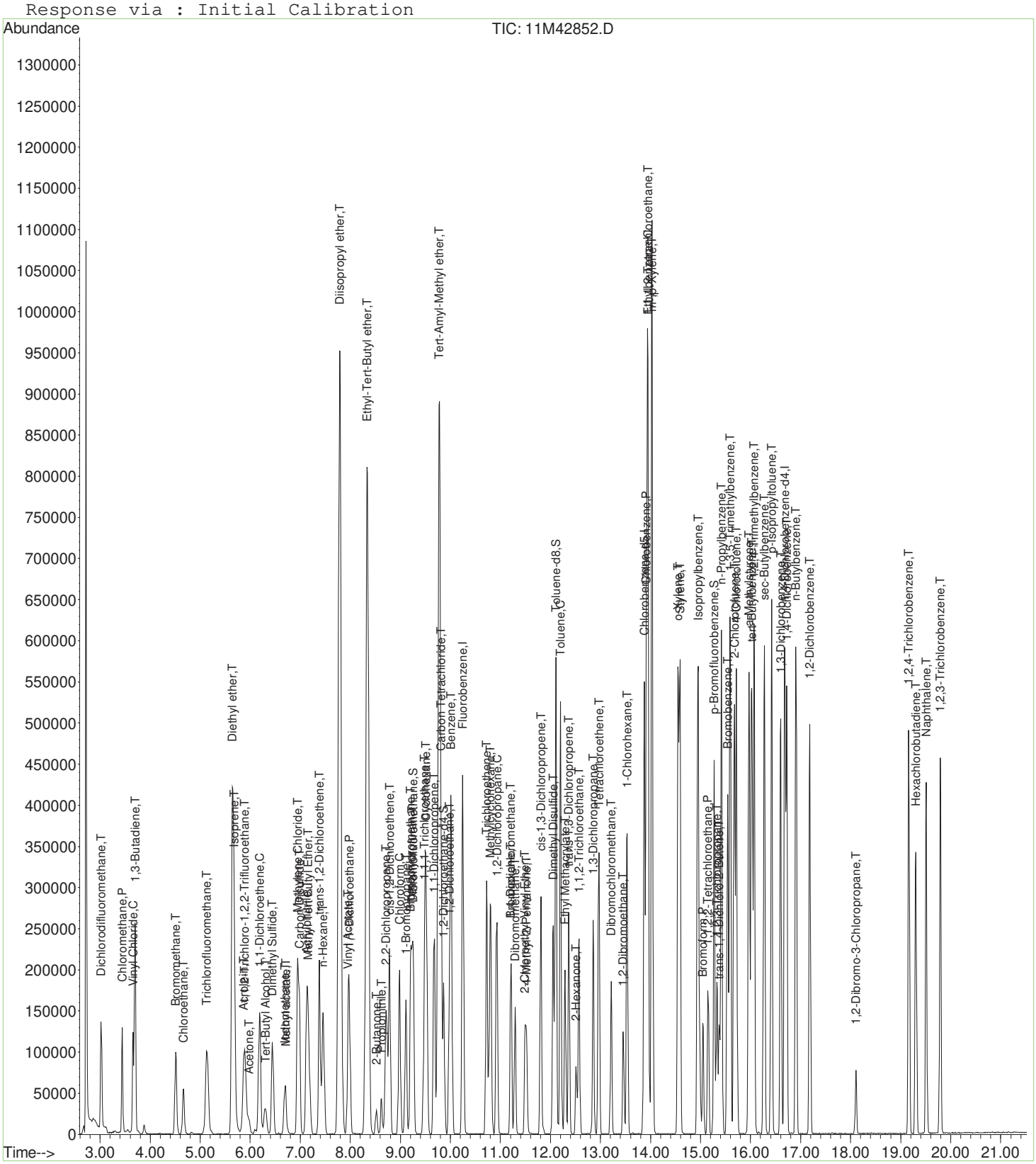
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
44)	1,2-Dichloroethane	9.9779	62	164609	21.3719	ug/L		99
45)	Benzene	10.0090	78	437894	21.1058	ug/L		100
46)	Trichloroethene	10.7224	130	129181	21.5061	ug/L		100
47)	Methylcyclohexane	10.7948	83	168465	20.7010	ug/L		98
48)	1,2-Dichloropropane	10.9292	63	123717	21.2741	ug/L		100
49)	1,4-Dioxane	11.2083	88	6223	159.8278	ug/L		97
50)	Bromodichloromethane	11.2083	83	155668	20.6987	ug/L		99
51)	Dibromomethane	11.2911	93	65885	21.6472	ug/L		98
52)	2-Chloroethyl Vinyl Ether	11.4875	63	51740	18.9880	ug/L		99
53)	4-Methyl-2-Pentanone	11.5185	58	38544	19.8978	ug/L		96
54)	cis-1,3-Dichloropropene	11.8081	75	177526	20.9758	ug/L		98
55)	Dimethyl Disulfide	12.0562	79	86537	19.4046	ug/L		90
58)	Toluene	12.2010	91	466152	21.4322	ug/L		99
59)	Ethyl Methacrylate	12.2940	69	123926	21.2558	ug/L		98
60)	trans-1,3-Dichloropropene	12.3664	75	159460	21.6932	ug/L		97
61)	1,1,2-Trichloroethane	12.5732	97	93584	21.3035	ug/L		97
62)	2-Hexanone	12.5111	43	80294	21.6753	ug/L		99
63)	1,3-Dichloropropane	12.8523	76	166983	21.9747	ug/L		96
64)	Tetrachloroethene	12.9661	164	100165	20.8735	ug/L		100
65)	Dibromochloromethane	13.2142	129	122128	21.4726	ug/L		100
66)	1,2-Dibromoethane	13.4521	107	97911	20.8896	ug/L		98
67)	1-Chlorohexane	13.5348	91	146665	21.0965	ug/L		98
68)	Chlorobenzene	13.9173	112	321051	20.9171	ug/L		98
69)	1,1,1,2-Tetrachloroethane	13.9483	131	123351	21.7746	ug/L		100
70)	Ethylbenzene	13.9483	106	173967	21.5040	ug/L		100
71)	m-,p-Xylene	14.0311	106	413273	43.0296	ug/L		96
72)	o-Xylene	14.5480	106	198248	20.8273	ug/L		94
73)	Styrene	14.5894	104	343109	22.6406	ug/L		99
74)	Bromoform	15.0443	173	82280	21.1883	ug/L		100
75)	Isopropylbenzene	14.9513	105	524577	21.8972	ug/L		100
77)	1,1,2,2-Tetrachloroethane	15.1477	83	108086	21.4482	ug/L		99
79)	1,2,3-Trichloropropane	15.3235	110	38862	21.3867	ug/L		94
80)	trans-1,4-Dichloro-2-Buten	15.3752	53	38037	20.2463	ug/L	#	24
81)	n-Propylbenzene	15.4166	91	621014	22.3922	ug/L		99
82)	Bromobenzene	15.5406	156	141672	21.0666	ug/L		99
83)	1,3,5-Trimethylbenzene	15.5923	105	448715	22.3385	ug/L		98
84)	2-Chlorotoluene	15.6751	91	397188	21.7768	ug/L		100
85)	4-Chlorotoluene	15.7164	91	340559	21.2906	ug/L		99
86)	a-Methylstyrene	15.9646	118	217926	21.2740	ug/L		99
87)	tert-Butylbenzene	16.0266	134	101310	21.6735	ug/L		98
88)	1,2,4-Trimethylbenzene	16.0680	105	449037	22.1018	ug/L		99
89)	sec-Butylbenzene	16.2748	105	572714	22.0790	ug/L		99
90)	p-Isopropyltoluene	16.4195	119	487466	22.3187	ug/L		100
91)	1,3-Dichlorobenzene	16.6056	146	268256	21.1027	ug/L		100
92)	1,4-Dichlorobenzene	16.7193	146	268987	20.9918	ug/L		100
93)	n-Butylbenzene	16.9055	91	424202	22.3538	ug/L		100
94)	1,2-Dichlorobenzene	17.1846	146	258433	21.7686	ug/L		100
95)	1,2-Dibromo-3-Chloropropan	18.1048	75	23132	20.9290	ug/L		93
96)	1,2,4-Trichlorobenzene	19.1595	180	190275	21.5185	ug/L		100
97)	Hexachlorobutadiene	19.3043	225	92287	20.9815	ug/L		99
98)	Naphthalene	19.5110	128	411087	22.4734	ug/L		100
99)	1,2,3-Trichlorobenzene	19.7902	180	178843	21.3309	ug/L		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\022221\11M42852.D Vial: 6
Acq On : 22 Feb 2021 20:25 Operator: CIM/EEA
Sample : S1B0345-CAL5 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 25 14:05 2021 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\022221\11M42852.D Vial: 6
Acq On : 22 Feb 2021 20:25 Operator: CIM/EEA
Sample : S1B0345-CAL5 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	25.000	25.000	0.0	100	0.00
2	T	Dichlorodifluoromethane	20.000	22.173	-10.9	100	0.00
3	P	Chloromethane	20.000	20.092	-0.5	100	0.00
4	C	Vinyl Chloride	20.000	22.302	-11.5	100	0.00
5	T	1,3-Butadiene	20.000	21.674	-8.4	100	0.00
6	T	Bromomethane	20.000	19.385	3.1	100	0.00
7	T	Chloroethane	20.000	21.114	-5.6	100	0.00
8	T	Trichlorofluoromethane	20.000	21.395	-7.0	100	-0.01
9	T	Diethyl ether	80.000	81.219	-1.5	100	0.00
10	T	Isoprene	20.000	20.808	-4.0	100	0.00
11	T	Acrolein	40.000	41.439	-3.6	100	-0.01
12	T	1,1,2-Trichloro-1,2,2-Trifl	20.000	21.000	-5.0	100	-0.01
13	T	Acetone	20.000	21.057	-5.3	100	0.00
14	C	1,1-Dichloroethene	20.000	20.817	-4.1	100	0.00
15	T	Tert-Butyl Alcohol	160.000	158.170	1.1	100	0.01
16	T	Dimethyl Sulfide	20.000	21.484	-7.4	100	0.00
17	T	Iodomethane	20.000	17.694	11.5	100	0.00
18	T	Methyl acetate	20.000	21.019	-5.1	100	0.00
19	T	Methylene Chloride	20.000	20.908	-4.5	100	0.00
20	T	Carbon Disulfide	20.000	20.515	-2.6	100	0.00
21	T	Acrylonitrile	40.000	39.759	0.6	100	0.00
22	T	Methyl Tert Butyl Ether	20.000	21.262	-6.3	100	0.00
23	T	trans-1,2-Dichloroethene	20.000	21.545	-7.7	100	0.00
24	T	n-Hexane	20.000	20.831	-4.2	100	0.00
25	T	Diisopropyl ether	80.000	81.809	-2.3	100	0.00
26	T	Vinyl Acetate	20.000	18.425	7.9	100	0.00
27	P	1,1-Dichloroethane	20.000	21.504	-7.5	100	0.00
28	T	Ethyl-Tert-Butyl ether	80.000	81.399	-1.7	100	0.00
29	T	2-Butanone	20.000	20.533	-2.7	100	0.00
30	T	Propionitrile	80.000	77.115	3.6	100	0.00
31	T	2,2-Dichloropropane	20.000	20.908	-4.5	100	0.00
32	T	cis-1,2-Dichloroethene	20.000	20.880	-4.4	100	0.00
33	C	Chloroform	20.000	20.662	-3.3	100	0.00
34	T	1-Bromopropane	20.000	21.744	-8.7	100	0.00
35	T	Bromochloromethane	20.000	21.164	-5.8	100	0.00
36	T	Tetrahydrofuran	80.000	82.171	-2.7	100	0.00
37	S	Dibromofluoromethane	25.000	25.449	-1.8	100	0.00
38	T	1,1,1-Trichloroethane	20.000	21.138	-5.7	100	-0.01
39	T	Cyclohexane	20.000	20.326	-1.6	100	0.00
40	T	1,1-Dichloropropene	20.000	21.014	-5.1	100	0.00
41	T	Carbon Tetrachloride	20.000	21.361	-6.8	100	0.00
42	T	Tert-Amyl-Methyl ether	80.000	82.029	-2.5	100	0.00
43	S	1,2-Dichloroethane-d4	25.000	24.738	1.0	100	0.00
44	T	1,2-Dichloroethane	20.000	21.372	-6.9	100	0.00
45	T	Benzene	20.000	21.106	-5.5	100	0.00
46	T	Trichloroethene	20.000	21.506	-7.5	100	0.00
47	T	Methylcyclohexane	20.000	20.701	-3.5	100	0.00
48	C	1,2-Dichloropropane	20.000	21.274	-6.4	100	0.00
49	T	1,4-Dioxane	160.000	159.828	0.1	100	0.00
50	T	Bromodichloromethane	20.000	20.699	-3.5	100	0.00
51	T	Dibromomethane	20.000	21.647	-8.2	100	0.00
52	T	2-Chloroethyl Vinyl Ether	20.000	18.988	5.1	100	0.00
53	T	4-Methyl-2-Pentanone	20.000	19.898	0.5	100	0.00
54	T	cis-1,3-Dichloropropene	20.000	20.976	-4.9	100	0.00
55	T	Dimethyl Disulfide	20.000	19.405	3.0	100	0.00
56	I	Chlorobenzene-d5	25.000	25.000	0.0	100	0.00
57	S	Toluene-d8	25.000	25.558	-2.2	100	0.00

58	C	Toluene	20.000	21.432	-7.2	100	0.00
59	T	Ethyl Methacrylate	20.000	21.256	-6.3	100	0.00
60	T	trans-1,3-Dichloropropene	20.000	21.693	-8.5	100	0.00
61	T	1,1,2-Trichloroethane	20.000	21.304	-6.5	100	0.00
62	T	2-Hexanone	20.000	21.675	-8.4	100	0.00
63	T	1,3-Dichloropropane	20.000	21.975	-9.9	100	0.00
64	T	Tetrachloroethene	20.000	20.873	-4.4	100	0.00
65	T	Dibromochloromethane	20.000	21.473	-7.4	100	0.00
66	T	1,2-Dibromoethane	20.000	20.890	-4.5	100	0.00
67	T	1-Chlorohexane	20.000	21.097	-5.5	100	0.00
68	P	Chlorobenzene	20.000	20.917	-4.6	100	0.00
69	T	1,1,1,2-Tetrachloroethane	20.000	21.775	-8.9	100	0.00
70	C	Ethylbenzene	20.000	21.504	-7.5	100	0.00
71	T	m-,p-Xylene	40.000	43.030	-7.6	100	0.00
72	T	o-Xylene	20.000	20.827	-4.1	100	0.00
73	T	Styrene	20.000	22.641	-13.2	100	0.00
74	P	Bromoform	20.000	21.188	-5.9	100	0.00
75	T	Isopropylbenzene	20.000	21.897	-9.5	100	0.00
76	I	1,4-Dichlorobenzene-d4	25.000	25.000	0.0	100	0.00
77	P	1,1,2,2-Tetrachloroethane	20.000	21.448	-7.2	100	0.00
78	S	p-Bromofluorobenzene	25.000	25.243	-1.0	100	0.00
79	T	1,2,3-Trichloropropane	20.000	21.387	-6.9	100	-0.01
80	T	trans-1,4-Dichloro-2-Butene	20.000	20.246	-1.2	100	0.00
81	T	n-Propylbenzene	20.000	22.392	-12.0	100	0.00
82	T	Bromobenzene	20.000	21.067	-5.3	100	0.00
83	T	1,3,5-Trimethylbenzene	20.000	22.338	-11.7	100	0.00
84	T	2-Chlorotoluene	20.000	21.777	-8.9	100	0.00
85	T	4-Chlorotoluene	20.000	21.291	-6.5	100	0.00
86	T	a-Methylstyrene	20.000	21.274	-6.4	100	0.00
87	T	tert-Butylbenzene	20.000	21.674	-8.4	100	0.00
88	T	1,2,4-Trimethylbenzene	20.000	22.102	-10.5	100	0.00
89	T	sec-Butylbenzene	20.000	22.079	-10.4	100	0.00
90	T	p-Isopropyltoluene	20.000	22.319	-11.6	100	0.00
91	T	1,3-Dichlorobenzene	20.000	21.103	-5.5	100	0.00
92	T	1,4-Dichlorobenzene	20.000	20.992	-5.0	100	0.00
93	T	n-Butylbenzene	20.000	22.354	-11.8	100	0.00
94	T	1,2-Dichlorobenzene	20.000	21.769	-8.8	100	0.00
95	T	1,2-Dibromo-3-Chloropropane	20.000	20.929	-4.6	100	0.00
96	T	1,2,4-Trichlorobenzene	20.000	21.518	-7.6	100	0.00
97	T	Hexachlorobutadiene	20.000	20.982	-4.9	100	0.00
98	T	Naphthalene	20.000	22.473	-12.4	100	0.00
99	T	1,2,3-Trichlorobenzene	20.000	21.331	-6.7	100	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
11M42852.D 8260WTR.M Thu Feb 25 14:09:43 2021

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\022221\11M42853.D Vial: 7
Acq On : 22 Feb 2021 20:55 Operator: CIM/EEA
Sample : S1B0345-CAL6 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 25 14:05:20 2021 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.2467	96	502420	25.0000	ug/L	0.0000
56) Chlorobenzene-d5	13.8759	117	395978	25.0000	ug/L	0.0000
76) 1,4-Dichlorobenzene-d4	16.6883	152	213354	25.0000	ug/L	0.0000
System Monitoring Compounds						
37) Dibromofluoromethane	9.2541	111	139175	25.2475	ug/L	0.0000
Spiked Amount 25.0000	Range 86 - 118		Recovery = 100.9900%			
43) 1,2-Dichloroethane-d4	9.8641	65	152728	24.9955	ug/L	0.0000
Spiked Amount 25.0000	Range 80 - 120		Recovery = 99.9820%			
57) Toluene-d8	12.1078	98	480631	24.4803	ug/L	0.0000
Spiked Amount 25.0000	Range 88 - 110		Recovery = 97.9212%			
78) p-Bromofluorobenzene	15.2717	95	183244	24.9730	ug/L	0.0000
Spiked Amount 25.0000	Range 86 - 115		Recovery = 99.8920%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.0193	85	362547	56.1653	ug/L	100
3) Chloromethane	3.4433	50	353537	49.6513	ug/L	100
4) Vinyl Chloride	3.6604	62	338549	55.7102	ug/L	100
5) 1,3-Butadiene	3.7018	54	289046	49.8123	ug/L	100
6) Bromomethane	4.5082	94	233144	47.7985	ug/L	100
7) Chloroethane	4.6633	64	187640	50.6839	ug/L	100
8) Trichlorofluoromethane	5.1390	101	472139	51.7771	ug/L	100
9) Diethyl ether	5.6456	59	464162	101.4556	ug/L	100
10) Isoprene	5.6766	67	327772	52.1313	ug/L	100
11) Acrolein	5.8834	56	27682	48.7640	ug/L	100
12) 1,1,2-Trichloro-1,2,2-Trif	5.8937	101	246670	53.0578	ug/L	100
13) Acetone	5.9765	43	82620	51.7345	ug/L	100
14) 1,1-Dichloroethene	6.1833	61	450478	52.2271	ug/L	100
15) Tert-Butyl Alcohol	6.2970	59	94214	201.1804	ug/L	100
16) Dimethyl Sulfide	6.4417	62	211359	52.1639	ug/L	100
17) Iodomethane	6.6899	142	165093	49.8094	ug/L	100
18) Methyl acetate	6.7106	43	206111	53.0484	ug/L	100
19) Methylene Chloride	6.9484	84	271101	50.8140	ug/L	100
20) Carbon Disulfide	6.9794	76	690297	51.2647	ug/L	100
21) Acrylonitrile	7.1242	53	106737	53.0955	ug/L	100
22) Methyl Tert Butyl Ether	7.1552	73	720902	53.2838	ug/L	100
23) trans-1,2-Dichloroethene	7.3826	96	271447	53.3257	ug/L	100
24) n-Hexane	7.4550	57	315158	51.8964	ug/L	100
25) Diisopropyl ether	7.7859	45	2191475	101.6112	ug/L	100
26) Vinyl Acetate	7.9513	43	609262	54.3168	ug/L	100
27) 1,1-Dichloroethane	7.9823	63	549799	53.2265	ug/L	100
28) Ethyl-Tert-Butyl ether	8.3339	59	1784123	101.7740	ug/L	100
29) 2-Butanone	8.5200	43	140871	51.6671	ug/L	100
30) Propionitrile	8.6234	54	76106	101.7507	ug/L	100
31) 2,2-Dichloropropane	8.7165	77	401390	51.7542	ug/L	100
32) cis-1,2-Dichloroethene	8.7888	96	310751	52.1062	ug/L	100
33) Chloroform	8.9853	83	518242	50.9959	ug/L	100
34) 1-Bromopropane	9.1093	122	59285	51.0234	ug/L	100
35) Bromochloromethane	9.2024	130	170121	50.9910	ug/L	100
36) Tetrahydrofuran	9.2334	42	182523	103.9277	ug/L	100
38) 1,1,1-Trichloroethane	9.4919	97	464930	52.1555	ug/L	100
39) Cyclohexane	9.5126	56	496836	50.6208	ug/L	100
40) 1,1-Dichloropropene	9.6780	75	384200	52.1282	ug/L	100
41) Carbon Tetrachloride	9.8125	117	447083	53.9116	ug/L	100
42) Tert-Amyl-Methyl ether	9.7711	73	1428308	102.1011	ug/L	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\022221\11M42853.D Vial: 7
Acq On : 22 Feb 2021 20:55 Operator: CIM/EEA
Sample : S1B0345-CAL6 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 25 14:05:20 2021 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration
DataAcq Meth : 8260WTR

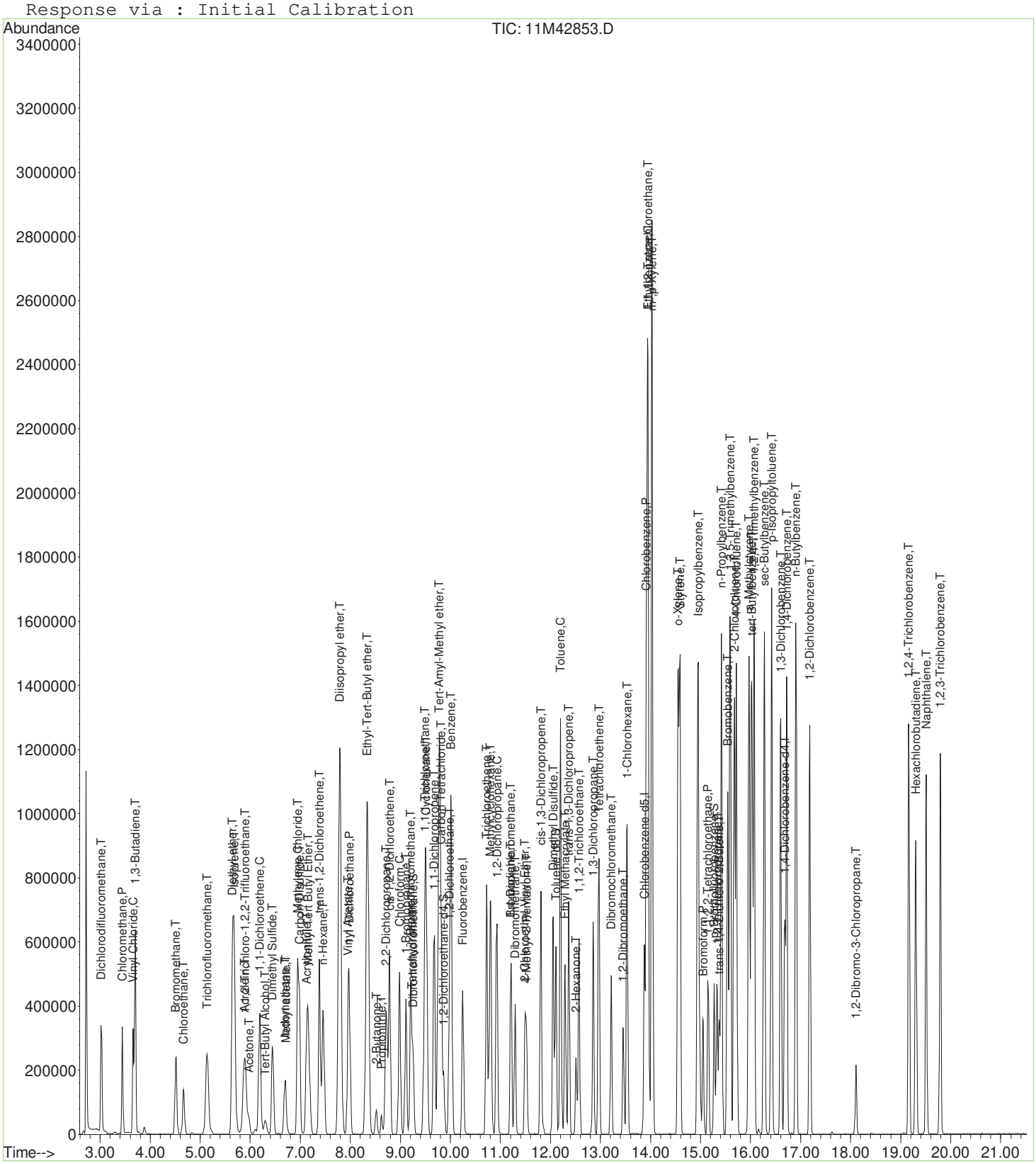
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44)	1,2-Dichloroethane	9.9779	62	407501	51.2261	ug/L	100
45)	Benzene	10.0089	78	1115009	52.0335	ug/L	100
46)	Trichloroethene	10.7223	130	323773	52.1888	ug/L	100
47)	Methylcyclohexane	10.7947	83	432704	51.4808	ug/L	100
48)	1,2-Dichloropropane	10.9291	63	317856	52.9206	ug/L	100
49)	1,4-Dioxane	11.2083	88	7310	181.7787	ug/L	100
50)	Bromodichloromethane	11.2083	83	412889	53.1558	ug/L	100
51)	Dibromomethane	11.2910	93	172201	54.7802	ug/L	100
52)	2-Chloroethyl Vinyl Ether	11.4875	63	142747	49.0253	ug/L	100
53)	4-Methyl-2-Pentanone	11.5185	58	105392	52.6780	ug/L	100
54)	cis-1,3-Dichloropropene	11.8080	75	465542	53.2585	ug/L	100
55)	Dimethyl Disulfide	12.0561	79	239754	52.0525	ug/L	100
58)	Toluene	12.2009	91	1154948	50.2662	ug/L	100
59)	Ethyl Methacrylate	12.2939	69	323429	52.5130	ug/L	100
60)	trans-1,3-Dichloropropene	12.3663	75	418985	53.9565	ug/L	100
61)	1,1,2-Trichloroethane	12.5731	97	237299	51.1351	ug/L	100
62)	2-Hexanone	12.5111	43	212701	54.3532	ug/L	100
63)	1,3-Dichloropropane	12.8523	76	418733	52.1629	ug/L	100
64)	Tetrachloroethene	12.9660	164	254257	50.1562	ug/L	100
65)	Dibromochloromethane	13.2142	129	315261	52.4702	ug/L	100
66)	1,2-Dibromoethane	13.4520	107	260854	52.6829	ug/L	100
67)	1-Chlorohexane	13.5347	91	387293	52.7349	ug/L	100
68)	Chlorobenzene	13.9172	112	816339	50.3468	ug/L	100
69)	1,1,1,2-Tetrachloroethane	13.9483	131	318585	53.2363	ug/L	100
70)	Ethylbenzene	13.9483	106	442574	51.7860	ug/L	100
71)	m-,p-Xylene	14.0310	106	1056157	104.0955	ug/L	100
72)	o-Xylene	14.5480	106	527210	52.4302	ug/L	100
73)	Styrene	14.5893	104	882231	55.1077	ug/L	100
74)	Bromoform	15.0546	173	224762	54.7895	ug/L	100
75)	Isopropylbenzene	14.9512	105	1357486	53.6399	ug/L	100
77)	1,1,2,2-Tetrachloroethane	15.1477	83	300666	56.1578	ug/L	100
79)	1,2,3-Trichloropropane	15.3338	110	96966	50.2275	ug/L	100
80)	trans-1,4-Dichloro-2-Buten	15.3751	53	102580	51.3932	ug/L	100
81)	n-Propylbenzene	15.4165	91	1580928	53.6551	ug/L	100
82)	Bromobenzene	15.5406	156	368317	51.5508	ug/L	100
83)	1,3,5-Trimethylbenzene	15.5923	105	1153076	54.0312	ug/L	100
84)	2-Chlorotoluene	15.6750	91	1024854	52.8888	ug/L	100
85)	4-Chlorotoluene	15.7163	91	878993	51.7233	ug/L	100
86)	a-Methylstyrene	15.9645	118	569456	52.3245	ug/L	100
87)	tert-Butylbenzene	16.0265	134	263437	53.0466	ug/L	100
88)	1,2,4-Trimethylbenzene	16.0679	105	1153535	53.4418	ug/L	100
89)	sec-Butylbenzene	16.2747	105	1479753	53.6952	ug/L	100
90)	p-Isopropyltoluene	16.4194	119	1261203	54.3517	ug/L	100
91)	1,3-Dichlorobenzene	16.6056	146	700143	51.8418	ug/L	100
92)	1,4-Dichlorobenzene	16.7193	146	693909	50.9713	ug/L	100
93)	n-Butylbenzene	16.9054	91	1103873	54.7523	ug/L	100
94)	1,2-Dichlorobenzene	17.1846	146	663783	52.6276	ug/L	100
95)	1,2-Dibromo-3-Chloropropan	18.1048	75	61945	52.7529	ug/L	100
96)	1,2,4-Trichlorobenzene	19.1594	180	495723	52.7683	ug/L	100
97)	Hexachlorobutadiene	19.3042	225	240876	51.5459	ug/L	100
98)	Naphthalene	19.5110	128	1062632	54.6793	ug/L	100
99)	1,2,3-Trichlorobenzene	19.7901	180	459212	51.5529	ug/L	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\022221\11M42853.D Vial: 7
Acq On : 22 Feb 2021 20:55 Operator: CIM/EEA
Sample : S1B0345-CAL6 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 25 14:05 2021 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\022221\11M42853.D Vial: 7
Acq On : 22 Feb 2021 20:55 Operator: CIM/EEA
Sample : S1B0345-CAL6 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	25.000	25.000	0.0	100	0.00
2	T	Dichlorodifluoromethane	50.000	56.165	-12.3	100	0.00
3	P	Chloromethane	50.000	49.651	0.7	100	0.00
4	C	Vinyl Chloride	50.000	55.710	-11.4	100	0.00
5	T	1,3-Butadiene	50.000	49.812	0.4	100	0.00
6	T	Bromomethane	50.000	47.799	4.4	100	0.00
7	T	Chloroethane	50.000	50.684	-1.4	100	0.00
8	T	Trichlorofluoromethane	50.000	51.777	-3.6	100	0.00
9	T	Diethyl ether	100.000	101.456	-1.5	100	0.00
10	T	Isoprene	50.000	52.131	-4.3	100	0.00
11	T	Acrolein	50.000	48.764	2.5	100	0.00
12	T	1,1,2-Trichloro-1,2,2-Trifl	50.000	53.058	-6.1	100	0.00
13	T	Acetone	50.000	51.735	-3.5	100	0.00
14	C	1,1-Dichloroethene	50.000	52.227	-4.5	100	0.00
15	T	Tert-Butyl Alcohol	200.000	201.180	-0.6	100	0.00
16	T	Dimethyl Sulfide	50.000	52.164	-4.3	100	0.00
17	T	Iodomethane	50.000	49.809	0.4	100	0.00
18	T	Methyl acetate	50.000	53.048	-6.1	100	0.00
19	T	Methylene Chloride	50.000	50.814	-1.6	100	0.00
20	T	Carbon Disulfide	50.000	51.265	-2.5	100	0.00
21	T	Acrylonitrile	50.000	53.095	-6.2	100	0.00
22	T	Methyl Tert Butyl Ether	50.000	53.284	-6.6	100	0.00
23	T	trans-1,2-Dichloroethene	50.000	53.326	-6.7	100	0.00
24	T	n-Hexane	50.000	51.896	-3.8	100	0.00
25	T	Diisopropyl ether	100.000	101.611	-1.6	100	0.00
26	T	Vinyl Acetate	50.000	54.317	-8.6	100	0.00
27	P	1,1-Dichloroethane	50.000	53.227	-6.5	100	0.00
28	T	Ethyl-Tert-Butyl ether	100.000	101.774	-1.8	100	0.00
29	T	2-Butanone	50.000	51.667	-3.3	100	0.00
30	T	Propionitrile	100.000	101.751	-1.8	100	0.00
31	T	2,2-Dichloropropane	50.000	51.754	-3.5	100	0.00
32	T	cis-1,2-Dichloroethene	50.000	52.106	-4.2	100	0.00
33	C	Chloroform	50.000	50.996	-2.0	100	0.00
34	T	1-Bromopropane	50.000	51.023	-2.0	100	0.00
35	T	Bromochloromethane	50.000	50.991	-2.0	100	0.00
36	T	Tetrahydrofuran	100.000	103.928	-3.9	100	0.00
37	S	Dibromofluoromethane	25.000	25.247	-1.0	100	0.00
38	T	1,1,1-Trichloroethane	50.000	52.156	-4.3	100	0.00
39	T	Cyclohexane	50.000	50.621	-1.2	100	0.00
40	T	1,1-Dichloropropene	50.000	52.128	-4.3	100	0.00
41	T	Carbon Tetrachloride	50.000	53.912	-7.8	100	0.00
42	T	Tert-Amyl-Methyl ether	100.000	102.101	-2.1	100	0.00
43	S	1,2-Dichloroethane-d4	25.000	24.996	0.0	100	0.00
44	T	1,2-Dichloroethane	50.000	51.226	-2.5	100	0.00
45	T	Benzene	50.000	52.034	-4.1	100	0.00
46	T	Trichloroethene	50.000	52.189	-4.4	100	0.00
47	T	Methylcyclohexane	50.000	51.481	-3.0	100	0.00
48	C	1,2-Dichloropropane	50.000	52.921	-5.8	100	0.00
49	T	1,4-Dioxane	200.000	181.779	9.1	100	0.00
50	T	Bromodichloromethane	50.000	53.156	-6.3	100	0.00
51	T	Dibromomethane	50.000	54.780	-9.6	100	0.00
52	T	2-Chloroethyl Vinyl Ether	50.000	49.025	2.0	100	0.00
53	T	4-Methyl-2-Pentanone	50.000	52.678	-5.4	100	0.00
54	T	cis-1,3-Dichloropropene	50.000	53.259	-6.5	100	0.00
55	T	Dimethyl Disulfide	50.000	52.052	-4.1	100	0.00
56	I	Chlorobenzene-d5	25.000	25.000	0.0	100	0.00
57	S	Toluene-d8	25.000	24.480	2.1	100	0.00

58	C	Toluene	50.000	50.266	-0.5	100	0.00
59	T	Ethyl Methacrylate	50.000	52.513	-5.0	100	0.00
60	T	trans-1,3-Dichloropropene	50.000	53.956	-7.9	100	0.00
61	T	1,1,2-Trichloroethane	50.000	51.135	-2.3	100	0.00
62	T	2-Hexanone	50.000	54.353	-8.7	100	0.00
63	T	1,3-Dichloropropane	50.000	52.163	-4.3	100	0.00
64	T	Tetrachloroethene	50.000	50.156	-0.3	100	0.00
65	T	Dibromochloromethane	50.000	52.470	-4.9	100	0.00
66	T	1,2-Dibromoethane	50.000	52.683	-5.4	100	0.00
67	T	1-Chlorohexane	50.000	52.735	-5.5	100	0.00
68	P	Chlorobenzene	50.000	50.347	-0.7	100	0.00
69	T	1,1,1,2-Tetrachloroethane	50.000	53.236	-6.5	100	0.00
70	C	Ethylbenzene	50.000	51.786	-3.6	100	0.00
71	T	m-,p-Xylene	100.000	104.096	-4.1	100	0.00
72	T	o-Xylene	50.000	52.430	-4.9	100	0.00
73	T	Styrene	50.000	55.108	-10.2	100	0.00
74	P	Bromoform	50.000	54.790	-9.6	100	0.00
75	T	Isopropylbenzene	50.000	53.640	-7.3	100	0.00
76	I	1,4-Dichlorobenzene-d4	25.000	25.000	0.0	100	0.00
77	P	1,1,2,2-Tetrachloroethane	50.000	56.158	-12.3	100	0.00
78	S	p-Bromofluorobenzene	25.000	24.973	0.1	100	0.00
79	T	1,2,3-Trichloropropane	50.000	50.228	-0.5	100	0.00
80	T	trans-1,4-Dichloro-2-Butene	50.000	51.393	-2.8	100	0.00
81	T	n-Propylbenzene	50.000	53.655	-7.3	100	0.00
82	T	Bromobenzene	50.000	51.551	-3.1	100	0.00
83	T	1,3,5-Trimethylbenzene	50.000	54.031	-8.1	100	0.00
84	T	2-Chlorotoluene	50.000	52.889	-5.8	100	0.00
85	T	4-Chlorotoluene	50.000	51.723	-3.4	100	0.00
86	T	a-Methylstyrene	50.000	52.325	-4.7	100	0.00
87	T	tert-Butylbenzene	50.000	53.047	-6.1	100	0.00
88	T	1,2,4-Trimethylbenzene	50.000	53.442	-6.9	100	0.00
89	T	sec-Butylbenzene	50.000	53.695	-7.4	100	0.00
90	T	p-Isopropyltoluene	50.000	54.352	-8.7	100	0.00
91	T	1,3-Dichlorobenzene	50.000	51.842	-3.7	100	0.00
92	T	1,4-Dichlorobenzene	50.000	50.971	-1.9	100	0.00
93	T	n-Butylbenzene	50.000	54.752	-9.5	100	0.00
94	T	1,2-Dichlorobenzene	50.000	52.628	-5.3	100	0.00
95	T	1,2-Dibromo-3-Chloropropane	50.000	52.753	-5.5	100	0.00
96	T	1,2,4-Trichlorobenzene	50.000	52.768	-5.5	100	0.00
97	T	Hexachlorobutadiene	50.000	51.546	-3.1	100	0.00
98	T	Naphthalene	50.000	54.679	-9.4	100	0.00
99	T	1,2,3-Trichlorobenzene	50.000	51.553	-3.1	100	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
11M42853.D 8260WTR.M Thu Feb 25 14:10:05 2021

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\022221\11M42854.D Vial: 8
Acq On : 22 Feb 2021 21:25 Operator: CIM/EEA
Sample : S1B0345-CAL7 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 25 14:05:20 2021 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.2468	96	526497	25.0000	ug/L	0.0000
56) Chlorobenzene-d5	13.8760	117	407001	25.0000	ug/L	0.0000
76) 1,4-Dichlorobenzene-d4	16.6884	152	224422	25.0000	ug/L	0.0000
System Monitoring Compounds						
37) Dibromofluoromethane	9.2542	111	147081	25.4615	ug/L	0.0000
Spiked Amount 25.0000	Range 86 - 118		Recovery = 101.8460%			
43) 1,2-Dichloroethane-d4	9.8643	65	162728	25.4142	ug/L	0.0000
Spiked Amount 25.0000	Range 80 - 120		Recovery = 101.6568%			
57) Toluene-d8	12.1079	98	512167	25.3800	ug/L	0.0000
Spiked Amount 25.0000	Range 88 - 110		Recovery = 101.5200%			
78) p-Bromofluorobenzene	15.2719	95	196618	25.4742	ug/L	0.0000
Spiked Amount 25.0000	Range 86 - 115		Recovery = 101.8968%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.0091	85	732019	108.2174	ug/L	98
3) Chloromethane	3.4330	50	741395	99.3611	ug/L	99
4) Vinyl Chloride	3.6398	62	587504	92.2560	ug/L	100
5) 1,3-Butadiene	3.6812	54	580848	95.5219	ug/L	97
6) Bromomethane	4.4980	94	488583	95.5872	ug/L	99
7) Chloroethane	4.6531	64	399843	103.0635	ug/L	98
8) Trichlorofluoromethane	5.1184	101	949654	99.3813	ug/L	100
9) Diethyl ether	5.6354	59	947917	197.7186	ug/L	99
10) Isoprene	5.6664	67	685316	104.0132	ug/L	99
11) Acrolein	5.8628	56	59002	99.1836	ug/L	97
12) 1,1,2-Trichloro-1,2,2-Trif	5.8835	101	506872	104.0405	ug/L	99
13) Acetone	5.9662	43	160649	95.9940	ug/L	99
14) 1,1-Dichloroethene	6.1834	61	932160	103.1297	ug/L	100
15) Tert-Butyl Alcohol	6.2867	59	194765	396.8735	ug/L	98
16) Dimethyl Sulfide	6.4315	62	450006	105.9836	ug/L	100
17) Iodomethane	6.6797	142	376722	107.3346	ug/L	99
18) Methyl acetate	6.7003	43	419461	103.0230	ug/L	98
19) Methylene Chloride	6.9382	84	560848	100.3157	ug/L	100
20) Carbon Disulfide	6.9795	76	1469014	104.1069	ug/L	100
21) Acrylonitrile	7.1243	53	224296	106.4719	ug/L	99
22) Methyl Tert Butyl Ether	7.1449	73	1471001	103.7535	ug/L	100
23) trans-1,2-Dichloroethene	7.3724	96	560693	105.1109	ug/L	100
24) n-Hexane	7.4448	57	653155	102.6352	ug/L	100
25) Diisopropyl ether	7.7860	45	4413305	195.2721	ug/L	98
26) Vinyl Acetate	7.9514	43	1286461	109.4454	ug/L	100
27) 1,1-Dichloroethane	7.9721	63	1099645	101.5892	ug/L	99
28) Ethyl-Tert-Butyl ether	8.3340	59	3645178	198.4275	ug/L	98
29) 2-Butanone	8.5098	43	282008	98.7018	ug/L	99
30) Propionitrile	8.6132	54	156241	199.3354	ug/L	95
31) 2,2-Dichloropropane	8.7165	77	830557	102.1925	ug/L	99
32) cis-1,2-Dichloroethene	8.7786	96	636728	101.8831	ug/L	100
33) Chloroform	8.9750	83	1063883	99.9004	ug/L	99
34) 1-Bromopropane	9.1095	122	127371	104.6083	ug/L	99
35) Bromochloromethane	9.2025	130	341487	97.6744	ug/L	100
36) Tetrahydrofuran	9.2232	42	374039	203.2364	ug/L	98
38) 1,1,1-Trichloroethane	9.4817	97	975730	104.4512	ug/L	100
39) Cyclohexane	9.5127	56	1047290	101.8248	ug/L	100
40) 1,1-Dichloropropene	9.6678	75	792828	102.6515	ug/L	100
41) Carbon Tetrachloride	9.8125	117	927410	106.7178	ug/L	99
42) Tert-Amyl-Methyl ether	9.7712	73	2956177	201.6554	ug/L	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\022221\11M42854.D Vial: 8
Acq On : 22 Feb 2021 21:25 Operator: CIM/EEA
Sample : S1B0345-CAL7 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 25 14:05:20 2021 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration
DataAcq Meth : 8260WTR

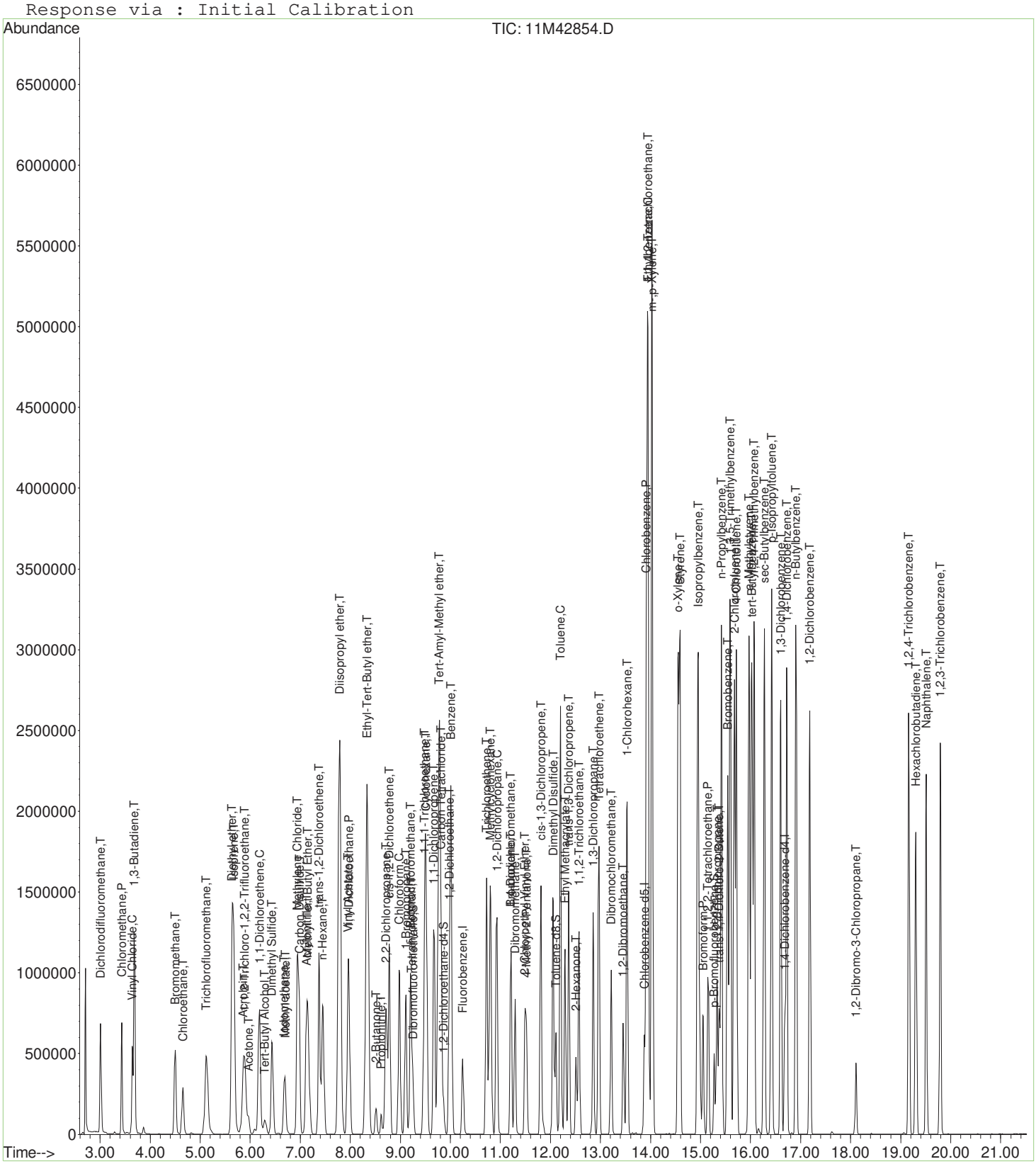
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44)	1,2-Dichloroethane	9.9780	62	844375	101.2905	ug/L	99
45)	Benzene	10.0090	78	2246280	100.0322	ug/L	99
46)	Trichloroethene	10.7224	130	658146	101.2347	ug/L	100
47)	Methylcyclohexane	10.7948	83	895811	101.7049	ug/L	99
48)	1,2-Dichloropropane	10.9292	63	648310	103.0025	ug/L	99
49)	1,4-Dioxane	11.2084	88	15742	373.5566	ug/L	98
50)	Bromodichloromethane	11.2084	83	855117	105.0543	ug/L	99
51)	Dibromomethane	11.2911	93	355543	107.9323	ug/L	99
52)	2-Chloroethyl Vinyl Ether	11.4876	63	299420	97.1142	ug/L	100
53)	4-Methyl-2-Pentanone	11.5186	58	216067	103.0578	ug/L	99
54)	cis-1,3-Dichloropropene	11.8081	75	969976	105.8918	ug/L	99
55)	Dimethyl Disulfide	12.0562	79	522155	108.1797	ug/L	98
58)	Toluene	12.2010	91	2308380	97.7455	ug/L	98
59)	Ethyl Methacrylate	12.2941	69	694327	109.6800	ug/L	100
60)	trans-1,3-Dichloropropene	12.3664	75	867405	108.6782	ug/L	99
61)	1,1,2-Trichloroethane	12.5732	97	487077	102.1166	ug/L	98
62)	2-Hexanone	12.5112	43	431198	107.2033	ug/L	99
63)	1,3-Dichloropropane	12.8524	76	862211	104.4995	ug/L	99
64)	Tetrachloroethene	12.9661	164	517370	99.2953	ug/L	100
65)	Dibromochloromethane	13.2143	129	659713	106.8250	ug/L	99
66)	1,2-Dibromoethane	13.4521	107	540753	106.2543	ug/L	99
67)	1-Chlorohexane	13.5348	91	814817	107.9428	ug/L	99
68)	Chlorobenzene	13.9174	112	1644779	98.6925	ug/L	99
69)	1,1,1,2-Tetrachloroethane	13.9484	131	663967	107.9454	ug/L	99
70)	Ethylbenzene	13.9484	106	913664	104.0133	ug/L	95
71)	m-,p-Xylene	14.0311	106	2132195	204.4589	ug/L	93
72)	o-Xylene	14.5481	106	1087478	105.2190	ug/L	97
73)	Styrene	14.5894	104	1799295	109.3472	ug/L	99
74)	Bromoform	15.0547	173	467759	110.9360	ug/L	99
75)	Isopropylbenzene	14.9513	105	2704126	103.9573	ug/L	99
77)	1,1,2,2-Tetrachloroethane	15.1478	83	619836	110.0622	ug/L	100
79)	1,2,3-Trichloropropane	15.3339	110	194024	95.5462	ug/L	99
80)	trans-1,4-Dichloro-2-Buten	15.3752	53	219901	104.7384	ug/L	94
81)	n-Propylbenzene	15.4166	91	3091153	99.7367	ug/L	97
82)	Bromobenzene	15.5407	156	756355	100.6409	ug/L	99
83)	1,3,5-Trimethylbenzene	15.5924	105	2315144	103.1336	ug/L	99
84)	2-Chlorotoluene	15.6751	91	2031635	99.6743	ug/L	99
85)	4-Chlorotoluene	15.7165	91	1777714	99.4484	ug/L	99
86)	a-Methylstyrene	15.9646	118	1196832	104.5475	ug/L	99
87)	tert-Butylbenzene	16.0266	134	530324	101.5214	ug/L	98
88)	1,2,4-Trimethylbenzene	16.0680	105	2279498	100.3980	ug/L	98
89)	sec-Butylbenzene	16.2748	105	2901115	100.0798	ug/L	98
90)	p-Isopropyltoluene	16.4196	119	2484807	101.8019	ug/L	98
91)	1,3-Dichlorobenzene	16.6057	146	1413396	99.4930	ug/L	99
92)	1,4-Dichlorobenzene	16.7194	146	1404430	98.0751	ug/L	99
93)	n-Butylbenzene	16.9055	91	2189837	103.2597	ug/L	99
94)	1,2-Dichlorobenzene	17.1847	146	1347029	101.5312	ug/L	99
95)	1,2-Dibromo-3-Chloropropan	18.1049	75	131092	106.1332	ug/L	95
96)	1,2,4-Trichlorobenzene	19.1595	180	997734	100.9681	ug/L	98
97)	Hexachlorobutadiene	19.3043	225	492259	100.1452	ug/L	100
98)	Naphthalene	19.5111	128	2081898	101.8438	ug/L	99
99)	1,2,3-Trichlorobenzene	19.7903	180	935492	99.8426	ug/L	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\022221\11M42854.D Vial: 8
Acq On : 22 Feb 2021 21:25 Operator: CIM/EEA
Sample : S1B0345-CAL7 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 25 14:05 2021 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\022221\11M42854.D Vial: 8
Acq On : 22 Feb 2021 21:25 Operator: CIM/EEA
Sample : S1B0345-CAL7 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	25.000	25.000	0.0	100	0.00
2	T	Dichlorodifluoromethane	100.000	108.217	-8.2	100	-0.01
3	P	Chloromethane	100.000	99.361	0.6	100	-0.01
4	C	Vinyl Chloride	100.000	92.256	7.7	100	-0.02
5	T	1,3-Butadiene	100.000	95.522	4.5	100	-0.02
6	T	Bromomethane	100.000	95.587	4.4	100	-0.01
7	T	Chloroethane	100.000	103.064	-3.1	100	0.00
8	T	Trichlorofluoromethane	100.000	99.381	0.6	100	-0.02
9	T	Diethyl ether	200.000	197.719	1.1	100	-0.01
10	T	Isoprene	100.000	104.013	-4.0	100	-0.01
11	T	Acrolein	100.000	99.184	0.8	100	-0.02
12	T	1,1,2-Trichloro-1,2,2-Trifl	100.000	104.040	-4.0	100	-0.01
13	T	Acetone	100.000	95.994	4.0	100	-0.01
14	C	1,1-Dichloroethene	100.000	103.130	-3.1	100	0.00
15	T	Tert-Butyl Alcohol	400.000	396.874	0.8	100	-0.01
16	T	Dimethyl Sulfide	100.000	105.984	-6.0	100	-0.01
17	T	Iodomethane	100.000	107.335	-7.3	100	0.00
18	T	Methyl acetate	100.000	103.023	-3.0	100	-0.01
19	T	Methylene Chloride	100.000	100.316	-0.3	100	-0.01
20	T	Carbon Disulfide	100.000	104.107	-4.1	100	0.00
21	T	Acrylonitrile	100.000	106.472	-6.5	100	0.00
22	T	Methyl Tert Butyl Ether	100.000	103.754	-3.8	100	-0.01
23	T	trans-1,2-Dichloroethene	100.000	105.111	-5.1	100	-0.01
24	T	n-Hexane	100.000	102.635	-2.6	100	-0.01
25	T	Diisopropyl ether	200.000	195.272	2.4	100	0.00
26	T	Vinyl Acetate	100.000	109.445	-9.4	100	0.00
27	P	1,1-Dichloroethane	100.000	101.589	-1.6	100	-0.01
28	T	Ethyl-Tert-Butyl ether	200.000	198.428	0.8	100	0.00
29	T	2-Butanone	100.000	98.702	1.3	100	-0.01
30	T	Propionitrile	200.000	199.335	0.3	100	0.00
31	T	2,2-Dichloropropane	100.000	102.193	-2.2	100	0.00
32	T	cis-1,2-Dichloroethene	100.000	101.883	-1.9	100	-0.01
33	C	Chloroform	100.000	99.900	0.1	100	-0.01
34	T	1-Bromopropane	100.000	104.608	-4.6	100	0.00
35	T	Bromochloromethane	100.000	97.674	2.3	100	0.00
36	T	Tetrahydrofuran	200.000	203.236	-1.6	100	-0.01
37	S	Dibromofluoromethane	25.000	25.462	-1.8	100	0.00
38	T	1,1,1-Trichloroethane	100.000	104.451	-4.5	100	-0.01
39	T	Cyclohexane	100.000	101.825	-1.8	100	0.00
40	T	1,1-Dichloropropene	100.000	102.652	-2.7	100	-0.01
41	T	Carbon Tetrachloride	100.000	106.718	-6.7	100	0.00
42	T	Tert-Amyl-Methyl ether	200.000	201.655	-0.8	100	0.00
43	S	1,2-Dichloroethane-d4	25.000	25.414	-1.7	100	0.00
44	T	1,2-Dichloroethane	100.000	101.291	-1.3	100	0.00
45	T	Benzene	100.000	100.032	-0.0	100	0.00
46	T	Trichloroethene	100.000	101.235	-1.2	100	0.00
47	T	Methylcyclohexane	100.000	101.705	-1.7	100	0.00
48	C	1,2-Dichloropropane	100.000	103.003	-3.0	100	0.00
49	T	1,4-Dioxane	400.000	373.557	6.6	100	0.00
50	T	Bromodichloromethane	100.000	105.054	-5.1	100	0.00
51	T	Dibromomethane	100.000	107.932	-7.9	100	0.00
52	T	2-Chloroethyl Vinyl Ether	100.000	97.114	2.9	100	0.00
53	T	4-Methyl-2-Pentanone	100.000	103.058	-3.1	100	0.00
54	T	cis-1,3-Dichloropropene	100.000	105.892	-5.9	100	0.00
55	T	Dimethyl Disulfide	100.000	108.180	-8.2	100	0.00
56	I	Chlorobenzene-d5	25.000	25.000	0.0	100	0.00
57	S	Toluene-d8	25.000	25.380	-1.5	100	0.00

58	C	Toluene	100.000	97.745	2.3	100	0.00
59	T	Ethyl Methacrylate	100.000	109.680	-9.7	100	0.00
60	T	trans-1,3-Dichloropropene	100.000	108.678	-8.7	100	0.00
61	T	1,1,2-Trichloroethane	100.000	102.117	-2.1	100	0.00
62	T	2-Hexanone	100.000	107.203	-7.2	100	0.00
63	T	1,3-Dichloropropane	100.000	104.499	-4.5	100	0.00
64	T	Tetrachloroethene	100.000	99.295	0.7	100	0.00
65	T	Dibromochloromethane	100.000	106.825	-6.8	100	0.00
66	T	1,2-Dibromoethane	100.000	106.254	-6.3	100	0.00
67	T	1-Chlorohexane	100.000	107.943	-7.9	100	0.00
68	P	Chlorobenzene	100.000	98.692	1.3	100	0.00
69	T	1,1,1,2-Tetrachloroethane	100.000	107.945	-7.9	100	0.00
70	C	Ethylbenzene	100.000	104.013	-4.0	100	0.00
71	T	m-,p-Xylene	200.000	204.459	-2.2	100	0.00
72	T	o-Xylene	100.000	105.219	-5.2	100	0.00
73	T	Styrene	100.000	109.347	-9.3	100	0.00
74	P	Bromoform	100.000	110.936	-10.9	100	0.00
75	T	Isopropylbenzene	100.000	103.957	-4.0	100	0.00
76	I	1,4-Dichlorobenzene-d4	25.000	25.000	0.0	100	0.00
77	P	1,1,2,2-Tetrachloroethane	100.000	110.062	-10.1	100	0.00
78	S	p-Bromofluorobenzene	25.000	25.474	-1.9	100	0.00
79	T	1,2,3-Trichloropropane	100.000	95.546	4.5	100	0.00
80	T	trans-1,4-Dichloro-2-Butene	100.000	104.738	-4.7	100	0.00
81	T	n-Propylbenzene	100.000	99.737	0.3	100	0.00
82	T	Bromobenzene	100.000	100.641	-0.6	100	0.00
83	T	1,3,5-Trimethylbenzene	100.000	103.134	-3.1	100	0.00
84	T	2-Chlorotoluene	100.000	99.674	0.3	100	0.00
85	T	4-Chlorotoluene	100.000	99.448	0.6	100	0.00
86	T	a-Methylstyrene	100.000	104.547	-4.5	100	0.00
87	T	tert-Butylbenzene	100.000	101.521	-1.5	100	0.00
88	T	1,2,4-Trimethylbenzene	100.000	100.398	-0.4	100	0.00
89	T	sec-Butylbenzene	100.000	100.080	-0.1	100	0.00
90	T	p-Isopropyltoluene	100.000	101.802	-1.8	100	0.00
91	T	1,3-Dichlorobenzene	100.000	99.493	0.5	100	0.00
92	T	1,4-Dichlorobenzene	100.000	98.075	1.9	100	0.00
93	T	n-Butylbenzene	100.000	103.260	-3.3	100	0.00
94	T	1,2-Dichlorobenzene	100.000	101.531	-1.5	100	0.00
95	T	1,2-Dibromo-3-Chloropropane	100.000	106.133	-6.1	100	0.00
96	T	1,2,4-Trichlorobenzene	100.000	100.968	-1.0	100	0.00
97	T	Hexachlorobutadiene	100.000	100.145	-0.1	100	0.00
98	T	Naphthalene	100.000	101.844	-1.8	100	0.00
99	T	1,2,3-Trichlorobenzene	100.000	99.843	0.2	100	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
11M42854.D 8260WTR.M Thu Feb 25 14:10:59 2021

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\022221\11M42855.D Vial: 9
Acq On : 22 Feb 2021 21:55 Operator: CIM/EEA
Sample : S1B0345-CAL8 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 25 14:05:20 2021 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.2467	96	525417	25.0000	ug/L	0.0000
56) Chlorobenzene-d5	13.8759	117	416154	25.0000	ug/L	0.0000
76) 1,4-Dichlorobenzene-d4	16.6883	152	235589	25.0000	ug/L	0.0000
System Monitoring Compounds						
37) Dibromofluoromethane	9.2541	111	135161	23.4461	ug/L	0.0000
Spiked Amount 25.0000	Range 86 - 118		Recovery = 93.7844%			
43) 1,2-Dichloroethane-d4	9.8641	65	156688	24.5212	ug/L	0.0000
Spiked Amount 25.0000	Range 80 - 120		Recovery = 98.0848%			
57) Toluene-d8	12.1078	98	506949	24.5689	ug/L	0.0000
Spiked Amount 25.0000	Range 88 - 110		Recovery = 98.2756%			
78) p-Bromofluorobenzene	15.2717	95	207202	25.5730	ug/L	0.0000
Spiked Amount 25.0000	Range 86 - 115		Recovery = 102.2920%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.0193	85	1426708	211.3498	ug/L	99
3) Chloromethane	3.4432	50	1532895	205.8596	ug/L	98
4) Vinyl Chloride	3.6500	62	1157298	182.1046	ug/L	99
5) 1,3-Butadiene	3.6914	54	1090137	179.6443	ug/L	94
6) Bromomethane	4.5082	94	989312	193.9486	ug/L	99
7) Chloroethane	4.6530	64	805576	208.0721	ug/L	98
8) Trichlorofluoromethane	5.1286	101	1893547	198.5669	ug/L	98
9) Diethyl ether	5.6456	59	1397450	292.0824	ug/L	99
10) Isoprene	5.6766	67	1357176	206.4075	ug/L	99
11) Acrolein	5.8731	56	89777	151.2273	ug/L	98
12) 1,1,2-Trichloro-1,2,2-Trif	5.8834	101	1015974	208.9673	ug/L	99
13) Acetone	5.9764	43	336288	201.3582	ug/L	97
14) 1,1-Dichloroethene	6.1832	61	1878877	208.2971	ug/L	100
15) Tert-Butyl Alcohol	6.3073	59	324295	662.1757	ug/L	96
16) Dimethyl Sulfide	6.4417	62	880177	207.7218	ug/L	100
17) Iodomethane	6.6795	142	690312	196.2861	ug/L	99
18) Methyl acetate	6.7002	43	851005	209.4433	ug/L	97
19) Methylene Chloride	6.9484	84	1124811	201.6021	ug/L	100
20) Carbon Disulfide	6.9794	76	2874745	204.1479	ug/L	98
21) Acrylonitrile	7.1241	53	349674	166.3293	ug/L	99
22) Methyl Tert Butyl Ether	7.1551	73	2968023	209.7727	ug/L	100
23) trans-1,2-Dichloroethene	7.3826	96	1130397	212.3467	ug/L	99
24) n-Hexane	7.4550	57	1310347	206.3280	ug/L	99
25) Diisopropyl ether	7.7859	45	6245278	276.8980	ug/L	96
26) Vinyl Acetate	7.9513	43	2503160	213.3935	ug/L	99
27) 1,1-Dichloroethane	7.9823	63	2022798	187.2575	ug/L	99
28) Ethyl-Tert-Butyl ether	8.3339	59	5280325	288.0286	ug/L	97
29) 2-Butanone	8.5200	43	591102	207.3088	ug/L	99
30) Propionitrile	8.6234	54	250304	319.9993	ug/L	97
31) 2,2-Dichloropropane	8.7164	77	1652627	203.7588	ug/L	99
32) cis-1,2-Dichloroethene	8.7888	96	1269104	203.4873	ug/L	100
33) Chloroform	8.9853	83	2046175	192.5343	ug/L	98
34) 1-Bromopropane	9.1093	122	253152	208.3382	ug/L	99
35) Bromochloromethane	9.2024	130	688878	197.4425	ug/L	99
36) Tetrahydrofuran	9.2334	42	565914	308.1249	ug/L	99
38) 1,1,1-Trichloroethane	9.4919	97	1940116	208.1149	ug/L	99
39) Cyclohexane	9.5126	56	2092657	203.8809	ug/L	99
40) 1,1-Dichloropropene	9.6780	75	1573336	204.1267	ug/L	98
41) Carbon Tetrachloride	9.8124	117	1861657	214.6627	ug/L	99
42) Tert-Amyl-Methyl ether	9.7711	73	4274311	292.1712	ug/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\022221\11M42855.D Vial: 9
Acq On : 22 Feb 2021 21:55 Operator: CIM/EEA
Sample : S1B0345-CAL8 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 25 14:05:20 2021 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration
DataAcq Meth : 8260WTR

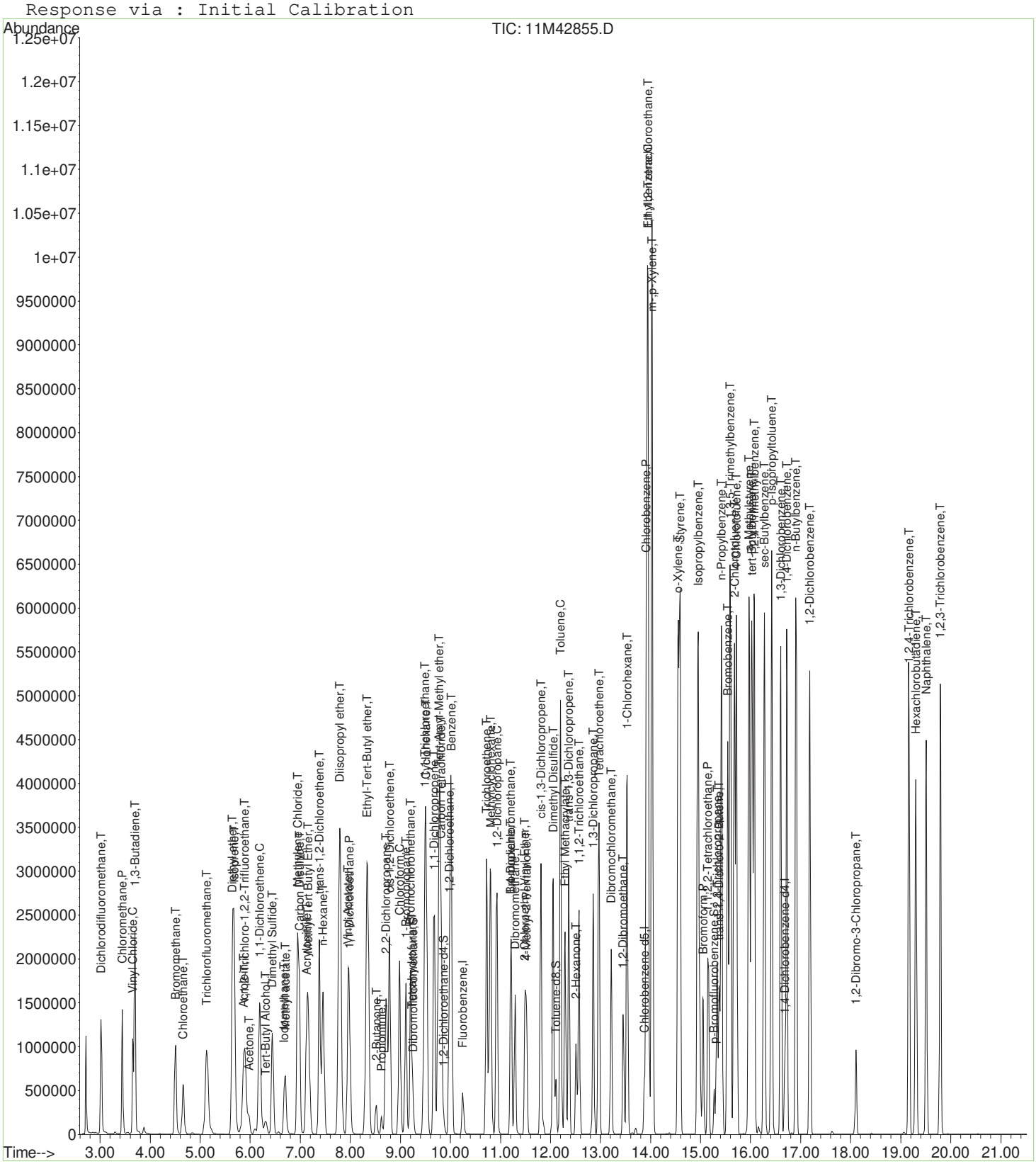
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
44)	1,2-Dichloroethane	9.9779	62	1694665	203.7084	ug/L		100
45)	Benzene	10.0192	78	4165941	185.9006	ug/L		97
46)	Trichloroethene	10.7223	130	1298433	200.1330	ug/L		99
47)	Methylcyclohexane	10.8050	83	1783716	202.9285	ug/L		99
48)	1,2-Dichloropropane	10.9291	63	1301804	207.2538	ug/L		98
49)	1,4-Dioxane	11.2083	88	26912	639.9327	ug/L		86
50)	Bromodichloromethane	11.2083	83	1701178	209.4257	ug/L		99
51)	Dibromomethane	11.2910	93	684511	208.2243	ug/L		99
52)	2-Chloroethyl Vinyl Ether	11.4874	63	634010	204.9194	ug/L		100
53)	4-Methyl-2-Pentanone	11.5185	58	461202	220.4325	ug/L		99
54)	cis-1,3-Dichloropropene	11.8080	75	1913634	209.3398	ug/L		99
55)	Dimethyl Disulfide	12.0561	79	1056680	219.3723	ug/L		94
58)	Toluene	12.2009	91	4238741	175.5366	ug/L		94
59)	Ethyl Methacrylate	12.2939	69	1393789	215.3287	ug/L		99
60)	trans-1,3-Dichloropropene	12.3663	75	1740658	213.2924	ug/L		99
61)	1,1,2-Trichloroethane	12.5731	97	972493	199.4007	ug/L		98
62)	2-Hexanone	12.5110	43	924668	224.8322	ug/L		98
63)	1,3-Dichloropropane	12.8523	76	1704719	202.0667	ug/L		99
64)	Tetrachloroethene	12.9660	164	1049299	196.9556	ug/L		99
65)	Dibromochloromethane	13.2142	129	1349195	213.6653	ug/L		100
66)	1,2-Dibromoethane	13.4520	107	1092524	209.9519	ug/L		99
67)	1-Chlorohexane	13.5347	91	1596117	206.7949	ug/L		97
68)	Chlorobenzene	13.9172	112	3141814	184.3735	ug/L		97
69)	1,1,1,2-Tetrachloroethane	13.9483	131	1328303	211.2012	ug/L		98
70)	Ethylbenzene	13.9483	106	1809225	201.4357	ug/L		81
71)	m-,p-Xylene	14.0310	106	3960181	371.3946	ug/L		80
72)	o-Xylene	14.5480	106	2156631	204.0755	ug/L		89
73)	Styrene	14.5893	104	3442778	204.6236	ug/L		94
74)	Bromoform	15.0546	173	968747	224.6994	ug/L		99
75)	Isopropylbenzene	14.9512	105	4912664	184.7083	ug/L		93
77)	1,1,2,2-Tetrachloroethane	15.1477	83	1295299	219.0997	ug/L		99
79)	1,2,3-Trichloropropane	15.3338	110	413848	194.1373	ug/L		98
80)	trans-1,4-Dichloro-2-Buten	15.3751	53	465546	211.2281	ug/L		93
81)	n-Propylbenzene	15.4165	91	5488130	168.6822	ug/L		89
82)	Bromobenzene	15.5406	156	1526960	193.5472	ug/L		98
83)	1,3,5-Trimethylbenzene	15.5923	105	4350106	184.6003	ug/L		94
84)	2-Chlorotoluene	15.6750	91	3785413	176.9135	ug/L		95
85)	4-Chlorotoluene	15.7163	91	3381975	180.2257	ug/L		94
86)	a-Methylstyrene	15.9645	118	2375234	197.6502	ug/L		98
87)	tert-Butylbenzene	16.0265	134	1079867	196.9233	ug/L		95
88)	1,2,4-Trimethylbenzene	16.0782	105	4278149	179.4949	ug/L		92
89)	sec-Butylbenzene	16.2747	105	5247256	172.4345	ug/L		92
90)	p-Isopropyltoluene	16.4194	119	4574149	178.5188	ug/L		93
91)	1,3-Dichlorobenzene	16.6055	146	2773926	186.0090	ug/L		96
92)	1,4-Dichlorobenzene	16.7193	146	2756975	183.4011	ug/L		96
93)	n-Butylbenzene	16.9054	91	4087149	183.5903	ug/L		94
94)	1,2-Dichlorobenzene	17.1846	146	2616000	187.8325	ug/L		95
95)	1,2-Dibromo-3-Chloropropan	18.1048	75	285952	220.5356	ug/L		96
96)	1,2,4-Trichlorobenzene	19.1698	180	2069182	199.4705	ug/L		96
97)	Hexachlorobutadiene	19.3042	225	1042207	201.9765	ug/L		100
98)	Naphthalene	19.5110	128	4086497	190.4307	ug/L	#	94
99)	1,2,3-Trichlorobenzene	19.7901	180	1969340	200.2197	ug/L		96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\022221\11M42855.D Vial: 9
Acq On : 22 Feb 2021 21:55 Operator: CIM/EEA
Sample : S1B0345-CAL8 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 25 14:05 2021 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\022221\11M42855.D Vial: 9
Acq On : 22 Feb 2021 21:55 Operator: CIM/EEA
Sample : S1B0345-CAL8 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	25.000	25.000	0.0	100	0.00
2	T	Dichlorodifluoromethane	200.000	211.350	-5.7	100	0.00
3	P	Chloromethane	200.000	205.860	-2.9	100	0.00
4	C	Vinyl Chloride	200.000	182.105	8.9	100	-0.01
5	T	1,3-Butadiene	200.000	179.644	10.2	100	-0.01
6	T	Bromomethane	200.000	193.949	3.0	100	0.00
7	T	Chloroethane	200.000	208.072	-4.0	100	-0.01
8	T	Trichlorofluoromethane	200.000	198.567	0.7	100	-0.01
9	T	Diethyl ether	300.000	292.082	2.6	100	0.00
10	T	Isoprene	200.000	206.407	-3.2	100	0.00
11	T	Acrolein	150.000	151.227	-0.8	100	-0.01
12	T	1,1,2-Trichloro-1,2,2-Trifl	200.000	208.967	-4.5	100	-0.01
13	T	Acetone	200.000	201.358	-0.7	100	0.00
14	C	1,1-Dichloroethene	200.000	208.297	-4.1	100	0.00
15	T	Tert-Butyl Alcohol	600.000	662.176	-10.4	100	0.01
16	T	Dimethyl Sulfide	200.000	207.722	-3.9	100	0.00
17	T	Iodomethane	200.000	196.286	1.9	100	0.00
18	T	Methyl acetate	200.000	209.443	-4.7	100	-0.01
19	T	Methylene Chloride	200.000	201.602	-0.8	100	0.00
20	T	Carbon Disulfide	200.000	204.148	-2.1	100	0.00
21	T	Acrylonitrile	150.000	166.329	-10.9	100	0.00
22	T	Methyl Tert Butyl Ether	200.000	209.773	-4.9	100	0.00
23	T	trans-1,2-Dichloroethene	200.000	212.347	-6.2	100	0.00
24	T	n-Hexane	200.000	206.328	-3.2	100	0.00
25	T	Diisopropyl ether	300.000	276.898	7.7	100	0.00
26	T	Vinyl Acetate	200.000	213.394	-6.7	100	0.00
27	P	1,1-Dichloroethane	200.000	187.258	6.4	100	0.00
28	T	Ethyl-Tert-Butyl ether	300.000	288.029	4.0	100	0.00
29	T	2-Butanone	200.000	207.309	-3.7	100	0.00
30	T	Propionitrile	300.000	319.999	-6.7	100	0.00
31	T	2,2-Dichloropropane	200.000	203.759	-1.9	100	0.00
32	T	cis-1,2-Dichloroethene	200.000	203.487	-1.7	100	0.00
33	C	Chloroform	200.000	192.534	3.7	100	0.00
34	T	1-Bromopropane	200.000	208.338	-4.2	100	0.00
35	T	Bromochloromethane	200.000	197.442	1.3	100	0.00
36	T	Tetrahydrofuran	300.000	308.125	-2.7	100	0.00
37	S	Dibromofluoromethane	25.000	23.446	6.2	100	0.00
38	T	1,1,1-Trichloroethane	200.000	208.115	-4.1	100	0.00
39	T	Cyclohexane	200.000	203.881	-1.9	100	0.00
40	T	1,1-Dichloropropene	200.000	204.127	-2.1	100	0.00
41	T	Carbon Tetrachloride	200.000	214.663	-7.3	100	0.00
42	T	Tert-Amyl-Methyl ether	300.000	292.171	2.6	100	0.00
43	S	1,2-Dichloroethane-d4	25.000	24.521	1.9	100	0.00
44	T	1,2-Dichloroethane	200.000	203.708	-1.9	100	0.00
45	T	Benzene	200.000	185.901	7.0	100	0.01
46	T	Trichloroethene	200.000	200.133	-0.1	100	0.00
47	T	Methylcyclohexane	200.000	202.928	-1.5	100	0.01
48	C	1,2-Dichloropropane	200.000	207.254	-3.6	100	0.00
49	T	1,4-Dioxane	600.000	639.933	-6.7	100	0.00
50	T	Bromodichloromethane	200.000	209.426	-4.7	100	0.00
51	T	Dibromomethane	200.000	208.224	-4.1	100	0.00
52	T	2-Chloroethyl Vinyl Ether	200.000	204.919	-2.5	100	0.00
53	T	4-Methyl-2-Pentanone	200.000	220.432	-10.2	100	0.00
54	T	cis-1,3-Dichloropropene	200.000	209.340	-4.7	100	0.00
55	T	Dimethyl Disulfide	200.000	219.372	-9.7	100	0.00
56	I	Chlorobenzene-d5	25.000	25.000	0.0	100	0.00
57	S	Toluene-d8	25.000	24.569	1.7	100	0.00

58	C	Toluene	200.000	175.537	12.2	100	0.00
59	T	Ethyl Methacrylate	200.000	215.329	-7.7	100	0.00
60	T	trans-1,3-Dichloropropene	200.000	213.292	-6.6	100	0.00
61	T	1,1,2-Trichloroethane	200.000	199.401	0.3	100	0.00
62	T	2-Hexanone	200.000	224.832	-12.4	100	0.00
63	T	1,3-Dichloropropane	200.000	202.067	-1.0	100	0.00
64	T	Tetrachloroethene	200.000	196.956	1.5	100	0.00
65	T	Dibromochloromethane	200.000	213.665	-6.8	100	0.00
66	T	1,2-Dibromoethane	200.000	209.952	-5.0	100	0.00
67	T	1-Chlorohexane	200.000	206.795	-3.4	100	0.00
68	P	Chlorobenzene	200.000	184.373	7.8	100	0.00
69	T	1,1,1,2-Tetrachloroethane	200.000	211.201	-5.6	100	0.00
70	C	Ethylbenzene	200.000	201.436	-0.7	100	0.00
71	T	m-,p-Xylene	400.000	371.395	7.2	100	0.00
72	T	o-Xylene	200.000	204.075	-2.0	100	0.00
73	T	Styrene	200.000	204.624	-2.3	100	0.00
74	P	Bromoform	200.000	224.699	-12.3	100	0.00
75	T	Isopropylbenzene	200.000	184.708	7.6	100	0.00
76	I	1,4-Dichlorobenzene-d4	25.000	25.000	0.0	100	0.00
77	P	1,1,2,2-Tetrachloroethane	200.000	219.100	-9.5	100	0.00
78	S	p-Bromofluorobenzene	25.000	25.573	-2.3	100	0.00
79	T	1,2,3-Trichloropropane	200.000	194.137	2.9	100	0.00
80	T	trans-1,4-Dichloro-2-Butene	200.000	211.228	-5.6	100	0.00
81	T	n-Propylbenzene	200.000	168.682	15.7	100	0.00
82	T	Bromobenzene	200.000	193.547	3.2	100	0.00
83	T	1,3,5-Trimethylbenzene	200.000	184.600	7.7	100	0.00
84	T	2-Chlorotoluene	200.000	176.914	11.5	100	0.00
85	T	4-Chlorotoluene	200.000	180.226	9.9	100	0.00
86	T	a-Methylstyrene	200.000	197.650	1.2	100	0.00
87	T	tert-Butylbenzene	200.000	196.923	1.5	100	0.00
88	T	1,2,4-Trimethylbenzene	200.000	179.495	10.3	100	0.01
89	T	sec-Butylbenzene	200.000	172.434	13.8	100	0.00
90	T	p-Isopropyltoluene	200.000	178.519	10.7	100	0.00
91	T	1,3-Dichlorobenzene	200.000	186.009	7.0	100	0.00
92	T	1,4-Dichlorobenzene	200.000	183.401	8.3	100	0.00
93	T	n-Butylbenzene	200.000	183.590	8.2	100	0.00
94	T	1,2-Dichlorobenzene	200.000	187.832	6.1	100	0.00
95	T	1,2-Dibromo-3-Chloropropane	200.000	220.536	-10.3	100	0.00
96	T	1,2,4-Trichlorobenzene	200.000	199.471	0.3	100	0.01
97	T	Hexachlorobutadiene	200.000	201.976	-1.0	100	0.00
98	T	Naphthalene	200.000	190.431	4.8	100	0.00
99	T	1,2,3-Trichlorobenzene	200.000	200.220	-0.1	100	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

11M42855.D 8260WTR.M Thu Feb 25 14:11:22 2021

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\022221\11M42857.D Vial: 11
Acq On : 22 Feb 2021 22:55 Operator: CIM/EEA
Sample : S1B0345-ICV1 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 25 14:13:57 2021 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.2467	96	507028	25.0000	ug/L	0.0000
56) Chlorobenzene-d5	13.8759	117	395772	25.0000	ug/L	0.0000
76) 1,4-Dichlorobenzene-d4	16.6882	152	221395	25.0000	ug/L	0.0000
System Monitoring Compounds						
37) Dibromofluoromethane	9.2541	111	141534	25.4421	ug/L	0.0000
Spiked Amount 25.0000	Range 86 - 118		Recovery = 101.7684%			
43) 1,2-Dichloroethane-d4	9.8641	65	150811	24.4575	ug/L	0.0000
Spiked Amount 25.0000	Range 80 - 120		Recovery = 97.8300%			
57) Toluene-d8	12.1078	98	485893	24.7612	ug/L	0.0000
Spiked Amount 25.0000	Range 88 - 110		Recovery = 99.0448%			
78) p-Bromofluorobenzene	15.2717	95	188827	24.7993	ug/L	0.0000
Spiked Amount 25.0000	Range 86 - 115		Recovery = 99.1972%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.0090	85	278254	42.7150	ug/L	99
3) Chloromethane	3.4329	50	339329	47.2228	ug/L	99
4) Vinyl Chloride	3.6397	62	251554	41.0184	ug/L	100
5) 1,3-Butadiene	3.6810	54	246682	42.1252	ug/L	92
6) Bromomethane	4.4979	94	247487	50.2780	ug/L	99
7) Chloroethane	4.6426	64	206590	55.2954	ug/L	98
8) Trichlorofluoromethane	5.1182	101	418325	45.4587	ug/L	99
9) Diethyl ether	5.6456	59	471443	102.1105	ug/L	99
10) Isoprene	5.6662	67	378026	59.5776	ug/L	99
11) Acrolein	5.8730	56	70835	123.6474	ug/L	99
12) 1,1,2-Trichloro-1,2,2-Trif	5.8730	101	263162	56.0907	ug/L	99
13) Acetone	5.9764	43	83757	51.9698	ug/L	99
14) 1,1-Dichloroethene	6.1832	61	443183	50.9143	ug/L	100
15) Tert-Butyl Alcohol	6.3073	59	104176	220.4311	ug/L	98
16) Dimethyl Sulfide	6.4314	62	332515	81.3196	ug/L	99
17) Iodomethane	6.6795	142	232454	69.1170	ug/L	98
18) Methyl acetate	6.7002	43	199658	50.9206	ug/L	98
19) Methylene Chloride	6.9380	84	272906	50.6875	ug/L	99
20) Carbon Disulfide	6.9690	76	708946	52.1712	ug/L	100
21) Acrylonitrile	7.1241	53	103912	51.2204	ug/L	97
22) Methyl Tert Butyl Ether	7.1448	73	708442	51.8869	ug/L	100
23) trans-1,2-Dichloroethene	7.3723	96	263760	51.3447	ug/L	98
24) n-Hexane	7.4550	57	352232	57.4742	ug/L	100
25) Diisopropyl ether	7.7858	45	2310270	106.1458	ug/L	99
26) Vinyl Acetate	7.9513	43	536242	47.3724	ug/L	100
27) 1,1-Dichloroethane	7.9720	63	534018	51.2289	ug/L	99
28) Ethyl-Tert-Butyl ether	8.3339	59	1899613	107.3772	ug/L	100
29) 2-Butanone	8.5200	43	132946	48.3173	ug/L	97
30) Propionitrile	8.6234	54	78876	104.4957	ug/L	97
31) 2,2-Dichloropropane	8.7164	77	367408	46.9421	ug/L	99
32) cis-1,2-Dichloroethene	8.7784	96	298402	49.5808	ug/L	100
33) Chloroform	8.9749	83	514825	50.1992	ug/L	99
34) 1-Bromopropane	9.1093	122	68583	58.4893	ug/L	100
35) Bromochloromethane	9.2024	130	172997	51.3818	ug/L	98
36) Tetrahydrofuran	9.2334	42	176580	99.6300	ug/L	99
38) 1,1,1-Trichloroethane	9.4815	97	459907	51.1231	ug/L	98
39) Cyclohexane	9.5126	56	480941	48.5559	ug/L	99
40) 1,1-Dichloropropene	9.6677	75	387664	52.1202	ug/L	98
41) Carbon Tetrachloride	9.8124	117	423805	50.6402	ug/L	99
42) Tert-Amyl-Methyl ether	9.7711	73	1497206	106.0535	ug/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\022221\11M42857.D Vial: 11
Acq On : 22 Feb 2021 22:55 Operator: CIM/EEA
Sample : S1B0345-ICV1 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 25 14:13:57 2021 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration
DataAcq Meth : 8260WTR

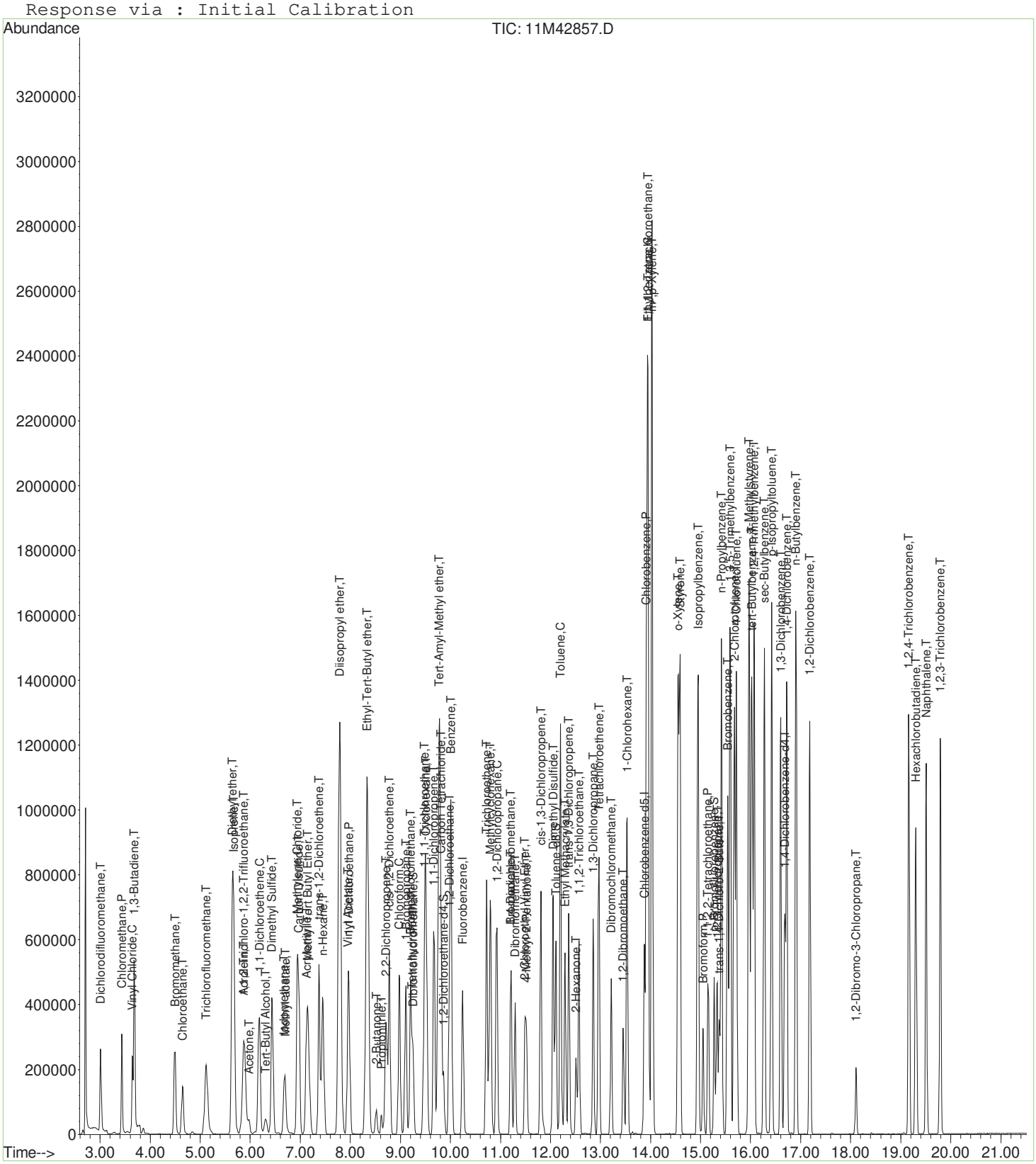
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
44)	1,2-Dichloroethane	9.9778	62	409665	51.0301	ug/L		99
45)	Benzene	10.0089	78	1092093	50.5010	ug/L		99
46)	Trichloroethene	10.7223	130	324055	51.7595	ug/L		99
47)	Methylcyclohexane	10.7947	83	424321	50.0246	ug/L		99
48)	1,2-Dichloropropane	10.9291	63	313636	51.7434	ug/L		98
49)	1,4-Dioxane	11.2083	88	8617	212.3326	ug/L		96
50)	Bromodichloromethane	11.2083	83	388343	49.5413	ug/L		99
51)	Dibromomethane	11.2910	93	171614	54.0973	ug/L		98
52)	2-Chloroethyl Vinyl Ether	11.4874	63	144575	49.1982	ug/L		99
53)	4-Methyl-2-Pentanone	11.5184	58	104831	51.9214	ug/L		99
54)	cis-1,3-Dichloropropene	11.8080	75	471654	53.4673	ug/L		99
55)	Dimethyl Disulfide	12.0561	79	264256	56.8506	ug/L		99
58)	Toluene	12.2009	91	1136200	49.4760	ug/L		100
59)	Ethyl Methacrylate	12.2939	69	355568	57.7613	ug/L		94
60)	trans-1,3-Dichloropropene	12.3663	75	400660	51.6234	ug/L		100
61)	1,1,2-Trichloroethane	12.5731	97	234187	50.4908	ug/L		98
62)	2-Hexanone	12.5110	43	208455	53.2959	ug/L		100
63)	1,3-Dichloropropane	12.8523	76	420494	52.4096	ug/L		100
64)	Tetrachloroethene	12.9660	164	255380	50.4040	ug/L		99
65)	Dibromochloromethane	13.2141	129	309806	51.5891	ug/L		100
66)	1,2-Dibromoethane	13.4519	107	260042	52.5462	ug/L		100
67)	1-Chlorohexane	13.5346	91	393665	53.6304	ug/L		99
68)	Chlorobenzene	13.9172	112	795332	49.0767	ug/L		99
69)	1,1,1,2-Tetrachloroethane	13.9482	131	314379	52.5608	ug/L		99
70)	Ethylbenzene	13.9482	106	432141	50.5916	ug/L		99
71)	m-,p-Xylene	14.0310	106	1064444	104.9669	ug/L		99
72)	o-Xylene	14.5479	106	519978	51.7379	ug/L		99
73)	Styrene	14.5893	104	879684	54.9772	ug/L		98
74)	Bromoform	15.0546	173	209072	50.9914	ug/L		100
75)	Isopropylbenzene	14.9512	105	1317361	52.0815	ug/L		100
77)	1,1,2,2-Tetrachloroethane	15.1476	83	298103	53.6569	ug/L		100
79)	1,2,3-Trichloropropane	15.3337	110	100297	50.0660	ug/L		97
80)	trans-1,4-Dichloro-2-Buten	15.3751	53	97360	47.0064	ug/L	#	11
81)	n-Propylbenzene	15.4164	91	1540949	50.3988	ug/L		99
82)	Bromobenzene	15.5405	156	363502	49.0290	ug/L		99
83)	1,3,5-Trimethylbenzene	15.5922	105	1137586	51.3693	ug/L		100
84)	2-Chlorotoluene	15.6750	91	994566	49.4616	ug/L		100
85)	4-Chlorotoluene	15.7163	91	871046	49.3940	ug/L		100
86)	a-Methylstyrene	15.9644	118	670413	59.3636	ug/L		99
87)	tert-Butylbenzene	16.0265	134	254556	49.3966	ug/L		88
88)	1,2,4-Trimethylbenzene	16.0679	105	1159130	51.7506	ug/L		99
89)	sec-Butylbenzene	16.2747	105	1419154	49.6259	ug/L		100
90)	p-Isopropyltoluene	16.4194	119	1230776	51.1140	ug/L		99
91)	1,3-Dichlorobenzene	16.6055	146	685312	48.9006	ug/L		99
92)	1,4-Dichlorobenzene	16.7192	146	707552	50.0858	ug/L		99
93)	n-Butylbenzene	16.9053	91	1127887	53.9116	ug/L		99
94)	1,2-Dichlorobenzene	17.1845	146	665640	50.8580	ug/L		100
95)	1,2-Dibromo-3-Chloropropan	18.1047	75	61913	50.8106	ug/L		96
96)	1,2,4-Trichlorobenzene	19.1594	180	504621	51.7646	ug/L		99
97)	Hexachlorobutadiene	19.3041	225	248570	51.2605	ug/L		98
98)	Naphthalene	19.5109	128	1099555	54.5243	ug/L		100
99)	1,2,3-Trichlorobenzene	19.7901	180	477704	51.6811	ug/L		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\022221\11M42857.D Vial: 11
Acq On : 22 Feb 2021 22:55 Operator: CIM/EEA
Sample : S1B0345-ICV1 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 25 14:13 2021 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\022221\11M42857.D Vial: 11
Acq On : 22 Feb 2021 22:55 Operator: CIM/EEA
Sample : S1B0345-ICV1 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	25.000	25.000	0.0	101	0.00
2	T	Dichlorodifluoromethane	50.000	42.715	14.6	77	-0.01
3	P	Chloromethane	50.000	47.223	5.6	96	-0.01
4	C	Vinyl Chloride	50.000	41.018	18.0	74	-0.02
5	T	1,3-Butadiene	50.000	42.125	15.8	85	-0.02
6	T	Bromomethane	50.000	50.278	-0.6	106	-0.01
7	T	Chloroethane	50.000	55.295	-10.6	110	-0.02
8	T	Trichlorofluoromethane	50.000	45.459	9.1	89	-0.02
9	T	Diethyl ether	100.000	102.111	-2.1	102	0.00
10	T	Isoprene	50.000	59.578	-19.2	115	-0.01
11	T	Acrolein	50.000	123.647	-147.3#	256	-0.01
12	T	1,1,2-Trichloro-1,2,2-Trifl	50.000	56.091	-12.2	107	-0.02
13	T	Acetone	50.000	51.970	-3.9	101	0.00
14	C	1,1-Dichloroethene	50.000	50.914	-1.8	98	0.00
15	T	Tert-Butyl Alcohol	200.000	220.431	-10.2	111	0.01
16	T	Dimethyl Sulfide	50.000	81.320	-62.6#	157	-0.01
17	T	Iodomethane	50.000	69.117	-38.2#	141	0.00
18	T	Methyl acetate	50.000	50.921	-1.8	97	-0.01
19	T	Methylene Chloride	50.000	50.687	-1.4	101	-0.01
20	T	Carbon Disulfide	50.000	52.171	-4.3	103	-0.01
21	T	Acrylonitrile	50.000	51.220	-2.4	97	0.00
22	T	Methyl Tert Butyl Ether	50.000	51.887	-3.8	98	-0.01
23	T	trans-1,2-Dichloroethene	50.000	51.345	-2.7	97	-0.01
24	T	n-Hexane	50.000	57.474	-14.9	112	0.00
25	T	Diisopropyl ether	100.000	106.146	-6.1	105	0.00
26	T	Vinyl Acetate	50.000	47.372	5.3	88	0.00
27	P	1,1-Dichloroethane	50.000	51.229	-2.5	97	-0.01
28	T	Ethyl-Tert-Butyl ether	100.000	107.377	-7.4	106	0.00
29	T	2-Butanone	50.000	48.317	3.4	94	0.00
30	T	Propionitrile	100.000	104.496	-4.5	104	0.00
31	T	2,2-Dichloropropane	50.000	46.942	6.1	92	0.00
32	T	cis-1,2-Dichloroethene	50.000	49.581	0.8	96	-0.01
33	C	Chloroform	50.000	50.199	-0.4	99	-0.01
34	T	1-Bromopropane	50.000	58.489	-17.0	116	0.00
35	T	Bromochloromethane	50.000	51.382	-2.8	102	0.00
36	T	Tetrahydrofuran	100.000	99.630	0.4	97	0.00
37	S	Dibromofluoromethane	25.000	25.442	-1.8	102	0.00
38	T	1,1,1-Trichloroethane	50.000	51.123	-2.2	99	-0.01
39	T	Cyclohexane	50.000	48.556	2.9	97	0.00
40	T	1,1-Dichloropropene	50.000	52.120	-4.2	101	-0.01
41	T	Carbon Tetrachloride	50.000	50.640	-1.3	95	0.00
42	T	Tert-Amyl-Methyl ether	100.000	106.054	-6.1	105	0.00
43	S	1,2-Dichloroethane-d4	25.000	24.457	2.2	99	0.00
44	T	1,2-Dichloroethane	50.000	51.030	-2.1	101	0.00
45	T	Benzene	50.000	50.501	-1.0	98	0.00
46	T	Trichloroethene	50.000	51.759	-3.5	100	0.00
47	T	Methylcyclohexane	50.000	50.025	-0.0	98	0.00
48	C	1,2-Dichloropropane	50.000	51.743	-3.5	99	0.00
49	T	1,4-Dioxane	200.000	212.333	-6.2	118	0.00
50	T	Bromodichloromethane	50.000	49.541	0.9	94	0.00
51	T	Dibromomethane	50.000	54.097	-8.2	100	0.00
52	T	2-Chloroethyl Vinyl Ether	50.000	49.198	1.6	101	0.00
53	T	4-Methyl-2-Pentanone	50.000	51.921	-3.8	99	0.00
54	T	cis-1,3-Dichloropropene	50.000	53.467	-6.9	101	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\022221\11M42857.D Vial: 11
Acq On : 22 Feb 2021 22:55 Operator: CIM/EEA
Sample : S1B0345-ICV1 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
55	T	Dimethyl Disulfide	50.000	56.851	-13.7	110	0.00
56	I	Chlorobenzene-d5	25.000	25.000	0.0	100	0.00
57	S	Toluene-d8	25.000	24.761	1.0	101	0.00
58	C	Toluene	50.000	49.476	1.0	98	0.00
59	T	Ethyl Methacrylate	50.000	57.761	-15.5	110	0.00
60	T	trans-1,3-Dichloropropene	50.000	51.623	-3.2	96	0.00
61	T	1,1,2-Trichloroethane	50.000	50.491	-1.0	99	0.00
62	T	2-Hexanone	50.000	53.296	-6.6	98	0.00
63	T	1,3-Dichloropropane	50.000	52.410	-4.8	100	0.00
64	T	Tetrachloroethene	50.000	50.404	-0.8	100	0.00
65	T	Dibromochloromethane	50.000	51.589	-3.2	98	0.00
66	T	1,2-Dibromoethane	50.000	52.546	-5.1	100	0.00
67	T	1-Chlorohexane	50.000	53.630	-7.3	102	0.00
68	P	Chlorobenzene	50.000	49.077	1.8	97	0.00
69	T	1,1,1,2-Tetrachloroethane	50.000	52.561	-5.1	99	0.00
70	C	Ethylbenzene	50.000	50.592	-1.2	98	0.00
71	T	m-,p-Xylene	100.000	104.967	-5.0	101	0.00
72	T	o-Xylene	50.000	51.738	-3.5	99	0.00
73	T	Styrene	50.000	54.977	-10.0	100	0.00
74	P	Bromoform	50.000	50.991	-2.0	93	0.00
75	T	Isopropylbenzene	50.000	52.081	-4.2	97	0.00
76	I	1,4-Dichlorobenzene-d4	25.000	25.000	0.0	104	0.00
77	P	1,1,2,2-Tetrachloroethane	50.000	53.657	-7.3	99	0.00
78	S	p-Bromofluorobenzene	25.000	24.799	0.8	103	0.00
79	T	1,2,3-Trichloropropane	50.000	50.066	-0.1	103	0.00
80	T	trans-1,4-Dichloro-2-Butene	50.000	47.006	6.0	95	0.00
81	T	n-Propylbenzene	50.000	50.399	-0.8	97	0.00
82	T	Bromobenzene	50.000	49.029	1.9	99	0.00
83	T	1,3,5-Trimethylbenzene	50.000	51.369	-2.7	99	0.00
84	T	2-Chlorotoluene	50.000	49.462	1.1	97	0.00
85	T	4-Chlorotoluene	50.000	49.394	1.2	99	0.00
86	T	a-Methylstyrene	50.000	59.364	-18.7	118	0.00
87	T	tert-Butylbenzene	50.000	49.397	1.2	97	0.00
88	T	1,2,4-Trimethylbenzene	50.000	51.751	-3.5	100	0.00
89	T	sec-Butylbenzene	50.000	49.626	0.7	96	0.00
90	T	p-Isopropyltoluene	50.000	51.114	-2.2	98	0.00
91	T	1,3-Dichlorobenzene	50.000	48.901	2.2	98	0.00
92	T	1,4-Dichlorobenzene	50.000	50.086	-0.2	102	0.00
93	T	n-Butylbenzene	50.000	53.912	-7.8	102	0.00
94	T	1,2-Dichlorobenzene	50.000	50.858	-1.7	100	0.00
95	T	1,2-Dibromo-3-Chloropropane	50.000	50.811	-1.6	100	0.00
96	T	1,2,4-Trichlorobenzene	50.000	51.765	-3.5	102	0.00
97	T	Hexachlorobutadiene	50.000	51.260	-2.5	103	0.00
98	T	Naphthalene	50.000	54.524	-9.0	103	0.00
99	T	1,2,3-Trichlorobenzene	50.000	51.681	-3.4	104	0.00

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\022221\11M42857.D Vial: 11
Acq On : 22 Feb 2021 22:55 Operator: CIM/EEA
Sample : S1B0345-ICV1 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	1.000	1.000	0.0	101	0.00
2	T	Dichlorodifluoromethane	0.321	0.274	14.6	77	-0.01
3	P	Chloromethane	0.354	0.335	5.4	96	-0.01
4	C	Vinyl Chloride	0.302	0.248	17.9	74	-0.02
5	T	1,3-Butadiene	0.289	0.243	15.9	85	-0.02
6	T	Bromomethane	0.243	0.244	-0.4	106	-0.01
7	T	Chloroethane	0.184	0.204	-10.9	110	-0.02
8	T	Trichlorofluoromethane	0.454	0.413	9.0	89	-0.02
9	T	Diethyl ether	0.228	0.232	-1.8	102	0.00
10	T	Isoprene	0.313	0.373	-19.2	115	-0.01
11	T	Acrolein	0.028	0.070	-150.0#	256#	-0.01
12	T	1,1,2-Trichloro-1,2,2-Trifl	0.231	0.260	-12.6	107	-0.02
13	T	Acetone	0.079	0.083	-5.1	101	0.00
14	C	1,1-Dichloroethene	0.429	0.437	-1.9	98	0.00
15	T	Tert-Butyl Alcohol	0.023	0.026	-13.0	111	0.01
16	T	Dimethyl Sulfide	0.202	0.328	-62.4#	157#	-0.01
17	T	Iodomethane	0.127	0.229	-80.3#	141	0.00
18	T	Methyl acetate	0.193	0.197	-2.1	97	-0.01
19	T	Methylene Chloride	0.265	0.269	-1.5	101	-0.01
20	T	Carbon Disulfide	0.670	0.699	-4.3	103	-0.01
21	T	Acrylonitrile	0.100	0.102	-2.0	97	0.00
22	T	Methyl Tert Butyl Ether	0.673	0.699	-3.9	98	-0.01
23	T	trans-1,2-Dichloroethene	0.253	0.260	-2.8	97	-0.01
24	T	n-Hexane	0.302	0.347	-14.9	112	0.00
25	T	Diisopropyl ether	1.073	1.139	-6.2	105	0.00
26	T	Vinyl Acetate	0.558	0.529	5.2	88	0.00
27	P	1,1-Dichloroethane	0.514	0.527	-2.5	97	-0.01
28	T	Ethyl-Tert-Butyl ether	0.872	0.937	-7.5	106	0.00
29	T	2-Butanone	0.136	0.131	3.7	94	0.00
30	T	Propionitrile	0.037	0.039	-5.4	104	0.00
31	T	2,2-Dichloropropane	0.386	0.362	6.2	92	0.00
32	T	cis-1,2-Dichloroethene	0.297	0.294	1.0	96	-0.01
33	C	Chloroform	0.506	0.508	-0.4	99	-0.01
34	T	1-Bromopropane	0.058	0.068	-17.2	116	0.00
35	T	Bromochloromethane	0.166	0.171	-3.0	102	0.00
36	T	Tetrahydrofuran	0.087	0.087	0.0	97	0.00
37	S	Dibromofluoromethane	0.274	0.279	-1.8	102	0.00
38	T	1,1,1-Trichloroethane	0.444	0.454	-2.3	99	-0.01
39	T	Cyclohexane	0.488	0.474	2.9	97	0.00
40	T	1,1-Dichloropropene	0.367	0.382	-4.1	101	-0.01
41	T	Carbon Tetrachloride	0.413	0.418	-1.2	95	0.00
42	T	Tert-Amyl-Methyl ether	0.696	0.738	-6.0	105	0.00
43	S	1,2-Dichloroethane-d4	0.304	0.297	2.3	99	0.00
44	T	1,2-Dichloroethane	0.396	0.404	-2.0	101	0.00
45	T	Benzene	1.066	1.077	-1.0	98	0.00
46	T	Trichloroethene	0.309	0.320	-3.6	100	0.00
47	T	Methylcyclohexane	0.418	0.418	0.0	98	0.00
48	C	1,2-Dichloropropane	0.299	0.309	-3.3	99	0.00
49	T	1,4-Dioxane	0.002	0.002	0.0	118	0.00
50	T	Bromodichloromethane	0.387	0.383	1.0	94	0.00
51	T	Dibromomethane	0.156	0.169	-8.3	100	0.00
52	T	2-Chloroethyl Vinyl Ether	0.128	0.143	-11.7	101	0.00
53	T	4-Methyl-2-Pentanone	0.100	0.103	-3.0	99	0.00
54	T	cis-1,3-Dichloropropene	0.435	0.465	-6.9	101	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\022221\11M42857.D Vial: 11
Acq On : 22 Feb 2021 22:55 Operator: CIM/EEA
Sample : S1B0345-ICV1 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p

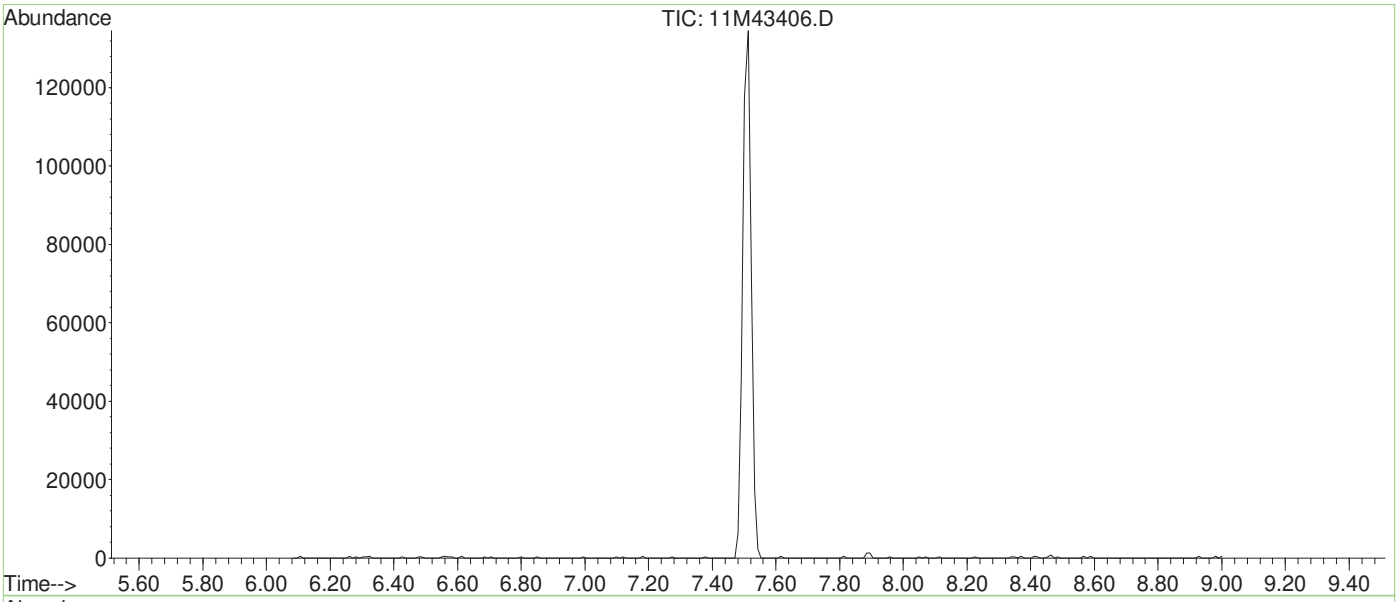
Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Multiple Level Calibration

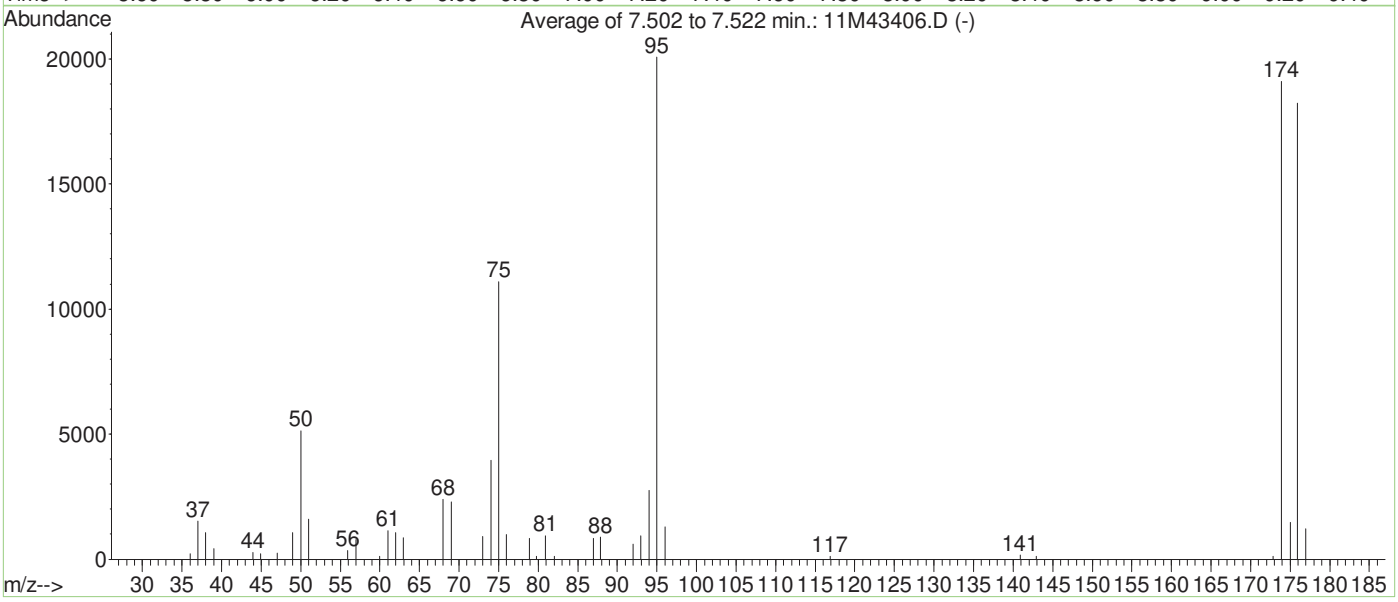
Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
55	T	Dimethyl Disulfide	0.229	0.261	-14.0	110	0.00
56	I	Chlorobenzene-d5	1.000	1.000	0.0	100	0.00
57	S	Toluene-d8	1.240	1.228	1.0	101	0.00
58	C	Toluene	1.451	1.435	1.1	98	0.00
59	T	Ethyl Methacrylate	0.389	0.449	-15.4	110	0.00
60	T	trans-1,3-Dichloropropene	0.490	0.506	-3.3	96	0.00
61	T	1,1,2-Trichloroethane	0.293	0.296	-1.0	99	0.00
62	T	2-Hexanone	0.247	0.263	-6.5	98	0.00
63	T	1,3-Dichloropropane	0.507	0.531	-4.7	100	0.00
64	T	Tetrachloroethene	0.320	0.323	-0.9	100	0.00
65	T	Dibromochloromethane	0.379	0.391	-3.2	98	0.00
66	T	1,2-Dibromoethane	0.313	0.329	-5.1	100	0.00
67	T	1-Chlorohexane	0.464	0.497	-7.1	102	0.00
68	P	Chlorobenzene	1.024	1.005	1.9	97	0.00
69	T	1,1,1,2-Tetrachloroethane	0.378	0.397	-5.0	99	0.00
70	C	Ethylbenzene	0.540	0.546	-1.1	98	0.00
71	T	m-,p-Xylene	0.641	0.672	-4.8	101	0.00
72	T	o-Xylene	0.635	0.657	-3.5	99	0.00
73	T	Styrene	1.011	1.111	-9.9	100	0.00
74	P	Bromoform	0.259	0.264	-1.9	93	0.00
75	T	Isopropylbenzene	1.598	1.664	-4.1	97	0.00
76	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	104	0.00
77	P	1,1,2,2-Tetrachloroethane	0.627	0.673	-7.3	99	0.00
78	S	p-Bromofluorobenzene	0.860	0.853	0.8	103	0.00
79	T	1,2,3-Trichloropropane	0.226	0.227	-0.4	103	0.00
80	T	trans-1,4-Dichloro-2-Butene	0.234	0.220	6.0	95	0.00
81	T	n-Propylbenzene	3.453	3.480	-0.8	97	0.00
82	T	Bromobenzene	0.837	0.821	1.9	99	0.00
83	T	1,3,5-Trimethylbenzene	2.501	2.569	-2.7	99	0.00
84	T	2-Chlorotoluene	2.271	2.246	1.1	97	0.00
85	T	4-Chlorotoluene	1.991	1.967	1.2	99	0.00
86	T	a-Methylstyrene	1.275	1.514	-18.7	118	0.00
87	T	tert-Butylbenzene	0.582	0.575	1.2	97	0.00
88	T	1,2,4-Trimethylbenzene	2.529	2.618	-3.5	100	0.00
89	T	sec-Butylbenzene	3.229	3.205	0.7	96	0.00
90	T	p-Isopropyltoluene	2.719	2.780	-2.2	98	0.00
91	T	1,3-Dichlorobenzene	1.583	1.548	2.2	98	0.00
92	T	1,4-Dichlorobenzene	1.595	1.598	-0.2	102	0.00
93	T	n-Butylbenzene	2.362	2.547	-7.8	102	0.00
94	T	1,2-Dichlorobenzene	1.478	1.503	-1.7	100	0.00
95	T	1,2-Dibromo-3-Chloropropane	0.138	0.140	-1.4	100	0.00
96	T	1,2,4-Trichlorobenzene	1.101	1.140	-3.5	102	0.00
97	T	Hexachlorobutadiene	0.548	0.561	-2.4	103	0.00
98	T	Naphthalene	2.277	2.483	-9.0	103	0.00
99	T	1,2,3-Trichlorobenzene	1.044	1.079	-3.4	104	0.00

BFB

Data File : C:\MSDCHEM\1\DATA\031921\11M43406.D Vial: 1
Acq On : 19 Mar 2021 12:09 Operator: CIM
Sample : S1C0383-TUN1 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 21B0038 HPMS11





AutoFind: Scans 138, 139, 140; Background Corrected with Scan 133

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	25.5	5128	PASS
75	95	30	60	55.2	11085	PASS
95	95	100	100	100.0	20074	PASS
96	95	5	9	6.5	1299	PASS
173	174	0.00	2	0.5	104	PASS
174	95	50	100	95.1	19097	PASS
175	174	5	9	7.7	1474	PASS
176	174	95	101	95.4	18218	PASS
177	176	5	9	6.7	1212	PASS

11M43406.D 8260WTR.M Mon Mar 22 13:47:49 2021

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\031921\11M43407.D Vial: 1
Acq On : 19 Mar 2021 12:34 Operator: CIM
Sample : S1C0383-CCV1 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 22 11:32:40 2021 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 21B0038 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.2468	96	368649	25.0000	ug/L	0.0000
56) Chlorobenzene-d5	13.8760	117	281412	25.0000	ug/L	0.0000
76) 1,4-Dichlorobenzene-d4	16.6780	152	154812	25.0000	ug/L	-0.0103
System Monitoring Compounds						
37) Dibromofluoromethane	9.2542	111	100498	24.8467	ug/L	0.0000
Spiked Amount 25.0000	Range 86 - 118		Recovery = 99.3868%			
43) 1,2-Dichloroethane-d4	9.8642	65	107676	24.0169	ug/L	0.0000
Spiked Amount 25.0000	Range 80 - 120		Recovery = 96.0676%			
57) Toluene-d8	12.1079	98	349788	25.0691	ug/L	0.0000
Spiked Amount 25.0000	Range 88 - 110		Recovery = 100.2764%			
78) p-Bromofluorobenzene	15.2718	95	127102	23.8721	ug/L	0.0000
Spiked Amount 25.0000	Range 86 - 115		Recovery = 95.4884%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.0194	85	250270	52.8405	ug/L	95
3) Chloromethane	3.4330	50	260461	49.8531	ug/L	99
4) Vinyl Chloride	3.6501	62	245842	55.1344	ug/L	99
5) 1,3-Butadiene	3.6915	54	253292	59.4901	ug/L	94
6) Bromomethane	4.5083	94	162075	45.2856	ug/L	100
7) Chloroethane	4.6531	64	139797	51.4631	ug/L	99
8) Trichlorofluoromethane	5.1287	101	352559	52.6931	ug/L	99
9) Diethyl ether	5.6353	59	304715	90.7724	ug/L	97
10) Isoprene	5.6767	67	229944	49.8428	ug/L	100
11) Acrolein	5.8731	56	19703	47.3030	ug/L	95
12) 1,1,2-Trichloro-1,2,2-Trif	5.8835	101	175492	51.4451	ug/L	96
13) Acetone	5.9662	43	48804	41.6490	ug/L	94
14) 1,1-Dichloroethene	6.1833	61	320368	50.6203	ug/L	98
15) Tert-Butyl Alcohol	6.2970	59	50334	146.4824	ug/L	95
16) Dimethyl Sulfide	6.4418	62	149329	50.2282	ug/L	94
17) Iodomethane	6.6796	142	112782	46.4402	ug/L	99
18) Methyl acetate	6.7003	43	146582	51.4169	ug/L	99
19) Methylene Chloride	6.9381	84	185637	47.4210	ug/L	90
20) Carbon Disulfide	6.9795	76	480130	48.5954	ug/L	100
21) Acrylonitrile	7.1242	53	64966	44.0436	ug/L	98
22) Methyl Tert Butyl Ether	7.1449	73	432757	43.5930	ug/L	99
23) trans-1,2-Dichloroethene	7.3724	96	183826	49.2167	ug/L	97
24) n-Hexane	7.4448	57	241977	54.3047	ug/L	100
25) Diisopropyl ether	7.7859	45	1591977	100.5995	ug/L	98
26) Vinyl Acetate	7.9514	43	369636	44.9115	ug/L	98
27) 1,1-Dichloroethane	7.9721	63	383906	50.6527	ug/L	100
28) Ethyl-Tert-Butyl ether	8.3339	59	1190089	92.5221	ug/L	99
29) 2-Butanone	8.5097	43	80717	40.3470	ug/L	98
30) Propionitrile	8.6131	54	44348	80.8065	ug/L	96
31) 2,2-Dichloropropane	8.7165	77	314286	55.2278	ug/L	99
32) cis-1,2-Dichloroethene	8.7785	96	208149	47.5670	ug/L	93
33) Chloroform	8.9750	83	356079	47.7532	ug/L	99
34) 1-Bromopropane	9.1094	122	42113	49.3963	ug/L	97
35) Bromochloromethane	9.2025	130	113418	46.3310	ug/L	91
36) Tetrahydrofuran	9.2232	42	108159	83.9325	ug/L	97
38) 1,1,1-Trichloroethane	9.4817	97	322469	49.3009	ug/L	96
39) Cyclohexane	9.5127	56	359511	49.9208	ug/L	99
40) 1,1-Dichloropropene	9.6677	75	267792	49.5184	ug/L	99
41) Carbon Tetrachloride	9.8022	117	313908	51.5882	ug/L	99
42) Tert-Amyl-Methyl ether	9.7712	73	915208	89.1625	ug/L	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\031921\11M43407.D Vial: 1
Acq On : 19 Mar 2021 12:34 Operator: CIM
Sample : S1C0383-CCV1 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 22 11:32:40 2021 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 21B0038 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration
DataAcq Meth : 8260WTR

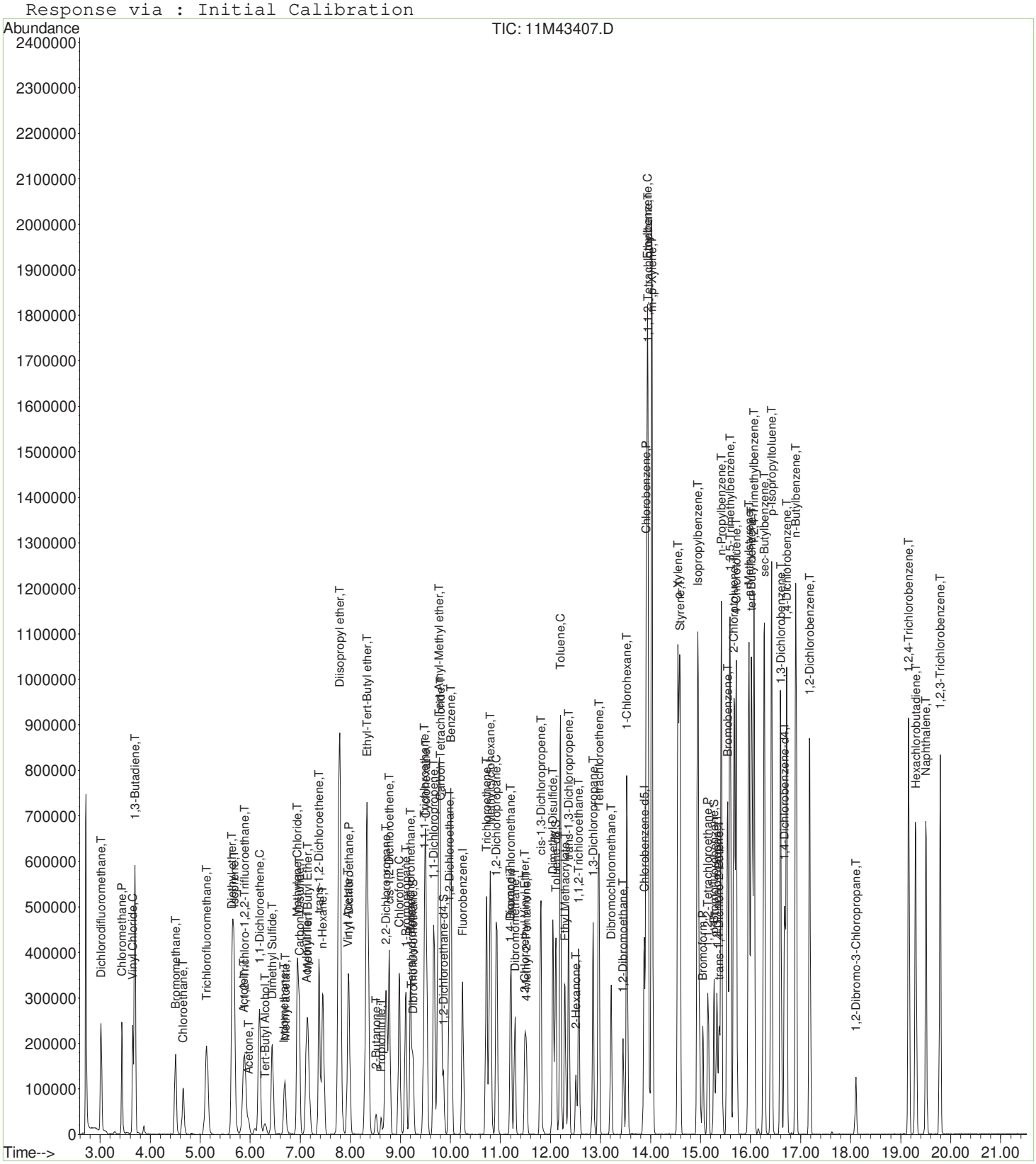
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44)	1,2-Dichloroethane	9.9779	62	283409	48.5545	ug/L	98
45)	Benzene	10.0090	78	781920	49.7303	ug/L	100
46)	Trichloroethene	10.7224	130	211485	46.4590	ug/L	99
47)	Methylcyclohexane	10.7948	83	314131	50.9353	ug/L	97
48)	1,2-Dichloropropane	10.9189	63	220332	49.9949	ug/L	99
49)	1,4-Dioxane	11.1980	88	5922	200.7002	ug/L	87
50)	Bromodichloromethane	11.2083	83	278519	48.8682	ug/L	98
51)	Dibromomethane	11.2911	93	112600	48.8181	ug/L	95
52)	2-Chloroethyl Vinyl Ether	11.4875	63	82917	39.0222	ug/L	100
53)	4-Methyl-2-Pentanone	11.5185	58	59800	40.7358	ug/L	98
54)	cis-1,3-Dichloropropene	11.8081	75	319236	49.7732	ug/L	100
55)	Dimethyl Disulfide	12.0459	79	153178	45.3237	ug/L	99
58)	Toluene	12.2010	91	815168	49.9217	ug/L	98
59)	Ethyl Methacrylate	12.2940	69	198234	45.2892	ug/L	93
60)	trans-1,3-Dichloropropene	12.3664	75	276887	50.1737	ug/L	99
61)	1,1,2-Trichloroethane	12.5628	97	150074	45.5048	ug/L	95
62)	2-Hexanone	12.5111	43	125953	45.2890	ug/L	94
63)	1,3-Dichloropropane	12.8523	76	272135	47.7021	ug/L	95
64)	Tetrachloroethene	12.9661	164	175453	48.7014	ug/L	100
65)	Dibromochloromethane	13.2142	129	201890	47.2809	ug/L	99
66)	1,2-Dibromoethane	13.4520	107	159706	45.3860	ug/L	99
67)	1-Chlorohexane	13.5244	91	279550	53.5607	ug/L	95
68)	Chlorobenzene	13.9173	112	550647	47.7862	ug/L	99
69)	1,1,1,2-Tetrachloroethane	13.9483	131	212124	49.8770	ug/L	98
70)	Ethylbenzene	13.9380	106	303843	50.0270	ug/L	97
71)	m-,p-Xylene	14.0311	106	738873	102.4712	ug/L	97
72)	o-Xylene	14.5480	106	361321	50.5615	ug/L	99
73)	Styrene	14.5894	104	600294	52.7621	ug/L	100
74)	Bromoform	15.0443	173	136896	46.9563	ug/L	99
75)	Isopropylbenzene	14.9409	105	950359	52.8407	ug/L	99
77)	1,1,2,2-Tetrachloroethane	15.1477	83	190596	49.0609	ug/L	99
79)	1,2,3-Trichloropropane	15.3235	110	58488	41.7528	ug/L	99
80)	trans-1,4-Dichloro-2-Buten	15.3752	53	67824	46.8299	ug/L	94
81)	n-Propylbenzene	15.4166	91	1150306	53.8033	ug/L	99
82)	Bromobenzene	15.5406	156	242387	46.7540	ug/L	95
83)	1,3,5-Trimethylbenzene	15.5923	105	809028	52.2452	ug/L	99
84)	2-Chlorotoluene	15.6647	91	745769	53.0399	ug/L	100
85)	4-Chlorotoluene	15.7164	91	582423	47.2319	ug/L	99
86)	a-Methylstyrene	15.9645	118	399329	50.5676	ug/L	99
87)	tert-Butylbenzene	16.0162	134	179125	49.7088	ug/L	90
88)	1,2,4-Trimethylbenzene	16.0680	105	809253	51.6691	ug/L	100
89)	sec-Butylbenzene	16.2748	105	1076886	53.8533	ug/L	99
90)	p-Isopropyltoluene	16.4195	119	906922	53.8634	ug/L	99
91)	1,3-Dichlorobenzene	16.6056	146	488737	49.8729	ug/L	99
92)	1,4-Dichlorobenzene	16.7193	146	466664	47.2415	ug/L	99
93)	n-Butylbenzene	16.9055	91	836685	57.1928	ug/L	98
94)	1,2-Dichlorobenzene	17.1846	146	457285	49.9655	ug/L	100
95)	1,2-Dibromo-3-Chloropropan	18.1048	75	36133	42.4072	ug/L	89
96)	1,2,4-Trichlorobenzene	19.1595	180	333908	48.9843	ug/L	99
97)	Hexachlorobutadiene	19.3042	225	174050	51.3300	ug/L	99
98)	Naphthalene	19.5007	128	653560	46.3470	ug/L	99
99)	1,2,3-Trichlorobenzene	19.7902	180	305142	47.2105	ug/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\031921\11M43407.D Vial: 1
Acq On : 19 Mar 2021 12:34 Operator: CIM
Sample : S1C0383-CCV1 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 22 11:32 2021 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 21B0038 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\031921\11M43407.D Vial: 1
Acq On : 19 Mar 2021 12:34 Operator: CIM
Sample : S1C0383-CCV1 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 21B0038 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	25.000	25.000	0.0	73	0.00
2	T	Dichlorodifluoromethane	50.000	52.840	-5.7	69	0.00
3	P	Chloromethane	50.000	49.853	0.3	74	-0.01
4	C	Vinyl Chloride	50.000	55.134	-10.3	73	-0.01
5	T	1,3-Butadiene	50.000	59.490	-19.0	88	-0.01
6	T	Bromomethane	50.000	45.286	9.4	70	0.00
7	T	Chloroethane	50.000	51.463	-2.9	75	0.00
8	T	Trichlorofluoromethane	50.000	52.693	-5.4	75	-0.01
9	T	Diethyl ether	100.000	90.772	9.2	66	-0.01
10	T	Isoprene	50.000	49.843	0.3	70	0.00
11	T	Acrolein	50.000	47.303	5.4	71	-0.01
12	T	1,1,2-Trichloro-1,2,2-Trifl	50.000	51.445	-2.9	71	-0.01
13	T	Acetone	50.000	41.649	16.7	59	-0.01
14	C	1,1-Dichloroethene	50.000	50.620	-1.2	71	0.00
15	T	Tert-Butyl Alcohol	200.000	146.482	26.8#	53	0.00
16	T	Dimethyl Sulfide	50.000	50.228	-0.5	71	0.00
17	T	Iodomethane	50.000	46.440	7.1	68	0.00
18	T	Methyl acetate	50.000	51.417	-2.8	71	-0.01
19	T	Methylene Chloride	50.000	47.421	5.2	68	-0.01
20	T	Carbon Disulfide	50.000	48.595	2.8	70	0.00
21	T	Acrylonitrile	50.000	44.044	11.9	61	0.00
22	T	Methyl Tert Butyl Ether	50.000	43.593	12.8	60	-0.01
23	T	trans-1,2-Dichloroethene	50.000	49.217	1.6	68	-0.01
24	T	n-Hexane	50.000	54.305	-8.6	77	-0.01
25	T	Diisopropyl ether	100.000	100.600	-0.6	73	0.00
26	T	Vinyl Acetate	50.000	44.912	10.2	61	0.00
27	P	1,1-Dichloroethane	50.000	50.653	-1.3	70	-0.01
28	T	Ethyl-Tert-Butyl ether	100.000	92.522	7.5	67	0.00
29	T	2-Butanone	50.000	40.347	19.3	57	-0.01
30	T	Propionitrile	100.000	80.807	19.2	58	0.00
31	T	2,2-Dichloropropane	50.000	55.228	-10.5	78	0.00
32	T	cis-1,2-Dichloroethene	50.000	47.567	4.9	67	-0.01
33	C	Chloroform	50.000	47.753	4.5	69	-0.01
34	T	1-Bromopropane	50.000	49.396	1.2	71	0.00
35	T	Bromochloromethane	50.000	46.331	7.3	67	0.00
36	T	Tetrahydrofuran	100.000	83.932	16.1	59	-0.01
37	S	Dibromofluoromethane	25.000	24.847	0.6	72	0.00
38	T	1,1,1-Trichloroethane	50.000	49.301	1.4	69	-0.01
39	T	Cyclohexane	50.000	49.921	0.2	72	0.00
40	T	1,1-Dichloropropene	50.000	49.518	1.0	70	-0.01
41	T	Carbon Tetrachloride	50.000	51.588	-3.2	70	-0.01
42	T	Tert-Amyl-Methyl ether	100.000	89.162	10.8	64	0.00
43	S	1,2-Dichloroethane-d4	25.000	24.017	3.9	71	0.00
44	T	1,2-Dichloroethane	50.000	48.555	2.9	70	0.00
45	T	Benzene	50.000	49.730	0.5	70	0.00
46	T	Trichloroethene	50.000	46.459	7.1	65	0.00
47	T	Methylcyclohexane	50.000	50.935	-1.9	73	0.00
48	C	1,2-Dichloropropane	50.000	49.995	0.0	69	-0.01
49	T	1,4-Dioxane	200.000	200.700	-0.3	81	-0.01
50	T	Bromodichloromethane	50.000	48.868	2.3	67	0.00
51	T	Dibromomethane	50.000	48.818	2.4	65	0.00
52	T	2-Chloroethyl Vinyl Ether	50.000	39.022	22.0	58	0.00
53	T	4-Methyl-2-Pentanone	50.000	40.736	18.5	57	0.00
54	T	cis-1,3-Dichloropropene	50.000	49.773	0.5	69	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\031921\11M43407.D Vial: 1
Acq On : 19 Mar 2021 12:34 Operator: CIM
Sample : S1C0383-CCV1 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 21B0038 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
55	T	Dimethyl Disulfide	50.000	45.324	9.4	64	-0.01
56	I	Chlorobenzene-d5	25.000	25.000	0.0	71	0.00
57	S	Toluene-d8	25.000	25.069	-0.3	73	0.00
58	C	Toluene	50.000	49.922	0.2	71	0.00
59	T	Ethyl Methacrylate	50.000	45.289	9.4	61	0.00
60	T	trans-1,3-Dichloropropene	50.000	50.174	-0.3	66	0.00
61	T	1,1,2-Trichloroethane	50.000	45.505	9.0	63	-0.01
62	T	2-Hexanone	50.000	45.289	9.4	59	0.00
63	T	1,3-Dichloropropane	50.000	47.702	4.6	65	0.00
64	T	Tetrachloroethene	50.000	48.701	2.6	69	0.00
65	T	Dibromochloromethane	50.000	47.281	5.4	64	0.00
66	T	1,2-Dibromoethane	50.000	45.386	9.2	61	0.00
67	T	1-Chlorohexane	50.000	53.561	-7.1	72	-0.01
68	P	Chlorobenzene	50.000	47.786	4.4	67	0.00
69	T	1,1,1,2-Tetrachloroethane	50.000	49.877	0.2	67	0.00
70	C	Ethylbenzene	50.000	50.027	-0.1	69	-0.01
71	T	m-,p-Xylene	100.000	102.471	-2.5	70	0.00
72	T	o-Xylene	50.000	50.561	-1.1	69	0.00
73	T	Styrene	50.000	52.762	-5.5	68	0.00
74	P	Bromoform	50.000	46.956	6.1	61	0.00
75	T	Isopropylbenzene	50.000	52.841	-5.7	70	-0.01
76	I	1,4-Dichlorobenzene-d4	25.000	25.000	0.0	73	-0.01
77	P	1,1,2,2-Tetrachloroethane	50.000	49.061	1.9	63	0.00
78	S	p-Bromofluorobenzene	25.000	23.872	4.5	69	0.00
79	T	1,2,3-Trichloropropane	50.000	41.753	16.5	60	-0.01
80	T	trans-1,4-Dichloro-2-Butene	50.000	46.830	6.3	66	0.00
81	T	n-Propylbenzene	50.000	53.803	-7.6	73	0.00
82	T	Bromobenzene	50.000	46.754	6.5	66	0.00
83	T	1,3,5-Trimethylbenzene	50.000	52.245	-4.5	70	0.00
84	T	2-Chlorotoluene	50.000	53.040	-6.1	73	-0.01
85	T	4-Chlorotoluene	50.000	47.232	5.5	66	0.00
86	T	a-Methylstyrene	50.000	50.568	-1.1	70	0.00
87	T	tert-Butylbenzene	50.000	49.709	0.6	68	-0.01
88	T	1,2,4-Trimethylbenzene	50.000	51.669	-3.3	70	0.00
89	T	sec-Butylbenzene	50.000	53.853	-7.7	73	0.00
90	T	p-Isopropyltoluene	50.000	53.863	-7.7	72	0.00
91	T	1,3-Dichlorobenzene	50.000	49.873	0.3	70	0.00
92	T	1,4-Dichlorobenzene	50.000	47.242	5.5	67	0.00
93	T	n-Butylbenzene	50.000	57.193	-14.4	76	0.00
94	T	1,2-Dichlorobenzene	50.000	49.966	0.1	69	0.00
95	T	1,2-Dibromo-3-Chloropropane	50.000	42.407	15.2	58	0.00
96	T	1,2,4-Trichlorobenzene	50.000	48.984	2.0	67	0.00
97	T	Hexachlorobutadiene	50.000	51.330	-2.7	72	0.00
98	T	Naphthalene	50.000	46.347	7.3	62	-0.01
99	T	1,2,3-Trichlorobenzene	50.000	47.210	5.6	66	0.00

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\031921\11M43407.D Vial: 1
Acq On : 19 Mar 2021 12:34 Operator: CIM
Sample : S1C0383-CCV1 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 21B0038 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	1.000	1.000	0.0	73	0.00
2	T	Dichlorodifluoromethane	0.321	0.339	-5.6	69	0.00
3	P	Chloromethane	0.354	0.353	0.3	74	-0.01
4	C	Vinyl Chloride	0.302	0.333	-10.3	73	-0.01
5	T	1,3-Butadiene	0.289	0.344	-19.0	88	-0.01
6	T	Bromomethane	0.243	0.220	9.5	70	0.00
7	T	Chloroethane	0.184	0.190	-3.3	75	0.00
8	T	Trichlorofluoromethane	0.454	0.478	-5.3	75	-0.01
9	T	Diethyl ether	0.228	0.207	9.2	66	-0.01
10	T	Isoprene	0.313	0.312	0.3	70	0.00
11	T	Acrolein	0.028	0.027	3.6	71	-0.01
12	T	1,1,2-Trichloro-1,2,2-Trifl	0.231	0.238	-3.0	71	-0.01
13	T	Acetone	0.079	0.066	16.5	59	-0.01
14	C	1,1-Dichloroethene	0.429	0.435	-1.4	71	0.00
15	T	Tert-Butyl Alcohol	0.023	0.017	26.1#	53	0.00
16	T	Dimethyl Sulfide	0.202	0.203	-0.5	71	0.00
17	T	Iodomethane	0.127	0.153	-20.5	68	0.00
18	T	Methyl acetate	0.193	0.199	-3.1	71	-0.01
19	T	Methylene Chloride	0.265	0.252	4.9	68	-0.01
20	T	Carbon Disulfide	0.670	0.651	2.8	70	0.00
21	T	Acrylonitrile	0.100	0.088	12.0	61	0.00
22	T	Methyl Tert Butyl Ether	0.673	0.587	12.8	60	-0.01
23	T	trans-1,2-Dichloroethene	0.253	0.249	1.6	68	-0.01
24	T	n-Hexane	0.302	0.328	-8.6	77	-0.01
25	T	Diisopropyl ether	1.073	1.080	-0.7	73	0.00
26	T	Vinyl Acetate	0.558	0.501	10.2	61	0.00
27	P	1,1-Dichloroethane	0.514	0.521	-1.4	70	-0.01
28	T	Ethyl-Tert-Butyl ether	0.872	0.807	7.5	67	0.00
29	T	2-Butanone	0.136	0.109	19.9	57	-0.01
30	T	Propionitrile	0.037	0.030	18.9	58	0.00
31	T	2,2-Dichloropropane	0.386	0.426	-10.4	78	0.00
32	T	cis-1,2-Dichloroethene	0.297	0.282	5.1	67	-0.01
33	C	Chloroform	0.506	0.483	4.5	69	-0.01
34	T	1-Bromopropane	0.058	0.057	1.7	71	0.00
35	T	Bromochloromethane	0.166	0.154	7.2	67	0.00
36	T	Tetrahydrofuran	0.087	0.073	16.1	59	-0.01
37	S	Dibromofluoromethane	0.274	0.273	0.4	72	0.00
38	T	1,1,1-Trichloroethane	0.444	0.437	1.6	69	-0.01
39	T	Cyclohexane	0.488	0.488	0.0	72	0.00
40	T	1,1-Dichloropropene	0.367	0.363	1.1	70	-0.01
41	T	Carbon Tetrachloride	0.413	0.426	-3.1	70	-0.01
42	T	Tert-Amyl-Methyl ether	0.696	0.621	10.8	64	0.00
43	S	1,2-Dichloroethane-d4	0.304	0.292	3.9	71	0.00
44	T	1,2-Dichloroethane	0.396	0.384	3.0	70	0.00
45	T	Benzene	1.066	1.061	0.5	70	0.00
46	T	Trichloroethene	0.309	0.287	7.1	65	0.00
47	T	Methylcyclohexane	0.418	0.426	-1.9	73	0.00
48	C	1,2-Dichloropropane	0.299	0.299	0.0	69	-0.01
49	T	1,4-Dioxane	0.002	0.002	0.0	81	-0.01
50	T	Bromodichloromethane	0.387	0.378	2.3	67	0.00
51	T	Dibromomethane	0.156	0.153	1.9	65	0.00
52	T	2-Chloroethyl Vinyl Ether	0.128	0.112	12.5	58	0.00
53	T	4-Methyl-2-Pentanone	0.100	0.081	19.0	57	0.00
54	T	cis-1,3-Dichloropropene	0.435	0.433	0.5	69	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\031921\11M43407.D Vial: 1
Acq On : 19 Mar 2021 12:34 Operator: CIM
Sample : S1C0383-CCV1 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 21B0038 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
55	T	Dimethyl Disulfide	0.229	0.208	9.2	64	-0.01
56	I	Chlorobenzene-d5	1.000	1.000	0.0	71	0.00
57	S	Toluene-d8	1.240	1.243	-0.2	73	0.00
58	C	Toluene	1.451	1.448	0.2	71	0.00
59	T	Ethyl Methacrylate	0.389	0.352	9.5	61	0.00
60	T	trans-1,3-Dichloropropene	0.490	0.492	-0.4	66	0.00
61	T	1,1,2-Trichloroethane	0.293	0.267	8.9	63	-0.01
62	T	2-Hexanone	0.247	0.224	9.3	59	0.00
63	T	1,3-Dichloropropane	0.507	0.484	4.5	65	0.00
64	T	Tetrachloroethene	0.320	0.312	2.5	69	0.00
65	T	Dibromochloromethane	0.379	0.359	5.3	64	0.00
66	T	1,2-Dibromoethane	0.313	0.284	9.3	61	0.00
67	T	1-Chlorohexane	0.464	0.497	-7.1	72	-0.01
68	P	Chlorobenzene	1.024	0.978	4.5	67	0.00
69	T	1,1,1,2-Tetrachloroethane	0.378	0.377	0.3	67	0.00
70	C	Ethylbenzene	0.540	0.540	0.0	69	-0.01
71	T	m-,p-Xylene	0.641	0.656	-2.3	70	0.00
72	T	o-Xylene	0.635	0.642	-1.1	69	0.00
73	T	Styrene	1.011	1.067	-5.5	68	0.00
74	P	Bromoform	0.259	0.243	6.2	61	0.00
75	T	Isopropylbenzene	1.598	1.689	-5.7	70	-0.01
76	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	73	-0.01
77	P	1,1,2,2-Tetrachloroethane	0.627	0.616	1.8	63	0.00
78	S	p-Bromofluorobenzene	0.860	0.821	4.5	69	0.00
79	T	1,2,3-Trichloropropane	0.226	0.189	16.4	60	-0.01
80	T	trans-1,4-Dichloro-2-Butene	0.234	0.219	6.4	66	0.00
81	T	n-Propylbenzene	3.453	3.715	-7.6	73	0.00
82	T	Bromobenzene	0.837	0.783	6.5	66	0.00
83	T	1,3,5-Trimethylbenzene	2.501	2.613	-4.5	70	0.00
84	T	2-Chlorotoluene	2.271	2.409	-6.1	73	-0.01
85	T	4-Chlorotoluene	1.991	1.881	5.5	66	0.00
86	T	a-Methylstyrene	1.275	1.290	-1.2	70	0.00
87	T	tert-Butylbenzene	0.582	0.579	0.5	68	-0.01
88	T	1,2,4-Trimethylbenzene	2.529	2.614	-3.4	70	0.00
89	T	sec-Butylbenzene	3.229	3.478	-7.7	73	0.00
90	T	p-Isopropyltoluene	2.719	2.929	-7.7	72	0.00
91	T	1,3-Dichlorobenzene	1.583	1.578	0.3	70	0.00
92	T	1,4-Dichlorobenzene	1.595	1.507	5.5	67	0.00
93	T	n-Butylbenzene	2.362	2.702	-14.4	76	0.00
94	T	1,2-Dichlorobenzene	1.478	1.477	0.1	69	0.00
95	T	1,2-Dibromo-3-Chloropropane	0.138	0.117	15.2	58	0.00
96	T	1,2,4-Trichlorobenzene	1.101	1.078	2.1	67	0.00
97	T	Hexachlorobutadiene	0.548	0.562	-2.6	72	0.00
98	T	Naphthalene	2.277	2.111	7.3	62	-0.01
99	T	1,2,3-Trichlorobenzene	1.044	0.986	5.6	66	0.00

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\031921\11M43429.D Vial: 23
Acq On : 19 Mar 2021 23:27 Operator: CIM
Sample : S1C0383-LCV1 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 22 11:39:16 2021 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 21B0038 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.2365	96	307535	25.0000	ug/L	-0.0102
56) Chlorobenzene-d5	13.8657	117	236342	25.0000	ug/L	-0.0102
76) 1,4-Dichlorobenzene-d4	16.6780	152	121145	25.0000	ug/L	-0.0102
System Monitoring Compounds						
37) Dibromofluoromethane	9.2542	111	86805	25.7261	ug/L	0.0000
Spiked Amount 25.0000	Range 86 - 118		Recovery = 102.9044%			
43) 1,2-Dichloroethane-d4	9.8642	65	95879	25.6354	ug/L	0.0000
Spiked Amount 25.0000	Range 80 - 120		Recovery = 102.5416%			
57) Toluene-d8	12.0976	98	312014	26.6262	ug/L	-0.0103
Spiked Amount 25.0000	Range 88 - 110		Recovery = 106.5048%			
78) p-Bromofluorobenzene	15.2615	95	109709	26.3317	ug/L	-0.0102
Spiked Amount 25.0000	Range 86 - 115		Recovery = 105.3268%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.0091	85	227048	57.4637	ug/L	97
3) Chloromethane	3.4330	50	243108	55.7786	ug/L	100
4) Vinyl Chloride	3.6502	62	232387	62.4737	ug/L	99
5) 1,3-Butadiene	3.6915	54	233370	65.7033	ug/L	87
6) Bromomethane	4.4980	94	142176	47.6200	ug/L	97
7) Chloroethane	4.6531	64	129251	57.0362	ug/L	97
8) Trichlorofluoromethane	5.1184	101	311034	55.7248	ug/L	99
9) Diethyl ether	5.6353	59	281340	100.4639	ug/L	97
10) Isoprene	5.6664	67	211562	54.9714	ug/L	98
11) Acrolein	5.8732	56	16020	46.1038	ug/L	99
12) 1,1,2-Trichloro-1,2,2-Trif	5.8835	101	154775	54.3884	ug/L	96
13) Acetone	5.9662	43	49922	51.0692	ug/L	100
14) 1,1-Dichloroethene	6.1730	61	293339	55.5603	ug/L	98
15) Tert-Butyl Alcohol	6.2971	59	45571	158.9758	ug/L	97
16) Dimethyl Sulfide	6.4315	62	140832	56.7836	ug/L	97
17) Iodomethane	6.6796	142	112937	55.5536	ug/L	99
18) Methyl acetate	6.6900	43	144179	60.6242	ug/L	99
19) Methylene Chloride	6.9381	84	168350	51.5511	ug/L	87
20) Carbon Disulfide	6.9692	76	438995	53.2617	ug/L	100
21) Acrylonitrile	7.1139	53	64050	52.0516	ug/L	99
22) Methyl Tert Butyl Ether	7.1449	73	413513	49.9322	ug/L	99
23) trans-1,2-Dichloroethene	7.3724	96	172931	55.5005	ug/L	98
24) n-Hexane	7.4448	57	189705	51.0341	ug/L	99
25) Diisopropyl ether	7.7756	45	1499434	113.5808	ug/L	98
26) Vinyl Acetate	7.9411	43	157034	22.8716	ug/L	98
27) 1,1-Dichloroethane	7.9721	63	356460	56.3777	ug/L	99
28) Ethyl-Tert-Butyl ether	8.3340	59	1119735	104.3518	ug/L	99
29) 2-Butanone	8.5098	43	80597	48.2930	ug/L	98
30) Propionitrile	8.6131	54	44066	96.2486	ug/L	98
31) 2,2-Dichloropropane	8.7165	77	210306	44.2999	ug/L	100
32) cis-1,2-Dichloroethene	8.7786	96	191072	52.3416	ug/L	97
33) Chloroform	8.9750	83	325231	52.2838	ug/L	99
34) 1-Bromopropane	9.1095	122	38332	53.8962	ug/L	97
35) Bromochloromethane	9.1922	130	105434	51.6284	ug/L	91
36) Tetrahydrofuran	9.2232	42	111053	103.3038	ug/L	98
38) 1,1,1-Trichloroethane	9.4817	97	296768	54.3879	ug/L	95
39) Cyclohexane	9.5127	56	334049	55.6030	ug/L	98
40) 1,1-Dichloropropene	9.6678	75	244058	54.0980	ug/L	99
41) Carbon Tetrachloride	9.8022	117	282046	55.5631	ug/L	97
42) Tert-Amyl-Methyl ether	9.7712	73	878401	102.5826	ug/L	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\031921\11M43429.D Vial: 23
Acq On : 19 Mar 2021 23:27 Operator: CIM
Sample : S1C0383-LCV1 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 22 11:39:16 2021 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 21B0038 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration
DataAcq Meth : 8260WTR

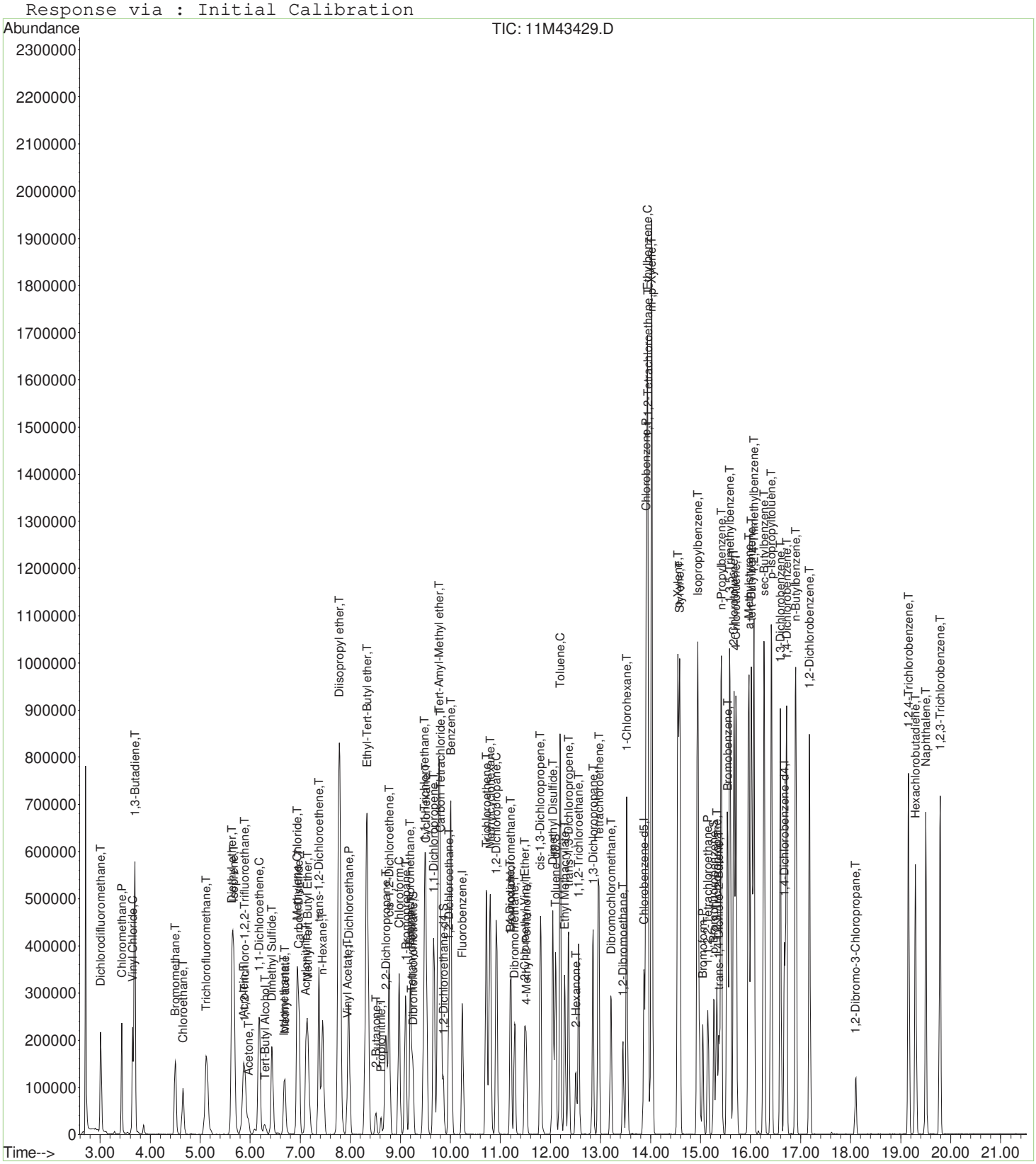
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44)	1,2-Dichloroethane	9.9676	62	259554	53.3043	ug/L	96
45)	Benzene	10.0090	78	732619	55.8542	ug/L	100
46)	Trichloroethene	10.7224	130	215592	56.7729	ug/L	99
47)	Methylcyclohexane	10.7948	83	281819	54.7769	ug/L	98
48)	1,2-Dichloropropane	10.9189	63	206436	56.1503	ug/L	99
49)	1,4-Dioxane	11.1981	88	3081	125.1669	ug/L	88
50)	Bromodichloromethane	11.2084	83	256581	53.9653	ug/L	99
51)	Dibromomethane	11.2808	93	104416	54.2660	ug/L	97
52)	2-Chloroethyl Vinyl Ether	11.4876	63	87467	49.0751	ug/L	96
53)	4-Methyl-2-Pentanone	11.5186	58	60863	49.6990	ug/L	95
54)	cis-1,3-Dichloropropene	11.7978	75	283098	52.9102	ug/L	98
55)	Dimethyl Disulfide	12.0459	79	146052	51.8030	ug/L	99
58)	Toluene	12.1907	91	752184	54.8489	ug/L	100
59)	Ethyl Methacrylate	12.2837	69	191931	52.2112	ug/L	92
60)	trans-1,3-Dichloropropene	12.3664	75	248533	53.6240	ug/L	100
61)	1,1,2-Trichloroethane	12.5629	97	145127	52.3964	ug/L	97
62)	2-Hexanone	12.5112	43	127700	54.6735	ug/L	98
63)	1,3-Dichloropropane	12.8524	76	258585	53.9707	ug/L	93
64)	Tetrachloroethene	12.9661	164	157282	51.9830	ug/L	99
65)	Dibromochloromethane	13.2143	129	191249	53.3300	ug/L	100
66)	1,2-Dibromoethane	13.4521	107	152478	51.5952	ug/L	99
67)	1-Chlorohexane	13.5245	91	247727	56.5147	ug/L	96
68)	Chlorobenzene	13.9174	112	523731	54.1177	ug/L	98
69)	1,1,1,2-Tetrachloroethane	13.9484	131	198313	55.5218	ug/L	100
70)	Ethylbenzene	13.9380	106	283192	55.5185	ug/L	99
71)	m-,p-Xylene	14.0208	106	680813	112.4246	ug/L	97
72)	o-Xylene	14.5481	106	330830	55.1230	ug/L	96
73)	Styrene	14.5791	104	551774	57.7459	ug/L	99
74)	Bromoform	15.0444	173	130809	53.4247	ug/L	99
75)	Isopropylbenzene	14.9410	105	873939	57.8580	ug/L	100
77)	1,1,2,2-Tetrachloroethane	15.1478	83	164594	54.1421	ug/L	99
79)	1,2,3-Trichloropropane	15.3235	110	56198	51.2671	ug/L	93
80)	trans-1,4-Dichloro-2-Buten	15.3649	53	60179	53.0987	ug/L	93
81)	n-Propylbenzene	15.4166	91	1043849	62.3925	ug/L	99
82)	Bromobenzene	15.5407	156	227003	55.9552	ug/L	94
83)	1,3,5-Trimethylbenzene	15.5820	105	734530	60.6166	ug/L	100
84)	2-Chlorotoluene	15.6648	91	605422	55.0244	ug/L	88
85)	4-Chlorotoluene	15.7061	91	609588	63.1731	ug/L	88
86)	a-Methylstyrene	15.9646	118	361377	58.4791	ug/L	99
87)	tert-Butylbenzene	16.0163	134	165897	58.8322	ug/L	94
88)	1,2,4-Trimethylbenzene	16.0680	105	736057	60.0561	ug/L	98
89)	sec-Butylbenzene	16.2644	105	968169	61.8718	ug/L	99
90)	p-Isopropyltoluene	16.4092	119	808949	61.3966	ug/L	100
91)	1,3-Dichlorobenzene	16.5953	146	436721	56.9499	ug/L	99
92)	1,4-Dichlorobenzene	16.7194	146	429923	55.6172	ug/L	100
93)	n-Butylbenzene	16.9055	91	720636	62.9499	ug/L	97
94)	1,2-Dichlorobenzene	17.1743	146	409452	57.1723	ug/L	99
95)	1,2-Dibromo-3-Chloropropan	18.0946	75	35670	53.4981	ug/L	88
96)	1,2,4-Trichlorobenzene	19.1595	180	281608	52.7928	ug/L	99
97)	Hexachlorobutadiene	19.2939	225	138881	52.3406	ug/L	99
98)	Naphthalene	19.5007	128	611748	55.4380	ug/L	98
99)	1,2,3-Trichlorobenzene	19.7902	180	267246	52.8380	ug/L	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\031921\11M43429.D Vial: 23
Acq On : 19 Mar 2021 23:27 Operator: CIM
Sample : S1C0383-LCV1 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 22 11:39 2021 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 21B0038 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\031921\11M43429.D Vial: 23
Acq On : 19 Mar 2021 23:27 Operator: CIM
Sample : S1C0383-LCV1 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 21B0038 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	25.000	25.000	0.0	61	-0.01
2	T	Dichlorodifluoromethane	50.000	57.464	-14.9	63	-0.01
3	P	Chloromethane	50.000	55.779	-11.6	69	-0.01
4	C	Vinyl Chloride	50.000	62.474	-24.9#	69	-0.01
5	T	1,3-Butadiene	50.000	65.703	-31.4#	81	-0.01
6	T	Bromomethane	50.000	47.620	4.8	61	-0.01
7	T	Chloroethane	50.000	57.036	-14.1	69	0.00
8	T	Trichlorofluoromethane	50.000	55.725	-11.5	66	-0.02
9	T	Diethyl ether	100.000	100.464	-0.5	61	-0.01
10	T	Isoprene	50.000	54.971	-9.9	65	-0.01
11	T	Acrolein	50.000	46.104	7.8	58	-0.01
12	T	1,1,2-Trichloro-1,2,2-Trifl	50.000	54.388	-8.8	63	-0.01
13	T	Acetone	50.000	51.069	-2.1	60	-0.01
14	C	1,1-Dichloroethene	50.000	55.560	-11.1	65	-0.01
15	T	Tert-Butyl Alcohol	200.000	158.976	20.5	48	0.00
16	T	Dimethyl Sulfide	50.000	56.784	-13.6	67	-0.01
17	T	Iodomethane	50.000	55.554	-11.1	68	0.00
18	T	Methyl acetate	50.000	60.624	-21.2	70	-0.02
19	T	Methylene Chloride	50.000	51.551	-3.1	62	-0.01
20	T	Carbon Disulfide	50.000	53.262	-6.5	64	-0.01
21	T	Acrylonitrile	50.000	52.052	-4.1	60	-0.01
22	T	Methyl Tert Butyl Ether	50.000	49.932	0.1	57	-0.01
23	T	trans-1,2-Dichloroethene	50.000	55.501	-11.0	64	-0.01
24	T	n-Hexane	50.000	51.034	-2.1	60	-0.01
25	T	Diisopropyl ether	100.000	113.581	-13.6	68	-0.01
26	T	Vinyl Acetate	50.000	22.872	54.3#	26	-0.01
27	P	1,1-Dichloroethane	50.000	56.378	-12.8	65	-0.01
28	T	Ethyl-Tert-Butyl ether	100.000	104.352	-4.4	63	0.00
29	T	2-Butanone	50.000	48.293	3.4	57	-0.01
30	T	Propionitrile	100.000	96.249	3.8	58	0.00
31	T	2,2-Dichloropropane	50.000	44.300	11.4	52	0.00
32	T	cis-1,2-Dichloroethene	50.000	52.342	-4.7	61	-0.01
33	C	Chloroform	50.000	52.284	-4.6	63	-0.01
34	T	1-Bromopropane	50.000	53.896	-7.8	65	0.00
35	T	Bromochloromethane	50.000	51.628	-3.3	62	-0.01
36	T	Tetrahydrofuran	100.000	103.304	-3.3	61	-0.01
37	S	Dibromofluoromethane	25.000	25.726	-2.9	62	0.00
38	T	1,1,1-Trichloroethane	50.000	54.388	-8.8	64	-0.01
39	T	Cyclohexane	50.000	55.603	-11.2	67	0.00
40	T	1,1-Dichloropropene	50.000	54.098	-8.2	64	-0.01
41	T	Carbon Tetrachloride	50.000	55.563	-11.1	63	-0.01
42	T	Tert-Amyl-Methyl ether	100.000	102.583	-2.6	61	0.00
43	S	1,2-Dichloroethane-d4	25.000	25.635	-2.5	63	0.00
44	T	1,2-Dichloroethane	50.000	53.304	-6.6	64	-0.01
45	T	Benzene	50.000	55.854	-11.7	66	0.00
46	T	Trichloroethene	50.000	56.773	-13.5	67	0.00
47	T	Methylcyclohexane	50.000	54.777	-9.6	65	0.00
48	C	1,2-Dichloropropane	50.000	56.150	-12.3	65	-0.01
49	T	1,4-Dioxane	200.000	125.167	37.4#	42	-0.01
50	T	Bromodichloromethane	50.000	53.965	-7.9	62	0.00
51	T	Dibromomethane	50.000	54.266	-8.5	61	-0.01
52	T	2-Chloroethyl Vinyl Ether	50.000	49.075	1.8	61	0.00
53	T	4-Methyl-2-Pentanone	50.000	49.699	0.6	58	0.00
54	T	cis-1,3-Dichloropropene	50.000	52.910	-5.8	61	-0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\031921\11M43429.D Vial: 23
Acq On : 19 Mar 2021 23:27 Operator: CIM
Sample : S1C0383-LCV1 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 21B0038 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
55	T	Dimethyl Disulfide	50.000	51.803	-3.6	61	-0.01
56	I	Chlorobenzene-d5	25.000	25.000	0.0	60	-0.01
57	S	Toluene-d8	25.000	26.626	-6.5	65	-0.01
58	C	Toluene	50.000	54.849	-9.7	65	-0.01
59	T	Ethyl Methacrylate	50.000	52.211	-4.4	59	-0.01
60	T	trans-1,3-Dichloropropene	50.000	53.624	-7.2	59	0.00
61	T	1,1,2-Trichloroethane	50.000	52.396	-4.8	61	-0.01
62	T	2-Hexanone	50.000	54.673	-9.3	60	0.00
63	T	1,3-Dichloropropane	50.000	53.971	-7.9	62	0.00
64	T	Tetrachloroethene	50.000	51.983	-4.0	62	0.00
65	T	Dibromochloromethane	50.000	53.330	-6.7	61	0.00
66	T	1,2-Dibromoethane	50.000	51.595	-3.2	58	0.00
67	T	1-Chlorohexane	50.000	56.515	-13.0	64	-0.01
68	P	Chlorobenzene	50.000	54.118	-8.2	64	0.00
69	T	1,1,1,2-Tetrachloroethane	50.000	55.522	-11.0	62	0.00
70	C	Ethylbenzene	50.000	55.519	-11.0	64	-0.01
71	T	m-,p-Xylene	100.000	112.425	-12.4	64	-0.01
72	T	o-Xylene	50.000	55.123	-10.2	63	0.00
73	T	Styrene	50.000	57.746	-15.5	63	-0.01
74	P	Bromoform	50.000	53.425	-6.8	58	0.00
75	T	Isopropylbenzene	50.000	57.858	-15.7	64	-0.01
76	I	1,4-Dichlorobenzene-d4	25.000	25.000	0.0	57	-0.01
77	P	1,1,2,2-Tetrachloroethane	50.000	54.142	-8.3	55	0.00
78	S	p-Bromofluorobenzene	25.000	26.332	-5.3	60	-0.01
79	T	1,2,3-Trichloropropane	50.000	51.267	-2.5	58	-0.01
80	T	trans-1,4-Dichloro-2-Butene	50.000	53.099	-6.2	59	-0.01
81	T	n-Propylbenzene	50.000	62.392	-24.8	66	0.00
82	T	Bromobenzene	50.000	55.955	-11.9	62	0.00
83	T	1,3,5-Trimethylbenzene	50.000	60.617	-21.2	64	-0.01
84	T	2-Chlorotoluene	50.000	55.024	-10.0	59	-0.01
85	T	4-Chlorotoluene	50.000	63.173	-26.3#	69	-0.01
86	T	a-Methylstyrene	50.000	58.479	-17.0	63	0.00
87	T	tert-Butylbenzene	50.000	58.832	-17.7	63	-0.01
88	T	1,2,4-Trimethylbenzene	50.000	60.056	-20.1	64	0.00
89	T	sec-Butylbenzene	50.000	61.872	-23.7	65	-0.01
90	T	p-Isopropyltoluene	50.000	61.397	-22.8	64	-0.01
91	T	1,3-Dichlorobenzene	50.000	56.950	-13.9	62	-0.01
92	T	1,4-Dichlorobenzene	50.000	55.617	-11.2	62	0.00
93	T	n-Butylbenzene	50.000	62.950	-25.9#	65	0.00
94	T	1,2-Dichlorobenzene	50.000	57.172	-14.3	62	-0.01
95	T	1,2-Dibromo-3-Chloropropane	50.000	53.498	-7.0	58	-0.01
96	T	1,2,4-Trichlorobenzene	50.000	52.793	-5.6	57	0.00
97	T	Hexachlorobutadiene	50.000	52.341	-4.7	58	-0.01
98	T	Naphthalene	50.000	55.438	-10.9	58	-0.01
99	T	1,2,3-Trichlorobenzene	50.000	52.838	-5.7	58	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 1

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\031921\11M43429.D Vial: 23
Acq On : 19 Mar 2021 23:27 Operator: CIM
Sample : S1C0383-LCV1 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 21B0038 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	1.000	1.000	0.0	61	-0.01
2	T	Dichlorodifluoromethane	0.321	0.369	-15.0	63	-0.01
3	P	Chloromethane	0.354	0.395	-11.6	69	-0.01
4	C	Vinyl Chloride	0.302	0.378	-25.2#	69	-0.01
5	T	1,3-Butadiene	0.289	0.379	-31.1#	81	-0.01
6	T	Bromomethane	0.243	0.231	4.9	61	-0.01
7	T	Chloroethane	0.184	0.210	-14.1	69	0.00
8	T	Trichlorofluoromethane	0.454	0.506	-11.5	66	-0.02
9	T	Diethyl ether	0.228	0.229	-0.4	61	-0.01
10	T	Isoprene	0.313	0.344	-9.9	65	-0.01
11	T	Acrolein	0.028	0.026	7.1	58	-0.01
12	T	1,1,2-Trichloro-1,2,2-Trifl	0.231	0.252	-9.1	63	-0.01
13	T	Acetone	0.079	0.081	-2.5	60	-0.01
14	C	1,1-Dichloroethene	0.429	0.477	-11.2	65	-0.01
15	T	Tert-Butyl Alcohol	0.023	0.019	17.4	48#	0.00
16	T	Dimethyl Sulfide	0.202	0.229	-13.4	67	-0.01
17	T	Iodomethane	0.127	0.184	-44.9#	68	0.00
18	T	Methyl acetate	0.193	0.234	-21.2	70	-0.02
19	T	Methylene Chloride	0.265	0.274	-3.4	62	-0.01
20	T	Carbon Disulfide	0.670	0.714	-6.6	64	-0.01
21	T	Acrylonitrile	0.100	0.104	-4.0	60	-0.01
22	T	Methyl Tert Butyl Ether	0.673	0.672	0.1	57	-0.01
23	T	trans-1,2-Dichloroethene	0.253	0.281	-11.1	64	-0.01
24	T	n-Hexane	0.302	0.308	-2.0	60	-0.01
25	T	Diisopropyl ether	1.073	1.219	-13.6	68	-0.01
26	T	Vinyl Acetate	0.558	0.255	54.3#	26#	-0.01
27	P	1,1-Dichloroethane	0.514	0.580	-12.8	65	-0.01
28	T	Ethyl-Tert-Butyl ether	0.872	0.910	-4.4	63	0.00
29	T	2-Butanone	0.136	0.131	3.7	57	-0.01
30	T	Propionitrile	0.037	0.036	2.7	58	0.00
31	T	2,2-Dichloropropane	0.386	0.342	11.4	52	0.00
32	T	cis-1,2-Dichloroethene	0.297	0.311	-4.7	61	-0.01
33	C	Chloroform	0.506	0.529	-4.5	63	-0.01
34	T	1-Bromopropane	0.058	0.062	-6.9	65	0.00
35	T	Bromochloromethane	0.166	0.171	-3.0	62	-0.01
36	T	Tetrahydrofuran	0.087	0.090	-3.4	61	-0.01
37	S	Dibromofluoromethane	0.274	0.282	-2.9	62	0.00
38	T	1,1,1-Trichloroethane	0.444	0.482	-8.6	64	-0.01
39	T	Cyclohexane	0.488	0.543	-11.3	67	0.00
40	T	1,1-Dichloropropene	0.367	0.397	-8.2	64	-0.01
41	T	Carbon Tetrachloride	0.413	0.459	-11.1	63	-0.01
42	T	Tert-Amyl-Methyl ether	0.696	0.714	-2.6	61	0.00
43	S	1,2-Dichloroethane-d4	0.304	0.312	-2.6	63	0.00
44	T	1,2-Dichloroethane	0.396	0.422	-6.6	64	-0.01
45	T	Benzene	1.066	1.191	-11.7	66	0.00
46	T	Trichloroethene	0.309	0.351	-13.6	67	0.00
47	T	Methylcyclohexane	0.418	0.458	-9.6	65	0.00
48	C	1,2-Dichloropropane	0.299	0.336	-12.4	65	-0.01
49	T	1,4-Dioxane	0.002	0.001	50.0#	42#	-0.01
50	T	Bromodichloromethane	0.387	0.417	-7.8	62	0.00
51	T	Dibromomethane	0.156	0.170	-9.0	61	-0.01
52	T	2-Chloroethyl Vinyl Ether	0.128	0.142	-10.9	61	0.00
53	T	4-Methyl-2-Pentanone	0.100	0.099	1.0	58	0.00
54	T	cis-1,3-Dichloropropene	0.435	0.460	-5.7	61	-0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\031921\11M43429.D Vial: 23
Acq On : 19 Mar 2021 23:27 Operator: CIM
Sample : S1C0383-LCV1 Inst : hpms11
Misc : 1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B(SOP: OVL MSV01) Water 022221 21B0038 HPMS11
Last Update : Thu Feb 25 14:04:08 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
55	T	Dimethyl Disulfide	0.229	0.237	-3.5	61	-0.01
56	I	Chlorobenzene-d5	1.000	1.000	0.0	60	-0.01
57	S	Toluene-d8	1.240	1.320	-6.5	65	-0.01
58	C	Toluene	1.451	1.591	-9.6	65	-0.01
59	T	Ethyl Methacrylate	0.389	0.406	-4.4	59	-0.01
60	T	trans-1,3-Dichloropropene	0.490	0.526	-7.3	59	0.00
61	T	1,1,2-Trichloroethane	0.293	0.307	-4.8	61	-0.01
62	T	2-Hexanone	0.247	0.270	-9.3	60	0.00
63	T	1,3-Dichloropropane	0.507	0.547	-7.9	62	0.00
64	T	Tetrachloroethene	0.320	0.333	-4.1	62	0.00
65	T	Dibromochloromethane	0.379	0.405	-6.9	61	0.00
66	T	1,2-Dibromoethane	0.313	0.323	-3.2	58	0.00
67	T	1-Chlorohexane	0.464	0.524	-12.9	64	-0.01
68	P	Chlorobenzene	1.024	1.108	-8.2	64	0.00
69	T	1,1,1,2-Tetrachloroethane	0.378	0.420	-11.1	62	0.00
70	C	Ethylbenzene	0.540	0.599	-10.9	64	-0.01
71	T	m-,p-Xylene	0.641	0.720	-12.3	64	-0.01
72	T	o-Xylene	0.635	0.700	-10.2	63	0.00
73	T	Styrene	1.011	1.167	-15.4	63	-0.01
74	P	Bromoform	0.259	0.277	-6.9	58	0.00
75	T	Isopropylbenzene	1.598	1.849	-15.7	64	-0.01
76	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	57	-0.01
77	P	1,1,2,2-Tetrachloroethane	0.627	0.679	-8.3	55	0.00
78	S	p-Bromofluorobenzene	0.860	0.906	-5.3	60	-0.01
79	T	1,2,3-Trichloropropane	0.226	0.232	-2.7	58	-0.01
80	T	trans-1,4-Dichloro-2-Butene	0.234	0.248	-6.0	59	-0.01
81	T	n-Propylbenzene	3.453	4.308	-24.8	66	0.00
82	T	Bromobenzene	0.837	0.937	-11.9	62	0.00
83	T	1,3,5-Trimethylbenzene	2.501	3.032	-21.2	64	-0.01
84	T	2-Chlorotoluene	2.271	2.499	-10.0	59	-0.01
85	T	4-Chlorotoluene	1.991	2.516	-26.4#	69	-0.01
86	T	a-Methylstyrene	1.275	1.492	-17.0	63	0.00
87	T	tert-Butylbenzene	0.582	0.685	-17.7	63	-0.01
88	T	1,2,4-Trimethylbenzene	2.529	3.038	-20.1	64	0.00
89	T	sec-Butylbenzene	3.229	3.996	-23.8	65	-0.01
90	T	p-Isopropyltoluene	2.719	3.339	-22.8	64	-0.01
91	T	1,3-Dichlorobenzene	1.583	1.802	-13.8	62	-0.01
92	T	1,4-Dichlorobenzene	1.595	1.774	-11.2	62	0.00
93	T	n-Butylbenzene	2.362	2.974	-25.9#	65	0.00
94	T	1,2-Dichlorobenzene	1.478	1.690	-14.3	62	-0.01
95	T	1,2-Dibromo-3-Chloropropane	0.138	0.147	-6.5	58	-0.01
96	T	1,2,4-Trichlorobenzene	1.101	1.162	-5.5	57	0.00
97	T	Hexachlorobutadiene	0.548	0.573	-4.6	58	-0.01
98	T	Naphthalene	2.277	2.525	-10.9	58	-0.01
99	T	1,2,3-Trichlorobenzene	1.044	1.103	-5.7	58	0.00

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Analysis Class

Metals

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Metals - Class Narrative and Notes

All test results meet the requirements of the QAPP and other applicable contract terms and conditions . Any exceptions are listed below in the sample and qc notes sections. Analytical results are reported on a 'as received' basis unless specified otherwise. Analytical results for solids with units ending in (dry) are reported on a dry weight basis. A statement of uncertainty for each analysis is available upon request.

QC Sample Notes

U	**The analyte was analyzed for but was not detected above the reported quantitation limit. The quantitation limit has been adjusted for any dilution or concentration of the sample.**

EPA 6010B

Arsenic

S1C0365-CAL2	Cal Standard

Cadmium

S1C0365-CCBA	Calibration Blank

Selenium

S1C0365-CAL2	Cal Standard

EPA 7470A

Mercury

S1C0346-CAL1	Cal Standard

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Metals
EPA 6010B

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FORM I:
Metals
EPA 6010B
RESULTS SUMMARY

Microbac Laboratories, Inc.
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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

Microbac Laboratories Inc., - Marietta, OH

Metals TCLP by ICP

CERTIFICATE OF ANALYSIS
FORM I

Client ID:	Soil IDW			**Collection Date:**	03/11/2021 10:00
Laboratory ID:	M1C1317-01	**PrePrep Method:**	1311 EX	**Prep Date:**	03/17/2021 11:19
Matrix:	Solid	**Prep Method:**	EPA 3015A	**Analyzed:**	03/18/2021 10:26
Batch / Sequence:	B1C1005 / S1C0365	**Analytical Method:**	EPA 6010B	**Calibration:**	UNASSIGNED
Instrument:	ICP-THERMO4	**Units:**	mg/L	**File ID:**	031821T4-1R-024
Analyst:	KHL	**Dilution:**	1	**% Solids:**	87.31

Analyte	CAS Number	Result	DL	LOD	LOQ	Flag	Qual
Arsenic	7440-38-2	0.200	0.100	0.200	0.200	U	
Barium	7440-39-3	0.875	0.0500	0.100	0.100		
Cadmium	7440-43-9	0.0200	0.0100	0.0200	0.0200	U	
Chromium	7440-47-3	0.0500	0.0250	0.0500	0.0500	U	
Lead	7439-92-1	0.200	0.100	0.200	0.200	U	
Selenium	7782-49-2	0.350	0.175	0.350	0.350	U	
Silver	7440-22-4	0.100	0.0500	0.100	0.100	U	

Notes and Definitions

DL: Detection Limit
LOD: Limit of Detection
LOQ: Limit of Quantitation
mg/L: Milligrams per Liter
U: The analyte was analyzed for but was not detected above the reported quantitation limit. The quantitation limit has been adjusted for any dilution or concentration of the sample.

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FORM II:
Metals
EPA 6010B
ICV/CCV SUMMARY

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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

INITIAL AND CONTINUING CALIBRATION CHECK
FORM II

Instrument: ICP-THERMO4
Sequence: S1C0365
Control Limt: +/- 10.00%

Method: EPA 6010B
File ID: 031821T4-1R-006
Analyst: KHL

Lab Sample ID	Analyte	True	Found	%R	Units	Date/Time	Q
S1C0365-ICV1	Arsenic	0.400	0.392	98.0	mg/L	03/18/21 09:16	
	Barium	1.00	0.998	99.8	mg/L	03/18/21 09:16	
	Cadmium	0.0500	0.0487	97.5	mg/L	03/18/21 09:16	
	Chromium	0.500	0.499	99.8	mg/L	03/18/21 09:16	
	Lead	0.500	0.492	98.5	mg/L	03/18/21 09:16	
	Selenium	0.400	0.393	98.2	mg/L	03/18/21 09:16	
	Silver	0.400	0.395	98.7	mg/L	03/18/21 09:16	
S1C0365-CCV1	Arsenic	0.400	0.388	96.9	mg/L	03/18/21 09:31	
	Barium	1.00	0.994	99.4	mg/L	03/18/21 09:31	
	Cadmium	0.0500	0.0493	98.5	mg/L	03/18/21 09:31	
	Chromium	0.500	0.494	98.8	mg/L	03/18/21 09:31	
	Lead	0.500	0.500	99.9	mg/L	03/18/21 09:31	
	Selenium	0.400	0.391	97.9	mg/L	03/18/21 09:31	
	Silver	0.400	0.395	98.8	mg/L	03/18/21 09:31	
S1C0365-CCV2	Arsenic	0.400	0.386	96.6	mg/L	03/18/21 10:30	
	Barium	1.00	1.03	103	mg/L	03/18/21 10:30	
	Cadmium	0.0500	0.0514	103	mg/L	03/18/21 10:30	
	Chromium	0.500	0.508	102	mg/L	03/18/21 10:30	
	Lead	0.500	0.523	105	mg/L	03/18/21 10:30	
	Selenium	0.400	0.396	99.1	mg/L	03/18/21 10:30	
	Silver	0.400	0.418	105	mg/L	03/18/21 10:30	
S1C0365-CCV3	Arsenic	0.400	0.401	100	mg/L	03/18/21 11:14	
	Barium	1.00	1.03	103	mg/L	03/18/21 11:14	
	Cadmium	0.0500	0.0523	105	mg/L	03/18/21 11:14	
	Chromium	0.500	0.512	102	mg/L	03/18/21 11:14	
	Lead	0.500	0.535	107	mg/L	03/18/21 11:14	
	Selenium	0.400	0.409	102	mg/L	03/18/21 11:14	
	Silver	0.400	0.422	105	mg/L	03/18/21 11:14	
S1C0365-CCV4	Arsenic	0.400	0.402	100	mg/L	03/18/21 11:25	
	Barium	1.00	1.03	103	mg/L	03/18/21 11:25	
	Cadmium	0.0500	0.0519	104	mg/L	03/18/21 11:25	
	Chromium	0.500	0.509	102	mg/L	03/18/21 11:25	
	Lead	0.500	0.529	106	mg/L	03/18/21 11:25	
	Selenium	0.400	0.402	101	mg/L	03/18/21 11:25	

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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

INITIAL AND CONTINUING CALIBRATION CHECK
FORM II

Instrument: ICP-THERMO4
Sequence: S1C0365
Control Limt: +/- 10.00%

Method: EPA 6010B
File ID: 031821T4-1R-040
Analyst: KHL

Lab Sample ID	Analyte	True	Found	%R	Units	Date/Time	Q
S1C0365-CCV4	Silver	0.400	0.419	105	mg/L	03/18/21 11:25	
S1C0365-CCV5	Arsenic	0.400	0.387	96.8	mg/L	03/18/21 12:10	
	Barium	1.00	1.02	102	mg/L	03/18/21 12:10	
	Cadmium	0.0500	0.0516	103	mg/L	03/18/21 12:10	
	Chromium	0.500	0.506	101	mg/L	03/18/21 12:10	
	Lead	0.500	0.525	105	mg/L	03/18/21 12:10	
	Selenium	0.400	0.393	98.2	mg/L	03/18/21 12:10	
	Silver	0.400	0.418	105	mg/L	03/18/21 12:10	
S1C0365-CCV6	Arsenic	0.400	0.382	95.6	mg/L	03/18/21 12:55	
	Barium	1.00	0.991	99.1	mg/L	03/18/21 12:55	
	Cadmium	0.0500	0.0501	100	mg/L	03/18/21 12:55	
	Chromium	0.500	0.489	97.9	mg/L	03/18/21 12:55	
	Lead	0.500	0.508	102	mg/L	03/18/21 12:55	
	Selenium	0.400	0.390	97.5	mg/L	03/18/21 12:55	
	Silver	0.400	0.404	101	mg/L	03/18/21 12:55	
S1C0365-CCV7	Arsenic	0.400	0.382	95.6	mg/L	03/18/21 13:06	
	Barium	1.00	0.992	99.2	mg/L	03/18/21 13:06	
	Cadmium	0.0500	0.0490	98.1	mg/L	03/18/21 13:06	
	Chromium	0.500	0.492	98.5	mg/L	03/18/21 13:06	
	Lead	0.500	0.498	99.6	mg/L	03/18/21 13:06	
	Selenium	0.400	0.388	96.9	mg/L	03/18/21 13:06	
	Silver	0.400	0.401	100	mg/L	03/18/21 13:06	
S1C0365-CCV8	Arsenic	0.400	0.382	95.5	mg/L	03/18/21 14:02	
	Barium	1.00	0.993	99.3	mg/L	03/18/21 14:02	
	Cadmium	0.0500	0.0501	100	mg/L	03/18/21 14:02	
	Chromium	0.500	0.492	98.4	mg/L	03/18/21 14:02	
	Lead	0.500	0.515	103	mg/L	03/18/21 14:02	
	Selenium	0.400	0.389	97.2	mg/L	03/18/21 14:02	
	Silver	0.400	0.403	101	mg/L	03/18/21 14:02	
S1C0365-CCV9	Arsenic	0.400	0.375	93.7	mg/L	03/18/21 15:04	
	Barium	1.00	0.995	99.5	mg/L	03/18/21 15:04	
	Cadmium	0.0500	0.0503	101	mg/L	03/18/21 15:04	
	Chromium	0.500	0.491	98.2	mg/L	03/18/21 15:04	
	Lead	0.500	0.519	104	mg/L	03/18/21 15:04	

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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

INITIAL AND CONTINUING CALIBRATION CHECK
FORM II

Instrument: ICP-THERMO4
Sequence: S1C0365
Control Limt: +/- 10.00%

Method: EPA 6010B
File ID: 031821T4-1R-094
Analyst: KHL

Lab Sample ID	Analyte	True	Found	%R	Units	Date/Time	Q
S1C0365-CCV9	Selenium	0.400	0.386	96.5	mg/L	03/18/21 15:04	
	Silver	0.400	0.408	102	mg/L	03/18/21 15:04	
S1C0365-CCVA	Arsenic	0.400	0.381	95.2	mg/L	03/18/21 15:30	
	Barium	1.00	0.996	99.6	mg/L	03/18/21 15:30	
	Cadmium	0.0500	0.0503	101	mg/L	03/18/21 15:30	
	Chromium	0.500	0.492	98.5	mg/L	03/18/21 15:30	
	Lead	0.500	0.513	103	mg/L	03/18/21 15:30	
	Selenium	0.400	0.385	96.2	mg/L	03/18/21 15:30	
	Silver	0.400	0.405	101	mg/L	03/18/21 15:30	

* Values outside of QC limits

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FORM III:
Metals
EPA 6010B
ICB/CCB/PREP BLANK SUMMARY

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

METHOD BLANK SUMMARY
FORM IIIA

Blank ID:	B1C1005-BLK1	**Batch:**	B1C1005
Blank File ID:	031821T4-1R-015	**Instrument:**	ICP-THERMO4
Prepared:	03/17/2021 11:19	**Method:**	EPA 6010B
Analyzed:	03/18/2021 9:49	**Analyst:**	KHL

This Method Blank Applies To The Following Samples:

Client Sample ID	Laboratory Sample ID	Lab File ID	Time Analyzed
Blank #693	B1C1005-BLK1	031821T4-1R-015	03/18/2021 9:49
Blank #576	B1C1005-BLK2	031821T4-1R-016	03/18/2021 9:53
FLT Blank	B1C1005-BLK3	031821T4-1R-017	03/18/2021 10:00
LCS	B1C1005-BS1	031821T4-1R-018	03/18/2021 10:04
Dilution Check	B1C1005-SRL1	031821T4-1R-021	03/18/2021 10:15
Soil IDW	M1C1317-01	031821T4-1R-024	03/18/2021 10:26

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

METHOD BLANK SUMMARY
FORM IIIA

Blank ID:	B1C1005-BLK2	**Batch:**	B1C1005
Blank File ID:	031821T4-1R-016	**Instrument:**	ICP-THERMO4
Prepared:	03/17/2021 11:19	**Method:**	EPA 6010B
Analyzed:	03/18/2021 9:53	**Analyst:**	KHL

This Method Blank Applies To The Following Samples:

Client Sample ID	Laboratory Sample ID	Lab File ID	Time Analyzed
Blank #693	B1C1005-BLK1	031821T4-1R-015	03/18/2021 9:49
Blank #576	B1C1005-BLK2	031821T4-1R-016	03/18/2021 9:53
FLT Blank	B1C1005-BLK3	031821T4-1R-017	03/18/2021 10:00
LCS	B1C1005-BS1	031821T4-1R-018	03/18/2021 10:04
Dilution Check	B1C1005-SRL1	031821T4-1R-021	03/18/2021 10:15
Soil IDW	M1C1317-01	031821T4-1R-024	03/18/2021 10:26

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

METHOD BLANK SUMMARY
FORM IIIA

Blank ID:	B1C1005-BLK3	**Batch:**	B1C1005
Blank File ID:	031821T4-1R-017	**Instrument:**	ICP-THERMO4
Prepared:	03/17/2021 11:19	**Method:**	EPA 6010B
Analyzed:	03/18/2021 10:00	**Analyst:**	KHL

This Method Blank Applies To The Following Samples:

Client Sample ID	Laboratory Sample ID	Lab File ID	Time Analyzed
Blank #693	B1C1005-BLK1	031821T4-1R-015	03/18/2021 9:49
Blank #576	B1C1005-BLK2	031821T4-1R-016	03/18/2021 9:53
FLT Blank	B1C1005-BLK3	031821T4-1R-017	03/18/2021 10:00
LCS	B1C1005-BS1	031821T4-1R-018	03/18/2021 10:04
Dilution Check	B1C1005-SRL1	031821T4-1R-021	03/18/2021 10:15
Soil IDW	M1C1317-01	031821T4-1R-024	03/18/2021 10:26

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Laboratory Report Number: M1C1317

METHOD BLANK
FORM IIIB

Client Project ID: Longhorn

Sample ID: B1C1005-BLK1 **Prep Date:** 03/17/21 11:19 **Matrix:** Aqueous
Instrument: ICP-THERMO4 **Analyzed:** 03/18/21 09:49 **Method:** EPA 6010B
File ID: 031821T4-1R-015 **Sequence:** S1C0365 **Analyst:** KHL
Batch: B1C1005 **Units:** mg/L

Analyte	Result	DL	LOD	LOQ	Dilution	Flag	Q
Arsenic	0.200	0.100	0.200	0.200	1	U	
Barium	0.100	0.0500	0.100	0.100	1	U	
Cadmium	0.0200	0.0100	0.0200	0.0200	1	U	
Chromium	0.0500	0.0250	0.0500	0.0500	1	U	
Lead	0.200	0.100	0.200	0.200	1	U	
Selenium	0.350	0.175	0.350	0.350	1	U	
Silver	0.100	0.0500	0.100	0.100	1	U	

Notes and Definitions

* - Detected in the associated method Blank at a concentration
U: The analyte was analyzed for but was not detected above the reported quantitation limit. The quantitation limit has been adjusted for any dilution or concentration of the sample.

Sample ID: B1C1005-BLK2 **Prep Date:** 03/17/21 11:19 **Matrix:** Aqueous
Instrument: ICP-THERMO4 **Analyzed:** 03/18/21 09:53 **Method:** EPA 6010B
File ID: 031821T4-1R-016 **Sequence:** S1C0365 **Analyst:** KHL
Batch: B1C1005 **Units:** mg/L

Analyte	Result	DL	LOD	LOQ	Dilution	Flag	Q
Arsenic	0.200	0.100	0.200	0.200	1	U	
Barium	0.128	0.0500	0.100	0.100	1		
Cadmium	0.0200	0.0100	0.0200	0.0200	1	U	
Chromium	0.0500	0.0250	0.0500	0.0500	1	U	
Lead	0.200	0.100	0.200	0.200	1	U	
Selenium	0.350	0.175	0.350	0.350	1	U	
Silver	0.100	0.0500	0.100	0.100	1	U	

Notes and Definitions

* - Detected in the associated method Blank at a concentration
U: The analyte was analyzed for but was not detected above the reported quantitation limit. The quantitation limit has been adjusted for any dilution or concentration of the sample.

Sample ID: B1C1005-BLK3 **Prep Date:** 03/17/21 11:19 **Matrix:** Aqueous
Instrument: ICP-THERMO4 **Analyzed:** 03/18/21 10:00 **Method:** EPA 6010B
File ID: 031821T4-1R-017 **Sequence:** S1C0365 **Analyst:** KHL
Batch: B1C1005 **Units:** mg/L

Analyte	Result	DL	LOD	LOQ	Dilution	Flag	Q
Arsenic	0.200	0.100	0.200	0.200	1	U	
Barium	0.100	0.0500	0.100	0.100	1	U	
Cadmium	0.0200	0.0100	0.0200	0.0200	1	U	
Chromium	0.0500	0.0250	0.0500	0.0500	1	U	
Lead	0.200	0.100	0.200	0.200	1	U	
Selenium	0.350	0.175	0.350	0.350	1	U	
Silver	0.100	0.0500	0.100	0.100	1	U	

Laboratory Report Number: M1C1317

Client Project ID: Longhorn

METHOD BLANK
FORM IIIB

Notes and Definitions

* - Detected in the associated method Blank at a concentration

U: The analyte was analyzed for but was not detected above the reported quantitation limit. The quantitation limit has been adjusted for any dilution or concentration of the sample.

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Laboratory Report Number: M1C1317 **CALIBRATION BLANK FORM IIIC**

Client Project ID: Longhorn

Instrument ID: ICP-THERMO4 **Method:** EPA 6010B

Sequence: S1C0365

Lab Sample ID	Analyte	Found	MDL	MRL	Units	Q	Date/Time
S1C0365-ICB1	Arsenic	0.00192	0.0100	0.0200	mg/L	U	03/18/2021 9:20
	Barium	0.00259	0.00500	0.01000	mg/L	U	03/18/2021 9:20
	Cadmium	0.0000600	0.00100	0.00200	mg/L	U	03/18/2021 9:20
	Chromium	0.000440	0.00250	0.00500	mg/L	U	03/18/2021 9:20
	Lead	-0.00145	0.0100	0.0200	mg/L	U	03/18/2021 9:20
	Selenium	-0.000700	0.0175	0.0350	mg/L	U	03/18/2021 9:20
	Silver	0.000210	0.00500	0.01000	mg/L	U	03/18/2021 9:20
S1C0365-CCB1	Arsenic	0.00118	0.0100	0.0200	mg/L	U	03/18/2021 9:34
	Barium	0.00248	0.00500	0.01000	mg/L	U	03/18/2021 9:34
	Cadmium	0.000230	0.00100	0.00200	mg/L	U	03/18/2021 9:34
	Chromium	0.00103	0.00250	0.00500	mg/L	U	03/18/2021 9:34
	Lead	-0.00326	0.0100	0.0200	mg/L	U	03/18/2021 9:34
	Selenium	0.00496	0.0175	0.0350	mg/L	U	03/18/2021 9:34
	Silver	-0.000310	0.00500	0.01000	mg/L	U	03/18/2021 9:34
S1C0365-CCB2	Arsenic	0.00163	0.0100	0.0200	mg/L	U	03/18/2021 10:34
	Barium	0.00167	0.00500	0.01000	mg/L	U	03/18/2021 10:34
	Cadmium	0.000200	0.00100	0.00200	mg/L	U	03/18/2021 10:34
	Chromium	0.00129	0.00250	0.00500	mg/L	U	03/18/2021 10:34
	Lead	-0.000410	0.0100	0.0200	mg/L	U	03/18/2021 10:34
	Selenium	0.00599	0.0175	0.0350	mg/L	U	03/18/2021 10:34
	Silver	-0.000350	0.00500	0.01000	mg/L	U	03/18/2021 10:34
S1C0365-CCB3	Arsenic	0.00293	0.0100	0.0200	mg/L	U	03/18/2021 11:18
	Barium	0.00246	0.00500	0.01000	mg/L	U	03/18/2021 11:18
	Cadmium	0.000210	0.00100	0.00200	mg/L	U	03/18/2021 11:18
	Chromium	0.00122	0.00250	0.00500	mg/L	U	03/18/2021 11:18
	Lead	-0.000670	0.0100	0.0200	mg/L	U	03/18/2021 11:18
	Selenium	0.00203	0.0175	0.0350	mg/L	U	03/18/2021 11:18
	Silver	-0.000150	0.00500	0.01000	mg/L	U	03/18/2021 11:18
S1C0365-CCB4	Arsenic	0.000770	0.0100	0.0200	mg/L	U	03/18/2021 11:29
	Barium	0.00141	0.00500	0.01000	mg/L	U	03/18/2021 11:29
	Cadmium	0.000280	0.00100	0.00200	mg/L	U	03/18/2021 11:29

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Laboratory Report Number: M1C1317 **CALIBRATION BLANK FORM IIIC**

Client Project ID: Longhorn

Instrument ID: ICP-THERMO4 **Method:** EPA 6010B

Sequence: S1C0365

Lab Sample ID	Analyte	Found	MDL	MRL	Units	Q	Date/Time
S1C0365-CCB4	Chromium	0.00104	0.00250	0.00500	mg/L	U	03/18/2021 11:29
	Lead	-0.00286	0.0100	0.0200	mg/L	U	03/18/2021 11:29
	Selenium	0.000150	0.0175	0.0350	mg/L	U	03/18/2021 11:29
	Silver	-0.0000900	0.00500	0.01000	mg/L	U	03/18/2021 11:29
S1C0365-CCB5	Arsenic	0.000100	0.0100	0.0200	mg/L	U	03/18/2021 12:14
	Barium	0.00105	0.00500	0.01000	mg/L	U	03/18/2021 12:14
	Cadmium	0.000180	0.00100	0.00200	mg/L	U	03/18/2021 12:14
	Chromium	0.000720	0.00250	0.00500	mg/L	U	03/18/2021 12:14
	Lead	-0.00180	0.0100	0.0200	mg/L	U	03/18/2021 12:14
	Selenium	0.00212	0.0175	0.0350	mg/L	U	03/18/2021 12:14
	Silver	0.000460	0.00500	0.01000	mg/L	U	03/18/2021 12:14
S1C0365-CCB6	Arsenic	-0.0000200	0.0100	0.0200	mg/L	U	03/18/2021 12:58
	Barium	0.00171	0.00500	0.01000	mg/L	U	03/18/2021 12:58
	Cadmium	0.000110	0.00100	0.00200	mg/L	U	03/18/2021 12:58
	Chromium	0.000880	0.00250	0.00500	mg/L	U	03/18/2021 12:58
	Lead	0.000560	0.0100	0.0200	mg/L	U	03/18/2021 12:58
	Selenium	0.00372	0.0175	0.0350	mg/L	U	03/18/2021 12:58
	Silver	-0.000650	0.00500	0.01000	mg/L	U	03/18/2021 12:58
S1C0365-CCB7	Arsenic	0.000880	0.0100	0.0200	mg/L	U	03/18/2021 13:10
	Barium	0.00306	0.00500	0.01000	mg/L	U	03/18/2021 13:10
	Cadmium	0.000230	0.00100	0.00200	mg/L	U	03/18/2021 13:10
	Chromium	0.000990	0.00250	0.00500	mg/L	U	03/18/2021 13:10
	Lead	0.00121	0.0100	0.0200	mg/L	U	03/18/2021 13:10
	Selenium	0.00409	0.0175	0.0350	mg/L	U	03/18/2021 13:10
	Silver	-0.000320	0.00500	0.01000	mg/L	U	03/18/2021 13:10
S1C0365-CCB8	Arsenic	-0.00116	0.0100	0.0200	mg/L	U	03/18/2021 14:06
	Barium	0.00186	0.00500	0.01000	mg/L	U	03/18/2021 14:06
	Cadmium	0.000150	0.00100	0.00200	mg/L	U	03/18/2021 14:06
	Chromium	0.000840	0.00250	0.00500	mg/L	U	03/18/2021 14:06
	Lead	-0.00335	0.0100	0.0200	mg/L	U	03/18/2021 14:06
	Selenium	0.00124	0.0175	0.0350	mg/L	U	03/18/2021 14:06

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Laboratory Report Number: M1C1317 **CALIBRATION BLANK FORM IIIC**

Client Project ID: Longhorn

Instrument ID: ICP-THERMO4 **Method:** EPA 6010B

Sequence: S1C0365

Lab Sample ID	Analyte	Found	MDL	MRL	Units	Q	Date/Time
S1C0365-CCB8	Silver	0.000490	0.00500	0.01000	mg/L	U	03/18/2021 14:06
S1C0365-CCB9	Arsenic	-0.00247	0.0100	0.0200	mg/L	U	03/18/2021 15:07
	Barium	0.00162	0.00500	0.01000	mg/L	U	03/18/2021 15:07
	Cadmium	0.000390	0.00100	0.00200	mg/L	U	03/18/2021 15:07
	Chromium	0.00118	0.00250	0.00500	mg/L	U	03/18/2021 15:07
	Lead	0.0000800	0.0100	0.0200	mg/L	U	03/18/2021 15:07
	Selenium	0.00479	0.0175	0.0350	mg/L	U	03/18/2021 15:07
	Silver	-0.000590	0.00500	0.01000	mg/L	U	03/18/2021 15:07
S1C0365-CCBA	Arsenic	-0.000140	0.0100	0.0200	mg/L	U	03/18/2021 15:34
	Barium	0.00134	0.00500	0.01000	mg/L	U	03/18/2021 15:34
	Cadmium	0.00	0.00100	0.00200	mg/L	U	03/18/2021 15:34
	Chromium	0.000620	0.00250	0.00500	mg/L	U	03/18/2021 15:34
	Lead	-0.00217	0.0100	0.0200	mg/L	U	03/18/2021 15:34
	Selenium	0.00262	0.0175	0.0350	mg/L	U	03/18/2021 15:34
	Silver	0.000810	0.00500	0.01000	mg/L	U	03/18/2021 15:34

* Values outside of QC limits

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FORM IV:
Metals
EPA 6010B
INTERFERENCE CHECK

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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

INTERFERENCES SUMMARY
FORM IV

Laboratory ID:	S1C0365-IFA1	**Run Date:**	03/18/21 09:23	**Matrix:**	Aqueous
Instrument:	ICP-THERMO4			**Method:**	EPA 6010B
File ID:	031821T4-1R-008	**Analyst:**	KHL	**Batch ID:**	S1C0365

Analyte	Known (mg/L)	Result (mg/L)	Recovery	LCL	UCL	MRL (mg/L)	Flags
Arsenic	NS	0.00577	NS			0.2000	
Barium	NS	0.00160	NS			0.1000	
Cadmium	NS	0.0000200	NS			0.0200	
Chromium	NS	0.00160	NS			0.0500	
Lead	NS	0.00788	NS			0.2000	
Selenium	NS	0.00580	NS			0.3500	
Silver	NS	0.00643	NS			0.1000	

+ The Interferance Check associated with the sample failed the acceptance criteria.

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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

INTERFERENCES SUMMARY
FORM IV

Laboratory ID:	S1C0365-IFB1	**Run Date:**	03/18/21 09:27	**Matrix:**	Aqueous
Instrument:	ICP-THERMO4			**Method:**	EPA 6010B
File ID:	031821T4-1R-009	**Analyst:**	KHL	**Batch ID:**	S1C0365

Analyte	Known (mg/L)	Result (mg/L)	Recovery	LCL	UCL	MRL (mg/L)	Flags
Arsenic	0.25000	0.246	98.6	80	120	0.2000	
Barium	0.25000	0.241	96.5	80	120	0.1000	
Cadmium	0.50000	0.539	108	80	120	0.0200	
Chromium	0.25000	0.242	96.8	80	120	0.0500	
Lead	0.50000	0.497	99.4	80	120	0.2000	
Selenium	0.25000	0.240	96.1	80	120	0.3500	
Silver	0.50000	0.477	95.4	80	120	0.1000	

+ The Interferance Check associated with the sample failed the acceptance criteria.

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FORM VII:
Metals
EPA 6010B
LCS/LCSD

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

BLANK SPIKE (BS)
FORM VII

Method: EPA 6010B
Batch: B1C1005
Analyst: KHL
Matrix: Aqueous
Units: mg/L
Instrument: ICP-THERMO4

Blank Spike
Spike ID: B1C1005-BS1
Prepared: 03/17/21 11:19
Analyzed: 03/18/21 10:04
File ID: 031821T4-1R-018
Initial/Final: 40mL/50mL

Analyte	BS Spiked	BS Found	BS %Rec	%Rec Limts	Q
Arsenic	0.250	0.223	89.4	80 - 120	
Barium	0.625	0.625	100	80 - 120	
Cadmium	0.0313	0.0306	97.9	80 - 120	
Chromium	0.313	0.306	98.1	80 - 120	
Lead	0.313	0.311	99.6	80 - 120	
Selenium	0.250	0.225	89.8	80 - 120	
Silver	0.250	0.247	98.8	80 - 120	

* - Does not meet %Rec acceptance criteria.
\# - Does not meet RPD acceptance criteria.

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FORM VIII:
Metals
EPA 6010B
Serial Dilutions

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Laboratory Report ID: M1C1317
Client Project ID: Longhorn

SERIAL DILUTION
FORM VIII

Matrix:	Aqueous	**Method:**	EPA 6010B
Sequence:	S1C0365	**Laboratory ID:**	B1C1005-SRL1
Preparation:	3015A_6010	**Lab Source ID:**	M1C1034-01
Source:	Dilution Check	**Initial/Final:**	40 / 50
		% Solids:	

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method	QC Limits % Difference
Arsenic	ND		ND				EPA 6010B	10
Barium	1.97		0.254		154	*	EPA 6010B	10
Cadmium	ND		ND				EPA 6010B	10
Chromium	0.0196		ND				EPA 6010B	10
Lead	ND		ND				EPA 6010B	10
Selenium	0.455		ND				EPA 6010B	10
Silver	ND		ND				EPA 6010B	10

* Values outside of QC limits

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Section A:
Metals
EPA 6010B
Batch / Sequence Raw Data

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Element Calibration Report **ICP-THERMO4**

Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
Ag 328.068 {103}	3/18/2021 9:16:21	3/18/2021 9:16:21	Linear	1/Conc	-0.000212	0.089884	0.000000	1.000000
Al 308.215 {109}	3/18/2021 9:16:21	3/18/2021 9:16:21	Linear	1/Conc	0.001756	0.012087	0.000000	1.000000
As 189.042 {478}	3/18/2021 9:16:21	3/18/2021 9:16:21	Linear	1/Conc	0.000267	0.028578	0.000000	1.000000
B 249.678 {135}	3/18/2021 9:16:21	3/18/2021 9:16:21	Linear	1/Conc	0.000016	0.025712	0.000000	1.000000
Ba 455.403 { 74}	3/18/2021 9:16:21	3/18/2021 9:16:21	Linear	1/Conc	0.014912	1.173744	0.000000	1.000000
Be 313.107 {108}	3/18/2021 9:16:21	3/18/2021 9:16:21	Linear	1/Conc	-0.000133	1.056172	0.000000	1.000000
Ca 422.673 { 80}	3/18/2021 9:16:21	3/18/2021 9:16:21	Linear	1/Conc	0.000041	0.035647	0.000000	1.000000
Cd 228.802 {447}	3/18/2021 9:16:21	3/18/2021 9:16:21	Linear	1/Conc	0.000250	0.358141	0.000000	1.000000
Co 228.616 {447}	3/18/2021 9:16:21	3/18/2021 9:16:21	Linear	1/Conc	0.000066	0.306279	0.000000	1.000000
Cr 267.716 {126}	3/18/2021 9:16:21	3/18/2021 9:16:21	Linear	1/Conc	0.000229	0.057682	0.000000	1.000000
Cu 224.700 {450}	3/18/2021 9:16:21	3/18/2021 9:16:21	Linear	1/Conc	-0.000398	0.108593	0.000000	1.000000
Fe 261.187 {129}	3/18/2021 9:16:21	3/18/2021 9:16:21	Linear	1/Conc	-0.000136	0.015087	0.000000	1.000000
K 766.490 { 44}	3/18/2021 9:16:21	3/18/2021 9:16:21	Linear	1/Conc	0.008732	0.033458	0.000000	1.000000
Li 670.784 { 50}	3/18/2021 9:16:21	3/18/2021 9:16:21	Linear	1/Conc	-0.003990	0.799065	0.000000	1.000000
Mg 279.079 {121}	3/18/2021 9:16:21	3/18/2021 9:16:21	Linear	1/Conc	-0.000064	0.005643	0.000000	1.000000
Mn 257.610 {131}	3/18/2021 9:16:21	3/18/2021 9:16:21	Linear	1/Conc	0.001268	0.171799	0.000000	1.000000
Mo 202.030 {467}	3/18/2021 9:16:21	3/18/2021 9:16:21	Linear	1/Conc	0.000608	0.139445	0.000000	1.000000
Na 589.592 { 57}	3/18/2021 9:16:21	3/18/2021 9:16:21	Linear	1/Conc	-0.013129	0.107392	0.000000	1.000000
Ni 231.604 {446}	3/18/2021 9:16:21	3/18/2021 9:16:21	Linear	1/Conc	-0.000678	0.085903	0.000000	1.000000
P 214.914 {457}	3/18/2021 9:16:21	3/18/2021 9:16:21	Linear	1/Conc	0.000095	0.011168	0.000000	1.000000
Pb 220.353 {453}	3/18/2021 9:16:21	3/18/2021 9:16:21	Linear	1/Conc	-0.000119	0.064487	0.000000	1.000000
Sb 206.833 {463}	3/18/2021 9:16:21	3/18/2021 9:16:21	Linear	1/Conc	0.000209	0.023545	0.000000	1.000000
Se 196.090 {472}	3/18/2021 9:16:21	3/18/2021 9:16:21	Linear	1/Conc	-0.000287	0.019881	0.000000	1.000000
Si 212.412 {459}	3/18/2021 9:16:21	3/18/2021 9:16:21	Linear	1/Conc	0.001025	0.024988	0.000000	1.000000
Sn 189.989 {477}	3/18/2021 9:16:21	3/18/2021 9:16:21	Linear	1/Conc	0.000161	0.087570	0.000000	1.000000
Sr 407.771 { 83}	3/18/2021 9:16:21	3/18/2021 9:16:21	Linear	1/Conc	0.002658	2.175215	0.000000	1.000000
Ti 337.280 {100}	3/18/2021 9:16:21	3/18/2021 9:16:21	Linear	1/Conc	-0.001350	0.130496	0.000000	1.000000
Tl 190.856 {477}	3/18/2021 9:16:21	3/18/2021 9:16:21	Linear	1/Conc	-0.000039	0.018653	0.000000	1.000000
V 292.402 {115}	3/18/2021 9:16:21	3/18/2021 9:16:21	Linear	1/Conc	0.000034	0.072484	0.000000	1.000000
Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 377.433 { 89}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Zn 206.200 {463}	3/18/2021 9:16:21	3/18/2021 9:16:21	Linear	1/Conc	0.000807	0.500768	0.000000	1.000000
Zr 339.198 { 99}	3/18/2021 9:16:21	3/18/2021 9:16:21	Linear	1/Conc	-0.007491	2.972771	0.000000	1.000000

Element Calibration Report ICP-THERMO4

Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
						Slope	Y-int	Slope factor	Offset
Ag 328.068 {103}	0.999852	0.000004	0.001122	0.003740	OK.	1.000000	0.000000	1	0
Al 308.215 {109}	0.999937	0.000009	0.005929	0.019764	OK.	1.000000	0.000000	1	0
As 189.042 {478}	0.999881	0.000002	0.002783	0.009278	OK.	1.000000	0.000000	1	0
B 249.678 {135}	0.999906	0.000002	0.002153	0.007177	OK.	1.000000	0.000000	1	0
Ba 455.403 { 74}	0.999807	0.000146	0.001161	0.003869	OK.	1.000000	0.000000	1	0
Be 313.107 {108}	0.999972	0.000003	0.000059	0.000196	OK.	1.000000	0.000000	1	0
Ca 422.673 { 80}	0.999271	0.000086	0.030891	0.102970	OK.	1.000000	0.000000	1	0
Cd 228.802 {447}	0.999375	0.000005	0.000273	0.000910	OK.	1.000000	0.000000	1	0
Co 228.616 {447}	0.999944	0.000004	0.000356	0.001185	OK.	1.000000	0.000000	1	0
Cr 267.716 {126}	0.999874	0.000003	0.000987	0.003291	OK.	1.000000	0.000000	1	0
Cu 224.700 {450}	0.999742	0.000008	0.001130	0.003767	OK.	1.000000	0.000000	1	0
Fe 261.187 {129}	0.999964	0.000003	0.020074	0.066912	OK.	1.000000	0.000000	1	0
K 766.490 { 44}	0.999919	0.000135	0.102831	0.342771	OK.	1.000000	0.000000	1	0
Li 670.784 { 50}	0.999736	0.000180	0.004113	0.013710	OK.	1.000000	0.000000	1	0
Mg 279.079 {121}	0.999947	0.000006	0.061565	0.205218	OK.	1.000000	0.000000	1	0
Mn 257.610 {131}	0.999826	0.000010	0.002293	0.007642	OK.	1.000000	0.000000	1	0
Mo 202.030 {467}	0.999692	0.000022	0.000412	0.001373	OK.	1.000000	0.000000	1	0
Na 589.592 { 57}	0.999982	0.000207	0.028487	0.094955	OK.	1.000000	0.000000	1	0
Ni 231.604 {446}	0.999945	0.000003	0.001145	0.003818	OK.	1.000000	0.000000	1	0
P 214.914 {457}	0.999975	0.000005	0.006184	0.020615	OK.	1.000000	0.000000	1	0
Pb 220.353 {453}	0.999915	0.000003	0.002644	0.008815	OK.	1.000000	0.000000	1	0
Sb 206.833 {463}	0.999692	0.000005	0.004279	0.014264	OK.	1.000000	0.000000	1	0
Se 196.090 {472}	0.999905	0.000001	0.004459	0.014863	OK.	1.000000	0.000000	1	0
Si 212.412 {459}	0.998692	0.000041	0.002535	0.008451	OK.	1.000000	0.000000	1	0
Sn 189.989 {477}	0.999960	0.000005	0.000583	0.001942	OK.	1.000000	0.000000	1	0
Sr 407.771 { 83}	0.999976	0.000095	0.000481	0.001603	OK.	1.000000	0.000000	1	0
Ti 337.280 {100}	0.999843	0.000015	0.005122	0.017074	OK.	1.000000	0.000000	1	0
Tl 190.856 {477}	0.999726	0.000002	0.003335	0.011116	OK.	1.000000	0.000000	1	0
V 292.402 {115}	0.999967	0.000004	0.000850	0.002834	OK.	1.000000	0.000000	1	0
Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 377.433 { 89}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Zn 206.200 {463}	0.999973	0.000023	0.000139	0.000463	OK.	1.000000	0.000000	1	0
Zr 339.198 { 99}	0.999971	0.000144	0.000334	0.001112	OK.	1.000000	0.000000	1	0

Method of Standard Additions

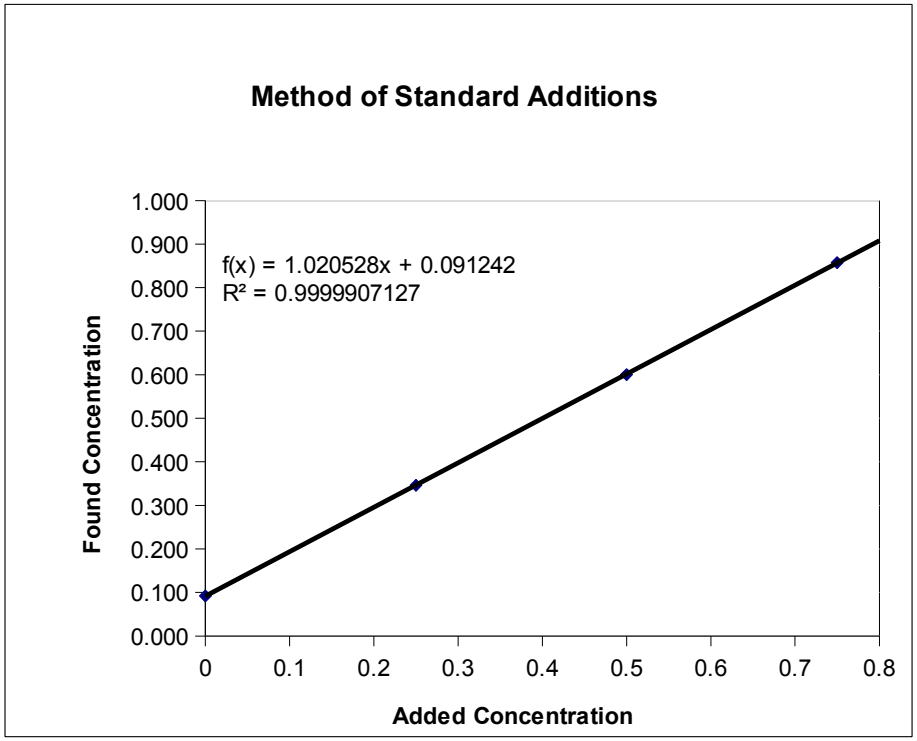
Sample #: M1C1010-01

Metal: Pb

Added Concentration (ppm)	Found Concentration (ppbb)
0	0.092
0.25	0.346
0.5	0.600
0.75	0.858

Slope: 1.0205280
Y-Intercept: 0.0912420
Initial: 1.000
Final: 1
Dilution Factor: 1
Dilution*Prep. Factor: 1.000

R= 0.9999953564
x'= -0.089406660
[Metal]= 0.089406660



MICROBAC®

Laboratory Report Number: M1C1317

Client Project ID: Longhorn

BATCH LOG SUMMARY
SECTION A1

Batch: B1C1005
Matrix: Aqueous
Method: EPA 6010B
SOP: me407

Prepared: 3/17/2021 11:19:00AM
Prepared By: JMH
Preparation: EPA 3015A

Laboratory ID	Client / Source ID	Initial	Final	Vessel Initial Weight (g)	Vessel Final Weight (g)	Vessel % Loss			Spike(s)
B1C1005-BLK1		5.00 mL	50.0 mL	204.018	204.008	17685580965			
B1C1005-BLK2		5.00 mL	50.0 mL	208.939	208.929	53149682303			
B1C1005-BLK3		5.00 mL	50.0 mL	206.727	206.721	24627396401			
B1C1005-BS1		40.0 mL	50.0 mL	211.767	211.76	56290139832			1000636 5000µL
B1C1005-SRL1	M1C1034-01	40.0 mL	50.0 mL	203.939	203.924	56815284092			
M1C1317-01	Soil IDW	5.00 mL	50.0 mL	209.623	209.608	52154116300			

Standards used in the batch:

Standard ID	Description	Date Prepared	Prepared By
1000636	ICP GENERAL SPIKE	1/22/2021 8:13:10AM	Erin Porter

Reagents used in the batch:

Reagent ID	Description	Prepared	Prepared By
0005891	.45 micron filters	6/4/2020 1:06:49PM	Erin Porter
0012098	HCL	12/2/2020 5:01:44PM	Kerri Buck
1001074	HNO3	2/4/2021 2:07:08PM	Tammy Morris
1001240	40 & 50 ML dIGESTION TUBES	2/11/2021 8:14:34AM	Erin Porter

Surrogate Spiked 1: 0.00 µL **Surrogate Spiked 2:** 0.00 µL

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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

SEQUENCE LOG SUMMARY
SECTION A2

Sequence: S1C0365
Instrument: ICP-THERMO4
Analyst 1: KHL
Method: EPA 6010B
SOP: ME600G

#	File ID	Laboratory ID	Client ID	Analyzed	Reference	Standard
1	031821T4-1R-001	S1C0365-CAL1	Cal Standard	03/18/21 08:57		1001394
2	031821T4-1R-002	S1C0365-CAL2	Cal Standard	03/18/21 09:01		1001393
3	031821T4-1R-003	S1C0365-CAL3	Cal Standard	03/18/21 09:05		1001392
4	031821T4-1R-004	S1C0365-CAL4	Cal Standard	03/18/21 09:09		1001391
5	031821T4-1R-005	S1C0365-CAL5	Cal Standard	03/18/21 09:12		1001388
6	031821T4-1R-006	S1C0365-ICV1	Initial Cal Check	03/18/21 09:16		1001390
7	031821T4-1R-007	S1C0365-ICB1	Initial Cal Blank	03/18/21 09:20		1001395
8	031821T4-1R-008	S1C0365-IFA1	Interference Check A	03/18/21 09:23		1001386
9	031821T4-1R-009	S1C0365-IFB1	Interference Check B	03/18/21 09:27		1001387
10	031821T4-1R-010	S1C0365-CCV1	Calibration Check	03/18/21 09:31		1001389
11	031821T4-1R-011	S1C0365-CCB1	Calibration Blank	03/18/21 09:34		1001394
15	031821T4-1R-015	B1C1005-BLK1	Blank #693	03/18/21 09:49		
16	031821T4-1R-016	B1C1005-BLK2	Blank #576	03/18/21 09:53		
17	031821T4-1R-017	B1C1005-BLK3	FLT Blank	03/18/21 10:00		
18	031821T4-1R-018	B1C1005-BS1	LCS	03/18/21 10:04		
39	031821T4-1R-021	B1C1005-SRL1	Dilution Check	03/18/21 10:15	M1C1034-01	
51	031821T4-1R-024	M1C1317-01	Soil IDW	03/18/21 10:26		
52	031821T4-1R-025	S1C0365-CCV2	Calibration Check	03/18/21 10:30		1001389
53	031821T4-1R-026	S1C0365-CCB2	Calibration Blank	03/18/21 10:34		1001394
94	031821T4-1R-037	S1C0365-CCV3	Calibration Check	03/18/21 11:14		1001389
95	031821T4-1R-038	S1C0365-CCB3	Calibration Blank	03/18/21 11:18		1001394
96	031821T4-1R-040	S1C0365-CCV4	Calibration Check	03/18/21 11:25		1001389
97	031821T4-1R-041	S1C0365-CCB4	Calibration Blank	03/18/21 11:29		1001394
118	031821T4-1R-052	S1C0365-CCV5	Calibration Check	03/18/21 12:10		1001389
119	031821T4-1R-053	S1C0365-CCB5	Calibration Blank	03/18/21 12:14		1001394
140	031821T4-1R-064	S1C0365-CCV6	Calibration Check	03/18/21 12:55		1001389
141	031821T4-1R-065	S1C0365-CCB6	Calibration Blank	03/18/21 12:58		1001394
152	031821T4-1R-067	S1C0365-CCV7	Calibration Check	03/18/21 13:06		1001389
153	031821T4-1R-068	S1C0365-CCB7	Calibration Blank	03/18/21 13:10		1001394
167	031821T4-1R-082	S1C0365-CCV8	Calibration Check	03/18/21 14:02		1001389
168	031821T4-1R-083	S1C0365-CCB8	Calibration Blank	03/18/21 14:06		1001394
179	031821T4-1R-094	S1C0365-CCV9	Calibration Check	03/18/21 15:04		1001389
180	031821T4-1R-095	S1C0365-CCB9	Calibration Blank	03/18/21 15:07		1001394

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

SEQUENCE LOG SUMMARY
SECTION A2

Sequence: S1C0365
Instrument: ICP-THERMO4
Analyst 1: KHL
Method: EPA 6010B
SOP: ME600G

#	File ID	Laboratory ID	Client ID	Analyzed	Reference	Standard
186	031821T4-1R-101	S1C0365-CCVA	Calibration Check	03/18/21 15:30		1001389
187	031821T4-1R-102	S1C0365-CCBA	Calibration Blank	03/18/21 15:34		1001394

Sequence Standards

Standard ID	Description	Prepared	PreparedBy	Expires
0006342	ICP LCV 0.1	06/17/2020	Kerri Buck	06/16/2021
0006345	ICP LCV 0.16	06/17/2020	Kerri Buck	06/16/2021
1001386	3015 ICSA	02/16/2021	Katelyn Liebau	03/18/2021
1001387	3015 ICSAB	02/16/2021	Katelyn Liebau	03/18/2021
1001388	3015 High Standard	02/16/2021	Katelyn Liebau	03/18/2021
1001389	3015 CCV	02/16/2021	Katelyn Liebau	03/18/2021
1001390	3015 ICV	02/16/2021	Katelyn Liebau	03/18/2021
1001391	3015 Calibration Standard 3	02/16/2021	Katelyn Liebau	03/18/2021
1001392	3015 Calibration Standard 2	02/16/2021	Katelyn Liebau	03/18/2021
1001393	3015 Calibration Standard 1	02/16/2021	Katelyn Liebau	03/18/2021
1001394	3015 Calibration Blank	02/16/2021	Katelyn Liebau	03/18/2021
1001395	3051 Calibration Blank	02/16/2021	Katelyn Liebau	03/18/2021

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Section B:
Metals
EPA 6010B
Sample Raw Data

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

Sample Name: M1C1317-01 Acquired: 3/18/2021 10:26:46 Type: Unk
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00017**	**.10668**	**-.00103**	**.03312**	**.08751**	**.00008**	**5.2367**	**.00036**
Stddev	.00087	.00736	.00111	.00160	.00082	.00005	.0239	.00013
%RSD	499.99	6.9030	107.49	4.8304	.93197	63.249	.45698	35.284
#1	.00061	.10504	-.00025	.03471	.08821	.00012	5.2407	.00043
#2	-.00083	.11472	-.00230	.03313	.08661	.00002	5.2110	.00042
#3	.00075	.10027	-.00054	.03151	.08769	.00011	5.2583	.00021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu2247	Fe2611	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00014**	**.00095**	**.00008**	**.02797**	**.60047**	**.00858**	**2.1586**	**.00311**
Stddev	.00017	.00029	.00059	.02213	.09383	.00283	.1185	.00120
%RSD	127.31	30.713	690.11	79.147	15.626	32.998	5.4907	38.602
#1	.00006	.00086	.00047	.00250	.55885	.01016	2.2144	.00174
#2	-.00021	.00071	.00038	.03887	.70791	.01026	2.0225	.00399
#3	-.00026	.00128	-.00059	.04253	.53465	.00531	2.2389	.00360
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	P_2149	Pb2203	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00292**	**135.86**	**.00147**	**-.00831**	**-.00001**	**-.00288**	**-.00198**	**.39449**
Stddev	.00037	.20	.00084	.00291	.00184	.00244	.00300	.01162
%RSD	12.696	.15012	57.468	34.992	17621.	84.786	151.75	2.9450
#1	-.00275	135.74	.00238	-.00617	.00186	-.00432	-.00095	.40373
#2	-.00334	135.75	.00130	-.00714	-.00007	-.00006	-.00536	.39828
#3	-.00266	136.09	.00072	-.01163	-.00182	-.00426	.00037	.38145
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: M1C1317-01 Acquired: 3/18/2021 10:26:46 Type: Unk
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Sn1899	Sr4077	Ti3372	Tl1908	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00041	.08533	.00300	-.00308	.00093	.01916	-.00018
Stddev	.00067	.00076	.00695	.00181	.00095	.00037	.00024
%RSD	162.29	.88958	231.96	58.749	101.87	1.9557	134.12
#1	.00018	.08454	.00488	-.00177	.00030	.01940	.00008
#2	-.00011	.08540	-.00470	-.00232	.00202	.01935	-.00039
#3	.00116	.08605	.00881	-.00514	.00047	.01873	-.00023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	15195.	90694.	6101.4
Stddev	3.	340.	19.0
%RSD	.01766	.37458	.31093
#1	15198.	90894.	6079.7
#2	15192.	90302.	6109.6
#3	15195.	90887.	6114.8

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Section C:
Metals
EPA 6010B
QC Sample Raw Data

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

Sample Name: B1C1005-BLK1 Acquired: 3/18/2021 9:49:50 Type: Unk
Method: ICP-THERMO4_6010Water(v250) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00047**	**.01926**	**-.00060**	**.00458**	**.00291**	**-.00003**	**.07659**	**.00007**
Stddev	.00069	.00365	.00127	.00116	.00031	.00006	.01136	.00021
%RSD	145.36	18.954	211.52	25.259	10.525	223.19	14.828	315.89
#1	-.00126	.01553	-.00089	.00582	.00297	-.00006	.08665	-.00017
#2	-.00019	.01944	-.00170	.00352	.00258	.00004	.07883	.00022
#3	.00003	.02282	.00079	.00441	.00318	-.00006	.06428	.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu2247	Fe2611	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00002**	**.00161**	**-.00124**	**.01216**	**-.02909**	**.01006**	**-.03007**	**-.00152**
Stddev	.00024	.00048	.00121	.01168	.05422	.00401	.03728	.00201
%RSD	988.23	30.022	97.307	96.049	186.37	39.873	123.97	132.45
#1	-.00012	.00178	-.00158	.00379	-.07259	.01420	-.07042	.00061
#2	.00025	.00198	-.00224	.00719	.03165	.00978	.00309	-.00178
#3	-.00020	.00106	.00010	.02550	-.04634	.00619	-.02288	-.00338
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	P_2149	Pb2203	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00277**	**144.87**	**-.00072**	**-.00956**	**-.00131**	**.00026**	**-.00041**	**-.02685**
Stddev	.00035	.39	.00035	.00445	.00178	.00297	.00005	.00121
%RSD	12.699	.27158	48.276	46.492	135.74	1137.5	12.893	4.5001
#1	-.00308	145.22	-.00067	-.01433	-.00304	-.00280	-.00043	-.02687
#2	-.00239	144.44	-.00110	-.00554	-.00140	.00046	-.00035	-.02805
#3	-.00284	144.95	-.00041	-.00881	.00051	.00313	-.00044	-.02563
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: B1C1005-BLK1 Acquired: 3/18/2021 9:49:50 Type: Unk
Method: ICP-THERMO4_6010Water(v250) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Sn1899	Sr4077	Ti3372	Tl1908	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00021	.00006	.00094	.00033	-.00052	.00381	-.00001
Stddev	.00066	.00019	.00132	.00159	.00020	.00023	.00033
%RSD	323.02	293.05	141.38	481.61	37.388	5.9310	3282.3
#1	-.00022	.00022	.00244	-.00091	-.00070	.00403	.00018
#2	.00047	.00011	.00044	.00213	-.00056	.00383	-.00039
#3	-.00086	-.00014	-.00007	-.00022	-.00031	.00358	.00017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	15258.	91052.	6220.3
Stddev	21.	157.	35.0
%RSD	.13527	.17238	.56254
#1	15273.	90950.	6214.9
#2	15267.	90974.	6257.6
#3	15235.	91233.	6188.3

Sample Name: B1C1005-BLK2 Acquired: 3/18/2021 9:53:38 Type: Unk
Method: ICP-THERMO4_6010Water(v250) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00036**	**.00936**	**-.00138**	**.01321**	**.01280**	**.00003**	**.24526**	**.00013**
Stddev	.00041	.00393	.00101	.00158	.00078	.00002	.00793	.00009
%RSD	114.88	41.985	73.174	11.934	6.1139	71.490	3.2339	70.727
#1	.00083	.00515	-.00210	.01159	.01362	.00001	.23611	.00023
#2	.00020	.01293	-.00023	.01330	.01271	.00004	.24949	.00011
#3	.00005	.01001	-.00181	.01473	.01206	.00003	.25018	.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu2247	Fe2611	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00004**	**.00091**	**-.00068**	**.02680**	**-.11357**	**.01197**	**.00112**	**-.00135**
Stddev	.00027	.00051	.00091	.01847	.04388	.00569	.02702	.00207
%RSD	630.27	55.798	133.68	68.923	38.641	47.562	2410.0	153.39
#1	.00026	.00094	.00027	.04171	-.16095	.01788	.01485	.00103
#2	-.00028	.00139	-.00154	.00613	-.10543	.01151	.01852	-.00266
#3	-.00010	.00038	-.00077	.03257	-.07432	.00652	-.03001	-.00242
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	P_2149	Pb2203	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00285**	**3.8105**	**.00034**	**-.00837**	**-.00070**	**-.00282**	**.00238**	**-.02211**
Stddev	.00026	.0176	.00107	.00085	.00089	.00206	.00214	.00124
%RSD	9.2348	.46266	317.10	10.182	127.88	72.857	89.615	5.5929
#1	-.00294	3.8297	.00123	-.00899	.00031	-.00453	.00356	-.02259
#2	-.00256	3.7950	.00062	-.00740	-.00139	-.00340	.00367	-.02070
#3	-.00306	3.8070	-.00085	-.00872	-.00100	-.00054	-.00008	-.02303
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: B1C1005-BLK2 Acquired: 3/18/2021 9:53:38 Type: Unk
Method: ICP-THERMO4_6010Water(v250) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Sn1899	Sr4077	Ti3372	Tl1908	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00059	.00056	-.00219	-.00241	.00029	.00952	-.00030
Stddev	.00019	.00026	.00217	.00203	.00038	.00029	.00051
%RSD	31.438	47.254	99.039	84.046	131.73	3.0602	167.46
#1	-.00045	.00068	-.00125	-.00239	.00071	.00976	-.00075
#2	-.00053	.00074	-.00468	-.00040	-.00004	.00959	-.00040
#3	-.00080	.00026	-.00065	-.00445	.00020	.00920	.00025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	15776.	95556.	6225.0
Stddev	5.	99.	49.3
%RSD	.03440	.10310	.79202
#1	15772.	95480.	6185.7
#2	15782.	95521.	6280.3
#3	15775.	95667.	6209.1

Sample Name: B1C1005-BLK3 Acquired: 3/18/2021 10:00:47 Type: Unk
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00059**	**-.00020**	**-.00336**	**.01297**	**.00276**	**-.00002**	**.01217**	**.00039**
Stddev	.00089	.00726	.00083	.00365	.00036	.00001	.01396	.00028
%RSD	151.24	3616.6	24.598	28.177	12.904	64.364	114.78	72.754
#1	-.00030	-.00787	-.00268	.01522	.00317	-.00003	-.00211	.00067
#2	.00059	.00068	-.00312	.00875	.00251	-.00003	.01282	.00011
#3	.00148	.00658	-.00428	.01493	.00260	-.00001	.02579	.00038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu2247	Fe2611	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00013**	**.00202**	**-.00089**	**-.00390**	**-.31919**	**.01510**	**-.02780**	**.00002**
Stddev	.00030	.00054	.00023	.00799	.02797	.00163	.04647	.00195
%RSD	242.36	26.696	25.748	205.05	8.7630	10.823	167.18	8026.7
#1	-.00017	.00140	-.00114	-.01308	-.31374	.01698	-.05246	.00026
#2	.00020	.00235	-.00084	-.00015	-.34948	.01427	.02580	-.00203
#3	-.00041	.00232	-.00069	.00153	-.29434	.01404	-.05674	.00185
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	P_2149	Pb2203	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00285**	**2.1391**	**-.00015**	**-.00741**	**-.00199**	**-.00115**	**.00524**	**-.01809**
Stddev	.00044	.0319	.00036	.00354	.00248	.00339	.00234	.00078
%RSD	15.368	1.4910	246.63	47.732	124.82	295.77	44.652	4.3004
#1	-.00270	2.1393	-.00046	-.00333	.00067	.00147	.00432	-.01885
#2	-.00334	2.1071	.00024	-.00948	-.00424	-.00497	.00349	-.01730
#3	-.00251	2.1709	-.00022	-.00942	-.00239	.00007	.00789	-.01812
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: B1C1005-BLK3 Acquired: 3/18/2021 10:00:47 Type: Unk
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Sn1899	Sr4077	Ti3372	Tl1908	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00111**	**.00029**	**-.00483**	**-.00155**	**.00026**	**.00123**	**-.00033**
Stddev	.00030	.00031	.00143	.00068	.00049	.00011	.00032
%RSD	27.119	104.38	29.665	43.832	191.08	8.6003	97.645
#1	-.00078	-.00005	-.00495	-.00187	-.00017	.00134	.00003
#2	-.00136	.00052	-.00334	-.00077	.00079	.00121	-.00044
#3	-.00120	.00041	-.00620	-.00201	.00014	.00113	-.00058
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**15542.**	**94270.**	**6131.2**
Stddev	12.	241.	28.0
%RSD	.07965	.25512	.45724
#1	15540.	93995.	6114.4
#2	15555.	94442.	6115.6
#3	15531.	94372.	6163.5

Sample Name: B1C1005-SRL1@5 Acquired: 3/18/2021 10:15:28 Type: Unk
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00032**	**2.2822**	**.00042**	**.00253**	**.04056**	**-.00001**	**58.706**	**.00008**
Stddev	.00151	.0071	.00078	.00187	.00131	.00008	.160	.00018
%RSD	470.44	.31080	186.47	73.992	3.2215	934.15	.27268	227.44
#1	-.00006	2.2885	-.00033	.00468	.04207	-.00005	58.818	.00028
#2	.00104	2.2836	.00036	.00150	.03986	.00008	58.523	-.00008
#3	-.00194	2.2745	.00123	.00139	.03975	-.00005	58.777	.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu2247	Fe2611	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00028**	**.00138**	**.00130**	**-.00132**	**51.640**	**.00683**	**.00172**	**-.00141**
Stddev	.00044	.00088	.00063	.03159	.353	.00480	.04134	.00150
%RSD	156.91	63.547	47.989	2402.2	.68288	70.340	2401.2	106.19
#1	-.00068	.00239	.00195	-.03347	51.987	.00681	-.03876	-.00312
#2	-.00037	.00077	.00070	.02969	51.282	.01164	.00006	-.00037
#3	.00020	.00099	.00126	-.00017	51.650	.00204	.04387	-.00073
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	P_2149	Pb2203	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00081**	**72.519**	**-.00102**	**.00679**	**.00019**	**-.00308**	**.01251**	**-.02077**
Stddev	.00025	.216	.00107	.00126	.00354	.00306	.00164	.00056
%RSD	30.866	.29747	105.52	18.611	1833.8	99.280	13.101	2.6877
#1	-.00100	72.672	-.00060	.00812	-.00116	-.00048	.01107	-.02134
#2	-.00090	72.273	-.00224	.00664	-.00247	-.00645	.01430	-.02074
#3	-.00053	72.614	-.00021	.00561	.00421	-.00230	.01218	-.02023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: B1C1005-SRL1@5 Acquired: 3/18/2021 10:15:28 Type: Unk
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Sn1899	Sr4077	Ti3372	Tl1908	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00084**	**.09418**	**-.00505**	**-.00368**	**.00047**	**-.00059**	**-.00056**
Stddev	.00001	.00102	.00163	.00455	.00071	.00005	.00019
%RSD	1.3533	1.0876	32.210	123.82	150.94	7.8711	34.042
#1	-.00083	.09525	-.00684	-.00884	-.00033	-.00061	-.00057
#2	-.00083	.09321	-.00367	-.00191	.00071	-.00054	-.00075
#3	-.00085	.09407	-.00463	-.00027	.00102	-.00063	-.00037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**15230.**	**90090.**	**6128.2**
Stddev	21.	420.	32.2
%RSD	.13621	.46636	.52539
#1	15254.	90518.	6098.8
#2	15217.	89678.	6162.6
#3	15219.	90073.	6123.2

Sample Name: B1C1005-BS1 Acquired: 3/18/2021 10:04:36 Type: Unk
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.19758**	**4.9653**	**.17873**	**.92858**	**.49978**	**.02356**	**4.9513**	**.02447**
Stddev	.00030	.0097	.00571	.00302	.00224	.00004	.0321	.00042
%RSD	.15196	.19486	3.1922	.32574	.44790	.17577	.64861	1.7356
#1	.19751	4.9701	.18318	.92969	.50178	.02352	4.9360	.02493
#2	.19792	4.9717	.18071	.93089	.49736	.02360	4.9297	.02436
#3	.19733	4.9542	.17230	.92516	.50019	.02355	4.9882	.02410
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu2247	Fe2611	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09847**	**.24515**	**.23902**	**2.0318**	**24.530**	**.50926**	**5.0862**	**.24702**
Stddev	.00283	.00081	.00807	.0139	.150	.00266	.0280	.00438
%RSD	2.8741	.33162	3.3781	.68409	.61340	.52215	.54967	1.7719
#1	.10084	.24560	.24656	2.0479	24.634	.50804	5.1167	.24665
#2	.09922	.24564	.24000	2.0249	24.598	.50743	5.0617	.24284
#3	.09534	.24421	.23050	2.0228	24.357	.51231	5.0801	.25157
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	P_2149	Pb2203	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48593**	**25.048**	**.24371**	**4.6271**	**.24906**	**.56064**	**.17967**	**2.3719**
Stddev	.01514	.105	.00742	.1429	.00818	.01913	.00368	.0624
%RSD	3.1158	.41908	3.0464	3.0895	3.2863	3.4117	2.0507	2.6328
#1	.49879	25.113	.25014	4.7537	.25684	.57890	.18173	2.4304
#2	.48976	24.927	.24541	4.6554	.24983	.56229	.18188	2.3791
#3	.46924	25.104	.23559	4.4721	.24052	.54075	.17542	2.3062
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: B1C1005-BS1 Acquired: 3/18/2021 10:04:36 Type: Unk
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Sn1899	Sr4077	Ti3372	Tl1908	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48426	.49408	.48353	.24890	.48963	.47331	.00431
Stddev	.01415	.00182	.00731	.00680	.00259	.01415	.00026
%RSD	2.9228	.36905	1.5120	2.7320	.52817	2.9904	6.1359
#1	.49684	.49609	.48770	.25491	.48962	.48633	.00407
#2	.48700	.49254	.47509	.25026	.49223	.47536	.00428
#3	.46893	.49361	.48781	.24152	.48706	.45825	.00459
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	15381.	91403.	6062.3
Stddev	32.	57.	30.5
%RSD	.20938	.06266	.50249
#1	15391.	91369.	6027.8
#2	15345.	91371.	6073.6
#3	15407.	91469.	6085.5

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Section E:
Metals
EPA 6010B
Sequence QC Sample Raw Data

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

Sample Name: S0 Acquired: 3/18/2021 8:57:54 Type: Cal
Method: ICP-THERMO4_6010Water(v250) Mode: IR Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00021**	**.00176**	**.00027**	**.00002**	**.01491**	**-.00013**	**.00004**
Stddev	.00009	.00003	.00002	.00004	.00016	.00001	.00071
%RSD	40.542	1.4438	7.2212	233.98	1.0759	9.3663	1804.3
#1	-.00026	.00173	.00029	.00004	.01475	-.00014	.00083
#2	-.00011	.00178	.00025	-.00003	.01507	-.00014	-.00016
#3	-.00026	.00176	.00027	.00003	.01490	-.00012	-.00055

Elem	Cd2288	Co2286	Cr2677	Cu2247	Fe2611	K_7664	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00025**	**.00007**	**.00023**	**-.00040**	**-.00014**	**.00873**	**-.00399**
Stddev	.00002	.00008	.00005	.00005	.00014	.00171	.00446
%RSD	9.8943	114.20	23.188	12.710	104.93	19.544	111.63
#1	.00026	-.00002	.00023	-.00042	-.00002	.01068	-.00599
#2	.00027	.00011	.00028	-.00043	-.00030	.00749	-.00711
#3	.00022	.00011	.00017	-.00034	-.00009	.00804	.00111

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2149	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00006**	**.00127**	**.00061**	**-.01313**	**-.00068**	**.00009**	**-.00012**
Stddev	.00017	.00016	.00021	.00304	.00005	.00005	.00007
%RSD	261.71	12.372	35.051	23.123	7.5819	49.426	57.745
#1	-.00011	.00120	.00043	-.01224	-.00063	.00012	-.00009
#2	-.00020	.00145	.00056	-.01652	-.00073	.00004	-.00007
#3	.00012	.00116	.00084	-.01064	-.00068	.00013	-.00020

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3372	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00021**	**-.00029**	**.00103**	**.00016**	**.00266**	**-.00135**	**-.00004**
Stddev	.00004	.00016	.00063	.00006	.00051	.00057	.00003
%RSD	18.167	55.478	61.064	39.515	19.098	42.051	82.358
#1	.00017	-.00016	.00046	.00010	.00213	-.00125	-.00001
#2	.00022	-.00024	.00093	.00016	.00314	-.00196	-.00003
#3	.00024	-.00046	.00170	.00022	.00270	-.00084	-.00007

Sample Name: S0 Acquired: 3/18/2021 8:57:54 Type: Cal
Method: ICP-THERMO4_6010Water(v250) Mode: IR Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	V_2924	Zn2062	Zr3391
Units	Cts/S	Cts/S	Cts/S
Avg	.00003	.00081	-.00749
Stddev	.00004	.00008	.00089
%RSD	121.59	9.5042	11.843
#1	.00007	.00072	-.00657
#2	-.00001	.00083	-.00754
#3	.00004	.00087	-.00834

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	15650.	93960.	6367.9
Stddev	12.	327.	375.5
%RSD	.07963	.34787	5.8968
#1	15659.	93692.	6800.7
#2	15636.	93862.	6174.0
#3	15655.	94324.	6128.9

Sample Name: S1 Acquired: 3/18/2021 9:01:44 Type: Cal
Method: ICP-THERMO4_6010Water(v250) Mode: IR Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	Ba4554	Be3131	Ca4226	Cd2288	Co2286
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00010**	**.00285**	**.02710**	**.00029**	**.00497**	**.00049**	**.00053**
Stddev	.00009	.00005	.00079	.00006	.00056	.00006	.00004
%RSD	87.706	1.6184	2.9217	19.583	11.369	11.857	7.3086
#1	.00009	.00283	.02720	.00024	.00441	.00045	.00050
#2	.00020	.00282	.02783	.00029	.00554	.00056	.00052
#3	.00002	.00290	.02626	.00035	.00495	.00048	.00057

Elem	Cr2677	Cu2247	Fe2611	K_7664	Mn2576	Mo2020	Na5895
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00053**	**-.00013**	**.00034**	**.02254**	**.00176**	**.00137**	**.03308**
Stddev	.00004	.00007	.00025	.00434	.00039	.00001	.00379
%RSD	7.4305	53.164	74.461	19.252	22.294	.89556	11.463
#1	.00057	-.00007	.00063	.02701	.00211	.00136	.03742
#2	.00053	-.00013	.00017	.02226	.00134	.00137	.03038
#3	.00049	-.00021	.00022	.01835	.00183	.00139	.03145

Elem	Ni2316	P_2149	Pb2203	Sb2068	Si2124	Sn1899	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00036**	**.00096**	**.00013**	**.00033**	**.00128**	**.00080**	**.02134**
Stddev	.00010	.00005	.00008	.00005	.00006	.00004	.00097
%RSD	27.449	5.4697	58.300	13.782	4.3595	5.1484	4.5623
#1	-.00042	.00097	.00017	.00028	.00135	.00083	.02164
#2	-.00040	.00101	.00004	.00036	.00125	.00081	.02214
#3	-.00024	.00091	.00018	.00036	.00125	.00075	.02026

Elem	Ti3372	V_2924	Zn2062	Zr3391
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00043**	**.00066**	**.00479**	**.01425**
Stddev	.00050	.00003	.00004	.00137
%RSD	116.43	3.9421	.91436	9.6193
#1	-.00016	.00069	.00478	.01583
#2	-.00012	.00064	.00484	.01335
#3	-.00100	.00065	.00475	.01357

Sample Name: S1 Acquired: 3/18/2021 9:01:44 Type: Cal
Method: ICP-THERMO4_6010Water(v250) Mode: IR Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	15577.	93147.	6039.8
Stddev	16.	226.	36.1
%RSD	.10411	.24234	.59837
#1	15592.	92894.	6001.5
#2	15560.	93329.	6044.7
#3	15579.	93217.	6073.3

Sample Name: S2 Acquired: 3/18/2021 9:05:35 Type: Cal
Method: ICP-THERMO4_6010Water(v250) Mode: IR Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00022**	**.00385**	**.00041**	**.00019**	**.03667**	**.00069**	**.00527**
Stddev	.00007	.00002	.00009	.00006	.00180	.00003	.00005
%RSD	34.750	.64382	22.018	29.740	4.9053	4.7535	.94565
#1	.00018	.00388	.00041	.00026	.03872	.00066	.00523
#2	.00030	.00385	.00032	.00015	.03595	.00072	.00526
#3	.00017	.00383	.00050	.00017	.03534	.00067	.00533

Elem	Cd2288	Co2286	Cr2677	Cu2247	Fe2611	K_7664	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00066**	**.00108**	**.00071**	**.00041**	**.00081**	**.03124**	**.01275**
Stddev	.00008	.00012	.00001	.00006	.00040	.00262	.00209
%RSD	12.103	10.860	1.9736	13.502	49.275	8.3969	16.409
#1	.00059	.00097	.00069	.00039	.00126	.03126	.01490
#2	.00063	.00106	.00072	.00047	.00067	.02861	.01073
#3	.00075	.00120	.00071	.00037	.00050	.03385	.01262

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2149	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00071**	**.00248**	**.00228**	**.07481**	**-.00004**	**.00172**	**.00036**
Stddev	.00026	.00025	.00004	.00226	.00009	.00007	.00011
%RSD	36.464	10.120	1.9300	3.0239	216.20	4.0830	29.755
#1	.00078	.00237	.00233	.07364	-.00006	.00180	.00048
#2	.00042	.00276	.00227	.07742	.00005	.00168	.00026
#3	.00093	.00230	.00225	.07337	-.00011	.00167	.00035

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3372	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00065**	**-.00014**	**.00211**	**.00141**	**.03763**	**.00117**	**.00011**
Stddev	.00009	.00005	.00004	.00005	.00068	.00055	.00001
%RSD	14.162	36.610	1.8639	3.2108	1.8015	47.059	11.791
#1	.00058	-.00019	.00215	.00146	.03691	.00065	.00010
#2	.00076	-.00011	.00210	.00138	.03825	.00111	.00011
#3	.00063	-.00010	.00208	.00138	.03772	.00174	.00013

Sample Name: S2 Acquired: 3/18/2021 9:05:35 Type: Cal
Method: ICP-THERMO4_6010Water(v250) Mode: IR Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	V_2924	Zn2062	Zr3391
Units	Cts/S	Cts/S	Cts/S
Avg	.00114	.00826	.03601
Stddev	.00005	.00016	.00108
%RSD	4.1191	1.9095	2.9868
#1	.00119	.00839	.03713
#2	.00112	.00831	.03591
#3	.00111	.00808	.03498

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	15616.	93053.	6036.2
Stddev	28.	319.	26.5
%RSD	.17628	.34300	.43960
#1	15634.	93087.	6033.7
#2	15584.	92718.	6011.0
#3	15629.	93353.	6063.9

Sample Name: S3 Acquired: 3/18/2021 9:09:22 Type: Cal
Method: ICP-THERMO4_6010Water(v250) Mode: IR Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226	Cd2288
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.03320	.12423	.01155	.01270	1.1804	.05251	.35369	.02168
Stddev	.00003	.00023	.00011	.00001	.0038	.00011	.00083	.00011
%RSD	.08754	.18699	.95913	.09526	.32183	.20839	.23399	.49609
#1	.03321	.12418	.01154	.01269	1.1842	.05249	.35458	.02160
#2	.03317	.12449	.01145	.01271	1.1766	.05263	.35355	.02163
#3	.03322	.12403	.01167	.01271	1.1803	.05241	.35295	.02180

Elem	Co2286	Cr2677	Cu2247	Fe2611	K_7664	Li6707	Mg2790	Mn2576
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.06318	.02896	.05538	.05950	1.6711	.78888	.05630	.08649
Stddev	.00021	.00010	.00024	.00022	.0055	.00359	.00009	.00088
%RSD	.33545	.34606	.43050	.36949	.32708	.45552	.16213	1.0127
#1	.06336	.02903	.05562	.05926	1.6667	.79170	.05628	.08575
#2	.06324	.02900	.05538	.05970	1.6772	.79009	.05640	.08746
#3	.06295	.02885	.05514	.05954	1.6694	.78483	.05622	.08626

Elem	Mo2020	Na5895	Ni2316	P_2149	Pb2203	Sb2068	Se1960	Si2124
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.14119	5.3219	.04282	.11208	.03277	.02961	.00767	.12796
Stddev	.00061	.0117	.00014	.00029	.00004	.00006	.00009	.00039
%RSD	.42957	.21980	.31853	.26281	.12972	.20434	1.1675	.30744
#1	.14180	5.3156	.04294	.11227	.03281	.02956	.00772	.12819
#2	.14118	5.3354	.04283	.11223	.03272	.02968	.00772	.12818
#3	.14059	5.3148	.04267	.11174	.03277	.02959	.00756	.12751

Elem	Sn1899	Sr4077	Ti3372	Tl1908	V_2924	Zn2062	Zr3391
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.08259	2.1599	.12767	.00962	.07182	.50530	2.9675
Stddev	.00031	.0045	.00066	.00009	.00023	.00151	.0141
%RSD	.37549	.20666	.51829	.91071	.32582	.29840	.47453
#1	.08291	2.1638	.12841	.00967	.07180	.50674	2.9733
#2	.08258	2.1550	.12745	.00967	.07207	.50543	2.9778
#3	.08228	2.1610	.12715	.00952	.07160	.50373	2.9515

Sample Name: S3 Acquired: 3/18/2021 9:09:22 Type: Cal
Method: ICP-THERMO4_6010Water(v250) Mode: IR Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	15301.	90243.	6034.9
Stddev	41.	309.	29.1
%RSD	.26681	.34284	.48273
#1	15254.	90589.	6056.1
#2	15321.	89992.	6001.7
#3	15328.	90148.	6047.0

Sample Name: S4 Acquired: 3/18/2021 9:12:56 Type: Cal
Method: ICP-THERMO4_6010Water(v250) Mode: IR Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226	Cd2288
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.06684	.24308	.02293	.02592	2.3649	.10673	.71419	.04236
Stddev	.00006	.00062	.00036	.00008	.0033	.00023	.00262	.00068
%RSD	.08660	.25677	1.5692	.30743	.14113	.21774	.36717	1.6001
#1	.06677	.24371	.02321	.02596	2.3629	.10698	.71289	.04295
#2	.06688	.24309	.02307	.02598	2.3631	.10668	.71721	.04251
#3	.06686	.24246	.02252	.02583	2.3688	.10652	.71247	.04162

Elem	Co2286	Cr2677	Cu2247	Fe2611	K_7664	Li6707	Mg2790	Mn2576
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.12370	.05801	.10943	.12127	3.3688	1.5964	.11261	.17426
Stddev	.00167	.00013	.00162	.00052	.0022	.0062	.00091	.00150
%RSD	1.3502	.23228	1.4787	.42660	.06465	.38829	.81235	.86338
#1	.12524	.05816	.11092	.12081	3.3673	1.6017	.11365	.17368
#2	.12392	.05793	.10965	.12183	3.3679	1.5979	.11229	.17597
#3	.12193	.05793	.10771	.12117	3.3713	1.5896	.11191	.17313

Elem	Mo2020	Na5895	Ni2316	P_2149	Pb2203	Sb2068	Se1960	Si2124
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.27912	10.755	.08475	.22371	.06403	.05854	.01562	.25268
Stddev	.00452	.031	.00114	.00303	.00080	.00075	.00025	.00351
%RSD	1.6205	.28839	1.3443	1.3559	1.2530	1.2751	1.6081	1.3882
#1	.28335	10.757	.08586	.22673	.06480	.05935	.01583	.25603
#2	.27967	10.785	.08483	.22374	.06408	.05839	.01569	.25299
#3	.27435	10.723	.08358	.22066	.06320	.05788	.01534	.24903

Elem	Sn1899	Sr4077	Ti3372	Tl1908	V_2924	Zn2062	Zr3391
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.16212	4.3703	.26061	.01834	.14544	.99840	5.9402
Stddev	.00209	.0046	.00097	.00042	.00019	.01342	.0459
%RSD	1.2909	.10628	.37189	2.2760	.13296	1.3442	.77286
#1	.16403	4.3650	.26147	.01874	.14558	1.0108	5.9803
#2	.16246	4.3721	.26079	.01839	.14553	1.0003	5.9502
#3	.15988	4.3738	.25956	.01791	.14522	.98414	5.8901

Sample Name: S4 Acquired: 3/18/2021 9:12:56 Type: Cal
Method: ICP-THERMO4_6010Water(v250) Mode: IR Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	15250.	89293.	6090.0
Stddev	20.	267.	25.2
%RSD	.13176	.29924	.41354
#1	15271.	89288.	6062.0
#2	15231.	89563.	6097.1
#3	15249.	89029.	6110.9

Sample Name: SEQ-ICV Acquired: 3/18/2021 9:16:27 Type: QC
Method: ICP-THERMO4_6010Water(v250) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.39484**	**10.073**	**.39196**	**.49738**	**.99810**	**.04922**	**9.9383**	**.04873**
Stddev	.00094	.011	.01139	.00246	.00373	.00016	.0115	.00090
%RSD	.23749	.10959	2.9058	.49548	.37384	.32857	.11539	1.8557
#1	.39590	10.086	.40360	.49953	.99426	.04939	9.9255	.04956
#2	.39412	10.066	.39145	.49793	1.0017	.04920	9.9476	.04886
#3	.39449	10.067	.38084	.49469	.99833	.04907	9.9417	.04777
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu2247	Fe2611	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.19570**	**.49877**	**.49599**	**3.9844**	**49.733**	**.99935**	**10.042**	**.50181**
Stddev	.00455	.00065	.01298	.0151	.061	.00182	.130	.00293
%RSD	2.3253	.12940	2.6171	.37859	.12241	.18181	1.2929	.58477
#1	.19986	.49948	.50756	4.0006	49.690	1.0014	10.160	.50445
#2	.19639	.49861	.49845	3.9819	49.803	.99785	9.9032	.49865
#3	.19084	.49822	.48195	3.9708	49.707	.99883	10.064	.50233
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	P_2149	Pb2203	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.96944**	**49.664**	**.49203**	**9.7311**	**.49237**	**1.1351**	**.39287**	**4.8506**
Stddev	.02476	.125	.01200	.2335	.00995	.0256	.00777	.1007
%RSD	2.5545	.25210	2.4381	2.3995	2.0212	2.2522	1.9783	2.0765
#1	.99213	49.760	.50314	9.9402	.50303	1.1598	.40042	4.9424
#2	.97315	49.710	.49363	9.7740	.49076	1.1368	.39330	4.8665
#3	.94302	49.522	.47931	9.4791	.48332	1.1087	.38490	4.7429
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: SEQ-ICV Acquired: 3/18/2021 9:16:27 Type: QC
Method: ICP-THERMO4_6010Water(v250) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Sn1899	Sr4077	Ti3372	Tl1908	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.96990	.99440	.97674	.51134	.99117	.98880	.99442
Stddev	.02210	.00353	.00476	.01191	.00144	.02349	.00770
%RSD	2.2784	.35512	.48774	2.3288	.14513	2.3756	.77412
#1	.98887	.99161	.97940	.52305	.99276	1.0098	1.0033
#2	.97518	.99837	.97958	.51173	.99081	.99324	.98948
#3	.94564	.99323	.97124	.49924	.98995	.96341	.99050
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value Range							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	15248.	89507.	6057.0
Stddev	35.	85.	34.7
%RSD	.23134	.09445	.57248
#1	15289.	89602.	6018.2
#2	15224.	89442.	6084.9
#3	15233.	89476.	6067.9

Sample Name: SEQ-ICB Acquired: 3/18/2021 9:20:01 Type: Blank
Method: ICP-THERMO4_6010Water(v250) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00021**	**.00662**	**.00192**	**.00290**	**.00259**	**.00009**	**-.01032**	**.00006**
Stddev	.00050	.00370	.00169	.00168	.00189	.00005	.04753	.00018
%RSD	242.99	55.857	88.040	57.926	73.036	58.380	460.67	300.61
#1	.00018	.00265	.00323	.00432	.00122	.00015	.03068	-.00007
#2	.00072	.00724	.00001	.00104	.00475	.00004	.00078	.00027
#3	-.00028	.00997	.00252	.00333	.00181	.00008	-.06241	-.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu2247	Fe2611	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00016**	**.00044**	**-.00050**	**.00743**	**.08371**	**.00480**	**.00297**	**-.00238**
Stddev	.00032	.00048	.00085	.01057	.06195	.00109	.06862	.00068
%RSD	198.17	110.37	171.68	142.32	74.001	22.682	2307.6	28.520
#1	-.00037	.00097	-.00148	.00830	.01419	.00602	-.06748	-.00206
#2	.00021	.00002	.00002	.01754	.10391	.00442	.00682	-.00192
#3	-.00032	.00033	-.00003	-.00355	.13304	.00395	.06959	-.00315
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	P_2149	Pb2203	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00318**	**.04787**	**.00019**	**-.00145**	**-.00145**	**.00459**	**-.00070**	**-.03343**
Stddev	.00068	.00745	.00126	.00365	.00069	.00061	.00359	.00170
%RSD	21.409	15.566	657.20	251.85	47.521	13.255	510.29	5.0972
#1	.00279	.05499	.00131	.00270	-.00161	.00511	-.00451	-.03288
#2	.00278	.04850	-.00118	-.00419	-.00205	.00392	-.00022	-.03208
#3	.00396	.04013	.00045	-.00286	-.00070	.00473	.00261	-.03535
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: SEQ-ICB Acquired: 3/18/2021 9:20:01 Type: Blank
Method: ICP-THERMO4_6010Water(v250) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Sn1899	Sr4077	Ti3372	Tl1908	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00043**	**.00004**	**-.00277**	**-.00292**	**.00072**	**-.00083**	**.00053**
Stddev	.00050	.00010	.00237	.00274	.00062	.00008	.00029
%RSD	117.60	284.06	85.480	93.692	86.586	9.4040	53.826
#1	-.00057	.00011	-.00452	-.00390	.00141	-.00082	.00021
#2	.00013	.00007	-.00008	.00017	.00055	-.00092	.00075
#3	-.00084	-.00008	-.00371	-.00505	.00020	-.00076	.00063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**15578.**	**92763.**	**6004.0**
Stddev	80.	216.	37.5
%RSD	.51544	.23303	.62497
#1	15592.	92944.	6031.7
#2	15492.	92523.	6018.9
#3	15651.	92820.	5961.3

Sample Name: SEQ-IFA Acquired: 3/18/2021 9:23:49 Type: QC
Method: ICP-THERMO4_6010Water(v250) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00643	237.88	.00577	-.01067	.00160	-.00000	238.18	.00002
Stddev	.00103	2.96	.00156	.00089	.00068	.00004	.94	.00012
%RSD	16.061	1.2436	27.118	8.3271	42.800	956.23	.39274	484.07
#1	.00756	240.94	.00571	-.00980	.00224	.00003	239.12	-.00009
#2	.00619	237.67	.00736	-.01158	.00088	.00001	238.19	.00015
#3	.00554	235.04	.00423	-.01064	.00167	-.00005	237.24	.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu2247	Fe2611	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00101	.00160	.00768	93.877	-.03541	.00578	238.74	.00171
Stddev	.00015	.00100	.00107	.343	.02830	.00349	.89	.00059
%RSD	14.429	62.706	13.972	.36569	79.914	60.337	.37146	34.416
#1	-.00085	.00261	.00776	94.272	-.06576	.00948	239.41	.00140
#2	-.00114	.00159	.00872	93.652	-.03071	.00530	239.07	.00135
#3	-.00103	.00060	.00657	93.706	-.00975	.00256	237.73	.00239
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	P_2149	Pb2203	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00183	.12289	-.00395	.00328	.00788	.01054	.00580	-.03139
Stddev	.00047	.03606	.00128	.01150	.00446	.00437	.00347	.00310
%RSD	25.630	29.340	32.311	350.19	56.570	41.437	59.760	9.8812
#1	-.00230	.15379	-.00398	.00726	.01225	.01552	.00209	-.03496
#2	-.00136	.08328	-.00521	.01227	.00806	.00737	.00635	-.02984
#3	-.00183	.13159	-.00266	-.00967	.00334	.00873	.00896	-.02937
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: SEQ-IFA Acquired: 3/18/2021 9:23:49 Type: QC
Method: ICP-THERMO4_6010Water(v250) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Sn1899	Sr4077	Ti3372	Tl1908	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00081**	**.00004**	**-.01136**	**-.00206**	**-.00109**	**.00097**	**-.00027**
Stddev	.00014	.00059	.00113	.00445	.00048	.00013	.00045
%RSD	16.682	1334.5	9.9813	215.84	44.311	13.950	167.24
#1	-.00078	.00052	-.01027	-.00207	-.00162	.00112	.00017
#2	-.00096	.00022	-.01253	.00239	-.00067	.00086	-.00074
#3	-.00069	-.00061	-.01128	-.00650	-.00098	.00092	-.00024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**14665.**	**84868.**	**5941.7**
Stddev	14.	363.	11.2
%RSD	.09569	.42776	.18814
#1	14653.	84547.	5928.9
#2	14661.	84795.	5949.2
#3	14680.	85262.	5947.0

Sample Name: SEQ-IFB Acquired: 3/18/2021 9:27:39 Type: QC
Method: ICP-THERMO4_6010Water(v250) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.47685**	**251.58**	**.24649**	**.47585**	**.24132**	**.24182**	**254.12**
Stddev	.00142	1.70	.00153	.00449	.00121	.00013	1.72
%RSD	.29798	.67627	.61878	.94279	.50133	.05414	.67709
#1	.47845	250.29	.24811	.48100	.24008	.24196	252.22
#2	.47573	253.51	.24627	.47375	.24250	.24182	254.57
#3	.47638	250.94	.24508	.47280	.24139	.24169	255.57
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu2247	Fe2611	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.53879**	**.23459**	**.24190**	**.23873**	**100.09**	**5.0478**	**.00941**
Stddev	.00383	.00178	.00062	.00146	.30	.1233	.00605
%RSD	.71019	.75807	.25552	.61349	.29862	2.4423	64.249
#1	.54212	.23543	.24245	.24027	99.852	5.0488	.00963
#2	.53965	.23579	.24203	.23859	100.00	5.1705	.00326
#3	.53461	.23255	.24123	.23735	100.43	4.9240	.01535
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2149	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**253.57**	**.23251**	F **.02438**	**5.0795**	**.45290**	**-.05658**	**.49702**
Stddev	1.70	.00412	.00019	.0321	.00531	.00588	.00441
%RSD	.67040	1.7740	.79570	.63280	1.1733	10.395	.88787
#1	251.70	.22802	.02425	5.0424	.45645	-.04990	.49639
#2	253.98	.23614	.02428	5.0992	.45546	-.05887	.50172
#3	255.02	.23335	.02460	5.0968	.44679	-.06097	.49296
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00800				
Low Limit			-.00800				

Sample Name: SEQ-IFB Acquired: 3/18/2021 9:27:39 Type: QC
Method: ICP-THERMO4_6010Water(v250) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3372	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.52379**	**.24017**	**.10729**	**.46566**	**.00012**	**.01820**	**.47435**
Stddev	.00456	.00266	.00279	.00425	.00061	.00212	.00444
%RSD	.87153	1.1055	2.5984	.91177	500.73	11.639	.93678
#1	.52906	.24230	.10873	.46928	.00068	.01780	.47194
#2	.52124	.23719	.10408	.46672	-.00052	.01631	.47948
#3	.52106	.24101	.10907	.46099	.00021	.02049	.47163
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	**.24343**	**.45669**	**.00134**
Stddev	.00050	.00271	.00017
%RSD	.20658	.59444	12.963
#1	.24332	.45914	.00114
#2	.24398	.45716	.00146
#3	.24299	.45377	.00143
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**14595.**	**85145.**	**6015.2**
Stddev	26.	174.	47.1
%RSD	.17712	.20490	.78288
#1	14601.	85261.	6051.3
#2	14567.	84944.	6032.3
#3	14618.	85228.	5961.9

Sample Name: SEQ-CCV Acquired: 3/18/2021 9:31:23 Type: QC
Method: ICP-THERMO4_6010Water(v250) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.39538**	**10.033**	**.38762**	**.49466**	**.99446**	**.04877**	**9.9105**	**.04925**
Stddev	.00071	.003	.00767	.00063	.00197	.00020	.0723	.00073
%RSD	.17846	.02728	1.9789	.12823	.19787	.40967	.72976	1.4767
#1	.39563	10.031	.39596	.49515	.99595	.04897	9.8866	.04986
#2	.39593	10.036	.38605	.49394	.99519	.04877	9.8532	.04945
#3	.39458	10.032	.38086	.49490	.99223	.04857	9.9917	.04845
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu2247	Fe2611	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.19711**	**.49375**	**.49390**	**4.0046**	**49.061**	**.99077**	**10.034**	**.49535**
Stddev	.00352	.00149	.00744	.0384	.223	.00299	.130	.00675
%RSD	1.7832	.30159	1.5070	.95789	.45418	.30146	1.2956	1.3629
#1	.20052	.49505	.50115	3.9665	48.964	.99168	9.9750	.48996
#2	.19732	.49213	.49428	4.0041	48.903	.98744	9.9444	.49317
#3	.19350	.49407	.48628	4.0432	49.316	.99320	10.183	.50292
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	P_2149	Pb2203	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.96663**	**49.334**	**.49554**	**9.7202**	**.49958**	**1.1395**	**.39149**	**4.8662**
Stddev	.01676	.172	.00729	.1530	.00883	.0155	.00863	.0747
%RSD	1.7341	.34922	1.4702	1.5742	1.7676	1.3635	2.2032	1.5358
#1	.98254	49.379	.50231	9.8701	.50918	1.1557	.40126	4.9358
#2	.96822	49.144	.49648	9.7264	.49777	1.1380	.38823	4.8755
#3	.94913	49.480	.48783	9.5642	.49180	1.1247	.38496	4.7872
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: SEQ-CCV Acquired: 3/18/2021 9:31:23 Type: QC
Method: ICP-THERMO4_6010Water(v250) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Sn1899	Sr4077	Ti3372	Tl1908	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.96999	.98876	.96338	.51129	.98847	.98406	.99455
Stddev	.01448	.00322	.00303	.00944	.00181	.01539	.00161
%RSD	1.4928	.32612	.31463	1.8459	.18335	1.5644	.16180
#1	.98428	.99177	.96681	.52091	.99024	.99818	.99318
#2	.97038	.98536	.96108	.51093	.98854	.98636	.99414
#3	.95532	.98914	.96224	.50204	.98662	.96765	.99632
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	15403.	90697.	6095.0
Stddev	23.	158.	22.3
%RSD	.15001	.17434	.36554
#1	15405.	90524.	6104.4
#2	15379.	90835.	6111.0
#3	15425.	90731.	6069.6

Sample Name: SEQ-CCB Acquired: 3/18/2021 9:34:55 Type: Blank
Method: ICP-THERMO4_6010Water(v250) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00031**	**.00842**	**.00118**	**.00123**	**.00248**	**-.00000**	**.00247**	**.00023**
Stddev	.00091	.00567	.00062	.00057	.00088	.00001	.01848	.00003
%RSD	294.69	67.395	52.644	46.509	35.628	4471.2	747.51	13.332
#1	-.00118	.00193	.00057	.00152	.00348	.00001	-.00635	.00021
#2	-.00037	.01247	.00181	.00057	.00215	.00000	.02371	.00022
#3	.00063	.01085	.00116	.00160	.00180	-.00001	-.00995	.00027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu2247	Fe2611	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00042**	**.00103**	**-.00066**	**.00602**	**.00507**	**.00937**	**.01842**	**.00019**
Stddev	.00017	.00055	.00082	.01832	.05717	.00195	.01246	.00181
%RSD	41.820	53.820	124.76	304.21	1127.1	20.787	67.645	971.76
#1	-.00060	.00155	-.00160	-.00042	.01436	.00712	.01686	.00226
#2	-.00039	.00107	-.00018	-.00821	.05703	.01039	.03159	-.00110
#3	-.00026	.00045	-.00018	.02670	-.05617	.01059	.00681	-.00060
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	P_2149	Pb2203	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00189**	**.04766**	**-.00043**	**-.00367**	**-.00326**	**.00414**	**.00496**	**-.03484**
Stddev	.00046	.01986	.00156	.00475	.00210	.00248	.00140	.00121
%RSD	24.583	41.666	365.97	129.50	64.471	59.844	28.224	3.4745
#1	.00159	.06689	.00126	.00167	-.00487	.00613	.00497	-.03623
#2	.00165	.04887	-.00073	-.00523	-.00088	.00492	.00636	-.03425
#3	.00242	.02723	-.00182	-.00744	-.00404	.00136	.00356	-.03404
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: SEQ-CCB Acquired: 3/18/2021 9:34:55 Type: Blank
Method: ICP-THERMO4_6010Water(v250) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Sn1899	Sr4077	Ti3372	Tl1908	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00013**	**.00012**	**-.00164**	**-.00079**	**.00057**	**-.00102**	**.00050**
Stddev	.00013	.00045	.00429	.00279	.00017	.00006	.00031
%RSD	102.11	376.68	260.81	355.24	29.650	5.8409	62.226
#1	-.00020	.00062	-.00397	.00094	.00041	-.00109	.00018
#2	-.00021	.00001	.00330	-.00401	.00074	-.00099	.00080
#3	.00002	-.00026	-.00426	.00071	.00056	-.00098	.00051
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**15659.**	**93315.**	**6076.3**
Stddev	38.	299.	20.3
%RSD	.24022	.32001	.33429
#1	15628.	92993.	6074.2
#2	15701.	93369.	6097.6
#3	15648.	93582.	6057.1

Sample Name: SEQ-CCV Acquired: 3/18/2021 10:30:32 Type: QC
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.41830**	**10.319**	**.38635**	**.51492**	**1.0301**	**.05012**	**10.282**	**.05137**
Stddev	.00128	.040	.01085	.00106	.0039	.00015	.092	.00112
%RSD	.30702	.38395	2.8075	.20554	.37581	.30171	.89033	2.1860
#1	.41866	10.357	.39670	.51614	1.0332	.05025	10.331	.05195
#2	.41936	10.321	.38730	.51429	1.0312	.05015	10.338	.05207
#3	.41687	10.278	.37506	.51433	1.0258	.04995	10.176	.05007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu2247	Fe2611	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.20299**	**.50836**	**.50081**	**4.1328**	**51.106**	**1.0304**	**10.386**	**.51269**
Stddev	.00538	.00137	.01350	.0552	.253	.0161	.128	.00187
%RSD	2.6511	.26921	2.6963	1.3361	.49550	1.5643	1.2321	.36395
#1	.20737	.50994	.51266	4.1581	51.262	1.0442	10.399	.51301
#2	.20463	.50745	.50366	4.1709	51.241	1.0343	10.507	.51437
#3	.19698	.50771	.48611	4.0695	50.813	1.0127	10.252	.51068
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	P_2149	Pb2203	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.99569**	**51.584**	**.51249**	**9.9524**	**.52306**	**1.1628**	**.39640**	**4.9916**
Stddev	.02823	.367	.01310	.2499	.00840	.0317	.01114	.1253
%RSD	2.8353	.71131	2.5562	2.5111	1.6060	2.7226	2.8108	2.5113
#1	1.0196	51.913	.52394	10.177	.52847	1.1889	.40477	5.1005
#2	1.0029	51.650	.51533	9.9969	.52732	1.1719	.40068	5.0198
#3	.96457	51.189	.49821	9.6832	.51338	1.1276	.38375	4.8546
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: SEQ-CCV Acquired: 3/18/2021 10:30:32 Type: QC
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Sn1899	Sr4077	Ti3372	Tl1908	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0025	1.0241	1.0113	.51857	1.0229	1.0003	1.0133
Stddev	.0249	.0045	.0073	.01131	.0018	.0267	.0141
%RSD	2.4876	.43800	.71913	2.1801	.17258	2.6669	1.3883
#1	1.0247	1.0286	1.0138	.52771	1.0246	1.0236	1.0219
#2	1.0073	1.0238	1.0171	.52207	1.0230	1.0061	1.0210
#3	.97552	1.0197	1.0031	.50593	1.0211	.97123	.99708
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	15300.	89981.	6076.7
Stddev	47.	163.	63.3
%RSD	.31033	.18125	1.0419
#1	15256.	89899.	6040.0
#2	15295.	90169.	6040.2
#3	15350.	89876.	6149.8

Sample Name: SEQ-CCB Acquired: 3/18/2021 10:34:05 Type: Blank
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00035**	**-.00302**	**.00163**	**.00355**	**.00167**	**.00001**	**-.00888**	**.00020**
Stddev	.00224	.00366	.00167	.00201	.00149	.00003	.00899	.00013
%RSD	638.99	121.38	102.64	56.653	89.113	578.95	101.26	67.086
#1	.00189	-.00361	-.00030	.00578	.00199	.00003	-.00445	.00034
#2	-.00035	.00090	.00258	.00190	.00298	.00001	-.01922	.00018
#3	-.00259	-.00635	.00261	.00296	.00005	-.00003	-.00296	.00008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu2247	Fe2611	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00015**	**.00129**	**-.00116**	**.00227**	**.22582**	**.00702**	**-.08213**	**-.00433**
Stddev	.00020	.00040	.00032	.01761	.05708	.00299	.04472	.00094
%RSD	135.65	31.001	27.477	776.87	25.274	42.551	54.452	21.705
#1	-.00037	.00084	-.00088	-.01650	.18667	.00487	-.05202	-.00325
#2	-.00010	.00143	-.00110	.00487	.29131	.01044	-.06085	-.00484
#3	.00002	.00159	-.00151	.01842	.19949	.00576	-.13351	-.00491
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	P_2149	Pb2203	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00181**	**.14021**	**-.00120**	**-.00352**	**-.00041**	**.00419**	**.00599**	**-.03183**
Stddev	.00008	.03321	.00062	.00563	.00063	.00132	.00447	.00068
%RSD	4.3342	23.686	51.720	159.81	151.87	31.486	74.730	2.1349
#1	.00173	.15512	-.00081	.00223	-.00108	.00570	.00189	-.03222
#2	.00181	.16335	-.00087	-.00379	.00016	.00331	.00531	-.03222
#3	.00188	.10216	-.00191	-.00902	-.00032	.00354	.01076	-.03104
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: SEQ-CCB Acquired: 3/18/2021 10:34:05 Type: Blank
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Sn1899	Sr4077	Ti3372	Tl1908	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00008**	**.00021**	**-.00313**	**-.00123**	**.00082**	**-.00110**	**.00041**
Stddev	.00042	.00046	.00421	.00136	.00048	.00004	.00046
%RSD	513.73	216.66	134.27	111.13	59.005	3.7371	113.19
#1	-.00008	.00072	-.00435	-.00092	.00129	-.00113	-.00007
#2	-.00050	-.00017	-.00659	-.00272	.00032	-.00105	.00043
#3	.00034	.00009	.00155	-.00004	.00085	-.00110	.00085
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**15529.**	**92997.**	**6093.3**
Stddev	55.	49.	9.3
%RSD	.35342	.05300	.15294
#1	15589.	92997.	6083.0
#2	15518.	93046.	6101.2
#3	15481.	92948.	6095.7

Sample Name: SEQ-CCV Acquired: 3/18/2021 11:14:34 Type: QC
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.42169	10.419	.40148	.52676	1.0308	.05062	10.379	.05232
Stddev	.00146	.022	.00416	.00154	.0017	.00009	.051	.00051
%RSD	.34652	.21023	1.0361	.29287	.16621	.18315	.48976	.98145
#1	.42045	10.435	.40554	.52531	1.0292	.05070	10.397	.05268
#2	.42330	10.429	.40168	.52838	1.0305	.05052	10.322	.05256
#3	.42133	10.394	.39723	.52660	1.0326	.05065	10.418	.05174
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu2247	Fe2611	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.20839	.51247	.51435	4.1604	51.437	1.0403	10.557	.52192
Stddev	.00223	.00102	.00702	.0229	.083	.0032	.016	.00233
%RSD	1.0691	.19893	1.3639	.54977	.16157	.30454	.15597	.44699
#1	.21047	.51325	.51879	4.1474	51.531	1.0439	10.567	.52422
#2	.20865	.51283	.51799	4.1469	51.373	1.0380	10.538	.51956
#3	.20604	.51131	.50626	4.1868	51.406	1.0390	10.566	.52197
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	P_2149	Pb2203	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0328	51.926	.52331	10.202	.53460	1.2039	.40948	5.0991
Stddev	.0121	.086	.00675	.111	.00479	.0140	.00552	.0544
%RSD	1.1726	.16575	1.2903	1.0863	.89676	1.1599	1.3482	1.0662
#1	1.0419	51.987	.52919	10.296	.53875	1.2188	.41576	5.1436
#2	1.0375	51.964	.52482	10.231	.53569	1.2019	.40537	5.1153
#3	1.0191	51.828	.51594	10.080	.52935	1.1911	.40732	5.0385
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: SEQ-CCV Acquired: 3/18/2021 11:14:34 Type: QC
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Sn1899	Sr4077	Ti3372	Tl1908	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0318	1.0267	1.0162	.53402	1.0315	1.0288	1.0211
Stddev	.0115	.0014	.0025	.00394	.0031	.0107	.0059
%RSD	1.1177	.13255	.24839	.73707	.29785	1.0375	.57519
#1	1.0417	1.0282	1.0189	.53336	1.0347	1.0382	1.0278
#2	1.0345	1.0255	1.0139	.53825	1.0285	1.0309	1.0187
#3	1.0191	1.0264	1.0159	.53046	1.0313	1.0172	1.0167
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	15070.	88441.	5962.8
Stddev	19.	126.	24.0
%RSD	.12412	.14221	.40300
#1	15078.	88552.	5937.5
#2	15049.	88304.	5965.5
#3	15084.	88466.	5985.4

Sample Name: SEQ-CCB Acquired: 3/18/2021 11:18:08 Type: Blank
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00015**	**-.00202**	**.00293**	**.00573**	**.00246**	**.00001**	**.00122**	**.00021**
Stddev	.00119	.00526	.00089	.00164	.00168	.00003	.01468	.00010
%RSD	779.69	260.80	30.484	28.567	68.248	224.58	1203.1	48.758
#1	.00030	-.00309	.00312	.00685	.00103	-.00002	-.01514	.00012
#2	-.00150	-.00665	.00372	.00385	.00204	.00005	.00558	.00032
#3	.00074	.00370	.00196	.00649	.00431	.00001	.01322	.00019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu2247	Fe2611	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00025**	**.00122**	**-.00132**	**.00144**	**.13906**	**.00994**	**-.00923**	**-.00213**
Stddev	.00011	.00121	.00072	.01598	.05103	.00487	.09851	.00205
%RSD	43.969	99.272	54.446	1112.5	36.695	48.979	1067.2	96.212
#1	-.00020	.00100	-.00203	.01986	.14555	.01483	-.00752	-.00341
#2	-.00017	.00013	-.00059	-.00875	.08510	.00509	-.10858	.00023
#3	-.00037	.00253	-.00134	-.00680	.18654	.00990	.08842	-.00322
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	P_2149	Pb2203	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00326**	**.12386**	**-.00079**	**-.00134**	**-.00067**	**.00254**	**.00203**	**-.03178**
Stddev	.00023	.01852	.00084	.00533	.00093	.00158	.00219	.00202
%RSD	7.0880	14.948	107.11	398.72	139.30	62.095	108.17	6.3498
#1	.00301	.14516	-.00149	-.00026	-.00173	.00104	.00440	-.02971
#2	.00330	.11161	-.00102	.00337	-.00028	.00419	.00161	-.03374
#3	.00346	.11482	.00015	-.00712	.00001	.00239	.00007	-.03189
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: SEQ-CCB Acquired: 3/18/2021 11:18:08 Type: Blank
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Sn1899	Sr4077	Ti3372	Tl1908	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00059**	**.00012**	**-.00163**	**-.00183**	**.00031**	**-.00101**	**.00027**
Stddev	.00052	.00033	.00062	.00194	.00028	.00015	.00011
%RSD	87.045	269.71	37.921	106.04	88.411	15.199	39.875
#1	-.00079	-.00006	-.00153	-.00352	.00058	-.00096	.00015
#2	-.00098	.00050	-.00107	-.00228	.00003	-.00118	.00033
#3	-.00001	-.00008	-.00229	.00029	.00033	-.00089	.00034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**15385.**	**91823.**	**5954.8**
Stddev	60.	354.	7.7
%RSD	.38724	.38503	.12979
#1	15364.	91427.	5962.5
#2	15340.	92109.	5954.8
#3	15453.	91931.	5947.1

Sample Name: SEQ-CCV Acquired: 3/18/2021 11:25:46 Type: QC
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.41904**	**10.362**	**.40158**	**.51609**	**1.0251**	**.05019**	**10.278**	**.05194**
Stddev	.00044	.021	.00445	.00214	.0018	.00007	.051	.00063
%RSD	.10513	.20241	1.1075	.41401	.17729	.14637	.49508	1.2182
#1	.41938	10.373	.40278	.51446	1.0271	.05011	10.220	.05248
#2	.41919	10.375	.40531	.51530	1.0242	.05020	10.316	.05208
#3	.41854	10.338	.39666	.51851	1.0238	.05026	10.298	.05124
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu2247	Fe2611	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.20743**	**.50884**	**.51344**	**4.1463**	**50.674**	**1.0329**	**10.394**	**.51140**
Stddev	.00155	.00073	.00400	.0220	.240	.0038	.067	.00514
%RSD	.74934	.14415	.77860	.52971	.47315	.36988	.64167	1.0042
#1	.20862	.50917	.51720	4.1227	50.402	1.0304	10.378	.50551
#2	.20801	.50800	.51388	4.1501	50.854	1.0372	10.468	.51489
#3	.20567	.50935	.50924	4.1662	50.765	1.0309	10.337	.51381
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	P_2149	Pb2203	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0219**	**51.420**	**.52126**	**10.164**	**.52920**	**1.2000**	**.40217**	**5.0811**
Stddev	.0106	.190	.00544	.081	.00372	.0147	.00473	.0448
%RSD	1.0351	.37004	1.0430	.79243	.70280	1.2280	1.1766	.88185
#1	1.0313	51.208	.52659	10.238	.53042	1.2122	.39903	5.1203
#2	1.0240	51.576	.52147	10.175	.53216	1.2042	.40761	5.0908
#3	1.0105	51.477	.51573	10.078	.52503	1.1836	.39987	5.0323
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: SEQ-CCV Acquired: 3/18/2021 11:25:46 Type: QC
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Sn1899	Sr4077	Ti3372	Tl1908	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0269	1.0223	1.0133	.53175	1.0214	1.0257	1.0235
Stddev	.0077	.0005	.0059	.00434	.0016	.0083	.0033
%RSD	.74644	.04601	.58588	.81625	.15454	.80811	.32135
#1	1.0331	1.0220	1.0169	.53603	1.0226	1.0330	1.0197
#2	1.0293	1.0228	1.0064	.53185	1.0196	1.0275	1.0253
#3	1.0184	1.0220	1.0165	.52736	1.0220	1.0167	1.0254
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	15093.	88598.	5956.5
Stddev	43.	186.	37.2
%RSD	.28235	.21033	.62431
#1	15044.	88776.	5998.1
#2	15115.	88404.	5926.5
#3	15119.	88615.	5944.9

Sample Name: SEQ-CCB Acquired: 3/18/2021 11:29:20 Type: Blank
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00009**	**-.00051**	**.00077**	**.00569**	**.00141**	**.00000**	**.02324**	**.00028**
Stddev	.00053	.00156	.00154	.00246	.00039	.00008	.00959	.00008
%RSD	579.33	308.14	199.77	43.210	27.345	4336.4	41.275	27.087
#1	-.00070	.00063	-.00100	.00376	.00162	-.00009	.01366	.00034
#2	.00010	.00013	.00156	.00846	.00097	.00004	.03284	.00031
#3	.00032	-.00229	.00176	.00486	.00166	.00005	.02320	.00019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu2247	Fe2611	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00010**	**.00104**	**-.00117**	**-.00564**	**.11024**	**.00361**	**-.06373**	**-.00005**
Stddev	.00040	.00069	.00072	.01225	.13184	.00427	.04530	.00089
%RSD	416.15	66.666	61.495	217.15	119.59	118.19	71.079	1790.0
#1	-.00053	.00055	-.00193	.00721	.11840	-.00043	-.01247	-.00019
#2	-.00001	.00074	-.00050	-.01717	.23782	.00808	-.09838	-.00086
#3	.00025	.00183	-.00108	-.00696	-.02549	.00319	-.08034	.00090
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	P_2149	Pb2203	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00203**	**.13274**	**-.00053**	**-.00382**	**-.00286**	**.00371**	**.00015**	**-.03295**
Stddev	.00041	.02403	.00151	.00308	.00085	.00338	.00505	.00210
%RSD	20.235	18.103	285.99	80.619	29.857	91.126	3276.6	6.3798
#1	.00156	.10620	.00064	-.00180	-.00307	.00057	-.00316	-.03094
#2	.00229	.13897	.00001	-.00736	-.00192	.00729	.00597	-.03513
#3	.00225	.15304	-.00223	-.00230	-.00359	.00328	-.00234	-.03280
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: SEQ-CCB Acquired: 3/18/2021 11:29:20 Type: Blank
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Sn1899	Sr4077	Ti3372	Tl1908	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00059**	**.00018**	**-.00095**	**.00147**	**.00037**	**.00120**	**.00058**
Stddev	.00017	.00050	.00272	.00055	.00058	.00006	.00022
%RSD	27.974	283.46	285.10	37.623	157.99	5.3005	37.244
#1	-.00065	.00044	-.00023	.00150	.00072	.00115	.00059
#2	-.00073	-.00040	.00133	.00090	.00068	.00119	.00079
#3	-.00041	.00049	-.00397	.00200	-.00030	.00127	.00036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**15358.**	**91985.**	**6047.2**
Stddev	41.	123.	21.1
%RSD	.26537	.13371	.34835
#1	15380.	91973.	6066.5
#2	15384.	91868.	6050.3
#3	15311.	92113.	6024.8

Sample Name: SEQ-CCV Acquired: 3/18/2021 12:10:43 Type: QC
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.41824**	**10.280**	**.38724**	**.51168**	**1.0194**	**.04984**	**10.293**	**.05157**
Stddev	.00159	.019	.00613	.00513	.0022	.00008	.075	.00107
%RSD	.38098	.18393	1.5822	1.0026	.21695	.16380	.72925	2.0662
#1	.41963	10.300	.39220	.50851	1.0220	.04986	10.285	.05251
#2	.41650	10.263	.38913	.51760	1.0181	.04991	10.371	.05178
#3	.41859	10.277	.38039	.50894	1.0182	.04975	10.221	.05041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu2247	Fe2611	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.20379**	**.50610**	**.50119**	**4.1171**	**50.525**	**1.0258**	**10.327**	**.51047**
Stddev	.00413	.00253	.01113	.0222	.104	.0016	.032	.00250
%RSD	2.0275	.49965	2.2198	.53823	.20549	.15416	.31388	.49012
#1	.20733	.50887	.51059	4.0990	50.567	1.0240	10.290	.51105
#2	.20480	.50552	.50406	4.1106	50.602	1.0270	10.342	.51263
#3	.19925	.50391	.48891	4.1418	50.407	1.0264	10.350	.50773
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	P_2149	Pb2203	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0003**	**51.500**	**.51212**	**9.9673**	**.52529**	**1.1695**	**.39273**	**4.9942**
Stddev	.0220	.078	.01141	.1976	.01090	.0231	.00663	.0984
%RSD	2.1981	.15209	2.2287	1.9825	2.0751	1.9753	1.6886	1.9706
#1	1.0201	51.453	.52266	10.137	.53251	1.1939	.39338	5.0815
#2	1.0041	51.591	.51370	10.015	.53061	1.1668	.39901	5.0136
#3	.97663	51.457	.50000	9.7503	.51275	1.1479	.38579	4.8875
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: SEQ-CCV Acquired: 3/18/2021 12:10:43 Type: QC
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Sn1899	Sr4077	Ti3372	Tl1908	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0089	1.0150	1.0066	.52225	1.0179	1.0020	1.0159
Stddev	.0206	.0006	.0006	.01176	.0008	.0199	.0050
%RSD	2.0417	.06101	.06245	2.2525	.07475	1.9874	.49740
#1	1.0266	1.0143	1.0060	.52987	1.0173	1.0190	1.0217
#2	1.0138	1.0153	1.0064	.52817	1.0188	1.0068	1.0134
#3	.98632	1.0154	1.0072	.50870	1.0178	.98009	1.0126
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	15230.	89564.	5997.6
Stddev	21.	118.	17.7
%RSD	.14102	.13205	.29554
#1	15235.	89688.	5978.0
#2	15207.	89452.	6012.7
#3	15249.	89552.	6002.0

Sample Name: SEQ-CCB Acquired: 3/18/2021 12:14:17 Type: Blank
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00046**	**-.00541**	**.00010**	**.00471**	**.00105**	**-.00002**	**.02480**	**.00018**
Stddev	.00095	.00323	.00077	.00104	.00083	.00004	.01111	.00037
%RSD	204.56	59.616	799.87	22.063	79.247	190.39	44.819	200.31
#1	.00068	-.00781	-.00008	.00560	.00038	-.00006	.03673	-.00024
#2	.00128	-.00668	.00094	.00496	.00198	-.00002	.01474	.00033
#3	-.00057	-.00174	-.00057	.00357	.00079	.00002	.02292	.00046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu2247	Fe2611	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00016**	**.00072**	**-.00088**	**.00710**	**.01367**	**.00692**	**-.08602**	**-.00194**
Stddev	.00006	.00103	.00093	.00915	.17974	.00376	.03487	.00295
%RSD	38.901	143.81	105.68	128.89	1315.2	54.373	40.541	152.17
#1	-.00021	.00180	.00013	.00136	-.10751	.00947	-.12298	.00137
#2	-.00019	-.00026	-.00170	.01765	.22018	.00869	-.05369	-.00289
#3	-.00009	.00062	-.00106	.00228	-.07167	.00260	-.08138	-.00430
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	P_2149	Pb2203	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00180**	**.13733**	**.00034**	**-.00241**	**-.00180**	**.00273**	**.00212**	**-.03086**
Stddev	.00068	.01990	.00038	.00777	.00079	.00349	.00181	.00145
%RSD	38.040	14.493	112.36	321.79	44.117	127.56	85.604	4.7044
#1	.00112	.12182	.00075	.00543	-.00091	.00293	.00115	-.03011
#2	.00178	.15978	.00026	-.00256	-.00243	-.00085	.00100	-.03254
#3	.00249	.13040	.00000	-.01011	-.00205	.00612	.00421	-.02994
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: SEQ-CCB Acquired: 3/18/2021 12:14:17 Type: Blank
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Sn1899	Sr4077	Ti3372	Tl1908	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00062	.00068	-.00022	-.00093	.00102	.00117	.00019
Stddev	.00051	.00019	.00268	.00407	.00058	.00008	.00044
%RSD	82.068	27.970	1220.6	439.78	56.183	6.5976	231.19
#1	-.00080	.00052	.00054	-.00207	.00147	.00116	-.00020
#2	-.00005	.00089	.00200	-.00430	.00123	.00125	.00010
#3	-.00102	.00063	-.00320	.00359	.00037	.00110	.00066
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	15442.	92215.	6077.1
Stddev	38.	215.	27.3
%RSD	.24369	.23326	.44976
#1	15421.	92445.	6102.9
#2	15420.	92020.	6079.9
#3	15486.	92179.	6048.5

Sample Name: SEQ-CCV Acquired: 3/18/2021 12:55:15 Type: QC
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.40438**	**9.9472**	**.38241**	**.49804**	**.99055**	**.04842**	**9.9781**	**.05013**
Stddev	.00028	.0273	.00240	.00193	.00303	.00001	.0563	.00072
%RSD	.06907	.27407	.62880	.38699	.30620	.01380	.56393	1.4336
#1	.40405	9.9732	.38487	.49903	.99060	.04841	9.9805	.05084
#2	.40455	9.9496	.38230	.49927	.99357	.04842	10.033	.05014
#3	.40452	9.9189	.38006	.49582	.98750	.04841	9.9207	.04941
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu2247	Fe2611	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.19909**	**.48945**	**.49201**	**3.9912**	**49.107**	**.99802**	**10.017**	**.49637**
Stddev	.00248	.00092	.00589	.0233	.053	.00249	.091	.00330
%RSD	1.2476	.18831	1.1978	.58280	.10813	.24920	.90363	.66514
#1	.20098	.49051	.49809	4.0141	49.151	.99552	9.9416	.49330
#2	.20001	.48900	.49161	3.9676	49.123	.99804	9.9913	.49595
#3	.19627	.48884	.48632	3.9921	49.048	1.0005	10.117	.49986
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	P_2149	Pb2203	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.97854**	**50.035**	**.49908**	**9.7361**	**.50802**	**1.1450**	**.39019**	**4.8812**
Stddev	.01530	.005	.00619	.1176	.00488	.0153	.00617	.0594
%RSD	1.5632	.00944	1.2395	1.2074	.95989	1.3329	1.5801	1.2164
#1	.99247	50.032	.50526	9.8369	.50878	1.1591	.39405	4.9373
#2	.98096	50.040	.49908	9.7645	.51247	1.1470	.39345	4.8873
#3	.96217	50.033	.49289	9.6070	.50281	1.1288	.38308	4.8190
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: SEQ-CCV Acquired: 3/18/2021 12:55:15 Type: QC
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Sn1899	Sr4077	Ti3372	Tl1908	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.98565	.98605	.98655	.51002	.98753	.98110	.98080
Stddev	.01209	.00132	.00651	.00725	.00215	.01236	.00118
%RSD	1.2270	.13355	.65988	1.4224	.21788	1.2599	.12080
#1	.99697	.98752	.99317	.51573	.98992	.99218	.98062
#2	.98707	.98566	.98015	.51247	.98577	.98334	.98206
#3	.97291	.98497	.98634	.50185	.98688	.96777	.97971
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	15283.	89990.	6063.8
Stddev	14.	246.	14.2
%RSD	.09098	.27305	.23373
#1	15298.	89747.	6056.8
#2	15280.	89983.	6054.5
#3	15270.	90238.	6080.1

Sample Name: SEQ-CCB Acquired: 3/18/2021 12:58:49 Type: Blank
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00065**	**.00105**	**-.00002**	**.00520**	**.00171**	**.00000**	**.03028**	**.00011**
Stddev	.00060	.00163	.00262	.00107	.00237	.00004	.05644	.00010
%RSD	91.694	155.57	12102.	20.502	138.80	771.78	186.42	94.880
#1	-.00071	.00078	.00048	.00553	-.00042	.00000	-.02804	-.00001
#2	-.00122	.00279	-.00286	.00606	.00129	.00004	.03424	.00017
#3	-.00003	-.00043	.00232	.00401	.00427	-.00003	.08464	.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu2247	Fe2611	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00005**	**.00088**	**-.00119**	**.00153**	**-.06803**	**.00554**	**-.04630**	**-.00310**
Stddev	.00011	.00050	.00068	.01385	.12235	.00828	.02782	.00079
%RSD	204.19	57.127	57.487	903.61	179.85	149.34	60.088	25.408
#1	-.00018	.00126	-.00051	-.01438	-.03072	-.00035	-.01696	-.00391
#2	.00002	.00106	-.00118	.00813	.03132	.01500	-.07230	-.00233
#3	-.00001	.00031	-.00188	.01085	-.20470	.00197	-.04962	-.00307
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	P_2149	Pb2203	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00182**	**.15699**	**-.00080**	**.00511**	**.00056**	**.00537**	**.00372**	**-.03410**
Stddev	.00027	.00990	.00110	.00156	.00137	.00370	.00250	.00074
%RSD	14.917	6.3091	136.10	30.502	244.59	69.004	67.257	2.1840
#1	.00151	.16572	.00003	.00654	.00068	.00130	.00120	-.03384
#2	.00203	.15901	-.00204	.00345	-.00086	.00626	.00375	-.03494
#3	.00191	.14623	-.00040	.00535	.00187	.00854	.00621	-.03352
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: SEQ-CCB Acquired: 3/18/2021 12:58:49 Type: Blank
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Sn1899	Sr4077	Ti3372	Tl1908	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00016	.00019	.00012	.00007	.00038	-.00091	.00001
Stddev	.00018	.00026	.00133	.00112	.00032	.00004	.00013
%RSD	112.64	137.86	1093.6	1564.5	85.051	4.8982	1147.0
#1	.00000	.00048	.00045	-.00101	.00002	-.00096	-.00005
#2	-.00013	-.00000	.00125	.00123	.00064	-.00089	-.00007
#3	-.00036	.00009	-.00134	-.00001	.00048	-.00088	.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	15461.	93029.	6076.1
Stddev	29.	189.	15.8
%RSD	.18539	.20289	.26012
#1	15470.	93043.	6081.2
#2	15485.	92833.	6088.6
#3	15429.	93210.	6058.3

Sample Name: SEQ-CCV Acquired: 3/18/2021 13:06:26 Type: QC
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.40147**	**9.9970**	**.38228**	**.49440**	**.99240**	**.04877**	**9.9882**	**.04903**
Stddev	.00134	.0197	.00993	.00258	.00264	.00011	.0845	.00098
%RSD	.33481	.19655	2.5966	.52128	.26575	.22679	.84622	1.9990
#1	.40070	9.9952	.39191	.49255	.98957	.04889	9.9001	.05001
#2	.40302	10.017	.38285	.49735	.99479	.04876	10.069	.04902
#3	.40068	9.9783	.37208	.49331	.99284	.04867	9.9960	.04805
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu2247	Fe2611	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.19554**	**.49240**	**.48806**	**3.9970**	**49.508**	**.99709**	**10.093**	**.50166**
Stddev	.00532	.00116	.01119	.0403	.222	.00862	.154	.00183
%RSD	2.7219	.23624	2.2937	1.0081	.44917	.86483	1.5219	.36452
#1	.20033	.49366	.49808	3.9873	49.312	.99288	9.9281	.49960
#2	.19649	.49217	.49013	3.9624	49.750	1.0070	10.232	.50226
#3	.18981	.49136	.47597	4.0412	49.461	.99137	10.120	.50311
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	P_2149	Pb2203	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.95669**	**49.843**	**.49147**	**9.6577**	**.49814**	**1.1339**	**.38761**	**4.8317**
Stddev	.02425	.148	.01172	.2365	.01107	.0266	.00848	.1014
%RSD	2.5352	.29610	2.3839	2.4485	2.2217	2.3448	2.1884	2.0994
#1	.97864	49.686	.50128	9.8673	.50848	1.1612	.39660	4.9240
#2	.96080	49.863	.49464	9.7044	.49947	1.1324	.38648	4.8480
#3	.93065	49.979	.47850	9.4014	.48647	1.1081	.37975	4.7231
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: SEQ-CCV Acquired: 3/18/2021 13:06:26 Type: QC
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Sn1899	Sr4077	Ti3372	Tl1908	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.96892	.99066	.98100	.50365	.98586	.97452	.98899
Stddev	.02381	.00225	.00558	.01183	.00228	.02476	.00235
%RSD	2.4574	.22666	.56890	2.3492	.23119	2.5403	.23739
#1	.98975	.98809	.97817	.51423	.98606	.99643	.99154
#2	.97405	.99221	.98743	.50586	.98804	.97945	.98850
#3	.94296	.99169	.97740	.49088	.98349	.94766	.98692
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	15256.	89019.	6001.6
Stddev	52.	175.	14.2
%RSD	.34053	.19657	.23648
#1	15227.	89075.	5992.9
#2	15226.	89160.	6017.9
#3	15316.	88823.	5993.8

Sample Name: SEQ-CCB Acquired: 3/18/2021 13:10:00 Type: Blank
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00032**	**-.00069**	**.00088**	**.00275**	**.00306**	**.00002**	**.00341**	**.00023**
Stddev	.00079	.00096	.00252	.00045	.00050	.00006	.03784	.00013
%RSD	249.21	138.93	287.02	16.443	16.396	246.55	1109.4	55.910
#1	.00041	-.00035	-.00166	.00292	.00355	-.00003	-.02816	.00033
#2	-.00021	.00005	.00338	.00309	.00308	.00002	-.00697	.00008
#3	-.00116	-.00177	.00092	.00224	.00255	.00008	.04536	.00029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu2247	Fe2611	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00034**	**.00099**	**-.00030**	**.00574**	**.00343**	**.00901**	**-.00449**	**-.00159**
Stddev	.00017	.00029	.00051	.02079	.06228	.00136	.12737	.00332
%RSD	50.924	28.945	168.79	362.18	1816.2	15.116	2840.0	208.87
#1	-.00052	.00118	-.00062	-.01024	.06603	.00868	.13937	.00203
#2	-.00018	.00112	.00028	-.00178	-.05852	.01051	-.10293	-.00230
#3	-.00032	.00066	-.00056	.02925	.00278	.00784	-.04990	-.00449
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	P_2149	Pb2203	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00184**	**.08420**	**.00012**	**-.00085**	**.00121**	**.00429**	**.00409**	**-.03201**
Stddev	.00077	.00529	.00019	.00467	.00237	.00339	.00519	.00096
%RSD	41.834	6.2800	158.45	548.42	195.54	78.962	127.00	2.9904
#1	.00109	.08656	.00003	-.00191	.00182	.00749	.00446	-.03224
#2	.00179	.07814	-.00000	.00426	.00322	.00074	-.00128	-.03282
#3	.00263	.08790	.00033	-.00490	-.00140	.00463	.00908	-.03095
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: SEQ-CCB Acquired: 3/18/2021 13:10:00 Type: Blank
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Sn1899	Sr4077	Ti3372	Tl1908	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00043**	**-.00023**	**-.00062**	**-.00129**	**.00064**	**-.00090**	**.00016**
Stddev	.00039	.00051	.00068	.00145	.00075	.00004	.00024
%RSD	90.769	217.79	109.58	112.84	116.78	4.2976	151.58
#1	-.00065	-.00000	-.00139	-.00018	.00049	-.00090	.00033
#2	-.00067	-.00081	-.00015	-.00294	.00145	-.00093	.00027
#3	.00002	.00012	-.00031	-.00075	-.00002	-.00086	-.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**15569.**	**93059.**	**6089.5**
Stddev	53.	218.	20.9
%RSD	.34273	.23420	.34386
#1	15511.	92936.	6085.4
#2	15617.	92929.	6070.9
#3	15579.	93310.	6112.2

Sample Name: SEQ-CCV Acquired: 3/18/2021 14:02:36 Type: QC
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.40273**	**9.9328**	**.38199**	**.49396**	**.99287**	**.04845**	**9.8998**	**.05008**
Stddev	.00118	.0132	.00486	.00178	.00094	.00006	.0452	.00074
%RSD	.29308	.13278	1.2728	.36015	.09417	.13244	.45647	1.4763
#1	.40336	9.9463	.38740	.49234	.99181	.04850	9.8729	.05069
#2	.40137	9.9322	.38057	.49369	.99357	.04848	9.8746	.05030
#3	.40346	9.9200	.37800	.49586	.99324	.04838	9.9520	.04926
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu2247	Fe2611	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.19957**	**.49192**	**.49427**	**3.9817**	**48.927**	**.99276**	**10.058**	**.49669**
Stddev	.00327	.00104	.00769	.0111	.031	.00206	.011	.00386
%RSD	1.6390	.21066	1.5550	.27771	.06245	.20782	.10625	.77773
#1	.20247	.49306	.50052	3.9896	48.897	.99138	10.057	.50088
#2	.20022	.49105	.49661	3.9690	48.926	.99513	10.047	.49326
#3	.19602	.49164	.48569	3.9863	48.958	.99176	10.069	.49594
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	P_2149	Pb2203	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.97568**	**49.698**	**.50213**	**9.7605**	**.51477**	**1.1431**	**.38880**	**4.8922**
Stddev	.01219	.050	.00806	.1226	.00412	.0178	.00515	.0516
%RSD	1.2492	.10003	1.6061	1.2556	.80078	1.5568	1.3245	1.0543
#1	.98571	49.754	.50933	9.8686	.51771	1.1578	.39361	4.9293
#2	.97922	49.659	.50365	9.7856	.51654	1.1482	.38944	4.9140
#3	.96212	49.680	.49341	9.6274	.51006	1.1233	.38337	4.8333
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: SEQ-CCV Acquired: 3/18/2021 14:02:36 Type: QC
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Sn1899	Sr4077	Ti3372	Tl1908	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.98488	.98624	.97644	.49739	.98617	.98231	.98983
Stddev	.01301	.00203	.00339	.00055	.00181	.01252	.00770
%RSD	1.3213	.20544	.34689	.11064	.18337	1.2745	.77811
#1	.99681	.98776	.97300	.49770	.98762	.99326	.99316
#2	.98681	.98394	.97977	.49770	.98674	.98501	.98102
#3	.97100	.98703	.97654	.49675	.98414	.96866	.99530
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	15258.	90338.	6041.5
Stddev	16.	119.	46.4
%RSD	.10524	.13203	.76786
#1	15262.	90224.	6031.6
#2	15240.	90328.	6092.1
#3	15272.	90462.	6000.9

Sample Name: SEQ-CCB Acquired: 3/18/2021 14:06:10 Type: Blank
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00049**	**-.00805**	**-.00116**	**.00250**	**.00186**	**-.00003**	**.00814**	**.00015**
Stddev	.00014	.00264	.00120	.00131	.00106	.00003	.02041	.00007
%RSD	28.476	32.792	103.59	52.429	57.088	89.266	250.84	51.530
#1	.00064	-.00618	-.00095	.00148	.00105	-.00002	-.01394	.00023
#2	.00046	-.01107	-.00244	.00398	.00306	-.00006	.02632	.00012
#3	.00036	-.00690	-.00007	.00204	.00146	-.00001	.01203	.00009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu2247	Fe2611	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00016**	**.00084**	**-.00025**	**.00456**	**-.14366**	**.01048**	**-.01701**	**.00055**
Stddev	.00023	.00105	.00030	.00978	.14052	.00266	.04469	.00090
%RSD	145.45	125.24	121.63	214.54	97.810	25.408	262.66	164.03
#1	-.00039	-.00037	.00010	-.00656	.01721	.00815	.02827	.00131
#2	.00006	.00141	-.00044	.01183	-.24242	.00991	-.01823	.00077
#3	-.00013	.00148	-.00041	.00840	-.20578	.01339	-.06108	-.00044
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	P_2149	Pb2203	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00171**	**.07831**	**-.00079**	**-.00231**	**-.00335**	**.00376**	**.00124**	**-.03449**
Stddev	.00053	.02082	.00063	.00665	.00113	.00301	.00398	.00260
%RSD	30.807	26.584	80.342	288.01	33.585	79.976	321.65	7.5310
#1	.00122	.05459	-.00043	-.00673	-.00414	.00236	-.00331	-.03447
#2	.00165	.08678	-.00152	-.00554	-.00206	.00721	.00295	-.03190
#3	.00227	.09355	-.00042	.00534	-.00385	.00170	.00408	-.03709
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: SEQ-CCB Acquired: 3/18/2021 14:06:10 Type: Blank
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Sn1899	Sr4077	Ti3372	Tl1908	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00040**	**.00019**	**.00012**	**-.00351**	**.00021**	**-.00100**	**.00010**
Stddev	.00022	.00052	.00574	.00338	.00034	.00007	.00020
%RSD	54.291	270.52	4661.6	96.292	166.66	6.7904	206.19
#1	-.00016	.00050	.00663	-.00523	.00020	-.00106	.00004
#2	-.00058	-.00041	-.00203	.00038	.00055	-.00102	-.00007
#3	-.00047	.00048	-.00422	-.00568	-.00013	-.00093	.00032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**15529.**	**93283.**	**6132.7**
Stddev	8.	424.	25.7
%RSD	.05324	.45504	.41832
#1	15539.	93770.	6158.9
#2	15527.	93083.	6107.6
#3	15523.	92995.	6131.6

Sample Name: SEQ-CCV Acquired: 3/18/2021 15:04:09 Type: QC
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.40840**	**9.9027**	**.37487**	**.49587**	**.99503**	**.04847**	**9.9278**	**.05026**
Stddev	.00038	.0277	.00566	.00371	.00234	.00002	.0333	.00092
%RSD	.09336	.27925	1.5110	.74871	.23532	.04428	.33496	1.8348
#1	.40836	9.9301	.38129	.49777	.99236	.04848	9.9107	.05088
#2	.40805	9.9034	.37277	.49825	.99601	.04844	9.9066	.05070
#3	.40881	9.8748	.37056	.49159	.99672	.04847	9.9661	.04920
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu2247	Fe2611	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.19937**	**.49105**	**.48678**	**4.0048**	**48.827**	**.99928**	**10.130**	**.49614**
Stddev	.00340	.00008	.00951	.0029	.110	.00498	.089	.00415
%RSD	1.7055	.01701	1.9536	.07236	.22616	.49790	.87818	.83605
#1	.20275	.49104	.49609	4.0080	48.954	1.0015	10.034	.49330
#2	.19941	.49114	.48717	4.0022	48.753	.99359	10.146	.50090
#3	.19595	.49098	.47708	4.0043	48.774	1.0028	10.210	.49422
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	P_2149	Pb2203	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.97770**	**49.830**	**.50165**	**9.6775**	**.51866**	**1.1354**	**.38616**	**4.8667**
Stddev	.01904	.104	.00975	.1665	.00894	.0142	.00667	.0684
%RSD	1.9476	.20921	1.9428	1.7206	1.7245	1.2521	1.7274	1.4056
#1	.99574	49.894	.51060	9.8316	.52605	1.1457	.39213	4.9285
#2	.97956	49.710	.50310	9.6999	.52120	1.1414	.38738	4.8785
#3	.95779	49.887	.49126	9.5009	.50872	1.1192	.37896	4.7932
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: SEQ-CCV Acquired: 3/18/2021 15:04:09 Type: QC
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Sn1899	Sr4077	Ti3372	Tl1908	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.98726	.98814	.98062	.50258	.99066	.97510	.96894
Stddev	.01769	.00010	.00548	.01081	.00182	.01725	.00292
%RSD	1.7923	.01039	.55914	2.1513	.18323	1.7694	.30100
#1	1.0039	.98813	.98574	.51237	.99255	.99031	.96888
#2	.98921	.98824	.98129	.50440	.99052	.97864	.96605
#3	.96866	.98804	.97484	.49098	.98893	.95635	.97189
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	15204.	89623.	6107.5
Stddev	7.	364.	44.6
%RSD	.04896	.40594	.73071
#1	15199.	89306.	6096.1
#2	15213.	90020.	6156.8
#3	15201.	89543.	6069.7

Sample Name: SEQ-CCB Acquired: 3/18/2021 15:07:43 Type: Blank
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00059**	**-.00406**	**-.00247**	**.00260**	**.00162**	**-.00001**	**.01935**	**.00039**
Stddev	.00122	.00519	.00117	.00013	.00109	.00003	.03150	.00020
%RSD	208.10	127.85	47.463	5.0608	67.369	571.19	162.81	50.746
#1	-.00160	-.00359	-.00186	.00262	.00223	.00002	.04853	.00061
#2	-.00092	-.00947	-.00173	.00246	.00227	-.00004	-.01404	.00034
#3	.00077	.00088	-.00382	.00272	.00036	.00000	.02354	.00023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu2247	Fe2611	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00002**	**.00118**	**-.00030**	**.00206**	**-.14887**	**.00766**	**.00442**	**-.00263**
Stddev	.00034	.00040	.00116	.02098	.04771	.00237	.05827	.00257
%RSD	1785.8	34.369	386.98	1015.9	32.047	30.979	1318.4	97.650
#1	.00026	.00073	-.00158	-.02106	-.10164	.00669	-.02317	-.00291
#2	-.00037	.00127	.00067	.00739	-.19704	.00592	.07136	.00007
#3	.00016	.00152	.00001	.01987	-.14792	.01036	-.03494	-.00504
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	P_2149	Pb2203	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00152**	**.04781**	**.00004**	**.00043**	**.00008**	**-.00100**	**.00479**	**-.03196**
Stddev	.00008	.02207	.00059	.00313	.00358	.00490	.00302	.00149
%RSD	4.9952	46.159	1439.3	725.35	4334.7	488.42	63.029	4.6578
#1	.00146	.07319	.00068	.00013	-.00220	-.00652	.00717	-.03156
#2	.00160	.03308	-.00007	-.00253	.00420	.00283	.00580	-.03361
#3	.00149	.03717	-.00048	.00370	-.00175	.00068	.00139	-.03072
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: SEQ-CCB Acquired: 3/18/2021 15:07:43 Type: Blank
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Sn1899	Sr4077	Ti3372	Tl1908	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00086**	**.00018**	**-.00142**	**-.00255**	**.00012**	**-.00089**	**.00020**
Stddev	.00051	.00068	.00511	.00252	.00075	.00003	.00018
%RSD	59.952	374.84	360.21	98.737	638.42	2.9436	91.985
#1	-.00049	-.00051	.00399	-.00331	-.00071	-.00091	.00009
#2	-.00145	.00085	-.00618	.00026	.00033	-.00091	.00041
#3	-.00064	.00020	-.00207	-.00460	.00073	-.00086	.00009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**15543.**	**92989.**	**6081.0**
Stddev	10.	387.	60.0
%RSD	.06502	.41570	.98671
#1	15536.	92701.	6149.2
#2	15555.	92838.	6036.0
#3	15538.	93428.	6057.9

Sample Name: SEQ-CCV Acquired: 3/18/2021 15:30:22 Type: QC
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.40492**	**9.8678**	**.38073**	**.49387**	**.99613**	**.04871**	**9.9554**	**.05030**
Stddev	.00195	.0262	.00704	.00058	.00401	.00008	.0390	.00077
%RSD	.48090	.26547	1.8495	.11703	.40304	.15414	.39147	1.5378
#1	.40703	9.8398	.38300	.49328	.99452	.04880	9.9401	.05104
#2	.40319	9.8916	.38635	.49444	1.0007	.04866	9.9997	.05035
#3	.40455	9.8722	.37283	.49389	.99318	.04867	9.9264	.04950
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu2247	Fe2611	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.19953**	**.49230**	**.49259**	**4.0001**	**49.323**	**1.0017**	**10.094**	**.49635**
Stddev	.00296	.00077	.00748	.0320	.291	.0115	.118	.00089
%RSD	1.4848	.15588	1.5177	.79888	.59007	1.1489	1.1728	.18009
#1	.20187	.49244	.49851	4.0007	49.070	.98958	10.091	.49550
#2	.20052	.49147	.49507	4.0318	49.641	1.0029	10.214	.49728
#3	.19620	.49299	.48419	3.9679	49.258	1.0125	9.9771	.49626
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	P_2149	Pb2203	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.97655**	**49.925**	**.50148**	**9.7380**	**.51325**	**1.1456**	**.38485**	**4.8776**
Stddev	.01772	.261	.00830	.1528	.01010	.0170	.00379	.0721
%RSD	1.8142	.52234	1.6546	1.5687	1.9683	1.4869	.98476	1.4777
#1	.99227	49.649	.50949	9.8599	.52144	1.1615	.38918	4.9377
#2	.98004	50.168	.50204	9.7875	.51635	1.1478	.38327	4.8974
#3	.95735	49.958	.49292	9.5667	.50196	1.1276	.38212	4.7977
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: SEQ-CCV Acquired: 3/18/2021 15:30:22 Type: QC
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Sn1899	Sr4077	Ti3372	Tl1908	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.98718**	**.99054**	**.97936**	**.50391**	**.99072**	**.98283**	**.98645**
Stddev	.01486	.00447	.00390	.00953	.00067	.01612	.00524
%RSD	1.5052	.45103	.39788	1.8905	.06726	1.6400	.53091
#1	1.0007	.98675	.97853	.51234	.99119	.99737	.98049
#2	.98961	.99547	.97594	.50581	.98996	.98561	.98853
#3	.97126	.98941	.98360	.49358	.99102	.96550	.99033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**15377.**	**90744.**	**6123.6**
Stddev	58.	134.	44.9
%RSD	.37451	.14723	.73395
#1	15313.	90873.	6175.3
#2	15422.	90752.	6100.9
#3	15397.	90607.	6094.4

Sample Name: SEQ-CCB Acquired: 3/18/2021 15:34:46 Type: Blank
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00081	-.00786	-.00014	.00228	.00134	-.00006	-.00059	-.00000
Stddev	.00066	.00068	.00222	.00087	.00047	.00002	.02358	.00031
%RSD	80.789	8.6471	1622.5	38.298	35.124	30.640	3997.8	48106.
#1	.00138	-.00758	-.00270	.00288	.00183	-.00004	-.00698	.00035
#2	.00009	-.00736	.00131	.00128	.00130	-.00008	-.02032	-.00012
#3	.00098	-.00863	.00098	.00267	.00089	-.00007	.02553	-.00023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu2247	Fe2611	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00029	.00062	-.00068	.00089	-.01450	.00677	-.02479	-.00052
Stddev	.00033	.00106	.00060	.03894	.02470	.00469	.07032	.00262
%RSD	114.73	172.40	88.736	4370.3	170.29	69.313	283.72	504.31
#1	-.00023	-.00046	-.00059	.02020	-.02654	.00183	-.08719	.00249
#2	-.00064	.00166	-.00013	.02640	-.03088	.00731	.05141	-.00178
#3	.00001	.00065	-.00132	-.04393	.01391	.01117	-.03858	-.00228
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	P_2149	Pb2203	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00016	.05294	.00018	-.00540	-.00217	.00370	.00262	-.03242
Stddev	.00012	.00164	.00108	.00257	.00045	.00102	.00221	.00155
%RSD	72.150	3.1029	586.91	47.651	20.850	27.477	84.449	4.7823
#1	.00015	.05422	-.00055	-.00810	-.00196	.00255	.00067	-.03154
#2	.00005	.05108	-.00032	-.00512	-.00269	.00449	.00217	-.03151
#3	.00029	.05350	.00143	-.00298	-.00186	.00406	.00502	-.03421
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: SEQ-CCB Acquired: 3/18/2021 15:34:46 Type: Blank
Method: ICP-THERMO4_6010Water(v233) Mode: CONC Corr. Factor: 1.000000
User: KHL Custom ID1: Custom ID2: Custom ID3:
Comment: 031821T4-1R

Elem	Sn1899	Sr4077	Ti3372	Tl1908	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00048**	**.00017**	**.00130**	**.00028**	**.00027**	**-.00097**	**-.00007**
Stddev	.00070	.00012	.00294	.00101	.00095	.00002	.00032
%RSD	147.47	70.585	225.83	366.80	351.01	2.1592	483.22
#1	-.00041	.00013	-.00206	-.00063	-.00081	-.00096	-.00030
#2	.00019	.00030	.00340	.00008	.00067	-.00099	-.00020
#3	-.00121	.00007	.00255	.00137	.00096	-.00095	.00030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**15730.**	**94263.**	**6221.7**
Stddev	22.	226.	5.0
%RSD	.13838	.23947	.08093
#1	15741.	94500.	6223.4
#2	15743.	94051.	6225.7
#3	15705.	94237.	6216.1

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Metals
EPA 7470A

Microbac Laboratories, Inc.
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FORM I:
Metals
EPA 7470A
RESULTS SUMMARY

Microbac Laboratories, Inc.
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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

Microbac Laboratories Inc., - Marietta, OH

Metals TCLP by AA

CERTIFICATE OF ANALYSIS
FORM I

Client ID:	Soil IDW			**Collection Date:**	03/11/2021 10:00
Laboratory ID:	M1C1317-01	**PrePrep Method:**	1311 EX	**Prep Date:**	03/18/2021 06:01
Matrix:	Solid			**Analyzed:**	03/18/2021 12:09
Batch / Sequence:	B1C1043 / S1C0346	**Analytical Method:**	EPA 7470A	**Calibration:**	UNASSIGNED
Instrument:	CVAA1	**Units:**	mg/L	**File ID:**	031821A-025
Analyst:	TMM	**Dilution:**	1	**% Solids:**	87.31

Analyte	CAS Number	Result	DL	LOD	LOQ	Flag	Qual
Mercury	7439-97-6	0.00200	0.00100	0.00200	0.00200	U	

Notes and Definitions

DL: Detection Limit
LOD: Limit of Detection
LOQ: Limit of Quantitation
mg/L: Milligrams per Liter
U: The analyte was analyzed for but was not detected above the reported quantitation limit. The quantitation limit has been adjusted for any dilution or concentration of the sample.

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FORM II:
Metals
EPA 7470A
ICV/CCV SUMMARY

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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

INITIAL AND CONTINUING CALIBRATION CHECK
FORM II

Instrument: CVAA1
Sequence: S1C0346
Control Limt: +/- 20.00%

Method: EPA 7470A
File ID: 031821A-007
Analyst: TMM

Lab Sample ID	Analyte	True	Found	%R	Units	Date/Time	Q
S1C0346-ICV1	Mercury	2.00	2.00	100	ug/L	03/18/21 11:23	
S1C0346-CCV1	Mercury	2.00	2.12	106	ug/L	03/18/21 11:28	
S1C0346-CCV2	Mercury	2.00	2.13	106	ug/L	03/18/21 11:56	
S1C0346-CCV3	Mercury	2.00	2.12	106	ug/L	03/18/21 12:16	

* Values outside of QC limits

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FORM III:
Metals
EPA 7470A
ICB/CCB/PREP BLANK SUMMARY

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

METHOD BLANK SUMMARY
FORM IIIA

Blank ID:	B1C1043-BLK1	**Batch:**	B1C1043
Blank File ID:	031821A-011	**Instrument:**	CVAA1
Prepared:	03/18/2021 6:01	**Method:**	EPA 7470A
Analyzed:	03/18/2021 11:33	**Analyst:**	TMM

This Method Blank Applies To The Following Samples:

Client Sample ID	Laboratory Sample ID	Lab File ID	Time Analyzed
Blank #693	B1C1043-BLK1	031821A-011	03/18/2021 11:33
Blank #576	B1C1043-BLK2	031821A-012	03/18/2021 11:36
Blank Flt_blk	B1C1043-BLK3	031821A-013	03/18/2021 11:38
LCS	B1C1043-BS1	031821A-014	03/18/2021 11:41
Soil IDW	M1C1317-01	031821A-025	03/18/2021 12:09

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

METHOD BLANK SUMMARY
FORM IIIA

Blank ID:	B1C1043-BLK2	**Batch:**	B1C1043
Blank File ID:	031821A-012	**Instrument:**	CVAA1
Prepared:	03/18/2021 6:01	**Method:**	EPA 7470A
Analyzed:	03/18/2021 11:36	**Analyst:**	TMM

This Method Blank Applies To The Following Samples:

Client Sample ID	Laboratory Sample ID	Lab File ID	Time Analyzed
Blank #693	B1C1043-BLK1	031821A-011	03/18/2021 11:33
Blank #576	B1C1043-BLK2	031821A-012	03/18/2021 11:36
Blank Flt_blk	B1C1043-BLK3	031821A-013	03/18/2021 11:38
LCS	B1C1043-BS1	031821A-014	03/18/2021 11:41
Soil IDW	M1C1317-01	031821A-025	03/18/2021 12:09

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

METHOD BLANK SUMMARY
FORM IIIA

Blank ID:	B1C1043-BLK3	**Batch:**	B1C1043
Blank File ID:	031821A-013	**Instrument:**	CVAA1
Prepared:	03/18/2021 6:01	**Method:**	EPA 7470A
Analyzed:	03/18/2021 11:38	**Analyst:**	TMM

This Method Blank Applies To The Following Samples:

Client Sample ID	Laboratory Sample ID	Lab File ID	Time Analyzed
Blank #693	B1C1043-BLK1	031821A-011	03/18/2021 11:33
Blank #576	B1C1043-BLK2	031821A-012	03/18/2021 11:36
Blank Flt_blk	B1C1043-BLK3	031821A-013	03/18/2021 11:38
LCS	B1C1043-BS1	031821A-014	03/18/2021 11:41
Soil IDW	M1C1317-01	031821A-025	03/18/2021 12:09

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Laboratory Report Number: M1C1317

METHOD BLANK
FORM IIIB

Client Project ID: Longhorn

Sample ID: B1C1043-BLK1 **Prep Date:** 03/18/21 06:01 **Matrix:** Aqueous
Instrument: CVAA1 **Analyzed:** 03/18/21 11:33 **Method:** EPA 7470A
File ID: 031821A-011 **Sequence:** S1C0346 **Analyst:** TMM
Batch: B1C1043 **Units:** mg/L

Analyte	Result	DL	LOD	LOQ	Dilution	Flag	Q
Mercury	0.00200	0.00100	0.00200	0.00200	1	U	

Notes and Definitions

* - Detected in the associated method Blank at a concentration
U: The analyte was analyzed for but was not detected above the reported quantitation limit. The quantitation limit has been adjusted for any dilution or concentration of the sample.

Sample ID: B1C1043-BLK2 **Prep Date:** 03/18/21 06:01 **Matrix:** Aqueous
Instrument: CVAA1 **Analyzed:** 03/18/21 11:36 **Method:** EPA 7470A
File ID: 031821A-012 **Sequence:** S1C0346 **Analyst:** TMM
Batch: B1C1043 **Units:** mg/L

Analyte	Result	DL	LOD	LOQ	Dilution	Flag	Q
Mercury	0.00200	0.00100	0.00200	0.00200	1	U	

Notes and Definitions

* - Detected in the associated method Blank at a concentration
U: The analyte was analyzed for but was not detected above the reported quantitation limit. The quantitation limit has been adjusted for any dilution or concentration of the sample.

Sample ID: B1C1043-BLK3 **Prep Date:** 03/18/21 06:01 **Matrix:** Aqueous
Instrument: CVAA1 **Analyzed:** 03/18/21 11:38 **Method:** EPA 7470A
File ID: 031821A-013 **Sequence:** S1C0346 **Analyst:** TMM
Batch: B1C1043 **Units:** mg/L

Analyte	Result	DL	LOD	LOQ	Dilution	Flag	Q
Mercury	0.00200	0.00100	0.00200	0.00200	1	U	

Notes and Definitions

* - Detected in the associated method Blank at a concentration
U: The analyte was analyzed for but was not detected above the reported quantitation limit. The quantitation limit has been adjusted for any dilution or concentration of the sample.

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Laboratory Report Number: M1C1317 **CALIBRATION BLANK FORM IIIC**

Client Project ID: Longhorn

Instrument ID: CVAA1 **Method:** EPA 7470A

Sequence: S1C0346

Lab Sample ID	Analyte	Found	MDL	MRL	Units	Q	Date/Time
S1C0346-ICB1	Mercury	-0.0488	0.100	0.200	ug/L	U	03/18/2021 11:26
S1C0346-CCB1	Mercury	-0.0519	0.100	0.200	ug/L	U	03/18/2021 11:31
S1C0346-CCB2	Mercury	-0.0651	0.100	0.200	ug/L	U	03/18/2021 11:59
S1C0346-CCB3	Mercury	-0.0613	0.100	0.200	ug/L	U	03/18/2021 12:19

* Values outside of QC limits

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FORM VII:
Metals
EPA 7470A
LCS/LCSD

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

BLANK SPIKE (BS)
FORM VII

Method:	EPA 7470A		**Blank Spike**
Batch:	B1C1043	**Spike ID:**	B1C1043-BS1
Analyst:	TMM	**Prepared:**	03/18/21 06:01
Matrix:	Aqueous	**Analyzed:**	03/18/21 11:41
Units:	mg/L	**File ID:**	031821A-014
Instrument:	CVAA1	**Initial/Final:**	40mL/40mL

Analyte	BS Spiked	BS Found	BS %Rec	%Rec Limts	Q
Mercury	0.00400	0.00409	102	80 - 120	

* - Does not meet %Rec acceptance criteria.
# - Does not meet RPD acceptance criteria.

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Section A:
Metals
EPA 7470A
Batch / Sequence Raw Data

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TMM

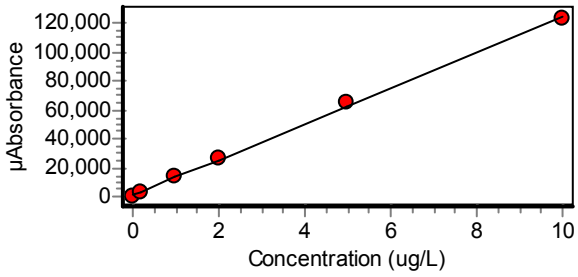
Report Generated By CETAC QuickTrace
Analyst: c10155
Worksheet file: C:\Program Files (x86)\QuickTrace\Worksheets\031821A.wsz
Date Started: 3/18/2021 9:39:23 AM
Comment:

Results

Sample Name					Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Flags	DF
S1C0346-CAL1					STD	03/18/21 11:08:24 am	0.0000	315	25.01		1.00
Replicates	418.0	332.7	266.5	242.0							
S1C0346-CAL2					STD	03/18/21 11:10:55 am	0.2000	3065	0.24		1.00
Replicates	3074.8	3065.1	3065.1	3056.7							
S1C0346-CAL3					STD	03/18/21 11:13:27 am	1.0000	13527	0.16		1.00
Replicates	13537.4	13545.6	13526.4	13497.3							
S1C0346-CAL4					STD	03/18/21 11:16:00 am	2.0000	26444	0.18		1.00
Replicates	26481.2	26479.7	26438.0	26377.2							
S1C0346-CAL5					STD	03/18/21 11:18:33 am	5.0000	64723	0.21		1.00
Replicates	64868.7	64788.8	64681.8	64554.1							
S1C0346-CAL6					STD	03/18/21 11:21:06 am	10.0000	123538	0.24		1.00
Replicates	123829.7	123702.1	123462.4	123156.2							

Calibration

Equation: A = 1169.784 + 12340.280C
R2: 0.99948
SEE: 1215.8400
Flags:



S1C0346-ICV1					ICV	03/18/21 11:23:41 am	2.0000	25849	0.76		1.00
Replicates	26071.5	25929.2	25778.2	25617.7							
% Recovery	100.00										

Sample Name				Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Flags	DF
S1C0346-ICB1				ICB	03/18/21 11:26:11 am	-0.0488	568	3.70		1.00
Replicates	593.9	555.6	574.9	546.7						
S1C0346-CCV1				CCV	03/18/21 11:28:44 am	2.1160	27278	0.08		1.00
Replicates	27246.9	27293.7	27277.9	27292.7						
% Recovery	105.78									
S1C0346-CCB1				CCB	03/18/21 11:31:15 am	-0.0519	529	6.85		1.00
Replicates	577.6	534.4	507.9	495.8						
B1C1043-BLK1				UNK	03/18/21 11:33:46 am	-0.0603	425	3.93		1.00
Replicates	417.2	450.2	418.4	415.2						
B1C1043-BLK2				UNK	03/18/21 11:36:17 am	-0.0674	338	2.24		1.00
Replicates	341.9	330.3	333.5	346.8						
B1C1043-BLK3				UNK	03/18/21 11:38:48 am	-0.0736	262	2.86		1.00
Replicates	266.8	250.4	264.9	263.9						
B1C1043-BS1				UNK	03/18/21 11:41:20 am	4.0930	51682	0.50		1.00
Replicates	51971.6	51789.0	51603.1	51363.6						
M1C1351-02				UNK	03/18/21 11:43:52 am	-0.0482	575	7.08		1.00
Replicates	619.4	598.3	543.7	536.7						
B1C1043-PS1				UNK	03/18/21 11:46:24 am	0.9097	12395	1.94		1.00
Replicates	12618.9	12534.0	12352.3	12076.5						
B1C1043-MS1				UNK	03/18/21 11:48:56 am	4.1080	51866	0.52		1.00
Replicates	52179.3	51976.3	51759.8	51548.6						
B1C1043-MSD1				UNK	03/18/21 11:51:29 am	4.0730	51426	0.64		1.00
Replicates	51798.2	51563.1	51299.6	51042.6						
M1C1351-01				UNK	03/18/21 11:54:00 am	-0.0717	285	15.56		1.00
Replicates	346.8	284.6	264.9	244.1						

Sample Name				Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Flags	DF
S1C0346-CCV2				CCV	03/18/21 11:56:32 am	2.1270	27418	0.55		1.00
Replicates	27572.2	27502.4	27362.1	27235.9						
% Recovery	106.35									
S1C0346-CCB2				CCB	03/18/21 11:59:03 am	-0.0651	367	6.60		1.00
Replicates	394.9	369.0	366.3	335.8						
M1C1034-01				UNK	03/18/21 12:01:36 pm	-0.0756	237	3.65		1.00
Replicates	243.2	229.8	229.3	245.6						
M1C1035-01				UNK	03/18/21 12:04:09 pm	-0.0696	311	3.94		1.00
Replicates	320.3	319.6	294.0	310.8						
M1C1226-01				UNK	03/18/21 12:06:43 pm	-0.0831	144	8.56		1.00
Replicates	128.5	147.0	158.4	142.9						
M1C1317-01				UNK	03/18/21 12:09:17 pm	-0.0809	172	9.56		1.00
Replicates	186.2	176.7	148.2	176.6						
M1C1323-01				UNK	03/18/21 12:11:47 pm	-0.0746	250	1.80		1.00
Replicates	253.6	243.3	250.3	251.6						
M1C1323-02				UNK	03/18/21 12:14:18 pm	-0.0688	320	1.12		1.00
Replicates	320.0	323.8	315.5	322.0						
S1C0346-CCV3				CCV	03/18/21 12:16:50 pm	2.1190	27320	0.30		1.00
Replicates	27217.5	27296.6	27357.8	27408.3						
% Recovery	105.95									
S1C0346-CCB3				CCB	03/18/21 12:19:21 pm	-0.0613	413	5.32		1.00
Replicates	441.8	419.5	397.3	394.8						

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

BATCH LOG SUMMARY
SECTION A1

Batch: B1C1043
Matrix: Aqueous
Method: EPA 7470A
SOP: ME404

Prepared: 3/18/2021 6:01:00AM
Prepared By: ERP

Laboratory ID	Client / Source ID	Initial	Final						Spike(s)
B1C1043-BLK1		4.00 mL	40.0 mL						
B1C1043-BLK2		4.00 mL	40.0 mL						
B1C1043-BLK3		4.00 mL	40.0 mL						
B1C1043-BS1		40.0 mL	40.0 mL						1002354 4000µL
M1C1317-01	Soil IDW	4.00 mL	40.0 mL						

Standards used in the batch:

Standard ID	Description	Date Prepared	Prepared By
1002354	HG H2O SPK/ ICV INTERMEDIATE DAILY	3/18/2021 5:57:18AM	Erin Porter

Reagents used in the batch:

Reagent ID	Description	Prepared	Prepared By
0006819	phospate monobasic	6/30/2020 7:56:44AM	Erin Porter
0009368	HG PERMAGNATE	9/11/2020 10:30:27AM	Erin Porter
0010744	HG K2S2O8	10/20/2020 7:09:16AM	Erin Porter
1001074	HNO3	2/4/2021 2:07:08PM	Tammy Morris
1001240	40 & 50 ML dIGESTION TUBES	2/11/2021 8:14:34AM	Erin Porter

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

SEQUENCE LOG SUMMARY
SECTION A2

Sequence: S1C0346
Instrument: CVAA1

Analyst 1: TMM
Method: EPA 7470A
SOP: ME404

#	File ID	Laboratory ID	Client ID	Analyzed	Reference	Standard
1	031821A-001	S1C0346-CAL1	Cal Standard	03/18/21 11:08		1002356
2	031821A-002	S1C0346-CAL2	Cal Standard	03/18/21 11:10		1002357
3	031821A-003	S1C0346-CAL3	Cal Standard	03/18/21 11:13		1002358
4	031821A-004	S1C0346-CAL4	Cal Standard	03/18/21 11:16		1002359
5	031821A-005	S1C0346-CAL5	Cal Standard	03/18/21 11:18		1002360
6	031821A-006	S1C0346-CAL6	Cal Standard	03/18/21 11:21		1002361
7	031821A-007	S1C0346-ICV1	Initial Cal Check	03/18/21 11:23		1002355
8	031821A-008	S1C0346-ICB1	Initial Cal Blank	03/18/21 11:26		1002356
9	031821A-009	S1C0346-CCV1	Calibration Check	03/18/21 11:28		1002359
10	031821A-010	S1C0346-CCB1	Calibration Blank	03/18/21 11:31		1002356
11	031821A-011	B1C1043-BLK1	Blank #693	03/18/21 11:33		
12	031821A-012	B1C1043-BLK2	Blank #576	03/18/21 11:36		
13	031821A-013	B1C1043-BLK3	Blank Flt_blk	03/18/21 11:38		
14	031821A-014	B1C1043-BS1	LCS	03/18/21 11:41		
20	031821A-020	S1C0346-CCV2	Calibration Check	03/18/21 11:56		1002359
21	031821A-021	S1C0346-CCB2	Calibration Blank	03/18/21 11:59		1002356
25	031821A-025	M1C1317-01	Soil IDW	03/18/21 12:09		
28	031821A-028	S1C0346-CCV3	Calibration Check	03/18/21 12:16		1002359
29	031821A-029	S1C0346-CCB3	Calibration Blank	03/18/21 12:19		1002356

Sequence Standards

Standard ID	Description	Prepared	PreparedBy	Expires
1002355	HG H2O ICV	03/18/2021	Erin Porter	03/19/2021
1002356	HG H2O BLK	03/18/2021	Erin Porter	03/19/2021
1002357	HG H2O .2ppb	03/18/2021	Erin Porter	03/19/2021
1002358	HG H2O 1ppb	03/18/2021	Erin Porter	03/19/2021
1002359	HG H2O 2ppb	03/18/2021	Erin Porter	03/19/2021
1002360	HG H2O 5ppb	03/18/2021	Erin Porter	03/19/2021
1002361	HG H2O 10ppb	03/18/2021	Erin Porter	03/19/2021

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Analysis Class

Sample Prep

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

Sample Prep - Class Narrative and Notes

All test results meet the requirements of the QAPP and other applicable contract terms and conditions . Any exceptions are listed below in the sample and qc notes sections. Analytical results are reported on a 'as received' basis unless specified otherwise. Analytical results for solids with units ending in (dry) are reported on a dry weight basis. A statement of uncertainty for each analysis is available upon request.

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Analysis Class

Wet Chemistry

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Wet Chemistry - Class Narrative and Notes

All test results meet the requirements of the QAPP and other applicable contract terms and conditions . Any exceptions are listed below in the sample and qc notes sections. Analytical results are reported on a 'as received' basis unless specified otherwise. Analytical results for solids with units ending in (dry) are reported on a dry weight basis. A statement of uncertainty for each analysis is available upon request.

Sample Notes

EPA 9045D

H4 **The test was performed outside of the EPA recommended holding time of 15 minutes.**

pH

M1C1317-01 Soil IDW

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Wet Chemistry
ASTM D2216-10

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FORM I:
Wet Chemistry
ASTM D2216-10
RESULTS SUMMARY

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

Microbac Laboratories Inc., - Marietta, OH

General Parameters

CERTIFICATE OF ANALYSIS
FORM I

Client ID:	Soil IDW			**Collection Date:**	03/11/2021 10:00
Laboratory ID:	M1C1317-01			**Prep Date:**	03/16/2021 07:44
Matrix:	Solid			**Analyzed:**	03/17/2021 06:26
Batch / Sequence:	B1C0890 /	**Analytical Method:**	ASTM D2216-10	**Calibration:**	NA
Instrument:	BAL021	**Units:**	% (by wt.)	**File ID:**	PSOLID_MOIST_ASH@750drywt_B1C0890_210316074534.xls
Analyst:	JMH	**Dilution:**	1	**% Solids:**	87.31

Analyte	CAS Number	Result	DL	LOD	LOQ	Flag	Qual
Percent Solids		87.3	0.500	1.00	1.00		

Notes and Definitions

DL: Detection Limit
LOD: Limit of Detection
LOQ: Limit of Quantitation
% (by wt.): Percent by Weight

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FORM III:
Wet Chemistry
ASTM D2216-10
ICB/CCB/PREP BLANK
SUMMARY

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

METHOD BLANK SUMMARY
FORM IIIA

Blank ID:	B1C0890-BLK1	**Batch:**	B1C0890
Blank File ID:	PSOLID_MOIST_ASH@750d	**Instrument:**	BAL021
Prepared:	03/16/2021 7:44	**Method:**	ASTM D2216-10
Analyzed:	03/17/2021 6:26	**Analyst:**	JMH

This Method Blank Applies To The Following Samples:

Client Sample ID	Laboratory Sample ID	Lab File ID	Time Analyzed
Blank	B1C0890-BLK1	_ASH@750drywt_B1C0890_21	03/17/2021 6:26
LCS	B1C0890-BS1	_ASH@750drywt_B1C0890_21	03/17/2021 6:26
Duplicate	B1C0890-DUP1	_ASH@750drywt_B1C0890_21	03/17/2021 6:26
Soil IDW	M1C1317-01	_ASH@750drywt_B1C0890_21	03/17/2021 6:26

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Laboratory Report Number: M1C1317

METHOD BLANK
FORM IIIB

Client Project ID: Longhorn

Sample ID:	B1C0890-BLK1	**Prep Date:**	03/16/21 07:44	**Matrix:**	Solid
Instrument:	BAL021	**Analyzed:**	03/17/21 06:26	**Method:**	ASTM D2216-10
File ID:	PSOLID_MOIST_ASH(	**Sequence:**		**Analyst:**	JMH
Batch:	B1C0890	**Units:**	% (by wt.)	**Calibration:**	

Analyte	Result	DL	LOD	LOQ	Dilution	Flag	Q
Percent Solids	100	0.500	1.00	1.00	1		*

Notes and Definitions

* - Detected in the associated method Blank at a concentration >= RL

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FORM VI:
Wet Chemistry
ASTM D2216-10
Duplicates

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Laboratory Report Number: M1C1317
Client Project ID: Longhorn

DUPLICATE
Form VI

Parent ID:	M1C1317-01	**Calibration:**		**Method:**	ASTM D2216-10
Instrument:	BAL021	**File ID:**	PSOLID_MOIST_A	**Dil:** 1	**Matrix:** Solid
Sample ID:	B1C0890-DUP1	**Batch:**	B1C0890	**Units:**	% (by wt.)

Analyte	Parent	Duplicate	RPD	RPD Limit	Q
Percent Solids	87.3	86.1	1.39	20	

* - Exceeds RPD Limit
# - Based on the low concentration of this analyte, Relative Percent Difference is not an appropriate evaluator of precision. The precision of the duplicate analysis is considered acceptable

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FORM VII:
Wet Chemistry
ASTM D2216-10
LCS/LCSD

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

BLANK SPIKE (BS)
FORM VII

Method:	ASTM D2216-10		**Blank Spike**
Batch:	B1C0890	**Spike ID:**	B1C0890-BS1
Analyst:	JMH	**Prepared:**	03/16/21 07:44
Matrix:	Solid	**Analyzed:**	03/17/21 06:26
Units:	% (by wt.)	**File ID:**	PSOLID_MOIST_ASH@750dryw
Instrument:	BAL021	**Initial/Final:**	1g/1mL
Calibration:			

Analyte	BS Spiked	BS Found	BS %Rec	%Rec Limts	Q
Percent Solids	80.0	76.9	96.1	90 - 110	

* - Does not meet %Rec acceptance criteria.
\# - Does not meet RPD acceptance criteria.

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Section A:
Wet Chemistry
ASTM D2216-10
Batch / Sequence Raw Data

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Percent Solids, Moisture, Ash and Volatiles (soils)

Laboratory: Microbac - OVD

Method:	ASTM D2216-10
Batch:	B1C0890
SOP/REV	K0003/15
Balance:	BAL021
Oven:	PCT-S4

Analyst	Date	Time	Temp °C	Oven
JMH	3/16/2021	8:40	110	IN
JMH	3/17/2021	6:26	110	OUT
				IN
				OUT
				IN
				OUT
				IN
				OUT

Analyst	Date	Time	Desicator
JMH	3/17/2021	6:26	IN
JMH	3/17/2021	6:32	OUT
			IN
			OUT
			IN
			OUT
			IN
			OUT

Analyst	Date	Time	Temp °C	Furnace
				IN
				OUT
				IN
				OUT
				IN
				OUT

Calculation: Percent Moisture (%) = (Weight of Dry sample (mg) / Weight of Wet Sample (ml) * 100)
Calculation: TVS (%) = (100% - ASH%)
Calculation: Ash from solids (%) = (Weight of furnace sample (g) - Boat weight(g)) / (Dry Sample Weight (g) - Boat weight(g)) * 100)

Samp Number	Samp Name	Samp Date	Boat #	Boat Weight (g)	Boat & Sample Weight (g)	Dry Boat & Sample #1 (g)	Dry Boat & Sample #2 (g)	Dry Boat & Sample #3 (g)	Dry Boat & Sample #4 (g)	Prior to Final Weight (g)	Dry Sample Weight (g)	Dry Sample (mg)	Percent Solids (%)	Percent Moisture (%)	Furnace Weight 1 (g)	Furnace Weight 2 (g)	Furnace Weight 3 (g)	Furnace Final Weight (g)	Furnace Dry Sample Weight (mg)	TVS (%)	Ash (%)
B1C0890-BLK1	Blank		1	1.2480	21.0110	21.0020				21.0020	21.0020	19754.0000	99.95	0.0455				99.95446	98706.46	-399.68	499.68
B1C0890-BS1	LCS		2	1.2330	27.0370	21.0640				21.0640	21.0640	19831.0000	76.85	23.1476				76.85243	75619.43	-281.32	381.32
B1C0890-DUP1	Duplicate M1C1317-01		3	1.2120	24.0470	20.8730				20.8730	20.8730	19661.0000	86.10	13.8997				86.10028	84888.28	-331.76	431.76
M1C1317-01	Soil IDW	03/11/21 10:00	4	1.2230	24.4170	21.4730				21.4730	21.4730	20250.0000	87.31	12.6929				87.30706	86084.06	-325.11	425.11
			5							-	-	0.0000	#DIV/0!	#DIV/0!				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
			6							-	-	0.0000	#DIV/0!	#DIV/0!				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
			7							-	-	0.0000	#DIV/0!	#DIV/0!				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
			8							-	-	0.0000	#DIV/0!	#DIV/0!				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
			9							-	-	0.0000	#DIV/0!	#DIV/0!				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
			10							-	-	0.0000	#VALUE!	#VALUE!				#VALUE!	#VALUE!	######	######
			11							-	-	0.0000	#DIV/0!	#DIV/0!				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
			12							-	-	0.0000	#DIV/0!	#DIV/0!				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
			13							-	-	0.0000	#DIV/0!	#DIV/0!				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
			14							-	-	0.0000	#DIV/0!	#DIV/0!				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
			15							-	-	0.0000	#DIV/0!	#DIV/0!				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
			16							-	-	0.0000	#DIV/0!	#DIV/0!				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
			17							-	-	0.0000	#DIV/0!	#DIV/0!				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
			18							-	-	0.0000	#DIV/0!	#DIV/0!				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
			19							-	-	0.0000	#DIV/0!	#DIV/0!				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
			20							-	-	0.0000	#DIV/0!	#DIV/0!				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
			21							-	-	0.0000	#DIV/0!	#DIV/0!				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
			22							-	-	0.0000	#DIV/0!	#DIV/0!				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
			23							-	-	0.0000	#DIV/0!	#DIV/0!				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
			24							-	-	0.0000	#DIV/0!	#DIV/0!				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
			25							-	-	0.0000	#DIV/0!	#DIV/0!				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

[redacted]

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

BATCH LOG SUMMARY
SECTION A1

Batch: B1C0890
Matrix: Solid
Method: ASTM D2216-10

Prepared: 3/16/2021 7:44:00AM
Prepared By: JMH

Laboratory ID	Client / Source ID	Initial	Final						Spike(s)
M1C1317-01	Soil IDW	1.00 g	1.00 mL						
B1C0890-BS1		1.00 g	1.00 mL						9008382 1µL
B1C0890-DUP1	M1C1317-01	1.00 g	1.00 mL						
B1C0890-BLK1		1.00 g	1.00 mL						

Standards used in the batch:

Standard ID	Description	Date Prepared	Prepared By
9008382	DI H2O	11/15/2019 11:23:35AM	Erin Porter

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Wet Chemistry
EPA 1030

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FORM I:
Wet Chemistry
EPA 1030
RESULTS SUMMARY

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS
FORM I

General Parameters

Client ID:	Soil IDW			**Collection Date:**	03/11/2021 10:00
Laboratory ID:	M1C1317-01			**Prep Date:**	03/18/2021 11:30
Matrix:	Solid			**Analyzed:**	03/18/2021 11:30
Batch / Sequence:	B1C1085 /	**Analytical Method:**	EPA 1030	**Calibration:**	NA
Instrument:	1405	**Units:**	mm/sec	**File ID:**	IGNITE_B1C1085_210318013200.xls
Analyst:	JDH	**Dilution:**	1	**% Solids:**	87.31

Analyte	CAS Number	Result	DL	LOD	LOQ	Flag	Qual
Ignitability of Solids		Did not ignite.	2.2	2.2	2.2		

Notes and Definitions

DL: Detection Limit
LOD: Limit of Detection
LOQ: Limit of Quantitation
mm/sec: Millimeter per Second

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FORM VII:
Wet Chemistry
EPA 1030
LCS/LCSD

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

BLANK SPIKE (BS)
FORM VII

Method:	EPA 1030		**Blank Spike**
Batch:	B1C1085	**Spike ID:**	B1C1085-BS1
Analyst:	JDH	**Prepared:**	03/18/21 11:30
Matrix:	Solid	**Analyzed:**	03/18/21 11:30
Units:	mm/sec	**File ID:**	IGNITE_B1C1085_21031801320(
Instrument:	1405	**Initial/Final:**	1mL/1mL
Calibration:			

Analyte	BS Spiked	BS Found	BS %Rec	%Rec Limts	Q
Ignitability of Solids	2.4	2.4	102	88 - 111	

* - Does not meet %Rec acceptance criteria.
\# - Does not meet RPD acceptance criteria.

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Section A:
Wet Chemistry
EPA 1030
Batch / Sequence Raw Data

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Ignitability

Laboratory: Microbac - OVD

Method:	BURNRATE
Batch:	B1C1085
SOP:	SW846 1030
Temp Probe ID:	1412
Timer: ID	1405

Analyst	JDH
Date	3/18/2021
Time	11:30

Calculation: Use Average Burning Rate for Final Result

Sample Number	Sample Name	Sample Date	Test #	Temperature of Material (°C)	Description of Material	Particle Size	Comments	Pretest Burning Time (sec)	Flame Temperature >1000 °C	Fume Hood Air Velocity (110-150) ft/min	Time (sec) elapsed between application of flame and start of ignition	Burning Time over 100mm (sec)	Burning rate (mm/sec)	Average	Standard Deviation	%RSD	Ignitability
B1C1085-BS1	LCS		1	17.0	OTHER	OTHER	LCS		Y	Y	<1	41.21	2.43	2.44	0.036	1.48%	2.44
			2								<1	41.43	2.41				
			3								<1	40.31	2.48				
M1B1536-01	1023083-01 (Burn Ove	2/19/2021	1	17.0	non-Metallic	Other	PIECES POPPED WHEN HEATED		Y	Y	NI	NI	0	0.00	0.000	#####	0.00
			2								NI	NI	0				
			3								NI	NI	0				
M1C0998-01	1032161-01 (HI- Wast	3/9/2021	1	17.0	non-Metallic	Fine Powder			Y	Y	NI	NI	0	0.00	0.000	#####	0.00
			2								NI	NI	0				
			3								NI	NI	0				
M1C0999-01	1032159-01 (HI - Wast	3/9/2021	1	17.0	non-Metallic	Other	TUMBLER STONES		Y	Y	NI	NI	0	0.00	0.000	#####	0.00
			2								NI	NI	0				
			3								NI	NI	0				
M1C1317-01	Soil IDW	3/11/2021	1	17.0	non-Metallic	Granular			Y	Y	NI	NI	0	0.00	0.000	#####	0.00
			2								NI	NI	0				
			3								NI	NI	0				
M1C1323-01	IDW Soil	3/10/2021	1	17.0	non-Metallic	Granular			Y	Y	NI	NI	0	0.00	0.000	#####	0.00
			2								NI	NI	0				
			3								NI	NI	0				
M1C1491-01	T1C1041-01 (Sludge (t	3/15/2021	1	17.0	non-Metallic	Other	SLUDGE		Y	Y	NI	NI	0	0.00	0.000	#####	0.00
			2								NI	NI	0				
			3								NI	NI	0				
			1	17.0	non-Metallic	Fine Powder	Sample Melts upon Contact with flame		Y	Y	<1	41.21	0	1.63	1.412	#####	1.63
			2								<1	41.43	2.41				
			3								<1	40.31	2.48				
			1	17.0	non-Metallic	Fine Powder	Sample Melts upon Contact with flame		Y	Y	<1	41.21	2.43	2.44	0.036	1.48%	2.44
			2								<1	41.43	2.41				
			3								<1	40.31	2.48				
			1	17.0	non-Metallic	Fine Powder	Sample Melts upon Contact with flame		Y	Y	<1	41.21	2.43	2.44	0.036	1.48%	2.44
			2								<1	41.43	2.41				
			3								<1	40.31	2.48				

IGNITE_B1C1085_210318013200
3/18/2021 1:36 PM
Version 1.0 (03/25/2019)

[redacted]

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

BATCH LOG SUMMARY
SECTION A1

Batch: B1C1085
Matrix: Solid
Method: EPA 1030
SOP: EXD01

Prepared: 3/18/2021 11:30:00AM
Prepared By: JDH

Laboratory ID	Client / Source ID	Initial	Final						Spike(s)
M1C1317-01	Soil IDW	1.00 mL	1.00 mL						
B1C1085-BS1		1.00 mL	1.00 mL						0003702 1000µL

Standards used in the batch:

Standard ID	Description	Date Prepared	Prepared By
0003702	CS-BURN	4/1/2020 12:46:13PM	** Vendor **

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Wet Chemistry
EPA 7.3.3.2

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FORM I:
Wet Chemistry
EPA 7.3.3.2
RESULTS SUMMARY

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Laboratory Report Number: M1C1317

CERTIFICATE OF ANALYSIS
FORM I

Client Project ID: Longhorn

Microbac Laboratories Inc., - Marietta, OH

Inorganics Total

Client ID:	Soil IDW			**Collection Date:**	03/11/2021 10:00
Laboratory ID:	M1C1317-01			**Prep Date:**	03/23/2021 14:44
Matrix:	Solid			**Analyzed:**	03/25/2021 15:08
Batch / Sequence:	B1C1470 /	**Analytical Method:**	EPA 7.3.3.2	**Calibration:**	NA
Instrument:	V-1200	**Units:**	mg/kg	**File ID:**	CyanideReactive011221-UV1200_B1C1470_210325024917.
Analyst:	APH	**Dilution:**	1	**% Solids:**	87.31

Analyte	CAS Number	Result	DL	LOD	LOQ	Flag	Qual
Reactive Cyanide		10.0	10.0	10.0	10.0	U	

Notes and Definitions

DL: Detection Limit
LOD: Limit of Detection
LOQ: Limit of Quantitation
mg/kg: Milligrams per Kilogram
U: The analyte was analyzed for but was not detected above the reported quantitation limit. The quantitation limit has been adjusted for any dilution or concentration of the sample.

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FORM VII:
Wet Chemistry
EPA 7.3.3.2
LCS/LCSD

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

BLANK SPIKE (BS)
FORM VII

Method:	EPA 7.3.3.2		**Blank Spike**
Batch:	B1C1470	**Spike ID:**	B1C1470-BS1
Analyst:	APH	**Prepared:**	03/23/21 14:44
Matrix:	Solid	**Analyzed:**	03/25/21 15:08
Units:	mg/kg	**File ID:**	CyanideReactive011221-UV1200
Instrument:	V-1200	**Initial/Final:**	10g/250mL
Calibration:			

Analyte	BS Spiked	BS Found	BS %Rec	%Rec Limts	Q
Reactive Cyanide	9.51	ND		0.5 - 100	*

* - Does not meet %Rec acceptance criteria.
# - Does not meet RPD acceptance criteria.

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Section A:
Wet Chemistry
EPA 7.3.3.2
Batch / Sequence Raw Data

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Env-Wet Chem
Wet Chem-Method Prep NA
Matrix: Solid

PREPARATION BENCH SHEET

B1C1470

Batch Notes:

Prep Analyst: _____

Date/Time Start: _____

Microbac Laboratories Inc., - Marietta, OH

D

Lab Number	Project / QC TYPE	Sample ID / QC Source	Amount					
			Initial g	Final mL				
B1C1470-CCV1	Calibration Check	-						
B1C1470-DUP1	Duplicate	M1C1702-01						
B1C1470-BS1	LCS	-						
M1C1226-01	1032527	1032527-01 (Booth Filters)						
M1C1317-01	Longhorn	Soil IDW						
M1C1491-01	T1C1041	T1C1041-01 (Sludge (total as received))						
M1C1528-01	Monessen	amm still wash						
M1C1641-02	3114.001	Trash Box						
M1C1699-01	[none]	Springfield Biosolids						
M1C1702-01	[none]	Dayton Biosolids						

Reagent	Description
1002199	Sodium Hydroxide 0.25N
1002311	Sodium Phosphate Monobasic Monohydrate Buffer (CN)
1002418	Pyridine Barbituric Acid (CN Color)
1002618	Chloramine T Daily Reagent (CN)

Standard	Description
1001746	CN LCS Spike Mix 10 mg/L
1001748	CN Curve Spike Mix 10 mg/L

B1424

Reactivity Preparation Log

	Sample	Weight (g)	Time On	Time Off
	LCS CN/S	10.00	1530	1600
	1317-01	10.06	1115	1145
	1491-01	11.16	1115	1145
	1699-01	10.14	1115	1145
*	1226-01	1.75	1320	1350
	1702-01	10.08	1320	1350
Cyanide only	1641-02	10.10	1320	1350
Cyanide only	1528-01	9.91	1530	1600
Dup	1702-01	9.71	1530	

Analyst: Erin Tarr Date/Time: _____

H_2SO_4 0.01 1001218

NaOH 1002199

* Too light to run 10g and have stir bar running and sample submerged.

Reactive Cyanide

Laboratory: Microbac - OVD

Method:	SW846 7.3.3.2
Batch:	B1C1470
SOP:	K7332 rev 12
Instrument:	V-1200

Analyst	Date	Time
APH	3/25/2021	15:08

Curve ID:	1/12/2021 JRH
Slope:	2.34820
Y Intercept:	-0.00064

Calculation: Cyanide = [(Absorbance-Intercept)/Slope] * Dilution Factor

Calculation: Reactive Cyanide = [(Cyanide*NaOH(ml))/Sample Amount (g)]

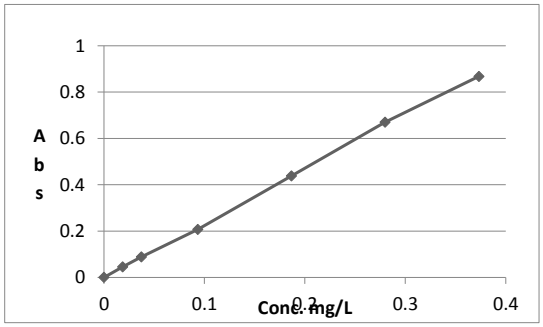
#	Sample ID	Sample Name	Sample Date	Sample Amount (g)	NaOH (ml)	Response (Abs) @ 665nm	Dil Factor	Spike Amt. mg/L	Cyanide (mg/L)	Reactive Cyanide (mg/L)
	B1C1470-BS1	LCS		10.00	250.00	0.8540	20.00		7.2791	181.9783
	B1C1470-CCV1	Calibration Check		50.00	50.00	0.4430	1.00	0.19	0.1889	0.1889
	B1C1470-DUP1	Duplicate M1C1702-01		9.71	250.00	0.0000	1.00		0.0003	0.0070
	M1C1226-01	1032527-01 (Booth F	3/10/2021	1.75	250.00	0.0020	1.00		0.0011	0.1608
	M1C1317-01	Soil IDW	3/11/2021	10.06	250.00	0.0020	1.00		0.0011	0.0280
	M1C1491-01	T1C1041-01 (Sludge (	3/15/2021	11.16	250.00	0.0030	1.00		0.0016	0.0347
	M1C1528-01	amm still wash	3/16/2021	9.91	250.00	0.0010	1.00		0.0007	0.0176
	M1C1641-02	Trash Box	3/17/2021	10.10	250.00	0.0000	1.00		0.0003	0.0068
	M1C1699-01	Springfield Biosolids	3/17/2021	10.14	250.00	0.0000	1.00		0.0003	0.0067
	M1C1702-01	Dayton Biosolids	3/17/2021	10.08	250.00	0.0000	1.00		0.0003	0.0068

Linear Calibration Model

y = mx + b

Instrument:	UV-1200
Curve ID:	1/12/2021 JRH
ICV (Abs):	0.425
ICV Conc (mg/L):	0.18126
ICV %REC	93%

ICV Standard ID:	0012742/0012741
ICV Initial Volume:	50
ICV Final Volume:	50
ICV Working Conc:	0.1945
Cell Size (cm):	1
Wavelength (nm):	578



Concentration (x)	Absorbance (OD) (y)	Calculated Amount	Relative Error	Response Factor	Standard ID
0	0	0.0003			
0.01866	0.046	0.0199	-6.4475	2.4652	
0.03732	0.089	0.0382	-2.2910	2.3848	
0.093375	0.207	0.0884	5.2998	2.2169	
0.1866	0.438	0.1868	-0.1070	2.3473	
0.2799	0.67	0.2856	-2.0360	2.3937	
0.3732	0.868	0.3699	0.8792	2.3258	

COC (r):	0.99972	Must be > 0.995
SLOPE (m):	2.34820	
y - INTERCEPT (b)	-0.00064	
INTERCEPT TEST:	71.59574	Ratio should be > 5
RESIDUAL TEST:	-6.44747	Should be less than two times CCV criteria

1. R is the coefficient of correlation
2. The intercept test is the ratio of the response (y) of the low standard to the intercept (b):
3. The residual test is the % difference between the true concentration of the low standard and the computed value from the curve.
4. The computed amount is calculated from x = (y - b)/m

CyanideReactive011221-UV1200_B1C1470_210325024917
3/30/2021 12:28 PM
Version 2.2 (10/19/2020)

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

BATCH LOG SUMMARY
SECTION A1

Batch: B1C1470
Matrix: Solid
Method: EPA 7.3.3.2

Prepared: 3/23/2021 2:44:00PM
Prepared By: EPT

Laboratory ID	Client / Source ID	Initial	Final						Spike(s)
M1C1317-01	Soil IDW	10.0 g	250 mL						
B1C1470-BS1		10.0 g	250 mL						1001746 10000µL

Standards used in the batch:

Standard ID	Description	Date Prepared	Prepared By
1001746	CN LCS Spike Mix 10 mg/L	3/1/2021 7:14:02AM	Justin.Hill

Reagents used in the batch:

Reagent ID	Description	Prepared	Prepared By
1002199	Sodium Hydroxide 0.25N	3/11/2021 3:46:58PM	Ethan Tidd
1002311	Sodium Phosphate Monobasic Monohydrate Buffer	3/16/2021 4:01:19PM	Andrew Hout
1002418	Pyridine Barbituric Acid (CN Color)	3/19/2021 11:05:50AM	Andrew Hout
1002618	Chloramine T Daily Reagent (CN)	3/25/2021 2:43:26PM	Andrew Hout

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Wet Chemistry
EPA 7.3.4.2

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FORM I:
Wet Chemistry
EPA 7.3.4.2
RESULTS SUMMARY

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

Microbac Laboratories Inc., - Marietta, OH

Inorganics Total

CERTIFICATE OF ANALYSIS
FORM I

Client ID:	Soil IDW			**Collection Date:**	03/11/2021 10:00
Laboratory ID:	M1C1317-01			**Prep Date:**	03/23/2021 18:45
Matrix:	Solid			**Analyzed:**	03/23/2021 18:45
Batch / Sequence:	B1C1424 /	**Analytical Method:**	EPA 7.3.4.2	**Calibration:**	NA
Instrument:	BURET	**Units:**	mg/kg	**File ID:**	SulfideReactive_B1C1424_210326042308.xls
Analyst:	EPT	**Dilution:**	1	**% Solids:**	87.31

Analyte	CAS Number	Result	DL	LOD	LOQ	Flag	Qual
Reactive Sulfide		100	100	100	100		

Notes and Definitions

DL: Detection Limit
LOD: Limit of Detection
LOQ: Limit of Quantitation
mg/kg: Milligrams per Kilogram

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FORM III:
Wet Chemistry
EPA 7.3.4.2
ICB/CCB/PREP BLANK SUMMARY

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

METHOD BLANK SUMMARY
FORM IIIA

Blank ID:	B1C1424-BLK1	**Batch:**	B1C1424
Blank File ID:	SulfideReactive_B1C1424_21	**Instrument:**	BURET
Prepared:	03/23/2021 18:45	**Method:**	EPA 7.3.4.2
Analyzed:	03/23/2021 18:45	**Analyst:**	EPT

This Method Blank Applies To The Following Samples:

Client Sample ID	Laboratory Sample ID	Lab File ID	Time Analyzed
Blank	B1C1424-BLK1	Reactive_B1C1424_210326042	03/23/2021 18:45
LCS	B1C1424-BS1	Reactive_B1C1424_210326042	03/23/2021 18:45
LCS	B1C1424-BS2	Reactive_B1C1424_210326042	03/23/2021 18:45
Soil IDW	M1C1317-01	Reactive_B1C1424_210326042	03/23/2021 18:45

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Laboratory Report Number: M1C1317

METHOD BLANK
FORM IIIB

Client Project ID: Longhorn

Sample ID:	B1C1424-BLK1	**Prep Date:**	03/23/21 18:45	**Matrix:**	Aqueous
Instrument:	BURET	**Analyzed:**	03/23/21 18:45	**Method:**	EPA 7.3.4.2
File ID:	SulfideReactive_B1C14	**Sequence:**		**Analyst:**	EPT
Batch:	B1C1424	**Units:**	mg/kg	**Calibration:**	

Analyte	Result	DL	LOD	LOQ	Dilution	Flag	Q
Reactive Sulfide	100	100	100	100	1	U	

Notes and Definitions

* - Detected in the associated method Blank at a concentration >= RL

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FORM VII:
Wet Chemistry
EPA 7.3.4.2
LCS/LCSD

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

BLANK SPIKE (BS)
FORM VII

Method:	EPA 7.3.4.2		**Blank Spike**
Batch:	B1C1424	**Spike ID:**	B1C1424-BS1
Analyst:	EPT	**Prepared:**	03/23/21 18:45
Matrix:	Aqueous	**Analyzed:**	03/23/21 18:45
Units:	mg/kg	**File ID:**	SulfideReactive_B1C1424_21032
Instrument:	BURET	**Initial/Final:**	10mL/250mL
Calibration:			

Analyte	BS Spiked	BS Found	BS %Rec	%Rec Limts	Q
Reactive Sulfide	293	ND		50 - 150	*

* - Does not meet %Rec acceptance criteria.
# - Does not meet RPD acceptance criteria.

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

BLANK SPIKE (BS)
FORM VII

Method:	EPA 7.3.4.2		**Blank Spike**
Batch:	B1C1424	**Spike ID:**	B1C1424-BS2
Analyst:	EPT	**Prepared:**	03/23/21 18:45
Matrix:	Aqueous	**Analyzed:**	03/23/21 18:45
Units:	mg/kg	**File ID:**	SulfideReactive_B1C1424_21032
Instrument:	BURET	**Initial/Final:**	10mL/250mL
Calibration:			

Analyte	BS Spiked	BS Found	BS %Rec	%Rec Limts	Q
Reactive Sulfide	1470	1200	82.2	50 - 150	

* - Does not meet %Rec acceptance criteria.
\# - Does not meet RPD acceptance criteria.

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Section A:
Wet Chemistry
EPA 7.3.4.2
Batch / Sequence Raw Data

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Sulfide Reactive

Laboratory: Microbac - OVD

Method:	sw846 7.3.4.2
Batch:	B1C1424
SOP/REV	K7332 rev:12
Buret:	BURET

Analyst:	EPT
Date:	3/23/2021
Time:	18:45

Titrant N:	0.0251

ml I	10	10
N I	0.099	0.099
ml titrant	21.2	21.2
ml Stock	5	
BS conc:	1465.2	

Calculation: Sulfide Result mg/L= [{((ml I - N I) - (ml titrant * N titrant)) * 16000}/ volume titrated] * dilution

Calculation: Reactive Sulfide mg/Kg = ((Sulfide mg/L * ml NaOH in scrubber)/g Sample) * Dilution Factor

#	Sample Number	Sample Name	Sample Date	Sample Amount (g)	Iodine (ml)	Iodine (N)	Titrant (ml)	Volume Titrated	Scrubber Solution (ml)	NaOH (ml)	Dilution Factor	Sulfide (mg/L)	Reactive Sulfide (mg/L)
1	B1C1424-BLK1	Blank		250.00	15.0	0.0251	15.00	200.00	250.00	50.00	1.00	**0.00**	**0.0000**
2	B1C1424-BS1	LCS		250.00	15.0	0.0251	7.80	200.00	250.00	50.00	1.00	**72.29**	**14.4576**
3	B1C1424-BS2	LCS		10.00	15.0	0.0251	3.00	100.00	250.00	50.00	1.00	**240.96**	**1204.8000**
4	B1C1424-DUP1	Duplicate M1C1702-01		9.71	5.0	0.0251	5.00	100.00	250.00	50.00	1.00	**0.00**	**0.0000**
5	M1C1226-01	1032527-01 (Booth Filters)	3/10/2021	1.75	5.0	0.0251	5.00	100.00	250.00	50.00	1.00	**0.00**	**0.0000**
6	M1C1317-01	Soil IDW	3/11/2021	10.06	5.0	0.0251	5.00	100.00	250.00	50.00	1.00	**0.00**	**0.0000**
7	M1C1491-01	T1C1041-01 (Sludge (total as received))	3/15/2021	11.16	5.0	0.0251	5.00	100.00	250.00	50.00	1.00	**0.00**	**0.0000**
8	M1C1699-01	Springfield Biosolids	3/17/2021	10.14	5.0	0.0251	5.00	100.00	250.00	50.00	1.00	**0.00**	**0.0000**
9	M1C1702-01	Dayton Biosolids	3/17/2021	10.08	5.0	0.0251	5.00	100.00	250.00	50.00	1.00	**0.00**	**0.0000**
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													
24													
25													

Env-Wet Chem
Wet Chem-Method Prep NA
Matrix: Aqueous

PREPARATION BENCH SHEET

B1C1424

Batch Notes:

Prep Analyst: EPT
Date/Time Start: 03/25/2021 08:15

Microbac Laboratories Inc., - Marietta, OH

Final Analyst:
Date/Time Finish:

Lab Number	Client	Sample Name	Amt. Initial mL	Amt. Final mL			Analyte	Result	Units	Comments
B1C1424-BLK1		Blank								
B1C1424-BS1		LCS								
B1C1424-BS2		LCS								
B1C1424-DUP1		Duplicate								
M1C1226-01	Microbac - PGH	1032527-01 (Booth Filters)					Reactive Sulfide		mg/kg	
M1C1317-01	HDR	Soil IDW					Reactive Sulfide		mg/kg	USDA
M1C1491-01	Microbac - PTN	T1C1041-01 (Sludge (total as received))					Reactive Sulfide		mg/kg	
M1C1699-01	Synagro	Springfield Biosolids					Reactive Sulfide		mg/kg	
M1C1702-01	Synagro	Dayton Biosolids					Reactive Sulfide		mg/kg	

Reagent	Description
1001218	REACT H2SO4 0.01N (pH2)
1001460	Hydrochloric Acid 1:1 (Sulfide)
1001785	Sodium Thiosulfate 0.0250N 1977-79-02
1002199	Sodium Hydroxide 0.25N
1002558	Iodine (Iodine-Iodide) 0.0250N
1002559	Iodine (Iodine-Iodide) 0.100N

Standard	Description
1002560	Sulfide Daily BS/MS Stock (conc varies)

B1424

Reactivity Preparation Log

	Sample	Weight (g)	Time On	Time Off
	LCS CN/S	10.00	1530	1600
	1317-01	10.06	1115	1145
	1491-01	11.16	1115	1145
	1699-01	10.14	1115	1145
*	1226-01	1.75	1320	1350
	1702-01	10.08	1320	1350
	1641-02	10.10	1320	1350
Cyanide only	1528-01	9.91	1530	1600
	Dup 1702-01	9.71	1530	

Analyst: Erin Turin Date/Time: _____

H_2SO_4 0.01)001218

NaOH 1002199

* Too light to run 10g and have stir bar running and sample submerged.

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

BATCH LOG SUMMARY
SECTION A1

Batch: B1C1424
Matrix: Aqueous
Method: EPA 7.3.4.2

Prepared: 3/23/2021 6:45:00PM
Prepared By: EPT

Laboratory ID	Client / Source ID	Initial	Final						Spike(s)
M1C1317-01	Soil IDW	10.0 mL	250 mL						
B1C1424-BS2		10.0 mL	250 mL						1002560 10000µL
B1C1424-BS1		10.0 mL	250 mL						1002560 2000µL
B1C1424-BLK1		10.0 mL	250 mL						

Standards used in the batch:

Standard ID	Description	Date Prepared	Prepared By
1002560	Sulfide Daily BS/MS Stock (conc varies)	3/23/2021 6:13:03PM	Ethan Tidd

Reagents used in the batch:

Reagent ID	Description	Prepared	Prepared By
1001218	REACT H2SO4 0.01N (pH2)	2/9/2021 4:36:09PM	Ethan Tidd
1001460	Hydrochloric Acid 1:1 (Sulfide)	2/15/2021 4:54:12PM	Ethan Tidd
1001785	Sodium Thiosulfate 0.0250N 1977-79-02	3/1/2021 4:20:33PM	Andrew Hout
1002199	Sodium Hydroxide 0.25N	3/11/2021 3:46:58PM	Ethan Tidd
1002558	Iodine (Iodine-Iodide) 0.0250N	3/23/2021 5:50:20PM	Ethan Tidd
1002559	Iodine (Iodine-Iodide) 0.100N	3/23/2021 5:55:42PM	Ethan Tidd

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Wet Chemistry
EPA 9045D

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FORM I:
Wet Chemistry
EPA 9045D
RESULTS SUMMARY

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

Microbac Laboratories Inc., - Marietta, OH

Inorganics Total

CERTIFICATE OF ANALYSIS
FORM I

Client ID:	Soil IDW			**Collection Date:**	03/11/2021 10:00
Laboratory ID:	M1C1317-01			**Prep Date:**	03/23/2021 12:47
Matrix:	Solid			**Analyzed:**	03/23/2021 14:13
Batch / Sequence:	B1C1333 /	**Analytical Method:**	EPA 9045D	**Calibration:**	NA
Instrument:	orion 4 star	**Units:**	S.U.	**File ID:**	pH_B1C1333_210323125015.xls
Analyst:	adg	**Dilution:**	1	**% Solids:**	87.31

Analyte	CAS Number	Result	DL	LOD	LOQ	Flag	Qual
pH		7.8					H4

Notes and Definitions

DL: Detection Limit
LOD: Limit of Detection
LOQ: Limit of Quantitation
H4: The test was performed outside of the EPA recommended holding time of 15 minutes.
S.U.: Standard Units

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FORM VII:
Wet Chemistry
EPA 9045D
LCS/LCSD

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

BLANK SPIKE (BS)
FORM VII

Method:	EPA 9045D		**Blank Spike**
Batch:	B1C1333	**Spike ID:**	B1C1333-BS1
Analyst:	adg	**Prepared:**	03/23/21 12:47
Matrix:	Solid	**Analyzed:**	03/23/21 14:13
Units:	S.U.	**File ID:**	pH_B1C1333_210323125015.xls
Instrument:	orion 4 star	**Initial/Final:**	1g/1mL
Calibration:			

Analyte	BS Spiked	BS Found	BS %Rec	%Rec Limts	Q
pH	6.00	6.0	100	0 - 200	

* - Does not meet %Rec acceptance criteria.
# - Does not meet RPD acceptance criteria.

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Laboratory Report Number: M1C1317

Client Project ID: Longhorn

BLANK SPIKE (BS)
FORM VII

Method:	EPA 9045D		**Blank Spike**
Batch:	B1C1333	**Spike ID:**	B1C1333-BS2
Analyst:	adg	**Prepared:**	03/23/21 12:47
Matrix:	Solid	**Analyzed:**	03/23/21 14:13
Units:	S.U.	**File ID:**	pH_B1C1333_210323125015.xls
Instrument:	orion 4 star	**Initial/Final:**	1g/1mL
Calibration:			

Analyte	BS Spiked	BS Found	BS %Rec	%Rec Limts	Q
pH	9.04	9.0	99.9	0 - 200	

* - Does not meet %Rec acceptance criteria.
\# - Does not meet RPD acceptance criteria.

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Section A:
Wet Chemistry
EPA 9045D
Batch / Sequence Raw Data

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pH Temperature

Microbac - OVD

Method:	9040/9045/SM4500H-B/150.1
Batch:	B1C1333
SOP/REV	K1501 rev:20
pH meter	orion 4 star
Cal date/time	3/23/21 14:05 7,4,12

Analyst:	adg
Date:	3/23/2021
Time	14:13

Sample Number	Sample Name	Sample Date	pH	Temperature °C	Comments/ calibration buffers used	
B1C1333-BS1	LCS		6.00	17.00	7,4,12	
B1C1333-BS2	LCS		9.03	17.20	7,4,12	
B1C1333-DUP1	Duplicate M1C1279-05		9.00	18.00	7,4,12	can't do 1/1 sample is rocks
M1C1279-02	Secondary Coal Pile Sump	03/11/21 08:15	7.85	16.00	7,4,12	can't do 1/1 sample is small beads
M1C1279-03	Slaker Air Compressor	02/27/21 08:00	9.51	19.80	7,4,12	
M1C1279-04	Mill Grease	03/11/21 14:00	9.01	18.40	7,4,12	insoluble in water
M1C1279-05	WWTP Cake	03/10/21 08:15	8.85	18.50	7,4,12	can't d0 1/1, sample is rocks
M1C1317-01	Soil IDW	03/11/21 10:00	7.78	16.80	7,4,12	
M1C1323-01	IDW Soil	03/10/21 17:50	8.20	17.90	7,4,12	
M1C1491-01	T1C1041-01 (Sludge (total as received))	03/15/21 09:45	6.83	17.00	7,4,12	
M1C1582-01	S1C0382-01 (800 Srockpile Bay 9 Zone 3)	03/10/21 12:50	8.83	18.20	7,4,12	
M1C1676-01	S1C0389-01 (Industrial Sludge)	03/17/21 10:30	11.60	26.50	7,4,12	sample heated up when H2O was added
M1C1699-01	Springfield Biosolids	03/17/21 09:00	8.70	17.50	7,4,12	
M1C1702-01	Dayton Biosolids	03/17/21 09:00	8.53	17.60	7,4,12	
M1C1809-01	J1C1175-01 (Compost Bar)	03/18/21 11:30	6.51	18.80	7,4,12	can't do 1/1 absorbs h2o

MICROBAC®

Laboratory Report Number: M1C1317

Client Project ID: Longhorn

BATCH LOG SUMMARY
SECTION A1

Batch: B1C1333
Matrix: Solid
Method: EPA 9045D

Prepared: 3/23/2021 12:47:00PM
Prepared By: DEA

Laboratory ID	Client / Source ID	Initial	Final						Spike(s)
M1C1317-01	Soil IDW	1.00 g	1.00 mL						
B1C1333-BS2		1.00 g	1.00 mL						0007556 1000µL
B1C1333-BS1		1.00 g	1.00 mL						0007557 1000µL

Standards used in the batch:

Standard ID	Description	Date Prepared	Prepared By
0007556	PH-9 buffer	1/5/2020 4:59:33PM	** Vendor **
0007557	PH-6 Buffer	1/5/2020 5:08:55PM	** Vendor **

MICROBAC Return to: 158 Starlite Drive Marietta Ohio 45750

CHAIN OF CUSTODY RECORD

Number
Instructions on back

TO BE COMPLETED BY MICROBAC

Lab Report Address	Invoice Address	Turnaround Time
Client Name: HDR	Client Name: HDR	[ ] Routine (5 to 7 business days) [ ] RUSH* (notify lab)
Address:	Address:	
City, State, Zip:	City, State, Zip:	(needed by)
Contact: Lynn Lutz	Contact: Phil Werner	Report Type
Telephone No.: 303-754-4200	Telephone No.: 301-331-6344	[ ]Results Only [ ]Level 1 [ ]Level 2 [ ]Level3 [ ]Level 4 [ ]EDD

Temperature Upon Receipt (°C)
Therm ID
Holding Time
Samples Received on Ice? Yes No N/A
Custody Seals Intact? Yes No N/A

Send Report via: [ ] Mail [ ] Fax [X] e-mail (address) LYNN.LUTZ@HDRINC.COM
Send Invoice via: [ ] Mail [ ] Fax [X] e-mail (address) PHILIP.WERNER@HDRINC.COM

Project: LHAAP-29 Location: KARNACK, TX PO No.:
Compliance Monitoring? [ ] Yes [ ] No
( ) Agency/Program

Sampled by (PRINT): JACOB MOORMAN Sampler Signature: Jacob Moorman Sampler Phone No.:

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)
** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

REQUESTED ANALYSIS

Lab ID	Client Sample ID	Date Collected	Time Collected	No. of Containers	Matrix	Grab / Comp	Preservative Types **	TCLP-VOCs/SVOCs	Explosives	Additional Notes
(X)	SOIL IDW	3/11/21	1000	12	SO	C		X		SEE COMMENTS
	295B134 PIPE	3/10/21	0905	1	SO	G			X	
	295B141 PIPE	3/9/21	1440	1	SO	G			X	
	295B154 PIPE	3/10/21	1255	1	SO	G			X	
	295B155 PIPE	3/9/21	0940	1	SO	G			X	
	295B156 PIPE	3/9/21	1245	1	SO	G			X	
	295B157 PIPE	3/9/21	1555	1	SO	G			X	
	295B158 PIPE	3/10/21	0815	1	SO	G			X	
	295B159 PIPE	3/10/21	1130	1	SO	G			X	
	295B134	3/10/21	0905	2	WW	G			X	

Possible Hazard Identification [ ] Hazardous [ ] Non-Hazardous [ ] Radioactive Sample Disposition [ ] Dispose a

M1C1317

Comments

TCLP - VOCs, SVOCs, METALS, MERCURY, HERBICIDE, PESTICIDE, IGNITABILITY, CORROSIVITY, REACTIVITY

10 DAY TAT

Relinquished By (signature)	Date/Time	Received
Jacob Moorman	03-11-2021/1430	
Relinquished By (signature)	Date/Time	Received
Relinquished By (signature)	Date/Time	Received By (signature) / Date/Time
		Brenda Gregory 3/12/21 0945

HDR Rec'd: 03/12/2021 09:45 By: Brenda Gregory Temp: 3.2 (Signature)

Rev: 07/18/2018

22

MICROBAC®

Work Order # MIC1317

COOLER TEMP >6° C LOG

SAMPLE ID	Bottle 1 °C	Bottle 2 °C	Bottle 3 °C	Bottle 4 °C	Bottle 5 °C	Bottle 6 °C

3-12-21 BLG

pH Lot # NA

pH Exceptions

SAMPLE ID	Bottle 1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6

3-12-21 BLG

PRESERVATIVE EXCEPTIONS

X NONE

_ AS NOTED

BLG 3-12-21

Document Control # 1957
Last 04-10-2019

Issued to: Document Master File

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ANALYTICAL REPORT

Job Number: 280-150636-1

Job Description: Longhorn AAP, TX

For:
HDR Inc
9781 S. Meridian Blvd
Suite 400
Englewood, CO 80112

Attention: Lynn K. Lutz



Approved for release.
Donna R Rydberg
Senior Project Manager
7/20/2021 9:17 AM

Donna R Rydberg, Senior Project Manager
4955 Yarrow Street, Arvada, CO, 80002
(303)736-0192
Donna.Rydberg@Eurofinset.com
07/20/2021

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 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 TestAmerica, Denver
4955 Yarrow Street, Arvada, CO 80002
Tel (303) 736-0100 Fax (303) 431-7171 www.testamericainc.com

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Definitions/Glossary

Client: HDR Inc
Job ID: 280-150636-1
Project/Site: Longhorn AAP, TX

Qualifiers

LCMS

Qualifier	Qualifier Description
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.
H	Sample was prepped or analyzed beyond the specified holding time
H3	Sample was received and analyzed past holding time.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
M	Manual integrated compound.
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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

Report Number: 280-150636-1

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 7/8/2021 at 3:00 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.2º C.

The following samples were received outside of holding time: 29SB123 (15-16) (280-150636-1), 29SB129 (5-6) (280-150636-2), 29SB145 (15-16) (280-150636-3), 29SB148 (15-16) (280-150636-4), 29SB137 (15-16) (280-150636-5), 29SB146 (15-16) (280-150636-6), 29SB155 (11-12) (280-150636-7), 29SB135 (15-16) (280-150636-8), 29SB136 (15-16) (280-150636-9), 29SB156 (12-13) (280-150636-10) and DUP18 (280-150636-11). Data was analyzed and reported.

EXPLOSIVES

Samples 29SB123 (15-16) (280-150636-1), 29SB129 (5-6) (280-150636-2), 29SB145 (15-16) (280-150636-3), 29SB148 (15-16) (280-150636-4), 29SB137 (15-16) (280-150636-5), 29SB146 (15-16) (280-150636-6), 29SB155 (11-12) (280-150636-7), 29SB135 (15-16) (280-150636-8), 29SB136 (15-16) (280-150636-9), 29SB156 (12-13) (280-150636-10) and DUP18 (280-150636-11) were analyzed for Explosives in accordance with 8321A. The samples were prepared on 07/12/2021 and analyzed on 07/15/2021.

Samples 29SB129 (5-6) (280-150636-2)[50X], 29SB129 (5-6) (280-150636-2)[500X] and 29SB137 (15-16) (280-150636-5)[50X] required dilution prior to analysis due to elevated target compounds. Because of this dilution, the surrogate spike concentration in the samples was reduced to a level where the recovery calculation does not provide useful information. The reporting limits have been adjusted accordingly.

The explosive 2,4,6-Trinitrotoluene was detected in method blank MB 280-542950/1-A at a level that was less than one half the LOQ; therefore, corrective action was deemed unnecessary. The value should be considered an estimate, and has been flagged “J” in accordance with the DoD QSM.

Tetryl failed the recovery criteria high for the MS and MSD performed on sample 29SB146 (15-16) (280-150636-6) in batch 280-543298. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

Job ID: 280-150636-1

Client Sample ID: 29SB123 (15-16) — Lab Sample ID: 280-150636-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
2,4,6-Trinitrotoluene	0.0066	J H H3	0.095	0.0048	mg/Kg	1		8321A	Total/NA
2,6-Dinitrotoluene	0.047	J M H H3	0.095	0.019	mg/Kg	1		8321A	Total/NA
o-Nitrotoluene	0.067	J M H H3	0.095	0.0054	mg/Kg	1		8321A	Total/NA
m-Nitrotoluene	0.015	J M H H3	0.095	0.012	mg/Kg	1		8321A	Total/NA
p-Nitrotoluene	0.10	M H H3	0.095	0.010	mg/Kg	1		8321A	Total/NA

Client Sample ID: 29SB129 (5-6) — Lab Sample ID: 280-150636-2

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
1,3-Dinitrobenzene	0.77	H H3	0.099	0.0070	mg/Kg	1		8321A	Total/NA
m-Nitrotoluene	0.77	M H H3	0.099	0.013	mg/Kg	1		8321A	Total/NA
Nitrobenzene	0.052	J H H3	0.099	0.011	mg/Kg	1		8321A	Total/NA
2,4,6-Trinitrotoluene - DL	22	D H H3	5.0	0.25	mg/Kg	50		8321A	Total/NA
o-Nitrotoluene - DL	3.5	J D M H H3	5.0	0.28	mg/Kg	50		8321A	Total/NA
p-Nitrotoluene - DL	4.2	J D M H H3	5.0	0.54	mg/Kg	50		8321A	Total/NA
1,3,5-Trinitrobenzene - DL2	74	D H H3 Q	50	6.2	mg/Kg	500		8321A	Total/NA
2,4-Dinitrotoluene - DL2	180	D M H H3 Q	50	4.1	mg/Kg	500		8321A	Total/NA
2,6-Dinitrotoluene - DL2	130	D M H H3 Q	50	9.9	mg/Kg	500		8321A	Total/NA

Client Sample ID: 29SB145 (15-16) — Lab Sample ID: 280-150636-3

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
2,4,6-Trinitrotoluene	0.024	J H H3	0.099	0.0050	mg/Kg	1		8321A	Total/NA
2,4-Dinitrotoluene	0.010	J H H3	0.099	0.0081	mg/Kg	1		8321A	Total/NA

Client Sample ID: 29SB148 (15-16) — Lab Sample ID: 280-150636-4

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
2,4,6-Trinitrotoluene	0.046	J H H3	0.096	0.0048	mg/Kg	1		8321A	Total/NA

Client Sample ID: 29SB137 (15-16) — Lab Sample ID: 280-150636-5

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trinitrobenzene	0.017	J H H3	0.098	0.012	mg/Kg	1		8321A	Total/NA
2,4-Dinitrotoluene	0.069	J M H H3	0.098	0.0080	mg/Kg	1		8321A	Total/NA
2-Amino-4,6-dinitrotoluene	0.046	J M H H3	0.098	0.012	mg/Kg	1		8321A	Total/NA
4-Amino-2,6-dinitrotoluene	0.057	J M H H3	0.098	0.0050	mg/Kg	1		8321A	Total/NA
Nitrobenzene	0.036	J H H3	0.098	0.011	mg/Kg	1		8321A	Total/NA
2,4,6-Trinitrotoluene - DL	21	D H H3 Q	4.9	0.25	mg/Kg	50		8321A	Total/NA

Client Sample ID: 29SB146 (15-16) — Lab Sample ID: 280-150636-6

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
2,4,6-Trinitrotoluene	0.074	J H H3	0.097	0.0049	mg/Kg	1		8321A	Total/NA

Client Sample ID: 29SB155 (11-12) — Lab Sample ID: 280-150636-7

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
2,4,6-Trinitrotoluene	0.073	J H H3	0.091	0.0046	mg/Kg	1		8321A	Total/NA

Client Sample ID: 29SB135 (15-16) — Lab Sample ID: 280-150636-8

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
2,4,6-Trinitrotoluene	0.0072	J M H H3	0.098	0.0049	mg/Kg	1		8321A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: HDR Inc
Job ID: 280-150636-1
Project/Site: Longhorn AAP, TX

Client Sample ID: 29SB136 (15-16) — Lab Sample ID: 280-150636-9

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
2,4,6-Trinitrotoluene	0.0072	J H H3	0.098	0.0049	mg/Kg	1		8321A	Total/NA

Client Sample ID: 29SB156 (12-13) — Lab Sample ID: 280-150636-10

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
2,4,6-Trinitrotoluene	0.0069	J H H3	0.093	0.0047	mg/Kg	1		8321A	Total/NA

Client Sample ID: DUP18 — Lab Sample ID: 280-150636-11

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
2,4,6-Trinitrotoluene	0.0088	J H H3	0.092	0.0046	mg/Kg	1		8321A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: HDR Inc
Job ID: 280-150636-1
Project/Site: Longhorn AAP, TX

Client Sample ID: 29SB123 (15-16)
Lab Sample ID: 280-150636-1
Date Collected: 03/02/21 10:55
Matrix: Solid
Date Received: 07/08/21 15:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.028	U H H3	0.095	0.012	mg/Kg		07/12/21 16:07	07/15/21 12:11	1
1,3-Dinitrobenzene	0.015	U H H3	0.095	0.0068	mg/Kg		07/12/21 16:07	07/15/21 12:11	1
2,4,6-Trinitrotoluene	**0.0066**	**J H H3**	0.095	0.0048	mg/Kg		07/12/21 16:07	07/15/21 12:11	1
2,4-Dinitrotoluene	0.028	U M H H3	0.095	0.0078	mg/Kg		07/12/21 16:07	07/15/21 12:11	1
2,6-Dinitrotoluene	**0.047**	**J M H H3**	0.095	0.019	mg/Kg		07/12/21 16:07	07/15/21 12:11	1
2-Amino-4,6-dinitrotoluene	0.028	U H H3	0.095	0.011	mg/Kg		07/12/21 16:07	07/15/21 12:11	1
o-Nitrotoluene	**0.067**	**J M H H3**	0.095	0.0054	mg/Kg		07/12/21 16:07	07/15/21 12:11	1
m-Nitrotoluene	**0.015**	**J M H H3**	0.095	0.012	mg/Kg		07/12/21 16:07	07/15/21 12:11	1
4-Amino-2,6-dinitrotoluene	0.014	U H H3	0.095	0.0048	mg/Kg		07/12/21 16:07	07/15/21 12:11	1
p-Nitrotoluene	**0.10**	**M H H3**	0.095	0.010	mg/Kg		07/12/21 16:07	07/15/21 12:11	1
Nitrobenzene	0.028	U M H H3	0.095	0.010	mg/Kg		07/12/21 16:07	07/15/21 12:11	1
Nitroglycerin	0.028	U H H3	0.095	0.010	mg/Kg		07/12/21 16:07	07/15/21 12:11	1
HMX	0.028	U H H3	0.095	0.014	mg/Kg		07/12/21 16:07	07/15/21 12:11	1
PETN	0.014	U H H3	0.095	0.0049	mg/Kg		07/12/21 16:07	07/15/21 12:11	1
RDX	0.014	U H H3	0.095	0.0041	mg/Kg		07/12/21 16:07	07/15/21 12:11	1
Tetryl	0.014	U H H3	0.095	0.0072	mg/Kg		07/12/21 16:07	07/15/21 12:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*124*		*68 - 140*	*07/12/21 16:07*	*07/15/21 12:11*	*1*

Client Sample ID: 29SB129 (5-6)
Lab Sample ID: 280-150636-2
Date Collected: 03/02/21 02:27
Matrix: Solid
Date Received: 07/08/21 15:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dinitrobenzene	**0.77**	**H H3**	0.099	0.0070	mg/Kg		07/12/21 16:07	07/15/21 12:23	1
2-Amino-4,6-dinitrotoluene	0.030	U H H3	0.099	0.012	mg/Kg		07/12/21 16:07	07/15/21 12:23	1
m-Nitrotoluene	**0.77**	**M H H3**	0.099	0.013	mg/Kg		07/12/21 16:07	07/15/21 12:23	1
4-Amino-2,6-dinitrotoluene	0.015	U H H3	0.099	0.0050	mg/Kg		07/12/21 16:07	07/15/21 12:23	1
Nitrobenzene	**0.052**	**J H H3**	0.099	0.011	mg/Kg		07/12/21 16:07	07/15/21 12:23	1
Nitroglycerin	0.030	U H H3	0.099	0.010	mg/Kg		07/12/21 16:07	07/15/21 12:23	1
HMX	0.030	U H H3	0.099	0.015	mg/Kg		07/12/21 16:07	07/15/21 12:23	1
PETN	0.015	U H H3	0.099	0.0051	mg/Kg		07/12/21 16:07	07/15/21 12:23	1
RDX	0.015	U H H3	0.099	0.0043	mg/Kg		07/12/21 16:07	07/15/21 12:23	1
Tetryl	0.015	U H H3	0.099	0.0075	mg/Kg		07/12/21 16:07	07/15/21 12:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*89*		*68 - 140*	*07/12/21 16:07*	*07/15/21 12:23*	*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	**22**	**D H H3**	5.0	0.25	mg/Kg		07/12/21 16:07	07/15/21 12:35	50
o-Nitrotoluene	**3.5**	**J D M H H3**	5.0	0.28	mg/Kg		07/12/21 16:07	07/15/21 12:35	50
p-Nitrotoluene	**4.2**	**J D M H H3**	5.0	0.54	mg/Kg		07/12/21 16:07	07/15/21 12:35	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*71*	*D*	*68 - 140*	*07/12/21 16:07*	*07/15/21 12:35*	*50*

Client Sample Results

Client: HDR Inc
Project/Site: Longhorn AAP, TX

Job ID: 280-150636-1

Client Sample ID: 29SB129 (5-6)

Lab Sample ID: 280-150636-2

Date Collected: 03/02/21 02:27
Matrix: Solid
Date Received: 07/08/21 15:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) - DL2

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**74**	**D H H3 Q**	50	6.2	mg/Kg		07/12/21 16:07	07/15/21 12:47	500
2,4-Dinitrotoluene	**180**	**D M H H3 Q**	50	4.1	mg/Kg		07/12/21 16:07	07/15/21 12:47	500
2,6-Dinitrotoluene	**130**	**D M H H3 Q**	50	9.9	mg/Kg		07/12/21 16:07	07/15/21 12:47	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*0*	*Q D*	*68 - 140*	*07/12/21 16:07*	*07/15/21 12:47*	*500*

Client Sample ID: 29SB145 (15-16)

Lab Sample ID: 280-150636-3

Date Collected: 03/08/21 05:30
Matrix: Solid
Date Received: 07/08/21 15:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.030	U H H3	0.099	0.013	mg/Kg		07/12/21 16:07	07/15/21 12:59	1
1,3-Dinitrobenzene	0.015	U H H3	0.099	0.0071	mg/Kg		07/12/21 16:07	07/15/21 12:59	1
2,4,6-Trinitrotoluene	**0.024**	**J H H3**	0.099	0.0050	mg/Kg		07/12/21 16:07	07/15/21 12:59	1
2,4-Dinitrotoluene	**0.010**	**J H H3**	0.099	0.0081	mg/Kg		07/12/21 16:07	07/15/21 12:59	1
2,6-Dinitrotoluene	0.030	U H H3	0.099	0.020	mg/Kg		07/12/21 16:07	07/15/21 12:59	1
2-Amino-4,6-dinitrotoluene	0.030	U H H3	0.099	0.012	mg/Kg		07/12/21 16:07	07/15/21 12:59	1
o-Nitrotoluene	0.015	U H H3	0.099	0.0057	mg/Kg		07/12/21 16:07	07/15/21 12:59	1
m-Nitrotoluene	0.030	U H H3	0.099	0.013	mg/Kg		07/12/21 16:07	07/15/21 12:59	1
4-Amino-2,6-dinitrotoluene	0.015	U H H3	0.099	0.0051	mg/Kg		07/12/21 16:07	07/15/21 12:59	1
p-Nitrotoluene	0.030	U H H3	0.099	0.011	mg/Kg		07/12/21 16:07	07/15/21 12:59	1
Nitrobenzene	0.030	U H H3	0.099	0.011	mg/Kg		07/12/21 16:07	07/15/21 12:59	1
Nitroglycerin	0.030	U M H H3	0.099	0.010	mg/Kg		07/12/21 16:07	07/15/21 12:59	1
HMX	0.030	U H H3	0.099	0.015	mg/Kg		07/12/21 16:07	07/15/21 12:59	1
PETN	0.015	U H H3	0.099	0.0051	mg/Kg		07/12/21 16:07	07/15/21 12:59	1
RDX	0.015	U H H3	0.099	0.0043	mg/Kg		07/12/21 16:07	07/15/21 12:59	1
Tetryl	0.015	U H H3	0.099	0.0075	mg/Kg		07/12/21 16:07	07/15/21 12:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*118*		*68 - 140*	*07/12/21 16:07*	*07/15/21 12:59*	*1*

Client Sample ID: 29SB148 (15-16)

Lab Sample ID: 280-150636-4

Date Collected: 03/08/21 01:45
Matrix: Solid
Date Received: 07/08/21 15:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.029	U H H3	0.096	0.012	mg/Kg		07/12/21 16:07	07/15/21 13:12	1
1,3-Dinitrobenzene	0.015	U H H3	0.096	0.0068	mg/Kg		07/12/21 16:07	07/15/21 13:12	1
2,4,6-Trinitrotoluene	**0.046**	**J H H3**	0.096	0.0048	mg/Kg		07/12/21 16:07	07/15/21 13:12	1
2,4-Dinitrotoluene	0.029	U M H H3	0.096	0.0079	mg/Kg		07/12/21 16:07	07/15/21 13:12	1
2,6-Dinitrotoluene	0.029	U M H H3	0.096	0.019	mg/Kg		07/12/21 16:07	07/15/21 13:12	1
2-Amino-4,6-dinitrotoluene	0.029	U H H3	0.096	0.012	mg/Kg		07/12/21 16:07	07/15/21 13:12	1
o-Nitrotoluene	0.015	U H H3	0.096	0.0055	mg/Kg		07/12/21 16:07	07/15/21 13:12	1
m-Nitrotoluene	0.029	U H H3	0.096	0.012	mg/Kg		07/12/21 16:07	07/15/21 13:12	1
4-Amino-2,6-dinitrotoluene	0.015	U H H3	0.096	0.0049	mg/Kg		07/12/21 16:07	07/15/21 13:12	1
p-Nitrotoluene	0.029	U H H3	0.096	0.011	mg/Kg		07/12/21 16:07	07/15/21 13:12	1

Client Sample Results

Client: HDR Inc
Project/Site: Longhorn AAP, TX

Job ID: 280-150636-1

Client Sample ID: 29SB148 (15-16)

Date Collected: 03/08/21 01:45
Date Received: 07/08/21 15:00

Lab Sample ID: 280-150636-4

Matrix: Solid

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrobenzene	0.029	U H H3	0.096	0.010	mg/Kg		07/12/21 16:07	07/15/21 13:12	1
Nitroglycerin	0.029	U H H3	0.096	0.010	mg/Kg		07/12/21 16:07	07/15/21 13:12	1
HMX	0.029	U H H3	0.096	0.014	mg/Kg		07/12/21 16:07	07/15/21 13:12	1
PETN	0.015	U H H3	0.096	0.0049	mg/Kg		07/12/21 16:07	07/15/21 13:12	1
RDX	0.015	U H H3	0.096	0.0041	mg/Kg		07/12/21 16:07	07/15/21 13:12	1
Tetryl	0.015	U H H3	0.096	0.0073	mg/Kg		07/12/21 16:07	07/15/21 13:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*111*		*68 - 140*	*07/12/21 16:07*	*07/15/21 13:12*	*1*

Client Sample ID: 29SB137 (15-16)

Date Collected: 03/08/21 08:10
Date Received: 07/08/21 15:00

Lab Sample ID: 280-150636-5

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	**0.017**	**J H H3**	0.098	0.012	mg/Kg		07/12/21 16:07	07/15/21 13:24	1
1,3-Dinitrobenzene	0.015	U H H3	0.098	0.0070	mg/Kg		07/12/21 16:07	07/15/21 13:24	1
2,4-Dinitrotoluene	**0.069**	**J M H H3**	0.098	0.0080	mg/Kg		07/12/21 16:07	07/15/21 13:24	1
2,6-Dinitrotoluene	0.029	U M H H3	0.098	0.020	mg/Kg		07/12/21 16:07	07/15/21 13:24	1
2-Amino-4,6-dinitrotoluene	**0.046**	**J M H H3**	0.098	0.012	mg/Kg		07/12/21 16:07	07/15/21 13:24	1
o-Nitrotoluene	0.015	U H H3	0.098	0.0056	mg/Kg		07/12/21 16:07	07/15/21 13:24	1
m-Nitrotoluene	0.029	U H H3	0.098	0.013	mg/Kg		07/12/21 16:07	07/15/21 13:24	1
4-Amino-2,6-dinitrotoluene	**0.057**	**J M H H3**	0.098	0.0050	mg/Kg		07/12/21 16:07	07/15/21 13:24	1
p-Nitrotoluene	0.029	U H H3	0.098	0.011	mg/Kg		07/12/21 16:07	07/15/21 13:24	1
Nitrobenzene	**0.036**	**J H H3**	0.098	0.011	mg/Kg		07/12/21 16:07	07/15/21 13:24	1
Nitroglycerin	0.029	U H H3	0.098	0.010	mg/Kg		07/12/21 16:07	07/15/21 13:24	1
HMX	0.029	U H H3	0.098	0.015	mg/Kg		07/12/21 16:07	07/15/21 13:24	1
PETN	0.015	U H H3	0.098	0.0050	mg/Kg		07/12/21 16:07	07/15/21 13:24	1
RDX	0.015	U H H3	0.098	0.0042	mg/Kg		07/12/21 16:07	07/15/21 13:24	1
Tetryl	0.015	U H H3	0.098	0.0074	mg/Kg		07/12/21 16:07	07/15/21 13:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*91*		*68 - 140*	*07/12/21 16:07*	*07/15/21 13:24*	*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	**21**	**D H H3 Q**	4.9	0.25	mg/Kg		07/12/21 16:07	07/15/21 13:36	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*67*	*Q D*	*68 - 140*	*07/12/21 16:07*	*07/15/21 13:36*	*50*

Client Sample ID: 29SB146 (15-16)

Date Collected: 03/09/21 09:35
Date Received: 07/08/21 15:00

Lab Sample ID: 280-150636-6

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	0.029	U H H3	0.097	0.012	mg/Kg		07/12/21 16:07	07/15/21 14:00	1
1,3-Dinitrobenzene	0.015	U H H3	0.097	0.0069	mg/Kg		07/12/21 16:07	07/15/21 14:00	1
2,4,6-Trinitrotoluene	**0.074**	**J H H3**	0.097	0.0049	mg/Kg		07/12/21 16:07	07/15/21 14:00	1

Client Sample Results

Client: HDR Inc
Project/Site: Longhorn AAP, TX

Job ID: 280-150636-1

Client Sample ID: 29SB146 (15-16)

Date Collected: 03/09/21 09:35
Date Received: 07/08/21 15:00

Lab Sample ID: 280-150636-6

Matrix: Solid

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	0.029	U M H H3	0.097	0.0080	mg/Kg		07/12/21 16:07	07/15/21 14:00	1
2,6-Dinitrotoluene	0.029	U M H H3	0.097	0.019	mg/Kg		07/12/21 16:07	07/15/21 14:00	1
2-Amino-4,6-dinitrotoluene	0.029	U H H3	0.097	0.012	mg/Kg		07/12/21 16:07	07/15/21 14:00	1
o-Nitrotoluene	0.015	U H H3	0.097	0.0056	mg/Kg		07/12/21 16:07	07/15/21 14:00	1
m-Nitrotoluene	0.029	U H H3	0.097	0.012	mg/Kg		07/12/21 16:07	07/15/21 14:00	1
4-Amino-2,6-dinitrotoluene	0.015	U H H3	0.097	0.0050	mg/Kg		07/12/21 16:07	07/15/21 14:00	1
p-Nitrotoluene	0.029	U H H3	0.097	0.011	mg/Kg		07/12/21 16:07	07/15/21 14:00	1
Nitrobenzene	0.029	U H H3	0.097	0.011	mg/Kg		07/12/21 16:07	07/15/21 14:00	1
Nitroglycerin	0.029	U H H3	0.097	0.010	mg/Kg		07/12/21 16:07	07/15/21 14:00	1
HMX	0.029	U H H3	0.097	0.015	mg/Kg		07/12/21 16:07	07/15/21 14:00	1
PETN	0.015	U H H3	0.097	0.0050	mg/Kg		07/12/21 16:07	07/15/21 14:00	1
RDX	0.015	U H H3	0.097	0.0042	mg/Kg		07/12/21 16:07	07/15/21 14:00	1
Tetryl	0.015	U H H3 J1	0.097	0.0074	mg/Kg		07/12/21 16:07	07/15/21 14:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*115*		*68 - 140*	*07/12/21 16:07*	*07/15/21 14:00*	*1*

Client Sample ID: 29SB155 (11-12)

Date Collected: 03/09/21 01:50
Date Received: 07/08/21 15:00

Lab Sample ID: 280-150636-7

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	0.027	U H H3	0.091	0.011	mg/Kg		07/12/21 16:07	07/15/21 14:37	1
1,3-Dinitrobenzene	0.014	U H H3	0.091	0.0065	mg/Kg		07/12/21 16:07	07/15/21 14:37	1
2,4,6-Trinitrotoluene	**0.073**	**J H H3**	0.091	0.0046	mg/Kg		07/12/21 16:07	07/15/21 14:37	1
2,4-Dinitrotoluene	0.027	U M H H3	0.091	0.0075	mg/Kg		07/12/21 16:07	07/15/21 14:37	1
2,6-Dinitrotoluene	0.027	U M H H3	0.091	0.018	mg/Kg		07/12/21 16:07	07/15/21 14:37	1
2-Amino-4,6-dinitrotoluene	0.027	U H H3	0.091	0.011	mg/Kg		07/12/21 16:07	07/15/21 14:37	1
o-Nitrotoluene	0.014	U H H3	0.091	0.0052	mg/Kg		07/12/21 16:07	07/15/21 14:37	1
m-Nitrotoluene	0.027	U H H3	0.091	0.012	mg/Kg		07/12/21 16:07	07/15/21 14:37	1
4-Amino-2,6-dinitrotoluene	0.014	U H H3	0.091	0.0047	mg/Kg		07/12/21 16:07	07/15/21 14:37	1
p-Nitrotoluene	0.027	U H H3	0.091	0.010	mg/Kg		07/12/21 16:07	07/15/21 14:37	1
Nitrobenzene	0.027	U H H3	0.091	0.0099	mg/Kg		07/12/21 16:07	07/15/21 14:37	1
Nitroglycerin	0.027	U H H3	0.091	0.0096	mg/Kg		07/12/21 16:07	07/15/21 14:37	1
HMX	0.027	U H H3	0.091	0.014	mg/Kg		07/12/21 16:07	07/15/21 14:37	1
PETN	0.014	U H H3	0.091	0.0047	mg/Kg		07/12/21 16:07	07/15/21 14:37	1
RDX	0.014	U H H3	0.091	0.0039	mg/Kg		07/12/21 16:07	07/15/21 14:37	1
Tetryl	0.014	U H H3	0.091	0.0069	mg/Kg		07/12/21 16:07	07/15/21 14:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*99*		*68 - 140*	*07/12/21 16:07*	*07/15/21 14:37*	*1*

Client Sample ID: 29SB135 (15-16)

Date Collected: 03/04/21 10:30
Date Received: 07/08/21 15:00

Lab Sample ID: 280-150636-8

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	0.029	U H H3	0.098	0.012	mg/Kg		07/12/21 16:07	07/15/21 14:49	1
1,3-Dinitrobenzene	0.015	U H H3	0.098	0.0070	mg/Kg		07/12/21 16:07	07/15/21 14:49	1

Client Sample Results

Client: HDR Inc
Project/Site: Longhorn AAP, TX

Job ID: 280-150636-1

Client Sample ID: 29SB135 (15-16)

Lab Sample ID: 280-150636-8
Matrix: Solid
Date Collected: 03/04/21 10:30
Date Received: 07/08/21 15:00

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	**0.0072**	**J M H H3**	0.098	0.0049	mg/Kg		07/12/21 16:07	07/15/21 14:49	1
2,4-Dinitrotoluene	0.029	U M H H3	0.098	0.0080	mg/Kg		07/12/21 16:07	07/15/21 14:49	1
2,6-Dinitrotoluene	0.029	U M H H3	0.098	0.020	mg/Kg		07/12/21 16:07	07/15/21 14:49	1
2-Amino-4,6-dinitrotoluene	0.029	U H H3	0.098	0.012	mg/Kg		07/12/21 16:07	07/15/21 14:49	1
o-Nitrotoluene	0.015	U H H3	0.098	0.0056	mg/Kg		07/12/21 16:07	07/15/21 14:49	1
m-Nitrotoluene	0.029	U H H3	0.098	0.013	mg/Kg		07/12/21 16:07	07/15/21 14:49	1
4-Amino-2,6-dinitrotoluene	0.015	U H H3	0.098	0.0050	mg/Kg		07/12/21 16:07	07/15/21 14:49	1
p-Nitrotoluene	0.029	U H H3	0.098	0.011	mg/Kg		07/12/21 16:07	07/15/21 14:49	1
Nitrobenzene	0.029	U H H3	0.098	0.011	mg/Kg		07/12/21 16:07	07/15/21 14:49	1
Nitroglycerin	0.029	U H H3	0.098	0.010	mg/Kg		07/12/21 16:07	07/15/21 14:49	1
HMX	0.029	U H H3	0.098	0.015	mg/Kg		07/12/21 16:07	07/15/21 14:49	1
PETN	0.015	U H H3	0.098	0.0050	mg/Kg		07/12/21 16:07	07/15/21 14:49	1
RDX	0.015	U H H3	0.098	0.0042	mg/Kg		07/12/21 16:07	07/15/21 14:49	1
Tetryl	0.015	U H H3	0.098	0.0074	mg/Kg		07/12/21 16:07	07/15/21 14:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*136*		*68 - 140*	*07/12/21 16:07*	*07/15/21 14:49*	*1*

Client Sample ID: 29SB136 (15-16)

Lab Sample ID: 280-150636-9
Matrix: Solid
Date Collected: 03/04/21 09:35
Date Received: 07/08/21 15:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.029	U H H3	0.098	0.012	mg/Kg		07/12/21 16:07	07/15/21 15:01	1
1,3-Dinitrobenzene	0.015	U H H3	0.098	0.0070	mg/Kg		07/12/21 16:07	07/15/21 15:01	1
2,4,6-Trinitrotoluene	**0.0072**	**J H H3**	0.098	0.0049	mg/Kg		07/12/21 16:07	07/15/21 15:01	1
2,4-Dinitrotoluene	0.029	U M H H3	0.098	0.0080	mg/Kg		07/12/21 16:07	07/15/21 15:01	1
2,6-Dinitrotoluene	0.029	U M H H3	0.098	0.020	mg/Kg		07/12/21 16:07	07/15/21 15:01	1
2-Amino-4,6-dinitrotoluene	0.029	U H H3	0.098	0.012	mg/Kg		07/12/21 16:07	07/15/21 15:01	1
o-Nitrotoluene	0.015	U H H3	0.098	0.0056	mg/Kg		07/12/21 16:07	07/15/21 15:01	1
m-Nitrotoluene	0.029	U H H3	0.098	0.013	mg/Kg		07/12/21 16:07	07/15/21 15:01	1
4-Amino-2,6-dinitrotoluene	0.015	U H H3	0.098	0.0050	mg/Kg		07/12/21 16:07	07/15/21 15:01	1
p-Nitrotoluene	0.029	U H H3	0.098	0.011	mg/Kg		07/12/21 16:07	07/15/21 15:01	1
Nitrobenzene	0.029	U H H3	0.098	0.011	mg/Kg		07/12/21 16:07	07/15/21 15:01	1
Nitroglycerin	0.029	U H H3	0.098	0.010	mg/Kg		07/12/21 16:07	07/15/21 15:01	1
HMX	0.029	U H H3	0.098	0.015	mg/Kg		07/12/21 16:07	07/15/21 15:01	1
PETN	0.015	U H H3	0.098	0.0050	mg/Kg		07/12/21 16:07	07/15/21 15:01	1
RDX	0.015	U H H3	0.098	0.0042	mg/Kg		07/12/21 16:07	07/15/21 15:01	1
Tetryl	0.015	U H H3	0.098	0.0074	mg/Kg		07/12/21 16:07	07/15/21 15:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*119*		*68 - 140*	*07/12/21 16:07*	*07/15/21 15:01*	*1*

Client Sample ID: 29SB156 (12-13)

Lab Sample ID: 280-150636-10
Matrix: Solid
Date Collected: 03/10/21 08:10
Date Received: 07/08/21 15:00

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.028	U H H3	0.093	0.012	mg/Kg		07/12/21 16:07	07/15/21 15:13	1

Client Sample Results

Client: HDR Inc
Project/Site: Longhorn AAP, TX

Job ID: 280-150636-1

Client Sample ID: 29SB156 (12-13)

Date Collected: 03/10/21 08:10
Date Received: 07/08/21 15:00

Lab Sample ID: 280-150636-10

Matrix: Solid

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dinitrobenzene	0.014	U H H3	0.093	0.0066	mg/Kg		07/12/21 16:07	07/15/21 15:13	1
2,4,6-Trinitrotoluene	**0.0069**	**J H H3**	0.093	0.0047	mg/Kg		07/12/21 16:07	07/15/21 15:13	1
2,4-Dinitrotoluene	0.028	U M H H3	0.093	0.0076	mg/Kg		07/12/21 16:07	07/15/21 15:13	1
2,6-Dinitrotoluene	0.028	U M H H3	0.093	0.019	mg/Kg		07/12/21 16:07	07/15/21 15:13	1
2-Amino-4,6-dinitrotoluene	0.028	U H H3	0.093	0.011	mg/Kg		07/12/21 16:07	07/15/21 15:13	1
o-Nitrotoluene	0.014	U H H3	0.093	0.0053	mg/Kg		07/12/21 16:07	07/15/21 15:13	1
m-Nitrotoluene	0.028	U H H3	0.093	0.012	mg/Kg		07/12/21 16:07	07/15/21 15:13	1
4-Amino-2,6-dinitrotoluene	0.014	U H H3	0.093	0.0048	mg/Kg		07/12/21 16:07	07/15/21 15:13	1
p-Nitrotoluene	0.028	U H H3	0.093	0.010	mg/Kg		07/12/21 16:07	07/15/21 15:13	1
Nitrobenzene	0.028	U H H3	0.093	0.010	mg/Kg		07/12/21 16:07	07/15/21 15:13	1
Nitroglycerin	0.028	U H H3	0.093	0.0098	mg/Kg		07/12/21 16:07	07/15/21 15:13	1
HMX	0.028	U H H3	0.093	0.014	mg/Kg		07/12/21 16:07	07/15/21 15:13	1
PETN	0.014	U H H3	0.093	0.0048	mg/Kg		07/12/21 16:07	07/15/21 15:13	1
RDX	0.014	U H H3	0.093	0.0040	mg/Kg		07/12/21 16:07	07/15/21 15:13	1
Tetryl	0.014	U H H3	0.093	0.0071	mg/Kg		07/12/21 16:07	07/15/21 15:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*117*		*68 - 140*	*07/12/21 16:07*	*07/15/21 15:13*	*1*

Client Sample ID: DUP18

Date Collected: 03/09/21 02:50
Date Received: 07/08/21 15:00

Lab Sample ID: 280-150636-11

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	0.027	U H H3	0.092	0.012	mg/Kg		07/12/21 16:07	07/15/21 15:25	1
1,3-Dinitrobenzene	0.014	U H H3	0.092	0.0065	mg/Kg		07/12/21 16:07	07/15/21 15:25	1
2,4,6-Trinitrotoluene	**0.0088**	**J H H3**	0.092	0.0046	mg/Kg		07/12/21 16:07	07/15/21 15:25	1
2,4-Dinitrotoluene	0.027	U M H H3	0.092	0.0075	mg/Kg		07/12/21 16:07	07/15/21 15:25	1
2,6-Dinitrotoluene	0.027	U M H H3	0.092	0.018	mg/Kg		07/12/21 16:07	07/15/21 15:25	1
2-Amino-4,6-dinitrotoluene	0.027	U H H3	0.092	0.011	mg/Kg		07/12/21 16:07	07/15/21 15:25	1
o-Nitrotoluene	0.014	U H H3	0.092	0.0053	mg/Kg		07/12/21 16:07	07/15/21 15:25	1
m-Nitrotoluene	0.027	U H H3	0.092	0.012	mg/Kg		07/12/21 16:07	07/15/21 15:25	1
4-Amino-2,6-dinitrotoluene	0.014	U H H3	0.092	0.0047	mg/Kg		07/12/21 16:07	07/15/21 15:25	1
p-Nitrotoluene	0.027	U H H3	0.092	0.010	mg/Kg		07/12/21 16:07	07/15/21 15:25	1
Nitrobenzene	0.027	U H H3	0.092	0.0099	mg/Kg		07/12/21 16:07	07/15/21 15:25	1
Nitroglycerin	0.027	U H H3	0.092	0.0096	mg/Kg		07/12/21 16:07	07/15/21 15:25	1
HMX	0.027	U H H3	0.092	0.014	mg/Kg		07/12/21 16:07	07/15/21 15:25	1
PETN	0.014	U H H3	0.092	0.0047	mg/Kg		07/12/21 16:07	07/15/21 15:25	1
RDX	0.014	U H H3	0.092	0.0040	mg/Kg		07/12/21 16:07	07/15/21 15:25	1
Tetryl	0.014	U H H3	0.092	0.0070	mg/Kg		07/12/21 16:07	07/15/21 15:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*116*		*68 - 140*	*07/12/21 16:07*	*07/15/21 15:25*	*1*

Default Detection Limits

Client: HDR Inc
Job ID: 280-150636-1
Project/Site: Longhorn AAP, TX

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Prep: 8330B

Analyte	LOQ	DL	Units
1,3,5-Trinitrobenzene	0.10	0.013	mg/Kg
1,3-Dinitrobenzene	0.10	0.0071	mg/Kg
2,4,6-Trinitrotoluene	0.10	0.0050	mg/Kg
2,4-Dinitrotoluene	0.10	0.0082	mg/Kg
2,6-Dinitrotoluene	0.10	0.020	mg/Kg
2-Amino-4,6-dinitrotoluene	0.10	0.012	mg/Kg
4-Amino-2,6-dinitrotoluene	0.10	0.0051	mg/Kg
HMX	0.10	0.015	mg/Kg
m-Nitrotoluene	0.10	0.013	mg/Kg
Nitrobenzene	0.10	0.011	mg/Kg
Nitroglycerin	0.10	0.011	mg/Kg
o-Nitrotoluene	0.10	0.0057	mg/Kg
PETN	0.10	0.0052	mg/Kg
p-Nitrotoluene	0.10	0.011	mg/Kg
RDX	0.10	0.0043	mg/Kg
Tetryl	0.10	0.0076	mg/Kg

Surrogate Summary

Client: HDR Inc
Project/Site: Longhorn AAP, TX

Job ID: 280-150636-1

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)							
280-150636-1	29SB123 (15-16)	124							
280-150636-2	29SB129 (5-6)	89							
280-150636-2 - DL	29SB129 (5-6)	71 D							
280-150636-2 - DL2	29SB129 (5-6)	0 Q D							
280-150636-3	29SB145 (15-16)	118							
280-150636-4	29SB148 (15-16)	111							
280-150636-5	29SB137 (15-16)	91							
280-150636-5 - DL	29SB137 (15-16)	67 Q D							
280-150636-6	29SB146 (15-16)	115							
280-150636-6 MS	29SB146 (15-16)	117							
280-150636-6 MSD	29SB146 (15-16)	108							
280-150636-7	29SB155 (11-12)	99							
280-150636-8	29SB135 (15-16)	136							
280-150636-9	29SB136 (15-16)	119							
280-150636-10	29SB156 (12-13)	117							
280-150636-11	DUP18	116							
LCS 280-542950/2-A	Lab Control Sample	109							
MB 280-542950/1-A	Method Blank	95							

Surrogate Legend

NBZ = Nitrobenzene-d5

QC Sample Results

Client: HDR Inc
Project/Site: Longhorn AAP, TX

Job ID: 280-150636-1

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Lab Sample ID: MB 280-542950/1-A
Matrix: Solid
Analysis Batch: 543298

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 542950

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.030	U	0.10	0.013	mg/Kg		07/12/21 16:07	07/15/21 11:47	1
1,3-Dinitrobenzene	0.016	U	0.10	0.0071	mg/Kg		07/12/21 16:07	07/15/21 11:47	1
2,4,6-Trinitrotoluene	0.00677	J	0.10	0.0050	mg/Kg		07/12/21 16:07	07/15/21 11:47	1
2,4-Dinitrotoluene	0.030	U	0.10	0.0082	mg/Kg		07/12/21 16:07	07/15/21 11:47	1
2,6-Dinitrotoluene	0.030	U	0.10	0.020	mg/Kg		07/12/21 16:07	07/15/21 11:47	1
2-Amino-4,6-dinitrotoluene	0.030	U	0.10	0.012	mg/Kg		07/12/21 16:07	07/15/21 11:47	1
o-Nitrotoluene	0.015	U	0.10	0.0057	mg/Kg		07/12/21 16:07	07/15/21 11:47	1
m-Nitrotoluene	0.030	U	0.10	0.013	mg/Kg		07/12/21 16:07	07/15/21 11:47	1
4-Amino-2,6-dinitrotoluene	0.015	U	0.10	0.0051	mg/Kg		07/12/21 16:07	07/15/21 11:47	1
p-Nitrotoluene	0.030	U	0.10	0.011	mg/Kg		07/12/21 16:07	07/15/21 11:47	1
Nitrobenzene	0.030	U	0.10	0.011	mg/Kg		07/12/21 16:07	07/15/21 11:47	1
Nitroglycerin	0.030	U	0.10	0.011	mg/Kg		07/12/21 16:07	07/15/21 11:47	1
HMX	0.030	U	0.10	0.015	mg/Kg		07/12/21 16:07	07/15/21 11:47	1
PETN	0.015	U M	0.10	0.0052	mg/Kg		07/12/21 16:07	07/15/21 11:47	1
RDX	0.015	U	0.10	0.0043	mg/Kg		07/12/21 16:07	07/15/21 11:47	1
Tetryl	0.015	U	0.10	0.0076	mg/Kg		07/12/21 16:07	07/15/21 11:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*95*		*68 - 140*	*07/12/21 16:07*	*07/15/21 11:47*	*1*

Lab Sample ID: LCS 280-542950/2-A
Matrix: Solid
Analysis Batch: 543298

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 542950

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,3,5-Trinitrobenzene			0.400	0.370		mg/Kg		93	69 - 115		
1,3-Dinitrobenzene			0.400	0.377		mg/Kg		94	83 - 122		
2,4,6-Trinitrotoluene			0.400	0.361		mg/Kg		90	65 - 133		
2,4-Dinitrotoluene			0.400	0.396		mg/Kg		99	82 - 119		
2,6-Dinitrotoluene			0.400	0.344		mg/Kg		86	86 - 113		
2-Amino-4,6-dinitrotoluene			0.400	0.378		mg/Kg		95	75 - 130		
o-Nitrotoluene			0.400	0.396		mg/Kg		99	72 - 125		
m-Nitrotoluene			0.400	0.385		mg/Kg		96	68 - 125		
4-Amino-2,6-dinitrotoluene			0.400	0.333		mg/Kg		83	77 - 125		
p-Nitrotoluene			0.400	0.381		mg/Kg		95	72 - 127		
Nitrobenzene			0.400	0.425		mg/Kg		106	75 - 120		
Nitroglycerin			0.400	0.295		mg/Kg		74	27 - 146		
HMX			0.400	0.393		mg/Kg		98	65 - 114		
PETN			0.400	0.300		mg/Kg		75	62 - 143		
RDX			0.400	0.404		mg/Kg		101	77 - 123		
Tetryl			0.400	0.481		mg/Kg		120	36 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*109*		*68 - 140*

QC Sample Results

Client: HDR Inc
Project/Site: Longhorn AAP, TX

Job ID: 280-150636-1

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Lab Sample ID: 280-150636-6 MS
Matrix: Solid
Analysis Batch: 543298

Client Sample ID: 29SB146 (15-16)
Prep Type: Total/NA
Prep Batch: 542950

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trinitrobenzene	0.029	U H H3	0.384	0.344		mg/Kg		90	69 - 115
1,3-Dinitrobenzene	0.015	U H H3	0.384	0.362		mg/Kg		94	83 - 122
2,4,6-Trinitrotoluene	0.074	J H H3	0.384	0.420		mg/Kg		90	65 - 133
2,4-Dinitrotoluene	0.029	U M H H3	0.384	0.353		mg/Kg		92	82 - 119
2,6-Dinitrotoluene	0.029	U M H H3	0.384	0.335		mg/Kg		87	86 - 113
2-Amino-4,6-dinitrotoluene	0.029	U H H3	0.384	0.337		mg/Kg		88	75 - 130
o-Nitrotoluene	0.015	U H H3	0.384	0.381		mg/Kg		99	72 - 125
m-Nitrotoluene	0.029	U H H3	0.384	0.365		mg/Kg		95	68 - 125
4-Amino-2,6-dinitrotoluene	0.015	U H H3	0.384	0.350		mg/Kg		91	77 - 125
p-Nitrotoluene	0.029	U H H3	0.384	0.396		mg/Kg		103	72 - 127
Nitrobenzene	0.029	U H H3	0.384	0.439		mg/Kg		114	75 - 120
Nitroglycerin	0.029	U H H3	0.384	0.320		mg/Kg		83	27 - 146
HMX	0.029	U H H3	0.384	0.381		mg/Kg		99	65 - 114
PETN	0.015	U H H3	0.384	0.297		mg/Kg		77	62 - 143
RDX	0.015	U H H3	0.384	0.328		mg/Kg		85	77 - 123
Tetryl	0.015	U H H3 J1	0.384	0.478	J1	mg/Kg		124	36 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5	*117*		*68 - 140*

Lab Sample ID: 280-150636-6 MSD
Matrix: Solid
Analysis Batch: 543298

Client Sample ID: 29SB146 (15-16)
Prep Type: Total/NA
Prep Batch: 542950

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene	0.029	U H H3	0.388	0.348		mg/Kg		90	69 - 115	1	20
1,3-Dinitrobenzene	0.015	U H H3	0.388	0.394		mg/Kg		102	83 - 122	9	20
2,4,6-Trinitrotoluene	0.074	J H H3	0.388	0.400		mg/Kg		84	65 - 133	5	20
2,4-Dinitrotoluene	0.029	U M H H3	0.388	0.362		mg/Kg		93	82 - 119	3	20
2,6-Dinitrotoluene	0.029	U M H H3	0.388	0.342		mg/Kg		88	86 - 113	2	20
2-Amino-4,6-dinitrotoluene	0.029	U H H3	0.388	0.349		mg/Kg		90	75 - 130	3	20
o-Nitrotoluene	0.015	U H H3	0.388	0.386		mg/Kg		99	72 - 125	1	20
m-Nitrotoluene	0.029	U H H3	0.388	0.405		mg/Kg		104	68 - 125	10	20
4-Amino-2,6-dinitrotoluene	0.015	U H H3	0.388	0.327		mg/Kg		84	77 - 125	7	20
p-Nitrotoluene	0.029	U H H3	0.388	0.358		mg/Kg		92	72 - 127	10	20
Nitrobenzene	0.029	U H H3	0.388	0.421		mg/Kg		108	75 - 120	4	20
Nitroglycerin	0.029	U H H3	0.388	0.301		mg/Kg		78	27 - 146	6	20
HMX	0.029	U H H3	0.388	0.365		mg/Kg		94	65 - 114	4	20
PETN	0.015	U H H3	0.388	0.281		mg/Kg		72	62 - 143	6	20
RDX	0.015	U H H3	0.388	0.343		mg/Kg		88	77 - 123	5	20
Tetryl	0.015	U H H3 J1	0.388	0.468	J1	mg/Kg		121	36 - 120	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5	*108*		*68 - 140*

QC Association Summary

Client: HDR Inc
Project/Site: Longhorn AAP, TX

Job ID: 280-150636-1

LCMS

Prep Batch: 542950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-150636-1	29SB123 (15-16)	Total/NA	Solid	8330B	
280-150636-2 - DL2	29SB129 (5-6)	Total/NA	Solid	8330B	
280-150636-2 - DL	29SB129 (5-6)	Total/NA	Solid	8330B	
280-150636-2	29SB129 (5-6)	Total/NA	Solid	8330B	
280-150636-3	29SB145 (15-16)	Total/NA	Solid	8330B	
280-150636-4	29SB148 (15-16)	Total/NA	Solid	8330B	
280-150636-5	29SB137 (15-16)	Total/NA	Solid	8330B	
280-150636-5 - DL	29SB137 (15-16)	Total/NA	Solid	8330B	
280-150636-6	29SB146 (15-16)	Total/NA	Solid	8330B	
280-150636-7	29SB155 (11-12)	Total/NA	Solid	8330B	
280-150636-8	29SB135 (15-16)	Total/NA	Solid	8330B	
280-150636-9	29SB136 (15-16)	Total/NA	Solid	8330B	
280-150636-10	29SB156 (12-13)	Total/NA	Solid	8330B	
280-150636-11	DUP18	Total/NA	Solid	8330B	
MB 280-542950/1-A	Method Blank	Total/NA	Solid	8330B	
LCS 280-542950/2-A	Lab Control Sample	Total/NA	Solid	8330B	
280-150636-6 MS	29SB146 (15-16)	Total/NA	Solid	8330B	
280-150636-6 MSD	29SB146 (15-16)	Total/NA	Solid	8330B	

Analysis Batch: 543298

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-150636-1	29SB123 (15-16)	Total/NA	Solid	8321A	542950
280-150636-2	29SB129 (5-6)	Total/NA	Solid	8321A	542950
280-150636-2 - DL	29SB129 (5-6)	Total/NA	Solid	8321A	542950
280-150636-2 - DL2	29SB129 (5-6)	Total/NA	Solid	8321A	542950
280-150636-3	29SB145 (15-16)	Total/NA	Solid	8321A	542950
280-150636-4	29SB148 (15-16)	Total/NA	Solid	8321A	542950
280-150636-5	29SB137 (15-16)	Total/NA	Solid	8321A	542950
280-150636-5 - DL	29SB137 (15-16)	Total/NA	Solid	8321A	542950
280-150636-6	29SB146 (15-16)	Total/NA	Solid	8321A	542950
280-150636-7	29SB155 (11-12)	Total/NA	Solid	8321A	542950
280-150636-8	29SB135 (15-16)	Total/NA	Solid	8321A	542950
280-150636-9	29SB136 (15-16)	Total/NA	Solid	8321A	542950
280-150636-10	29SB156 (12-13)	Total/NA	Solid	8321A	542950
280-150636-11	DUP18	Total/NA	Solid	8321A	542950
MB 280-542950/1-A	Method Blank	Total/NA	Solid	8321A	542950
LCS 280-542950/2-A	Lab Control Sample	Total/NA	Solid	8321A	542950
280-150636-6 MS	29SB146 (15-16)	Total/NA	Solid	8321A	542950
280-150636-6 MSD	29SB146 (15-16)	Total/NA	Solid	8321A	542950

Lab Chronicle

Client: HDR Inc
Job ID: 280-150636-1
Project/Site: Longhorn AAP, TX

Client Sample ID: 29SB123 (15-16)
Lab Sample ID: 280-150636-1
Date Collected: 03/02/21 10:55
Matrix: Solid
Date Received: 07/08/21 15:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8330B			10.54 g	40 mL	542950	07/12/21 16:07	TEH	TAL DEN
Total/NA	Analysis	8321A		1			543298	07/15/21 12:11	AGCM	TAL DEN

Client Sample ID: 29SB129 (5-6)
Lab Sample ID: 280-150636-2
Date Collected: 03/02/21 02:27
Matrix: Solid
Date Received: 07/08/21 15:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8330B			10.1 g	40 mL	542950	07/12/21 16:07	TEH	TAL DEN
Total/NA	Analysis	8321A		1			543298	07/15/21 12:23	AGCM	TAL DEN
Total/NA	Prep	8330B	DL		10.1 g	40 mL	542950	07/12/21 16:07	TEH	TAL DEN
Total/NA	Analysis	8321A	DL	50			543298	07/15/21 12:35	AGCM	TAL DEN
Total/NA	Prep	8330B	DL2		10.1 g	40 mL	542950	07/12/21 16:07	TEH	TAL DEN
Total/NA	Analysis	8321A	DL2	500			543298	07/15/21 12:47	AGCM	TAL DEN

Client Sample ID: 29SB145 (15-16)
Lab Sample ID: 280-150636-3
Date Collected: 03/08/21 05:30
Matrix: Solid
Date Received: 07/08/21 15:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8330B			10.08 g	40 mL	542950	07/12/21 16:07	TEH	TAL DEN
Total/NA	Analysis	8321A		1			543298	07/15/21 12:59	AGCM	TAL DEN

Client Sample ID: 29SB148 (15-16)
Lab Sample ID: 280-150636-4
Date Collected: 03/08/21 01:45
Matrix: Solid
Date Received: 07/08/21 15:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8330B			10.42 g	40 mL	542950	07/12/21 16:07	TEH	TAL DEN
Total/NA	Analysis	8321A		1			543298	07/15/21 13:12	AGCM	TAL DEN

Client Sample ID: 29SB137 (15-16)
Lab Sample ID: 280-150636-5
Date Collected: 03/08/21 08:10
Matrix: Solid
Date Received: 07/08/21 15:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8330B			10.23 g	40 mL	542950	07/12/21 16:07	TEH	TAL DEN
Total/NA	Analysis	8321A		1			543298	07/15/21 13:24	AGCM	TAL DEN
Total/NA	Prep	8330B	DL		10.23 g	40 mL	542950	07/12/21 16:07	TEH	TAL DEN
Total/NA	Analysis	8321A	DL	50			543298	07/15/21 13:36	AGCM	TAL DEN

Lab Chronicle

Client: HDR Inc
Project/Site: Longhorn AAP, TX

Job ID: 280-150636-1

Client Sample ID: 29SB146 (15-16)
Date Collected: 03/09/21 09:35
Date Received: 07/08/21 15:00

Lab Sample ID: 280-150636-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8330B			10.26 g	40 mL	542950	07/12/21 16:07	TEH	TAL DEN
Total/NA	Analysis	8321A		1			543298	07/15/21 14:00	AGCM	TAL DEN

Client Sample ID: 29SB155 (11-12)
Date Collected: 03/09/21 01:50
Date Received: 07/08/21 15:00

Lab Sample ID: 280-150636-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8330B			10.96 g	40 mL	542950	07/12/21 16:07	TEH	TAL DEN
Total/NA	Analysis	8321A		1			543298	07/15/21 14:37	AGCM	TAL DEN

Client Sample ID: 29SB135 (15-16)
Date Collected: 03/04/21 10:30
Date Received: 07/08/21 15:00

Lab Sample ID: 280-150636-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8330B			10.21 g	40 mL	542950	07/12/21 16:07	TEH	TAL DEN
Total/NA	Analysis	8321A		1			543298	07/15/21 14:49	AGCM	TAL DEN

Client Sample ID: 29SB136 (15-16)
Date Collected: 03/04/21 09:35
Date Received: 07/08/21 15:00

Lab Sample ID: 280-150636-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8330B			10.2 g	40 mL	542950	07/12/21 16:07	TEH	TAL DEN
Total/NA	Analysis	8321A		1			543298	07/15/21 15:01	AGCM	TAL DEN

Client Sample ID: 29SB156 (12-13)
Date Collected: 03/10/21 08:10
Date Received: 07/08/21 15:00

Lab Sample ID: 280-150636-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8330B			10.73 g	40 mL	542950	07/12/21 16:07	TEH	TAL DEN
Total/NA	Analysis	8321A		1			543298	07/15/21 15:13	AGCM	TAL DEN

Client Sample ID: DUP18
Date Collected: 03/09/21 02:50
Date Received: 07/08/21 15:00

Lab Sample ID: 280-150636-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8330B			10.91 g	40 mL	542950	07/12/21 16:07	TEH	TAL DEN
Total/NA	Analysis	8321A		1			543298	07/15/21 15:25	AGCM	TAL DEN

Laboratory References:

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

Accreditation/Certification Summary

Client: HDR Inc
Job ID: 280-150636-1
Project/Site: Longhorn AAP, TX

Laboratory: Eurofins TestAmerica, Denver

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

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	2907.01	11-02-21

Method Summary

Client: HDR Inc
Job ID: 280-150636-1
Project/Site: Longhorn AAP, TX

Method	Method Description	Protocol	Laboratory
8321A	Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)	SW846	TAL DEN
8330B	Sonication Extraction (Explosives)	SW846	TAL DEN

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: HDR Inc
Job ID: 280-150636-1
Project/Site: Longhorn AAP, TX

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
280-150636-1	29SB123 (15-16)	Solid	03/02/21 10:55	07/08/21 15:00	
280-150636-2	29SB129 (5-6)	Solid	03/02/21 02:27	07/08/21 15:00	
280-150636-3	29SB145 (15-16)	Solid	03/08/21 05:30	07/08/21 15:00	
280-150636-4	29SB148 (15-16)	Solid	03/08/21 01:45	07/08/21 15:00	
280-150636-5	29SB137 (15-16)	Solid	03/08/21 08:10	07/08/21 15:00	
280-150636-6	29SB146 (15-16)	Solid	03/09/21 09:35	07/08/21 15:00	
280-150636-7	29SB155 (11-12)	Solid	03/09/21 01:50	07/08/21 15:00	
280-150636-8	29SB135 (15-16)	Solid	03/04/21 10:30	07/08/21 15:00	
280-150636-9	29SB136 (15-16)	Solid	03/04/21 09:35	07/08/21 15:00	
280-150636-10	29SB156 (12-13)	Solid	03/10/21 08:10	07/08/21 15:00	
280-150636-11	DUP18	Solid	03/09/21 02:50	07/08/21 15:00	

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Instrument ID: LC_LCMS4 Analysis Batch Number: 543297

Lab Sample ID: STD005 280-543297/4 IC Client Sample ID:

Date Analyzed: 07/15/21 09:58 Lab File ID: ex421G15003.d GC Column: IonPac ID: 2(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	3.03	Baseline	meyera	07/15/21 12:10

Lab Sample ID: STD300 280-543297/10 IC Client Sample ID:

Date Analyzed: 07/15/21 11:10 Lab File ID: ex421G15009.d GC Column: IonPac ID: 2(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
o-Nitrotoluene	8.05	Baseline	meyera	07/15/21 12:09
p-Nitrotoluene	8.59	Baseline	meyera	07/15/21 12:09
m-Nitrotoluene	9.18	Baseline	meyera	07/15/21 12:09

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Instrument ID: LC_LCMS4 Analysis Batch Number: 543298

Lab Sample ID: MB 280-542950/1-A Client Sample ID:

Date Analyzed: 07/15/21 11:47 Lab File ID: ex421G15012.d GC Column: IonPac ID: 2(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN		Invalid Compound ID	meyera	07/15/21 12:20

Lab Sample ID: 280-150636-1 Client Sample ID: 29SB123 (15-16)

Date Analyzed: 07/15/21 12:11 Lab File ID: ex421G15014.d GC Column: IonPac ID: 2(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-Dinitrotoluene	6.69	Baseline	meyera	07/15/21 14:56
2,4-Dinitrotoluene	7.07	Baseline	meyera	07/15/21 14:56
o-Nitrotoluene	8.02	Baseline	meyera	07/15/21 14:56
p-Nitrotoluene	8.57	Baseline	meyera	07/15/21 14:56
m-Nitrotoluene	9.16	Baseline	meyera	07/15/21 14:56
Nitrobenzene		Invalid Compound ID	meyera	07/15/21 14:56

Lab Sample ID: 280-150636-2 Client Sample ID: 29SB129 (5-6)

Date Analyzed: 07/15/21 12:23 Lab File ID: ex421G15015.d GC Column: IonPac ID: 2(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
m-Nitrotoluene	9.16	Baseline	meyera	07/15/21 14:56

Lab Sample ID: 280-150636-2 DL Client Sample ID: 29SB129 (5-6) DL

Date Analyzed: 07/15/21 12:35 Lab File ID: ex421G15016.d GC Column: IonPac ID: 2(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
o-Nitrotoluene	8.00	Baseline	meyera	07/15/21 14:55
p-Nitrotoluene	8.54	Baseline	meyera	07/15/21 14:55

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Instrument ID: LC_LCMS4 Analysis Batch Number: 543298

Lab Sample ID: 280-150636-2 DL2 Client Sample ID: 29SB129 (5-6) DL2

Date Analyzed: 07/15/21 12:47 Lab File ID: ex421G15017.d GC Column: IonPac ID: 2(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-Dinitrotoluene	6.69	Baseline	meyera	07/15/21 14:54
2,4-Dinitrotoluene	7.12	Baseline	meyera	07/15/21 14:54

Lab Sample ID: 280-150636-3 Client Sample ID:

Date Analyzed: 07/15/21 12:59 Lab File ID: ex421G15018.d GC Column: IonPac ID: 2(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Hexahydro-1,3,5-trinitro-1,3,5-triazine 13C3	3.01	Baseline	meyera	07/15/21 14:54
Nitroglycerin		Invalid Compound ID	meyera	07/15/21 14:54

Lab Sample ID: 280-150636-4 Client Sample ID: 29SB148 (15-16)

Date Analyzed: 07/15/21 13:12 Lab File ID: ex421G15019.d GC Column: IonPac ID: 2(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-Dinitrotoluene	6.67	Baseline	meyera	07/15/21 14:54
2,4-Dinitrotoluene	7.09	Baseline	meyera	07/15/21 14:53

Lab Sample ID: 280-150636-5 Client Sample ID: 29SB137 (15-16)

Date Analyzed: 07/15/21 13:24 Lab File ID: ex421G15020.d GC Column: IonPac ID: 2(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Amino-2,6-dinitrotoluene	6.01	Baseline	meyera	07/15/21 14:53
2-Amino-4,6-dinitrotoluene	6.62	Baseline	meyera	07/15/21 14:53
2,6-Dinitrotoluene	6.71	Baseline	meyera	07/15/21 14:53
2,4-Dinitrotoluene	7.14	Baseline	meyera	07/15/21 14:53

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Instrument ID: LC_LCMS4 Analysis Batch Number: 543298

Lab Sample ID: 280-150636-6 Client Sample ID: 29SB146 (15-16)

Date Analyzed: 07/15/21 14:00 Lab File ID: ex421G15023.d GC Column: IonPac ID: 2(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-Dinitrotoluene	6.69	Baseline	meyera	07/15/21 14:51
2,4-Dinitrotoluene	7.04	Baseline	meyera	07/15/21 14:51

Lab Sample ID: 280-150636-7 Client Sample ID: 29SB155 (11-12)

Date Analyzed: 07/15/21 14:37 Lab File ID: ex421G15026.d GC Column: IonPac ID: 2(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-Dinitrotoluene	6.69	Baseline	meyera	07/16/21 08:10
2,4-Dinitrotoluene	7.04	Baseline	meyera	07/16/21 08:10

Lab Sample ID: 280-150636-8 Client Sample ID: 29SB135 (15-16)

Date Analyzed: 07/15/21 14:49 Lab File ID: ex421G15027.d GC Column: IonPac ID: 2(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4,6-Trinitrotoluene	5.30	Baseline	meyera	07/16/21 08:11
2,6-Dinitrotoluene	6.74	Baseline	meyera	07/16/21 08:10
2,4-Dinitrotoluene	7.09	Baseline	meyera	07/16/21 08:10

Lab Sample ID: 280-150636-9 Client Sample ID: 29SB136 (15-16)

Date Analyzed: 07/15/21 15:01 Lab File ID: ex421G15028.d GC Column: IonPac ID: 2(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-Dinitrotoluene	6.71	Baseline	meyera	07/16/21 08:11
2,4-Dinitrotoluene	7.04	Baseline	meyera	07/16/21 08:11

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Instrument ID: LC_LCMS4 Analysis Batch Number: 543298

Lab Sample ID: 280-150636-10 Client Sample ID: 29SB156 (12-13)

Date Analyzed: 07/15/21 15:13 Lab File ID: ex421G15029.d GC Column: IonPac ID: 2(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-Dinitrotoluene	6.71	Baseline	meyera	07/16/21 08:11
2,4-Dinitrotoluene	7.16	Baseline	meyera	07/16/21 08:11

Lab Sample ID: 280-150636-11 Client Sample ID: DUP18

Date Analyzed: 07/15/21 15:25 Lab File ID: ex421G15030.d GC Column: IonPac ID: 2(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-Dinitrotoluene	6.74	Baseline	meyera	07/16/21 08:12
2,4-Dinitrotoluene	7.14	Baseline	meyera	07/16/21 08:12

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
8321EXcalprim_00025	02/14/22	04/21/21	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
.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
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
					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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00046	09/02/21	03/02/21	Acetonitrile, Lot ACN_00051	100 mL	8330_NG_Stk_00090	80 uL	Nitroglycerin	4 ug/mL
					8330_PETN_Stk_00100	80 uL	PETN	4 ug/mL
					8330LCSMix1_00119	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_00021	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_00090	01/22/22		Restek, Lot A0161450		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00100	01/22/22		Restek, Lot A0159876		(Purchased Reagent)		PETN	5000 ug/mL
.8330LCSMix1_00119	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_00021	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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							p-Nitrotoluene	1000 ug/mL
							Tetryl	1000 ug/mL
8321ExplosSur_00053	10/29/21	06/15/21	Acetonitrile, Lot Acetonitrile 00053	200 mL	8321NB-D5-1_00016	67 uL	Nitrobenzene-d5	4.01297 ug/mL
.8321NB-D5-1_00016	10/29/21	10/29/20	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_00020	10/29/21	01/28/21	ACN, Lot 111238	40 mL	8321NB-D5-2_00016	4 mL	Nitrobenzene-d5	10.0025 ug/mL
.8321NB-D5-2_00016	10/29/21	10/29/20	ACN, Lot 111238	10 mL	8321NB-D5-1_00016	0.0835 mL	Nitrobenzene-d5	100.025 ug/mL
..8321NB-D5-1_00016	10/29/21	10/29/20	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 %
EXPWORKINGIS_00084	08/22/21	10/28/20	Acetonitrile, Lot 130057	40 mL	83212,4DNTIS_00008	240 uL	2,4-dinitrotoluene-d3	6 ug/mL
					8321HMX13C4IS_00015	240 uL	HMX-13C4	6 ug/mL
					8321RDX13C3IS_00013	140 uL	Hexahydro-1,3,5-trinitro-1,3,5-triazine 13C3	6 ug/mL
					8321RDX13C3IS_00014	100 uL	Hexahydro-1,3,5-trinitro-1,3,5-triazine 13C3	6 ug/mL
					EXPDNBD4IS_00014	40 uL	1,3-Dinitrobenzene-d4	6.468 ug/mL
.83212,4DNTIS_00008	10/27/24	Cambridge Isotope, Lot SDEJ-005			(Purchased Reagent)		2,4-dinitrotoluene-d3	1000 mg/L
.8321HMX13C4IS_00015	08/22/21	Cambridge Isotope, Lot SCGF-021			(Purchased Reagent)		HMX-13C4	1000 mg/L
.8321RDX13C3IS_00013	03/30/22	Cambridge Isotope, Lot SDBK-002			(Purchased Reagent)		Hexahydro-1,3,5-trinitro-1,3,5-triazine 13C3	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.

50 Frontage Road, Andover, MA 01810-5413 USA
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_00008

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

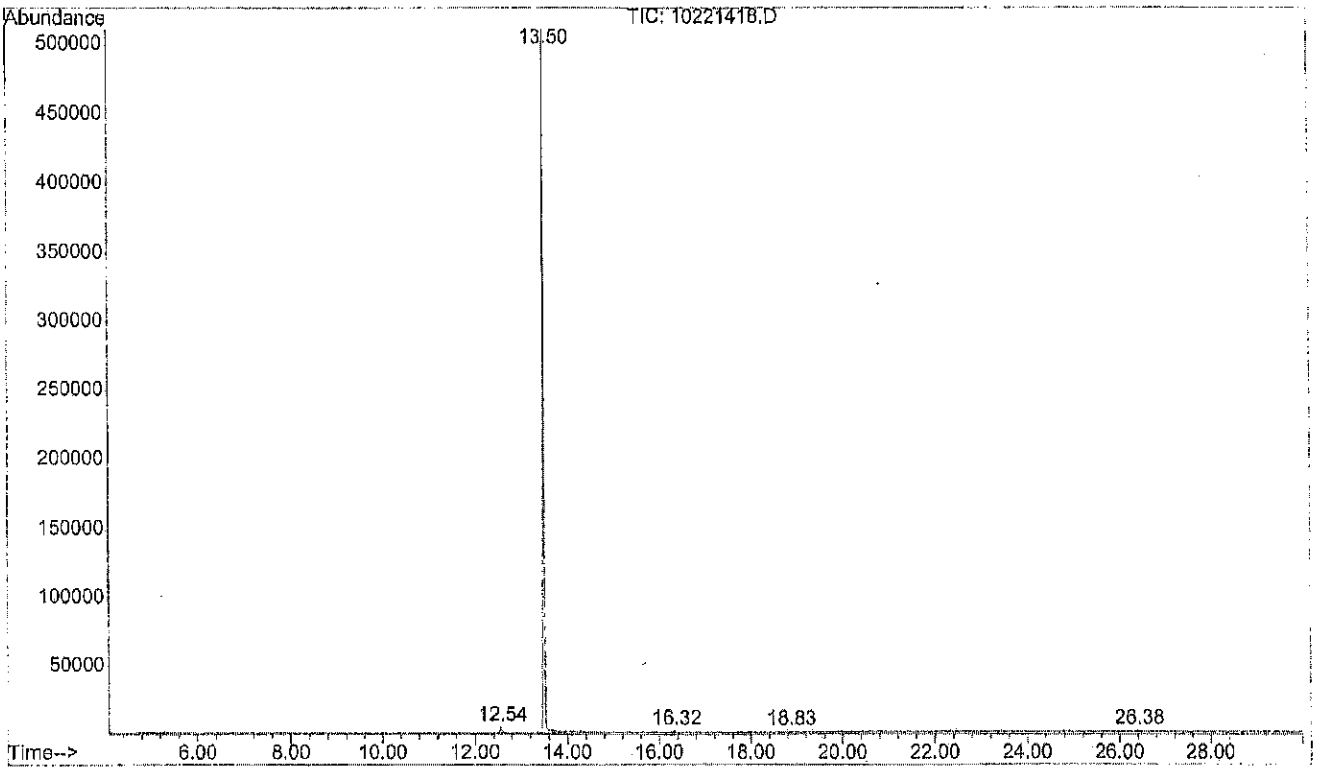
Timothy J. Eckersley, Ph.D., Quality Assurance

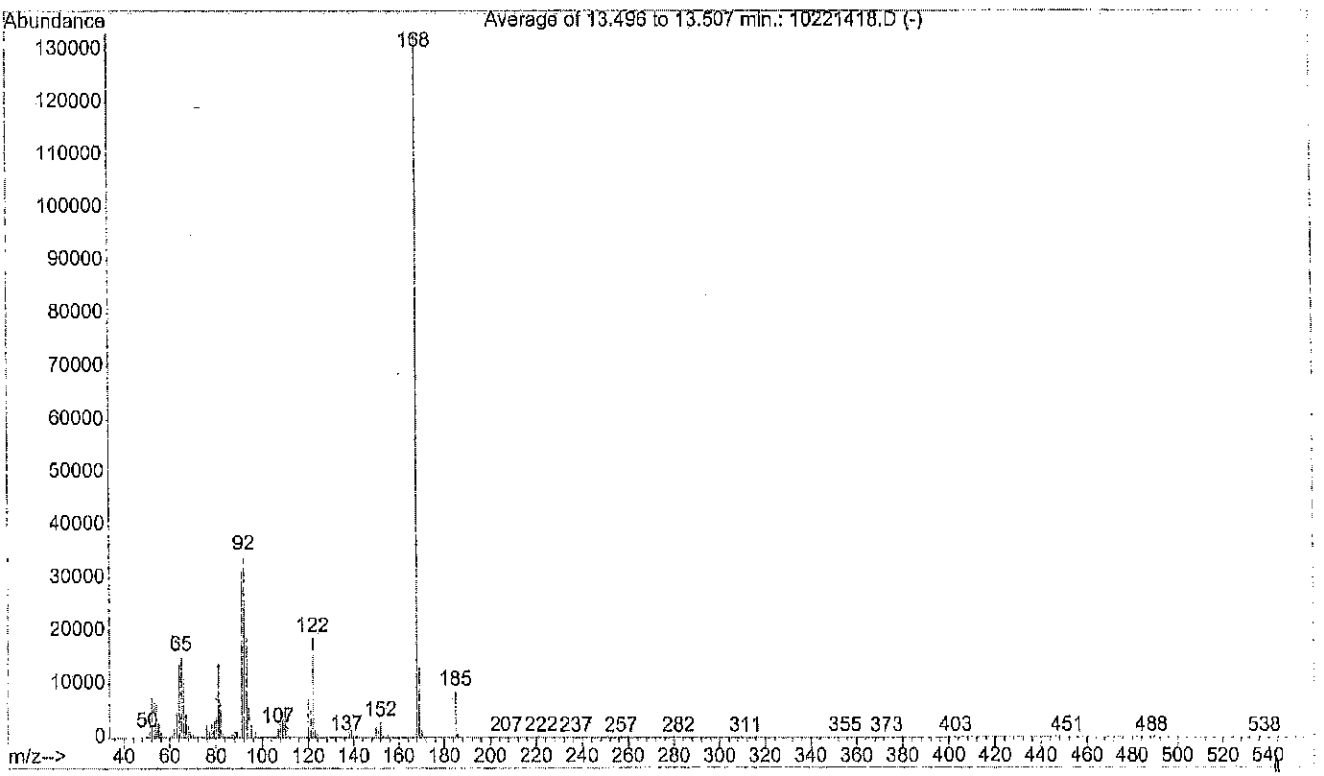
Quality Control Tests and Results

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)

CIL subscribes to the following standards for different products: ISO Guide 34, ISO/IEC 17025, ISO 13485 and cGMP as appropriate.

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_00015

Cambridge Isotope Laboratories, Inc.

Certificate of Analysis

Product Name: (Isotopic Label & Enrichment Specification)	HMX (13C4, 99%; RING-I5N4, 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

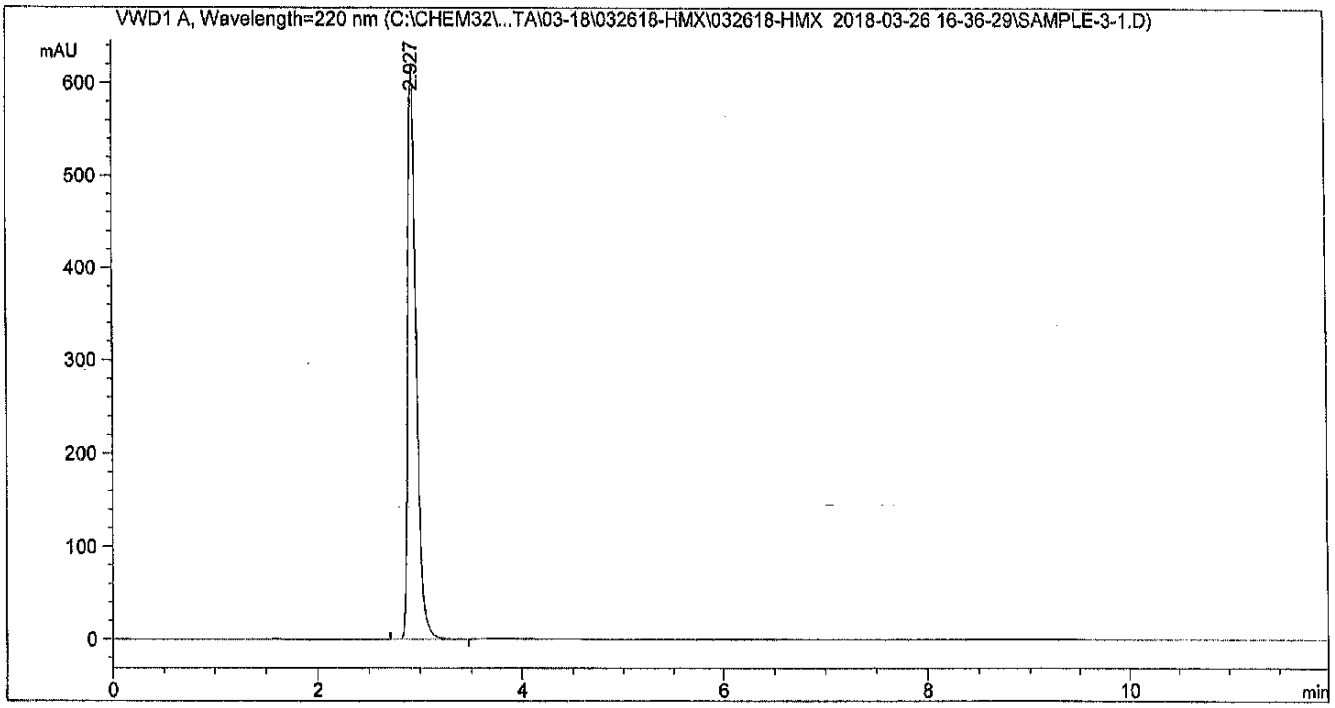
Quality Control Tests and Results (continued)

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

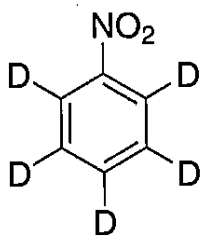
Product Name: NITROBENZENE-D5
(Isotopic Label & Enrichment Specification) (D, 99%)

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%

CIL subscribes to the following standards for different products: ISO Guide 34, ISO/IEC 17025, ISO 13485 and cGMP as appropriate.

Reagent

8321NG_00013

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-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_00013

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

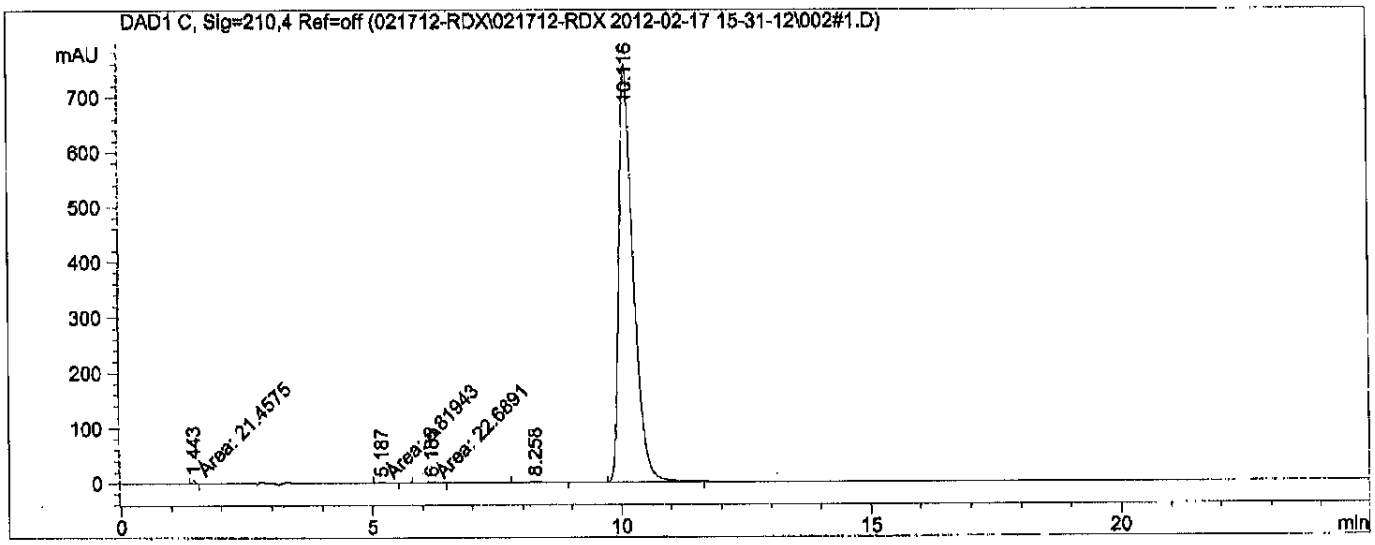
Timothy J. Eckersley, Ph.D., Quality Assurance

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

8321RDX13C3IS_00014

Cambridge Isotope Laboratories, Inc.

Certificate of Analysis

Product Name: (Isotopic Label & Enrichment Specification)	RDX (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

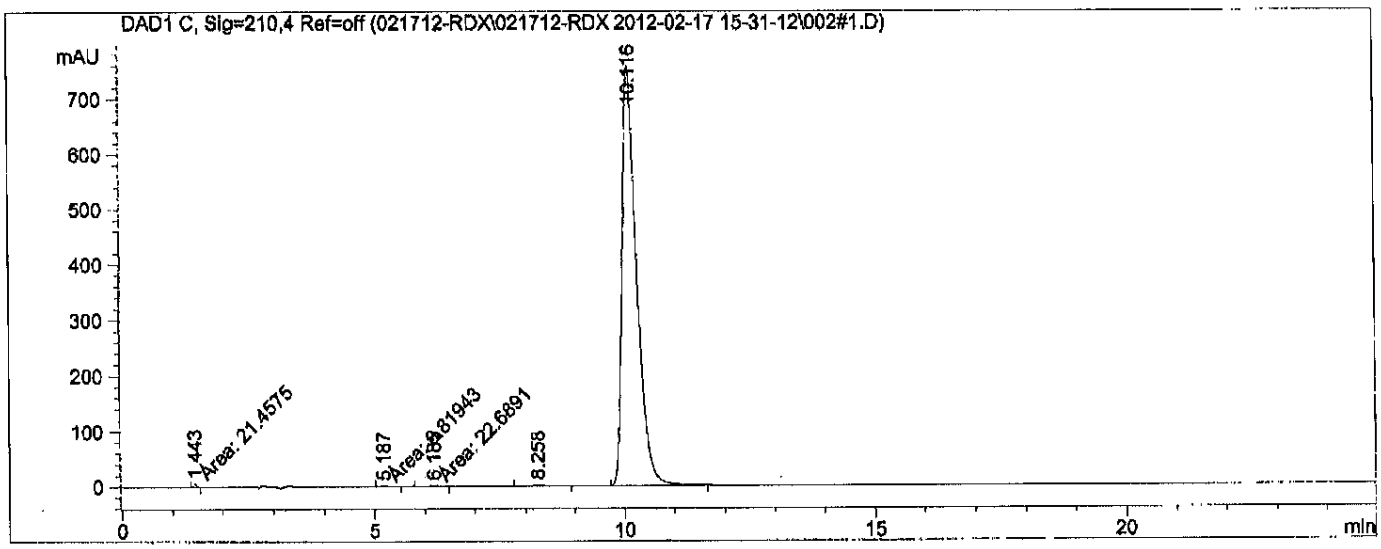
Quality Control Tests and Results

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)

CIL subscribes to the following standards for different products: ISO Guide 34, ISO/IEC 17025, ISO 13485 and cGMP as appropriate.

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 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_00090

CERTIFIED REFERENCE MATERIAL

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Fax: (814)353-1309

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Certificate of Composition

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.:** A0161450

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

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

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Nitroglycerin	5,020.0 µg/mL	+/- 46.6833 µg/mL	Gravimetric
	CAS # 55-63-0 (Lot 200507JLM)		+/- 277.3466 µg/mL	Unstressed
	Purity 99%		+/- 322.6949 µg/mL	Stressed

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

ilac-MRA

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Certificate #3222.02

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

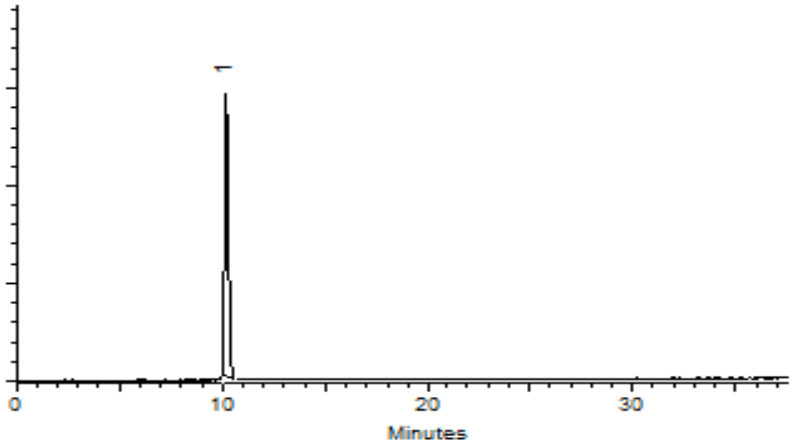
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Matt Fragassi - Mix Technician

Date Mixed: 03-Jun-2020 **Balance:** 1128342314

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 04-Jun-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_NG1000_00003

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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. : 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)

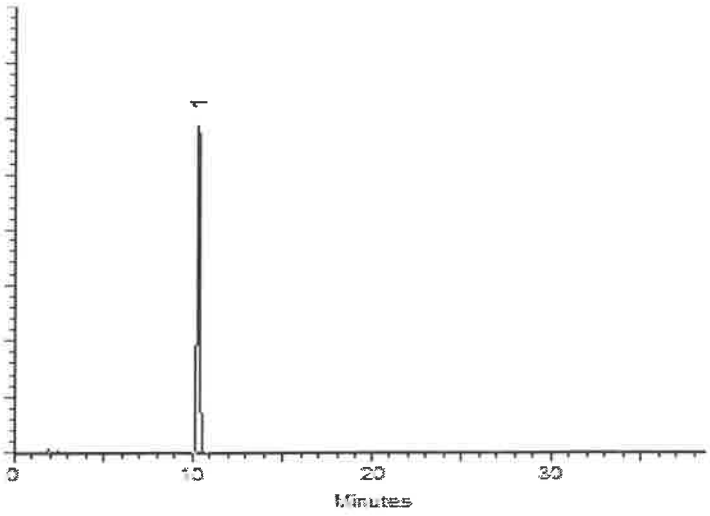
Flow Rate:
1.0 ml/min.

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_00100

CERTIFIED REFERENCE MATERIAL

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Certificate #3222.01

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.:** A0159876

Description : Custom PETN Standard

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

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

Expiration Date : April 30, 2023 **Storage:** 10°C or colder

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

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

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

ilac-MRA

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Testing Laboratory
Certificate #3222.02

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

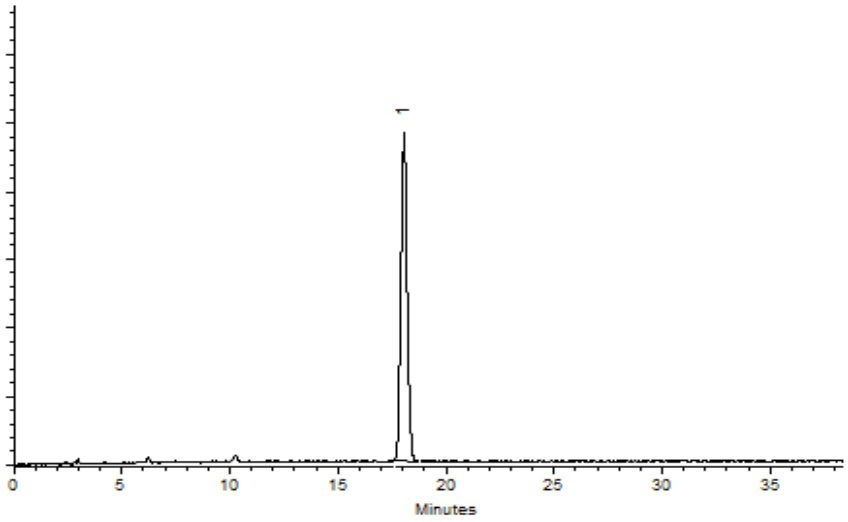
Flow Rate:
1.0 ml/min.

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.

Jessica McClenahan - Operations Technician I

Date Mixed: 13-Apr-2020 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 15-Apr-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)	< 25°C	≥ 25°C up to 7 days

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330_PETN1000_00003

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Certificate #3222.02

Certificate of Analysis

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

Catalog No. : 31600 **Lot No.:** 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)

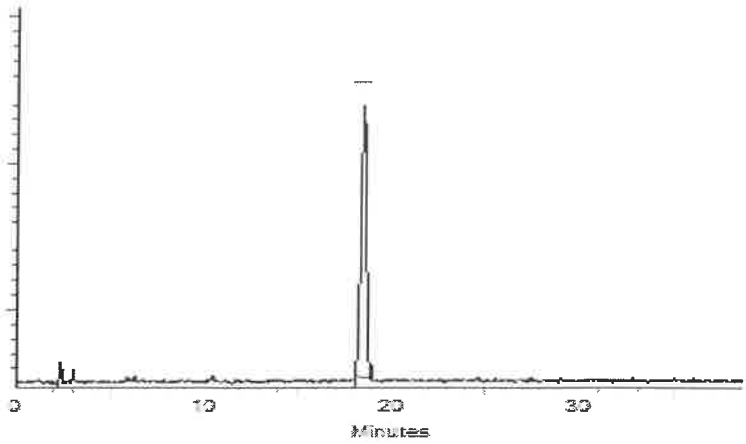
Flow Rate:
1.0 ml/min.

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_00119

4 vials Rec. 10/6/20
8330 Cali mix 1

01128774

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Certificate #3222.01

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Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31450 **Lot No.:** A0163590

Description : 8330 Calibration Mix #1

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	HMX		1,002.5 µg/mL	+/- 5.9548	µg/mL	Gravimetric
	CAS # 2691-41-0	(Lot 191003JLM)		+/- 54.9222	µg/mL	Unstressed
	Purity 98%			+/- 64.0446	µg/mL	Stressed
2	RDX		1,005.0 µg/mL	+/- 5.9694	µg/mL	Gravimetric
	CAS # 121-82-4	(Lot 080228JLM)		+/- 55.0569	µg/mL	Unstressed
	Purity 99%			+/- 64.2018	µg/mL	Stressed
3	1,3,5-Trinitrobenzene		1,005.0 µg/mL	+/- 5.9694	µg/mL	Gravimetric
	CAS # 99-35-4	(Lot A6TDK)		+/- 55.0569	µg/mL	Unstressed
	Purity 99%			+/- 64.2018	µg/mL	Stressed
4	1,3-Dinitrobenzene		1,007.0 µg/mL	+/- 5.9813	µg/mL	Gravimetric
	CAS # 99-65-0	(Lot BCBN4329V)		+/- 55.1665	µg/mL	Unstressed
	Purity 99%			+/- 64.3295	µg/mL	Stressed
5	Nitrobenzene		1,000.0 µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS # 98-95-3	(Lot SHBJ3622)		+/- 54.7830	µg/mL	Unstressed
	Purity 99%			+/- 63.8824	µg/mL	Stressed
6	2,4,6-Trinitrotoluene		1,006.0 µg/mL	+/- 5.9753	µg/mL	Gravimetric
	CAS # 118-96-7	(Lot 5737200)		+/- 55.1117	µg/mL	Unstressed
	Purity 99%			+/- 64.2657	µg/mL	Stressed
7	2,4-Dinitrotoluene		1,009.0 µg/mL	+/- 5.9932	µg/mL	Gravimetric
	CAS # 121-14-2	(Lot MKAA0690V)		+/- 55.2761	µg/mL	Unstressed
	Purity 99%			+/- 64.4573	µg/mL	Stressed

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

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

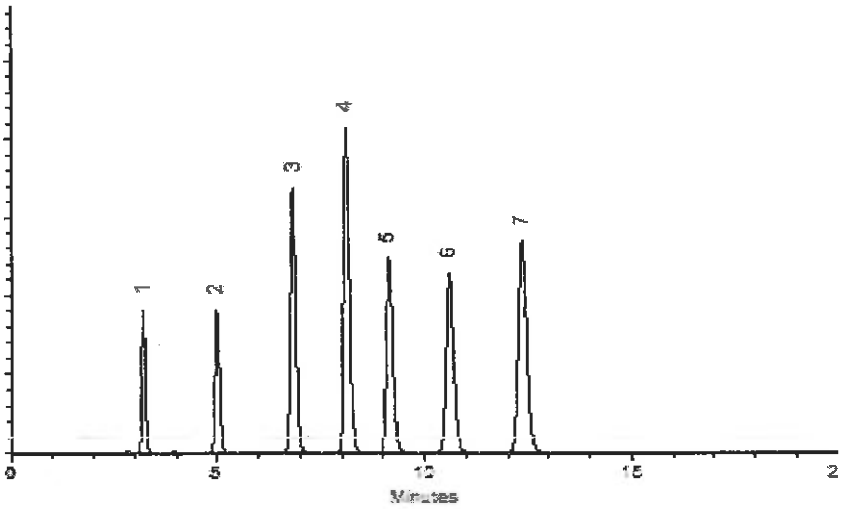
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Dalton Stover - Operations Technician I

Date Mixed: 17-Aug-2020 **Balance:** 1128353505

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 19-Aug-2020

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

Reagent

8330LCSMix1_00122

4 vials Rec. 10/6/20
8330 Cali mix 1

01128777

RESTEK CERTIFIED REFERENCE MATERIAL

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

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Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31450 **Lot No.:** A0163590

Description : 8330 Calibration Mix #1

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	HMX		1,002.5 µg/mL	+/- 5.9548	µg/mL	Gravimetric
	CAS # 2691-41-0	(Lot 191003JLM)		+/- 54.9222	µg/mL	Unstressed
	Purity 98%			+/- 64.0446	µg/mL	Stressed
2	RDX		1,005.0 µg/mL	+/- 5.9694	µg/mL	Gravimetric
	CAS # 121-82-4	(Lot 080228JLM)		+/- 55.0569	µg/mL	Unstressed
	Purity 99%			+/- 64.2018	µg/mL	Stressed
3	1,3,5-Trinitrobenzene		1,005.0 µg/mL	+/- 5.9694	µg/mL	Gravimetric
	CAS # 99-35-4	(Lot A6TDK)		+/- 55.0569	µg/mL	Unstressed
	Purity 99%			+/- 64.2018	µg/mL	Stressed
4	1,3-Dinitrobenzene		1,007.0 µg/mL	+/- 5.9813	µg/mL	Gravimetric
	CAS # 99-65-0	(Lot BCBN4329V)		+/- 55.1665	µg/mL	Unstressed
	Purity 99%			+/- 64.3295	µg/mL	Stressed
5	Nitrobenzene		1,000.0 µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS # 98-95-3	(Lot SHBJ3622)		+/- 54.7830	µg/mL	Unstressed
	Purity 99%			+/- 63.8824	µg/mL	Stressed
6	2,4,6-Trinitrotoluene		1,006.0 µg/mL	+/- 5.9753	µg/mL	Gravimetric
	CAS # 118-96-7	(Lot 5737200)		+/- 55.1117	µg/mL	Unstressed
	Purity 99%			+/- 64.2657	µg/mL	Stressed
7	2,4-Dinitrotoluene		1,009.0 µg/mL	+/- 5.9932	µg/mL	Gravimetric
	CAS # 121-14-2	(Lot MKAA0690V)		+/- 55.2761	µg/mL	Unstressed
	Purity 99%			+/- 64.4573	µg/mL	Stressed

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

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

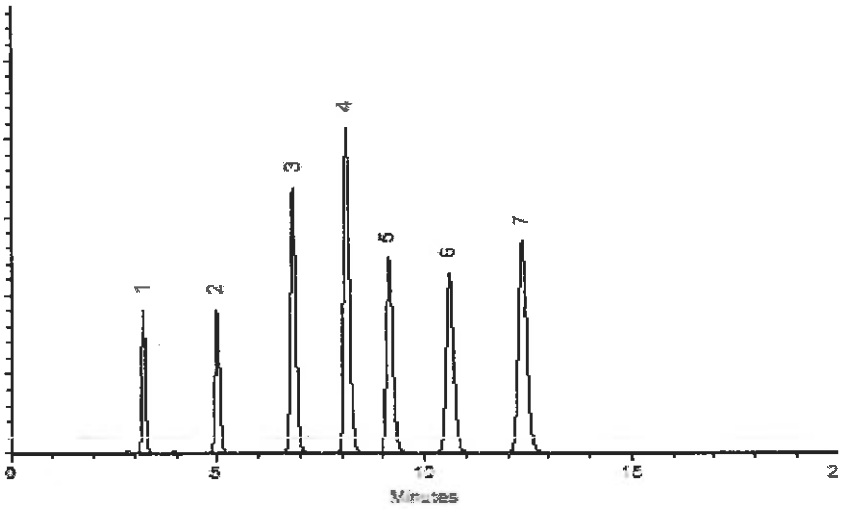
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Dalton Stover - Operations Technician I

Date Mixed: 17-Aug-2020 **Balance:** 1128353505

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 19-Aug-2020

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

Reagent

8330LCSmix2_00021

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

www.restek.com

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ilac-MRA

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31451 **Lot No.:** 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)

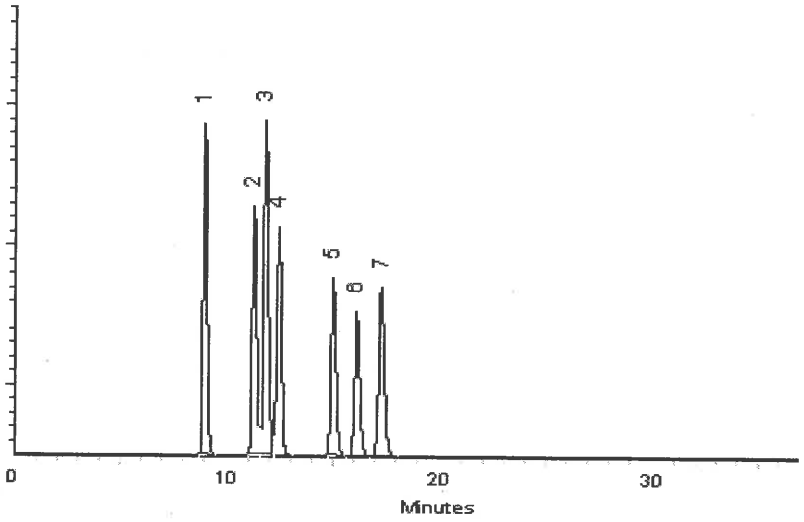
Flow Rate:
1.0 ml/min.

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®
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ilac-MRA

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31451 **Lot No.:** 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)

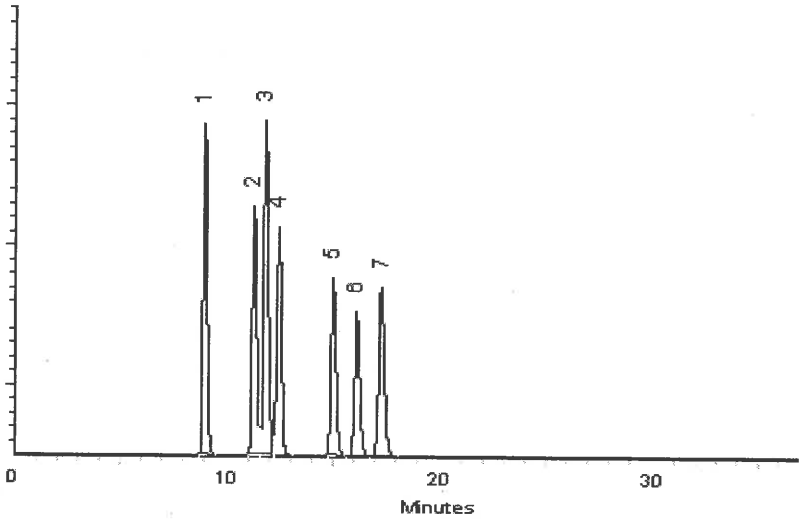
Flow Rate:
1.0 ml/min.

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

8321A_EXP_DOD5

Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

FORM II
LCMS SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): IonPac ID: 2 (mm)

Client Sample ID	Lab Sample ID	NBZ	#
29SB123 (15-16)	280-150636-1	124	
29SB129 (5-6)	280-150636-2	89	
29SB129 (5-6) DL	280-150636-2 DL	71	D
29SB129 (5-6) DL2	280-150636-2 DL2	0 Q	D
29SB145 (15-16)	280-150636-3	118	
29SB148 (15-16)	280-150636-4	111	
29SB137 (15-16)	280-150636-5	91	
29SB137 (15-16) DL	280-150636-5 DL	67 Q	D
29SB146 (15-16)	280-150636-6	115	
29SB155 (11-12)	280-150636-7	99	
29SB135 (15-16)	280-150636-8	136	
29SB136 (15-16)	280-150636-9	119	
29SB156 (12-13)	280-150636-10	117	
DUP18	280-150636-11	116	
	MB 280-542950/1-A	95	
	LCS 280-542950/2-A	109	
29SB146 (15-16) MS	280-150636-6 MS	117	
29SB146 (15-16) MSD	280-150636-6 MSD	108	

	QC LIMITS
NBZ = Nitrobenzene-d5	68-140

Column to be used to flag recovery values

FORM II 8321A

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex421G15013.d

Lab ID: LCS 280-542950/2-A Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	0.400	0.370	93	69-115	
1,3-Dinitrobenzene	0.400	0.377	94	83-122	
2,4,6-Trinitrotoluene	0.400	0.361	90	65-133	
2,4-Dinitrotoluene	0.400	0.396	99	82-119	
2,6-Dinitrotoluene	0.400	0.344	86	86-113	
2-Amino-4,6-dinitrotoluene	0.400	0.378	95	75-130	
o-Nitrotoluene	0.400	0.396	99	72-125	
m-Nitrotoluene	0.400	0.385	96	68-125	
4-Amino-2,6-dinitrotoluene	0.400	0.333	83	77-125	
p-Nitrotoluene	0.400	0.381	95	72-127	
Nitrobenzene	0.400	0.425	106	75-120	
Nitroglycerin	0.400	0.295	74	27-146	
HMX	0.400	0.393	98	65-114	
PETN	0.400	0.300	75	62-143	
RDX	0.400	0.404	101	77-123	
Tetryl	0.400	0.481	120	36-120	

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM III
LCMS MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex421G15024.d

Lab ID: 280-150636-6 MS Client ID: 29SB146 (15-16) MS

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONCENTRATION (mg/Kg)	MS CONCENTRATION (mg/Kg)	MS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	0.384	0.029 U	0.344	90	69-115	
1,3-Dinitrobenzene	0.384	0.015 U	0.362	94	83-122	
2,4,6-Trinitrotoluene	0.384	0.074 J	0.420	90	65-133	
2,4-Dinitrotoluene	0.384	0.029 U	0.353	92	82-119	
2,6-Dinitrotoluene	0.384	0.029 U	0.335	87	86-113	
2-Amino-4,6-dinitrotoluene	0.384	0.029 U	0.337	88	75-130	
o-Nitrotoluene	0.384	0.015 U	0.381	99	72-125	
m-Nitrotoluene	0.384	0.029 U	0.365	95	68-125	
4-Amino-2,6-dinitrotoluene	0.384	0.015 U	0.350	91	77-125	
p-Nitrotoluene	0.384	0.029 U	0.396	103	72-127	
Nitrobenzene	0.384	0.029 U	0.439	114	75-120	
Nitroglycerin	0.384	0.029 U	0.320	83	27-146	
HMX	0.384	0.029 U	0.381	99	65-114	
PETN	0.384	0.015 U	0.297	77	62-143	
RDX	0.384	0.015 U	0.328	85	77-123	
Tetryl	0.384	0.015 U	0.478	124	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 TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex421G15025.d

Lab ID: 280-150636-6 MSD Client ID: 29SB146 (15-16) MSD

COMPOUND	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,3,5-Trinitrobenzene	0.388	0.348	90	1	20	69-115	
1,3-Dinitrobenzene	0.388	0.394	102	9	20	83-122	
2,4,6-Trinitrotoluene	0.388	0.400	84	5	20	65-133	
2,4-Dinitrotoluene	0.388	0.362	93	3	20	82-119	
2,6-Dinitrotoluene	0.388	0.342	88	2	20	86-113	
2-Amino-4,6-dinitrotoluene	0.388	0.349	90	3	20	75-130	
o-Nitrotoluene	0.388	0.386	99	1	20	72-125	
m-Nitrotoluene	0.388	0.405	104	10	20	68-125	
4-Amino-2,6-dinitrotoluene	0.388	0.327	84	7	20	77-125	
p-Nitrotoluene	0.388	0.358	92	10	20	72-127	
Nitrobenzene	0.388	0.421	108	4	20	75-120	
Nitroglycerin	0.388	0.301	78	6	20	27-146	
HMX	0.388	0.365	94	4	20	65-114	
PETN	0.388	0.281	72	6	20	62-143	
RDX	0.388	0.343	88	5	20	77-123	
Tetryl	0.388	0.468	121	2	20	36-120	J1

Column to be used to flag recovery and RPD values

FORM III 8321A

FORM IV
LCMS METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Lab File ID: ex421G15012.d Lab Sample ID: MB 280-542950/1-A

Matrix: Solid Date Extracted: 07/12/2021 16:07

Instrument ID: LC_LCMS4 Date Analyzed: 07/15/2021 11:47

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-542950/2-A	ex421G15013.d	07/15/2021 11:59
29SB123 (15-16)	280-150636-1	ex421G15014.d	07/15/2021 12:11
29SB129 (5-6)	280-150636-2	ex421G15015.d	07/15/2021 12:23
29SB129 (5-6) DL	280-150636-2 DL	ex421G15016.d	07/15/2021 12:35
29SB129 (5-6) DL2	280-150636-2 DL2	ex421G15017.d	07/15/2021 12:47
29SB145 (15-16)	280-150636-3	ex421G15018.d	07/15/2021 12:59
29SB148 (15-16)	280-150636-4	ex421G15019.d	07/15/2021 13:12
29SB137 (15-16)	280-150636-5	ex421G15020.d	07/15/2021 13:24
29SB137 (15-16) DL	280-150636-5 DL	ex421G15021.d	07/15/2021 13:36
29SB146 (15-16)	280-150636-6	ex421G15023.d	07/15/2021 14:00
29SB146 (15-16) MS	280-150636-6 MS	ex421G15024.d	07/15/2021 14:12
29SB146 (15-16) MSD	280-150636-6 MSD	ex421G15025.d	07/15/2021 14:25
29SB155 (11-12)	280-150636-7	ex421G15026.d	07/15/2021 14:37
29SB135 (15-16)	280-150636-8	ex421G15027.d	07/15/2021 14:49
29SB136 (15-16)	280-150636-9	ex421G15028.d	07/15/2021 15:01
29SB156 (12-13)	280-150636-10	ex421G15029.d	07/15/2021 15:13
DUP18	280-150636-11	ex421G15030.d	07/15/2021 15:25

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Instrument ID: LC_LCMS4 Calibration Start Date: 07/15/2021 09:58

GC Column: IonPac ID: 2(mm) Calibration End Date: 07/15/2021 11:10

Calibration ID: 55391

		HXC4		HHTT		DNB4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		148854	2.06	809013	3.01	1489125	4.91
UPPER LIMIT		297708	2.56	1618026	3.51	2978250	5.41
LOWER LIMIT		74427	1.56	404507	2.51	744563	4.41
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICB 280-543297/11		155410	2.07	713142	3.03	1519399	4.92
ICV 280-543297/12		110908	2.07	699220	3.01	1521394	4.92
MB 280-542950/1-A		189463	2.05	789293	3.01	1523904	4.92
LCS 280-542950/2-A		146465	2.05	892545	2.99	1414584	4.87
280-150636-1	29SB123 (15-16)	187393	2.05	804310	3.01	1346830	4.87
280-150636-2	29SB129 (5-6)	113841	2.05	422318	2.99	1285461	4.92
280-150636-2 DL	29SB129 (5-6) DL	146348	2.05	683790	2.99	1324127	4.87
280-150636-2 DL2	29SB129 (5-6) DL2	145396	2.05	713009	3.01	1389654	4.92
280-150636-3	29SB145 (15-16)	156532	2.05	680592	3.01	1381613	4.92
280-150636-4	29SB148 (15-16)	191036	2.05	705778	2.99	1373256	4.87
280-150636-5	29SB137 (15-16)	165280	2.05	715561	2.99	1398587	4.92
280-150636-5 DL	29SB137 (15-16) DL	140638	2.05	694202	3.03	1241982	4.87
CCV 280-543298/23		129278	2.07	670743	3.04	1550341	4.92
280-150636-6	29SB146 (15-16)	153233	2.05	756192	3.01	1322219	4.92
280-150636-6 MS	29SB146 (15-16) MS	145368	2.05	826674	3.01	1439674	4.92
280-150636-6 MSD	29SB146 (15-16) MSD	153705	2.05	925904	2.99	1465189	4.87
280-150636-7	29SB155 (11-12)	158330	2.05	793157	3.01	1489404	4.87
280-150636-8	29SB135 (15-16)	160211	2.07	780851	2.99	1239186	4.87
280-150636-9	29SB136 (15-16)	171006	2.05	763387	2.98	1335996	4.87
280-150636-10	29SB156 (12-13)	170568	2.07	807831	3.01	1245870	4.92
280-150636-11	DUP18	176821	2.05	790871	2.99	1388444	4.92
CCV 280-543298/32		122701	2.05	834037	3.01	1527515	4.92

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 TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Instrument ID: LC_LCMS4 Calibration Start Date: 07/15/2021 09:58

GC Column: IonPac ID: 2(mm) Calibration End Date: 07/15/2021 11:10

Calibration ID: 55391

		DNT3					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		3758607	7.04				
UPPER LIMIT		7517214	7.54				
LOWER LIMIT		1879304	6.54				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICB 280-543297/11		3878045	7.07				
ICV 280-543297/12		4111148	7.07				
MB 280-542950/1-A		3296178	7.04				
LCS 280-542950/2-A		3510913	7.04				
280-150636-1	29SB123 (15-16)	3467380	7.04				
280-150636-2	29SB129 (5-6)	1852230	7.02				
280-150636-2 DL	29SB129 (5-6) DL	3316944	7.02				
280-150636-2 DL2	29SB129 (5-6) DL2	3231363	7.02				
280-150636-3	29SB145 (15-16)	3142176	7.04				
280-150636-4	29SB148 (15-16)	3558258	7.02				
280-150636-5	29SB137 (15-16)	3361104	7.07				
280-150636-5 DL	29SB137 (15-16) DL	3399796	7.04				
CCV 280-543298/23		3792631	7.07				
280-150636-6	29SB146 (15-16)	3477052	7.02				
280-150636-6 MS	29SB146 (15-16) MS	3491610	7.04				
280-150636-6 MSD	29SB146 (15-16) MSD	3478695	7.00				
280-150636-7	29SB155 (11-12)	3256941	7.02				
280-150636-8	29SB135 (15-16)	3023506	7.04				
280-150636-9	29SB136 (15-16)	3393823	7.04				
280-150636-10	29SB156 (12-13)	3303879	7.09				
280-150636-11	DUP18	3311866	7.07				
CCV 280-543298/32		3809686	7.07				

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 TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Client Sample ID: 29SB123 (15-16) Lab Sample ID: 280-150636-1

Matrix: Solid Lab File ID: ex421G15014.d

Analysis Method: 8321A Date Collected: 03/02/2021 10:55

Extraction Method: 8330B Date Extracted: 07/12/2021 16:07

Sample wt/vol: 10.54(g) Date Analyzed: 07/15/2021 12:11

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

Injection Volume: 40(uL) GC Column: IonPac ID: 2(mm)

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

Analysis Batch No.: 543298 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.028	U H H3	0.095	0.028	0.012
99-65-0	1,3-Dinitrobenzene	0.015	U H H3	0.095	0.015	0.0068
118-96-7	2,4,6-Trinitrotoluene	0.0066	J H H3	0.095	0.014	0.0048
121-14-2	2,4-Dinitrotoluene	0.028	U M H H3	0.095	0.028	0.0078
606-20-2	2,6-Dinitrotoluene	0.047	J M H H3	0.095	0.028	0.019
35572-78-2	2-Amino-4,6-dinitrotoluene	0.028	U H H3	0.095	0.028	0.011
88-72-2	o-Nitrotoluene	0.067	J M H H3	0.095	0.014	0.0054
99-08-1	m-Nitrotoluene	0.015	J M H H3	0.095	0.028	0.012
19406-51-0	4-Amino-2,6-dinitrotoluene	0.014	U H H3	0.095	0.014	0.0048
99-99-0	p-Nitrotoluene	0.10	M H H3	0.095	0.028	0.010
98-95-3	Nitrobenzene	0.028	U M H H3	0.095	0.028	0.010
55-63-0	Nitroglycerin	0.028	U H H3	0.095	0.028	0.010
2691-41-0	HMX	0.028	U H H3	0.095	0.028	0.014
78-11-5	PETN	0.014	U H H3	0.095	0.014	0.0049
121-82-4	RDX	0.014	U H H3	0.095	0.014	0.0041
479-45-8	Tetryl	0.014	U H H3	0.095	0.014	0.0072

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	124		68-140

Report Date: 16-Jul-2021 08:16:47

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Chrom Revision: 2.3 13-May-2021 07:57:40

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15014.d
Lims ID: 280-150636-A-1-A
Client ID: 29SB123 (15-16)
Sample Type: Client
Inject. Date: 15-Jul-2021 12:11:15 ALS Bottle#: 12 Worklist Smp#: 15
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 280-150636-A-1-A
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 16-Jul-2021 08:16:45 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1655

First Level Reviewer: meyera Date: 15-Jul-2021 14:57:04
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
360.9	2.052	2.052	0.0		187393	120.0	232	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	3.011	2.993	0.018		804310	120.0	728	
* 7 1,3-Dinitrobenzene-d4								
172.1	4.872	4.871	0.001		1346830	129.4	62.0	
10 2,4,6-Trinitrotoluene								
227.2	5.336	5.353	0.037	0.758	4594	1.74	7.6	
$ 11 Nitrobenzene-d5								
128.1	5.373	5.428	0.0	0.763	1149397	124.1	522	
15 2,3-Dinitrotoluene								
182.2	6.309	6.324	-0.015	0.896	24713	NC	13.5	
17 2,6-Dinitrotoluene								M
182.2	6.690	6.760	0.024	0.950	621123	12.5	251	M
* 18 2,4-dinitrotoluene-d3								
185.1	7.043	6.996	0.047		3467380	120.0	290	
19 2,4-Dinitrotoluene								M
182.2	7.067	7.115	0.0	1.003	57595	1.73	33.5	M
22 o-Nitrotoluene								M
137.2	8.024	8.030	0.048	1.139	228137	17.7	118	M
23 p-Nitrotoluene								M
137.2	8.566	8.552	0.071	1.216	308516	26.2	142	M
24 m-Nitrotoluene								M
137.2	9.155	9.193	0.023	1.300	17330	3.89	8.2	M

Report Date: 16-Jul-2021 08:16:47

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Chrom Revision: 2.3 13-May-2021 07:57:40

Reagents:

EXPWORKINGIS_00084	Amount Added:	20.00	Units: uL	Run Reagent

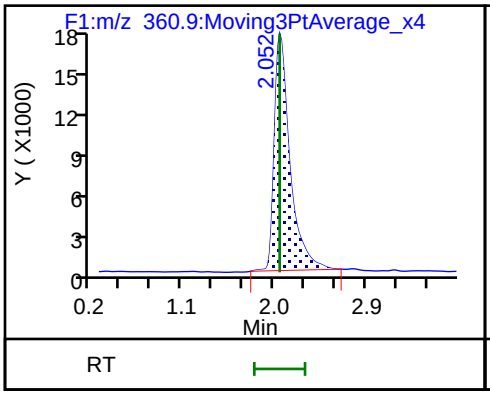
Report Date: 16-Jul-2021 08:16:47 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

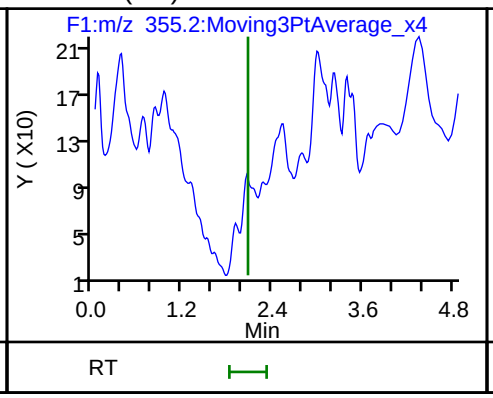
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Injection Date:	15-Jul-2021 12:11:15	Instrument ID:	LC_LCMS4
Lims ID:	280-150636-A-1-A	Lab Sample ID:	280-150636-1
Client ID:	29SB123 (15-16)		
Operator ID:	acm	ALS Bottle#:	12 Worklist Smp#: 15
Injection Vol:	40.0 ul	Dil. Factor:	1.0000
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl

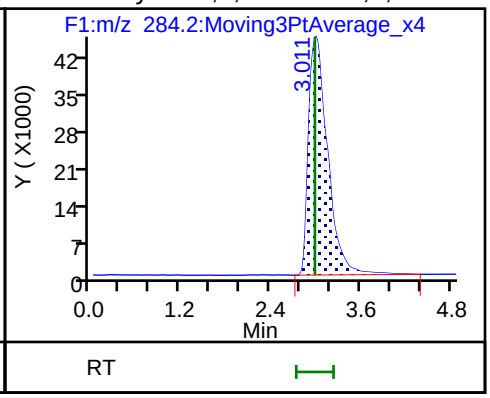
* 1 HMX-13C4



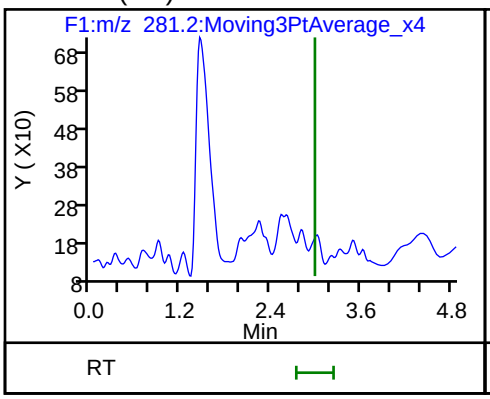
2 HMX (ND)



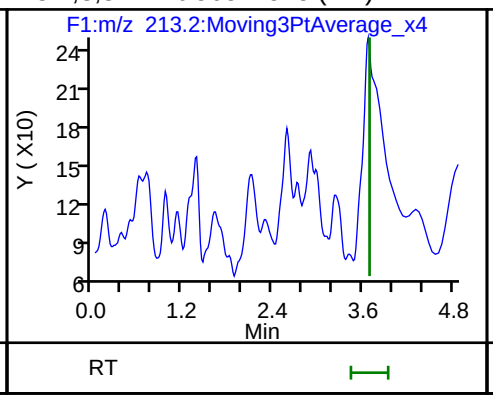
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



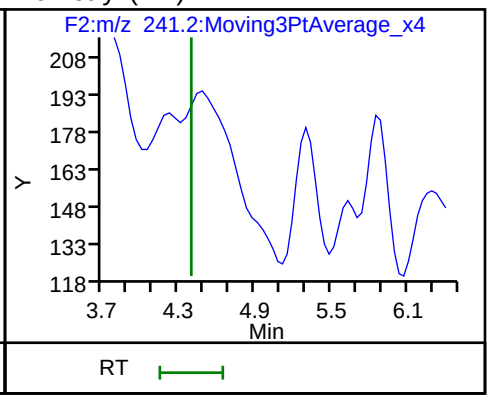
4 RDX (ND)



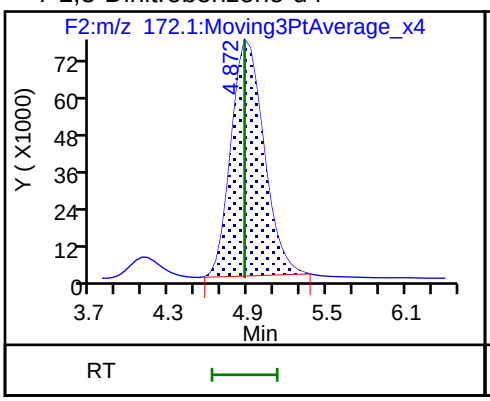
5 1,3,5-Trinitrobenzene (ND)



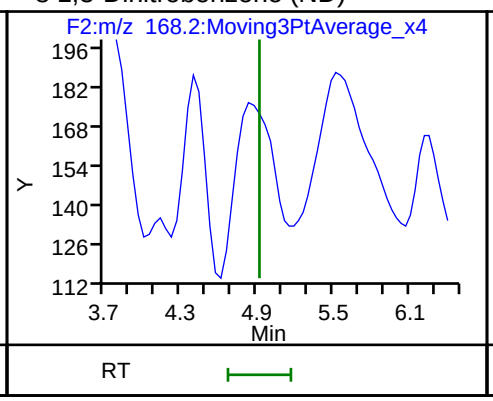
6 Tetryl (ND)



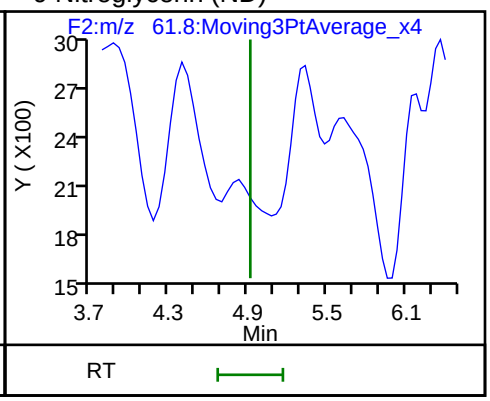
* 7 1,3-Dinitrobenzene-d4



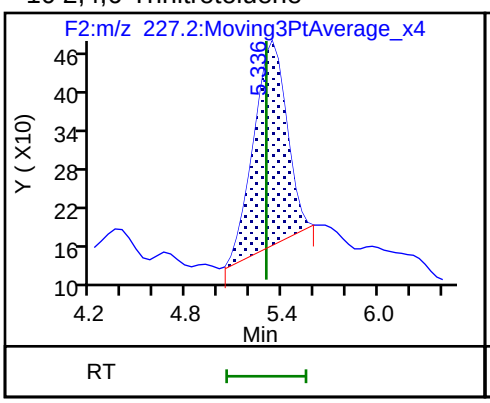
8 1,3-Dinitrobenzene (ND)



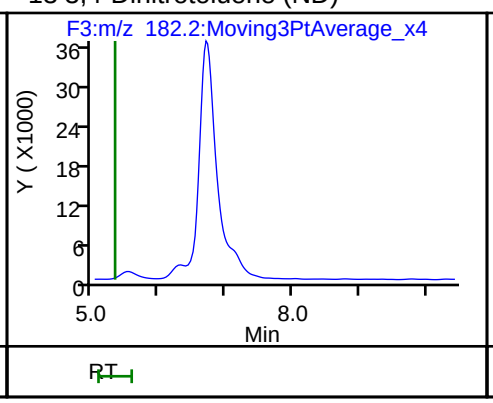
9 Nitroglycerin (ND)



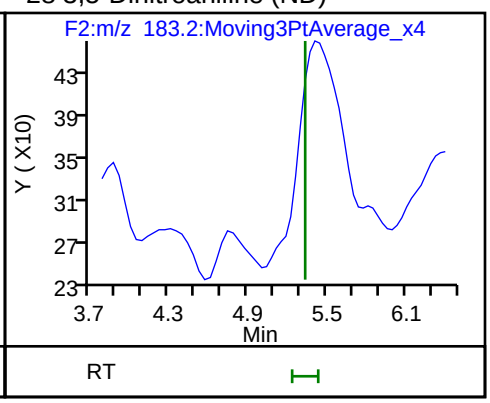
10 2,4,6-Trinitrotoluene



13 3,4-Dinitrotoluene (ND)



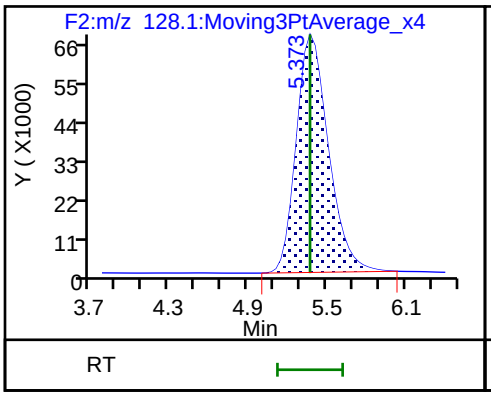
28 3,5-Dinitroaniline (ND)



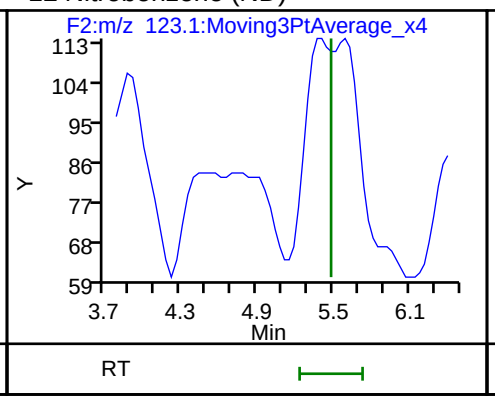
Report Date: 16-Jul-2021 08:16:47 Chrom Revision: 2.3 13-May-2021 07:57:40

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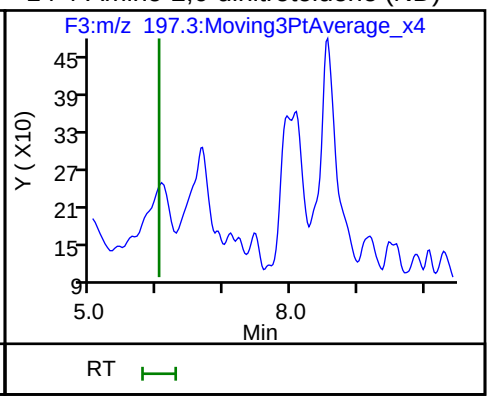
$ 11 Nitrobenzene-d5



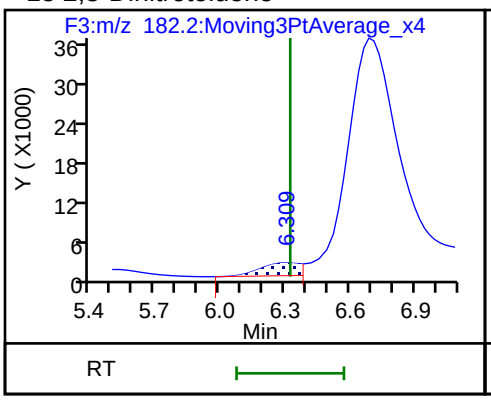
12 Nitrobenzene (ND)



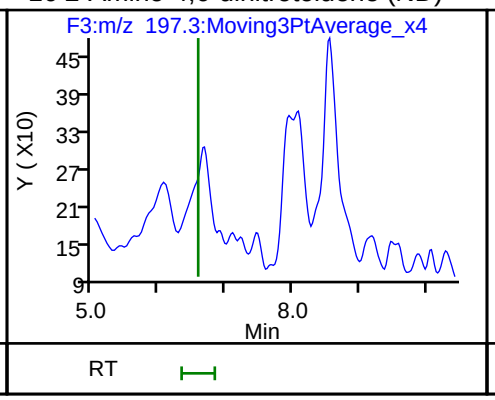
14 4-Amino-2,6-dinitrotoluene (ND)



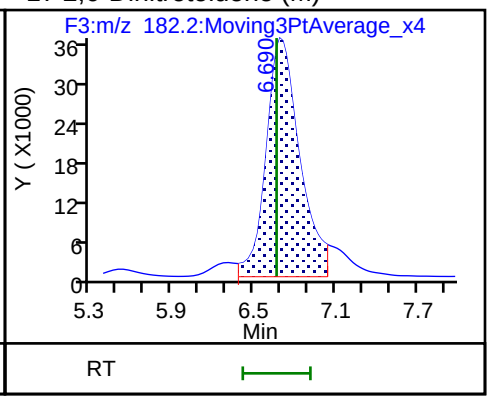
15 2,3-Dinitrotoluene



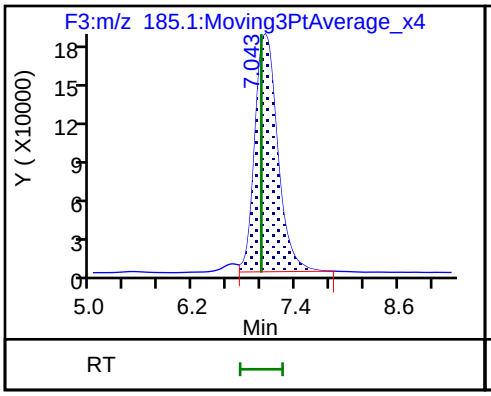
16 2-Amino-4,6-dinitrotoluene (ND)



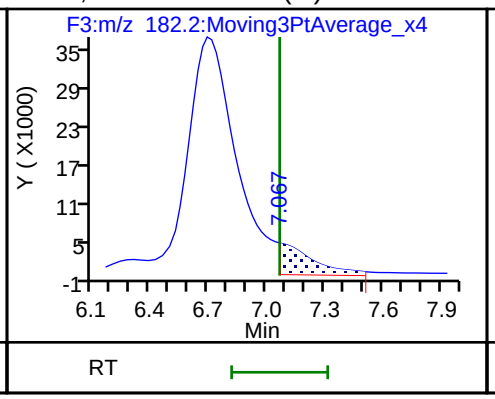
17 2,6-Dinitrotoluene (M)



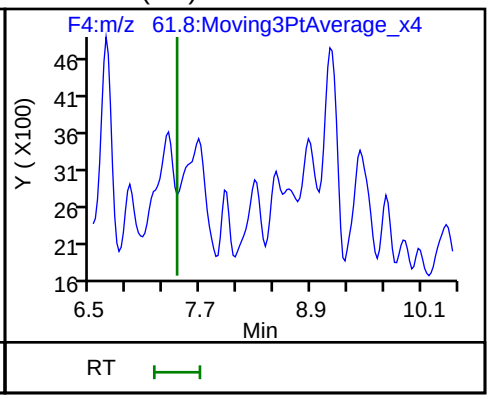
* 18 2,4-dinitrotoluene-d3



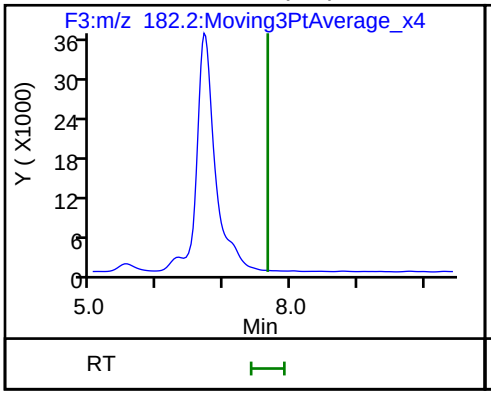
19 2,4-Dinitrotoluene (M)



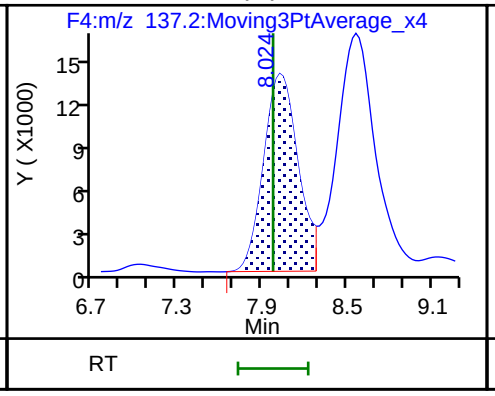
20 PETN (ND)



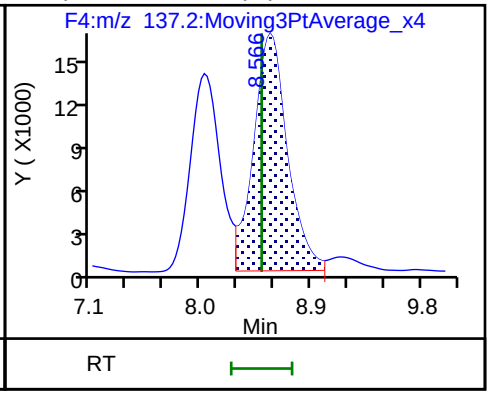
21 3,5-Dinitrotoluene (ND)



22 o-Nitrotoluene (M)



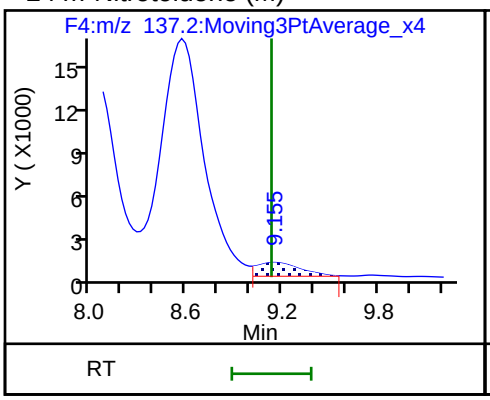
23 p-Nitrotoluene (M)



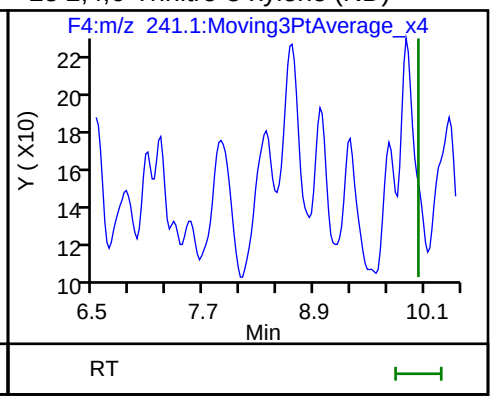
Report Date: 16-Jul-2021 08:16:47 Chrom Revision: 2.3 13-May-2021 07:57:40

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15014.d

24 m-Nitrotoluene (M)



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



Report Date: 16-Jul-2021 08:16:47 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15014.d
Lims ID: 280-150636-A-1-A
Client ID: 29SB123 (15-16)
Sample Type: Client
Inject. Date: 15-Jul-2021 12:11:15 ALS Bottle#: 12 Worklist Smp#: 15
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 280-150636-A-1-A
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 16-Jul-2021 08:16:45 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1655

First Level Reviewer: meyera Date: 15-Jul-2021 14:57:04

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	124.1	123.70

Report Date: 16-Jul-2021 08:16:47

Chrom Revision: 2.3 13-May-2021 07:57:40

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15014.d				
Injection Date:	15-Jul-2021 12:11:15	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-1-A	Lab Sample ID:	280-150636-1		
Client ID:	29SB123 (15-16)				
Operator ID:	acm	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		
Column:		Detector	F3:SIR		

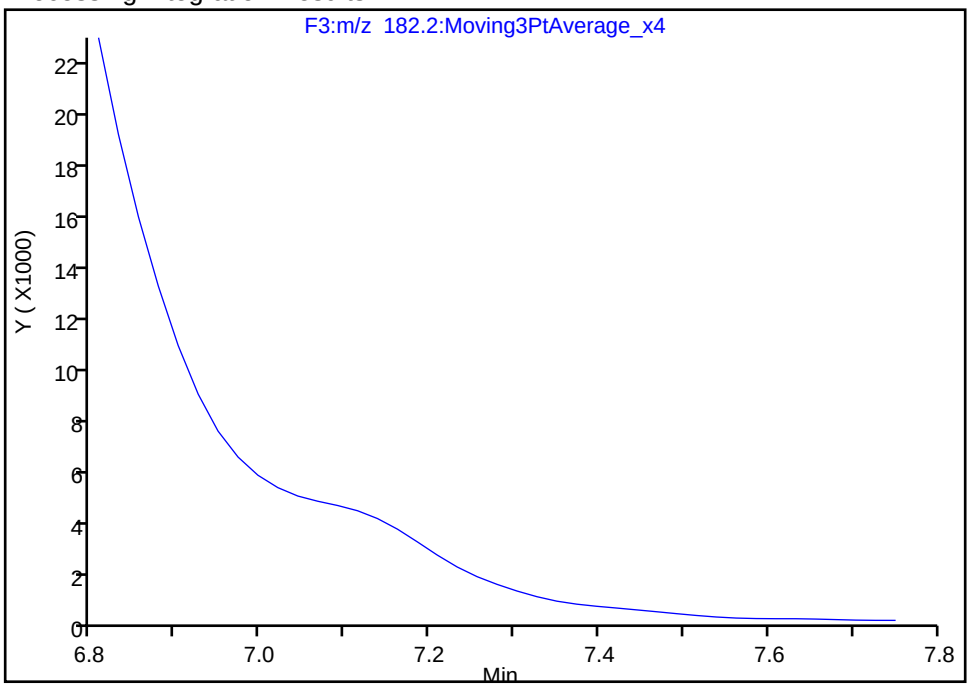
19 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

Not Detected

Expected RT: 7.07

Processing Integration Results



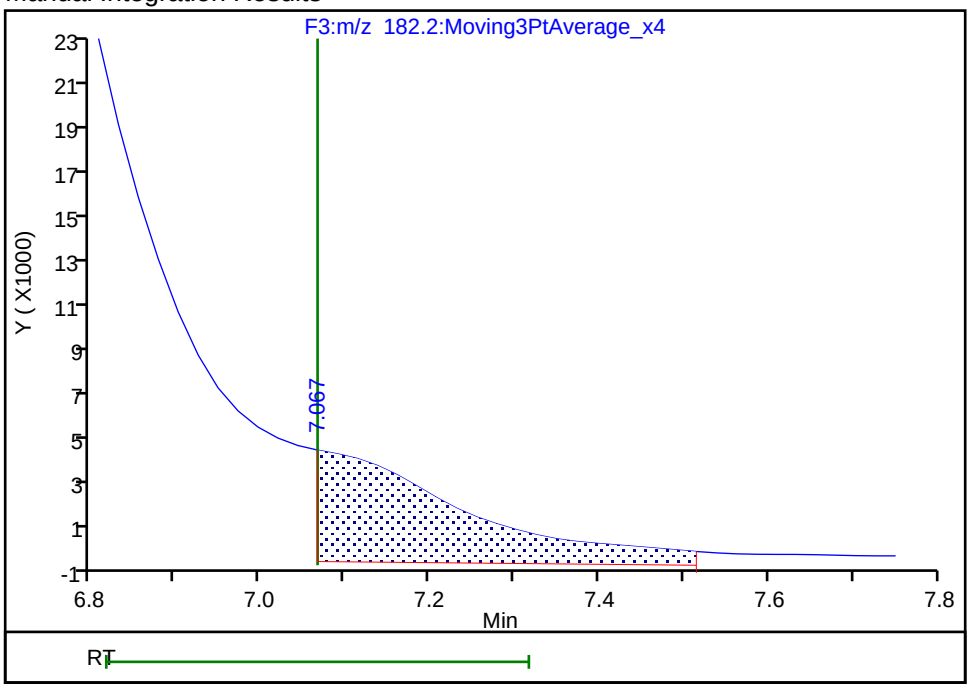
Manual Integration Results

RT: 7.07

Area: 57595

Amount: 1.728702

Amount Units: ug/l



Reviewer: meyera, 15-Jul-2021 14:56:39

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 16-Jul-2021 08:16:47 Chrom Revision: 2.3 13-May-2021 07:57:40

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

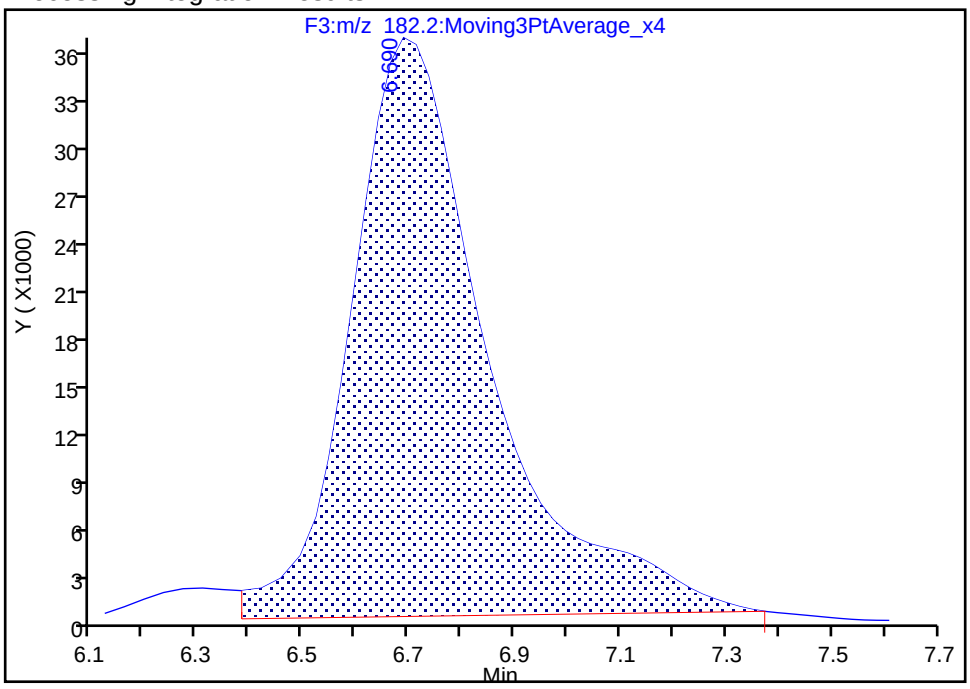
Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15014.d				
Injection Date:	15-Jul-2021 12:11:15	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-1-A	Lab Sample ID:	280-150636-1		
Client ID:	29SB123 (15-16)				
Operator ID:	acm	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		
Column:		Detector	F3:SIR		

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

Signal: 1

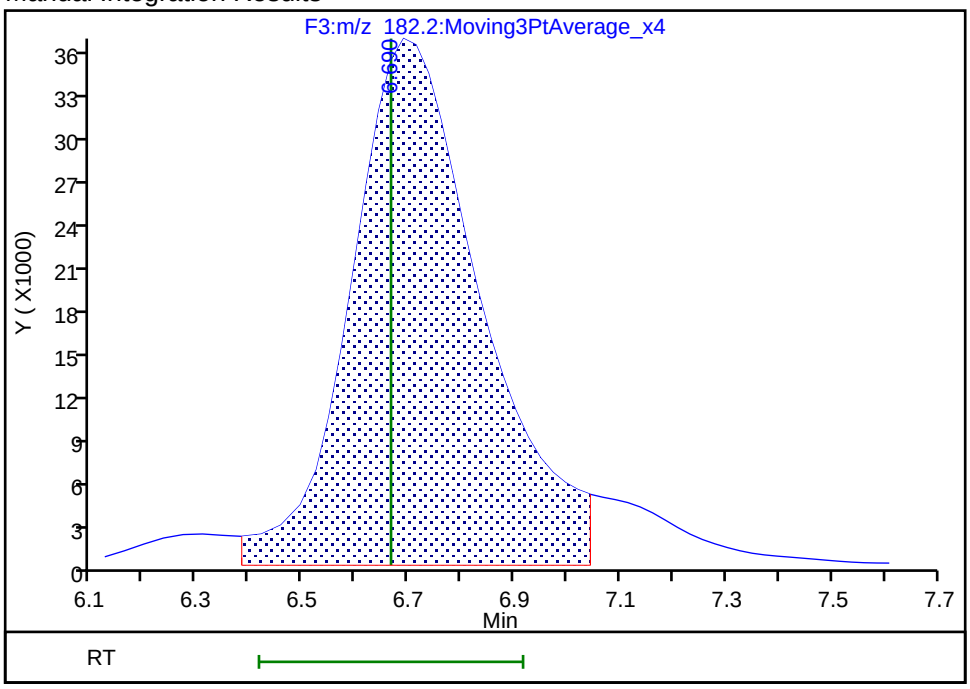
Processing Integration Results

RT: 6.69
Area: 646610
Amount: 12.951383
Amount Units: ug/l



Manual Integration Results

RT: 6.69
Area: 621123
Amount: 12.497201
Amount Units: ug/l



Reviewer: meyera, 15-Jul-2021 14:56:33

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 16-Jul-2021 08:16:47

Chrom Revision: 2.3 13-May-2021 07:57:40

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

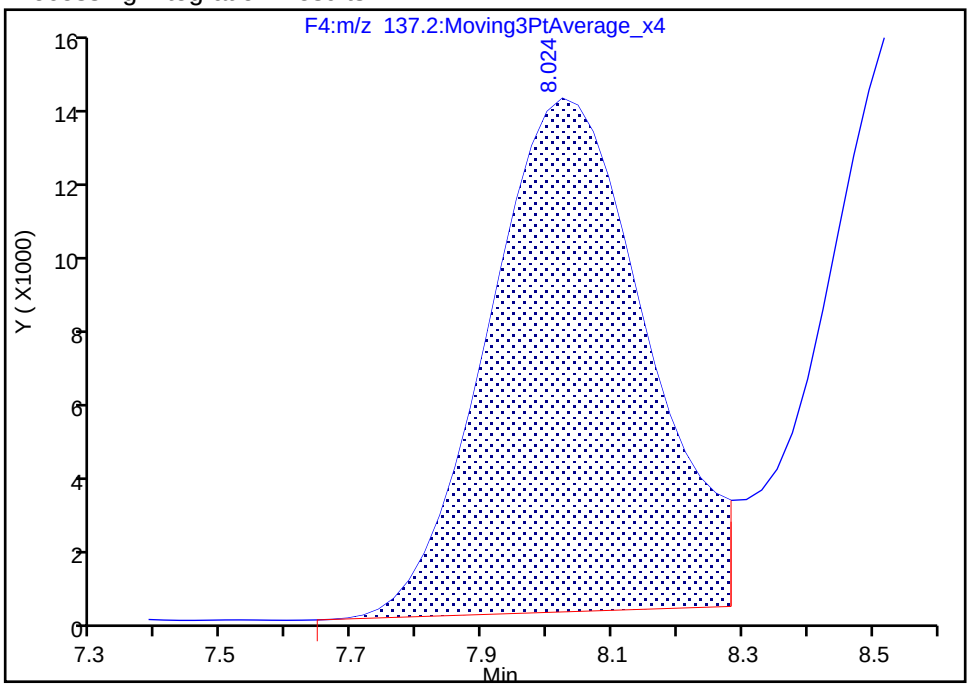
Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15014.d		
Injection Date:	15-Jul-2021 12:11:15	Instrument ID:	LC_LCMS4
Lims ID:	280-150636-A-1-A	Lab Sample ID:	280-150636-1
Client ID:	29SB123 (15-16)		
Operator ID:	acm	ALS Bottle#:	12 Worklist Smp#: 15
Injection Vol:	40.0 ul	Dil. Factor:	1.0000
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl
Column:		Detector	F4:SIR

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

Signal: 1

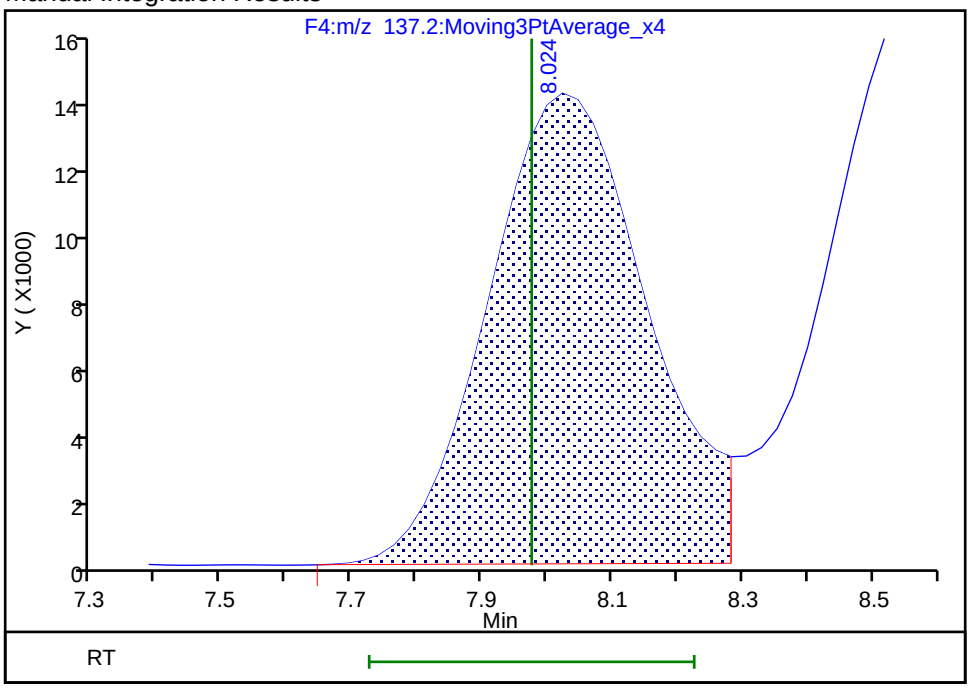
Processing Integration Results

RT: 8.02
Area: 222427
Amount: 17.325908
Amount Units: ug/l



Manual Integration Results

RT: 8.02
Area: 228137
Amount: 17.742230
Amount Units: ug/l



Reviewer: meyera, 15-Jul-2021 14:56:47

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 16-Jul-2021 08:16:47 Chrom Revision: 2.3 13-May-2021 07:57:40

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15014.d				
Injection Date:	15-Jul-2021 12:11:15	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-1-A	Lab Sample ID:	280-150636-1		
Client ID:	29SB123 (15-16)				
Operator ID:	acm	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		
Column:		Detector	F4:SIR		

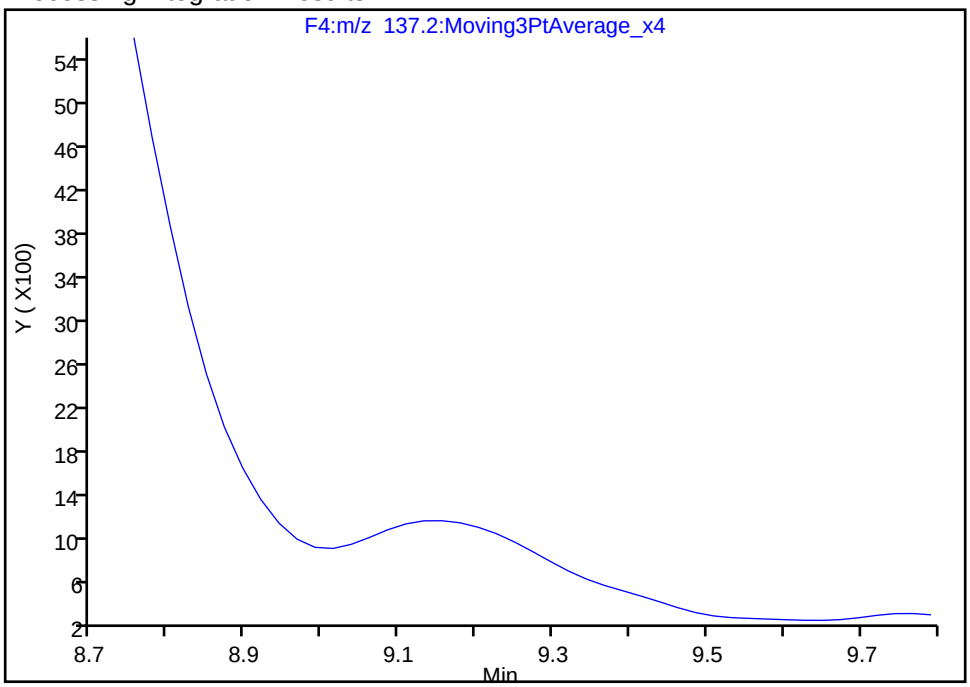
24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

Not Detected

Expected RT: 9.13

Processing Integration Results



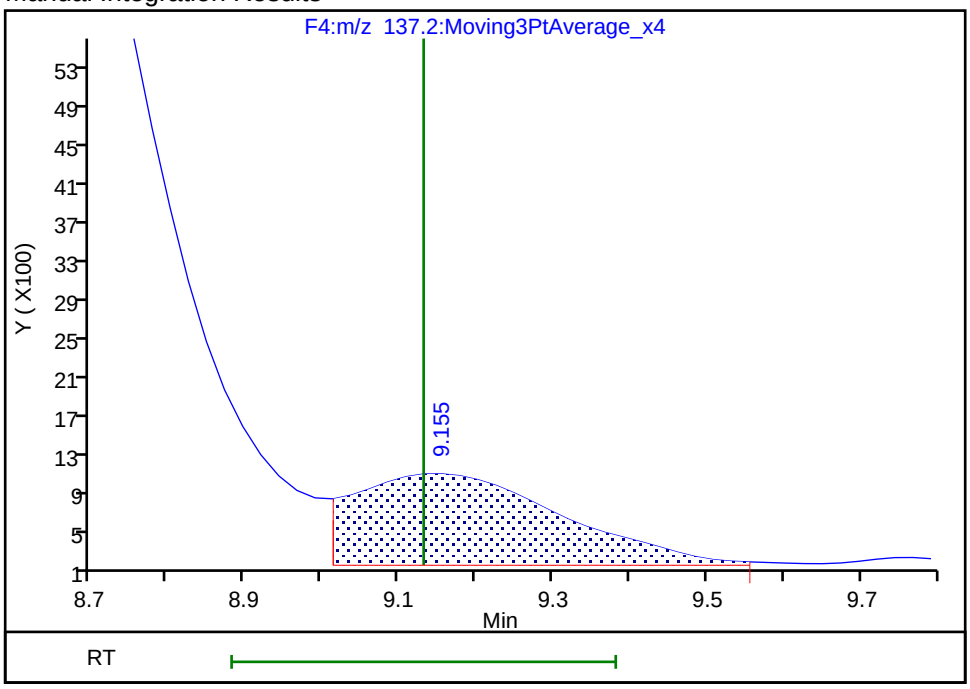
Manual Integration Results

RT: 9.16

Area: 17330

Amount: 3.885088

Amount Units: ug/l



Reviewer: meyera, 15-Jul-2021 14:56:56

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 16-Jul-2021 08:16:47 Chrom Revision: 2.3 13-May-2021 07:57:40

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

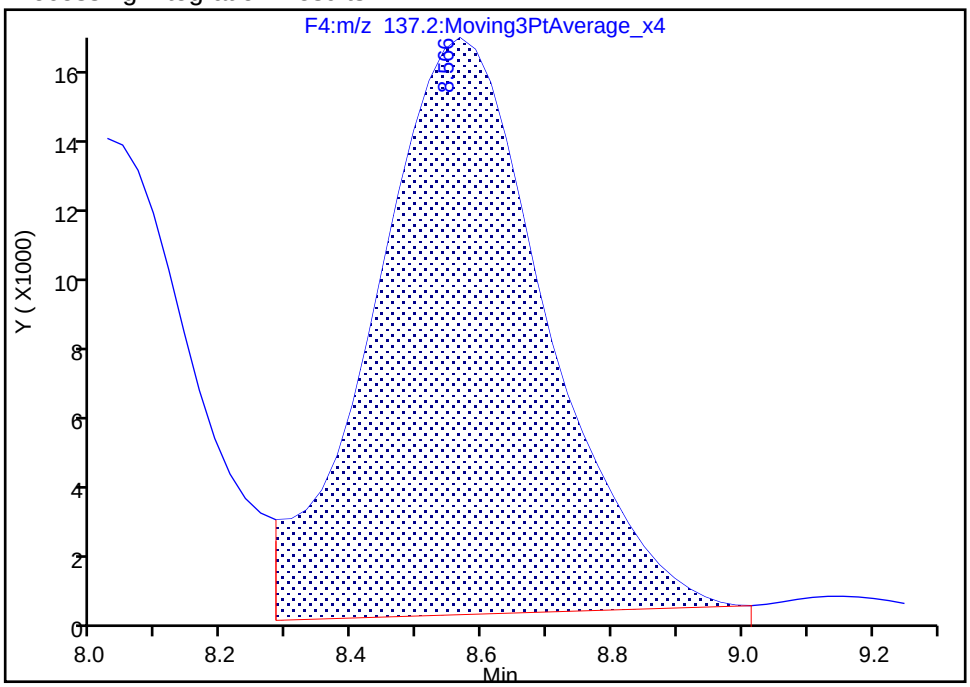
Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15014.d				
Injection Date:	15-Jul-2021 12:11:15	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-1-A	Lab Sample ID:	280-150636-1		
Client ID:	29SB123 (15-16)				
Operator ID:	acm	ALS Bottle#:	12	Worklist Smp#:	15
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		
Column:		Detector	F4:SIR		

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

Signal: 1

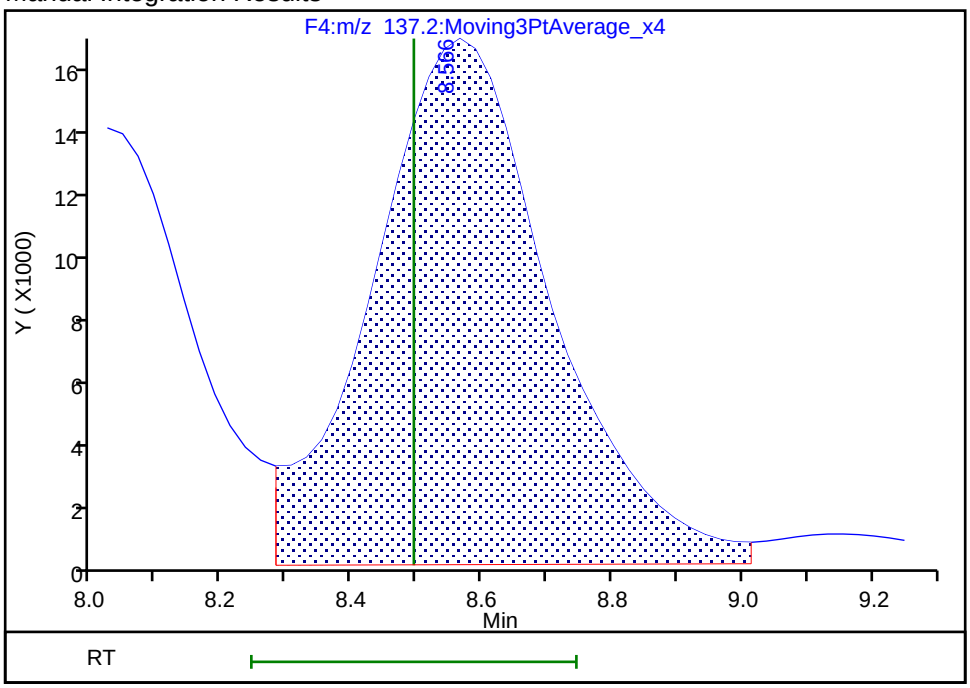
Processing Integration Results

RT: 8.57
Area: 287465
Amount: 24.504860
Amount Units: ug/l



Manual Integration Results

RT: 8.57
Area: 308516
Amount: 26.225180
Amount Units: ug/l



Reviewer: meyera, 15-Jul-2021 14:56:47

Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Client Sample ID: 29SB129 (5-6) Lab Sample ID: 280-150636-2

Matrix: Solid Lab File ID: ex421G15015.d

Analysis Method: 8321A Date Collected: 03/02/2021 02:27

Extraction Method: 8330B Date Extracted: 07/12/2021 16:07

Sample wt/vol: 10.1(g) Date Analyzed: 07/15/2021 12:23

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

Injection Volume: 40(uL) GC Column: IonPac ID: 2(mm)

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

Analysis Batch No.: 543298 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.77	H H3	0.099	0.015	0.0070
35572-78-2	2-Amino-4,6-dinitrotoluene	0.030	U H H3	0.099	0.030	0.012
99-08-1	m-Nitrotoluene	0.77	M H H3	0.099	0.030	0.013
19406-51-0	4-Amino-2,6-dinitrotoluene	0.015	U H H3	0.099	0.015	0.0050
98-95-3	Nitrobenzene	0.052	J H H3	0.099	0.030	0.011
55-63-0	Nitroglycerin	0.030	U H H3	0.099	0.030	0.010
2691-41-0	HMX	0.030	U H H3	0.099	0.030	0.015
78-11-5	PETN	0.015	U H H3	0.099	0.015	0.0051
121-82-4	RDX	0.015	U H H3	0.099	0.015	0.0043
479-45-8	Tetryl	0.015	U H H3	0.099	0.015	0.0075

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	89		68-140

Report Date: 16-Jul-2021 08:16:48 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15015.d
Lims ID: 280-150636-A-2-A
Client ID: 29SB129 (5-6)
Sample Type: Client
Inject. Date: 15-Jul-2021 12:23:19 ALS Bottle#: 13 Worklist Smp#: 16
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 280-150636-A-2-A
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 16-Jul-2021 08:16:45 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1655

First Level Reviewer: meyera Date: 15-Jul-2021 14:56:14
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
360.9	2.052	2.052	0.0		113841	120.0	49.2	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	2.994	2.993	0.001		422318	120.0	165	
5 1,3,5-Trinitrobenzene								E
213.2	3.700	3.733	0.0	0.753	167090215	19624	1535	E
* 7 1,3-Dinitrobenzene-d4								
172.1	4.915	4.871	0.044		1285461	129.4	50.1	
8 1,3-Dinitrobenzene								
168.2	4.959	4.959	0.044	1.009	1868720	194.7	37.3	
10 2,4,6-Trinitrotoluene								E
227.2	5.336	5.353	0.037	0.760	150905134	6970.2	164	E
13 3,4-Dinitrotoluene								
182.2	5.531	5.320	0.211	0.788	168187533	NC	31.9	
$ 11 Nitrobenzene-d5								
128.1	5.410	5.428	0.037	0.771	794309	89.5	394	
12 Nitrobenzene								
123.1	5.336	5.521	-0.148	0.760	53972	13.2	41.7	
17 2,6-Dinitrotoluene								E
182.2	6.713	6.760	0.047	0.956	817479394	27272	123	E
* 18 2,4-dinitrotoluene-d3								s
185.1	7.020	6.996	0.024		1852230	120.0	13.6	
19 2,4-Dinitrotoluene								E
182.2	7.114	7.115	0.047	1.013	669506584	43492	114	E
22 o-Nitrotoluene								EM
137.2	8.023	8.030	0.047	1.143	9532820	1302.2	47.7	EM
23 p-Nitrotoluene								EM
137.2	8.566	8.552	0.071	1.220	12268	1877.9	59.1	EM

Report Date: 16-Jul-2021 08:16:48 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15015.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
137.2	9.155	9.193	0.023	1.304	877749	194.6	3.6	M
25 2,4,6-Trinitro-3-xylene								
241.1	10.028	10.044	-0.016	2.040	127785	NC	2.9	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- E - Exceeded Maximum Amount
- s - Failed ISTD Recovery Test

Review Flags
- M - Manually Integrated

Reagents:

EXPWORKINGIS_00084 Amount Added: 20.00 Units: uL Run Reagent

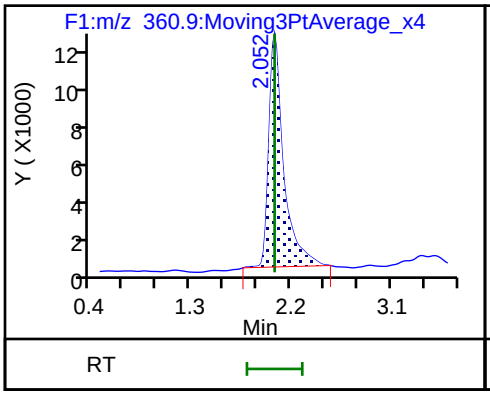
Report Date: 16-Jul-2021 08:16:48 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

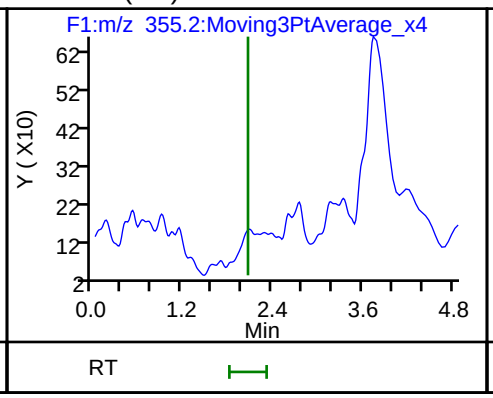
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15015.d

Injection Date:	15-Jul-2021 12:23:19	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-2-A	Lab Sample ID:	280-150636-2		
Client ID:	29SB129 (5-6)				
Operator ID:	acm	ALS Bottle#:	13	Worklist Smp#:	16
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		

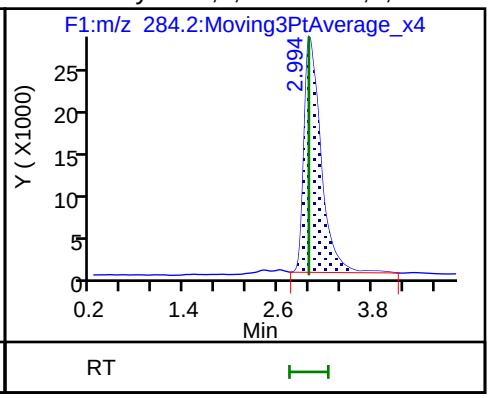
* 1 HMX-13C4



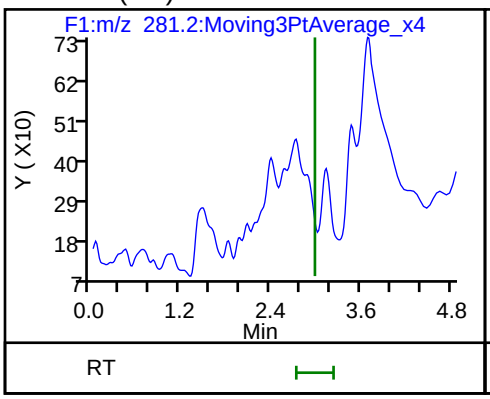
2 HMX (ND)



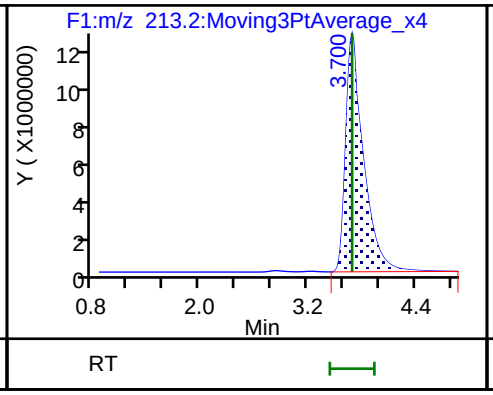
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



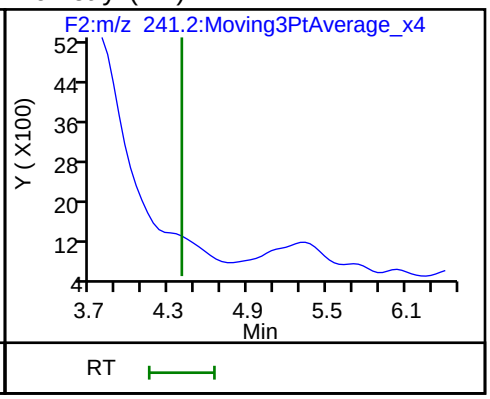
4 RDX (ND)



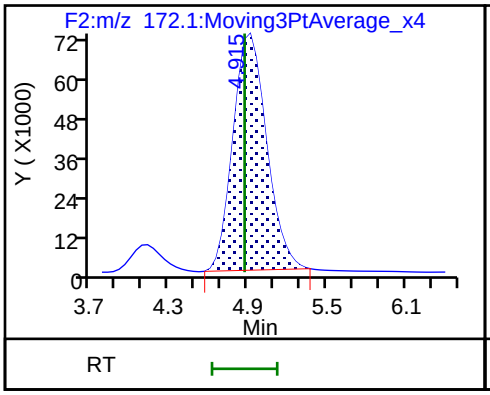
5 1,3,5-Trinitrobenzene



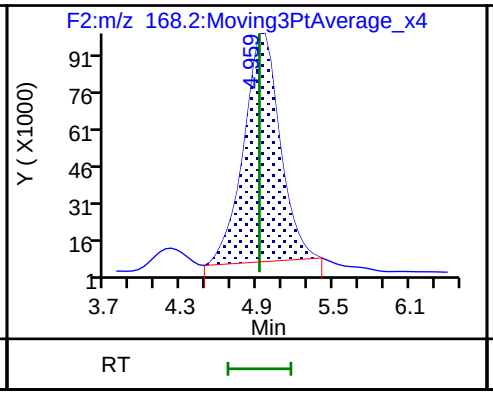
6 Tetryl (ND)



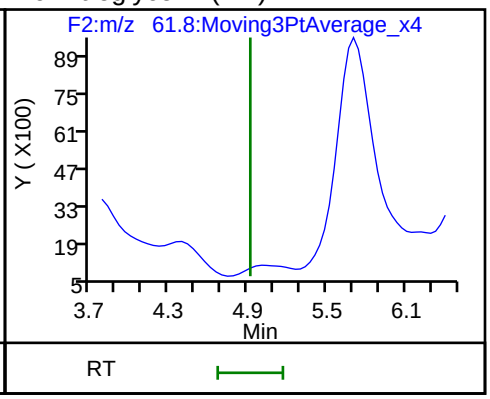
* 7 1,3-Dinitrobenzene-d4



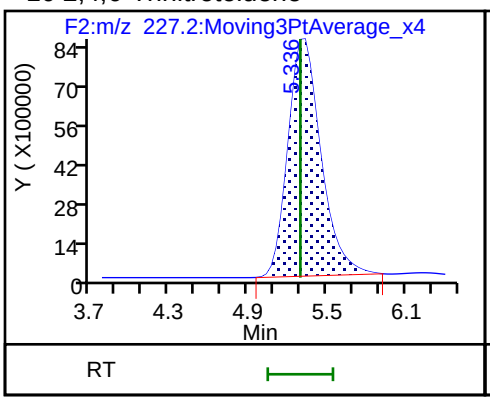
8 1,3-Dinitrobenzene



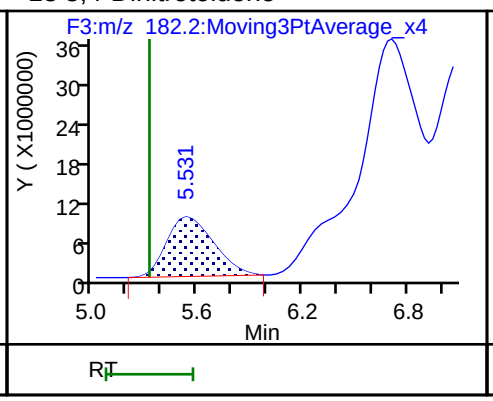
9 Nitroglycerin (ND)



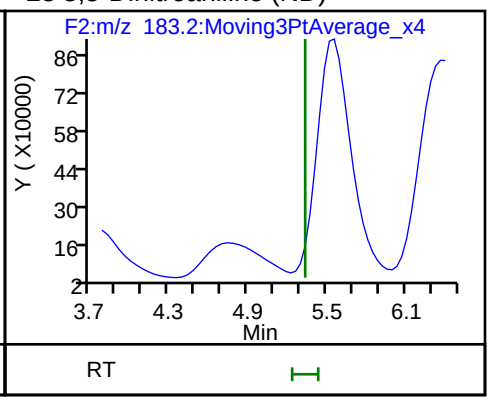
10 2,4,6-Trinitrotoluene



13 3,4-Dinitrotoluene

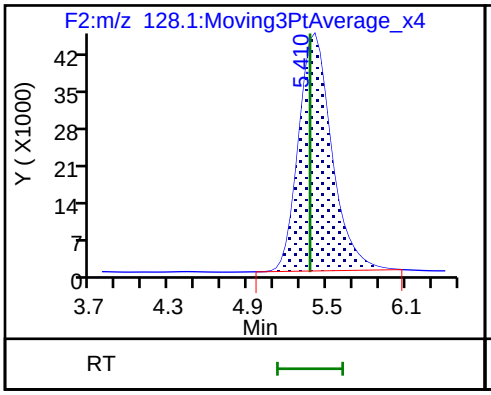


28 3,5-Dinitroaniline (ND)

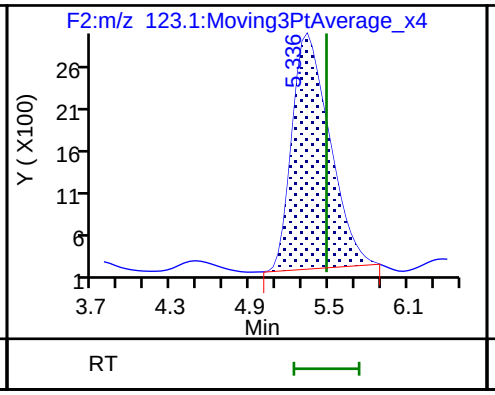


Report Date: 16-Jul-2021 08:16:48 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15015.d

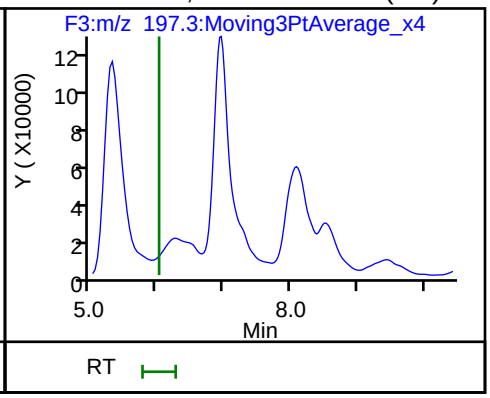
$ 11 Nitrobenzene-d5



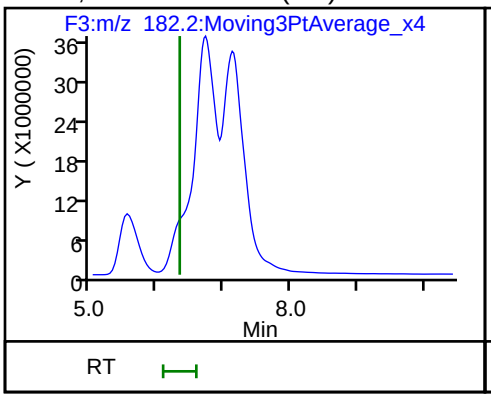
12 Nitrobenzene



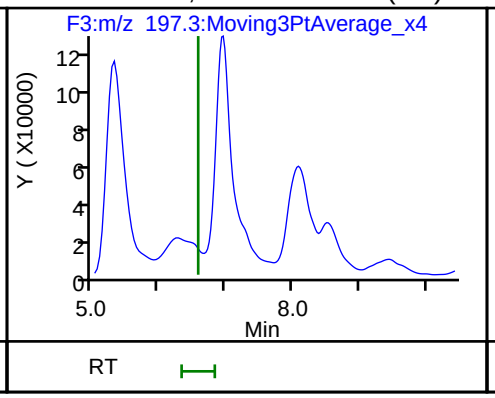
14 4-Amino-2,6-dinitrotoluene (ND)



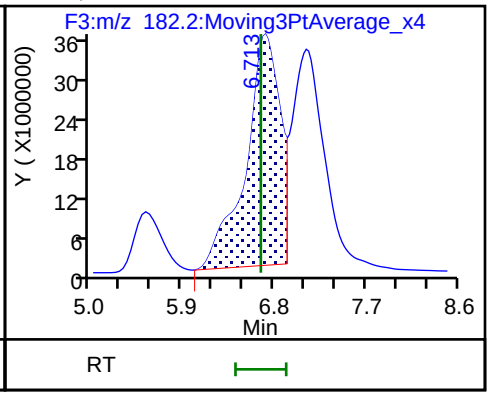
15 2,3-Dinitrotoluene (ND)



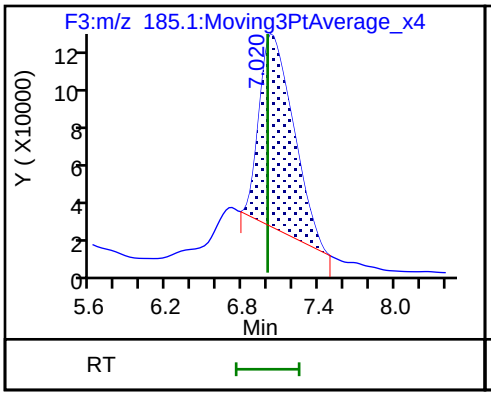
16 2-Amino-4,6-dinitrotoluene (ND)



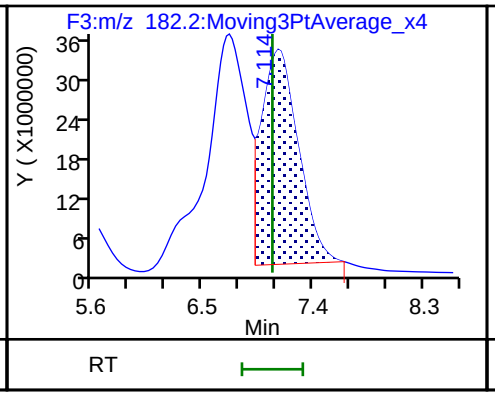
17 2,6-Dinitrotoluene



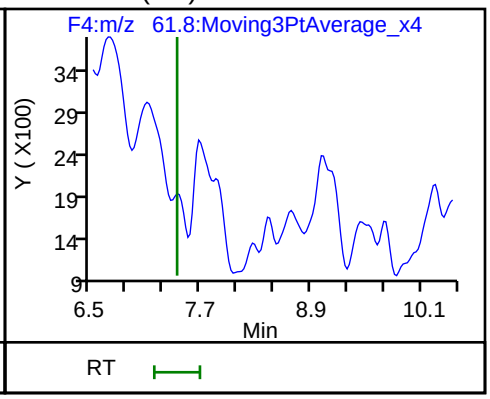
* 18 2,4-dinitrotoluene-d3



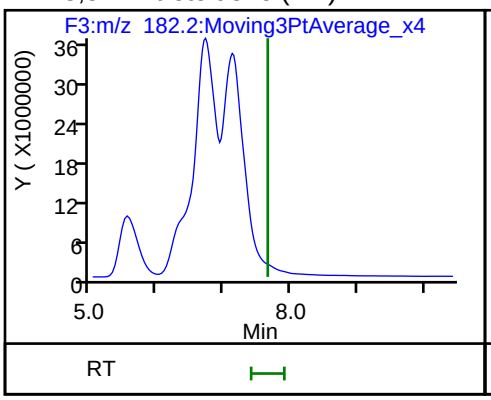
19 2,4-Dinitrotoluene



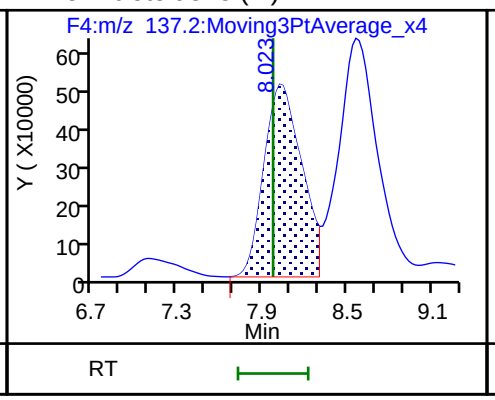
20 PETN (ND)



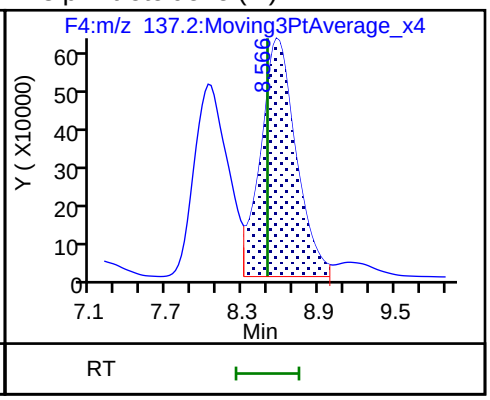
21 3,5-Dinitrotoluene (ND)



22 o-Nitrotoluene (M)



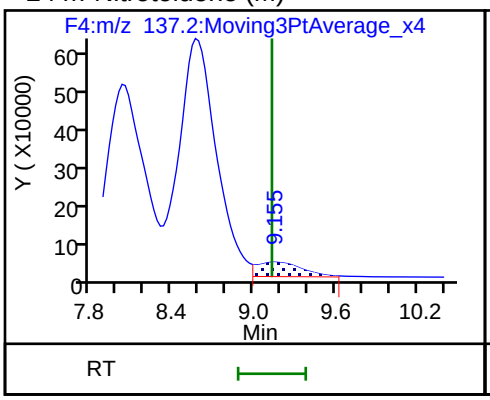
23 p-Nitrotoluene (M)



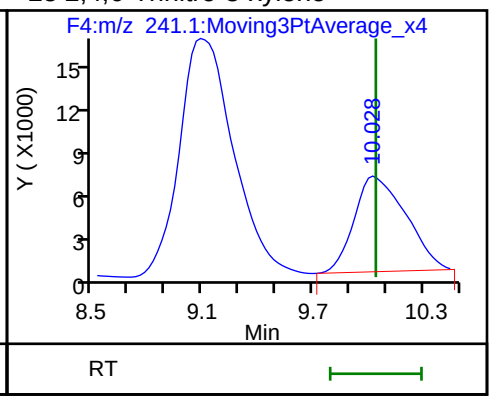
Report Date: 16-Jul-2021 08:16:48 Chrom Revision: 2.3 13-May-2021 07:57:40

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15015.d

24 m-Nitrotoluene (M)



25 2,4,6-Trinitro-3-xylene



Report Date: 16-Jul-2021 08:16:48 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15015.d
Lims ID: 280-150636-A-2-A
Client ID: 29SB129 (5-6)
Sample Type: Client
Inject. Date: 15-Jul-2021 12:23:19 ALS Bottle#: 13 Worklist Smp#: 16
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 280-150636-A-2-A
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 16-Jul-2021 08:16:45 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1655

First Level Reviewer: meyera Date: 15-Jul-2021 14:56:14

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	89.5	89.24

Report Date: 16-Jul-2021 08:16:48

Chrom Revision: 2.3 13-May-2021 07:57:40
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

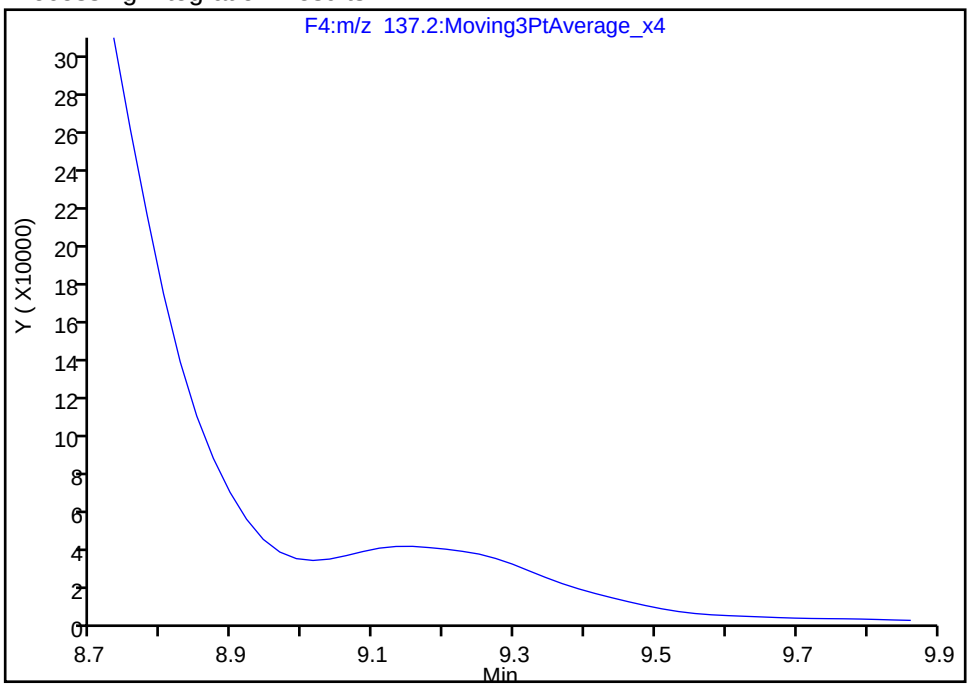
Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15015.d				
Injection Date:	15-Jul-2021 12:23:19	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-2-A	Lab Sample ID:	280-150636-2		
Client ID:	29SB129 (5-6)				
Operator ID:	acm	ALS Bottle#:	13	Worklist Smp#:	16
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		
Column:		Detector	F4:SIR		

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

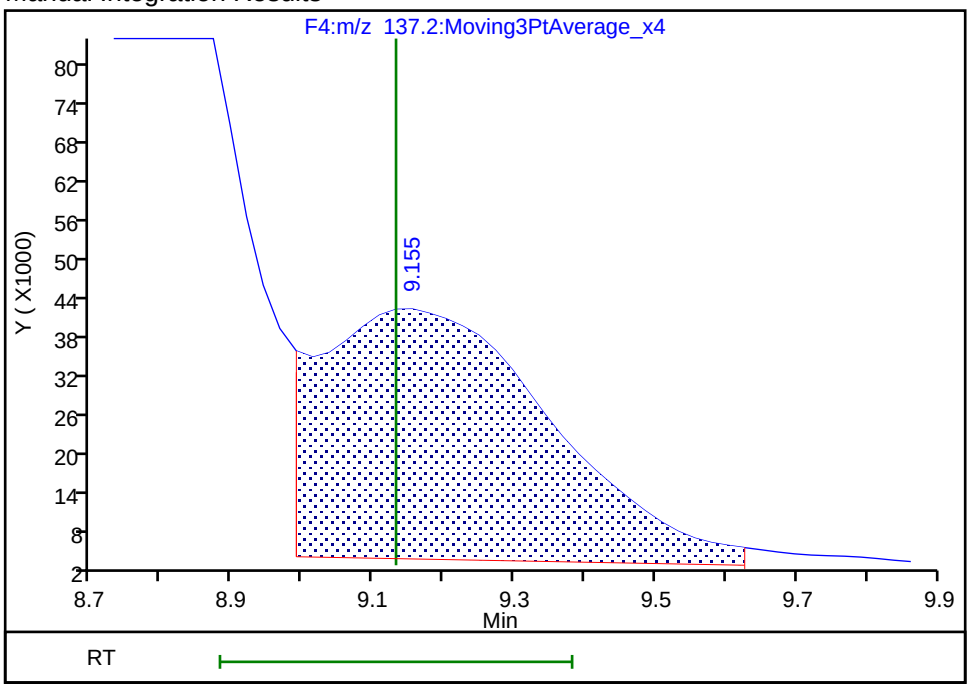
Not Detected
Expected RT: 9.13

Processing Integration Results



Manual Integration Results

RT: 9.16
Area: 877749
Amount: 194.5794
Amount Units: ug/l



Reviewer: meyera, 15-Jul-2021 14:56:06
Audit Action: Manually Integrated
Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Client Sample ID: 29SB129 (5-6) DL Lab Sample ID: 280-150636-2 DL

Matrix: Solid Lab File ID: ex421G15016.d

Analysis Method: 8321A Date Collected: 03/02/2021 02:27

Extraction Method: 8330B Date Extracted: 07/12/2021 16:07

Sample wt/vol: 10.1(g) Date Analyzed: 07/15/2021 12:35

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.: 543298 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
118-96-7	2,4,6-Trinitrotoluene	22	D H H3	5.0	0.75	0.25
88-72-2	o-Nitrotoluene	3.5	J D M H H3	5.0	0.75	0.28
99-99-0	p-Nitrotoluene	4.2	J D M H H3	5.0	1.5	0.54

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	71	D	68-140

Report Date: 16-Jul-2021 08:16:48 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15016.d
Lims ID: 280-150636-A-2-A
Client ID: 29SB129 (5-6)
Sample Type: Client
Inject. Date: 15-Jul-2021 12:35:23 ALS Bottle#: 54 Worklist Smp#: 17
Injection Vol: 40.0 ul Dil. Factor: 50.0000
Sample Info: 280-150636-A-2-A 50x
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 16-Jul-2021 08:16:45 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1655

First Level Reviewer: meyera Date: 15-Jul-2021 14:55:36
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
360.9	2.052	2.052	0.0		146348	120.0	9.5	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	2.994	2.993	0.001		683790	120.0	689	
5 1,3,5-Trinitrobenzene								E
213.2	3.701	3.733	0.001	0.760	3851226	440.1	463	E
* 7 1,3-Dinitrobenzene-d4								
172.1	4.872	4.871	0.001		1324127	129.4	51.8	
8 1,3-Dinitrobenzene								
168.2	4.960	4.959	0.045	1.018	37477	3.01	12.0	
10 2,4,6-Trinitrotoluene								
227.2	5.300	5.353	0.001	0.755	4284095	112.1	238	
13 3,4-Dinitrotoluene								
182.2	5.532	5.320	0.212	0.788	4269338	NC	13.0	
$ 11 Nitrobenzene-d5								
128.1	5.374	5.428	0.001	0.765	23610	1.43	15.5	
12 Nitrobenzene								
123.1	5.448	5.521	-0.036	0.776	2027	0.9676	4.4	
17 2,6-Dinitrotoluene								EM
182.2	6.667	6.760	0.001	0.950	34465059	643.5	109	EM
* 18 2,4-dinitrotoluene-d3								
185.1	7.020	6.996	0.024		3316944	120.0	200	
19 2,4-Dinitrotoluene								E
182.2	7.091	7.115	0.024	1.010	26612518	965.1	75.3	E
22 o-Nitrotoluene								M
137.2	8.001	8.030	0.025	1.140	217490	17.7	16.9	M
23 p-Nitrotoluene								M
137.2	8.543	8.552	0.048	1.217	233568	21.0	16.0	M

Report Date: 16-Jul-2021 08:16:48 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15016.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
137.2	9.109	9.193	-0.023	1.297	16777	3.91	1.2	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
E - Exceeded Maximum Amount
Review Flags
M - Manually Integrated

Reagents:

EXPWORKINGIS_00084 Amount Added: 20.00 Units: uL Run Reagent

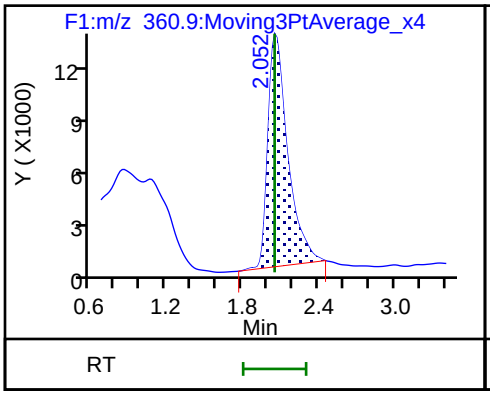
Report Date: 16-Jul-2021 08:16:48 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

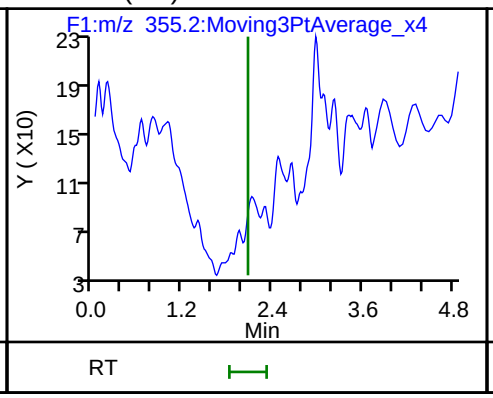
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15016.d

Injection Date:	15-Jul-2021 12:35:23	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-2-A	Lab Sample ID:	280-150636-2		
Client ID:	29SB129 (5-6)				
Operator ID:	acm	ALS Bottle#:	54	Worklist Smp#:	17
Injection Vol:	40.0 ul	Dil. Factor:	50.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		

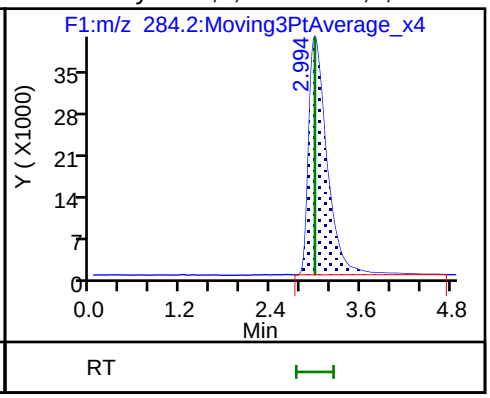
* 1 HMX-13C4



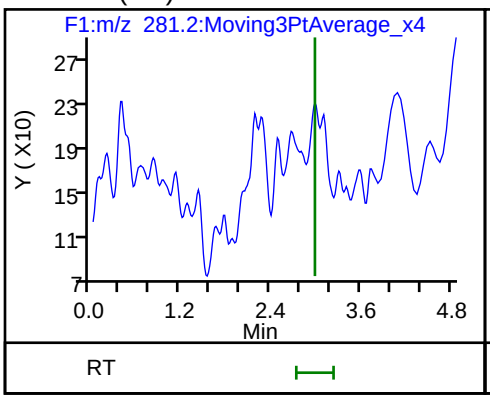
2 HMX (ND)



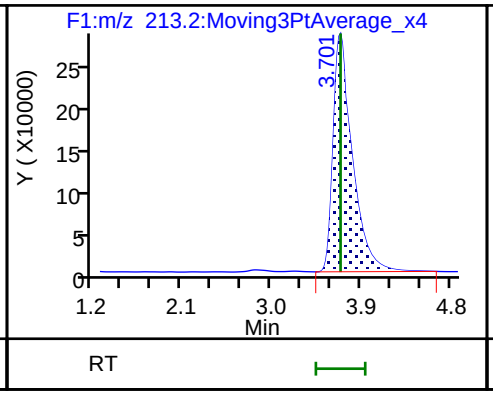
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



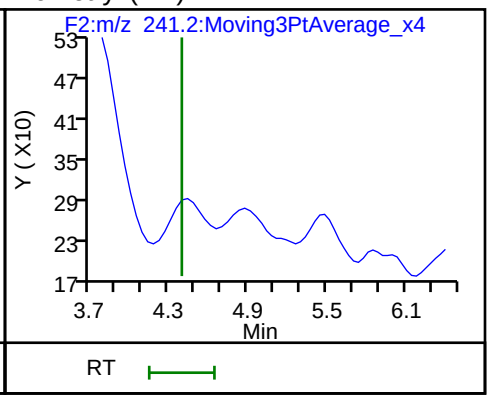
4 RDX (ND)



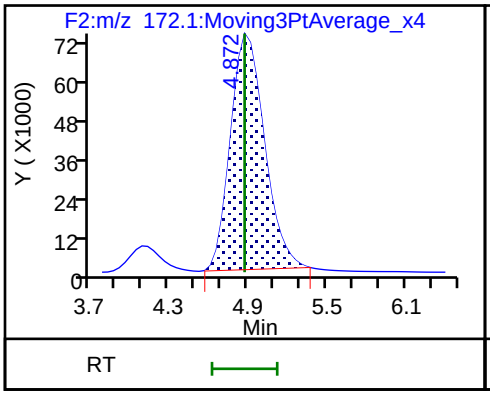
5 1,3,5-Trinitrobenzene



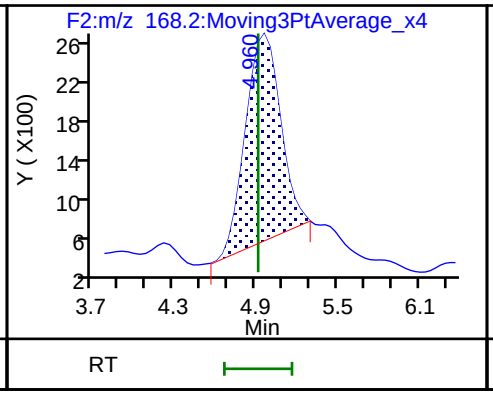
6 Tetryl (ND)



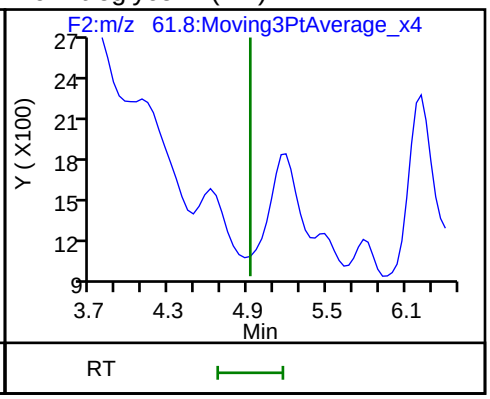
* 7 1,3-Dinitrobenzene-d4



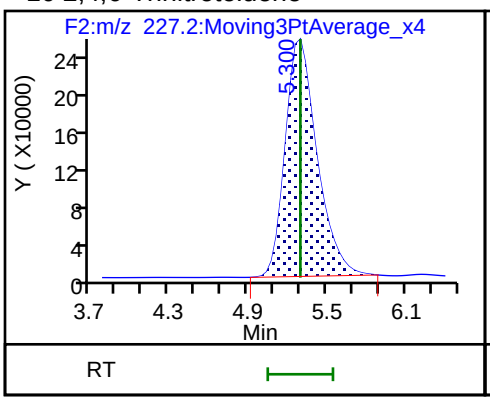
8 1,3-Dinitrobenzene



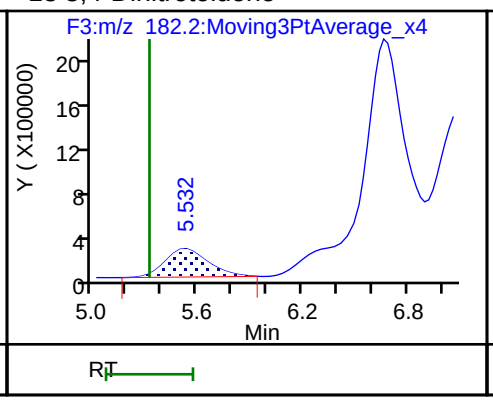
9 Nitroglycerin (ND)



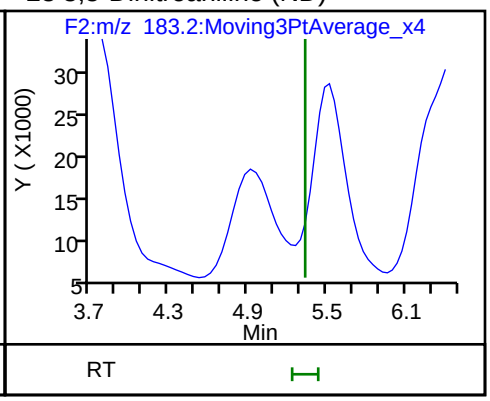
10 2,4,6-Trinitrotoluene



13 3,4-Dinitrotoluene

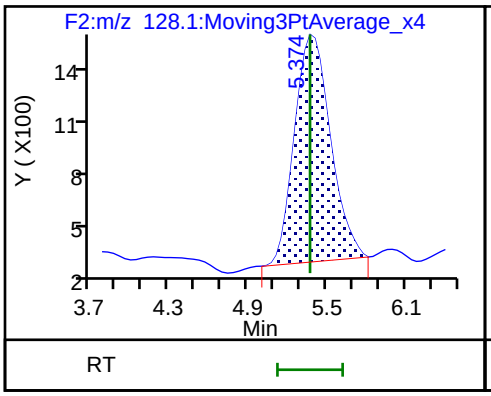


28 3,5-Dinitroaniline (ND)

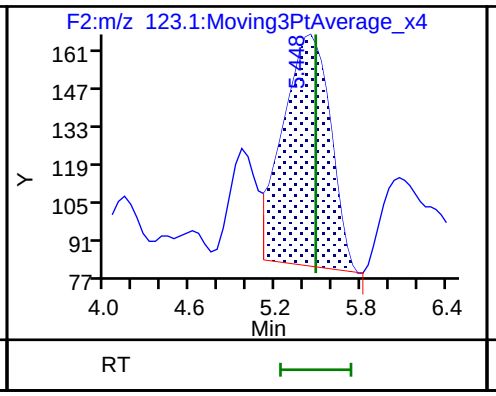


Report Date: 16-Jul-2021 08:16:48 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15016.d

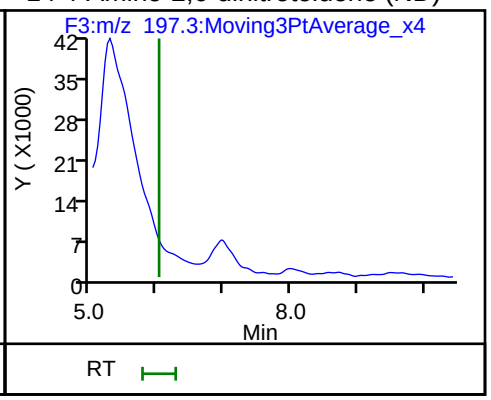
$ 11 Nitrobenzene-d5



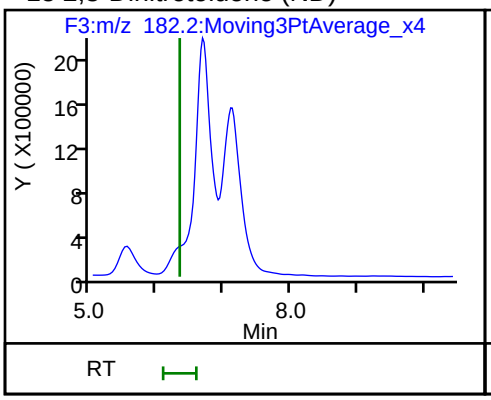
12 Nitrobenzene



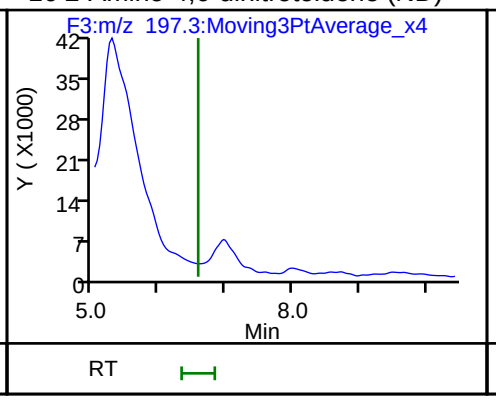
14 4-Amino-2,6-dinitrotoluene (ND)



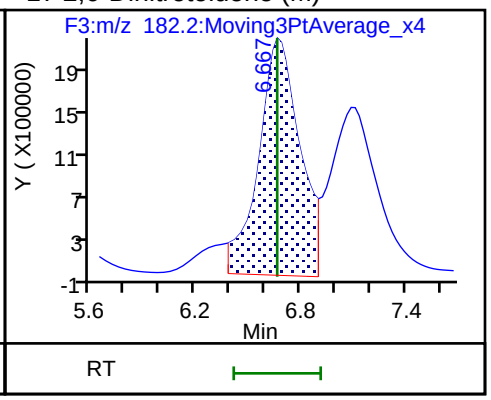
15 2,3-Dinitrotoluene (ND)



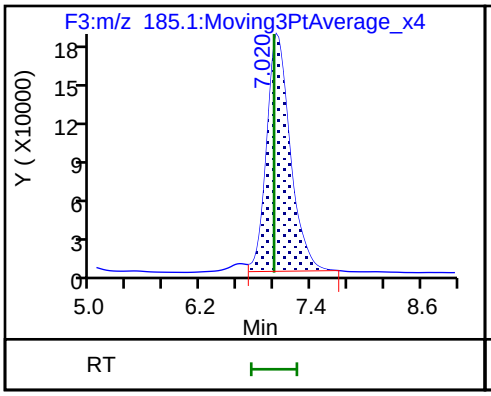
16 2-Amino-4,6-dinitrotoluene (ND)



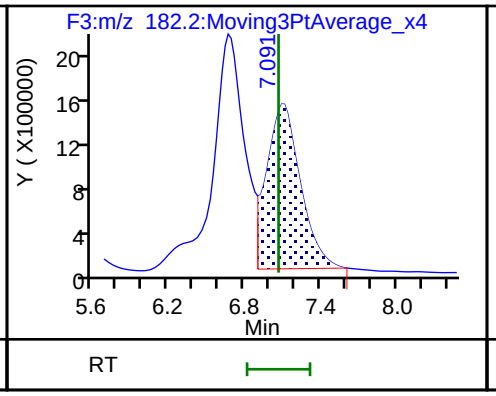
17 2,6-Dinitrotoluene (M)



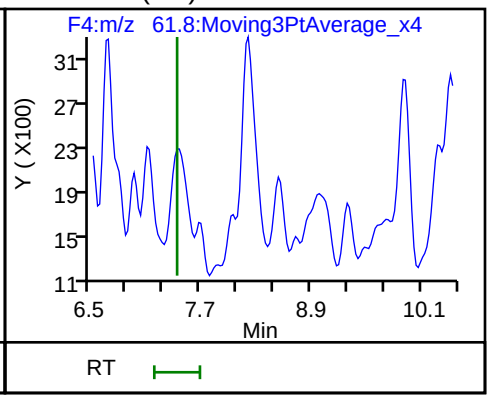
* 18 2,4-dinitrotoluene-d3



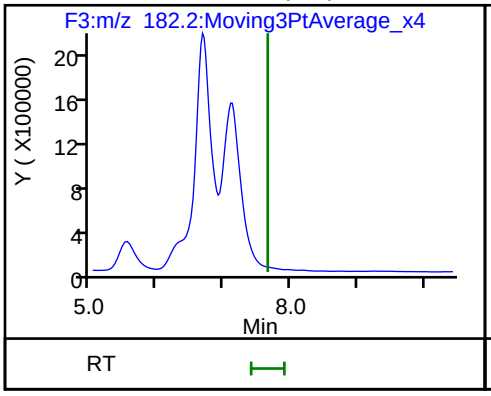
19 2,4-Dinitrotoluene



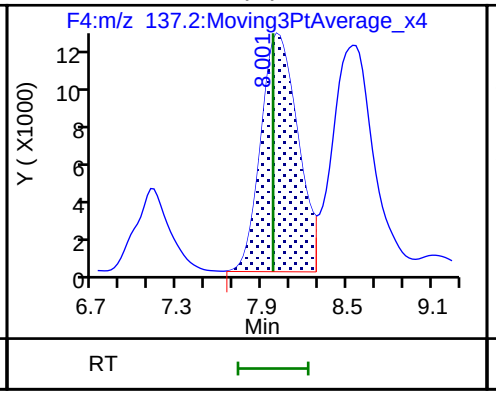
20 PETN (ND)



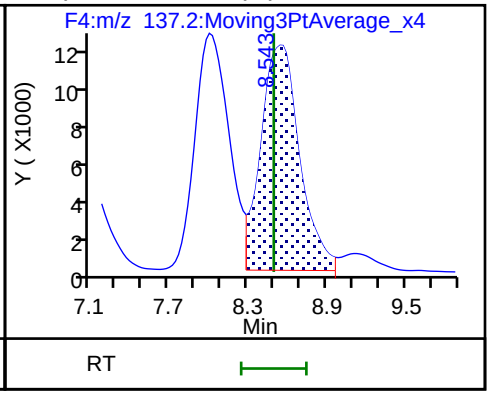
21 3,5-Dinitrotoluene (ND)



22 o-Nitrotoluene (M)



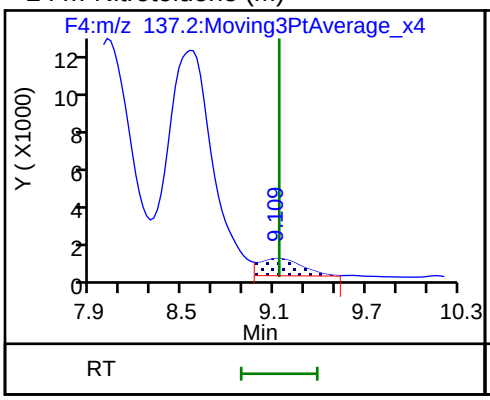
23 p-Nitrotoluene (M)



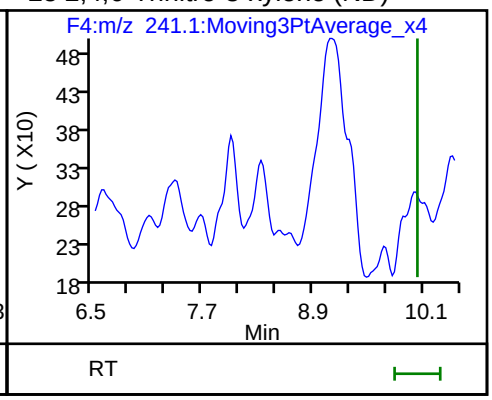
Report Date: 16-Jul-2021 08:16:48 Chrom Revision: 2.3 13-May-2021 07:57:40

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15016.d

24 m-Nitrotoluene (M)



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



Report Date: 16-Jul-2021 08:16:48 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15016.d
Lims ID: 280-150636-A-2-A
Client ID: 29SB129 (5-6)
Sample Type: Client
Inject. Date: 15-Jul-2021 12:35:23 ALS Bottle#: 54 Worklist Smp#: 17
Injection Vol: 40.0 ul Dil. Factor: 50.0000
Sample Info: 280-150636-A-2-A 50x
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 16-Jul-2021 08:16:45 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1655

First Level Reviewer: meyera Date: 15-Jul-2021 14:55:36

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	1.43	1.43

Report Date: 16-Jul-2021 08:16:48 Chrom Revision: 2.3 13-May-2021 07:57:40

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

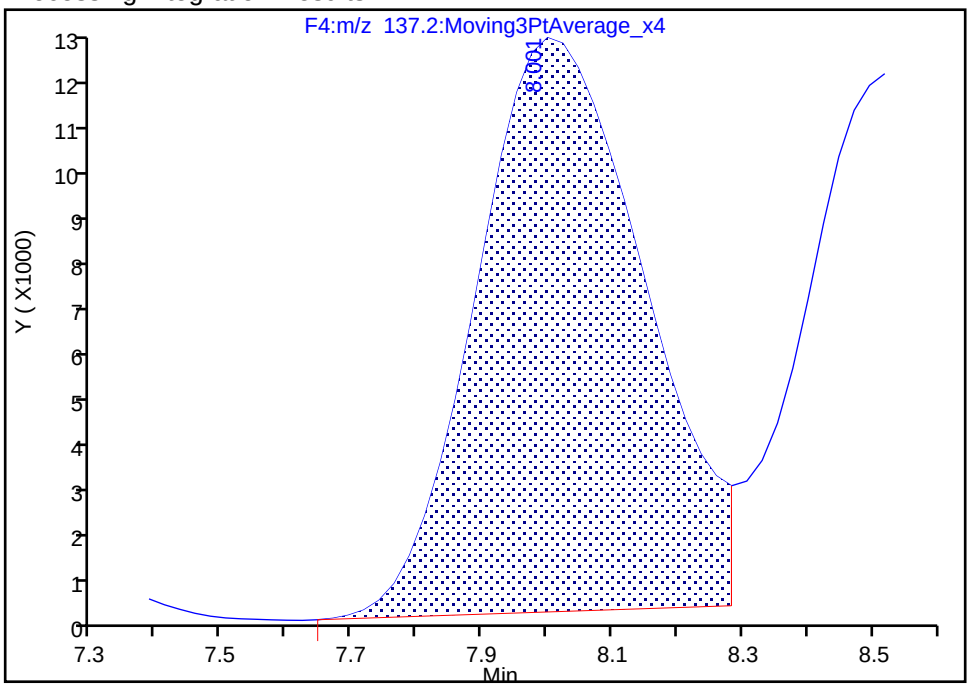
Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15016.d				
Injection Date:	15-Jul-2021 12:35:23	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-2-A	Lab Sample ID:	280-150636-2		
Client ID:	29SB129 (5-6)				
Operator ID:	acm	ALS Bottle#:	54	Worklist Smp#:	17
Injection Vol:	40.0 ul	Dil. Factor:	50.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		
Column:		Detector	F4:SIR		

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

Signal: 1

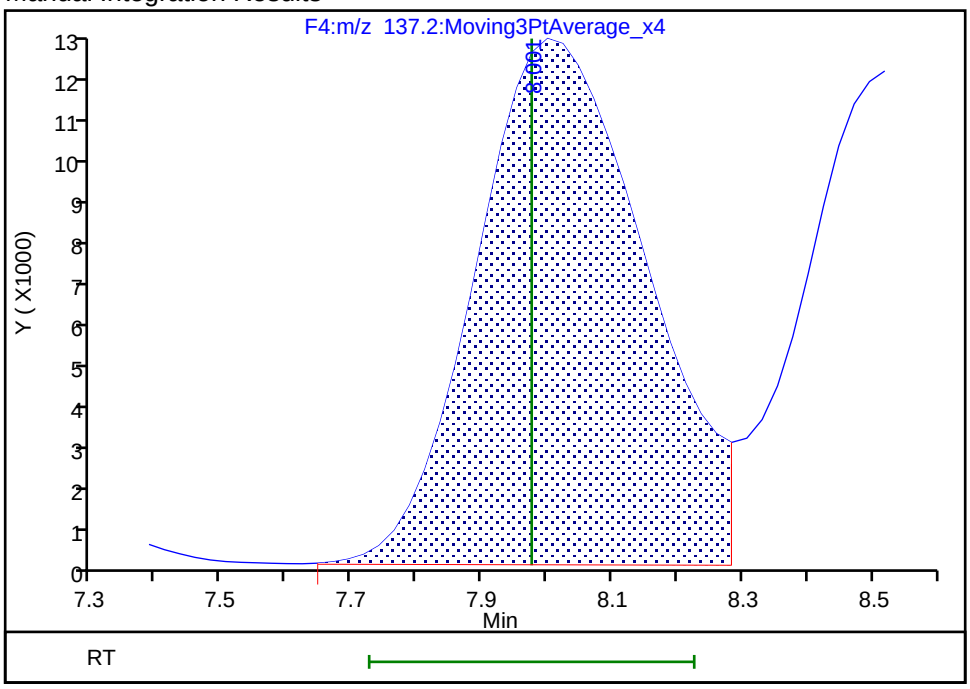
Processing Integration Results

RT: 8.00
Area: 210653
Amount: 17.164039
Amount Units: ug/l



Manual Integration Results

RT: 8.00
Area: 217490
Amount: 17.685141
Amount Units: ug/l



Reviewer: meyera, 15-Jul-2021 14:55:06

Audit Action: Assigned New Baseline Audit Reason: Baseline

Report Date: 16-Jul-2021 08:16:48 Chrom Revision: 2.3 13-May-2021 07:57:40

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

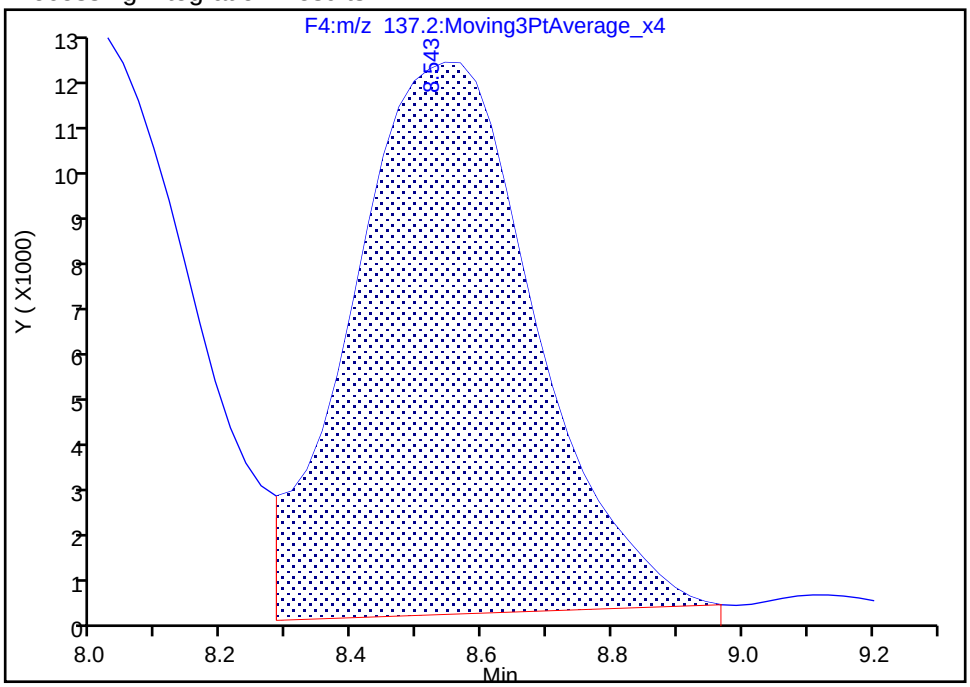
Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15016.d				
Injection Date:	15-Jul-2021 12:35:23	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-2-A	Lab Sample ID:	280-150636-2		
Client ID:	29SB129 (5-6)				
Operator ID:	acm	ALS Bottle#:	54	Worklist Smp#:	17
Injection Vol:	40.0 ul	Dil. Factor:	50.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		
Column:		Detector	F4:SIR		

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

Signal: 1

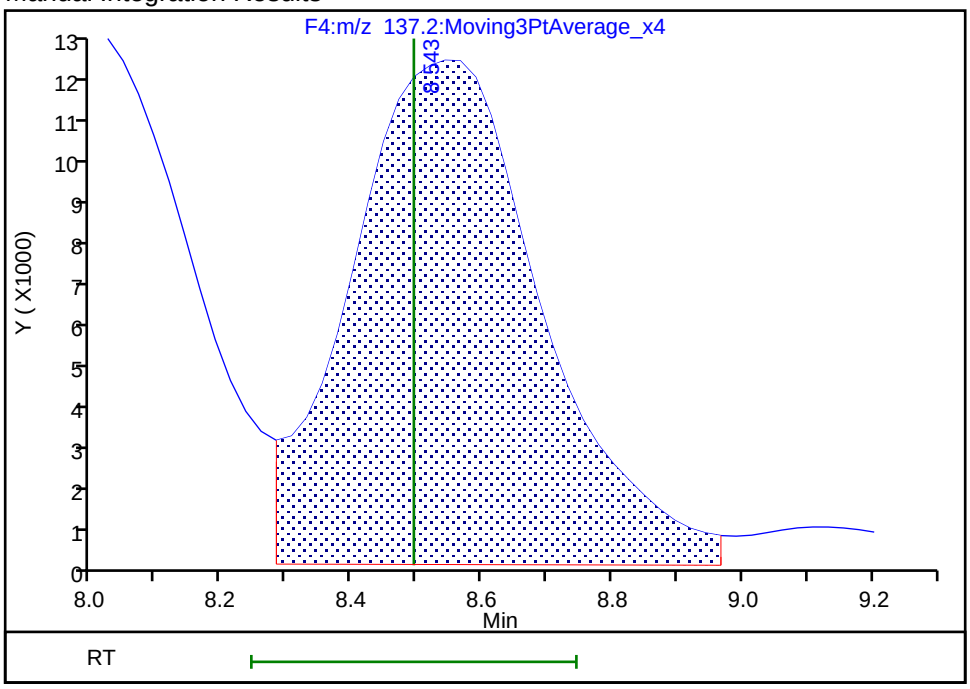
Processing Integration Results

RT: 8.54
Area: 213008
Amount: 19.209608
Amount Units: ug/l



Manual Integration Results

RT: 8.54
Area: 233583
Amount: 20.967287
Amount Units: ug/l



Reviewer: meyera, 15-Jul-2021 14:55:06

Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Client Sample ID: 29SB129 (5-6) DL2 Lab Sample ID: 280-150636-2 DL2

Matrix: Solid Lab File ID: ex421G15017.d

Analysis Method: 8321A Date Collected: 03/02/2021 02:27

Extraction Method: 8330B Date Extracted: 07/12/2021 16:07

Sample wt/vol: 10.1(g) Date Analyzed: 07/15/2021 12:47

Con. Extract Vol.: 40(mL) Dilution Factor: 500

Injection Volume: 40(uL) GC Column: IonPac ID: 2(mm)

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

Analysis Batch No.: 543298 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	74	D H H3 Q	50	15	6.2
121-14-2	2,4-Dinitrotoluene	180	D M H H3 Q	50	15	4.1
606-20-2	2,6-Dinitrotoluene	130	D M H H3 Q	50	15	9.9

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

Report Date: 16-Jul-2021 08:16:49 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15017.d
Lims ID: 280-150636-A-2-A
Client ID: 29SB129 (5-6)
Sample Type: Client
Inject. Date: 15-Jul-2021 12:47:43 ALS Bottle#: 55 Worklist Smp#: 18
Injection Vol: 40.0 ul Dil. Factor: 500.0000
Sample Info: 280-150636-A-2-A 500x
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 16-Jul-2021 08:16:45 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1655

First Level Reviewer: meyera Date: 15-Jul-2021 14:54:57
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
360.9	2.052	2.052	0.0		145396	120.0	58.1	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	3.011	2.993	0.018		713009	120.0	631	
5 1,3,5-Trinitrobenzene								
213.2	3.701	3.733	0.001	0.753	332217	37.1	249	
* 7 1,3-Dinitrobenzene-d4								
172.1	4.916	4.871	0.045		1389654	129.4	57.9	
10 2,4,6-Trinitrotoluene								
227.2	5.300	5.353	0.001	0.755	353077	11.0	182	
13 3,4-Dinitrotoluene								
182.2	5.532	5.320	0.212	0.788	422961	NC	9.7	
17 2,6-Dinitrotoluene								M
182.2	6.690	6.760	0.024	0.953	3284084	64.2	75.1	M
* 18 2,4-dinitrotoluene-d3								
185.1	7.020	6.996	0.024		3231363	120.0	260	
19 2,4-Dinitrotoluene								M
182.2	7.115	7.115	0.048	1.013	2383201	88.5	49.7	M
22 o-Nitrotoluene								
137.2	8.024	8.030	0.048	1.143	21714	2.81	10.2	
23 p-Nitrotoluene								
137.2	8.566	8.552	0.071	1.220	27162	3.39	11.1	

Report Date: 16-Jul-2021 08:16:49 Chrom Revision: 2.3 13-May-2021 07:57:40

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

EXPWORKINGIS_00084	Amount Added: 20.00	Units: uL	Run Reagent

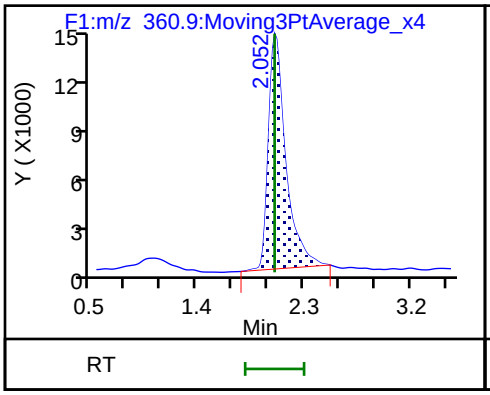
Report Date: 16-Jul-2021 08:16:49 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

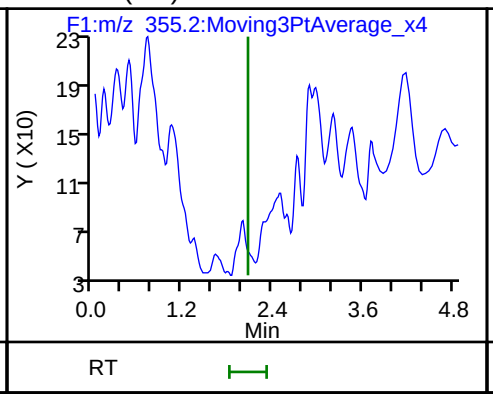
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15017.d

Injection Date:	15-Jul-2021 12:47:43	Instrument ID:	LC_LCMS4
Lims ID:	280-150636-A-2-A	Lab Sample ID:	280-150636-2
Client ID:	29SB129 (5-6)		
Operator ID:	acm	ALS Bottle#:	55 Worklist Smp#: 18
Injection Vol:	40.0 ul	Dil. Factor:	500.0000
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl

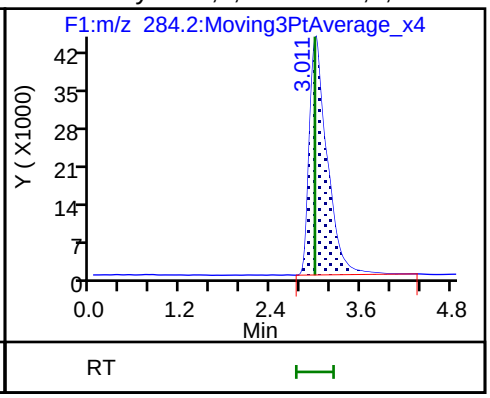
* 1 HMX-13C4



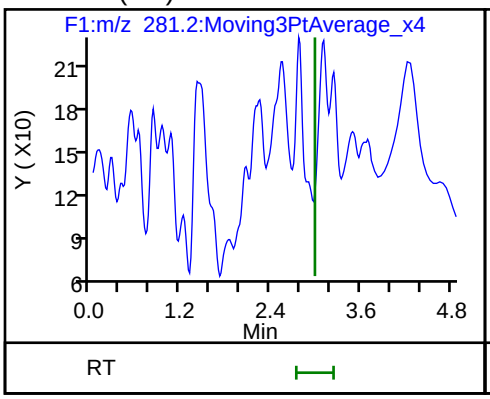
2 HMX (ND)



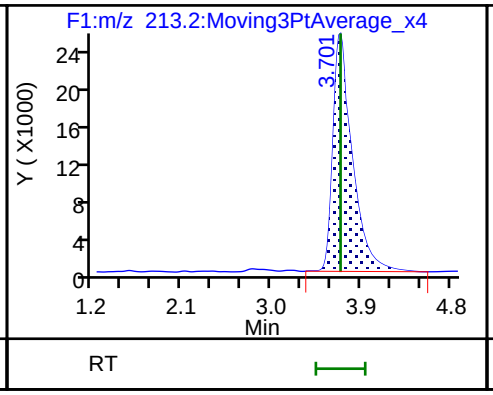
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



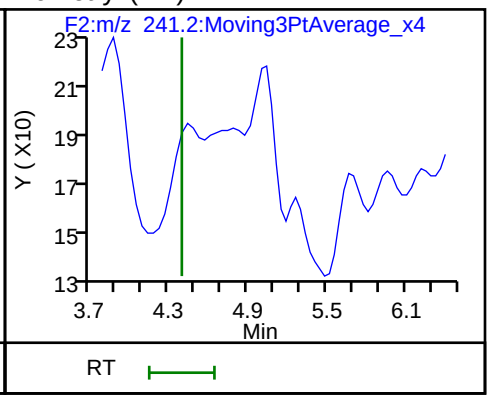
4 RDX (ND)



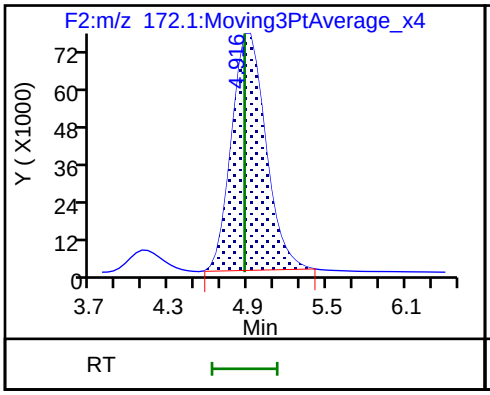
5 1,3,5-Trinitrobenzene



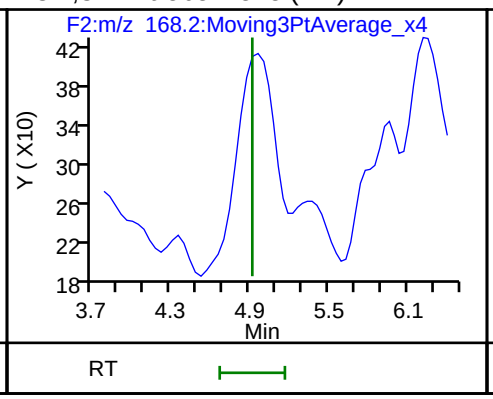
6 Tetryl (ND)



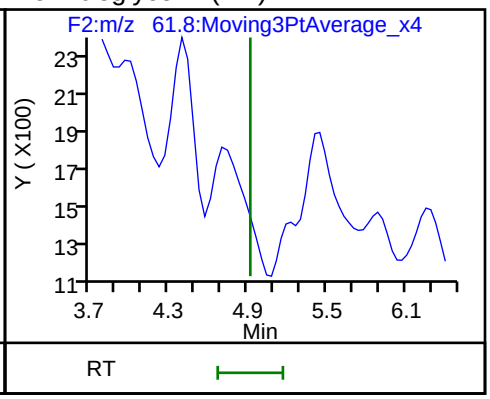
* 7 1,3-Dinitrobenzene-d4



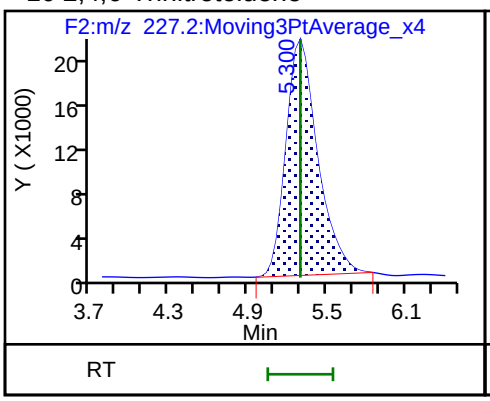
8 1,3-Dinitrobenzene (ND)



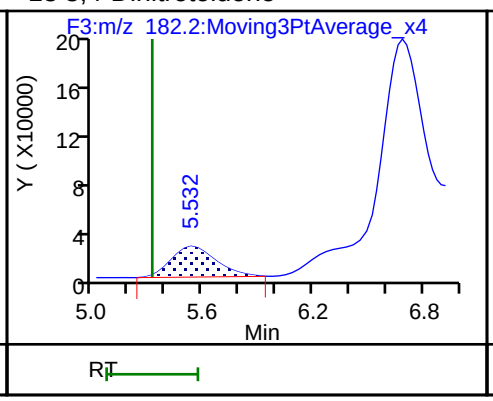
9 Nitroglycerin (ND)



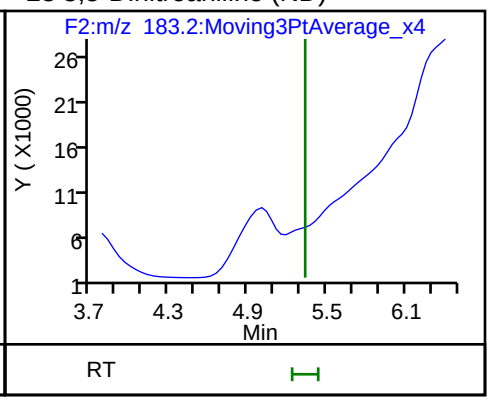
10 2,4,6-Trinitrotoluene



13 3,4-Dinitrotoluene

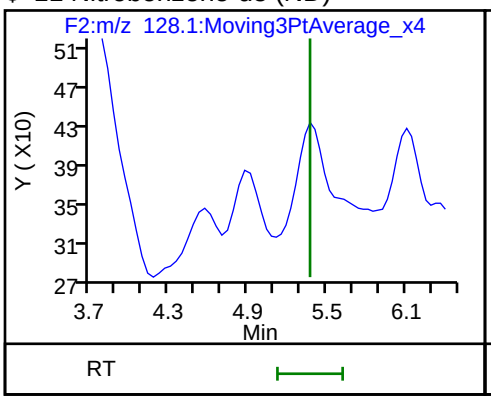


28 3,5-Dinitroaniline (ND)

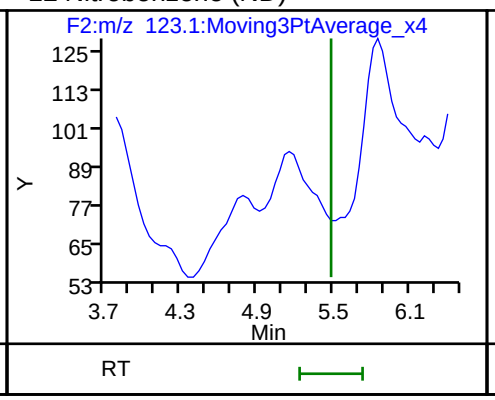


Report Date: 16-Jul-2021 08:16:49 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15017.d

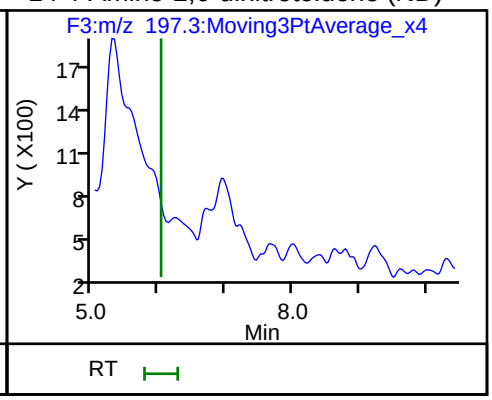
$ 11 Nitrobenzene-d5 (ND)



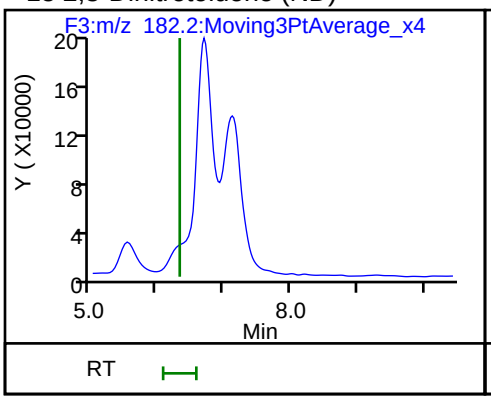
12 Nitrobenzene (ND)



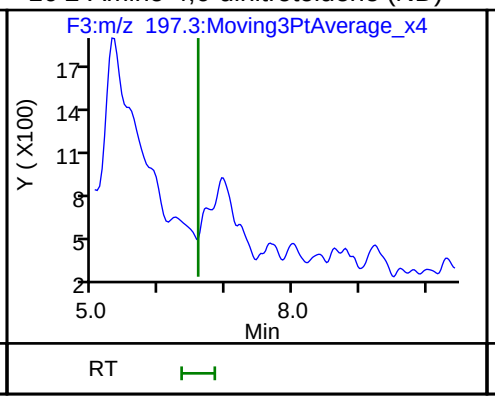
14 4-Amino-2,6-dinitrotoluene (ND)



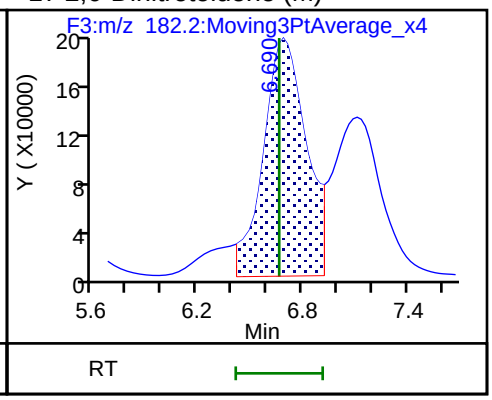
15 2,3-Dinitrotoluene (ND)



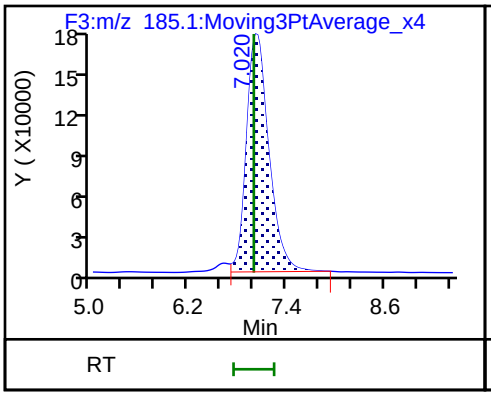
16 2-Amino-4,6-dinitrotoluene (ND)



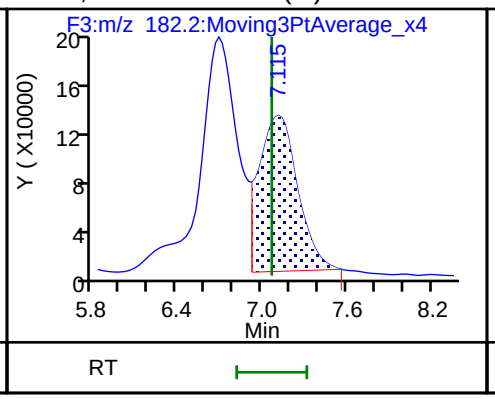
17 2,6-Dinitrotoluene (M)



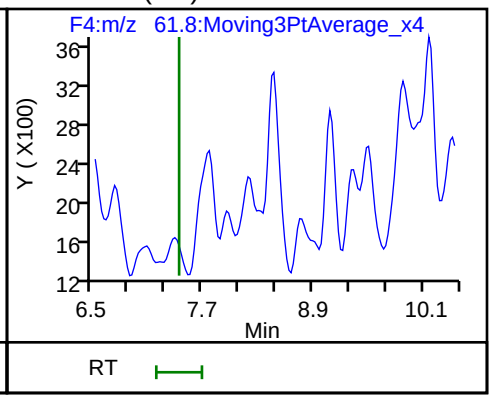
* 18 2,4-dinitrotoluene-d3



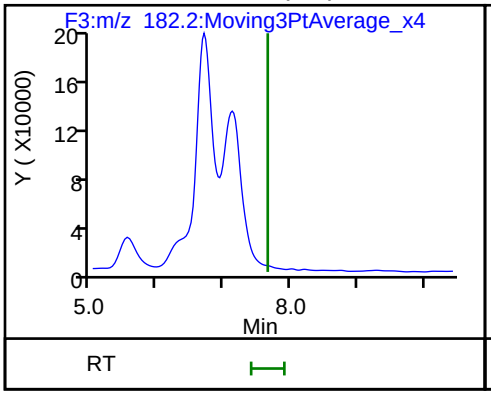
19 2,4-Dinitrotoluene (M)



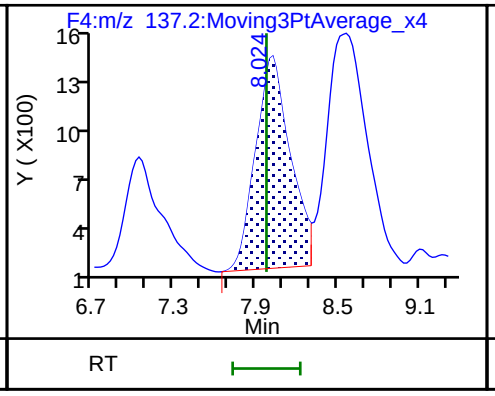
20 PETN (ND)



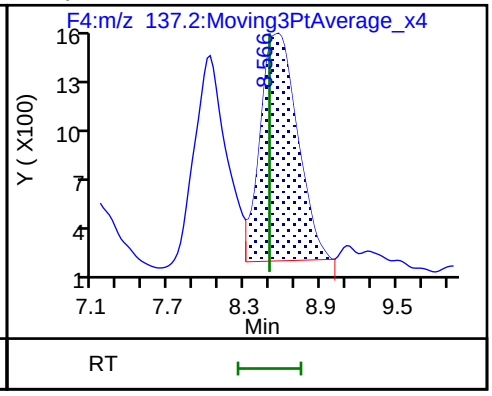
21 3,5-Dinitrotoluene (ND)



22 o-Nitrotoluene



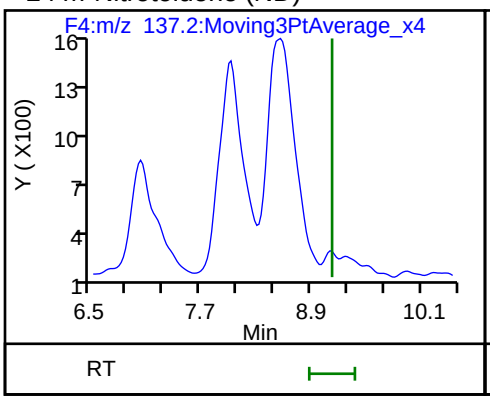
23 p-Nitrotoluene



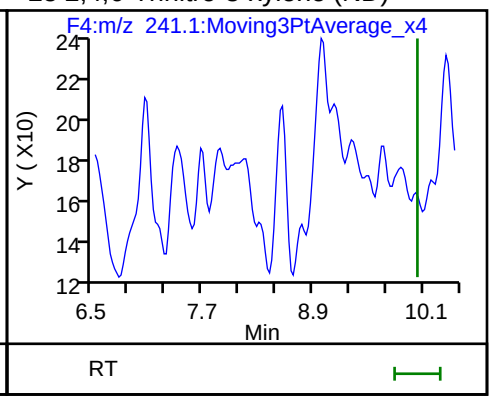
Report Date: 16-Jul-2021 08:16:49 Chrom Revision: 2.3 13-May-2021 07:57:40

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15017.d

24 m-Nitrotoluene (ND)



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



Report Date: 16-Jul-2021 08:16:49 Chrom Revision: 2.3 13-May-2021 07:57:40

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

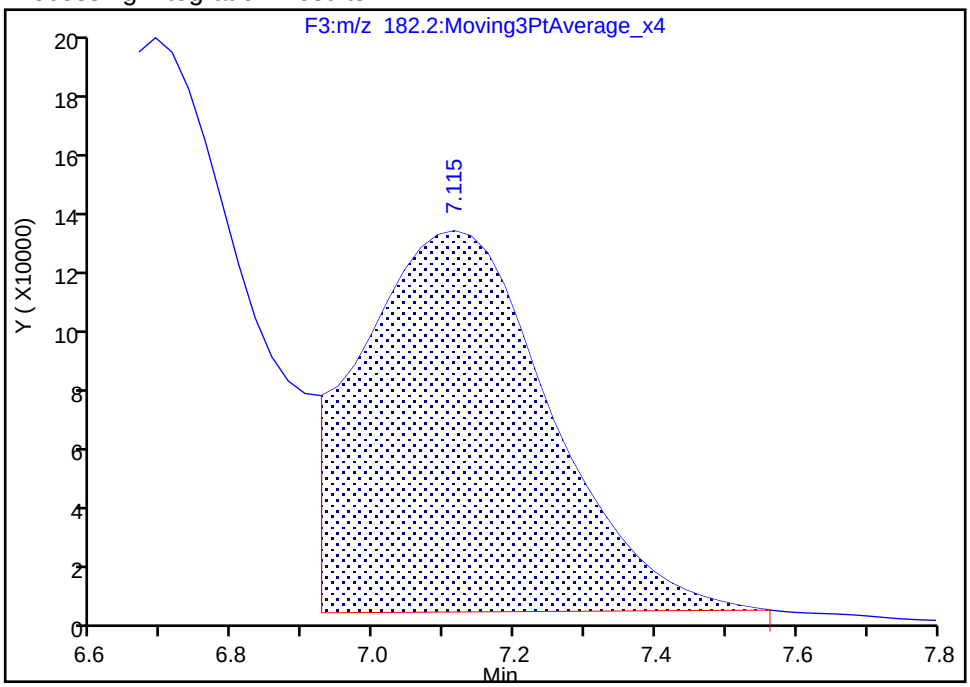
Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15017.d				
Injection Date:	15-Jul-2021 12:47:43	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-2-A	Lab Sample ID:	280-150636-2		
Client ID:	29SB129 (5-6)				
Operator ID:	acm	ALS Bottle#:	55	Worklist Smp#:	18
Injection Vol:	40.0 ul	Dil. Factor:	500.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		
Column:		Detector	F3:SIR		

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

Signal: 1

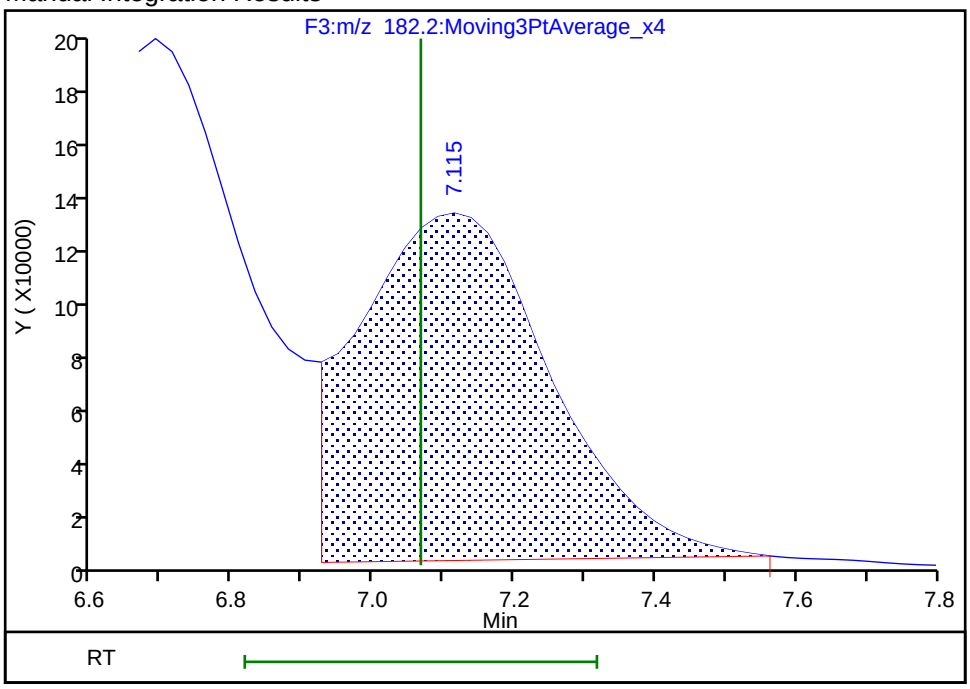
Processing Integration Results

RT: 7.11
Area: 2355142
Amount: 87.426200
Amount Units: ug/l



Manual Integration Results

RT: 7.11
Area: 2383201
Amount: 88.471005
Amount Units: ug/l



Reviewer: meyera, 15-Jul-2021 14:54:49

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 16-Jul-2021 08:16:49 Chrom Revision: 2.3 13-May-2021 07:57:40

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

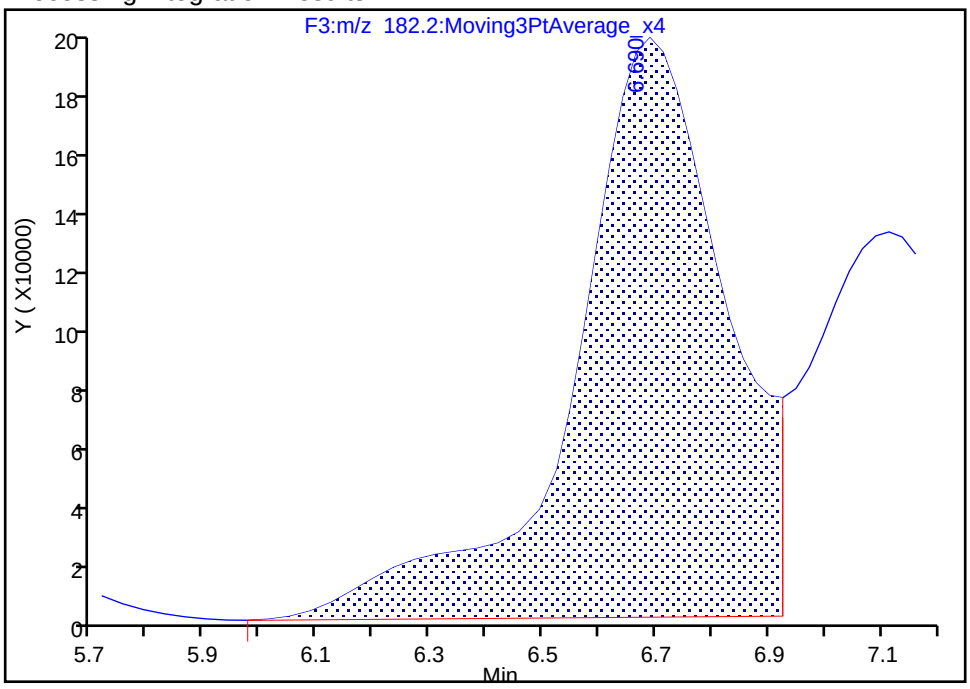
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Injection Date:	15-Jul-2021 12:47:43	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-2-A	Lab Sample ID:	280-150636-2		
Client ID:	29SB129 (5-6)				
Operator ID:	acm	ALS Bottle#:	55	Worklist Smp#:	18
Injection Vol:	40.0 ul	Dil. Factor:	500.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		
Column:		Detector	F3:SIR		

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

Signal: 1

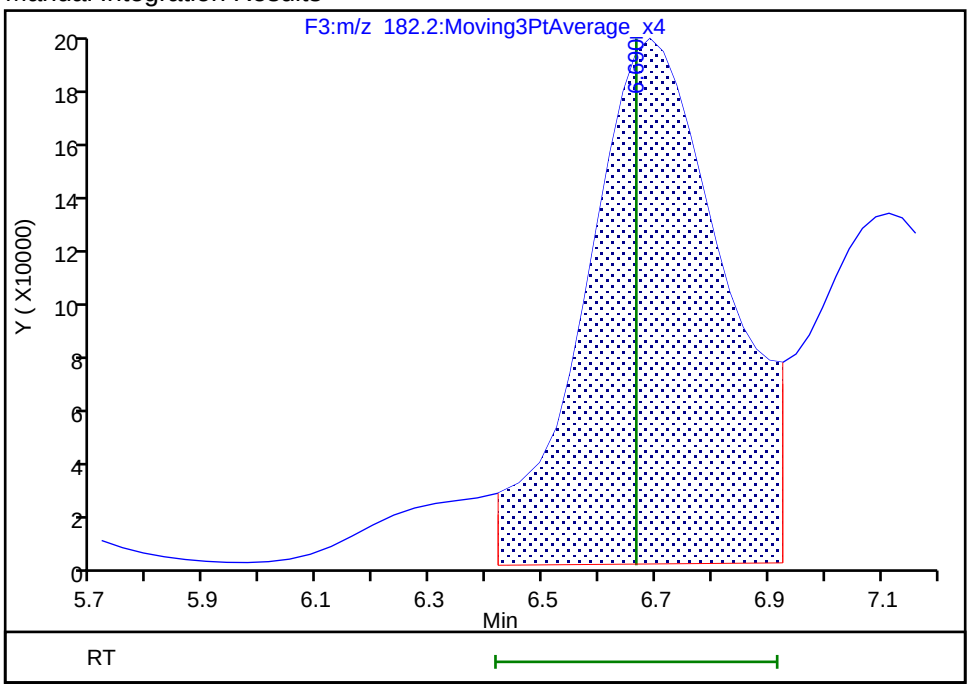
Processing Integration Results

RT: 6.69
Area: 3567606
Amount: 69.647420
Amount Units: ug/l



Manual Integration Results

RT: 6.69
Area: 3284084
Amount: 64.225995
Amount Units: ug/l



Reviewer: meyera, 15-Jul-2021 14:54:49

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Client Sample ID: 29SB145 (15-16) Lab Sample ID: 280-150636-3

Matrix: Solid Lab File ID: ex421G15018.d

Analysis Method: 8321A Date Collected: 03/08/2021 05:30

Extraction Method: 8330B Date Extracted: 07/12/2021 16:07

Sample wt/vol: 10.08(g) Date Analyzed: 07/15/2021 12:59

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

Injection Volume: 40(uL) GC Column: IonPac ID: 2(mm)

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

Analysis Batch No.: 543298 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.030	U H H3	0.099	0.030	0.013
99-65-0	1,3-Dinitrobenzene	0.015	U H H3	0.099	0.015	0.0071
118-96-7	2,4,6-Trinitrotoluene	0.024	J H H3	0.099	0.015	0.0050
121-14-2	2,4-Dinitrotoluene	0.010	J H H3	0.099	0.030	0.0081
606-20-2	2,6-Dinitrotoluene	0.030	U H H3	0.099	0.030	0.020
35572-78-2	2-Amino-4,6-dinitrotoluene	0.030	U H H3	0.099	0.030	0.012
88-72-2	o-Nitrotoluene	0.015	U H H3	0.099	0.015	0.0057
99-08-1	m-Nitrotoluene	0.030	U H H3	0.099	0.030	0.013
19406-51-0	4-Amino-2,6-dinitrotoluene	0.015	U H H3	0.099	0.015	0.0051
99-99-0	p-Nitrotoluene	0.030	U H H3	0.099	0.030	0.011
98-95-3	Nitrobenzene	0.030	U H H3	0.099	0.030	0.011
55-63-0	Nitroglycerin	0.030	U M H H3	0.099	0.030	0.010
2691-41-0	HMX	0.030	U H H3	0.099	0.030	0.015
78-11-5	PETN	0.015	U H H3	0.099	0.015	0.0051
121-82-4	RDX	0.015	U H H3	0.099	0.015	0.0043
479-45-8	Tetryl	0.015	U H H3	0.099	0.015	0.0075

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	118		68-140

Report Date: 16-Jul-2021 08:16:50 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15018.d
Lims ID: 280-150636-A-3-A
Client ID: 29SB145 (15-16)
Sample Type: Client
Inject. Date: 15-Jul-2021 12:59:47 ALS Bottle#: 14 Worklist Smp#: 19
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 280-150636-A-3-A
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 16-Jul-2021 08:16:45 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1655

First Level Reviewer: meyera Date: 15-Jul-2021 14:54:30
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	2.052	2.052	0.0		156532	120.0	98.1	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								M
284.2	3.011	2.993	0.018		680592	120.0	514	M
5 1,3,5-Trinitrobenzene								
213.2	3.717	3.733	0.017	0.756	8731	2.00	9.1	
* 7 1,3-Dinitrobenzene-d4								
172.1	4.915	4.871	0.044		1381613	129.4	57.1	
10 2,4,6-Trinitrotoluene								
227.2	5.299	5.353	0.0	0.752	162436	6.05	131	
$ 11 Nitrobenzene-d5								
128.1	5.373	5.428	0.0	0.763	1126585	118.5	643	
17 2,6-Dinitrotoluene								
182.2	6.713	6.760	0.047	0.953	80197	3.01	7.5	
* 18 2,4-dinitrotoluene-d3								
185.1	7.043	6.996	0.047		3142176	120.0	270	
19 2,4-Dinitrotoluene								
182.2	7.114	7.115	0.047	1.010	73072	2.53	6.9	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

EXPWORKINGIS_00084 Amount Added: 20.00 Units: uL Run Reagent

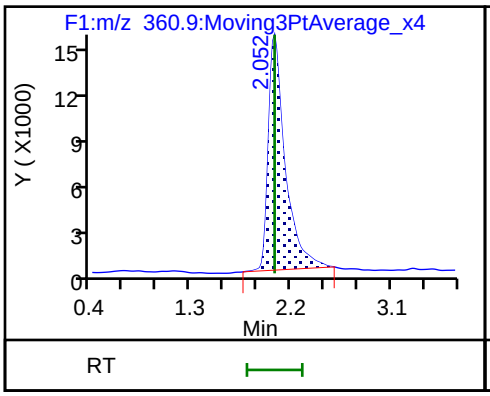
Report Date: 16-Jul-2021 08:16:50 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

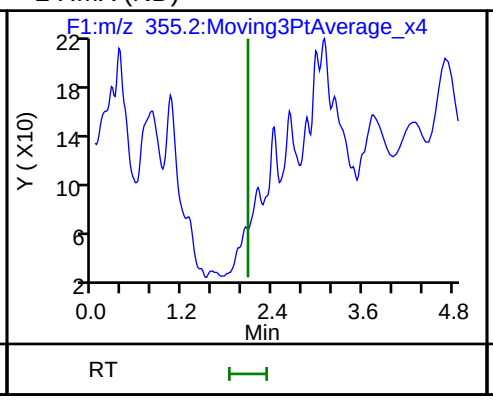
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Injection Date:	15-Jul-2021 12:59:47	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-3-A	Lab Sample ID:	280-150636-3		
Client ID:	29SB145 (15-16)				
Operator ID:	acm	ALS Bottle#:	14	Worklist Smp#:	19
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		

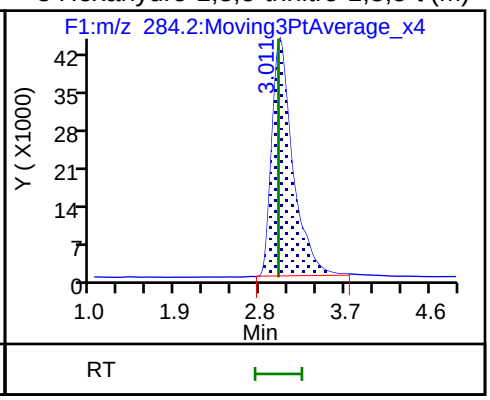
* 1 HMX-13C4



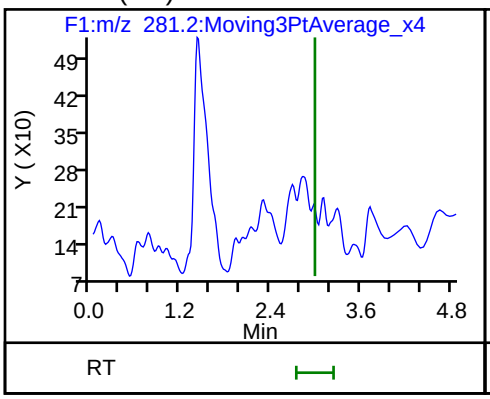
2 HMX (ND)



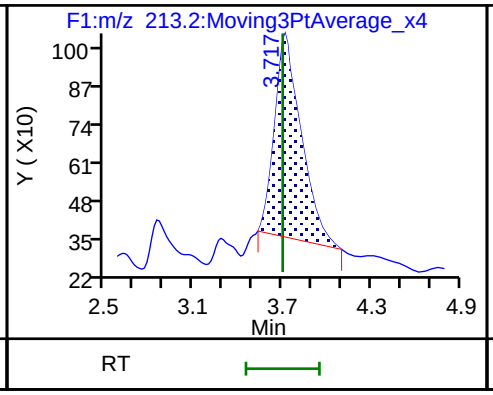
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t (M)



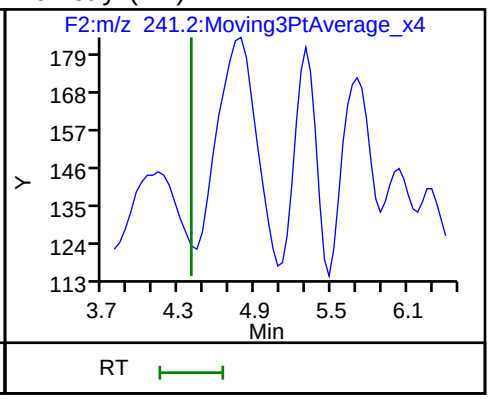
4 RDX (ND)



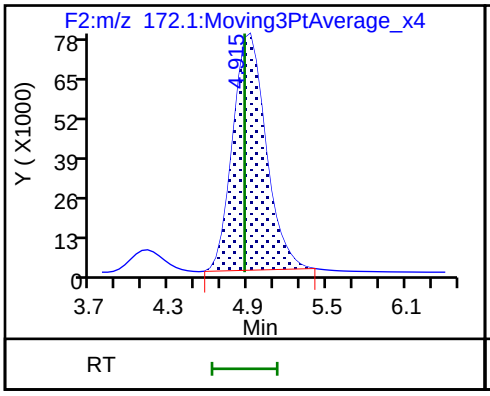
5 1,3,5-Trinitrobenzene



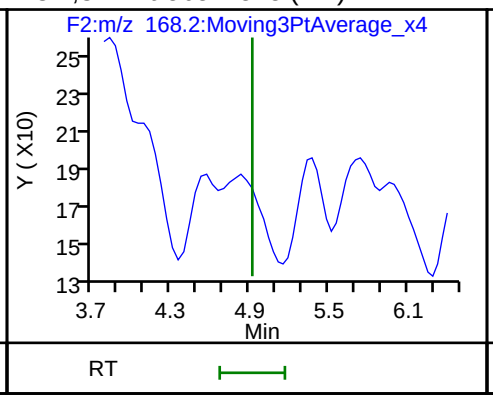
6 Tetryl (ND)



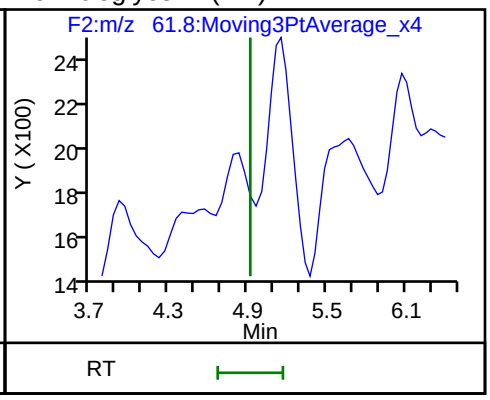
* 7 1,3-Dinitrobenzene-d4



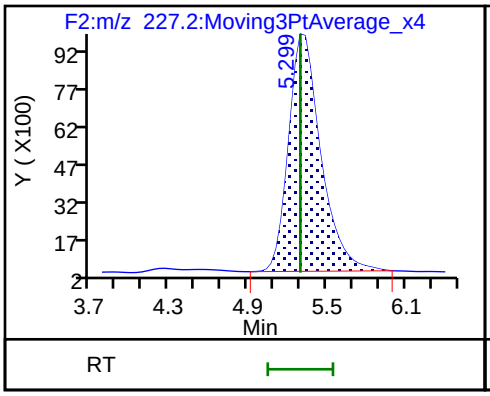
8 1,3-Dinitrobenzene (ND)



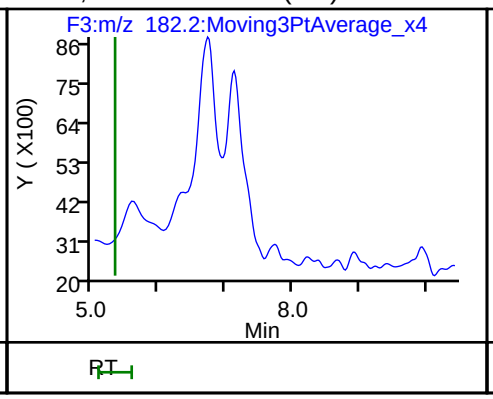
9 Nitroglycerin (ND)



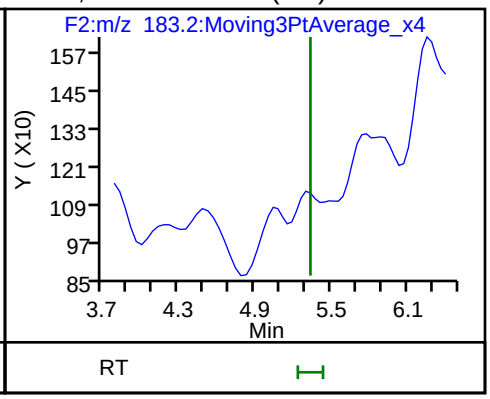
10 2,4,6-Trinitrotoluene



13 3,4-Dinitrotoluene (ND)



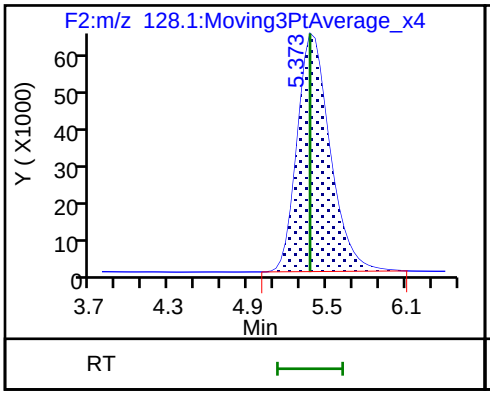
28 3,5-Dinitroaniline (ND)



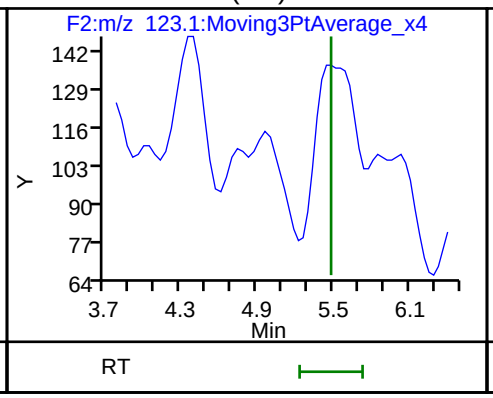
Report Date: 16-Jul-2021 08:16:50 Chrom Revision: 2.3 13-May-2021 07:57:40

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15018.d

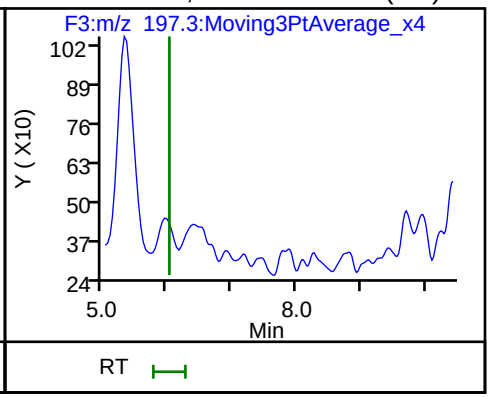
$ 11 Nitrobenzene-d5



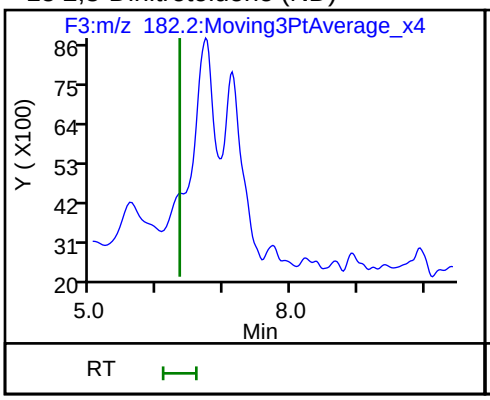
12 Nitrobenzene (ND)



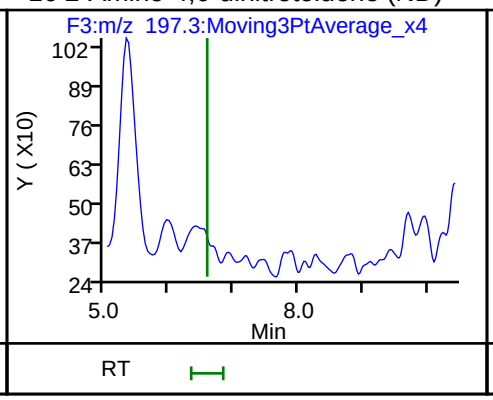
14 4-Amino-2,6-dinitrotoluene (ND)



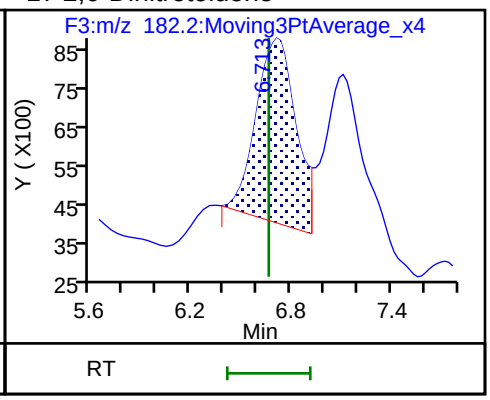
15 2,3-Dinitrotoluene (ND)



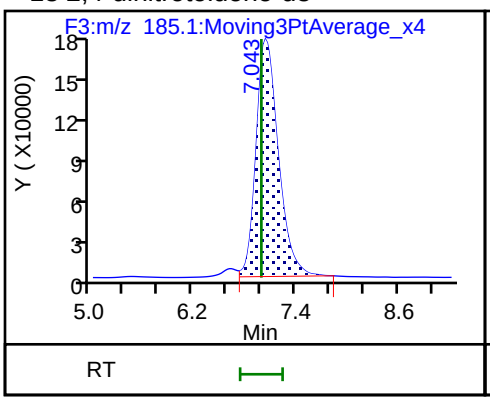
16 2-Amino-4,6-dinitrotoluene (ND)



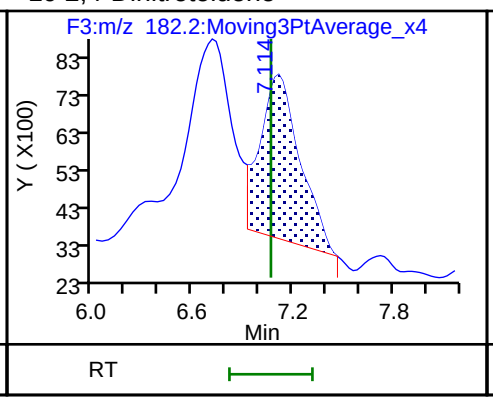
17 2,6-Dinitrotoluene



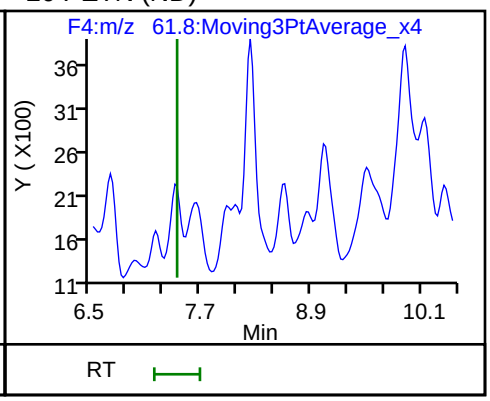
* 18 2,4-dinitrotoluene-d3



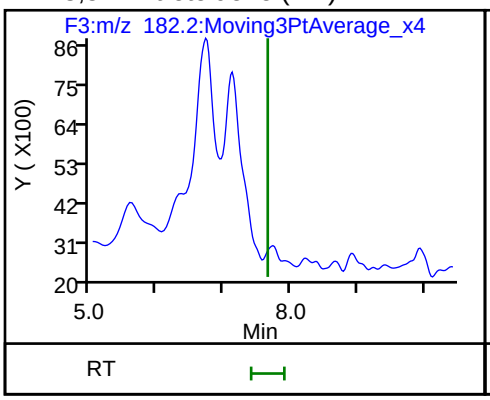
19 2,4-Dinitrotoluene



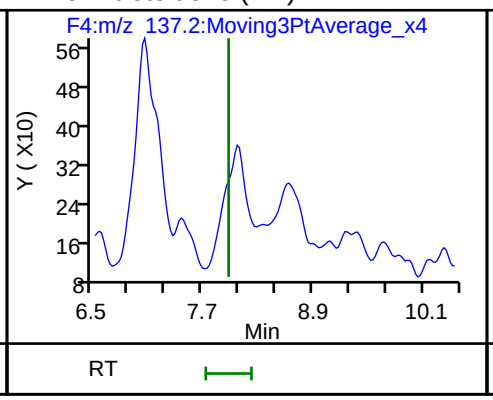
20 PETN (ND)



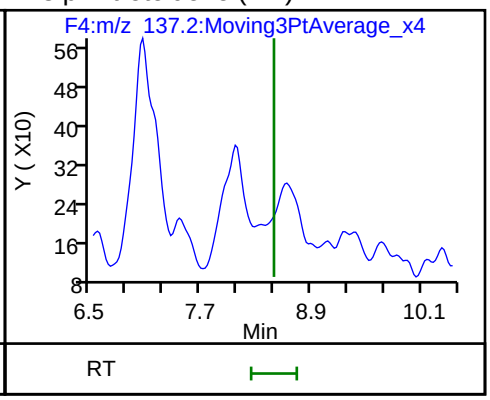
21 3,5-Dinitrotoluene (ND)



22 o-Nitrotoluene (ND)



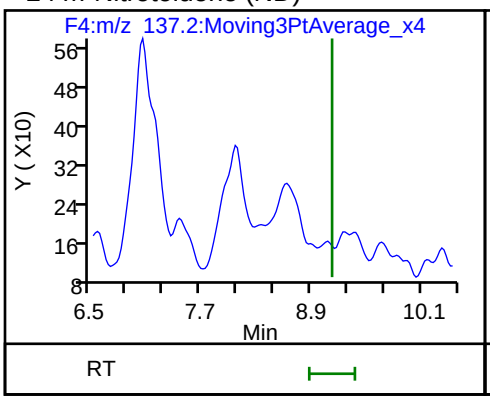
23 p-Nitrotoluene (ND)



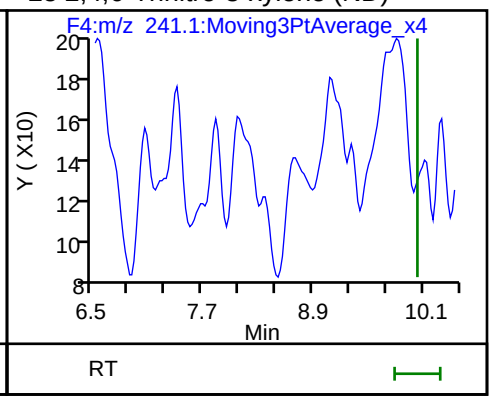
Report Date: 16-Jul-2021 08:16:50 Chrom Revision: 2.3 13-May-2021 07:57:40

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15018.d

24 m-Nitrotoluene (ND)



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



Report Date: 16-Jul-2021 08:16:50 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15018.d
Lims ID: 280-150636-A-3-A
Client ID: 29SB145 (15-16)
Sample Type: Client
Inject. Date: 15-Jul-2021 12:59:47 ALS Bottle#: 14 Worklist Smp#: 19
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 280-150636-A-3-A
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 16-Jul-2021 08:16:45 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1655

First Level Reviewer: meyera Date: 15-Jul-2021 14:54:30

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	118.5	118.14

Report Date: 16-Jul-2021 08:16:50 Chrom Revision: 2.3 13-May-2021 07:57:40

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

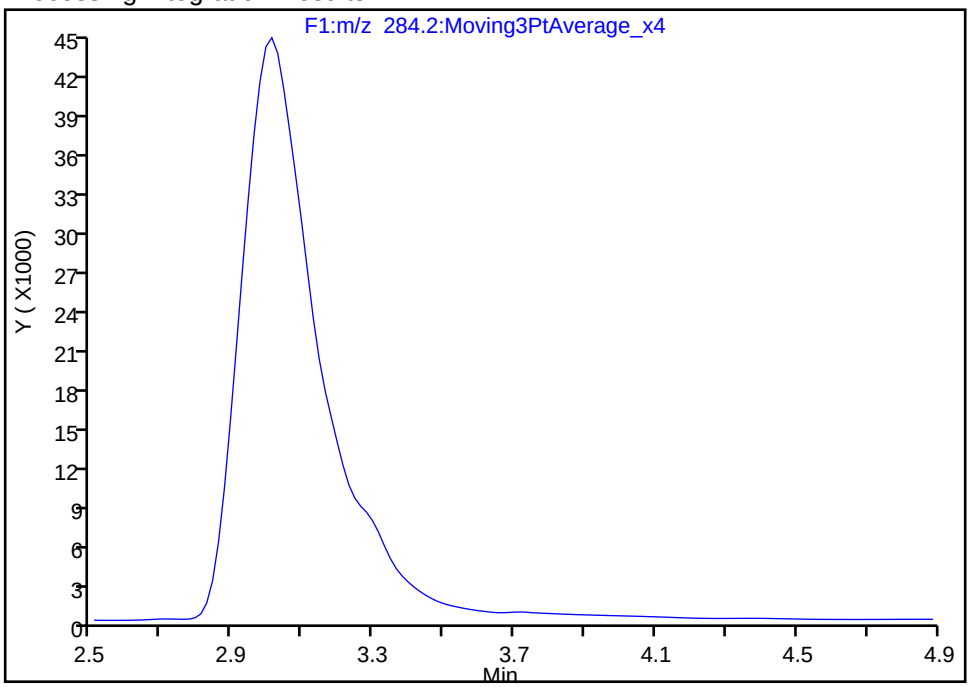
Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15018.d				
Injection Date:	15-Jul-2021 12:59:47	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-3-A	Lab Sample ID:	280-150636-3		
Client ID:	29SB145 (15-16)				
Operator ID:	acm	ALS Bottle#:	14	Worklist Smp#:	19
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		
Column:		Detector	F1:SIR		

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

Signal: 1

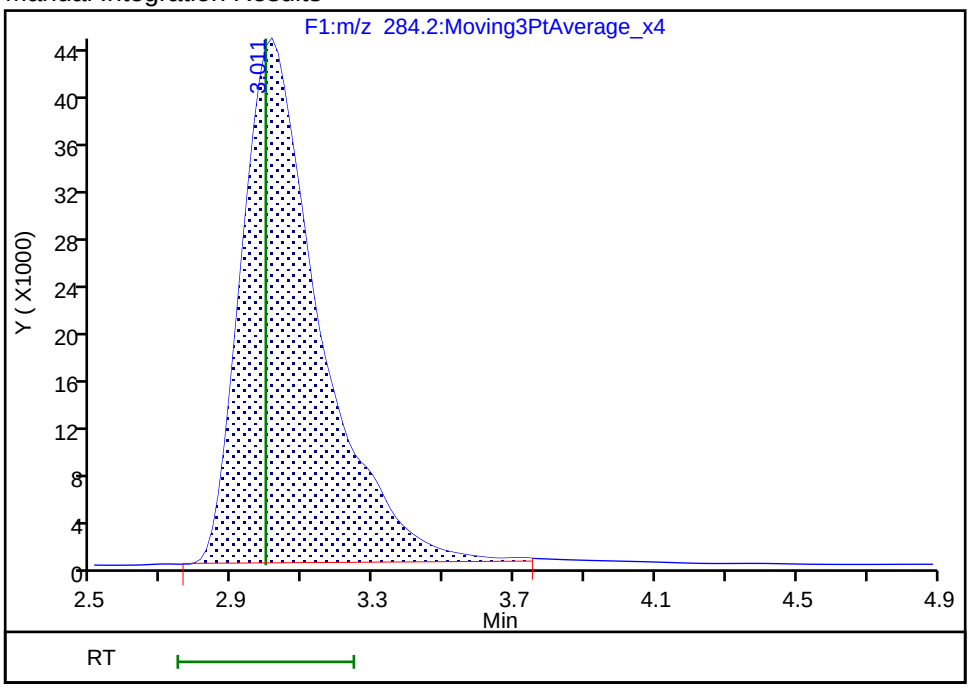
Processing Integration Results

RT: 3.01
Area: 442994
Amount: 120.0000
Amount Units: ug/l



Manual Integration Results

RT: 3.01
Area: 680592
Amount: 120.0000
Amount Units: ug/l



Reviewer: meyera, 15-Jul-2021 14:54:27

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Client Sample ID: 29SB148 (15-16) Lab Sample ID: 280-150636-4

Matrix: Solid Lab File ID: ex421G15019.d

Analysis Method: 8321A Date Collected: 03/08/2021 01:45

Extraction Method: 8330B Date Extracted: 07/12/2021 16:07

Sample wt/vol: 10.42(g) Date Analyzed: 07/15/2021 13:12

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

Injection Volume: 40(uL) GC Column: IonPac ID: 2(mm)

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

Analysis Batch No.: 543298 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.029	U H H3	0.096	0.029	0.012
99-65-0	1,3-Dinitrobenzene	0.015	U H H3	0.096	0.015	0.0068
118-96-7	2,4,6-Trinitrotoluene	0.046	J H H3	0.096	0.015	0.0048
121-14-2	2,4-Dinitrotoluene	0.029	U M H H3	0.096	0.029	0.0079
606-20-2	2,6-Dinitrotoluene	0.029	U M H H3	0.096	0.029	0.019
35572-78-2	2-Amino-4,6-dinitrotoluene	0.029	U H H3	0.096	0.029	0.012
88-72-2	o-Nitrotoluene	0.015	U H H3	0.096	0.015	0.0055
99-08-1	m-Nitrotoluene	0.029	U H H3	0.096	0.029	0.012
19406-51-0	4-Amino-2,6-dinitrotoluene	0.015	U H H3	0.096	0.015	0.0049
99-99-0	p-Nitrotoluene	0.029	U H H3	0.096	0.029	0.011
98-95-3	Nitrobenzene	0.029	U H H3	0.096	0.029	0.010
55-63-0	Nitroglycerin	0.029	U H H3	0.096	0.029	0.010
2691-41-0	HMX	0.029	U H H3	0.096	0.029	0.014
78-11-5	PETN	0.015	U H H3	0.096	0.015	0.0049
121-82-4	RDX	0.015	U H H3	0.096	0.015	0.0041
479-45-8	Tetryl	0.015	U H H3	0.096	0.015	0.0073

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	111		68-140

Report Date: 16-Jul-2021 08:16:50 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15019.d
Lims ID: 280-150636-A-4-A
Client ID: 29SB148 (15-16)
Sample Type: Client
Inject. Date: 15-Jul-2021 13:12:07 ALS Bottle#: 15 Worklist Smp#: 20
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 280-150636-A-4-A
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 16-Jul-2021 08:16:45 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1655

First Level Reviewer: meyera Date: 15-Jul-2021 14:54:10
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
360.9	2.052	2.052	0.0		191036	120.0	109	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	2.994	2.993	0.001		705778	120.0	695	
5 1,3,5-Trinitrobenzene								
213.2	3.684	3.733	-0.016	0.756	3217	1.40	4.0	
6 Tetryl								
241.2	4.172	4.429	-0.218	0.856	958	0.3460	2.7	
* 7 1,3-Dinitrobenzene-d4								
172.1	4.872	4.871	0.001		1373256	129.4	57.1	
8 1,3-Dinitrobenzene								
168.2	4.828	4.959	-0.087	0.991	1482	-0.6507	4.5	
10 2,4,6-Trinitrotoluene								
227.2	5.299	5.353	0.0	0.755	431159	12.0	378	
$ 11 Nitrobenzene-d5								
128.1	5.374	5.428	0.001	0.765	1056781	111.8	497	
17 2,6-Dinitrotoluene								M
182.2	6.666	6.760	0.0	0.950	54578	2.38	6.4	M
* 18 2,4-dinitrotoluene-d3								
185.1	7.020	6.996	0.024		3558258	120.0	375	
19 2,4-Dinitrotoluene								M
182.2	7.091	7.115	0.024	1.010	50914	1.45	7.6	M

QC Flag Legend

Processing Flags

Report Date: 16-Jul-2021 08:16:50 Chrom Revision: 2.3 13-May-2021 07:57:40

Review Flags

M - Manually Integrated

Reagents:

EXPWORKINGIS_00084 Amount Added: 20.00 Units: uL Run Reagent

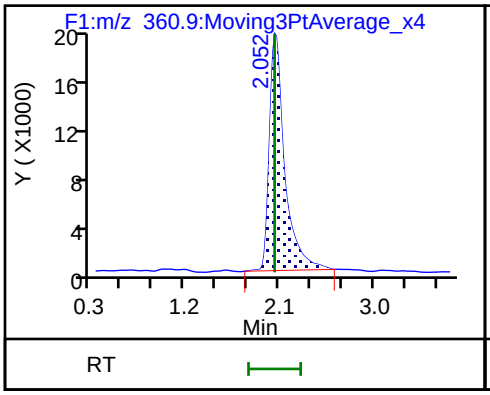
Report Date: 16-Jul-2021 08:16:50 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

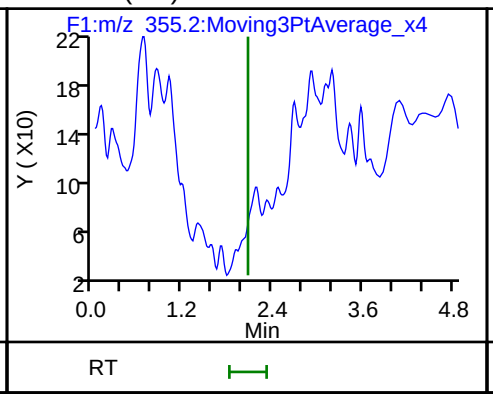
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15019.d

Injection Date:	15-Jul-2021 13:12:07	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-4-A	Lab Sample ID:	280-150636-4		
Client ID:	29SB148 (15-16)				
Operator ID:	acm	ALS Bottle#:	15	Worklist Smp#:	20
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		

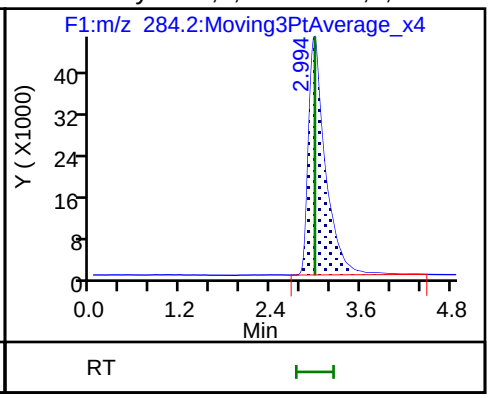
* 1 HMX-13C4



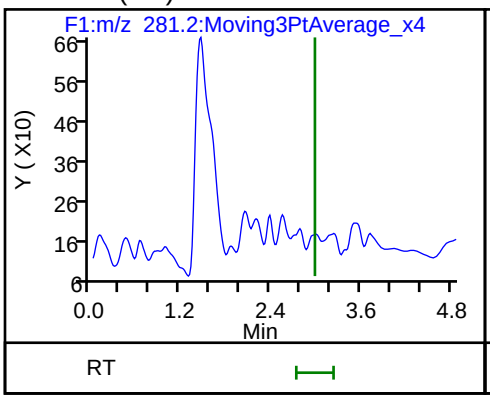
2 HMX (ND)



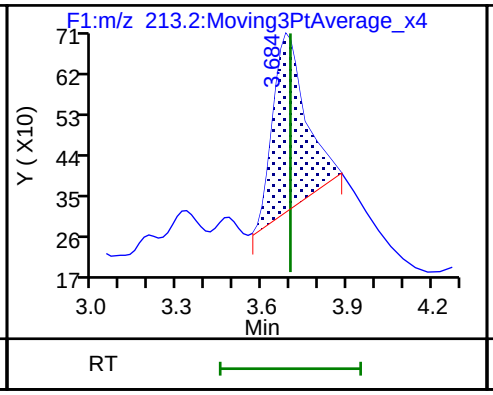
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



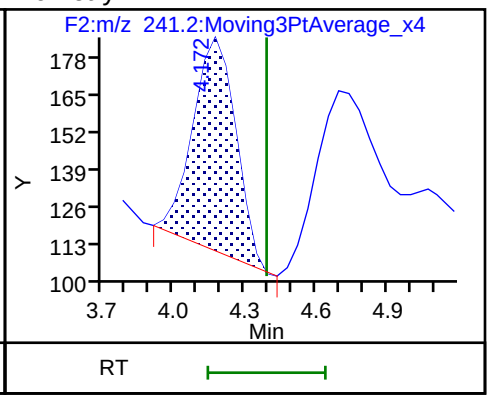
4 RDX (ND)



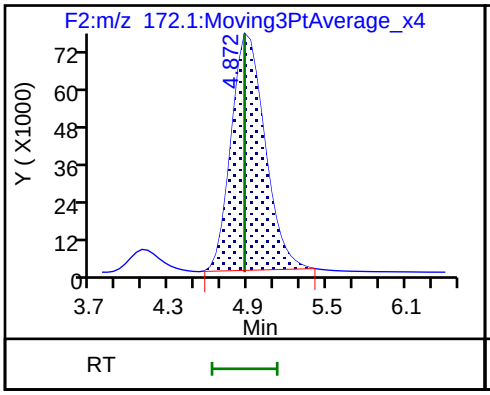
5 1,3,5-Trinitrobenzene



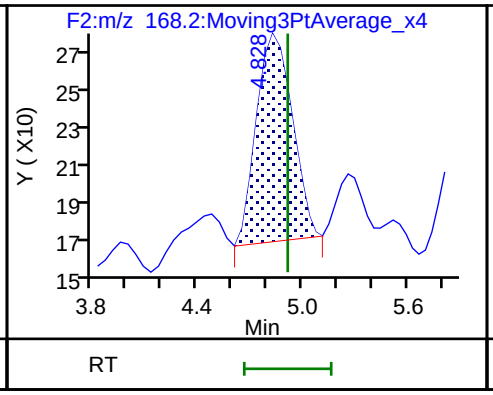
6 Tetryl



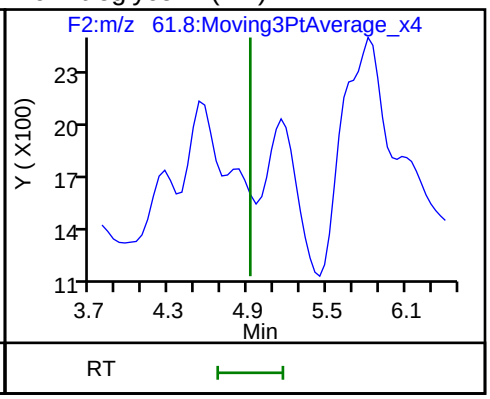
* 7 1,3-Dinitrobenzene-d4



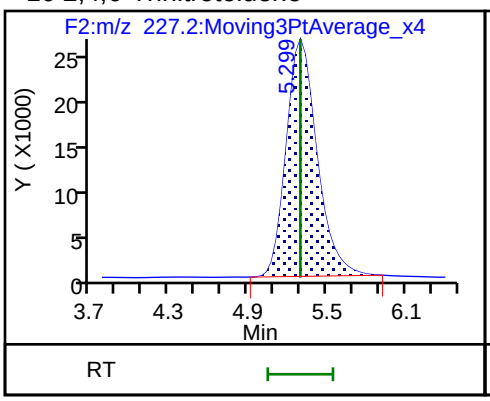
8 1,3-Dinitrobenzene



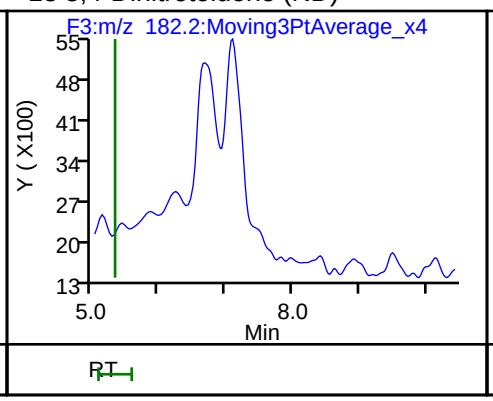
9 Nitroglycerin (ND)



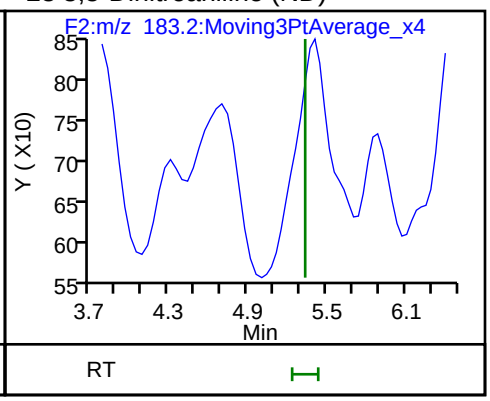
10 2,4,6-Trinitrotoluene



13 3,4-Dinitrotoluene (ND)

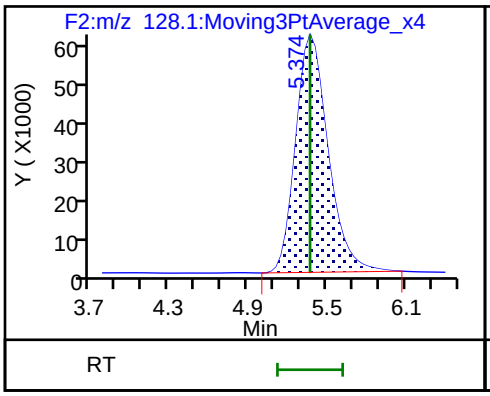


28 3,5-Dinitroaniline (ND)

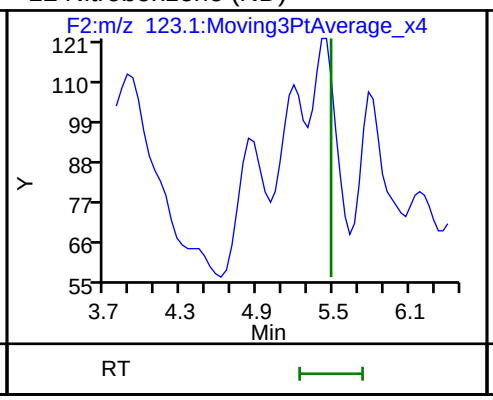


Report Date: 16-Jul-2021 08:16:50 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15019.d

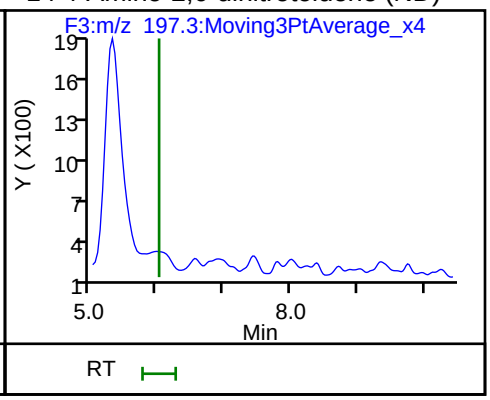
$ 11 Nitrobenzene-d5



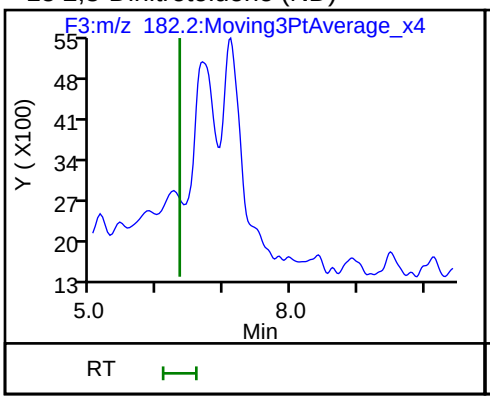
12 Nitrobenzene (ND)



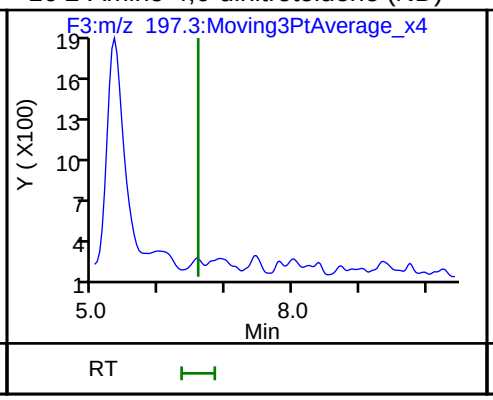
14 4-Amino-2,6-dinitrotoluene (ND)



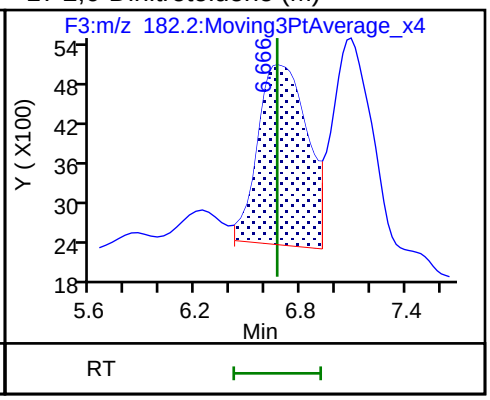
15 2,3-Dinitrotoluene (ND)



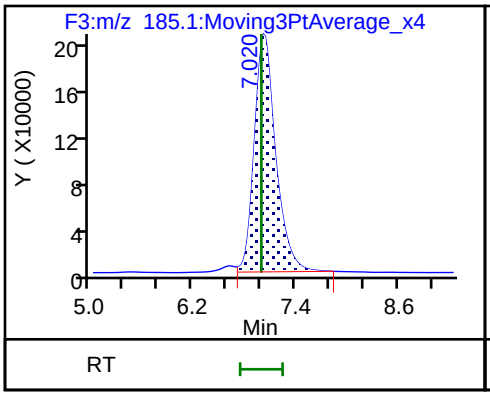
16 2-Amino-4,6-dinitrotoluene (ND)



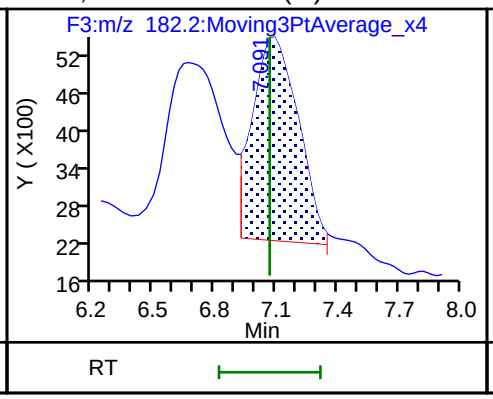
17 2,6-Dinitrotoluene (M)



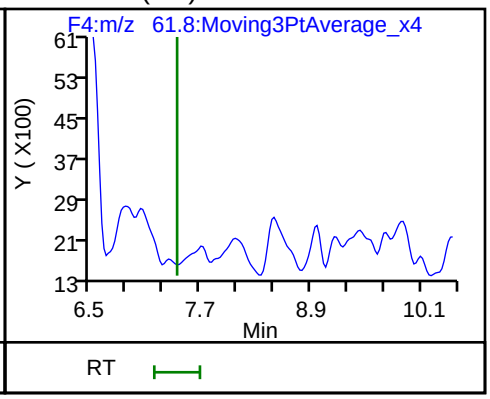
* 18 2,4-dinitrotoluene-d3



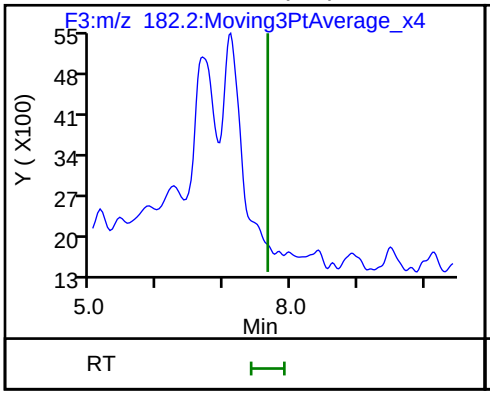
19 2,4-Dinitrotoluene (M)



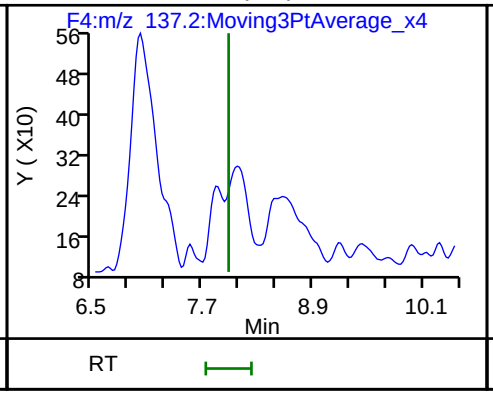
20 PETN (ND)



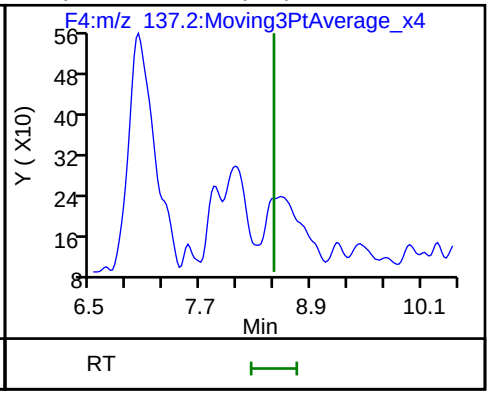
21 3,5-Dinitrotoluene (ND)



22 o-Nitrotoluene (ND)



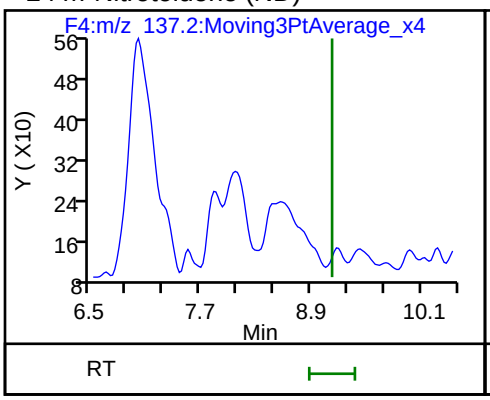
23 p-Nitrotoluene (ND)



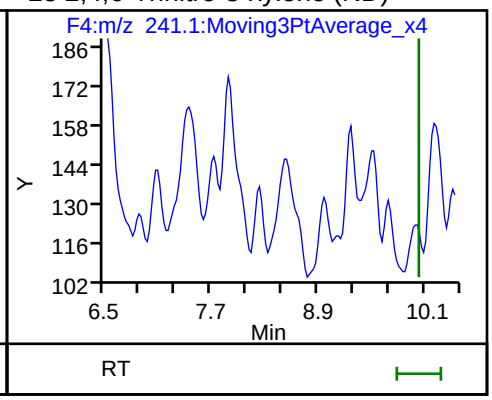
Report Date: 16-Jul-2021 08:16:50 Chrom Revision: 2.3 13-May-2021 07:57:40

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15019.d

24 m-Nitrotoluene (ND)



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



Report Date: 16-Jul-2021 08:16:50 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15019.d
Lims ID: 280-150636-A-4-A
Client ID: 29SB148 (15-16)
Sample Type: Client
Inject. Date: 15-Jul-2021 13:12:07 ALS Bottle#: 15 Worklist Smp#: 20
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 280-150636-A-4-A
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 16-Jul-2021 08:16:45 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1655

First Level Reviewer: meyera Date: 15-Jul-2021 14:54:10

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	111.8	111.43

Report Date: 16-Jul-2021 08:16:50 Chrom Revision: 2.3 13-May-2021 07:57:40

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

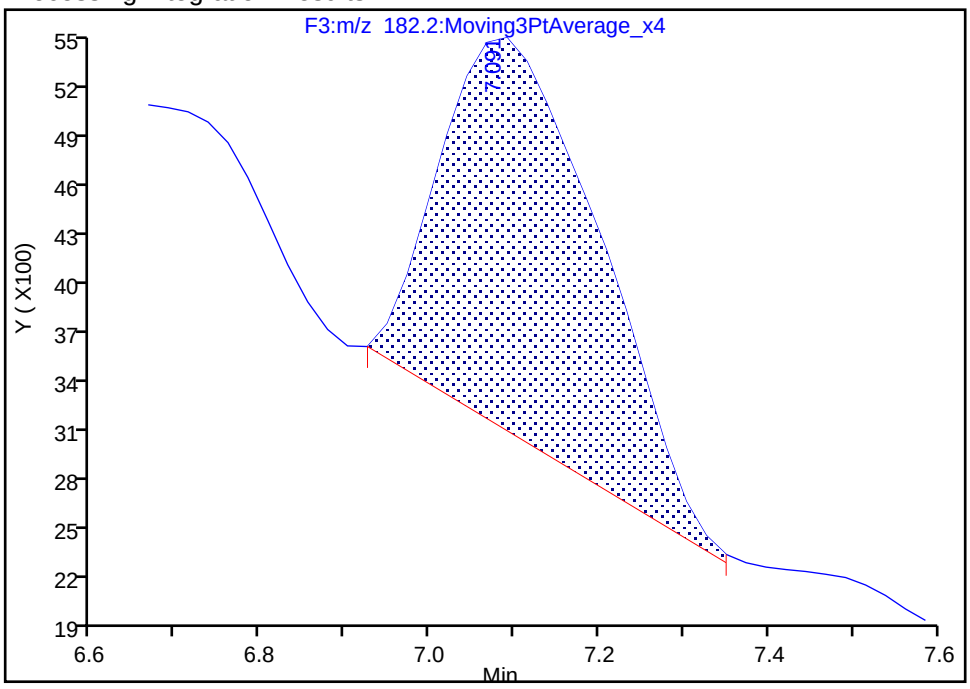
Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15019.d				
Injection Date:	15-Jul-2021 13:12:07	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-4-A	Lab Sample ID:	280-150636-4		
Client ID:	29SB148 (15-16)				
Operator ID:	acm	ALS Bottle#:	15	Worklist Smp#:	20
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		
Column:		Detector	F3:SIR		

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

Signal: 1

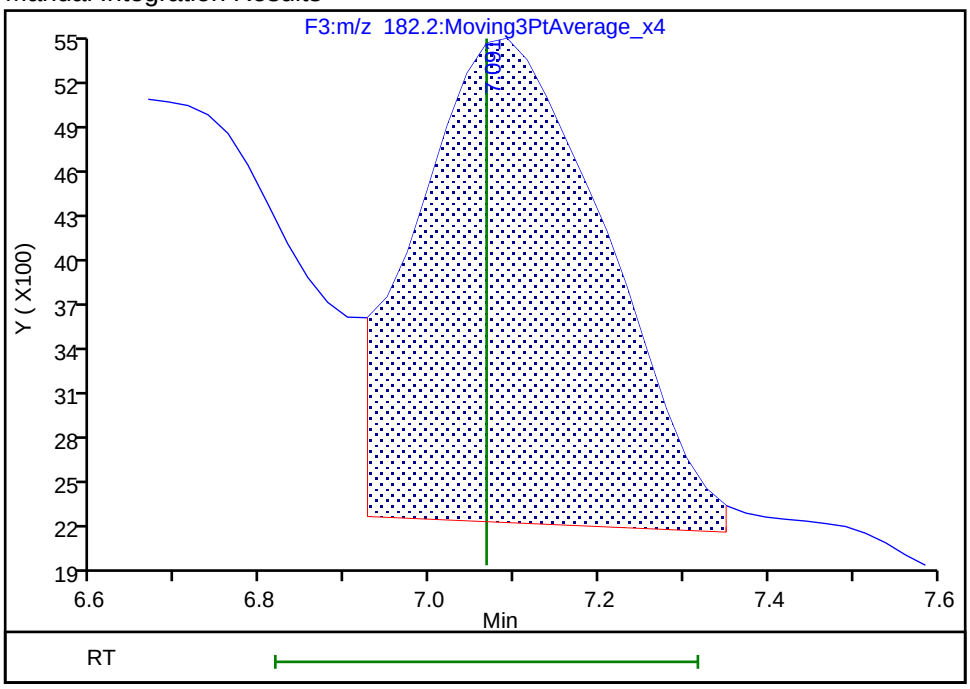
Processing Integration Results

RT: 7.09
Area: 32082
Amount: 0.814931
Amount Units: ug/l



Manual Integration Results

RT: 7.09
Area: 50914
Amount: 1.451738
Amount Units: ug/l



Reviewer: meyera, 15-Jul-2021 14:53:57

Audit Action: Assigned New Baseline Audit Reason: Baseline

Report Date: 16-Jul-2021 08:16:50 Chrom Revision: 2.3 13-May-2021 07:57:40

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

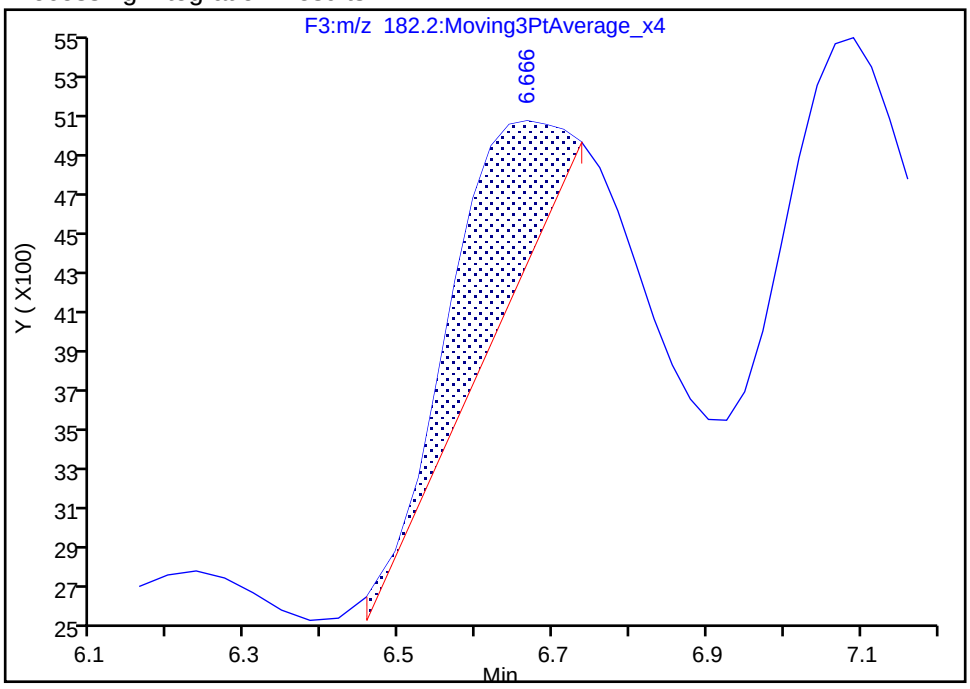
Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15019.d				
Injection Date:	15-Jul-2021 13:12:07	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-4-A	Lab Sample ID:	280-150636-4		
Client ID:	29SB148 (15-16)				
Operator ID:	acm	ALS Bottle#:	15	Worklist Smp#:	20
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		
Column:		Detector	F3:SIR		

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

Signal: 1

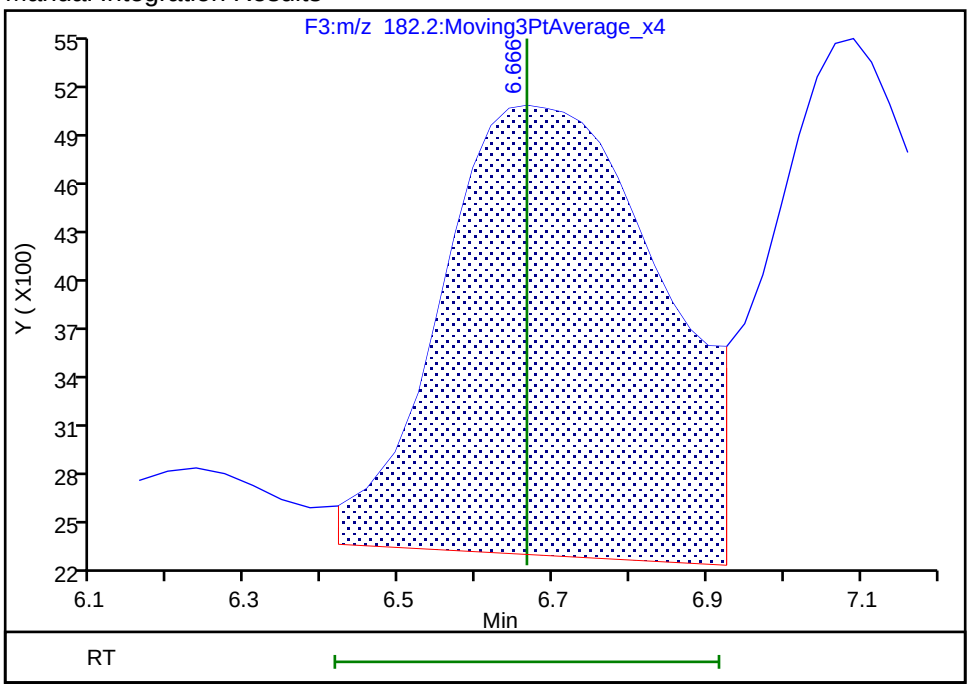
Processing Integration Results

RT: 6.67
Area: 8004
Amount: 1.567696
Amount Units: ug/l



Manual Integration Results

RT: 6.67
Area: 54578
Amount: 2.376454
Amount Units: ug/l



Reviewer: meyera, 15-Jul-2021 14:54:02

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Client Sample ID: 29SB137 (15-16) Lab Sample ID: 280-150636-5

Matrix: Solid Lab File ID: ex421G15020.d

Analysis Method: 8321A Date Collected: 03/08/2021 08:10

Extraction Method: 8330B Date Extracted: 07/12/2021 16:07

Sample wt/vol: 10.23(g) Date Analyzed: 07/15/2021 13:24

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

Injection Volume: 40(uL) GC Column: IonPac ID: 2(mm)

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

Analysis Batch No.: 543298 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.017	J H H3	0.098	0.029	0.012
99-65-0	1,3-Dinitrobenzene	0.015	U H H3	0.098	0.015	0.0070
121-14-2	2,4-Dinitrotoluene	0.069	J M H H3	0.098	0.029	0.0080
606-20-2	2,6-Dinitrotoluene	0.029	U M H H3	0.098	0.029	0.020
35572-78-2	2-Amino-4,6-dinitrotoluene	0.046	J M H H3	0.098	0.029	0.012
88-72-2	o-Nitrotoluene	0.015	U H H3	0.098	0.015	0.0056
99-08-1	m-Nitrotoluene	0.029	U H H3	0.098	0.029	0.013
19406-51-0	4-Amino-2,6-dinitrotoluene	0.057	J M H H3	0.098	0.015	0.0050
99-99-0	p-Nitrotoluene	0.029	U H H3	0.098	0.029	0.011
98-95-3	Nitrobenzene	0.036	J H H3	0.098	0.029	0.011
55-63-0	Nitroglycerin	0.029	U H H3	0.098	0.029	0.010
2691-41-0	HMX	0.029	U H H3	0.098	0.029	0.015
78-11-5	PETN	0.015	U H H3	0.098	0.015	0.0050
121-82-4	RDX	0.015	U H H3	0.098	0.015	0.0042
479-45-8	Tetryl	0.015	U H H3	0.098	0.015	0.0074

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	91		68-140

Report Date: 16-Jul-2021 08:16:51 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15020.d
Lims ID: 280-150636-A-5-A
Client ID: 29SB137 (15-16)
Sample Type: Client
Inject. Date: 15-Jul-2021 13:24:11 ALS Bottle#: 16 Worklist Smp#: 21
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 280-150636-A-5-A
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 16-Jul-2021 08:16:45 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1655

First Level Reviewer: meyera Date: 15-Jul-2021 14:53:39
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
360.9	2.052	2.052	0.0		165280	120.0	165	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	2.994	2.993	0.001		715561	120.0	591	
5 1,3,5-Trinitrobenzene								
213.2	3.701	3.733	0.001	0.753	30687	4.36	12.8	
* 7 1,3-Dinitrobenzene-d4								
172.1	4.916	4.871	0.045		1398587	129.4	56.8	
10 2,4,6-Trinitrotoluene								E
227.2	5.337	5.353	0.038	0.755	202879535	5164.5	692	E
28 3,5-Dinitroaniline								
183.2	5.374	5.384	0.038	1.093	35807	1.66	10.3	
$ 11 Nitrobenzene-d5								
128.1	5.411	5.428	0.038	0.766	877170	90.9	325	
12 Nitrobenzene								
123.1	5.374	5.521	-0.110	0.760	66379	9.17	138	
14 4-Amino-2,6-dinitrotoluene								M
197.3	6.014	6.053	0.001	0.851	475660	14.6	1.8	M
16 2-Amino-4,6-dinitrotoluene								M
197.3	6.620	6.616	0.048	0.937	431782	11.9	1.7	M
17 2,6-Dinitrotoluene								M
182.2	6.714	6.760	0.048	0.950	73594	2.78	5.5	M
* 18 2,4-dinitrotoluene-d3								
185.1	7.068	6.996	0.072		3361104	120.0	380	
19 2,4-Dinitrotoluene								M
182.2	7.139	7.115	0.072	1.010	502892	17.7	32.4	M
25 2,4,6-Trinitro-3-xylene								
241.1	10.076	10.044	0.032	2.050	50467	NC	4.1	

Report Date: 16-Jul-2021 08:16:51 Chrom Revision: 2.3 13-May-2021 07:57:40

QC Flag Legend

Processing Flags

NC - Not Calibrated

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

Reagents:

EXPWORKINGIS_00084	Amount Added: 20.00	Units: uL	Run Reagent

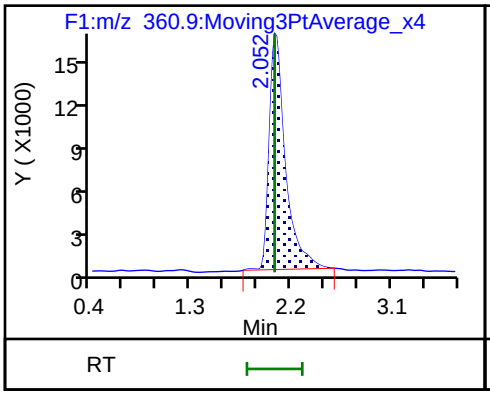
Report Date: 16-Jul-2021 08:16:51 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

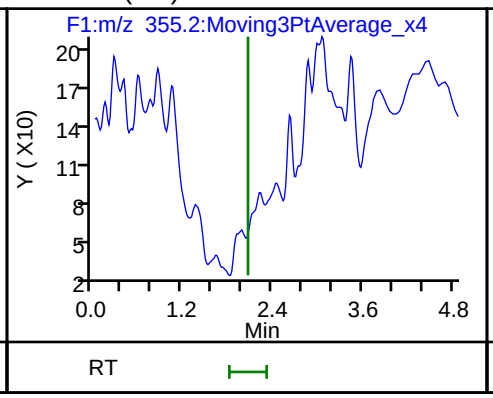
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15020.d

Injection Date:	15-Jul-2021 13:24:11	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-5-A	Lab Sample ID:	280-150636-5		
Client ID:	29SB137 (15-16)				
Operator ID:	acm	ALS Bottle#:	16	Worklist Smp#:	21
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		

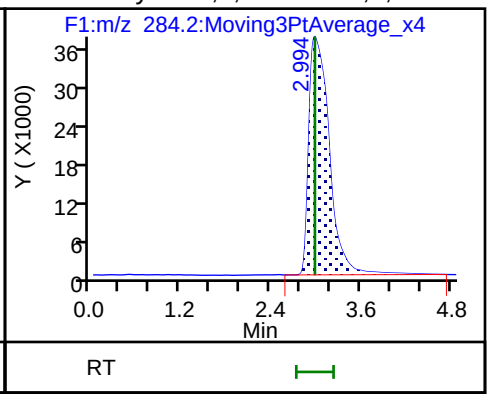
* 1 HMX-13C4



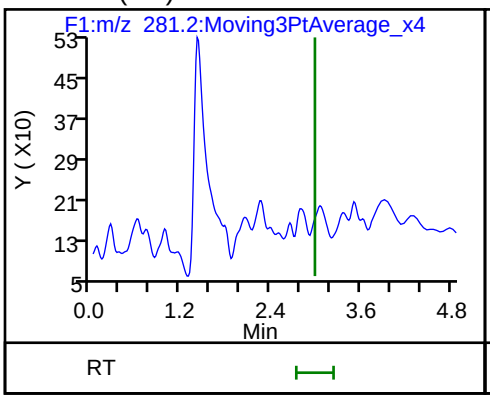
2 HMX (ND)



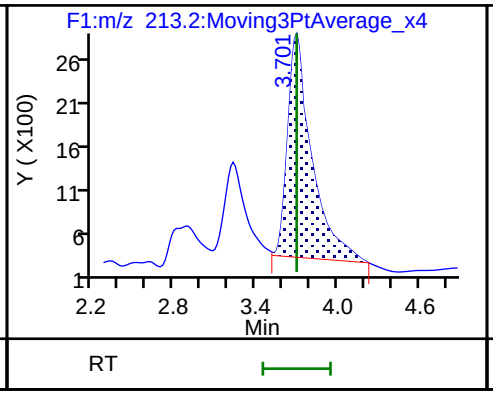
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



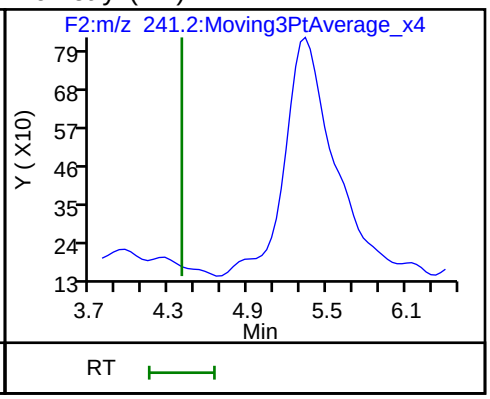
4 RDX (ND)



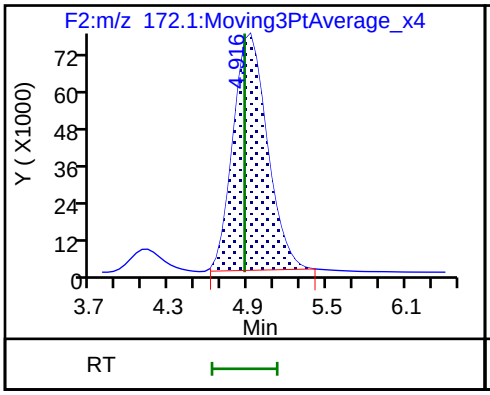
5 1,3,5-Trinitrobenzene



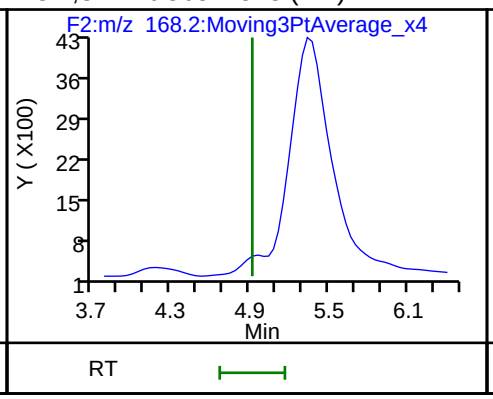
6 Tetryl (ND)



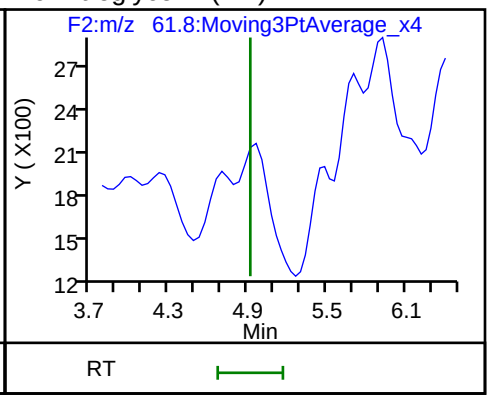
* 7 1,3-Dinitrobenzene-d4



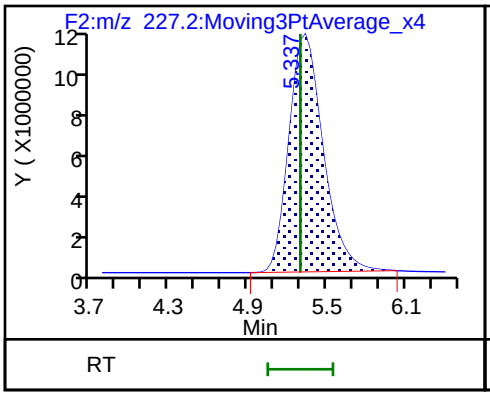
8 1,3-Dinitrobenzene (ND)



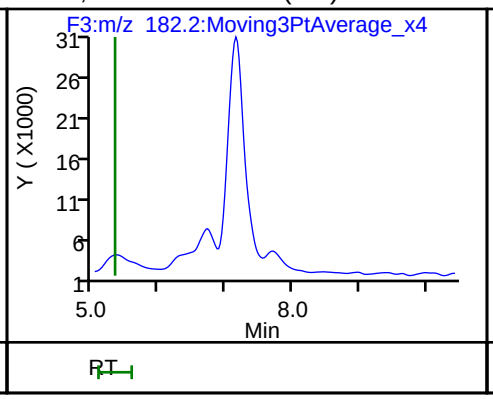
9 Nitroglycerin (ND)



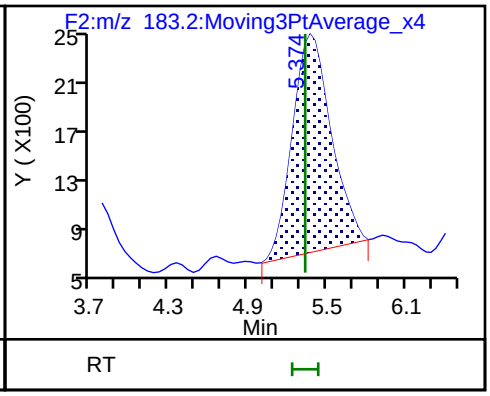
10 2,4,6-Trinitrotoluene



13 3,4-Dinitrotoluene (ND)

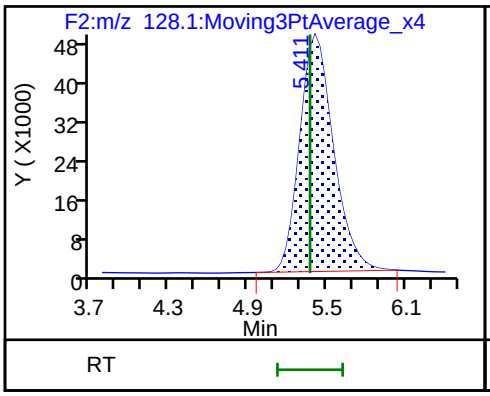


28 3,5-Dinitroaniline

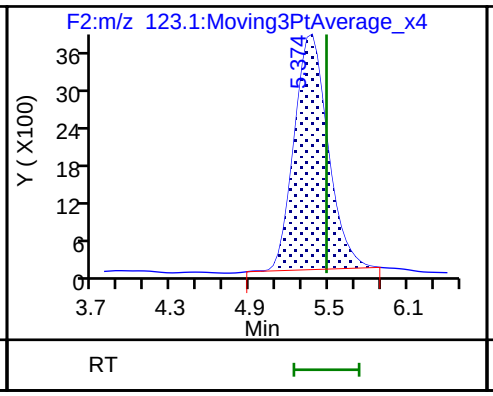


Report Date: 16-Jul-2021 08:16:51 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15020.d

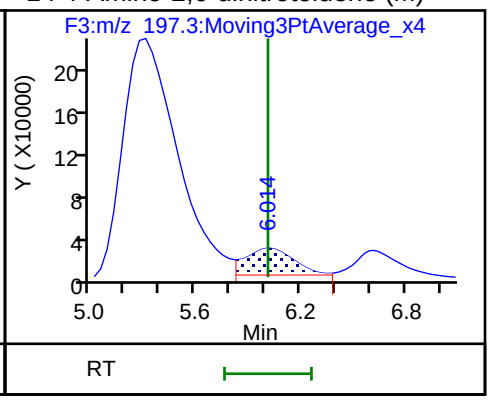
$ 11 Nitrobenzene-d5



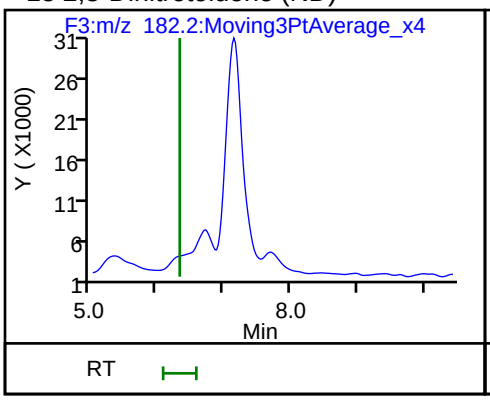
12 Nitrobenzene



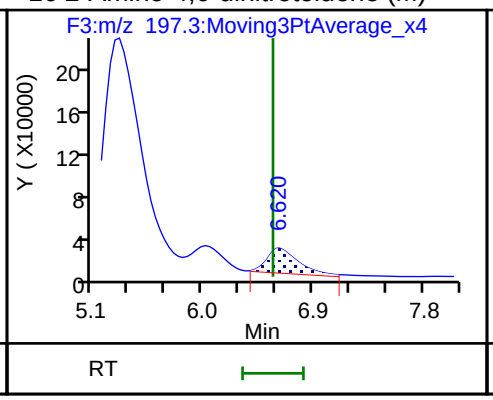
14 4-Amino-2,6-dinitrotoluene (M)



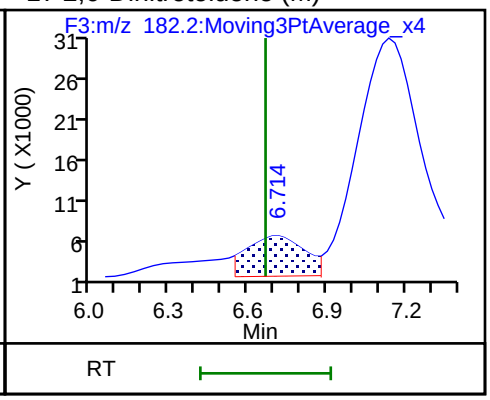
15 2,3-Dinitrotoluene (ND)



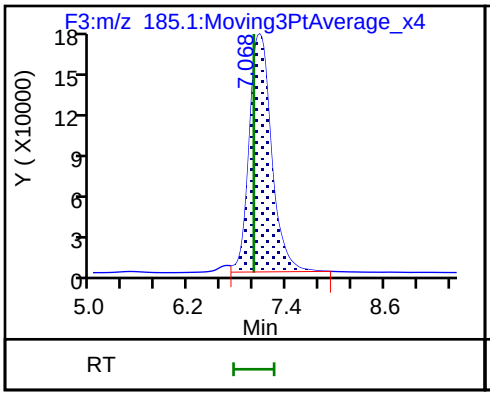
16 2-Amino-4,6-dinitrotoluene (M)



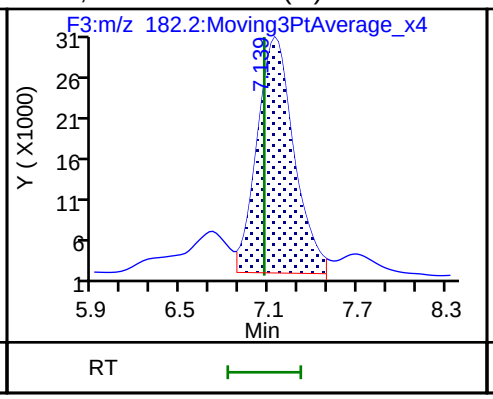
17 2,6-Dinitrotoluene (M)



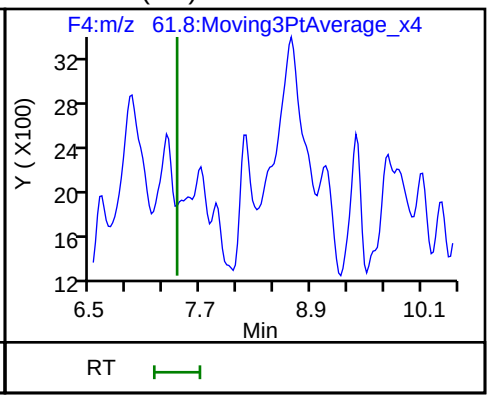
* 18 2,4-dinitrotoluene-d3



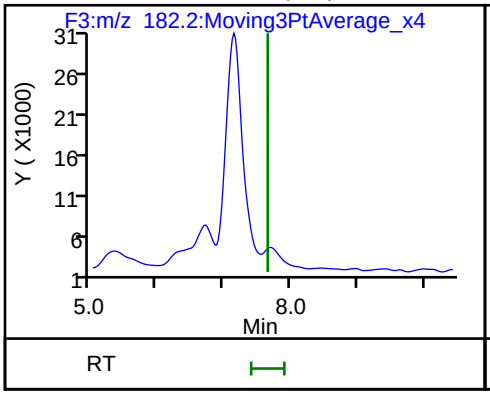
19 2,4-Dinitrotoluene (M)



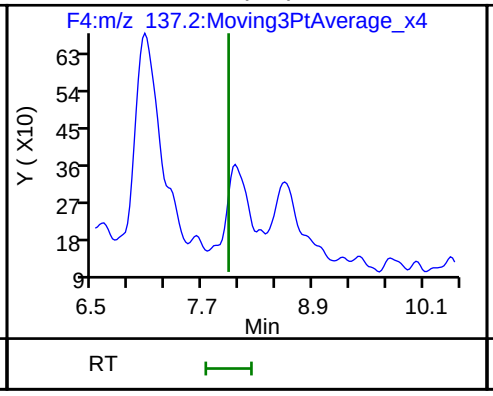
20 PETN (ND)



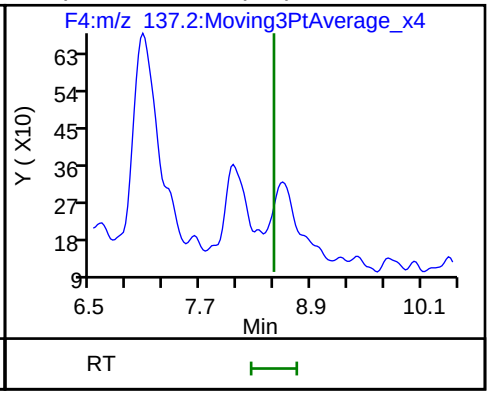
21 3,5-Dinitrotoluene (ND)



22 o-Nitrotoluene (ND)



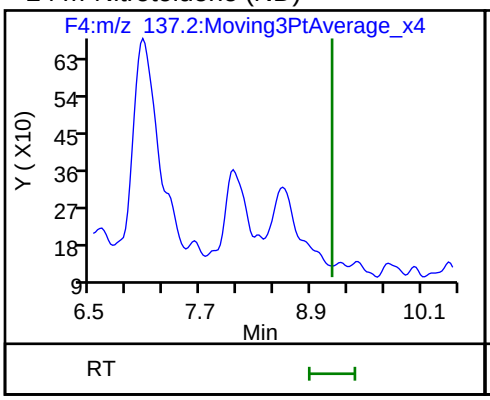
23 p-Nitrotoluene (ND)



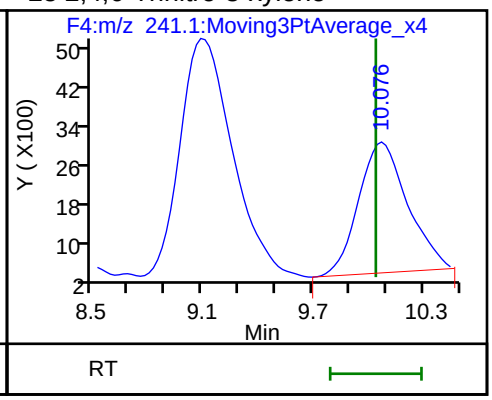
Report Date: 16-Jul-2021 08:16:51 Chrom Revision: 2.3 13-May-2021 07:57:40

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15020.d

24 m-Nitrotoluene (ND)



25 2,4,6-Trinitro-3-xylene



Report Date: 16-Jul-2021 08:16:51 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15020.d
Lims ID: 280-150636-A-5-A
Client ID: 29SB137 (15-16)
Sample Type: Client
Inject. Date: 15-Jul-2021 13:24:11 ALS Bottle#: 16 Worklist Smp#: 21
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 280-150636-A-5-A
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 16-Jul-2021 08:16:45 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1655

First Level Reviewer: meyera Date: 15-Jul-2021 14:53:39

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	90.9	90.60

Report Date: 16-Jul-2021 08:16:51 Chrom Revision: 2.3 13-May-2021 07:57:40

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

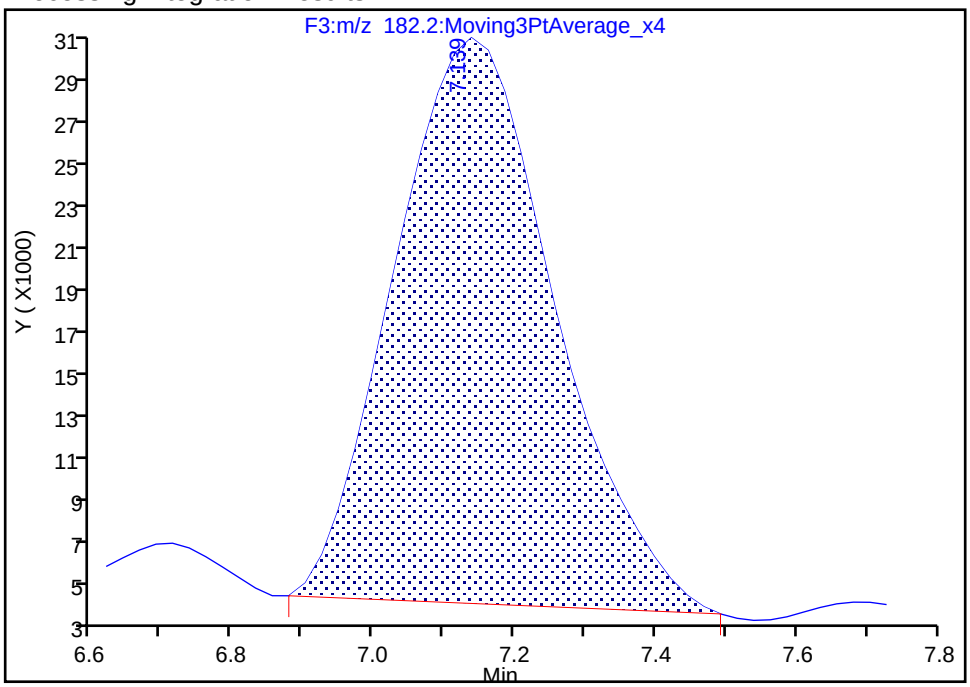
Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15020.d		
Injection Date:	15-Jul-2021 13:24:11	Instrument ID:	LC_LCMS4
Lims ID:	280-150636-A-5-A	Lab Sample ID:	280-150636-5
Client ID:	29SB137 (15-16)		
Operator ID:	acm	ALS Bottle#:	16 Worklist Smp#: 21
Injection Vol:	40.0 ul	Dil. Factor:	1.0000
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl
Column:		Detector	F3:SIR

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

Signal: 1

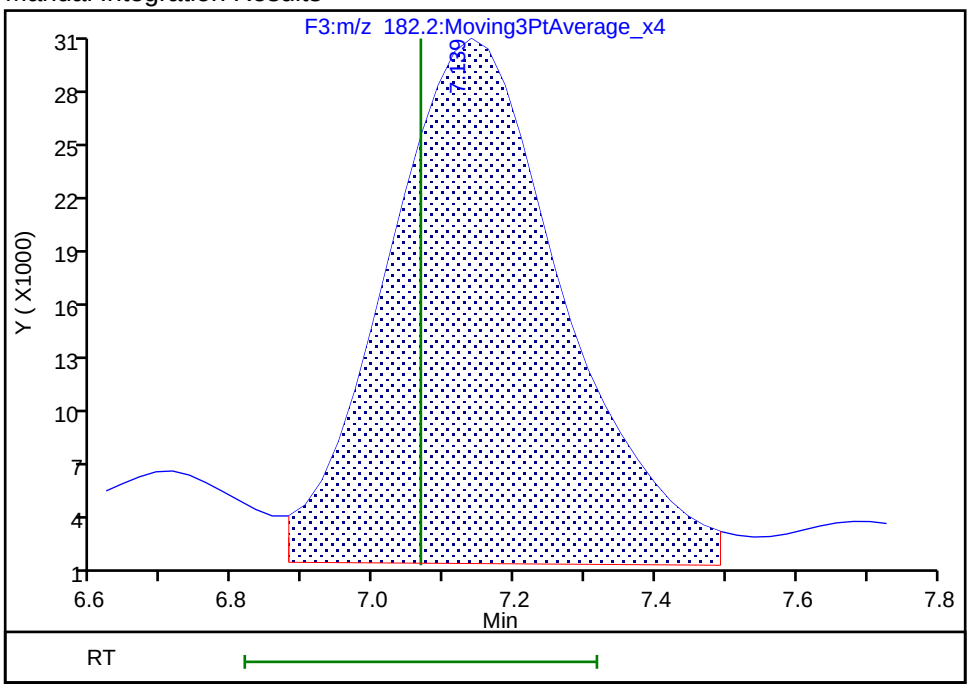
Processing Integration Results

RT: 7.14
Area: 421942
Amount: 14.835043
Amount Units: ug/l



Manual Integration Results

RT: 7.14
Area: 502892
Amount: 17.732946
Amount Units: ug/l



Reviewer: meyera, 15-Jul-2021 14:53:03

Audit Action: Assigned New Baseline Audit Reason: Baseline

Report Date: 16-Jul-2021 08:16:51 Chrom Revision: 2.3 13-May-2021 07:57:40

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

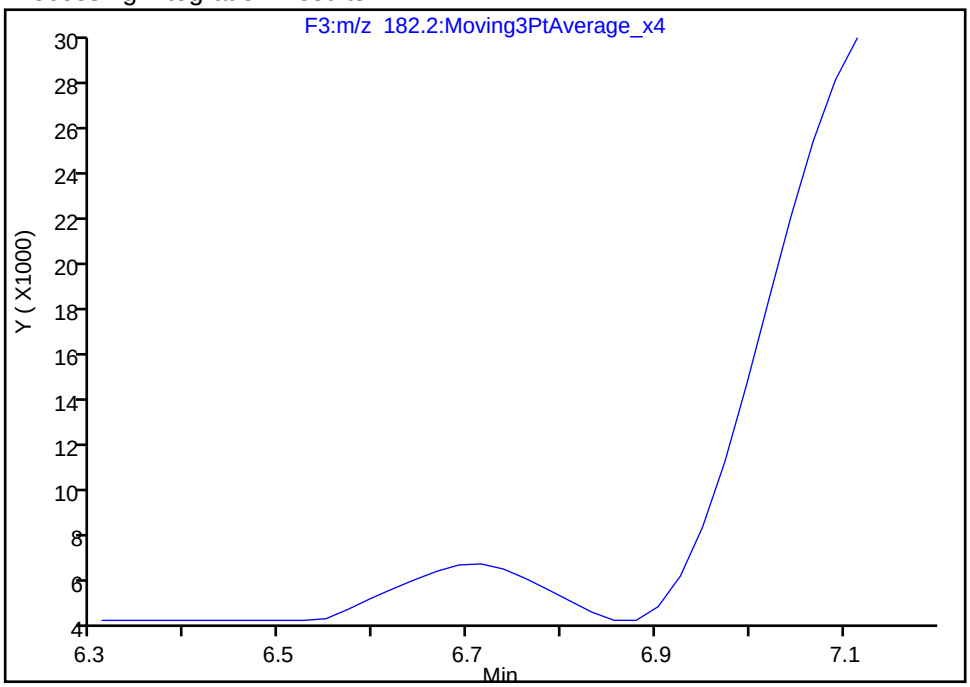
Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15020.d		
Injection Date:	15-Jul-2021 13:24:11	Instrument ID:	LC_LCMS4
Lims ID:	280-150636-A-5-A	Lab Sample ID:	280-150636-5
Client ID:	29SB137 (15-16)		
Operator ID:	acm	ALS Bottle#:	16 Worklist Smp#: 21
Injection Vol:	40.0 ul	Dil. Factor:	1.0000
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl
Column:		Detector	F3:SIR

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

Signal: 1

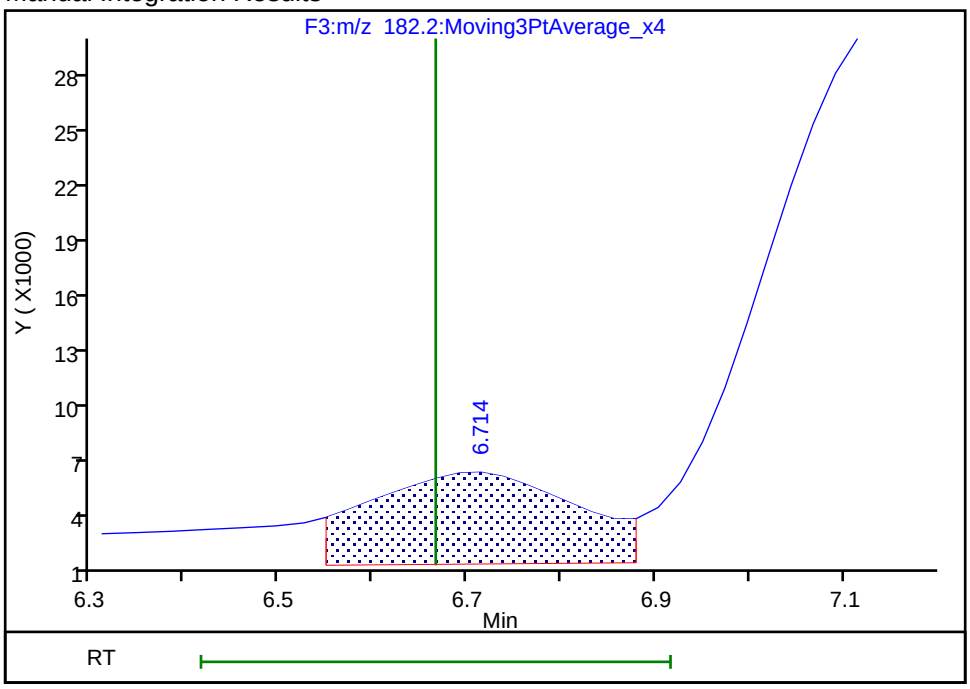
Not Detected
Expected RT: 6.67

Processing Integration Results



RT: 6.71
Area: 73594
Amount: 2.781629
Amount Units: ug/l

Manual Integration Results



Reviewer: meyera, 15-Jul-2021 14:53:20
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 16-Jul-2021 08:16:51 Chrom Revision: 2.3 13-May-2021 07:57:40

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

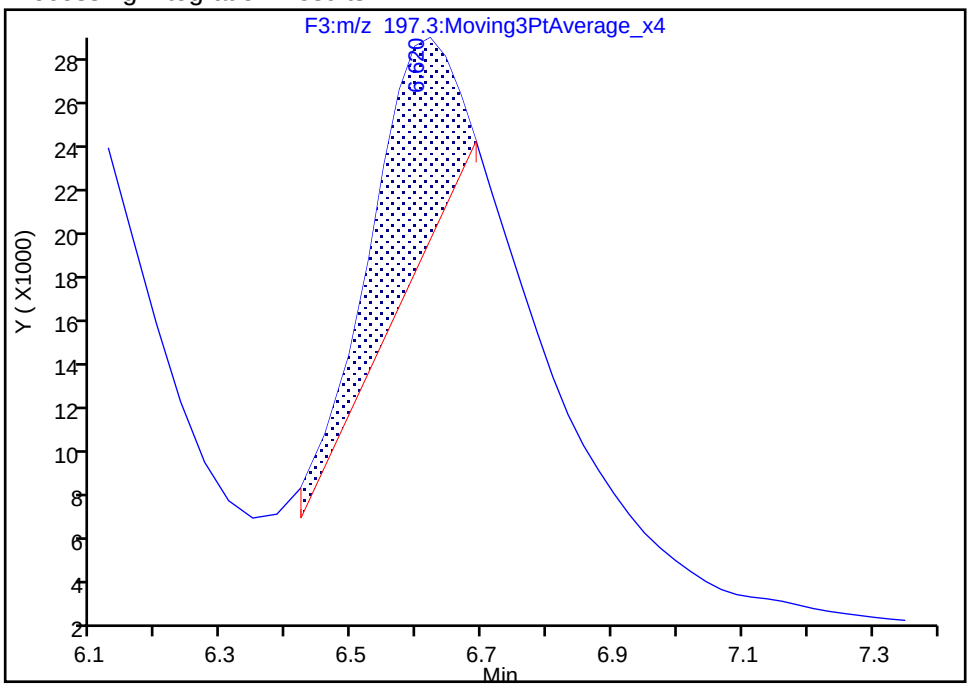
Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15020.d				
Injection Date:	15-Jul-2021 13:24:11	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-5-A	Lab Sample ID:	280-150636-5		
Client ID:	29SB137 (15-16)				
Operator ID:	acm	ALS Bottle#:	16	Worklist Smp#:	21
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		
Column:		Detector	F3:SIR		

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

Signal: 1

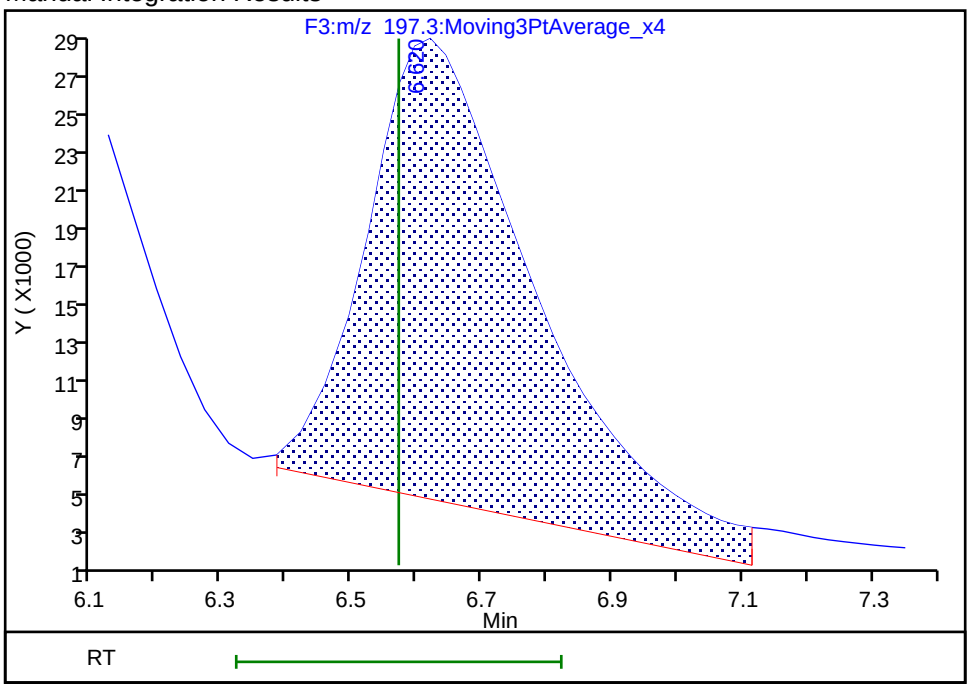
Processing Integration Results

RT: 6.62
Area: 85106
Amount: 3.437799
Amount Units: ug/l



Manual Integration Results

RT: 6.62
Area: 431782
Amount: 11.863528
Amount Units: ug/l



Reviewer: meyera, 15-Jul-2021 14:53:26

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 16-Jul-2021 08:16:51 Chrom Revision: 2.3 13-May-2021 07:57:40

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

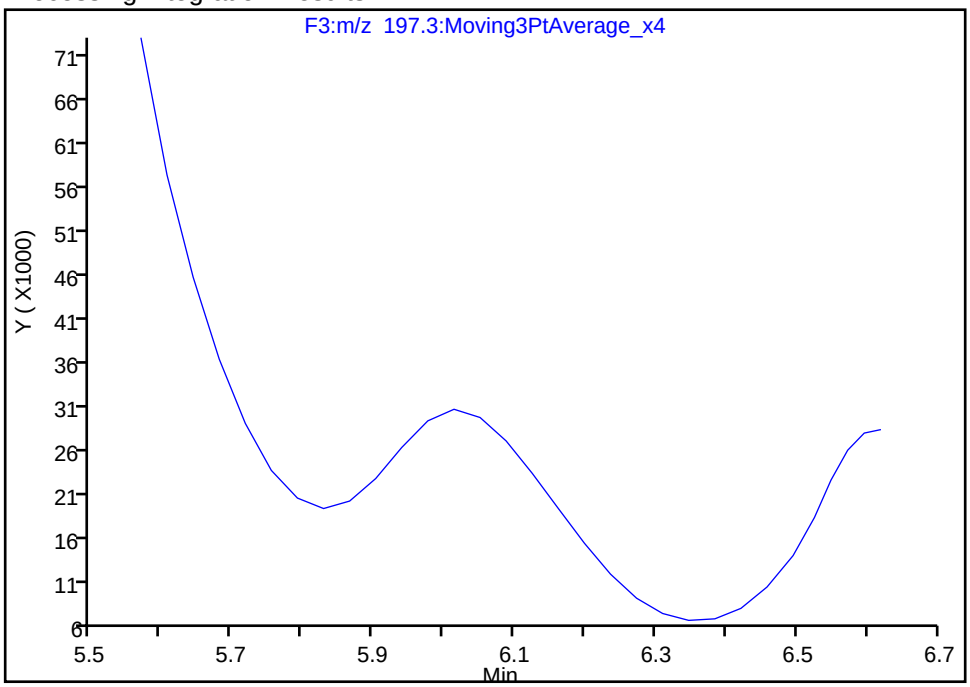
Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15020.d				
Injection Date:	15-Jul-2021 13:24:11	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-5-A	Lab Sample ID:	280-150636-5		
Client ID:	29SB137 (15-16)				
Operator ID:	acm	ALS Bottle#:	16	Worklist Smp#:	21
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		
Column:		Detector	F3:SIR		

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

Signal: 1

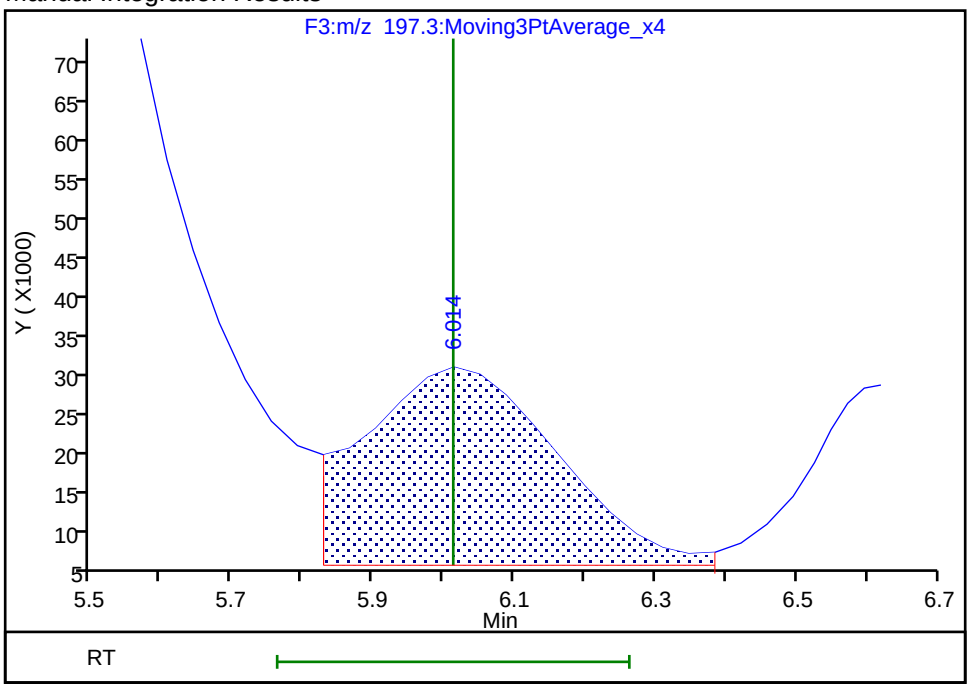
Not Detected
Expected RT: 6.01

Processing Integration Results



Manual Integration Results

RT: 6.01
Area: 475660
Amount: 14.552778
Amount Units: ug/l



Reviewer: meyera, 15-Jul-2021 14:53:31
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Client Sample ID: 29SB137 (15-16) DL Lab Sample ID: 280-150636-5 DL

Matrix: Solid Lab File ID: ex421G15021.d

Analysis Method: 8321A Date Collected: 03/08/2021 08:10

Extraction Method: 8330B Date Extracted: 07/12/2021 16:07

Sample wt/vol: 10.23(g) Date Analyzed: 07/15/2021 13:36

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.: 543298 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
118-96-7	2,4,6-Trinitrotoluene	21	D H H3 Q	4.9	0.74	0.25

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	67	Q D	68-140

Report Date: 16-Jul-2021 08:16:51 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15021.d
Lims ID: 280-150636-A-5-A
Client ID: 29SB137 (15-16)
Sample Type: Client
Inject. Date: 15-Jul-2021 13:36:15 ALS Bottle#: 56 Worklist Smp#: 22
Injection Vol: 40.0 ul Dil. Factor: 50.0000
Sample Info: 280-150636-A-5-A 50x
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 16-Jul-2021 08:16:45 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1655

First Level Reviewer: meyera Date: 15-Jul-2021 14:52:47
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
360.9	2.052	2.052	0.0		140638	120.0	56.1	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	3.028	2.993	0.035		694202	120.0	253	
* 7 1,3-Dinitrobenzene-d4								
172.1	4.872	4.871	0.001		1241982	129.4	46.3	
10 2,4,6-Trinitrotoluene								
227.2	5.299	5.353	0.0	0.752	4115559	105.2	439	
$ 11 Nitrobenzene-d5								
128.1	5.374	5.428	0.001	0.763	21408	1.35	18.1	
* 18 2,4-dinitrotoluene-d3								
185.1	7.044	6.996	0.048		3399796	120.0	363	
19 2,4-Dinitrotoluene								
182.2	7.091	7.115	0.024	1.007	15906	0.2930	3.9	

QC Flag Legend

Processing Flags

Reagents:

EXPWORKINGIS_00084 Amount Added: 20.00 Units: uL Run Reagent

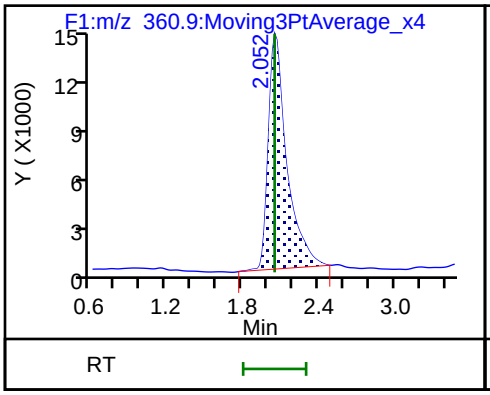
Report Date: 16-Jul-2021 08:16:51 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

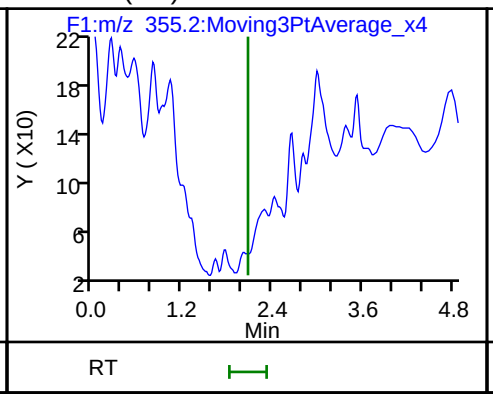
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15021.d

Injection Date:	15-Jul-2021 13:36:15	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-5-A	Lab Sample ID:	280-150636-5		
Client ID:	29SB137 (15-16)				
Operator ID:	acm	ALS Bottle#:	56	Worklist Smp#:	22
Injection Vol:	40.0 ul	Dil. Factor:	50.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		

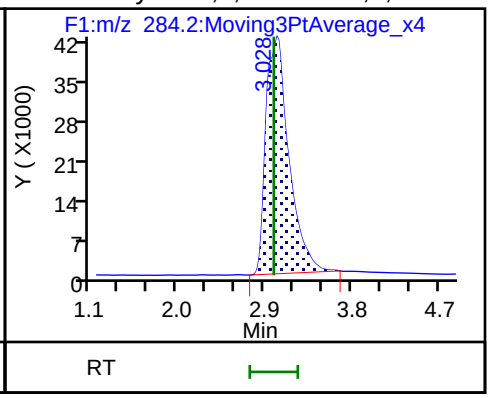
* 1 HMX-13C4



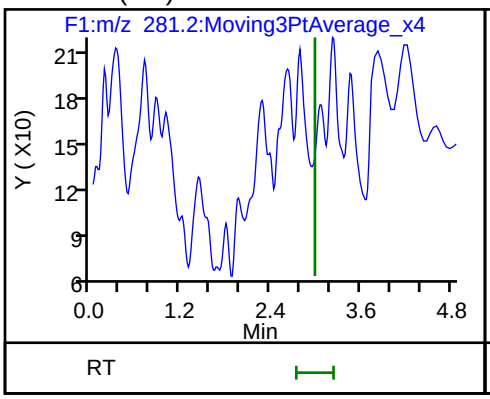
2 HMX (ND)



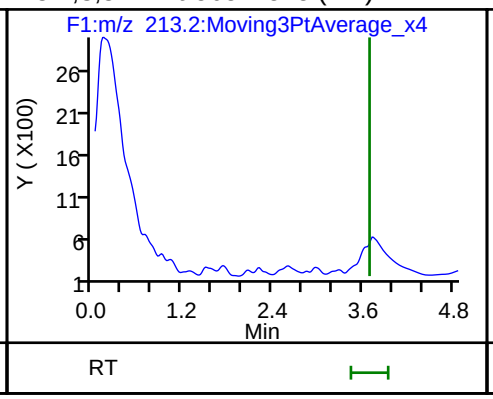
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



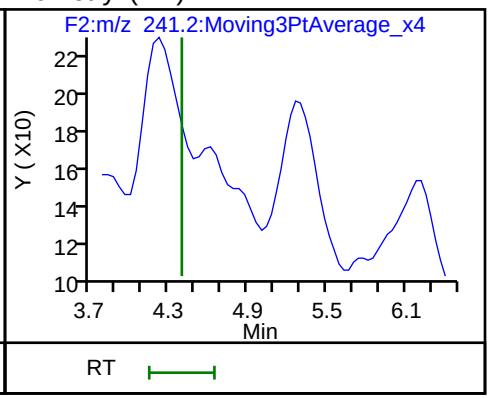
4 RDX (ND)



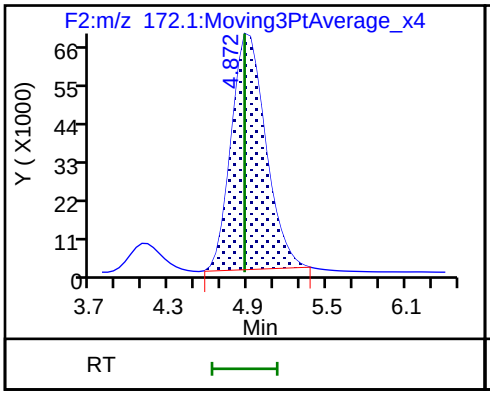
5 1,3,5-Trinitrobenzene (ND)



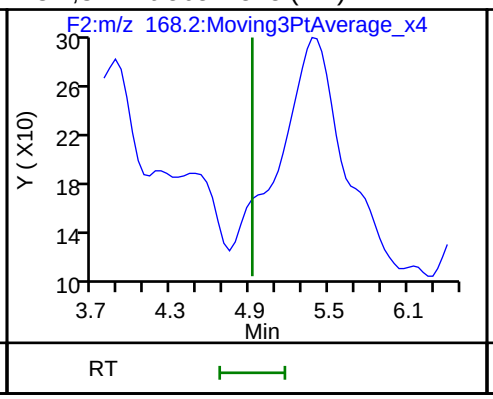
6 Tetryl (ND)



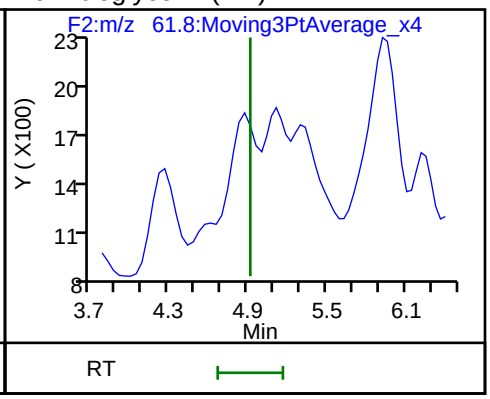
* 7 1,3-Dinitrobenzene-d4



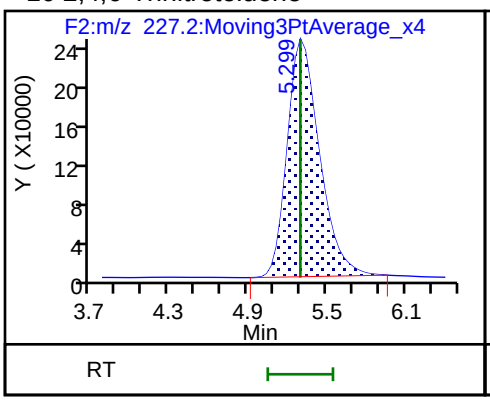
8 1,3-Dinitrobenzene (ND)



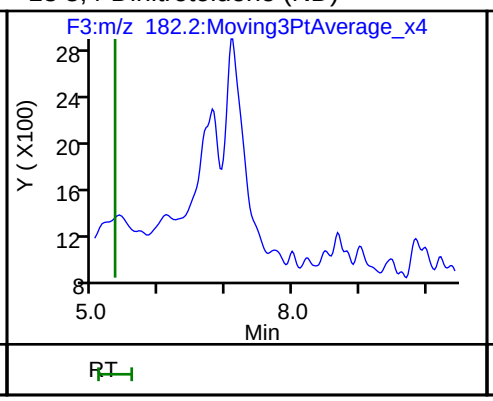
9 Nitroglycerin (ND)



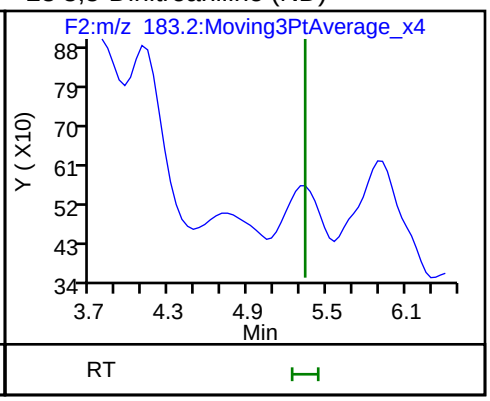
10 2,4,6-Trinitrotoluene



13 3,4-Dinitrotoluene (ND)

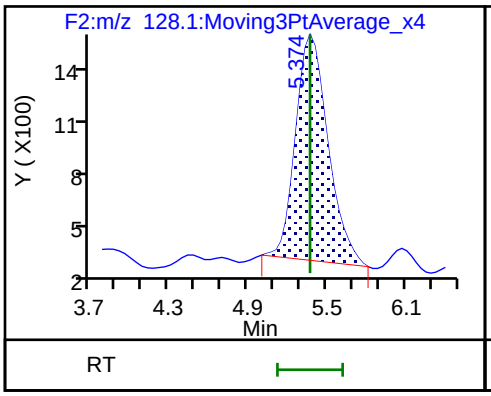


28 3,5-Dinitroaniline (ND)

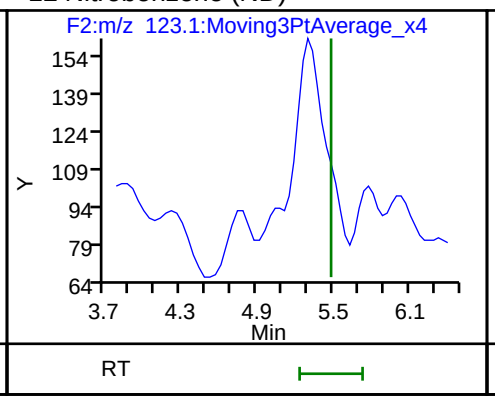


Report Date: 16-Jul-2021 08:16:51 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15021.d

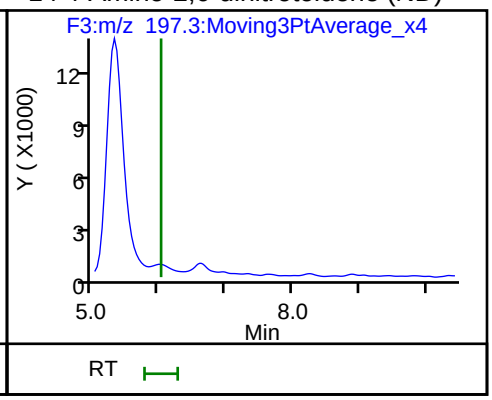
$ 11 Nitrobenzene-d5



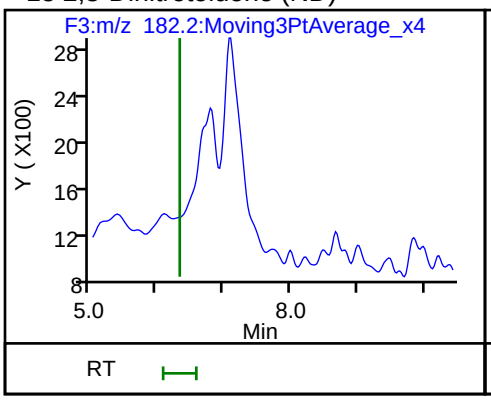
12 Nitrobenzene (ND)



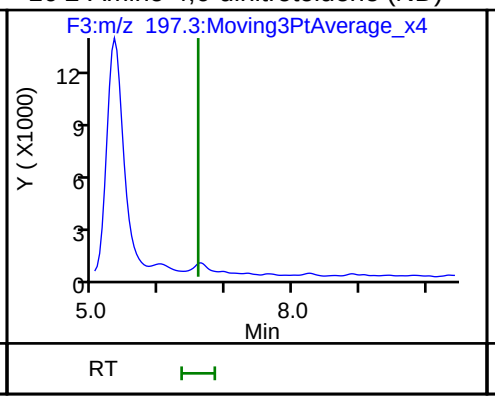
14 4-Amino-2,6-dinitrotoluene (ND)



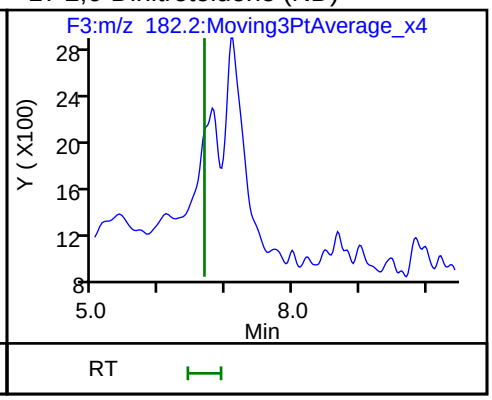
15 2,3-Dinitrotoluene (ND)



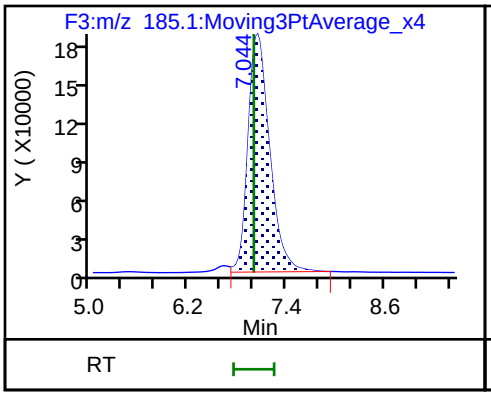
16 2-Amino-4,6-dinitrotoluene (ND)



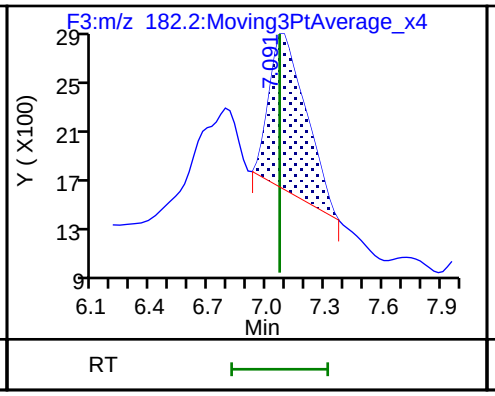
17 2,6-Dinitrotoluene (ND)



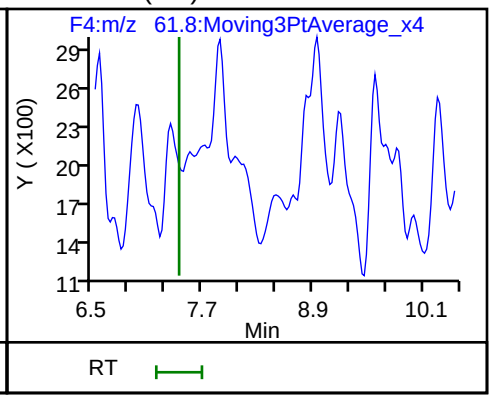
* 18 2,4-dinitrotoluene-d3



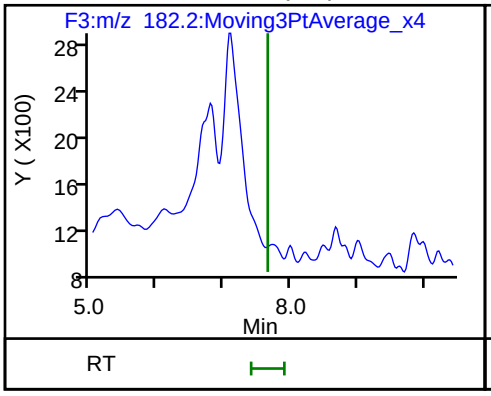
19 2,4-Dinitrotoluene



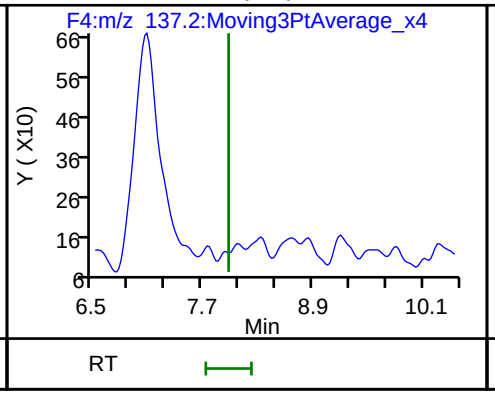
20 PETN (ND)



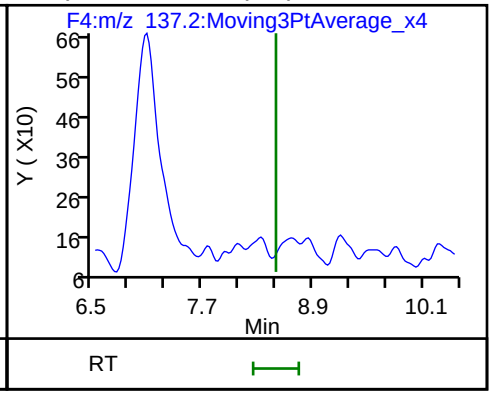
21 3,5-Dinitrotoluene (ND)



22 o-Nitrotoluene (ND)

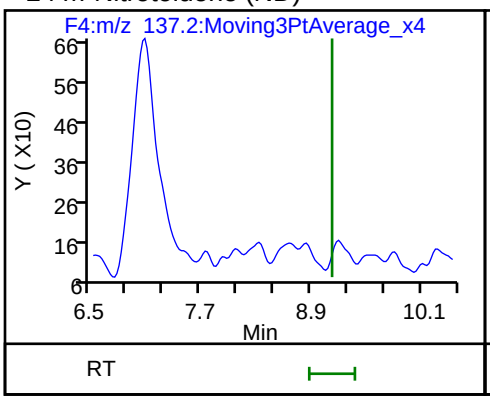


23 p-Nitrotoluene (ND)

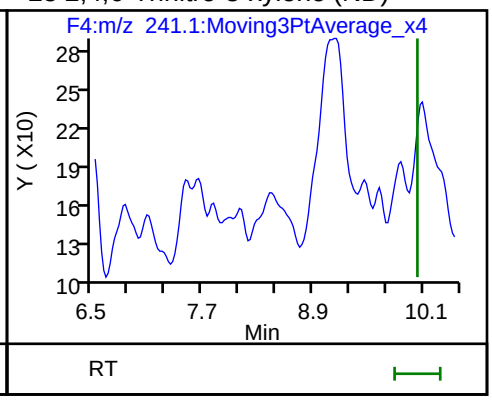


Report Date: 16-Jul-2021 08:16:51 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15021.d

24 m-Nitrotoluene (ND)



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



Report Date: 16-Jul-2021 08:16:51 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15021.d
Lims ID: 280-150636-A-5-A
Client ID: 29SB137 (15-16)
Sample Type: Client
Inject. Date: 15-Jul-2021 13:36:15 ALS Bottle#: 56 Worklist Smp#: 22
Injection Vol: 40.0 ul Dil. Factor: 50.0000
Sample Info: 280-150636-A-5-A 50x
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 16-Jul-2021 08:16:45 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1655

First Level Reviewer: meyera Date: 15-Jul-2021 14:52:47

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	1.35	1.34

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Client Sample ID: 29SB146 (15-16) Lab Sample ID: 280-150636-6

Matrix: Solid Lab File ID: ex421G15023.d

Analysis Method: 8321A Date Collected: 03/09/2021 09:35

Extraction Method: 8330B Date Extracted: 07/12/2021 16:07

Sample wt/vol: 10.26(g) Date Analyzed: 07/15/2021 14:00

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

Injection Volume: 40(uL) GC Column: IonPac ID: 2(mm)

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

Analysis Batch No.: 543298 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.029	U H H3	0.097	0.029	0.012
99-65-0	1,3-Dinitrobenzene	0.015	U H H3	0.097	0.015	0.0069
118-96-7	2,4,6-Trinitrotoluene	0.074	J H H3	0.097	0.015	0.0049
121-14-2	2,4-Dinitrotoluene	0.029	U M H H3	0.097	0.029	0.0080
606-20-2	2,6-Dinitrotoluene	0.029	U M H H3	0.097	0.029	0.019
35572-78-2	2-Amino-4,6-dinitrotoluene	0.029	U H H3	0.097	0.029	0.012
88-72-2	o-Nitrotoluene	0.015	U H H3	0.097	0.015	0.0056
99-08-1	m-Nitrotoluene	0.029	U H H3	0.097	0.029	0.012
19406-51-0	4-Amino-2,6-dinitrotoluene	0.015	U H H3	0.097	0.015	0.0050
99-99-0	p-Nitrotoluene	0.029	U H H3	0.097	0.029	0.011
98-95-3	Nitrobenzene	0.029	U H H3	0.097	0.029	0.011
55-63-0	Nitroglycerin	0.029	U H H3	0.097	0.029	0.010
2691-41-0	HMX	0.029	U H H3	0.097	0.029	0.015
78-11-5	PETN	0.015	U H H3	0.097	0.015	0.0050
121-82-4	RDX	0.015	U H H3	0.097	0.015	0.0042
479-45-8	Tetryl	0.015	U H H3 J1	0.097	0.015	0.0074

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	115		68-140

Report Date: 16-Jul-2021 08:16:52 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15023.d
Lims ID: 280-150636-A-6-A
Client ID: 29SB146 (15-16)
Sample Type: Client
Inject. Date: 15-Jul-2021 14:00:56 ALS Bottle#: 17 Worklist Smp#: 24
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 280-150636-A-6-A
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 16-Jul-2021 08:16:52 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1655

First Level Reviewer: meyera Date: 15-Jul-2021 14:52:03
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
360.9	2.052	2.052	0.0		153233	120.0	133	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	3.011	2.993	0.018		756192	120.0	766	
* 7 1,3-Dinitrobenzene-d4								
172.1	4.916	4.871	0.045		1322219	129.4	54.1	
10 2,4,6-Trinitrotoluene								
227.2	5.300	5.353	0.001	0.755	705572	19.0	392	
$ 11 Nitrobenzene-d5								
128.1	5.374	5.428	0.001	0.765	1050429	115.4	270	
17 2,6-Dinitrotoluene								M
182.2	6.691	6.760	0.025	0.953	21303	1.81	8.6	M
* 18 2,4-dinitrotoluene-d3								
185.1	7.021	6.996	0.025		3477052	120.0	354	
19 2,4-Dinitrotoluene								M
182.2	7.044	7.115	-0.023	1.003	22186	0.4978	6.7	M
20 PETN								
61.8	7.388	7.484	-0.046	1.052	11238	0.9262	2.6	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

EXPWORKINGIS_00084 Amount Added: 20.00 Units: uL Run Reagent

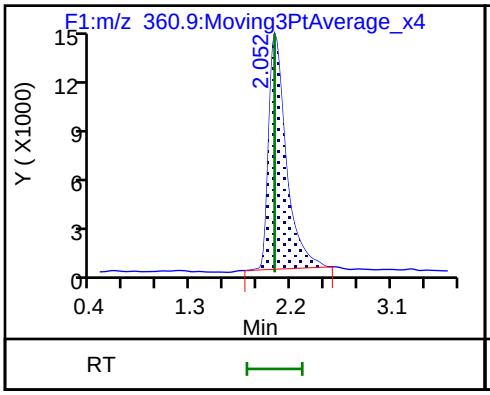
Report Date: 16-Jul-2021 08:16:52 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

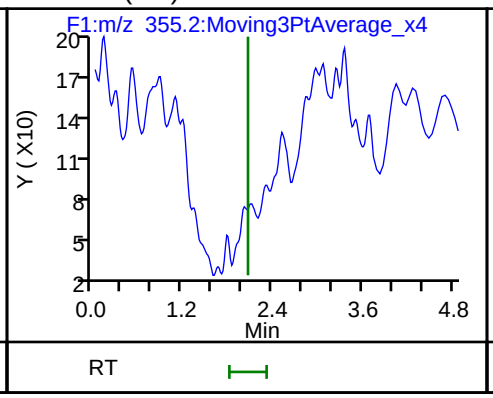
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15023.d

Injection Date:	15-Jul-2021 14:00:56	Instrument ID:	LC_LCMS4
Lims ID:	280-150636-A-6-A	Lab Sample ID:	280-150636-6
Client ID:	29SB146 (15-16)		
Operator ID:	acm	ALS Bottle#:	17 Worklist Smp#: 24
Injection Vol:	40.0 ul	Dil. Factor:	1.0000
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl

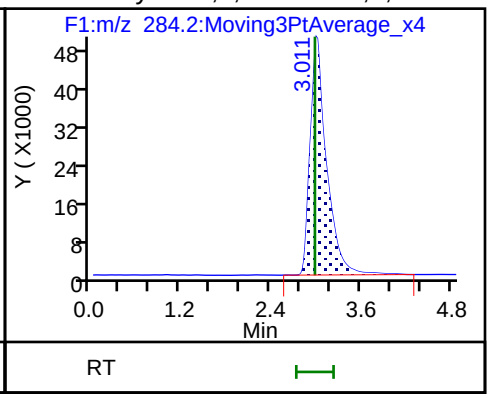
* 1 HMX-13C4



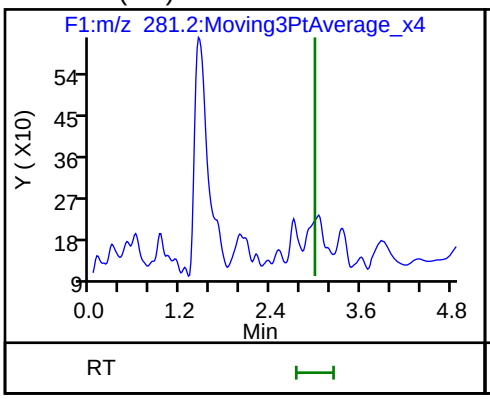
2 HMX (ND)



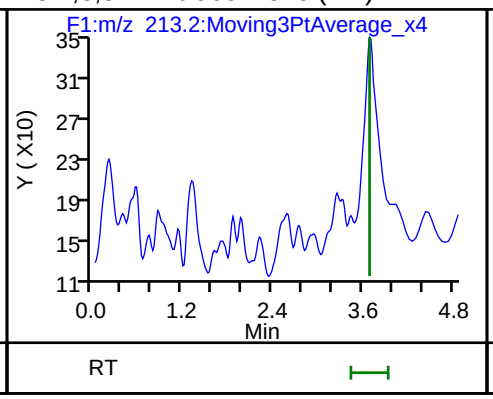
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



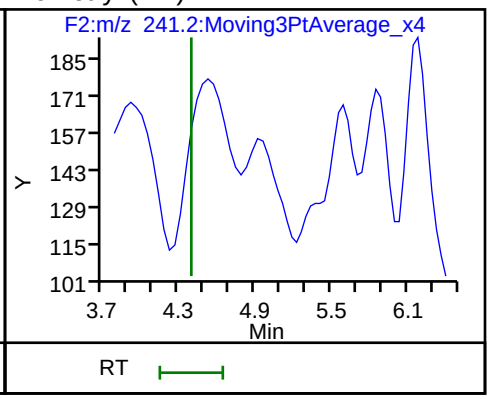
4 RDX (ND)



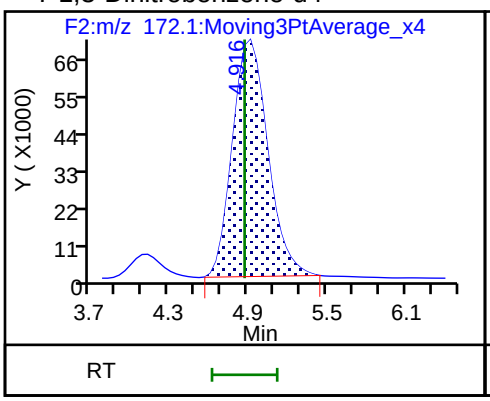
5 1,3,5-Trinitrobenzene (ND)



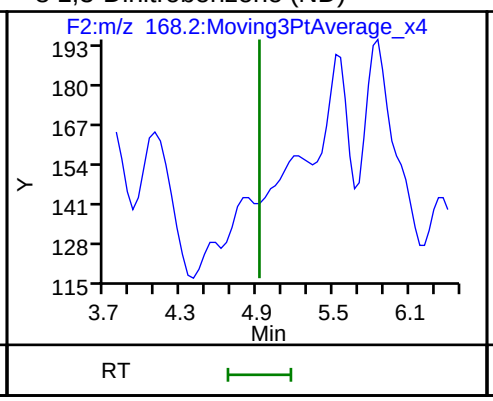
6 Tetryl (ND)



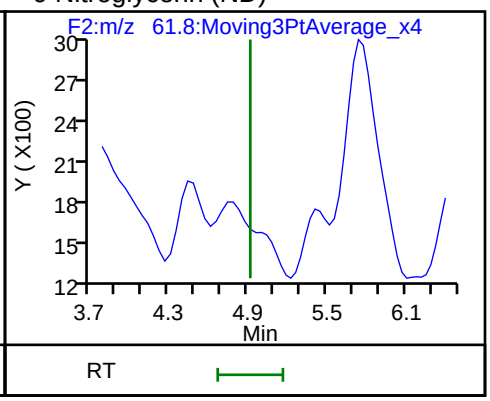
* 7 1,3-Dinitrobenzene-d4



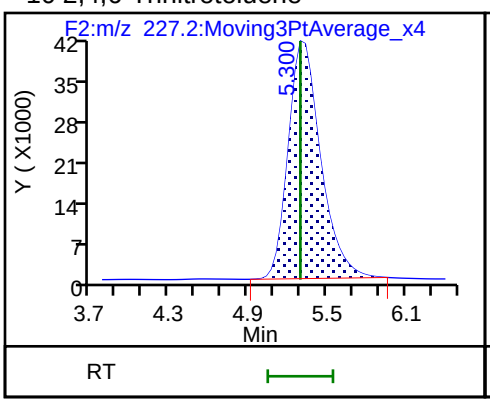
8 1,3-Dinitrobenzene (ND)



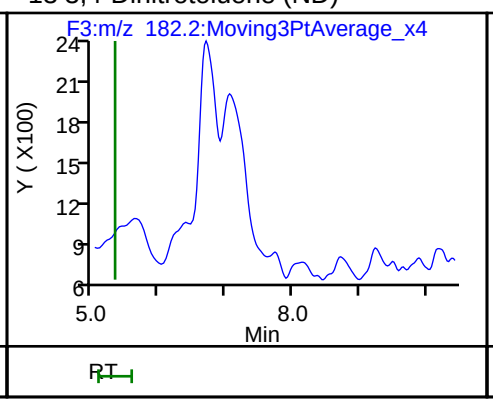
9 Nitroglycerin (ND)



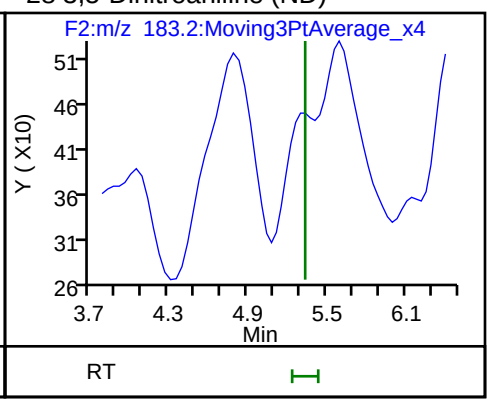
10 2,4,6-Trinitrotoluene



13 3,4-Dinitrotoluene (ND)

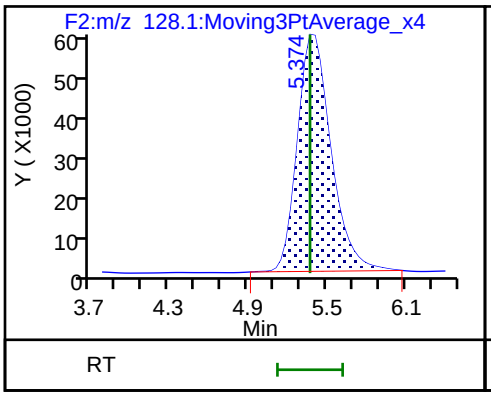


28 3,5-Dinitroaniline (ND)

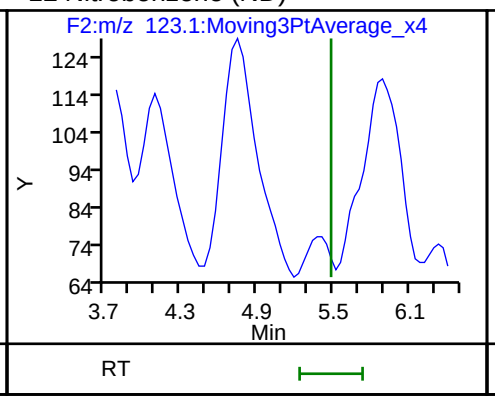


Report Date: 16-Jul-2021 08:16:52 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15023.d

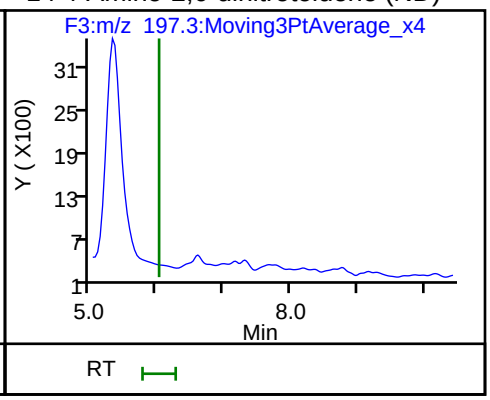
$ 11 Nitrobenzene-d5



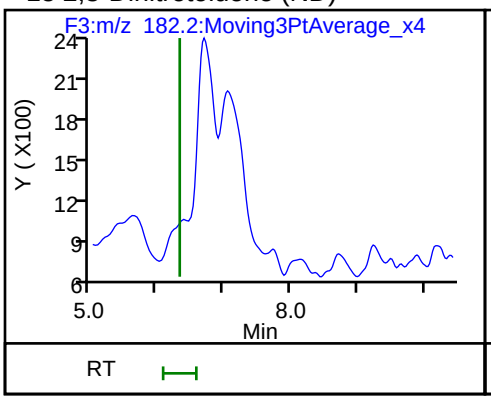
12 Nitrobenzene (ND)



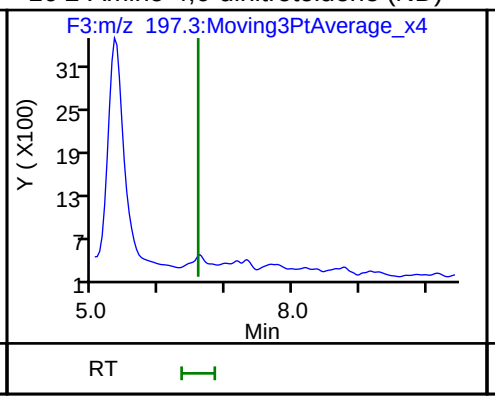
14 4-Amino-2,6-dinitrotoluene (ND)



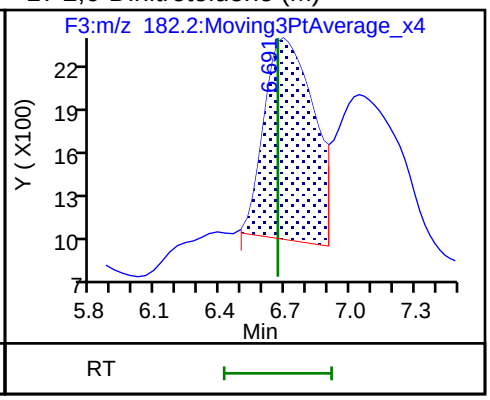
15 2,3-Dinitrotoluene (ND)



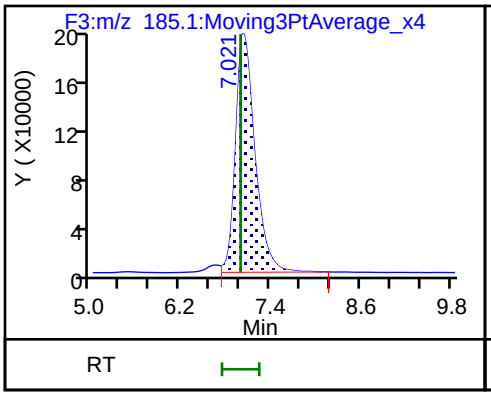
16 2-Amino-4,6-dinitrotoluene (ND)



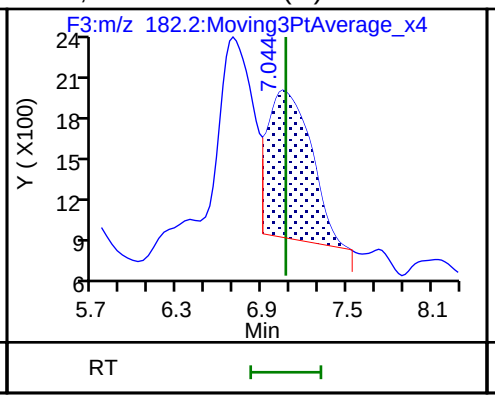
17 2,6-Dinitrotoluene (M)



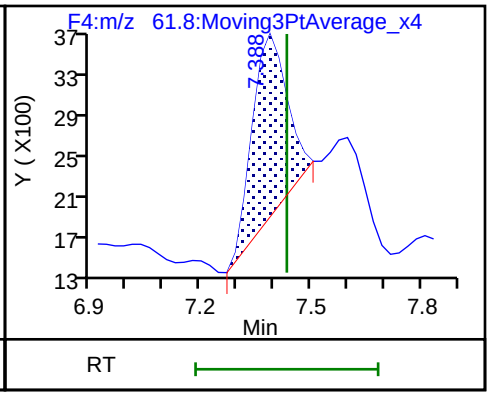
* 18 2,4-dinitrotoluene-d3



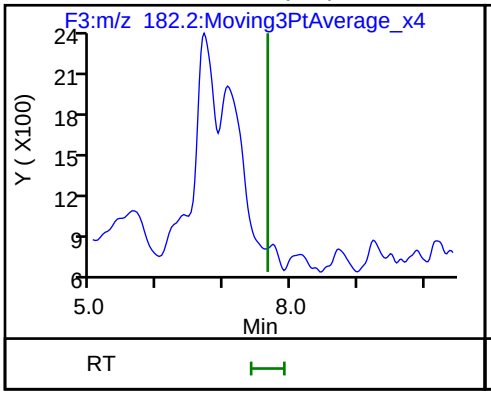
19 2,4-Dinitrotoluene (M)



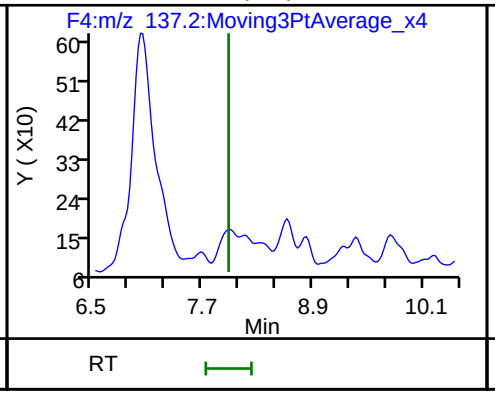
20 PETN



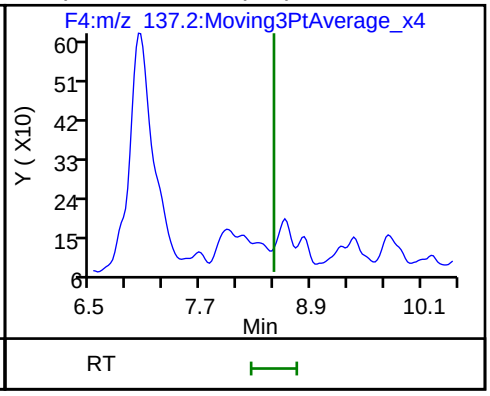
21 3,5-Dinitrotoluene (ND)



22 o-Nitrotoluene (ND)

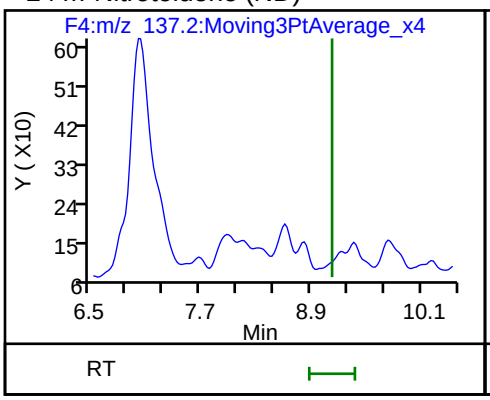


23 p-Nitrotoluene (ND)

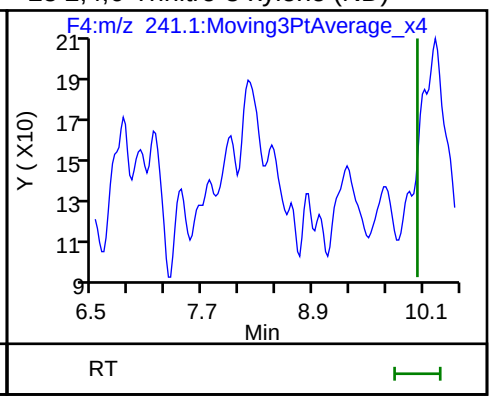


Report Date: 16-Jul-2021 08:16:52 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15023.d

24 m-Nitrotoluene (ND)



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



Report Date: 16-Jul-2021 08:16:52 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15023.d
Lims ID: 280-150636-A-6-A
Client ID: 29SB146 (15-16)
Sample Type: Client
Inject. Date: 15-Jul-2021 14:00:56 ALS Bottle#: 17 Worklist Smp#: 24
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 280-150636-A-6-A
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 16-Jul-2021 08:16:52 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1655

First Level Reviewer: meyera Date: 15-Jul-2021 14:52:03

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	115.4	115.07

Report Date: 16-Jul-2021 08:16:52 Chrom Revision: 2.3 13-May-2021 07:57:40

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

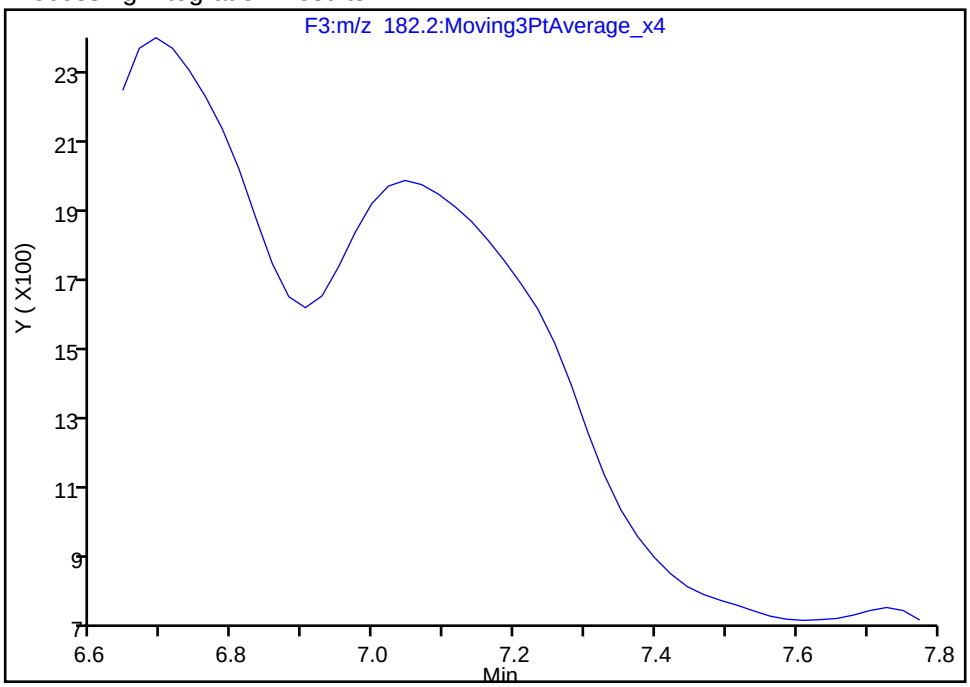
Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15023.d		
Injection Date:	15-Jul-2021 14:00:56	Instrument ID:	LC_LCMS4
Lims ID:	280-150636-A-6-A	Lab Sample ID:	280-150636-6
Client ID:	29SB146 (15-16)		
Operator ID:	acm	ALS Bottle#:	17 Worklist Smp#: 24
Injection Vol:	40.0 ul	Dil. Factor:	1.0000
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl
Column:		Detector	F3:SIR

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

Signal: 1

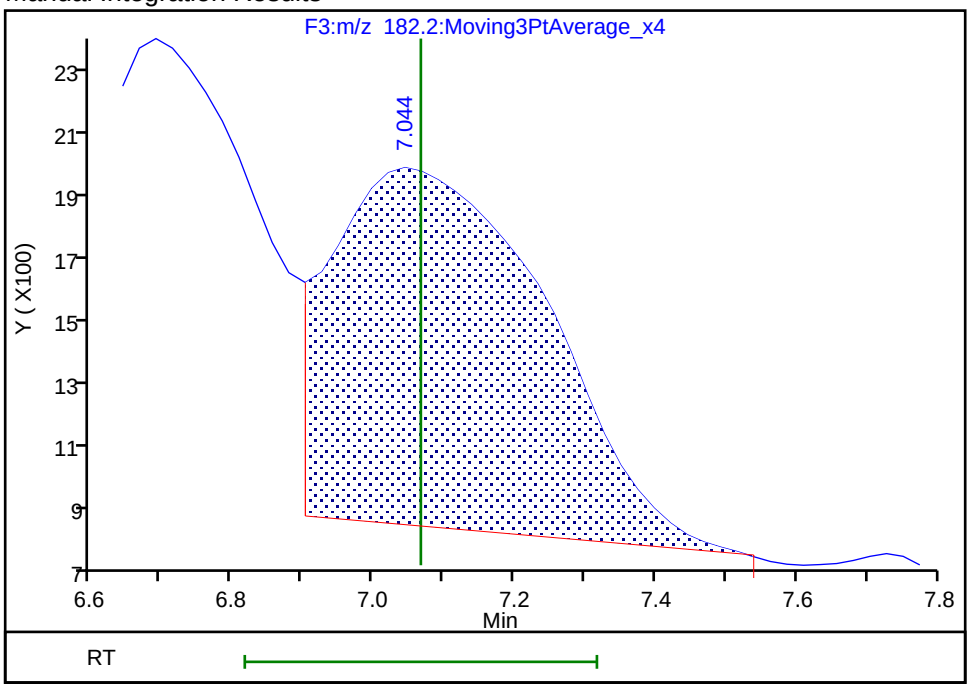
Not Detected
Expected RT: 7.07

Processing Integration Results



Manual Integration Results

RT: 7.04
Area: 22186
Amount: 0.497817
Amount Units: ug/l



Reviewer: meyera, 15-Jul-2021 14:51:50
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 16-Jul-2021 08:16:52 Chrom Revision: 2.3 13-May-2021 07:57:40

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

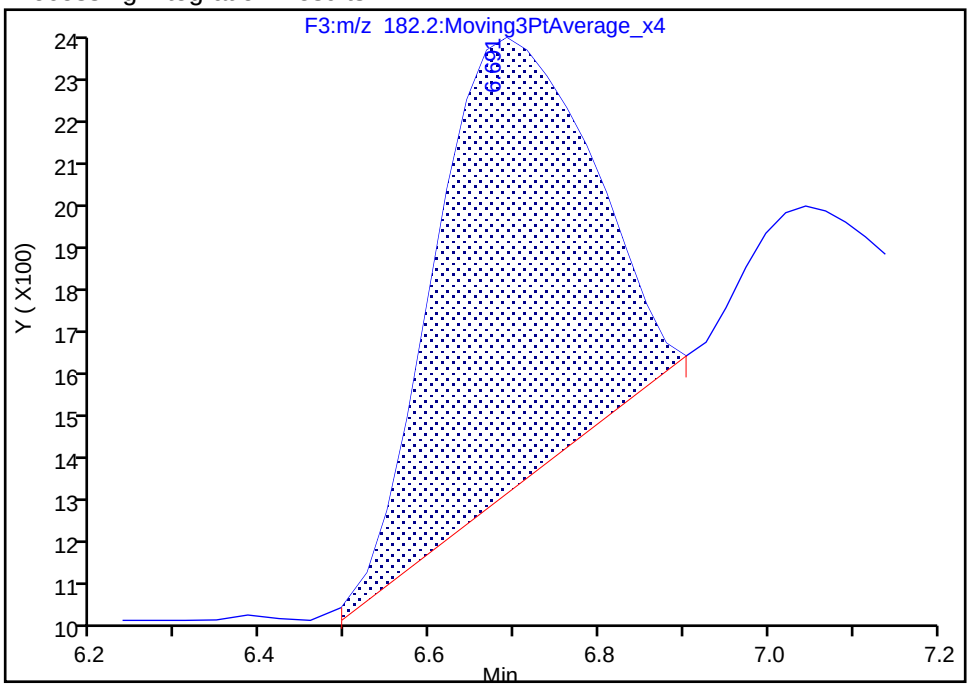
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Injection Date:	15-Jul-2021 14:00:56	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-6-A	Lab Sample ID:	280-150636-6		
Client ID:	29SB146 (15-16)				
Operator ID:	acm	ALS Bottle#:	17	Worklist Smp#:	24
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		
Column:		Detector	F3:SIR		

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

Signal: 1

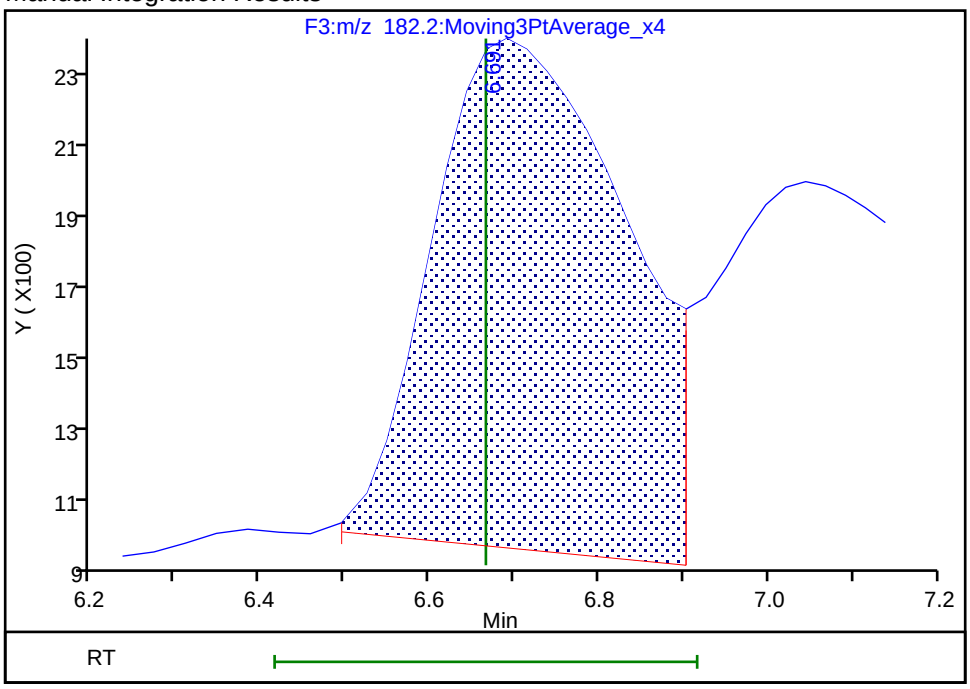
Processing Integration Results

RT: 6.69
Area: 13111
Amount: 1.661697
Amount Units: ug/l



Manual Integration Results

RT: 6.69
Area: 21303
Amount: 1.807273
Amount Units: ug/l



Reviewer: meyera, 15-Jul-2021 14:51:46

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Client Sample ID: 29SB155 (11-12) Lab Sample ID: 280-150636-7

Matrix: Solid Lab File ID: ex421G15026.d

Analysis Method: 8321A Date Collected: 03/09/2021 01:50

Extraction Method: 8330B Date Extracted: 07/12/2021 16:07

Sample wt/vol: 10.96(g) Date Analyzed: 07/15/2021 14:37

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

Injection Volume: 40(uL) GC Column: IonPac ID: 2(mm)

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

Analysis Batch No.: 543298 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.027	U H H3	0.091	0.027	0.011
99-65-0	1,3-Dinitrobenzene	0.014	U H H3	0.091	0.014	0.0065
118-96-7	2,4,6-Trinitrotoluene	0.073	J H H3	0.091	0.014	0.0046
121-14-2	2,4-Dinitrotoluene	0.027	U M H H3	0.091	0.027	0.0075
606-20-2	2,6-Dinitrotoluene	0.027	U M H H3	0.091	0.027	0.018
35572-78-2	2-Amino-4,6-dinitrotoluene	0.027	U H H3	0.091	0.027	0.011
88-72-2	o-Nitrotoluene	0.014	U H H3	0.091	0.014	0.0052
99-08-1	m-Nitrotoluene	0.027	U H H3	0.091	0.027	0.012
19406-51-0	4-Amino-2,6-dinitrotoluene	0.014	U H H3	0.091	0.014	0.0047
99-99-0	p-Nitrotoluene	0.027	U H H3	0.091	0.027	0.010
98-95-3	Nitrobenzene	0.027	U H H3	0.091	0.027	0.0099
55-63-0	Nitroglycerin	0.027	U H H3	0.091	0.027	0.0096
2691-41-0	HMX	0.027	U H H3	0.091	0.027	0.014
78-11-5	PETN	0.014	U H H3	0.091	0.014	0.0047
121-82-4	RDX	0.014	U H H3	0.091	0.014	0.0039
479-45-8	Tetryl	0.014	U H H3	0.091	0.014	0.0069

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

Report Date: 16-Jul-2021 08:16:54 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15026.d
Lims ID: 280-150636-A-7-A
Client ID: 29SB155 (11-12)
Sample Type: Client
Inject. Date: 15-Jul-2021 14:37:07 ALS Bottle#: 20 Worklist Smp#: 27
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 280-150636-A-7-A
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 16-Jul-2021 08:16:52 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1655

First Level Reviewer: meyera Date: 16-Jul-2021 08:10:42
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
360.9	2.052	2.052	0.0		158330	120.0	154	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	3.011	2.993	0.018		793157	120.0	810	
* 7 1,3-Dinitrobenzene-d4								
172.1	4.872	4.871	0.001		1489404	129.4	61.3	
10 2,4,6-Trinitrotoluene								
227.2	5.299	5.353	0.0	0.755	700111	20.0	359	
$ 11 Nitrobenzene-d5								
128.1	5.374	5.428	0.001	0.765	1014930	98.9	528	
17 2,6-Dinitrotoluene								M
182.2	6.690	6.760	0.024	0.953	26127	1.92	9.7	M
* 18 2,4-dinitrotoluene-d3								
185.1	7.020	6.996	0.024		3256941	120.0	848	
19 2,4-Dinitrotoluene								M
182.2	7.044	7.115	-0.023	1.003	14874	0.2796	5.4	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

EXPWORKINGIS_00084 Amount Added: 20.00 Units: uL Run Reagent

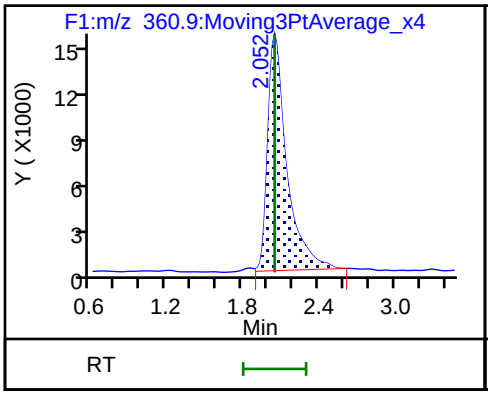
Report Date: 16-Jul-2021 08:16:54 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

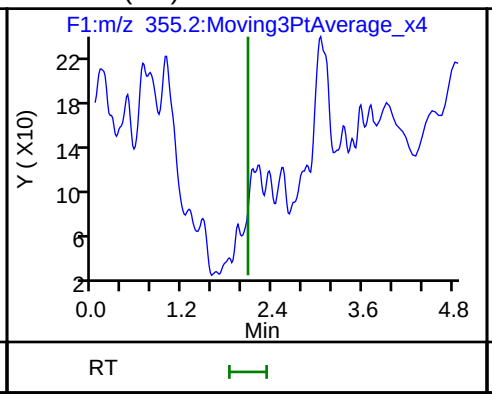
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15026.d

Injection Date:	15-Jul-2021 14:37:07	Instrument ID:	LC_LCMS4
Lims ID:	280-150636-A-7-A	Lab Sample ID:	280-150636-7
Client ID:	29SB155 (11-12)		
Operator ID:	acm	ALS Bottle#:	20 Worklist Smp#: 27
Injection Vol:	40.0 ul	Dil. Factor:	1.0000
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl

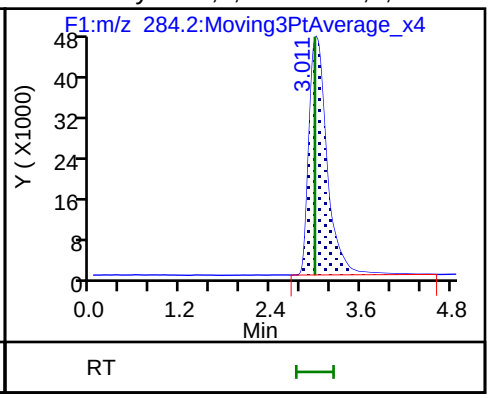
* 1 HMX-13C4



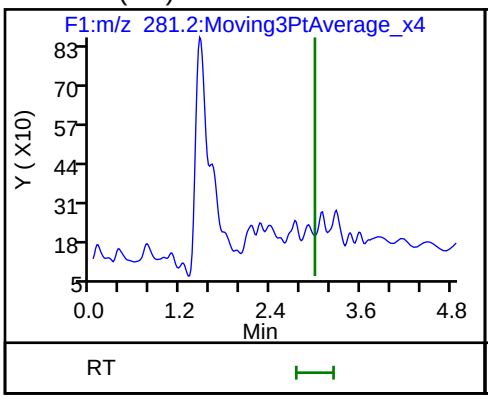
2 HMX (ND)



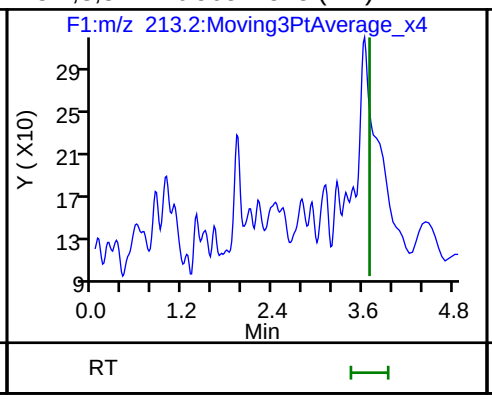
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



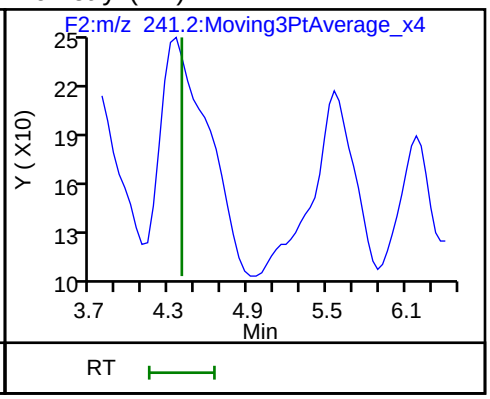
4 RDX (ND)



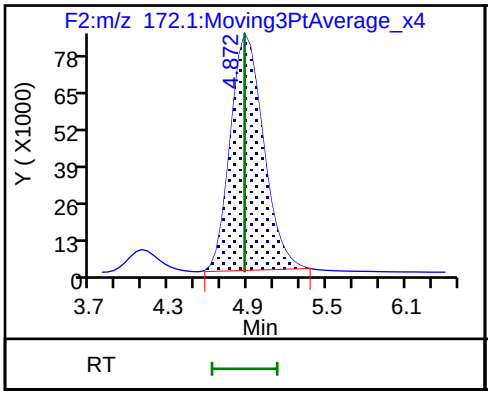
5 1,3,5-Trinitrobenzene (ND)



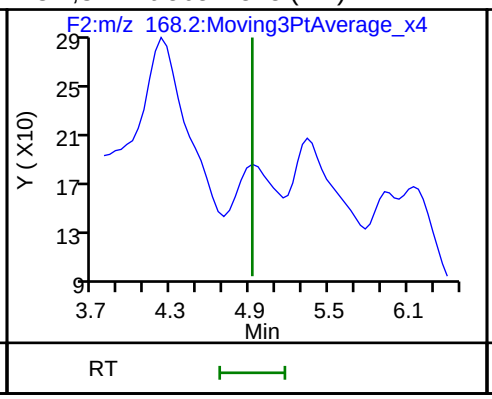
6 Tetryl (ND)



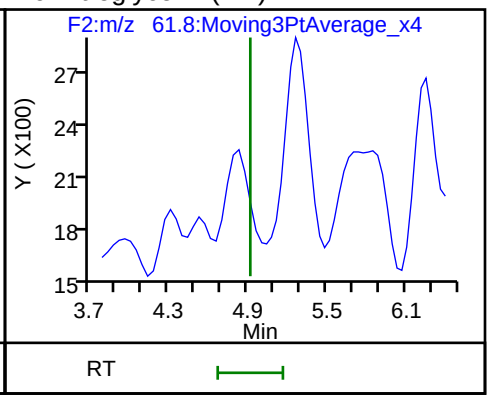
* 7 1,3-Dinitrobenzene-d4



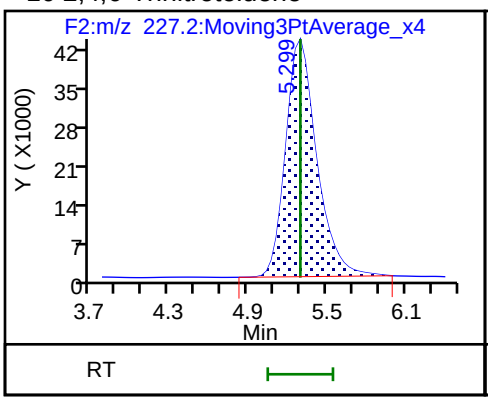
8 1,3-Dinitrobenzene (ND)



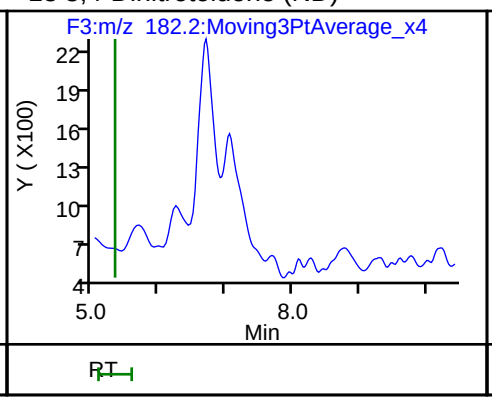
9 Nitroglycerin (ND)



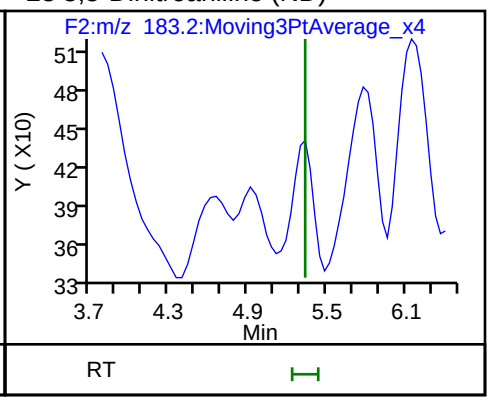
10 2,4,6-Trinitrotoluene



13 3,4-Dinitrotoluene (ND)



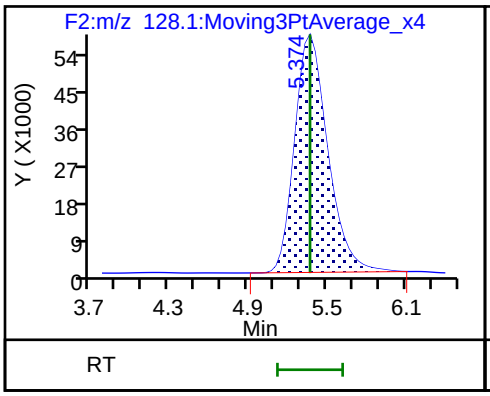
28 3,5-Dinitroaniline (ND)



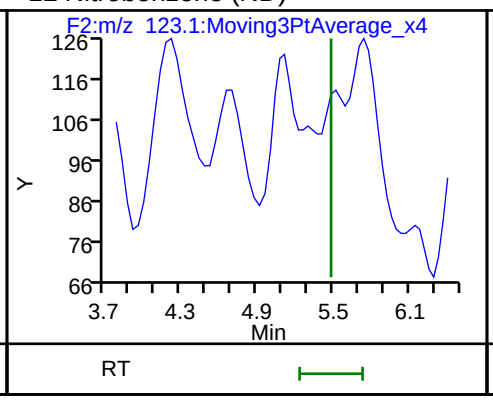
Report Date: 16-Jul-2021 08:16:54 Chrom Revision: 2.3 13-May-2021 07:57:40

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15026.d

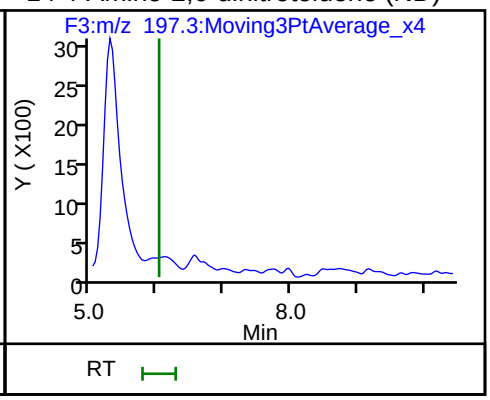
$ 11 Nitrobenzene-d5



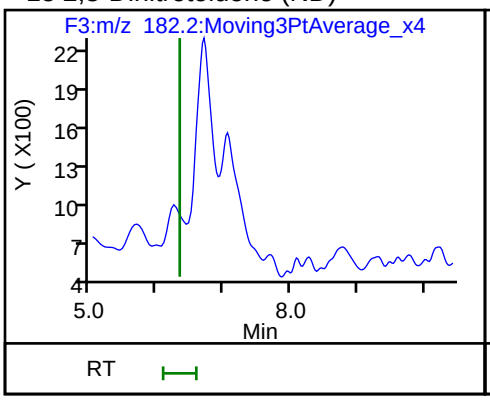
12 Nitrobenzene (ND)



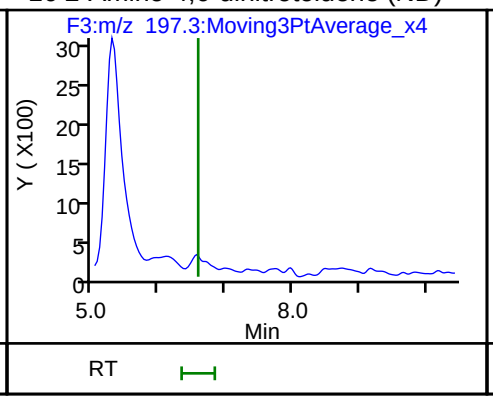
14 4-Amino-2,6-dinitrotoluene (ND)



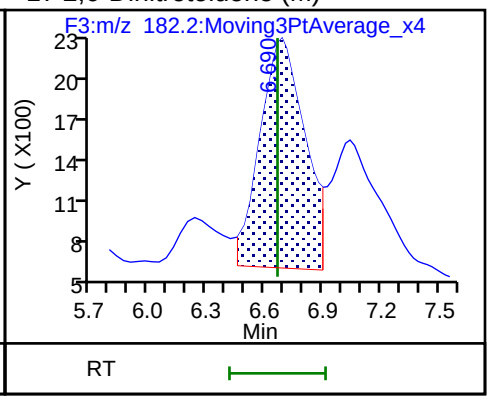
15 2,3-Dinitrotoluene (ND)



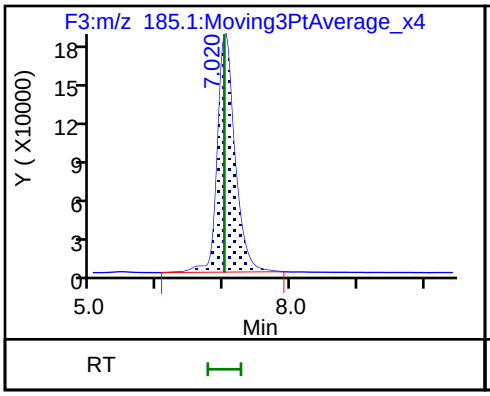
16 2-Amino-4,6-dinitrotoluene (ND)



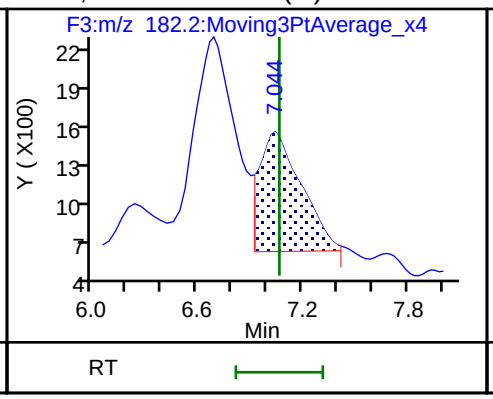
17 2,6-Dinitrotoluene (M)



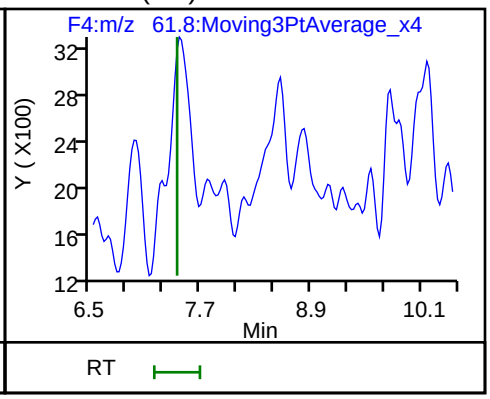
* 18 2,4-dinitrotoluene-d3



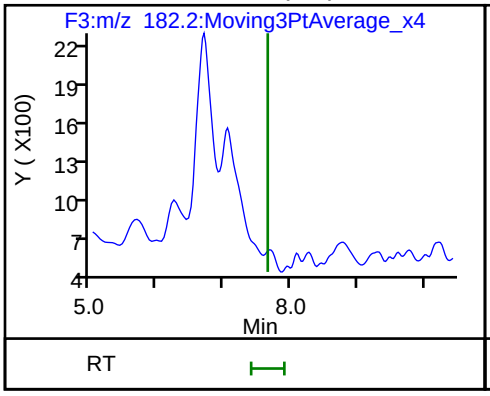
19 2,4-Dinitrotoluene (M)



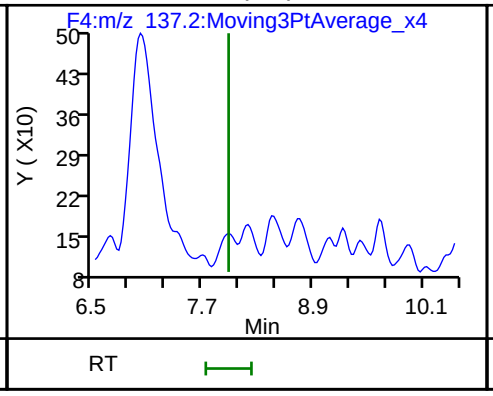
20 PETN (ND)



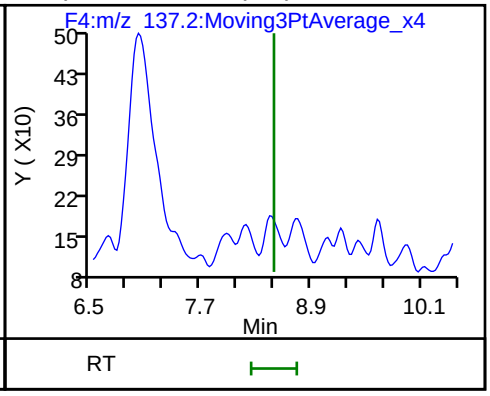
21 3,5-Dinitrotoluene (ND)



22 o-Nitrotoluene (ND)

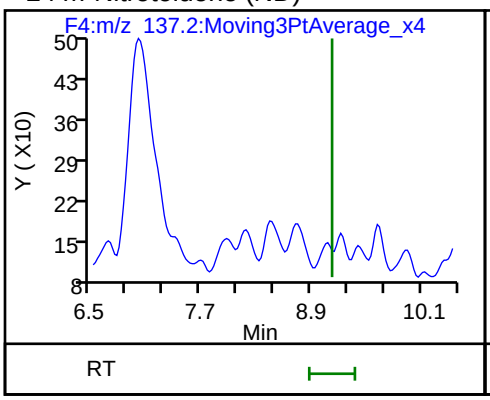


23 p-Nitrotoluene (ND)

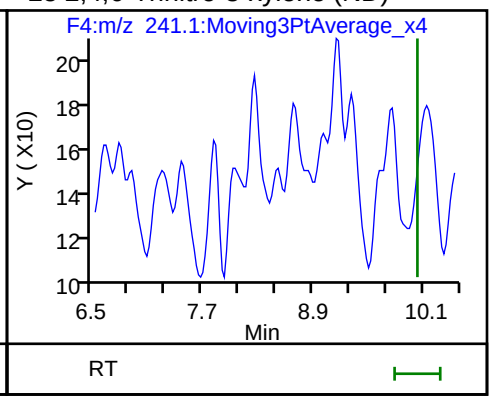


Report Date: 16-Jul-2021 08:16:54 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15026.d

24 m-Nitrotoluene (ND)



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



Report Date: 16-Jul-2021 08:16:54 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15026.d				
Lims ID:	280-150636-A-7-A				
Client ID:	29SB155 (11-12)				
Sample Type:	Client				
Inject. Date:	15-Jul-2021 14:37:07	ALS Bottle#:	20	Worklist Smp#:	27
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-150636-A-7-A				
Misc. Info.:	06/30/2021 0.1%HAC				
Operator ID:	acm	Instrument ID:	LC_LCMS4		
Method:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m				
Limit Group:	LC - 8321A Expl				
Last Update:	16-Jul-2021 08:16:52	Calib Date:	15-Jul-2021 11:10:54		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1655				
First Level Reviewer: meyera		Date:	16-Jul-2021 08:10:42		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	98.9	98.53

Report Date: 16-Jul-2021 08:16:54 Chrom Revision: 2.3 13-May-2021 07:57:40

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

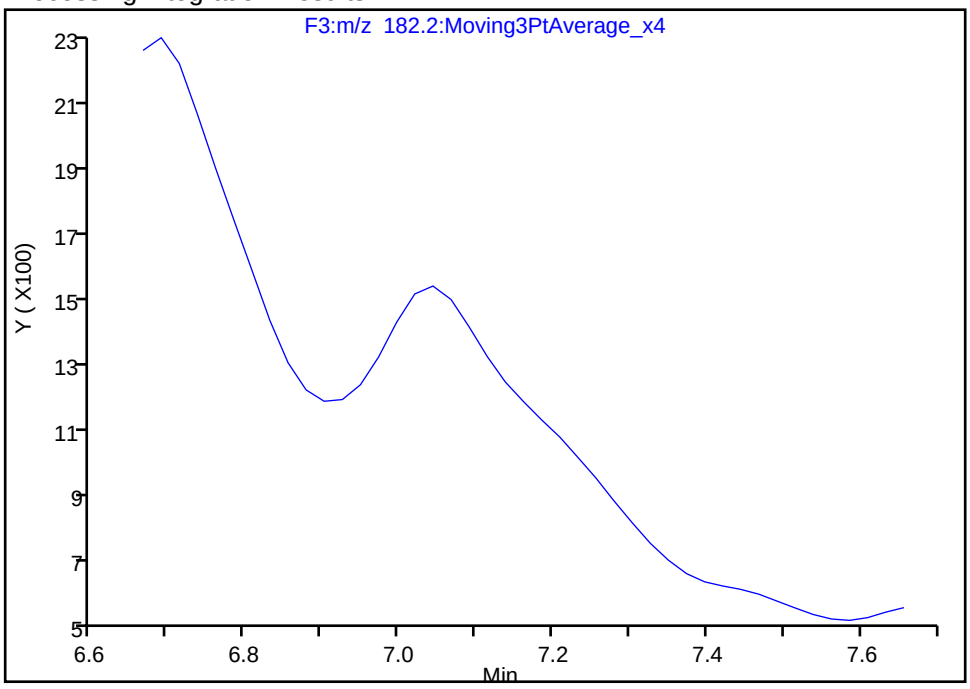
Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15026.d				
Injection Date:	15-Jul-2021 14:37:07	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-7-A	Lab Sample ID:	280-150636-7		
Client ID:	29SB155 (11-12)				
Operator ID:	acm	ALS Bottle#:	20	Worklist Smp#:	27
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		
Column:		Detector	F3:SIR		

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

Signal: 1

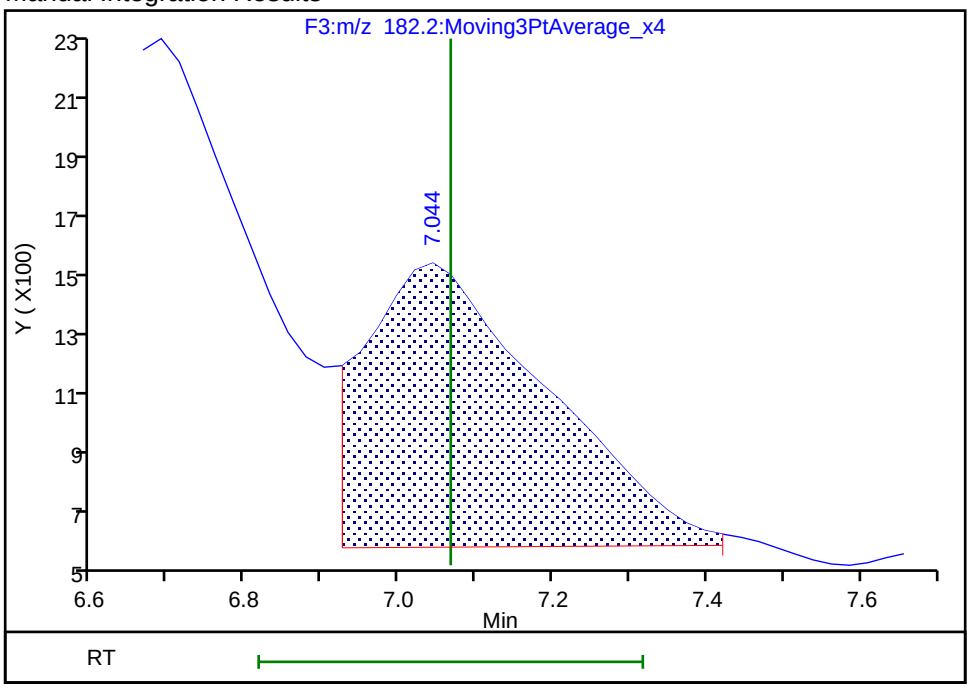
Not Detected
Expected RT: 7.07

Processing Integration Results



Manual Integration Results

RT: 7.04
Area: 14874
Amount: 0.279571
Amount Units: ug/l



Reviewer: meyera, 16-Jul-2021 08:10:39
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 16-Jul-2021 08:16:54 Chrom Revision: 2.3 13-May-2021 07:57:40

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

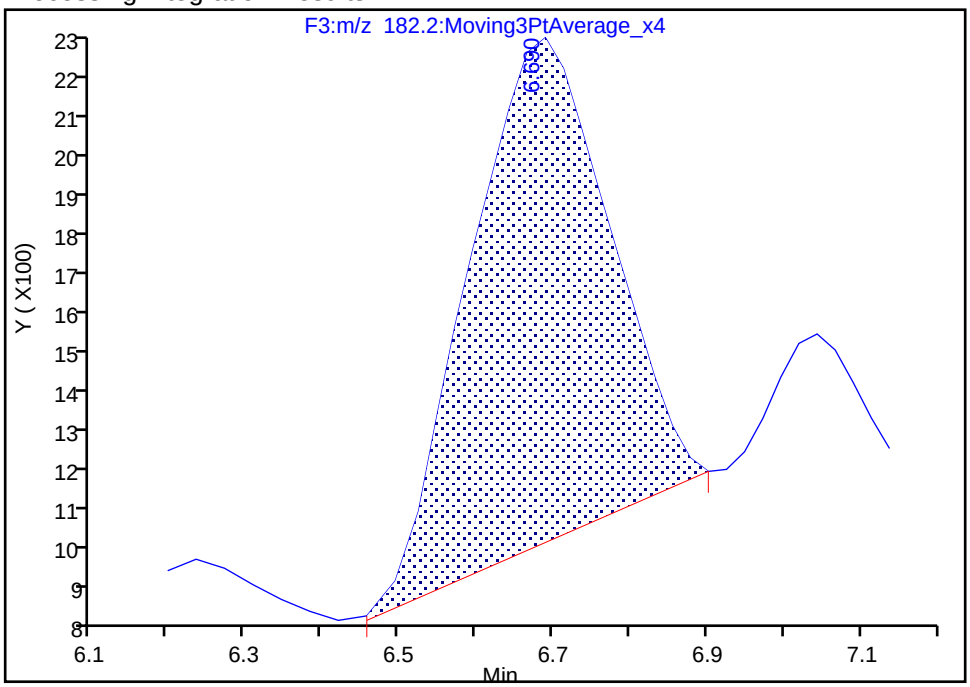
Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15026.d				
Injection Date:	15-Jul-2021 14:37:07	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-7-A	Lab Sample ID:	280-150636-7		
Client ID:	29SB155 (11-12)				
Operator ID:	acm	ALS Bottle#:	20	Worklist Smp#:	27
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		
Column:		Detector	F3:SIR		

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

Signal: 1

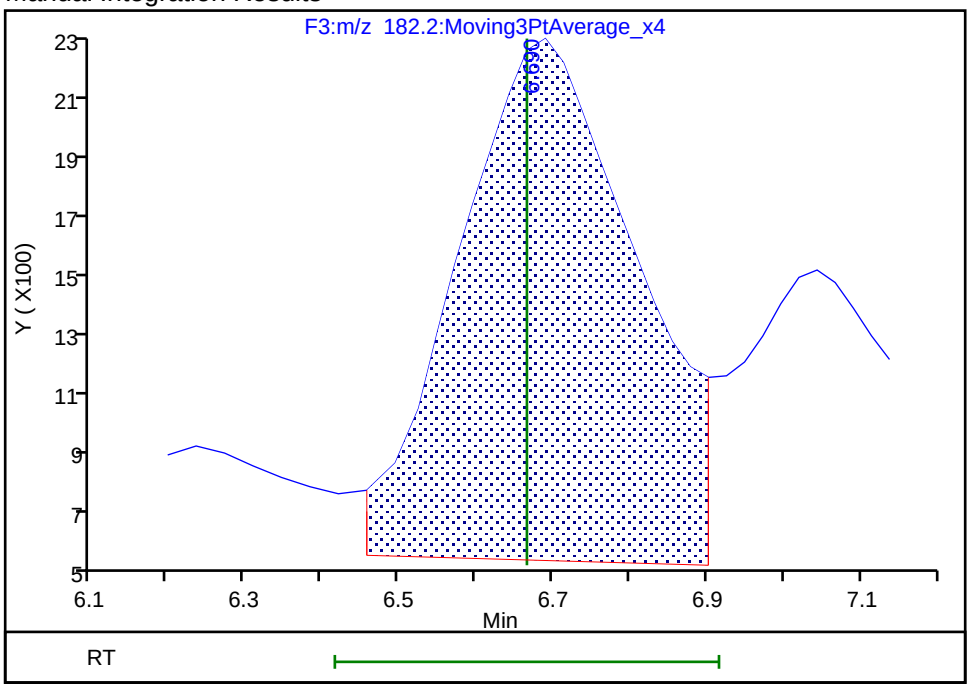
Processing Integration Results

RT: 6.69
Area: 15751
Amount: 1.727527
Amount Units: ug/l



Manual Integration Results

RT: 6.69
Area: 26127
Amount: 1.924376
Amount Units: ug/l



Reviewer: meyera, 16-Jul-2021 08:10:30

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Client Sample ID: 29SB135 (15-16) Lab Sample ID: 280-150636-8

Matrix: Solid Lab File ID: ex421G15027.d

Analysis Method: 8321A Date Collected: 03/04/2021 10:30

Extraction Method: 8330B Date Extracted: 07/12/2021 16:07

Sample wt/vol: 10.21(g) Date Analyzed: 07/15/2021 14:49

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

Injection Volume: 40(uL) GC Column: IonPac ID: 2(mm)

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

Analysis Batch No.: 543298 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.029	U H H3	0.098	0.029	0.012
99-65-0	1,3-Dinitrobenzene	0.015	U H H3	0.098	0.015	0.0070
118-96-7	2,4,6-Trinitrotoluene	0.0072	J M H H3	0.098	0.015	0.0049
121-14-2	2,4-Dinitrotoluene	0.029	U M H H3	0.098	0.029	0.0080
606-20-2	2,6-Dinitrotoluene	0.029	U M H H3	0.098	0.029	0.020
35572-78-2	2-Amino-4,6-dinitrotoluene	0.029	U H H3	0.098	0.029	0.012
88-72-2	o-Nitrotoluene	0.015	U H H3	0.098	0.015	0.0056
99-08-1	m-Nitrotoluene	0.029	U H H3	0.098	0.029	0.013
19406-51-0	4-Amino-2,6-dinitrotoluene	0.015	U H H3	0.098	0.015	0.0050
99-99-0	p-Nitrotoluene	0.029	U H H3	0.098	0.029	0.011
98-95-3	Nitrobenzene	0.029	U H H3	0.098	0.029	0.011
55-63-0	Nitroglycerin	0.029	U H H3	0.098	0.029	0.010
2691-41-0	HMX	0.029	U H H3	0.098	0.029	0.015
78-11-5	PETN	0.015	U H H3	0.098	0.015	0.0050
121-82-4	RDX	0.015	U H H3	0.098	0.015	0.0042
479-45-8	Tetryl	0.015	U H H3	0.098	0.015	0.0074

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	136		68-140

Report Date: 16-Jul-2021 08:16:54 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15027.d
Lims ID: 280-150636-A-8-A
Client ID: 29SB135 (15-16)
Sample Type: Client
Inject. Date: 15-Jul-2021 14:49:11 ALS Bottle#: 21 Worklist Smp#: 28
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 280-150636-A-8-A
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 16-Jul-2021 08:16:52 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1655

First Level Reviewer: meyera Date: 16-Jul-2021 08:11:12
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
360.9	2.069	2.052	0.017		160211	120.0	162	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	2.994	2.993	0.001		780851	120.0	554	
* 7 1,3-Dinitrobenzene-d4								
172.1	4.872	4.871	0.001		1239186	129.4	61.6	
10 2,4,6-Trinitrotoluene								M
227.2	5.299	5.353	0.0	0.752	7870	1.85	6.0	M
$ 11 Nitrobenzene-d5								
128.1	5.373	5.428	0.0	0.763	1160049	136.2	539	
17 2,6-Dinitrotoluene								M
182.2	6.737	6.760	0.071	0.956	30185	2.05	13.8	M
* 18 2,4-dinitrotoluene-d3								
185.1	7.043	6.996	0.047		3023506	120.0	341	
19 2,4-Dinitrotoluene								M
182.2	7.091	7.115	0.024	1.007	9474	0.1071	5.3	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

EXPWORKINGIS_00084 Amount Added: 20.00 Units: uL Run Reagent

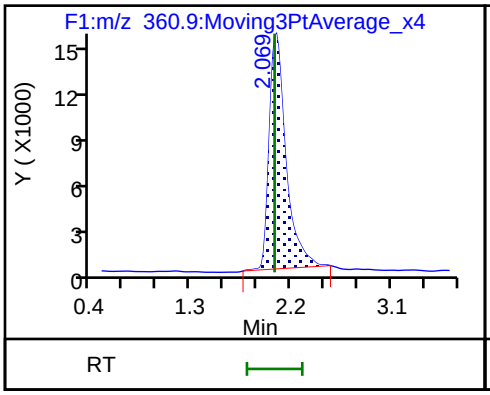
Report Date: 16-Jul-2021 08:16:54 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

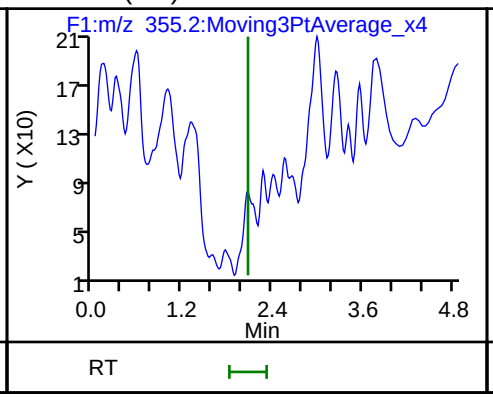
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15027.d

Injection Date:	15-Jul-2021 14:49:11	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-8-A	Lab Sample ID:	280-150636-8		
Client ID:	29SB135 (15-16)				
Operator ID:	acm	ALS Bottle#:	21	Worklist Smp#:	28
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		

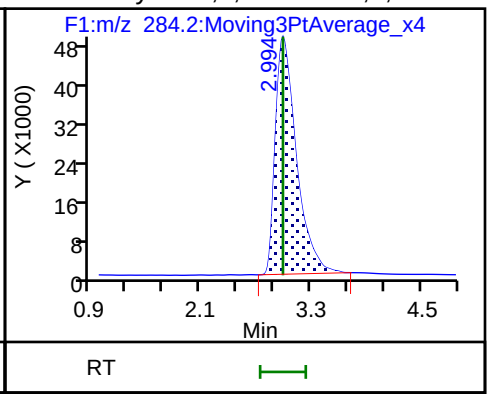
* 1 HMX-13C4



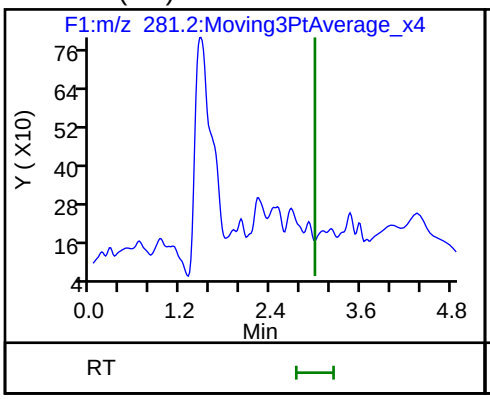
2 HMX (ND)



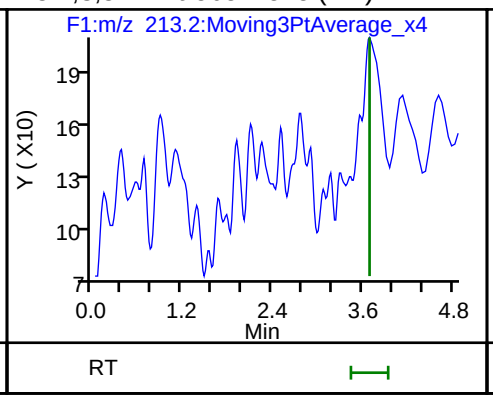
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



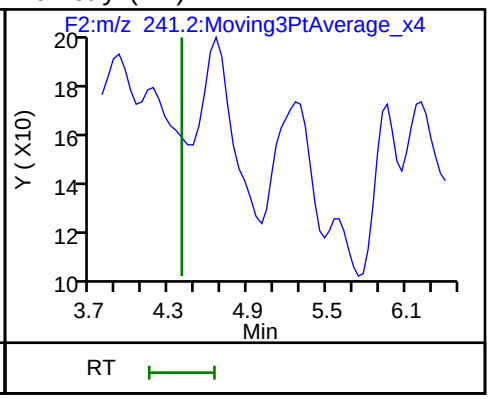
4 RDX (ND)



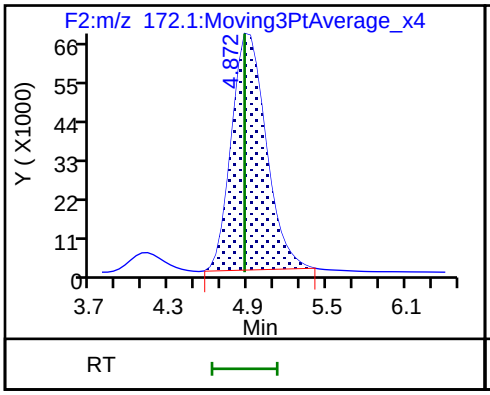
5 1,3,5-Trinitrobenzene (ND)



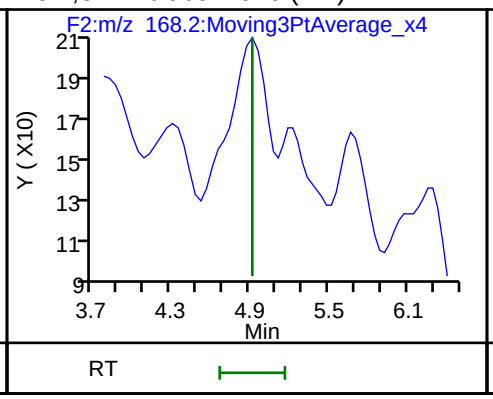
6 Tetryl (ND)



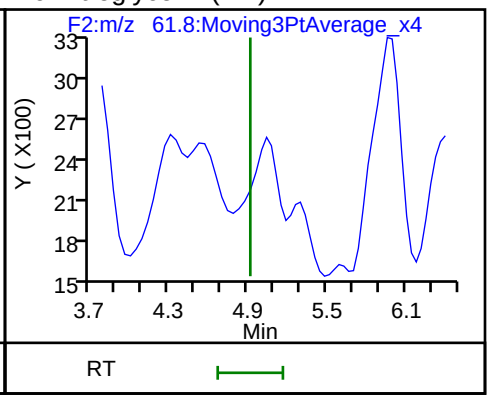
* 7 1,3-Dinitrobenzene-d4



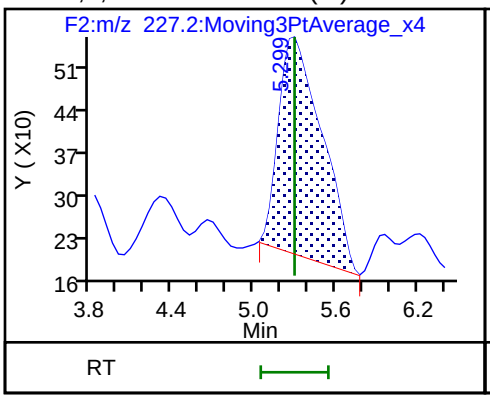
8 1,3-Dinitrobenzene (ND)



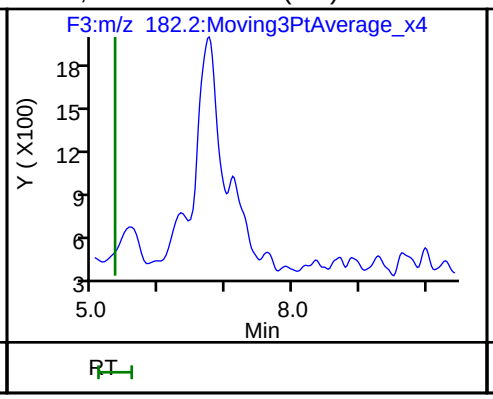
9 Nitroglycerin (ND)



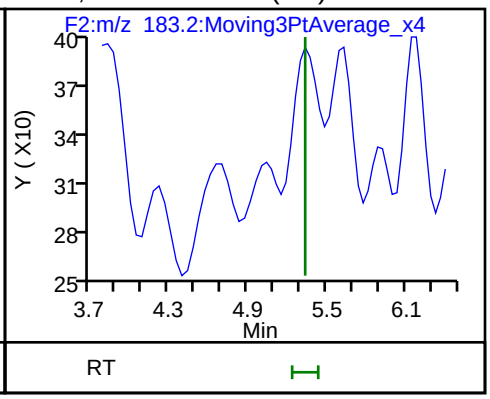
10 2,4,6-Trinitrotoluene (M)



13 3,4-Dinitrotoluene (ND)



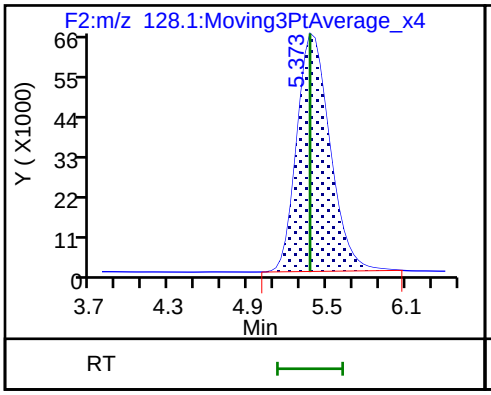
28 3,5-Dinitroaniline (ND)



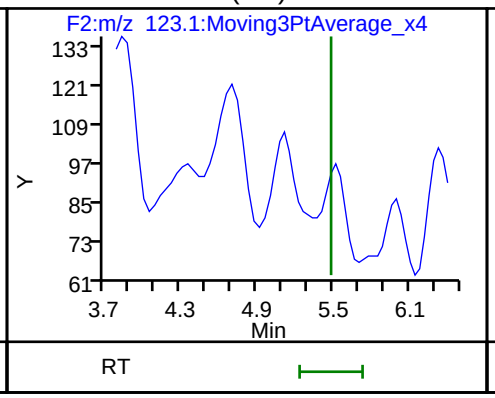
Report Date: 16-Jul-2021 08:16:54 Chrom Revision: 2.3 13-May-2021 07:57:40

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15027.d

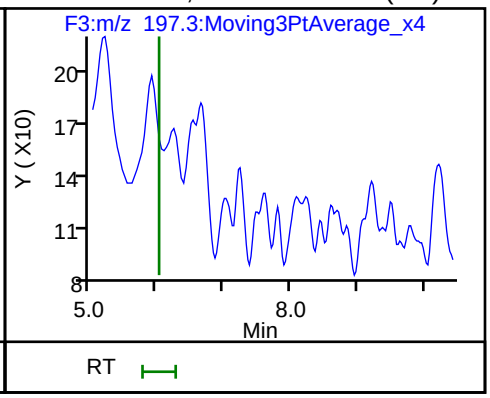
$ 11 Nitrobenzene-d5



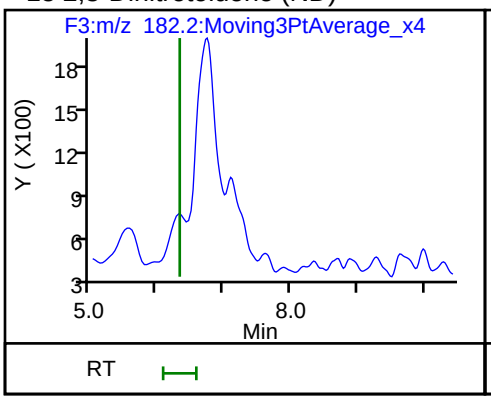
12 Nitrobenzene (ND)



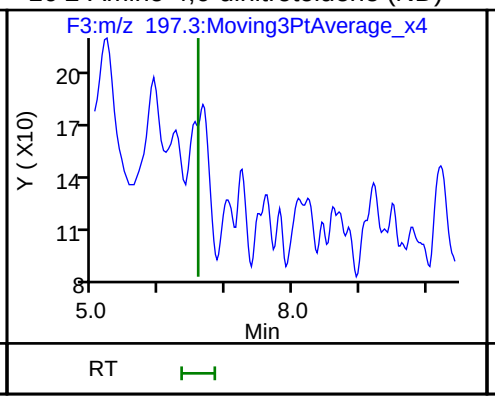
14 4-Amino-2,6-dinitrotoluene (ND)



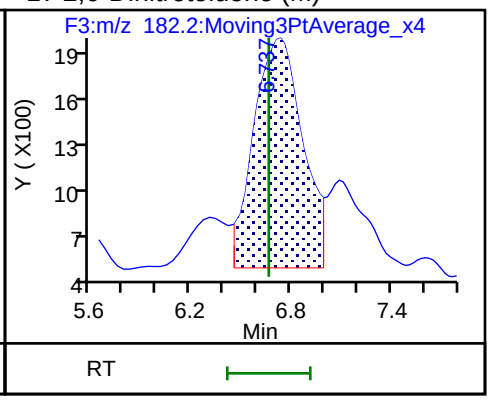
15 2,3-Dinitrotoluene (ND)



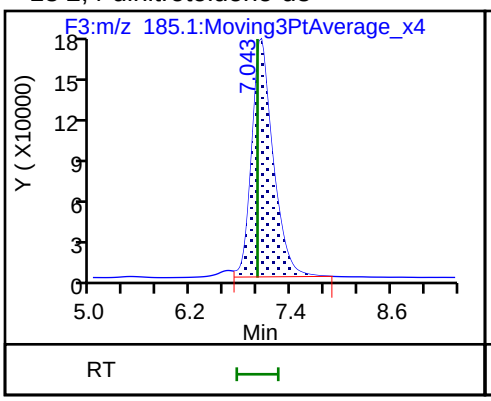
16 2-Amino-4,6-dinitrotoluene (ND)



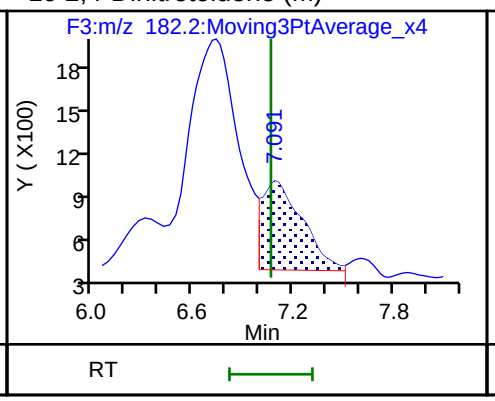
17 2,6-Dinitrotoluene (M)



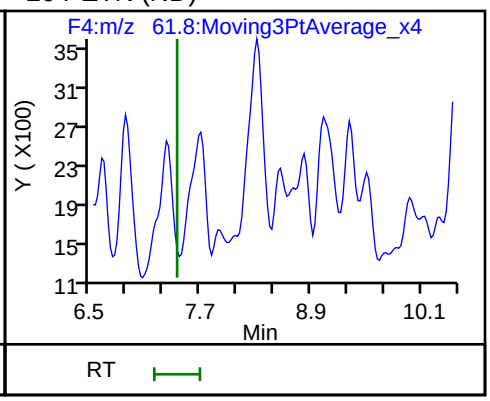
* 18 2,4-dinitrotoluene-d3



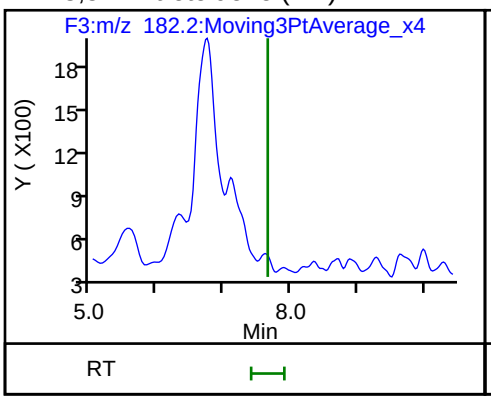
19 2,4-Dinitrotoluene (M)



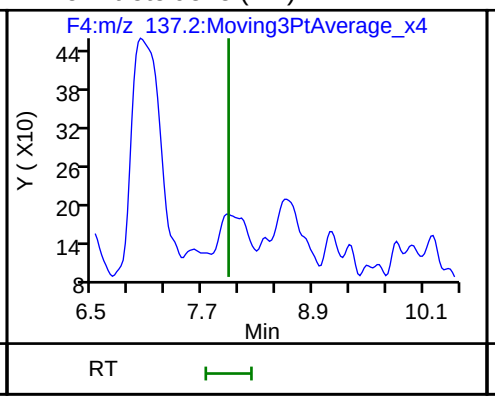
20 PETN (ND)



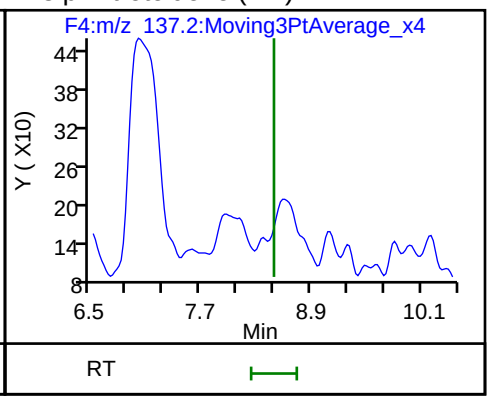
21 3,5-Dinitrotoluene (ND)



22 o-Nitrotoluene (ND)

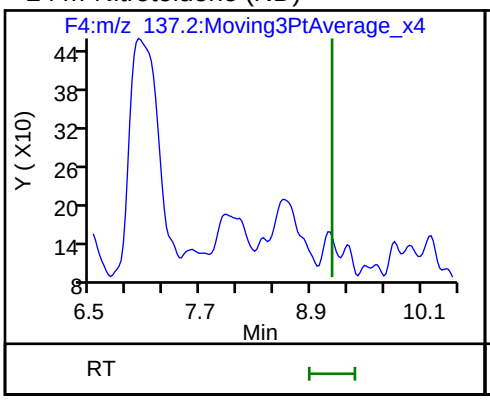


23 p-Nitrotoluene (ND)

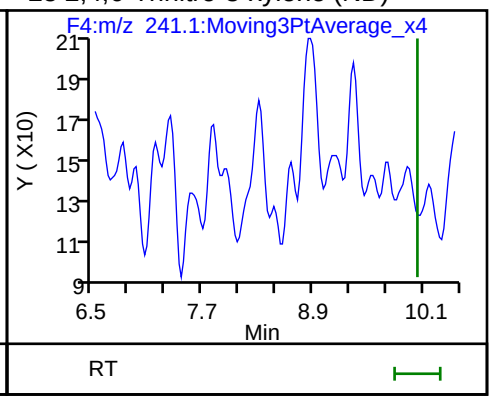


Report Date: 16-Jul-2021 08:16:54 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15027.d

24 m-Nitrotoluene (ND)



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



Report Date: 16-Jul-2021 08:16:54 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15027.d				
Lims ID:	280-150636-A-8-A				
Client ID:	29SB135 (15-16)				
Sample Type:	Client				
Inject. Date:	15-Jul-2021 14:49:11	ALS Bottle#:	21	Worklist Smp#:	28
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-150636-A-8-A				
Misc. Info.:	06/30/2021 0.1%HAC				
Operator ID:	acm	Instrument ID:	LC_LCMS4		
Method:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m				
Limit Group:	LC - 8321A Expl				
Last Update:	16-Jul-2021 08:16:52	Calib Date:	15-Jul-2021 11:10:54		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1655				
First Level Reviewer: meyera		Date:	16-Jul-2021 08:11:12		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	136.2	135.81

Report Date: 16-Jul-2021 08:16:54 Chrom Revision: 2.3 13-May-2021 07:57:40

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

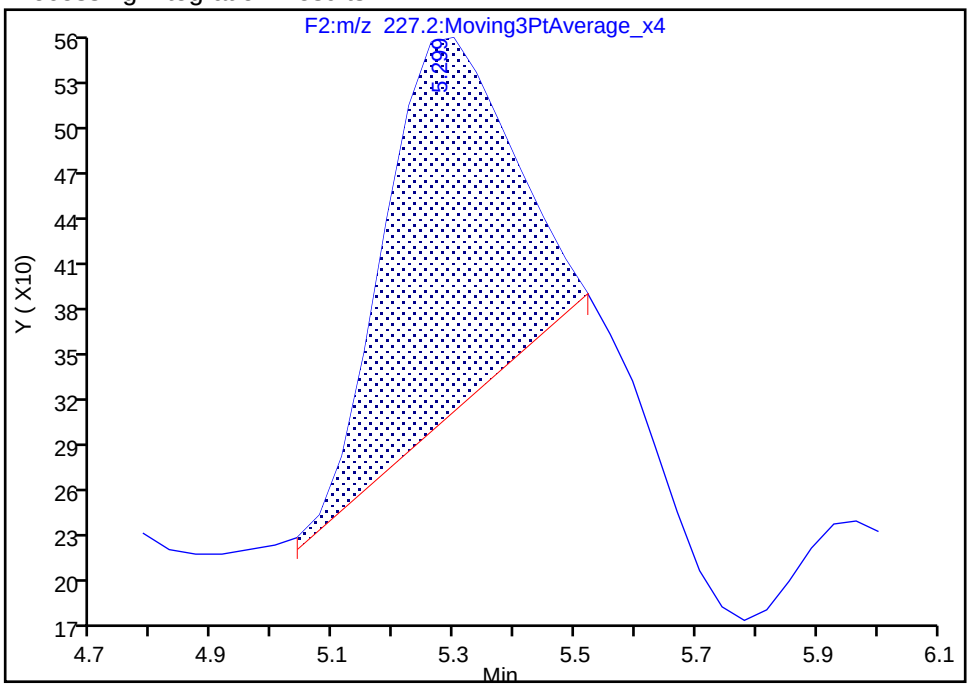
Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15027.d				
Injection Date:	15-Jul-2021 14:49:11	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-8-A	Lab Sample ID:	280-150636-8		
Client ID:	29SB135 (15-16)				
Operator ID:	acm	ALS Bottle#:	21	Worklist Smp#:	28
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		
Column:		Detector	F2:SIR		

10 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

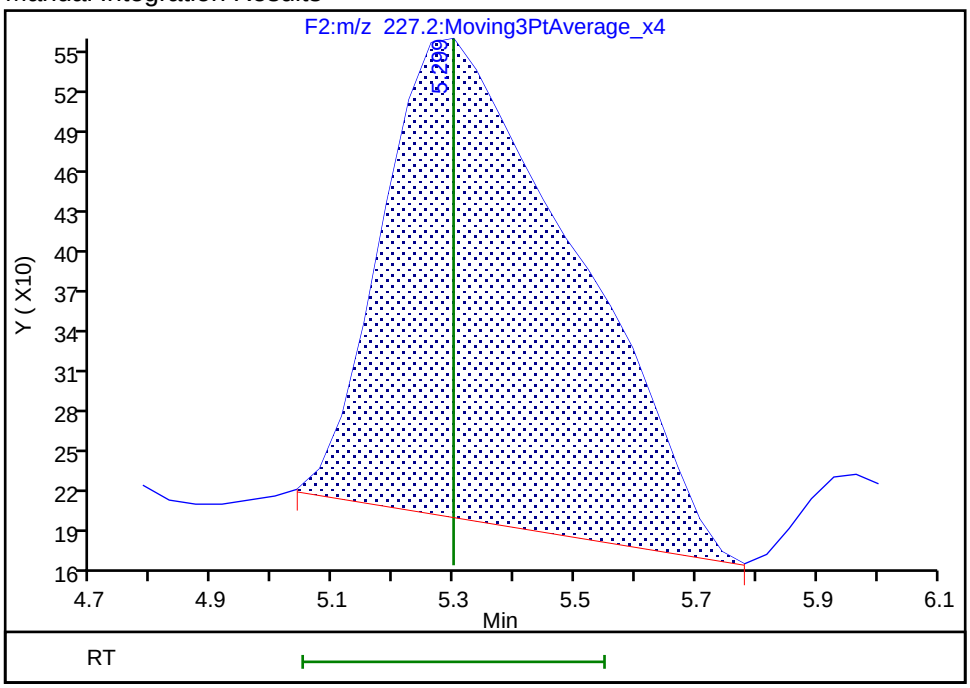
Processing Integration Results

RT: 5.30
Area: 3685
Amount: 1.731197
Amount Units: ug/l



Manual Integration Results

RT: 5.30
Area: 7870
Amount: 1.849588
Amount Units: ug/l



Reviewer: meyera, 16-Jul-2021 08:11:05

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 16-Jul-2021 08:16:54 Chrom Revision: 2.3 13-May-2021 07:57:40

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

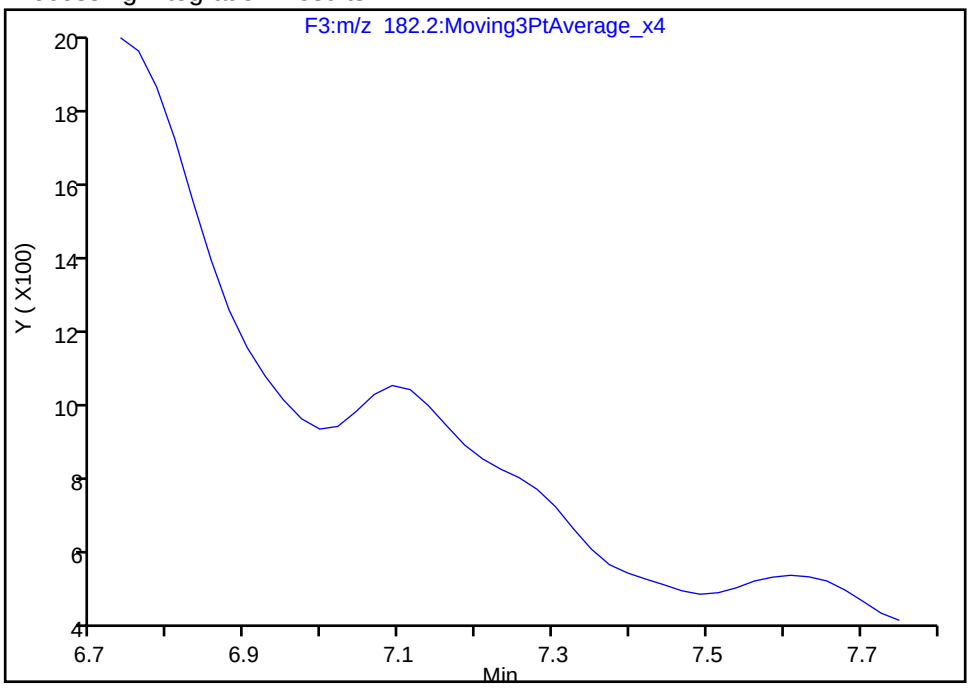
Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15027.d				
Injection Date:	15-Jul-2021 14:49:11	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-8-A	Lab Sample ID:	280-150636-8		
Client ID:	29SB135 (15-16)				
Operator ID:	acm	ALS Bottle#:	21	Worklist Smp#:	28
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		
Column:		Detector	F3:SIR		

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

Signal: 1

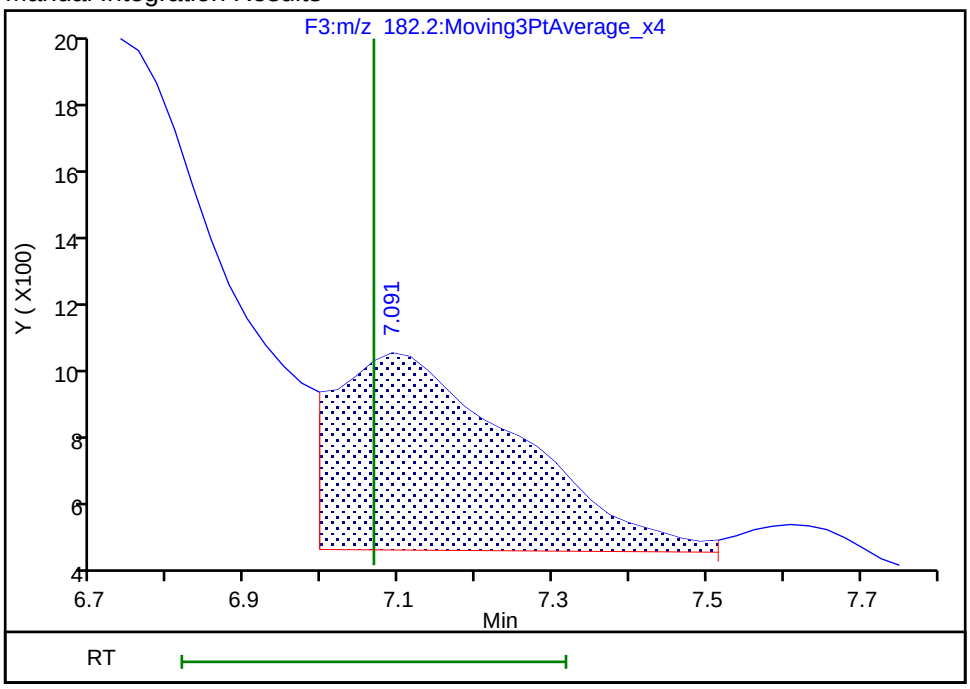
Not Detected
Expected RT: 7.07

Processing Integration Results



Manual Integration Results

RT: 7.09
Area: 9474
Amount: 0.107099
Amount Units: ug/l



Reviewer: meyera, 16-Jul-2021 08:10:56
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 16-Jul-2021 08:16:54 Chrom Revision: 2.3 13-May-2021 07:57:40

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

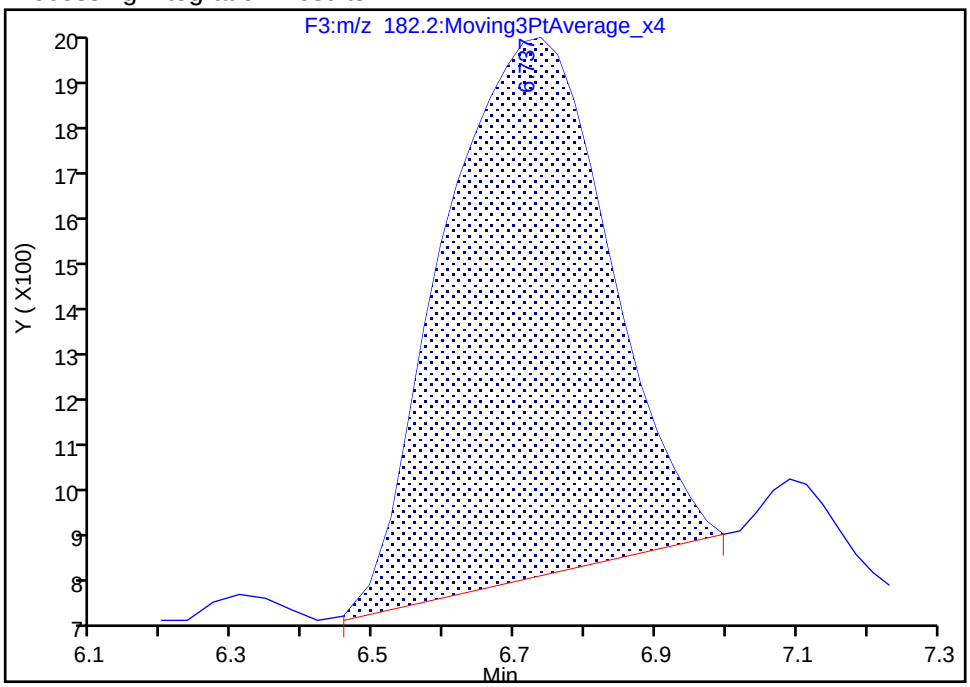
Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15027.d				
Injection Date:	15-Jul-2021 14:49:11	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-8-A	Lab Sample ID:	280-150636-8		
Client ID:	29SB135 (15-16)				
Operator ID:	acm	ALS Bottle#:	21	Worklist Smp#:	28
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		
Column:		Detector	F3:SIR		

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

Signal: 1

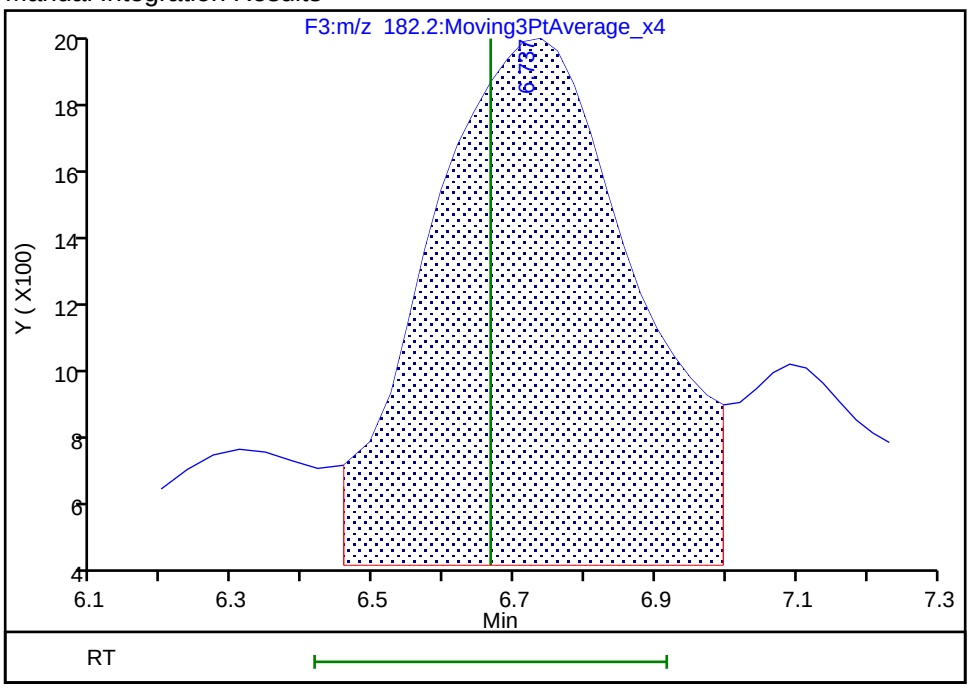
Processing Integration Results

RT: 6.74
Area: 18464
Amount: 1.806042
Amount Units: ug/l



Manual Integration Results

RT: 6.74
Area: 30185
Amount: 2.045575
Amount Units: ug/l



Reviewer: meyera, 16-Jul-2021 08:10:51

Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Client Sample ID: 29SB136 (15-16) Lab Sample ID: 280-150636-9

Matrix: Solid Lab File ID: ex421G15028.d

Analysis Method: 8321A Date Collected: 03/04/2021 09:35

Extraction Method: 8330B Date Extracted: 07/12/2021 16:07

Sample wt/vol: 10.2(g) Date Analyzed: 07/15/2021 15:01

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

Injection Volume: 40(uL) GC Column: IonPac ID: 2(mm)

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

Analysis Batch No.: 543298 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.029	U H H3	0.098	0.029	0.012
99-65-0	1,3-Dinitrobenzene	0.015	U H H3	0.098	0.015	0.0070
118-96-7	2,4,6-Trinitrotoluene	0.0072	J H H3	0.098	0.015	0.0049
121-14-2	2,4-Dinitrotoluene	0.029	U M H H3	0.098	0.029	0.0080
606-20-2	2,6-Dinitrotoluene	0.029	U M H H3	0.098	0.029	0.020
35572-78-2	2-Amino-4,6-dinitrotoluene	0.029	U H H3	0.098	0.029	0.012
88-72-2	o-Nitrotoluene	0.015	U H H3	0.098	0.015	0.0056
99-08-1	m-Nitrotoluene	0.029	U H H3	0.098	0.029	0.013
19406-51-0	4-Amino-2,6-dinitrotoluene	0.015	U H H3	0.098	0.015	0.0050
99-99-0	p-Nitrotoluene	0.029	U H H3	0.098	0.029	0.011
98-95-3	Nitrobenzene	0.029	U H H3	0.098	0.029	0.011
55-63-0	Nitroglycerin	0.029	U H H3	0.098	0.029	0.010
2691-41-0	HMX	0.029	U H H3	0.098	0.029	0.015
78-11-5	PETN	0.015	U H H3	0.098	0.015	0.0050
121-82-4	RDX	0.015	U H H3	0.098	0.015	0.0042
479-45-8	Tetryl	0.015	U H H3	0.098	0.015	0.0074

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	119		68-140

Report Date: 16-Jul-2021 08:16:55 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15028.d
Lims ID: 280-150636-A-9-A
Client ID: 29SB136 (15-16)
Sample Type: Client
Inject. Date: 15-Jul-2021 15:01:15 ALS Bottle#: 22 Worklist Smp#: 29
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 280-150636-A-9-A
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 16-Jul-2021 08:16:52 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1655

First Level Reviewer: meyera Date: 16-Jul-2021 08:11:34
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
360.9	2.052	2.052	0.0		171006	120.0	240	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	2.977	2.993	-0.016		763387	120.0	905	
* 7 1,3-Dinitrobenzene-d4								
172.1	4.872	4.871	0.001		1335996	129.4	58.6	
10 2,4,6-Trinitrotoluene								
227.2	5.299	5.353	0.0	0.752	8313	1.84	10.5	
$ 11 Nitrobenzene-d5								
128.1	5.373	5.428	0.0	0.763	1093975	119.0	518	
17 2,6-Dinitrotoluene								M
182.2	6.713	6.760	0.047	0.953	23906	1.86	10.7	M
* 18 2,4-dinitrotoluene-d3								
185.1	7.044	6.996	0.048		3393823	120.0	354	
19 2,4-Dinitrotoluene								M
182.2	7.044	7.115	-0.023	1.000	10262	0.0939	4.9	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

EXPWORKINGIS_00084 Amount Added: 20.00 Units: uL Run Reagent

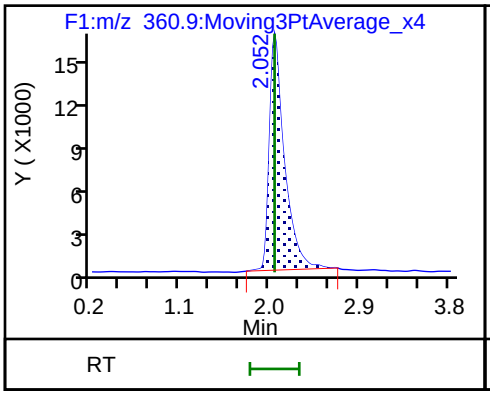
Report Date: 16-Jul-2021 08:16:55 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

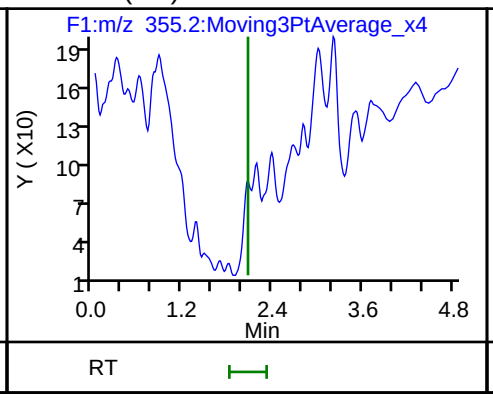
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15028.d

Injection Date:	15-Jul-2021 15:01:15	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-9-A	Lab Sample ID:	280-150636-9		
Client ID:	29SB136 (15-16)				
Operator ID:	acm	ALS Bottle#:	22	Worklist Smp#:	29
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		

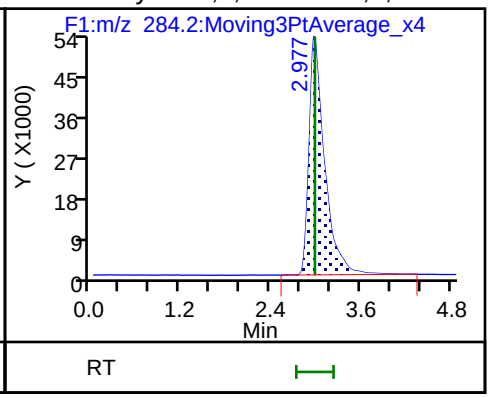
* 1 HMX-13C4



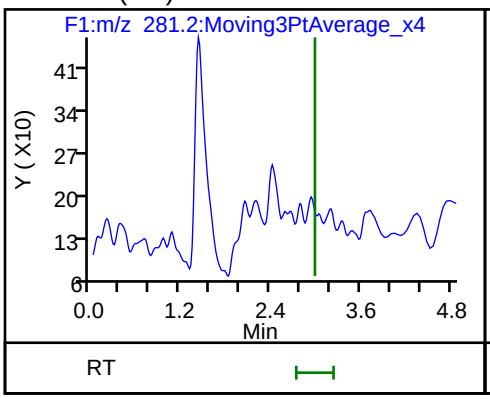
2 HMX (ND)



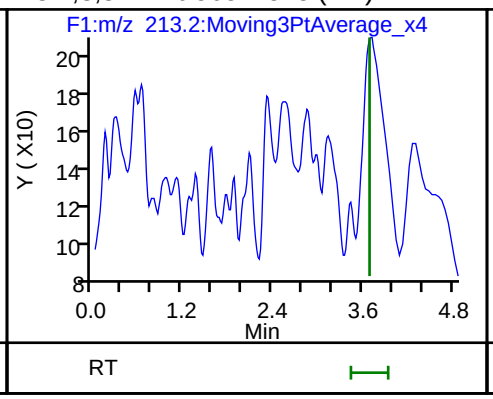
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



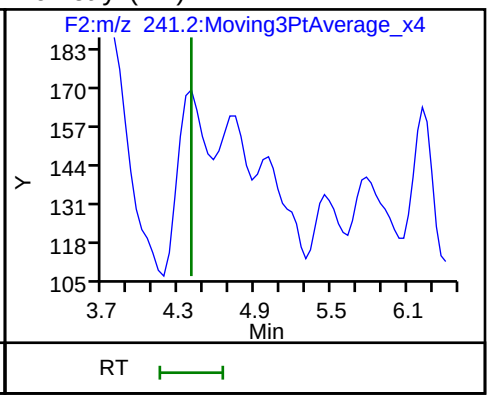
4 RDX (ND)



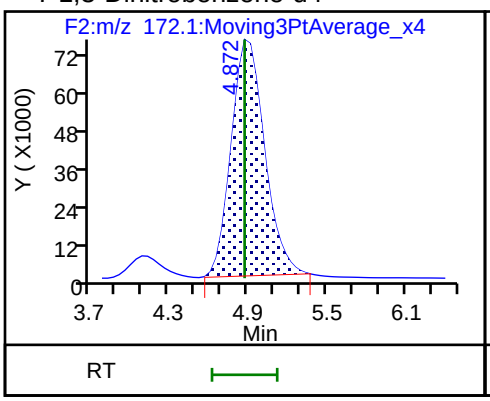
5 1,3,5-Trinitrobenzene (ND)



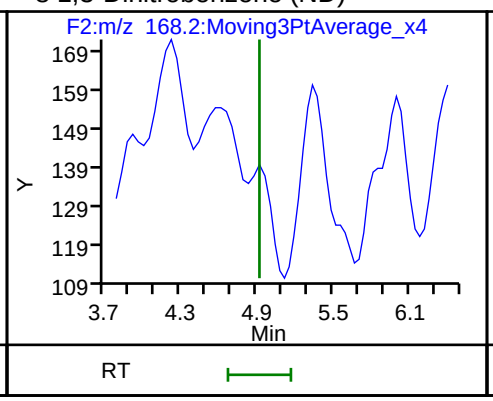
6 Tetryl (ND)



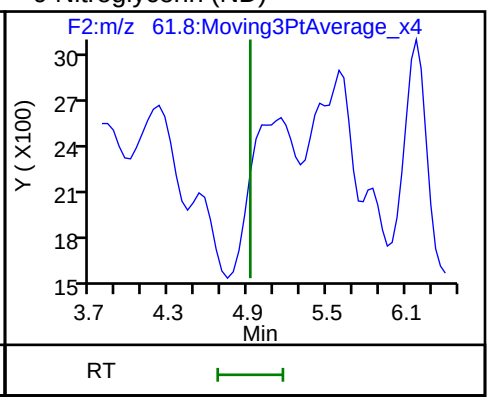
* 7 1,3-Dinitrobenzene-d4



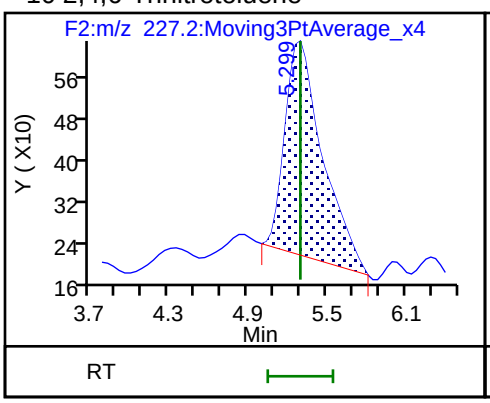
8 1,3-Dinitrobenzene (ND)



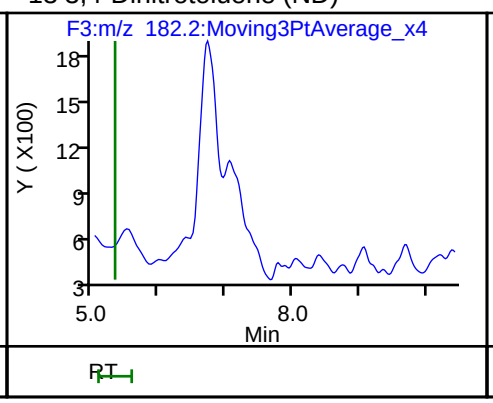
9 Nitroglycerin (ND)



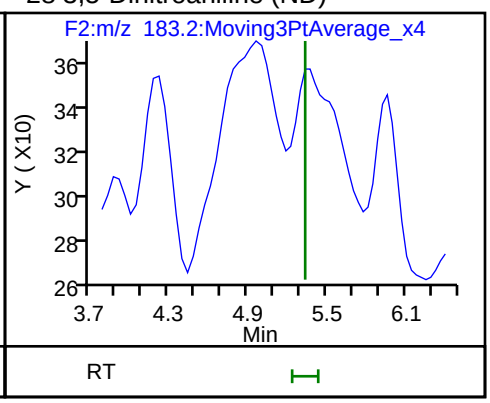
10 2,4,6-Trinitrotoluene



13 3,4-Dinitrotoluene (ND)

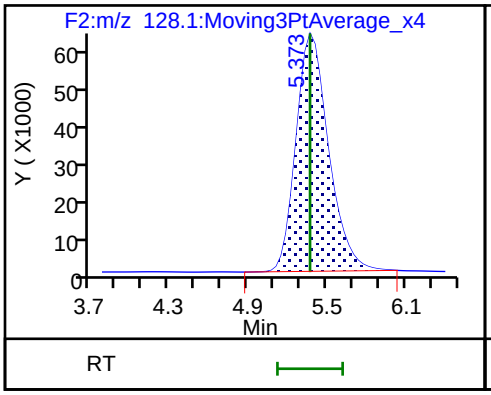


28 3,5-Dinitroaniline (ND)

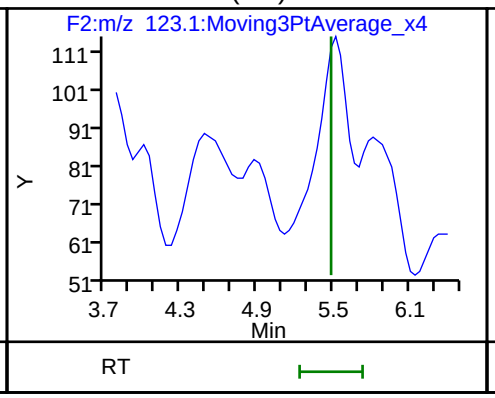


Report Date: 16-Jul-2021 08:16:55 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15028.d

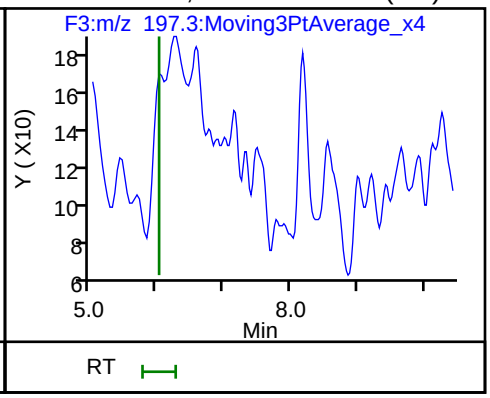
$ 11 Nitrobenzene-d5



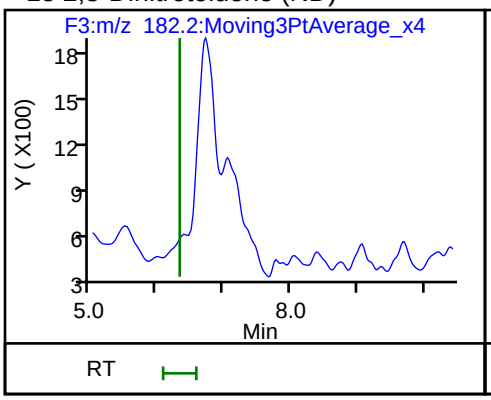
12 Nitrobenzene (ND)



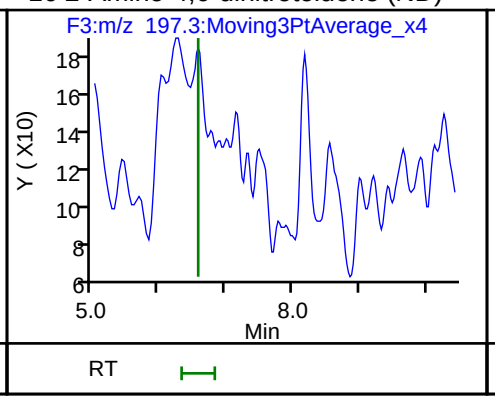
14 4-Amino-2,6-dinitrotoluene (ND)



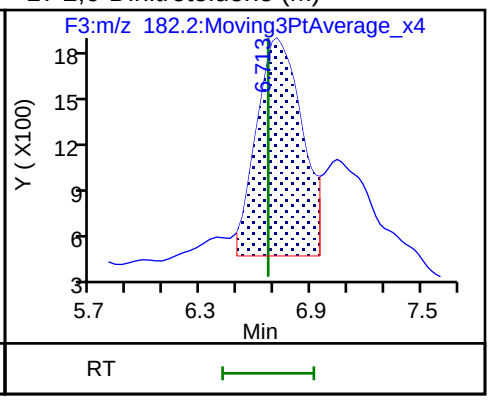
15 2,3-Dinitrotoluene (ND)



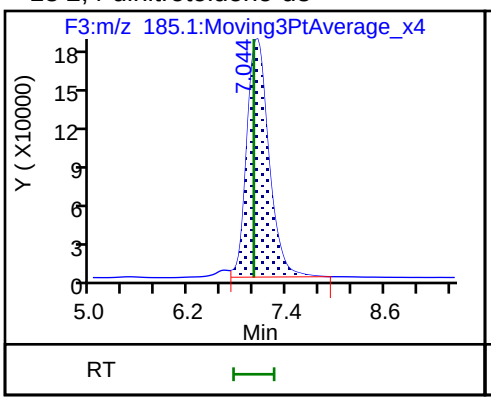
16 2-Amino-4,6-dinitrotoluene (ND)



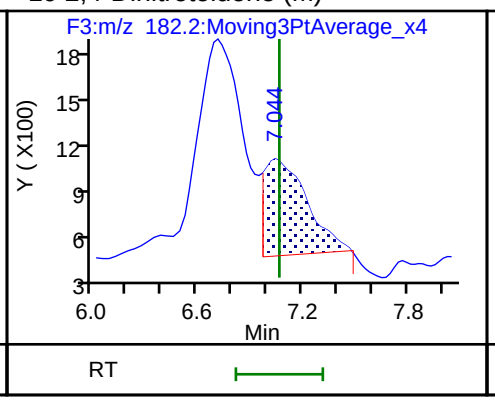
17 2,6-Dinitrotoluene (M)



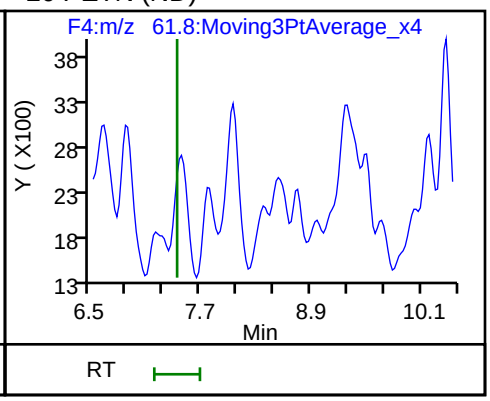
* 18 2,4-dinitrotoluene-d3



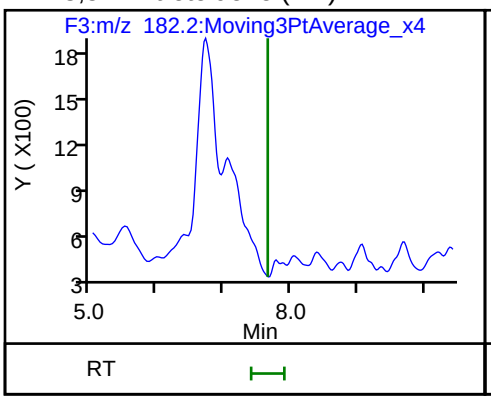
19 2,4-Dinitrotoluene (M)



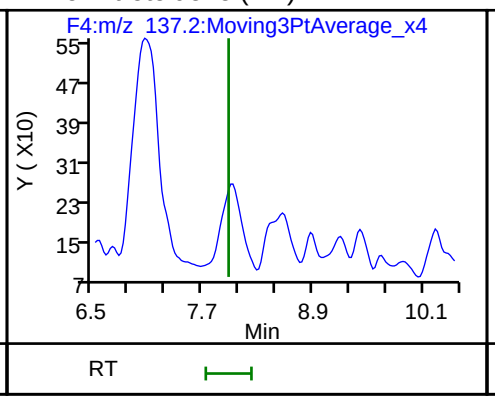
20 PETN (ND)



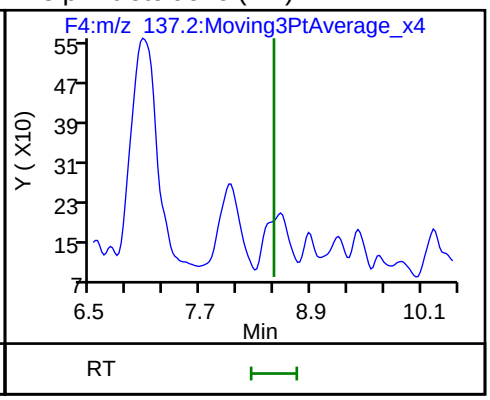
21 3,5-Dinitrotoluene (ND)



22 o-Nitrotoluene (ND)



23 p-Nitrotoluene (ND)

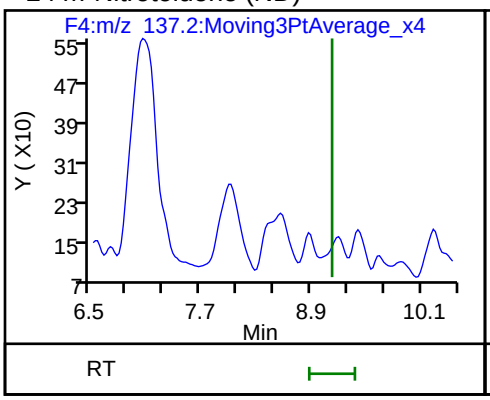


Chrom Revision: 2.3 13-May-2021 07:57:40

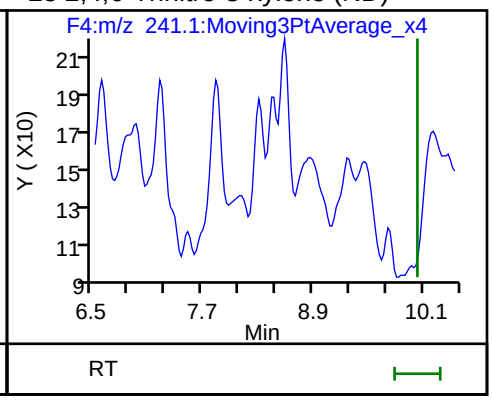
Report Date: 16-Jul-2021 08:16:55

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15028.d

24 m-Nitrotoluene (ND)



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



Report Date: 16-Jul-2021 08:16:55 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15028.d				
Lims ID:	280-150636-A-9-A				
Client ID:	29SB136 (15-16)				
Sample Type:	Client				
Inject. Date:	15-Jul-2021 15:01:15	ALS Bottle#:	22	Worklist Smp#:	29
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-150636-A-9-A				
Misc. Info.:	06/30/2021 0.1%HAC				
Operator ID:	acm	Instrument ID:	LC_LCMS4		
Method:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m				
Limit Group:	LC - 8321A Expl				
Last Update:	16-Jul-2021 08:16:52	Calib Date:	15-Jul-2021 11:10:54		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1655				
First Level Reviewer: meyera		Date:	16-Jul-2021 08:11:34		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	119.0	118.64

Report Date: 16-Jul-2021 08:16:55 Chrom Revision: 2.3 13-May-2021 07:57:40

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

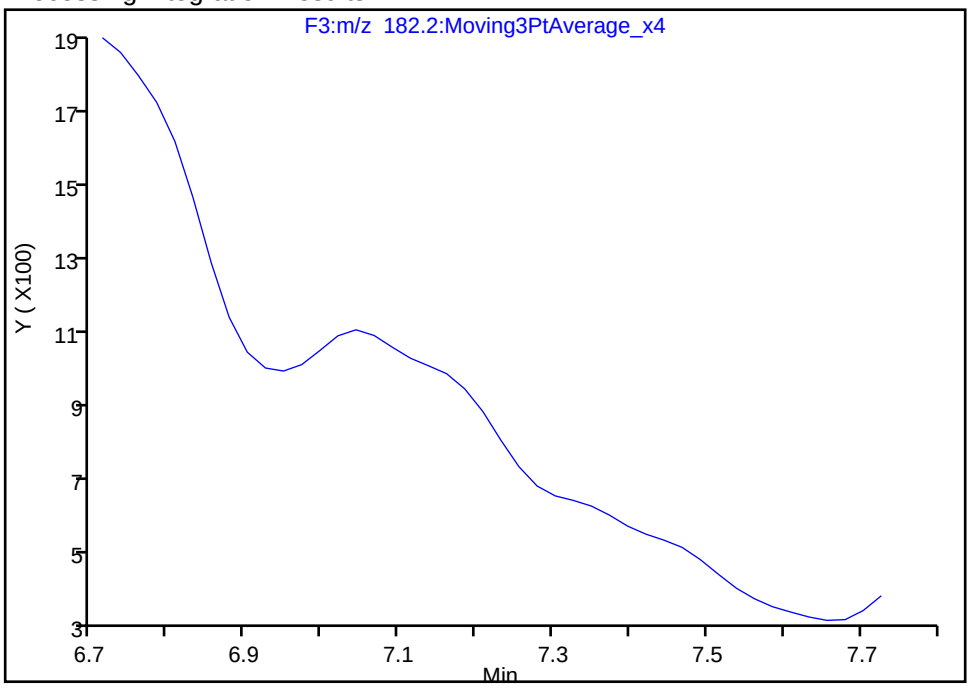
Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15028.d				
Injection Date:	15-Jul-2021 15:01:15	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-9-A	Lab Sample ID:	280-150636-9		
Client ID:	29SB136 (15-16)				
Operator ID:	acm	ALS Bottle#:	22	Worklist Smp#:	29
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		
Column:		Detector	F3:SIR		

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

Signal: 1

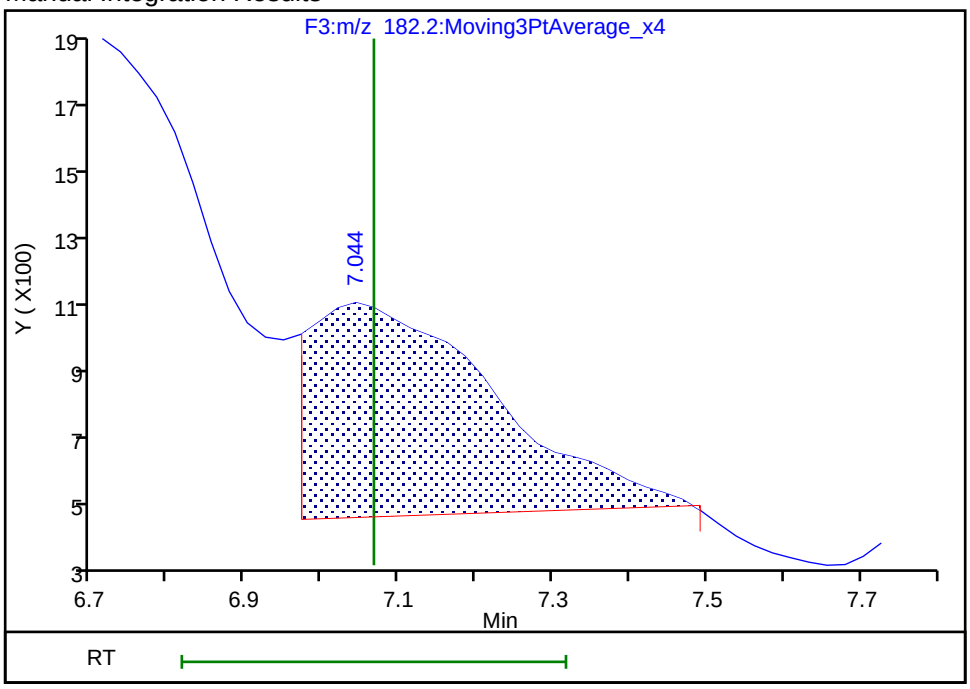
Not Detected
Expected RT: 7.07

Processing Integration Results



Manual Integration Results

RT: 7.04
Area: 10262
Amount: 0.093897
Amount Units: ug/l



Reviewer: meyera, 16-Jul-2021 08:11:30
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 16-Jul-2021 08:16:55 Chrom Revision: 2.3 13-May-2021 07:57:40

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15028.d

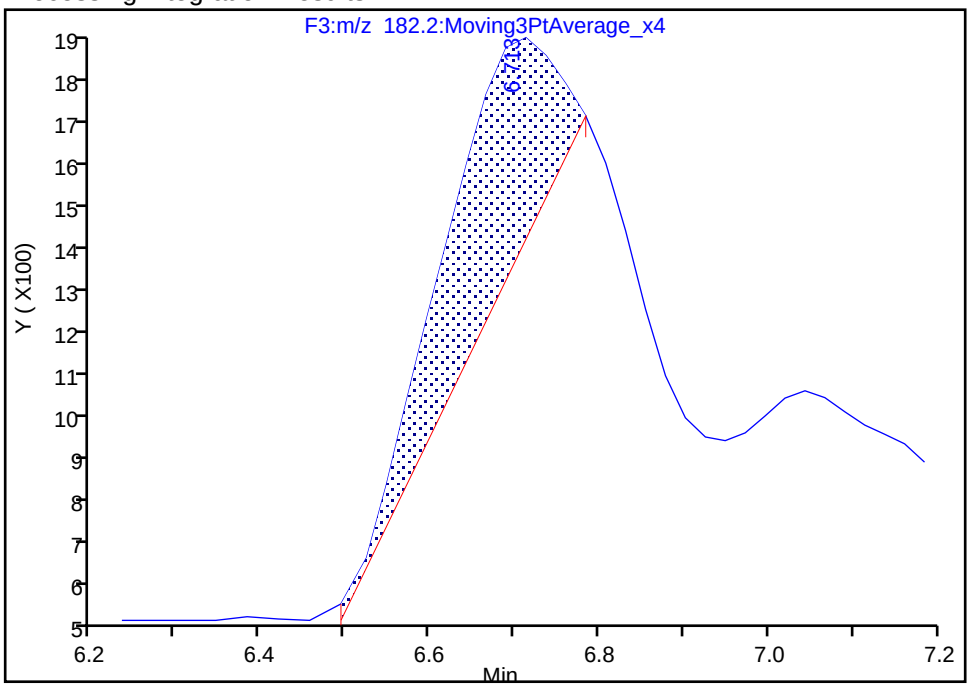
Injection Date:	15-Jul-2021 15:01:15	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-9-A	Lab Sample ID:	280-150636-9		
Client ID:	29SB136 (15-16)				
Operator ID:	acm	ALS Bottle#:	22	Worklist Smp#:	29
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		
Column:		Detector	F3:SIR		

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

Signal: 1

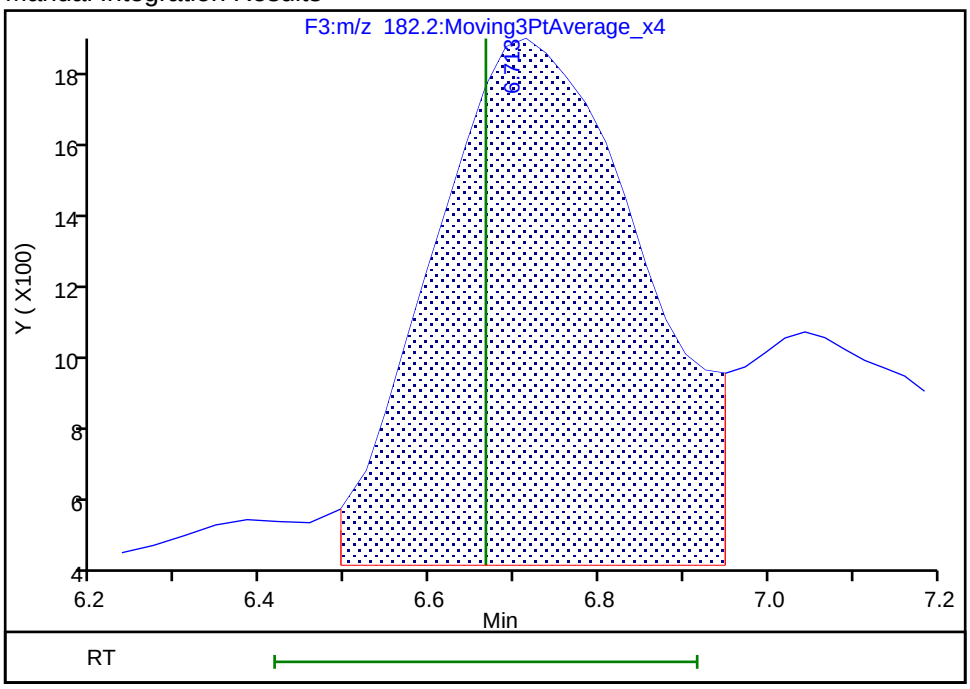
Processing Integration Results

RT: 6.71
Area: 4660
Amount: 1.513548
Amount Units: ug/l



Manual Integration Results

RT: 6.71
Area: 23906
Amount: 1.863948
Amount Units: ug/l



Reviewer: meyera, 16-Jul-2021 08:11:25

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Client Sample ID: 29SB156 (12-13) Lab Sample ID: 280-150636-10

Matrix: Solid Lab File ID: ex421G15029.d

Analysis Method: 8321A Date Collected: 03/10/2021 08:10

Extraction Method: 8330B Date Extracted: 07/12/2021 16:07

Sample wt/vol: 10.73(g) Date Analyzed: 07/15/2021 15:13

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

Injection Volume: 40(uL) GC Column: IonPac ID: 2(mm)

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

Analysis Batch No.: 543298 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.028	U H H3	0.093	0.028	0.012
99-65-0	1,3-Dinitrobenzene	0.014	U H H3	0.093	0.014	0.0066
118-96-7	2,4,6-Trinitrotoluene	0.0069	J H H3	0.093	0.014	0.0047
121-14-2	2,4-Dinitrotoluene	0.028	U M H H3	0.093	0.028	0.0076
606-20-2	2,6-Dinitrotoluene	0.028	U M H H3	0.093	0.028	0.019
35572-78-2	2-Amino-4,6-dinitrotoluene	0.028	U H H3	0.093	0.028	0.011
88-72-2	o-Nitrotoluene	0.014	U H H3	0.093	0.014	0.0053
99-08-1	m-Nitrotoluene	0.028	U H H3	0.093	0.028	0.012
19406-51-0	4-Amino-2,6-dinitrotoluene	0.014	U H H3	0.093	0.014	0.0048
99-99-0	p-Nitrotoluene	0.028	U H H3	0.093	0.028	0.010
98-95-3	Nitrobenzene	0.028	U H H3	0.093	0.028	0.010
55-63-0	Nitroglycerin	0.028	U H H3	0.093	0.028	0.0098
2691-41-0	HMX	0.028	U H H3	0.093	0.028	0.014
78-11-5	PETN	0.014	U H H3	0.093	0.014	0.0048
121-82-4	RDX	0.014	U H H3	0.093	0.014	0.0040
479-45-8	Tetryl	0.014	U H H3	0.093	0.014	0.0071

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	117		68-140

Report Date: 16-Jul-2021 08:16:55 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15029.d
Lims ID: 280-150636-A-10-A
Client ID: 29SB156 (12-13)
Sample Type: Client
Inject. Date: 15-Jul-2021 15:13:19 ALS Bottle#: 23 Worklist Smp#: 30
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 280-150636-A-10-A
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 16-Jul-2021 08:16:52 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1655

First Level Reviewer: meyera Date: 16-Jul-2021 08:11:59
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	2.069	2.052	0.017		170568	120.0	204	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	3.011	2.993	0.018		807831	120.0	985	
* 7 1,3-Dinitrobenzene-d4								
172.1	4.916	4.871	0.045		1245870	129.4	57.0	
10 2,4,6-Trinitrotoluene								
227.2	5.374	5.353	0.075	0.758	8967	1.86	9.6	
$ 11 Nitrobenzene-d5								
128.1	5.411	5.428	0.038	0.763	1005473	117.3	672	
17 2,6-Dinitrotoluene								M
182.2	6.714	6.760	0.048	0.947	15619	1.72	8.0	M
* 18 2,4-dinitrotoluene-d3								
185.1	7.092	6.996	0.096		3303879	120.0	348	
19 2,4-Dinitrotoluene								M
182.2	7.162	7.115	0.095	1.010	10715	0.1203	6.1	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

EXPWORKINGIS_00084 Amount Added: 20.00 Units: uL Run Reagent

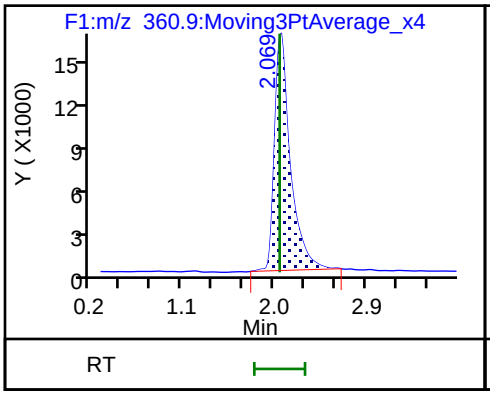
Report Date: 16-Jul-2021 08:16:55 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

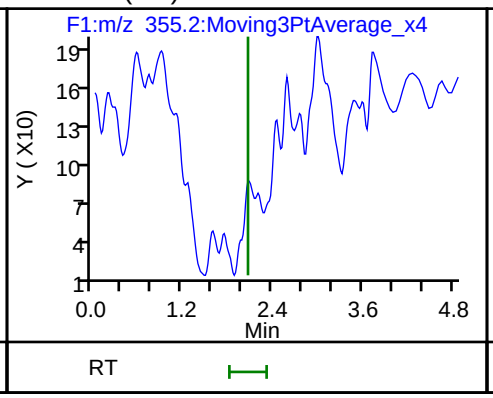
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15029.d

Injection Date:	15-Jul-2021 15:13:19	Instrument ID:	LC_LCMS4
Lims ID:	280-150636-A-10-A	Lab Sample ID:	280-150636-10
Client ID:	29SB156 (12-13)		
Operator ID:	acm	ALS Bottle#:	23 Worklist Smp#: 30
Injection Vol:	40.0 ul	Dil. Factor:	1.0000
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl

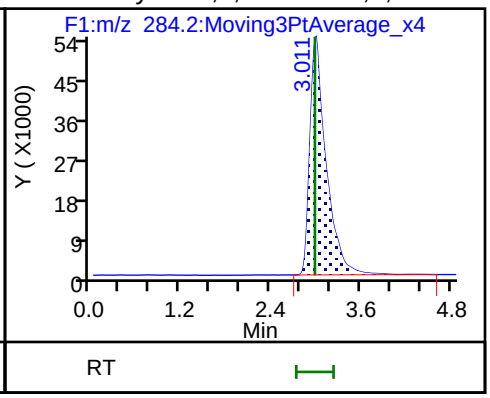
* 1 HMX-13C4



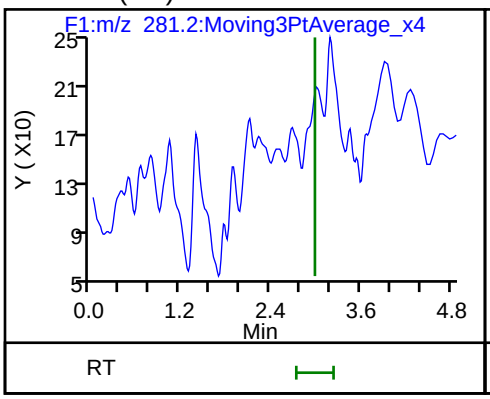
2 HMX (ND)



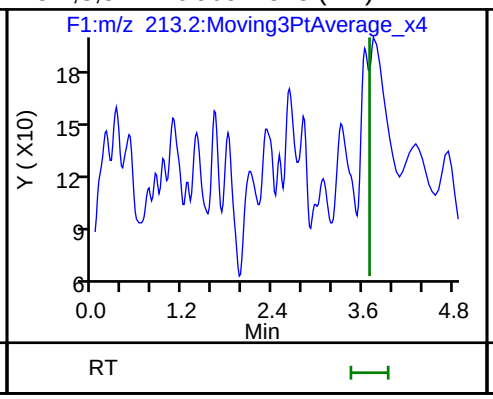
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



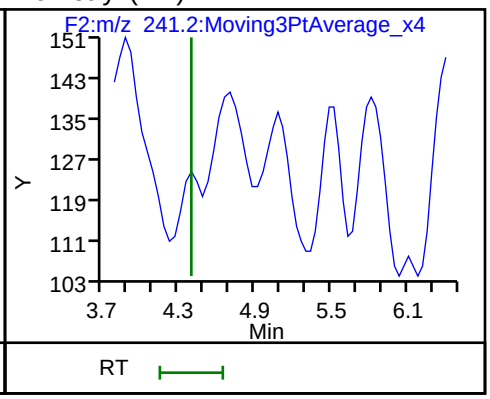
4 RDX (ND)



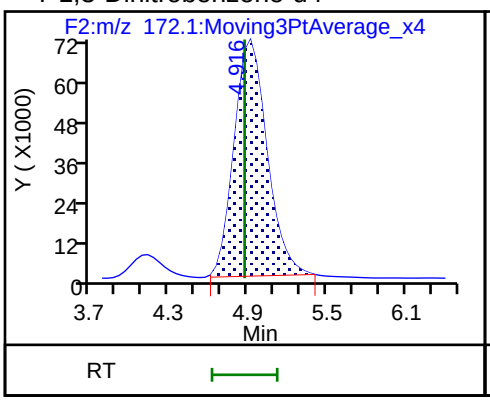
5 1,3,5-Trinitrobenzene (ND)



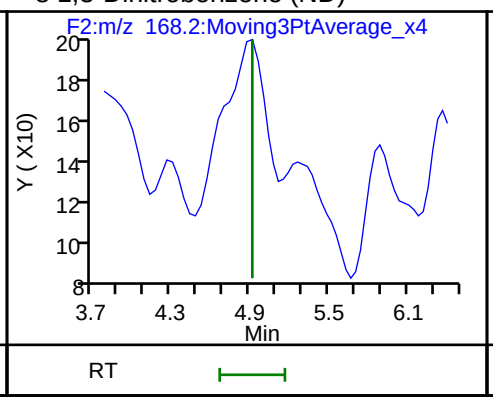
6 Tetryl (ND)



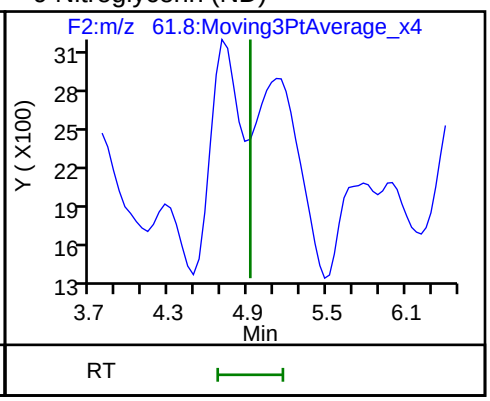
* 7 1,3-Dinitrobenzene-d4



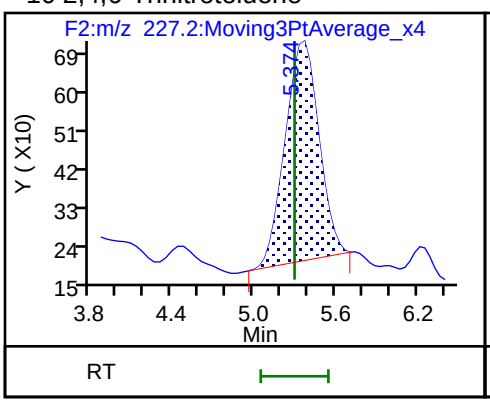
8 1,3-Dinitrobenzene (ND)



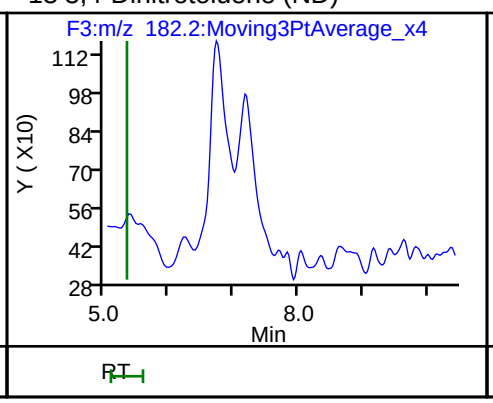
9 Nitroglycerin (ND)



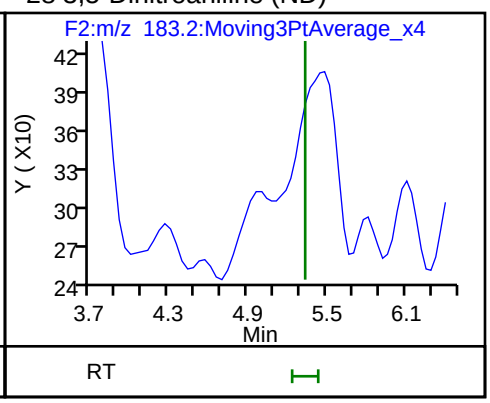
10 2,4,6-Trinitrotoluene



13 3,4-Dinitrotoluene (ND)



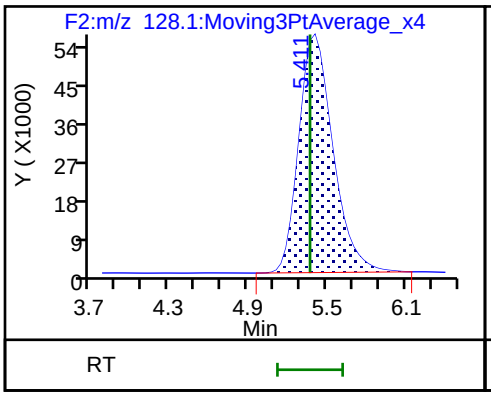
28 3,5-Dinitroaniline (ND)



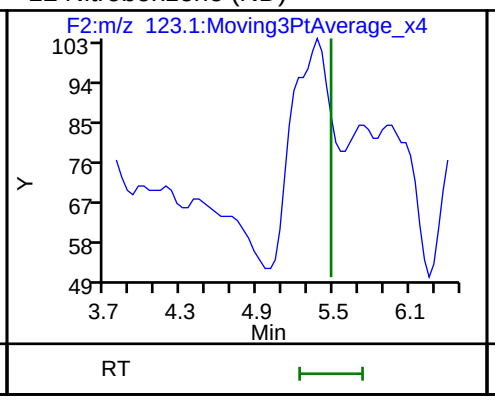
Report Date: 16-Jul-2021 08:16:55 Chrom Revision: 2.3 13-May-2021 07:57:40

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15029.d

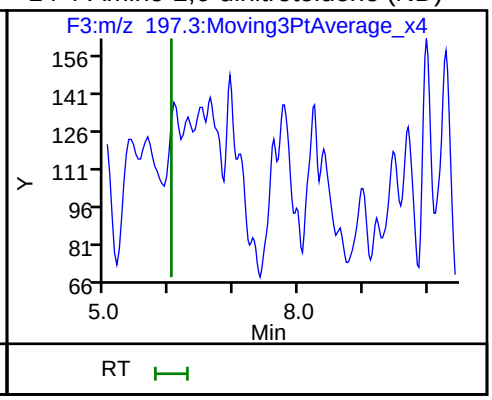
$ 11 Nitrobenzene-d5



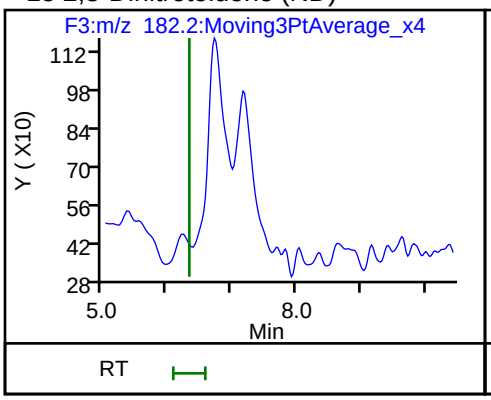
12 Nitrobenzene (ND)



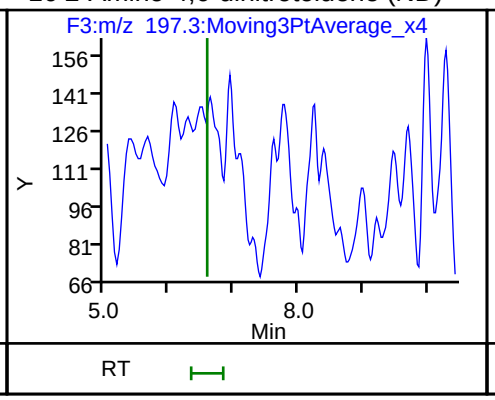
14 4-Amino-2,6-dinitrotoluene (ND)



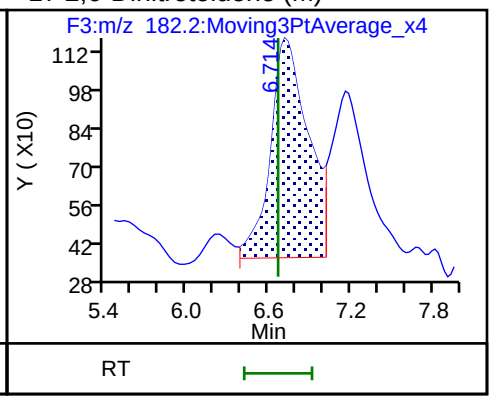
15 2,3-Dinitrotoluene (ND)



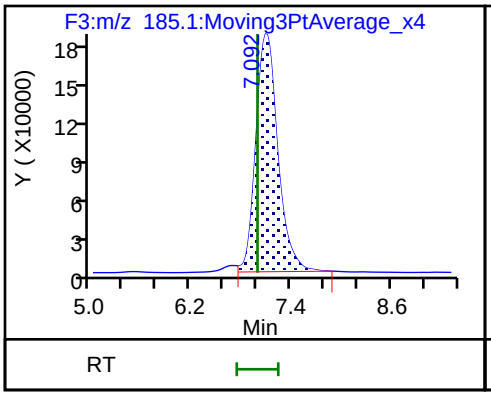
16 2-Amino-4,6-dinitrotoluene (ND)



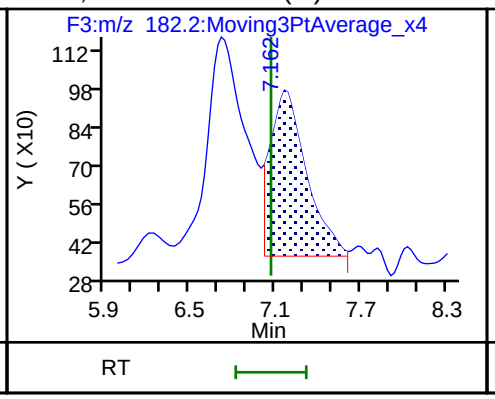
17 2,6-Dinitrotoluene (M)



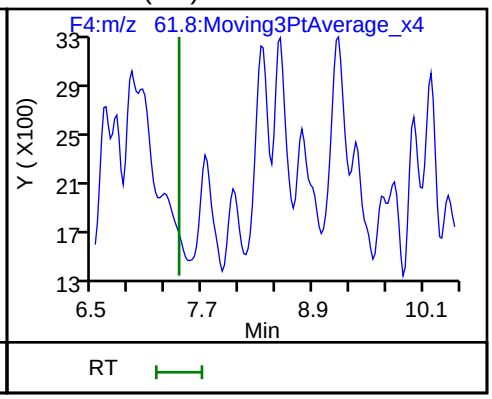
* 18 2,4-dinitrotoluene-d3



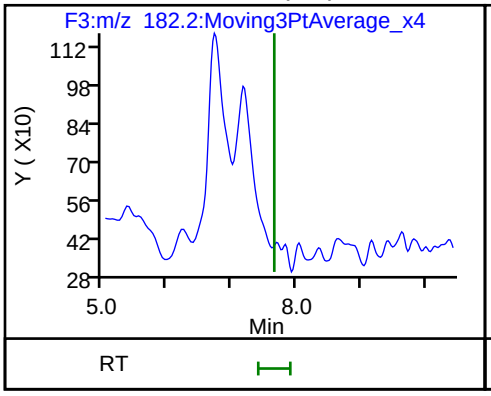
19 2,4-Dinitrotoluene (M)



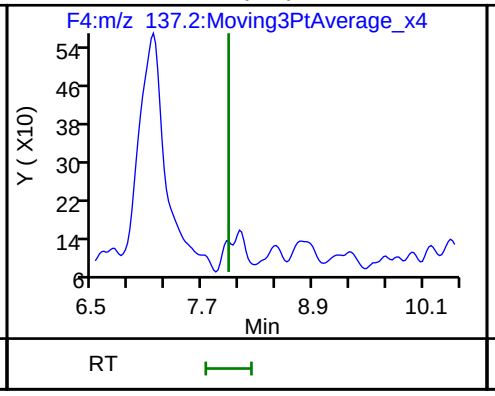
20 PETN (ND)



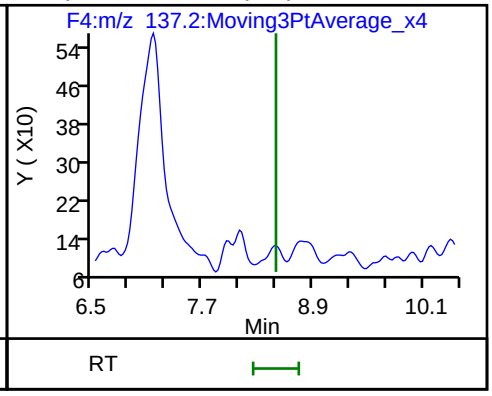
21 3,5-Dinitrotoluene (ND)



22 o-Nitrotoluene (ND)



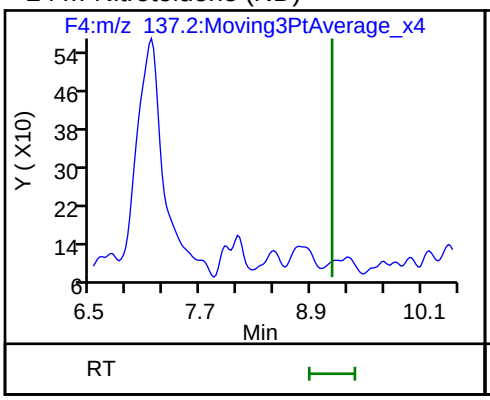
23 p-Nitrotoluene (ND)



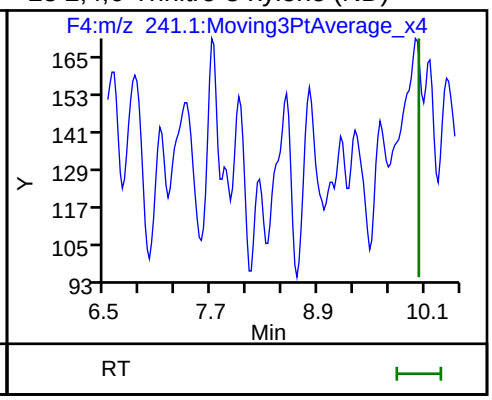
Report Date: 16-Jul-2021 08:16:55 Chrom Revision: 2.3 13-May-2021 07:57:40

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15029.d

24 m-Nitrotoluene (ND)



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



Report Date: 16-Jul-2021 08:16:55 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15029.d				
Lims ID:	280-150636-A-10-A				
Client ID:	29SB156 (12-13)				
Sample Type:	Client				
Inject. Date:	15-Jul-2021 15:13:19	ALS Bottle#:	23	Worklist Smp#:	30
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-150636-A-10-A				
Misc. Info.:	06/30/2021 0.1%HAC				
Operator ID:	acm	Instrument ID:	LC_LCMS4		
Method:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m				
Limit Group:	LC - 8321A Expl				
Last Update:	16-Jul-2021 08:16:52	Calib Date:	15-Jul-2021 11:10:54		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1655				
First Level Reviewer: meyera		Date:	16-Jul-2021 08:11:59		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	117.3	116.92

Report Date: 16-Jul-2021 08:16:55

Chrom Revision: 2.3 13-May-2021 07:57:40
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

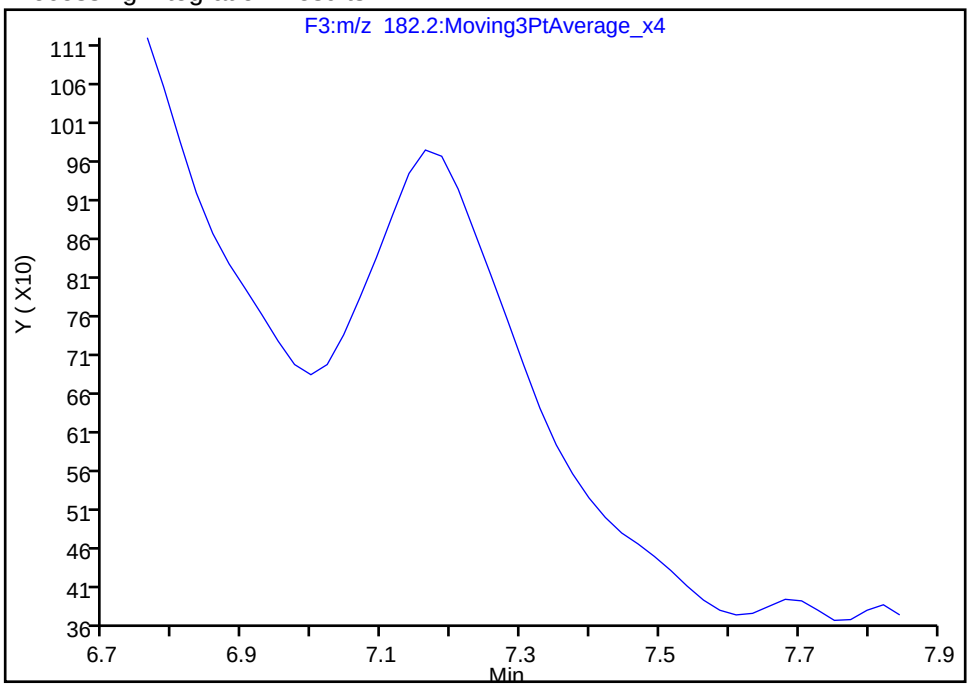
Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15029.d				
Injection Date:	15-Jul-2021 15:13:19	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-10-A	Lab Sample ID:	280-150636-10		
Client ID:	29SB156 (12-13)				
Operator ID:	acm	ALS Bottle#:	23	Worklist Smp#:	30
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		
Column:		Detector	F3:SIR		

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

Signal: 1

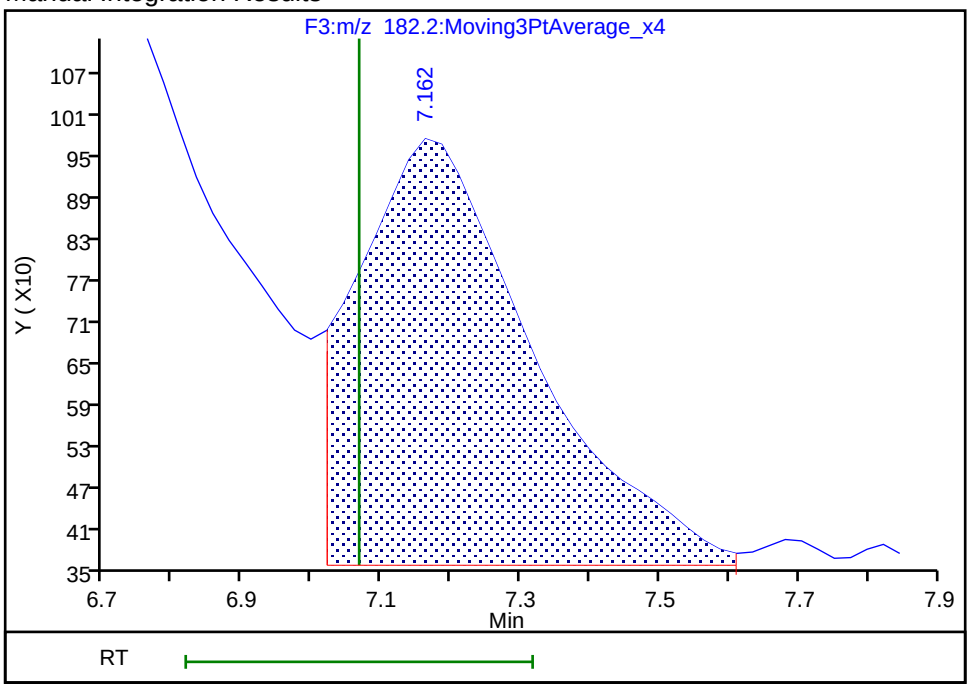
Not Detected
Expected RT: 7.07

Processing Integration Results



Manual Integration Results

RT: 7.16
Area: 10715
Amount: 0.120299
Amount Units: ug/l



Reviewer: meyera, 16-Jul-2021 08:11:53
Audit Action: Manually Integrated
Audit Reason: Baseline

Report Date: 16-Jul-2021 08:16:55 Chrom Revision: 2.3 13-May-2021 07:57:40

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

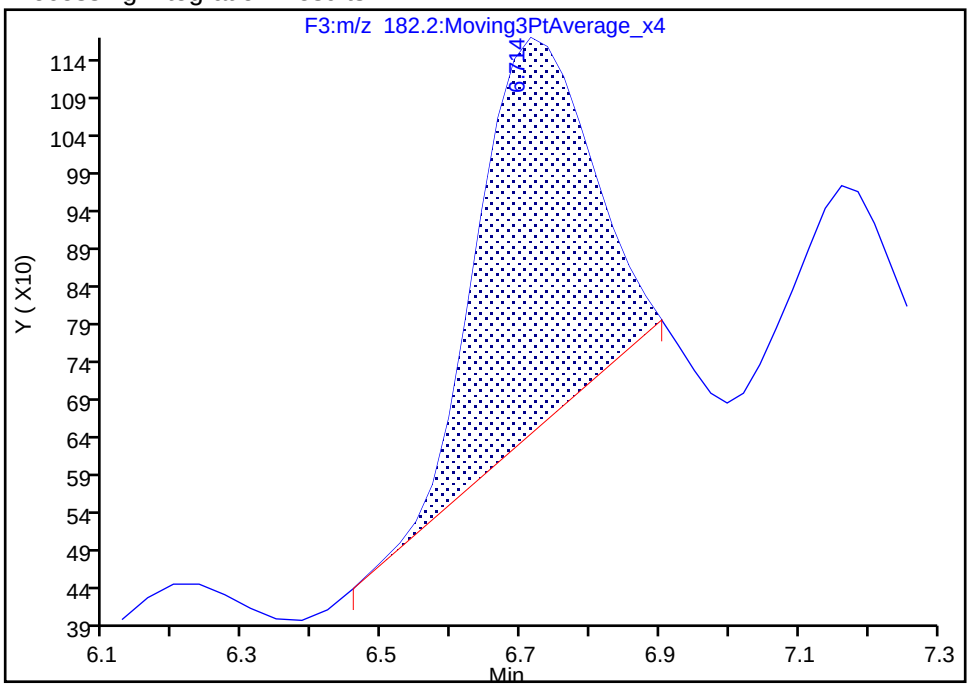
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Injection Date:	15-Jul-2021 15:13:19	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-10-A	Lab Sample ID:	280-150636-10		
Client ID:	29SB156 (12-13)				
Operator ID:	acm	ALS Bottle#:	23	Worklist Smp#:	30
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		
Column:		Detector	F3:SIR		

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

Signal: 1

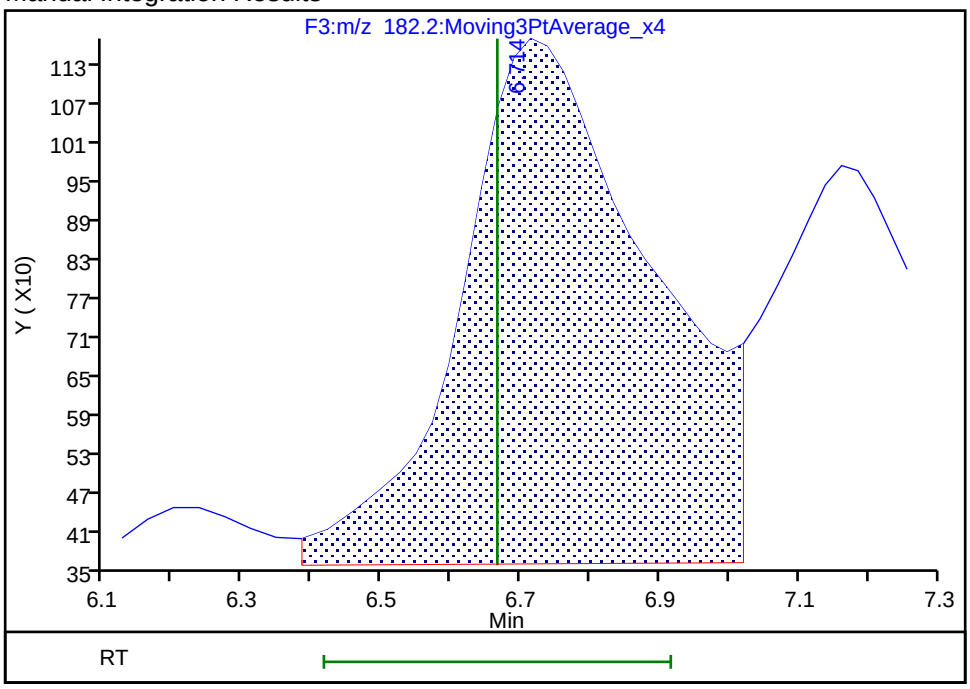
Processing Integration Results

RT: 6.71
Area: 5871
Amount: 1.538506
Amount Units: ug/l



Manual Integration Results

RT: 6.71
Area: 15619
Amount: 1.720813
Amount Units: ug/l



Reviewer: meyera, 16-Jul-2021 08:11:53

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Client Sample ID: DUP18 Lab Sample ID: 280-150636-11

Matrix: Solid Lab File ID: ex421G15030.d

Analysis Method: 8321A Date Collected: 03/09/2021 02:50

Extraction Method: 8330B Date Extracted: 07/12/2021 16:07

Sample wt/vol: 10.91(g) Date Analyzed: 07/15/2021 15:25

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

Injection Volume: 40(uL) GC Column: IonPac ID: 2(mm)

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

Analysis Batch No.: 543298 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.027	U H H3	0.092	0.027	0.012
99-65-0	1,3-Dinitrobenzene	0.014	U H H3	0.092	0.014	0.0065
118-96-7	2,4,6-Trinitrotoluene	0.0088	J H H3	0.092	0.014	0.0046
121-14-2	2,4-Dinitrotoluene	0.027	U M H H3	0.092	0.027	0.0075
606-20-2	2,6-Dinitrotoluene	0.027	U M H H3	0.092	0.027	0.018
35572-78-2	2-Amino-4,6-dinitrotoluene	0.027	U H H3	0.092	0.027	0.011
88-72-2	o-Nitrotoluene	0.014	U H H3	0.092	0.014	0.0053
99-08-1	m-Nitrotoluene	0.027	U H H3	0.092	0.027	0.012
19406-51-0	4-Amino-2,6-dinitrotoluene	0.014	U H H3	0.092	0.014	0.0047
99-99-0	p-Nitrotoluene	0.027	U H H3	0.092	0.027	0.010
98-95-3	Nitrobenzene	0.027	U H H3	0.092	0.027	0.0099
55-63-0	Nitroglycerin	0.027	U H H3	0.092	0.027	0.0096
2691-41-0	HMX	0.027	U H H3	0.092	0.027	0.014
78-11-5	PETN	0.014	U H H3	0.092	0.014	0.0047
121-82-4	RDX	0.014	U H H3	0.092	0.014	0.0040
479-45-8	Tetryl	0.014	U H H3	0.092	0.014	0.0070

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	116		68-140

Report Date: 16-Jul-2021 08:16:56 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15030.d
Lims ID: 280-150636-A-11-A
Client ID: DUP18
Sample Type: Client
Inject. Date: 15-Jul-2021 15:25:23 ALS Bottle#: 24 Worklist Smp#: 31
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 280-150636-A-11-A
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 16-Jul-2021 08:16:52 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1655

First Level Reviewer: meyera Date: 16-Jul-2021 08:12:21
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
360.9	2.052	2.052	0.0		176821	120.0	179	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	2.994	2.993	0.001		790871	120.0	578	
* 7 1,3-Dinitrobenzene-d4								
172.1	4.915	4.871	0.044		1388444	129.4	56.3	
10 2,4,6-Trinitrotoluene								
227.2	5.336	5.353	0.037	0.755	29934	2.40	20.2	
$ 11 Nitrobenzene-d5								
128.1	5.410	5.428	0.037	0.766	1109463	116.1	391	
17 2,6-Dinitrotoluene								M
182.2	6.737	6.760	0.071	0.953	10195	1.62	4.7	M
* 18 2,4-dinitrotoluene-d3								
185.1	7.067	6.996	0.071		3311866	120.0	359	
19 2,4-Dinitrotoluene								M
182.2	7.138	7.115	0.071	1.010	7890	0.0167	4.2	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

EXPWORKINGIS_00084 Amount Added: 20.00 Units: uL Run Reagent

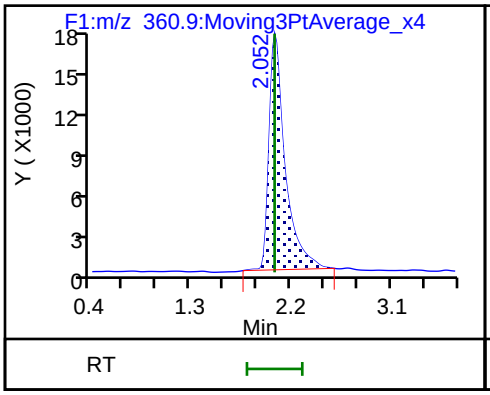
Report Date: 16-Jul-2021 08:16:56 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

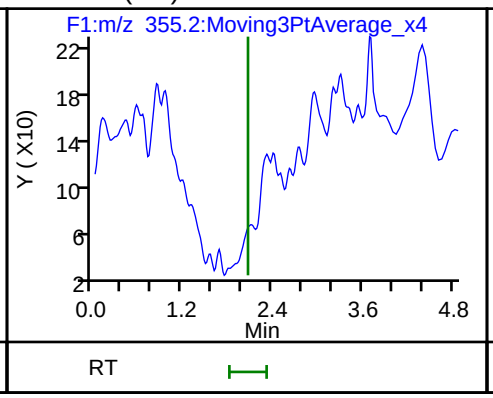
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15030.d

Injection Date:	15-Jul-2021 15:25:23	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-11-A	Lab Sample ID:	280-150636-11		
Client ID:	DUP18				
Operator ID:	acm	ALS Bottle#:	24	Worklist Smp#:	31
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		

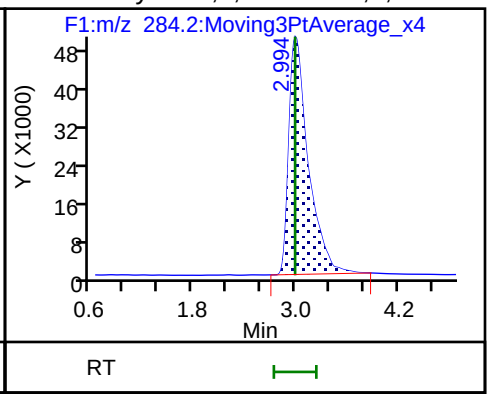
* 1 HMX-13C4



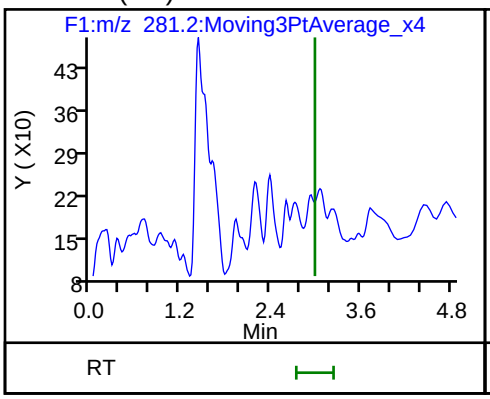
2 HMX (ND)



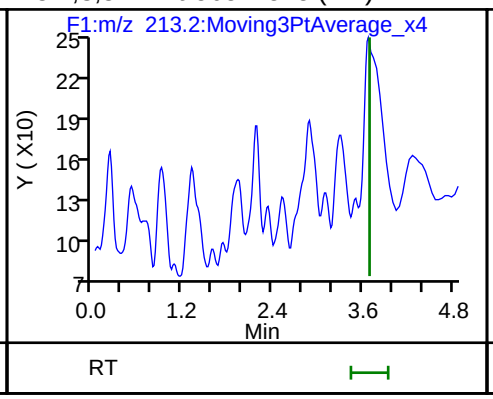
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



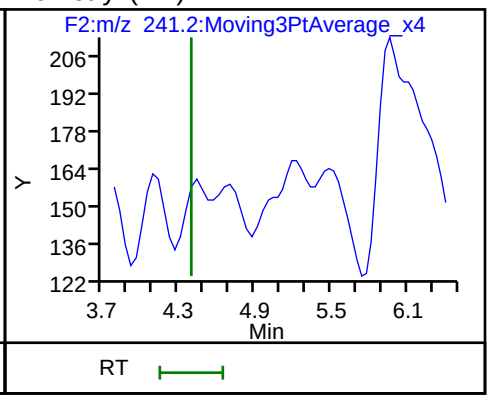
4 RDX (ND)



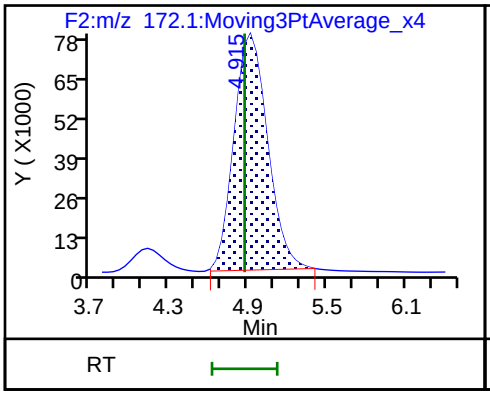
5 1,3,5-Trinitrobenzene (ND)



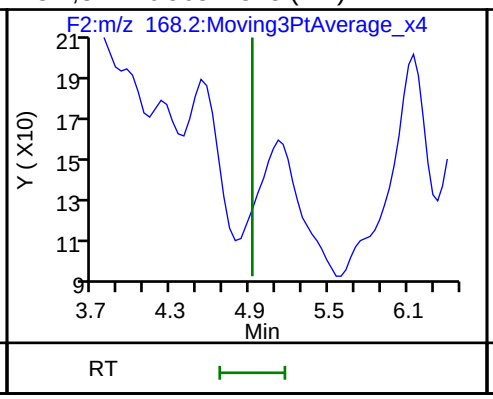
6 Tetryl (ND)



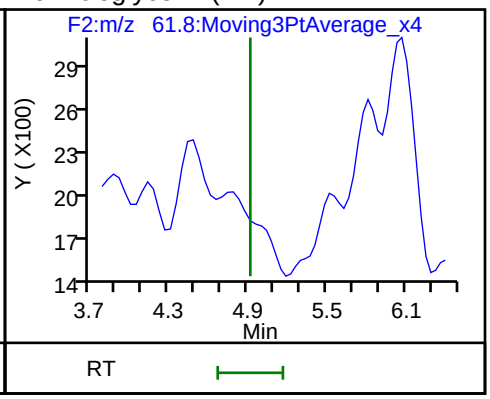
* 7 1,3-Dinitrobenzene-d4



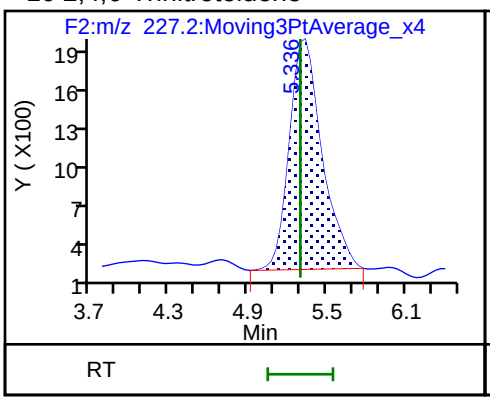
8 1,3-Dinitrobenzene (ND)



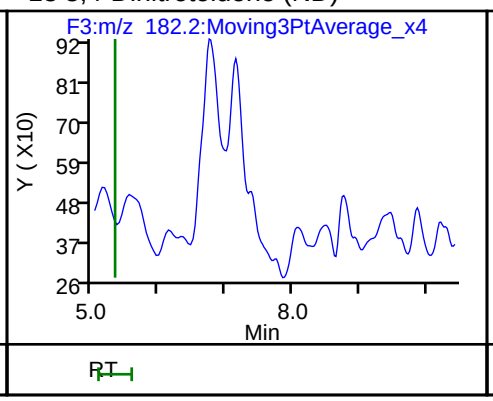
9 Nitroglycerin (ND)



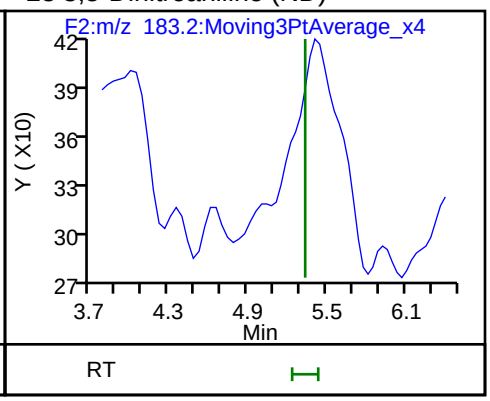
10 2,4,6-Trinitrotoluene



13 3,4-Dinitrotoluene (ND)

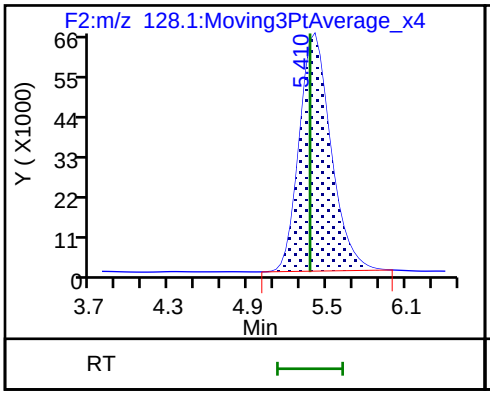


28 3,5-Dinitroaniline (ND)

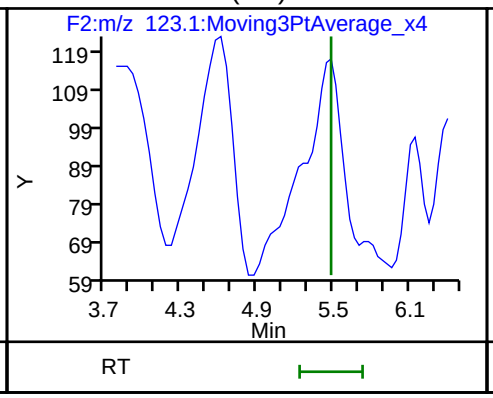


Report Date: 16-Jul-2021 08:16:56 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15030.d

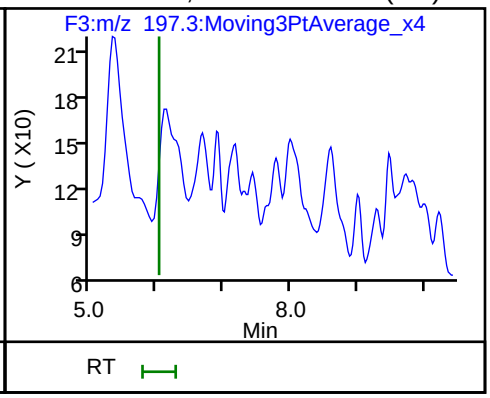
$ 11 Nitrobenzene-d5



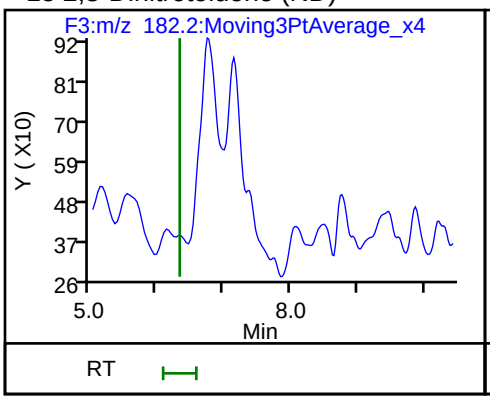
12 Nitrobenzene (ND)



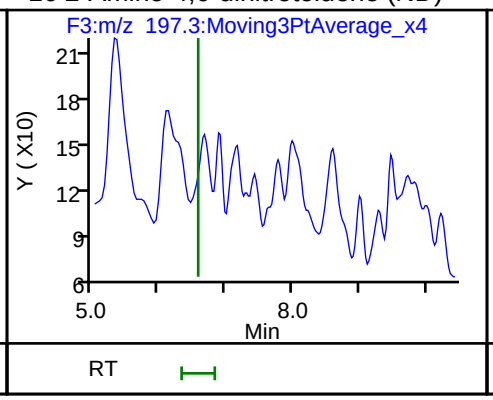
14 4-Amino-2,6-dinitrotoluene (ND)



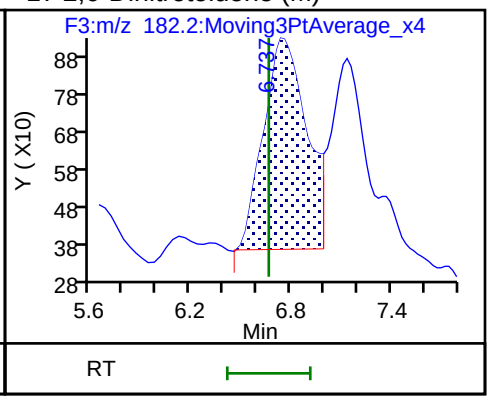
15 2,3-Dinitrotoluene (ND)



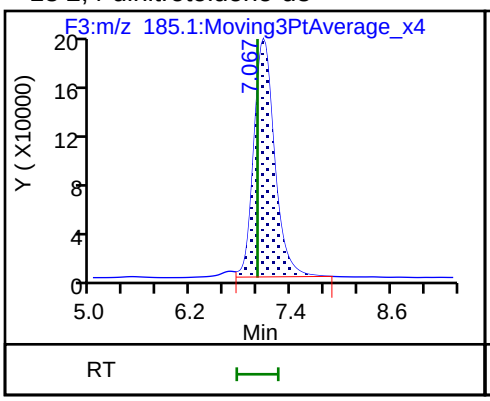
16 2-Amino-4,6-dinitrotoluene (ND)



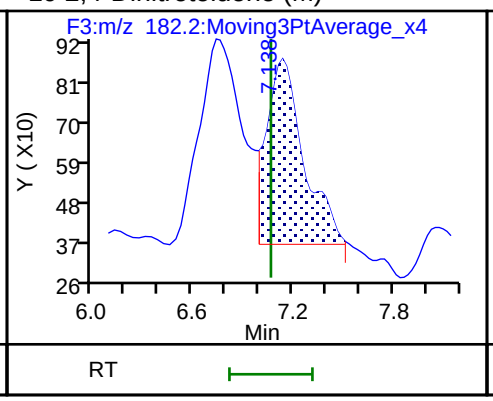
17 2,6-Dinitrotoluene (M)



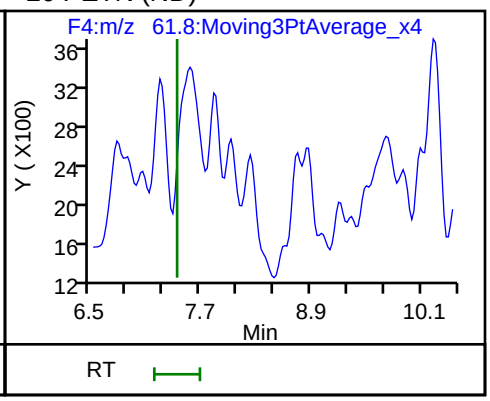
* 18 2,4-dinitrotoluene-d3



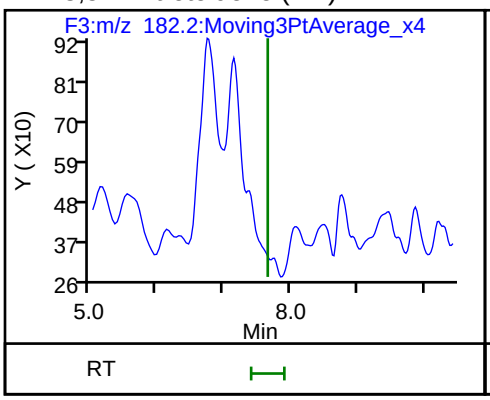
19 2,4-Dinitrotoluene (M)



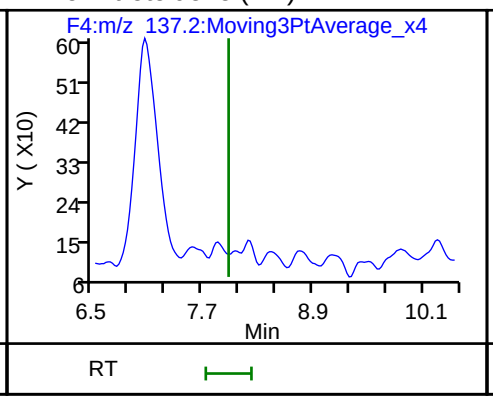
20 PETN (ND)



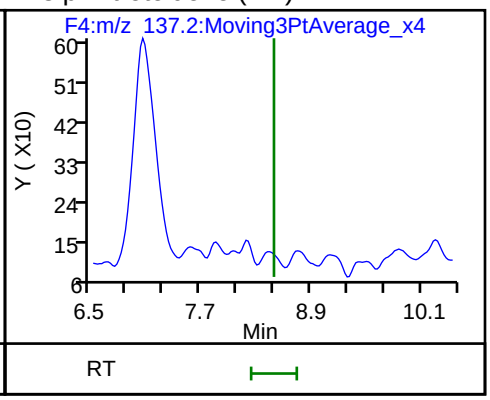
21 3,5-Dinitrotoluene (ND)



22 o-Nitrotoluene (ND)

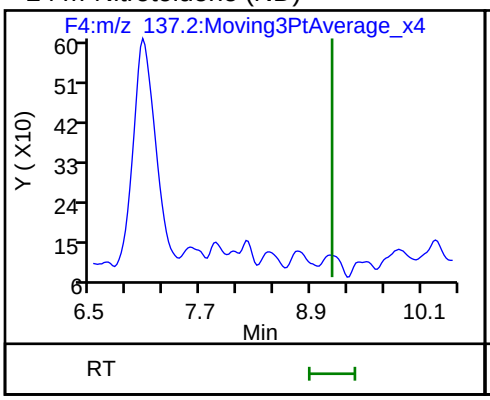


23 p-Nitrotoluene (ND)

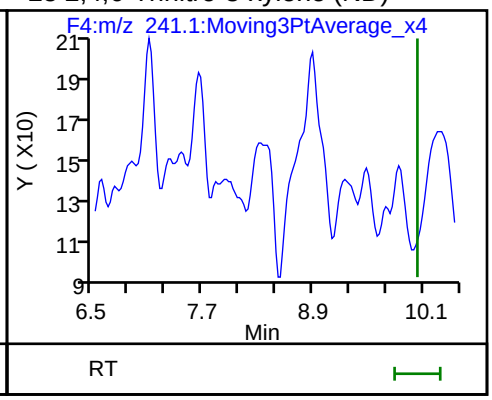


Report Date: 16-Jul-2021 08:16:56
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15030.d

24 m-Nitrotoluene (ND)



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



Report Date: 16-Jul-2021 08:16:56 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15030.d				
Lims ID:	280-150636-A-11-A				
Client ID:	DUP18				
Sample Type:	Client				
Inject. Date:	15-Jul-2021 15:25:23	ALS Bottle#:	24	Worklist Smp#:	31
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-150636-A-11-A				
Misc. Info.:	06/30/2021 0.1%HAC				
Operator ID:	acm	Instrument ID:	LC_LCMS4		
Method:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m				
Limit Group:	LC - 8321A Expl				
Last Update:	16-Jul-2021 08:16:52	Calib Date:	15-Jul-2021 11:10:54		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1655				
First Level Reviewer: meyera		Date:	16-Jul-2021 08:12:21		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	116.1	115.75

Report Date: 16-Jul-2021 08:16:56 Chrom Revision: 2.3 13-May-2021 07:57:40

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

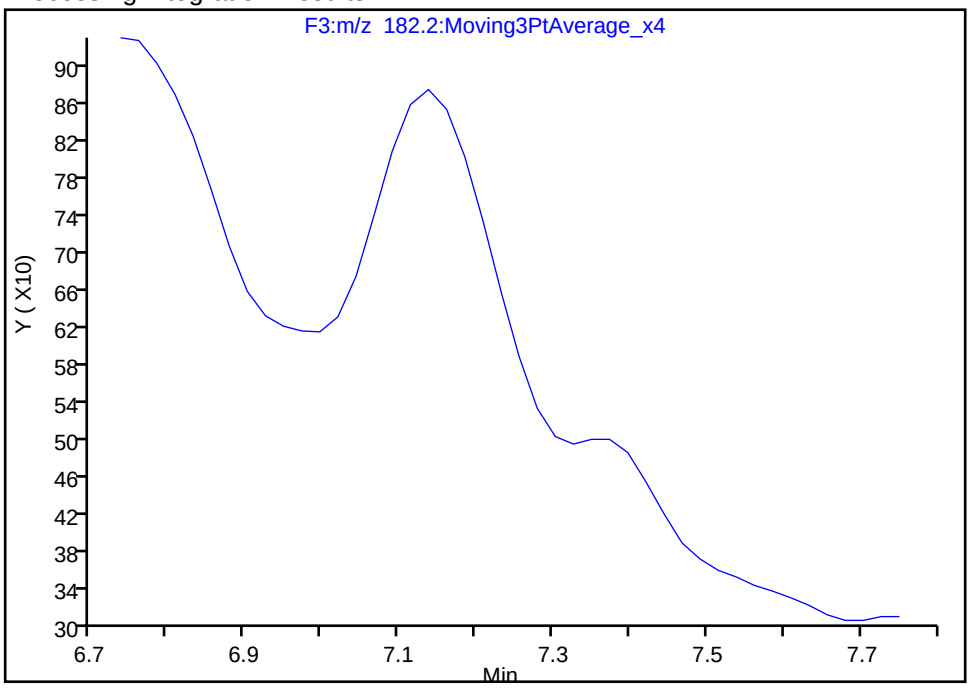
Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15030.d				
Injection Date:	15-Jul-2021 15:25:23	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-11-A	Lab Sample ID:	280-150636-11		
Client ID:	DUP18				
Operator ID:	acm	ALS Bottle#:	24	Worklist Smp#:	31
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		
Column:		Detector	F3:SIR		

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

Signal: 1

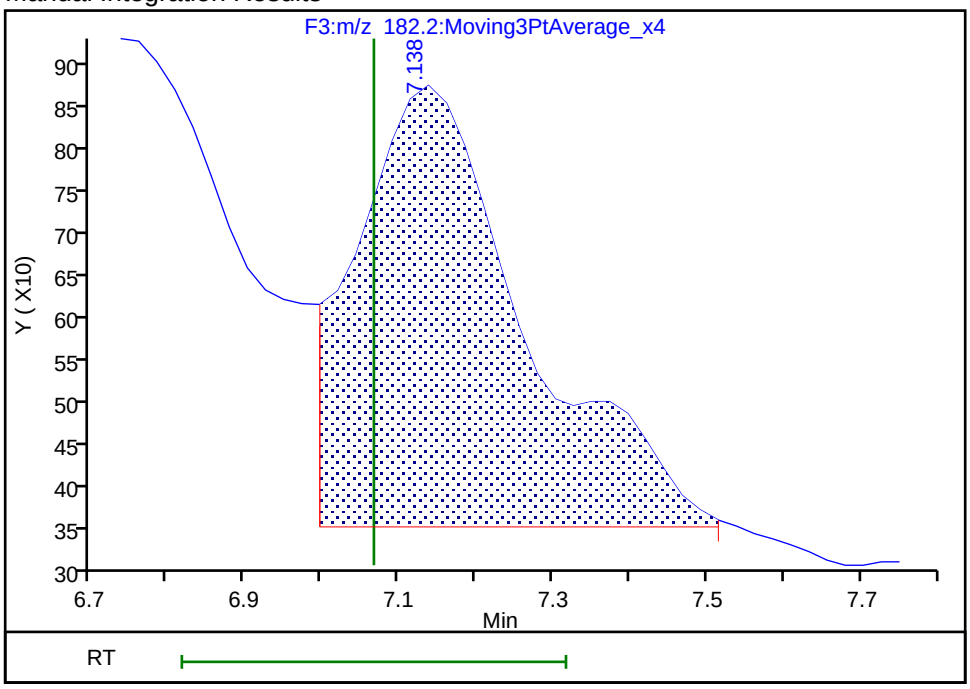
Not Detected
Expected RT: 7.07

Processing Integration Results



Manual Integration Results

RT: 7.14
Area: 7890
Amount: 0.016723
Amount Units: ug/l



Reviewer: meyera, 16-Jul-2021 08:12:18
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 16-Jul-2021 08:16:56

Chrom Revision: 2.3 13-May-2021 07:57:40

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15030.d				
Injection Date:	15-Jul-2021 15:25:23	Instrument ID:	LC_LCMS4		
Lims ID:	280-150636-A-11-A	Lab Sample ID:	280-150636-11		
Client ID:	DUP18				
Operator ID:	acm	ALS Bottle#:	24	Worklist Smp#:	31
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Method:	8321exp4-25	Limit Group:	LC - 8321A Expl		
Column:		Detector	F3:SIR		

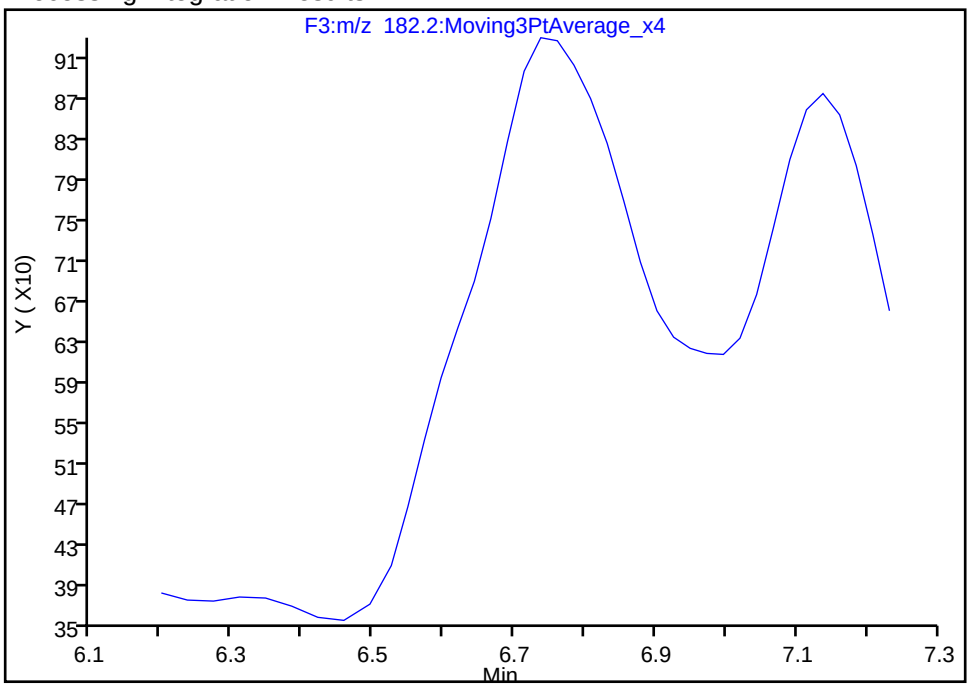
17 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

Not Detected

Expected RT: 6.67

Processing Integration Results



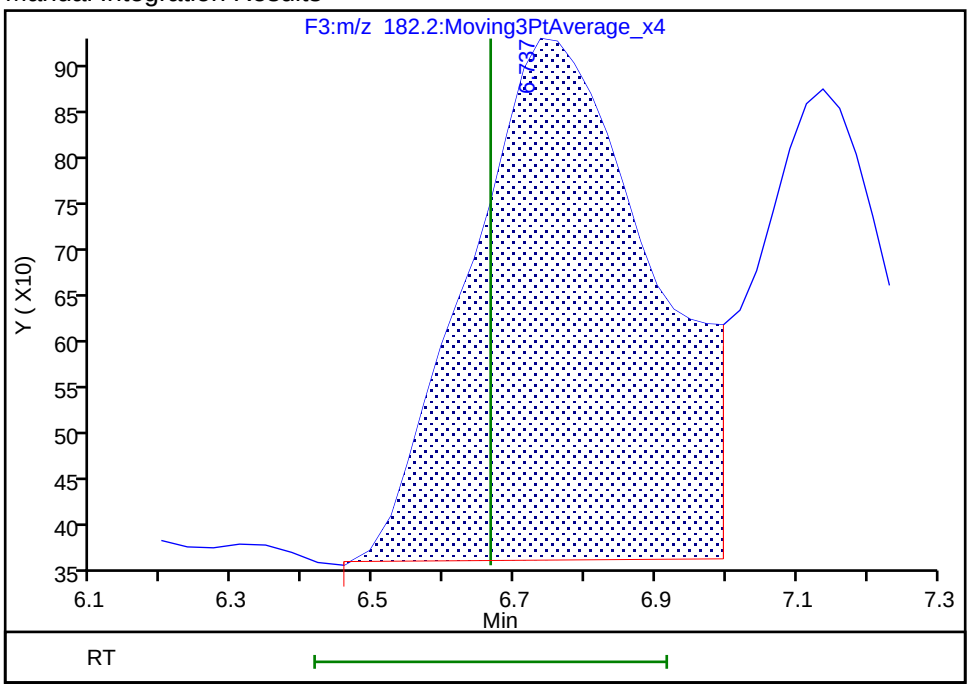
Manual Integration Results

RT: 6.74

Area: 10195

Amount: 1.618914

Amount Units: ug/l



Reviewer: meyera, 16-Jul-2021 08:12:13

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VI
LCMS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1 Analy Batch No.: 543297

SDG No.:

Instrument ID: LC_LCMS4 GC Column: IonPac ID: 2(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2021 09:58 Calibration End Date: 07/15/2021 11:10 Calibration ID: 55391

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 280-543297/4	ex421G15003.d
Level 2	STD010 280-543297/5	ex421G15004.d
Level 3	STD025 280-543297/6	ex421G15005.d
Level 4	STD050 280-543297/7	ex421G15006.d
Level 5	STD100 280-543297/8	ex421G15007.d
Level 6	STD200 280-543297/9	ex421G15008.d
Level 7	STD300 280-543297/10	ex421G15009.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	2.7833 3.2291	2.6182 3.2350	2.8051	2.7087	2.9710	Lin1	-5.055	3.1804							0.9970		0.9900
RDX	0.8072 0.5432	0.8427 0.4403	0.7259	0.6382	0.5517	Qua1	1.2521	0.6504	-0.000692						0.9970		0.9900
1,3,5-Trinitrobenzene	0.7054 0.8212	0.7803 0.8663	0.8247	0.7445	0.9170	Lin1	-0.898	0.8569							0.9970		0.9900
Tetryl	0.8853 0.8544	0.8359 0.9233	0.9169	0.8835	1.0285	Lin1	-0.227	0.9162							0.9950		0.9900
1,3-Dinitrobenzene	0.9940 0.9209	1.0547 0.9635	1.0283	1.0297	1.0305	Lin1	0.7655	0.9618							0.9980		0.9900
Nitroglycerin	2.8558 3.2967	2.9291 2.7279	2.4128	2.9184	2.7095	Lin1	-1.388	2.9103							0.9900		0.9900
2,4,6-Trinitrotoluene	1.1967 1.3083	1.1970 1.4996	1.2016	1.2630	1.2944	Lin1	-2.283	1.4030							0.9940		0.9900
Nitrobenzene	0.2696 0.2916	0.2542 0.2783	0.2630	0.2666	0.2617	Lin1	-0.198	0.2799							0.9980		0.9900
4-Amino-2,6-dinitrotoluene	2.6767 2.7903	2.9968 3.0820	3.2403	2.9915	3.4154	Lin1	-0.301	3.0438							0.9940		0.9900
2-Amino-4,6-dinitrotoluene	1.3110 1.4665	1.3886 1.5120	1.2832	1.1239	1.4397	Lin1	-2.012	1.4690							0.9950		0.9900
2,6-Dinitrotoluene	1.8294 1.8622	1.7495 2.0505	1.6190	1.5574	1.8812	Lin1	-2.775	1.9421							0.9940		0.9900
2,4-Dinitrotoluene	1.0656 1.0271	0.9583 0.9828	1.0262	1.0615	0.9613	Lin1	0.2692	0.9973							0.9990		0.9900
PETN	2.4611 2.7807	2.7580 2.8610	2.5581	2.7193	2.6769	Lin1	-2.213	2.8079							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 TestAmerica, Denver Job No.: 280-150636-1 Analy Batch No.: 543297

SDG No.:

Instrument ID: LC_LCMS4 GC Column: IonPac ID: 2(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2021 09:58 Calibration End Date: 07/15/2021 11:10 Calibration ID: 55391

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								
o-Nitrotoluene	0.4454 0.4623	0.4150 0.4926	0.4291	0.4283	0.4509	Lin1	-0.526	0.4747							0.9980		0.9900
p-Nitrotoluene	0.3997 0.4403	0.3767 0.4186	0.3547	0.4061	0.4065	Lin1	-0.429	0.4235							0.9980		0.9900
m-Nitrotoluene	0.2456 0.2925	0.2455 0.3079	0.2447	0.2634	0.2592	Lin1	-0.547	0.2951							0.9960		0.9900
Nitrobenzene-d5	1.0312 0.8281	0.8975 0.8892	1.0009	0.9570	0.9591	Lin1	1.0442	0.8812							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
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1 Analy Batch No.: 543297

SDG No.:

Instrument ID: LC_LCMS4 GC Column: IonPac ID: 2(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2021 09:58 Calibration End Date: 07/15/2021 11:10 Calibration ID: 55391

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 280-543297/4	ex421G15003.d
Level 2	STD010 280-543297/5	ex421G15004.d
Level 3	STD025 280-543297/6	ex421G15005.d
Level 4	STD050 280-543297/7	ex421G15006.d
Level 5	STD100 280-543297/8	ex421G15007.d
Level 6	STD200 280-543297/9	ex421G15008.d
Level 7	STD300 280-543297/10	ex421G15009.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	20618 599448	41726 777488	105852	181119	306573	5.00 200	10.0 300	25.0	50.0	100
RDX	HHTT	Qua1	26065 683049	58793 933352	121554	217296	380490	5.00 200	10.0 300	25.0	50.0	100
1,3,5-Trinitrobenzene	DNB4	Lin1	45536 1991944	90415 3081393	223719	412734	946213	5.01 200	10.0 301	25.1	50.1	100
Tetryl	DNB4	Lin1	57154 2072503	96852 3284002	248746	489810	1061294	5.01 200	10.0 301	25.1	50.1	100
1,3-Dinitrobenzene	DNB4	Lin1	64169 2233875	122205 3427011	278965	570888	1063310	5.01 200	10.0 301	25.1	50.1	100
Nitroglycerin	DNT3	Lin1	474654 19137719	995673 24157720	1978682	4538058	8368409	5.03 201	10.1 302	25.2	50.3	101
2,4,6-Trinitrotoluene	DNT3	Lin1	198495 7579610	406082 13254209	983445	1960140	3989947	5.02 201	10.0 301	25.1	50.2	100
Nitrobenzene	DNT3	Lin1	44723 1689688	86254 2459502	215269	413746	806731	5.02 201	10.0 301	25.1	50.2	100
4-Amino-2,6-dinitrotoluene	DNB4	Lin1	172628 6761654	346905 10951569	878163	1656863	3520683	5.01 200	10.0 300	25.0	50.1	100
2-Amino-4,6-dinitrotoluene	DNT3	Lin1	217455 8496119	471098 13363187	1050190	1744267	4437785	5.02 201	10.0 301	25.1	50.2	100
2,6-Dinitrotoluene	DNT3	Lin1	303443 10788719	593506 18123093	1325029	2416891	5798662	5.02 201	10.0 301	25.1	50.2	100
2,4-Dinitrotoluene	DNT3	Lin1	176751 5950583	325089 8686239	839856	1647340	2963040	5.02 201	10.0 301	25.1	50.2	100
PETN	DNT3	Lin1	404982 15981864	928184 25084699	2076953	4186485	8185692	4.98 199	9.96 299	24.9	49.8	99.6
o-Nitrotoluene	DNT3	Lin1	73586	140241	349832	661979	1384265	5.00	10.0	25.0	50.0	100

FORM VI
LCMS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1 Analy Batch No.: 543297

SDG No.:

Instrument ID: LC_LCMS4 GC Column: IonPac ID: 2(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2021 09:58 Calibration End Date: 07/15/2021 11:10 Calibration ID: 55391

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
			2667606	4336137				200	300			
p-Nitrotoluene	DNT3	Lin1	66170 2545638	127538 3692195	289697	628979	1250401	5.01 200	10.0 301	25.1	50.1	100
m-Nitrotoluene	DNT3	Lin1	40620 1689509	83046 2713490	199659	407503	796683	5.01 200	10.0 300	25.0	50.1	100
Nitrobenzene-d5	DNB4	Lin1	66455 2005307	103812 3157360	271048	529669	987887	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 TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15003.d
Lims ID: STD005
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 15-Jul-2021 09:58:13 ALS Bottle#: 2 Worklist Smp#: 4
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 06/30/21EX1 STD005 ug/L
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4
Sublist: chrom-8321exp4-25*sub26

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 15-Jul-2021 14:57:36 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1662

First Level Reviewer: meyera Date: 15-Jul-2021 12:10:39
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
360.9	2.069	2.052	0.017		177789	120.0	156	
2 HMX								
355.2	2.052	2.069	-0.017	0.992	20618	5.96	24.4	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	3.011	2.993	0.018		775010	120.0	693	
4 RDX								M
281.2	3.027	2.993	0.034	1.006	26065	4.30	13.4	M
5 1,3,5-Trinitrobenzene								
213.2	3.717	3.700	0.017	0.756	45536	5.17	75.0	
6 Tetryl								
241.2	4.390	4.390	0.0	0.893	57154	5.09	75.4	
* 7 1,3-Dinitrobenzene-d4								
172.1	4.915	4.871	0.044		1666864	129.4	68.3	
8 1,3-Dinitrobenzene								
168.2	4.959	4.915	0.044	1.009	64169	4.38	86.5	
9 Nitroglycerin								
61.8	4.959	4.915	0.044	1.009	474654	5.41	46.2	
10 2,4,6-Trinitrotoluene								
227.2	5.336	5.299	0.037	0.758	198495	5.91	235	
28 3,5-Dinitroaniline								
183.2	5.373	5.336	0.037	1.093	225970	5.76	90.5	
$ 11 Nitrobenzene-d5								
128.1	5.373	5.373	0.0	0.763	66455	4.67	53.3	
12 Nitrobenzene								
123.1	5.521	5.484	0.037	0.784	44723	5.54	69.3	

Report Date: 15-Jul-2021 14:57:36 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15003.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
14 4-Amino-2,6-dinitrotoluene								
197.3	6.050	6.013	0.037	0.859	172628	4.50	91.0	
16 2-Amino-4,6-dinitrotoluene								
197.3	6.619	6.572	0.047	0.940	217455	5.85	113	
17 2,6-Dinitrotoluene								
182.2	6.713	6.666	0.047	0.953	303443	6.16	115	
* 18 2,4-dinitrotoluene-d3								
185.1	7.044	6.996	0.048		3965112	120.0	391	
19 2,4-Dinitrotoluene								
182.2	7.114	7.067	0.047	1.010	176751	5.09	61.2	
20 PETN								
61.8	7.505	7.434	0.071	1.066	404982	5.15	25.0	
22 o-Nitrotoluene								
137.2	8.024	7.976	0.048	1.139	73586	5.80	39.2	
23 p-Nitrotoluene								
137.2	8.566	8.495	0.071	1.216	66170	5.74	33.4	
24 m-Nitrotoluene								
137.2	9.203	9.132	0.071	1.307	40620	6.02	19.6	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

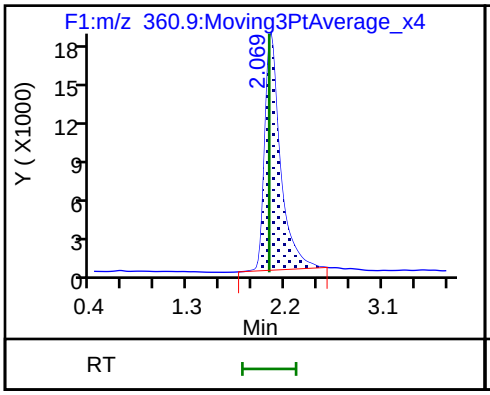
8321NB-D5-cal_00020	Amount Added:	0.50	Units: uL	
8321EXcalprim_00025	Amount Added:	0.50	Units: uL	
EXPWORKINGIS_00084	Amount Added:	20.00	Units: uL	Run Reagent

Report Date: 15-Jul-2021 14:57:36 Chrom Revision: 2.3 13-May-2021 07:57:40

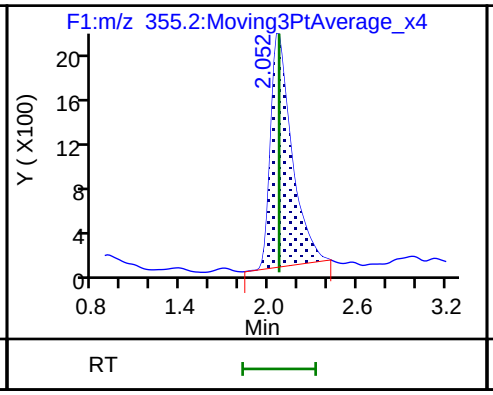
Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15003.d
Injection Date: 15-Jul-2021 09:58:13 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: 8321exp4-25 Limit Group: LC - 8321A Expl

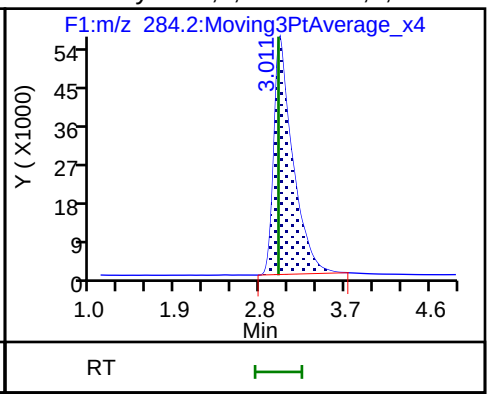
* 1 HMX-13C4



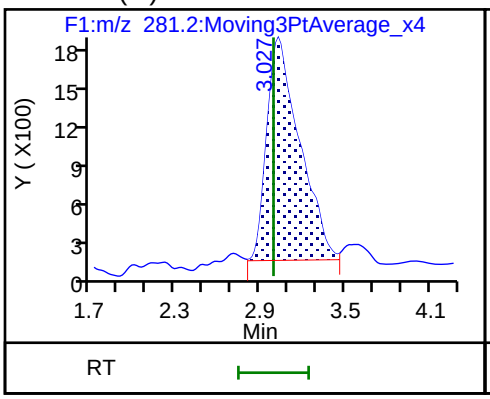
2 HMX



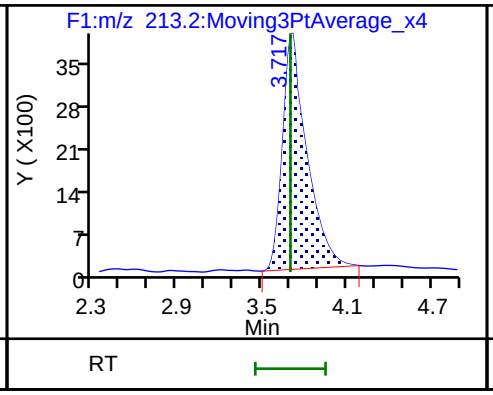
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



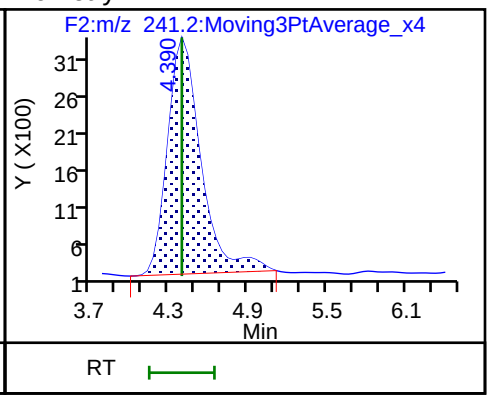
4 RDX (M)



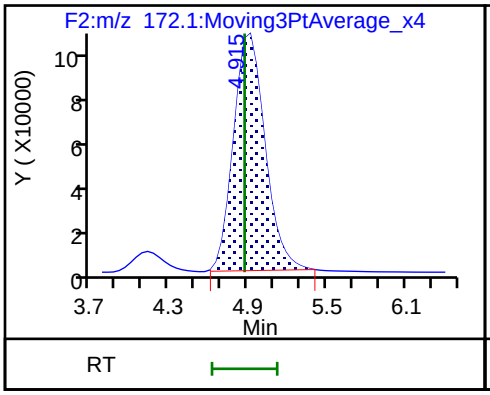
5 1,3,5-Trinitrobenzene



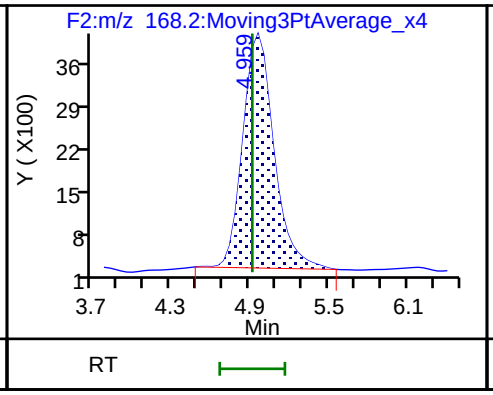
6 Tetryl



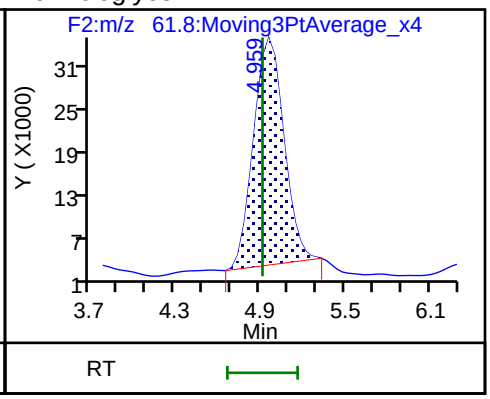
* 7 1,3-Dinitrobenzene-d4



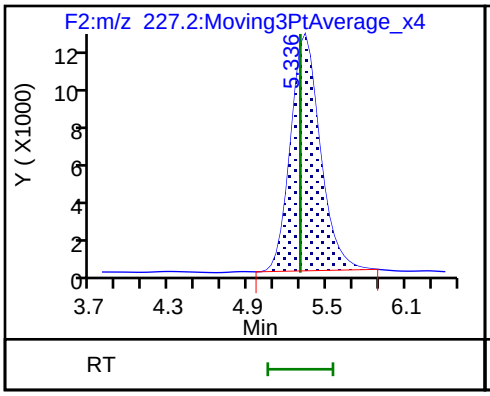
8 1,3-Dinitrobenzene



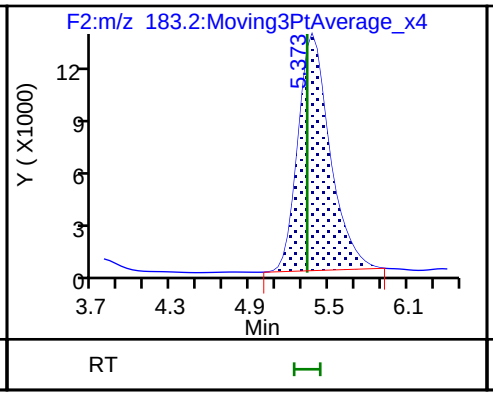
9 Nitroglycerin



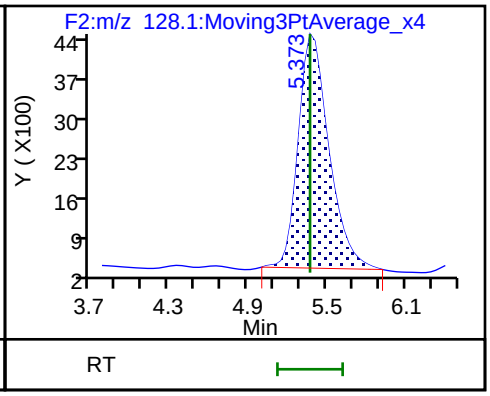
10 2,4,6-Trinitrotoluene



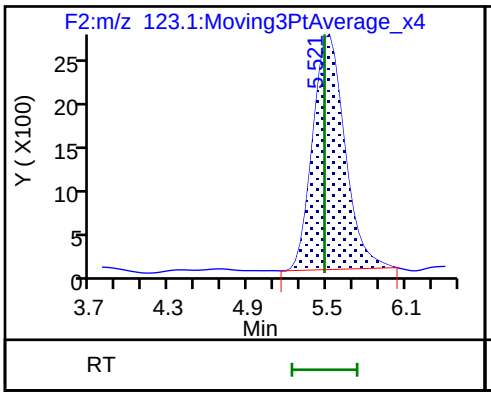
28 3,5-Dinitroaniline



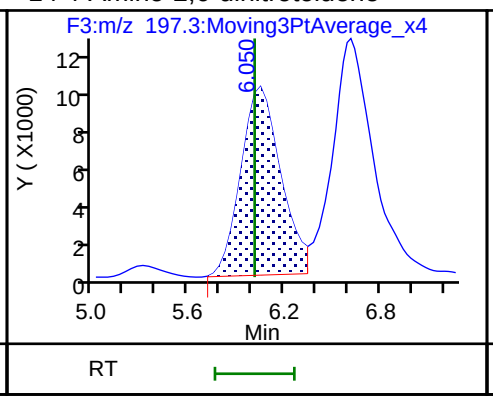
$ 11 Nitrobenzene-d5



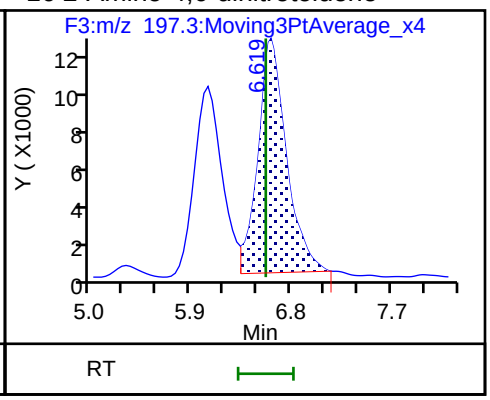
12 Nitrobenzene



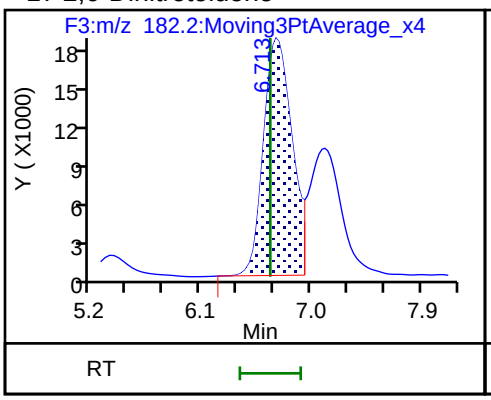
14 4-Amino-2,6-dinitrotoluene



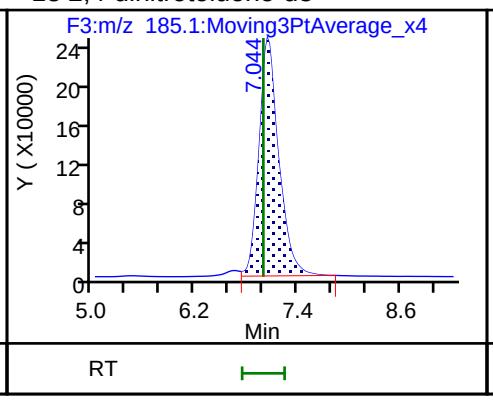
16 2-Amino-4,6-dinitrotoluene



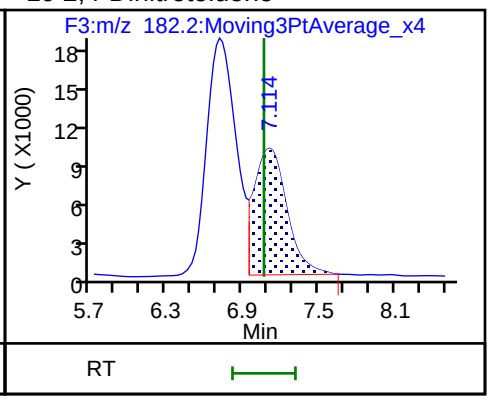
17 2,6-Dinitrotoluene



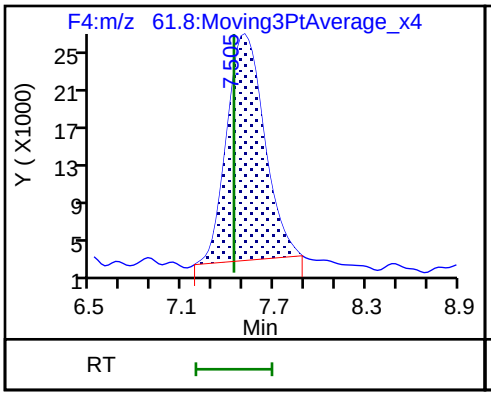
* 18 2,4-dinitrotoluene-d3



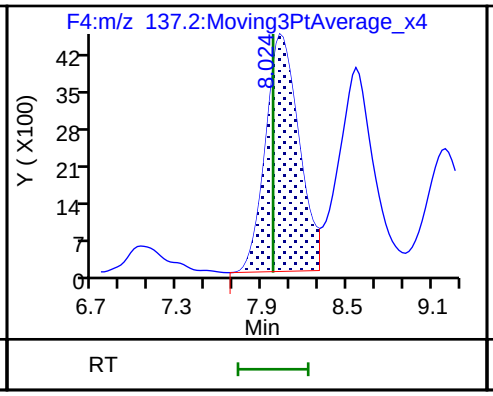
19 2,4-Dinitrotoluene



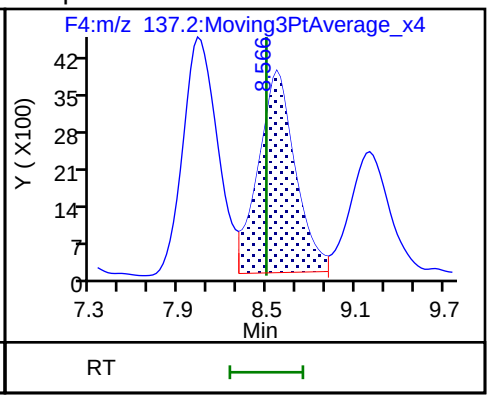
20 PETN



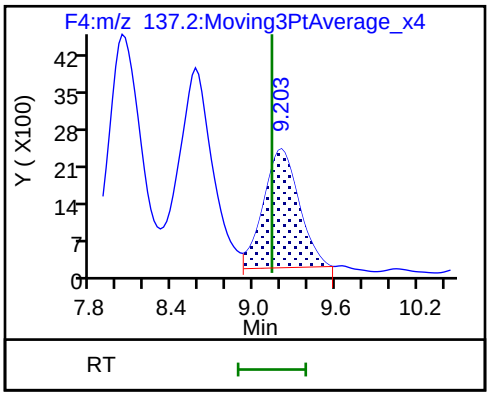
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



Report Date: 15-Jul-2021 14:57:37 Chrom Revision: 2.3 13-May-2021 07:57:40

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15003.d

Injection Date: 15-Jul-2021 09:58:13 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: 8321exp4-25 Limit Group: LC - 8321A Expl

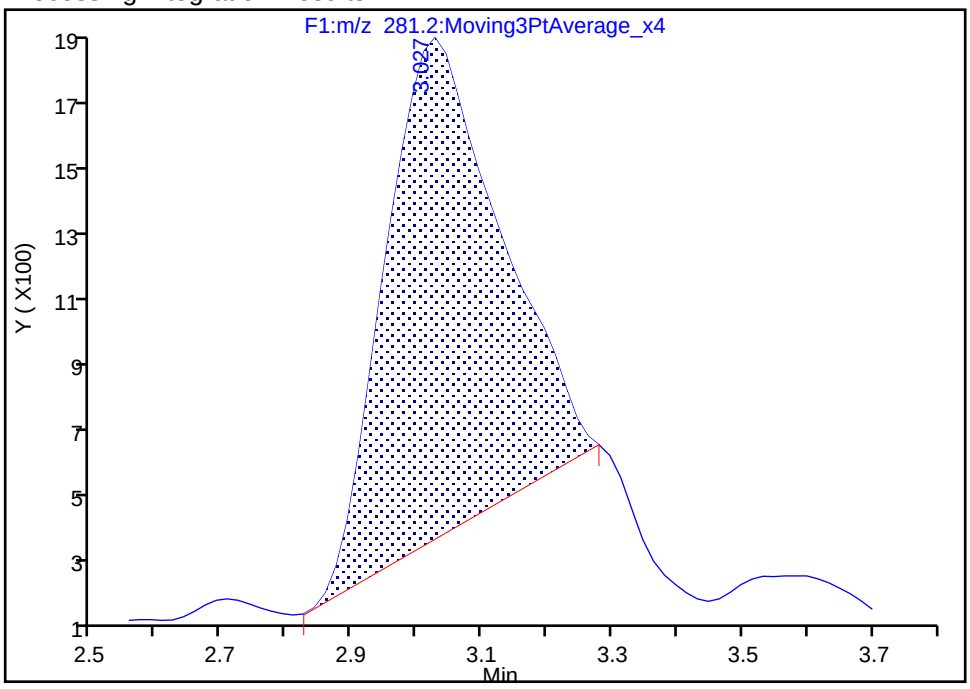
Column: Detector F1:SIR

4 RDX, CAS: 121-82-4

Signal: 1

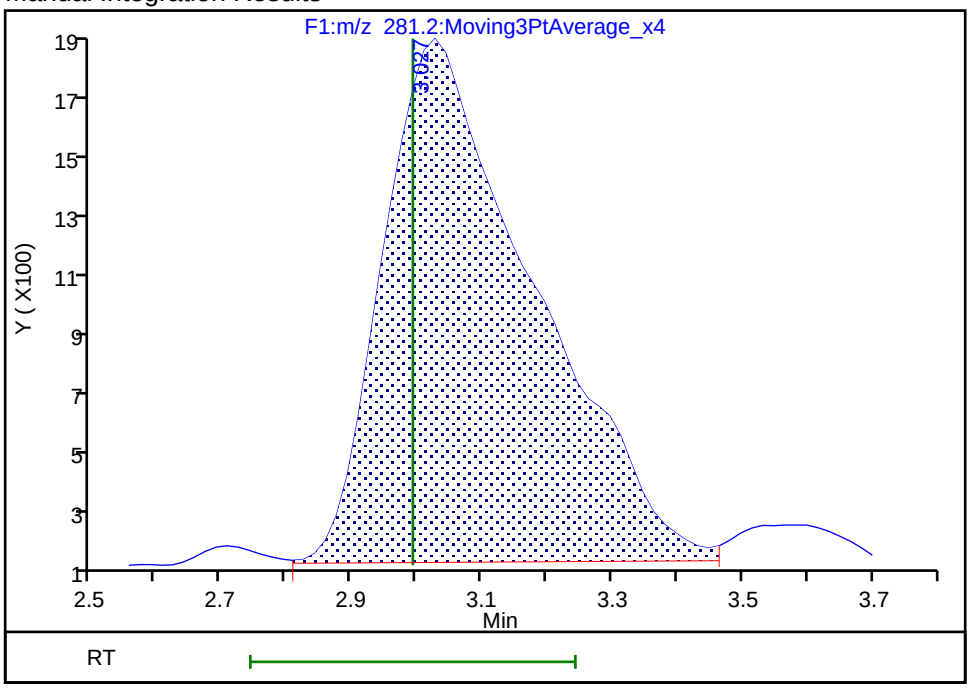
Processing Integration Results

RT: 3.03
Area: 17291
Amount: 3.663750
Amount Units: ug/l



Manual Integration Results

RT: 3.03
Area: 26065
Amount: 4.299393
Amount Units: ug/l



Reviewer: meyera, 15-Jul-2021 12:10:31

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Jul-2021 14:57:37 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15004.d
Lims ID: STD010
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 15-Jul-2021 10:10:33 ALS Bottle#: 3 Worklist Smp#: 5
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 06/30/21EX2 STD010 ug/L
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4
Sublist: chrom-8321exp4-25*sub26

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 15-Jul-2021 14:57:37 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1662

First Level Reviewer: meyera Date: 15-Jul-2021 12:10:20
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
360.9	2.069	2.052	0.017		191240	120.0	171	
2 HMX								
355.2	2.069	2.069	0.0	1.000	41726	9.82	48.7	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	3.027	2.993	0.034		837182	120.0	587	
4 RDX								
281.2	3.027	2.993	0.034	1.000	58793	11.2	47.5	
5 1,3,5-Trinitrobenzene								
213.2	3.717	3.700	0.017	0.756	90415	10.2	174	
6 Tetryl								
241.2	4.434	4.390	0.044	0.902	96852	9.39	68.3	
* 7 1,3-Dinitrobenzene-d4								
172.1	4.915	4.871	0.044		1495933	129.4	54.7	
8 1,3-Dinitrobenzene								
168.2	4.959	4.915	0.044	1.009	122205	10.2	111	
9 Nitroglycerin								
61.8	4.959	4.915	0.044	1.009	995673	10.6	90.9	
10 2,4,6-Trinitrotoluene								
227.2	5.336	5.299	0.037	0.758	406082	10.2	588	
28 3,5-Dinitroaniline								
183.2	5.373	5.336	0.037	1.093	389329	9.22	91.9	
$ 11 Nitrobenzene-d5								
128.1	5.410	5.373	0.037	0.768	103812	9.00	76.6	
12 Nitrobenzene								
123.1	5.521	5.484	0.037	0.784	86254	9.82	156	

Report Date: 15-Jul-2021 14:57:37 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15004.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
14 4-Amino-2,6-dinitrotoluene								
197.3	6.050	6.013	0.037	0.859	346905	9.95	92.9	
16 2-Amino-4,6-dinitrotoluene								
197.3	6.666	6.572	0.094	0.946	471098	10.9	125	
17 2,6-Dinitrotoluene								
182.2	6.714	6.666	0.048	0.953	593506	10.5	154	
* 18 2,4-dinitrotoluene-d3								
185.1	7.044	6.996	0.048		4054789	120.0	359	
19 2,4-Dinitrotoluene								
182.2	7.114	7.067	0.047	1.010	325089	9.38	76.1	
20 PETN								
61.8	7.505	7.434	0.071	1.066	928184	10.6	52.6	
22 o-Nitrotoluene								
137.2	8.047	7.976	0.071	1.142	140241	9.85	73.4	
23 p-Nitrotoluene								
137.2	8.566	8.495	0.071	1.216	127538	9.93	60.6	
24 m-Nitrotoluene								
137.2	9.203	9.132	0.071	1.307	83046	10.2	41.5	

QC Flag Legend

Processing Flags

Reagents:

8321NB-D5-cal_00020	Amount Added: 1.00	Units: uL	
8321EXcalprim_00025	Amount Added: 1.00	Units: uL	
EXPWORKINGIS_00084	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 15-Jul-2021 14:57:37

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15004.d

Injection Date: 15-Jul-2021 10:10:33 Instrument ID: LC_LCMS4

Lims ID: STD010

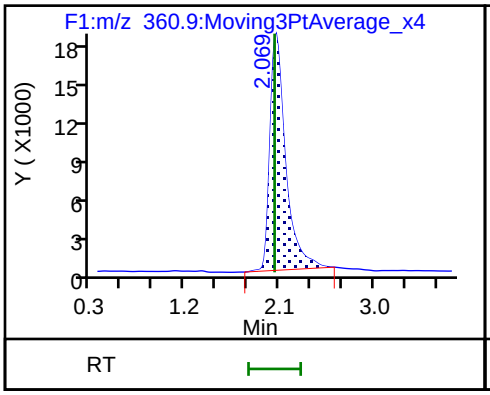
Client ID:

Operator ID: acm ALS Bottle#: 3 Worklist Smp#: 5

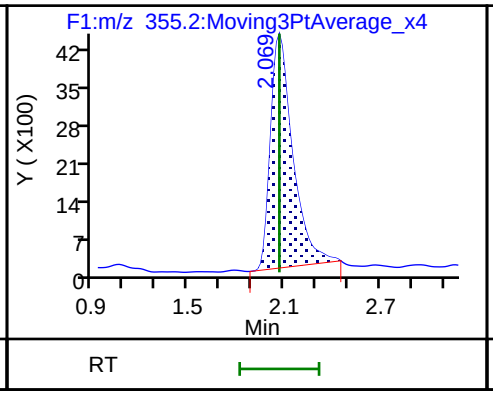
Injection Vol: 40.0 ul Dil. Factor: 1.0000

Method: 8321exp4-25 Limit Group: LC - 8321A Expl

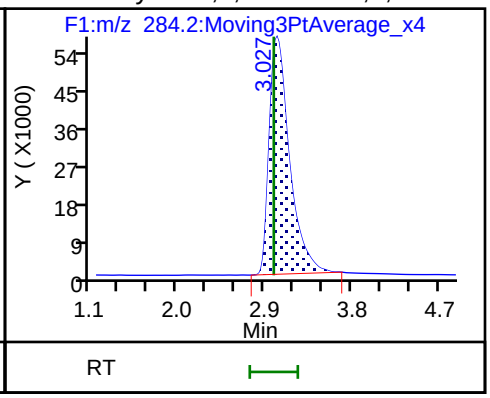
* 1 HMX-13C4



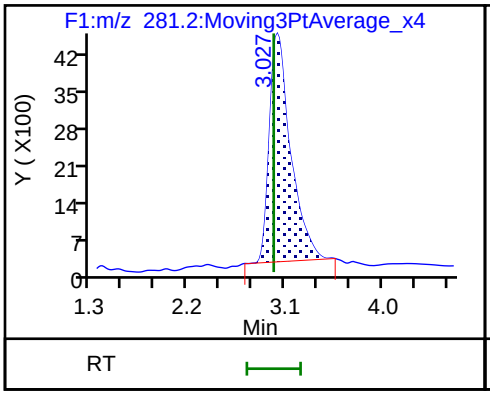
2 HMX



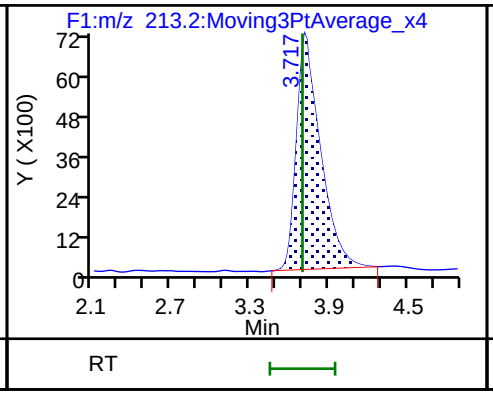
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



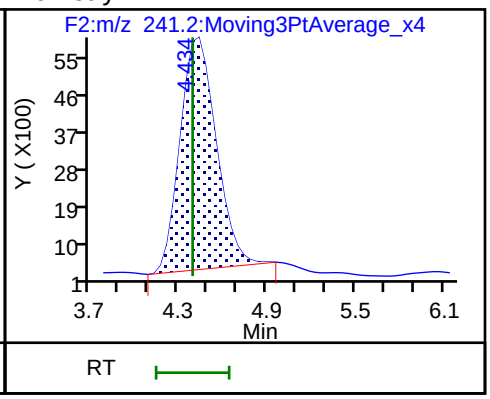
4 RDX



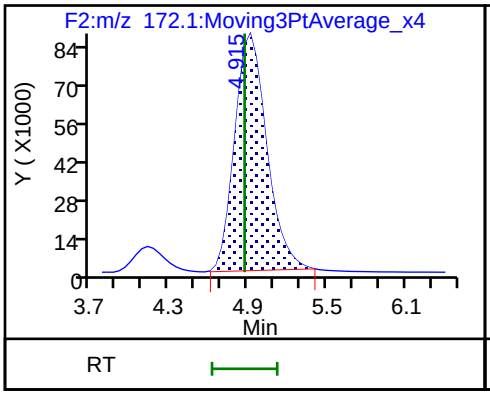
5 1,3,5-Trinitrobenzene



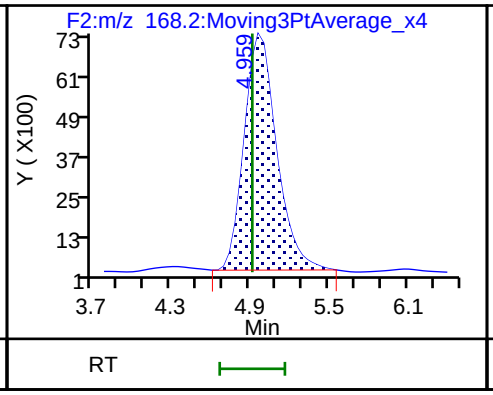
6 Tetryl



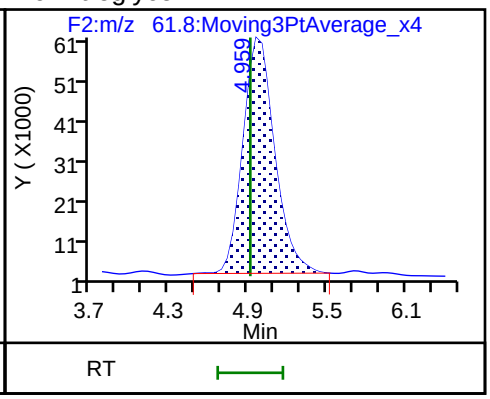
* 7 1,3-Dinitrobenzene-d4



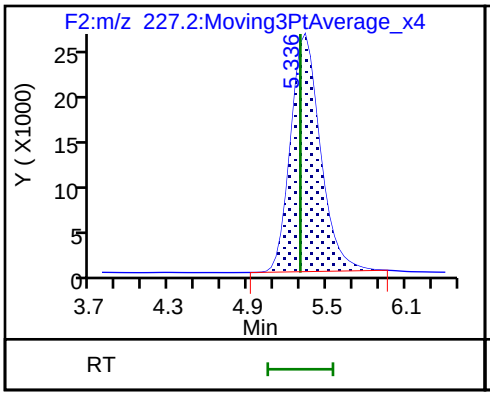
8 1,3-Dinitrobenzene



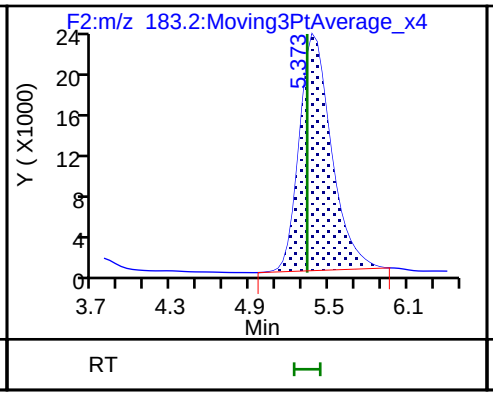
9 Nitroglycerin



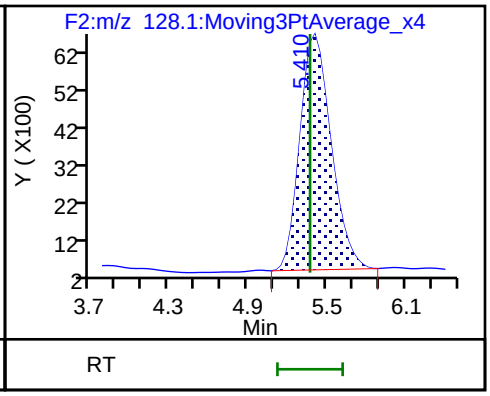
10 2,4,6-Trinitrotoluene



28 3,5-Dinitroaniline

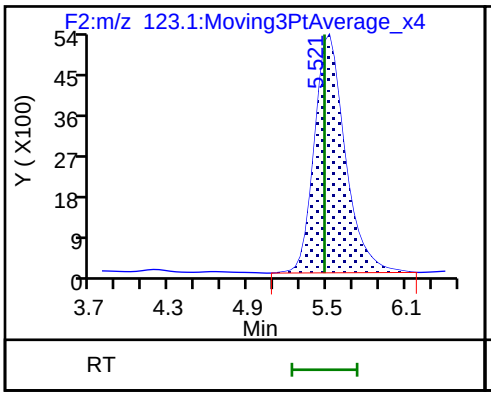


$ 11 Nitrobenzene-d5

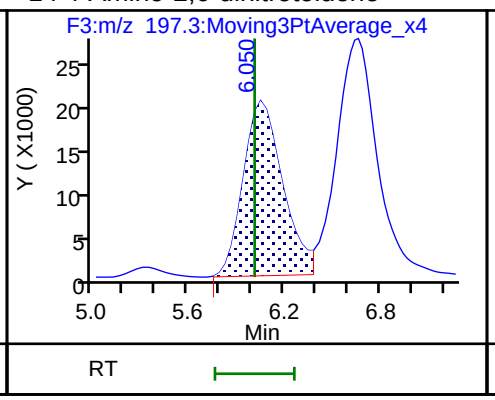


Report Date: 15-Jul-2021 14:57:37 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15004.d

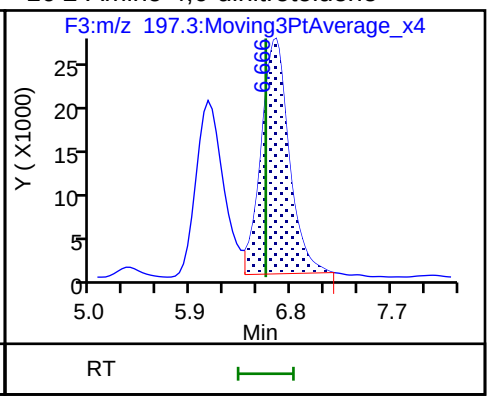
12 Nitrobenzene



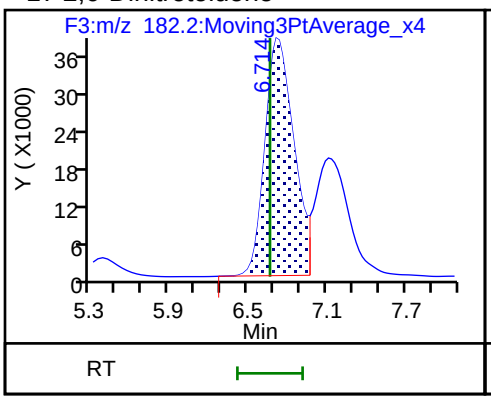
14 4-Amino-2,6-dinitrotoluene



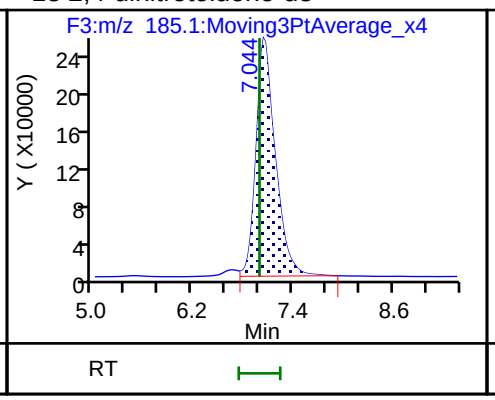
16 2-Amino-4,6-dinitrotoluene



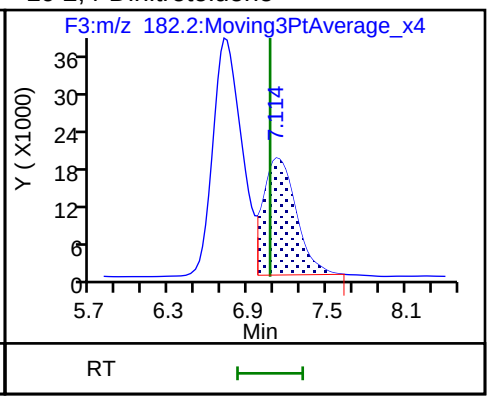
17 2,6-Dinitrotoluene



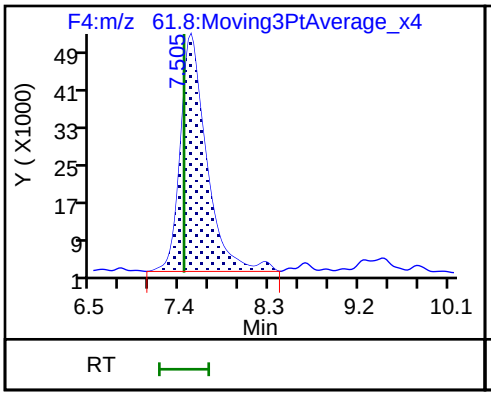
* 18 2,4-dinitrotoluene-d3



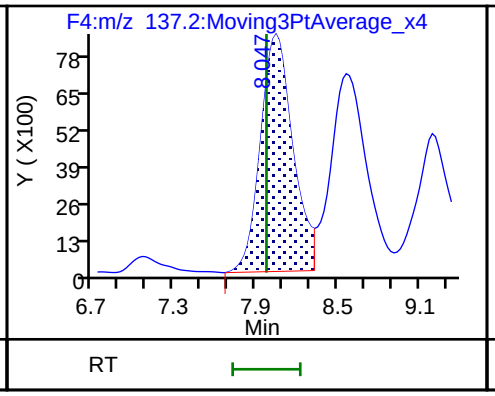
19 2,4-Dinitrotoluene



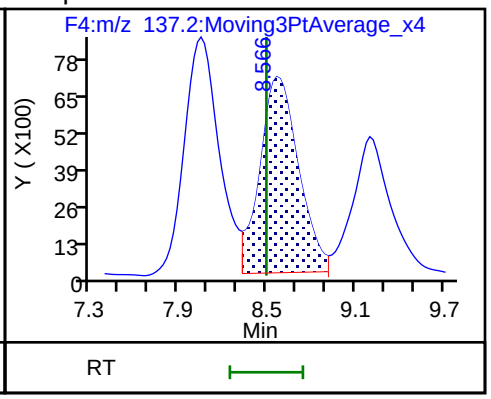
20 PETN



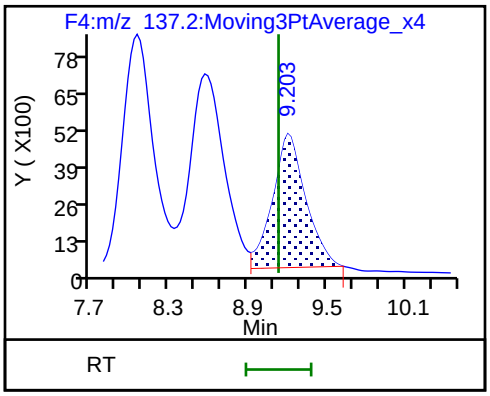
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



Report Date: 15-Jul-2021 14:57:38 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15005.d
Lims ID: STD025
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 15-Jul-2021 10:22:37 ALS Bottle#: 4 Worklist Smp#: 6
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 06/30/21EX3 STD025 ug/L
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4
Sublist: chrom-8321exp4-25*sub26

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 15-Jul-2021 14:57:38 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1662

First Level Reviewer: meyera Date: 15-Jul-2021 12:10:12
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
360.9	2.069	2.052	0.017		181131	120.0	173	
2 HMX								
355.2	2.069	2.069	0.0	1.000	105852	23.6	110	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	2.994	2.993	0.001		803724	120.0	569	
4 RDX								
281.2	3.011	2.993	0.018	1.006	121554	26.7	71.1	
5 1,3,5-Trinitrobenzene								
213.2	3.718	3.700	0.018	0.756	223719	25.2	279	
6 Tetryl								
241.2	4.391	4.390	0.001	0.893	248746	25.3	123	
* 7 1,3-Dinitrobenzene-d4								
172.1	4.916	4.871	0.045		1400919	129.4	55.0	
8 1,3-Dinitrobenzene								
168.2	4.960	4.915	0.045	1.009	278965	26.0	135	
9 Nitroglycerin								
61.8	4.960	4.915	0.045	1.009	1978682	21.3	138	
10 2,4,6-Trinitrotoluene								
227.2	5.337	5.299	0.038	0.758	983445	23.1	453	
28 3,5-Dinitroaniline								
183.2	5.374	5.336	0.038	1.093	1028373	24.0	101	
$ 11 Nitrobenzene-d5								
128.1	5.411	5.373	0.038	0.768	271048	27.2	169	
12 Nitrobenzene								
123.1	5.485	5.484	0.001	0.779	215269	24.3	240	

Report Date: 15-Jul-2021 14:57:38 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15005.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
14 4-Amino-2,6-dinitrotoluene								
197.3	6.051	6.013	0.038	0.859	878163	26.7	109	
16 2-Amino-4,6-dinitrotoluene								
197.3	6.643	6.572	0.071	0.943	1050190	23.3	109	
17 2,6-Dinitrotoluene								
182.2	6.714	6.666	0.048	0.953	1325029	22.4	171	
* 18 2,4-dinitrotoluene-d3								
185.1	7.044	6.996	0.048		3912878	120.0	366	
19 2,4-Dinitrotoluene								
182.2	7.091	7.067	0.024	1.007	839856	25.6	93.3	
20 PETN								
61.8	7.482	7.434	0.048	1.062	2076953	23.5	101	
22 o-Nitrotoluene								
137.2	8.001	7.976	0.025	1.136	349832	23.7	135	
23 p-Nitrotoluene								
137.2	8.543	8.495	0.048	1.213	289697	22.0	96.0	
24 m-Nitrotoluene								
137.2	9.132	9.132	0.0	1.296	199659	22.6	67.0	

QC Flag Legend

Processing Flags

Reagents:

8321NB-D5-cal_00020	Amount Added: 2.50	Units: uL	
8321EXcalprim_00025	Amount Added: 2.50	Units: uL	
EXPWORKINGIS_00084	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 15-Jul-2021 14:57:38 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15005.d

Injection Date: 15-Jul-2021 10:22:37 Instrument ID: LC_LCMS4

Lims ID: STD025

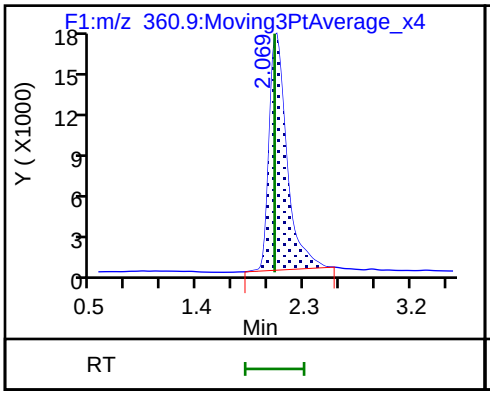
Client ID:

Operator ID: acm ALS Bottle#: 4 Worklist Smp#: 6

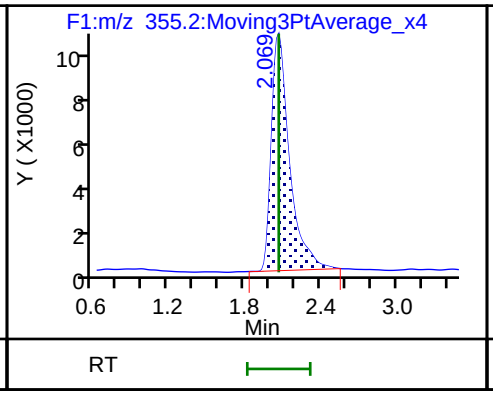
Injection Vol: 40.0 ul Dil. Factor: 1.0000

Method: 8321exp4-25 Limit Group: LC - 8321A Expl

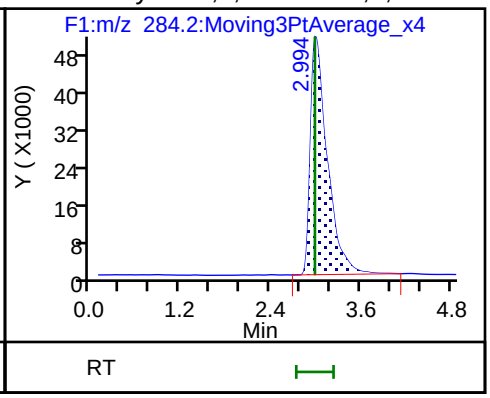
* 1 HMX-13C4



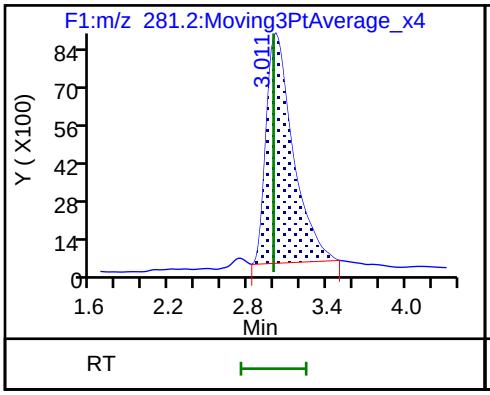
2 HMX



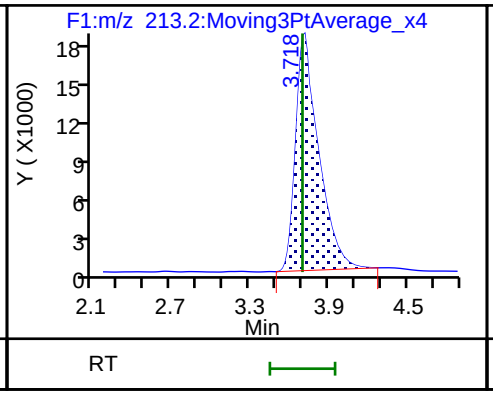
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



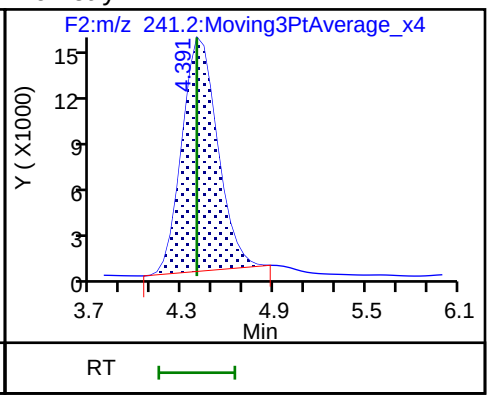
4 RDX



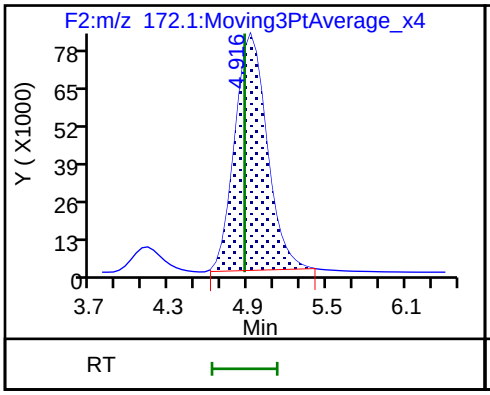
5 1,3,5-Trinitrobenzene



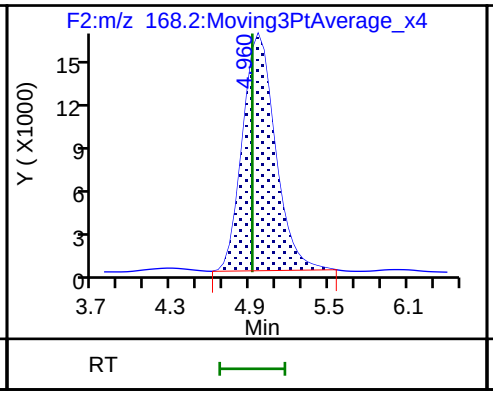
6 Tetryl



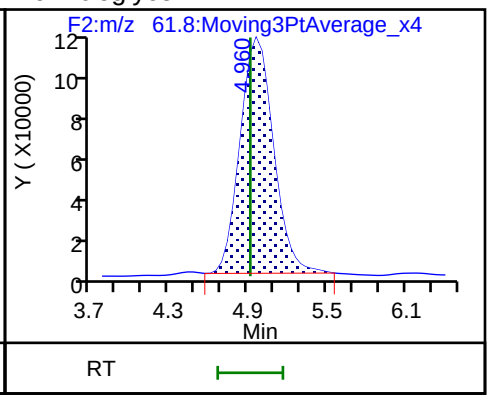
* 7 1,3-Dinitrobenzene-d4



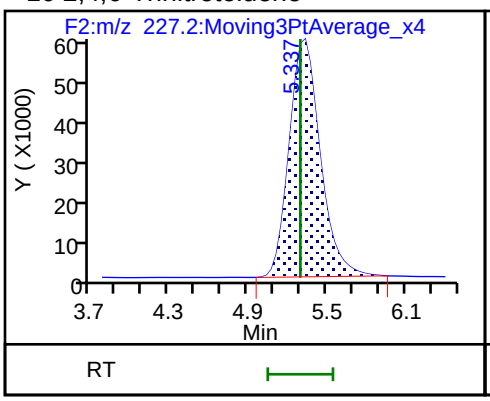
8 1,3-Dinitrobenzene



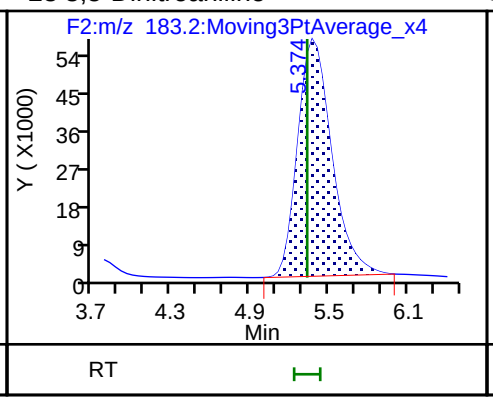
9 Nitroglycerin



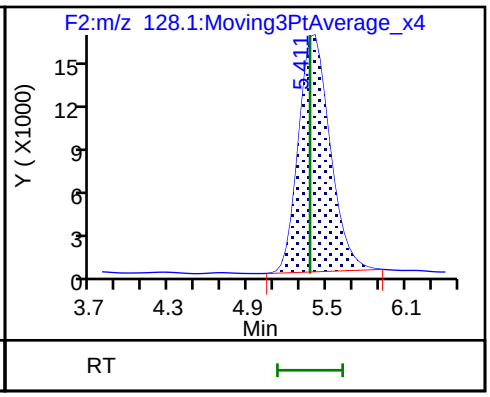
10 2,4,6-Trinitrotoluene



28 3,5-Dinitroaniline

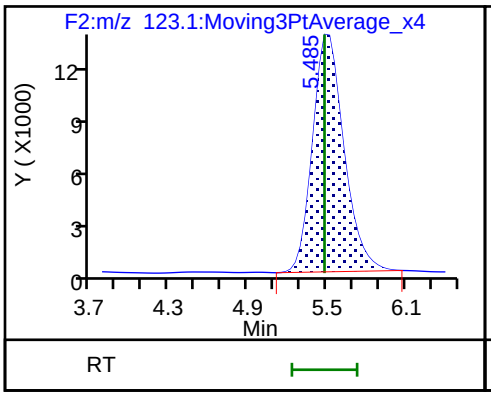


$ 11 Nitrobenzene-d5

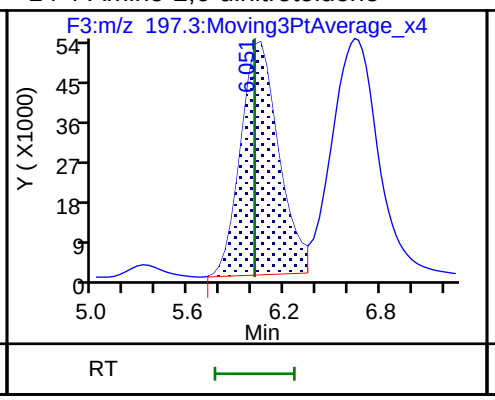


Report Date: 15-Jul-2021 14:57:38 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15005.d

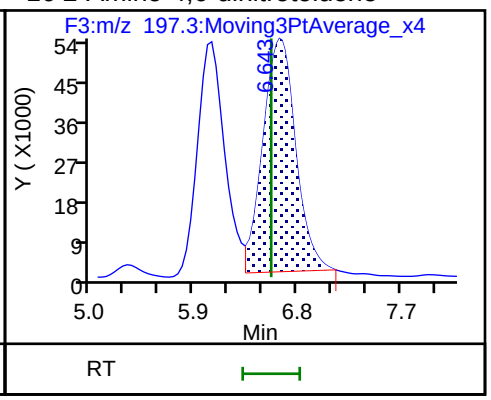
12 Nitrobenzene



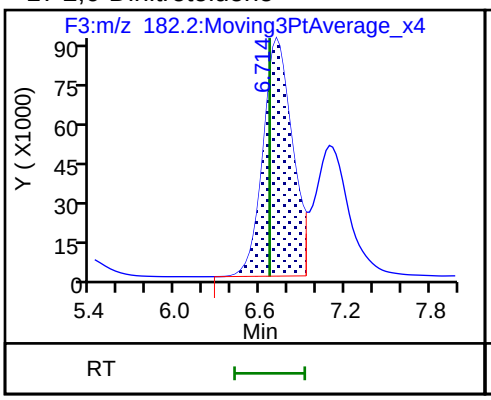
14 4-Amino-2,6-dinitrotoluene



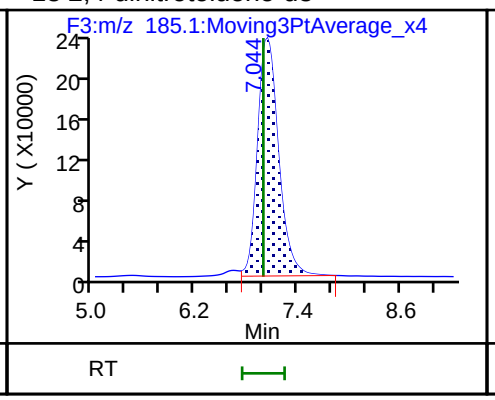
16 2-Amino-4,6-dinitrotoluene



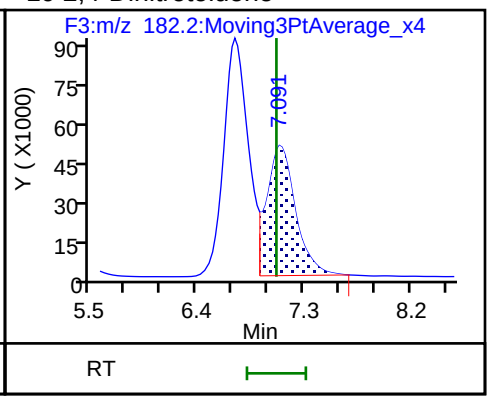
17 2,6-Dinitrotoluene



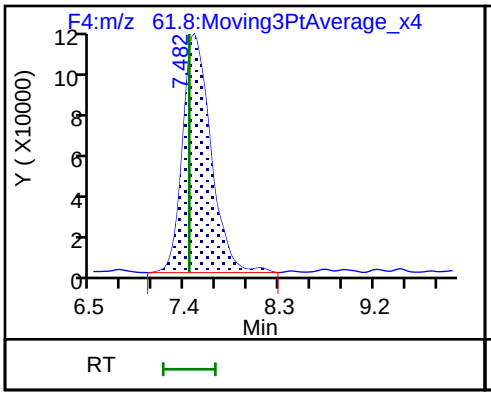
* 18 2,4-dinitrotoluene-d3



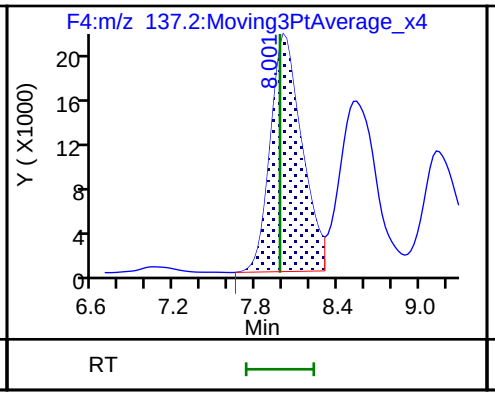
19 2,4-Dinitrotoluene



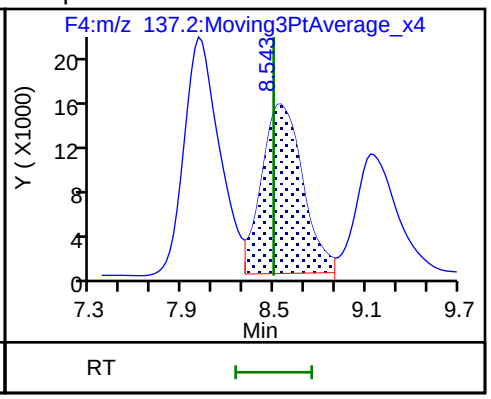
20 PETN



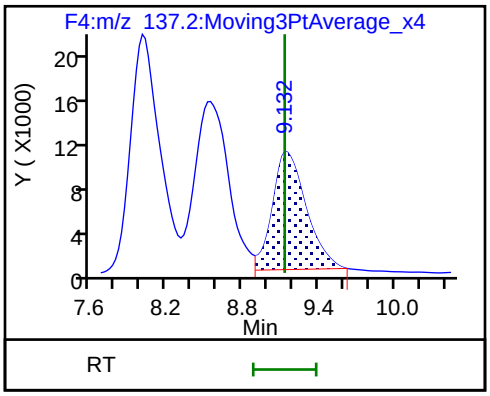
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



Report Date: 15-Jul-2021 14:57:39 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15006.d
Lims ID: STD050
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 15-Jul-2021 10:34:42 ALS Bottle#: 5 Worklist Smp#: 7
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 06/30/21EX4 STD050 ug/L
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4
Sublist: chrom-8321exp4-25*sub26

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 15-Jul-2021 14:57:39 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1662

First Level Reviewer: meyera Date: 15-Jul-2021 12:10:04
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
360.9	2.069	2.052	0.017		160476	120.0	149	
2 HMX								
355.2	2.069	2.069	0.0	1.000	181119	44.2	155	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	2.994	2.993	0.001		817199	120.0	925	
4 RDX								
281.2	3.028	2.993	0.035	1.011	217296	49.8	90.5	
5 1,3,5-Trinitrobenzene								
213.2	3.700	3.700	0.0	0.753	412734	44.6	518	
6 Tetryl								
241.2	4.390	4.390	0.0	0.893	489810	48.6	128	
* 7 1,3-Dinitrobenzene-d4								
172.1	4.915	4.871	0.044		1431512	129.4	56.0	
8 1,3-Dinitrobenzene								
168.2	4.959	4.915	0.044	1.009	570888	52.8	245	
9 Nitroglycerin								
61.8	4.959	4.915	0.044	1.009	4538058	50.9	248	
10 2,4,6-Trinitrotoluene								
227.2	5.336	5.299	0.037	0.758	1960140	46.8	617	
28 3,5-Dinitroaniline								
183.2	5.373	5.336	0.037	1.093	2013638	48.8	125	
$ 11 Nitrobenzene-d5								
128.1	5.410	5.373	0.037	0.768	529669	53.1	426	
12 Nitrobenzene								
123.1	5.521	5.484	0.037	0.784	413746	48.5	727	

Report Date: 15-Jul-2021 14:57:39 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15006.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
14 4-Amino-2,6-dinitrotoluene								
197.3	6.050	6.013	0.037	0.859	1656863	49.3	111	
16 2-Amino-4,6-dinitrotoluene								
197.3	6.595	6.572	0.023	0.936	1744267	39.8	119	
17 2,6-Dinitrotoluene								
182.2	6.737	6.666	0.071	0.956	2416891	41.7	163	
* 18 2,4-dinitrotoluene-d3								
185.1	7.043	6.996	0.047		3709749	120.0	387	
19 2,4-Dinitrotoluene								
182.2	7.114	7.067	0.047	1.010	1647340	53.2	105	
20 PETN								
61.8	7.505	7.434	0.071	1.066	4186485	49.0	222	
22 o-Nitrotoluene								
137.2	8.024	7.976	0.048	1.139	661979	46.2	195	
23 p-Nitrotoluene								
137.2	8.566	8.495	0.071	1.216	628979	49.1	173	
24 m-Nitrotoluene								
137.2	9.202	9.132	0.070	1.307	407503	46.5	100	

QC Flag Legend

Processing Flags

Reagents:

8321NB-D5-cal_00020	Amount Added: 5.00	Units: uL	
8321EXcalprim_00025	Amount Added: 5.00	Units: uL	
EXPWORKINGIS_00084	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 15-Jul-2021 14:57:39 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15006.d

Injection Date: 15-Jul-2021 10:34:42 Instrument ID: LC_LCMS4

Lims ID: STD050

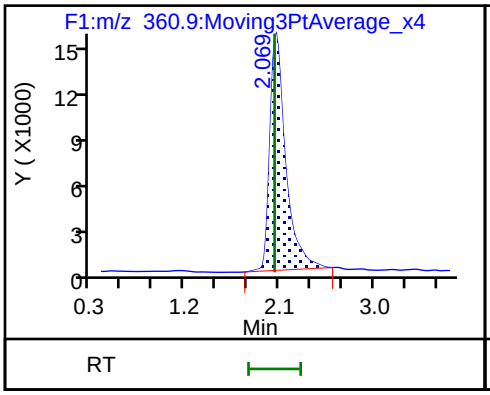
Client ID:

Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 7

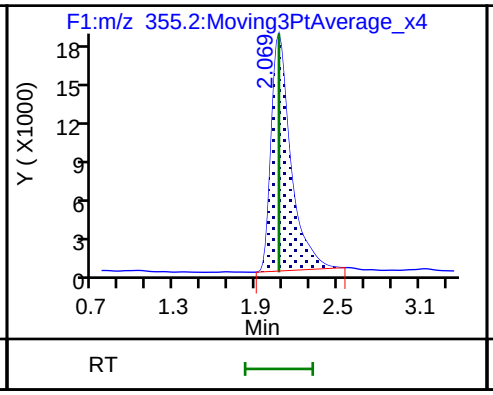
Injection Vol: 40.0 ul Dil. Factor: 1.0000

Method: 8321exp4-25 Limit Group: LC - 8321A Expl

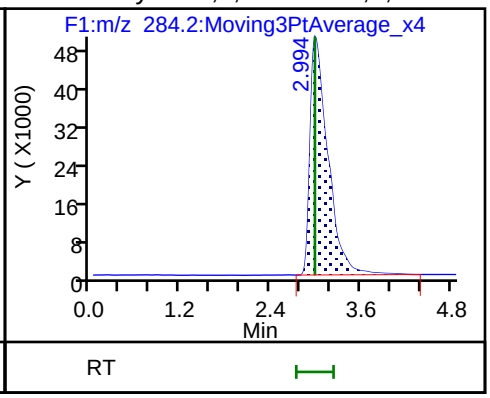
* 1 HMX-13C4



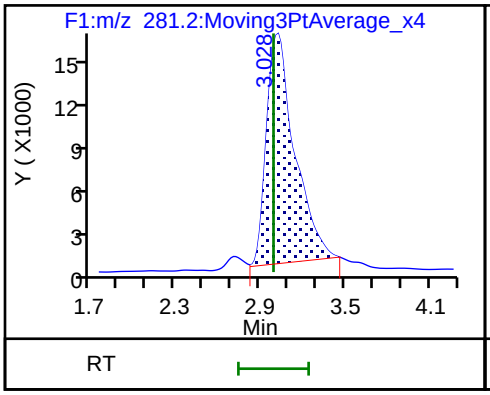
2 HMX



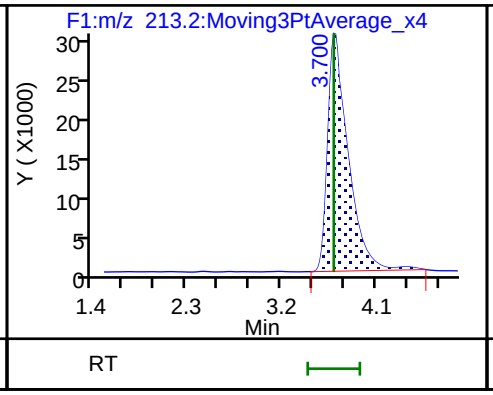
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



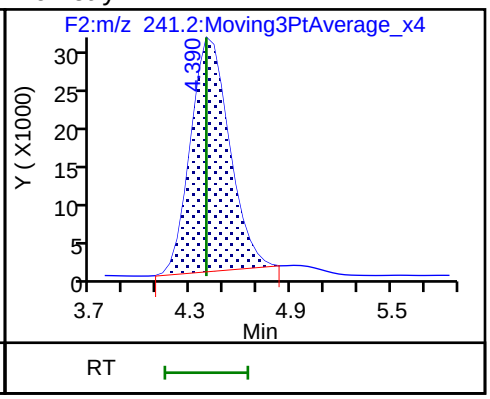
4 RDX



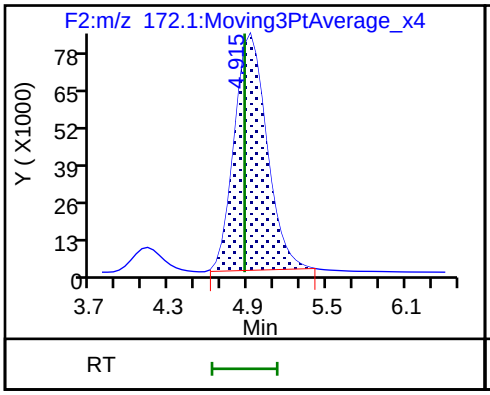
5 1,3,5-Trinitrobenzene



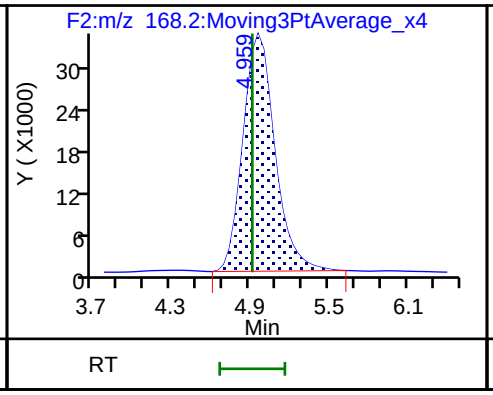
6 Tetryl



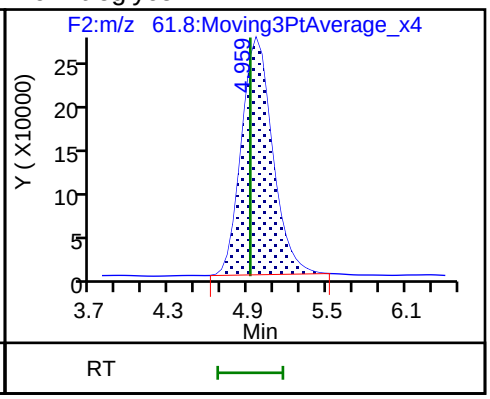
* 7 1,3-Dinitrobenzene-d4



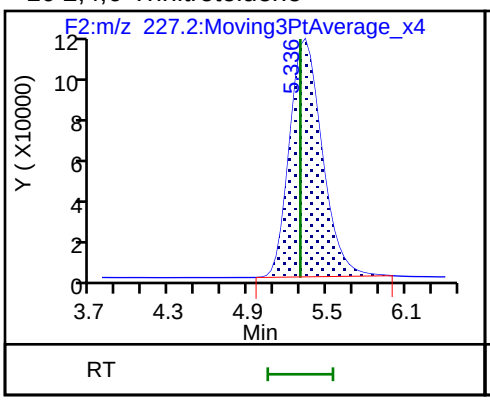
8 1,3-Dinitrobenzene



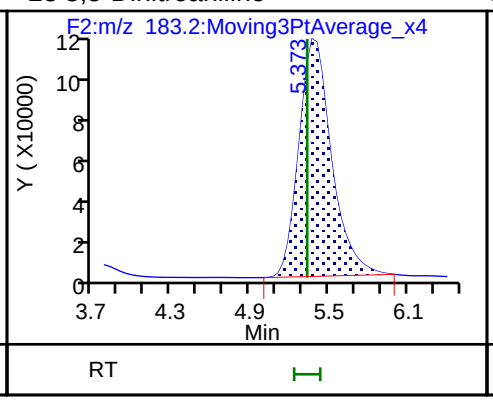
9 Nitroglycerin



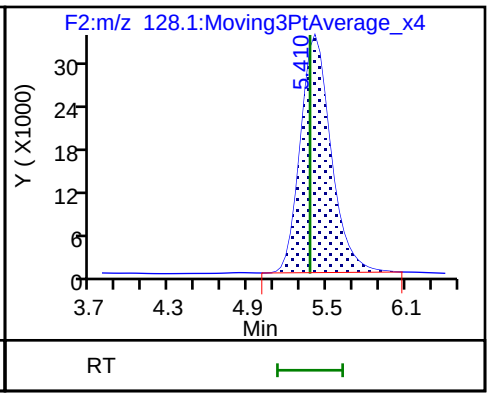
10 2,4,6-Trinitrotoluene



28 3,5-Dinitroaniline

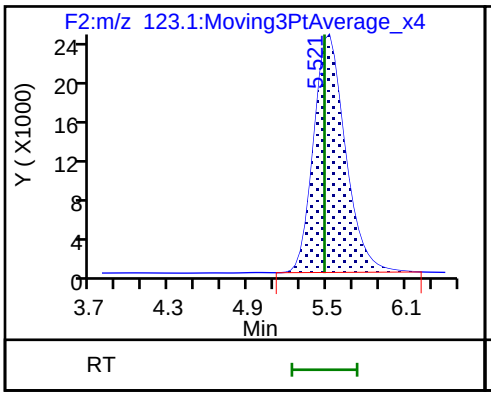


$ 11 Nitrobenzene-d5

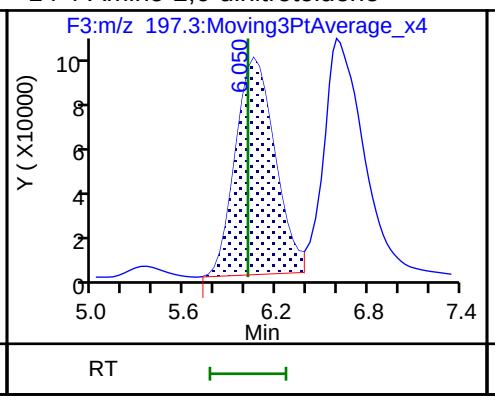


Report Date: 15-Jul-2021 14:57:39 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15006.d

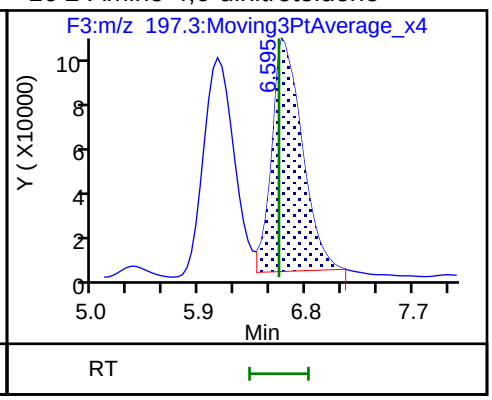
12 Nitrobenzene



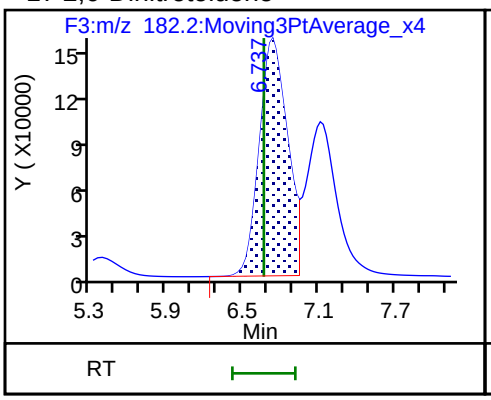
14 4-Amino-2,6-dinitrotoluene



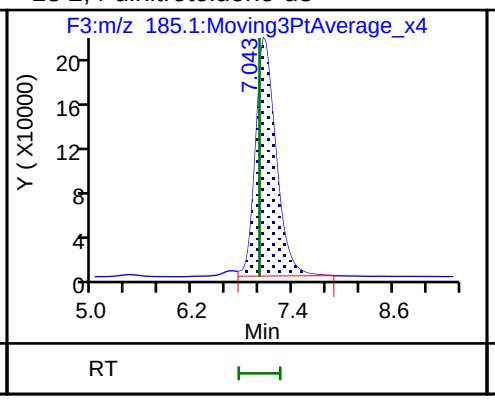
16 2-Amino-4,6-dinitrotoluene



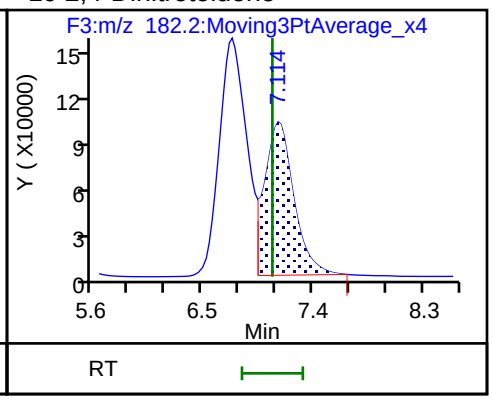
17 2,6-Dinitrotoluene



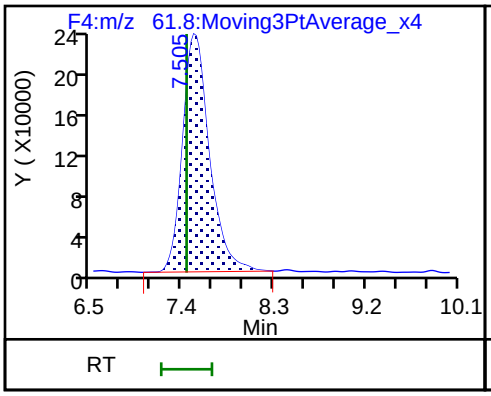
* 18 2,4-dinitrotoluene-d3



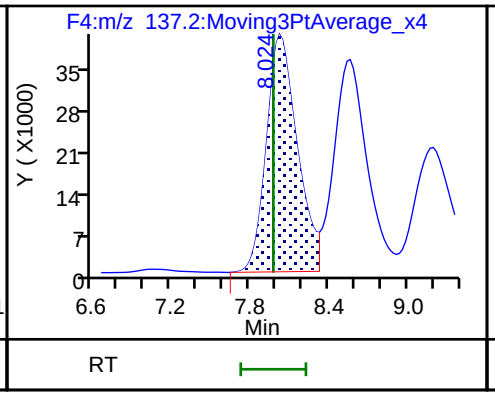
19 2,4-Dinitrotoluene



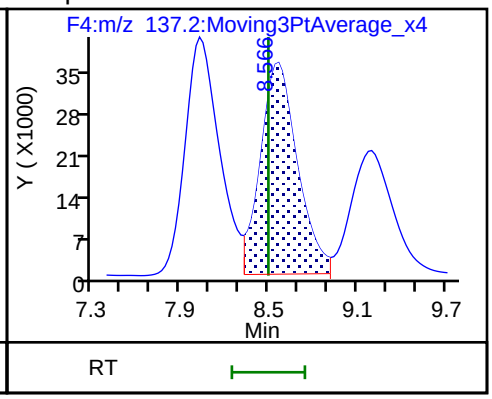
20 PETN



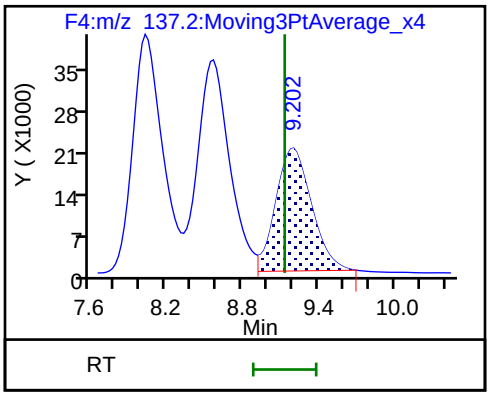
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



Report Date: 15-Jul-2021 14:57:40 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15007.d
Lims ID: STD100
Client ID:
Sample Type: ICISAV Calib Level: 5
Inject. Date: 15-Jul-2021 10:46:46 ALS Bottle#: 6 Worklist Smp#: 8
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 06/30/21EX5 STD100 ug/L
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4
Sublist: chrom-8321exp4-25*sub26

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 15-Jul-2021 14:57:40 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1662

First Level Reviewer: meyera Date: 15-Jul-2021 12:09:17
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
360.9	2.052	2.052	0.0		123826	120.0	113	
2 HMX								
355.2	2.069	2.069	0.0	1.008	306573	95.0	235	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	2.993	2.993	0.0		827546	120.0	966	
4 RDX								
281.2	2.993	2.993	0.0	1.000	380490	91.9	110	
5 1,3,5-Trinitrobenzene								
213.2	3.700	3.700	0.0	0.760	946213	108.3	1323	
6 Tetryl								
241.2	4.390	4.390	0.0	0.901	1061294	112.7	241	
* 7 1,3-Dinitrobenzene-d4								
172.1	4.871	4.871	0.0		1332132	129.4	53.8	
8 1,3-Dinitrobenzene								
168.2	4.915	4.915	0.0	1.009	1063310	106.6	185	
9 Nitroglycerin								
61.8	4.915	4.915	0.0	1.009	8368409	94.1	311	
10 2,4,6-Trinitrotoluene								
227.2	5.299	5.299	0.0	0.757	3989947	94.3	619	
28 3,5-Dinitroaniline								
183.2	5.336	5.336	0.0	1.095	3776417	91.5	125	
$ 11 Nitrobenzene-d5								
128.1	5.373	5.373	0.0	0.768	987887	107.7	581	
12 Nitrobenzene								
123.1	5.484	5.484	0.0	0.784	806731	94.6	823	

Report Date: 15-Jul-2021 14:57:40 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15007.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
14 4-Amino-2,6-dinitrotoluene								
197.3	6.013	6.013	0.0	0.859	3520683	112.4	138	
16 2-Amino-4,6-dinitrotoluene								
197.3	6.572	6.572	0.0	0.939	4437785	99.8	184	
17 2,6-Dinitrotoluene								
182.2	6.666	6.666	0.0	0.953	5798662	98.7	227	
* 18 2,4-dinitrotoluene-d3								
185.1	6.996	6.996	0.0		3684187	120.0	297	
19 2,4-Dinitrotoluene								
182.2	7.067	7.067	0.0	1.010	2963040	96.5	97.4	
20 PETN								
61.8	7.434	7.434	0.0	1.063	8185692	95.7	392	
22 o-Nitrotoluene								
137.2	7.976	7.976	0.0	1.140	1384265	96.1	252	
23 p-Nitrotoluene								
137.2	8.495	8.495	0.0	1.214	1250401	97.2	214	
24 m-Nitrotoluene								
137.2	9.132	9.132	0.0	1.305	796683	89.8	137	

QC Flag Legend

Processing Flags

Reagents:

8321NB-D5-cal_00020	Amount Added:	10.00	Units: uL	
8321EXcalprim_00025	Amount Added:	10.00	Units: uL	
EXPWORKINGIS_00084	Amount Added:	20.00	Units: uL	Run Reagent

Report Date: 15-Jul-2021 14:57:40 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15007.d

Injection Date: 15-Jul-2021 10:46:46 Instrument ID: LC_LCMS4

Lims ID: STD100

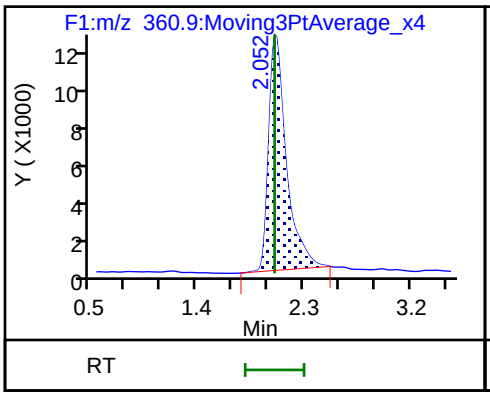
Client ID:

Operator ID: acm ALS Bottle#: 6 Worklist Smp#: 8

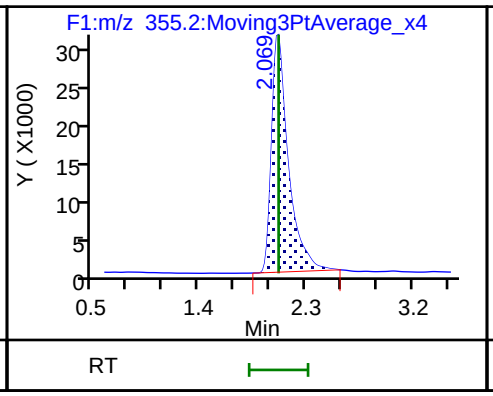
Injection Vol: 40.0 ul Dil. Factor: 1.0000

Method: 8321exp4-25 Limit Group: LC - 8321A Expl

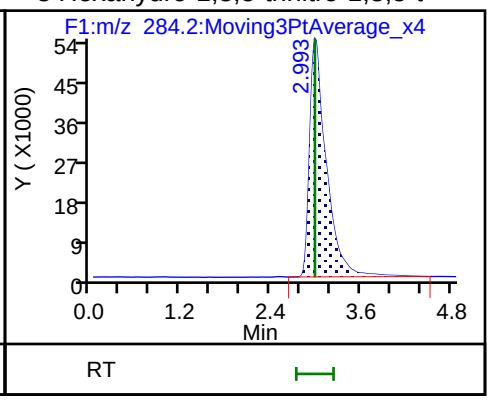
* 1 HMX-13C4



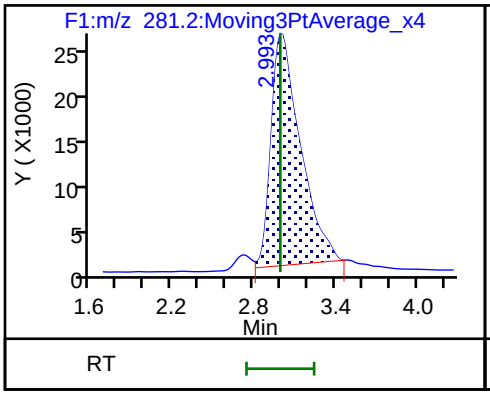
2 HMX



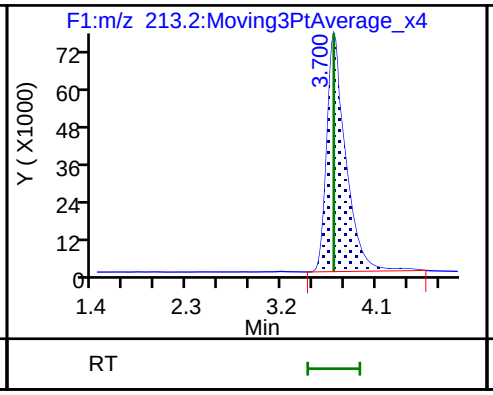
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



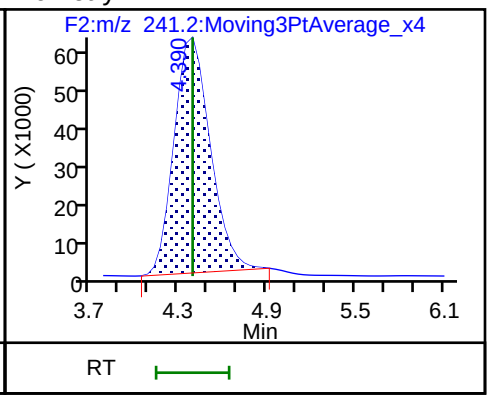
4 RDX



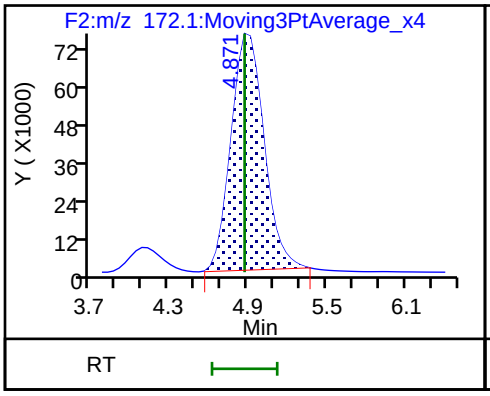
5 1,3,5-Trinitrobenzene



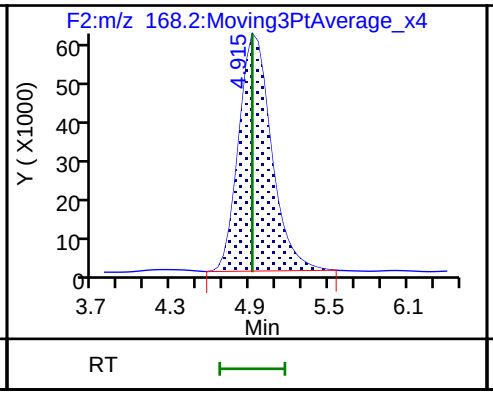
6 Tetryl



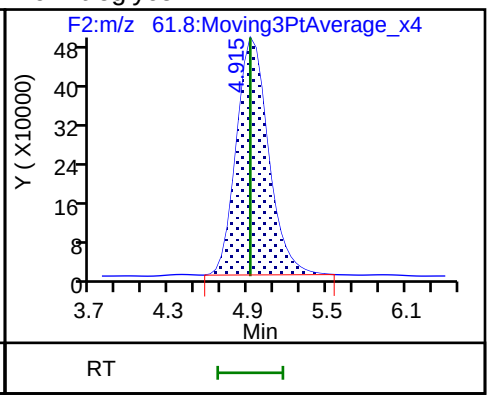
* 7 1,3-Dinitrobenzene-d4



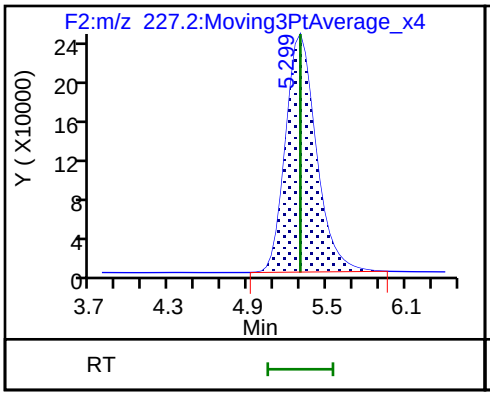
8 1,3-Dinitrobenzene



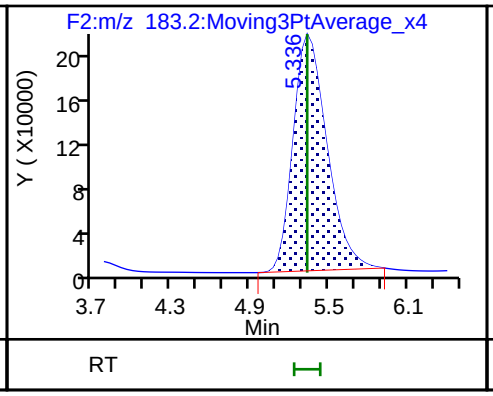
9 Nitroglycerin



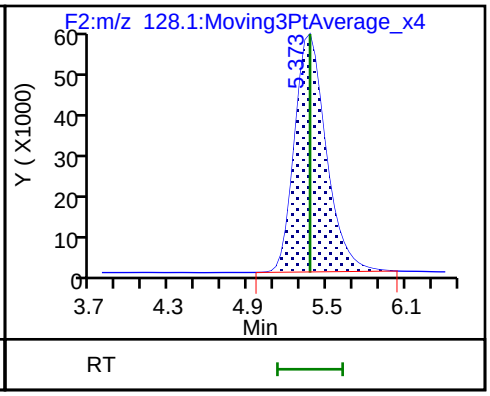
10 2,4,6-Trinitrotoluene



28 3,5-Dinitroaniline

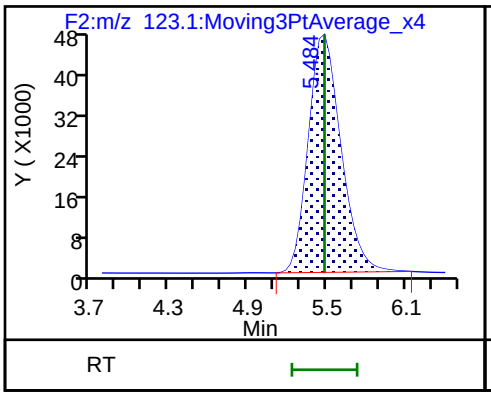


$ 11 Nitrobenzene-d5

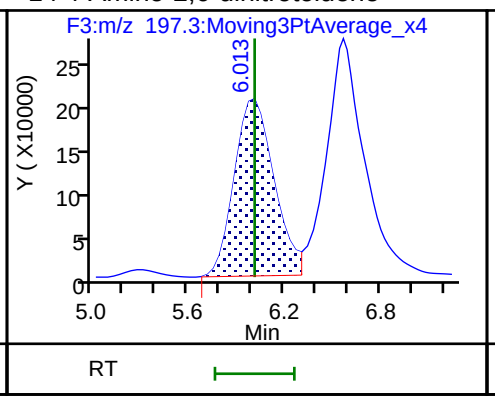


Report Date: 15-Jul-2021 14:57:40 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15007.d

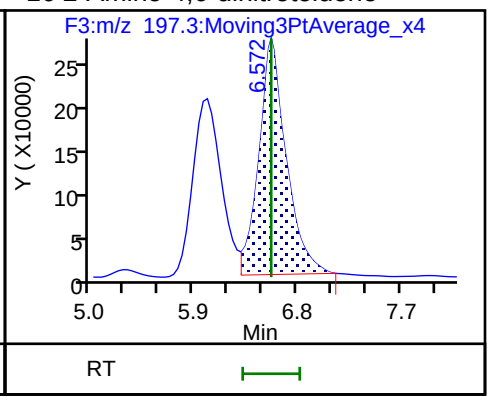
12 Nitrobenzene



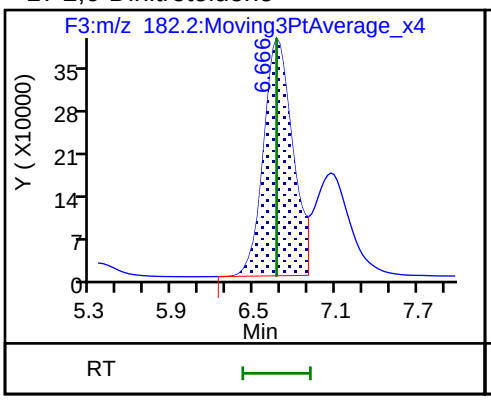
14 4-Amino-2,6-dinitrotoluene



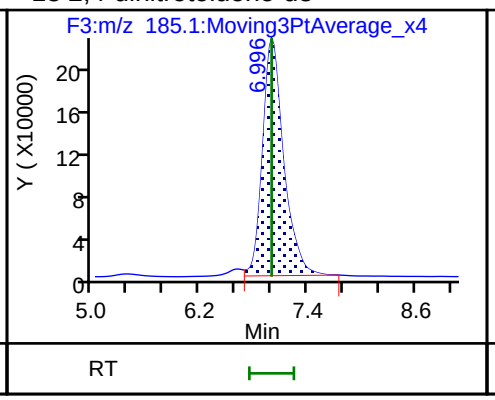
16 2-Amino-4,6-dinitrotoluene



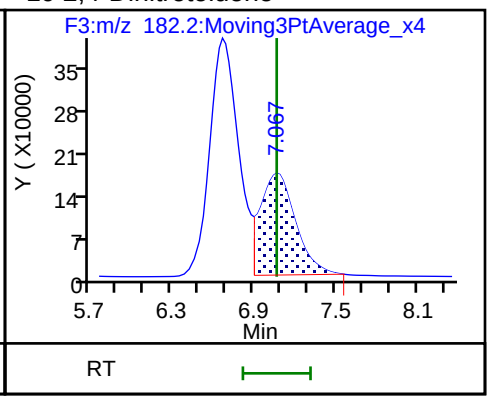
17 2,6-Dinitrotoluene



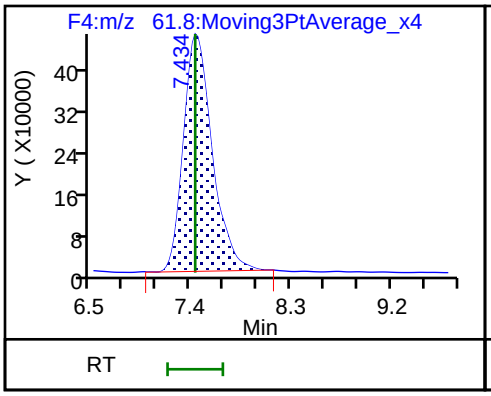
* 18 2,4-dinitrotoluene-d3



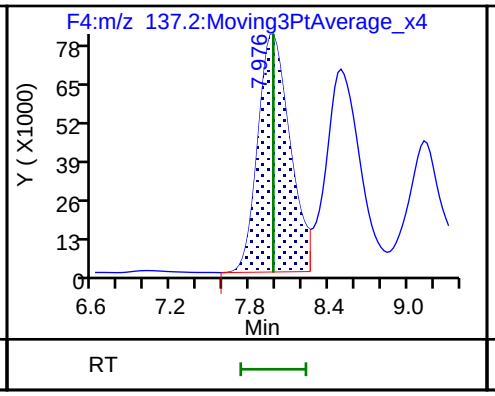
19 2,4-Dinitrotoluene



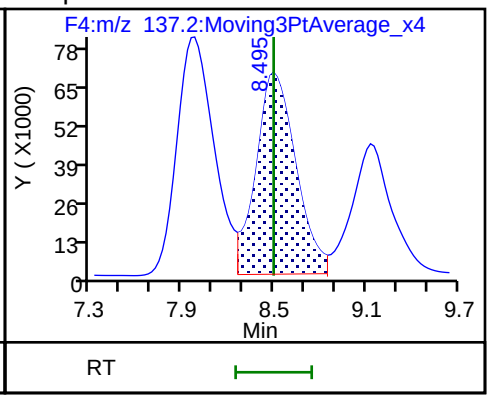
20 PETN



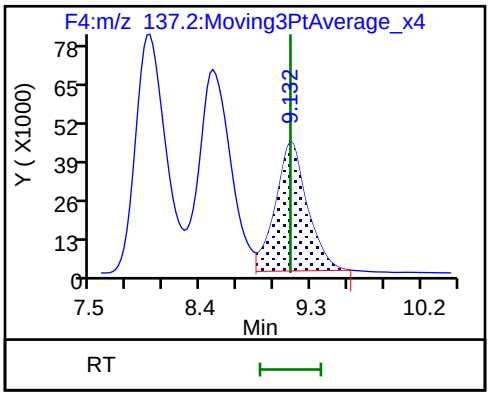
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



Report Date: 15-Jul-2021 14:57:42 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15008.d
Lims ID: STD200
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 15-Jul-2021 10:58:49 ALS Bottle#: 7 Worklist Smp#: 9
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 06/30/21EX6 STD200 ug/L
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4
Sublist: chrom-8321exp4-25*sub26

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 15-Jul-2021 14:57:42 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1662

First Level Reviewer: meyera Date: 15-Jul-2021 12:09:26
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
360.9	2.052	2.052	0.0		111382	120.0	89.0	
2 HMX								
355.2	2.069	2.069	0.0	1.008	599448	204.7	310	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	3.028	2.993	0.035		754447	120.0	636	
4 RDX								
281.2	3.028	2.993	0.035	1.000	683049	213.7	115	
5 1,3,5-Trinitrobenzene								
213.2	3.718	3.700	0.018	0.756	1991944	193.1	1799	
6 Tetryl								
241.2	4.391	4.390	0.001	0.893	2072503	187.1	181	
* 7 1,3-Dinitrobenzene-d4								
172.1	4.916	4.871	0.045		1565823	129.4	63.8	
8 1,3-Dinitrobenzene								
168.2	4.960	4.915	0.045	1.009	2233875	191.1	173	
9 Nitroglycerin								
61.8	4.960	4.915	0.045	1.009	19137719	228.4	449	
10 2,4,6-Trinitrotoluene								
227.2	5.337	5.299	0.038	0.755	7579610	188.9	554	
28 3,5-Dinitroaniline								
183.2	5.374	5.336	0.038	1.093	8699273	223.2	135	
$ 11 Nitrobenzene-d5								
128.1	5.411	5.373	0.038	0.766	2005307	186.8	586	
12 Nitrobenzene								
123.1	5.522	5.484	0.038	0.781	1689688	209.9	663	

Report Date: 15-Jul-2021 14:57:42 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15008.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
14 4-Amino-2,6-dinitrotoluene								
197.3	6.051	6.013	0.038	0.856	6761654	183.6	112	
16 2-Amino-4,6-dinitrotoluene								
197.3	6.667	6.572	0.095	0.943	8496119	201.8	149	
17 2,6-Dinitrotoluene								
182.2	6.714	6.666	0.048	0.950	10788719	194.0	203	
* 18 2,4-dinitrotoluene-d3								
185.1	7.068	6.996	0.072		3462290	120.0	191	
19 2,4-Dinitrotoluene								
182.2	7.139	7.067	0.072	1.010	5950583	206.5	104	
20 PETN								
61.8	7.506	7.434	0.072	1.062	15981864	198.1	412	
22 o-Nitrotoluene								
137.2	8.048	7.976	0.072	1.139	2667606	195.9	262	
23 p-Nitrotoluene								
137.2	8.567	8.495	0.072	1.212	2545638	209.4	230	
24 m-Nitrotoluene								
137.2	9.203	9.132	0.071	1.302	1689509	200.3	150	

QC Flag Legend

Processing Flags

Reagents:

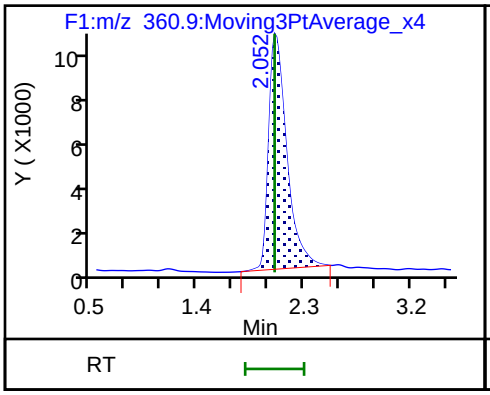
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8321EXcalprim_00025	Amount Added: 20.00	Units: uL	
EXPWORKINGIS_00084	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 15-Jul-2021 14:57:42 Chrom Revision: 2.3 13-May-2021 07:57:40

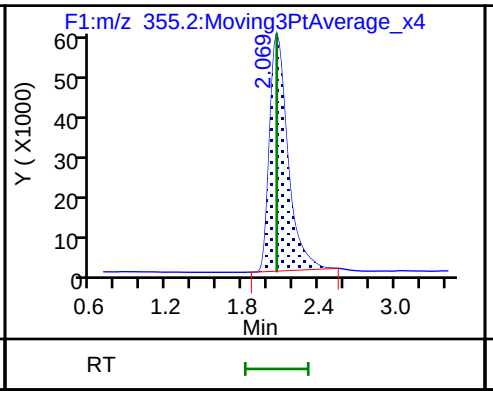
Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15008.d
Injection Date: 15-Jul-2021 10:58:49 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: 8321exp4-25 Limit Group: LC - 8321A Expl

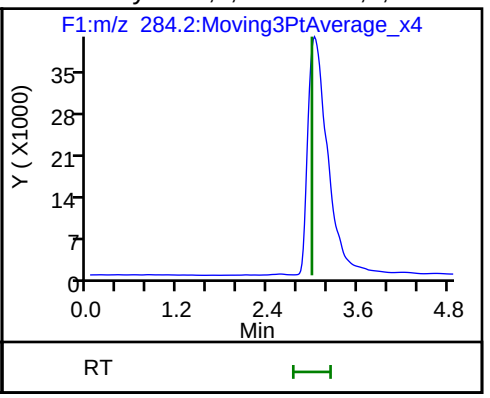
* 1 HMX-13C4



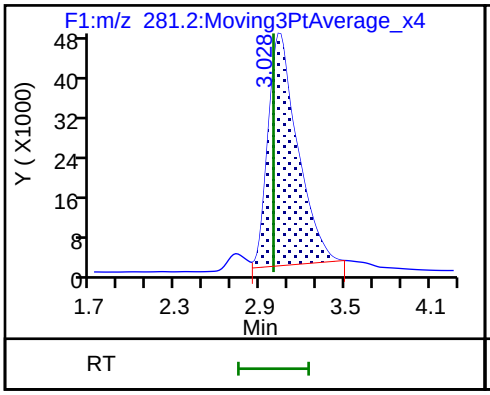
2 HMX



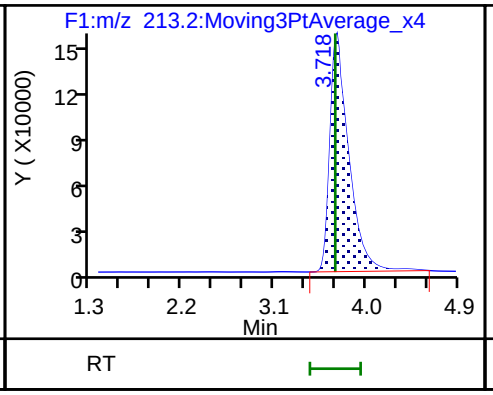
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



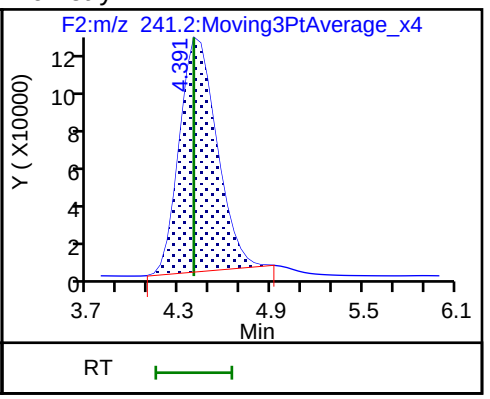
4 RDX



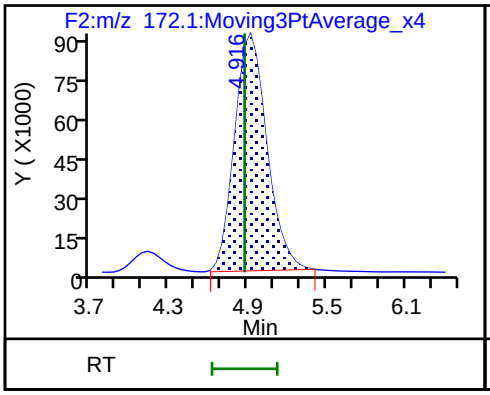
5 1,3,5-Trinitrobenzene



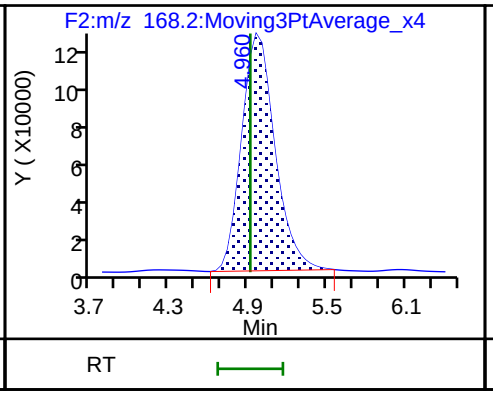
6 Tetryl



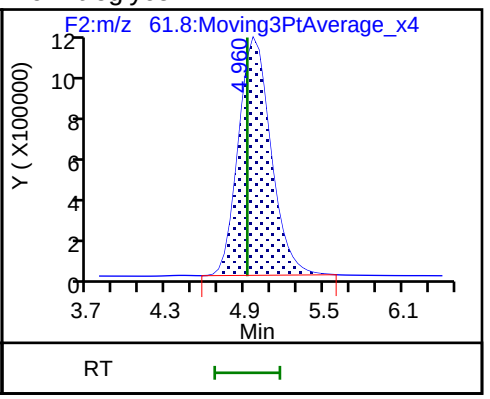
* 7 1,3-Dinitrobenzene-d4



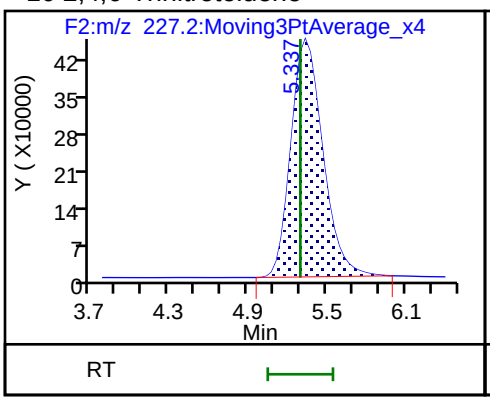
8 1,3-Dinitrobenzene



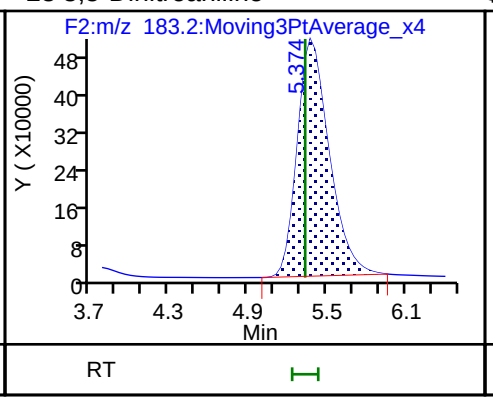
9 Nitroglycerin



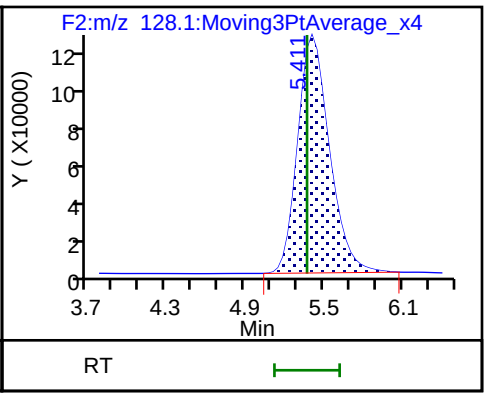
10 2,4,6-Trinitrotoluene



28 3,5-Dinitroaniline

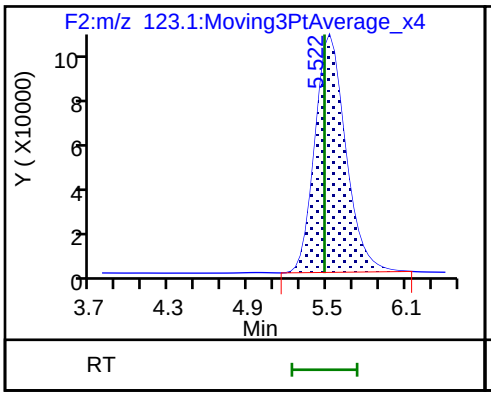


$ 11 Nitrobenzene-d5

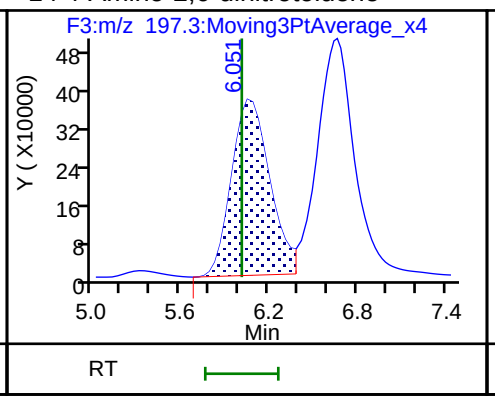


Report Date: 15-Jul-2021 14:57:42 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15008.d

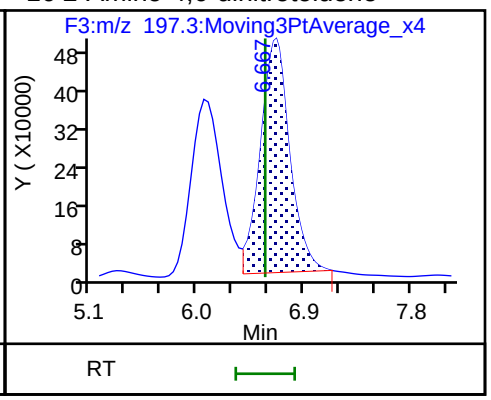
12 Nitrobenzene



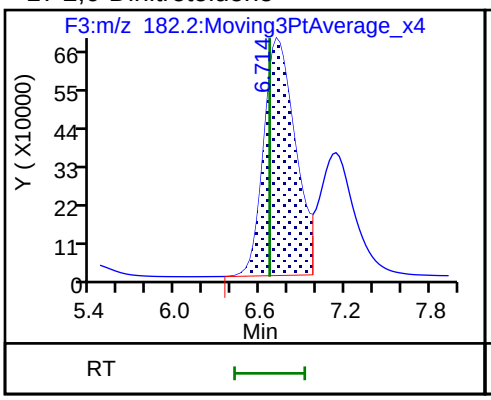
14 4-Amino-2,6-dinitrotoluene



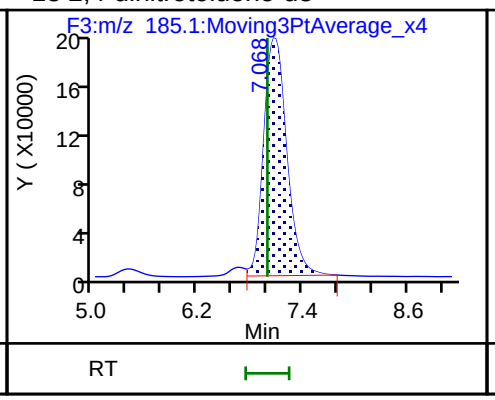
16 2-Amino-4,6-dinitrotoluene



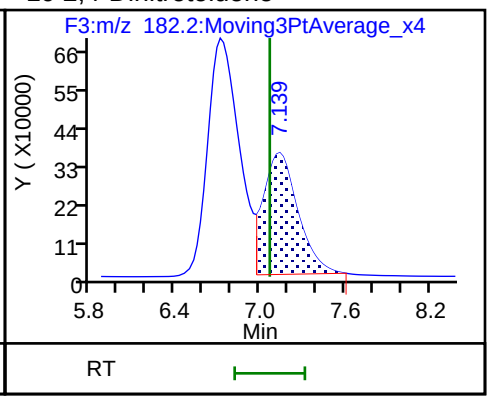
17 2,6-Dinitrotoluene



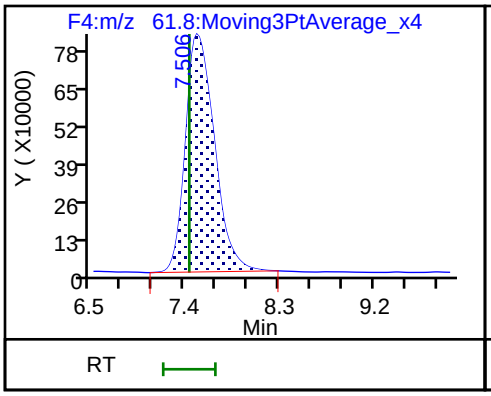
* 18 2,4-dinitrotoluene-d3



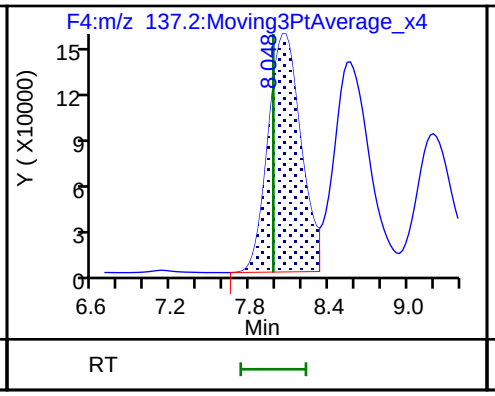
19 2,4-Dinitrotoluene



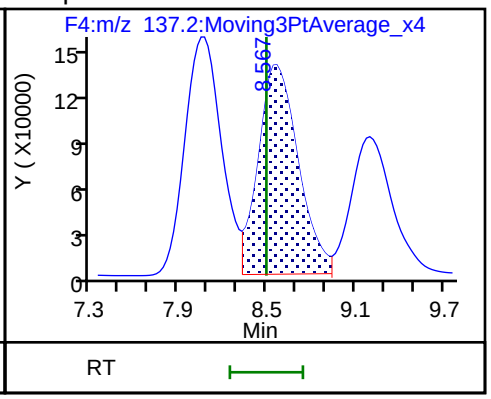
20 PETN



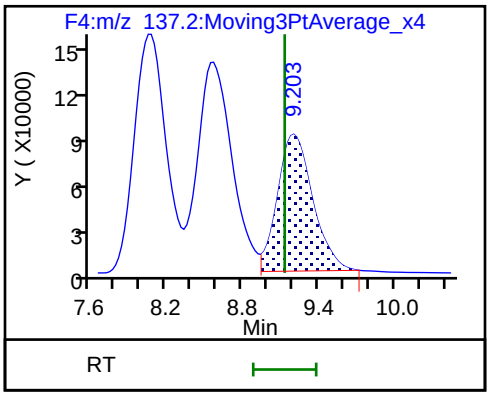
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



Report Date: 15-Jul-2021 14:57:43 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d
Lims ID: STD300
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 15-Jul-2021 11:10:54 ALS Bottle#: 8 Worklist Smp#: 10
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 06/30/21EX7 STD300 ug/L
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4
Sublist: chrom-8321exp4-25*sub26

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 15-Jul-2021 14:57:43 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1662

First Level Reviewer: meyera Date: 15-Jul-2021 12:09:52
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
360.9	2.069	2.052	0.017		96134	120.0	97.0	
2 HMX								
355.2	2.069	2.069	0.0	1.000	777488	306.7	286	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	3.011	2.993	0.018		847986	120.0	500	
4 RDX								
281.2	3.028	2.993	0.035	1.006	933352	291.7	110	
5 1,3,5-Trinitrobenzene								
213.2	3.718	3.700	0.018	0.756	3081393	304.9	1156	
6 Tetryl								
241.2	4.435	4.390	0.045	0.902	3284002	303.2	626	
* 7 1,3-Dinitrobenzene-d4								
172.1	4.916	4.871	0.045		1530690	129.4	54.1	
8 1,3-Dinitrobenzene								
168.2	4.960	4.915	0.045	1.009	3427011	300.3	164	
9 Nitroglycerin								
61.8	4.960	4.915	0.045	1.009	24157720	283.4	331	
10 2,4,6-Trinitrotoluene								
227.2	5.337	5.299	0.038	0.758	13254209	323.6	692	
28 3,5-Dinitroaniline								
183.2	5.374	5.336	0.038	1.093	11402319	287.5	124	
$ 11 Nitrobenzene-d5								
128.1	5.411	5.373	0.038	0.768	3157360	301.6	689	
12 Nitrobenzene								
123.1	5.522	5.484	0.038	0.784	2459502	300.1	810	

Report Date: 15-Jul-2021 14:57:43 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d
Ratio Calibration: Average of Initial Calibration

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
14 4-Amino-2,6-dinitrotoluene								
197.3	6.051	6.013	0.038	0.859	10951569	304.2	127	
16 2-Amino-4,6-dinitrotoluene								
197.3	6.643	6.572	0.071	0.943	13363187	311.4	148	
17 2,6-Dinitrotoluene								
182.2	6.714	6.666	0.048	0.953	18123093	319.4	235	
* 18 2,4-dinitrotoluene-d3								
185.1	7.044	6.996	0.048		3521242	120.0	168	
19 2,4-Dinitrotoluene								
182.2	7.138	7.067	0.071	1.013	8686239	296.5	98.1	
20 PETN								
61.8	7.506	7.434	0.072	1.066	25084699	305.2	527	
22 o-Nitrotoluene								M
137.2	8.048	7.976	0.072	1.142	4336137	312.4	386	M
23 p-Nitrotoluene								M
137.2	8.590	8.495	0.095	1.219	3692195	298.1	275	M
24 m-Nitrotoluene								M
137.2	9.180	9.132	0.048	1.303	2713490	315.3	188	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

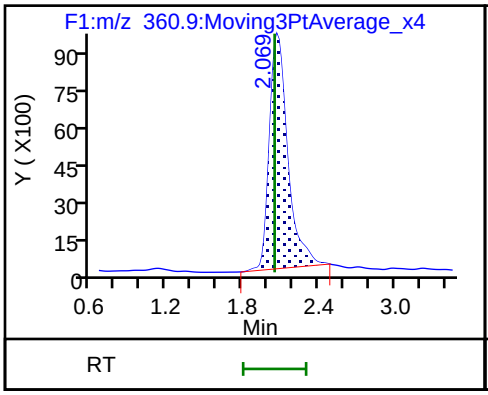
8321NB-D5-cal_00020	Amount Added: 30.00	Units: uL	
8321EXcalprim_00025	Amount Added: 30.00	Units: uL	
EXPWORKINGIS_00084	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 15-Jul-2021 14:57:43 Chrom Revision: 2.3 13-May-2021 07:57:40

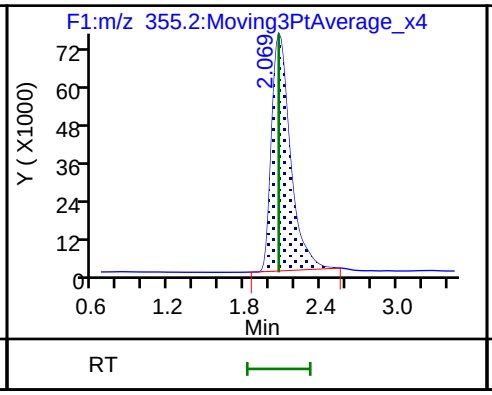
Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d
Injection Date: 15-Jul-2021 11:10:54 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: 8321exp4-25 Limit Group: LC - 8321A Expl

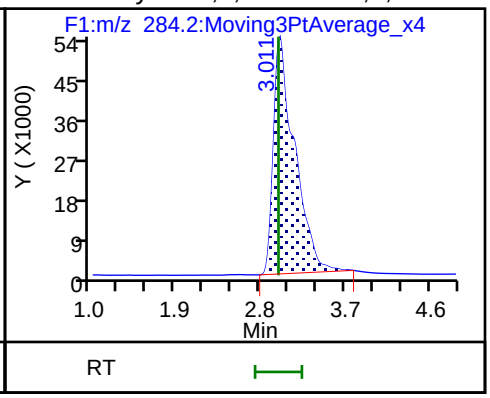
* 1 HMX-13C4



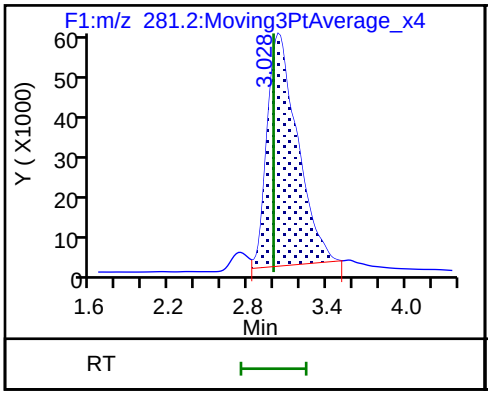
2 HMX



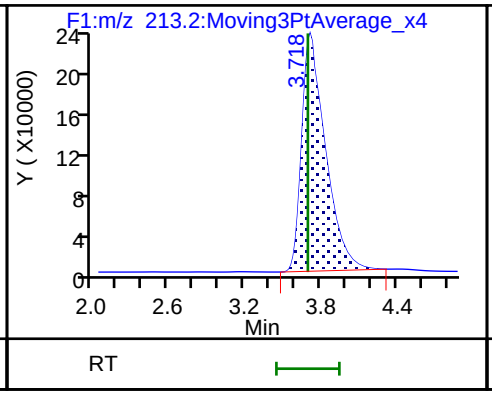
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



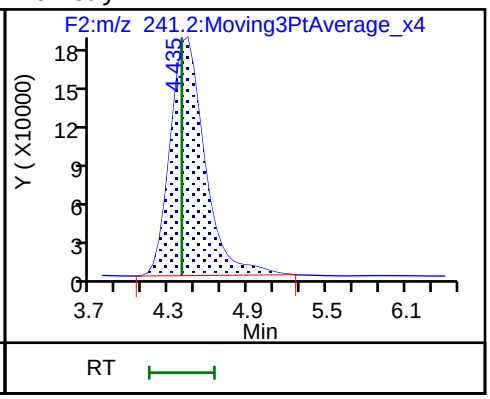
4 RDX



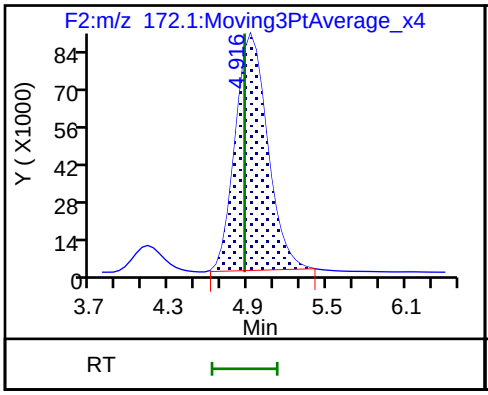
5 1,3,5-Trinitrobenzene



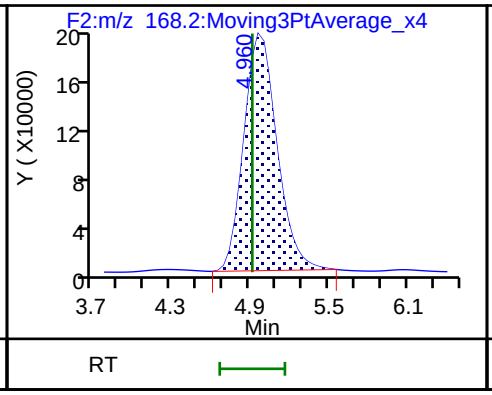
6 Tetryl



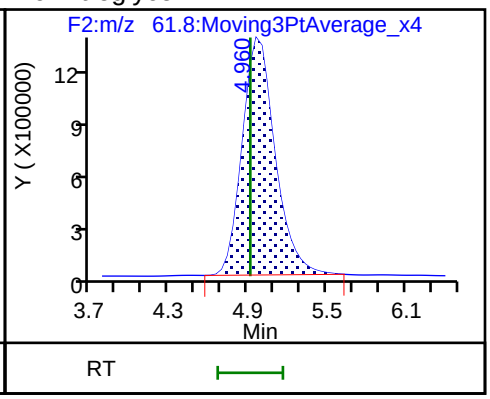
* 7 1,3-Dinitrobenzene-d4



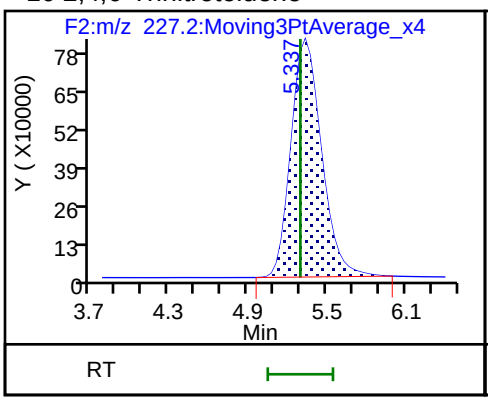
8 1,3-Dinitrobenzene



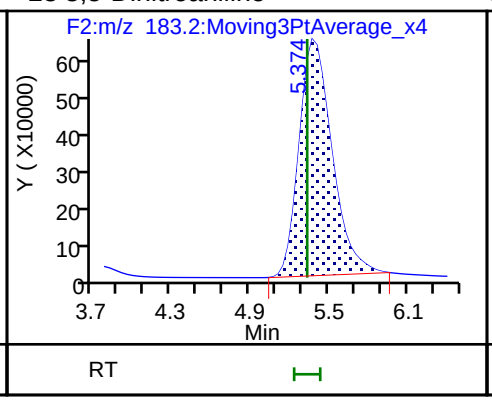
9 Nitroglycerin



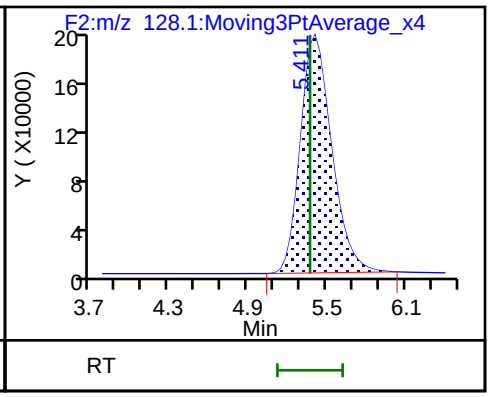
10 2,4,6-Trinitrotoluene



28 3,5-Dinitroaniline

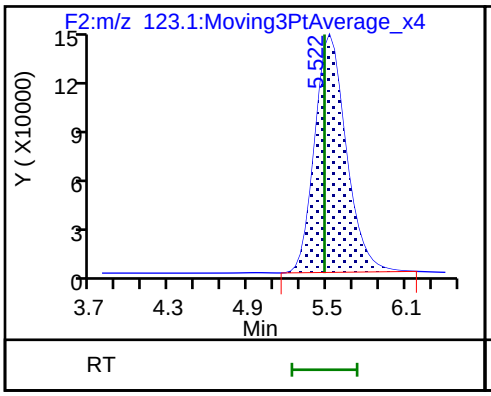


$ 11 Nitrobenzene-d5

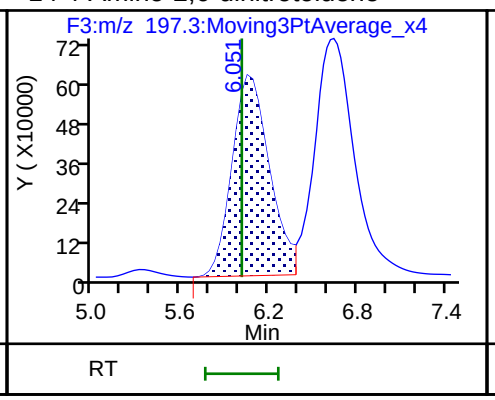


Report Date: 15-Jul-2021 14:57:43 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

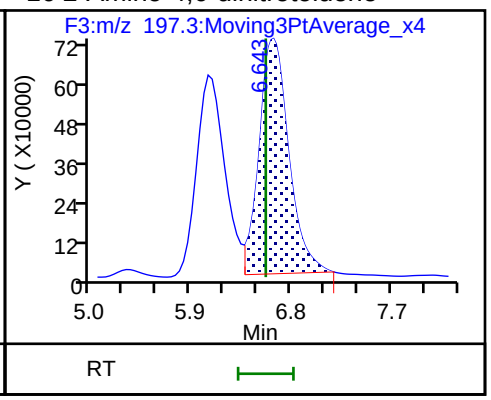
12 Nitrobenzene



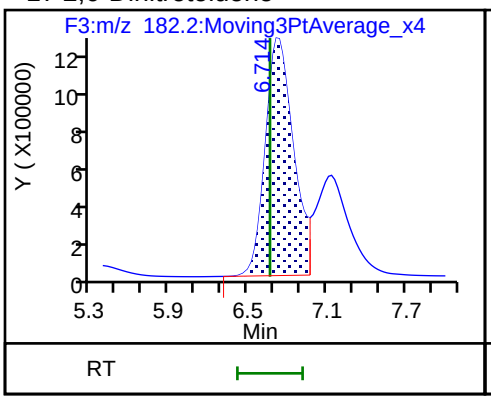
14 4-Amino-2,6-dinitrotoluene



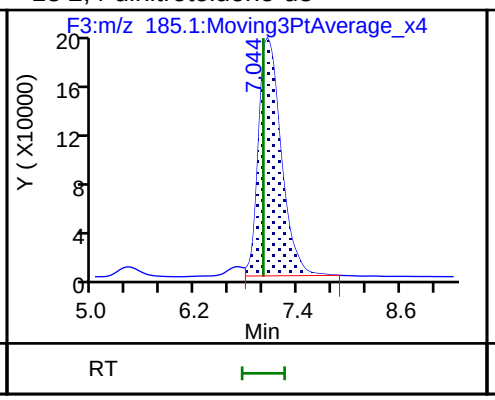
16 2-Amino-4,6-dinitrotoluene



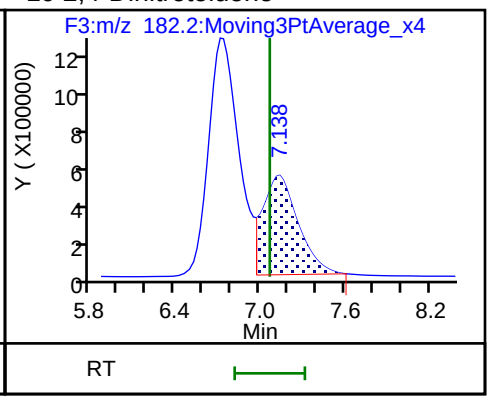
17 2,6-Dinitrotoluene



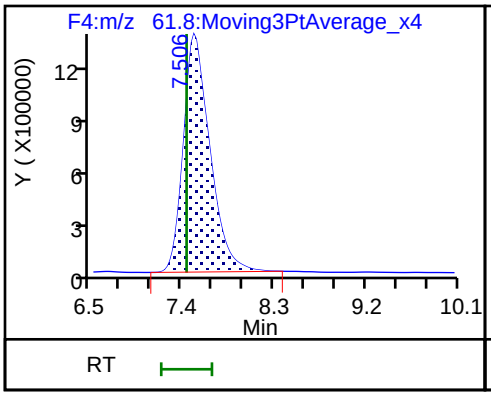
* 18 2,4-dinitrotoluene-d3



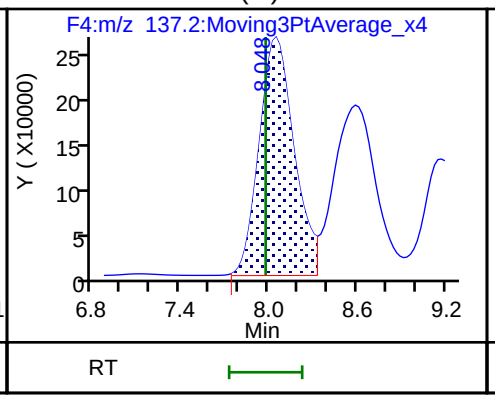
19 2,4-Dinitrotoluene



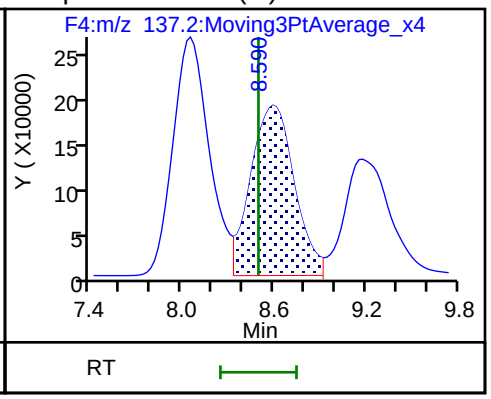
20 PETN



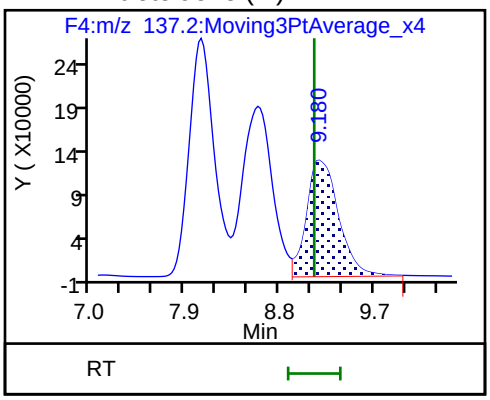
22 o-Nitrotoluene (M)



23 p-Nitrotoluene (M)



24 m-Nitrotoluene (M)



Report Date: 15-Jul-2021 14:57:43 Chrom Revision: 2.3 13-May-2021 07:57:40

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Injection Date: 15-Jul-2021 11:10:54 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: 8321exp4-25 Limit Group: LC - 8321A Expl

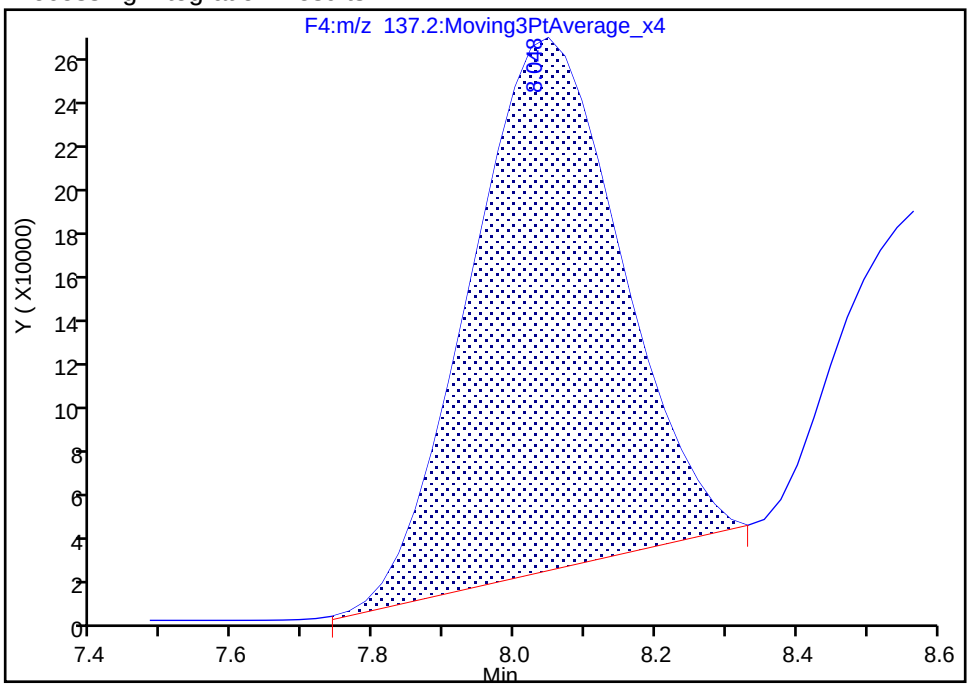
Column: Detector F4:SIR

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

Signal: 1

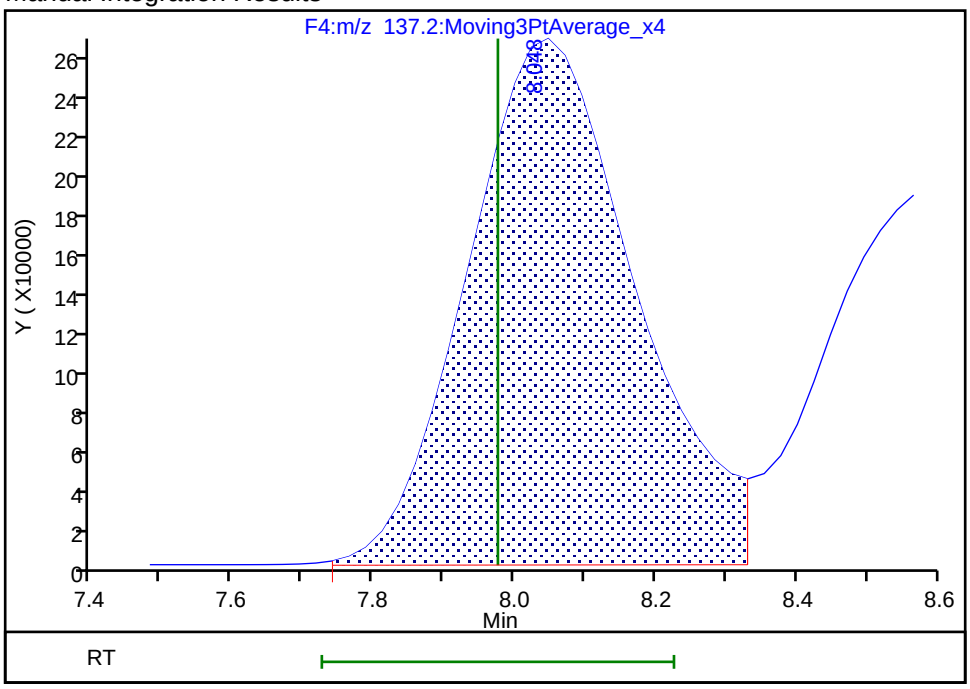
Processing Integration Results

RT: 8.05
Area: 3570895
Amount: 282.2251
Amount Units: ug/l



Manual Integration Results

RT: 8.05
Area: 4336137
Amount: 312.4253
Amount Units: ug/l



Reviewer: meyera, 15-Jul-2021 12:09:41

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 15-Jul-2021 14:57:43 Chrom Revision: 2.3 13-May-2021 07:57:40

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Injection Date: 15-Jul-2021 11:10:54 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: 8321exp4-25 Limit Group: LC - 8321A Expl

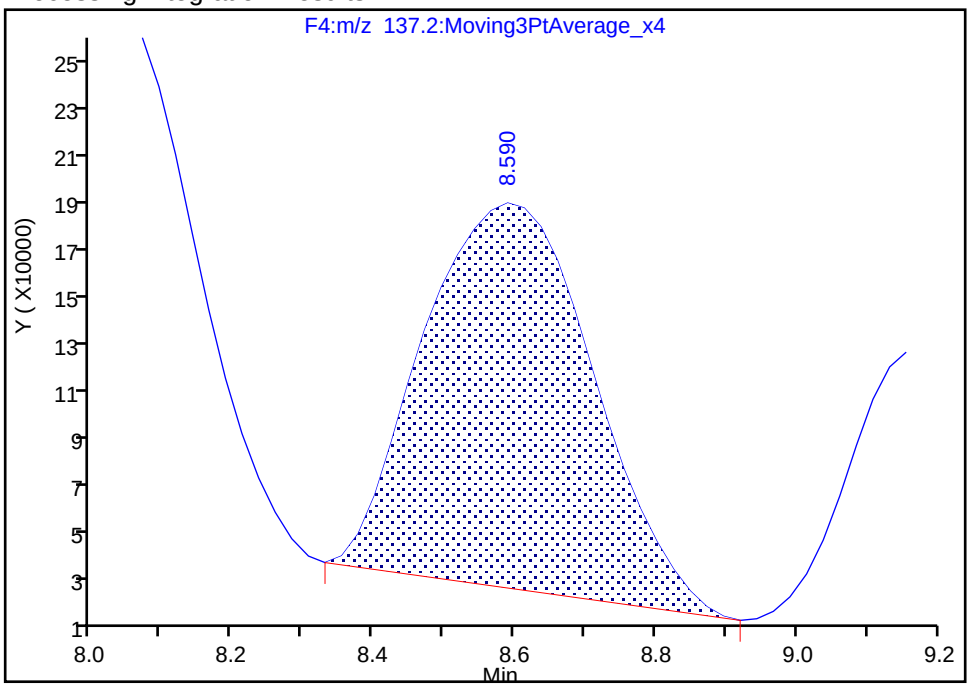
Column: Detector F4:SIR

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

Signal: 1

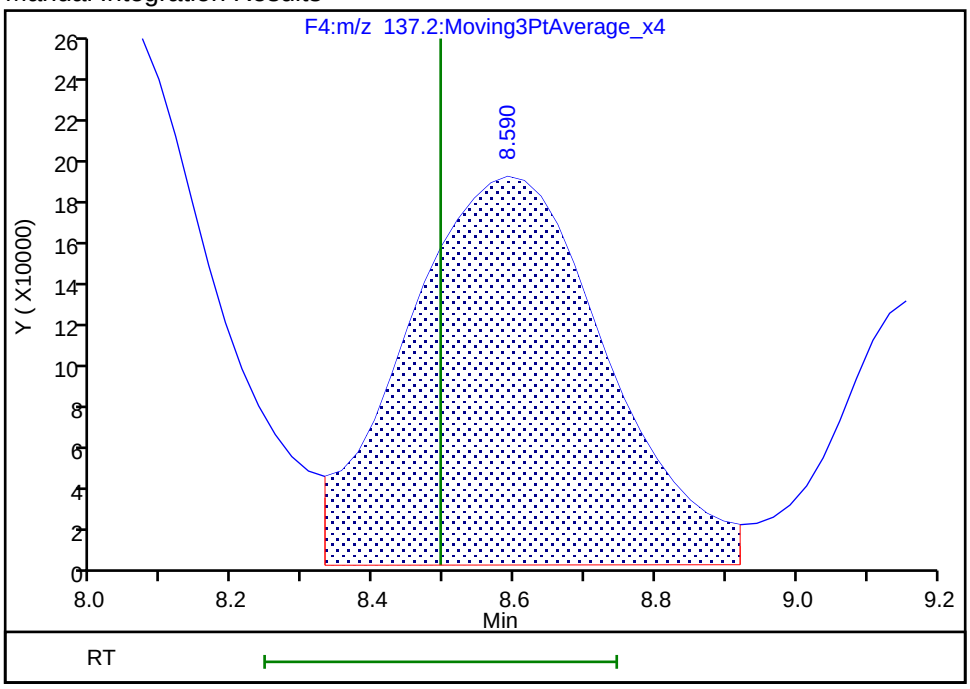
Processing Integration Results

RT: 8.59
Area: 2597975
Amount: 231.3860
Amount Units: ug/l



Manual Integration Results

RT: 8.59
Area: 3692195
Amount: 298.1293
Amount Units: ug/l



Reviewer: meyera, 15-Jul-2021 12:09:41

Audit Action: Assigned New Baseline Audit Reason: Baseline

Report Date: 15-Jul-2021 14:57:43 Chrom Revision: 2.3 13-May-2021 07:57:40

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Injection Date: 15-Jul-2021 11:10:54 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: 8321exp4-25 Limit Group: LC - 8321A Expl

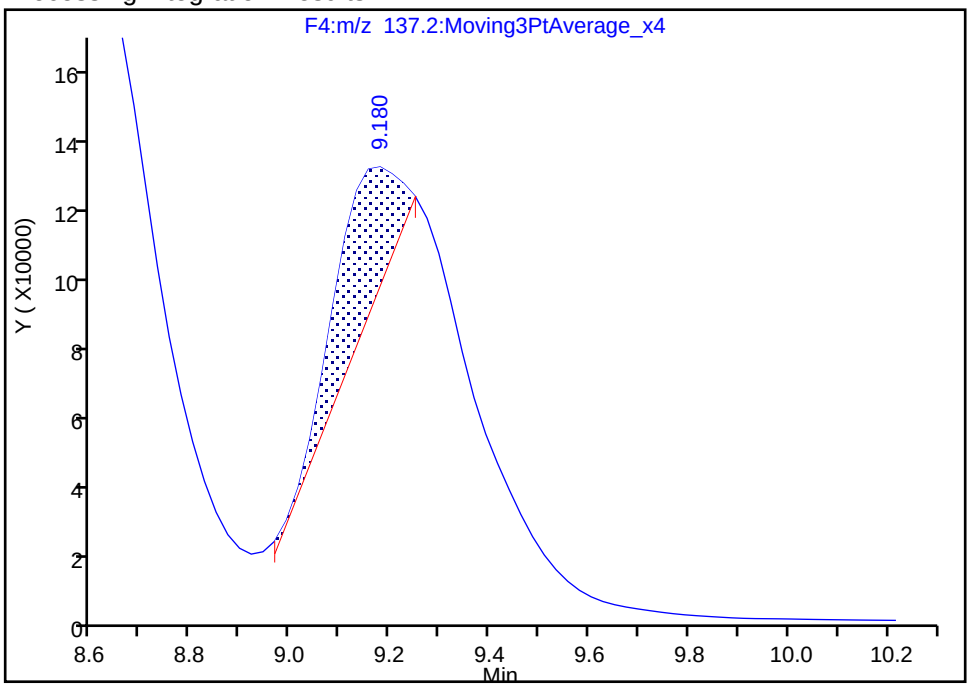
Column: Detector F4:SIR

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

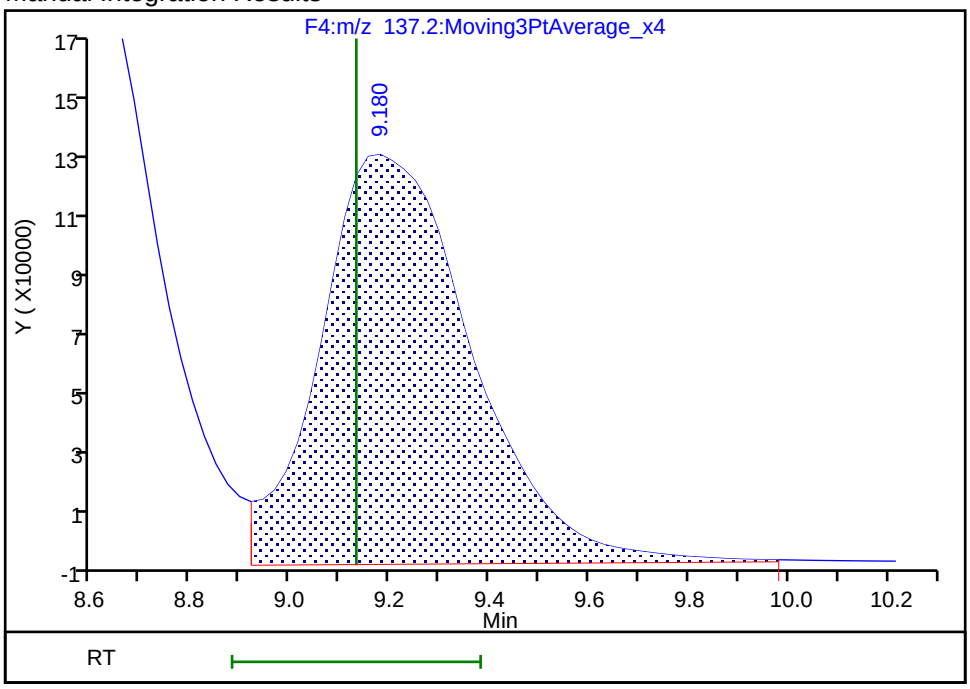
Processing Integration Results

RT: 9.18
Area: 351575
Amount: 66.963072
Amount Units: ug/l



Manual Integration Results

RT: 9.18
Area: 2713490
Amount: 315.2528
Amount Units: ug/l



Reviewer: meyera, 15-Jul-2021 12:09:48

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

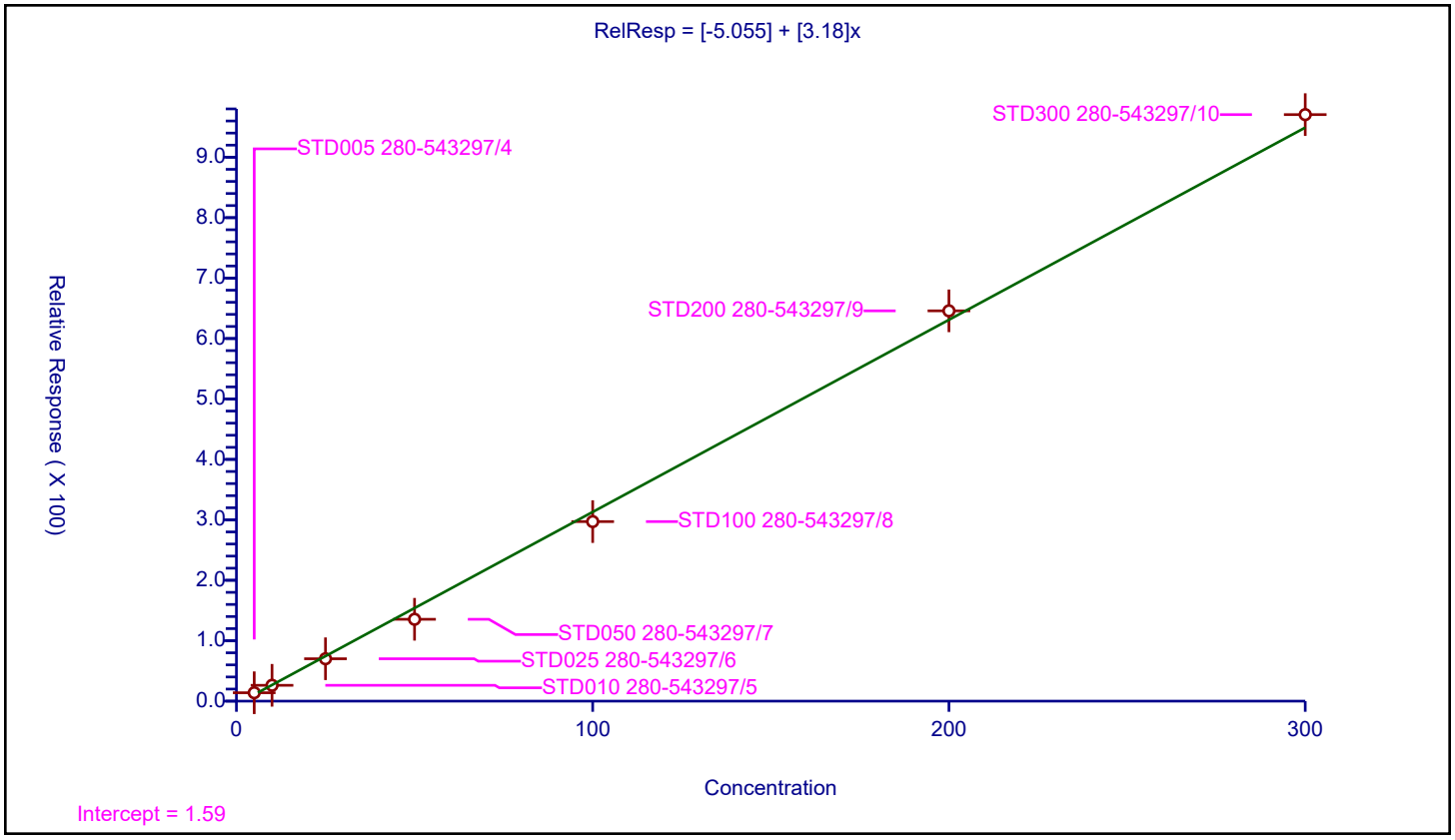
Curve Coefficients

Intercept:	-5.055
Slope:	3.18

Error Coefficients

Standard Error:	469000
Relative Standard Error:	10.7
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-543297/4	5.0	13.916272	120.0	177789.0	2.783254	Y
2	STD010 280-543297/5	10.0	26.182389	120.0	191240.0	2.618239	Y
3	STD025 280-543297/6	25.0	70.127366	120.0	181131.0	2.805095	Y
4	STD050 280-543297/7	50.0	135.436327	120.0	160476.0	2.708727	Y
5	STD100 280-543297/8	100.0	297.100447	120.0	123826.0	2.971004	Y
6	STD200 280-543297/9	200.0	645.829308	120.0	111382.0	3.229147	Y
7	STD300 280-543297/10	300.0	970.505336	120.0	96134.0	3.235018	Y



Calibration / RDX

Curve Type:	Quadratic
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

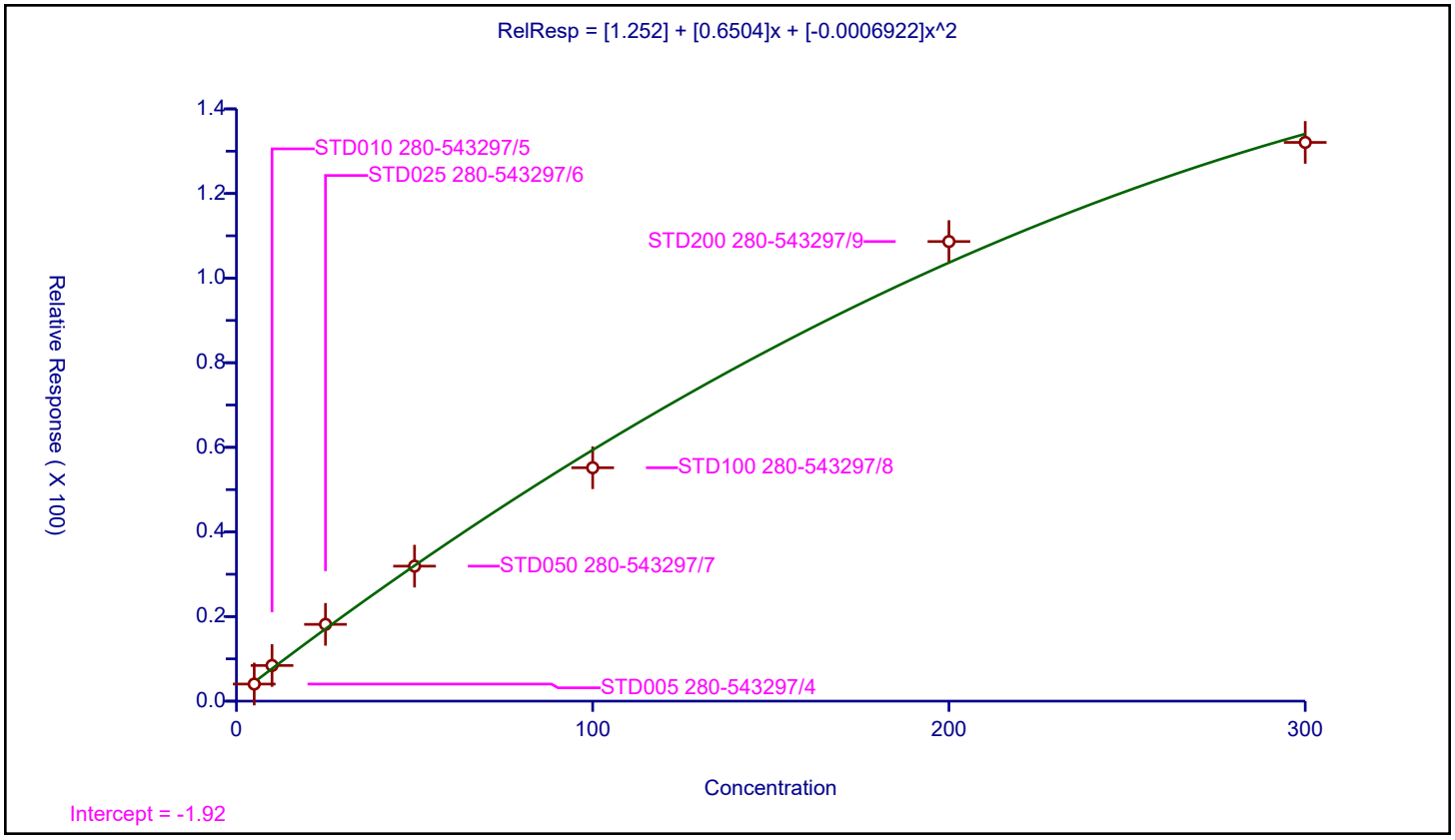
Curve Coefficients

Intercept:	1.252
Slope:	0.6504
Second Order:	-0.0006922

Error Coefficients

Standard Error:	622000
Relative Standard Error:	11.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-543297/4	5.0	4.035819	120.0	775010.0	0.807164	Y
2	STD010 280-543297/5	10.0	8.427271	120.0	837182.0	0.842727	Y
3	STD025 280-543297/6	25.0	18.148618	120.0	803724.0	0.725945	Y
4	STD050 280-543297/7	50.0	31.908409	120.0	817199.0	0.638168	Y
5	STD100 280-543297/8	100.0	55.173731	120.0	827546.0	0.551737	Y
6	STD200 280-543297/9	200.0	108.643656	120.0	754447.0	0.543218	Y
7	STD300 280-543297/10	300.0	132.080294	120.0	847986.0	0.440268	Y



Calibration / 1,3,5-Trinitrobenzene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

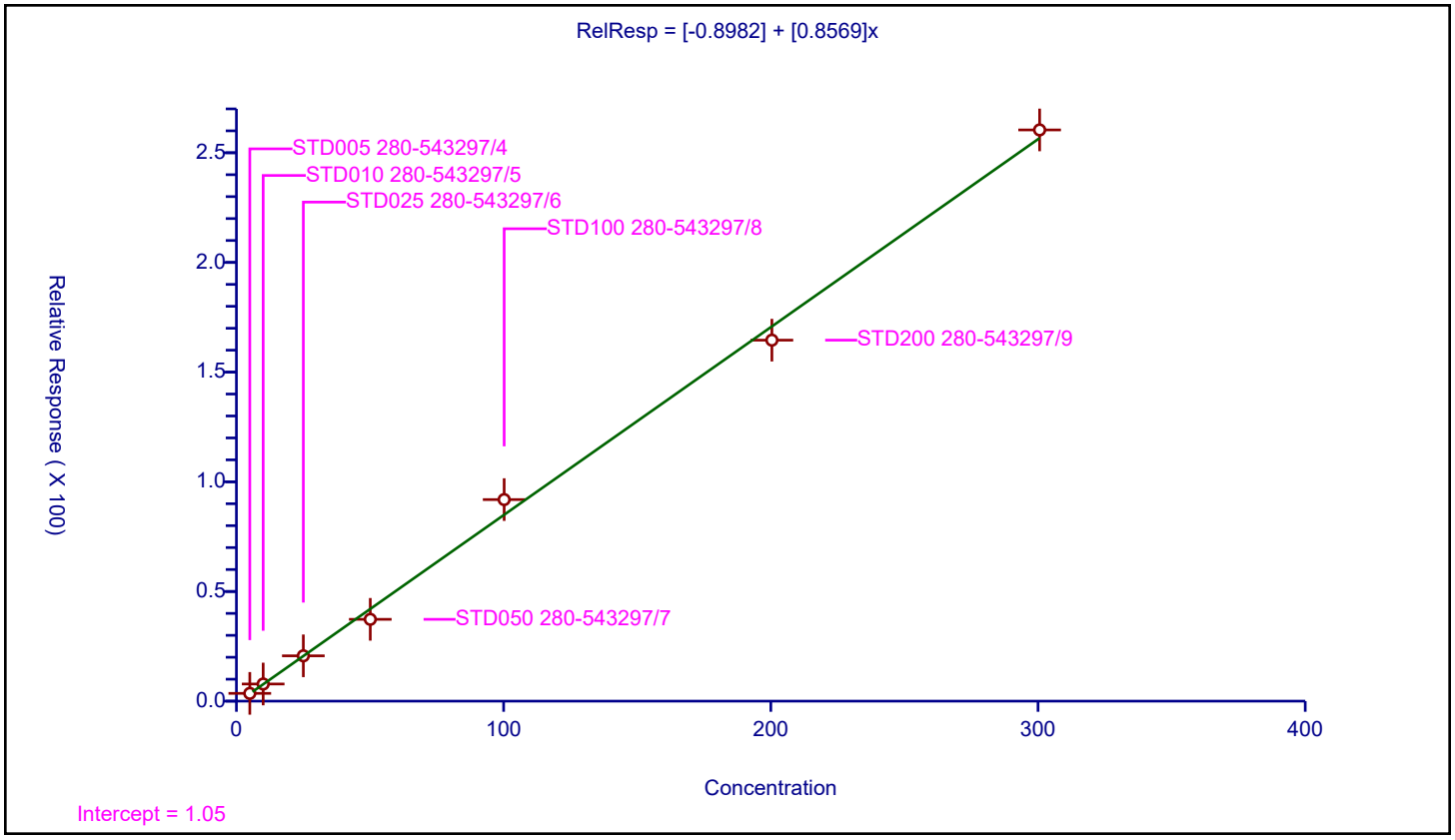
Curve Coefficients

Intercept:	-0.8982
Slope:	0.8569

Error Coefficients

Standard Error:	1710000
Relative Standard Error:	6.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-543297/4	5.01	3.533904	129.36	1666864.0	0.70537	Y
2	STD010 280-543297/5	10.02	7.818588	129.36	1495933.0	0.780298	Y
3	STD025 280-543297/6	25.05	20.658075	129.36	1400919.0	0.824674	Y
4	STD050 280-543297/7	50.1	37.297117	129.36	1431512.0	0.744453	Y
5	STD100 280-543297/8	100.2	91.884373	129.36	1332132.0	0.91701	Y
6	STD200 280-543297/9	200.4	164.563859	129.36	1565823.0	0.821177	Y
7	STD300 280-543297/10	300.6	260.411317	129.36	1530690.0	0.866305	Y



Calibration / Tetryl

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

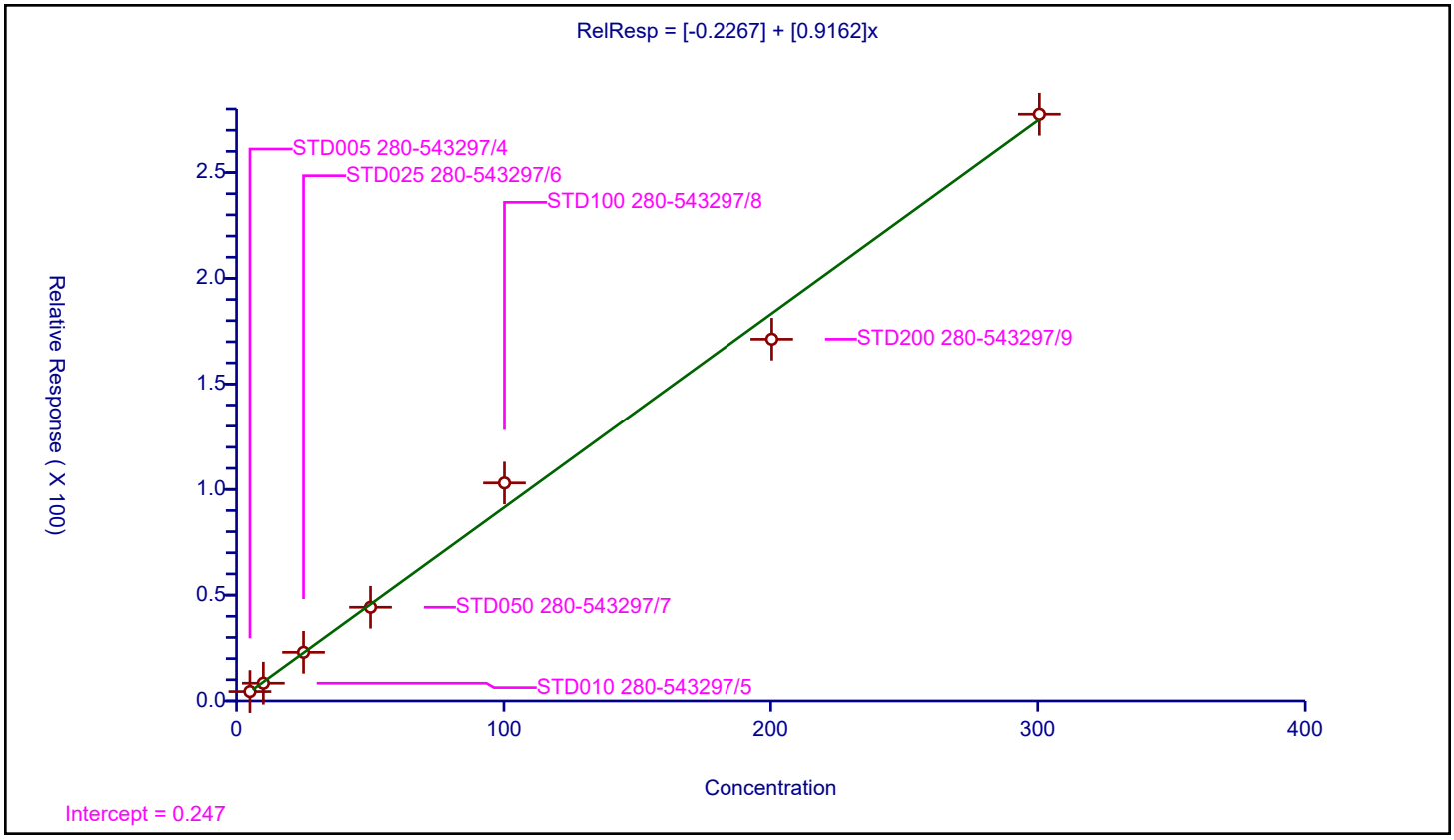
Curve Coefficients

Intercept:	-0.2267
Slope:	0.9162

Error Coefficients

Standard Error:	1820000
Relative Standard Error:	7.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-543297/4	5.01	4.43554	129.36	1666864.0	0.885337	Y
2	STD010 280-543297/5	10.02	8.375225	129.36	1495933.0	0.835851	Y
3	STD025 280-543297/6	25.05	22.969053	129.36	1400919.0	0.916928	Y
4	STD050 280-543297/7	50.1	44.262166	129.36	1431512.0	0.883476	Y
5	STD100 280-543297/8	100.2	103.059601	129.36	1332132.0	1.028539	Y
6	STD200 280-543297/9	200.4	171.219217	129.36	1565823.0	0.854387	Y
7	STD300 280-543297/10	300.6	277.533987	129.36	1530690.0	0.923267	Y



Calibration / 1,3-Dinitrobenzene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

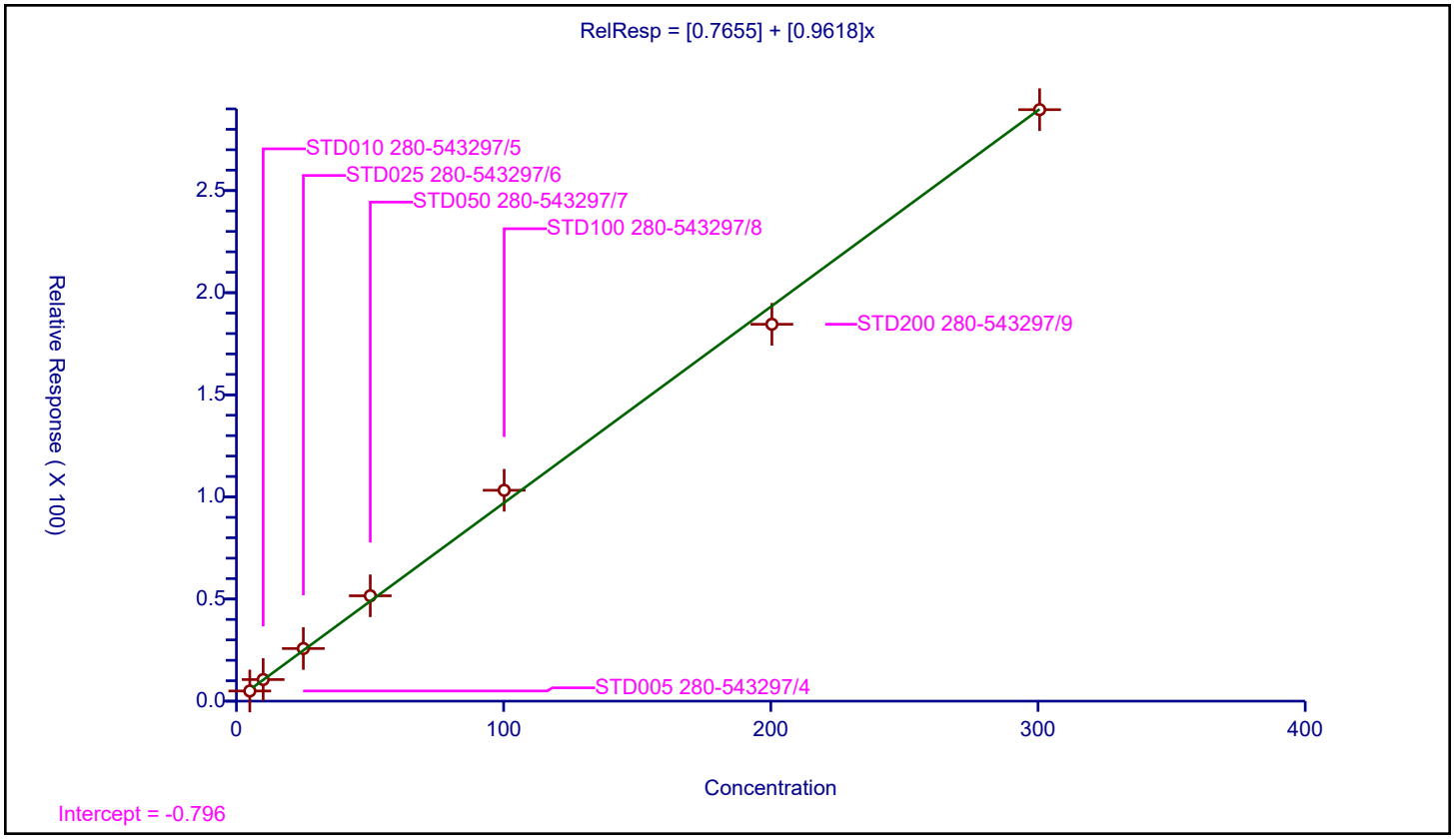
Curve Coefficients

Intercept:	0.7655
Slope:	0.9618

Error Coefficients

Standard Error:	1910000
Relative Standard Error:	7.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-543297/4	5.01	4.979951	129.36	1666864.0	0.994002	Y
2	STD010 280-543297/5	10.02	10.567612	129.36	1495933.0	1.054652	Y
3	STD025 280-543297/6	25.05	25.759457	129.36	1400919.0	1.028322	Y
4	STD050 280-543297/7	50.1	51.58886	129.36	1431512.0	1.029718	Y
5	STD100 280-543297/8	100.2	103.255369	129.36	1332132.0	1.030493	Y
6	STD200 280-543297/9	200.4	184.550917	129.36	1565823.0	0.920913	Y
7	STD300 280-543297/10	300.6	289.619807	129.36	1530690.0	0.963472	Y



Calibration / Nitroglycerin

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

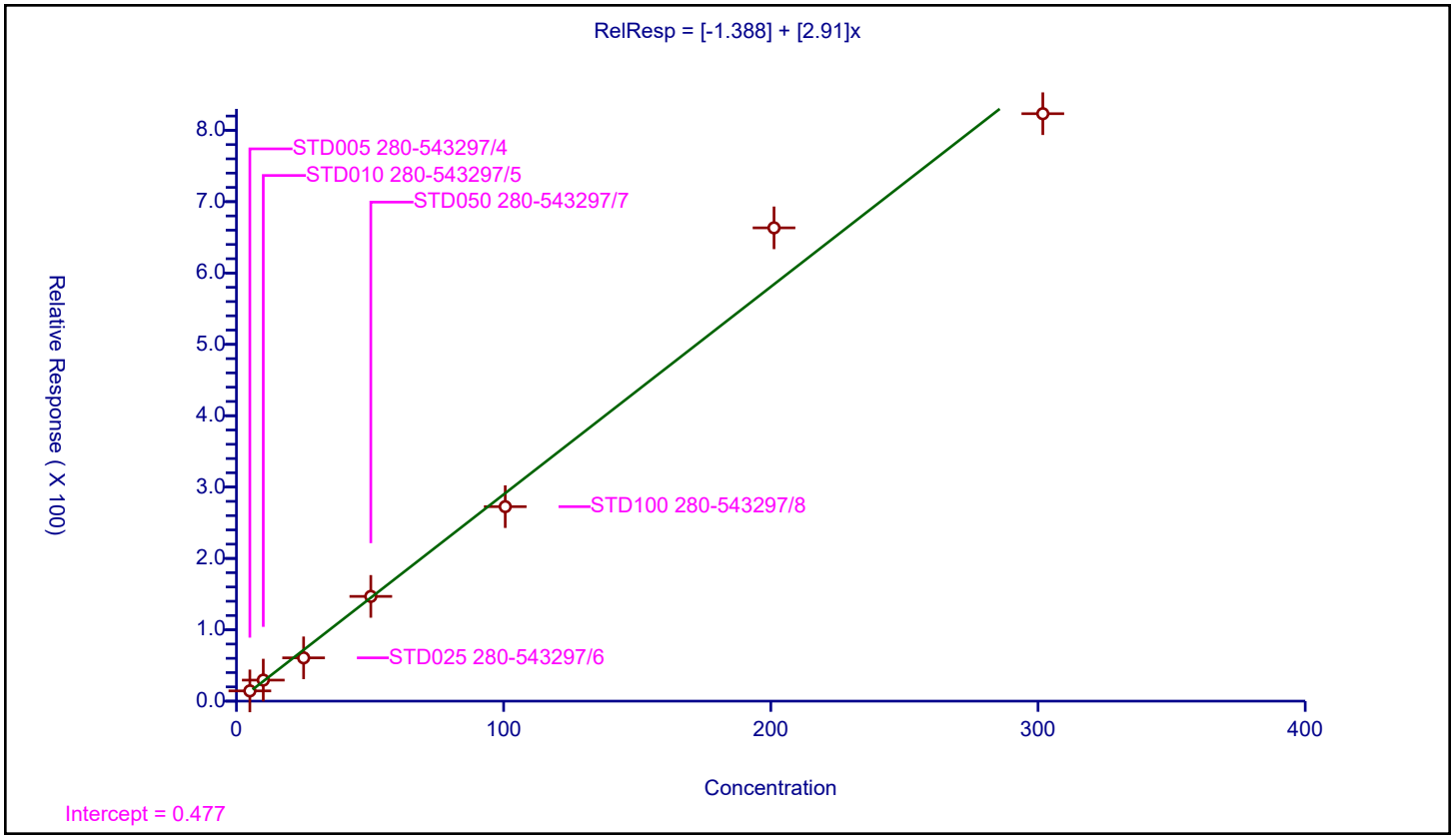
Curve Coefficients

Intercept:	-1.388
Slope:	2.91

Error Coefficients

Standard Error:	14500000
Relative Standard Error:	10.8
Correlation Coefficient:	0.988
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-543297/4	5.03	14.364911	120.0	3965112.0	2.855847	Y
2	STD010 280-543297/5	10.06	29.466579	120.0	4054789.0	2.929083	Y
3	STD025 280-543297/6	25.15	60.682148	120.0	3912878.0	2.412809	Y
4	STD050 280-543297/7	50.3	146.793478	120.0	3709749.0	2.918359	Y
5	STD100 280-543297/8	100.6	272.572777	120.0	3684187.0	2.709471	Y
6	STD200 280-543297/9	201.2	663.296916	120.0	3462290.0	3.296704	Y
7	STD300 280-543297/10	301.8	823.268154	120.0	3521242.0	2.72786	Y



Calibration / 2,4,6-Trinitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

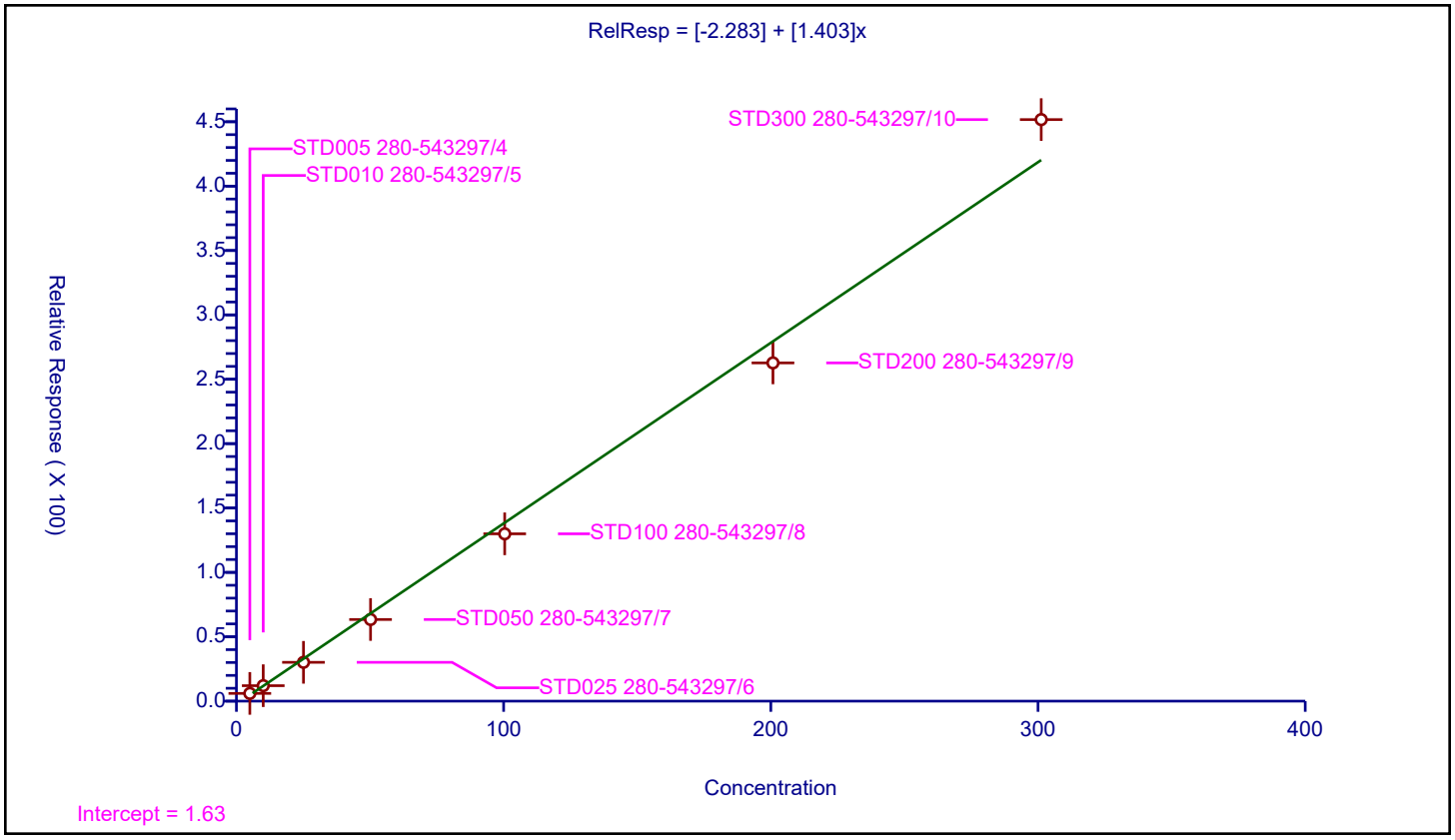
Curve Coefficients

Intercept:	-2.283
Slope:	1.403

Error Coefficients

Standard Error:	7130000
Relative Standard Error:	10.5
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-543297/4	5.02	6.007245	120.0	3965112.0	1.196662	Y
2	STD010 280-543297/5	10.04	12.017849	120.0	4054789.0	1.196997	Y
3	STD025 280-543297/6	25.1	30.160255	120.0	3912878.0	1.201604	Y
4	STD050 280-543297/7	50.2	63.405044	120.0	3709749.0	1.263049	Y
5	STD100 280-543297/8	100.4	129.959104	120.0	3684187.0	1.294413	Y
6	STD200 280-543297/9	200.8	262.702778	120.0	3462290.0	1.308281	Y
7	STD300 280-543297/10	301.2	451.68866	120.0	3521242.0	1.49963	Y



Calibration / Nitrobenzene-d5

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

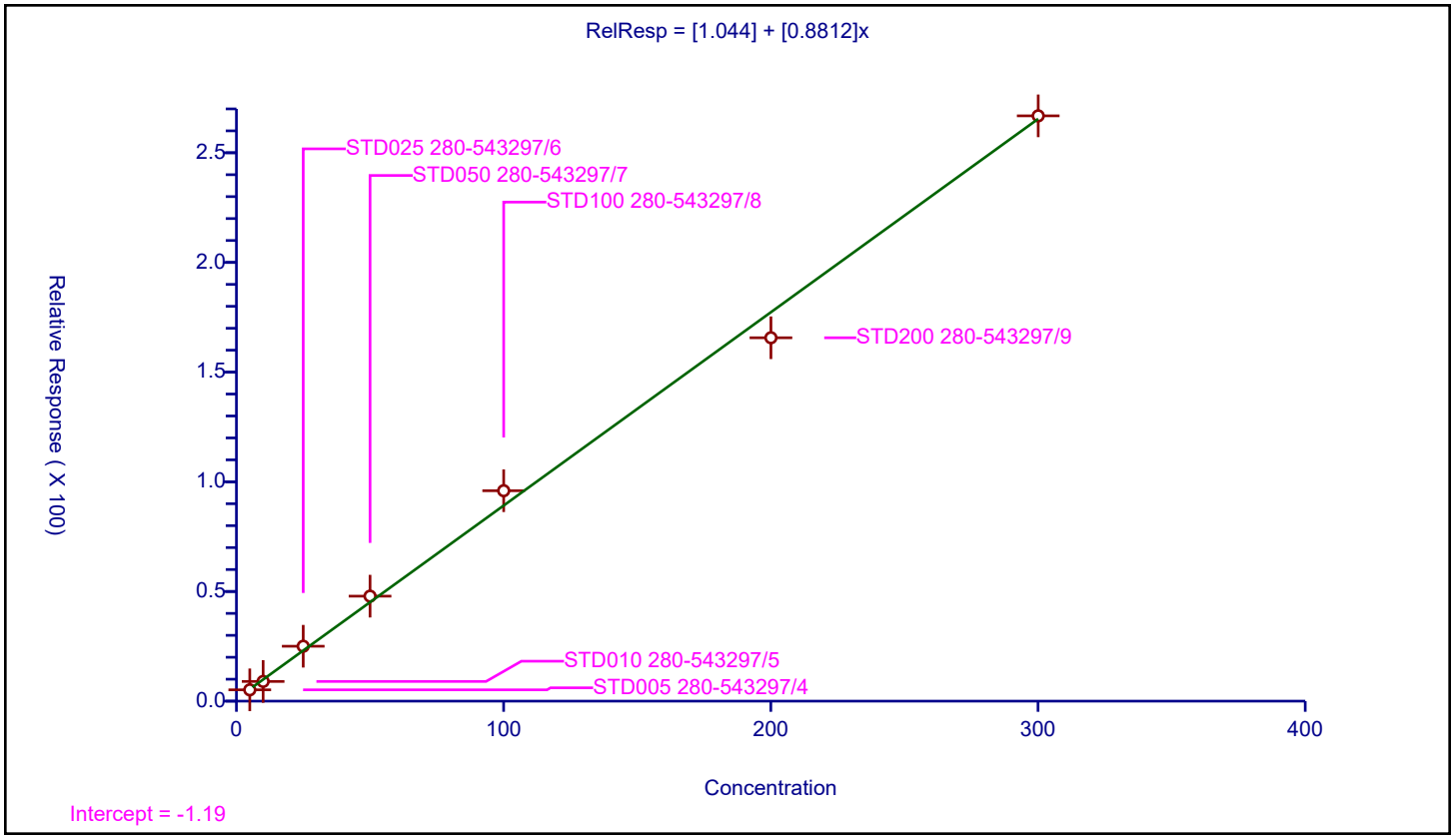
Curve Coefficients

Intercept:	1.044
Slope:	0.8812

Error Coefficients

Standard Error:	1750000
Relative Standard Error:	8.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-543297/4	5.001233	5.157361	129.36	1666864.0	1.031218	Y
2	STD010 280-543297/5	10.002465	8.977087	129.36	1495933.0	0.897487	Y
3	STD025 280-543297/6	25.006163	25.028406	129.36	1400919.0	1.00089	Y
4	STD050 280-543297/7	50.012325	47.864064	129.36	1431512.0	0.957045	Y
5	STD100 280-543297/8	100.02465	95.931231	129.36	1332132.0	0.959076	Y
6	STD200 280-543297/9	200.0493	165.66784	129.36	1565823.0	0.828135	Y
7	STD300 280-543297/10	300.07395	266.831357	129.36	1530690.0	0.889219	Y



Calibration / Nitrobenzene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

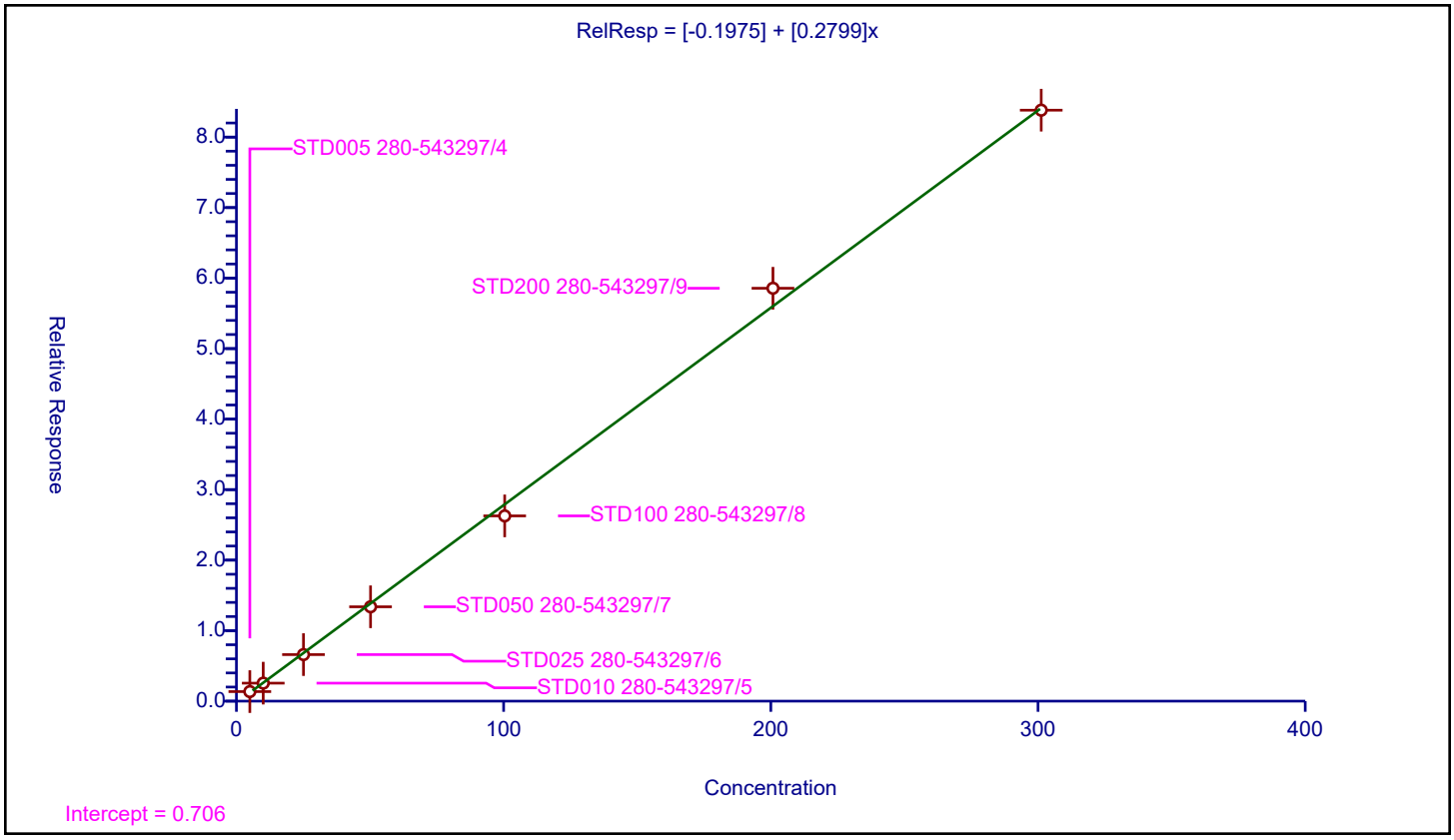
Curve Coefficients

Intercept:	-0.1975
Slope:	0.2799

Error Coefficients

Standard Error:	1400000
Relative Standard Error:	6.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-543297/4	5.02	1.353495	120.0	3965112.0	0.269621	Y
2	STD010 280-543297/5	10.04	2.552656	120.0	4054789.0	0.254249	Y
3	STD025 280-543297/6	25.1	6.601862	120.0	3912878.0	0.263022	Y
4	STD050 280-543297/7	50.2	13.383525	120.0	3709749.0	0.266604	Y
5	STD100 280-543297/8	100.4	26.276549	120.0	3684187.0	0.261719	Y
6	STD200 280-543297/9	200.8	58.563136	120.0	3462290.0	0.291649	Y
7	STD300 280-543297/10	301.2	83.817085	120.0	3521242.0	0.278277	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

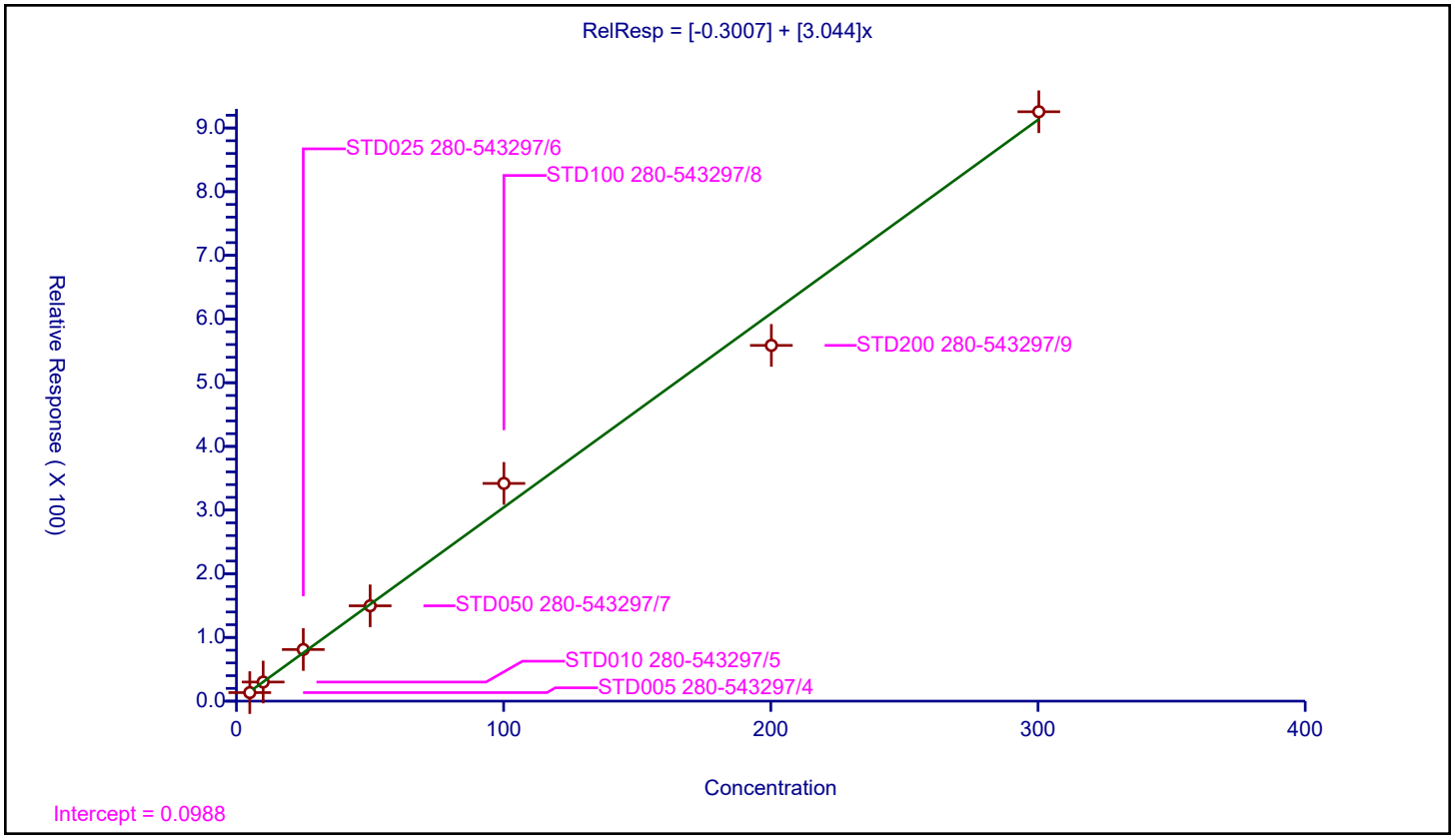
Curve Coefficients

Intercept:	-0.3007
Slope:	3.044

Error Coefficients

Standard Error:	6030000
Relative Standard Error:	8.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-543297/4	5.005	13.397109	129.36	1666864.0	2.676745	Y
2	STD010 280-543297/5	10.01	29.998423	129.36	1495933.0	2.996845	Y
3	STD025 280-543297/6	25.025	81.089032	129.36	1400919.0	3.240321	Y
4	STD050 280-543297/7	50.05	149.724066	129.36	1431512.0	2.99149	Y
5	STD100 280-543297/8	100.1	341.884703	129.36	1332132.0	3.415432	Y
6	STD200 280-543297/9	200.2	558.612028	129.36	1565823.0	2.79027	Y
7	STD300 280-543297/10	300.3	925.527028	129.36	1530690.0	3.082008	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

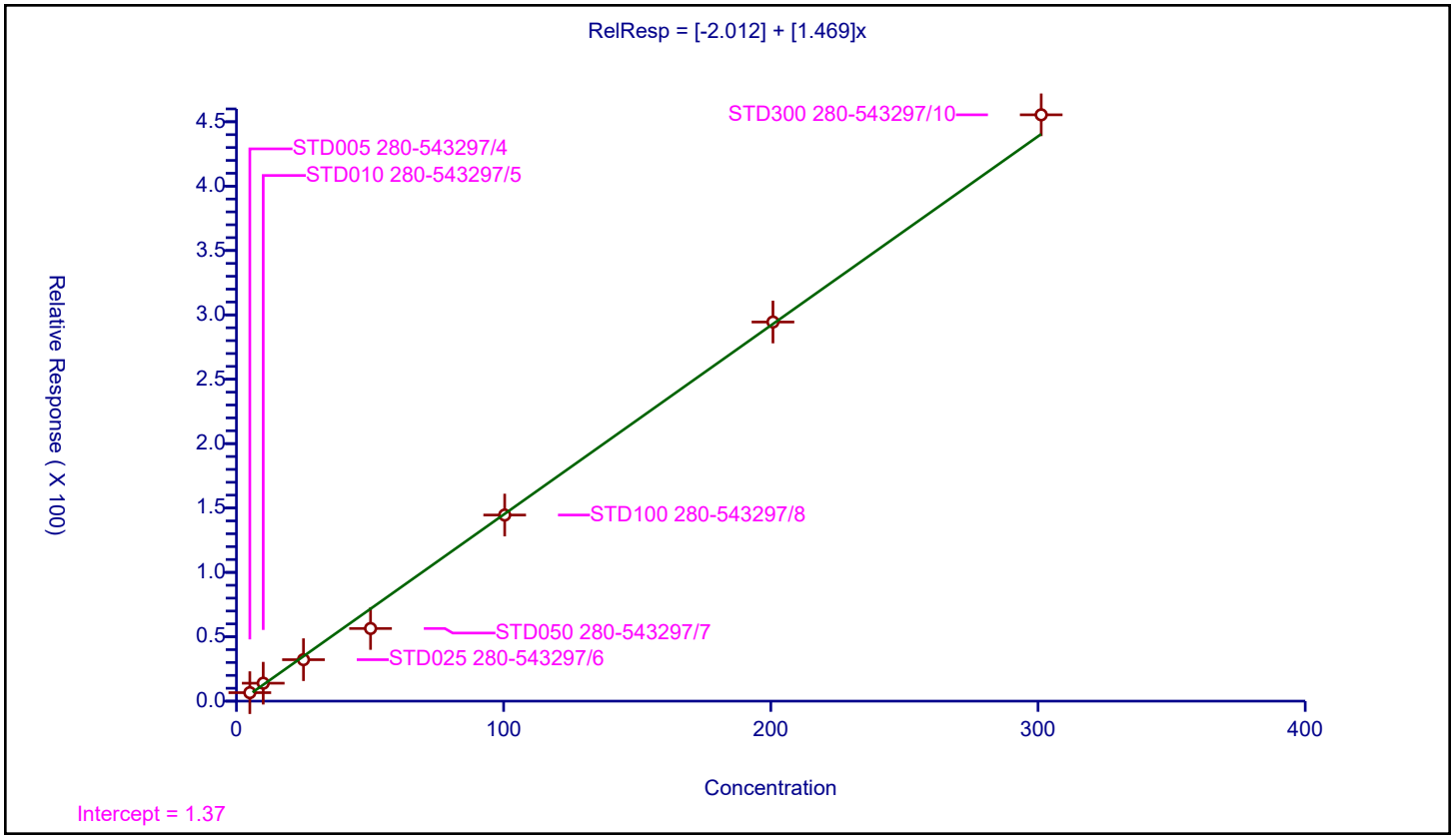
Curve Coefficients

Intercept:	-2.012
Slope:	1.469

Error Coefficients

Standard Error:	7410000
Relative Standard Error:	12.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-543297/4	5.02	6.58105	120.0	3965112.0	1.310966	Y
2	STD010 280-543297/5	10.04	13.941973	120.0	4054789.0	1.388643	Y
3	STD025 280-543297/6	25.1	32.207189	120.0	3912878.0	1.283155	Y
4	STD050 280-543297/7	50.2	56.422157	120.0	3709749.0	1.123947	Y
5	STD100 280-543297/8	100.4	144.54592	120.0	3684187.0	1.4397	Y
6	STD200 280-543297/9	200.8	294.468193	120.0	3462290.0	1.466475	Y
7	STD300 280-543297/10	301.2	455.402509	120.0	3521242.0	1.511961	Y



Calibration / 2,6-Dinitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

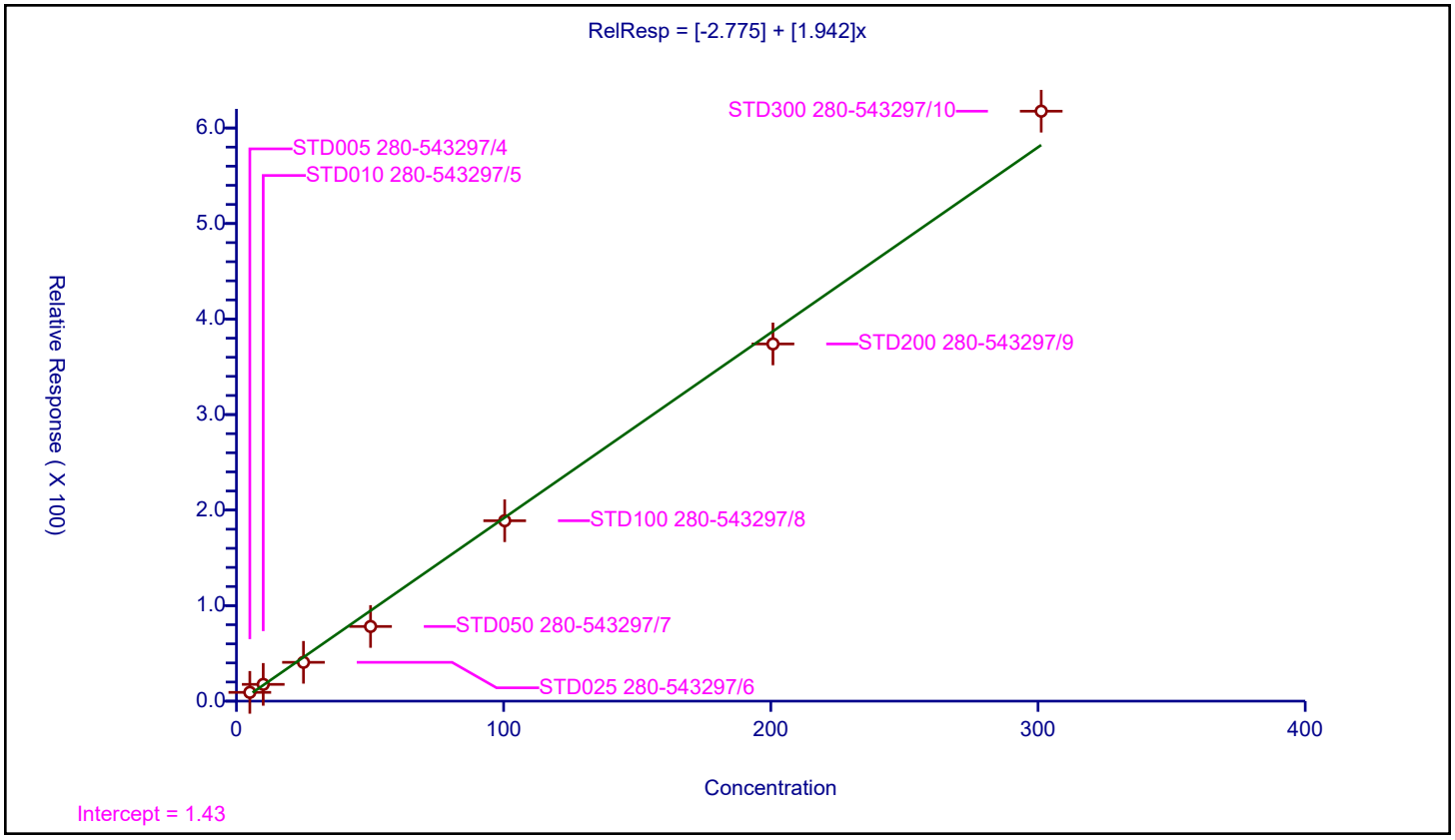
Curve Coefficients

Intercept:	-2.775
Slope:	1.942

Error Coefficients

Standard Error:	9860000
Relative Standard Error:	14.1
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-543297/4	5.02	9.183388	120.0	3965112.0	1.82936	Y
2	STD010 280-543297/5	10.04	17.564593	120.0	4054789.0	1.749461	Y
3	STD025 280-543297/6	25.1	40.635941	120.0	3912878.0	1.618962	Y
4	STD050 280-543297/7	50.2	78.179661	120.0	3709749.0	1.557364	Y
5	STD100 280-543297/8	100.4	188.871911	120.0	3684187.0	1.881194	Y
6	STD200 280-543297/9	200.8	373.927741	120.0	3462290.0	1.86219	Y
7	STD300 280-543297/10	301.2	617.614796	120.0	3521242.0	2.050514	Y



Calibration / 2,4-Dinitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

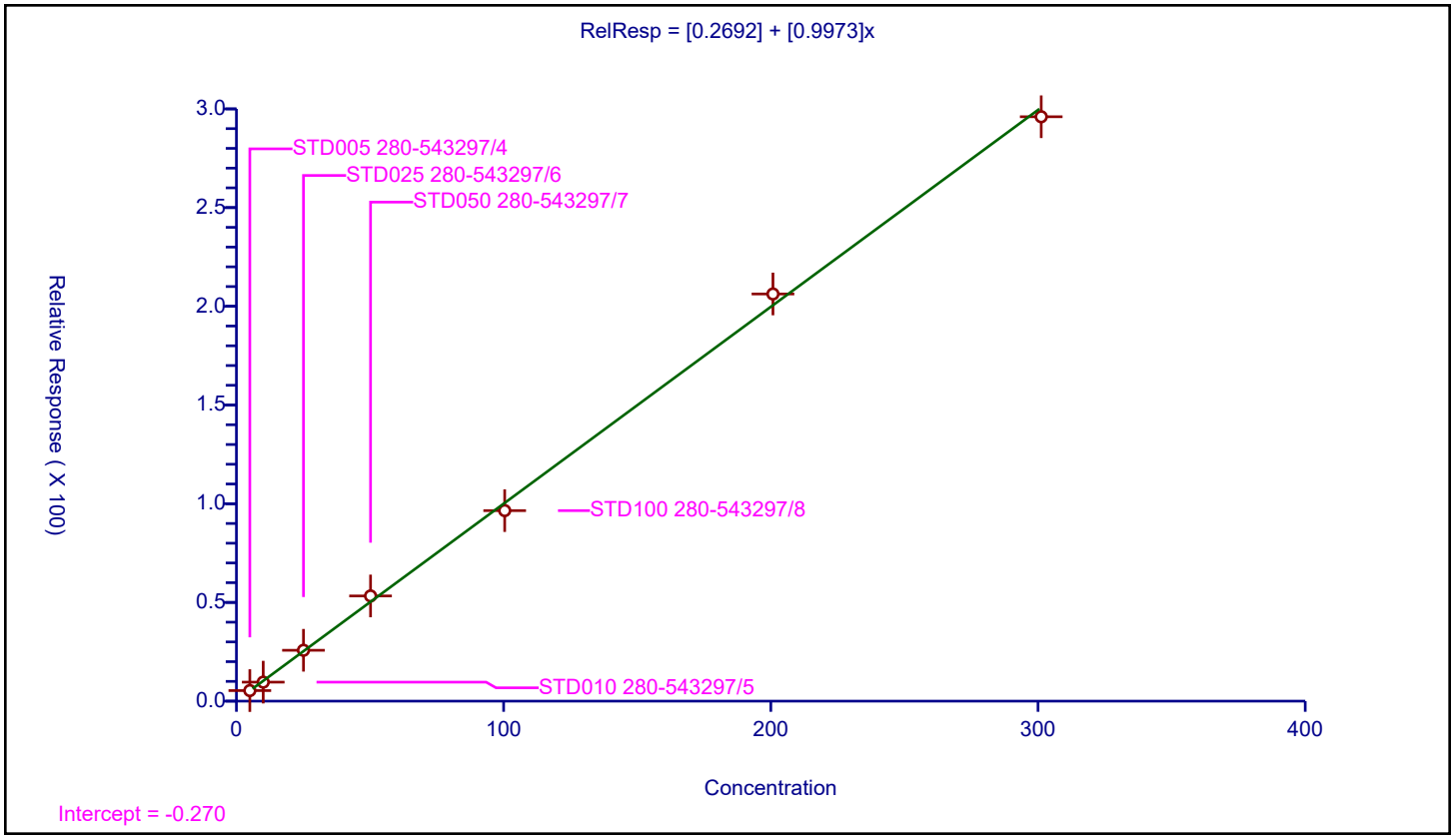
Curve Coefficients

Intercept:	0.2692
Slope:	0.9973

Error Coefficients

Standard Error:	4960000
Relative Standard Error:	4.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-543297/4	5.02	5.349186	120.0	3965112.0	1.065575	Y
2	STD010 280-543297/5	10.04	9.62089	120.0	4054789.0	0.958256	Y
3	STD025 280-543297/6	25.1	25.756673	120.0	3912878.0	1.026162	Y
4	STD050 280-543297/7	50.2	53.28684	120.0	3709749.0	1.061491	Y
5	STD100 280-543297/8	100.4	96.511062	120.0	3684187.0	0.961266	Y
6	STD200 280-543297/9	200.8	206.2421	120.0	3462290.0	1.027102	Y
7	STD300 280-543297/10	301.2	296.017337	120.0	3521242.0	0.982793	Y



Calibration / PETN

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

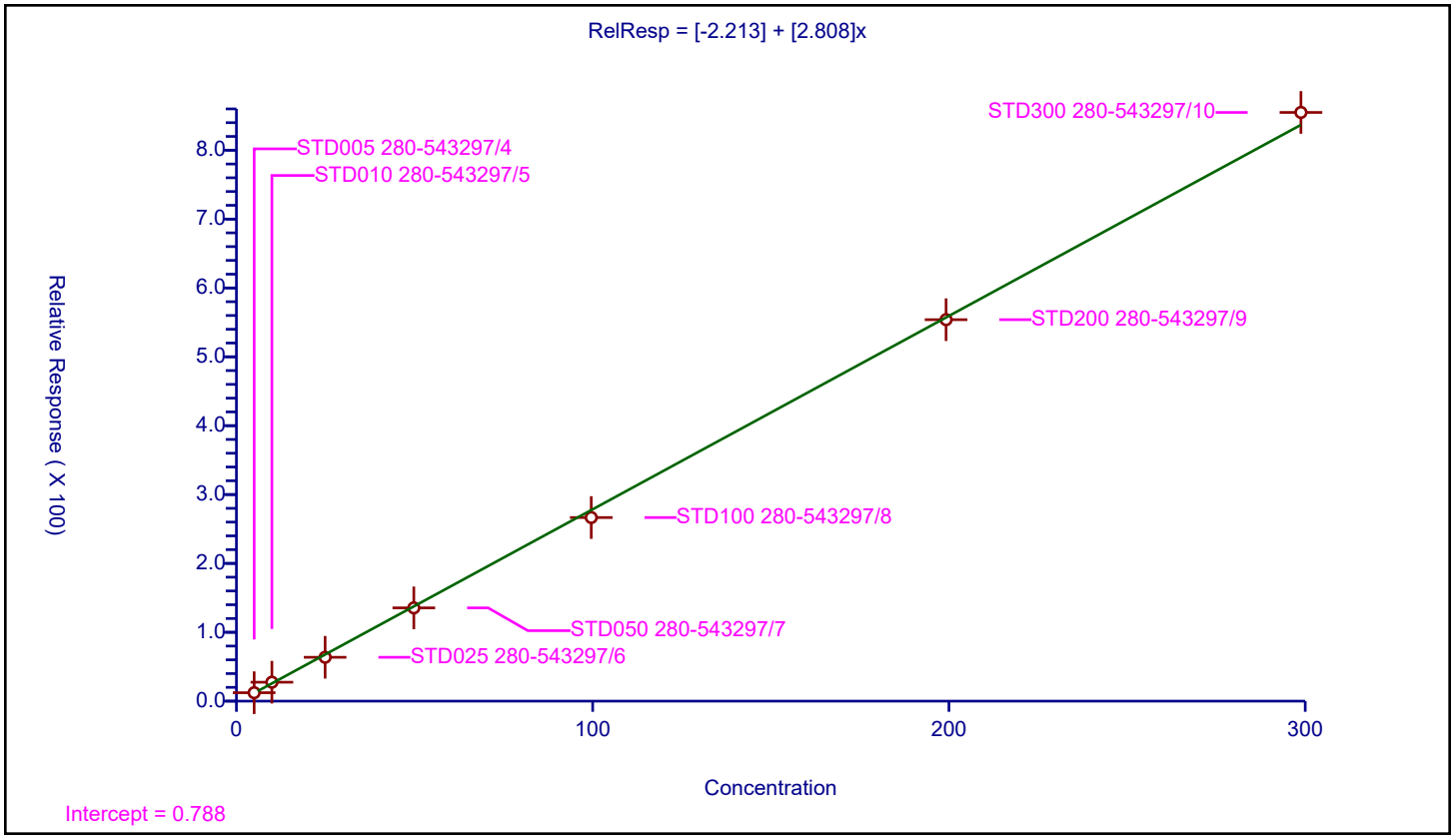
Curve Coefficients

Intercept:	-2.213
Slope:	2.808

Error Coefficients

Standard Error:	14000000
Relative Standard Error:	4.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-543297/4	4.98	12.25636	120.0	3965112.0	2.461116	Y
2	STD010 280-543297/5	9.96	27.469267	120.0	4054789.0	2.757958	Y
3	STD025 280-543297/6	24.9	63.695919	120.0	3912878.0	2.558069	Y
4	STD050 280-543297/7	49.8	135.421076	120.0	3709749.0	2.719299	Y
5	STD100 280-543297/8	99.6	266.621385	120.0	3684187.0	2.676922	Y
6	STD200 280-543297/9	199.2	553.91769	120.0	3462290.0	2.780711	Y
7	STD300 280-543297/10	298.8	854.858564	120.0	3521242.0	2.860972	Y



Calibration / o-Nitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

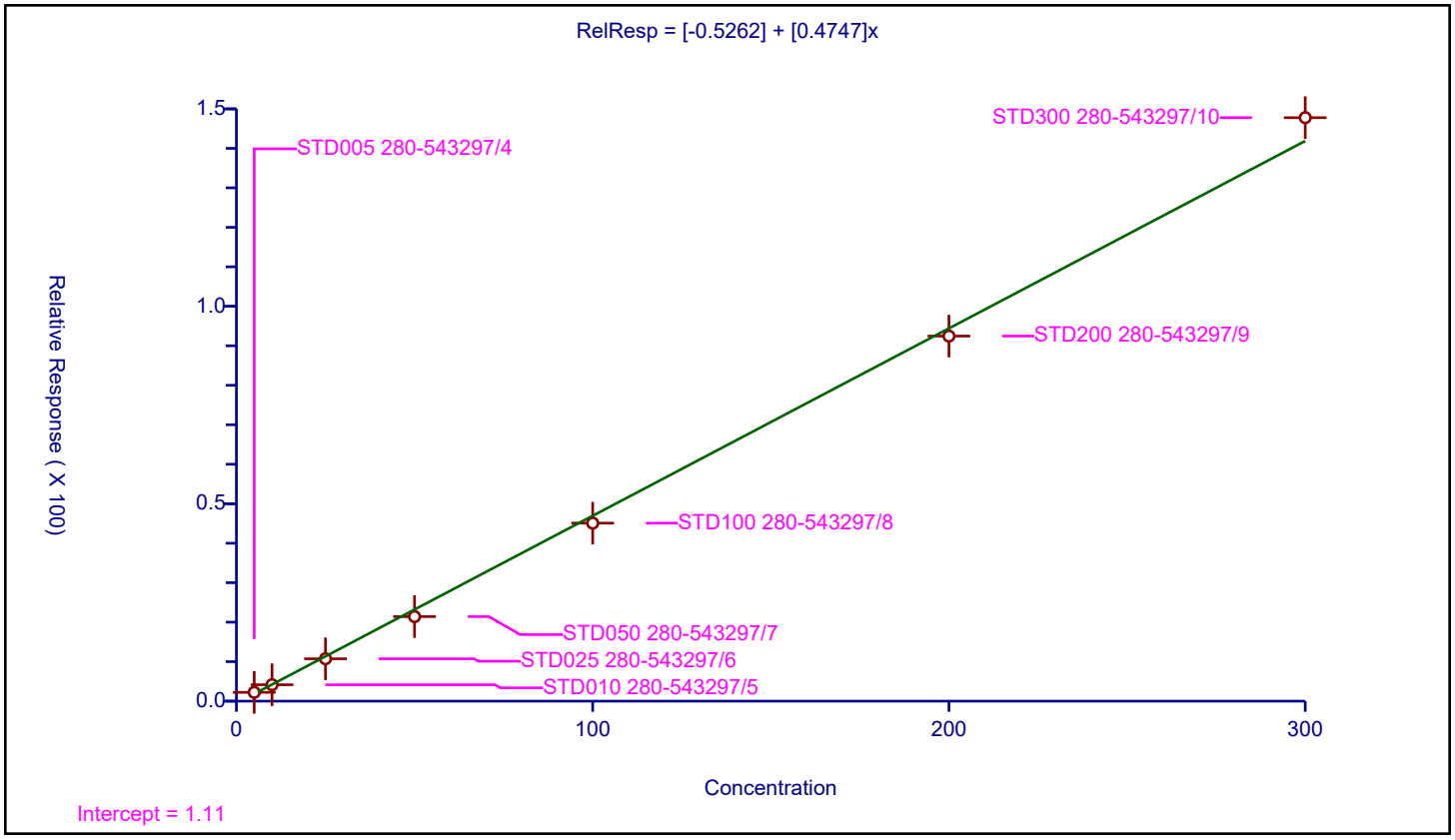
Curve Coefficients

Intercept:	-0.5262
Slope:	0.4747

Error Coefficients

Standard Error:	2380000
Relative Standard Error:	8.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-543297/4	5.0	2.227004	120.0	3965112.0	0.445401	Y
2	STD010 280-543297/5	10.0	4.150381	120.0	4054789.0	0.415038	Y
3	STD025 280-543297/6	25.0	10.728635	120.0	3912878.0	0.429145	Y
4	STD050 280-543297/7	50.0	21.413168	120.0	3709749.0	0.428263	Y
5	STD100 280-543297/8	100.0	45.087776	120.0	3684187.0	0.450878	Y
6	STD200 280-543297/9	200.0	92.456935	120.0	3462290.0	0.462285	Y
7	STD300 280-543297/10	300.0	147.770713	120.0	3521242.0	0.492569	Y



Calibration / p-Nitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

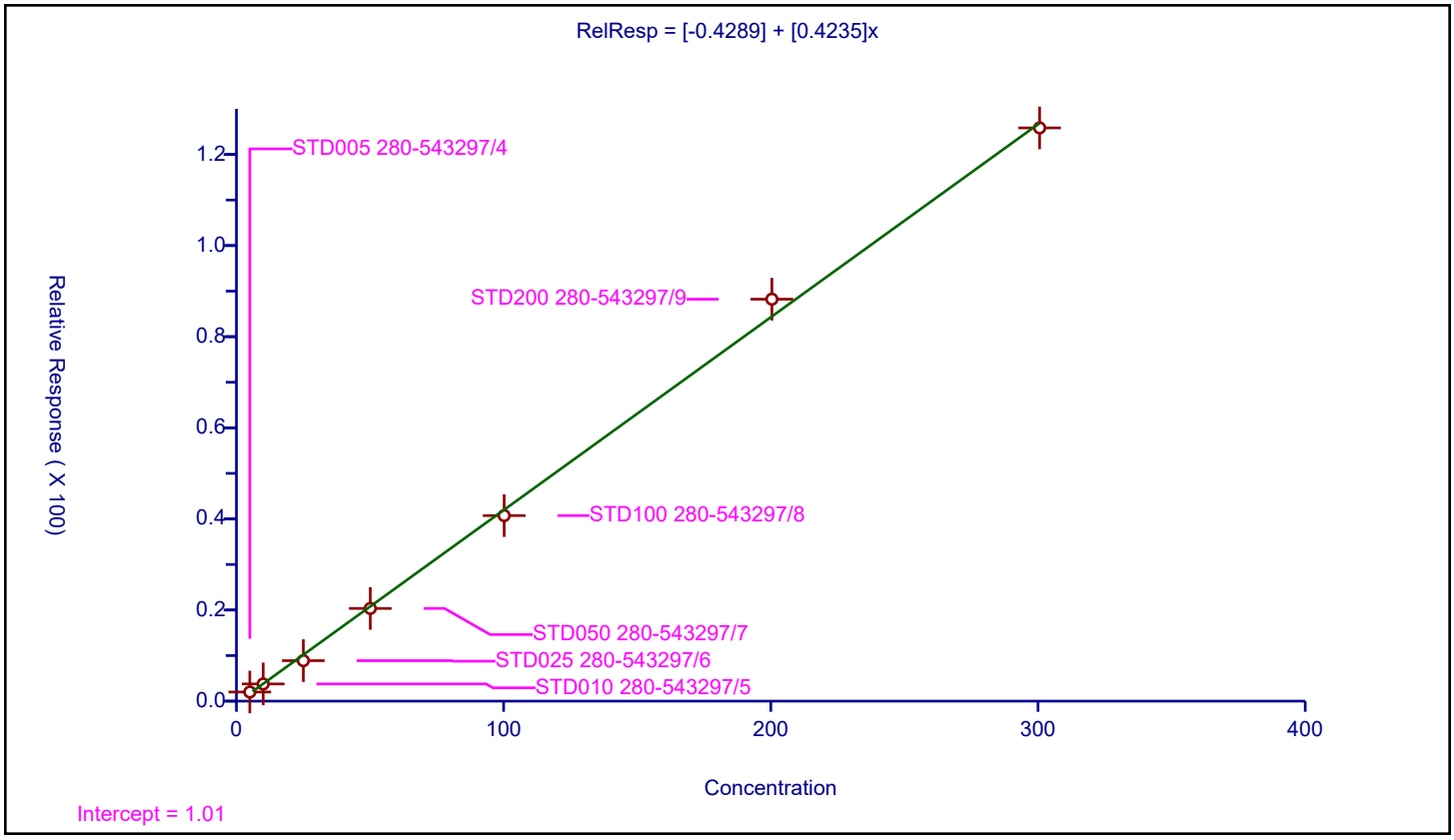
Curve Coefficients

Intercept:	-0.4289
Slope:	0.4235

Error Coefficients

Standard Error:	2110000
Relative Standard Error:	8.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-543297/4	5.01	2.002566	120.0	3965112.0	0.399714	Y
2	STD010 280-543297/5	10.02	3.774441	120.0	4054789.0	0.376691	Y
3	STD025 280-543297/6	25.05	8.884417	120.0	3912878.0	0.354667	Y
4	STD050 280-543297/7	50.1	20.345711	120.0	3709749.0	0.406102	Y
5	STD100 280-543297/8	100.2	40.727607	120.0	3684187.0	0.406463	Y
6	STD200 280-543297/9	200.4	88.229628	120.0	3462290.0	0.440268	Y
7	STD300 280-543297/10	300.6	125.825888	120.0	3521242.0	0.418582	Y



Calibration / m-Nitrotoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

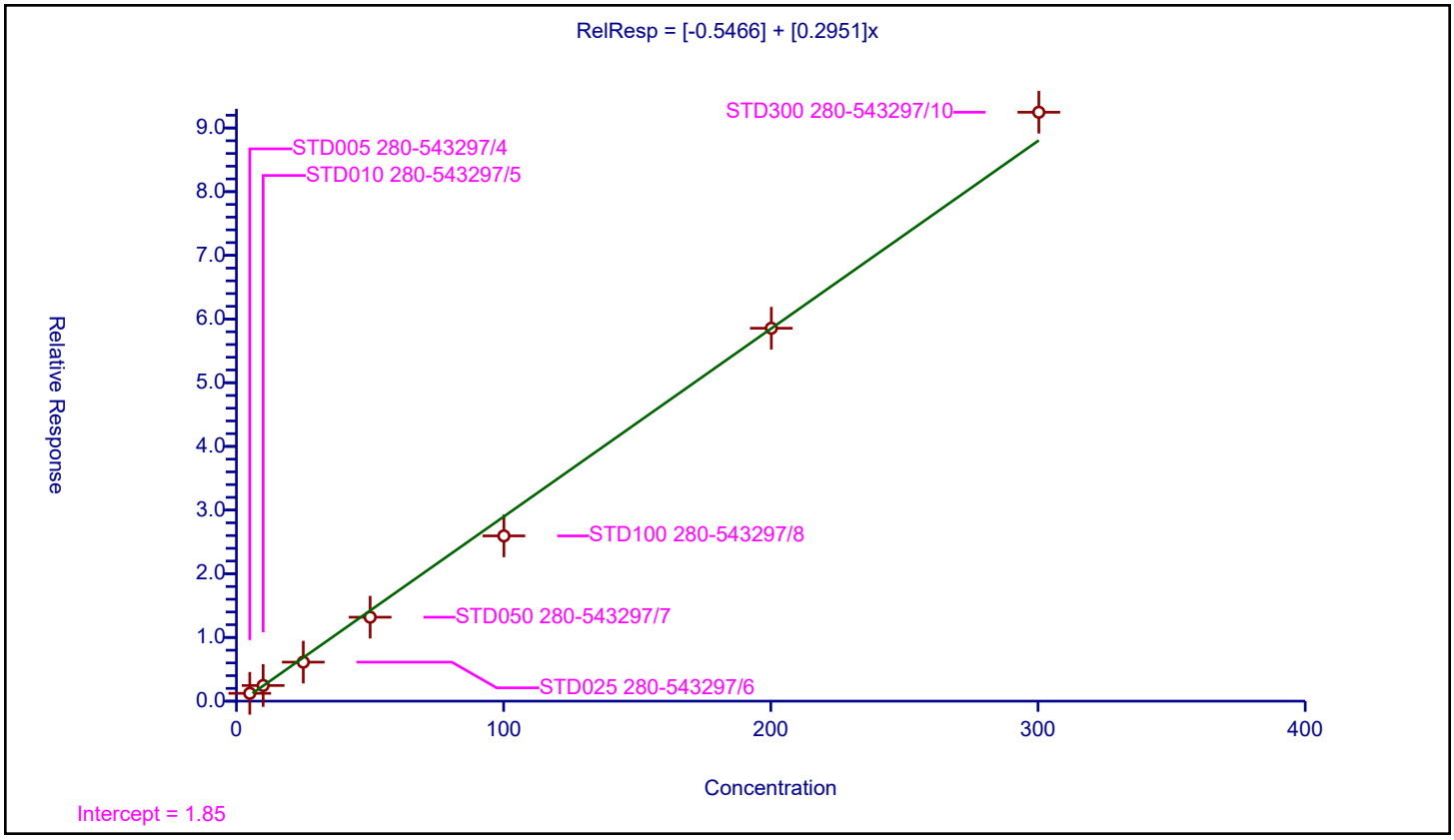
Curve Coefficients

Intercept:	-0.5466
Slope:	0.2951

Error Coefficients

Standard Error:	1490000
Relative Standard Error:	11.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-543297/4	5.005	1.229322	120.0	3965112.0	0.245619	Y
2	STD010 280-543297/5	10.01	2.457716	120.0	4054789.0	0.245526	Y
3	STD025 280-543297/6	25.025	6.123135	120.0	3912878.0	0.244681	Y
4	STD050 280-543297/7	50.05	13.181582	120.0	3709749.0	0.263368	Y
5	STD100 280-543297/8	100.1	25.949269	120.0	3684187.0	0.259233	Y
6	STD200 280-543297/9	200.2	58.556932	120.0	3462290.0	0.292492	Y
7	STD300 280-543297/10	300.3	92.472713	120.0	3521242.0	0.307934	Y



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Lab Sample ID: ICV 280-543297/12 Calibration Date: 07/15/2021 11:35

Instrument ID: LC_LCMS4 Calib Start Date: 07/15/2021 09:58

GC Column: IonPac ID: 2.00(mm) Calib End Date: 07/15/2021 11:10

Lab File ID: ex421G15011.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin1		3.601		115	100	14.8	20.0
RDX	Qua1		0.6075		103	100	2.7	20.0
1,3,5-Trinitrobenzene	Lin1		0.8231		97.1	100	-2.9	20.0
Tetryl	Lin1		0.8141		89.1	100	-10.9	20.0
1,3-Dinitrobenzene	Lin1		1.031		106	100	6.4	20.0
Nitroglycerin	Lin1		2.632		90.9	100	-9.1	20.0
2,4,6-Trinitrotoluene	Lin1		1.130		82.2	100	-17.8	20.0
Nitrobenzene	Lin1		0.2401		86.5	100	-13.5	20.0
4-Amino-2,6-dinitrotoluene	Lin1		3.395		112	100	11.7	20.0
2-Amino-4,6-dinitrotoluene	Lin1		1.417		97.9	100	-2.1	20.0
2,6-Dinitrotoluene	Lin1		1.848		96.6	100	-3.4	20.0
2,4-Dinitrotoluene	Lin1		1.013		101	100	1.3	20.0
PETN	Lin1		2.454		88.2	100	-11.8	20.0
o-Nitrotoluene	Lin1		0.4334		92.4	100	-7.6	20.0
p-Nitrotoluene	Lin1		0.3922		93.6	100	-6.4	20.0
m-Nitrotoluene	Lin1		0.2698		93.3	100	-6.7	20.0
Nitrobenzene-d5	Lin1		0.8560		96.0	100	-4.0	20.0

Report Date: 16-Jul-2021 08:16:46 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15011.d
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 15-Jul-2021 11:35:02 ALS Bottle#: 9 Worklist Smp#: 12
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 06/30/21ICV ICV
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4
Sublist:

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 16-Jul-2021 08:16:45 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1655

First Level Reviewer: meyera Date: 15-Jul-2021 12:20:17
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	2.069	2.052	0.017		110908	120.0	101	
2 HMX								
355.2	2.069	2.069	0.0	1.000	332829	114.8	233	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	3.011	2.993	0.018		699220	120.0	545	
4 RDX								
281.2	3.027	3.010	0.034	1.006	353985	102.7	96.4	
5 1,3,5-Trinitrobenzene								
213.2	3.717	3.733	0.017	0.756	968065	97.1	1228	
6 Tetryl								
241.2	4.434	4.429	0.044	0.902	957434	89.1	173	
* 7 1,3-Dinitrobenzene-d4								
172.1	4.915	4.871	0.044		1521394	129.4	64.2	
8 1,3-Dinitrobenzene								
168.2	4.959	4.959	0.044	1.009	1212391	106.4	168	
9 Nitroglycerin								
61.8	4.959	4.959	0.044	1.009	9016076	90.9	304	
10 2,4,6-Trinitrotoluene								
227.2	5.336	5.353	0.037	0.755	3871134	82.2	484	
28 3,5-Dinitroaniline								
183.2	5.410	5.384	0.074	1.101	4480389	97.2	136	
$ 11 Nitrobenzene-d5								
128.1	5.410	5.428	0.037	0.766	1006973	96.0	488	
12 Nitrobenzene								
123.1	5.521	5.521	0.037	0.781	822632	86.5	728	

Report Date: 16-Jul-2021 08:16:46 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15011.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
14 4-Amino-2,6-dinitrotoluene								
197.3	6.050	6.053	0.037	0.856	3993339	111.7	122	
16 2-Amino-4,6-dinitrotoluene								
197.3	6.643	6.616	0.071	0.940	4856052	97.9	149	
17 2,6-Dinitrotoluene								
182.2	6.737	6.760	0.071	0.953	6329544	96.6	224	
* 18 2,4-dinitrotoluene-d3								
185.1	7.067	6.996	0.071		4111148	120.0	291	
19 2,4-Dinitrotoluene								
182.2	7.114	7.115	0.047	1.007	3469787	101.3	115	
20 PETN								
61.8	7.529	7.484	0.095	1.065	8408642	88.2	307	
22 o-Nitrotoluene								
137.2	8.047	8.030	0.071	1.139	1484650	92.4	251	
23 p-Nitrotoluene								
137.2	8.590	8.552	0.095	1.215	1343717	93.6	216	
24 m-Nitrotoluene								
137.2	9.203	9.193	0.071	1.302	924188	93.3	152	

QC Flag Legend

Processing Flags

Reagents:

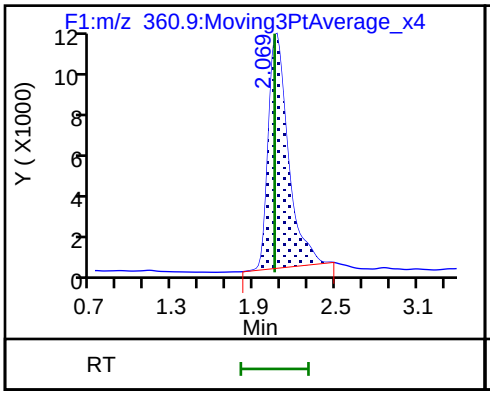
8321NB-D5-cal_00020	Amount Added: 10.00	Units: uL	
8321expICV_00019	Amount Added: 10.00	Units: uL	
EXPWORKINGIS_00084	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 16-Jul-2021 08:16:46 Chrom Revision: 2.3 13-May-2021 07:57:40

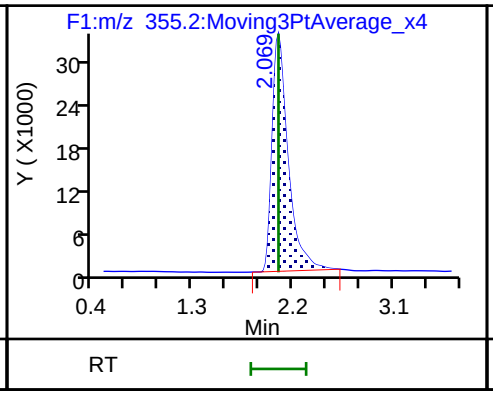
Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15011.d
Injection Date: 15-Jul-2021 11:35:02 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: 8321exp4-25 Limit Group: LC - 8321A Expl

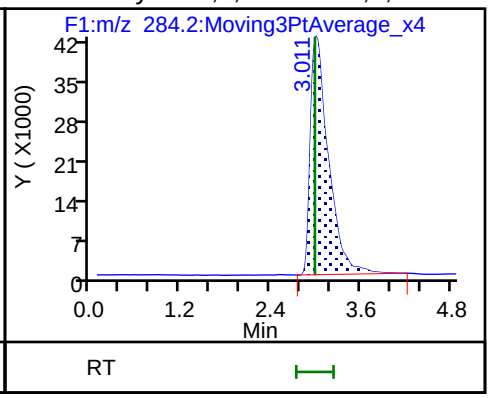
* 1 HMX-13C4



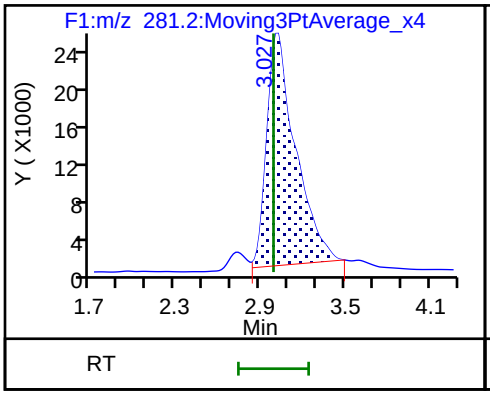
2 HMX



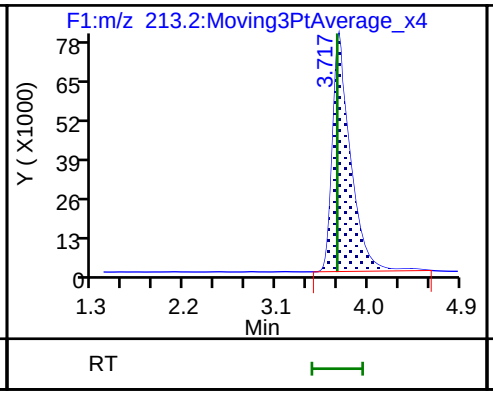
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



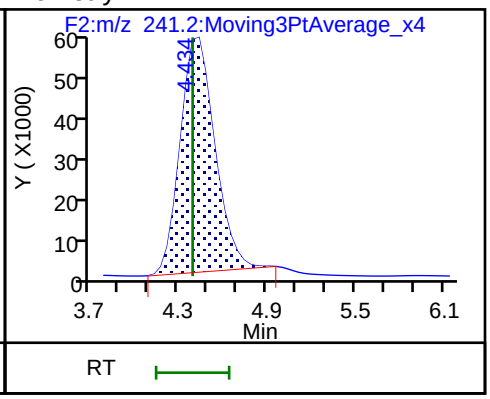
4 RDX



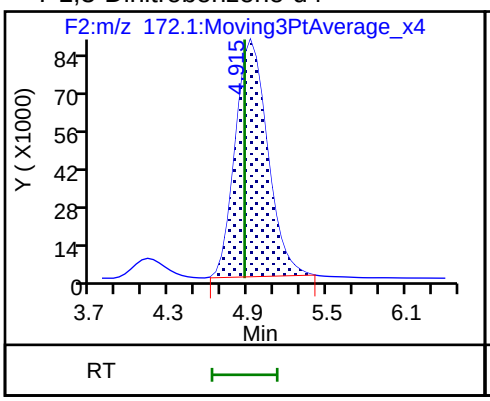
5 1,3,5-Trinitrobenzene



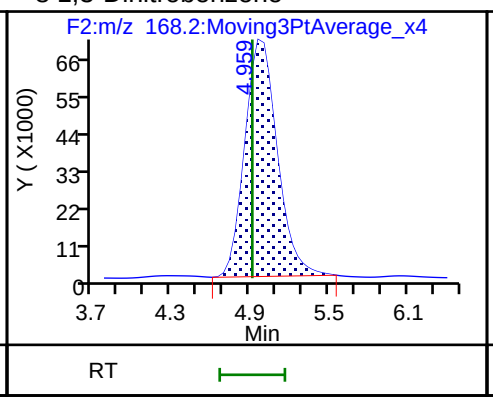
6 Tetryl



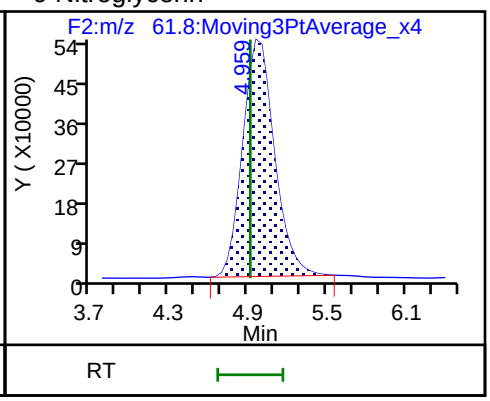
* 7 1,3-Dinitrobenzene-d4



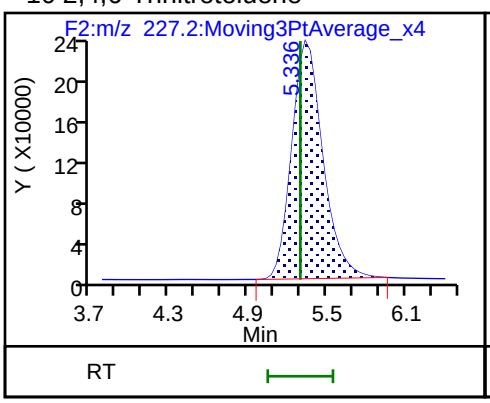
8 1,3-Dinitrobenzene



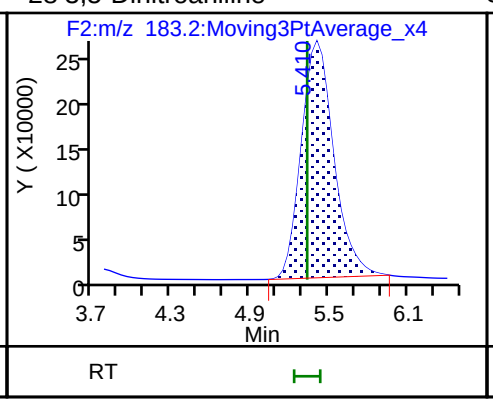
9 Nitroglycerin



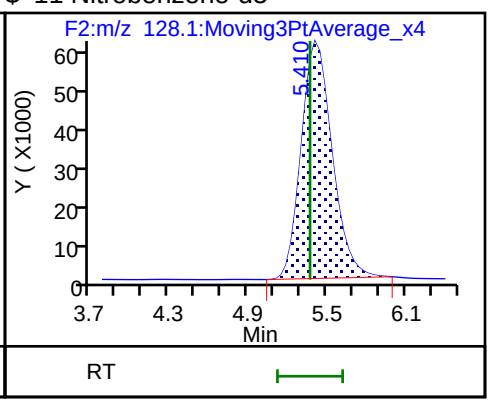
10 2,4,6-Trinitrotoluene



28 3,5-Dinitroaniline

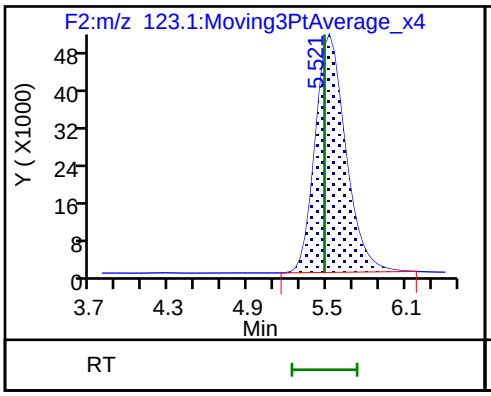


$ 11 Nitrobenzene-d5

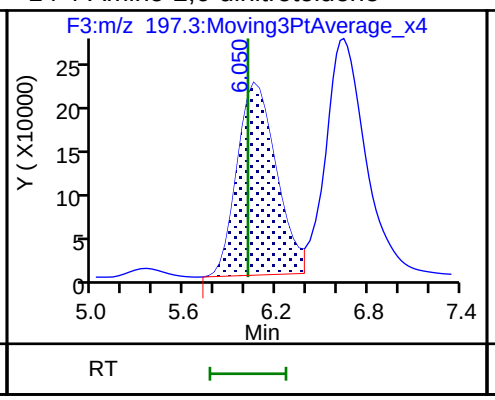


Report Date: 16-Jul-2021 08:16:46 Chrom Revision: 2.3 13-May-2021 07:57:40
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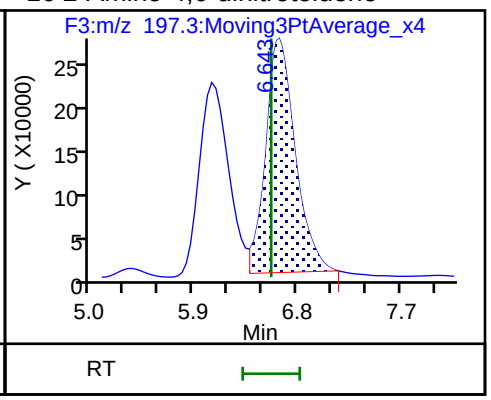
12 Nitrobenzene



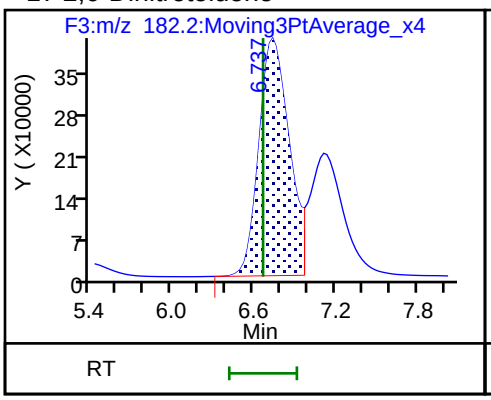
14 4-Amino-2,6-dinitrotoluene



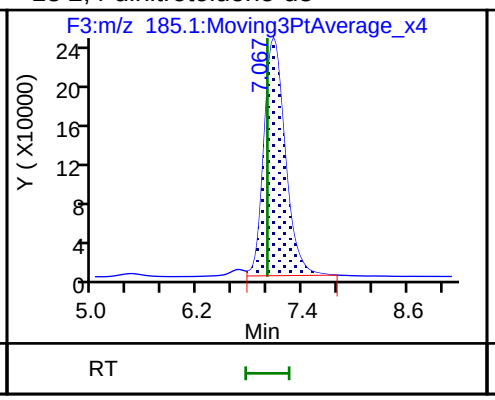
16 2-Amino-4,6-dinitrotoluene



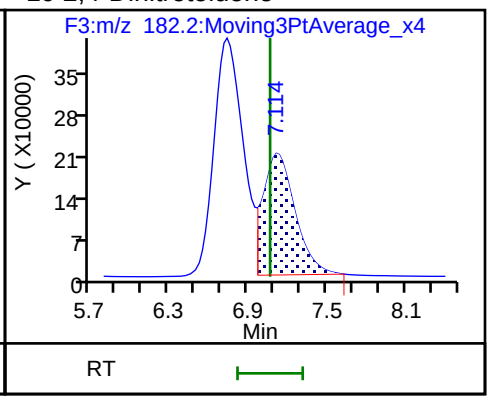
17 2,6-Dinitrotoluene



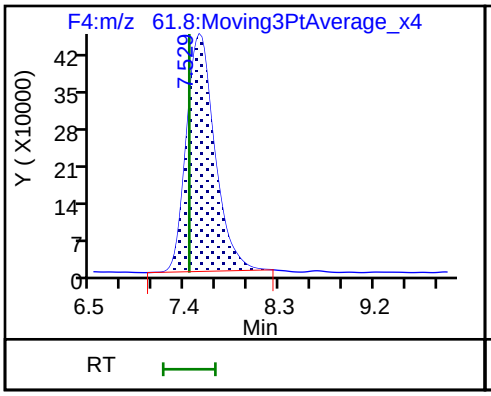
* 18 2,4-dinitrotoluene-d3



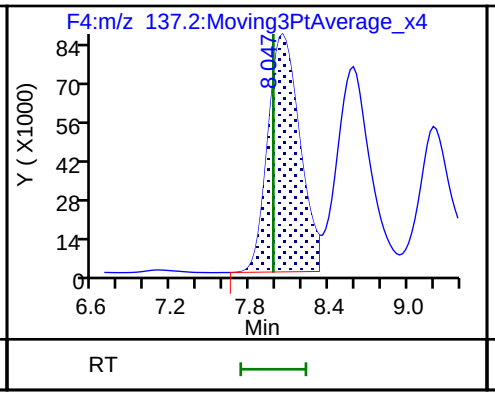
19 2,4-Dinitrotoluene



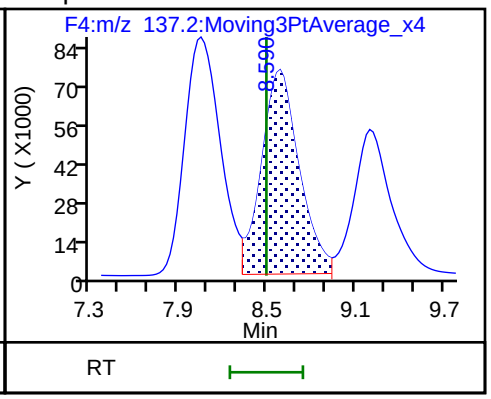
20 PETN



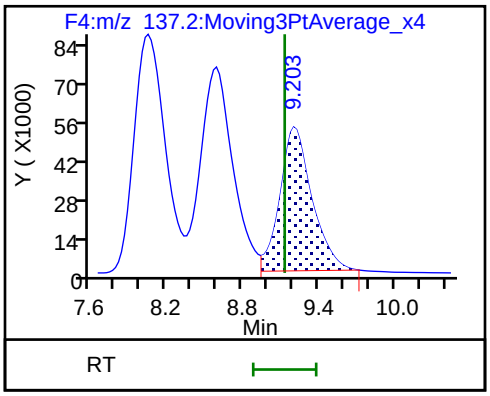
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Lab Sample ID: CCV 280-543298/23 Calibration Date: 07/15/2021 13:48

Instrument ID: LC_LCMS4 Calib Start Date: 07/15/2021 09:58

GC Column: IonPac ID: 2.00(mm) Calib End Date: 07/15/2021 11:10

Lab File ID: ex421G15022.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin1		2.938		47.8	50.0	-4.4	20.0
RDX	Qua1		0.6862		53.9	50.0	7.8	20.0
1,3,5-Trinitrobenzene	Lin1		0.7424		44.5	50.1	-11.3	20.0
Tetryl	Lin1		0.8966		49.3	50.1	-1.6	20.0
1,3-Dinitrobenzene	Lin1		0.9836		50.4	50.1	0.7	20.0
Nitroglycerin	Lin1		2.488		43.5	50.3	-13.6	20.0
2,4,6-Trinitrotoluene	Lin1		1.176		43.7	50.2	-12.9	20.0
Nitrobenzene	Lin1		0.2642		48.1	50.2	-4.2	20.0
4-Amino-2,6-dinitrotoluene	Lin1		2.905		47.9	50.1	-4.4	20.0
2-Amino-4,6-dinitrotoluene	Lin1		1.339		47.1	50.2	-6.1	20.0
2,6-Dinitrotoluene	Lin1		1.849		49.2	50.2	-2.0	20.0
2,4-Dinitrotoluene	Lin1		0.9541		47.8	50.2	-4.9	20.0
PETN	Lin1		2.443		44.1	49.8	-11.4	20.0
o-Nitrotoluene	Lin1		0.4150		44.8	50.0	-10.4	20.0
p-Nitrotoluene	Lin1		0.3841		46.4	50.1	-7.3	20.0
m-Nitrotoluene	Lin1		0.2533		44.8	50.1	-10.5	20.0
Nitrobenzene-d5	Lin1		0.8930		49.5	50.0	-1.0	20.0

Report Date: 16-Jul-2021 08:16:52 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15022.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 15-Jul-2021 13:48:35 ALS Bottle#: 5 Worklist Smp#: 23
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 06/30/21EX4 CCV 50 ug/L
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4
Sublist: chrom-8321exp4-25*sub26

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 16-Jul-2021 08:16:52 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1655

First Level Reviewer: meyera Date: 15-Jul-2021 14:51:30
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	2.069	2.052	0.017		129278	120.0	93.4	
2 HMX								
355.2	2.069	2.069	0.0	1.000	158260	47.8	115	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	3.044	2.993	0.051		670743	120.0	549	
4 RDX								
281.2	3.010	3.010	0.017	0.989	191785	53.9	87.4	
5 1,3,5-Trinitrobenzene								
213.2	3.717	3.733	0.017	0.756	445765	44.5	376	
6 Tetryl								
241.2	4.434	4.429	0.044	0.902	538334	49.3	231	
* 7 1,3-Dinitrobenzene-d4								
172.1	4.915	4.871	0.044		1550341	129.4	62.7	
8 1,3-Dinitrobenzene								
168.2	4.959	4.959	0.044	1.009	590592	50.4	155	
9 Nitroglycerin								
61.8	4.959	4.959	0.044	1.009	3955413	43.5	248	
10 2,4,6-Trinitrotoluene								
227.2	5.336	5.353	0.037	0.755	1866007	43.7	365	
28 3,5-Dinitroaniline								
183.2	5.410	5.384	0.074	1.101	1650213	39.3	86.6	
$ 11 Nitrobenzene-d5								
128.1	5.410	5.428	0.037	0.766	535221	49.5	351	
12 Nitrobenzene								
123.1	5.521	5.521	0.037	0.781	419104	48.1	521	

Report Date: 16-Jul-2021 08:16:52 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15022.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
14 4-Amino-2,6-dinitrotoluene								
197.3	6.050	6.053	0.037	0.856	1742619	47.9	112	
16 2-Amino-4,6-dinitrotoluene								
197.3	6.643	6.616	0.071	0.940	2124055	47.1	129	
17 2,6-Dinitrotoluene								
182.2	6.713	6.760	0.047	0.950	2933286	49.2	181	
* 18 2,4-dinitrotoluene-d3								
185.1	7.067	6.996	0.071		3792631	120.0	341	
19 2,4-Dinitrotoluene								
182.2	7.114	7.115	0.047	1.007	1513798	47.8	85.3	
20 PETN								
61.8	7.529	7.484	0.095	1.065	3844680	44.1	244	
22 o-Nitrotoluene								
137.2	8.047	8.030	0.071	1.139	655807	44.8	179	
23 p-Nitrotoluene								
137.2	8.566	8.552	0.071	1.212	608135	46.4	157	
24 m-Nitrotoluene								
137.2	9.226	9.193	0.094	1.306	400606	44.8	101	

QC Flag Legend

Processing Flags

Reagents:

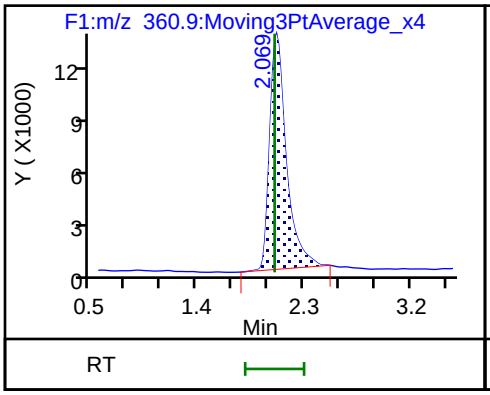
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8321EXcalprim_00025	Amount Added: 5.00	Units: uL	
EXPWORKINGIS_00084	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 16-Jul-2021 08:16:52 Chrom Revision: 2.3 13-May-2021 07:57:40

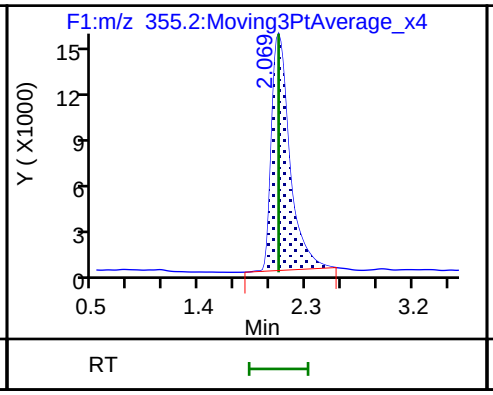
Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15022.d
Injection Date: 15-Jul-2021 13:48:35 Instrument ID: LC_LCMS4
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 5 Worklist Smp#: 23
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Method: 8321exp4-25 Limit Group: LC - 8321A Expl

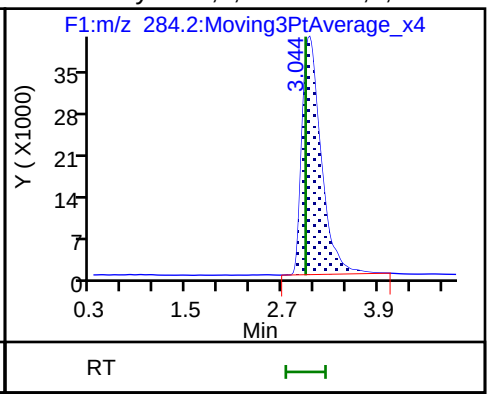
* 1 HMX-13C4



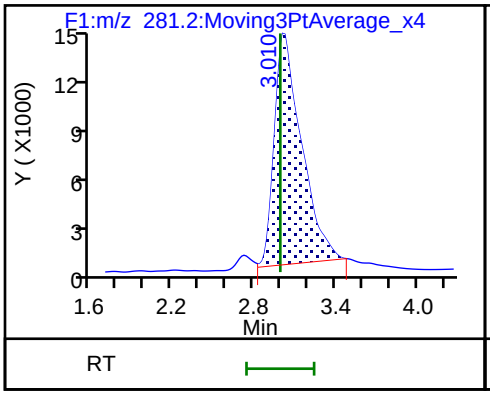
2 HMX



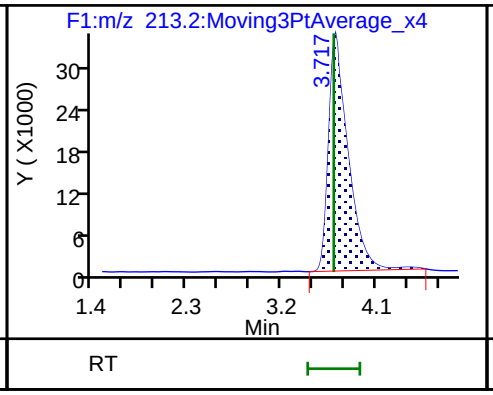
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



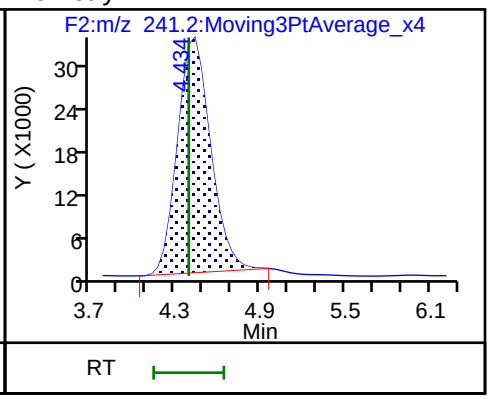
4 RDX



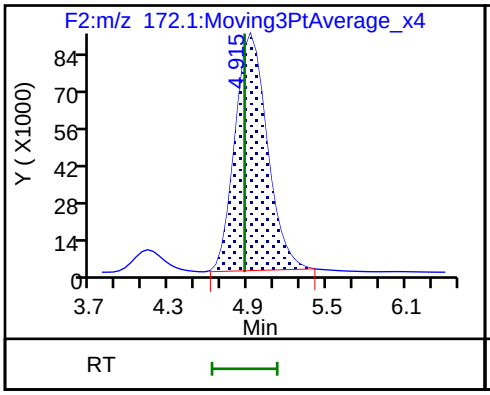
5 1,3,5-Trinitrobenzene



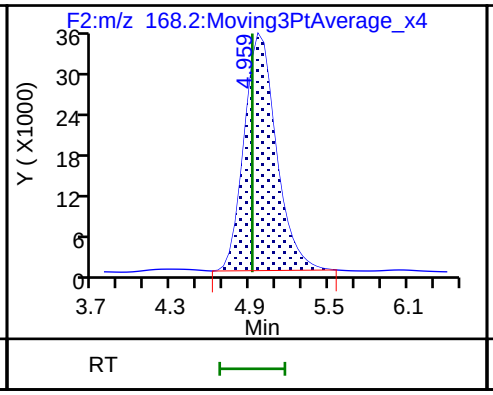
6 Tetryl



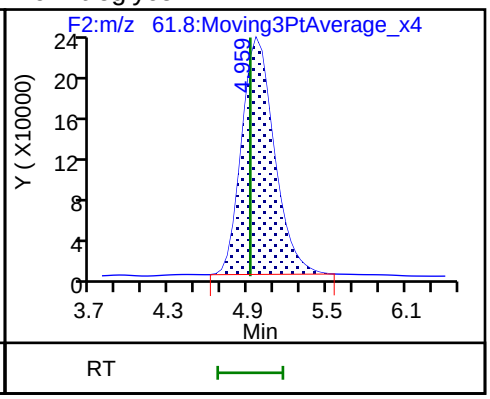
* 7 1,3-Dinitrobenzene-d4



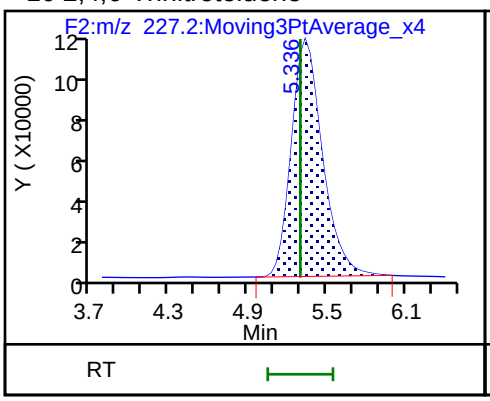
8 1,3-Dinitrobenzene



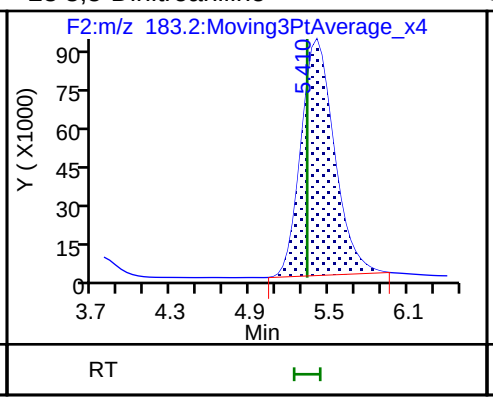
9 Nitroglycerin



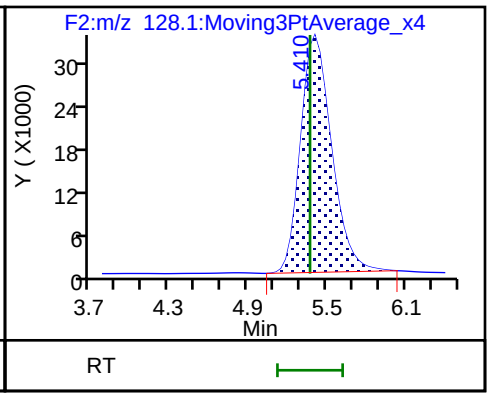
10 2,4,6-Trinitrotoluene



28 3,5-Dinitroaniline

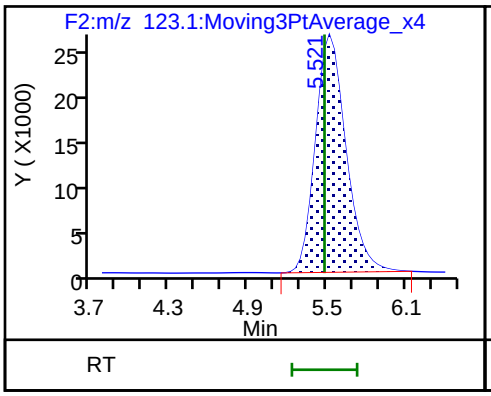


$ 11 Nitrobenzene-d5

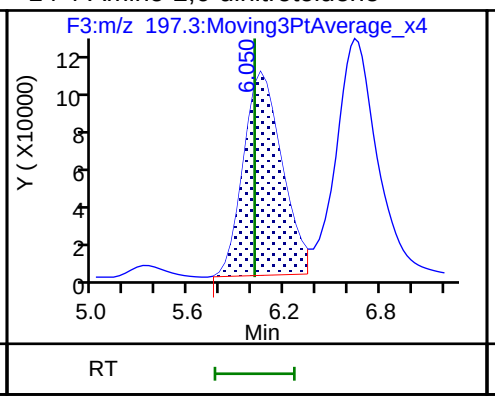


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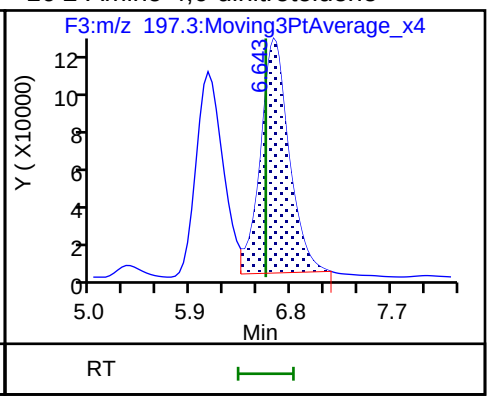
12 Nitrobenzene



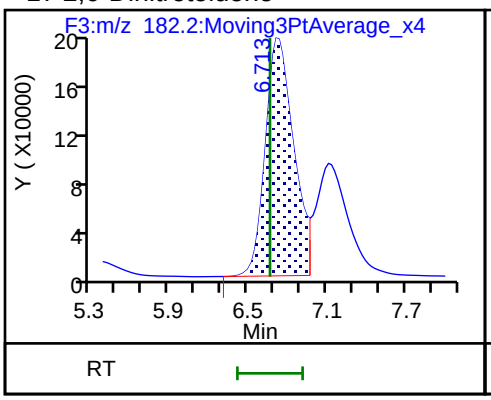
14 4-Amino-2,6-dinitrotoluene



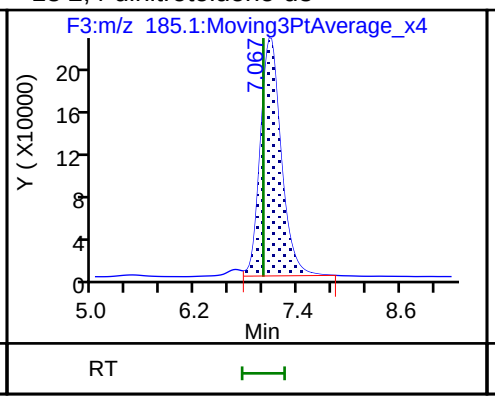
16 2-Amino-4,6-dinitrotoluene



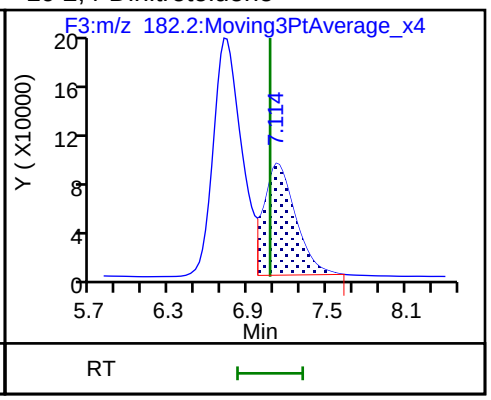
17 2,6-Dinitrotoluene



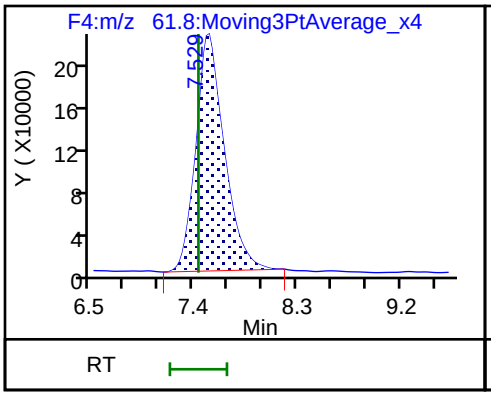
* 18 2,4-dinitrotoluene-d3



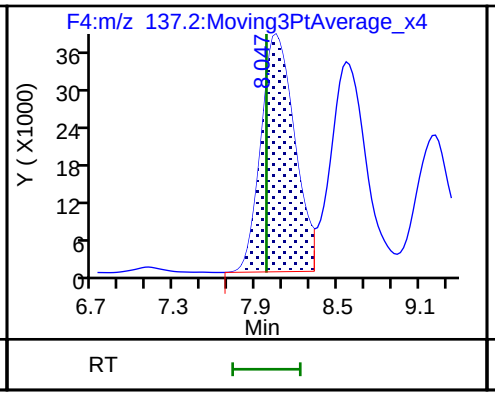
19 2,4-Dinitrotoluene



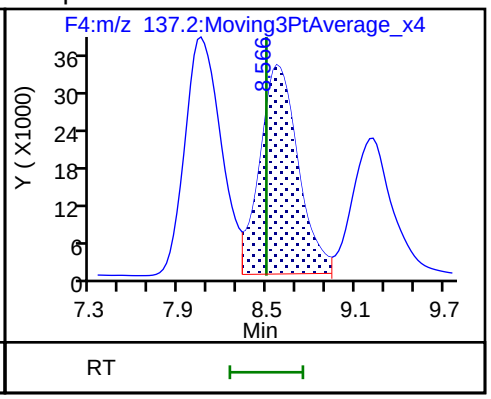
20 PETN



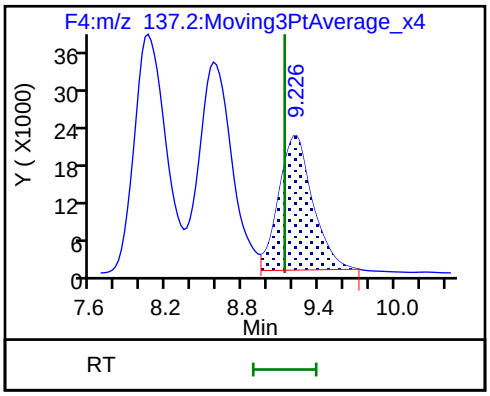
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Lab Sample ID: CCV 280-543298/32 Calibration Date: 07/15/2021 15:37

Instrument ID: LC_LCMS4 Calib Start Date: 07/15/2021 09:58

GC Column: IonPac ID: 2.00(mm) Calib End Date: 07/15/2021 11:10

Lab File ID: ex421G15031.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin1		2.943		94.1	100	-5.9	20.0
RDX	Qua1		0.5541		92.3	100	-7.7	20.0
1,3,5-Trinitrobenzene	Lin1		0.7593		89.8	100	-10.3	20.0
Tetryl	Lin1		0.9258		101	100	1.3	20.0
1,3-Dinitrobenzene	Lin1		1.009		104	100	4.1	20.0
Nitroglycerin	Lin1		2.633		91.5	101	-9.1	20.0
2,4,6-Trinitrotoluene	Lin1		1.123		82.0	100	-18.3	20.0
Nitrobenzene	Lin1		0.2808		101	100	1.0	20.0
4-Amino-2,6-dinitrotoluene	Lin1		2.673		88.0	100	-12.1	20.0
2-Amino-4,6-dinitrotoluene	Lin1		1.208		84.0	100	-16.4	20.0
2,6-Dinitrotoluene	Lin1		1.833		96.2	100	-4.2	20.0
2,4-Dinitrotoluene	Lin1		0.9824		98.6	100	-1.8	20.0
PETN	Lin1		2.320		83.1	99.6	-16.6	20.0
o-Nitrotoluene	Lin1		0.4379		93.4	100	-6.6	20.0
p-Nitrotoluene	Lin1		0.3363		80.6	100	-19.6	20.0
m-Nitrotoluene	Lin1		0.2608		90.3	100	-9.7	20.0
Nitrobenzene-d5	Lin1		0.9422		106	100	5.7	20.0

Report Date: 16-Jul-2021 08:16:56 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15031.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 15-Jul-2021 15:37:27 ALS Bottle#: 6 Worklist Smp#: 32
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 06/30/21EX5 CCV 100 ug/L
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4
Sublist: chrom-8321exp4-25*sub26

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 16-Jul-2021 08:16:56 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1655

First Level Reviewer: meyera Date: 16-Jul-2021 08:12:29
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	2.052	2.052	0.0		122701	120.0	119	
2 HMX								
355.2	2.069	2.069	0.0	1.008	300943	94.1	198	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	3.010	2.993	0.017		834037	120.0	757	
4 RDX								
281.2	2.994	3.010	0.001	0.994	385139	92.3	114	
5 1,3,5-Trinitrobenzene								
213.2	3.717	3.733	0.017	0.756	898371	89.8	1021	
6 Tetryl								
241.2	4.434	4.429	0.044	0.902	1095367	101.5	249	
* 7 1,3-Dinitrobenzene-d4								
172.1	4.915	4.871	0.044		1527515	129.4	62.1	
8 1,3-Dinitrobenzene								
168.2	4.959	4.959	0.044	1.009	1194107	104.3	173	
9 Nitroglycerin								
61.8	4.959	4.959	0.044	1.009	8408805	91.5	366	
10 2,4,6-Trinitrotoluene								
227.2	5.336	5.353	0.037	0.755	3580996	82.0	467	
28 3,5-Dinitroaniline								
183.2	5.410	5.384	0.074	1.101	3585960	84.1	88.7	
$ 11 Nitrobenzene-d5								
128.1	5.410	5.428	0.037	0.766	1112856	105.8	422	
12 Nitrobenzene								
123.1	5.521	5.521	0.037	0.781	895000	101.4	785	

Report Date: 16-Jul-2021 08:16:56 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15031.d
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
14 4-Amino-2,6-dinitrotoluene								
197.3	6.050	6.053	0.037	0.856	3158967	88.0	102	
16 2-Amino-4,6-dinitrotoluene								
197.3	6.642	6.616	0.070	0.940	3851633	84.0	129	
17 2,6-Dinitrotoluene								
182.2	6.737	6.760	0.071	0.953	5843398	96.2	214	
* 18 2,4-dinitrotoluene-d3								
185.1	7.067	6.996	0.071		3809686	120.0	279	
19 2,4-Dinitrotoluene								
182.2	7.137	7.115	0.070	1.010	3131301	98.6	102	
20 PETN								
61.8	7.528	7.484	0.094	1.065	7337509	83.1	364	
22 o-Nitrotoluene								
137.2	8.047	8.030	0.071	1.139	1390127	93.4	311	
23 p-Nitrotoluene								
137.2	8.566	8.552	0.071	1.212	1069712	80.6	215	
24 m-Nitrotoluene								
137.2	9.226	9.193	0.094	1.306	828915	90.3	159	

QC Flag Legend

Processing Flags

Reagents:

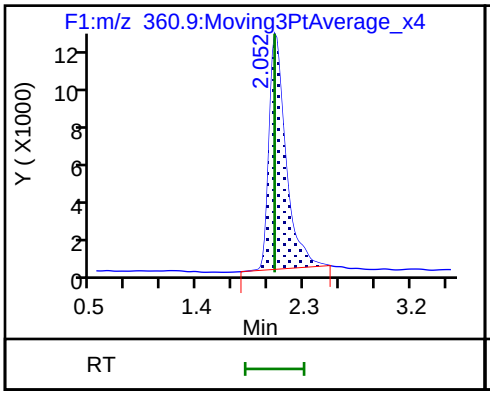
8321NB-D5-cal_00020	Amount Added:	10.00	Units: uL	
8321EXcalprim_00025	Amount Added:	10.00	Units: uL	
EXPWORKINGIS_00084	Amount Added:	20.00	Units: uL	Run Reagent

Report Date: 16-Jul-2021 08:16:56 Chrom Revision: 2.3 13-May-2021 07:57:40

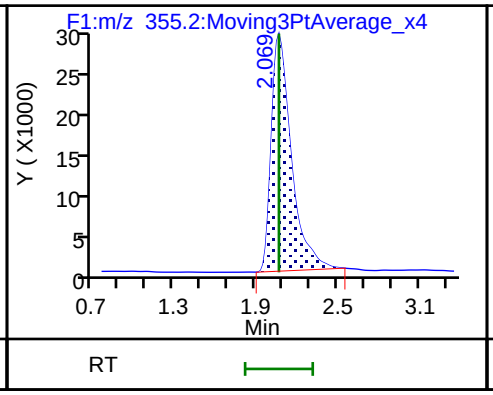
Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15031.d
Injection Date: 15-Jul-2021 15:37:27 Instrument ID: LC_LCMS4
Lims ID: CCV
Client ID:
Operator ID: acm ALS Bottle#: 6 Worklist Smp#: 32
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Method: 8321exp4-25 Limit Group: LC - 8321A Expl

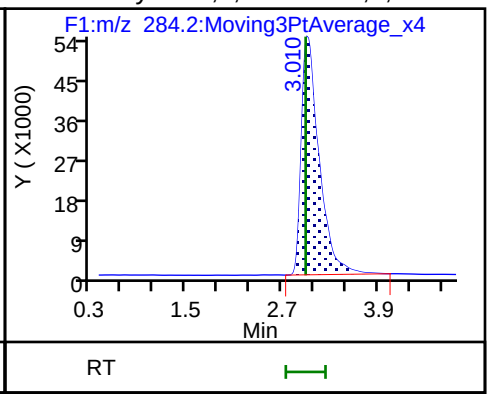
* 1 HMX-13C4



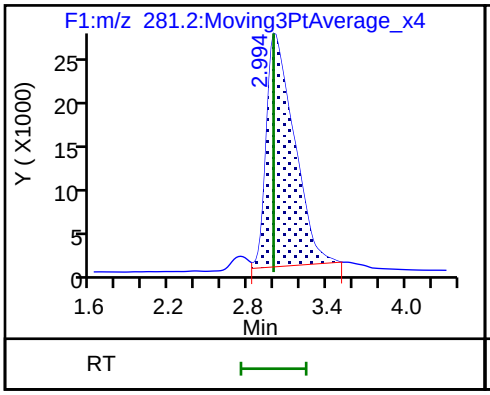
2 HMX



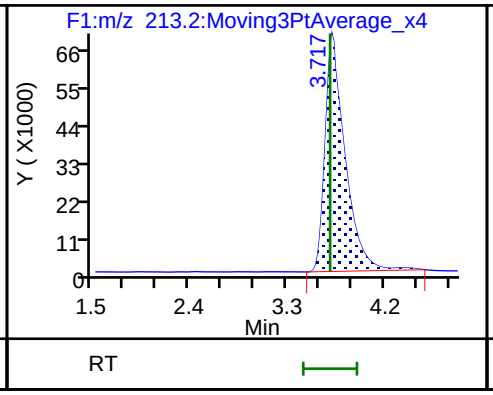
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



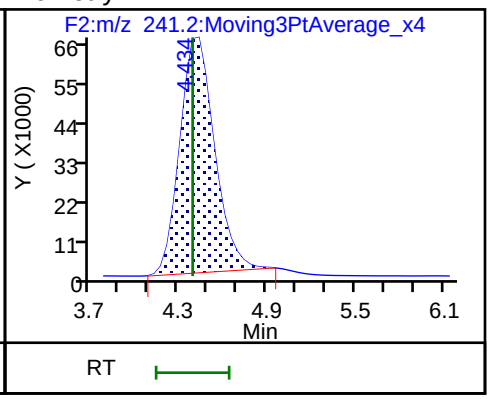
4 RDX



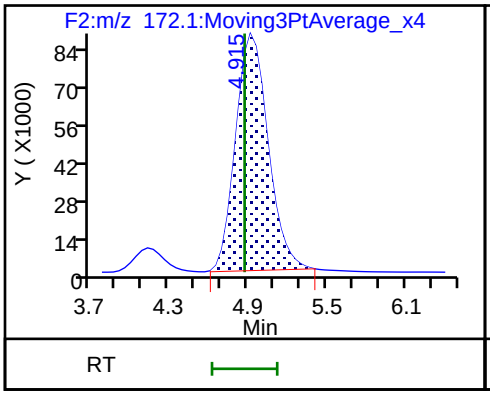
5 1,3,5-Trinitrobenzene



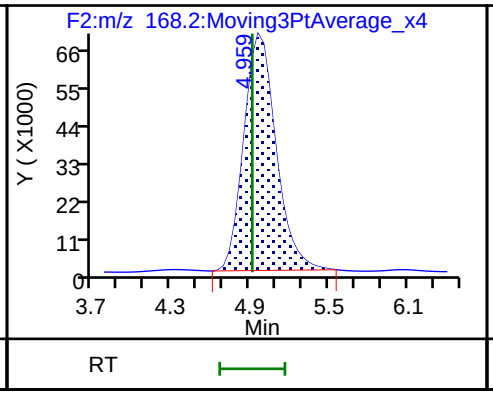
6 Tetryl



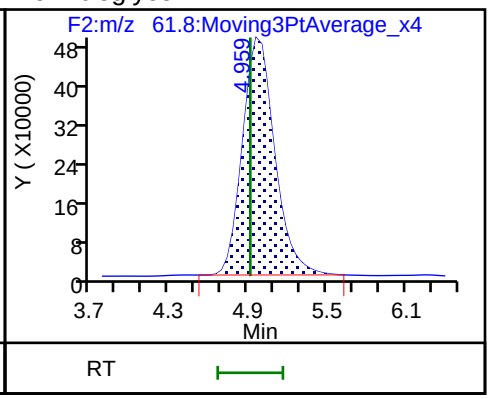
* 7 1,3-Dinitrobenzene-d4



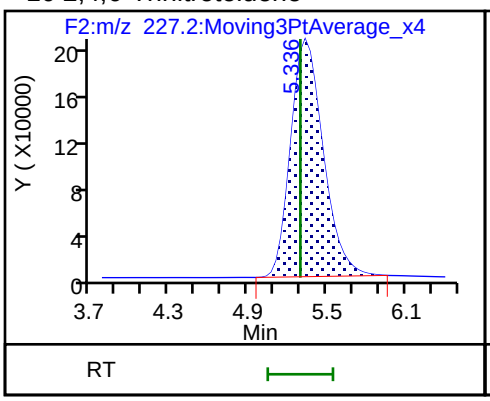
8 1,3-Dinitrobenzene



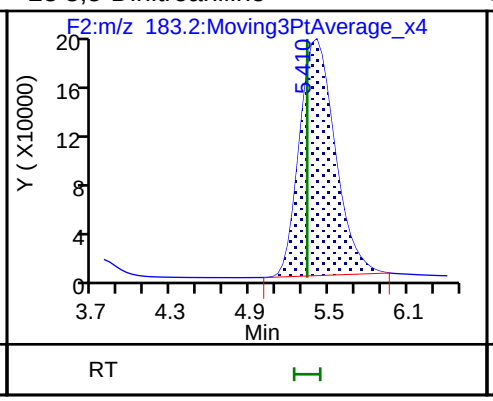
9 Nitroglycerin



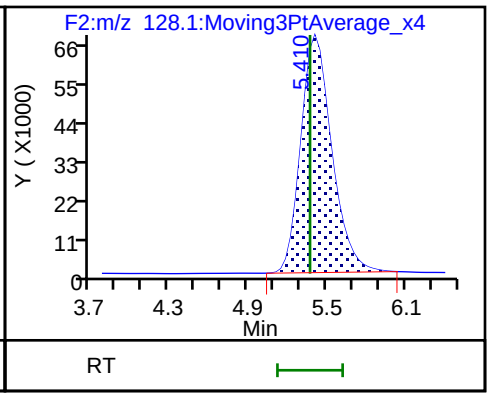
10 2,4,6-Trinitrotoluene



28 3,5-Dinitroaniline

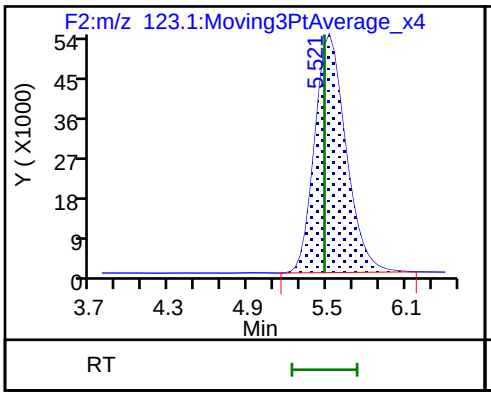


$ 11 Nitrobenzene-d5

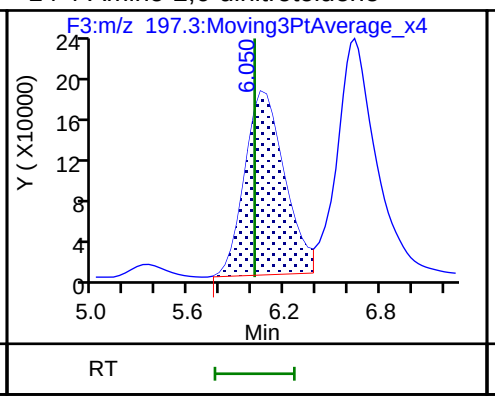


Report Date: 16-Jul-2021 08:16:56 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15031.d

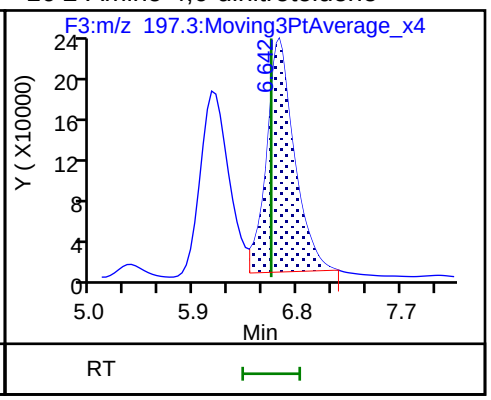
12 Nitrobenzene



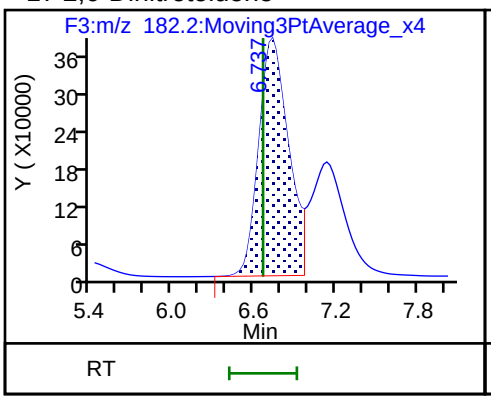
14 4-Amino-2,6-dinitrotoluene



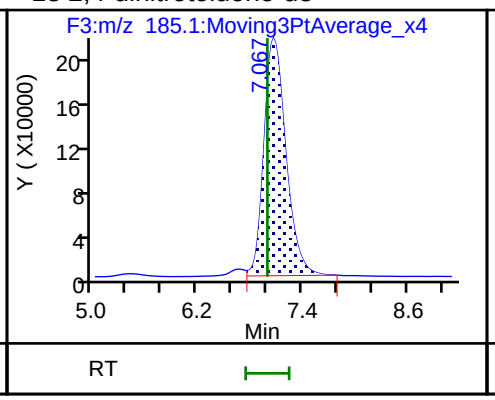
16 2-Amino-4,6-dinitrotoluene



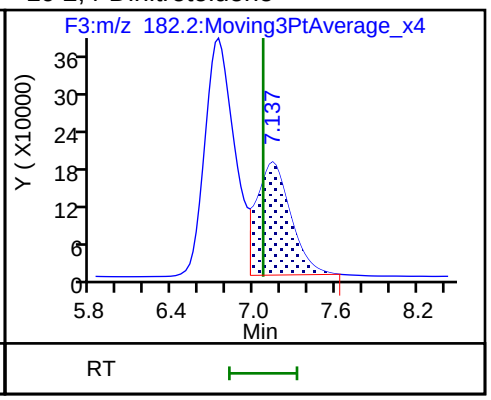
17 2,6-Dinitrotoluene



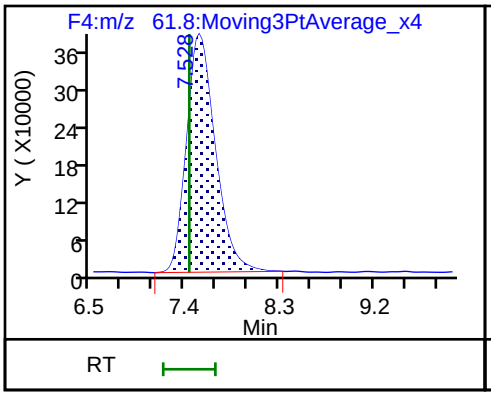
* 18 2,4-dinitrotoluene-d3



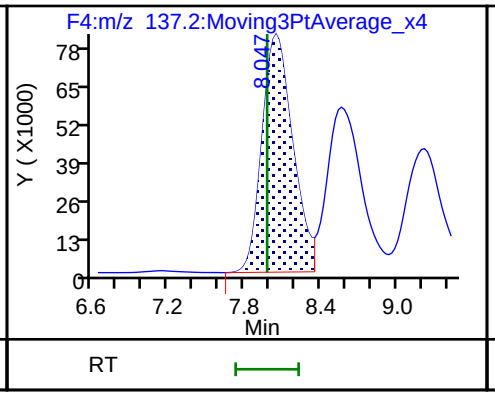
19 2,4-Dinitrotoluene



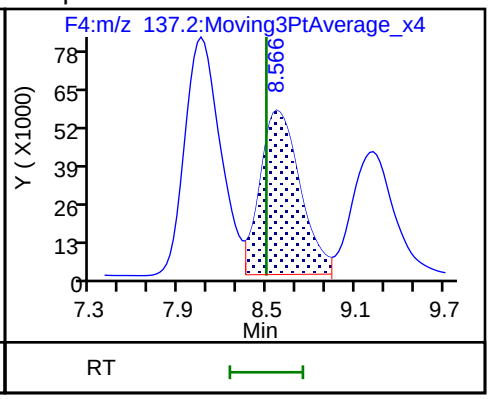
20 PETN



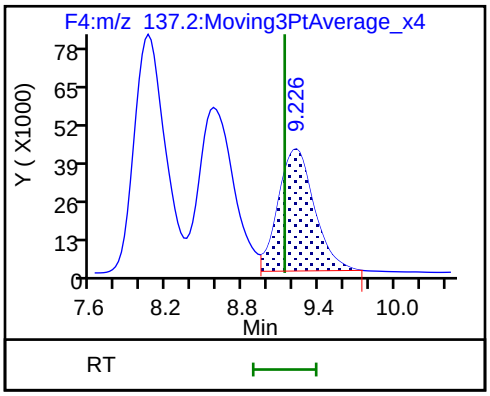
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-542950/1-A

Matrix: Solid Lab File ID: ex421G15012.d

Analysis Method: 8321A Date Collected:

Extraction Method: 8330B Date Extracted: 07/12/2021 16:07

Sample wt/vol: 10(g) Date Analyzed: 07/15/2021 11:47

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

Injection Volume: 40(uL) GC Column: IonPac ID: 2(mm)

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

Analysis Batch No.: 543298 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.030	U	0.10	0.030	0.013
99-65-0	1,3-Dinitrobenzene	0.016	U	0.10	0.016	0.0071
118-96-7	2,4,6-Trinitrotoluene	0.00677	J	0.10	0.015	0.0050
121-14-2	2,4-Dinitrotoluene	0.030	U	0.10	0.030	0.0082
606-20-2	2,6-Dinitrotoluene	0.030	U	0.10	0.030	0.020
35572-78-2	2-Amino-4,6-dinitrotoluene	0.030	U	0.10	0.030	0.012
88-72-2	o-Nitrotoluene	0.015	U	0.10	0.015	0.0057
99-08-1	m-Nitrotoluene	0.030	U	0.10	0.030	0.013
19406-51-0	4-Amino-2,6-dinitrotoluene	0.015	U	0.10	0.015	0.0051
99-99-0	p-Nitrotoluene	0.030	U	0.10	0.030	0.011
98-95-3	Nitrobenzene	0.030	U	0.10	0.030	0.011
55-63-0	Nitroglycerin	0.030	U	0.10	0.030	0.011
2691-41-0	HMX	0.030	U	0.10	0.030	0.015
78-11-5	PETN	0.015	U M	0.10	0.015	0.0052
121-82-4	RDX	0.015	U	0.10	0.015	0.0043
479-45-8	Tetryl	0.015	U	0.10	0.015	0.0076

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

Report Date: 16-Jul-2021 08:16:46 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15012.d
Lims ID: MB 280-542950/1-A
Client ID:
Sample Type: MB
Inject. Date: 15-Jul-2021 11:47:06 ALS Bottle#: 10 Worklist Smp#: 13
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-542950/1-A
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 16-Jul-2021 08:16:45 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1655

First Level Reviewer: meyera Date: 15-Jul-2021 12:20:34
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
360.9	2.052	2.052	0.0		189463	120.0	132	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	3.011	2.993	0.018		789293	120.0	887	
* 7 1,3-Dinitrobenzene-d4								
172.1	4.916	4.871	0.045		1523904	129.4	59.5	
10 2,4,6-Trinitrotoluene								
227.2	5.337	5.353	0.038	0.758	2527	1.69	4.4	
$ 11 Nitrobenzene-d5								
128.1	5.374	5.428	0.001	0.763	997240	94.9	553	
* 18 2,4-dinitrotoluene-d3								
185.1	7.044	6.996	0.048		3296178	120.0	321	

QC Flag Legend

Processing Flags

Reagents:

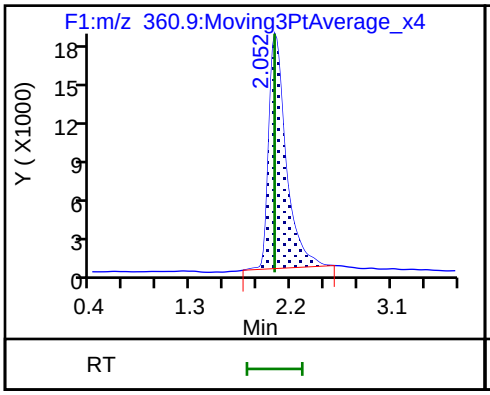
EXPWORKINGIS_00084 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 16-Jul-2021 08:16:46 Chrom Revision: 2.3 13-May-2021 07:57:40

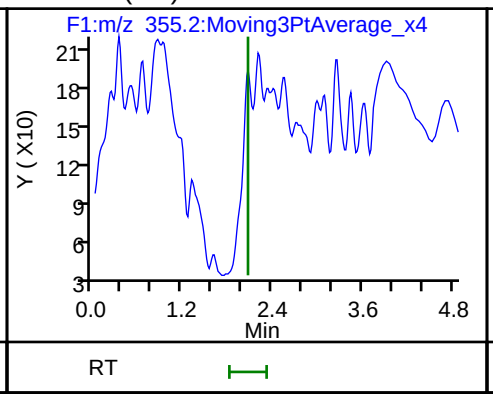
Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15012.d
Injection Date: 15-Jul-2021 11:47:06 Instrument ID: LC_LCMS4
Lims ID: MB 280-542950/1-A
Client ID:
Operator ID: acm ALS Bottle#: 10 Worklist Smp#: 13
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Method: 8321exp4-25 Limit Group: LC - 8321A Expl

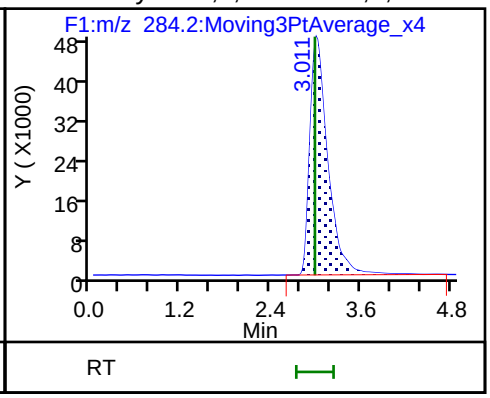
* 1 HMX-13C4



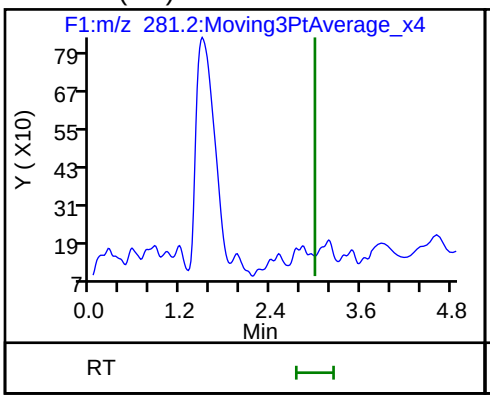
2 HMX (ND)



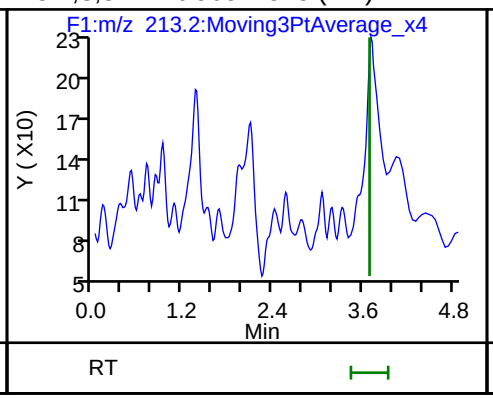
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



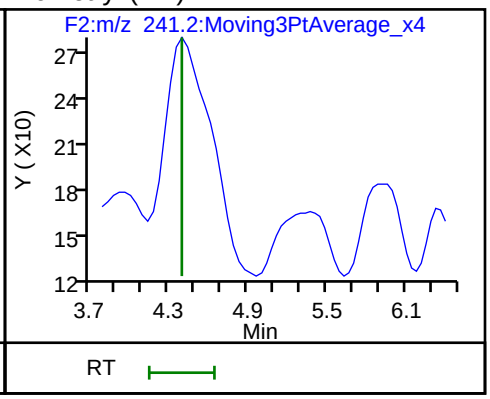
4 RDX (ND)



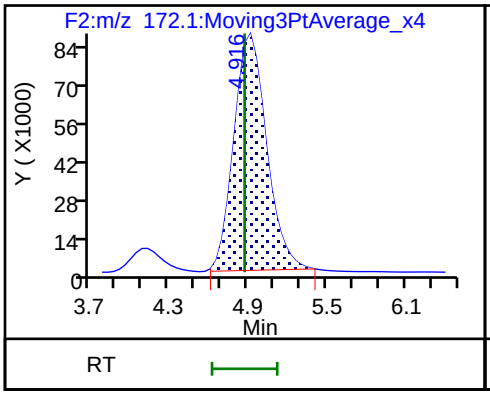
5 1,3,5-Trinitrobenzene (ND)



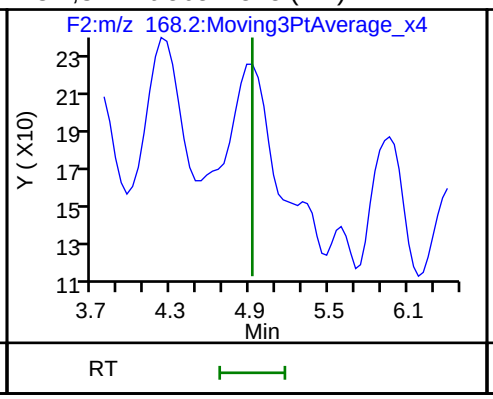
6 Tetryl (ND)



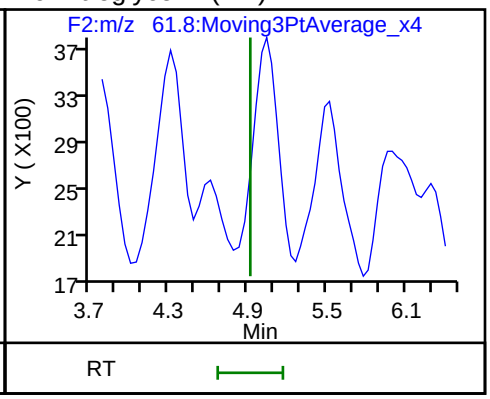
* 7 1,3-Dinitrobenzene-d4



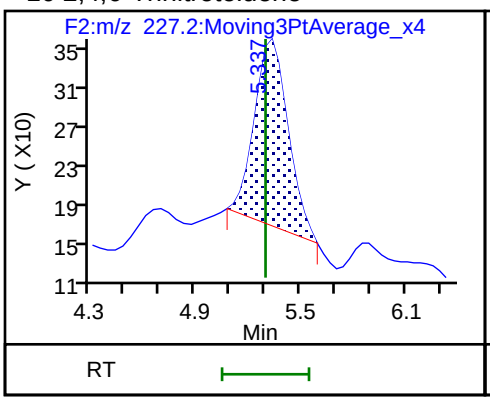
8 1,3-Dinitrobenzene (ND)



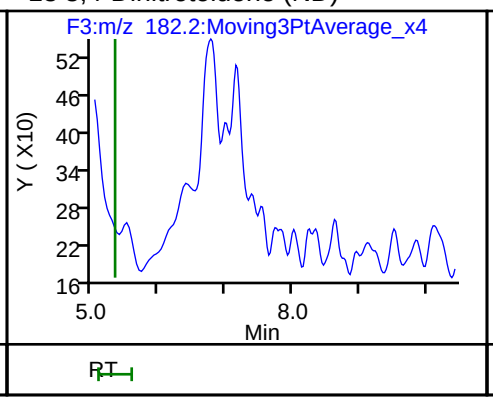
9 Nitroglycerin (ND)



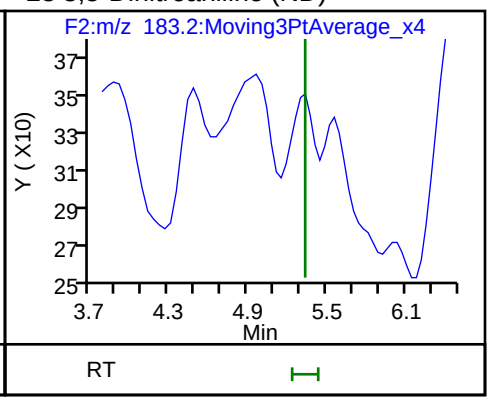
10 2,4,6-Trinitrotoluene



13 3,4-Dinitrotoluene (ND)

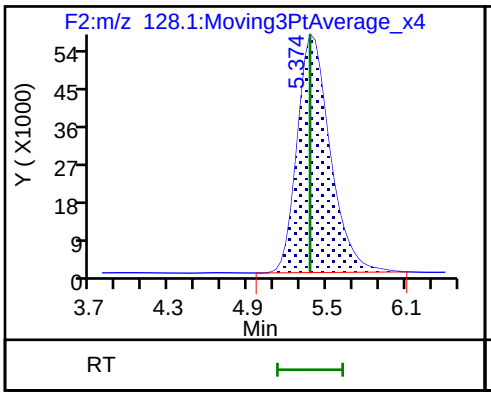


28 3,5-Dinitroaniline (ND)

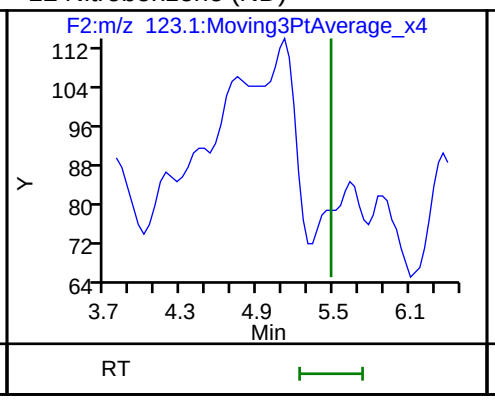


Report Date: 16-Jul-2021 08:16:46 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15012.d

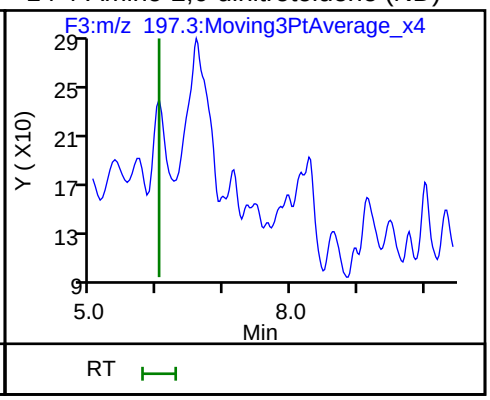
$ 11 Nitrobenzene-d5



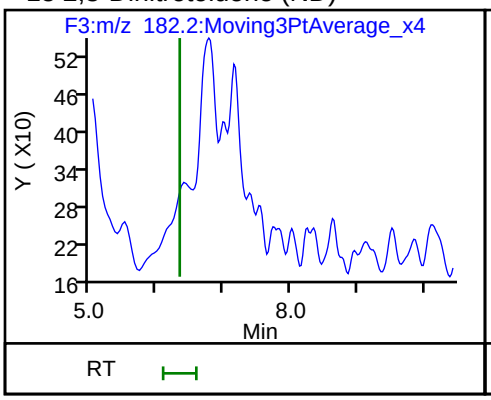
12 Nitrobenzene (ND)



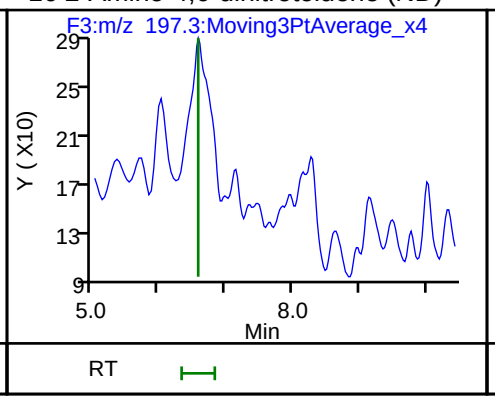
14 4-Amino-2,6-dinitrotoluene (ND)



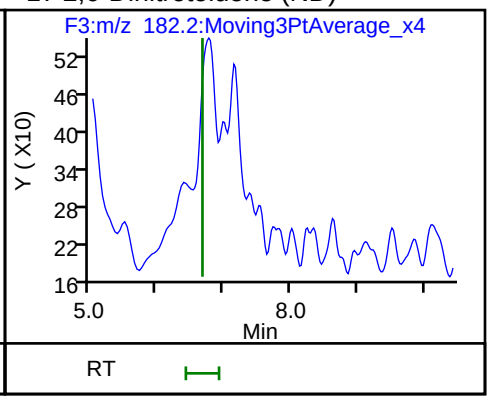
15 2,3-Dinitrotoluene (ND)



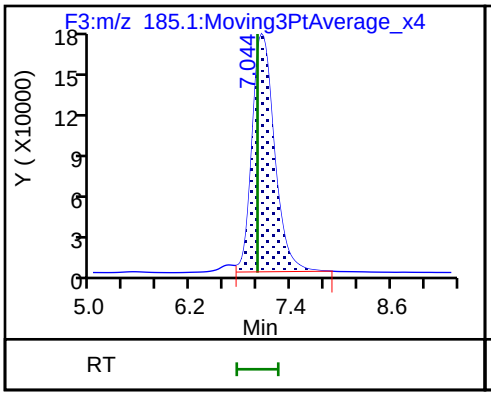
16 2-Amino-4,6-dinitrotoluene (ND)



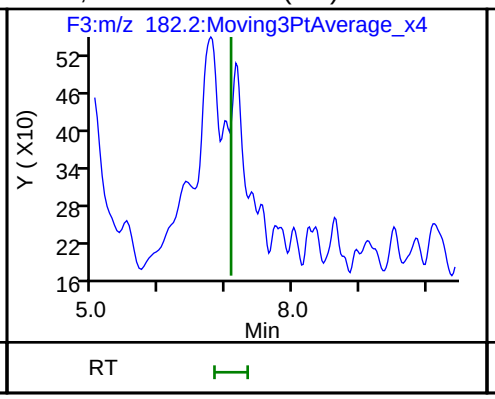
17 2,6-Dinitrotoluene (ND)



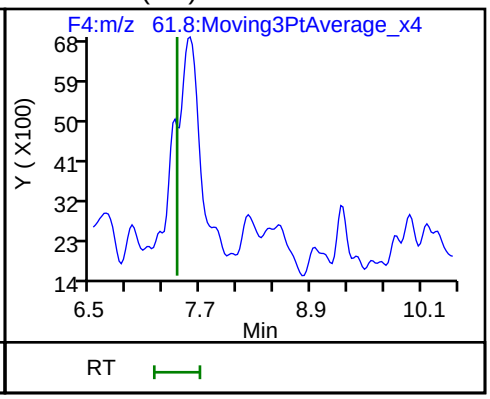
* 18 2,4-dinitrotoluene-d3



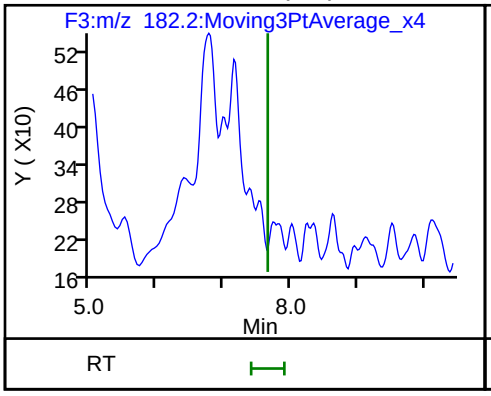
19 2,4-Dinitrotoluene (ND)



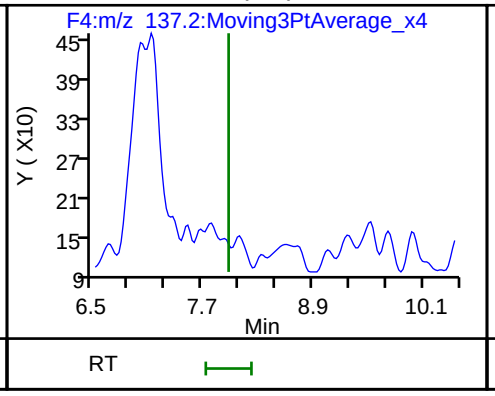
20 PETN (ND)



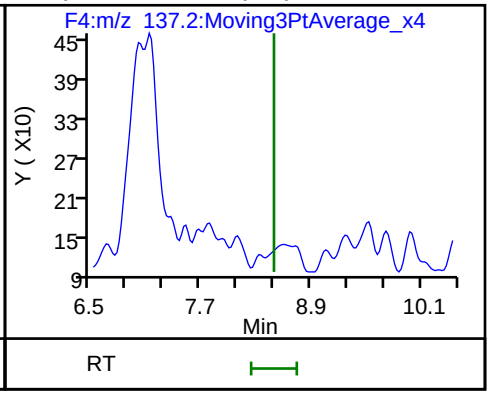
21 3,5-Dinitrotoluene (ND)



22 o-Nitrotoluene (ND)

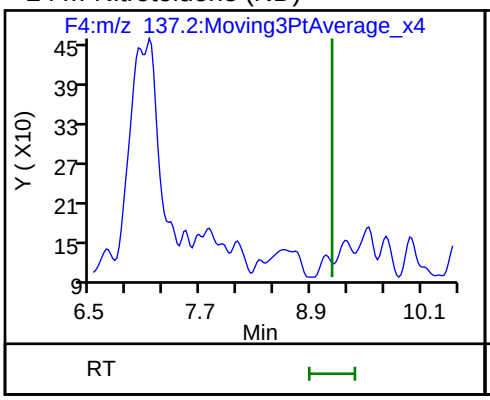


23 p-Nitrotoluene (ND)

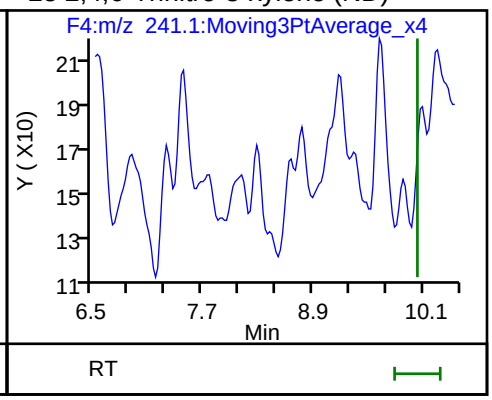


Report Date: 16-Jul-2021 08:16:46 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15012.d

24 m-Nitrotoluene (ND)



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



Report Date: 16-Jul-2021 08:16:46 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15012.d				
Lims ID:	MB 280-542950/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	15-Jul-2021 11:47:06	ALS Bottle#:	10	Worklist Smp#:	13
Injection Vol:	40.0 ul	Dil. Factor:	1.0000		
Sample Info:	MB 280-542950/1-A				
Misc. Info.:	06/30/2021 0.1%HAC				
Operator ID:	acm	Instrument ID:	LC_LCMS4		
Method:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m				
Limit Group:	LC - 8321A Expl				
Last Update:	16-Jul-2021 08:16:45	Calib Date:	15-Jul-2021 11:10:54		
Integrator:	Picker				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d				
Column 1 :			Det: F1:SIR		
Process Host:	CTX1655				
First Level Reviewer: meyera		Date:	15-Jul-2021 12:20:34		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	94.9	94.58

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1
SDG No.:
Client Sample ID: Lab Sample ID: ICB 280-543297/11
Matrix: Solid Lab File ID: ex421G15010.d
Analysis Method: 8321A Date Collected:
Extraction Method: Date Extracted:
Sample wt/vol: 1(mL) Date Analyzed: 07/15/2021 11:22
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.: 543297 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	12	U	20	12	3.4
99-65-0	1,3-Dinitrobenzene	6.4	U	20	6.4	2.8
118-96-7	2,4,6-Trinitrotoluene	12	U	20	12	4.4
121-14-2	2,4-Dinitrotoluene	12	U	20	12	4.4
606-20-2	2,6-Dinitrotoluene	12	U	20	12	4.4
35572-78-2	2-Amino-4,6-dinitrotoluene	12	U	20	12	4.2
88-72-2	o-Nitrotoluene	12	U	20	12	4.4
99-08-1	m-Nitrotoluene	12	U	20	12	5.0
19406-51-0	4-Amino-2,6-dinitrotoluene	12	U	20	12	3.8
99-99-0	p-Nitrotoluene	12	U	20	12	5.2
98-95-3	Nitrobenzene	12	U	20	12	6.6
55-63-0	Nitroglycerin	12	U	28	12	3.4
2691-41-0	HMX	12	U	20	12	3.8
78-11-5	PETN	12	U	20	12	3.6
121-82-4	RDX	12	U	20	12	4.2
479-45-8	Tetryl	12	U	20	12	4.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	93		68-140

Report Date: 16-Jul-2021 08:16:44 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15010.d
Lims ID: ICB
Client ID:
Sample Type: ICB
Inject. Date: 15-Jul-2021 11:22:57 ALS Bottle#: 1 Worklist Smp#: 11
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 06/30/21BLK ICB
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 16-Jul-2021 08:16:20 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1655

First Level Reviewer: meyera Date: 15-Jul-2021 12:20:07
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
360.9	2.069	2.052	0.017		155410	120.0	134	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	3.028	2.993	0.035		713142	120.0	580	
* 7 1,3-Dinitrobenzene-d4								
172.1	4.915	4.871	0.044		1519399	129.4	56.7	
10 2,4,6-Trinitrotoluene								
227.2	5.336	5.353	0.037	0.755	3172	1.70	4.4	
$ 11 Nitrobenzene-d5								
128.1	5.410	5.428	0.037	0.766	495901	46.7	242	
* 18 2,4-dinitrotoluene-d3								
185.1	7.067	6.996	0.071		3878045	120.0	419	

QC Flag Legend

Processing Flags

Reagents:

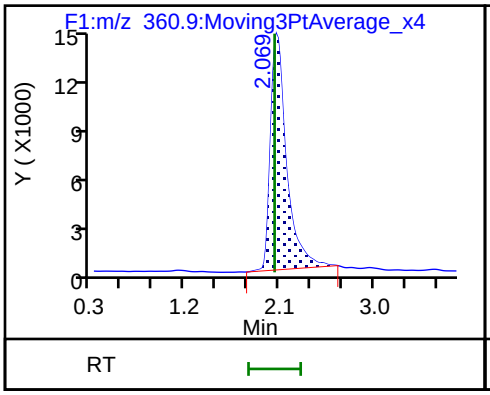
8321NB-D5-cal_00020 Amount Added: 5.00 Units: uL
EXPWORKINGIS_00084 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 16-Jul-2021 08:16:45 Chrom Revision: 2.3 13-May-2021 07:57:40

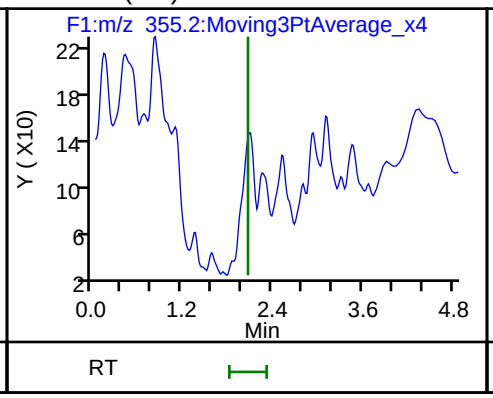
Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15010.d
Injection Date: 15-Jul-2021 11:22:57 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: 8321exp4-25 Limit Group: LC - 8321A Expl

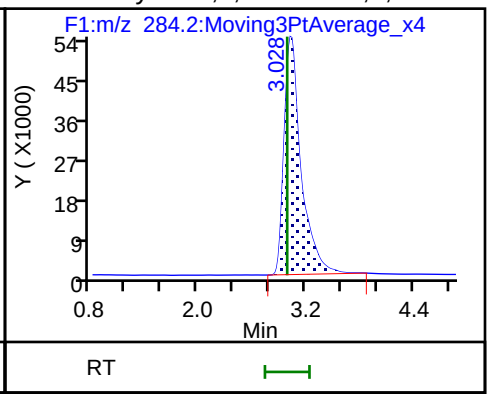
* 1 HMX-13C4



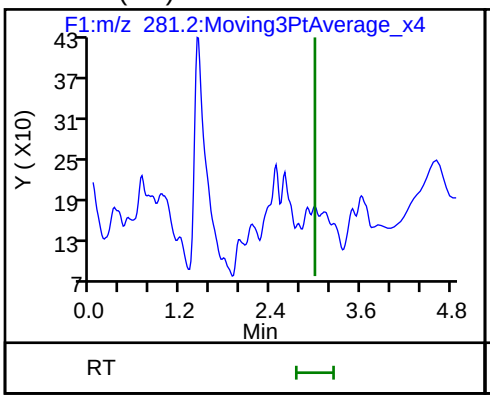
2 HMX (ND)



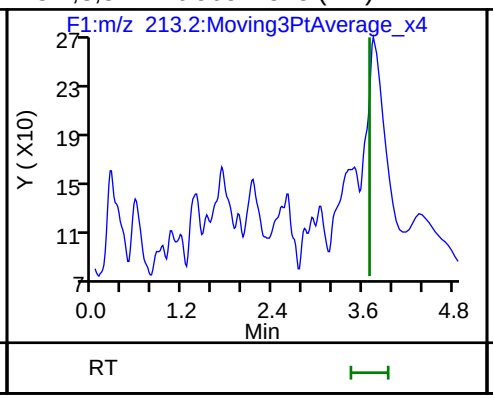
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



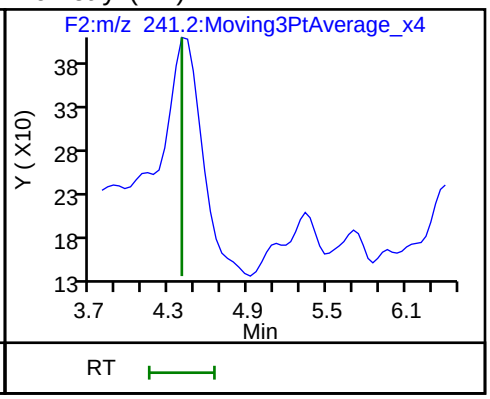
4 RDX (ND)



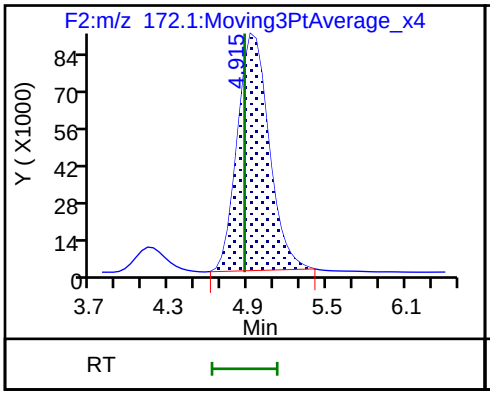
5 1,3,5-Trinitrobenzene (ND)



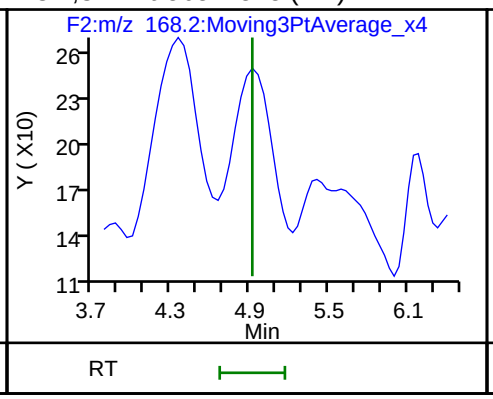
6 Tetryl (ND)



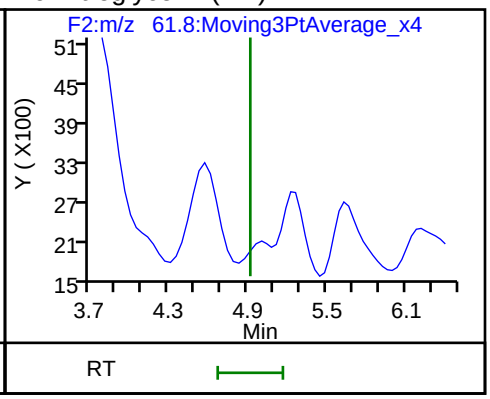
* 7 1,3-Dinitrobenzene-d4



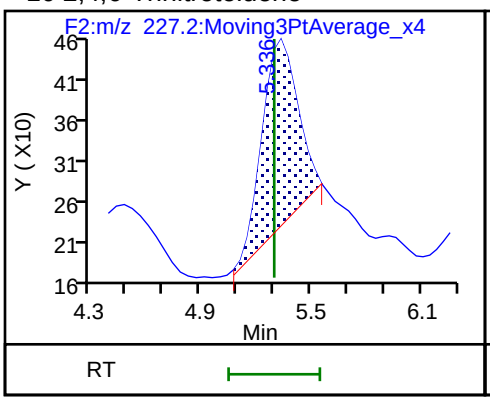
8 1,3-Dinitrobenzene (ND)



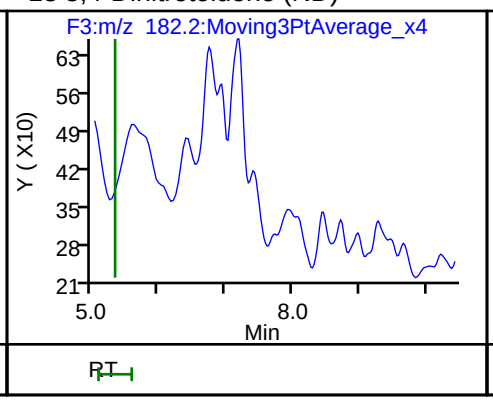
9 Nitroglycerin (ND)



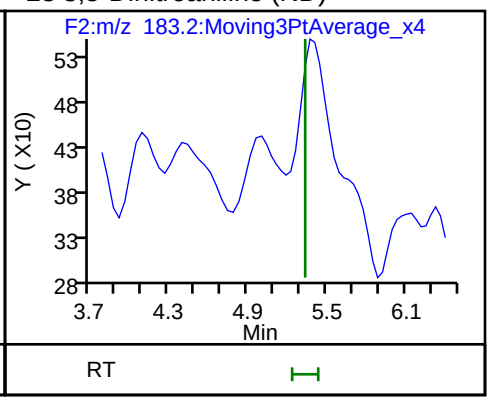
10 2,4,6-Trinitrotoluene



13 3,4-Dinitrotoluene (ND)

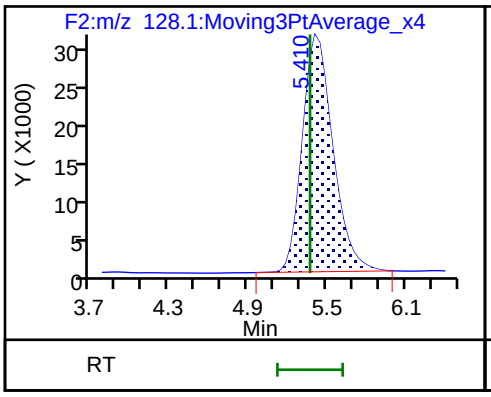


28 3,5-Dinitroaniline (ND)

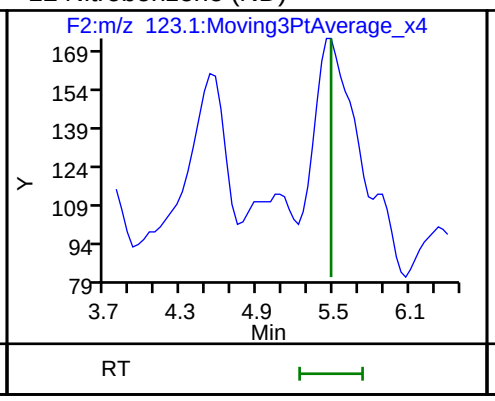


Report Date: 16-Jul-2021 08:16:45 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15010.d

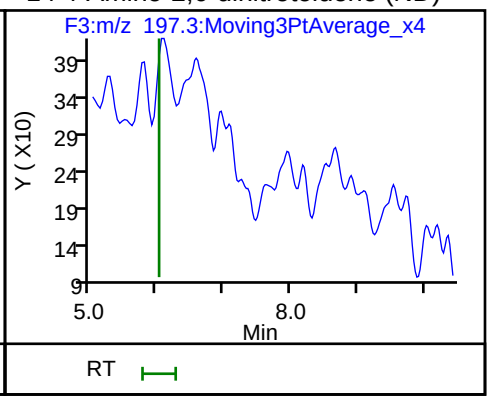
$ 11 Nitrobenzene-d5



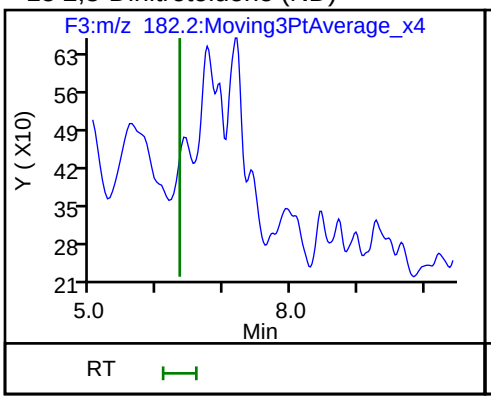
12 Nitrobenzene (ND)



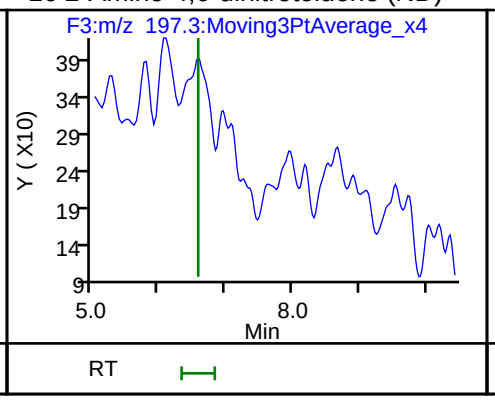
14 4-Amino-2,6-dinitrotoluene (ND)



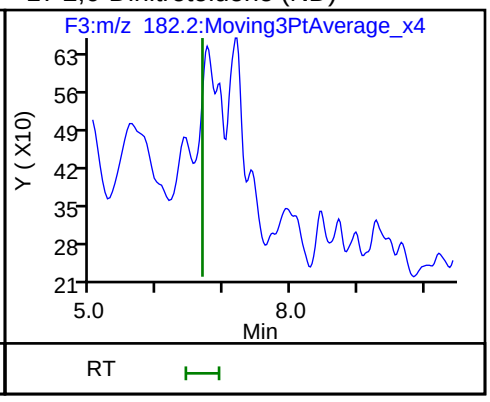
15 2,3-Dinitrotoluene (ND)



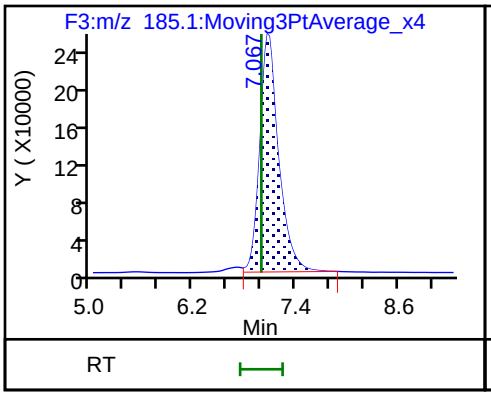
16 2-Amino-4,6-dinitrotoluene (ND)



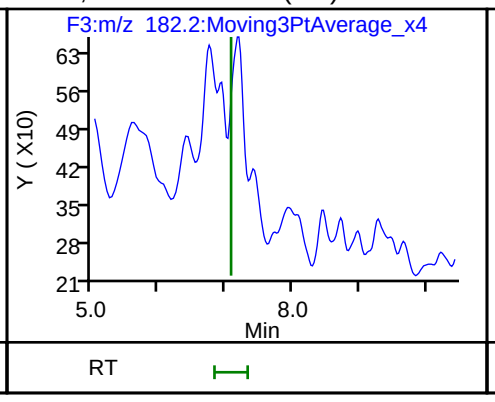
17 2,6-Dinitrotoluene (ND)



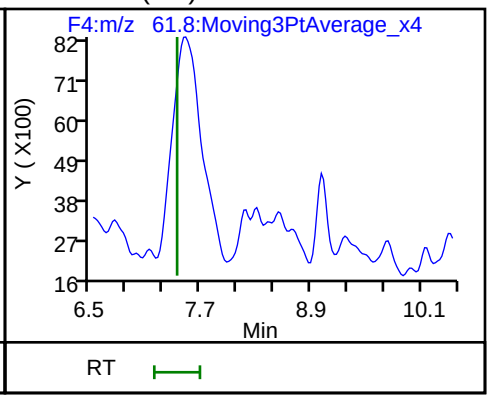
* 18 2,4-dinitrotoluene-d3



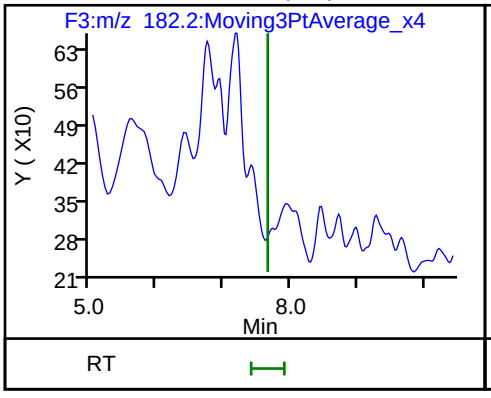
19 2,4-Dinitrotoluene (ND)



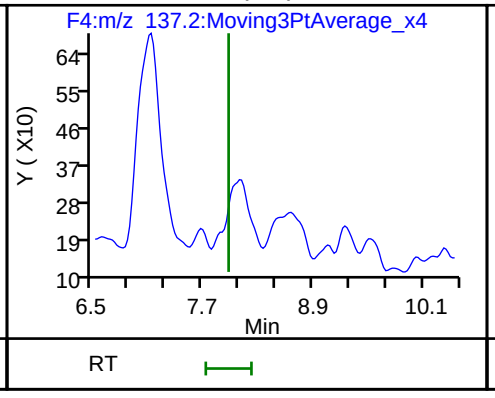
20 PETN (ND)



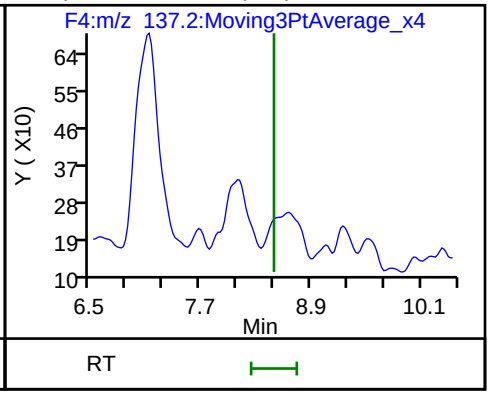
21 3,5-Dinitrotoluene (ND)



22 o-Nitrotoluene (ND)

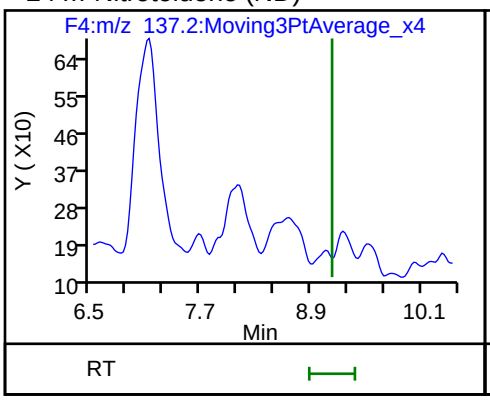


23 p-Nitrotoluene (ND)

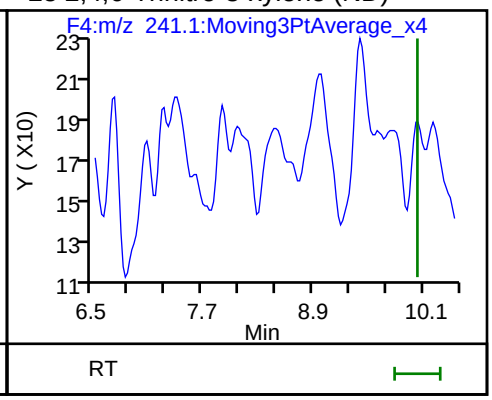


Report Date: 16-Jul-2021 08:16:45
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15010.d

24 m-Nitrotoluene (ND)



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



Report Date: 16-Jul-2021 08:16:45 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15010.d
Lims ID: ICB
Client ID:
Sample Type: ICB
Inject. Date: 15-Jul-2021 11:22:57 ALS Bottle#: 1 Worklist Smp#: 11
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 06/30/21BLK ICB
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 16-Jul-2021 08:16:20 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1655

First Level Reviewer: meyera Date: 15-Jul-2021 12:20:07

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	50.0	46.7	93.44

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-542950/2-A

Matrix: Solid Lab File ID: ex421G15013.d

Analysis Method: 8321A Date Collected:

Extraction Method: 8330B Date Extracted: 07/12/2021 16:07

Sample wt/vol: 10(g) Date Analyzed: 07/15/2021 11:59

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

Injection Volume: 40(uL) GC Column: IonPac ID: 2(mm)

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

Analysis Batch No.: 543298 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.370		0.10	0.030	0.013
99-65-0	1,3-Dinitrobenzene	0.377		0.10	0.016	0.0071
118-96-7	2,4,6-Trinitrotoluene	0.361		0.10	0.015	0.0050
121-14-2	2,4-Dinitrotoluene	0.396		0.10	0.030	0.0082
606-20-2	2,6-Dinitrotoluene	0.344		0.10	0.030	0.020
35572-78-2	2-Amino-4,6-dinitrotoluene	0.378		0.10	0.030	0.012
88-72-2	o-Nitrotoluene	0.396		0.10	0.015	0.0057
99-08-1	m-Nitrotoluene	0.385		0.10	0.030	0.013
19406-51-0	4-Amino-2,6-dinitrotoluene	0.333		0.10	0.015	0.0051
99-99-0	p-Nitrotoluene	0.381		0.10	0.030	0.011
98-95-3	Nitrobenzene	0.425		0.10	0.030	0.011
55-63-0	Nitroglycerin	0.295		0.10	0.030	0.011
2691-41-0	HMX	0.393		0.10	0.030	0.015
78-11-5	PETN	0.300		0.10	0.015	0.0052
121-82-4	RDX	0.404		0.10	0.015	0.0043
479-45-8	Tetryl	0.481		0.10	0.015	0.0076

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	109		68-140

Report Date: 16-Jul-2021 08:16:47 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15013.d
Lims ID: LCS 280-542950/2-A
Client ID:
Sample Type: LCS
Inject. Date: 15-Jul-2021 11:59:11 ALS Bottle#: 11 Worklist Smp#: 14
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-542950/2-A
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 16-Jul-2021 08:16:45 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1655

First Level Reviewer: meyera Date: 15-Jul-2021 14:57:16
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
360.9	2.052	2.052	0.0		146465	120.0	122	
2 HMX								
355.2	2.069	2.069	0.0	1.008	375696	98.4	224	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	2.994	2.993	0.001		892545	120.0	708	
4 RDX								
281.2	2.994	3.010	0.001	1.000	445490	101.0	218	
5 1,3,5-Trinitrobenzene								
213.2	3.701	3.733	0.001	0.760	857312	92.5	1368	
6 Tetryl								
241.2	4.391	4.429	0.001	0.901	1201642	120.2	384	
* 7 1,3-Dinitrobenzene-d4								
172.1	4.872	4.871	0.001		1414584	129.4	60.7	
8 1,3-Dinitrobenzene								
168.2	4.960	4.959	0.045	1.018	999930	94.3	177	
9 Nitroglycerin								
61.8	4.960	4.959	0.045	1.018	6230074	73.6	311	
10 2,4,6-Trinitrotoluene								
227.2	5.300	5.353	0.001	0.752	3640270	90.3	774	
$ 11 Nitrobenzene-d5								
128.1	5.374	5.428	0.001	0.763	1062426	109.1	579	
12 Nitrobenzene								
123.1	5.485	5.521	0.001	0.779	863844	106.2	773	
14 4-Amino-2,6-dinitrotoluene								
197.3	6.014	6.053	0.001	0.854	2765159	83.2	101	
16 2-Amino-4,6-dinitrotoluene								
197.3	6.620	6.616	0.048	0.940	4004867	94.6	140	

Report Date: 16-Jul-2021 08:16:47 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15013.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								
182.2	6.714	6.760	0.048	0.953	4811244	86.1	794	
* 18 2,4-dinitrotoluene-d3								
185.1	7.044	6.996	0.048		3510913	120.0	300	
19 2,4-Dinitrotoluene								
182.2	7.091	7.115	0.024	1.007	2893383	98.9	385	
20 PETN								
61.8	7.482	7.484	0.048	1.062	6105527	75.1	260	
22 o-Nitrotoluene								
137.2	8.024	8.030	0.048	1.139	1361192	99.1	272	
23 p-Nitrotoluene								
137.2	8.543	8.552	0.048	1.213	1168891	95.4	201	
24 m-Nitrotoluene								
137.2	9.203	9.193	0.071	1.307	814932	96.3	145	

QC Flag Legend

Processing Flags

Reagents:

EXPWORKINGIS_00084 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 16-Jul-2021 08:16:47 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15013.d

Injection Date: 15-Jul-2021 11:59:11 Instrument ID: LC_LCMS4

Lims ID: LCS 280-542950/2-A

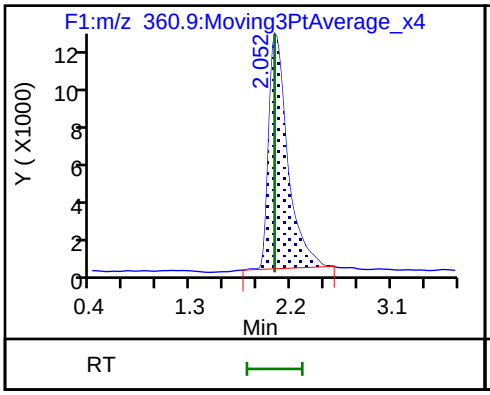
Client ID:

Operator ID: acm ALS Bottle#: 11 Worklist Smp#: 14

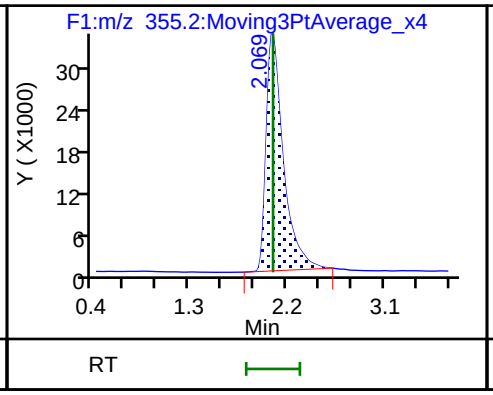
Injection Vol: 40.0 ul Dil. Factor: 1.0000

Method: 8321exp4-25 Limit Group: LC - 8321A Expl

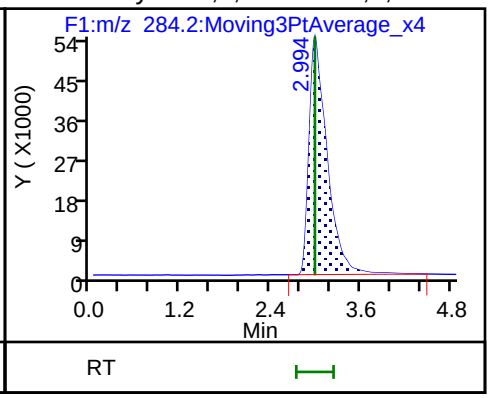
* 1 HMX-13C4



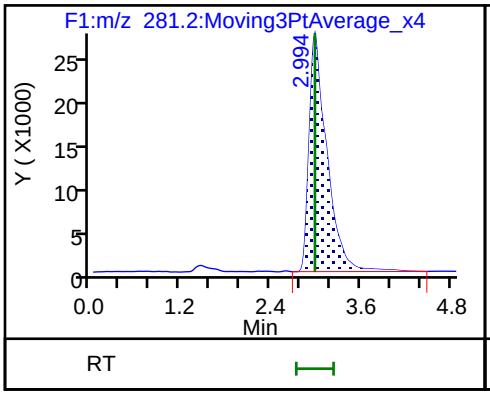
2 HMX



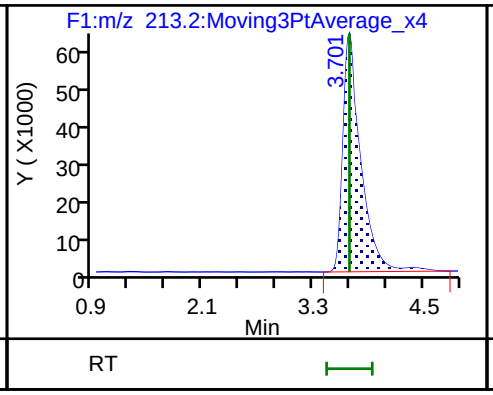
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



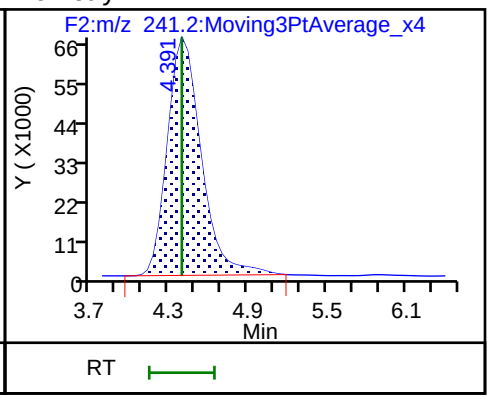
4 RDX



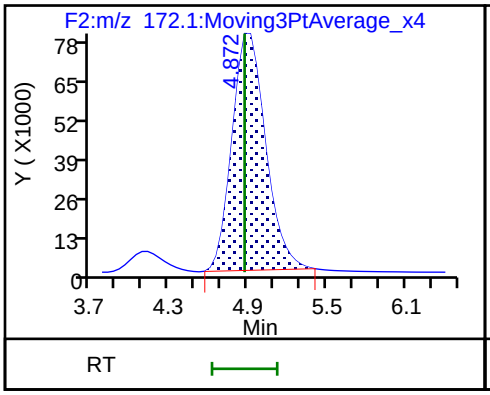
5 1,3,5-Trinitrobenzene



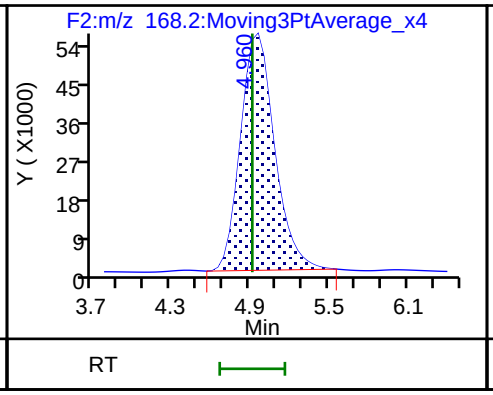
6 Tetryl



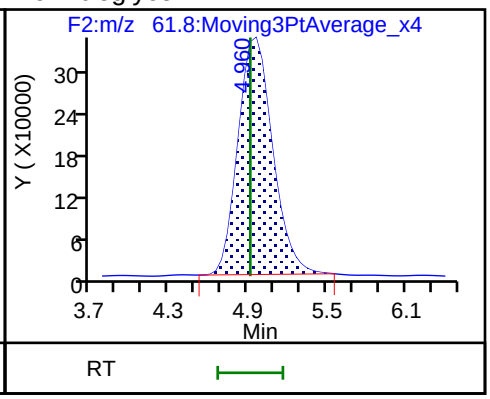
* 7 1,3-Dinitrobenzene-d4



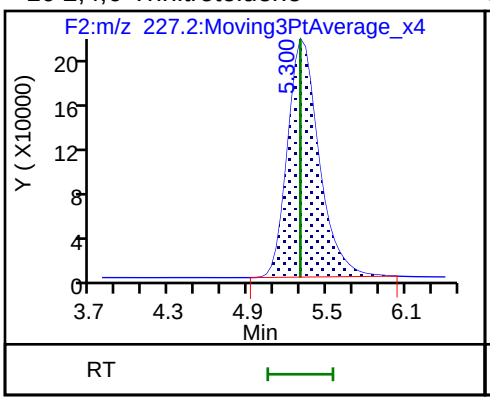
8 1,3-Dinitrobenzene



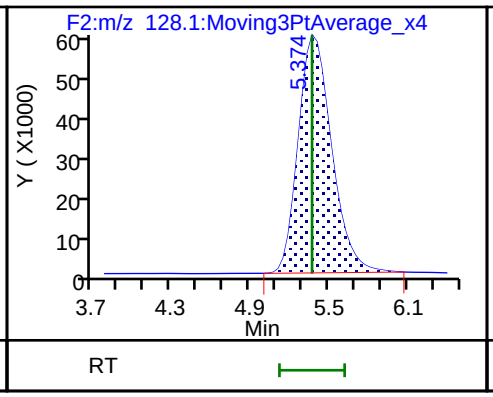
9 Nitroglycerin



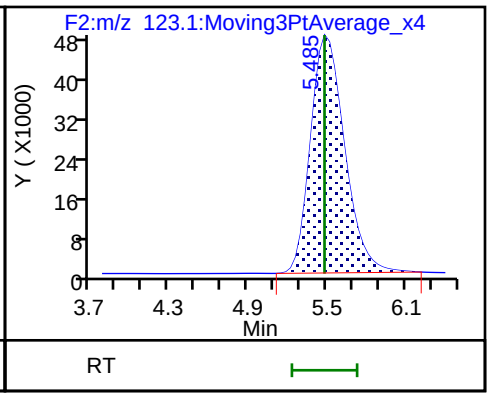
10 2,4,6-Trinitrotoluene



$ 11 Nitrobenzene-d5



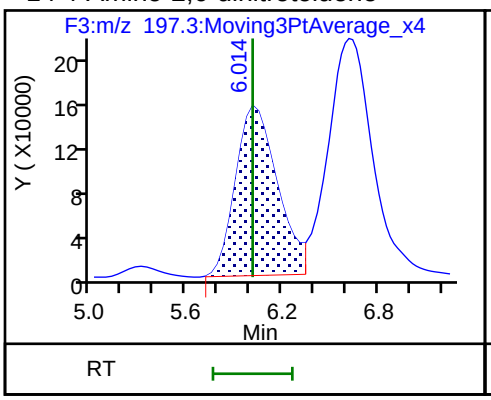
12 Nitrobenzene



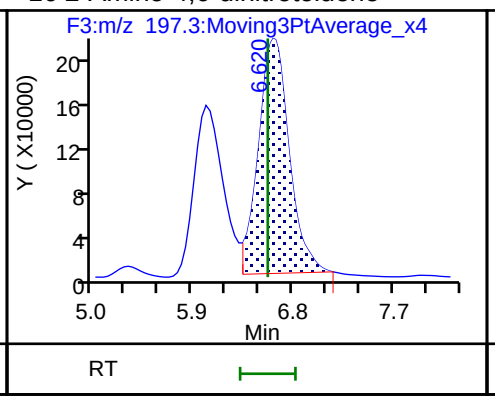
Report Date: 16-Jul-2021 08:16:47 Chrom Revision: 2.3 13-May-2021 07:57:40

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15013.d

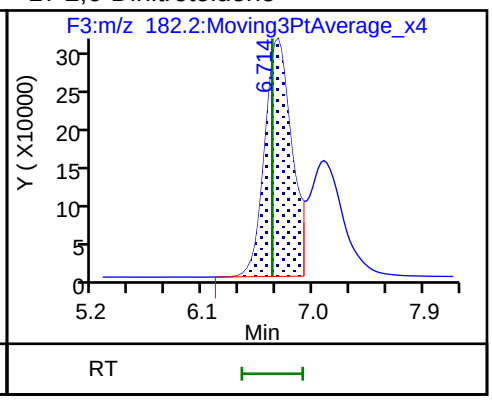
14 4-Amino-2,6-dinitrotoluene



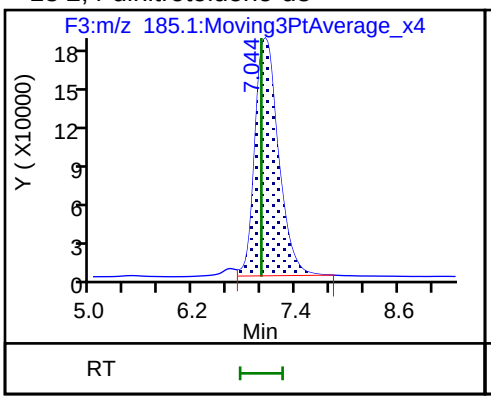
16 2-Amino-4,6-dinitrotoluene



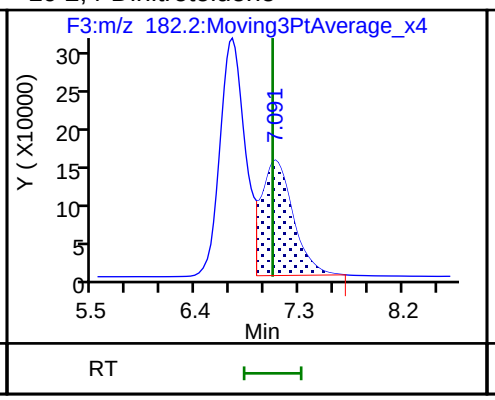
17 2,6-Dinitrotoluene



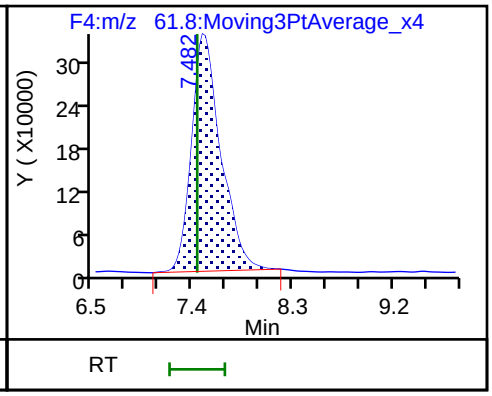
* 18 2,4-dinitrotoluene-d3



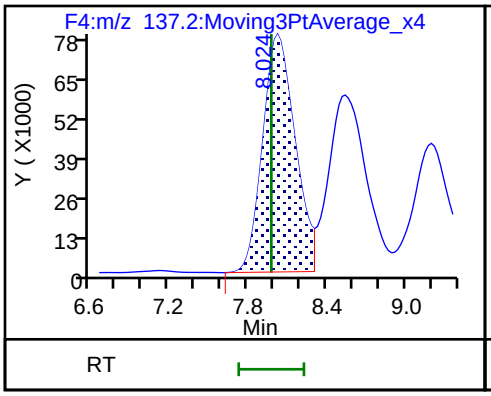
19 2,4-Dinitrotoluene



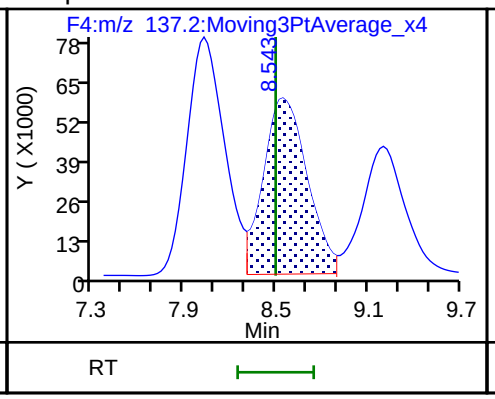
20 PETN



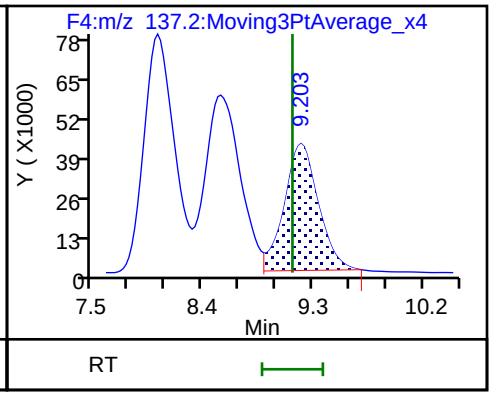
22 o-Nitrotoluene



23 p-Nitrotoluene



24 m-Nitrotoluene



Report Date: 16-Jul-2021 08:16:47 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15013.d
Lims ID: LCS 280-542950/2-A
Client ID:
Sample Type: LCS
Inject. Date: 15-Jul-2021 11:59:11 ALS Bottle#: 11 Worklist Smp#: 14
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-542950/2-A
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 16-Jul-2021 08:16:45 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1655

First Level Reviewer: meyera Date: 15-Jul-2021 14:57:16

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	109.1	108.72

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Client Sample ID: 29SB146 (15-16) MS Lab Sample ID: 280-150636-6 MS

Matrix: Solid Lab File ID: ex421G15024.d

Analysis Method: 8321A Date Collected: 03/09/2021 09:35

Extraction Method: 8330B Date Extracted: 07/12/2021 16:07

Sample wt/vol: 10.41(g) Date Analyzed: 07/15/2021 14:12

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

Injection Volume: 40(uL) GC Column: IonPac ID: 2(mm)

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

Analysis Batch No.: 543298 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.344		0.096	0.029	0.012
99-65-0	1,3-Dinitrobenzene	0.362		0.096	0.015	0.0068
118-96-7	2,4,6-Trinitrotoluene	0.420		0.096	0.015	0.0048
121-14-2	2,4-Dinitrotoluene	0.353		0.096	0.029	0.0079
606-20-2	2,6-Dinitrotoluene	0.335		0.096	0.029	0.019
35572-78-2	2-Amino-4,6-dinitrotoluene	0.337		0.096	0.029	0.012
88-72-2	o-Nitrotoluene	0.381		0.096	0.015	0.0055
99-08-1	m-Nitrotoluene	0.365		0.096	0.029	0.012
19406-51-0	4-Amino-2,6-dinitrotoluene	0.350		0.096	0.015	0.0049
99-99-0	p-Nitrotoluene	0.396		0.096	0.029	0.011
98-95-3	Nitrobenzene	0.439		0.096	0.029	0.010
55-63-0	Nitroglycerin	0.320		0.096	0.029	0.010
2691-41-0	HMX	0.381		0.096	0.029	0.014
78-11-5	PETN	0.297		0.096	0.015	0.0049
121-82-4	RDX	0.328		0.096	0.015	0.0041
479-45-8	Tetryl	0.478	J1	0.096	0.015	0.0073

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	117		68-140

Report Date: 16-Jul-2021 08:16:53 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15024.d
Lims ID: 280-150636-A-6-B MS
Client ID:
Sample Type: MS
Inject. Date: 15-Jul-2021 14:12:59 ALS Bottle#: 18 Worklist Smp#: 25
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 280-150636-A-6-B MS
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 16-Jul-2021 08:16:52 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1655

First Level Reviewer: meyera Date: 15-Jul-2021 14:52:10
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	2.052	2.052	0.0		145368	120.0	171	
2 HMX								
355.2	2.069	2.069	0.0	1.008	376098	99.2	212	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	3.011	2.993	0.018		826674	120.0	575	
4 RDX								
281.2	3.028	3.010	0.035	1.006	356423	85.4	164	
5 1,3,5-Trinitrobenzene								
213.2	3.701	3.733	0.001	0.753	844278	89.6	978	
6 Tetryl								
241.2	4.391	4.429	0.001	0.893	1265003	124.3	657	
* 7 1,3-Dinitrobenzene-d4								
172.1	4.916	4.871	0.045		1439674	129.4	57.1	
8 1,3-Dinitrobenzene								
168.2	4.960	4.959	0.045	1.009	1016436	94.2	154	
9 Nitroglycerin								
61.8	4.960	4.959	0.045	1.009	7007417	83.2	295	
10 2,4,6-Trinitrotoluene								
227.2	5.300	5.353	0.001	0.752	4398889	109.4	559	
$ 11 Nitrobenzene-d5								
128.1	5.411	5.428	0.038	0.768	1163338	117.4	281	
12 Nitrobenzene								
123.1	5.485	5.521	0.001	0.779	924387	114.2	544	
14 4-Amino-2,6-dinitrotoluene								
197.3	6.050	6.053	0.037	0.859	3079469	91.0	100	
16 2-Amino-4,6-dinitrotoluene								
197.3	6.643	6.616	0.071	0.943	8689534	87.7	116	

Report Date: 16-Jul-2021 08:16:53 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15024.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								
182.2	6.714	6.760	0.048	0.953	4845054	87.2	813	
* 18 2,4-dinitrotoluene-d3								
185.1	7.044	6.996	0.048		3491610	120.0	365	
19 2,4-Dinitrotoluene								
182.2	7.091	7.115	0.024	1.007	2673140	91.8	398	
20 PETN								
61.8	7.529	7.484	0.095	1.069	6248158	77.3	282	
22 o-Nitrotoluene								
137.2	8.047	8.030	0.071	1.142	1354488	99.2	265	
23 p-Nitrotoluene								
137.2	8.566	8.552	0.071	1.216	1257881	103.1	228	
24 m-Nitrotoluene								
137.2	9.179	9.193	0.047	1.303	800696	95.1	145	

QC Flag Legend

Processing Flags

Reagents:

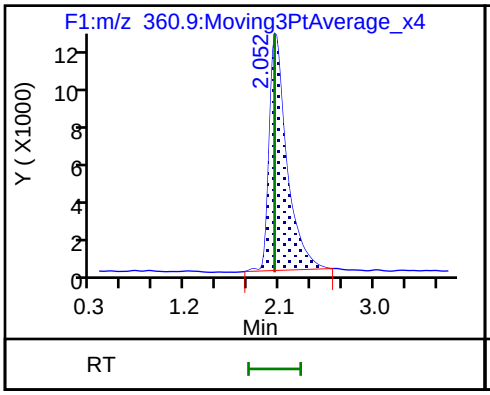
EXPWORKINGIS_00084 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 16-Jul-2021 08:16:53 Chrom Revision: 2.3 13-May-2021 07:57:40

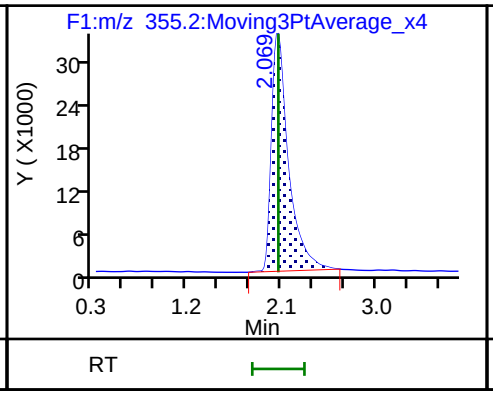
Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15024.d
Injection Date: 15-Jul-2021 14:12:59 Instrument ID: LC_LCMS4
Lims ID: 280-150636-A-6-B MS
Client ID:
Operator ID: acm ALS Bottle#: 18 Worklist Smp#: 25
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Method: 8321exp4-25 Limit Group: LC - 8321A Expl

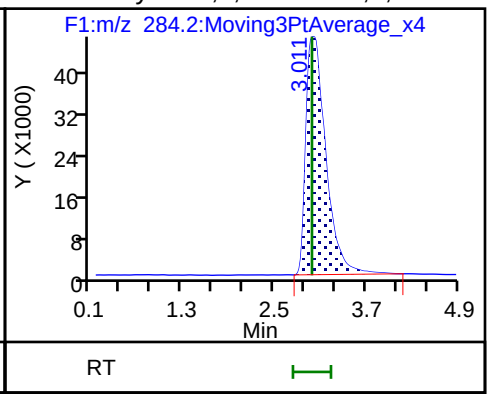
* 1 HMX-13C4



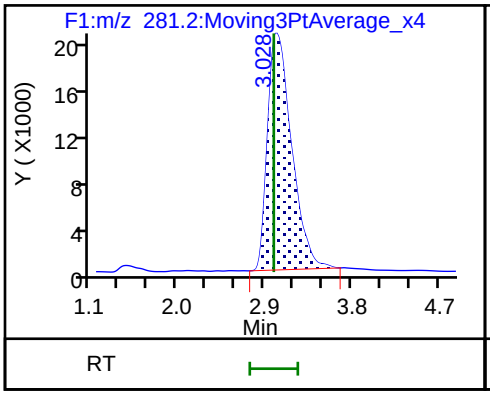
2 HMX



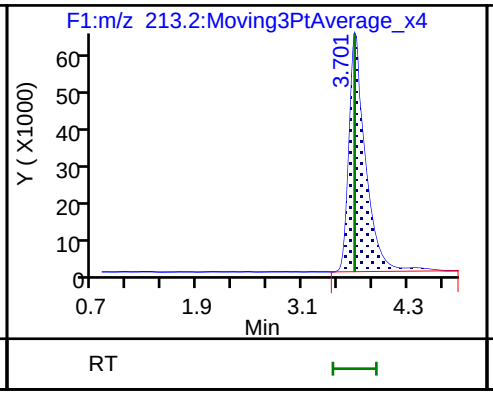
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



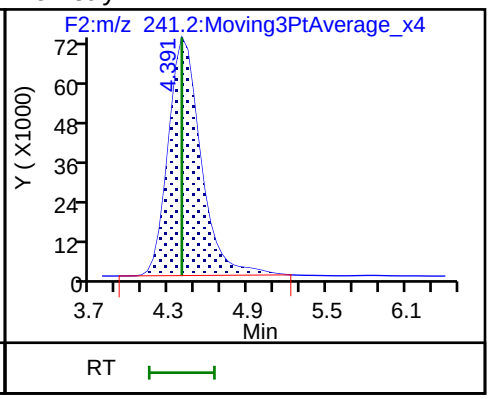
4 RDX



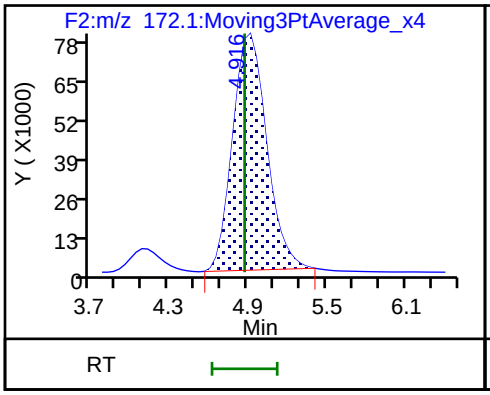
5 1,3,5-Trinitrobenzene



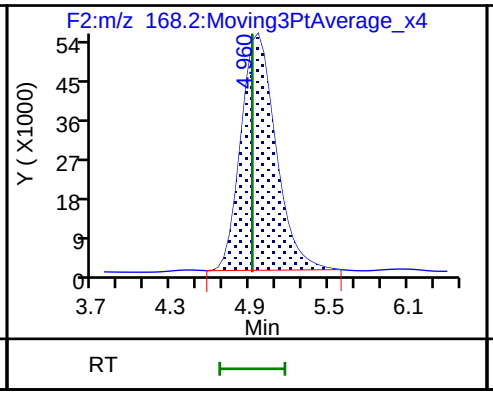
6 Tetryl



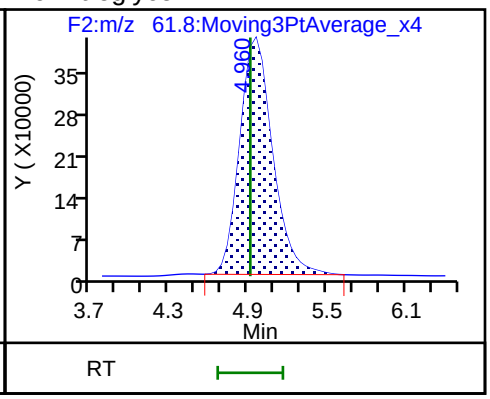
* 7 1,3-Dinitrobenzene-d4



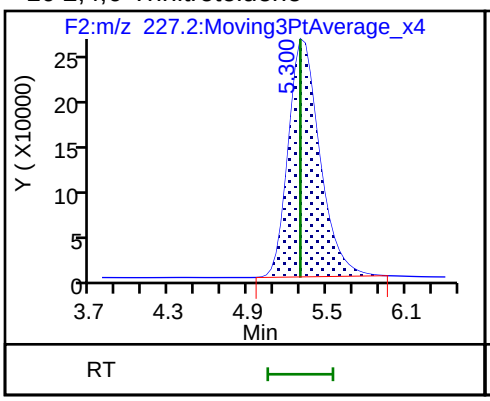
8 1,3-Dinitrobenzene



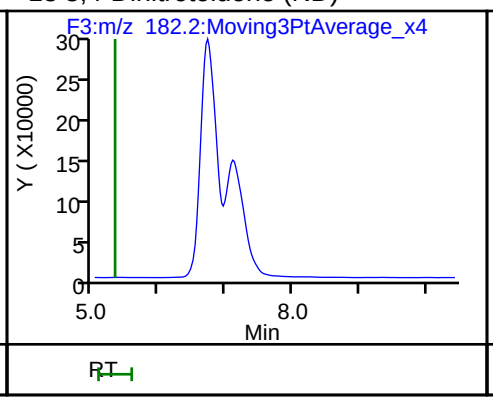
9 Nitroglycerin



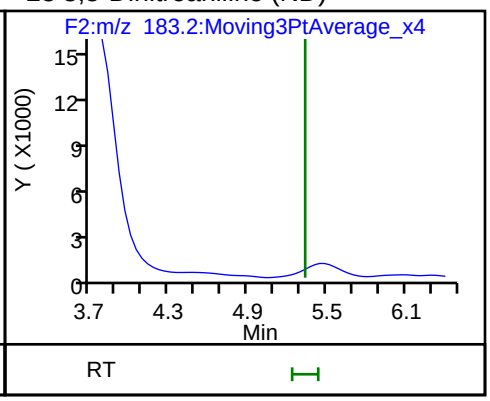
10 2,4,6-Trinitrotoluene



13 3,4-Dinitrotoluene (ND)



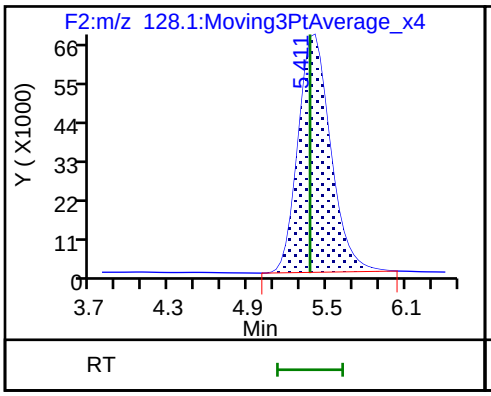
28 3,5-Dinitroaniline (ND)



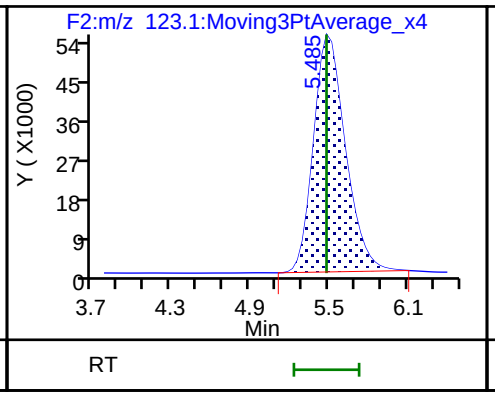
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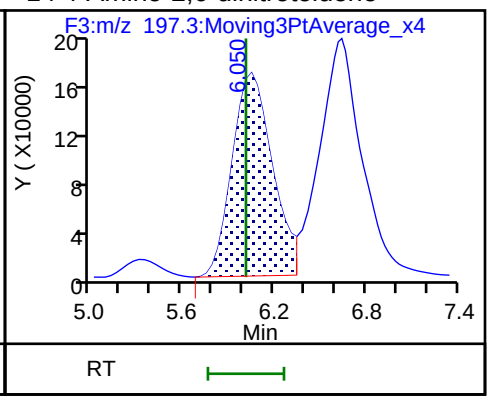
$ 11 Nitrobenzene-d5



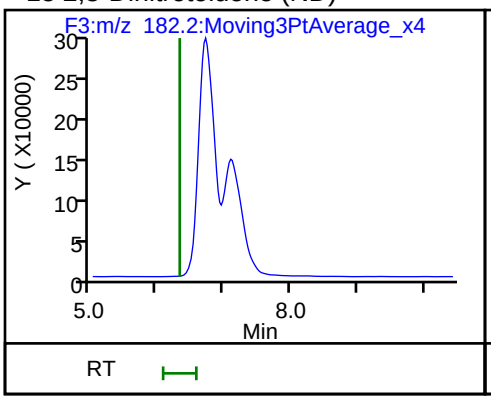
12 Nitrobenzene



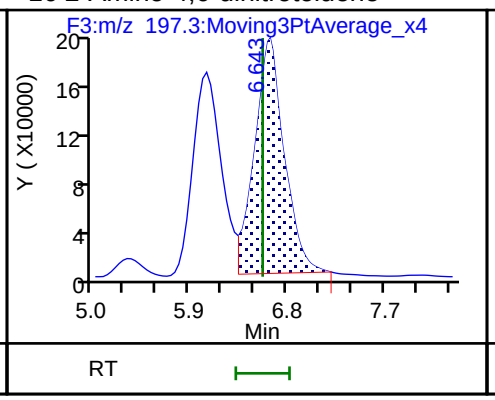
14 4-Amino-2,6-dinitrotoluene



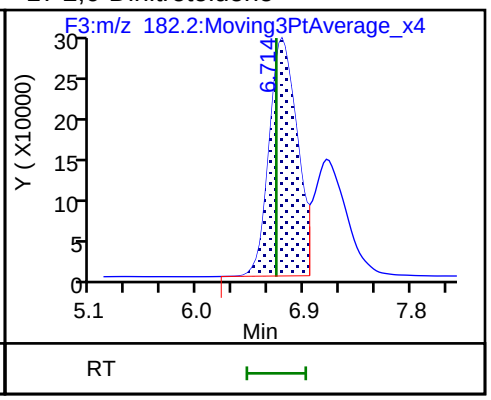
15 2,3-Dinitrotoluene (ND)



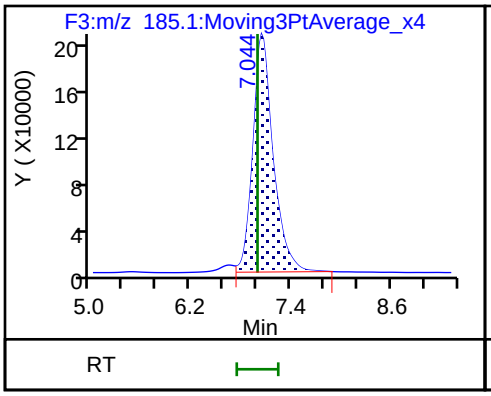
16 2-Amino-4,6-dinitrotoluene



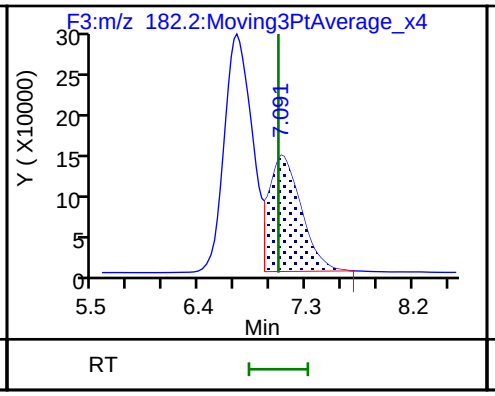
17 2,6-Dinitrotoluene



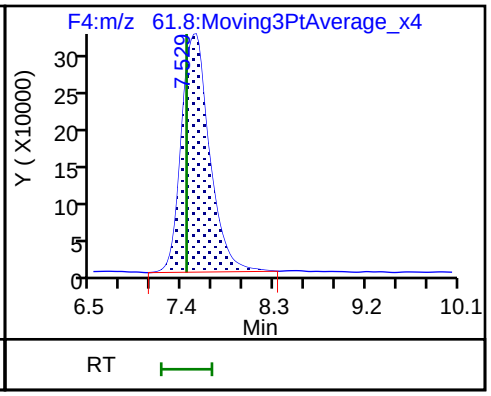
* 18 2,4-dinitrotoluene-d3



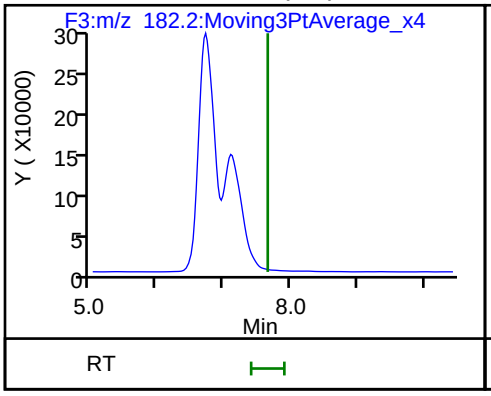
19 2,4-Dinitrotoluene



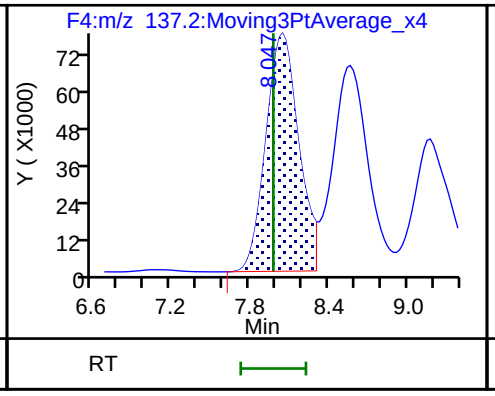
20 PETN



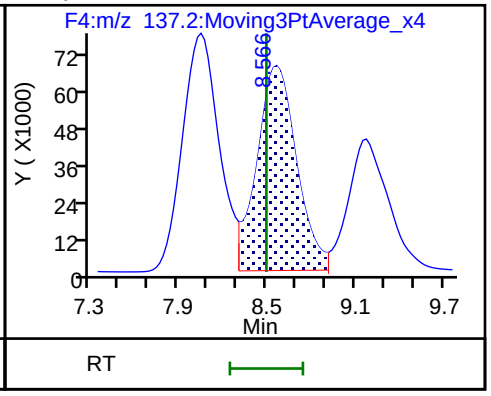
21 3,5-Dinitrotoluene (ND)



22 o-Nitrotoluene

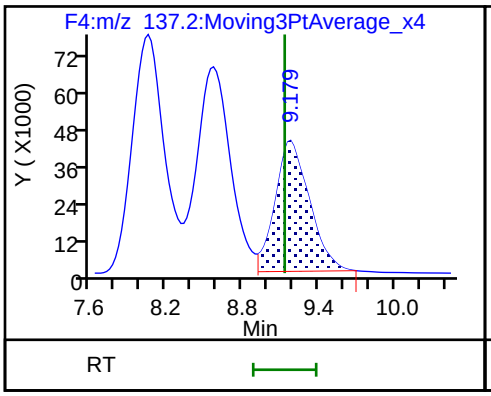


23 p-Nitrotoluene

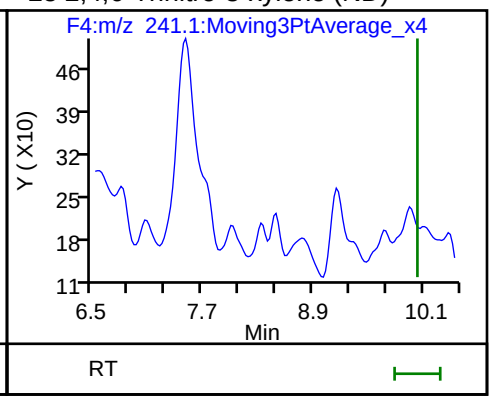


Report Date: 16-Jul-2021 08:16:53 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15024.d

24 m-Nitrotoluene



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



Report Date: 16-Jul-2021 08:16:53 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15024.d
Lims ID: 280-150636-A-6-B MS
Client ID:
Sample Type: MS
Inject. Date: 15-Jul-2021 14:12:59 ALS Bottle#: 18 Worklist Smp#: 25
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 280-150636-A-6-B MS
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 16-Jul-2021 08:16:52 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1655

First Level Reviewer: meyera Date: 15-Jul-2021 14:52:10

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	117.4	117.06

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Client Sample ID: 29SB146 (15-16) MSD Lab Sample ID: 280-150636-6 MSD

Matrix: Solid Lab File ID: ex421G15025.d

Analysis Method: 8321A Date Collected: 03/09/2021 09:35

Extraction Method: 8330B Date Extracted: 07/12/2021 16:07

Sample wt/vol: 10.3(g) Date Analyzed: 07/15/2021 14:25

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

Injection Volume: 40(uL) GC Column: IonPac ID: 2(mm)

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

Analysis Batch No.: 543298 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.348		0.097	0.029	0.012
99-65-0	1,3-Dinitrobenzene	0.394		0.097	0.015	0.0069
118-96-7	2,4,6-Trinitrotoluene	0.400		0.097	0.015	0.0049
121-14-2	2,4-Dinitrotoluene	0.362		0.097	0.029	0.0080
606-20-2	2,6-Dinitrotoluene	0.342		0.097	0.029	0.019
35572-78-2	2-Amino-4,6-dinitrotoluene	0.349		0.097	0.029	0.012
88-72-2	o-Nitrotoluene	0.386		0.097	0.015	0.0056
99-08-1	m-Nitrotoluene	0.405		0.097	0.029	0.012
19406-51-0	4-Amino-2,6-dinitrotoluene	0.327		0.097	0.015	0.0050
99-99-0	p-Nitrotoluene	0.358		0.097	0.029	0.011
98-95-3	Nitrobenzene	0.421		0.097	0.029	0.010
55-63-0	Nitroglycerin	0.301		0.097	0.029	0.010
2691-41-0	HMX	0.365		0.097	0.029	0.014
78-11-5	PETN	0.281		0.097	0.015	0.0050
121-82-4	RDX	0.343		0.097	0.015	0.0042
479-45-8	Tetryl	0.468	J1	0.097	0.015	0.0074

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	108		68-140

Report Date: 16-Jul-2021 08:16:53 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15025.d
Lims ID: 280-150636-A-6-C MSD
Client ID:
Sample Type: MSD
Inject. Date: 15-Jul-2021 14:25:04 ALS Bottle#: 19 Worklist Smp#: 26
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 280-150636-A-6-C MSD
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 16-Jul-2021 08:16:52 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1655

First Level Reviewer: meyera Date: 15-Jul-2021 14:52:25
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
360.9	2.052	2.052	0.0		153705	120.0	232	
2 HMX								
355.2	2.052	2.069	-0.017	1.000	376253	94.0	193	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	2.994	2.993	0.001		925904	120.0	959	
4 RDX								
281.2	2.977	3.010	-0.016	0.994	411459	88.4	227	
5 1,3,5-Trinitrobenzene								
213.2	3.700	3.733	0.0	0.760	859691	89.6	832	
6 Tetryl								
241.2	4.390	4.429	0.0	0.901	1248150	120.5	395	
* 7 1,3-Dinitrobenzene-d4								
172.1	4.872	4.871	0.001		1465189	129.4	60.8	
8 1,3-Dinitrobenzene								
168.2	4.915	4.959	0.0	1.009	1114823	101.5	160	
9 Nitroglycerin								
61.8	4.915	4.959	0.0	1.009	6508714	77.6	223	
10 2,4,6-Trinitrotoluene								
227.2	5.299	5.353	0.0	0.757	4119696	102.9	492	
$ 11 Nitrobenzene-d5								
128.1	5.373	5.428	0.0	0.768	1095223	108.6	501	
12 Nitrobenzene								
123.1	5.484	5.521	0.0	0.784	874122	108.4	506	
14 4-Amino-2,6-dinitrotoluene								
197.3	6.013	6.053	0.0	0.859	2898374	84.2	90.3	
16 2-Amino-4,6-dinitrotoluene								
197.3	6.572	6.616	0.0	0.939	3766182	89.8	108	

Report Date: 16-Jul-2021 08:16:53 Chrom Revision: 2.3 13-May-2021 07:57:40

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15025.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								
182.2	6.666	6.760	0.0	0.953	4876948	88.1	630	
* 18 2,4-dinitrotoluene-d3								
185.1	6.996	6.996	0.0		3478695	120.0	736	
19 2,4-Dinitrotoluene								
182.2	7.043	7.115	-0.024	1.007	2704848	93.3	301	
20 PETN								
61.8	7.458	7.484	0.024	1.066	5821644	72.3	392	
22 o-Nitrotoluene								
137.2	7.976	8.030	0.0	1.140	1353574	99.5	266	
23 p-Nitrotoluene								
137.2	8.495	8.552	0.0	1.214	1119076	92.2	201	
24 m-Nitrotoluene								
137.2	9.108	9.193	-0.024	1.302	876244	104.3	150	

QC Flag Legend

Processing Flags

Reagents:

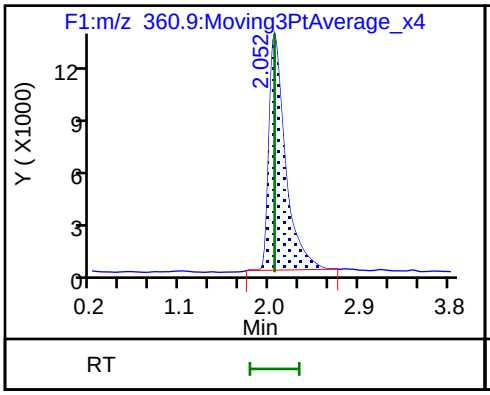
EXPWORKINGIS_00084 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 16-Jul-2021 08:16:53 Chrom Revision: 2.3 13-May-2021 07:57:40

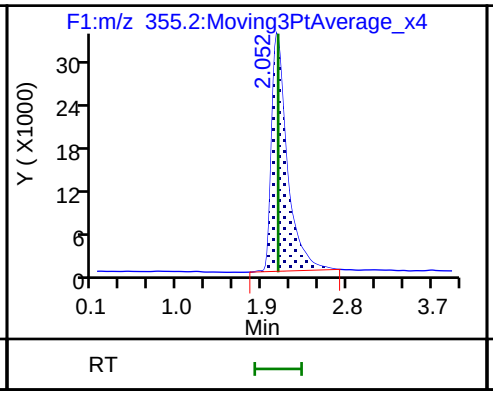
Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15025.d
Injection Date: 15-Jul-2021 14:25:04 Instrument ID: LC_LCMS4
Lims ID: 280-150636-A-6-C MSD
Client ID:
Operator ID: acm ALS Bottle#: 19 Worklist Smp#: 26
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Method: 8321exp4-25 Limit Group: LC - 8321A Expl

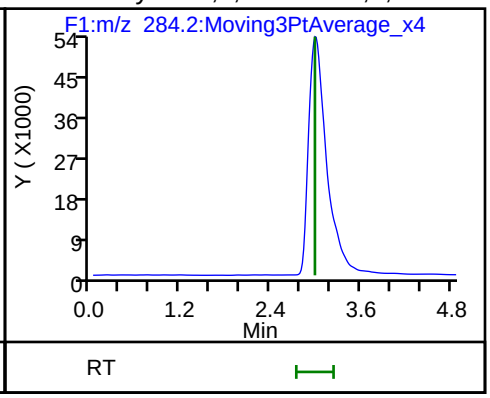
* 1 HMX-13C4



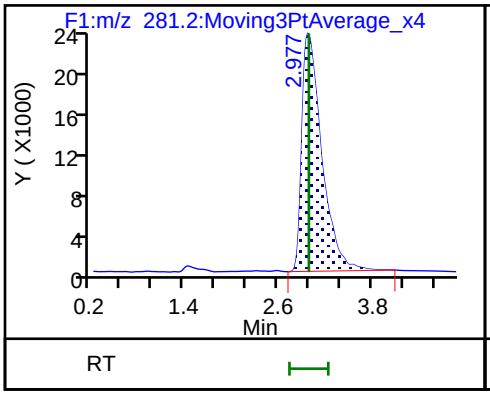
2 HMX



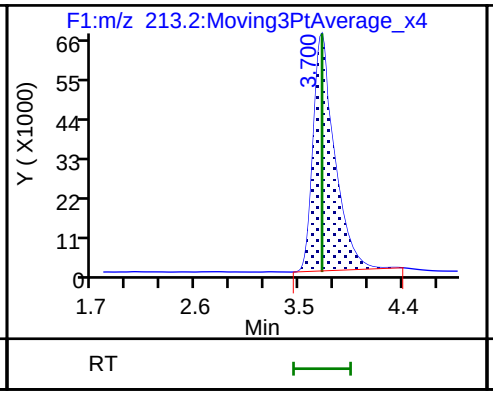
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



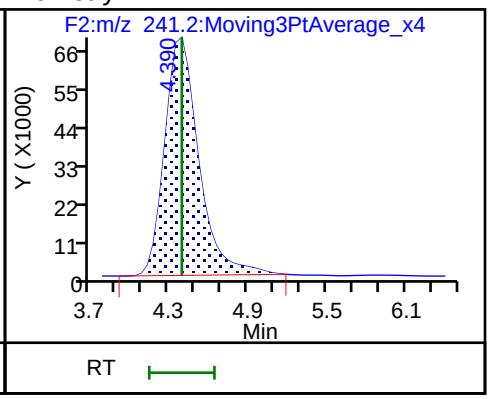
4 RDX



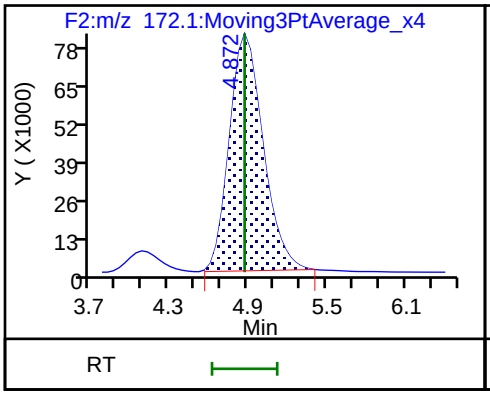
5 1,3,5-Trinitrobenzene



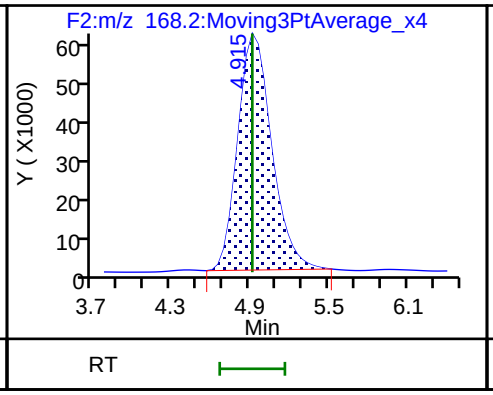
6 Tetryl



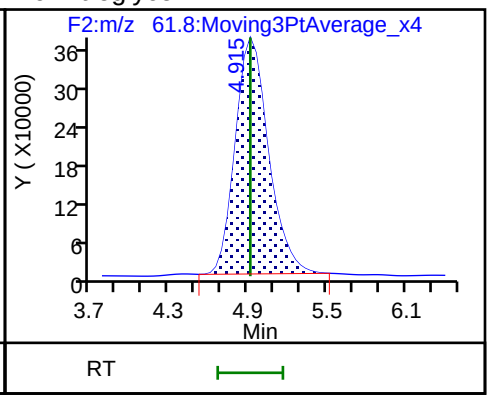
* 7 1,3-Dinitrobenzene-d4



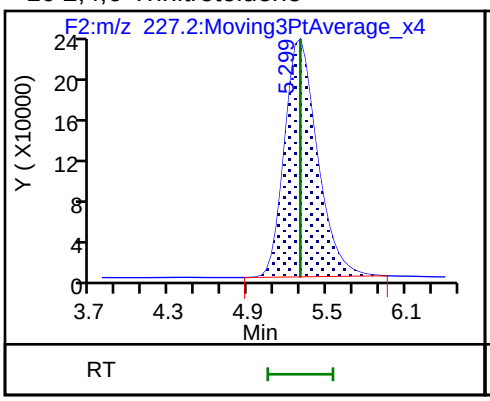
8 1,3-Dinitrobenzene



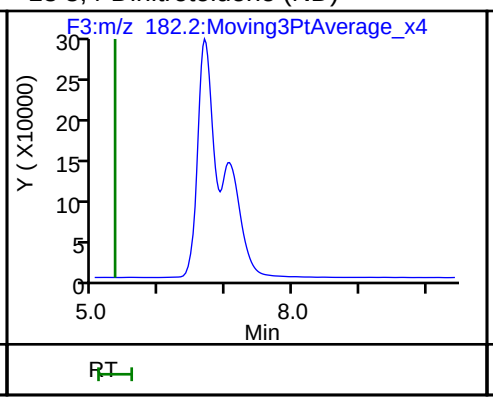
9 Nitroglycerin



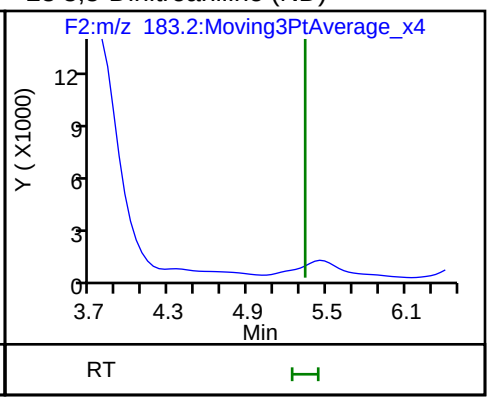
10 2,4,6-Trinitrotoluene



13 3,4-Dinitrotoluene (ND)

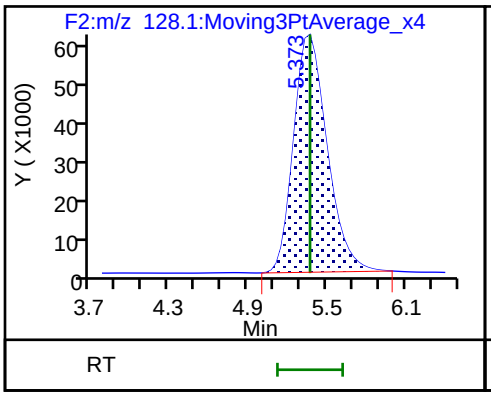


28 3,5-Dinitroaniline (ND)

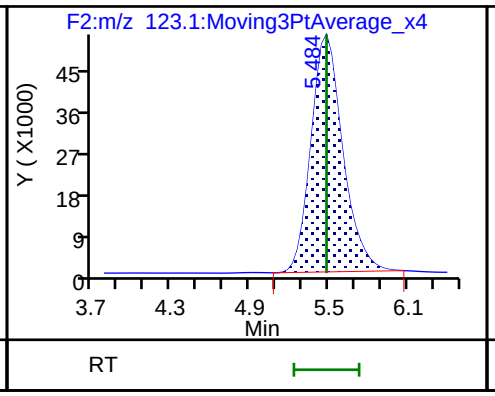


Report Date: 16-Jul-2021 08:16:53 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15025.d

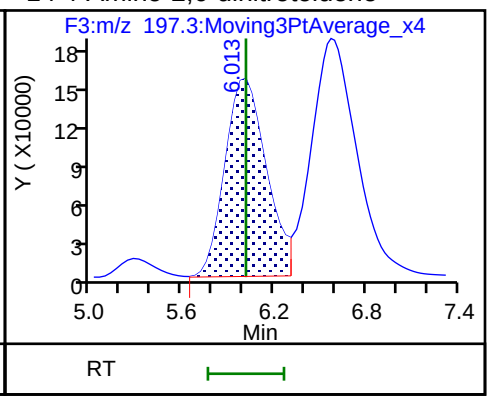
$ 11 Nitrobenzene-d5



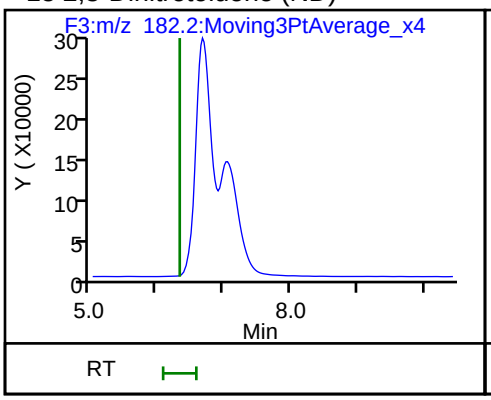
12 Nitrobenzene



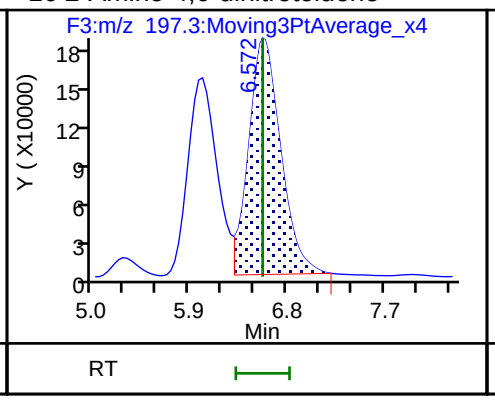
14 4-Amino-2,6-dinitrotoluene



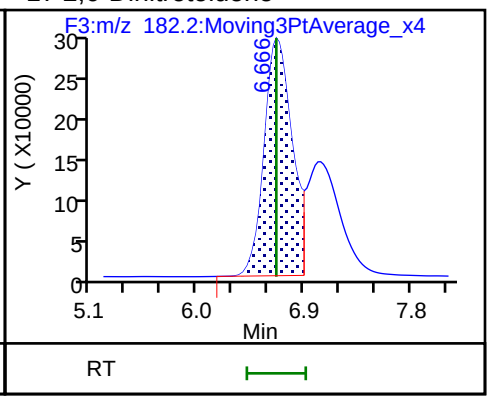
15 2,3-Dinitrotoluene (ND)



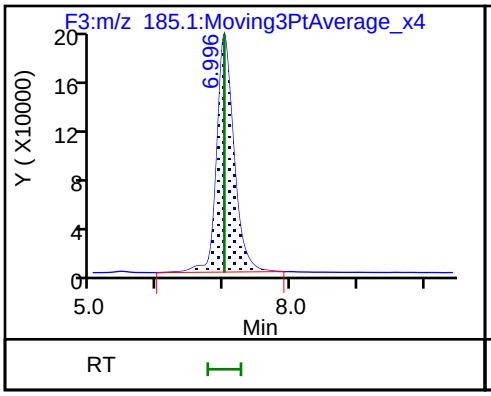
16 2-Amino-4,6-dinitrotoluene



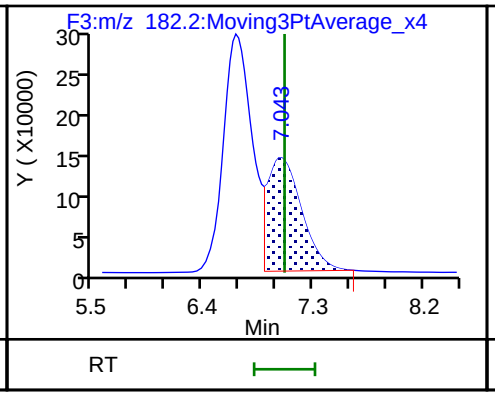
17 2,6-Dinitrotoluene



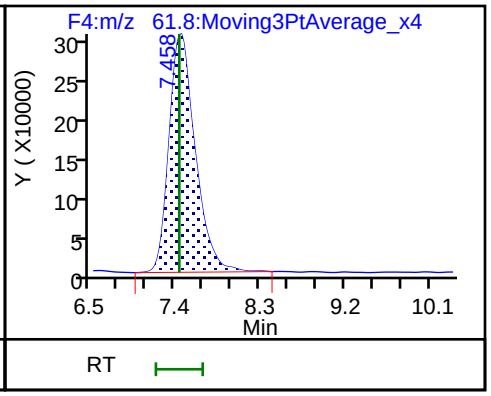
* 18 2,4-dinitrotoluene-d3



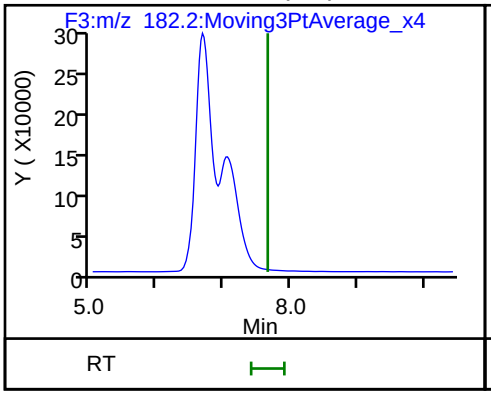
19 2,4-Dinitrotoluene



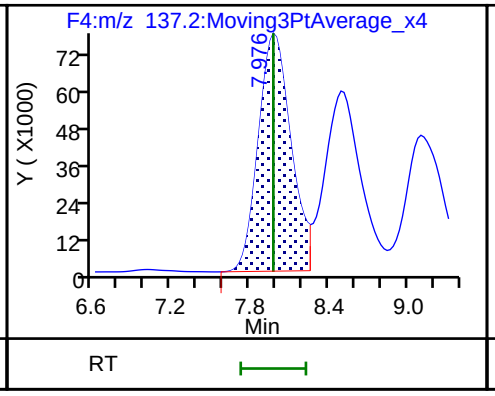
20 PETN



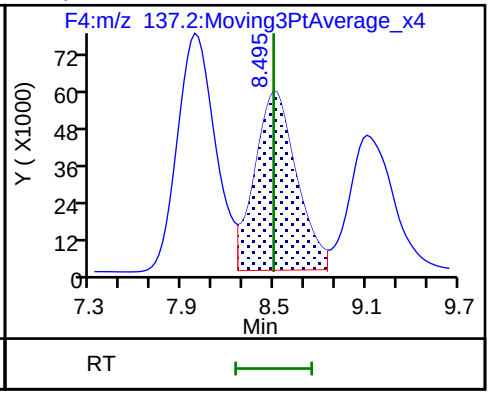
21 3,5-Dinitrotoluene (ND)



22 o-Nitrotoluene

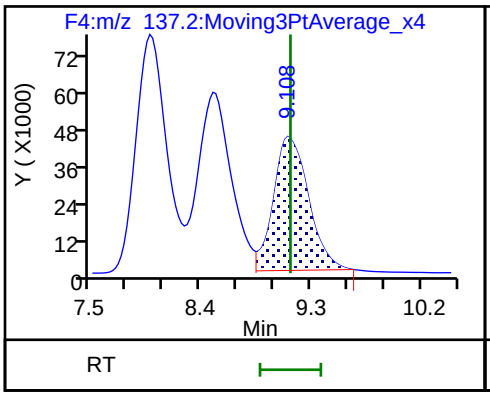


23 p-Nitrotoluene

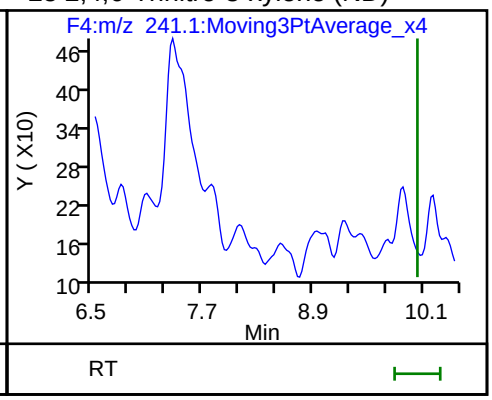


Report Date: 16-Jul-2021 08:16:53 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15025.d

24 m-Nitrotoluene



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



Report Date: 16-Jul-2021 08:16:53 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15025.d
Lims ID: 280-150636-A-6-C MSD
Client ID:
Sample Type: MSD
Inject. Date: 15-Jul-2021 14:25:04 ALS Bottle#: 19 Worklist Smp#: 26
Injection Vol: 40.0 ul Dil. Factor: 1.0000
Sample Info: 280-150636-A-6-C MSD
Misc. Info.: 06/30/2021 0.1%HAC
Operator ID: acm Instrument ID: LC_LCMS4

Method: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\8321exp4-25.m
Limit Group: LC - 8321A Expl
Last Update: 16-Jul-2021 08:16:52 Calib Date: 15-Jul-2021 11:10:54
Integrator: Picker
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\LC_LCMS4\20210715-103158.b\ex421G15009.d

Column 1 : Det: F1:SIR
Process Host: CTX1655

First Level Reviewer: meyera Date: 15-Jul-2021 14:52:25

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	108.6	108.20

LCMS ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Instrument ID: LC_LCMS4 Start Date: 07/15/2021 09:58

Analysis Batch Number: 543297 End Date: 07/15/2021 11:35

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD005 280-543297/4 IC		07/15/2021 09:58	1	ex421G15003.d	IonPac 2(mm)
STD010 280-543297/5 IC		07/15/2021 10:10	1	ex421G15004.d	IonPac 2(mm)
STD025 280-543297/6 IC		07/15/2021 10:22	1	ex421G15005.d	IonPac 2(mm)
STD050 280-543297/7 IC		07/15/2021 10:34	1	ex421G15006.d	IonPac 2(mm)
STD100 280-543297/8 ICISAV		07/15/2021 10:46	1	ex421G15007.d	IonPac 2(mm)
STD200 280-543297/9 IC		07/15/2021 10:58	1	ex421G15008.d	IonPac 2(mm)
STD300 280-543297/10 IC		07/15/2021 11:10	1	ex421G15009.d	IonPac 2(mm)
ICB 280-543297/11		07/15/2021 11:22	1	ex421G15010.d	IonPac 2(mm)
ICV 280-543297/12		07/15/2021 11:35	1	ex421G15011.d	IonPac 2(mm)

LCMS ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Instrument ID: LC_LCMS4 Start Date: 07/15/2021 11:47

Analysis Batch Number: 543298 End Date: 07/15/2021 15:37

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
MB 280-542950/1-A		07/15/2021 11:47	1	ex421G15012.d	IonPac 2(mm)
LCS 280-542950/2-A		07/15/2021 11:59	1	ex421G15013.d	IonPac 2(mm)
280-150636-1	29SB123 (15-16)	07/15/2021 12:11	1	ex421G15014.d	IonPac 2(mm)
280-150636-2	29SB129 (5-6)	07/15/2021 12:23	1	ex421G15015.d	IonPac 2(mm)
280-150636-2 DL	29SB129 (5-6) DL	07/15/2021 12:35	50	ex421G15016.d	IonPac 2(mm)
280-150636-2 DL2	29SB129 (5-6) DL2	07/15/2021 12:47	500	ex421G15017.d	IonPac 2(mm)
280-150636-3	29SB145 (15-16)	07/15/2021 12:59	1	ex421G15018.d	IonPac 2(mm)
280-150636-4	29SB148 (15-16)	07/15/2021 13:12	1	ex421G15019.d	IonPac 2(mm)
280-150636-5	29SB137 (15-16)	07/15/2021 13:24	1	ex421G15020.d	IonPac 2(mm)
280-150636-5 DL	29SB137 (15-16) DL	07/15/2021 13:36	50	ex421G15021.d	IonPac 2(mm)
CCV 280-543298/23		07/15/2021 13:48	1	ex421G15022.d	IonPac 2(mm)
280-150636-6	29SB146 (15-16)	07/15/2021 14:00	1	ex421G15023.d	IonPac 2(mm)
280-150636-6 MS	29SB146 (15-16) MS	07/15/2021 14:12	1	ex421G15024.d	IonPac 2(mm)
280-150636-6 MSD	29SB146 (15-16) MSD	07/15/2021 14:25	1	ex421G15025.d	IonPac 2(mm)
280-150636-7	29SB155 (11-12)	07/15/2021 14:37	1	ex421G15026.d	IonPac 2(mm)
280-150636-8	29SB135 (15-16)	07/15/2021 14:49	1	ex421G15027.d	IonPac 2(mm)
280-150636-9	29SB136 (15-16)	07/15/2021 15:01	1	ex421G15028.d	IonPac 2(mm)
280-150636-10	29SB156 (12-13)	07/15/2021 15:13	1	ex421G15029.d	IonPac 2(mm)
280-150636-11	DUP18	07/15/2021 15:25	1	ex421G15030.d	IonPac 2(mm)
CCV 280-543298/32		07/15/2021 15:37	1	ex421G15031.d	IonPac 2(mm)

LCMS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Batch Number: 542950 Batch Start Date: 07/12/21 16:07 Batch Analyst: Holahan, Thomas E

Batch Method: 8330B Batch End Date: 07/13/21 12:11

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8321ExplosLCS 00046	8321ExplosSur 00053		
MB 280-542950/1		8330B, 8321A		10 g	40 mL		1 mL		
LCS 280-542950/2		8330B, 8321A		10 g	40 mL	1 mL	1 mL		
280-150636-A-1	29SB123 (15-16)	8330B, 8321A	T	10.54 g	40 mL		1 mL		
280-150636-A-2	29SB129 (5-6)	8330B, 8321A	T	10.1 g	40 mL		1 mL		
280-150636-A-3	29SB145 (15-16)	8330B, 8321A	T	10.08 g	40 mL		1 mL		
280-150636-A-4	29SB148 (15-16)	8330B, 8321A	T	10.42 g	40 mL		1 mL		
280-150636-A-5	29SB137 (15-16)	8330B, 8321A	T	10.23 g	40 mL		1 mL		
280-150636-A-6	29SB146 (15-16)	8330B, 8321A	T	10.26 g	40 mL		1 mL		
280-150636-A-6 MS	29SB146 (15-16)	8330B, 8321A	T	10.41 g	40 mL	1 mL	1 mL		
280-150636-A-6 MSD	29SB146 (15-16)	8330B, 8321A	T	10.3 g	40 mL	1 mL	1 mL		
280-150636-A-7	29SB155 (11-12)	8330B, 8321A	T	10.96 g	40 mL		1 mL		
280-150636-A-8	29SB135 (15-16)	8330B, 8321A	T	10.21 g	40 mL		1 mL		
280-150636-A-9	29SB136 (15-16)	8330B, 8321A	T	10.2 g	40 mL		1 mL		
280-150636-A-10	29SB156 (12-13)	8330B, 8321A	T	10.73 g	40 mL		1 mL		
280-150636-A-11	DUP18	8330B, 8321A	T	10.91 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 TestAmerica, Denver Job No.: 280-150636-1

SDG No.:

Batch Number: 542950 Batch Start Date: 07/12/21 16:07 Batch Analyst: Holahan, Thomas E

Batch Method: 8330B Batch End Date: 07/13/21 12:11

Batch Notes	
Balance ID	C33519
Analyst ID - Concentration	TH
Date Sample was Dried	542701
Filter ID	R1DB89361
Filter Type	0.2 um
Date Sample was Ground	542701
Pipette ID	Tia
Pipette ID for Solvent	Firine
Prep Solvent Volume Used	20 mL
Analyst ID - Reagent Drop Witness	Reviewer:TH
Blank Sand Lot #	198950
Solvent Lot #	0.1%AAinACN_00166
Solvent Name	0.1%AAinACN
Sonication Start Time	16:19
Sonication Stop Time	10:19
SOP Number	DV-OP0018

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

280-150579 Chain of Custody

SUB-CONTRACTED ANALYSES

L#: _____

Shipped To: Eurofins Test America
4955 Yarrow St
Arvada, CO
Pat McEntee

From: Microbac Laboratories Inc.
Marietta Division
158 Starlite Park
Marietta, OH 45750
(740) 373-4071

Shipped Via: Fed Ex

Report To: S. Mossburg

P.O. #: _____

TAT Required: _____

See Chain of Custody for ID's, date and time collected

Microbac Workorder Number	Number of Samples	Analyses
MIC0514-12	1	8330
38	1	
MIC1287-4	1	
14	1	
18	1	
MIC1288-6	1	
11	1	
MIC0730-22	1	
26	1	
MIC1285-1	1	
29	1	

Level: 1 2 3 4

Internal COC: YES / NO

Relinquished By	Date/Time	Comments
B Gregory	7/17/21 1500	
Received By	**Date/Time**	**Cooler Temp**
	7/18/21 1500	3.6 IR12 CF+0.6

Document Control # 1000
Form 7-1
Revised 07/02/2018

Issued to: Document Master File

M1C0514

MICROBAC Return to: 158 Starlite Drive Marietta Ohio 45750

CHAIN OF CUSTODY RECORD

Number
Instructions on back

Lab Report Address	Invoice Address	Turnaround Time	TO BE COMPLETED BY MICROBAC
Client Name:	Client Name:	[ ] Routine (5 to 7 business days) [ ] RUSH* (notify lab)	Temperature Upon Receipt (°C) Therm ID
Address:	Address:		Holding Time
City, State, Zip:	City, State, Zip:	(needed by)	Samples Received on Ice? Yes No N/A
Contact:	Contact:	Report Type	Custody Seals Intact? Yes No N/A
Telephone No.:	Telephone No.:	[ ]Results Only [ ]Level 1 [ ]Level 2 [ ]Level3 [ ]Level 4 [ ]EDD	

Send Report via: [ ] Mail [ ] Fax [ ] e-mail (address) Send Invoice via: [ ] Mail [ ] Fax [ ] e-mail (address)

Project: Location: PO No.: Compliance Monitoring? [ ] Yes [ ] No
( ) Agency/Program

Sampled by (PRINT): Sampler Signature: Sampler Phone No.:

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)
** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

REQUESTED ANALYSIS

Lab ID	Client Sample ID	Date Collected	Time Collected	No. of Containers	Matrix	Grab / Comp	Preservative Types **	Grain Size								Additional Notes
	29SB123 (11-12)	3/2/21	1052	1	So			X								
	29SB123 (15-16)	3/2/21	1055	1	So			X								
	29SB121 (3-4)	3/2/21	1100	1	So			X								
	29SB121 (7-8)	3/2/21	1103	1	So			X								
	29SB121 (11-12)	3/2/21	1105	1	So			X								
	29SB121 (15-16)	3/2/21	1110	1	So			X								
	29SB118 (3-4)	3/2/21	1210	1	So			X								
	DUP-01	3/2/21	0800	1	So			X								
	29SB118 (7-8)	3/2/21	1213	3	So			X								MS/MSD
	29SB118 (11-12)	3/2/21	1218	1	So			X								

Possible Hazard Identification [ ] Hazardous [ ] Non-Hazardous [ ] Radioactive
Comments

Sample Disposition [ ] Dispose as appropriate [ ] Return [ ] Archive

Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
[signature]	3/3 1500		
Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
Relinquished By (signature)	Date/Time	Received By (signature) [signature]	Date/Time 3/4/21 1145

Rev: 07/15/2016

MICROBAC Return to: 158 Starlite Drive Marietta Ohio 45750

CHAIN OF CUSTODY RECORD

Number

Instructions on back

Lab Report Address	Invoice Address	Turnaround Time	TO BE COMPLETED BY MICROBAC
Client Name:	Client Name:	[ ] Routine (5 to 7 business days) [ ] RUSH* (notify lab)	Temperature Upon Receipt (°C) Therm ID
Address:	Address:		Holding Time
City, State, Zip:	City, State, Zip:	(needed by)	Samples Received on Ice? Yes No N/A
Contact:	Contact:	Report Type	Custody Seals Intact? Yes No N/A
Telephone No.:	Telephone No.:	[ ]Results Only [ ]Level 1 [ ]Level 2 [ ]Level3 [ ]Level 4 [ ]EDD	

Send Report via: [ ] Mail [ ] Fax [ ] e-mail (address) Send Invoice via: [ ] Mail [ ] Fax [ ] e-mail (address)

Project: Location: PO No.: Compliance Monitoring? [ ] Yes [ ] No ( ) Agency/Program

Sampled by (PRINT): Sampler Signature: Sampler Phone No.:

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)

** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

REQUESTED ANALYSIS

Lab ID	Client Sample ID	Date Collected	Time Collected	No. of Containers	Matrix	Grab / Comp	Preservative Types **	Explosives	Additional Notes
	29SB122 (3-4)	3/2/21	1303	1	S		U	X	
	29SB122 (7-8)	3/2/21	1305	1	S		U	X	
	DUP-03	3/2/21	0820	1	S		U	X	
	29SB122 (11-12)	3/2/21	1310	1	S		U	X	
	29SB122 (15-16)	3/2/21	1312	1	S		U	X	
	29SB129 (1-2)	3/2/21	1423	1	S		U	X	
	29SB129 (3-4)	3/2/21	1425	1	S		U	X	
	29SB129 (5-6)	3/2/21	1427	1	S		U	X	
	29SB129 (7-8)	3/2/21	1429	1	S		U	X	
	29SB126 (1-2)	3/2/21	1435	1	S		U	X	

Possible Hazard Identification [ ] Hazardous [ ] Non-Hazardous [ ] Radioactive Sample Disposition [ ] Dispose as appropriate [ ] Return [ ] Archive

Comments

Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
[illegible]	3/3 1500		
Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
		Brenda Gregory	3/4/21 1145

Rev. 07/18/2018

MICROBAC Return to: 158 Starlite Drive Marietta Ohio 45750

CHAIN OF CUSTODY RECORD

Number:

Instructions on back

TO BE COMPLETED BY MICROBAC

Temperature Upon Receipt (°C)

Therm ID

Holding Time

Samples Received on Ice? Yes No N/A

Custody Seals Intact? Yes No N/A

Lab Report Address	Invoice Address	Turnaround Time
Client Name: HDR	Client Name: HDR	[ ] Routine (5 to 7 business days) [ ] RUSH* (notify lab)
Address:	Address:	
City, State, Zip:	City, State, Zip:	(needed by)
Contact: LYNN LUTZ	Contact: PHIL WERNER	Report Type
Telephone No.: 303-754-4200	Telephone No.: 201-831-0344	[ ]Results Only [ ]Level 1 [ ]Level 2 [ ]Level3 [ ]Level 4 [ ]EDD

Send Report via: [ ] Mail [ ] Fax [X] e-mail (address) LYNN.LUTZ@HDRINC.COM Send Invoice via: [ ] Mail [ ] Fax [X] e-mail (address) PHILIP.WERNER@HDRINC.COM

Project: LHAAP-29 Location: LHAAP Karnack, TX PO No.: Compliance Monitoring? [ ] Yes [ ] No [ ] Agency/Program

Sampled by (PRINT): JACOB MOORMAN Sampler Signature: Sampler Phone No.:

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)

** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

REQUESTED ANALYSIS

Lab ID	Client Sample ID	Date Collected	Time Collected	No. of Containers	Matrix	Grab / Comp	Preservative Types **	Explosives	Additional Notes
	295B145(3-4)	3/8/21	1715	1	SO	G		X	
	295B145(7-8)	3/8/21	1720	1	SO	G		X	
	295B145(11-12)	3/8/21	1725	3	SO	G		X	MS/MSD
	295B145(15-16)	3/8/21	1730	1	SO	G		X	
	295B144(3-4)	3/8/21	1640	1	SO	G		X	
	295B144(7-8)	3/8/21	1645	3	SO	G		X	MS/MSD
	295B144(11-12)	3/8/21	1650	1	SO	G		X	
	295B144(15-16)	3/8/21	1655	1	SO	G		X	
	295B138(3-4)	3/8/21	1605	1	SO	G		X	
	295B138(7-8)	3/8/21	1610	1	SO	G		X	

Possible Hazard Identification [ ] Hazardous [ ] Non-Hazardous [ ] Radioactive Sample Disposition [ ] Dispos

Comments

10 DAY TAT

Relinquished By (signature)	Date/Time	Rece
	03-11-2021 / 1430	
Relinquished By (signature)	Date/Time	Rece
Relinquished By (signature)	Date/Time	Received By (signature) / Date/Time
		3/12/21 0945

M1C1287

HDR

Rev 07/18/2016

MICROBAC Return to: 158 Starlite Drive Marietta Ohio 45750

CHAIN OF CUSTODY RECORD

Number

Instructions on back

TO BE COMPLETED BY MICROBAC

Temperature Upon Receipt (°C)

Therm ID

Holding Time

Samples Received on Ice? Yes No N/A

Custody Seals Intact? Yes No N/A

Lab Report Address

Client Name: HDR

Address:

City, State, Zip:

Contact:

Telephone No.:

Send Report via: [ ] Mail [ ] Fax [ ] e-mail (address)

Invoice Address

Client Name: HDR

Address:

City, State, Zip:

Contact:

Telephone No.:

Send Invoice via: [ ] Mail [ ] Fax [ ] e-mail (address)

Turnaround Time

[ ] Routine (5 to 7 business days)

[ ] RUSH* (notify lab)

(needed by)

Report Type

[ ]Results Only [ ]Level 1 [ ]Level 2 [ ]Level3 [ ]Level 4 [ ]EDD

Project: LHAAP-29

Location: KARNACK, TX

PO No.:

Compliance Monitoring? [ ] Yes [ ] No

[ ] Agency/Program

Sampled by (PRINT): JACOB MOORMAN

Sampler Signature: Jacob Moorman

Sampler Phone No.:

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)

** Preservative Types: (1) HNO_3, (2) H_2SO_4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

REQUESTED ANALYSIS

Lab ID	Client Sample ID	Date Collected	Time Collected	No. of Containers	Matrix	Grab / Comp	Preservative Types **	EXPLOSIVES	Additional Notes
	295B148(3-4)	3/2/21	1330	1	SO	G		X	
	295B148(7-8)	3/2/21	1335	3	SO	G		X	MS/MSD
	295B148(11-12)	3/2/21	1340	1	SO	G		X	
	295B148(15-16)	3/2/21	1345	1	SO	G		X	
	295B137(3-4)	3/8/21	0755	1	SO	G		X	
	295B137(7-8)	3/8/21	0800	3	SO	G		X	MS/MSD
	295B137(11-12)	3/8/21	0805	1	SO	G		X	
	295B137(15-16)	3/8/21	0810	1	SO	G		X	
	295B139(3-4)	3/9/21	0830	1	SO	G		X	
	295B139(7-8)	3/9/21	0835	1	SO	G		X	

Possible Hazard Identification [ ] Hazardous [ ] Non-Hazardous [ ] Radioactive

Sample Disposition [ ] Dispose as appropriate [ ] Return [ ] Archive

Comments

10 DAY TAT

Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
Jacob Moorman	03-11-2021/1430		
Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
		Brent Gregory	3/12/21 @ 905

Rev. 07/18/2018

Page 2 of 10

MICROBAC Return to: 158 Starlite Drive Marietta Ohio 45750

CHAIN OF CUSTODY RECORD

Number
Instructions on back

TO BE COMPLETED BY MICROBAC

Temperature Upon Receipt (°C)
Therm ID
Holding Time
Samples Received on Ice? Yes No N/A
Custody Seals Intact? Yes No N/A

Lab Report Address
Client Name:
Address:
City, State, Zip:
Contact:
Telephone No.:

Invoice Address
Client Name:
Address:
City, State, Zip:
Contact:
Telephone No.:

Turnaround Time
[ ] Routine (5 to 7 business days)
[ ] RUSH* (notify lab)
(needed by)

Report Type
[ ]Results Only [ ]Level 1 [ ]Level 2 [ ]Level3 [ ]Level 4 [ ]EDD

Send Report via: [ ] Mail [ ] Fax [ ] e-mail (address)

Send Invoice via: [ ] Mail [ ] Fax [ ] e-mail (address)

Project: LHAAP-29

Location: KARNACK, TX

PO No.:

Compliance Monitoring? [ ] Yes [ ] No
( ) Agency/Program

Sampled by (PRINT): JACOB MOORMAN

Sampler Signature:

Sampler Phone No.:

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)

** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (0) Unpreserved

REQUESTED ANALYSIS

Lab ID	Client Sample ID	Date Collected	Time Collected	No. of Containers	Matrix	Grab / Comp	Preservative Types **	Explosives	Additional Notes
	2958137 (11-12)	3/9/21	0840	1	SO	G		X	
	2958139 (15-16)	3/9/21	0845	1	SO	G		X	
	2958146 (3-4)	3/9/21	0920	1	SO	G		X	
	2958146 (7-8)	3/9/21	0925	1	SO	G		X	
	2958146 (11-12)	3/9/21	0930	1	SO	G		X	
	2958146 (15-16)	3/9/21	0935	1	SO	G		X	
	2958147 (3-4)	3/9/21	0955	1	SO	G		X	
	2958147 (7-8)	3/9/21	1000	1	SO	G		X	
	2958147 (11-12)	3/9/21	1005	1	SO	G		X	
	2958147 (15-16)	3/9/21	1010	1	SO	G		X	

M1C1288

Possible Hazard Identification [ ] Hazardous [ ] Non-Hazardous [ ] Radioactive

Sample Disposition [ ] Dispose

Comments

10 DAY TAT

Relinquished By (signature) Date/Time

Relinquished By (signature) Date/Time 03-11-2021 / 1430

Relinquished By (signature) Date/Time

Received HDR
Rec'd: 03/12/2021 09:15
By: Brenda Gregory Time: 2:5

Received By (signature) Date/Time

Received By (signature) Date/Time 3/12/21 945

Rev. 07/16/2018

Page 1 of 10

MICROBAC Return to: 158 Starlite Drive Marietta Ohio 45750

CHAIN OF CUSTODY RECORD

Number

Instructions on back

TO BE COMPLETED BY MICROBAC

Temperature Upon Receipt (°C)

Therm ID

Holding Time

Samples Received on Ice? Yes No N/A

Custody Seals Intact? Yes No N/A

Lab Report Address

Client Name:

Address:

City, State, Zip:

Contact:

Telephone No.:

Send Report via: [ ] Mail [ ] Fax [ ] e-mail (address)

Invoice Address

Client Name:

Address:

City, State, Zip:

Contact:

Telephone No.:

Turnaround Time

[ ] Routine (5 to 7 business days)
[ ] RUSH* (notify lab)

(needed by)

Report Type

[ ]Results Only [ ]Level 1 [ ]Level 2 [ ]Level3 [ ]Level 4 [ ]EDD

Send Invoice via: [ ] Mail [ ] Fax [ ] e-mail (address)

Project: LHAAP-29

Location: KARNACK TX

PO No.:

Compliance Monitoring? [ ] Yes [ ] No
( ) Agency/Program

Sampled by (PRINT): JACOB MOORMAN

Sampler Signature:

Sampler Phone No.:

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)

** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

REQUESTED ANALYSIS

Lab ID	Client Sample ID	Date Collected	Time Collected	No. of Containers	Matrix	Grab / Comp	Preservative Types **	EXPLOSIVES	Additional Notes
	295B155(11-12)	3/9/21	1350	1	SO	G		X	
	295B155(15-16)	3/9/21	1400	1	SO	G		X	
	~~295B155(3-4)~~ 295B165(3-4)	3/9/21	1100	1	SO	G		X	
	~~295B155(7-8)~~ 295B165(7-8)	3/9/21	1105	1	SO	G		X	
	295B165(11-12)	3/9/21	1110	1	SO	G		X	
	295B165(15-16)	3/9/21	1115	1	SO	G		X	
	295B134(5-6)	3/10/21	1150	1	SO	G		X	
	295B134(8-9)	3/10/21	1155	1	SO	G		X	
	295B134(12-13)	3/10/21	1200	1	SO	G		X	
	295B156(9-10)	3/10/21	0800	1	SO	G		X	

Possible Hazard Identification [ ] Hazardous [ ] Non-Hazardous [ ] Radioactive

Sample Disposition [ ] Dispose as appropriate [ ] Return [ ] Archive

Comments

10 DAY TAT

Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
	03-11-2021/1430		
Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
		Derek Gregory	3/12/21 0945

Rev: 07/18/2018

MIC0730

MICROBAC Return to: 158 Starlite Drive Marietta Ohio 45750

CHAIN OF CUSTODY RECORD

Number

Instructions on back

TO BE COMPLETED BY MICROBAC

Lab Report Address	Invoice Address	Turnaround Time	
Client Name: HDR	Client Name: HDR	[ ] Routine (5 to 7 business days) [ ] RUSH* (notify lab)	Temperature Upon Receipt (°C) Therm ID
Address:	Address:		Holding Time
City, State, Zip:	City, State, Zip:	(needed by)	Samples Received on Ice? Yes No N/A
Contact: LYNN LUTZ	Contact: PHIL WERNER	Report Type	Custody Seals Intact? Yes No N/A
Telephone No.: 303-754-4200	Telephone No.: 301-331-0344	[ ]Results Only [ ]Level 1 [ ]Level 2 [ ]Level3 [ ]Level 4 [ ]EDD	

Send Report via: [ ] Mail [ ] Fax [X] e-mail (address) LYNN.LUTZ@HDRINC.COM Send Invoice via: [ ] Mail [ ] Fax [X] e-mail (address) PHILIP.WERNER@HDRINC.COM

Project: LHAAP Location: Karnack, TX PO No.: Compliance Monitoring? [ ] Yes [ ] No ( ) Agency/Program

Sampled by (PRINT): J. Ruff, ng Sampler Signature: Sampler Phone No.:

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)

** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

REQUESTED ANALYSIS

Lab ID	Client Sample ID	Date Collected	Time Collected	No. of Containers	Matrix	Grab / Comp	Preservative Types **	Explosives	Additional Notes
	295B135 (11-12)	3/4/21	1025	1	S	G	U	X	
	295B135 (15-16)		1030						
	295B136 (3-4)	3/4/21	0920						
	295B136 (7-8)		0925						
	295B136 (11-12)		0930						
	295B136 (15-16)		0935						
	295B162 (3-4)	3/4/21	0530						
	295B162 (7-8)		0535						
	295B162 (11-12)		0540						
	295B162 (15-16)		0545						

Possible Hazard Identification [ ] Hazardous [ ] Non-Hazardous [ ] Radioactive Sample Disposition [ ] Dispose as appropriate [ ] Return [ ] Archive

Comments

10 DAY TAT

Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
[signature]	03-05-2021 / 1315		
Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
		[signature]	3-6-21 1045
Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time

Rev: 07/18/2018

MICROBAC Return to: 158 Starlite Drive Marietta Ohio 45750

CHAIN OF CUSTODY RECORD

Number
Instructions on back

TO BE COMPLETED BY MICROBAC

Temperature Upon Receipt (°C)
Therm ID

Holding Time

Samples Received on Ice? Yes No N/A

Custody Seals Intact? Yes No N/A

Lab Report Address

Client Name: HDR

Address:

City, State, Zip:

Contact: LYAN LUTZ

Telephone No.: 303-754-4200

Invoice Address

Client Name: HDR

Address:

City, State, Zip:

Contact: PHIL WERNER

Telephone No.: 301-831-0344

Turnaround Time

[ ] Routine (5 to 7 business days)
[ ] RUSH* (notify lab)

(needed by)

Report Type

[ ]Results Only [ ]Level 1 [ ]Level 2 [ ]Level3 [ ]Level 4 [ ]EDD

Send Report via: [ ] Mail [ ] Fax [x] e-mail (address) LYAN.LUTZ@HDRINC.COM

Send Invoice via: [ ] Mail [ ] Fax [x] e-mail (address) PHILIP.WERNER@HDRINC.COM

Project: LHAAP-29

Location: KARNACK, TX

PO No.:

Compliance Monitoring? [ ] Yes [ ] No
[ ] Agency/Program

Sampled by (PRINT): JACOB MCGRIGAN

Sampler Signature:

Sampler Phone No.:

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)

** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

REQUESTED ANALYSIS

Lab ID	Client Sample ID	Date Collected	Time Collected	No. of Containers	Matrix	Grab / Comp	Preservative Types **	EXPLOSIVES	Additional Notes
	295B156 (12-13)	3/10/21	0810	1	SO	G		X	
	295B156 (16-17)	3/10/21	0820	1	SO	G		X	
	295B157 (5.5-6.5)	3/10/21	0930	1	SO	G		X	
	295B157 (8.5-9.5)	3/10/21	0935	1	SO	G		X	
	295B157 (12.5-13.5)	3/10/21	0940	1	SO	G		X	
	295B154 (3-4)	3/10/21	1400	1	SO	G		X	
	295B154 (6-7)	3/10/21	1405	1	SO	G		X	
	295B154 (10-11)	3/10/21	1410	1	SO	G		X	
	295B159 (1.5-2.5)	3/10/21	1235	1	SO	G		X	
	295B159 (4.5-5.5)	3/10/21	1340	1	SO	G		X	

Possible Hazard Identification [ ] Hazardous [ ] Non-Hazardous [ ] Radioactive

Sample Disposition [ ] Dispose

Comments

10 DAY TAT

Relinquished By (signature) Date/Time

Relinquished By (signature) 03-11-2021 / 1430 Date/Time

Relinquished By (signature) Date/Time

Received

Received

Received By (signature) Brent Gregory Date/Time 3/12/21 0945

M1C1285

HDR

Rev: 07/18/2018

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MICROBAC
158 S [illegible] Drive Marietta [illegible] 45750

CHAIN OF CUSTODY RECORD

Number

TO BE COMPLETED BY MICROBAC

Lab Report Address	Invoice Address	Turnaround Time	Temperature Upon Receipt (°C)
Client Name: HDR	Client Name: HDR	[ ] Routine (5 to 7 business days) [ ] RUSH* (notify lab)	Therm ID
Address:	Address:		Holding Time
City, State, Zip:	City, State, Zip:	(needed by)	Samples Received on Ice? Yes No N/A
Contact: LYNN LUTZ	Contact: PHIL WERNER	Report Type	Custody Seals Intact? Yes No N/A
Telephone No.: 303-754-[illegible]00	Telephone No.: 301-831-0344	[ ]Results Only [ ]Level 1 [ ]Level 2 [ ]Level3 [ ]Level 4 [ ]EDD	
Send Report via: [ ] Mail [ ] Fax [x] e-mail (address) LYNN.LUTZ@HDRINC.COM	Send Invoice via: [ ] Mail [ ] Fax [x] e-mail (address) PHILIP.WERNER@HDRINC.COM		
Project LHAAP-29	Location: KARNACK, TX	PO No.:	Compliance Monitoring? [ ] Yes [ ] No ( ) Agency Program
Sampled by (PRINT) JACOB MCCORMAN	Sampler Signature: [signature]	Sampler Phone No.:	

Matrix Types: Soil/Solid (S) Sludge (SL) Wipe Drinking Water (DW) Groundwater (GW) Surface Water (SW) Waste Water (WW) Other (specify)

** Preservative Types: (1) HNO3 (2) H2SO4 (3) HCl (4) NaOH (5) Zinc Acetate (6) Methanol (7) Sodium Bisulfate (8) Sodium Thiosulfate (9) Hexane (U) Unpreserved

REQUESTED ANALYSIS

Lab ID	Client Sample ID	Date Collected	Time Collected	No. of Containers	Matrix	Grab / Comp	Preservative Types **	Explosives	Additional Notes
	DUP 10	3/8/21	1430	1	SO	G		X	
	DUP 11	3/8/21	1510	1	SO	G		X	
	DUP 12	3/8/21	1540	1	SO	G		X	
	DUP 13	3/8/21	1620	1	SO	G		X	
	DUP 14	3/9/21	0730	1	SO	G		X	
	DUP 15	3/9/21	1310	1	SO	G		X	
	DUP 16	3/9/21	1105	1	SO	G		X	
	DUP 17	3/9/21	1215	1	SO	G		X	
	DUP 18	3/9/21	1450	1	SO	G		X	
	DUP 19	3/10/21	0700	1	SO	G		X	

Possible Hazard Identification [ ] Hazardous [ ] Non-Hazardous [ ] Radioactive

Sample Disposition [ ] Dispose as appropriate [ ] Return [ ] Archive

Comments

10 DAY TAT

Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
[signature]	03-11-2021 / 1430		
Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time

Rev. 07/18/2018

Page 3 of

Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 280-150636-1

Login Number: 150636
List Number: 1
Creator: Rydberg, Donna R

List Source: Eurofins TestAmerica, Denver

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time (excluding tests with immediate HTs)		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

eurofins | Environment Testing America

ANALYTICAL REPORT

Job Number: 280-160187-1

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
4/19/2022 12:21 PM

Donna R Rydberg, Senior Project Manager
4955 Yarrow Street, Arvada, CO, 80002
(303)736-0192
Donna.Rydberg@et.eurofinsus.com
04/19/2022
Revision: 1

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.

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Definitions/Glossary

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Qualifiers

LCMS

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

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: 280-160187-1

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.

REVISED REPORT
The attached report was revised to fix the CCV QC which was only reporting Nitrobenzene-d5. The corrected data is now included in this revised report.

RECEIPT
The samples were received on 3/25/2022 at 12:00 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 0.6º C and 1.7º C.

EXPLOSIVES
Samples 29SB183 (1-2) (280-160187-1), 29SB183 (3-4) (280-160187-2), DUP-01 (280-160187-3), 29SB185 (3-4) (280-160187-4), 29SB185 (7-8) (280-160187-5), 29SB185 (11-12) (280-160187-6), 29SB185 (13.5-14) (280-160187-7), 29SB186 (9-10) (280-160187-8), 29SB186 (11-12) (280-160187-9), 29SB186 (13.5-14) (280-160187-10), 29SB184 (3-4) (280-160187-11), 29SB184 (7-8) (280-160187-12), 29SB184 (11-12) (280-160187-13), 29SB184 (13.5-14) (280-160187-14), DUP-02 (280-160187-15), 29SB199 (3-4) (280-160187-16), 29SB199 (7-8) (280-160187-17), 29SB198 (3-4) (280-160187-18), 29SB198 (7-8) (280-160187-19), 29SB202 (3-4) (280-160187-20), 29SB202 (11-12) (280-160187-21), 29SB202 (15-15.5) (280-160187-22), 29SB200 (15-15.5) (280-160187-23), DUP-03 (280-160187-24), 29SB201(3-4) (280-160187-25), 29SB201(11-12) (280-160187-26), 29SB201(15-15.5) (280-160187-27), 29SB187 (0-2) (280-160187-29), 29SB187 (5-7) (280-160187-30), 29SB187 (10-0.5) (280-160187-31), 29SB189 (0-2) (280-160187-32), 29SB189 (5-7) (280-160187-33), 29SB189 (10-10.5) (280-160187-34), 29SB188 (7-9) (280-160187-35), 29SB188 (10-10.5) (280-160187-36), 29SB195 (7-8) (280-160187-37), 29SB195 (9.5-10) (280-160187-38), 29SB194 (7-8) (280-160187-39), 29SB194 (9.5-10) (280-160187-40), DUP-04 (280-160187-41), 29SB191 (9.5-10) (280-160187-42), 29SB197 (3-4) (280-160187-43), 29SB197 (7-7.5) (280-160187-44), 29SB196 (3-4) (280-160187-45), 29SB196 (7-7.5) (280-160187-46), 29SB172 (3-4) (280-160187-48), 29SB172 (6-7) (280-160187-49), 29SB172 (11-12) (280-160187-50), 29SB172 (14.5-15) (280-160187-51), 29SB180 (14.5-15) (280-160187-52), 29SB173 (3-4) (280-160187-53), 29SB173 (6-7) (280-160187-54) and 29SB173 (11-12) (280-160187-55) were analyzed for explosives in accordance with 8321. The samples were leached on 03/29/2022, prepared on 04/01/2022 and 04/04/2022 and analyzed on 04/05/2022 and 04/07/2022.

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 was not detected in the associated samples EB-1 (280-160187-28) and EB-02 (280-160187-47) ; therefore, the data have been reported. The associated LCS was in control for this analyte.

The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) in preparation batch 280-570516 and analytical batch 280-570785 recovered outside control limits (36-120%) for Tetryl (149%, 146%). This analytes were biased high in the LCS and LCSD and were not detected in the associated samples 29SB183 (1-2) (280-160187-1), 29SB183 (3-4) (280-160187-2), DUP-01 (280-160187-3), 29SB185 (3-4) (280-160187-4), 29SB185 (7-8) (280-160187-5), 29SB185 (11-12) (280-160187-6), 29SB185 (13.5-14) (280-160187-7), 29SB186 (9-10) (280-160187-8), 29SB186 (11-12) (280-160187-9), 29SB186 (13.5-14) (280-160187-10), 29SB184 (3-4) (280-160187-11), 29SB184 (7-8) (280-160187-12), 29SB184 (11-12) (280-160187-13), 29SB184 (13.5-14) (280-160187-14), DUP-02 (280-160187-15), 29SB199 (3-4) (280-160187-16), 29SB199 (7-8) (280-160187-17), 29SB198 (3-4) (280-160187-18), 29SB198 (7-8) (280-160187-19) and 29SB202 (3-4) (280-160187-20) ; therefore, the data have been reported.

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for Tetryl (131%, 136%) and precision for 4-Amino-2,6-dinitrotoluene (26%) in preparation batch 280-570516 and analytical batch 280-570785 were outside control limits (36-120% for Tetryl) and (RPD 20%). Matrix interference and/or non-homogeneity is suspect.

The laboratory control sample (149%) and / or laboratory control sample duplicate (137%) for preparation batch 280-570543 and analytical batch 280-570786 recovered outside control limits (36-120%) for Tetryl. These analytes were biased high in the LCS and were not detected in the associated samples 29SB202 (11-12) (280-160187-21), 29SB202 (15-15.5) (280-160187-22), 29SB200 (15-15.5) (280-160187-23), DUP-03 (280-160187-24), 29SB201(3-4) (280-160187-25), 29SB201(11-12) (280-160187-26), 29SB201(15-15.5) (280-160187-27), 29SB187 (0-2) (280-160187-29), 29SB187 (5-7) (280-160187-30), 29SB187 (10-0.5) (280-160187-31), 29SB189 (0-2) (280-160187-32), 29SB189 (5-7) (280-160187-33), 29SB189 (10-10.5) (280-160187-34), 29SB188 (7-9) (280-160187-35), 29SB188 (10-10.5) (280-160187-36), 29SB195 (7-8) (280-160187-37), 29SB195 (9.5-10) (280-160187-38), 29SB194 (7-8) (280-160187-39), 29SB194 (9.5-10) (280-160187-40) and DUP-04 (280-160187-41) ; therefore, the data have been reported. The LCSD was also outside spike control limits and RPD values for 2,6-Dinitrotoluene and 4-Amino-2,6-dinitrotoluene The data have been reported. The batch laboratory control sample (LCS), matrix spike/matrix spike duplicate (MS/MSD) and LCSSRM was within acceptance limits for these compounds.

The matrix spike (150%) / matrix spike duplicate (141%) recoveries in analytical batch 280-570786 were outside control limits (36-120%) for Tetryl. Associated samples are ND.

The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 280-570718 and analytical batch 280-571108 recovered outside control limits (36-120%) for Tetryl (145%, 149%). These analytes were biased high in the LCS and were not detected in the associated samples 29SB191 (9.5-10) (280-160187-42), 29SB197 (3-4) (280-160187-43), 29SB197 (7-7.5) (280-160187-44), 29SB196 (3-4) (280-160187-45), 29SB196 (7-7.5) (280-160187-46), 29SB172 (3-4) (280-160187-48), 29SB172 (6-7) (280-160187-49), 29SB172 (11-12) (280-160187-50), 29SB172 (14.5-15) (280-160187-51), 29SB180 (14.5-15) (280-160187-52), 29SB173 (3-4) (280-160187-53), 29SB173 (6-7) (280-160187-54) and 29SB173 (11-12) (280-160187-55) ; therefore, the data have been reported.

The LCSSRM 280-570105/2-B was outside control limits for 2,4,6-Trinitrotoluene. The associated LCS and LCSD samples were in control for this analyte.

The matrix spike (138%)/ matrix spike duplicate (136%) recoveries in the MS and MSD performed on sample 29SB197 (3-4) (280-160187-43) in analytical batch 280-571108 were outside of Tetryl control limits (36-120%).

The samples reached a fully ground state in less than 5 milling cycles. Milling was stopped when samples reached a fully milled state in order to reduce the chance of analyte loss due to overheating as per the instructions in the SOP.

The following samples contained non-soil material that was removed prior to milling: 29SB183 (1-2) (280-160187-1) and DUP-01 (280-160187-3). This material is described in the aliquot spreadsheet.

The following samples contained non-soil material that was removed prior to milling: 29SB187 (5-7) (280-160187-30) and 29SB195 (7-8) (280-160187-37). This material is described in the aliquot spreadsheet.

The following sample was air dried and sieved per the procedure; however, the sample contained material that would not pass through the sieve: 29SB180 (14.5-15) (280-160187-52). This material was removed and not extracted. The non-soil material is described in the aliquot worksheet. Method Dry_Grind/8330B_Sonc_10g/8321A_EXP_DOD5.

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

Detection Summary

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB183 (1-2) — Lab Sample ID: 280-160187-1

No Detections.

Client Sample ID: 29SB183 (3-4) — Lab Sample ID: 280-160187-2

No Detections.

Client Sample ID: DUP-01 — Lab Sample ID: 280-160187-3

No Detections.

Client Sample ID: 29SB185 (3-4) — Lab Sample ID: 280-160187-4

No Detections.

Client Sample ID: 29SB185 (7-8) — Lab Sample ID: 280-160187-5

No Detections.

Client Sample ID: 29SB185 (11-12) — Lab Sample ID: 280-160187-6

No Detections.

Client Sample ID: 29SB185 (13.5-14) — Lab Sample ID: 280-160187-7

No Detections.

Client Sample ID: 29SB186 (9-10) — Lab Sample ID: 280-160187-8

No Detections.

Client Sample ID: 29SB186 (11-12) — Lab Sample ID: 280-160187-9

No Detections.

Client Sample ID: 29SB186 (13.5-14) — Lab Sample ID: 280-160187-10

No Detections.

Client Sample ID: 29SB184 (3-4) — Lab Sample ID: 280-160187-11

No Detections.

Client Sample ID: 29SB184 (7-8) — Lab Sample ID: 280-160187-12

No Detections.

Client Sample ID: 29SB184 (11-12) — Lab Sample ID: 280-160187-13

No Detections.

Client Sample ID: 29SB184 (13.5-14) — Lab Sample ID: 280-160187-14

No Detections.

Client Sample ID: DUP-02 — Lab Sample ID: 280-160187-15

No Detections.

Client Sample ID: 29SB199 (3-4) — Lab Sample ID: 280-160187-16

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB199 (7-8) — Lab Sample ID: 280-160187-17

No Detections.

Client Sample ID: 29SB198 (3-4) — Lab Sample ID: 280-160187-18

No Detections.

Client Sample ID: 29SB198 (7-8) — Lab Sample ID: 280-160187-19

No Detections.

Client Sample ID: 29SB202 (3-4) — Lab Sample ID: 280-160187-20

No Detections.

Client Sample ID: 29SB202 (11-12) — Lab Sample ID: 280-160187-21

No Detections.

Client Sample ID: 29SB202 (15-15.5) — Lab Sample ID: 280-160187-22

No Detections.

Client Sample ID: 29SB200 (15-15.5) — Lab Sample ID: 280-160187-23

No Detections.

Client Sample ID: DUP-03 — Lab Sample ID: 280-160187-24

No Detections.

Client Sample ID: 29SB201(3-4) — Lab Sample ID: 280-160187-25

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: 29SB201(11-12) — Lab Sample ID: 280-160187-26

No Detections.

Client Sample ID: 29SB201(15-15.5) — Lab Sample ID: 280-160187-27

No Detections.

Client Sample ID: EB-1 — Lab Sample ID: 280-160187-28

No Detections.

Client Sample ID: 29SB187 (0-2) — Lab Sample ID: 280-160187-29

No Detections.

Client Sample ID: 29SB187 (5-7) — Lab Sample ID: 280-160187-30

No Detections.

Client Sample ID: 29SB187 (10-0.5) — Lab Sample ID: 280-160187-31

No Detections.

Client Sample ID: 29SB189 (0-2) — Lab Sample ID: 280-160187-32

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB189 (5-7) — Lab Sample ID: 280-160187-33

No Detections.

Client Sample ID: 29SB189 (10-10.5) — Lab Sample ID: 280-160187-34

No Detections.

Client Sample ID: 29SB188 (7-9) — Lab Sample ID: 280-160187-35

No Detections.

Client Sample ID: 29SB188 (10-10.5) — Lab Sample ID: 280-160187-36

No Detections.

Client Sample ID: 29SB195 (7-8) — Lab Sample ID: 280-160187-37

No Detections.

Client Sample ID: 29SB195 (9.5-10) — Lab Sample ID: 280-160187-38

No Detections.

Client Sample ID: 29SB194 (7-8) — Lab Sample ID: 280-160187-39

No Detections.

Client Sample ID: 29SB194 (9.5-10) — Lab Sample ID: 280-160187-40

No Detections.

Client Sample ID: DUP-04 — Lab Sample ID: 280-160187-41

No Detections.

Client Sample ID: 29SB191 (9.5-10) — Lab Sample ID: 280-160187-42

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
2,4-Dinitrotoluene	0.11		0.096	0.045	mg/Kg	1		8321A	Total/NA

Client Sample ID: 29SB197 (3-4) — Lab Sample ID: 280-160187-43

No Detections.

Client Sample ID: 29SB197 (7-7.5) — Lab Sample ID: 280-160187-44

No Detections.

Client Sample ID: 29SB196 (3-4) — Lab Sample ID: 280-160187-45

No Detections.

Client Sample ID: 29SB196 (7-7.5) — Lab Sample ID: 280-160187-46

No Detections.

Client Sample ID: EB-02 — Lab Sample ID: 280-160187-47

No Detections.

Client Sample ID: 29SB172 (3-4) — Lab Sample ID: 280-160187-48

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB172 (6-7) — Lab Sample ID: 280-160187-49

No Detections.

Client Sample ID: 29SB172 (11-12) — Lab Sample ID: 280-160187-50

No Detections.

Client Sample ID: 29SB172 (14.5-15) — Lab Sample ID: 280-160187-51

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
2,4-Dinitrotoluene	0.11	M	0.098	0.046	mg/Kg	1		8321A	Total/NA

Client Sample ID: 29SB180 (14.5-15) — Lab Sample ID: 280-160187-52

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
2,4-Dinitrotoluene	0.56	M	0.098	0.046	mg/Kg	1		8321A	Total/NA
2,6-Dinitrotoluene	0.072	J M	0.098	0.039	mg/Kg	1		8321A	Total/NA
2-Amino-4,6-dinitrotoluene	0.054	J	0.098	0.048	mg/Kg	1		8321A	Total/NA
o-Nitrotoluene	0.15		0.098	0.042	mg/Kg	1		8321A	Total/NA
p-Nitrotoluene	0.20		0.098	0.048	mg/Kg	1		8321A	Total/NA

Client Sample ID: 29SB173 (3-4) — Lab Sample ID: 280-160187-53

No Detections.

Client Sample ID: 29SB173 (6-7) — Lab Sample ID: 280-160187-54

No Detections.

Client Sample ID: 29SB173 (11-12) — Lab Sample ID: 280-160187-55

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB183 (1-2)
Lab Sample ID: 280-160187-1
Date Collected: 03/22/22 12:20
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	0.049	U	0.098	0.044	mg/Kg		04/01/22 16:56	04/05/22 12:34	1
1,3-Dinitrobenzene	0.049	U	0.098	0.044	mg/Kg		04/01/22 16:56	04/05/22 12:34	1
2,4,6-Trinitrotoluene	0.049	U	0.098	0.036	mg/Kg		04/01/22 16:56	04/05/22 12:34	1
2,4-Dinitrotoluene	0.049	U	0.098	0.046	mg/Kg		04/01/22 16:56	04/05/22 12:34	1
2,6-Dinitrotoluene	0.049	U	0.098	0.040	mg/Kg		04/01/22 16:56	04/05/22 12:34	1
2-Amino-4,6-dinitrotoluene	0.049	U	0.098	0.049	mg/Kg		04/01/22 16:56	04/05/22 12:34	1
4-Amino-2,6-dinitrotoluene	0.049	U	0.098	0.031	mg/Kg		04/01/22 16:56	04/05/22 12:34	1
HMX	0.049	U	0.098	0.045	mg/Kg		04/01/22 16:56	04/05/22 12:34	1
m-Nitrotoluene	0.049	U	0.098	0.042	mg/Kg		04/01/22 16:56	04/05/22 12:34	1
Nitrobenzene	0.049	U	0.11	0.037	mg/Kg		04/01/22 16:56	04/05/22 12:34	1
Nitroglycerin	0.049	U	0.098	0.029	mg/Kg		04/01/22 16:56	04/05/22 12:34	1
o-Nitrotoluene	0.049	U	0.098	0.042	mg/Kg		04/01/22 16:56	04/05/22 12:34	1
PETN	0.049	U	0.098	0.033	mg/Kg		04/01/22 16:56	04/05/22 12:34	1
p-Nitrotoluene	0.049	U	0.098	0.049	mg/Kg		04/01/22 16:56	04/05/22 12:34	1
RDX	0.049	U	0.12	0.042	mg/Kg		04/01/22 16:56	04/05/22 12:34	1
Tetryl	0.049	U Q	0.098	0.038	mg/Kg		04/01/22 16:56	04/05/22 12:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*95*		*68 - 140*	*04/01/22 16:56*	*04/05/22 12:34*	*1*

Client Sample ID: 29SB183 (3-4)
Lab Sample ID: 280-160187-2
Date Collected: 03/22/22 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	0.048	U	0.095	0.043	mg/Kg		04/01/22 16:56	04/05/22 12:41	1
1,3-Dinitrobenzene	0.048	U	0.095	0.043	mg/Kg		04/01/22 16:56	04/05/22 12:41	1
2,4,6-Trinitrotoluene	0.048	U	0.095	0.035	mg/Kg		04/01/22 16:56	04/05/22 12:41	1
2,4-Dinitrotoluene	0.048	U	0.095	0.044	mg/Kg		04/01/22 16:56	04/05/22 12:41	1
2,6-Dinitrotoluene	0.048	U	0.095	0.038	mg/Kg		04/01/22 16:56	04/05/22 12:41	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.095	0.047	mg/Kg		04/01/22 16:56	04/05/22 12:41	1
4-Amino-2,6-dinitrotoluene	0.048	U J1	0.095	0.030	mg/Kg		04/01/22 16:56	04/05/22 12:41	1
HMX	0.048	U M	0.095	0.044	mg/Kg		04/01/22 16:56	04/05/22 12:41	1
m-Nitrotoluene	0.048	U	0.095	0.041	mg/Kg		04/01/22 16:56	04/05/22 12:41	1
Nitrobenzene	0.048	U	0.10	0.036	mg/Kg		04/01/22 16:56	04/05/22 12:41	1
Nitroglycerin	0.048	U	0.095	0.028	mg/Kg		04/01/22 16:56	04/05/22 12:41	1
o-Nitrotoluene	0.048	U	0.095	0.041	mg/Kg		04/01/22 16:56	04/05/22 12:41	1
PETN	0.048	U	0.095	0.032	mg/Kg		04/01/22 16:56	04/05/22 12:41	1
p-Nitrotoluene	0.048	U	0.095	0.047	mg/Kg		04/01/22 16:56	04/05/22 12:41	1
RDX	0.048	U	0.11	0.041	mg/Kg		04/01/22 16:56	04/05/22 12:41	1
Tetryl	0.048	U J1 Q	0.095	0.037	mg/Kg		04/01/22 16:56	04/05/22 12:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*99*		*68 - 140*	*04/01/22 16:56*	*04/05/22 12:41*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: DUP-01
Lab Sample ID: 280-160187-3
Date Collected: 03/22/22 13:40
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	0.049	U	0.098	0.044	mg/Kg		04/01/22 16:56	04/05/22 13:19	1
1,3-Dinitrobenzene	0.049	U	0.098	0.044	mg/Kg		04/01/22 16:56	04/05/22 13:19	1
2,4,6-Trinitrotoluene	0.049	U	0.098	0.036	mg/Kg		04/01/22 16:56	04/05/22 13:19	1
2,4-Dinitrotoluene	0.049	U	0.098	0.046	mg/Kg		04/01/22 16:56	04/05/22 13:19	1
2,6-Dinitrotoluene	0.049	U	0.098	0.039	mg/Kg		04/01/22 16:56	04/05/22 13:19	1
2-Amino-4,6-dinitrotoluene	0.049	U	0.098	0.049	mg/Kg		04/01/22 16:56	04/05/22 13:19	1
4-Amino-2,6-dinitrotoluene	0.049	U	0.098	0.030	mg/Kg		04/01/22 16:56	04/05/22 13:19	1
HMX	0.049	U M	0.098	0.045	mg/Kg		04/01/22 16:56	04/05/22 13:19	1
m-Nitrotoluene	0.049	U	0.098	0.042	mg/Kg		04/01/22 16:56	04/05/22 13:19	1
Nitrobenzene	0.049	U	0.11	0.037	mg/Kg		04/01/22 16:56	04/05/22 13:19	1
Nitroglycerin	0.049	U	0.098	0.028	mg/Kg		04/01/22 16:56	04/05/22 13:19	1
o-Nitrotoluene	0.049	U	0.098	0.042	mg/Kg		04/01/22 16:56	04/05/22 13:19	1
PETN	0.049	U	0.098	0.033	mg/Kg		04/01/22 16:56	04/05/22 13:19	1
p-Nitrotoluene	0.049	U	0.098	0.048	mg/Kg		04/01/22 16:56	04/05/22 13:19	1
RDX	0.049	U	0.12	0.042	mg/Kg		04/01/22 16:56	04/05/22 13:19	1
Tetryl	0.049	U Q	0.098	0.038	mg/Kg		04/01/22 16:56	04/05/22 13:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*98*		*68 - 140*	*04/01/22 16:56*	*04/05/22 13:19*	*1*

Client Sample ID: 29SB185 (3-4)
Lab Sample ID: 280-160187-4
Date Collected: 03/22/22 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	0.096	0.043	mg/Kg		04/01/22 16:56	04/05/22 13:26	1
1,3-Dinitrobenzene	0.048	U	0.096	0.043	mg/Kg		04/01/22 16:56	04/05/22 13:26	1
2,4,6-Trinitrotoluene	0.048	U	0.096	0.035	mg/Kg		04/01/22 16:56	04/05/22 13:26	1
2,4-Dinitrotoluene	0.048	U	0.096	0.045	mg/Kg		04/01/22 16:56	04/05/22 13:26	1
2,6-Dinitrotoluene	0.048	U	0.096	0.039	mg/Kg		04/01/22 16:56	04/05/22 13:26	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.096	0.048	mg/Kg		04/01/22 16:56	04/05/22 13:26	1
4-Amino-2,6-dinitrotoluene	0.048	U	0.096	0.030	mg/Kg		04/01/22 16:56	04/05/22 13:26	1
HMX	0.048	U M	0.096	0.044	mg/Kg		04/01/22 16:56	04/05/22 13:26	1
m-Nitrotoluene	0.048	U	0.096	0.042	mg/Kg		04/01/22 16:56	04/05/22 13:26	1
Nitrobenzene	0.048	U	0.11	0.037	mg/Kg		04/01/22 16:56	04/05/22 13:26	1
Nitroglycerin	0.048	U	0.096	0.028	mg/Kg		04/01/22 16:56	04/05/22 13:26	1
o-Nitrotoluene	0.048	U	0.096	0.041	mg/Kg		04/01/22 16:56	04/05/22 13:26	1
PETN	0.048	U	0.096	0.033	mg/Kg		04/01/22 16:56	04/05/22 13:26	1
p-Nitrotoluene	0.048	U	0.096	0.048	mg/Kg		04/01/22 16:56	04/05/22 13:26	1
RDX	0.048	U M	0.12	0.042	mg/Kg		04/01/22 16:56	04/05/22 13:26	1
Tetryl	0.048	U Q	0.096	0.037	mg/Kg		04/01/22 16:56	04/05/22 13:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*101*		*68 - 140*	*04/01/22 16:56*	*04/05/22 13:26*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB185 (7-8)
Lab Sample ID: 280-160187-5
Date Collected: 03/22/22 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	0.048	U	0.096	0.043	mg/Kg		04/01/22 16:56	04/05/22 13:32	1
1,3-Dinitrobenzene	0.048	U	0.096	0.043	mg/Kg		04/01/22 16:56	04/05/22 13:32	1
2,4,6-Trinitrotoluene	0.048	U	0.096	0.035	mg/Kg		04/01/22 16:56	04/05/22 13:32	1
2,4-Dinitrotoluene	0.048	U	0.096	0.045	mg/Kg		04/01/22 16:56	04/05/22 13:32	1
2,6-Dinitrotoluene	0.048	U M	0.096	0.039	mg/Kg		04/01/22 16:56	04/05/22 13:32	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.096	0.047	mg/Kg		04/01/22 16:56	04/05/22 13:32	1
4-Amino-2,6-dinitrotoluene	0.048	U	0.096	0.030	mg/Kg		04/01/22 16:56	04/05/22 13:32	1
HMX	0.048	U M	0.096	0.044	mg/Kg		04/01/22 16:56	04/05/22 13:32	1
m-Nitrotoluene	0.048	U	0.096	0.041	mg/Kg		04/01/22 16:56	04/05/22 13:32	1
Nitrobenzene	0.048	U	0.11	0.036	mg/Kg		04/01/22 16:56	04/05/22 13:32	1
Nitroglycerin	0.048	U	0.096	0.028	mg/Kg		04/01/22 16:56	04/05/22 13:32	1
o-Nitrotoluene	0.048	U	0.096	0.041	mg/Kg		04/01/22 16:56	04/05/22 13:32	1
PETN	0.048	U	0.096	0.033	mg/Kg		04/01/22 16:56	04/05/22 13:32	1
p-Nitrotoluene	0.048	U	0.096	0.047	mg/Kg		04/01/22 16:56	04/05/22 13:32	1
RDX	0.048	U	0.11	0.041	mg/Kg		04/01/22 16:56	04/05/22 13:32	1
Tetryl	0.048	U Q	0.096	0.037	mg/Kg		04/01/22 16:56	04/05/22 13:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*94*		*68 - 140*	*04/01/22 16:56*	*04/05/22 13:32*	*1*

Client Sample ID: 29SB185 (11-12)
Lab Sample ID: 280-160187-6
Date Collected: 03/22/22 12:55
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	0.048	U	0.095	0.043	mg/Kg		04/01/22 16:56	04/05/22 13:38	1
1,3-Dinitrobenzene	0.048	U	0.095	0.043	mg/Kg		04/01/22 16:56	04/05/22 13:38	1
2,4,6-Trinitrotoluene	0.048	U	0.095	0.035	mg/Kg		04/01/22 16:56	04/05/22 13:38	1
2,4-Dinitrotoluene	0.048	U	0.095	0.044	mg/Kg		04/01/22 16:56	04/05/22 13:38	1
2,6-Dinitrotoluene	0.048	U	0.095	0.038	mg/Kg		04/01/22 16:56	04/05/22 13:38	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.095	0.047	mg/Kg		04/01/22 16:56	04/05/22 13:38	1
4-Amino-2,6-dinitrotoluene	0.048	U	0.095	0.030	mg/Kg		04/01/22 16:56	04/05/22 13:38	1
HMX	0.048	U	0.095	0.044	mg/Kg		04/01/22 16:56	04/05/22 13:38	1
m-Nitrotoluene	0.048	U	0.095	0.041	mg/Kg		04/01/22 16:56	04/05/22 13:38	1
Nitrobenzene	0.048	U	0.10	0.036	mg/Kg		04/01/22 16:56	04/05/22 13:38	1
Nitroglycerin	0.048	U	0.095	0.028	mg/Kg		04/01/22 16:56	04/05/22 13:38	1
o-Nitrotoluene	0.048	U	0.095	0.041	mg/Kg		04/01/22 16:56	04/05/22 13:38	1
PETN	0.048	U	0.095	0.032	mg/Kg		04/01/22 16:56	04/05/22 13:38	1
p-Nitrotoluene	0.048	U	0.095	0.047	mg/Kg		04/01/22 16:56	04/05/22 13:38	1
RDX	0.048	U	0.11	0.041	mg/Kg		04/01/22 16:56	04/05/22 13:38	1
Tetryl	0.048	U Q	0.095	0.037	mg/Kg		04/01/22 16:56	04/05/22 13:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*102*		*68 - 140*	*04/01/22 16:56*	*04/05/22 13:38*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB185 (13.5-14)
Lab Sample ID: 280-160187-7
Date Collected: 03/22/22 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	0.049	U	0.098	0.044	mg/Kg		04/01/22 16:56	04/05/22 13:45	1
1,3-Dinitrobenzene	0.049	U	0.098	0.044	mg/Kg		04/01/22 16:56	04/05/22 13:45	1
2,4,6-Trinitrotoluene	0.049	U	0.098	0.036	mg/Kg		04/01/22 16:56	04/05/22 13:45	1
2,4-Dinitrotoluene	0.049	U	0.098	0.046	mg/Kg		04/01/22 16:56	04/05/22 13:45	1
2,6-Dinitrotoluene	0.049	U	0.098	0.040	mg/Kg		04/01/22 16:56	04/05/22 13:45	1
2-Amino-4,6-dinitrotoluene	0.049	U	0.098	0.049	mg/Kg		04/01/22 16:56	04/05/22 13:45	1
4-Amino-2,6-dinitrotoluene	0.049	U	0.098	0.031	mg/Kg		04/01/22 16:56	04/05/22 13:45	1
HMX	0.049	U M	0.098	0.045	mg/Kg		04/01/22 16:56	04/05/22 13:45	1
m-Nitrotoluene	0.049	U	0.098	0.042	mg/Kg		04/01/22 16:56	04/05/22 13:45	1
Nitrobenzene	0.049	U	0.11	0.037	mg/Kg		04/01/22 16:56	04/05/22 13:45	1
Nitroglycerin	0.049	U	0.098	0.029	mg/Kg		04/01/22 16:56	04/05/22 13:45	1
o-Nitrotoluene	0.049	U	0.098	0.042	mg/Kg		04/01/22 16:56	04/05/22 13:45	1
PETN	0.049	U	0.098	0.033	mg/Kg		04/01/22 16:56	04/05/22 13:45	1
p-Nitrotoluene	0.049	U	0.098	0.049	mg/Kg		04/01/22 16:56	04/05/22 13:45	1
RDX	0.049	U	0.12	0.042	mg/Kg		04/01/22 16:56	04/05/22 13:45	1
Tetryl	0.049	U Q	0.098	0.038	mg/Kg		04/01/22 16:56	04/05/22 13:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*93*		*68 - 140*	*04/01/22 16:56*	*04/05/22 13:45*	*1*

Client Sample ID: 29SB186 (9-10)
Lab Sample ID: 280-160187-8
Date Collected: 03/22/22 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	0.047	U	0.094	0.042	mg/Kg		04/01/22 16:56	04/05/22 13:51	1
1,3-Dinitrobenzene	0.047	U	0.094	0.042	mg/Kg		04/01/22 16:56	04/05/22 13:51	1
2,4,6-Trinitrotoluene	0.047	U	0.094	0.035	mg/Kg		04/01/22 16:56	04/05/22 13:51	1
2,4-Dinitrotoluene	0.047	U	0.094	0.044	mg/Kg		04/01/22 16:56	04/05/22 13:51	1
2,6-Dinitrotoluene	0.047	U	0.094	0.038	mg/Kg		04/01/22 16:56	04/05/22 13:51	1
2-Amino-4,6-dinitrotoluene	0.047	U	0.094	0.047	mg/Kg		04/01/22 16:56	04/05/22 13:51	1
4-Amino-2,6-dinitrotoluene	0.047	U	0.094	0.029	mg/Kg		04/01/22 16:56	04/05/22 13:51	1
HMX	0.047	U M	0.094	0.043	mg/Kg		04/01/22 16:56	04/05/22 13:51	1
m-Nitrotoluene	0.047	U	0.094	0.041	mg/Kg		04/01/22 16:56	04/05/22 13:51	1
Nitrobenzene	0.047	U	0.10	0.036	mg/Kg		04/01/22 16:56	04/05/22 13:51	1
Nitroglycerin	0.047	U	0.094	0.027	mg/Kg		04/01/22 16:56	04/05/22 13:51	1
o-Nitrotoluene	0.047	U	0.094	0.040	mg/Kg		04/01/22 16:56	04/05/22 13:51	1
PETN	0.047	U	0.094	0.032	mg/Kg		04/01/22 16:56	04/05/22 13:51	1
p-Nitrotoluene	0.047	U	0.094	0.047	mg/Kg		04/01/22 16:56	04/05/22 13:51	1
RDX	0.047	U	0.11	0.041	mg/Kg		04/01/22 16:56	04/05/22 13:51	1
Tetryl	0.047	U Q	0.094	0.037	mg/Kg		04/01/22 16:56	04/05/22 13:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*99*		*68 - 140*	*04/01/22 16:56*	*04/05/22 13:51*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB186 (11-12)
Lab Sample ID: 280-160187-9
Date Collected: 03/22/22 13:18
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		04/01/22 16:56	04/05/22 13:58	1
1,3-Dinitrobenzene	0.049	U	0.097	0.043	mg/Kg		04/01/22 16:56	04/05/22 13:58	1
2,4,6-Trinitrotoluene	0.049	U	0.097	0.036	mg/Kg		04/01/22 16:56	04/05/22 13:58	1
2,4-Dinitrotoluene	0.049	U	0.097	0.045	mg/Kg		04/01/22 16:56	04/05/22 13:58	1
2,6-Dinitrotoluene	0.049	U	0.097	0.039	mg/Kg		04/01/22 16:56	04/05/22 13:58	1
2-Amino-4,6-dinitrotoluene	0.049	U	0.097	0.048	mg/Kg		04/01/22 16:56	04/05/22 13:58	1
4-Amino-2,6-dinitrotoluene	0.049	U	0.097	0.030	mg/Kg		04/01/22 16:56	04/05/22 13:58	1
HMX	0.049	U M	0.097	0.045	mg/Kg		04/01/22 16:56	04/05/22 13:58	1
m-Nitrotoluene	0.049	U	0.097	0.042	mg/Kg		04/01/22 16:56	04/05/22 13:58	1
Nitrobenzene	0.049	U	0.11	0.037	mg/Kg		04/01/22 16:56	04/05/22 13:58	1
Nitroglycerin	0.049	U	0.097	0.028	mg/Kg		04/01/22 16:56	04/05/22 13:58	1
o-Nitrotoluene	0.049	U	0.097	0.042	mg/Kg		04/01/22 16:56	04/05/22 13:58	1
PETN	0.049	U	0.097	0.033	mg/Kg		04/01/22 16:56	04/05/22 13:58	1
p-Nitrotoluene	0.049	U	0.097	0.048	mg/Kg		04/01/22 16:56	04/05/22 13:58	1
RDX	0.049	U	0.12	0.042	mg/Kg		04/01/22 16:56	04/05/22 13:58	1
Tetryl	0.049	U Q	0.097	0.038	mg/Kg		04/01/22 16:56	04/05/22 13:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*102*		*68 - 140*	*04/01/22 16:56*	*04/05/22 13:58*	*1*

Client Sample ID: 29SB186 (13.5-14)
Lab Sample ID: 280-160187-10
Date Collected: 03/22/22 13:20
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	0.047	U	0.094	0.042	mg/Kg		04/01/22 16:56	04/05/22 14:04	1
1,3-Dinitrobenzene	0.047	U	0.094	0.042	mg/Kg		04/01/22 16:56	04/05/22 14:04	1
2,4,6-Trinitrotoluene	0.047	U	0.094	0.034	mg/Kg		04/01/22 16:56	04/05/22 14:04	1
2,4-Dinitrotoluene	0.047	U	0.094	0.044	mg/Kg		04/01/22 16:56	04/05/22 14:04	1
2,6-Dinitrotoluene	0.047	U	0.094	0.038	mg/Kg		04/01/22 16:56	04/05/22 14:04	1
2-Amino-4,6-dinitrotoluene	0.047	U	0.094	0.046	mg/Kg		04/01/22 16:56	04/05/22 14:04	1
4-Amino-2,6-dinitrotoluene	0.047	U	0.094	0.029	mg/Kg		04/01/22 16:56	04/05/22 14:04	1
HMX	0.047	U M	0.094	0.043	mg/Kg		04/01/22 16:56	04/05/22 14:04	1
m-Nitrotoluene	0.047	U	0.094	0.040	mg/Kg		04/01/22 16:56	04/05/22 14:04	1
Nitrobenzene	0.047	U	0.10	0.036	mg/Kg		04/01/22 16:56	04/05/22 14:04	1
Nitroglycerin	0.047	U	0.094	0.027	mg/Kg		04/01/22 16:56	04/05/22 14:04	1
o-Nitrotoluene	0.047	U	0.094	0.040	mg/Kg		04/01/22 16:56	04/05/22 14:04	1
PETN	0.047	U	0.094	0.032	mg/Kg		04/01/22 16:56	04/05/22 14:04	1
p-Nitrotoluene	0.047	U	0.094	0.046	mg/Kg		04/01/22 16:56	04/05/22 14:04	1
RDX	0.047	U	0.11	0.040	mg/Kg		04/01/22 16:56	04/05/22 14:04	1
Tetryl	0.047	U Q	0.094	0.036	mg/Kg		04/01/22 16:56	04/05/22 14:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*96*		*68 - 140*	*04/01/22 16:56*	*04/05/22 14:04*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB184 (3-4)
Lab Sample ID: 280-160187-11
Date Collected: 03/22/22 13:35
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	0.050	U	0.099	0.044	mg/Kg		04/01/22 16:56	04/05/22 14:17	1
1,3-Dinitrobenzene	0.050	U	0.099	0.044	mg/Kg		04/01/22 16:56	04/05/22 14:17	1
2,4,6-Trinitrotoluene	0.050	U	0.099	0.036	mg/Kg		04/01/22 16:56	04/05/22 14:17	1
2,4-Dinitrotoluene	0.050	U M	0.099	0.046	mg/Kg		04/01/22 16:56	04/05/22 14:17	1
2,6-Dinitrotoluene	0.050	U M	0.099	0.040	mg/Kg		04/01/22 16:56	04/05/22 14:17	1
2-Amino-4,6-dinitrotoluene	0.050	U	0.099	0.049	mg/Kg		04/01/22 16:56	04/05/22 14:17	1
4-Amino-2,6-dinitrotoluene	0.050	U	0.099	0.031	mg/Kg		04/01/22 16:56	04/05/22 14:17	1
HMX	0.050	U M	0.099	0.046	mg/Kg		04/01/22 16:56	04/05/22 14:17	1
m-Nitrotoluene	0.050	U	0.099	0.043	mg/Kg		04/01/22 16:56	04/05/22 14:17	1
Nitrobenzene	0.050	U	0.11	0.038	mg/Kg		04/01/22 16:56	04/05/22 14:17	1
Nitroglycerin	0.050	U M	0.099	0.029	mg/Kg		04/01/22 16:56	04/05/22 14:17	1
o-Nitrotoluene	0.050	U	0.099	0.042	mg/Kg		04/01/22 16:56	04/05/22 14:17	1
PETN	0.050	U	0.099	0.034	mg/Kg		04/01/22 16:56	04/05/22 14:17	1
p-Nitrotoluene	0.050	U	0.099	0.049	mg/Kg		04/01/22 16:56	04/05/22 14:17	1
RDX	0.050	U	0.12	0.043	mg/Kg		04/01/22 16:56	04/05/22 14:17	1
Tetryl	0.050	U Q	0.099	0.038	mg/Kg		04/01/22 16:56	04/05/22 14:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*96*		*68 - 140*	*04/01/22 16:56*	*04/05/22 14:17*	*1*

Client Sample ID: 29SB184 (7-8)
Lab Sample ID: 280-160187-12
Date Collected: 03/22/22 13:38
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		04/01/22 16:56	04/05/22 14:23	1
1,3-Dinitrobenzene	0.050	U M	0.099	0.044	mg/Kg		04/01/22 16:56	04/05/22 14:23	1
2,4,6-Trinitrotoluene	0.050	U	0.099	0.036	mg/Kg		04/01/22 16:56	04/05/22 14:23	1
2,4-Dinitrotoluene	0.050	U	0.099	0.046	mg/Kg		04/01/22 16:56	04/05/22 14:23	1
2,6-Dinitrotoluene	0.050	U	0.099	0.040	mg/Kg		04/01/22 16:56	04/05/22 14:23	1
2-Amino-4,6-dinitrotoluene	0.050	U	0.099	0.049	mg/Kg		04/01/22 16:56	04/05/22 14:23	1
4-Amino-2,6-dinitrotoluene	0.050	U	0.099	0.031	mg/Kg		04/01/22 16:56	04/05/22 14:23	1
HMX	0.050	U	0.099	0.046	mg/Kg		04/01/22 16:56	04/05/22 14:23	1
m-Nitrotoluene	0.050	U	0.099	0.043	mg/Kg		04/01/22 16:56	04/05/22 14:23	1
Nitrobenzene	0.050	U	0.11	0.038	mg/Kg		04/01/22 16:56	04/05/22 14:23	1
Nitroglycerin	0.050	U	0.099	0.029	mg/Kg		04/01/22 16:56	04/05/22 14:23	1
o-Nitrotoluene	0.050	U	0.099	0.042	mg/Kg		04/01/22 16:56	04/05/22 14:23	1
PETN	0.050	U	0.099	0.034	mg/Kg		04/01/22 16:56	04/05/22 14:23	1
p-Nitrotoluene	0.050	U	0.099	0.049	mg/Kg		04/01/22 16:56	04/05/22 14:23	1
RDX	0.050	U	0.12	0.043	mg/Kg		04/01/22 16:56	04/05/22 14:23	1
Tetryl	0.050	U Q	0.099	0.038	mg/Kg		04/01/22 16:56	04/05/22 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*98*		*68 - 140*	*04/01/22 16:56*	*04/05/22 14:23*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB184 (11-12)
Lab Sample ID: 280-160187-13
Date Collected: 03/22/22 13:40
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	0.094	0.042	mg/Kg		04/01/22 16:56	04/05/22 14:30	1
1,3-Dinitrobenzene	0.047	U	0.094	0.042	mg/Kg		04/01/22 16:56	04/05/22 14:30	1
2,4,6-Trinitrotoluene	0.047	U	0.094	0.034	mg/Kg		04/01/22 16:56	04/05/22 14:30	1
2,4-Dinitrotoluene	0.047	U	0.094	0.044	mg/Kg		04/01/22 16:56	04/05/22 14:30	1
2,6-Dinitrotoluene	0.047	U	0.094	0.038	mg/Kg		04/01/22 16:56	04/05/22 14:30	1
2-Amino-4,6-dinitrotoluene	0.047	U	0.094	0.046	mg/Kg		04/01/22 16:56	04/05/22 14:30	1
4-Amino-2,6-dinitrotoluene	0.047	U	0.094	0.029	mg/Kg		04/01/22 16:56	04/05/22 14:30	1
HMX	0.047	U M	0.094	0.043	mg/Kg		04/01/22 16:56	04/05/22 14:30	1
m-Nitrotoluene	0.047	U	0.094	0.040	mg/Kg		04/01/22 16:56	04/05/22 14:30	1
Nitrobenzene	0.047	U	0.10	0.036	mg/Kg		04/01/22 16:56	04/05/22 14:30	1
Nitroglycerin	0.047	U	0.094	0.027	mg/Kg		04/01/22 16:56	04/05/22 14:30	1
o-Nitrotoluene	0.047	U	0.094	0.040	mg/Kg		04/01/22 16:56	04/05/22 14:30	1
PETN	0.047	U	0.094	0.032	mg/Kg		04/01/22 16:56	04/05/22 14:30	1
p-Nitrotoluene	0.047	U	0.094	0.046	mg/Kg		04/01/22 16:56	04/05/22 14:30	1
RDX	0.047	U	0.11	0.040	mg/Kg		04/01/22 16:56	04/05/22 14:30	1
Tetryl	0.047	U Q	0.094	0.036	mg/Kg		04/01/22 16:56	04/05/22 14:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*101*		*68 - 140*	*04/01/22 16:56*	*04/05/22 14:30*	*1*

Client Sample ID: 29SB184 (13.5-14)
Lab Sample ID: 280-160187-14
Date Collected: 03/22/22 13:43
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		04/01/22 16:56	04/05/22 14:36	1
1,3-Dinitrobenzene	0.047	U	0.095	0.042	mg/Kg		04/01/22 16:56	04/05/22 14:36	1
2,4,6-Trinitrotoluene	0.047	U	0.095	0.035	mg/Kg		04/01/22 16:56	04/05/22 14:36	1
2,4-Dinitrotoluene	0.047	U	0.095	0.044	mg/Kg		04/01/22 16:56	04/05/22 14:36	1
2,6-Dinitrotoluene	0.047	U	0.095	0.038	mg/Kg		04/01/22 16:56	04/05/22 14:36	1
2-Amino-4,6-dinitrotoluene	0.047	U	0.095	0.047	mg/Kg		04/01/22 16:56	04/05/22 14:36	1
4-Amino-2,6-dinitrotoluene	0.047	U	0.095	0.030	mg/Kg		04/01/22 16:56	04/05/22 14:36	1
HMX	0.047	U M	0.095	0.044	mg/Kg		04/01/22 16:56	04/05/22 14:36	1
m-Nitrotoluene	0.047	U	0.095	0.041	mg/Kg		04/01/22 16:56	04/05/22 14:36	1
Nitrobenzene	0.047	U	0.10	0.036	mg/Kg		04/01/22 16:56	04/05/22 14:36	1
Nitroglycerin	0.047	U	0.095	0.028	mg/Kg		04/01/22 16:56	04/05/22 14:36	1
o-Nitrotoluene	0.047	U	0.095	0.041	mg/Kg		04/01/22 16:56	04/05/22 14:36	1
PETN	0.047	U	0.095	0.032	mg/Kg		04/01/22 16:56	04/05/22 14:36	1
p-Nitrotoluene	0.047	U	0.095	0.047	mg/Kg		04/01/22 16:56	04/05/22 14:36	1
RDX	0.047	U	0.11	0.041	mg/Kg		04/01/22 16:56	04/05/22 14:36	1
Tetryl	0.047	U Q	0.095	0.037	mg/Kg		04/01/22 16:56	04/05/22 14:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*92*		*68 - 140*	*04/01/22 16:56*	*04/05/22 14:36*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: DUP-02
Lab Sample ID: 280-160187-15
Date Collected: 03/22/22 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	0.047	U	0.095	0.043	mg/Kg		04/01/22 16:56	04/05/22 14:42	1
1,3-Dinitrobenzene	0.047	U	0.095	0.042	mg/Kg		04/01/22 16:56	04/05/22 14:42	1
2,4,6-Trinitrotoluene	0.047	U	0.095	0.035	mg/Kg		04/01/22 16:56	04/05/22 14:42	1
2,4-Dinitrotoluene	0.047	U	0.095	0.044	mg/Kg		04/01/22 16:56	04/05/22 14:42	1
2,6-Dinitrotoluene	0.047	U	0.095	0.038	mg/Kg		04/01/22 16:56	04/05/22 14:42	1
2-Amino-4,6-dinitrotoluene	0.047	U	0.095	0.047	mg/Kg		04/01/22 16:56	04/05/22 14:42	1
4-Amino-2,6-dinitrotoluene	0.047	U	0.095	0.030	mg/Kg		04/01/22 16:56	04/05/22 14:42	1
HMX	0.047	U M	0.095	0.044	mg/Kg		04/01/22 16:56	04/05/22 14:42	1
m-Nitrotoluene	0.047	U	0.095	0.041	mg/Kg		04/01/22 16:56	04/05/22 14:42	1
Nitrobenzene	0.047	U	0.10	0.036	mg/Kg		04/01/22 16:56	04/05/22 14:42	1
Nitroglycerin	0.047	U	0.095	0.028	mg/Kg		04/01/22 16:56	04/05/22 14:42	1
o-Nitrotoluene	0.047	U	0.095	0.041	mg/Kg		04/01/22 16:56	04/05/22 14:42	1
PETN	0.047	U	0.095	0.032	mg/Kg		04/01/22 16:56	04/05/22 14:42	1
p-Nitrotoluene	0.047	U	0.095	0.047	mg/Kg		04/01/22 16:56	04/05/22 14:42	1
RDX	0.047	U	0.11	0.041	mg/Kg		04/01/22 16:56	04/05/22 14:42	1
Tetryl	0.047	U Q	0.095	0.037	mg/Kg		04/01/22 16:56	04/05/22 14:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*98*		*68 - 140*	*04/01/22 16:56*	*04/05/22 14:42*	*1*

Client Sample ID: 29SB199 (3-4)
Lab Sample ID: 280-160187-16
Date Collected: 03/22/22 14:30
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	0.098	0.044	mg/Kg		04/01/22 16:56	04/05/22 14:49	1
1,3-Dinitrobenzene	0.049	U	0.098	0.044	mg/Kg		04/01/22 16:56	04/05/22 14:49	1
2,4,6-Trinitrotoluene	0.049	U	0.098	0.036	mg/Kg		04/01/22 16:56	04/05/22 14:49	1
2,4-Dinitrotoluene	0.049	U	0.098	0.046	mg/Kg		04/01/22 16:56	04/05/22 14:49	1
2,6-Dinitrotoluene	0.049	U M	0.098	0.040	mg/Kg		04/01/22 16:56	04/05/22 14:49	1
2-Amino-4,6-dinitrotoluene	0.049	U	0.098	0.049	mg/Kg		04/01/22 16:56	04/05/22 14:49	1
4-Amino-2,6-dinitrotoluene	0.049	U	0.098	0.031	mg/Kg		04/01/22 16:56	04/05/22 14:49	1
HMX	0.049	U	0.098	0.045	mg/Kg		04/01/22 16:56	04/05/22 14:49	1
m-Nitrotoluene	0.049	U	0.098	0.042	mg/Kg		04/01/22 16:56	04/05/22 14:49	1
Nitrobenzene	0.049	U	0.11	0.037	mg/Kg		04/01/22 16:56	04/05/22 14:49	1
Nitroglycerin	0.049	U	0.098	0.028	mg/Kg		04/01/22 16:56	04/05/22 14:49	1
o-Nitrotoluene	0.049	U	0.098	0.042	mg/Kg		04/01/22 16:56	04/05/22 14:49	1
PETN	0.049	U	0.098	0.033	mg/Kg		04/01/22 16:56	04/05/22 14:49	1
p-Nitrotoluene	0.049	U	0.098	0.049	mg/Kg		04/01/22 16:56	04/05/22 14:49	1
RDX	0.049	U	0.12	0.042	mg/Kg		04/01/22 16:56	04/05/22 14:49	1
Tetryl	0.049	U Q	0.098	0.038	mg/Kg		04/01/22 16:56	04/05/22 14:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*97*		*68 - 140*	*04/01/22 16:56*	*04/05/22 14:49*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB199 (7-8)
Lab Sample ID: 280-160187-17
Date Collected: 03/22/22 14:35
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	0.048	U	0.097	0.043	mg/Kg		04/01/22 16:56	04/05/22 14:55	1
1,3-Dinitrobenzene	0.048	U	0.097	0.043	mg/Kg		04/01/22 16:56	04/05/22 14:55	1
2,4,6-Trinitrotoluene	0.048	U	0.097	0.036	mg/Kg		04/01/22 16:56	04/05/22 14:55	1
2,4-Dinitrotoluene	0.048	U	0.097	0.045	mg/Kg		04/01/22 16:56	04/05/22 14:55	1
2,6-Dinitrotoluene	0.048	U	0.097	0.039	mg/Kg		04/01/22 16:56	04/05/22 14:55	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.097	0.048	mg/Kg		04/01/22 16:56	04/05/22 14:55	1
4-Amino-2,6-dinitrotoluene	0.048	U	0.097	0.030	mg/Kg		04/01/22 16:56	04/05/22 14:55	1
HMX	0.048	U	0.097	0.045	mg/Kg		04/01/22 16:56	04/05/22 14:55	1
m-Nitrotoluene	0.048	U	0.097	0.042	mg/Kg		04/01/22 16:56	04/05/22 14:55	1
Nitrobenzene	0.048	U	0.11	0.037	mg/Kg		04/01/22 16:56	04/05/22 14:55	1
Nitroglycerin	0.048	U	0.097	0.028	mg/Kg		04/01/22 16:56	04/05/22 14:55	1
o-Nitrotoluene	0.048	U	0.097	0.042	mg/Kg		04/01/22 16:56	04/05/22 14:55	1
PETN	0.048	U	0.097	0.033	mg/Kg		04/01/22 16:56	04/05/22 14:55	1
p-Nitrotoluene	0.048	U	0.097	0.048	mg/Kg		04/01/22 16:56	04/05/22 14:55	1
RDX	0.048	U	0.12	0.042	mg/Kg		04/01/22 16:56	04/05/22 14:55	1
Tetryl	0.048	U Q	0.097	0.038	mg/Kg		04/01/22 16:56	04/05/22 14:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*94*		*68 - 140*	*04/01/22 16:56*	*04/05/22 14:55*	*1*

Client Sample ID: 29SB198 (3-4)
Lab Sample ID: 280-160187-18
Date Collected: 03/22/22 15:05
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	0.049	U	0.097	0.043	mg/Kg		04/01/22 16:56	04/05/22 15:02	1
1,3-Dinitrobenzene	0.049	U	0.097	0.043	mg/Kg		04/01/22 16:56	04/05/22 15:02	1
2,4,6-Trinitrotoluene	0.049	U	0.097	0.036	mg/Kg		04/01/22 16:56	04/05/22 15:02	1
2,4-Dinitrotoluene	0.049	U	0.097	0.045	mg/Kg		04/01/22 16:56	04/05/22 15:02	1
2,6-Dinitrotoluene	0.049	U	0.097	0.039	mg/Kg		04/01/22 16:56	04/05/22 15:02	1
2-Amino-4,6-dinitrotoluene	0.049	U	0.097	0.048	mg/Kg		04/01/22 16:56	04/05/22 15:02	1
4-Amino-2,6-dinitrotoluene	0.049	U	0.097	0.030	mg/Kg		04/01/22 16:56	04/05/22 15:02	1
HMX	0.049	U M	0.097	0.045	mg/Kg		04/01/22 16:56	04/05/22 15:02	1
m-Nitrotoluene	0.049	U	0.097	0.042	mg/Kg		04/01/22 16:56	04/05/22 15:02	1
Nitrobenzene	0.049	U	0.11	0.037	mg/Kg		04/01/22 16:56	04/05/22 15:02	1
Nitroglycerin	0.049	U	0.097	0.028	mg/Kg		04/01/22 16:56	04/05/22 15:02	1
o-Nitrotoluene	0.049	U	0.097	0.042	mg/Kg		04/01/22 16:56	04/05/22 15:02	1
PETN	0.049	U	0.097	0.033	mg/Kg		04/01/22 16:56	04/05/22 15:02	1
p-Nitrotoluene	0.049	U	0.097	0.048	mg/Kg		04/01/22 16:56	04/05/22 15:02	1
RDX	0.049	U	0.12	0.042	mg/Kg		04/01/22 16:56	04/05/22 15:02	1
Tetryl	0.049	U Q	0.097	0.038	mg/Kg		04/01/22 16:56	04/05/22 15:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*97*		*68 - 140*	*04/01/22 16:56*	*04/05/22 15:02*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB198 (7-8)
Lab Sample ID: 280-160187-19
Date Collected: 03/22/22 15:10
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		04/01/22 16:56	04/05/22 15:08	1
1,3-Dinitrobenzene	0.047	U	0.093	0.042	mg/Kg		04/01/22 16:56	04/05/22 15:08	1
2,4,6-Trinitrotoluene	0.047	U	0.093	0.034	mg/Kg		04/01/22 16:56	04/05/22 15:08	1
2,4-Dinitrotoluene	0.047	U	0.093	0.043	mg/Kg		04/01/22 16:56	04/05/22 15:08	1
2,6-Dinitrotoluene	0.047	U	0.093	0.038	mg/Kg		04/01/22 16:56	04/05/22 15:08	1
2-Amino-4,6-dinitrotoluene	0.047	U	0.093	0.046	mg/Kg		04/01/22 16:56	04/05/22 15:08	1
4-Amino-2,6-dinitrotoluene	0.047	U	0.093	0.029	mg/Kg		04/01/22 16:56	04/05/22 15:08	1
HMX	0.047	U M	0.093	0.043	mg/Kg		04/01/22 16:56	04/05/22 15:08	1
m-Nitrotoluene	0.047	U	0.093	0.040	mg/Kg		04/01/22 16:56	04/05/22 15:08	1
Nitrobenzene	0.047	U	0.10	0.035	mg/Kg		04/01/22 16:56	04/05/22 15:08	1
Nitroglycerin	0.047	U	0.093	0.027	mg/Kg		04/01/22 16:56	04/05/22 15:08	1
o-Nitrotoluene	0.047	U	0.093	0.040	mg/Kg		04/01/22 16:56	04/05/22 15:08	1
PETN	0.047	U	0.093	0.032	mg/Kg		04/01/22 16:56	04/05/22 15:08	1
p-Nitrotoluene	0.047	U	0.093	0.046	mg/Kg		04/01/22 16:56	04/05/22 15:08	1
RDX	0.047	U	0.11	0.040	mg/Kg		04/01/22 16:56	04/05/22 15:08	1
Tetryl	0.047	U M Q	0.093	0.036	mg/Kg		04/01/22 16:56	04/05/22 15:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*93*		*68 - 140*	*04/01/22 16:56*	*04/05/22 15:08*	*1*

Client Sample ID: 29SB202 (3-4)
Lab Sample ID: 280-160187-20
Date Collected: 03/22/22 16:30
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	0.098	0.044	mg/Kg		04/01/22 16:56	04/05/22 15:14	1
1,3-Dinitrobenzene	0.049	U	0.098	0.044	mg/Kg		04/01/22 16:56	04/05/22 15:14	1
2,4,6-Trinitrotoluene	0.049	U	0.098	0.036	mg/Kg		04/01/22 16:56	04/05/22 15:14	1
2,4-Dinitrotoluene	0.049	U	0.098	0.046	mg/Kg		04/01/22 16:56	04/05/22 15:14	1
2,6-Dinitrotoluene	0.049	U	0.098	0.039	mg/Kg		04/01/22 16:56	04/05/22 15:14	1
2-Amino-4,6-dinitrotoluene	0.049	U	0.098	0.049	mg/Kg		04/01/22 16:56	04/05/22 15:14	1
4-Amino-2,6-dinitrotoluene	0.049	U	0.098	0.030	mg/Kg		04/01/22 16:56	04/05/22 15:14	1
HMX	0.049	U M	0.098	0.045	mg/Kg		04/01/22 16:56	04/05/22 15:14	1
m-Nitrotoluene	0.049	U	0.098	0.042	mg/Kg		04/01/22 16:56	04/05/22 15:14	1
Nitrobenzene	0.049	U	0.11	0.037	mg/Kg		04/01/22 16:56	04/05/22 15:14	1
Nitroglycerin	0.049	U	0.098	0.028	mg/Kg		04/01/22 16:56	04/05/22 15:14	1
o-Nitrotoluene	0.049	U	0.098	0.042	mg/Kg		04/01/22 16:56	04/05/22 15:14	1
PETN	0.049	U	0.098	0.033	mg/Kg		04/01/22 16:56	04/05/22 15:14	1
p-Nitrotoluene	0.049	U	0.098	0.048	mg/Kg		04/01/22 16:56	04/05/22 15:14	1
RDX	0.049	U	0.12	0.042	mg/Kg		04/01/22 16:56	04/05/22 15:14	1
Tetryl	0.049	U Q	0.098	0.038	mg/Kg		04/01/22 16:56	04/05/22 15:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*98*		*68 - 140*	*04/01/22 16:56*	*04/05/22 15:14*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB202 (11-12)
Lab Sample ID: 280-160187-21
Date Collected: 03/22/22 16:35
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	0.094	0.042	mg/Kg		04/01/22 16:54	04/05/22 15:59	1
1,3-Dinitrobenzene	0.047	U	0.094	0.042	mg/Kg		04/01/22 16:54	04/05/22 15:59	1
2,4,6-Trinitrotoluene	0.047	U	0.094	0.035	mg/Kg		04/01/22 16:54	04/05/22 15:59	1
2,4-Dinitrotoluene	0.047	U	0.094	0.044	mg/Kg		04/01/22 16:54	04/05/22 15:59	1
2,6-Dinitrotoluene	0.047	U Q	0.094	0.038	mg/Kg		04/01/22 16:54	04/05/22 15:59	1
2-Amino-4,6-dinitrotoluene	0.047	U	0.094	0.047	mg/Kg		04/01/22 16:54	04/05/22 15:59	1
4-Amino-2,6-dinitrotoluene	0.047	U Q	0.094	0.029	mg/Kg		04/01/22 16:54	04/05/22 15:59	1
HMX	0.047	U M	0.094	0.043	mg/Kg		04/01/22 16:54	04/05/22 15:59	1
m-Nitrotoluene	0.047	U	0.094	0.041	mg/Kg		04/01/22 16:54	04/05/22 15:59	1
Nitrobenzene	0.047	U	0.10	0.036	mg/Kg		04/01/22 16:54	04/05/22 15:59	1
Nitroglycerin	0.047	U	0.094	0.027	mg/Kg		04/01/22 16:54	04/05/22 15:59	1
o-Nitrotoluene	0.047	U	0.094	0.040	mg/Kg		04/01/22 16:54	04/05/22 15:59	1
PETN	0.047	U	0.094	0.032	mg/Kg		04/01/22 16:54	04/05/22 15:59	1
p-Nitrotoluene	0.047	U	0.094	0.047	mg/Kg		04/01/22 16:54	04/05/22 15:59	1
RDX	0.047	U	0.11	0.041	mg/Kg		04/01/22 16:54	04/05/22 15:59	1
Tetryl	0.047	U Q	0.094	0.037	mg/Kg		04/01/22 16:54	04/05/22 15:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*94*		*68 - 140*	*04/01/22 16:54*	*04/05/22 15:59*	*1*

Client Sample ID: 29SB202 (15-15.5)
Lab Sample ID: 280-160187-22
Date Collected: 03/22/22 16:40
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	0.050	U	0.10	0.045	mg/Kg		04/01/22 16:54	04/05/22 16:06	1
1,3-Dinitrobenzene	0.050	U	0.10	0.045	mg/Kg		04/01/22 16:54	04/05/22 16:06	1
2,4,6-Trinitrotoluene	0.050	U	0.10	0.037	mg/Kg		04/01/22 16:54	04/05/22 16:06	1
2,4-Dinitrotoluene	0.050	U	0.10	0.047	mg/Kg		04/01/22 16:54	04/05/22 16:06	1
2,6-Dinitrotoluene	0.050	U Q	0.10	0.040	mg/Kg		04/01/22 16:54	04/05/22 16:06	1
2-Amino-4,6-dinitrotoluene	0.050	U	0.10	0.050	mg/Kg		04/01/22 16:54	04/05/22 16:06	1
4-Amino-2,6-dinitrotoluene	0.050	U Q	0.10	0.031	mg/Kg		04/01/22 16:54	04/05/22 16:06	1
HMX	0.050	U M	0.10	0.046	mg/Kg		04/01/22 16:54	04/05/22 16:06	1
m-Nitrotoluene	0.050	U	0.10	0.043	mg/Kg		04/01/22 16:54	04/05/22 16:06	1
Nitrobenzene	0.050	U	0.11	0.038	mg/Kg		04/01/22 16:54	04/05/22 16:06	1
Nitroglycerin	0.050	U	0.10	0.029	mg/Kg		04/01/22 16:54	04/05/22 16:06	1
o-Nitrotoluene	0.050	U	0.10	0.043	mg/Kg		04/01/22 16:54	04/05/22 16:06	1
PETN	0.050	U	0.10	0.034	mg/Kg		04/01/22 16:54	04/05/22 16:06	1
p-Nitrotoluene	0.050	U	0.10	0.049	mg/Kg		04/01/22 16:54	04/05/22 16:06	1
RDX	0.050	U	0.12	0.043	mg/Kg		04/01/22 16:54	04/05/22 16:06	1
Tetryl	0.050	U Q	0.10	0.039	mg/Kg		04/01/22 16:54	04/05/22 16:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*92*		*68 - 140*	*04/01/22 16:54*	*04/05/22 16:06*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB200 (15-15.5)
Lab Sample ID: 280-160187-23
Date Collected: 03/22/22 16:55
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	0.048	U	0.096	0.043	mg/Kg		04/01/22 16:54	04/05/22 16:12	1
1,3-Dinitrobenzene	0.048	U	0.096	0.043	mg/Kg		04/01/22 16:54	04/05/22 16:12	1
2,4,6-Trinitrotoluene	0.048	U	0.096	0.035	mg/Kg		04/01/22 16:54	04/05/22 16:12	1
2,4-Dinitrotoluene	0.048	U	0.096	0.045	mg/Kg		04/01/22 16:54	04/05/22 16:12	1
2,6-Dinitrotoluene	0.048	U Q	0.096	0.039	mg/Kg		04/01/22 16:54	04/05/22 16:12	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.096	0.047	mg/Kg		04/01/22 16:54	04/05/22 16:12	1
4-Amino-2,6-dinitrotoluene	0.048	U Q	0.096	0.030	mg/Kg		04/01/22 16:54	04/05/22 16:12	1
HMX	0.048	U M	0.096	0.044	mg/Kg		04/01/22 16:54	04/05/22 16:12	1
m-Nitrotoluene	0.048	U	0.096	0.041	mg/Kg		04/01/22 16:54	04/05/22 16:12	1
Nitrobenzene	0.048	U	0.11	0.036	mg/Kg		04/01/22 16:54	04/05/22 16:12	1
Nitroglycerin	0.048	U M	0.096	0.028	mg/Kg		04/01/22 16:54	04/05/22 16:12	1
o-Nitrotoluene	0.048	U	0.096	0.041	mg/Kg		04/01/22 16:54	04/05/22 16:12	1
PETN	0.048	U	0.096	0.033	mg/Kg		04/01/22 16:54	04/05/22 16:12	1
p-Nitrotoluene	0.048	U	0.096	0.047	mg/Kg		04/01/22 16:54	04/05/22 16:12	1
RDX	0.048	U	0.11	0.041	mg/Kg		04/01/22 16:54	04/05/22 16:12	1
Tetryl	0.048	U Q	0.096	0.037	mg/Kg		04/01/22 16:54	04/05/22 16:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*95*		*68 - 140*	*04/01/22 16:54*	*04/05/22 16:12*	*1*

Client Sample ID: DUP-03
Lab Sample ID: 280-160187-24
Date Collected: 03/22/22 18:00
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	0.095	0.043	mg/Kg		04/01/22 16:54	04/05/22 16:18	1
1,3-Dinitrobenzene	0.048	U	0.095	0.043	mg/Kg		04/01/22 16:54	04/05/22 16:18	1
2,4,6-Trinitrotoluene	0.048	U	0.095	0.035	mg/Kg		04/01/22 16:54	04/05/22 16:18	1
2,4-Dinitrotoluene	0.048	U	0.095	0.044	mg/Kg		04/01/22 16:54	04/05/22 16:18	1
2,6-Dinitrotoluene	0.048	U Q	0.095	0.038	mg/Kg		04/01/22 16:54	04/05/22 16:18	1
2-Amino-4,6-dinitrotoluene	0.048	U M	0.095	0.047	mg/Kg		04/01/22 16:54	04/05/22 16:18	1
4-Amino-2,6-dinitrotoluene	0.048	U Q	0.095	0.030	mg/Kg		04/01/22 16:54	04/05/22 16:18	1
HMX	0.048	U M	0.095	0.044	mg/Kg		04/01/22 16:54	04/05/22 16:18	1
m-Nitrotoluene	0.048	U	0.095	0.041	mg/Kg		04/01/22 16:54	04/05/22 16:18	1
Nitrobenzene	0.048	U	0.10	0.036	mg/Kg		04/01/22 16:54	04/05/22 16:18	1
Nitroglycerin	0.048	U	0.095	0.028	mg/Kg		04/01/22 16:54	04/05/22 16:18	1
o-Nitrotoluene	0.048	U	0.095	0.041	mg/Kg		04/01/22 16:54	04/05/22 16:18	1
PETN	0.048	U	0.095	0.032	mg/Kg		04/01/22 16:54	04/05/22 16:18	1
p-Nitrotoluene	0.048	U	0.095	0.047	mg/Kg		04/01/22 16:54	04/05/22 16:18	1
RDX	0.048	U M	0.11	0.041	mg/Kg		04/01/22 16:54	04/05/22 16:18	1
Tetryl	0.048	U Q	0.095	0.037	mg/Kg		04/01/22 16:54	04/05/22 16:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*94*		*68 - 140*	*04/01/22 16:54*	*04/05/22 16:18*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB201(3-4)
Lab Sample ID: 280-160187-25
Date Collected: 03/22/22 17:18
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		04/01/22 16:54	04/05/22 16:25	1
1,3-Dinitrobenzene	0.048	U	0.097	0.043	mg/Kg		04/01/22 16:54	04/05/22 16:25	1
2,4,6-Trinitrotoluene	0.048	U	0.097	0.036	mg/Kg		04/01/22 16:54	04/05/22 16:25	1
2,4-Dinitrotoluene	**0.19**		0.097	0.045	mg/Kg		04/01/22 16:54	04/05/22 16:25	1
2,6-Dinitrotoluene	0.048	U M Q	0.097	0.039	mg/Kg		04/01/22 16:54	04/05/22 16:25	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.097	0.048	mg/Kg		04/01/22 16:54	04/05/22 16:25	1
4-Amino-2,6-dinitrotoluene	0.048	U Q	0.097	0.030	mg/Kg		04/01/22 16:54	04/05/22 16:25	1
HMX	0.048	U M	0.097	0.045	mg/Kg		04/01/22 16:54	04/05/22 16:25	1
m-Nitrotoluene	0.048	U	0.097	0.042	mg/Kg		04/01/22 16:54	04/05/22 16:25	1
Nitrobenzene	0.048	U	0.11	0.037	mg/Kg		04/01/22 16:54	04/05/22 16:25	1
Nitroglycerin	0.048	U	0.097	0.028	mg/Kg		04/01/22 16:54	04/05/22 16:25	1
o-Nitrotoluene	0.048	U	0.097	0.041	mg/Kg		04/01/22 16:54	04/05/22 16:25	1
PETN	0.048	U	0.097	0.033	mg/Kg		04/01/22 16:54	04/05/22 16:25	1
p-Nitrotoluene	0.048	U	0.097	0.048	mg/Kg		04/01/22 16:54	04/05/22 16:25	1
RDX	0.048	U	0.12	0.042	mg/Kg		04/01/22 16:54	04/05/22 16:25	1
Tetryl	0.048	U Q	0.097	0.038	mg/Kg		04/01/22 16:54	04/05/22 16:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*91*		*68 - 140*	*04/01/22 16:54*	*04/05/22 16:25*	*1*

Client Sample ID: 29SB201(11-12)
Lab Sample ID: 280-160187-26
Date Collected: 03/22/22 17:20
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	0.047	U	0.094	0.042	mg/Kg		04/01/22 16:54	04/05/22 16:38	1
1,3-Dinitrobenzene	0.047	U	0.094	0.042	mg/Kg		04/01/22 16:54	04/05/22 16:38	1
2,4,6-Trinitrotoluene	0.047	U	0.094	0.035	mg/Kg		04/01/22 16:54	04/05/22 16:38	1
2,4-Dinitrotoluene	0.047	U	0.094	0.044	mg/Kg		04/01/22 16:54	04/05/22 16:38	1
2,6-Dinitrotoluene	0.047	U Q	0.094	0.038	mg/Kg		04/01/22 16:54	04/05/22 16:38	1
2-Amino-4,6-dinitrotoluene	0.047	U	0.094	0.047	mg/Kg		04/01/22 16:54	04/05/22 16:38	1
4-Amino-2,6-dinitrotoluene	0.047	U Q	0.094	0.029	mg/Kg		04/01/22 16:54	04/05/22 16:38	1
HMX	0.047	U M	0.094	0.043	mg/Kg		04/01/22 16:54	04/05/22 16:38	1
m-Nitrotoluene	0.047	U	0.094	0.041	mg/Kg		04/01/22 16:54	04/05/22 16:38	1
Nitrobenzene	0.047	U	0.10	0.036	mg/Kg		04/01/22 16:54	04/05/22 16:38	1
Nitroglycerin	0.047	U	0.094	0.027	mg/Kg		04/01/22 16:54	04/05/22 16:38	1
o-Nitrotoluene	0.047	U	0.094	0.040	mg/Kg		04/01/22 16:54	04/05/22 16:38	1
PETN	0.047	U	0.094	0.032	mg/Kg		04/01/22 16:54	04/05/22 16:38	1
p-Nitrotoluene	0.047	U	0.094	0.047	mg/Kg		04/01/22 16:54	04/05/22 16:38	1
RDX	0.047	U	0.11	0.041	mg/Kg		04/01/22 16:54	04/05/22 16:38	1
Tetryl	0.047	U Q J1	0.094	0.037	mg/Kg		04/01/22 16:54	04/05/22 16:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*89*		*68 - 140*	*04/01/22 16:54*	*04/05/22 16:38*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB201(15-15.5)
Lab Sample ID: 280-160187-27
Date Collected: 03/22/22 17:25
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	0.049	U	0.098	0.044	mg/Kg		04/01/22 16:54	04/05/22 17:10	1
1,3-Dinitrobenzene	0.049	U	0.098	0.044	mg/Kg		04/01/22 16:54	04/05/22 17:10	1
2,4,6-Trinitrotoluene	0.049	U	0.098	0.036	mg/Kg		04/01/22 16:54	04/05/22 17:10	1
2,4-Dinitrotoluene	0.049	U	0.098	0.046	mg/Kg		04/01/22 16:54	04/05/22 17:10	1
2,6-Dinitrotoluene	0.049	U Q	0.098	0.039	mg/Kg		04/01/22 16:54	04/05/22 17:10	1
2-Amino-4,6-dinitrotoluene	0.049	U	0.098	0.049	mg/Kg		04/01/22 16:54	04/05/22 17:10	1
4-Amino-2,6-dinitrotoluene	0.049	U Q	0.098	0.030	mg/Kg		04/01/22 16:54	04/05/22 17:10	1
HMX	0.049	U M	0.098	0.045	mg/Kg		04/01/22 16:54	04/05/22 17:10	1
m-Nitrotoluene	0.049	U	0.098	0.042	mg/Kg		04/01/22 16:54	04/05/22 17:10	1
Nitrobenzene	0.049	U	0.11	0.037	mg/Kg		04/01/22 16:54	04/05/22 17:10	1
Nitroglycerin	0.049	U	0.098	0.028	mg/Kg		04/01/22 16:54	04/05/22 17:10	1
o-Nitrotoluene	0.049	U	0.098	0.042	mg/Kg		04/01/22 16:54	04/05/22 17:10	1
PETN	0.049	U	0.098	0.033	mg/Kg		04/01/22 16:54	04/05/22 17:10	1
p-Nitrotoluene	0.049	U	0.098	0.048	mg/Kg		04/01/22 16:54	04/05/22 17:10	1
RDX	0.049	U	0.12	0.042	mg/Kg		04/01/22 16:54	04/05/22 17:10	1
Tetryl	0.049	U Q	0.098	0.038	mg/Kg		04/01/22 16:54	04/05/22 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*89*		*68 - 140*	*04/01/22 16:54*	*04/05/22 17:10*	*1*

Client Sample ID: EB-1
Lab Sample ID: 280-160187-28
Date Collected: 03/22/22 18:05
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	0.068	U	0.11	0.026	ug/L		03/29/22 13:01	04/05/22 11:37	1
1,3-Dinitrobenzene	0.068	U	0.11	0.025	ug/L		03/29/22 13:01	04/05/22 11:37	1
2,4,6-Trinitrotoluene	0.068	U	0.11	0.034	ug/L		03/29/22 13:01	04/05/22 11:37	1
2,4-Dinitrotoluene	0.068	U	0.11	0.031	ug/L		03/29/22 13:01	04/05/22 11:37	1
2,6-Dinitrotoluene	0.068	U	0.11	0.028	ug/L		03/29/22 13:01	04/05/22 11:37	1
2-Amino-4,6-dinitrotoluene	0.068	U	0.11	0.034	ug/L		03/29/22 13:01	04/05/22 11:37	1
4-Amino-2,6-dinitrotoluene	0.068	U	0.11	0.044	ug/L		03/29/22 13:01	04/05/22 11:37	1
HMX	0.068	U	0.11	0.038	ug/L		03/29/22 13:01	04/05/22 11:37	1
m-Nitrotoluene	0.068	U	0.11	0.032	ug/L		03/29/22 13:01	04/05/22 11:37	1
Nitrobenzene	0.068	U	0.17	0.032	ug/L		03/29/22 13:01	04/05/22 11:37	1
Nitroglycerin	0.068	U	0.17	0.033	ug/L		03/29/22 13:01	04/05/22 11:37	1
o-Nitrotoluene	0.068	U	0.11	0.036	ug/L		03/29/22 13:01	04/05/22 11:37	1
PETN	0.068	U M	0.11	0.040	ug/L		03/29/22 13:01	04/05/22 11:37	1
p-Nitrotoluene	0.068	U	0.11	0.033	ug/L		03/29/22 13:01	04/05/22 11:37	1
RDX	0.068	U	0.11	0.031	ug/L		03/29/22 13:01	04/05/22 11:37	1
Tetryl	0.068	U Q	0.11	0.032	ug/L		03/29/22 13:01	04/05/22 11:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*97*		*48 - 130*	*03/29/22 13:01*	*04/05/22 11:37*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB187 (0-2)
Lab Sample ID: 280-160187-29
Date Collected: 03/23/22 08:15
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	0.095	0.043	mg/Kg		04/01/22 16:54	04/05/22 17:16	1
1,3-Dinitrobenzene	0.048	U	0.095	0.042	mg/Kg		04/01/22 16:54	04/05/22 17:16	1
2,4,6-Trinitrotoluene	0.048	U	0.095	0.035	mg/Kg		04/01/22 16:54	04/05/22 17:16	1
2,4-Dinitrotoluene	0.048	U	0.095	0.044	mg/Kg		04/01/22 16:54	04/05/22 17:16	1
2,6-Dinitrotoluene	0.048	U Q	0.095	0.038	mg/Kg		04/01/22 16:54	04/05/22 17:16	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.095	0.047	mg/Kg		04/01/22 16:54	04/05/22 17:16	1
4-Amino-2,6-dinitrotoluene	0.048	U Q	0.095	0.030	mg/Kg		04/01/22 16:54	04/05/22 17:16	1
HMX	0.048	U M	0.095	0.044	mg/Kg		04/01/22 16:54	04/05/22 17:16	1
m-Nitrotoluene	0.048	U	0.095	0.041	mg/Kg		04/01/22 16:54	04/05/22 17:16	1
Nitrobenzene	0.048	U	0.10	0.036	mg/Kg		04/01/22 16:54	04/05/22 17:16	1
Nitroglycerin	0.048	U M	0.095	0.028	mg/Kg		04/01/22 16:54	04/05/22 17:16	1
o-Nitrotoluene	0.048	U	0.095	0.041	mg/Kg		04/01/22 16:54	04/05/22 17:16	1
PETN	0.048	U	0.095	0.032	mg/Kg		04/01/22 16:54	04/05/22 17:16	1
p-Nitrotoluene	0.048	U	0.095	0.047	mg/Kg		04/01/22 16:54	04/05/22 17:16	1
RDX	0.048	U	0.11	0.041	mg/Kg		04/01/22 16:54	04/05/22 17:16	1
Tetryl	0.048	U Q	0.095	0.037	mg/Kg		04/01/22 16:54	04/05/22 17:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*96*		*68 - 140*	*04/01/22 16:54*	*04/05/22 17:16*	*1*

Client Sample ID: 29SB187 (5-7)
Lab Sample ID: 280-160187-30
Date Collected: 03/23/22 08:25
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	0.096	0.043	mg/Kg		04/01/22 16:54	04/05/22 17:22	1
1,3-Dinitrobenzene	0.048	U	0.096	0.043	mg/Kg		04/01/22 16:54	04/05/22 17:22	1
2,4,6-Trinitrotoluene	0.048	U	0.096	0.035	mg/Kg		04/01/22 16:54	04/05/22 17:22	1
2,4-Dinitrotoluene	0.048	U	0.096	0.045	mg/Kg		04/01/22 16:54	04/05/22 17:22	1
2,6-Dinitrotoluene	0.048	U Q	0.096	0.039	mg/Kg		04/01/22 16:54	04/05/22 17:22	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.096	0.048	mg/Kg		04/01/22 16:54	04/05/22 17:22	1
4-Amino-2,6-dinitrotoluene	0.048	U Q	0.096	0.030	mg/Kg		04/01/22 16:54	04/05/22 17:22	1
HMX	0.048	U M	0.096	0.044	mg/Kg		04/01/22 16:54	04/05/22 17:22	1
m-Nitrotoluene	0.048	U	0.096	0.041	mg/Kg		04/01/22 16:54	04/05/22 17:22	1
Nitrobenzene	0.048	U	0.11	0.036	mg/Kg		04/01/22 16:54	04/05/22 17:22	1
Nitroglycerin	0.048	U	0.096	0.028	mg/Kg		04/01/22 16:54	04/05/22 17:22	1
o-Nitrotoluene	0.048	U	0.096	0.041	mg/Kg		04/01/22 16:54	04/05/22 17:22	1
PETN	0.048	U	0.096	0.033	mg/Kg		04/01/22 16:54	04/05/22 17:22	1
p-Nitrotoluene	0.048	U	0.096	0.047	mg/Kg		04/01/22 16:54	04/05/22 17:22	1
RDX	0.048	U M	0.11	0.041	mg/Kg		04/01/22 16:54	04/05/22 17:22	1
Tetryl	0.048	U Q	0.096	0.037	mg/Kg		04/01/22 16:54	04/05/22 17:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*95*		*68 - 140*	*04/01/22 16:54*	*04/05/22 17:22*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB187 (10-0.5)
Lab Sample ID: 280-160187-31
Date Collected: 03/23/22 08:35
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	0.050	U	0.10	0.045	mg/Kg		04/01/22 16:54	04/05/22 17:29	1
1,3-Dinitrobenzene	0.050	U	0.10	0.044	mg/Kg		04/01/22 16:54	04/05/22 17:29	1
2,4,6-Trinitrotoluene	0.050	U	0.10	0.037	mg/Kg		04/01/22 16:54	04/05/22 17:29	1
2,4-Dinitrotoluene	0.050	U	0.10	0.046	mg/Kg		04/01/22 16:54	04/05/22 17:29	1
2,6-Dinitrotoluene	0.050	U Q	0.10	0.040	mg/Kg		04/01/22 16:54	04/05/22 17:29	1
2-Amino-4,6-dinitrotoluene	0.050	U	0.10	0.049	mg/Kg		04/01/22 16:54	04/05/22 17:29	1
4-Amino-2,6-dinitrotoluene	0.050	U Q	0.10	0.031	mg/Kg		04/01/22 16:54	04/05/22 17:29	1
HMX	0.050	U M	0.10	0.046	mg/Kg		04/01/22 16:54	04/05/22 17:29	1
m-Nitrotoluene	0.050	U	0.10	0.043	mg/Kg		04/01/22 16:54	04/05/22 17:29	1
Nitrobenzene	0.050	U	0.11	0.038	mg/Kg		04/01/22 16:54	04/05/22 17:29	1
Nitroglycerin	0.050	U	0.10	0.029	mg/Kg		04/01/22 16:54	04/05/22 17:29	1
o-Nitrotoluene	0.050	U	0.10	0.043	mg/Kg		04/01/22 16:54	04/05/22 17:29	1
PETN	0.050	U	0.10	0.034	mg/Kg		04/01/22 16:54	04/05/22 17:29	1
p-Nitrotoluene	0.050	U	0.10	0.049	mg/Kg		04/01/22 16:54	04/05/22 17:29	1
RDX	0.050	U	0.12	0.043	mg/Kg		04/01/22 16:54	04/05/22 17:29	1
Tetryl	0.050	U Q	0.10	0.039	mg/Kg		04/01/22 16:54	04/05/22 17:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*98*		*68 - 140*	*04/01/22 16:54*	*04/05/22 17:29*	*1*

Client Sample ID: 29SB189 (0-2)
Lab Sample ID: 280-160187-32
Date Collected: 03/23/22 08:50
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	0.047	U	0.095	0.043	mg/Kg		04/01/22 16:54	04/05/22 17:35	1
1,3-Dinitrobenzene	0.047	U	0.095	0.042	mg/Kg		04/01/22 16:54	04/05/22 17:35	1
2,4,6-Trinitrotoluene	0.047	U	0.095	0.035	mg/Kg		04/01/22 16:54	04/05/22 17:35	1
2,4-Dinitrotoluene	0.047	U	0.095	0.044	mg/Kg		04/01/22 16:54	04/05/22 17:35	1
2,6-Dinitrotoluene	0.047	U Q	0.095	0.038	mg/Kg		04/01/22 16:54	04/05/22 17:35	1
2-Amino-4,6-dinitrotoluene	0.047	U	0.095	0.047	mg/Kg		04/01/22 16:54	04/05/22 17:35	1
4-Amino-2,6-dinitrotoluene	0.047	U Q	0.095	0.030	mg/Kg		04/01/22 16:54	04/05/22 17:35	1
HMX	0.047	U M	0.095	0.044	mg/Kg		04/01/22 16:54	04/05/22 17:35	1
m-Nitrotoluene	0.047	U	0.095	0.041	mg/Kg		04/01/22 16:54	04/05/22 17:35	1
Nitrobenzene	0.047	U	0.10	0.036	mg/Kg		04/01/22 16:54	04/05/22 17:35	1
Nitroglycerin	0.047	U	0.095	0.028	mg/Kg		04/01/22 16:54	04/05/22 17:35	1
o-Nitrotoluene	0.047	U	0.095	0.041	mg/Kg		04/01/22 16:54	04/05/22 17:35	1
PETN	0.047	U	0.095	0.032	mg/Kg		04/01/22 16:54	04/05/22 17:35	1
p-Nitrotoluene	0.047	U	0.095	0.047	mg/Kg		04/01/22 16:54	04/05/22 17:35	1
RDX	0.047	U	0.11	0.041	mg/Kg		04/01/22 16:54	04/05/22 17:35	1
Tetryl	0.047	U Q	0.095	0.037	mg/Kg		04/01/22 16:54	04/05/22 17:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*93*		*68 - 140*	*04/01/22 16:54*	*04/05/22 17:35*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB189 (5-7)
Lab Sample ID: 280-160187-33
Date Collected: 03/23/22 08:55
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		04/01/22 16:54	04/05/22 17:48	1
1,3-Dinitrobenzene	0.049	U	0.099	0.044	mg/Kg		04/01/22 16:54	04/05/22 17:48	1
2,4,6-Trinitrotoluene	0.049	U	0.099	0.036	mg/Kg		04/01/22 16:54	04/05/22 17:48	1
2,4-Dinitrotoluene	0.049	U	0.099	0.046	mg/Kg		04/01/22 16:54	04/05/22 17:48	1
2,6-Dinitrotoluene	0.049	U Q	0.099	0.040	mg/Kg		04/01/22 16:54	04/05/22 17:48	1
2-Amino-4,6-dinitrotoluene	0.049	U	0.099	0.049	mg/Kg		04/01/22 16:54	04/05/22 17:48	1
4-Amino-2,6-dinitrotoluene	0.049	U Q	0.099	0.031	mg/Kg		04/01/22 16:54	04/05/22 17:48	1
HMX	0.049	U	0.099	0.046	mg/Kg		04/01/22 16:54	04/05/22 17:48	1
m-Nitrotoluene	0.049	U	0.099	0.043	mg/Kg		04/01/22 16:54	04/05/22 17:48	1
Nitrobenzene	0.049	U	0.11	0.038	mg/Kg		04/01/22 16:54	04/05/22 17:48	1
Nitroglycerin	0.049	U	0.099	0.029	mg/Kg		04/01/22 16:54	04/05/22 17:48	1
o-Nitrotoluene	0.049	U	0.099	0.042	mg/Kg		04/01/22 16:54	04/05/22 17:48	1
PETN	0.049	U	0.099	0.034	mg/Kg		04/01/22 16:54	04/05/22 17:48	1
p-Nitrotoluene	0.049	U	0.099	0.049	mg/Kg		04/01/22 16:54	04/05/22 17:48	1
RDX	0.049	U	0.12	0.043	mg/Kg		04/01/22 16:54	04/05/22 17:48	1
Tetryl	0.049	U Q	0.099	0.038	mg/Kg		04/01/22 16:54	04/05/22 17:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*92*		*68 - 140*	*04/01/22 16:54*	*04/05/22 17:48*	*1*

Client Sample ID: 29SB189 (10-10.5)
Lab Sample ID: 280-160187-34
Date Collected: 03/23/22 08:58
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	0.094	0.042	mg/Kg		04/01/22 16:54	04/05/22 17:54	1
1,3-Dinitrobenzene	0.047	U	0.094	0.042	mg/Kg		04/01/22 16:54	04/05/22 17:54	1
2,4,6-Trinitrotoluene	0.047	U	0.094	0.035	mg/Kg		04/01/22 16:54	04/05/22 17:54	1
2,4-Dinitrotoluene	0.047	U	0.094	0.044	mg/Kg		04/01/22 16:54	04/05/22 17:54	1
2,6-Dinitrotoluene	0.047	U Q	0.094	0.038	mg/Kg		04/01/22 16:54	04/05/22 17:54	1
2-Amino-4,6-dinitrotoluene	0.047	U	0.094	0.047	mg/Kg		04/01/22 16:54	04/05/22 17:54	1
4-Amino-2,6-dinitrotoluene	0.047	U Q	0.094	0.029	mg/Kg		04/01/22 16:54	04/05/22 17:54	1
HMX	0.047	U M	0.094	0.043	mg/Kg		04/01/22 16:54	04/05/22 17:54	1
m-Nitrotoluene	0.047	U	0.094	0.041	mg/Kg		04/01/22 16:54	04/05/22 17:54	1
Nitrobenzene	0.047	U	0.10	0.036	mg/Kg		04/01/22 16:54	04/05/22 17:54	1
Nitroglycerin	0.047	U	0.094	0.027	mg/Kg		04/01/22 16:54	04/05/22 17:54	1
o-Nitrotoluene	0.047	U	0.094	0.040	mg/Kg		04/01/22 16:54	04/05/22 17:54	1
PETN	0.047	U	0.094	0.032	mg/Kg		04/01/22 16:54	04/05/22 17:54	1
p-Nitrotoluene	0.047	U	0.094	0.046	mg/Kg		04/01/22 16:54	04/05/22 17:54	1
RDX	0.047	U	0.11	0.040	mg/Kg		04/01/22 16:54	04/05/22 17:54	1
Tetryl	0.047	U Q	0.094	0.036	mg/Kg		04/01/22 16:54	04/05/22 17:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*101*		*68 - 140*	*04/01/22 16:54*	*04/05/22 17:54*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB188 (7-9)
Lab Sample ID: 280-160187-35
Date Collected: 03/23/22 09:00
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	0.050	U	0.099	0.044	mg/Kg		04/01/22 16:54	04/05/22 18:01	1
1,3-Dinitrobenzene	0.050	U	0.099	0.044	mg/Kg		04/01/22 16:54	04/05/22 18:01	1
2,4,6-Trinitrotoluene	0.050	U	0.099	0.036	mg/Kg		04/01/22 16:54	04/05/22 18:01	1
2,4-Dinitrotoluene	0.050	U	0.099	0.046	mg/Kg		04/01/22 16:54	04/05/22 18:01	1
2,6-Dinitrotoluene	0.050	U Q	0.099	0.040	mg/Kg		04/01/22 16:54	04/05/22 18:01	1
2-Amino-4,6-dinitrotoluene	0.050	U M	0.099	0.049	mg/Kg		04/01/22 16:54	04/05/22 18:01	1
4-Amino-2,6-dinitrotoluene	0.050	U M Q	0.099	0.031	mg/Kg		04/01/22 16:54	04/05/22 18:01	1
HMX	0.050	U M	0.099	0.046	mg/Kg		04/01/22 16:54	04/05/22 18:01	1
m-Nitrotoluene	0.050	U	0.099	0.043	mg/Kg		04/01/22 16:54	04/05/22 18:01	1
Nitrobenzene	0.050	U	0.11	0.038	mg/Kg		04/01/22 16:54	04/05/22 18:01	1
Nitroglycerin	0.050	U	0.099	0.029	mg/Kg		04/01/22 16:54	04/05/22 18:01	1
o-Nitrotoluene	0.050	U	0.099	0.042	mg/Kg		04/01/22 16:54	04/05/22 18:01	1
PETN	0.050	U	0.099	0.034	mg/Kg		04/01/22 16:54	04/05/22 18:01	1
p-Nitrotoluene	0.050	U	0.099	0.049	mg/Kg		04/01/22 16:54	04/05/22 18:01	1
RDX	0.050	U	0.12	0.043	mg/Kg		04/01/22 16:54	04/05/22 18:01	1
Tetryl	0.050	U Q	0.099	0.038	mg/Kg		04/01/22 16:54	04/05/22 18:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*92*		*68 - 140*	*04/01/22 16:54*	*04/05/22 18:01*	*1*

Client Sample ID: 29SB188 (10-10.5)
Lab Sample ID: 280-160187-36
Date Collected: 03/23/22 09:05
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	0.095	0.043	mg/Kg		04/01/22 16:54	04/05/22 18:07	1
1,3-Dinitrobenzene	0.048	U	0.095	0.043	mg/Kg		04/01/22 16:54	04/05/22 18:07	1
2,4,6-Trinitrotoluene	0.048	U	0.095	0.035	mg/Kg		04/01/22 16:54	04/05/22 18:07	1
2,4-Dinitrotoluene	0.048	U M	0.095	0.044	mg/Kg		04/01/22 16:54	04/05/22 18:07	1
2,6-Dinitrotoluene	0.048	U M Q	0.095	0.038	mg/Kg		04/01/22 16:54	04/05/22 18:07	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.095	0.047	mg/Kg		04/01/22 16:54	04/05/22 18:07	1
4-Amino-2,6-dinitrotoluene	0.048	U Q	0.095	0.030	mg/Kg		04/01/22 16:54	04/05/22 18:07	1
HMX	0.048	U	0.095	0.044	mg/Kg		04/01/22 16:54	04/05/22 18:07	1
m-Nitrotoluene	0.048	U	0.095	0.041	mg/Kg		04/01/22 16:54	04/05/22 18:07	1
Nitrobenzene	0.048	U	0.10	0.036	mg/Kg		04/01/22 16:54	04/05/22 18:07	1
Nitroglycerin	0.048	U	0.095	0.028	mg/Kg		04/01/22 16:54	04/05/22 18:07	1
o-Nitrotoluene	0.048	U	0.095	0.041	mg/Kg		04/01/22 16:54	04/05/22 18:07	1
PETN	0.048	U	0.095	0.032	mg/Kg		04/01/22 16:54	04/05/22 18:07	1
p-Nitrotoluene	0.048	U	0.095	0.047	mg/Kg		04/01/22 16:54	04/05/22 18:07	1
RDX	0.048	U	0.11	0.041	mg/Kg		04/01/22 16:54	04/05/22 18:07	1
Tetryl	0.048	U Q	0.095	0.037	mg/Kg		04/01/22 16:54	04/05/22 18:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*99*		*68 - 140*	*04/01/22 16:54*	*04/05/22 18:07*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB195 (7-8)
Lab Sample ID: 280-160187-37
Date Collected: 03/23/22 10:10
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	0.048	U	0.096	0.043	mg/Kg		04/01/22 16:54	04/05/22 18:14	1
1,3-Dinitrobenzene	0.048	U	0.096	0.043	mg/Kg		04/01/22 16:54	04/05/22 18:14	1
2,4,6-Trinitrotoluene	0.048	U	0.096	0.035	mg/Kg		04/01/22 16:54	04/05/22 18:14	1
2,4-Dinitrotoluene	0.048	U	0.096	0.045	mg/Kg		04/01/22 16:54	04/05/22 18:14	1
2,6-Dinitrotoluene	0.048	U Q	0.096	0.039	mg/Kg		04/01/22 16:54	04/05/22 18:14	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.096	0.048	mg/Kg		04/01/22 16:54	04/05/22 18:14	1
4-Amino-2,6-dinitrotoluene	0.048	U Q	0.096	0.030	mg/Kg		04/01/22 16:54	04/05/22 18:14	1
HMX	0.048	U M	0.096	0.044	mg/Kg		04/01/22 16:54	04/05/22 18:14	1
m-Nitrotoluene	0.048	U	0.096	0.042	mg/Kg		04/01/22 16:54	04/05/22 18:14	1
Nitrobenzene	0.048	U	0.11	0.037	mg/Kg		04/01/22 16:54	04/05/22 18:14	1
Nitroglycerin	0.048	U	0.096	0.028	mg/Kg		04/01/22 16:54	04/05/22 18:14	1
o-Nitrotoluene	0.048	U	0.096	0.041	mg/Kg		04/01/22 16:54	04/05/22 18:14	1
PETN	0.048	U	0.096	0.033	mg/Kg		04/01/22 16:54	04/05/22 18:14	1
p-Nitrotoluene	0.048	U	0.096	0.048	mg/Kg		04/01/22 16:54	04/05/22 18:14	1
RDX	0.048	U	0.12	0.042	mg/Kg		04/01/22 16:54	04/05/22 18:14	1
Tetryl	0.048	U Q	0.096	0.037	mg/Kg		04/01/22 16:54	04/05/22 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*89*		*68 - 140*	*04/01/22 16:54*	*04/05/22 18:14*	*1*

Client Sample ID: 29SB195 (9.5-10)
Lab Sample ID: 280-160187-38
Date Collected: 03/23/22 10:15
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		04/01/22 16:54	04/05/22 18:20	1
1,3-Dinitrobenzene	0.047	U	0.095	0.042	mg/Kg		04/01/22 16:54	04/05/22 18:20	1
2,4,6-Trinitrotoluene	0.047	U	0.095	0.035	mg/Kg		04/01/22 16:54	04/05/22 18:20	1
2,4-Dinitrotoluene	0.047	U	0.095	0.044	mg/Kg		04/01/22 16:54	04/05/22 18:20	1
2,6-Dinitrotoluene	0.047	U Q	0.095	0.038	mg/Kg		04/01/22 16:54	04/05/22 18:20	1
2-Amino-4,6-dinitrotoluene	0.047	U	0.095	0.047	mg/Kg		04/01/22 16:54	04/05/22 18:20	1
4-Amino-2,6-dinitrotoluene	0.047	U Q	0.095	0.029	mg/Kg		04/01/22 16:54	04/05/22 18:20	1
HMX	0.047	U M	0.095	0.044	mg/Kg		04/01/22 16:54	04/05/22 18:20	1
m-Nitrotoluene	0.047	U	0.095	0.041	mg/Kg		04/01/22 16:54	04/05/22 18:20	1
Nitrobenzene	0.047	U	0.10	0.036	mg/Kg		04/01/22 16:54	04/05/22 18:20	1
Nitroglycerin	0.047	U	0.095	0.027	mg/Kg		04/01/22 16:54	04/05/22 18:20	1
o-Nitrotoluene	0.047	U	0.095	0.041	mg/Kg		04/01/22 16:54	04/05/22 18:20	1
PETN	0.047	U	0.095	0.032	mg/Kg		04/01/22 16:54	04/05/22 18:20	1
p-Nitrotoluene	0.047	U	0.095	0.047	mg/Kg		04/01/22 16:54	04/05/22 18:20	1
RDX	0.047	U	0.11	0.041	mg/Kg		04/01/22 16:54	04/05/22 18:20	1
Tetryl	0.047	U Q	0.095	0.037	mg/Kg		04/01/22 16:54	04/05/22 18:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*97*		*68 - 140*	*04/01/22 16:54*	*04/05/22 18:20*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB194 (7-8)
Lab Sample ID: 280-160187-39
Date Collected: 03/23/22 10:20
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	0.049	U	0.098	0.044	mg/Kg		04/01/22 16:54	04/05/22 18:26	1
1,3-Dinitrobenzene	0.049	U	0.098	0.044	mg/Kg		04/01/22 16:54	04/05/22 18:26	1
2,4,6-Trinitrotoluene	0.049	U	0.098	0.036	mg/Kg		04/01/22 16:54	04/05/22 18:26	1
2,4-Dinitrotoluene	0.049	U	0.098	0.046	mg/Kg		04/01/22 16:54	04/05/22 18:26	1
2,6-Dinitrotoluene	0.049	U Q	0.098	0.040	mg/Kg		04/01/22 16:54	04/05/22 18:26	1
2-Amino-4,6-dinitrotoluene	0.049	U	0.098	0.049	mg/Kg		04/01/22 16:54	04/05/22 18:26	1
4-Amino-2,6-dinitrotoluene	0.049	U Q	0.098	0.031	mg/Kg		04/01/22 16:54	04/05/22 18:26	1
HMX	0.049	U M	0.098	0.045	mg/Kg		04/01/22 16:54	04/05/22 18:26	1
m-Nitrotoluene	0.049	U	0.098	0.042	mg/Kg		04/01/22 16:54	04/05/22 18:26	1
Nitrobenzene	0.049	U M	0.11	0.037	mg/Kg		04/01/22 16:54	04/05/22 18:26	1
Nitroglycerin	0.049	U	0.098	0.028	mg/Kg		04/01/22 16:54	04/05/22 18:26	1
o-Nitrotoluene	0.049	U	0.098	0.042	mg/Kg		04/01/22 16:54	04/05/22 18:26	1
PETN	0.049	U	0.098	0.033	mg/Kg		04/01/22 16:54	04/05/22 18:26	1
p-Nitrotoluene	0.049	U	0.098	0.049	mg/Kg		04/01/22 16:54	04/05/22 18:26	1
RDX	0.049	U	0.12	0.042	mg/Kg		04/01/22 16:54	04/05/22 18:26	1
Tetryl	0.049	U Q	0.098	0.038	mg/Kg		04/01/22 16:54	04/05/22 18:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*95*		*68 - 140*	*04/01/22 16:54*	*04/05/22 18:26*	*1*

Client Sample ID: 29SB194 (9.5-10)
Lab Sample ID: 280-160187-40
Date Collected: 03/23/22 10:25
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	0.093	0.042	mg/Kg		04/01/22 16:54	04/05/22 18:33	1
1,3-Dinitrobenzene	0.047	U	0.093	0.042	mg/Kg		04/01/22 16:54	04/05/22 18:33	1
2,4,6-Trinitrotoluene	0.047	U	0.093	0.034	mg/Kg		04/01/22 16:54	04/05/22 18:33	1
2,4-Dinitrotoluene	0.047	U	0.093	0.044	mg/Kg		04/01/22 16:54	04/05/22 18:33	1
2,6-Dinitrotoluene	0.047	U Q	0.093	0.038	mg/Kg		04/01/22 16:54	04/05/22 18:33	1
2-Amino-4,6-dinitrotoluene	0.047	U	0.093	0.046	mg/Kg		04/01/22 16:54	04/05/22 18:33	1
4-Amino-2,6-dinitrotoluene	0.047	U Q	0.093	0.029	mg/Kg		04/01/22 16:54	04/05/22 18:33	1
HMX	0.047	U M	0.093	0.043	mg/Kg		04/01/22 16:54	04/05/22 18:33	1
m-Nitrotoluene	0.047	U	0.093	0.040	mg/Kg		04/01/22 16:54	04/05/22 18:33	1
Nitrobenzene	0.047	U	0.10	0.035	mg/Kg		04/01/22 16:54	04/05/22 18:33	1
Nitroglycerin	0.047	U	0.093	0.027	mg/Kg		04/01/22 16:54	04/05/22 18:33	1
o-Nitrotoluene	0.047	U	0.093	0.040	mg/Kg		04/01/22 16:54	04/05/22 18:33	1
PETN	0.047	U	0.093	0.032	mg/Kg		04/01/22 16:54	04/05/22 18:33	1
p-Nitrotoluene	0.047	U	0.093	0.046	mg/Kg		04/01/22 16:54	04/05/22 18:33	1
RDX	0.047	U	0.11	0.040	mg/Kg		04/01/22 16:54	04/05/22 18:33	1
Tetryl	0.047	U Q	0.093	0.036	mg/Kg		04/01/22 16:54	04/05/22 18:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*87*		*68 - 140*	*04/01/22 16:54*	*04/05/22 18:33*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: DUP-04
Lab Sample ID: 280-160187-41
Date Collected: 03/23/22 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		04/01/22 16:54	04/05/22 18:39	1
1,3-Dinitrobenzene	0.047	U	0.095	0.042	mg/Kg		04/01/22 16:54	04/05/22 18:39	1
2,4,6-Trinitrotoluene	0.047	U	0.095	0.035	mg/Kg		04/01/22 16:54	04/05/22 18:39	1
2,4-Dinitrotoluene	0.047	U	0.095	0.044	mg/Kg		04/01/22 16:54	04/05/22 18:39	1
2,6-Dinitrotoluene	0.047	U Q	0.095	0.038	mg/Kg		04/01/22 16:54	04/05/22 18:39	1
2-Amino-4,6-dinitrotoluene	0.047	U	0.095	0.047	mg/Kg		04/01/22 16:54	04/05/22 18:39	1
4-Amino-2,6-dinitrotoluene	0.047	U Q	0.095	0.029	mg/Kg		04/01/22 16:54	04/05/22 18:39	1
HMX	0.047	U	0.095	0.044	mg/Kg		04/01/22 16:54	04/05/22 18:39	1
m-Nitrotoluene	0.047	U	0.095	0.041	mg/Kg		04/01/22 16:54	04/05/22 18:39	1
Nitrobenzene	0.047	U	0.10	0.036	mg/Kg		04/01/22 16:54	04/05/22 18:39	1
Nitroglycerin	0.047	U	0.095	0.027	mg/Kg		04/01/22 16:54	04/05/22 18:39	1
o-Nitrotoluene	0.047	U	0.095	0.040	mg/Kg		04/01/22 16:54	04/05/22 18:39	1
PETN	0.047	U	0.095	0.032	mg/Kg		04/01/22 16:54	04/05/22 18:39	1
p-Nitrotoluene	0.047	U	0.095	0.047	mg/Kg		04/01/22 16:54	04/05/22 18:39	1
RDX	0.047	U	0.11	0.041	mg/Kg		04/01/22 16:54	04/05/22 18:39	1
Tetryl	0.047	U Q	0.095	0.037	mg/Kg		04/01/22 16:54	04/05/22 18:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*102*		*68 - 140*	*04/01/22 16:54*	*04/05/22 18:39*	*1*

Client Sample ID: 29SB191 (9.5-10)
Lab Sample ID: 280-160187-42
Date Collected: 03/23/22 10:40
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	0.096	0.043	mg/Kg		04/04/22 16:57	04/07/22 12:11	1
1,3-Dinitrobenzene	0.048	U	0.096	0.043	mg/Kg		04/04/22 16:57	04/07/22 12:11	1
2,4,6-Trinitrotoluene	0.048	U Q	0.096	0.035	mg/Kg		04/04/22 16:57	04/07/22 12:11	1
2,4-Dinitrotoluene	**0.11**		0.096	0.045	mg/Kg		04/04/22 16:57	04/07/22 12:11	1
2,6-Dinitrotoluene	0.048	U M	0.096	0.039	mg/Kg		04/04/22 16:57	04/07/22 12:11	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.096	0.048	mg/Kg		04/04/22 16:57	04/07/22 12:11	1
4-Amino-2,6-dinitrotoluene	0.048	U	0.096	0.030	mg/Kg		04/04/22 16:57	04/07/22 12:11	1
HMX	0.048	U M	0.096	0.044	mg/Kg		04/04/22 16:57	04/07/22 12:11	1
m-Nitrotoluene	0.048	U	0.096	0.041	mg/Kg		04/04/22 16:57	04/07/22 12:11	1
Nitrobenzene	0.048	U M	0.11	0.036	mg/Kg		04/04/22 16:57	04/07/22 12:11	1
Nitroglycerin	0.048	U	0.096	0.028	mg/Kg		04/04/22 16:57	04/07/22 12:11	1
o-Nitrotoluene	0.048	U	0.096	0.041	mg/Kg		04/04/22 16:57	04/07/22 12:11	1
PETN	0.048	U	0.096	0.033	mg/Kg		04/04/22 16:57	04/07/22 12:11	1
p-Nitrotoluene	0.048	U	0.096	0.047	mg/Kg		04/04/22 16:57	04/07/22 12:11	1
RDX	0.048	U	0.12	0.041	mg/Kg		04/04/22 16:57	04/07/22 12:11	1
Tetryl	0.048	U Q	0.096	0.037	mg/Kg		04/04/22 16:57	04/07/22 12:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*96*		*68 - 140*	*04/04/22 16:57*	*04/07/22 12:11*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB197 (3-4)
Lab Sample ID: 280-160187-43
Date Collected: 03/23/22 11:35
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	0.095	0.043	mg/Kg		04/04/22 16:57	04/07/22 12:18	1
1,3-Dinitrobenzene	0.047	U	0.095	0.042	mg/Kg		04/04/22 16:57	04/07/22 12:18	1
2,4,6-Trinitrotoluene	0.047	U Q	0.095	0.035	mg/Kg		04/04/22 16:57	04/07/22 12:18	1
2,4-Dinitrotoluene	0.047	U	0.095	0.044	mg/Kg		04/04/22 16:57	04/07/22 12:18	1
2,6-Dinitrotoluene	0.047	U	0.095	0.038	mg/Kg		04/04/22 16:57	04/07/22 12:18	1
2-Amino-4,6-dinitrotoluene	0.047	U	0.095	0.047	mg/Kg		04/04/22 16:57	04/07/22 12:18	1
4-Amino-2,6-dinitrotoluene	0.047	U	0.095	0.030	mg/Kg		04/04/22 16:57	04/07/22 12:18	1
HMX	0.047	U M	0.095	0.044	mg/Kg		04/04/22 16:57	04/07/22 12:18	1
m-Nitrotoluene	0.047	U	0.095	0.041	mg/Kg		04/04/22 16:57	04/07/22 12:18	1
Nitrobenzene	0.047	U	0.10	0.036	mg/Kg		04/04/22 16:57	04/07/22 12:18	1
Nitroglycerin	0.047	U	0.095	0.028	mg/Kg		04/04/22 16:57	04/07/22 12:18	1
o-Nitrotoluene	0.047	U	0.095	0.041	mg/Kg		04/04/22 16:57	04/07/22 12:18	1
PETN	0.047	U	0.095	0.032	mg/Kg		04/04/22 16:57	04/07/22 12:18	1
p-Nitrotoluene	0.047	U	0.095	0.047	mg/Kg		04/04/22 16:57	04/07/22 12:18	1
RDX	0.047	U	0.11	0.041	mg/Kg		04/04/22 16:57	04/07/22 12:18	1
Tetryl	0.047	U Q J1	0.095	0.037	mg/Kg		04/04/22 16:57	04/07/22 12:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*98*		*68 - 140*	*04/04/22 16:57*	*04/07/22 12:18*	*1*

Client Sample ID: 29SB197 (7-7.5)
Lab Sample ID: 280-160187-44
Date Collected: 03/23/22 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	0.096	0.043	mg/Kg		04/04/22 16:57	04/07/22 12:57	1
1,3-Dinitrobenzene	0.048	U	0.096	0.043	mg/Kg		04/04/22 16:57	04/07/22 12:57	1
2,4,6-Trinitrotoluene	0.048	U Q	0.096	0.035	mg/Kg		04/04/22 16:57	04/07/22 12:57	1
2,4-Dinitrotoluene	0.048	U	0.096	0.045	mg/Kg		04/04/22 16:57	04/07/22 12:57	1
2,6-Dinitrotoluene	0.048	U	0.096	0.039	mg/Kg		04/04/22 16:57	04/07/22 12:57	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.096	0.047	mg/Kg		04/04/22 16:57	04/07/22 12:57	1
4-Amino-2,6-dinitrotoluene	0.048	U	0.096	0.030	mg/Kg		04/04/22 16:57	04/07/22 12:57	1
HMX	0.048	U M	0.096	0.044	mg/Kg		04/04/22 16:57	04/07/22 12:57	1
m-Nitrotoluene	0.048	U	0.096	0.041	mg/Kg		04/04/22 16:57	04/07/22 12:57	1
Nitrobenzene	0.048	U	0.11	0.036	mg/Kg		04/04/22 16:57	04/07/22 12:57	1
Nitroglycerin	0.048	U	0.096	0.028	mg/Kg		04/04/22 16:57	04/07/22 12:57	1
o-Nitrotoluene	0.048	U	0.096	0.041	mg/Kg		04/04/22 16:57	04/07/22 12:57	1
PETN	0.048	U	0.096	0.033	mg/Kg		04/04/22 16:57	04/07/22 12:57	1
p-Nitrotoluene	0.048	U	0.096	0.047	mg/Kg		04/04/22 16:57	04/07/22 12:57	1
RDX	0.048	U	0.11	0.041	mg/Kg		04/04/22 16:57	04/07/22 12:57	1
Tetryl	0.048	U Q	0.096	0.037	mg/Kg		04/04/22 16:57	04/07/22 12:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*92*		*68 - 140*	*04/04/22 16:57*	*04/07/22 12:57*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB196 (3-4)
Lab Sample ID: 280-160187-45
Date Collected: 03/23/22 11:45
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	0.049	U	0.098	0.044	mg/Kg		04/04/22 16:57	04/07/22 13:04	1
1,3-Dinitrobenzene	0.049	U	0.098	0.044	mg/Kg		04/04/22 16:57	04/07/22 13:04	1
2,4,6-Trinitrotoluene	0.049	U Q	0.098	0.036	mg/Kg		04/04/22 16:57	04/07/22 13:04	1
2,4-Dinitrotoluene	0.049	U	0.098	0.046	mg/Kg		04/04/22 16:57	04/07/22 13:04	1
2,6-Dinitrotoluene	0.049	U	0.098	0.039	mg/Kg		04/04/22 16:57	04/07/22 13:04	1
2-Amino-4,6-dinitrotoluene	0.049	U	0.098	0.048	mg/Kg		04/04/22 16:57	04/07/22 13:04	1
4-Amino-2,6-dinitrotoluene	0.049	U	0.098	0.030	mg/Kg		04/04/22 16:57	04/07/22 13:04	1
HMX	0.049	U	0.098	0.045	mg/Kg		04/04/22 16:57	04/07/22 13:04	1
m-Nitrotoluene	0.049	U	0.098	0.042	mg/Kg		04/04/22 16:57	04/07/22 13:04	1
Nitrobenzene	0.049	U	0.11	0.037	mg/Kg		04/04/22 16:57	04/07/22 13:04	1
Nitroglycerin	0.049	U M	0.098	0.028	mg/Kg		04/04/22 16:57	04/07/22 13:04	1
o-Nitrotoluene	0.049	U	0.098	0.042	mg/Kg		04/04/22 16:57	04/07/22 13:04	1
PETN	0.049	U	0.098	0.033	mg/Kg		04/04/22 16:57	04/07/22 13:04	1
p-Nitrotoluene	0.049	U	0.098	0.048	mg/Kg		04/04/22 16:57	04/07/22 13:04	1
RDX	0.049	U	0.12	0.042	mg/Kg		04/04/22 16:57	04/07/22 13:04	1
Tetryl	0.049	U Q	0.098	0.038	mg/Kg		04/04/22 16:57	04/07/22 13:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*96*		*68 - 140*	*04/04/22 16:57*	*04/07/22 13:04*	*1*

Client Sample ID: 29SB196 (7-7.5)
Lab Sample ID: 280-160187-46
Date Collected: 03/23/22 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	0.048	U	0.096	0.043	mg/Kg		04/04/22 16:57	04/07/22 13:10	1
1,3-Dinitrobenzene	0.048	U	0.096	0.043	mg/Kg		04/04/22 16:57	04/07/22 13:10	1
2,4,6-Trinitrotoluene	0.048	U Q	0.096	0.035	mg/Kg		04/04/22 16:57	04/07/22 13:10	1
2,4-Dinitrotoluene	0.048	U	0.096	0.045	mg/Kg		04/04/22 16:57	04/07/22 13:10	1
2,6-Dinitrotoluene	0.048	U	0.096	0.039	mg/Kg		04/04/22 16:57	04/07/22 13:10	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.096	0.048	mg/Kg		04/04/22 16:57	04/07/22 13:10	1
4-Amino-2,6-dinitrotoluene	0.048	U	0.096	0.030	mg/Kg		04/04/22 16:57	04/07/22 13:10	1
HMX	0.048	U M	0.096	0.044	mg/Kg		04/04/22 16:57	04/07/22 13:10	1
m-Nitrotoluene	0.048	U	0.096	0.042	mg/Kg		04/04/22 16:57	04/07/22 13:10	1
Nitrobenzene	0.048	U	0.11	0.037	mg/Kg		04/04/22 16:57	04/07/22 13:10	1
Nitroglycerin	0.048	U	0.096	0.028	mg/Kg		04/04/22 16:57	04/07/22 13:10	1
o-Nitrotoluene	0.048	U	0.096	0.041	mg/Kg		04/04/22 16:57	04/07/22 13:10	1
PETN	0.048	U	0.096	0.033	mg/Kg		04/04/22 16:57	04/07/22 13:10	1
p-Nitrotoluene	0.048	U	0.096	0.048	mg/Kg		04/04/22 16:57	04/07/22 13:10	1
RDX	0.048	U	0.12	0.042	mg/Kg		04/04/22 16:57	04/07/22 13:10	1
Tetryl	0.048	U Q	0.096	0.037	mg/Kg		04/04/22 16:57	04/07/22 13:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*92*		*68 - 140*	*04/04/22 16:57*	*04/07/22 13:10*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: EB-02
Lab Sample ID: 280-160187-47
Date Collected: 03/23/22 13:55
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	0.072	U	0.12	0.028	ug/L		03/29/22 13:01	04/05/22 11:43	1
1,3-Dinitrobenzene	0.072	U	0.12	0.027	ug/L		03/29/22 13:01	04/05/22 11:43	1
2,4,6-Trinitrotoluene	0.072	U	0.12	0.036	ug/L		03/29/22 13:01	04/05/22 11:43	1
2,4-Dinitrotoluene	0.072	U	0.12	0.033	ug/L		03/29/22 13:01	04/05/22 11:43	1
2,6-Dinitrotoluene	0.072	U	0.12	0.030	ug/L		03/29/22 13:01	04/05/22 11:43	1
2-Amino-4,6-dinitrotoluene	0.072	U	0.12	0.036	ug/L		03/29/22 13:01	04/05/22 11:43	1
4-Amino-2,6-dinitrotoluene	0.072	U	0.12	0.047	ug/L		03/29/22 13:01	04/05/22 11:43	1
HMX	0.072	U M	0.12	0.040	ug/L		03/29/22 13:01	04/05/22 11:43	1
m-Nitrotoluene	0.072	U	0.12	0.034	ug/L		03/29/22 13:01	04/05/22 11:43	1
Nitrobenzene	0.072	U	0.18	0.034	ug/L		03/29/22 13:01	04/05/22 11:43	1
Nitroglycerin	0.072	U	0.18	0.035	ug/L		03/29/22 13:01	04/05/22 11:43	1
o-Nitrotoluene	0.072	U	0.12	0.039	ug/L		03/29/22 13:01	04/05/22 11:43	1
PETN	0.072	U	0.12	0.042	ug/L		03/29/22 13:01	04/05/22 11:43	1
p-Nitrotoluene	0.072	U	0.12	0.035	ug/L		03/29/22 13:01	04/05/22 11:43	1
RDX	0.072	U	0.12	0.033	ug/L		03/29/22 13:01	04/05/22 11:43	1
Tetryl	0.072	U Q	0.12	0.034	ug/L		03/29/22 13:01	04/05/22 11:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*94*		*48 - 130*	*03/29/22 13:01*	*04/05/22 11:43*	*1*

Client Sample ID: 29SB172 (3-4)
Lab Sample ID: 280-160187-48
Date Collected: 03/24/22 08:40
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		04/04/22 16:57	04/07/22 13:17	1
1,3-Dinitrobenzene	0.048	U	0.097	0.043	mg/Kg		04/04/22 16:57	04/07/22 13:17	1
2,4,6-Trinitrotoluene	0.048	U Q	0.097	0.036	mg/Kg		04/04/22 16:57	04/07/22 13:17	1
2,4-Dinitrotoluene	0.048	U	0.097	0.045	mg/Kg		04/04/22 16:57	04/07/22 13:17	1
2,6-Dinitrotoluene	0.048	U	0.097	0.039	mg/Kg		04/04/22 16:57	04/07/22 13:17	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.097	0.048	mg/Kg		04/04/22 16:57	04/07/22 13:17	1
4-Amino-2,6-dinitrotoluene	0.048	U	0.097	0.030	mg/Kg		04/04/22 16:57	04/07/22 13:17	1
HMX	0.048	U M	0.097	0.045	mg/Kg		04/04/22 16:57	04/07/22 13:17	1
m-Nitrotoluene	0.048	U	0.097	0.042	mg/Kg		04/04/22 16:57	04/07/22 13:17	1
Nitrobenzene	0.048	U	0.11	0.037	mg/Kg		04/04/22 16:57	04/07/22 13:17	1
Nitroglycerin	0.048	U	0.097	0.028	mg/Kg		04/04/22 16:57	04/07/22 13:17	1
o-Nitrotoluene	0.048	U	0.097	0.041	mg/Kg		04/04/22 16:57	04/07/22 13:17	1
PETN	0.048	U	0.097	0.033	mg/Kg		04/04/22 16:57	04/07/22 13:17	1
p-Nitrotoluene	0.048	U	0.097	0.048	mg/Kg		04/04/22 16:57	04/07/22 13:17	1
RDX	0.048	U	0.12	0.042	mg/Kg		04/04/22 16:57	04/07/22 13:17	1
Tetryl	0.048	U Q	0.097	0.038	mg/Kg		04/04/22 16:57	04/07/22 13:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*94*		*68 - 140*	*04/04/22 16:57*	*04/07/22 13:17*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB172 (6-7)
Lab Sample ID: 280-160187-49
Date Collected: 03/24/22 08:42
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	0.047	U	0.094	0.042	mg/Kg		04/04/22 16:57	04/07/22 13:24	1
1,3-Dinitrobenzene	0.047	U	0.094	0.042	mg/Kg		04/04/22 16:57	04/07/22 13:24	1
2,4,6-Trinitrotoluene	0.047	U M Q	0.094	0.035	mg/Kg		04/04/22 16:57	04/07/22 13:24	1
2,4-Dinitrotoluene	0.047	U	0.094	0.044	mg/Kg		04/04/22 16:57	04/07/22 13:24	1
2,6-Dinitrotoluene	0.047	U	0.094	0.038	mg/Kg		04/04/22 16:57	04/07/22 13:24	1
2-Amino-4,6-dinitrotoluene	0.047	U	0.094	0.047	mg/Kg		04/04/22 16:57	04/07/22 13:24	1
4-Amino-2,6-dinitrotoluene	0.047	U	0.094	0.029	mg/Kg		04/04/22 16:57	04/07/22 13:24	1
HMX	0.047	U	0.094	0.043	mg/Kg		04/04/22 16:57	04/07/22 13:24	1
m-Nitrotoluene	0.047	U	0.094	0.041	mg/Kg		04/04/22 16:57	04/07/22 13:24	1
Nitrobenzene	0.047	U M	0.10	0.036	mg/Kg		04/04/22 16:57	04/07/22 13:24	1
Nitroglycerin	0.047	U	0.094	0.027	mg/Kg		04/04/22 16:57	04/07/22 13:24	1
o-Nitrotoluene	0.047	U	0.094	0.040	mg/Kg		04/04/22 16:57	04/07/22 13:24	1
PETN	0.047	U	0.094	0.032	mg/Kg		04/04/22 16:57	04/07/22 13:24	1
p-Nitrotoluene	0.047	U	0.094	0.046	mg/Kg		04/04/22 16:57	04/07/22 13:24	1
RDX	0.047	U	0.11	0.040	mg/Kg		04/04/22 16:57	04/07/22 13:24	1
Tetryl	0.047	U Q	0.094	0.036	mg/Kg		04/04/22 16:57	04/07/22 13:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*94*		*68 - 140*	*04/04/22 16:57*	*04/07/22 13:24*	*1*

Client Sample ID: 29SB172 (11-12)
Lab Sample ID: 280-160187-50
Date Collected: 03/24/22 08:45
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	0.048	U	0.097	0.043	mg/Kg		04/04/22 16:57	04/07/22 13:30	1
1,3-Dinitrobenzene	0.048	U	0.097	0.043	mg/Kg		04/04/22 16:57	04/07/22 13:30	1
2,4,6-Trinitrotoluene	0.048	U Q	0.097	0.036	mg/Kg		04/04/22 16:57	04/07/22 13:30	1
2,4-Dinitrotoluene	0.048	U M	0.097	0.045	mg/Kg		04/04/22 16:57	04/07/22 13:30	1
2,6-Dinitrotoluene	0.048	U M	0.097	0.039	mg/Kg		04/04/22 16:57	04/07/22 13:30	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.097	0.048	mg/Kg		04/04/22 16:57	04/07/22 13:30	1
4-Amino-2,6-dinitrotoluene	0.048	U	0.097	0.030	mg/Kg		04/04/22 16:57	04/07/22 13:30	1
HMX	0.048	U M	0.097	0.045	mg/Kg		04/04/22 16:57	04/07/22 13:30	1
m-Nitrotoluene	0.048	U	0.097	0.042	mg/Kg		04/04/22 16:57	04/07/22 13:30	1
Nitrobenzene	0.048	U M	0.11	0.037	mg/Kg		04/04/22 16:57	04/07/22 13:30	1
Nitroglycerin	0.048	U	0.097	0.028	mg/Kg		04/04/22 16:57	04/07/22 13:30	1
o-Nitrotoluene	0.048	U	0.097	0.041	mg/Kg		04/04/22 16:57	04/07/22 13:30	1
PETN	0.048	U	0.097	0.033	mg/Kg		04/04/22 16:57	04/07/22 13:30	1
p-Nitrotoluene	0.048	U	0.097	0.048	mg/Kg		04/04/22 16:57	04/07/22 13:30	1
RDX	0.048	U	0.12	0.042	mg/Kg		04/04/22 16:57	04/07/22 13:30	1
Tetryl	0.048	U Q	0.097	0.037	mg/Kg		04/04/22 16:57	04/07/22 13:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*93*		*68 - 140*	*04/04/22 16:57*	*04/07/22 13:30*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB172 (14.5-15)
Lab Sample ID: 280-160187-51
Date Collected: 03/24/22 08:48
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	0.098	0.044	mg/Kg		04/04/22 16:57	04/07/22 13:37	1
1,3-Dinitrobenzene	0.049	U	0.098	0.044	mg/Kg		04/04/22 16:57	04/07/22 13:37	1
2,4,6-Trinitrotoluene	0.049	U M Q	0.098	0.036	mg/Kg		04/04/22 16:57	04/07/22 13:37	1
2,4-Dinitrotoluene	**0.11**	**M**	0.098	0.046	mg/Kg		04/04/22 16:57	04/07/22 13:37	1
2,6-Dinitrotoluene	0.049	U M	0.098	0.040	mg/Kg		04/04/22 16:57	04/07/22 13:37	1
2-Amino-4,6-dinitrotoluene	0.049	U M	0.098	0.049	mg/Kg		04/04/22 16:57	04/07/22 13:37	1
4-Amino-2,6-dinitrotoluene	0.049	U	0.098	0.031	mg/Kg		04/04/22 16:57	04/07/22 13:37	1
HMX	0.049	U M	0.098	0.045	mg/Kg		04/04/22 16:57	04/07/22 13:37	1
m-Nitrotoluene	0.049	U	0.098	0.043	mg/Kg		04/04/22 16:57	04/07/22 13:37	1
Nitrobenzene	0.049	U	0.11	0.037	mg/Kg		04/04/22 16:57	04/07/22 13:37	1
Nitroglycerin	0.049	U	0.098	0.029	mg/Kg		04/04/22 16:57	04/07/22 13:37	1
o-Nitrotoluene	0.049	U M	0.098	0.042	mg/Kg		04/04/22 16:57	04/07/22 13:37	1
PETN	0.049	U	0.098	0.033	mg/Kg		04/04/22 16:57	04/07/22 13:37	1
p-Nitrotoluene	0.049	U M	0.098	0.049	mg/Kg		04/04/22 16:57	04/07/22 13:37	1
RDX	0.049	U	0.12	0.042	mg/Kg		04/04/22 16:57	04/07/22 13:37	1
Tetryl	0.049	U Q	0.098	0.038	mg/Kg		04/04/22 16:57	04/07/22 13:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*86*		*68 - 140*	*04/04/22 16:57*	*04/07/22 13:37*	*1*

Client Sample ID: 29SB180 (14.5-15)
Lab Sample ID: 280-160187-52
Date Collected: 03/24/22 08:55
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 13:43	1
1,3-Dinitrobenzene	0.049	U M	0.098	0.044	mg/Kg		04/04/22 16:57	04/07/22 13:43	1
2,4,6-Trinitrotoluene	0.049	U Q	0.098	0.036	mg/Kg		04/04/22 16:57	04/07/22 13:43	1
2,4-Dinitrotoluene	**0.56**	**M**	0.098	0.046	mg/Kg		04/04/22 16:57	04/07/22 13:43	1
2,6-Dinitrotoluene	**0.072**	**J M**	0.098	0.039	mg/Kg		04/04/22 16:57	04/07/22 13:43	1
2-Amino-4,6-dinitrotoluene	**0.054**	**J**	0.098	0.048	mg/Kg		04/04/22 16:57	04/07/22 13:43	1
4-Amino-2,6-dinitrotoluene	0.049	U	0.098	0.030	mg/Kg		04/04/22 16:57	04/07/22 13:43	1
HMX	0.049	U M	0.098	0.045	mg/Kg		04/04/22 16:57	04/07/22 13:43	1
m-Nitrotoluene	0.049	U M	0.098	0.042	mg/Kg		04/04/22 16:57	04/07/22 13:43	1
Nitrobenzene	0.049	U	0.11	0.037	mg/Kg		04/04/22 16:57	04/07/22 13:43	1
Nitroglycerin	0.049	U	0.098	0.028	mg/Kg		04/04/22 16:57	04/07/22 13:43	1
o-Nitrotoluene	**0.15**		0.098	0.042	mg/Kg		04/04/22 16:57	04/07/22 13:43	1
PETN	0.049	U	0.098	0.033	mg/Kg		04/04/22 16:57	04/07/22 13:43	1
p-Nitrotoluene	**0.20**		0.098	0.048	mg/Kg		04/04/22 16:57	04/07/22 13:43	1
RDX	0.049	U	0.12	0.042	mg/Kg		04/04/22 16:57	04/07/22 13:43	1
Tetryl	0.049	U Q	0.098	0.038	mg/Kg		04/04/22 16:57	04/07/22 13:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*97*		*68 - 140*	*04/04/22 16:57*	*04/07/22 13:43*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB173 (3-4)
Lab Sample ID: 280-160187-53
Date Collected: 03/24/22 09:08
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		04/04/22 16:57	04/07/22 13:57	1
1,3-Dinitrobenzene	0.048	U	0.096	0.043	mg/Kg		04/04/22 16:57	04/07/22 13:57	1
2,4,6-Trinitrotoluene	0.048	U Q	0.096	0.035	mg/Kg		04/04/22 16:57	04/07/22 13:57	1
2,4-Dinitrotoluene	0.048	U	0.096	0.045	mg/Kg		04/04/22 16:57	04/07/22 13:57	1
2,6-Dinitrotoluene	0.048	U	0.096	0.039	mg/Kg		04/04/22 16:57	04/07/22 13:57	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.096	0.048	mg/Kg		04/04/22 16:57	04/07/22 13:57	1
4-Amino-2,6-dinitrotoluene	0.048	U	0.096	0.030	mg/Kg		04/04/22 16:57	04/07/22 13:57	1
HMX	0.048	U M	0.096	0.044	mg/Kg		04/04/22 16:57	04/07/22 13:57	1
m-Nitrotoluene	0.048	U	0.096	0.042	mg/Kg		04/04/22 16:57	04/07/22 13:57	1
Nitrobenzene	0.048	U	0.11	0.037	mg/Kg		04/04/22 16:57	04/07/22 13:57	1
Nitroglycerin	0.048	U	0.096	0.028	mg/Kg		04/04/22 16:57	04/07/22 13:57	1
o-Nitrotoluene	0.048	U	0.096	0.041	mg/Kg		04/04/22 16:57	04/07/22 13:57	1
PETN	0.048	U	0.096	0.033	mg/Kg		04/04/22 16:57	04/07/22 13:57	1
p-Nitrotoluene	0.048	U	0.096	0.048	mg/Kg		04/04/22 16:57	04/07/22 13:57	1
RDX	0.048	U M	0.12	0.041	mg/Kg		04/04/22 16:57	04/07/22 13:57	1
Tetryl	0.048	U M Q	0.096	0.037	mg/Kg		04/04/22 16:57	04/07/22 13:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*96*		*68 - 140*	*04/04/22 16:57*	*04/07/22 13:57*	*1*

Client Sample ID: 29SB173 (6-7)
Lab Sample ID: 280-160187-54
Date Collected: 03/24/22 09:10
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	0.048	U	0.096	0.043	mg/Kg		04/04/22 16:57	04/07/22 14:03	1
1,3-Dinitrobenzene	0.048	U	0.096	0.043	mg/Kg		04/04/22 16:57	04/07/22 14:03	1
2,4,6-Trinitrotoluene	0.048	U Q	0.096	0.035	mg/Kg		04/04/22 16:57	04/07/22 14:03	1
2,4-Dinitrotoluene	0.048	U	0.096	0.045	mg/Kg		04/04/22 16:57	04/07/22 14:03	1
2,6-Dinitrotoluene	0.048	U	0.096	0.039	mg/Kg		04/04/22 16:57	04/07/22 14:03	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.096	0.047	mg/Kg		04/04/22 16:57	04/07/22 14:03	1
4-Amino-2,6-dinitrotoluene	0.048	U	0.096	0.030	mg/Kg		04/04/22 16:57	04/07/22 14:03	1
HMX	0.048	U	0.096	0.044	mg/Kg		04/04/22 16:57	04/07/22 14:03	1
m-Nitrotoluene	0.048	U	0.096	0.041	mg/Kg		04/04/22 16:57	04/07/22 14:03	1
Nitrobenzene	0.048	U	0.11	0.036	mg/Kg		04/04/22 16:57	04/07/22 14:03	1
Nitroglycerin	0.048	U	0.096	0.028	mg/Kg		04/04/22 16:57	04/07/22 14:03	1
o-Nitrotoluene	0.048	U	0.096	0.041	mg/Kg		04/04/22 16:57	04/07/22 14:03	1
PETN	0.048	U	0.096	0.033	mg/Kg		04/04/22 16:57	04/07/22 14:03	1
p-Nitrotoluene	0.048	U	0.096	0.047	mg/Kg		04/04/22 16:57	04/07/22 14:03	1
RDX	0.048	U	0.11	0.041	mg/Kg		04/04/22 16:57	04/07/22 14:03	1
Tetryl	0.048	U Q	0.096	0.037	mg/Kg		04/04/22 16:57	04/07/22 14:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*97*		*68 - 140*	*04/04/22 16:57*	*04/07/22 14:03*	*1*

Client Sample Results

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB173 (11-12)
Date Collected: 03/24/22 09:12
Date Received: 03/25/22 00:00

Lab Sample ID: 280-160187-55
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 14:10	1
1,3-Dinitrobenzene	0.048	U	0.096	0.043	mg/Kg		04/04/22 16:57	04/07/22 14:10	1
2,4,6-Trinitrotoluene	0.048	U Q	0.096	0.035	mg/Kg		04/04/22 16:57	04/07/22 14:10	1
2,4-Dinitrotoluene	0.048	U	0.096	0.045	mg/Kg		04/04/22 16:57	04/07/22 14:10	1
2,6-Dinitrotoluene	0.048	U	0.096	0.038	mg/Kg		04/04/22 16:57	04/07/22 14:10	1
2-Amino-4,6-dinitrotoluene	0.048	U M	0.096	0.047	mg/Kg		04/04/22 16:57	04/07/22 14:10	1
4-Amino-2,6-dinitrotoluene	0.048	U M	0.096	0.030	mg/Kg		04/04/22 16:57	04/07/22 14:10	1
HMX	0.048	U M	0.096	0.044	mg/Kg		04/04/22 16:57	04/07/22 14:10	1
m-Nitrotoluene	0.048	U M	0.096	0.041	mg/Kg		04/04/22 16:57	04/07/22 14:10	1
Nitrobenzene	0.048	U	0.11	0.036	mg/Kg		04/04/22 16:57	04/07/22 14:10	1
Nitroglycerin	0.048	U	0.096	0.028	mg/Kg		04/04/22 16:57	04/07/22 14:10	1
o-Nitrotoluene	0.048	U M	0.096	0.041	mg/Kg		04/04/22 16:57	04/07/22 14:10	1
PETN	0.048	U	0.096	0.032	mg/Kg		04/04/22 16:57	04/07/22 14:10	1
p-Nitrotoluene	0.048	U M	0.096	0.047	mg/Kg		04/04/22 16:57	04/07/22 14:10	1
RDX	0.048	U	0.11	0.041	mg/Kg		04/04/22 16:57	04/07/22 14:10	1
Tetryl	0.048	U Q	0.096	0.037	mg/Kg		04/04/22 16:57	04/07/22 14:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*97*		*68 - 140*	*04/04/22 16:57*	*04/07/22 14:10*	*1*

Default Detection Limits

Client: HDR Inc
Job ID: 280-160187-1
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: 280-160187-1
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)							
280-160187-1	29SB183 (1-2)	95							
280-160187-2	29SB183 (3-4)	99							
280-160187-2 DU	29SB183 (3-4)	95							
280-160187-2 MS	29SB183 (3-4)	92							
280-160187-2 MSD	29SB183 (3-4)	98							
280-160187-2 TRL	29SB183 (3-4)	102							
280-160187-3	DUP-01	98							
280-160187-4	29SB185 (3-4)	101							
280-160187-5	29SB185 (7-8)	94							
280-160187-6	29SB185 (11-12)	102							
280-160187-7	29SB185 (13.5-14)	93							
280-160187-8	29SB186 (9-10)	99							
280-160187-9	29SB186 (11-12)	102							
280-160187-10	29SB186 (13.5-14)	96							
280-160187-11	29SB184 (3-4)	96							
280-160187-12	29SB184 (7-8)	98							
280-160187-13	29SB184 (11-12)	101							
280-160187-14	29SB184 (13.5-14)	92							
280-160187-15	DUP-02	98							
280-160187-16	29SB199 (3-4)	97							
280-160187-17	29SB199 (7-8)	94							
280-160187-18	29SB198 (3-4)	97							
280-160187-19	29SB198 (7-8)	93							
280-160187-20	29SB202 (3-4)	98							
280-160187-21	29SB202 (11-12)	94							
280-160187-22	29SB202 (15-15.5)	92							
280-160187-23	29SB200 (15-15.5)	95							
280-160187-24	DUP-03	94							
280-160187-25	29SB201(3-4)	91							
280-160187-26	29SB201(11-12)	89							
280-160187-26 DU	29SB201(11-12)	90							
280-160187-26 MS	29SB201(11-12)	99							
280-160187-26 MSD	29SB201(11-12)	94							
280-160187-26 TRL	29SB201(11-12)	93							
280-160187-27	29SB201(15-15.5)	89							
280-160187-29	29SB187 (0-2)	96							
280-160187-30	29SB187 (5-7)	95							
280-160187-31	29SB187 (10-0.5)	98							
280-160187-32	29SB189 (0-2)	93							
280-160187-33	29SB189 (5-7)	92							
280-160187-34	29SB189 (10-10.5)	101							
280-160187-35	29SB188 (7-9)	92							
280-160187-36	29SB188 (10-10.5)	99							
280-160187-37	29SB195 (7-8)	89							
280-160187-38	29SB195 (9.5-10)	97							
280-160187-39	29SB194 (7-8)	95							
280-160187-40	29SB194 (9.5-10)	87							
280-160187-41	DUP-04	102							
280-160187-42	29SB191 (9.5-10)	96							

Surrogate Summary

Client: HDR Inc
Job ID: 280-160187-1
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)
280-160187-43	29SB197 (3-4)	98
280-160187-43 DU	29SB197 (3-4)	98
280-160187-43 MS	29SB197 (3-4)	96
280-160187-43 MSD	29SB197 (3-4)	88
280-160187-43 TRL	29SB197 (3-4)	92
280-160187-44	29SB197 (7-7.5)	92
280-160187-45	29SB196 (3-4)	96
280-160187-46	29SB196 (7-7.5)	92
280-160187-48	29SB172 (3-4)	94
280-160187-49	29SB172 (6-7)	94
280-160187-50	29SB172 (11-12)	93
280-160187-51	29SB172 (14.5-15)	86
280-160187-52	29SB180 (14.5-15)	97
280-160187-53	29SB173 (3-4)	96
280-160187-54	29SB173 (6-7)	97
280-160187-55	29SB173 (11-12)	97
GB 280-570095/1-B	Method Blank	98
GB 280-570100/1-B	Method Blank	94
GB 280-570105/1-B	Method Blank	95
LCS 280-570516/2-A	Lab Control Sample	94
LCS 280-570543/2-A	Lab Control Sample	99
LCS 280-570718/2-A	Lab Control Sample	98
LCSD 280-570516/3-A	Lab Control Sample Dup	98
LCSD 280-570543/3-A	Lab Control Sample Dup	94
LCSD 280-570718/3-A	Lab Control Sample Dup	101
LCSSRM 280-570095/2-B	Lab Control Sample	97
LCSSRM 280-570100/2-B	Lab Control Sample	93
LCSSRM 280-570105/2-B	Lab Control Sample	91
MB 280-570516/1-A	Method Blank	90
MB 280-570543/1-A	Method Blank	101
MB 280-570718/1-A	Method Blank	98

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)
Lab Sample ID	Client Sample ID	NBZ (48-130)
280-160187-28	EB-1	97
280-160187-47	EB-02	94
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: 280-160187-1

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: 280-160187-1

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 280-570095/1-B
Matrix: Solid
Analysis Batch: 570785

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 570516

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		04/01/22 16:56	04/05/22 12:22	1
1,3-Dinitrobenzene	0.048	U	0.096	0.043	mg/Kg		04/01/22 16:56	04/05/22 12:22	1
2,4,6-Trinitrotoluene	0.048	U M	0.096	0.035	mg/Kg		04/01/22 16:56	04/05/22 12:22	1
2,4-Dinitrotoluene	0.048	U	0.096	0.045	mg/Kg		04/01/22 16:56	04/05/22 12:22	1
2,6-Dinitrotoluene	0.048	U	0.096	0.039	mg/Kg		04/01/22 16:56	04/05/22 12:22	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.096	0.048	mg/Kg		04/01/22 16:56	04/05/22 12:22	1
4-Amino-2,6-dinitrotoluene	0.048	U	0.096	0.030	mg/Kg		04/01/22 16:56	04/05/22 12:22	1
HMX	0.048	U M	0.096	0.044	mg/Kg		04/01/22 16:56	04/05/22 12:22	1
m-Nitrotoluene	0.048	U	0.096	0.041	mg/Kg		04/01/22 16:56	04/05/22 12:22	1
Nitrobenzene	0.048	U	0.11	0.036	mg/Kg		04/01/22 16:56	04/05/22 12:22	1
Nitroglycerin	0.048	U M	0.096	0.028	mg/Kg		04/01/22 16:56	04/05/22 12:22	1
o-Nitrotoluene	0.048	U	0.096	0.041	mg/Kg		04/01/22 16:56	04/05/22 12:22	1
PETN	0.048	U	0.096	0.033	mg/Kg		04/01/22 16:56	04/05/22 12:22	1
p-Nitrotoluene	0.048	U	0.096	0.047	mg/Kg		04/01/22 16:56	04/05/22 12:22	1
RDX	0.048	U	0.11	0.041	mg/Kg		04/01/22 16:56	04/05/22 12:22	1
Tetryl	0.048	U	0.096	0.037	mg/Kg		04/01/22 16:56	04/05/22 12:22	1

Surrogate	*GB %Recovery*	*GB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*98*		*68 - 140*	*04/01/22 16:56*	*04/05/22 12:22*	*1*

QC Sample Results

Client: HDR Inc
Project/Site: Longhorn AAP, TX (March 2022)

Job ID: 280-160187-1

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Lab Sample ID: MB 280-570516/1-A
Matrix: Solid
Analysis Batch: 570785

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 570516

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		04/01/22 16:56	04/05/22 12:02	1
1,3-Dinitrobenzene	0.050	U	0.10	0.045	mg/Kg		04/01/22 16:56	04/05/22 12:02	1
2,4,6-Trinitrotoluene	0.050	U	0.10	0.037	mg/Kg		04/01/22 16:56	04/05/22 12:02	1
2,4-Dinitrotoluene	0.050	U	0.10	0.047	mg/Kg		04/01/22 16:56	04/05/22 12:02	1
2,6-Dinitrotoluene	0.050	U	0.10	0.040	mg/Kg		04/01/22 16:56	04/05/22 12:02	1
2-Amino-4,6-dinitrotoluene	0.050	U	0.10	0.050	mg/Kg		04/01/22 16:56	04/05/22 12:02	1
4-Amino-2,6-dinitrotoluene	0.050	U	0.10	0.031	mg/Kg		04/01/22 16:56	04/05/22 12:02	1
HMX	0.050	U M	0.10	0.046	mg/Kg		04/01/22 16:56	04/05/22 12:02	1
m-Nitrotoluene	0.050	U	0.10	0.043	mg/Kg		04/01/22 16:56	04/05/22 12:02	1
Nitrobenzene	0.050	U	0.11	0.038	mg/Kg		04/01/22 16:56	04/05/22 12:02	1
Nitroglycerin	0.050	U	0.10	0.029	mg/Kg		04/01/22 16:56	04/05/22 12:02	1
o-Nitrotoluene	0.050	U	0.10	0.043	mg/Kg		04/01/22 16:56	04/05/22 12:02	1
PETN	0.050	U	0.10	0.034	mg/Kg		04/01/22 16:56	04/05/22 12:02	1
p-Nitrotoluene	0.050	U	0.10	0.049	mg/Kg		04/01/22 16:56	04/05/22 12:02	1
RDX	0.050	U	0.12	0.043	mg/Kg		04/01/22 16:56	04/05/22 12:02	1
Tetryl	0.050	U	0.10	0.039	mg/Kg		04/01/22 16:56	04/05/22 12:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*90*		*68 - 140*	*04/01/22 16:56*	*04/05/22 12:02*	*1*

Lab Sample ID: LCS 280-570516/2-A
Matrix: Solid
Analysis Batch: 570785

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 570516

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,3,5-Trinitrobenzene			0.400	0.394		mg/Kg		98	69 - 115		
1,3-Dinitrobenzene			0.400	0.372		mg/Kg		93	83 - 122		
2,4,6-Trinitrotoluene			0.400	0.417		mg/Kg		104	65 - 133		
2,4-Dinitrotoluene			0.400	0.377		mg/Kg		94	82 - 119		
2,6-Dinitrotoluene			0.400	0.390		mg/Kg		98	86 - 113		
2-Amino-4,6-dinitrotoluene			0.400	0.400		mg/Kg		100	75 - 130		
4-Amino-2,6-dinitrotoluene			0.400	0.379		mg/Kg		95	77 - 125		
HMX			0.400	0.378		mg/Kg		95	65 - 114		
m-Nitrotoluene			0.400	0.378		mg/Kg		95	68 - 125		
Nitrobenzene			0.400	0.372		mg/Kg		93	75 - 120		
Nitroglycerin			0.400	0.415		mg/Kg		104	27 - 146		
o-Nitrotoluene			0.400	0.382		mg/Kg		96	72 - 125		
PETN			0.400	0.417		mg/Kg		104	62 - 143		
p-Nitrotoluene			0.400	0.392		mg/Kg		98	72 - 127		
RDX			0.400	0.362		mg/Kg		90	77 - 123		
Tetryl			0.400	0.595	Q	mg/Kg		149	36 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*94*		*68 - 140*

QC Sample Results

Client: HDR Inc
Project/Site: Longhorn AAP, TX (March 2022)

Job ID: 280-160187-1

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Lab Sample ID: LCSD 280-570516/3-A
Matrix: Solid
Analysis Batch: 570785

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 570516

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene			0.400	0.388		mg/Kg		97	69 - 115	1	20
1,3-Dinitrobenzene			0.400	0.383		mg/Kg		96	83 - 122	3	20
2,4,6-Trinitrotoluene			0.400	0.408		mg/Kg		102	65 - 133	2	20
2,4-Dinitrotoluene			0.400	0.345		mg/Kg		86	82 - 119	9	20
2,6-Dinitrotoluene			0.400	0.359		mg/Kg		90	86 - 113	8	20
2-Amino-4,6-dinitrotoluene			0.400	0.359		mg/Kg		90	75 - 130	11	20
4-Amino-2,6-dinitrotoluene			0.400	0.357		mg/Kg		89	77 - 125	6	20
HMX			0.400	0.342		mg/Kg		85	65 - 114	10	20
m-Nitrotoluene			0.400	0.338		mg/Kg		85	68 - 125	11	20
Nitrobenzene			0.400	0.373		mg/Kg		93	75 - 120	0	20
Nitroglycerin			0.400	0.404		mg/Kg		101	27 - 146	3	20
o-Nitrotoluene			0.400	0.353		mg/Kg		88	72 - 125	8	20
PETN			0.400	0.395		mg/Kg		99	62 - 143	5	20
p-Nitrotoluene			0.400	0.350		mg/Kg		88	72 - 127	11	20
RDX			0.400	0.397		mg/Kg		99	77 - 123	9	20
Tetryl			0.400	0.584	Q	mg/Kg		146	36 - 120	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5	*98*		*68 - 140*

Lab Sample ID: LCSSRM 280-570095/2-B
Matrix: Solid
Analysis Batch: 570785

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 570516

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
1,3,5-Trinitrobenzene			0.600	0.569		mg/Kg		95	58 - 116
1,3-Dinitrobenzene			0.600	0.564		mg/Kg		94	69 - 116
2,4,6-Trinitrotoluene			0.600	0.429		mg/Kg		71	69 - 120
2,4-Dinitrotoluene			0.600	0.501		mg/Kg		84	69 - 137
2,6-Dinitrotoluene			0.600	0.543		mg/Kg		90	60 - 121
2-Amino-4,6-dinitrotoluene			0.600	0.479		mg/Kg		80	56 - 108
4-Amino-2,6-dinitrotoluene			0.600	0.423		mg/Kg		71	46 - 98
HMX			0.600	0.521		mg/Kg		87	59 - 131
m-Nitrotoluene			0.600	0.528		mg/Kg		88	69 - 124
Nitrobenzene			0.600	0.534		mg/Kg		89	58 - 119
Nitroglycerin			0.600	0.556		mg/Kg		93	60 - 115
o-Nitrotoluene			0.600	0.523		mg/Kg		87	67 - 117
PETN			0.600	0.505		mg/Kg		84	60 - 115
p-Nitrotoluene			0.600	0.512		mg/Kg		85	51 - 143
RDX			0.600	0.463		mg/Kg		77	62 - 123
Tetryl			0.600	0.357		mg/Kg		59	36 - 120

Surrogate	*LCSSRM %Recovery*	*LCSSRM Qualifier*	*Limits*
Nitrobenzene-d5	*97*		*68 - 140*

QC Sample Results

Client: HDR Inc
Project/Site: Longhorn AAP, TX (March 2022)

Job ID: 280-160187-1

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Lab Sample ID: 280-160187-2 MS
Matrix: Solid
Analysis Batch: 570785

Client Sample ID: 29SB183 (3-4)
Prep Type: Total/NA
Prep Batch: 570516

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,3,5-Trinitrobenzene	0.048	U	0.396	0.368		mg/Kg		93	69 - 115
1,3-Dinitrobenzene	0.048	U	0.396	0.360		mg/Kg		91	83 - 122
2,4,6-Trinitrotoluene	0.048	U	0.396	0.396		mg/Kg		100	65 - 133
2,4-Dinitrotoluene	0.048	U	0.396	0.363		mg/Kg		92	82 - 119
2,6-Dinitrotoluene	0.048	U	0.396	0.390		mg/Kg		99	86 - 113
2-Amino-4,6-dinitrotoluene	0.048	U	0.396	0.384		mg/Kg		97	75 - 130
4-Amino-2,6-dinitrotoluene	0.048	U J1	0.396	0.384		mg/Kg		97	77 - 125
HMX	0.048	U M	0.396	0.359		mg/Kg		91	65 - 114
m-Nitrotoluene	0.048	U	0.396	0.343		mg/Kg		87	68 - 125
Nitrobenzene	0.048	U	0.396	0.348		mg/Kg		88	75 - 120
Nitroglycerin	0.048	U	0.396	0.409		mg/Kg		103	27 - 146
o-Nitrotoluene	0.048	U	0.396	0.372		mg/Kg		94	72 - 125
PETN	0.048	U	0.396	0.435		mg/Kg		110	62 - 143
p-Nitrotoluene	0.048	U	0.396	0.373		mg/Kg		94	72 - 127
RDX	0.048	U	0.396	0.341		mg/Kg		86	77 - 123
Tetryl	0.048	U J1 Q	0.396	0.518	J1	mg/Kg		131	36 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5	*92*		*68 - 140*

Lab Sample ID: 280-160187-2 MSD
Matrix: Solid
Analysis Batch: 570785

Client Sample ID: 29SB183 (3-4)
Prep Type: Total/NA
Prep Batch: 570516

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene	0.048	U	0.378	0.350		mg/Kg		93	69 - 115	5	20
1,3-Dinitrobenzene	0.048	U	0.378	0.355		mg/Kg		94	83 - 122	1	20
2,4,6-Trinitrotoluene	0.048	U	0.378	0.386		mg/Kg		102	65 - 133	3	20
2,4-Dinitrotoluene	0.048	U	0.378	0.322		mg/Kg		85	82 - 119	12	20
2,6-Dinitrotoluene	0.048	U	0.378	0.347		mg/Kg		92	86 - 113	12	20
2-Amino-4,6-dinitrotoluene	0.048	U	0.378	0.352	M	mg/Kg		93	75 - 130	9	20
4-Amino-2,6-dinitrotoluene	0.048	U J1	0.378	0.296	M J1	mg/Kg		78	77 - 125	26	20
HMX	0.048	U M	0.378	0.309		mg/Kg		82	65 - 114	15	20
m-Nitrotoluene	0.048	U	0.378	0.344		mg/Kg		91	68 - 125	0	20
Nitrobenzene	0.048	U	0.378	0.348		mg/Kg		92	75 - 120	0	20
Nitroglycerin	0.048	U	0.378	0.387		mg/Kg		102	27 - 146	5	20
o-Nitrotoluene	0.048	U	0.378	0.334		mg/Kg		89	72 - 125	11	20
PETN	0.048	U	0.378	0.393		mg/Kg		104	62 - 143	10	20
p-Nitrotoluene	0.048	U	0.378	0.345		mg/Kg		91	72 - 127	8	20
RDX	0.048	U	0.378	0.299	M	mg/Kg		79	77 - 123	13	20
Tetryl	0.048	U J1 Q	0.378	0.514	J1	mg/Kg		136	36 - 120	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5	*98*		*68 - 140*

QC Sample Results

Client: HDR Inc
Project/Site: Longhorn AAP, TX (March 2022)

Job ID: 280-160187-1

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Lab Sample ID: 280-160187-2 DU
Matrix: Solid
Analysis Batch: 570785

Client Sample ID: 29SB183 (3-4)
Prep Type: Total/NA
Prep Batch: 570516

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
1,3,5-Trinitrobenzene	0.048	U		0.047	U M	mg/Kg				NC	20
1,3-Dinitrobenzene	0.048	U		0.047	U	mg/Kg				NC	20
2,4,6-Trinitrotoluene	0.048	U		0.047	U	mg/Kg				NC	20
2,4-Dinitrotoluene	0.048	U		0.047	U	mg/Kg				NC	20
2,6-Dinitrotoluene	0.048	U		0.047	U	mg/Kg				NC	20
2-Amino-4,6-dinitrotoluene	0.048	U		0.047	U	mg/Kg				NC	20
4-Amino-2,6-dinitrotoluene	0.048	U J1		0.047	U	mg/Kg				NC	20
HMX	0.048	U M		0.047	U M	mg/Kg				NC	20
m-Nitrotoluene	0.048	U		0.047	U	mg/Kg				NC	20
Nitrobenzene	0.048	U		0.047	U	mg/Kg				NC	20
Nitroglycerin	0.048	U		0.047	U	mg/Kg				NC	20
o-Nitrotoluene	0.048	U		0.047	U	mg/Kg				NC	20
PETN	0.048	U		0.047	U	mg/Kg				NC	20
p-Nitrotoluene	0.048	U		0.047	U	mg/Kg				NC	20
RDX	0.048	U		0.047	U	mg/Kg				NC	20
Tetryl	0.048	U J1 Q		0.047	U Q	mg/Kg				NC	20

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
Nitrobenzene-d5	*95*		*68 - 140*

Lab Sample ID: 280-160187-2 TRL
Matrix: Solid
Analysis Batch: 570785

Client Sample ID: 29SB183 (3-4)
Prep Type: Total/NA
Prep Batch: 570516

Analyte	Sample Result	Sample Qualifier		TRL Result	TRL Qualifier	Unit	D			RSD	RSD Limit
1,3,5-Trinitrobenzene	0.048	U		0.047	U	mg/Kg				NC	20
1,3-Dinitrobenzene	0.048	U		0.047	U	mg/Kg				NC	20
2,4,6-Trinitrotoluene	0.048	U		0.047	U	mg/Kg				NC	20
2,4-Dinitrotoluene	0.048	U		0.047	U	mg/Kg				NC	20
2,6-Dinitrotoluene	0.048	U		0.047	U	mg/Kg				NC	20
2-Amino-4,6-dinitrotoluene	0.048	U		0.047	U	mg/Kg				NC	20
4-Amino-2,6-dinitrotoluene	0.048	U J1		0.047	U	mg/Kg				NC	20
HMX	0.048	U M		0.047	U	mg/Kg				NC	20
m-Nitrotoluene	0.048	U		0.047	U	mg/Kg				NC	20
Nitrobenzene	0.048	U		0.047	U	mg/Kg				NC	20
Nitroglycerin	0.048	U		0.047	U	mg/Kg				NC	20
o-Nitrotoluene	0.048	U		0.047	U	mg/Kg				NC	20
PETN	0.048	U		0.047	U	mg/Kg				NC	20
p-Nitrotoluene	0.048	U		0.047	U	mg/Kg				NC	20
RDX	0.048	U		0.047	U	mg/Kg				NC	20
Tetryl	0.048	U J1 Q		0.047	U Q	mg/Kg				NC	20

Surrogate	*TRL %Recovery*	*TRL Qualifier*	*Limits*
Nitrobenzene-d5	*102*		*68 - 140*

QC Sample Results

Client: HDR Inc
Project/Site: Longhorn AAP, TX (March 2022)

Job ID: 280-160187-1

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Lab Sample ID: GB 280-570100/1-B
Matrix: Solid
Analysis Batch: 570786

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 570543

Analyte	GB Result	GB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.048	U M	0.097	0.043	mg/Kg		04/01/22 16:54	04/05/22 15:46	1
1,3-Dinitrobenzene	0.048	U	0.097	0.043	mg/Kg		04/01/22 16:54	04/05/22 15:46	1
2,4,6-Trinitrotoluene	0.048	U	0.097	0.036	mg/Kg		04/01/22 16:54	04/05/22 15:46	1
2,4-Dinitrotoluene	0.048	U	0.097	0.045	mg/Kg		04/01/22 16:54	04/05/22 15:46	1
2,6-Dinitrotoluene	0.048	U	0.097	0.039	mg/Kg		04/01/22 16:54	04/05/22 15:46	1
2-Amino-4,6-dinitrotoluene	0.048	U	0.097	0.048	mg/Kg		04/01/22 16:54	04/05/22 15:46	1
4-Amino-2,6-dinitrotoluene	0.048	U	0.097	0.030	mg/Kg		04/01/22 16:54	04/05/22 15:46	1
HMX	0.048	U M	0.097	0.045	mg/Kg		04/01/22 16:54	04/05/22 15:46	1
m-Nitrotoluene	0.048	U	0.097	0.042	mg/Kg		04/01/22 16:54	04/05/22 15:46	1
Nitrobenzene	0.048	U	0.11	0.037	mg/Kg		04/01/22 16:54	04/05/22 15:46	1
Nitroglycerin	0.048	U	0.097	0.028	mg/Kg		04/01/22 16:54	04/05/22 15:46	1
o-Nitrotoluene	0.048	U	0.097	0.041	mg/Kg		04/01/22 16:54	04/05/22 15:46	1
PETN	0.048	U	0.097	0.033	mg/Kg		04/01/22 16:54	04/05/22 15:46	1
p-Nitrotoluene	0.048	U	0.097	0.048	mg/Kg		04/01/22 16:54	04/05/22 15:46	1
RDX	0.048	U	0.12	0.042	mg/Kg		04/01/22 16:54	04/05/22 15:46	1
Tetryl	0.048	U M	0.097	0.037	mg/Kg		04/01/22 16:54	04/05/22 15:46	1

Surrogate	*GB %Recovery*	*GB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*94*		*68 - 140*	*04/01/22 16:54*	*04/05/22 15:46*	*1*

Lab Sample ID: MB 280-570543/1-A
Matrix: Solid
Analysis Batch: 570786

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 570543

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		04/01/22 16:54	04/05/22 15:27	1
1,3-Dinitrobenzene	0.050	U	0.10	0.045	mg/Kg		04/01/22 16:54	04/05/22 15:27	1
2,4,6-Trinitrotoluene	0.050	U	0.10	0.037	mg/Kg		04/01/22 16:54	04/05/22 15:27	1
2,4-Dinitrotoluene	0.050	U	0.10	0.047	mg/Kg		04/01/22 16:54	04/05/22 15:27	1
2,6-Dinitrotoluene	0.050	U	0.10	0.040	mg/Kg		04/01/22 16:54	04/05/22 15:27	1
2-Amino-4,6-dinitrotoluene	0.050	U	0.10	0.050	mg/Kg		04/01/22 16:54	04/05/22 15:27	1
4-Amino-2,6-dinitrotoluene	0.050	U	0.10	0.031	mg/Kg		04/01/22 16:54	04/05/22 15:27	1
HMX	0.050	U M	0.10	0.046	mg/Kg		04/01/22 16:54	04/05/22 15:27	1
m-Nitrotoluene	0.050	U	0.10	0.043	mg/Kg		04/01/22 16:54	04/05/22 15:27	1
Nitrobenzene	0.050	U	0.11	0.038	mg/Kg		04/01/22 16:54	04/05/22 15:27	1
Nitroglycerin	0.050	U	0.10	0.029	mg/Kg		04/01/22 16:54	04/05/22 15:27	1
o-Nitrotoluene	0.050	U	0.10	0.043	mg/Kg		04/01/22 16:54	04/05/22 15:27	1
PETN	0.050	U	0.10	0.034	mg/Kg		04/01/22 16:54	04/05/22 15:27	1
p-Nitrotoluene	0.050	U	0.10	0.049	mg/Kg		04/01/22 16:54	04/05/22 15:27	1
RDX	0.050	U	0.12	0.043	mg/Kg		04/01/22 16:54	04/05/22 15:27	1
Tetryl	0.050	U	0.10	0.039	mg/Kg		04/01/22 16:54	04/05/22 15:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*101*		*68 - 140*	*04/01/22 16:54*	*04/05/22 15:27*	*1*

QC Sample Results

Client: HDR Inc
Project/Site: Longhorn AAP, TX (March 2022)

Job ID: 280-160187-1

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Lab Sample ID: LCS 280-570543/2-A
Matrix: Solid
Analysis Batch: 570786

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 570543

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,3,5-Trinitrobenzene			0.400	0.382		mg/Kg		96	69 - 115		
1,3-Dinitrobenzene			0.400	0.370		mg/Kg		92	83 - 122		
2,4,6-Trinitrotoluene			0.400	0.405		mg/Kg		101	65 - 133		
2,4-Dinitrotoluene			0.400	0.355		mg/Kg		89	82 - 119		
2,6-Dinitrotoluene			0.400	0.380		mg/Kg		95	86 - 113		
2-Amino-4,6-dinitrotoluene			0.400	0.368		mg/Kg		92	75 - 130		
4-Amino-2,6-dinitrotoluene			0.400	0.369		mg/Kg		92	77 - 125		
HMX			0.400	0.355		mg/Kg		89	65 - 114		
m-Nitrotoluene			0.400	0.362		mg/Kg		91	68 - 125		
Nitrobenzene			0.400	0.372		mg/Kg		93	75 - 120		
Nitroglycerin			0.400	0.375		mg/Kg		94	27 - 146		
o-Nitrotoluene			0.400	0.373		mg/Kg		93	72 - 125		
PETN			0.400	0.414		mg/Kg		103	62 - 143		
p-Nitrotoluene			0.400	0.369		mg/Kg		92	72 - 127		
RDX			0.400	0.340		mg/Kg		85	77 - 123		
Tetryl			0.400	0.597	Q	mg/Kg		149	36 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*99*		*68 - 140*

Lab Sample ID: LCSD 280-570543/3-A
Matrix: Solid
Analysis Batch: 570786

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 570543

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene			0.400	0.365		mg/Kg		91	69 - 115	4	20
1,3-Dinitrobenzene			0.400	0.345		mg/Kg		86	83 - 122	7	20
2,4,6-Trinitrotoluene			0.400	0.387		mg/Kg		97	65 - 133	5	20
2,4-Dinitrotoluene			0.400	0.344		mg/Kg		86	82 - 119	3	20
2,6-Dinitrotoluene			0.400	0.306	Q	mg/Kg		77	86 - 113	22	20
2-Amino-4,6-dinitrotoluene			0.400	0.301		mg/Kg		75	75 - 130	20	20
4-Amino-2,6-dinitrotoluene			0.400	0.285	Q	mg/Kg		71	77 - 125	26	20
HMX			0.400	0.347		mg/Kg		87	65 - 114	2	20
m-Nitrotoluene			0.400	0.360		mg/Kg		90	68 - 125	1	20
Nitrobenzene			0.400	0.362		mg/Kg		90	75 - 120	3	20
Nitroglycerin			0.400	0.380		mg/Kg		95	27 - 146	1	20
o-Nitrotoluene			0.400	0.362		mg/Kg		91	72 - 125	3	20
PETN			0.400	0.448		mg/Kg		112	62 - 143	8	20
p-Nitrotoluene			0.400	0.368		mg/Kg		92	72 - 127	0	20
RDX			0.400	0.360		mg/Kg		90	77 - 123	6	20
Tetryl			0.400	0.549	Q	mg/Kg		137	36 - 120	8	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: 280-160187-1

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Lab Sample ID: LCSSRM 280-570100/2-B
Matrix: Solid
Analysis Batch: 570786

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 570543

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
1,3,5-Trinitrobenzene	0.600	0.547		mg/Kg		91	58 - 116
1,3-Dinitrobenzene	0.600	0.529		mg/Kg		88	69 - 116
2,4,6-Trinitrotoluene	0.600	0.428		mg/Kg		71	69 - 120
2,4-Dinitrotoluene	0.600	0.494		mg/Kg		82	69 - 137
2,6-Dinitrotoluene	0.600	0.541		mg/Kg		90	60 - 121
2-Amino-4,6-dinitrotoluene	0.600	0.474		mg/Kg		79	56 - 108
4-Amino-2,6-dinitrotoluene	0.600	0.413		mg/Kg		69	46 - 98
HMX	0.600	0.545		mg/Kg		91	59 - 131
m-Nitrotoluene	0.600	0.542		mg/Kg		90	69 - 124
Nitrobenzene	0.600	0.521		mg/Kg		87	58 - 119
Nitroglycerin	0.600	0.540		mg/Kg		90	60 - 115
o-Nitrotoluene	0.600	0.525		mg/Kg		88	67 - 117
PETN	0.600	0.490		mg/Kg		82	60 - 115
p-Nitrotoluene	0.600	0.522		mg/Kg		87	51 - 143
RDX	0.600	0.473		mg/Kg		79	62 - 123
Tetryl	0.600	0.333		mg/Kg		56	36 - 120

Surrogate	*LCSSRM %Recovery*	*LCSSRM Qualifier*	*Limits*
Nitrobenzene-d5	*93*		*68 - 140*

Lab Sample ID: 280-160187-26 MS
Matrix: Solid
Analysis Batch: 570786

Client Sample ID: 29SB201(11-12)
Prep Type: Total/NA
Prep Batch: 570543

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,3,5-Trinitrobenzene	0.047	U	0.387	0.370		mg/Kg		96	69 - 115
1,3-Dinitrobenzene	0.047	U	0.387	0.375		mg/Kg		97	83 - 122
2,4,6-Trinitrotoluene	0.047	U	0.387	0.396		mg/Kg		102	65 - 133
2,4-Dinitrotoluene	0.047	U	0.387	0.337		mg/Kg		87	82 - 119
2,6-Dinitrotoluene	0.047	U Q	0.387	0.358		mg/Kg		92	86 - 113
2-Amino-4,6-dinitrotoluene	0.047	U	0.387	0.354		mg/Kg		91	75 - 130
4-Amino-2,6-dinitrotoluene	0.047	U Q	0.387	0.341		mg/Kg		88	77 - 125
HMX	0.047	U M	0.387	0.338		mg/Kg		87	65 - 114
m-Nitrotoluene	0.047	U	0.387	0.345		mg/Kg		89	68 - 125
Nitrobenzene	0.047	U	0.387	0.360		mg/Kg		93	75 - 120
Nitroglycerin	0.047	U	0.387	0.375		mg/Kg		97	27 - 146
o-Nitrotoluene	0.047	U	0.387	0.348		mg/Kg		90	72 - 125
PETN	0.047	U	0.387	0.392		mg/Kg		101	62 - 143
p-Nitrotoluene	0.047	U	0.387	0.348		mg/Kg		90	72 - 127
RDX	0.047	U	0.387	0.347		mg/Kg		90	77 - 123
Tetryl	0.047	U Q J1	0.387	0.581	J1	mg/Kg		150	36 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5	*99*		*68 - 140*

QC Sample Results

Client: HDR Inc
Project/Site: Longhorn AAP, TX (March 2022)

Job ID: 280-160187-1

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Lab Sample ID: 280-160187-26 MSD
Matrix: Solid
Analysis Batch: 570786

Client Sample ID: 29SB201(11-12)
Prep Type: Total/NA
Prep Batch: 570543

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	0.392	0.368		mg/Kg		94	69 - 115	1	20
1,3-Dinitrobenzene	0.047	U	0.392	0.366		mg/Kg		93	83 - 122	3	20
2,4,6-Trinitrotoluene	0.047	U	0.392	0.382		mg/Kg		98	65 - 133	4	20
2,4-Dinitrotoluene	0.047	U	0.392	0.351		mg/Kg		90	82 - 119	4	20
2,6-Dinitrotoluene	0.047	U Q	0.392	0.373		mg/Kg		95	86 - 113	4	20
2-Amino-4,6-dinitrotoluene	0.047	U	0.392	0.360		mg/Kg		92	75 - 130	2	20
4-Amino-2,6-dinitrotoluene	0.047	U Q	0.392	0.355		mg/Kg		91	77 - 125	4	20
HMX	0.047	U M	0.392	0.348		mg/Kg		89	65 - 114	3	20
m-Nitrotoluene	0.047	U	0.392	0.356		mg/Kg		91	68 - 125	3	20
Nitrobenzene	0.047	U	0.392	0.352		mg/Kg		90	75 - 120	2	20
Nitroglycerin	0.047	U	0.392	0.391		mg/Kg		100	27 - 146	4	20
o-Nitrotoluene	0.047	U	0.392	0.368		mg/Kg		94	72 - 125	5	20
PETN	0.047	U	0.392	0.460		mg/Kg		118	62 - 143	16	20
p-Nitrotoluene	0.047	U	0.392	0.368		mg/Kg		94	72 - 127	6	20
RDX	0.047	U	0.392	0.333		mg/Kg		85	77 - 123	4	20
Tetryl	0.047	U Q J1	0.392	0.554	J1	mg/Kg		141	36 - 120	5	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5	*94*		*68 - 140*

Lab Sample ID: 280-160187-26 DU
Matrix: Solid
Analysis Batch: 570786

Client Sample ID: 29SB201(11-12)
Prep Type: Total/NA
Prep Batch: 570543

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD 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		0.048	U	mg/Kg				NC	20
2,4-Dinitrotoluene	0.047	U		0.048	U	mg/Kg				NC	20
2,6-Dinitrotoluene	0.047	U Q		0.048	U Q	mg/Kg				NC	20
2-Amino-4,6-dinitrotoluene	0.047	U		0.048	U	mg/Kg				NC	20
4-Amino-2,6-dinitrotoluene	0.047	U Q		0.048	U Q	mg/Kg				NC	20
HMX	0.047	U M		0.048	U	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		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		0.048	U	mg/Kg				NC	20
Tetryl	0.047	U Q J1		0.048	U Q	mg/Kg				NC	20

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
Nitrobenzene-d5	*90*		*68 - 140*

QC Sample Results

Client: HDR Inc
Project/Site: Longhorn AAP, TX (March 2022)

Job ID: 280-160187-1

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Lab Sample ID: 280-160187-26 TRL
Matrix: Solid
Analysis Batch: 570786

Client Sample ID: 29SB201(11-12)
Prep Type: Total/NA
Prep Batch: 570543

Analyte	Sample Result	Sample Qualifier		TRL Result	TRL Qualifier	Unit	D			RSD	RSD 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		0.049	U	mg/Kg				NC	20
2,4-Dinitrotoluene	0.047	U		0.049	U	mg/Kg				NC	20
2,6-Dinitrotoluene	0.047	U Q		0.049	U Q	mg/Kg				NC	20
2-Amino-4,6-dinitrotoluene	0.047	U		0.049	U	mg/Kg				NC	20
4-Amino-2,6-dinitrotoluene	0.047	U Q		0.049	U Q	mg/Kg				NC	20
HMX	0.047	U M		0.049	U M	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	*TRL %Recovery*	*TRL Qualifier*	*Limits*
Nitrobenzene-d5	*93*		*68 - 140*

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: 280-160187-1

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: 280-160187-1

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: 280-160187-1

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Lab Sample ID: 280-160187-43 MS
Matrix: Solid
Analysis Batch: 571108

Client Sample ID: 29SB197 (3-4)
Prep Type: Total/NA
Prep Batch: 570718

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,3,5-Trinitrobenzene	0.047	U	0.372	0.333		mg/Kg		90	69 - 115
1,3-Dinitrobenzene	0.047	U	0.372	0.340		mg/Kg		92	83 - 122
2,4,6-Trinitrotoluene	0.047	U Q	0.372	0.365		mg/Kg		98	65 - 133
2,4-Dinitrotoluene	0.047	U	0.372	0.347		mg/Kg		93	82 - 119
2,6-Dinitrotoluene	0.047	U	0.372	0.354		mg/Kg		95	86 - 113
2-Amino-4,6-dinitrotoluene	0.047	U	0.372	0.364		mg/Kg		98	75 - 130
4-Amino-2,6-dinitrotoluene	0.047	U	0.372	0.340		mg/Kg		91	77 - 125
HMX	0.047	U M	0.372	0.339		mg/Kg		91	65 - 114
m-Nitrotoluene	0.047	U	0.372	0.343		mg/Kg		92	68 - 125
Nitrobenzene	0.047	U	0.372	0.324		mg/Kg		87	75 - 120
Nitroglycerin	0.047	U	0.372	0.363		mg/Kg		98	27 - 146
o-Nitrotoluene	0.047	U	0.372	0.368		mg/Kg		99	72 - 125
PETN	0.047	U	0.372	0.408		mg/Kg		110	62 - 143
p-Nitrotoluene	0.047	U	0.372	0.355		mg/Kg		95	72 - 127
RDX	0.047	U	0.372	0.345		mg/Kg		93	77 - 123
Tetryl	0.047	U Q J1	0.372	0.513	J1	mg/Kg		138	36 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5	*96*		*68 - 140*

Lab Sample ID: 280-160187-43 MSD
Matrix: Solid
Analysis Batch: 571108

Client Sample ID: 29SB197 (3-4)
Prep Type: Total/NA
Prep Batch: 570718

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	0.396	0.351		mg/Kg		89	69 - 115	5	20
1,3-Dinitrobenzene	0.047	U	0.396	0.340		mg/Kg		86	83 - 122	0	20
2,4,6-Trinitrotoluene	0.047	U Q	0.396	0.371		mg/Kg		94	65 - 133	2	20
2,4-Dinitrotoluene	0.047	U	0.396	0.354		mg/Kg		90	82 - 119	2	20
2,6-Dinitrotoluene	0.047	U	0.396	0.360		mg/Kg		91	86 - 113	2	20
2-Amino-4,6-dinitrotoluene	0.047	U	0.396	0.336		mg/Kg		85	75 - 130	8	20
4-Amino-2,6-dinitrotoluene	0.047	U	0.396	0.332		mg/Kg		84	77 - 125	2	20
HMX	0.047	U M	0.396	0.371		mg/Kg		94	65 - 114	9	20
m-Nitrotoluene	0.047	U	0.396	0.376		mg/Kg		95	68 - 125	9	20
Nitrobenzene	0.047	U	0.396	0.341		mg/Kg		86	75 - 120	5	20
Nitroglycerin	0.047	U	0.396	0.370		mg/Kg		94	27 - 146	2	20
o-Nitrotoluene	0.047	U	0.396	0.360		mg/Kg		91	72 - 125	2	20
PETN	0.047	U	0.396	0.405		mg/Kg		102	62 - 143	1	20
p-Nitrotoluene	0.047	U	0.396	0.366		mg/Kg		93	72 - 127	3	20
RDX	0.047	U	0.396	0.406		mg/Kg		103	77 - 123	16	20
Tetryl	0.047	U Q J1	0.396	0.539	J1	mg/Kg		136	36 - 120	5	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5	*88*		*68 - 140*

QC Sample Results

Client: HDR Inc
Project/Site: Longhorn AAP, TX (March 2022)

Job ID: 280-160187-1

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Lab Sample ID: 280-160187-43 DU
Matrix: Solid
Analysis Batch: 571108

Client Sample ID: 29SB197 (3-4)
Prep Type: Total/NA
Prep Batch: 570718

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD 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 Q	mg/Kg				NC	20
2,4-Dinitrotoluene	0.047	U		0.048	U	mg/Kg				NC	20
2,6-Dinitrotoluene	0.047	U		0.048	U	mg/Kg				NC	20
2-Amino-4,6-dinitrotoluene	0.047	U		0.048	U	mg/Kg				NC	20
4-Amino-2,6-dinitrotoluene	0.047	U		0.048	U	mg/Kg				NC	20
HMX	0.047	U M		0.048	U	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		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		0.048	U M	mg/Kg				NC	20
Tetryl	0.047	U Q J1		0.048	U Q	mg/Kg				NC	20

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
Nitrobenzene-d5	*98*		*68 - 140*

Lab Sample ID: 280-160187-43 TRL
Matrix: Solid
Analysis Batch: 571108

Client Sample ID: 29SB197 (3-4)
Prep Type: Total/NA
Prep Batch: 570718

Analyte	Sample Result	Sample Qualifier		TRL Result	TRL Qualifier	Unit	D			RSD	RSD Limit
1,3,5-Trinitrobenzene	0.047	U		0.050	U	mg/Kg				NC	20
1,3-Dinitrobenzene	0.047	U		0.050	U	mg/Kg				NC	20
2,4,6-Trinitrotoluene	0.047	U Q		0.050	U	mg/Kg				NC	20
2,4-Dinitrotoluene	0.047	U		0.050	U	mg/Kg				NC	20
2,6-Dinitrotoluene	0.047	U		0.050	U	mg/Kg				NC	20
2-Amino-4,6-dinitrotoluene	0.047	U		0.050	U	mg/Kg				NC	20
4-Amino-2,6-dinitrotoluene	0.047	U		0.050	U	mg/Kg				NC	20
HMX	0.047	U M		0.050	U M	mg/Kg				NC	20
m-Nitrotoluene	0.047	U		0.050	U	mg/Kg				NC	20
Nitrobenzene	0.047	U		0.050	U	mg/Kg				NC	20
Nitroglycerin	0.047	U		0.050	U	mg/Kg				NC	20
o-Nitrotoluene	0.047	U		0.050	U	mg/Kg				NC	20
PETN	0.047	U		0.050	U	mg/Kg				NC	20
p-Nitrotoluene	0.047	U		0.050	U	mg/Kg				NC	20
RDX	0.047	U		0.050	U	mg/Kg				NC	20
Tetryl	0.047	U Q J1		0.050	U Q	mg/Kg				NC	20

Surrogate	*TRL %Recovery*	*TRL Qualifier*	*Limits*
Nitrobenzene-d5	*92*		*68 - 140*

QC Association Summary

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

LCMS

Prep Batch: 570053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-160187-28	EB-1	Total/NA	Water	3535	
280-160187-47	EB-02	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: 570095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-160187-1	29SB183 (1-2)	Total/NA	Solid	Dry and Grind	
280-160187-2	29SB183 (3-4)	Total/NA	Solid	Dry and Grind	
280-160187-3	DUP-01	Total/NA	Solid	Dry and Grind	
280-160187-4	29SB185 (3-4)	Total/NA	Solid	Dry and Grind	
280-160187-5	29SB185 (7-8)	Total/NA	Solid	Dry and Grind	
280-160187-6	29SB185 (11-12)	Total/NA	Solid	Dry and Grind	
280-160187-7	29SB185 (13.5-14)	Total/NA	Solid	Dry and Grind	
280-160187-8	29SB186 (9-10)	Total/NA	Solid	Dry and Grind	
280-160187-9	29SB186 (11-12)	Total/NA	Solid	Dry and Grind	
280-160187-10	29SB186 (13.5-14)	Total/NA	Solid	Dry and Grind	
280-160187-11	29SB184 (3-4)	Total/NA	Solid	Dry and Grind	
280-160187-12	29SB184 (7-8)	Total/NA	Solid	Dry and Grind	
280-160187-13	29SB184 (11-12)	Total/NA	Solid	Dry and Grind	
280-160187-14	29SB184 (13.5-14)	Total/NA	Solid	Dry and Grind	
280-160187-15	DUP-02	Total/NA	Solid	Dry and Grind	
280-160187-16	29SB199 (3-4)	Total/NA	Solid	Dry and Grind	
280-160187-17	29SB199 (7-8)	Total/NA	Solid	Dry and Grind	
280-160187-18	29SB198 (3-4)	Total/NA	Solid	Dry and Grind	
280-160187-19	29SB198 (7-8)	Total/NA	Solid	Dry and Grind	
280-160187-20	29SB202 (3-4)	Total/NA	Solid	Dry and Grind	
GB 280-570095/1-B	Method Blank	Total/NA	Solid	Dry and Grind	
LCSSRM 280-570095/2-B	Lab Control Sample	Total/NA	Solid	Dry and Grind	
280-160187-2 MS	29SB183 (3-4)	Total/NA	Solid	Dry and Grind	
280-160187-2 MSD	29SB183 (3-4)	Total/NA	Solid	Dry and Grind	
280-160187-2 DU	29SB183 (3-4)	Total/NA	Solid	Dry and Grind	
280-160187-2 TRL	29SB183 (3-4)	Total/NA	Solid	Dry and Grind	

Leach Batch: 570100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-160187-21	29SB202 (11-12)	Total/NA	Solid	Dry and Grind	
280-160187-22	29SB202 (15-15.5)	Total/NA	Solid	Dry and Grind	
280-160187-23	29SB200 (15-15.5)	Total/NA	Solid	Dry and Grind	
280-160187-24	DUP-03	Total/NA	Solid	Dry and Grind	
280-160187-25	29SB201(3-4)	Total/NA	Solid	Dry and Grind	
280-160187-26	29SB201(11-12)	Total/NA	Solid	Dry and Grind	
280-160187-27	29SB201(15-15.5)	Total/NA	Solid	Dry and Grind	
280-160187-29	29SB187 (0-2)	Total/NA	Solid	Dry and Grind	
280-160187-30	29SB187 (5-7)	Total/NA	Solid	Dry and Grind	
280-160187-31	29SB187 (10-0.5)	Total/NA	Solid	Dry and Grind	
280-160187-32	29SB189 (0-2)	Total/NA	Solid	Dry and Grind	
280-160187-33	29SB189 (5-7)	Total/NA	Solid	Dry and Grind	
280-160187-34	29SB189 (10-10.5)	Total/NA	Solid	Dry and Grind	
280-160187-35	29SB188 (7-9)	Total/NA	Solid	Dry and Grind	

QC Association Summary

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

LCMS (Continued)

Leach Batch: 570100 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-160187-36	29SB188 (10-10.5)	Total/NA	Solid	Dry and Grind	
280-160187-37	29SB195 (7-8)	Total/NA	Solid	Dry and Grind	
280-160187-38	29SB195 (9.5-10)	Total/NA	Solid	Dry and Grind	
280-160187-39	29SB194 (7-8)	Total/NA	Solid	Dry and Grind	
280-160187-40	29SB194 (9.5-10)	Total/NA	Solid	Dry and Grind	
280-160187-41	DUP-04	Total/NA	Solid	Dry and Grind	
GB 280-570100/1-B	Method Blank	Total/NA	Solid	Dry and Grind	
LCSSRM 280-570100/2-B	Lab Control Sample	Total/NA	Solid	Dry and Grind	
280-160187-26 MS	29SB201(11-12)	Total/NA	Solid	Dry and Grind	
280-160187-26 MSD	29SB201(11-12)	Total/NA	Solid	Dry and Grind	
280-160187-26 DU	29SB201(11-12)	Total/NA	Solid	Dry and Grind	
280-160187-26 TRL	29SB201(11-12)	Total/NA	Solid	Dry and Grind	

Leach Batch: 570105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-160187-42	29SB191 (9.5-10)	Total/NA	Solid	Dry and Grind	
280-160187-43	29SB197 (3-4)	Total/NA	Solid	Dry and Grind	
280-160187-44	29SB197 (7-7.5)	Total/NA	Solid	Dry and Grind	
280-160187-45	29SB196 (3-4)	Total/NA	Solid	Dry and Grind	
280-160187-46	29SB196 (7-7.5)	Total/NA	Solid	Dry and Grind	
280-160187-48	29SB172 (3-4)	Total/NA	Solid	Dry and Grind	
280-160187-49	29SB172 (6-7)	Total/NA	Solid	Dry and Grind	
280-160187-50	29SB172 (11-12)	Total/NA	Solid	Dry and Grind	
280-160187-51	29SB172 (14.5-15)	Total/NA	Solid	Dry and Grind	
280-160187-52	29SB180 (14.5-15)	Total/NA	Solid	Dry and Grind	
280-160187-53	29SB173 (3-4)	Total/NA	Solid	Dry and Grind	
280-160187-54	29SB173 (6-7)	Total/NA	Solid	Dry and Grind	
280-160187-55	29SB173 (11-12)	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	
280-160187-43 MS	29SB197 (3-4)	Total/NA	Solid	Dry and Grind	
280-160187-43 MSD	29SB197 (3-4)	Total/NA	Solid	Dry and Grind	
280-160187-43 DU	29SB197 (3-4)	Total/NA	Solid	Dry and Grind	
280-160187-43 TRL	29SB197 (3-4)	Total/NA	Solid	Dry and Grind	

Prep Batch: 570516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-160187-1	29SB183 (1-2)	Total/NA	Solid	8330B	570095
280-160187-2	29SB183 (3-4)	Total/NA	Solid	8330B	570095
280-160187-3	DUP-01	Total/NA	Solid	8330B	570095
280-160187-4	29SB185 (3-4)	Total/NA	Solid	8330B	570095
280-160187-5	29SB185 (7-8)	Total/NA	Solid	8330B	570095
280-160187-6	29SB185 (11-12)	Total/NA	Solid	8330B	570095
280-160187-7	29SB185 (13.5-14)	Total/NA	Solid	8330B	570095
280-160187-8	29SB186 (9-10)	Total/NA	Solid	8330B	570095
280-160187-9	29SB186 (11-12)	Total/NA	Solid	8330B	570095
280-160187-10	29SB186 (13.5-14)	Total/NA	Solid	8330B	570095
280-160187-11	29SB184 (3-4)	Total/NA	Solid	8330B	570095
280-160187-12	29SB184 (7-8)	Total/NA	Solid	8330B	570095
280-160187-13	29SB184 (11-12)	Total/NA	Solid	8330B	570095
280-160187-14	29SB184 (13.5-14)	Total/NA	Solid	8330B	570095

QC Association Summary

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

LCMS (Continued)

Prep Batch: 570516 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-160187-15	DUP-02	Total/NA	Solid	8330B	570095
280-160187-16	29SB199 (3-4)	Total/NA	Solid	8330B	570095
280-160187-17	29SB199 (7-8)	Total/NA	Solid	8330B	570095
280-160187-18	29SB198 (3-4)	Total/NA	Solid	8330B	570095
280-160187-19	29SB198 (7-8)	Total/NA	Solid	8330B	570095
280-160187-20	29SB202 (3-4)	Total/NA	Solid	8330B	570095
GB 280-570095/1-B	Method Blank	Total/NA	Solid	8330B	570095
MB 280-570516/1-A	Method Blank	Total/NA	Solid	8330B	
LCS 280-570516/2-A	Lab Control Sample	Total/NA	Solid	8330B	
LCSD 280-570516/3-A	Lab Control Sample Dup	Total/NA	Solid	8330B	
LCSSRM 280-570095/2-B	Lab Control Sample	Total/NA	Solid	8330B	570095
280-160187-2 MS	29SB183 (3-4)	Total/NA	Solid	8330B	570095
280-160187-2 MSD	29SB183 (3-4)	Total/NA	Solid	8330B	570095
280-160187-2 DU	29SB183 (3-4)	Total/NA	Solid	8330B	570095
280-160187-2 TRL	29SB183 (3-4)	Total/NA	Solid	8330B	570095

Prep Batch: 570543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-160187-21	29SB202 (11-12)	Total/NA	Solid	8330B	570100
280-160187-22	29SB202 (15-15.5)	Total/NA	Solid	8330B	570100
280-160187-23	29SB200 (15-15.5)	Total/NA	Solid	8330B	570100
280-160187-24	DUP-03	Total/NA	Solid	8330B	570100
280-160187-25	29SB201(3-4)	Total/NA	Solid	8330B	570100
280-160187-26	29SB201(11-12)	Total/NA	Solid	8330B	570100
280-160187-27	29SB201(15-15.5)	Total/NA	Solid	8330B	570100
280-160187-29	29SB187 (0-2)	Total/NA	Solid	8330B	570100
280-160187-30	29SB187 (5-7)	Total/NA	Solid	8330B	570100
280-160187-31	29SB187 (10-0.5)	Total/NA	Solid	8330B	570100
280-160187-32	29SB189 (0-2)	Total/NA	Solid	8330B	570100
280-160187-33	29SB189 (5-7)	Total/NA	Solid	8330B	570100
280-160187-34	29SB189 (10-10.5)	Total/NA	Solid	8330B	570100
280-160187-35	29SB188 (7-9)	Total/NA	Solid	8330B	570100
280-160187-36	29SB188 (10-10.5)	Total/NA	Solid	8330B	570100
280-160187-37	29SB195 (7-8)	Total/NA	Solid	8330B	570100
280-160187-38	29SB195 (9.5-10)	Total/NA	Solid	8330B	570100
280-160187-39	29SB194 (7-8)	Total/NA	Solid	8330B	570100
280-160187-40	29SB194 (9.5-10)	Total/NA	Solid	8330B	570100
280-160187-41	DUP-04	Total/NA	Solid	8330B	570100
GB 280-570100/1-B	Method Blank	Total/NA	Solid	8330B	570100
MB 280-570543/1-A	Method Blank	Total/NA	Solid	8330B	
LCS 280-570543/2-A	Lab Control Sample	Total/NA	Solid	8330B	
LCSD 280-570543/3-A	Lab Control Sample Dup	Total/NA	Solid	8330B	
LCSSRM 280-570100/2-B	Lab Control Sample	Total/NA	Solid	8330B	570100
280-160187-26 MS	29SB201(11-12)	Total/NA	Solid	8330B	570100
280-160187-26 MSD	29SB201(11-12)	Total/NA	Solid	8330B	570100
280-160187-26 DU	29SB201(11-12)	Total/NA	Solid	8330B	570100
280-160187-26 TRL	29SB201(11-12)	Total/NA	Solid	8330B	570100

Prep Batch: 570718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-160187-42	29SB191 (9.5-10)	Total/NA	Solid	8330B	570105

QC Association Summary

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

LCMS (Continued)

Prep Batch: 570718 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-160187-43	29SB197 (3-4)	Total/NA	Solid	8330B	570105
280-160187-44	29SB197 (7-7.5)	Total/NA	Solid	8330B	570105
280-160187-45	29SB196 (3-4)	Total/NA	Solid	8330B	570105
280-160187-46	29SB196 (7-7.5)	Total/NA	Solid	8330B	570105
280-160187-48	29SB172 (3-4)	Total/NA	Solid	8330B	570105
280-160187-49	29SB172 (6-7)	Total/NA	Solid	8330B	570105
280-160187-50	29SB172 (11-12)	Total/NA	Solid	8330B	570105
280-160187-51	29SB172 (14.5-15)	Total/NA	Solid	8330B	570105
280-160187-52	29SB180 (14.5-15)	Total/NA	Solid	8330B	570105
280-160187-53	29SB173 (3-4)	Total/NA	Solid	8330B	570105
280-160187-54	29SB173 (6-7)	Total/NA	Solid	8330B	570105
280-160187-55	29SB173 (11-12)	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
280-160187-43 MS	29SB197 (3-4)	Total/NA	Solid	8330B	570105
280-160187-43 MSD	29SB197 (3-4)	Total/NA	Solid	8330B	570105
280-160187-43 DU	29SB197 (3-4)	Total/NA	Solid	8330B	570105
280-160187-43 TRL	29SB197 (3-4)	Total/NA	Solid	8330B	570105

Analysis Batch: 570784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-160187-28	EB-1	Total/NA	Water	8321A	570053
280-160187-47	EB-02	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

Analysis Batch: 570785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-160187-1	29SB183 (1-2)	Total/NA	Solid	8321A	570516
280-160187-2	29SB183 (3-4)	Total/NA	Solid	8321A	570516
280-160187-3	DUP-01	Total/NA	Solid	8321A	570516
280-160187-4	29SB185 (3-4)	Total/NA	Solid	8321A	570516
280-160187-5	29SB185 (7-8)	Total/NA	Solid	8321A	570516
280-160187-6	29SB185 (11-12)	Total/NA	Solid	8321A	570516
280-160187-7	29SB185 (13.5-14)	Total/NA	Solid	8321A	570516
280-160187-8	29SB186 (9-10)	Total/NA	Solid	8321A	570516
280-160187-9	29SB186 (11-12)	Total/NA	Solid	8321A	570516
280-160187-10	29SB186 (13.5-14)	Total/NA	Solid	8321A	570516
280-160187-11	29SB184 (3-4)	Total/NA	Solid	8321A	570516
280-160187-12	29SB184 (7-8)	Total/NA	Solid	8321A	570516
280-160187-13	29SB184 (11-12)	Total/NA	Solid	8321A	570516
280-160187-14	29SB184 (13.5-14)	Total/NA	Solid	8321A	570516
280-160187-15	DUP-02	Total/NA	Solid	8321A	570516
280-160187-16	29SB199 (3-4)	Total/NA	Solid	8321A	570516
280-160187-17	29SB199 (7-8)	Total/NA	Solid	8321A	570516
280-160187-18	29SB198 (3-4)	Total/NA	Solid	8321A	570516
280-160187-19	29SB198 (7-8)	Total/NA	Solid	8321A	570516

QC Association Summary

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

LCMS (Continued)

Analysis Batch: 570785 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-160187-20	29SB202 (3-4)	Total/NA	Solid	8321A	570516
GB 280-570095/1-B	Method Blank	Total/NA	Solid	8321A	570516
MB 280-570516/1-A	Method Blank	Total/NA	Solid	8321A	570516
LCS 280-570516/2-A	Lab Control Sample	Total/NA	Solid	8321A	570516
LCSD 280-570516/3-A	Lab Control Sample Dup	Total/NA	Solid	8321A	570516
LCSSRM 280-570095/2-B	Lab Control Sample	Total/NA	Solid	8321A	570516
280-160187-2 MS	29SB183 (3-4)	Total/NA	Solid	8321A	570516
280-160187-2 MSD	29SB183 (3-4)	Total/NA	Solid	8321A	570516
280-160187-2 DU	29SB183 (3-4)	Total/NA	Solid	8321A	570516
280-160187-2 TRL	29SB183 (3-4)	Total/NA	Solid	8321A	570516

Analysis Batch: 570786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-160187-21	29SB202 (11-12)	Total/NA	Solid	8321A	570543
280-160187-22	29SB202 (15-15.5)	Total/NA	Solid	8321A	570543
280-160187-23	29SB200 (15-15.5)	Total/NA	Solid	8321A	570543
280-160187-24	DUP-03	Total/NA	Solid	8321A	570543
280-160187-25	29SB201(3-4)	Total/NA	Solid	8321A	570543
280-160187-26	29SB201(11-12)	Total/NA	Solid	8321A	570543
280-160187-27	29SB201(15-15.5)	Total/NA	Solid	8321A	570543
280-160187-29	29SB187 (0-2)	Total/NA	Solid	8321A	570543
280-160187-30	29SB187 (5-7)	Total/NA	Solid	8321A	570543
280-160187-31	29SB187 (10-0.5)	Total/NA	Solid	8321A	570543
280-160187-32	29SB189 (0-2)	Total/NA	Solid	8321A	570543
280-160187-33	29SB189 (5-7)	Total/NA	Solid	8321A	570543
280-160187-34	29SB189 (10-10.5)	Total/NA	Solid	8321A	570543
280-160187-35	29SB188 (7-9)	Total/NA	Solid	8321A	570543
280-160187-36	29SB188 (10-10.5)	Total/NA	Solid	8321A	570543
280-160187-37	29SB195 (7-8)	Total/NA	Solid	8321A	570543
280-160187-38	29SB195 (9.5-10)	Total/NA	Solid	8321A	570543
280-160187-39	29SB194 (7-8)	Total/NA	Solid	8321A	570543
280-160187-40	29SB194 (9.5-10)	Total/NA	Solid	8321A	570543
280-160187-41	DUP-04	Total/NA	Solid	8321A	570543
GB 280-570100/1-B	Method Blank	Total/NA	Solid	8321A	570543
MB 280-570543/1-A	Method Blank	Total/NA	Solid	8321A	570543
LCS 280-570543/2-A	Lab Control Sample	Total/NA	Solid	8321A	570543
LCSD 280-570543/3-A	Lab Control Sample Dup	Total/NA	Solid	8321A	570543
LCSSRM 280-570100/2-B	Lab Control Sample	Total/NA	Solid	8321A	570543
280-160187-26 MS	29SB201(11-12)	Total/NA	Solid	8321A	570543
280-160187-26 MSD	29SB201(11-12)	Total/NA	Solid	8321A	570543
280-160187-26 DU	29SB201(11-12)	Total/NA	Solid	8321A	570543
280-160187-26 TRL	29SB201(11-12)	Total/NA	Solid	8321A	570543

Analysis Batch: 571108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-160187-42	29SB191 (9.5-10)	Total/NA	Solid	8321A	570718
280-160187-43	29SB197 (3-4)	Total/NA	Solid	8321A	570718
280-160187-44	29SB197 (7-7.5)	Total/NA	Solid	8321A	570718
280-160187-45	29SB196 (3-4)	Total/NA	Solid	8321A	570718
280-160187-46	29SB196 (7-7.5)	Total/NA	Solid	8321A	570718
280-160187-48	29SB172 (3-4)	Total/NA	Solid	8321A	570718

QC Association Summary

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

LCMS (Continued)

Analysis Batch: 571108 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-160187-49	29SB172 (6-7)	Total/NA	Solid	8321A	570718
280-160187-50	29SB172 (11-12)	Total/NA	Solid	8321A	570718
280-160187-51	29SB172 (14.5-15)	Total/NA	Solid	8321A	570718
280-160187-52	29SB180 (14.5-15)	Total/NA	Solid	8321A	570718
280-160187-53	29SB173 (3-4)	Total/NA	Solid	8321A	570718
280-160187-54	29SB173 (6-7)	Total/NA	Solid	8321A	570718
280-160187-55	29SB173 (11-12)	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
280-160187-43 MS	29SB197 (3-4)	Total/NA	Solid	8321A	570718
280-160187-43 MSD	29SB197 (3-4)	Total/NA	Solid	8321A	570718
280-160187-43 DU	29SB197 (3-4)	Total/NA	Solid	8321A	570718
280-160187-43 TRL	29SB197 (3-4)	Total/NA	Solid	8321A	570718

Lab Chronicle

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB183 (1-2)
Lab Sample ID: 280-160187-1
Date Collected: 03/22/22 12:20
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	570095	03/29/22 12:24	EKB	TAL DEN
Total/NA	Prep	8330B			10.17 g	40 mL	570516	04/01/22 16:56	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570785	04/05/22 12:34	AGCM	TAL DEN

Client Sample ID: 29SB183 (3-4)
Lab Sample ID: 280-160187-2
Date Collected: 03/22/22 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	570095	03/29/22 12:24	EKB	TAL DEN
Total/NA	Prep	8330B			10.49 g	40 mL	570516	04/01/22 16:56	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570785	04/05/22 12:41	AGCM	TAL DEN

Client Sample ID: DUP-01
Lab Sample ID: 280-160187-3
Date Collected: 03/22/22 13:40
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	570095	03/29/22 12:24	EKB	TAL DEN
Total/NA	Prep	8330B			10.21 g	40 mL	570516	04/01/22 16:56	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570785	04/05/22 13:19	AGCM	TAL DEN

Client Sample ID: 29SB185 (3-4)
Lab Sample ID: 280-160187-4
Date Collected: 03/22/22 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	570095	03/29/22 12:24	EKB	TAL DEN
Total/NA	Prep	8330B			10.38 g	40 mL	570516	04/01/22 16:56	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570785	04/05/22 13:26	AGCM	TAL DEN

Client Sample ID: 29SB185 (7-8)
Lab Sample ID: 280-160187-5
Date Collected: 03/22/22 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	570095	03/29/22 12:24	EKB	TAL DEN
Total/NA	Prep	8330B			10.45 g	40 mL	570516	04/01/22 16:56	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570785	04/05/22 13:32	AGCM	TAL DEN

Lab Chronicle

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB185 (11-12)
Lab Sample ID: 280-160187-6
Date Collected: 03/22/22 12:55
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	570095	03/29/22 12:24	EKB	TAL DEN
Total/NA	Prep	8330B			10.51 g	40 mL	570516	04/01/22 16:56	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570785	04/05/22 13:38	AGCM	TAL DEN

Client Sample ID: 29SB185 (13.5-14)
Lab Sample ID: 280-160187-7
Date Collected: 03/22/22 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	570095	03/29/22 12:24	EKB	TAL DEN
Total/NA	Prep	8330B			10.17 g	40 mL	570516	04/01/22 16:56	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570785	04/05/22 13:45	AGCM	TAL DEN

Client Sample ID: 29SB186 (9-10)
Lab Sample ID: 280-160187-8
Date Collected: 03/22/22 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	570095	03/29/22 12:24	EKB	TAL DEN
Total/NA	Prep	8330B			10.62 g	40 mL	570516	04/01/22 16:56	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570785	04/05/22 13:51	AGCM	TAL DEN

Client Sample ID: 29SB186 (11-12)
Lab Sample ID: 280-160187-9
Date Collected: 03/22/22 13:18
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	570095	03/29/22 12:24	EKB	TAL DEN
Total/NA	Prep	8330B			10.28 g	40 mL	570516	04/01/22 16:56	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570785	04/05/22 13:58	AGCM	TAL DEN

Client Sample ID: 29SB186 (13.5-14)
Lab Sample ID: 280-160187-10
Date Collected: 03/22/22 13:20
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	570095	03/29/22 12:24	EKB	TAL DEN
Total/NA	Prep	8330B			10.68 g	40 mL	570516	04/01/22 16:56	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570785	04/05/22 14:04	AGCM	TAL DEN

Lab Chronicle

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB184 (3-4)
Lab Sample ID: 280-160187-11
Date Collected: 03/22/22 13:35
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	570095	03/29/22 12:24	EKB	TAL DEN
Total/NA	Prep	8330B			10.1 g	40 mL	570516	04/01/22 16:56	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570785	04/05/22 14:17	AGCM	TAL DEN

Client Sample ID: 29SB184 (7-8)
Lab Sample ID: 280-160187-12
Date Collected: 03/22/22 13:38
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	570095	03/29/22 12:24	EKB	TAL DEN
Total/NA	Prep	8330B			10.1 g	40 mL	570516	04/01/22 16:56	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570785	04/05/22 14:23	AGCM	TAL DEN

Client Sample ID: 29SB184 (11-12)
Lab Sample ID: 280-160187-13
Date Collected: 03/22/22 13:40
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	570095	03/29/22 12:24	EKB	TAL DEN
Total/NA	Prep	8330B			10.67 g	40 mL	570516	04/01/22 16:56	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570785	04/05/22 14:30	AGCM	TAL DEN

Client Sample ID: 29SB184 (13.5-14)
Lab Sample ID: 280-160187-14
Date Collected: 03/22/22 13:43
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	570095	03/29/22 12:24	EKB	TAL DEN
Total/NA	Prep	8330B			10.54 g	40 mL	570516	04/01/22 16:56	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570785	04/05/22 14:36	AGCM	TAL DEN

Client Sample ID: DUP-02
Lab Sample ID: 280-160187-15
Date Collected: 03/22/22 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	570095	03/29/22 12:24	EKB	TAL DEN
Total/NA	Prep	8330B			10.54 g	40 mL	570516	04/01/22 16:56	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570785	04/05/22 14:42	AGCM	TAL DEN

Lab Chronicle

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB199 (3-4)
Lab Sample ID: 280-160187-16
Date Collected: 03/22/22 14:30
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	570095	03/29/22 12:24	EKB	TAL DEN
Total/NA	Prep	8330B			10.18 g	40 mL	570516	04/01/22 16:56	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570785	04/05/22 14:49	AGCM	TAL DEN

Client Sample ID: 29SB199 (7-8)
Lab Sample ID: 280-160187-17
Date Collected: 03/22/22 14:35
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	570095	03/29/22 12:24	EKB	TAL DEN
Total/NA	Prep	8330B			10.31 g	40 mL	570516	04/01/22 16:56	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570785	04/05/22 14:55	AGCM	TAL DEN

Client Sample ID: 29SB198 (3-4)
Lab Sample ID: 280-160187-18
Date Collected: 03/22/22 15:05
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	570095	03/29/22 12:24	EKB	TAL DEN
Total/NA	Prep	8330B			10.3 g	40 mL	570516	04/01/22 16:56	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570785	04/05/22 15:02	AGCM	TAL DEN

Client Sample ID: 29SB198 (7-8)
Lab Sample ID: 280-160187-19
Date Collected: 03/22/22 15:10
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	570095	03/29/22 12:24	EKB	TAL DEN
Total/NA	Prep	8330B			10.72 g	40 mL	570516	04/01/22 16:56	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570785	04/05/22 15:08	AGCM	TAL DEN

Client Sample ID: 29SB202 (3-4)
Lab Sample ID: 280-160187-20
Date Collected: 03/22/22 16:30
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	570095	03/29/22 12:24	EKB	TAL DEN
Total/NA	Prep	8330B			10.21 g	40 mL	570516	04/01/22 16:56	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570785	04/05/22 15:14	AGCM	TAL DEN

Lab Chronicle

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB202 (11-12)
Lab Sample ID: 280-160187-21
Date Collected: 03/22/22 16:35
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	570100	03/29/22 12:45	EKB	TAL DEN
Total/NA	Prep	8330B			10.6 g	40 mL	570543	04/01/22 16:54	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570786	04/05/22 15:59	AGCM	TAL DEN

Client Sample ID: 29SB202 (15-15.5)
Lab Sample ID: 280-160187-22
Date Collected: 03/22/22 16:40
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	570100	03/29/22 12:45	EKB	TAL DEN
Total/NA	Prep	8330B			10 g	40 mL	570543	04/01/22 16:54	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570786	04/05/22 16:06	AGCM	TAL DEN

Client Sample ID: 29SB200 (15-15.5)
Lab Sample ID: 280-160187-23
Date Collected: 03/22/22 16:55
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	570100	03/29/22 12:45	EKB	TAL DEN
Total/NA	Prep	8330B			10.46 g	40 mL	570543	04/01/22 16:54	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570786	04/05/22 16:12	AGCM	TAL DEN

Client Sample ID: DUP-03
Lab Sample ID: 280-160187-24
Date Collected: 03/22/22 18:00
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	570100	03/29/22 12:45	EKB	TAL DEN
Total/NA	Prep	8330B			10.51 g	40 mL	570543	04/01/22 16:54	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570786	04/05/22 16:18	AGCM	TAL DEN

Client Sample ID: 29SB201(3-4)
Lab Sample ID: 280-160187-25
Date Collected: 03/22/22 17:18
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	570100	03/29/22 12:45	EKB	TAL DEN
Total/NA	Prep	8330B			10.33 g	40 mL	570543	04/01/22 16:54	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570786	04/05/22 16:25	AGCM	TAL DEN

Lab Chronicle

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB201(11-12)
Lab Sample ID: 280-160187-26
Date Collected: 03/22/22 17:20
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	570100	03/29/22 12:45	EKB	TAL DEN
Total/NA	Prep	8330B			10.61 g	40 mL	570543	04/01/22 16:54	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570786	04/05/22 16:38	AGCM	TAL DEN

Client Sample ID: 29SB201(15-15.5)
Lab Sample ID: 280-160187-27
Date Collected: 03/22/22 17:25
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	570100	03/29/22 12:45	EKB	TAL DEN
Total/NA	Prep	8330B			10.22 g	40 mL	570543	04/01/22 16:54	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570786	04/05/22 17:10	AGCM	TAL DEN

Client Sample ID: EB-1
Lab Sample ID: 280-160187-28
Date Collected: 03/22/22 18:05
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			878.8 mL	5 mL	570053	03/29/22 13:01	ARC	TAL DEN
Total/NA	Analysis	8321A		1			570784	04/05/22 11:37	AGCM	TAL DEN

Client Sample ID: 29SB187 (0-2)
Lab Sample ID: 280-160187-29
Date Collected: 03/23/22 08:15
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	570100	03/29/22 12:45	EKB	TAL DEN
Total/NA	Prep	8330B			10.52 g	40 mL	570543	04/01/22 16:54	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570786	04/05/22 17:16	AGCM	TAL DEN

Client Sample ID: 29SB187 (5-7)
Lab Sample ID: 280-160187-30
Date Collected: 03/23/22 08:25
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	570100	03/29/22 12:45	EKB	TAL DEN
Total/NA	Prep	8330B			10.44 g	40 mL	570543	04/01/22 16:54	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570786	04/05/22 17:22	AGCM	TAL DEN

Client Sample ID: 29SB187 (10-0.5)
Lab Sample ID: 280-160187-31
Date Collected: 03/23/22 08:35
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	570100	03/29/22 12:45	EKB	TAL DEN
Total/NA	Prep	8330B			10.05 g	40 mL	570543	04/01/22 16:54	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570786	04/05/22 17:29	AGCM	TAL DEN

Lab Chronicle

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB189 (0-2)
Lab Sample ID: 280-160187-32
Date Collected: 03/23/22 08:50
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	570100	03/29/22 12:45	EKB	TAL DEN
Total/NA	Prep	8330B			10.53 g	40 mL	570543	04/01/22 16:54	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570786	04/05/22 17:35	AGCM	TAL DEN

Client Sample ID: 29SB189 (5-7)
Lab Sample ID: 280-160187-33
Date Collected: 03/23/22 08:55
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	570100	03/29/22 12:45	EKB	TAL DEN
Total/NA	Prep	8330B			10.12 g	40 mL	570543	04/01/22 16:54	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570786	04/05/22 17:48	AGCM	TAL DEN

Client Sample ID: 29SB189 (10-10.5)
Lab Sample ID: 280-160187-34
Date Collected: 03/23/22 08:58
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	570100	03/29/22 12:45	EKB	TAL DEN
Total/NA	Prep	8330B			10.66 g	40 mL	570543	04/01/22 16:54	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570786	04/05/22 17:54	AGCM	TAL DEN

Client Sample ID: 29SB188 (7-9)
Lab Sample ID: 280-160187-35
Date Collected: 03/23/22 09:00
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	570100	03/29/22 12:45	EKB	TAL DEN
Total/NA	Prep	8330B			10.1 g	40 mL	570543	04/01/22 16:54	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570786	04/05/22 18:01	AGCM	TAL DEN

Client Sample ID: 29SB188 (10-10.5)
Lab Sample ID: 280-160187-36
Date Collected: 03/23/22 09:05
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	570100	03/29/22 12:45	EKB	TAL DEN
Total/NA	Prep	8330B			10.5 g	40 mL	570543	04/01/22 16:54	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570786	04/05/22 18:07	AGCM	TAL DEN

Lab Chronicle

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB195 (7-8)
Lab Sample ID: 280-160187-37
Date Collected: 03/23/22 10:10
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	570100	03/29/22 12:45	EKB	TAL DEN
Total/NA	Prep	8330B			10.38 g	40 mL	570543	04/01/22 16:54	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570786	04/05/22 18:14	AGCM	TAL DEN

Client Sample ID: 29SB195 (9.5-10)
Lab Sample ID: 280-160187-38
Date Collected: 03/23/22 10:15
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	570100	03/29/22 12:45	EKB	TAL DEN
Total/NA	Prep	8330B			10.55 g	40 mL	570543	04/01/22 16:54	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570786	04/05/22 18:20	AGCM	TAL DEN

Client Sample ID: 29SB194 (7-8)
Lab Sample ID: 280-160187-39
Date Collected: 03/23/22 10:20
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	570100	03/29/22 12:45	EKB	TAL DEN
Total/NA	Prep	8330B			10.18 g	40 mL	570543	04/01/22 16:54	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570786	04/05/22 18:26	AGCM	TAL DEN

Client Sample ID: 29SB194 (9.5-10)
Lab Sample ID: 280-160187-40
Date Collected: 03/23/22 10:25
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	570100	03/29/22 12:45	EKB	TAL DEN
Total/NA	Prep	8330B			10.71 g	40 mL	570543	04/01/22 16:54	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570786	04/05/22 18:33	AGCM	TAL DEN

Client Sample ID: DUP-04
Lab Sample ID: 280-160187-41
Date Collected: 03/23/22 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	570100	03/29/22 12:45	EKB	TAL DEN
Total/NA	Prep	8330B			10.57 g	40 mL	570543	04/01/22 16:54	TEH	TAL DEN
Total/NA	Analysis	8321A		1			570786	04/05/22 18:39	AGCM	TAL DEN

Lab Chronicle

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB191 (9.5-10)
Lab Sample ID: 280-160187-42
Date Collected: 03/23/22 10:40
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			10.43 g	40 mL	570718	04/04/22 16:57	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571108	04/07/22 12:11	AGCM	TAL DEN

Client Sample ID: 29SB197 (3-4)
Lab Sample ID: 280-160187-43
Date Collected: 03/23/22 11:35
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	570105	03/29/22 13:09	EKB	TAL DEN
Total/NA	Prep	8330B			10.53 g	40 mL	570718	04/04/22 16:57	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571108	04/07/22 12:18	AGCM	TAL DEN

Client Sample ID: 29SB197 (7-7.5)
Lab Sample ID: 280-160187-44
Date Collected: 03/23/22 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	570105	03/29/22 13:09	EKB	TAL DEN
Total/NA	Prep	8330B			10.45 g	40 mL	570718	04/04/22 16:57	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571108	04/07/22 12:57	AGCM	TAL DEN

Client Sample ID: 29SB196 (3-4)
Lab Sample ID: 280-160187-45
Date Collected: 03/23/22 11:45
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	570105	03/29/22 13:09	EKB	TAL DEN
Total/NA	Prep	8330B			10.24 g	40 mL	570718	04/04/22 16:57	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571108	04/07/22 13:04	AGCM	TAL DEN

Client Sample ID: 29SB196 (7-7.5)
Lab Sample ID: 280-160187-46
Date Collected: 03/23/22 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			1.0 g	1.0 g	570105	03/29/22 13:09	EKB	TAL DEN
Total/NA	Prep	8330B			10.37 g	40 mL	570718	04/04/22 16:57	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571108	04/07/22 13:10	AGCM	TAL DEN

Client Sample ID: EB-02
Lab Sample ID: 280-160187-47
Date Collected: 03/23/22 13:55
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			828.2 mL	5 mL	570053	03/29/22 13:01	ARC	TAL DEN
Total/NA	Analysis	8321A		1			570784	04/05/22 11:43	AGCM	TAL DEN

Lab Chronicle

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB172 (3-4)
Lab Sample ID: 280-160187-48
Date Collected: 03/24/22 08:40
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			10.34 g	40 mL	570718	04/04/22 16:57	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571108	04/07/22 13:17	AGCM	TAL DEN

Client Sample ID: 29SB172 (6-7)
Lab Sample ID: 280-160187-49
Date Collected: 03/24/22 08:42
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	570105	03/29/22 13:09	EKB	TAL DEN
Total/NA	Prep	8330B			10.66 g	40 mL	570718	04/04/22 16:57	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571108	04/07/22 13:24	AGCM	TAL DEN

Client Sample ID: 29SB172 (11-12)
Lab Sample ID: 280-160187-50
Date Collected: 03/24/22 08:45
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	570105	03/29/22 13:09	EKB	TAL DEN
Total/NA	Prep	8330B			10.35 g	40 mL	570718	04/04/22 16:57	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571108	04/07/22 13:30	AGCM	TAL DEN

Client Sample ID: 29SB172 (14.5-15)
Lab Sample ID: 280-160187-51
Date Collected: 03/24/22 08:48
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	570105	03/29/22 13:09	EKB	TAL DEN
Total/NA	Prep	8330B			10.16 g	40 mL	570718	04/04/22 16:57	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571108	04/07/22 13:37	AGCM	TAL DEN

Client Sample ID: 29SB180 (14.5-15)
Lab Sample ID: 280-160187-52
Date Collected: 03/24/22 08:55
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			10.23 g	40 mL	570718	04/04/22 16:57	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571108	04/07/22 13:43	AGCM	TAL DEN

Lab Chronicle

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Client Sample ID: 29SB173 (3-4)
Lab Sample ID: 280-160187-53
Date Collected: 03/24/22 09:08
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			10.4 g	40 mL	570718	04/04/22 16:57	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571108	04/07/22 13:57	AGCM	TAL DEN

Client Sample ID: 29SB173 (6-7)
Lab Sample ID: 280-160187-54
Date Collected: 03/24/22 09:10
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	570105	03/29/22 13:09	EKB	TAL DEN
Total/NA	Prep	8330B			10.46 g	40 mL	570718	04/04/22 16:57	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571108	04/07/22 14:03	AGCM	TAL DEN

Client Sample ID: 29SB173 (11-12)
Lab Sample ID: 280-160187-55
Date Collected: 03/24/22 09:12
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	570105	03/29/22 13:09	EKB	TAL DEN
Total/NA	Prep	8330B			10.47 g	40 mL	570718	04/04/22 16:57	TEH	TAL DEN
Total/NA	Analysis	8321A		1			571108	04/07/22 14:10	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: 280-160187-1
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: 280-160187-1
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: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-160187-1	29SB183 (1-2)	Solid	03/22/22 12:20	03/25/22 00:00
280-160187-2	29SB183 (3-4)	Solid	03/22/22 12:30	03/25/22 00:00
280-160187-3	DUP-01	Solid	03/22/22 13:40	03/25/22 00:00
280-160187-4	29SB185 (3-4)	Solid	03/22/22 12:40	03/25/22 00:00
280-160187-5	29SB185 (7-8)	Solid	03/22/22 12:50	03/25/22 00:00
280-160187-6	29SB185 (11-12)	Solid	03/22/22 12:55	03/25/22 00:00
280-160187-7	29SB185 (13.5-14)	Solid	03/22/22 13:00	03/25/22 00:00
280-160187-8	29SB186 (9-10)	Solid	03/22/22 13:15	03/25/22 00:00
280-160187-9	29SB186 (11-12)	Solid	03/22/22 13:18	03/25/22 00:00
280-160187-10	29SB186 (13.5-14)	Solid	03/22/22 13:20	03/25/22 00:00
280-160187-11	29SB184 (3-4)	Solid	03/22/22 13:35	03/25/22 00:00
280-160187-12	29SB184 (7-8)	Solid	03/22/22 13:38	03/25/22 00:00
280-160187-13	29SB184 (11-12)	Solid	03/22/22 13:40	03/25/22 00:00
280-160187-14	29SB184 (13.5-14)	Solid	03/22/22 13:43	03/25/22 00:00
280-160187-15	DUP-02	Solid	03/22/22 14:00	03/25/22 00:00
280-160187-16	29SB199 (3-4)	Solid	03/22/22 14:30	03/25/22 00:00
280-160187-17	29SB199 (7-8)	Solid	03/22/22 14:35	03/25/22 00:00
280-160187-18	29SB198 (3-4)	Solid	03/22/22 15:05	03/25/22 00:00
280-160187-19	29SB198 (7-8)	Solid	03/22/22 15:10	03/25/22 00:00
280-160187-20	29SB202 (3-4)	Solid	03/22/22 16:30	03/25/22 00:00
280-160187-21	29SB202 (11-12)	Solid	03/22/22 16:35	03/25/22 00:00
280-160187-22	29SB202 (15-15.5)	Solid	03/22/22 16:40	03/25/22 00:00
280-160187-23	29SB200 (15-15.5)	Solid	03/22/22 16:55	03/25/22 00:00
280-160187-24	DUP-03	Solid	03/22/22 18:00	03/25/22 00:00
280-160187-25	29SB201(3-4)	Solid	03/22/22 17:18	03/25/22 00:00
280-160187-26	29SB201(11-12)	Solid	03/22/22 17:20	03/25/22 00:00
280-160187-27	29SB201(15-15.5)	Solid	03/22/22 17:25	03/25/22 00:00
280-160187-28	EB-1	Water	03/22/22 18:05	03/25/22 00:00
280-160187-29	29SB187 (0-2)	Solid	03/23/22 08:15	03/25/22 00:00
280-160187-30	29SB187 (5-7)	Solid	03/23/22 08:25	03/25/22 00:00
280-160187-31	29SB187 (10-0.5)	Solid	03/23/22 08:35	03/25/22 00:00
280-160187-32	29SB189 (0-2)	Solid	03/23/22 08:50	03/25/22 00:00
280-160187-33	29SB189 (5-7)	Solid	03/23/22 08:55	03/25/22 00:00
280-160187-34	29SB189 (10-10.5)	Solid	03/23/22 08:58	03/25/22 00:00
280-160187-35	29SB188 (7-9)	Solid	03/23/22 09:00	03/25/22 00:00
280-160187-36	29SB188 (10-10.5)	Solid	03/23/22 09:05	03/25/22 00:00
280-160187-37	29SB195 (7-8)	Solid	03/23/22 10:10	03/25/22 00:00
280-160187-38	29SB195 (9.5-10)	Solid	03/23/22 10:15	03/25/22 00:00
280-160187-39	29SB194 (7-8)	Solid	03/23/22 10:20	03/25/22 00:00
280-160187-40	29SB194 (9.5-10)	Solid	03/23/22 10:25	03/25/22 00:00
280-160187-41	DUP-04	Solid	03/23/22 12:00	03/25/22 00:00
280-160187-42	29SB191 (9.5-10)	Solid	03/23/22 10:40	03/25/22 00:00
280-160187-43	29SB197 (3-4)	Solid	03/23/22 11:35	03/25/22 00:00
280-160187-44	29SB197 (7-7.5)	Solid	03/23/22 11:40	03/25/22 00:00
280-160187-45	29SB196 (3-4)	Solid	03/23/22 11:45	03/25/22 00:00
280-160187-46	29SB196 (7-7.5)	Solid	03/23/22 11:50	03/25/22 00:00
280-160187-47	EB-02	Water	03/23/22 13:55	03/25/22 00:00
280-160187-48	29SB172 (3-4)	Solid	03/24/22 08:40	03/25/22 00:00
280-160187-49	29SB172 (6-7)	Solid	03/24/22 08:42	03/25/22 00:00
280-160187-50	29SB172 (11-12)	Solid	03/24/22 08:45	03/25/22 00:00
280-160187-51	29SB172 (14.5-15)	Solid	03/24/22 08:48	03/25/22 00:00
280-160187-52	29SB180 (14.5-15)	Solid	03/24/22 08:55	03/25/22 00:00
280-160187-53	29SB173 (3-4)	Solid	03/24/22 09:08	03/25/22 00:00
280-160187-54	29SB173 (6-7)	Solid	03/24/22 09:10	03/25/22 00:00

Sample Summary

Client: HDR Inc
Job ID: 280-160187-1
Project/Site: Longhorn AAP, TX (March 2022)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-160187-55	29SB173 (11-12)	Solid	03/24/22 09:12	03/25/22 00:00

LCMS MANUAL INTEGRATION SUMMARY

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

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.: 280-160187-1

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: 280-160187-28 Client Sample ID: EB-1

Date Analyzed: 04/05/22 11:37 Lab File ID: ex722D05015.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN		Invalid Compound ID	meyera	04/05/22 12:47

Lab Sample ID: 280-160187-47 Client Sample ID: EB-02

Date Analyzed: 04/05/22 11:43 Lab File ID: ex722D05016.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		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.: 280-160187-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 570785

Lab Sample ID: CCV 280-570785/18 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

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

Date Analyzed: 04/05/22 12:02 Lab File ID: ex722D05022.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

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

Date Analyzed: 04/05/22 12:22 Lab File ID: ex722D05025.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4,6-Trinitrotoluene		Invalid Compound ID	meyera	04/05/22 12:49
HMX		Invalid Compound ID	meyera	04/05/22 12:49
Nitroglycerin		Invalid Compound ID	meyera	04/05/22 12:49

Lab Sample ID: 280-160187-2 Client Sample ID: 29SB183 (3-4)

Date Analyzed: 04/05/22 12:41 Lab File ID: ex722D05028.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/05/22 13:34

LCMS MANUAL INTEGRATION SUMMARY

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

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 570785

Lab Sample ID: 280-160187-2 MSD Client Sample ID: 29SB183 (3-4) MSD

Date Analyzed: 04/05/22 12:54 Lab File ID: ex722D05030.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	1.77	Baseline	meyera	04/06/22 07:44
4-Amino-2,6-dinitrotoluene	3.40	Baseline	meyera	04/06/22 07:45
2-Amino-4,6-dinitrotoluene	3.71	Baseline	meyera	04/06/22 07:45

Lab Sample ID: 280-160187-2 DU Client Sample ID: 29SB183 (3-4) DU

Date Analyzed: 04/05/22 13:06 Lab File ID: ex722D05032.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3,5-Trinitrobenzene		Invalid Compound ID	meyera	04/05/22 13:36
HMX		Invalid Compound ID	meyera	04/05/22 13:36

Lab Sample ID: 280-160187-3 Client Sample ID: DUP-01

Date Analyzed: 04/05/22 13:19 Lab File ID: ex722D05034.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/05/22 14:51

Lab Sample ID: 280-160187-4 Client Sample ID: 29SB185 (3-4)

Date Analyzed: 04/05/22 13:26 Lab File ID: ex722D05035.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/05/22 14:51
RDX		Invalid Compound ID	meyera	04/05/22 14:51

LCMS MANUAL INTEGRATION SUMMARY

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

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 570785

Lab Sample ID: 280-160187-5 Client Sample ID: 29SB185 (7-8)

Date Analyzed: 04/05/22 13:32 Lab File ID: ex722D05036.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-Dinitrotoluene		Invalid Compound ID	meyera	04/05/22 14:51
HMX		Invalid Compound ID	meyera	04/05/22 14:52

Lab Sample ID: 280-160187-7 Client Sample ID: 29SB185 (13.5-14)

Date Analyzed: 04/05/22 13:45 Lab File ID: ex722D05038.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/05/22 14:52

Lab Sample ID: 280-160187-8 Client Sample ID: 29SB186 (9-10)

Date Analyzed: 04/05/22 13:51 Lab File ID: ex722D05039.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/05/22 14:52

Lab Sample ID: 280-160187-9 Client Sample ID: 29SB186 (11-12)

Date Analyzed: 04/05/22 13:58 Lab File ID: ex722D05040.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/05/22 14:52

Lab Sample ID: 280-160187-10 Client Sample ID: 29SB186 (13.5-14)

Date Analyzed: 04/05/22 14:04 Lab File ID: ex722D05041.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/05/22 14:52

8321A

LCMS MANUAL INTEGRATION SUMMARY

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

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 570785

Lab Sample ID: CCV 280-570785/39 Client Sample ID:

Date Analyzed: 04/05/22 14:10 Lab File ID: ex722D05042.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-Dinitrotoluene	3.86	Baseline	meyera	04/05/22 14:53
2,4-Dinitrotoluene	4.08	Baseline	meyera	04/05/22 14:52

Lab Sample ID: 280-160187-11 Client Sample ID: 29SB184 (3-4)

Date Analyzed: 04/05/22 14:17 Lab File ID: ex722D05043.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4-Dinitrotoluene		Invalid Compound ID	meyera	04/06/22 06:52
2,6-Dinitrotoluene		Invalid Compound ID	meyera	04/06/22 06:52
HMX		Invalid Compound ID	meyera	04/06/22 06:52
Nitroglycerin		Invalid Compound ID	meyera	04/06/22 06:52

Lab Sample ID: 280-160187-12 Client Sample ID: 29SB184 (7-8)

Date Analyzed: 04/05/22 14:23 Lab File ID: ex722D05044.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Dinitrobenzene		Invalid Compound ID	meyera	04/06/22 06:52

Lab Sample ID: 280-160187-13 Client Sample ID: 29SB184 (11-12)

Date Analyzed: 04/05/22 14:30 Lab File ID: ex722D05045.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/06/22 06:52

LCMS MANUAL INTEGRATION SUMMARY

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

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 570785

Lab Sample ID: 280-160187-14 Client Sample ID: 29SB184 (13.5-14)

Date Analyzed: 04/05/22 14:36 Lab File ID: ex722D05046.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/06/22 06:53

Lab Sample ID: 280-160187-15 Client Sample ID: DUP-02

Date Analyzed: 04/05/22 14:42 Lab File ID: ex722D05047.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/06/22 06:53

Lab Sample ID: 280-160187-16 Client Sample ID: 29SB199 (3-4)

Date Analyzed: 04/05/22 14:49 Lab File ID: ex722D05048.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-Dinitrotoluene		Invalid Compound ID	meyera	04/06/22 06:53

Lab Sample ID: 280-160187-18 Client Sample ID: 29SB198 (3-4)

Date Analyzed: 04/05/22 15:02 Lab File ID: ex722D05050.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/06/22 06:53

Lab Sample ID: 280-160187-19 Client Sample ID: 29SB198 (7-8)

Date Analyzed: 04/05/22 15:08 Lab File ID: ex722D05051.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/06/22 06:53
Tetryl		Invalid Compound ID	meyera	04/06/22 06:54

8321A

LCMS MANUAL INTEGRATION SUMMARY

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

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 570785

Lab Sample ID: 280-160187-20 Client Sample ID: 29SB202 (3-4)

Date Analyzed: 04/05/22 15:14 Lab File ID: ex722D05052.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/06/22 06:54

8321A

LCMS MANUAL INTEGRATION SUMMARY

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

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 570786

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

Date Analyzed: 04/05/22 15:27 Lab File ID: ex722D05054.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/06/22 06:54

Lab Sample ID: GB 280-570100/1-B Client Sample ID:

Date Analyzed: 04/05/22 15:46 Lab File ID: ex722D05057.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3,5-Trinitrobenzene	2.18	Baseline	meyera	04/06/22 06:55
HMX		Invalid Compound ID	meyera	04/06/22 06:55
Tetryl		Invalid Compound ID	meyera	04/06/22 06:55

Lab Sample ID: 280-160187-21 Client Sample ID: 29SB202 (11-12)

Date Analyzed: 04/05/22 15:59 Lab File ID: ex722D05059.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/06/22 06:55

Lab Sample ID: 280-160187-22 Client Sample ID: 29SB202 (15-15.5)

Date Analyzed: 04/05/22 16:06 Lab File ID: ex722D05060.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/06/22 06:55

LCMS MANUAL INTEGRATION SUMMARY

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

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 570786

Lab Sample ID: 280-160187-23 Client Sample ID: 29SB200 (15-15.5)

Date Analyzed: 04/05/22 16:12 Lab File ID: ex722D05061.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/06/22 06:55
Nitroglycerin		Invalid Compound ID	meyera	04/06/22 06:55

Lab Sample ID: 280-160187-24 Client Sample ID: DUP-03

Date Analyzed: 04/05/22 16:18 Lab File ID: ex722D05062.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	meyera	04/06/22 06:56
HMX		Invalid Compound ID	meyera	04/06/22 06:56
RDX		Invalid Compound ID	meyera	04/06/22 06:56

Lab Sample ID: 280-160187-25 Client Sample ID: 29SB201(3-4)

Date Analyzed: 04/05/22 16:25 Lab File ID: ex722D05063.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-Dinitrotoluene		Invalid Compound ID	meyera	04/06/22 06:56
HMX		Invalid Compound ID	meyera	04/06/22 06:56

Lab Sample ID: CCV 280-570786/61 Client Sample ID:

Date Analyzed: 04/05/22 16:31 Lab File ID: ex722D05064.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3,5-Dinitroaniline	3.04	Baseline	meyera	04/06/22 06:56

LCMS MANUAL INTEGRATION SUMMARY

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

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 570786

Lab Sample ID: 280-160187-26 Client Sample ID: 29SB201(11-12)

Date Analyzed: 04/05/22 16:38 Lab File ID: ex722D05065.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/06/22 06:57

Lab Sample ID: 280-160187-26 TRL Client Sample ID: 29SB201(11-12) TRL

Date Analyzed: 04/05/22 17:03 Lab File ID: ex722D05069.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/06/22 06:57

Lab Sample ID: 280-160187-27 Client Sample ID: 29SB201(15-15.5)

Date Analyzed: 04/05/22 17:10 Lab File ID: ex722D05070.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/06/22 06:57

Lab Sample ID: 280-160187-29 Client Sample ID: 29SB187 (0-2)

Date Analyzed: 04/05/22 17:16 Lab File ID: ex722D05071.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/06/22 06:58
Nitroglycerin		Invalid Compound ID	meyera	04/06/22 06:58

Lab Sample ID: 280-160187-30 Client Sample ID: 29SB187 (5-7)

Date Analyzed: 04/05/22 17:22 Lab File ID: ex722D05072.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/06/22 06:58
RDX		Invalid Compound ID	meyera	04/06/22 06:58

8321A

LCMS MANUAL INTEGRATION SUMMARY

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

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 570786

Lab Sample ID: 280-160187-31 Client Sample ID: 29SB187 (10-0.5)

Date Analyzed: 04/05/22 17:29 Lab File ID: ex722D05073.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/06/22 06:58

Lab Sample ID: 280-160187-32 Client Sample ID: 29SB189 (0-2)

Date Analyzed: 04/05/22 17:35 Lab File ID: ex722D05074.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/06/22 06:58

Lab Sample ID: 280-160187-34 Client Sample ID: 29SB189 (10-10.5)

Date Analyzed: 04/05/22 17:54 Lab File ID: ex722D05077.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/06/22 06:59

Lab Sample ID: 280-160187-35 Client Sample ID: 29SB188 (7-9)

Date Analyzed: 04/05/22 18:01 Lab File ID: ex722D05078.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	meyera	04/06/22 06:59
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	meyera	04/06/22 06:59
HMX		Invalid Compound ID	meyera	04/06/22 06:59

LCMS MANUAL INTEGRATION SUMMARY

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

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 570786

Lab Sample ID: 280-160187-36 Client Sample ID: 29SB188 (10-10.5)

Date Analyzed: 04/05/22 18:07 Lab File ID: ex722D05079.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4-Dinitrotoluene		Invalid Compound ID	meyera	04/06/22 06:59
2,6-Dinitrotoluene		Invalid Compound ID	meyera	04/06/22 06:59

Lab Sample ID: 280-160187-37 Client Sample ID: 29SB195 (7-8)

Date Analyzed: 04/05/22 18:14 Lab File ID: ex722D05080.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/06/22 07:00

Lab Sample ID: 280-160187-38 Client Sample ID: 29SB195 (9.5-10)

Date Analyzed: 04/05/22 18:20 Lab File ID: ex722D05081.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/06/22 07:00

Lab Sample ID: 280-160187-39 Client Sample ID: 29SB194 (7-8)

Date Analyzed: 04/05/22 18:26 Lab File ID: ex722D05082.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/06/22 07:00
Nitrobenzene		Invalid Compound ID	meyera	04/06/22 07:00

Lab Sample ID: 280-160187-40 Client Sample ID: 29SB194 (9.5-10)

Date Analyzed: 04/05/22 18:33 Lab File ID: ex722D05083.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/06/22 07:00

8321A

LCMS MANUAL INTEGRATION SUMMARY

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

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 570786

Lab Sample ID: CCV 280-570786/82 Client Sample ID:

Date Analyzed: 04/05/22 18:45 Lab File ID: ex722D05085.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Amino-2,6-dinitrotoluene	3.41	Baseline	meyera	04/06/22 07:02
2-Amino-4,6-dinitrotoluene	3.72	Baseline	meyera	04/06/22 07:02

LCMS MANUAL INTEGRATION SUMMARY

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

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.: 280-160187-1

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.: 280-160187-1

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: 280-160187-42 Client Sample ID: 29SB191 (9.5-10)

Date Analyzed: 04/07/22 12:11 Lab File ID: ex722D07017.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 12:36
HMX		Invalid Compound ID	meyera	04/07/22 12:36
Nitrobenzene		Invalid Compound ID	meyera	04/07/22 12:36

Lab Sample ID: 280-160187-43 Client Sample ID: 29SB197 (3-4)

Date Analyzed: 04/07/22 12:18 Lab File ID: ex722D07018.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/07/22 13:09

LCMS MANUAL INTEGRATION SUMMARY

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

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571108

Lab Sample ID: 280-160187-43 MS Client Sample ID:

Date Analyzed: 04/07/22 12:24 Lab File ID: ex722D07019.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 13:09

Lab Sample ID: 280-160187-43 MSD Client Sample ID:

Date Analyzed: 04/07/22 12:31 Lab File ID: ex722D07020.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	04/08/22 07:46

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: 280-160187-43 DU Client Sample ID: 29SB197 (3-4) DU

Date Analyzed: 04/07/22 12:44 Lab File ID: ex722D07022.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX		Invalid Compound ID	meyera	04/07/22 13:11

LCMS MANUAL INTEGRATION SUMMARY

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

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571108

Lab Sample ID: 280-160187-43 TRL Client Sample ID:

Date Analyzed: 04/07/22 12:51 Lab File ID: ex722D07023.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 13:11
HMX		Invalid Compound ID	meyera	04/07/22 13:11

Lab Sample ID: 280-160187-44 Client Sample ID:

Date Analyzed: 04/07/22 12:57 Lab File ID: ex722D07024.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	04/08/22 07:47
HMX		Invalid Compound ID	meyera	04/07/22 13:51

Lab Sample ID: 280-160187-45 Client Sample ID: 29SB196 (3-4)

Date Analyzed: 04/07/22 13:04 Lab File ID: ex722D07025.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin		Invalid Compound ID	meyera	04/07/22 13:51

Lab Sample ID: 280-160187-46 Client Sample ID: 29SB196 (7-7.5)

Date Analyzed: 04/07/22 13:10 Lab File ID: ex722D07026.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/07/22 13:51

LCMS MANUAL INTEGRATION SUMMARY

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

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571108

Lab Sample ID: 280-160187-48 Client Sample ID:

Date Analyzed: 04/07/22 13:17 Lab File ID: ex722D07027.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 13:52
HMX		Invalid Compound ID	meyera	04/07/22 13:52

Lab Sample ID: 280-160187-49 Client Sample ID: 29SB172 (6-7)

Date Analyzed: 04/07/22 13:24 Lab File ID: ex722D07028.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4,6-Trinitrotoluene		Invalid Compound ID	meyera	04/07/22 13:52
Nitrobenzene		Invalid Compound ID	meyera	04/07/22 13:52

Lab Sample ID: 280-160187-50 Client Sample ID: 29SB172 (11-12)

Date Analyzed: 04/07/22 13:30 Lab File ID: ex722D07029.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4-Dinitrotoluene		Invalid Compound ID	meyera	04/07/22 13:52
2,6-Dinitrotoluene		Invalid Compound ID	meyera	04/07/22 13:52
HMX		Invalid Compound ID	meyera	04/07/22 13:52
Nitrobenzene		Invalid Compound ID	meyera	04/07/22 13:52

LCMS MANUAL INTEGRATION SUMMARY

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

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571108

Lab Sample ID: 280-160187-51 Client Sample ID: 29SB172 (14.5-15)

Date Analyzed: 04/07/22 13:37 Lab File ID: ex722D07030.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Amino-2,6-dinitrotoluene	3.64	Baseline	meyera	04/07/22 13:53
2-Amino-4,6-dinitrotoluene	3.95	Baseline	meyera	04/07/22 13:53
2,6-Dinitrotoluene	4.13	Baseline	meyera	04/07/22 13:53
2,4-Dinitrotoluene	4.37	Baseline	meyera	04/07/22 13:53
o-Nitrotoluene	4.99	Baseline	meyera	04/07/22 13:53
p-Nitrotoluene	5.30	Baseline	meyera	04/07/22 13:53
2,4,6-Trinitrotoluene		Invalid Compound ID	meyera	04/07/22 13:52
HMX		Invalid Compound ID	meyera	04/07/22 13:52

Lab Sample ID: 280-160187-52 Client Sample ID: 29SB180 (14.5-15)

Date Analyzed: 04/07/22 13:43 Lab File ID: ex722D07031.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 14:40
2,4-Dinitrotoluene	4.37	Baseline	meyera	04/07/22 14:40
m-Nitrotoluene	5.69	Baseline	meyera	04/07/22 14:40
1,3-Dinitrobenzene		Invalid Compound ID	meyera	04/07/22 14:39
HMX		Invalid Compound ID	meyera	04/07/22 14:39

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.: 280-160187-1

SDG No.:

Instrument ID: LC_LCMS7 Analysis Batch Number: 571108

Lab Sample ID: 280-160187-53 Client Sample ID: 29SB173 (3-4)

Date Analyzed: 04/07/22 13:57 Lab File ID: ex722D07033.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	meyera	04/07/22 14:40
RDX		Invalid Compound ID	meyera	04/07/22 14:41
Tetryl		Invalid Compound ID	meyera	04/07/22 14:41

Lab Sample ID: 280-160187-55 Client Sample ID: 29SB173 (11-12)

Date Analyzed: 04/07/22 14:10 Lab File ID: ex722D07035.d GC Column: Synergi Hydro ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	meyera	04/07/22 14:41
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	meyera	04/07/22 14:41
HMX		Invalid Compound ID	meyera	04/07/22 14:41
m-Nitrotoluene		Invalid Compound ID	meyera	04/07/22 14:41
o-Nitrotoluene		Invalid Compound ID	meyera	04/07/22 14:41
p-Nitrotoluene		Invalid Compound ID	meyera	04/07/22 14:41

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

REAGENT TRACEABILITY SUMMARY

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

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.: 280-160187-1

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.: 280-160187-1

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 %
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
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.

50 Frontage Road, Andover, MA 01810-5413 USA
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

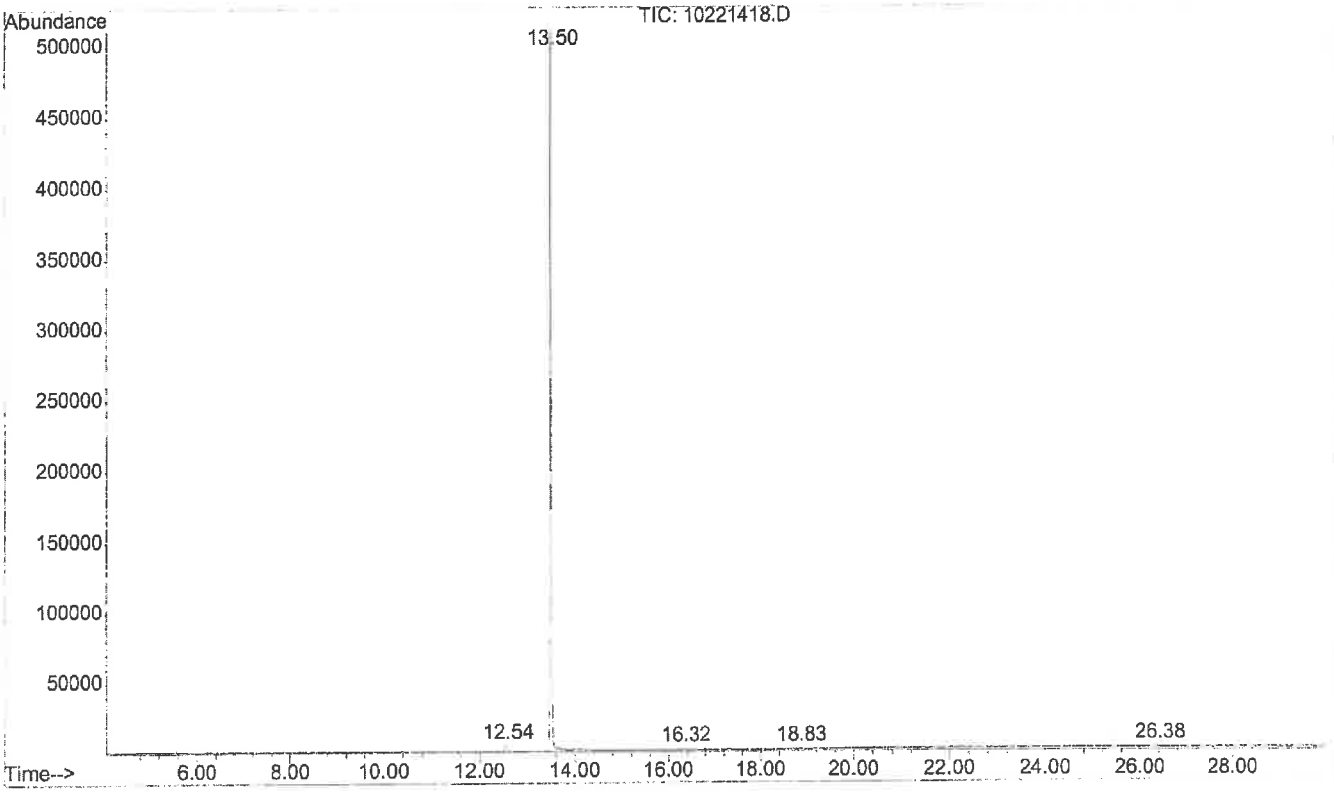
Timothy J. Eckersley, Ph.D., Quality Assurance

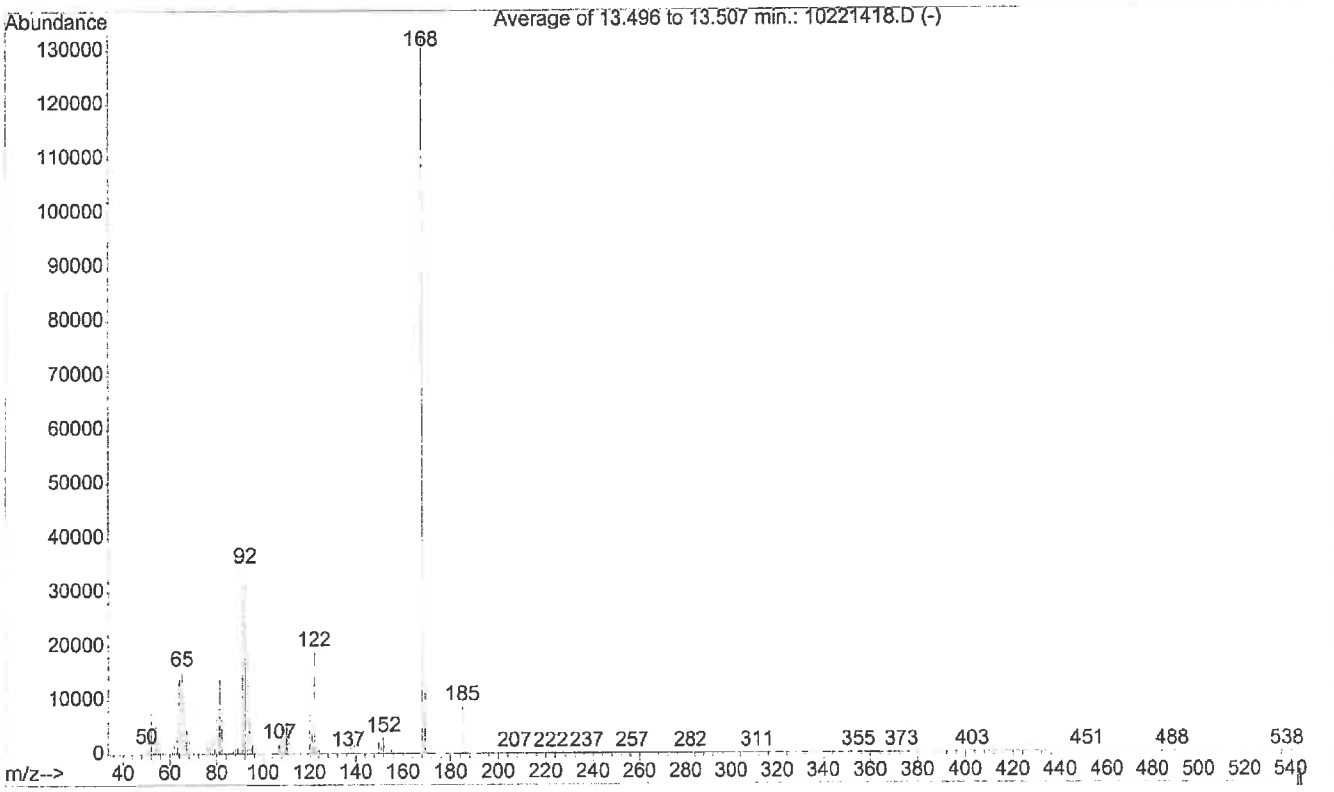
Quality Control Tests and Results

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)

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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

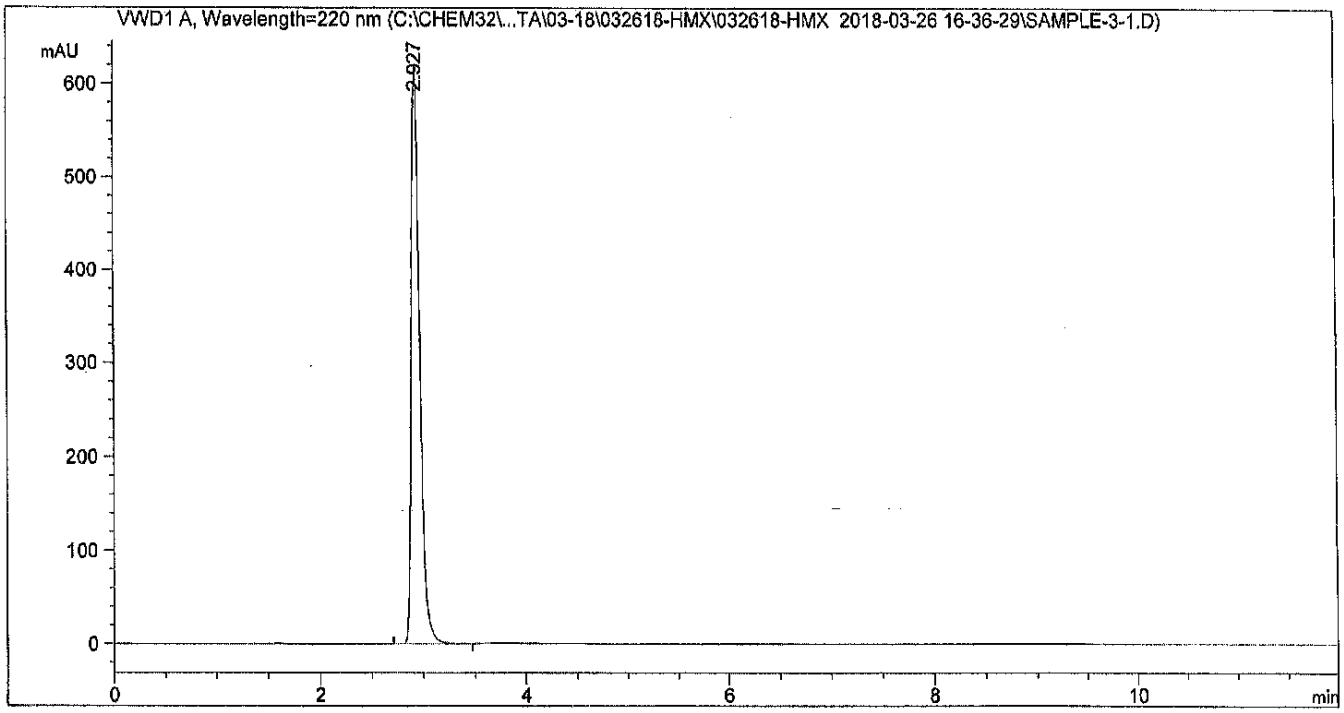
Quality Control Tests and Results (continued)

HPLC for Chemical Purity	99.3%

CIL subscribes to the following standards for different products: ISO Guide 34, ISO/IEC 17025, ISO 13485 and cGMP as appropriate.

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

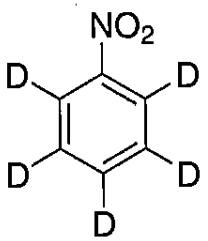
Product Name: NITROBENZENE-D5
(Isotopic Label & Enrichment Specification) (D, 99%)

Lot Number: PR-25462

Catalog Number: DLM-294-0

Product Information

Chemical Purity Specification: ≥98%



MW*: 128.14
* For isotopically labeled compounds, MW listed is for the fully enriched product.

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%

CIL subscribes to the following standards for different products: ISO Guide 34, ISO/IEC 17025, ISO 13485 and cGMP as appropriate.

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Reagent

8321NG_00013

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New Haven, CT 06513
USA

AccuStandard®

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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

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

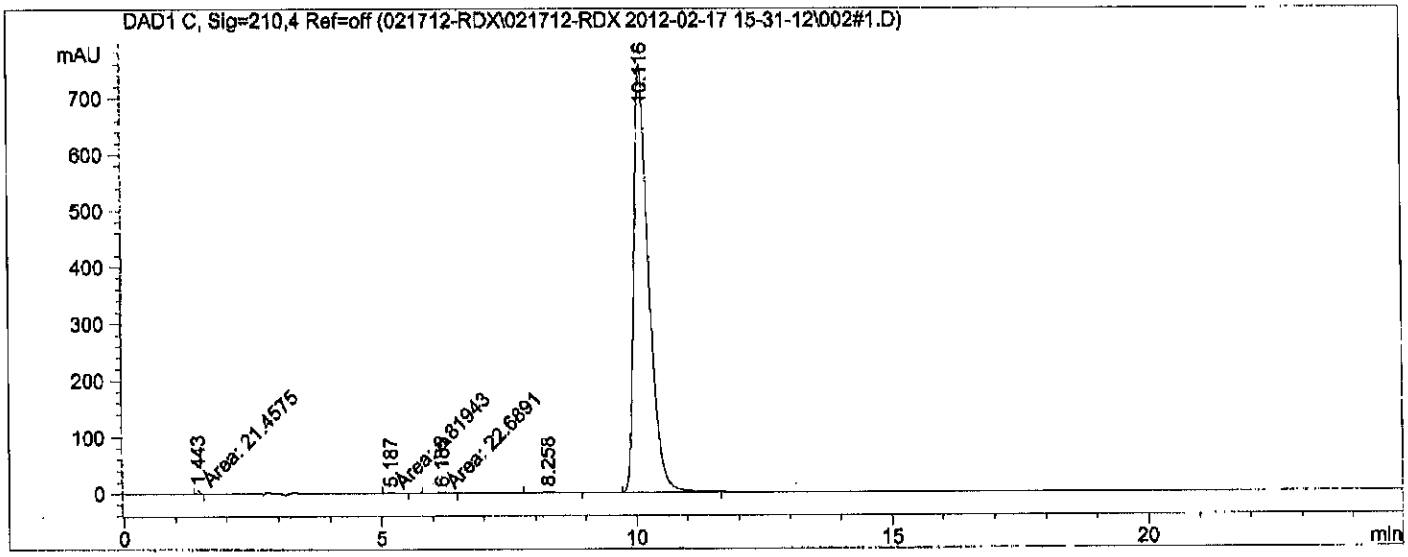
Timothy J. Eckersley, Ph.D., Quality Assurance

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 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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Certificate #3222.01

Certificate of Composition

ilac-MRA

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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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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)

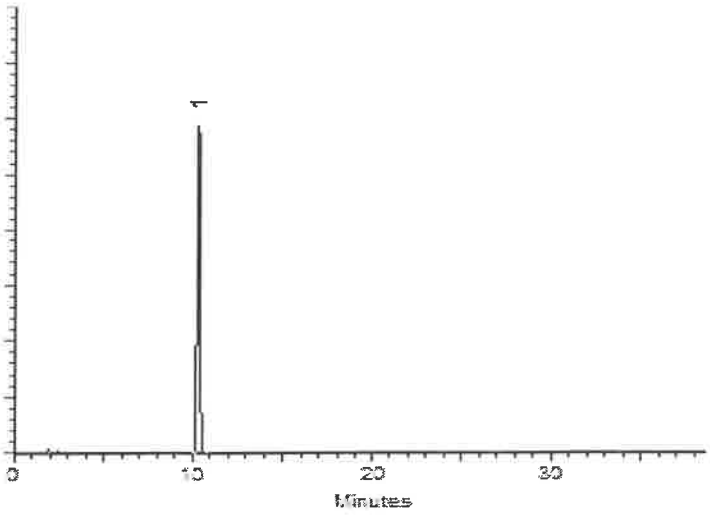
Flow Rate:
1.0 ml/min.

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

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)

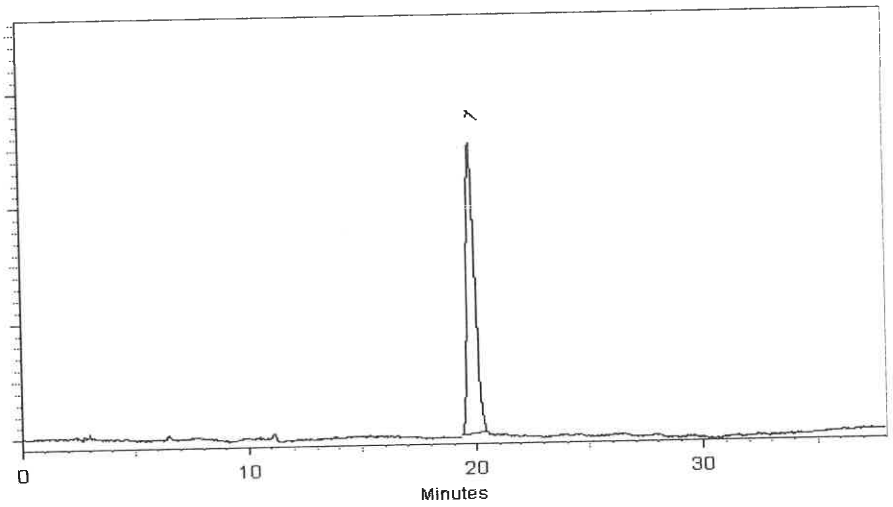
Flow Rate:
1.0 ml/min.

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

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Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)

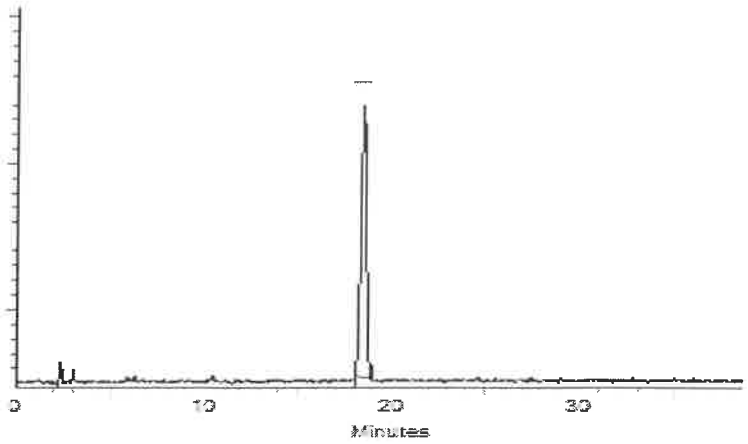
Flow Rate:
1.0 ml/min.

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

01129170

RESTEK CERTIFIED REFERENCE MATERIAL

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Bellefonte, PA 16823-8812
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Fax: (814)353-1309

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Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31450 **Lot No.:** A0163590

Description : 8330 Calibration Mix #1

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	HMX		1,002.5 µg/mL	+/- 5.9548	µg/mL	Gravimetric
	CAS # 2691-41-0	(Lot 191003JLM)		+/- 54.9222	µg/mL	Unstressed
	Purity 98%			+/- 64.0446	µg/mL	Stressed
2	RDX		1,005.0 µg/mL	+/- 5.9694	µg/mL	Gravimetric
	CAS # 121-82-4	(Lot 080228JLM)		+/- 55.0569	µg/mL	Unstressed
	Purity 99%			+/- 64.2018	µg/mL	Stressed
3	1,3,5-Trinitrobenzene		1,005.0 µg/mL	+/- 5.9694	µg/mL	Gravimetric
	CAS # 99-35-4	(Lot A6TDK)		+/- 55.0569	µg/mL	Unstressed
	Purity 99%			+/- 64.2018	µg/mL	Stressed
4	1,3-Dinitrobenzene		1,007.0 µg/mL	+/- 5.9813	µg/mL	Gravimetric
	CAS # 99-65-0	(Lot BCBN4329V)		+/- 55.1665	µg/mL	Unstressed
	Purity 99%			+/- 64.3295	µg/mL	Stressed
5	Nitrobenzene		1,000.0 µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS # 98-95-3	(Lot SHBJ3622)		+/- 54.7830	µg/mL	Unstressed
	Purity 99%			+/- 63.8824	µg/mL	Stressed
6	2,4,6-Trinitrotoluene		1,006.0 µg/mL	+/- 5.9753	µg/mL	Gravimetric
	CAS # 118-96-7	(Lot 5737200)		+/- 55.1117	µg/mL	Unstressed
	Purity 99%			+/- 64.2657	µg/mL	Stressed
7	2,4-Dinitrotoluene		1,009.0 µg/mL	+/- 5.9932	µg/mL	Gravimetric
	CAS # 121-14-2	(Lot MKAA0690V)		+/- 55.2761	µg/mL	Unstressed
	Purity 99%			+/- 64.4573	µg/mL	Stressed

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

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

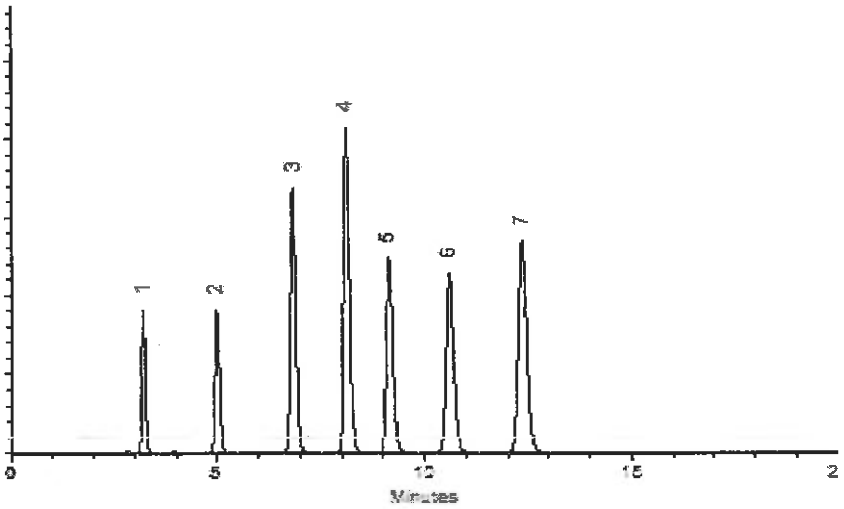
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Dalton Stover - Operations Technician I

Date Mixed: 17-Aug-2020 **Balance:** 1128353505

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 19-Aug-2020

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

Reagent

8330LCSMix1_00127

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31450 **Lot No.:** 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 µg/mL +/- 54.8926 µg/mL +/- 64.0101 µg/mL		Gravimetric Unstressed Stressed
2	RDX **CAS #** 121-82-4 **Purity** 99%	(Lot 080220JLM)	1,003.0 µg/mL	+/- 5.9575 µg/mL +/- 54.9474 µg/mL +/- 64.0740 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 µg/mL +/- 55.0021 µg/mL +/- 64.1379 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 µg/mL +/- 54.7830 µg/mL +/- 63.8824 µg/mL		Gravimetric Unstressed Stressed
5	Nitrobenzene **CAS #** 98-95-3 **Purity** 99%	(Lot MKCK4267)	1,010.0 µg/mL	+/- 5.9991 µg/mL +/- 55.3308 µg/mL +/- 64.5212 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 µg/mL +/- 54.7830 µg/mL +/- 63.8824 µg/mL		Gravimetric Unstressed Stressed
7	2,4-Dinitrotoluene **CAS #** 121-14-2 **Purity** 99%	(Lot MKAA0690)	1,004.0 µg/mL	+/- 5.9635 µg/mL +/- 55.0021 µg/mL +/- 64.1379 µg/mL		Gravimetric Unstressed Stressed

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

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

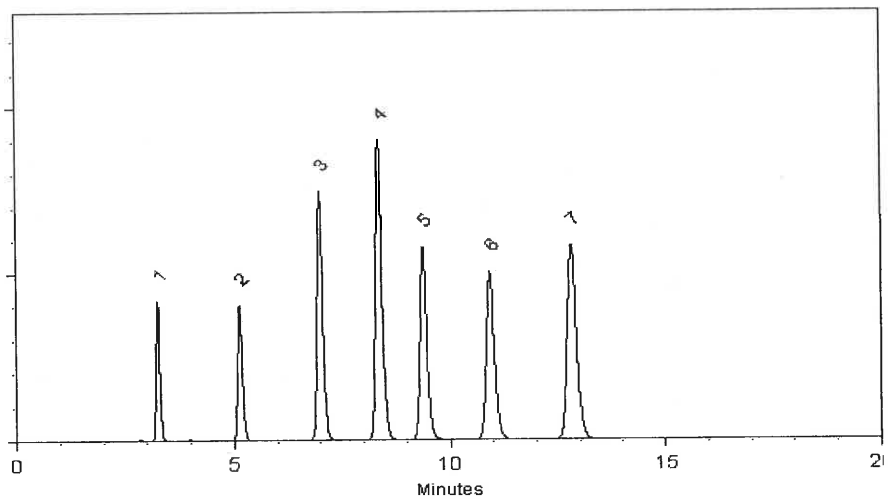
Flow Rate:
1.0 ml/min.

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.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330LCSmix2_00019

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Certificate #3222.01

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)

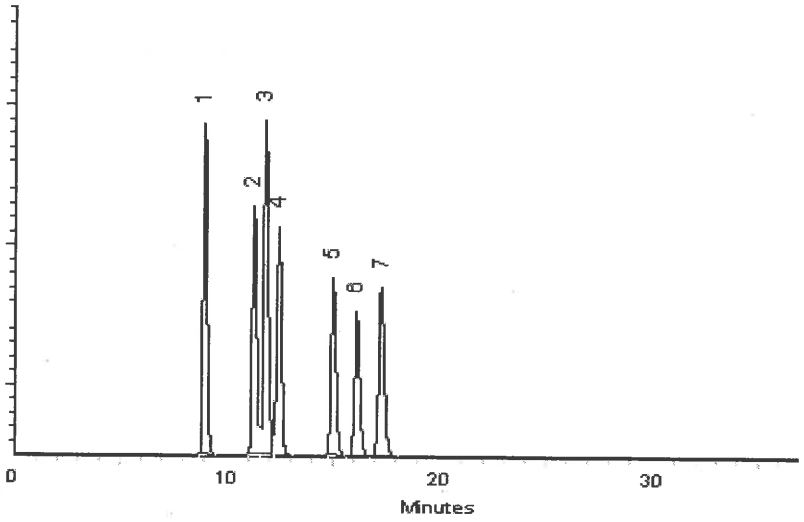
Flow Rate:
1.0 ml/min.

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

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31451 **Lot No.:** 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)

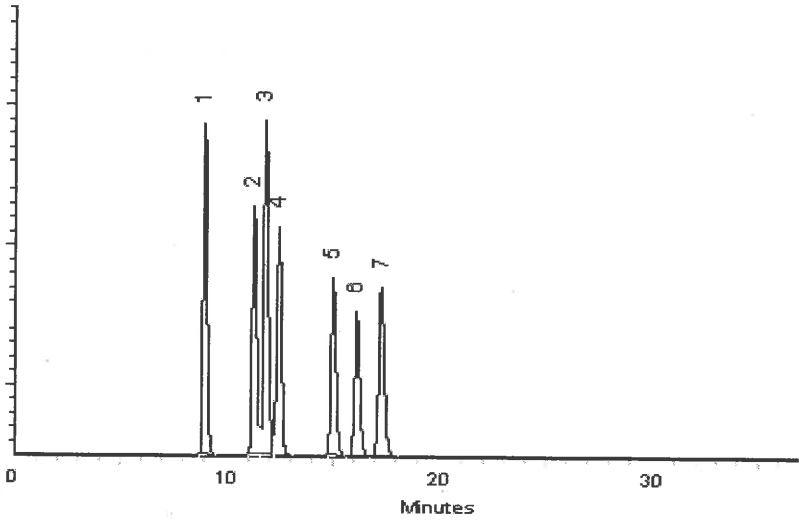
Flow Rate:
1.0 ml/min.

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.: 280-160187-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): Synergi Hyd ID:

Client Sample ID	Lab Sample ID	NBZ #
29SB183 (1-2)	280-160187-1	95
29SB183 (3-4)	280-160187-2	99
DUP-01	280-160187-3	98
29SB185 (3-4)	280-160187-4	101
29SB185 (7-8)	280-160187-5	94
29SB185 (11-12)	280-160187-6	102
29SB185 (13.5-14)	280-160187-7	93
29SB186 (9-10)	280-160187-8	99
29SB186 (11-12)	280-160187-9	102
29SB186 (13.5-14)	280-160187-10	96
29SB184 (3-4)	280-160187-11	96
29SB184 (7-8)	280-160187-12	98
29SB184 (11-12)	280-160187-13	101
29SB184 (13.5-14)	280-160187-14	92
DUP-02	280-160187-15	98
29SB199 (3-4)	280-160187-16	97
29SB199 (7-8)	280-160187-17	94
29SB198 (3-4)	280-160187-18	97
29SB198 (7-8)	280-160187-19	93
29SB202 (3-4)	280-160187-20	98
29SB202 (11-12)	280-160187-21	94
29SB202 (15-15.5)	280-160187-22	92
29SB200 (15-15.5)	280-160187-23	95
DUP-03	280-160187-24	94
29SB201(3-4)	280-160187-25	91
29SB201(11-12)	280-160187-26	89
29SB201(15-15.5)	280-160187-27	89
29SB187 (0-2)	280-160187-29	96
29SB187 (5-7)	280-160187-30	95
29SB187 (10-0.5)	280-160187-31	98
29SB189 (0-2)	280-160187-32	93
29SB189 (5-7)	280-160187-33	92
29SB189 (10-10.5)	280-160187-34	101
29SB188 (7-9)	280-160187-35	92
29SB188 (10-10.5)	280-160187-36	99

	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.: 280-160187-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): Synergi Hyd ID:

Client Sample ID	Lab Sample ID	NBZ #
29SB195 (7-8)	280-160187-37	89
29SB195 (9.5-10)	280-160187-38	97
29SB194 (7-8)	280-160187-39	95
29SB194 (9.5-10)	280-160187-40	87
DUP-04	280-160187-41	102
29SB191 (9.5-10)	280-160187-42	96
29SB197 (3-4)	280-160187-43	98
29SB197 (7-7.5)	280-160187-44	92
29SB196 (3-4)	280-160187-45	96
29SB196 (7-7.5)	280-160187-46	92
29SB172 (3-4)	280-160187-48	94
29SB172 (6-7)	280-160187-49	94
29SB172 (11-12)	280-160187-50	93
29SB172 (14.5-15)	280-160187-51	86
29SB180 (14.5-15)	280-160187-52	97
29SB173 (3-4)	280-160187-53	96
29SB173 (6-7)	280-160187-54	97
29SB173 (11-12)	280-160187-55	97
	MB 280-570516/1-A	90
	MB 280-570543/1-A	101
	MB 280-570718/1-A	98
	GB 280-570095/1-B	98
	GB 280-570100/1-B	94
	GB 280-570105/1-B	95
	LCS 280-570516/2-A	94
	LCS 280-570543/2-A	99
	LCS 280-570718/2-A	98
	LCSD 280-570516/3-A	98
	LCSD 280-570543/3-A	94
	LCSD 280-570718/3-A	101

	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.: 280-160187-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): Synergi Hyd ID:

Client Sample ID	Lab Sample ID	NBZ	#
	LCSSRM 280-570095/2-B	97	
	LCSSRM 280-570100/2-B	93	
	LCSSRM 280-570105/2-B	91	
29SB183 (3-4) MS	280-160187-2 MS	92	
29SB201(11-12) MS	280-160187-26 MS	99	
29SB197 (3-4) MS	280-160187-43 MS	96	
29SB183 (3-4) MSD	280-160187-2 MSD	98	
29SB201(11-12) MSD	280-160187-26 MSD	94	
29SB197 (3-4) MSD	280-160187-43 MSD	88	
29SB183 (3-4) DU	280-160187-2 DU	95	
29SB201(11-12) DU	280-160187-26 DU	90	
29SB197 (3-4) DU	280-160187-43 DU	98	
29SB183 (3-4) TRL	280-160187-2 TRL	102	
29SB201(11-12) TRL	280-160187-26 TRL	93	
29SB197 (3-4) TRL	280-160187-43 TRL	92	

	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.: 280-160187-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Synergi Hyd ID:

Client Sample ID	Lab Sample ID	NBZ #
EB-1	280-160187-28	97
EB-02	280-160187-47	94
	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.: 280-160187-1

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.: 280-160187-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D05023.d

Lab ID: LCS 280-570516/2-A Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	0.400	0.394	98	69-115	
1,3-Dinitrobenzene	0.400	0.372	93	83-122	
2,4,6-Trinitrotoluene	0.400	0.417	104	65-133	
2,4-Dinitrotoluene	0.400	0.377	94	82-119	
2,6-Dinitrotoluene	0.400	0.390	98	86-113	
2-Amino-4,6-dinitrotoluene	0.400	0.400	100	75-130	
4-Amino-2,6-dinitrotoluene	0.400	0.379	95	77-125	
HMX	0.400	0.378	95	65-114	
m-Nitrotoluene	0.400	0.378	95	68-125	
Nitrobenzene	0.400	0.372	93	75-120	
Nitroglycerin	0.400	0.415	104	27-146	
o-Nitrotoluene	0.400	0.382	96	72-125	
PETN	0.400	0.417	104	62-143	
p-Nitrotoluene	0.400	0.392	98	72-127	
RDX	0.400	0.362	90	77-123	
Tetryl	0.400	0.595	149	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.: 280-160187-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D05055.d

Lab ID: LCS 280-570543/2-A Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	0.400	0.382	96	69-115	
1,3-Dinitrobenzene	0.400	0.370	92	83-122	
2,4,6-Trinitrotoluene	0.400	0.405	101	65-133	
2,4-Dinitrotoluene	0.400	0.355	89	82-119	
2,6-Dinitrotoluene	0.400	0.380	95	86-113	
2-Amino-4,6-dinitrotoluene	0.400	0.368	92	75-130	
4-Amino-2,6-dinitrotoluene	0.400	0.369	92	77-125	
HMX	0.400	0.355	89	65-114	
m-Nitrotoluene	0.400	0.362	91	68-125	
Nitrobenzene	0.400	0.372	93	75-120	
Nitroglycerin	0.400	0.375	94	27-146	
o-Nitrotoluene	0.400	0.373	93	72-125	
PETN	0.400	0.414	103	62-143	
p-Nitrotoluene	0.400	0.369	92	72-127	
RDX	0.400	0.340	85	77-123	
Tetryl	0.400	0.597	149	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.: 280-160187-1

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 DUPLICATE RECOVERY

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

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.: 280-160187-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D05024.d

Lab ID: LCSD 280-570516/3-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	0.388	97	1	20	69-115	
1,3-Dinitrobenzene	0.400	0.383	96	3	20	83-122	
2,4,6-Trinitrotoluene	0.400	0.408	102	2	20	65-133	
2,4-Dinitrotoluene	0.400	0.345	86	9	20	82-119	
2,6-Dinitrotoluene	0.400	0.359	90	8	20	86-113	
2-Amino-4,6-dinitrotoluene	0.400	0.359	90	11	20	75-130	
4-Amino-2,6-dinitrotoluene	0.400	0.357	89	6	20	77-125	
HMX	0.400	0.342	85	10	20	65-114	
m-Nitrotoluene	0.400	0.338	85	11	20	68-125	
Nitrobenzene	0.400	0.373	93	0	20	75-120	
Nitroglycerin	0.400	0.404	101	3	20	27-146	
o-Nitrotoluene	0.400	0.353	88	8	20	72-125	
PETN	0.400	0.395	99	5	20	62-143	
p-Nitrotoluene	0.400	0.350	88	11	20	72-127	
RDX	0.400	0.397	99	9	20	77-123	
Tetryl	0.400	0.584	146	2	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.: 280-160187-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D05056.d

Lab ID: LCSD 280-570543/3-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	0.365	91	4	20	69-115	
1,3-Dinitrobenzene	0.400	0.345	86	7	20	83-122	
2,4,6-Trinitrotoluene	0.400	0.387	97	5	20	65-133	
2,4-Dinitrotoluene	0.400	0.344	86	3	20	82-119	
2,6-Dinitrotoluene	0.400	0.306	77	22	20	86-113	Q
2-Amino-4,6-dinitrotoluene	0.400	0.301	75	20	20	75-130	
4-Amino-2,6-dinitrotoluene	0.400	0.285	71	26	20	77-125	Q
HMX	0.400	0.347	87	2	20	65-114	
m-Nitrotoluene	0.400	0.360	90	1	20	68-125	
Nitrobenzene	0.400	0.362	90	3	20	75-120	
Nitroglycerin	0.400	0.380	95	1	20	27-146	
o-Nitrotoluene	0.400	0.362	91	3	20	72-125	
PETN	0.400	0.448	112	8	20	62-143	
p-Nitrotoluene	0.400	0.368	92	0	20	72-127	
RDX	0.400	0.360	90	6	20	77-123	
Tetryl	0.400	0.549	137	8	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.: 280-160187-1

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 LCS-CERTIFIED REFERENCE MATERIAL RECOVERY

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

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D05026.d

Lab ID: LCSSRM 280-570095/2-B Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSSRM CONCENTRATION (mg/Kg)	LCSSRM % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	0.600	0.569	95	58-116	
1,3-Dinitrobenzene	0.600	0.564	94	69-116	
2,4,6-Trinitrotoluene	0.600	0.429	71	69-120	
2,4-Dinitrotoluene	0.600	0.501	84	69-137	
2,6-Dinitrotoluene	0.600	0.543	90	60-121	
2-Amino-4,6-dinitrotoluene	0.600	0.479	80	56-108	
4-Amino-2,6-dinitrotoluene	0.600	0.423	71	46-98	
HMX	0.600	0.521	87	59-131	
m-Nitrotoluene	0.600	0.528	88	69-124	
Nitrobenzene	0.600	0.534	89	58-119	
Nitroglycerin	0.600	0.556	93	60-115	
o-Nitrotoluene	0.600	0.523	87	67-117	
PETN	0.600	0.505	84	60-115	
p-Nitrotoluene	0.600	0.512	85	51-143	
RDX	0.600	0.463	77	62-123	
Tetryl	0.600	0.357	59	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.: 280-160187-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D05058.d

Lab ID: LCSSRM 280-570100/2-B Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSSRM CONCENTRATION (mg/Kg)	LCSSRM % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	0.600	0.547	91	58-116	
1,3-Dinitrobenzene	0.600	0.529	88	69-116	
2,4,6-Trinitrotoluene	0.600	0.428	71	69-120	
2,4-Dinitrotoluene	0.600	0.494	82	69-137	
2,6-Dinitrotoluene	0.600	0.541	90	60-121	
2-Amino-4,6-dinitrotoluene	0.600	0.474	79	56-108	
4-Amino-2,6-dinitrotoluene	0.600	0.413	69	46-98	
HMX	0.600	0.545	91	59-131	
m-Nitrotoluene	0.600	0.542	90	69-124	
Nitrobenzene	0.600	0.521	87	58-119	
Nitroglycerin	0.600	0.540	90	60-115	
o-Nitrotoluene	0.600	0.525	88	67-117	
PETN	0.600	0.490	82	60-115	
p-Nitrotoluene	0.600	0.522	87	51-143	
RDX	0.600	0.473	79	62-123	
Tetryl	0.600	0.333	56	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.: 280-160187-1

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 MATRIX SPIKE RECOVERY

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

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D05029.d

Lab ID: 280-160187-2 MS Client ID: 29SB183 (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	0.396	0.048 U	0.368	93	69-115	
1,3-Dinitrobenzene	0.396	0.048 U	0.360	91	83-122	
2,4,6-Trinitrotoluene	0.396	0.048 U	0.396	100	65-133	
2,4-Dinitrotoluene	0.396	0.048 U	0.363	92	82-119	
2,6-Dinitrotoluene	0.396	0.048 U	0.390	99	86-113	
2-Amino-4,6-dinitrotoluene	0.396	0.048 U	0.384	97	75-130	
4-Amino-2,6-dinitrotoluene	0.396	0.048 U	0.384	97	77-125	
HMX	0.396	0.048 U	0.359	91	65-114	
m-Nitrotoluene	0.396	0.048 U	0.343	87	68-125	
Nitrobenzene	0.396	0.048 U	0.348	88	75-120	
Nitroglycerin	0.396	0.048 U	0.409	103	27-146	
o-Nitrotoluene	0.396	0.048 U	0.372	94	72-125	
PETN	0.396	0.048 U	0.435	110	62-143	
p-Nitrotoluene	0.396	0.048 U	0.373	94	72-127	
RDX	0.396	0.048 U	0.341	86	77-123	
Tetryl	0.396	0.048 U	0.518	131	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.: 280-160187-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D05066.d

Lab ID: 280-160187-26 MS Client ID: 29SB201(11-12) MS

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONCENTRATION (mg/Kg)	MS CONCENTRATION (mg/Kg)	MS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	0.387	0.047 U	0.370	96	69-115	
1,3-Dinitrobenzene	0.387	0.047 U	0.375	97	83-122	
2,4,6-Trinitrotoluene	0.387	0.047 U	0.396	102	65-133	
2,4-Dinitrotoluene	0.387	0.047 U	0.337	87	82-119	
2,6-Dinitrotoluene	0.387	0.047 U	0.358	92	86-113	
2-Amino-4,6-dinitrotoluene	0.387	0.047 U	0.354	91	75-130	
4-Amino-2,6-dinitrotoluene	0.387	0.047 U	0.341	88	77-125	
HMX	0.387	0.047 U	0.338	87	65-114	
m-Nitrotoluene	0.387	0.047 U	0.345	89	68-125	
Nitrobenzene	0.387	0.047 U	0.360	93	75-120	
Nitroglycerin	0.387	0.047 U	0.375	97	27-146	
o-Nitrotoluene	0.387	0.047 U	0.348	90	72-125	
PETN	0.387	0.047 U	0.392	101	62-143	
p-Nitrotoluene	0.387	0.047 U	0.348	90	72-127	
RDX	0.387	0.047 U	0.347	90	77-123	
Tetryl	0.387	0.047 U	0.581	150	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.: 280-160187-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D07019.d

Lab ID: 280-160187-43 MS Client ID: 29SB197 (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	0.372	0.047 U	0.333	90	69-115	
1,3-Dinitrobenzene	0.372	0.047 U	0.340	92	83-122	
2,4,6-Trinitrotoluene	0.372	0.047 U	0.365	98	65-133	
2,4-Dinitrotoluene	0.372	0.047 U	0.347	93	82-119	
2,6-Dinitrotoluene	0.372	0.047 U	0.354	95	86-113	
2-Amino-4,6-dinitrotoluene	0.372	0.047 U	0.364	98	75-130	
4-Amino-2,6-dinitrotoluene	0.372	0.047 U	0.340	91	77-125	
HMX	0.372	0.047 U	0.339	91	65-114	
m-Nitrotoluene	0.372	0.047 U	0.343	92	68-125	
Nitrobenzene	0.372	0.047 U	0.324	87	75-120	
Nitroglycerin	0.372	0.047 U	0.363	98	27-146	
o-Nitrotoluene	0.372	0.047 U	0.368	99	72-125	
PETN	0.372	0.047 U	0.408	110	62-143	
p-Nitrotoluene	0.372	0.047 U	0.355	95	72-127	
RDX	0.372	0.047 U	0.345	93	77-123	
Tetryl	0.372	0.047 U	0.513	138	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.: 280-160187-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D05030.d

Lab ID: 280-160187-2 MSD Client ID: 29SB183 (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	0.378	0.350	93	5	20	69-115	
1,3-Dinitrobenzene	0.378	0.355	94	1	20	83-122	
2,4,6-Trinitrotoluene	0.378	0.386	102	3	20	65-133	
2,4-Dinitrotoluene	0.378	0.322	85	12	20	82-119	
2,6-Dinitrotoluene	0.378	0.347	92	12	20	86-113	
2-Amino-4,6-dinitrotoluene	0.378	0.352	93	9	20	75-130	M
4-Amino-2,6-dinitrotoluene	0.378	0.296	78	26	20	77-125	M J1
HMX	0.378	0.309	82	15	20	65-114	
m-Nitrotoluene	0.378	0.344	91	0	20	68-125	
Nitrobenzene	0.378	0.348	92	0	20	75-120	
Nitroglycerin	0.378	0.387	102	5	20	27-146	
o-Nitrotoluene	0.378	0.334	89	11	20	72-125	
PETN	0.378	0.393	104	10	20	62-143	
p-Nitrotoluene	0.378	0.345	91	8	20	72-127	
RDX	0.378	0.299	79	13	20	77-123	M
Tetryl	0.378	0.514	136	1	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.: 280-160187-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D05067.d

Lab ID: 280-160187-26 MSD Client ID: 29SB201(11-12) MSD

COMPOUND	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,3,5-Trinitrobenzene	0.392	0.368	94	1	20	69-115	
1,3-Dinitrobenzene	0.392	0.366	93	3	20	83-122	
2,4,6-Trinitrotoluene	0.392	0.382	98	4	20	65-133	
2,4-Dinitrotoluene	0.392	0.351	90	4	20	82-119	
2,6-Dinitrotoluene	0.392	0.373	95	4	20	86-113	
2-Amino-4,6-dinitrotoluene	0.392	0.360	92	2	20	75-130	
4-Amino-2,6-dinitrotoluene	0.392	0.355	91	4	20	77-125	
HMX	0.392	0.348	89	3	20	65-114	
m-Nitrotoluene	0.392	0.356	91	3	20	68-125	
Nitrobenzene	0.392	0.352	90	2	20	75-120	
Nitroglycerin	0.392	0.391	100	4	20	27-146	
o-Nitrotoluene	0.392	0.368	94	5	20	72-125	
PETN	0.392	0.460	118	16	20	62-143	
p-Nitrotoluene	0.392	0.368	94	6	20	72-127	
RDX	0.392	0.333	85	4	20	77-123	
Tetryl	0.392	0.554	141	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.: 280-160187-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D07020.d

Lab ID: 280-160187-43 MSD Client ID: 29SB197 (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	0.396	0.351	89	5	20	69-115	
1,3-Dinitrobenzene	0.396	0.340	86	0	20	83-122	
2,4,6-Trinitrotoluene	0.396	0.371	94	2	20	65-133	
2,4-Dinitrotoluene	0.396	0.354	90	2	20	82-119	
2,6-Dinitrotoluene	0.396	0.360	91	2	20	86-113	
2-Amino-4,6-dinitrotoluene	0.396	0.336	85	8	20	75-130	
4-Amino-2,6-dinitrotoluene	0.396	0.332	84	2	20	77-125	
HMX	0.396	0.371	94	9	20	65-114	
m-Nitrotoluene	0.396	0.376	95	9	20	68-125	
Nitrobenzene	0.396	0.341	86	5	20	75-120	
Nitroglycerin	0.396	0.370	94	2	20	27-146	
o-Nitrotoluene	0.396	0.360	91	2	20	72-125	
PETN	0.396	0.405	102	1	20	62-143	
p-Nitrotoluene	0.396	0.366	93	3	20	72-127	
RDX	0.396	0.406	103	16	20	77-123	
Tetryl	0.396	0.539	136	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.: 280-160187-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D05033.d

Lab ID: 280-160187-2 TRL Client ID: 29SB183 (3-4) TRL

COMPOUND	SAMPLE CONC. (mg/Kg)	DUPLICATE CONC. (mg/Kg)	TRIPLICATE CONC. (mg/Kg)	%RSD	%RSD LIMIT	#
1,3,5-Trinitrobenzene	0.048 U	0.047 U	0.047 U	NC	20	
1,3-Dinitrobenzene	0.048 U	0.047 U	0.047 U	NC	20	
2,4,6-Trinitrotoluene	0.048 U	0.047 U	0.047 U	NC	20	
2,4-Dinitrotoluene	0.048 U	0.047 U	0.047 U	NC	20	
2,6-Dinitrotoluene	0.048 U	0.047 U	0.047 U	NC	20	
2-Amino-4,6-dinitrotoluene	0.048 U	0.047 U	0.047 U	NC	20	
4-Amino-2,6-dinitrotoluene	0.048 U	0.047 U	0.047 U	NC	20	
HMX	0.048 U	0.047 U	0.047 U	NC	20	
m-Nitrotoluene	0.048 U	0.047 U	0.047 U	NC	20	
Nitrobenzene	0.048 U	0.047 U	0.047 U	NC	20	
Nitroglycerin	0.048 U	0.047 U	0.047 U	NC	20	
o-Nitrotoluene	0.048 U	0.047 U	0.047 U	NC	20	
PETN	0.048 U	0.047 U	0.047 U	NC	20	
p-Nitrotoluene	0.048 U	0.047 U	0.047 U	NC	20	
RDX	0.048 U	0.047 U	0.047 U	NC	20	
Tetryl	0.048 U	0.047 U	0.047 U	NC	20	

Column to be used to flag %RSD values

8321A

LCMS TRIPLICATE SUMMARY

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

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D05069.d

Lab ID: 280-160187-26 TRL Client ID: 29SB201(11-12) TRL

COMPOUND	SAMPLE CONC. (mg/Kg)	DUPLICATE CONC. (mg/Kg)	TRIPLICATE CONC. (mg/Kg)	%RSD	%RSD LIMIT	#
1,3,5-Trinitrobenzene	0.047 U	0.048 U	0.049 U	NC	20	
1,3-Dinitrobenzene	0.047 U	0.048 U	0.049 U	NC	20	
2,4,6-Trinitrotoluene	0.047 U	0.048 U	0.049 U	NC	20	
2,4-Dinitrotoluene	0.047 U	0.048 U	0.049 U	NC	20	
2,6-Dinitrotoluene	0.047 U	0.048 U	0.049 U	NC	20	
2-Amino-4,6-dinitrotoluene	0.047 U	0.048 U	0.049 U	NC	20	
4-Amino-2,6-dinitrotoluene	0.047 U	0.048 U	0.049 U	NC	20	
HMX	0.047 U	0.048 U	0.049 U	NC	20	
m-Nitrotoluene	0.047 U	0.048 U	0.049 U	NC	20	
Nitrobenzene	0.047 U	0.048 U	0.049 U	NC	20	
Nitroglycerin	0.047 U	0.048 U	0.049 U	NC	20	
o-Nitrotoluene	0.047 U	0.048 U	0.049 U	NC	20	
PETN	0.047 U	0.048 U	0.049 U	NC	20	
p-Nitrotoluene	0.047 U	0.048 U	0.049 U	NC	20	
RDX	0.047 U	0.048 U	0.049 U	NC	20	
Tetryl	0.047 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.: 280-160187-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: ex722D07023.d

Lab ID: 280-160187-43 TRL Client ID: 29SB197 (3-4) TRL

COMPOUND	SAMPLE CONC. (mg/Kg)	DUPLICATE CONC. (mg/Kg)	TRIPLICATE CONC. (mg/Kg)	%RSD	%RSD LIMIT	#
1,3,5-Trinitrobenzene	0.047 U	0.048 U	0.050 U	NC	20	
1,3-Dinitrobenzene	0.047 U	0.048 U	0.050 U	NC	20	
2,4,6-Trinitrotoluene	0.047 U	0.048 U	0.050 U	NC	20	
2,4-Dinitrotoluene	0.047 U	0.048 U	0.050 U	NC	20	
2,6-Dinitrotoluene	0.047 U	0.048 U	0.050 U	NC	20	
2-Amino-4,6-dinitrotoluene	0.047 U	0.048 U	0.050 U	NC	20	
4-Amino-2,6-dinitrotoluene	0.047 U	0.048 U	0.050 U	NC	20	
HMX	0.047 U	0.048 U	0.050 U	NC	20	
m-Nitrotoluene	0.047 U	0.048 U	0.050 U	NC	20	
Nitrobenzene	0.047 U	0.048 U	0.050 U	NC	20	
Nitroglycerin	0.047 U	0.048 U	0.050 U	NC	20	
o-Nitrotoluene	0.047 U	0.048 U	0.050 U	NC	20	
PETN	0.047 U	0.048 U	0.050 U	NC	20	
p-Nitrotoluene	0.047 U	0.048 U	0.050 U	NC	20	
RDX	0.047 U	0.048 U	0.050 U	NC	20	
Tetryl	0.047 U	0.048 U	0.050 U	NC	20	

Column to be used to flag %RSD values

8321A

FORM IV
LCMS METHOD BLANK SUMMARY

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

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-1	280-160187-28	ex722D05015.d	04/05/2022 11:37
EB-02	280-160187-47	ex722D05016.d	04/05/2022 11:43

FORM IV
LCMS METHOD BLANK SUMMARY

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

SDG No.:

Lab File ID: ex722D05054.d Lab Sample ID: MB 280-570543/1-A

Matrix: Solid Date Extracted: 04/01/2022 16:54

Instrument ID: LC_LCMS7 Date Analyzed: 04/05/2022 15:27

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-570543/2-A	ex722D05055.d	04/05/2022 15:34
	LCSD 280-570543/3-A	ex722D05056.d	04/05/2022 15:40
	GB 280-570100/1-B	ex722D05057.d	04/05/2022 15:46
	LCSSRM 280-570100/2-B	ex722D05058.d	04/05/2022 15:53
29SB202 (11-12)	280-160187-21	ex722D05059.d	04/05/2022 15:59
29SB202 (15-15.5)	280-160187-22	ex722D05060.d	04/05/2022 16:06
29SB200 (15-15.5)	280-160187-23	ex722D05061.d	04/05/2022 16:12
DUP-03	280-160187-24	ex722D05062.d	04/05/2022 16:18
29SB201(3-4)	280-160187-25	ex722D05063.d	04/05/2022 16:25
29SB201(11-12)	280-160187-26	ex722D05065.d	04/05/2022 16:38
29SB201(11-12) MS	280-160187-26 MS	ex722D05066.d	04/05/2022 16:44
29SB201(11-12) MSD	280-160187-26 MSD	ex722D05067.d	04/05/2022 16:50
29SB201(11-12) DU	280-160187-26 DU	ex722D05068.d	04/05/2022 16:57
29SB201(11-12) TRL	280-160187-26 TRL	ex722D05069.d	04/05/2022 17:03
29SB201(15-15.5)	280-160187-27	ex722D05070.d	04/05/2022 17:10
29SB187 (0-2)	280-160187-29	ex722D05071.d	04/05/2022 17:16
29SB187 (5-7)	280-160187-30	ex722D05072.d	04/05/2022 17:22
29SB187 (10-0.5)	280-160187-31	ex722D05073.d	04/05/2022 17:29
29SB189 (0-2)	280-160187-32	ex722D05074.d	04/05/2022 17:35
29SB189 (5-7)	280-160187-33	ex722D05076.d	04/05/2022 17:48
29SB189 (10-10.5)	280-160187-34	ex722D05077.d	04/05/2022 17:54
29SB188 (7-9)	280-160187-35	ex722D05078.d	04/05/2022 18:01

FORM IV
LCMS METHOD BLANK SUMMARY

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

SDG No.:

Lab File ID: ex722D05054.d Lab Sample ID: MB 280-570543/1-A

Matrix: Solid Date Extracted: 04/01/2022 16:54

Instrument ID: LC_LCMS7 Date Analyzed: 04/05/2022 15:27

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
29SB188 (10-10.5)	280-160187-36	ex722D05079.d	04/05/2022 18:07
29SB195 (7-8)	280-160187-37	ex722D05080.d	04/05/2022 18:14
29SB195 (9.5-10)	280-160187-38	ex722D05081.d	04/05/2022 18:20
29SB194 (7-8)	280-160187-39	ex722D05082.d	04/05/2022 18:26
29SB194 (9.5-10)	280-160187-40	ex722D05083.d	04/05/2022 18:33
DUP-04	280-160187-41	ex722D05084.d	04/05/2022 18:39

FORM IV
LCMS METHOD BLANK SUMMARY

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

SDG No.:

Lab File ID: ex722D05022.d Lab Sample ID: MB 280-570516/1-A

Matrix: Solid Date Extracted: 04/01/2022 16:56

Instrument ID: LC_LCMS7 Date Analyzed: 04/05/2022 12:02

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-570516/2-A	ex722D05023.d	04/05/2022 12:09
	LCSD 280-570516/3-A	ex722D05024.d	04/05/2022 12:15
	GB 280-570095/1-B	ex722D05025.d	04/05/2022 12:22
	LCSSRM 280-570095/2-B	ex722D05026.d	04/05/2022 12:28
29SB183 (1-2)	280-160187-1	ex722D05027.d	04/05/2022 12:34
29SB183 (3-4)	280-160187-2	ex722D05028.d	04/05/2022 12:41
29SB183 (3-4) MS	280-160187-2 MS	ex722D05029.d	04/05/2022 12:47
29SB183 (3-4) MSD	280-160187-2 MSD	ex722D05030.d	04/05/2022 12:54
29SB183 (3-4) DU	280-160187-2 DU	ex722D05032.d	04/05/2022 13:06
29SB183 (3-4) TRL	280-160187-2 TRL	ex722D05033.d	04/05/2022 13:13
DUP-01	280-160187-3	ex722D05034.d	04/05/2022 13:19
29SB185 (3-4)	280-160187-4	ex722D05035.d	04/05/2022 13:26
29SB185 (7-8)	280-160187-5	ex722D05036.d	04/05/2022 13:32
29SB185 (11-12)	280-160187-6	ex722D05037.d	04/05/2022 13:38
29SB185 (13.5-14)	280-160187-7	ex722D05038.d	04/05/2022 13:45
29SB186 (9-10)	280-160187-8	ex722D05039.d	04/05/2022 13:51
29SB186 (11-12)	280-160187-9	ex722D05040.d	04/05/2022 13:58
29SB186 (13.5-14)	280-160187-10	ex722D05041.d	04/05/2022 14:04
29SB184 (3-4)	280-160187-11	ex722D05043.d	04/05/2022 14:17
29SB184 (7-8)	280-160187-12	ex722D05044.d	04/05/2022 14:23
29SB184 (11-12)	280-160187-13	ex722D05045.d	04/05/2022 14:30
29SB184 (13.5-14)	280-160187-14	ex722D05046.d	04/05/2022 14:36

FORM IV
LCMS METHOD BLANK SUMMARY

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

SDG No.:

Lab File ID: ex722D05022.d Lab Sample ID: MB 280-570516/1-A

Matrix: Solid Date Extracted: 04/01/2022 16:56

Instrument ID: LC_LCMS7 Date Analyzed: 04/05/2022 12:02

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
DUP-02	280-160187-15	ex722D05047.d	04/05/2022 14:42
29SB199 (3-4)	280-160187-16	ex722D05048.d	04/05/2022 14:49
29SB199 (7-8)	280-160187-17	ex722D05049.d	04/05/2022 14:55
29SB198 (3-4)	280-160187-18	ex722D05050.d	04/05/2022 15:02
29SB198 (7-8)	280-160187-19	ex722D05051.d	04/05/2022 15:08
29SB202 (3-4)	280-160187-20	ex722D05052.d	04/05/2022 15:14

FORM IV
LCMS METHOD BLANK SUMMARY

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

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
29SB191 (9.5-10)	280-160187-42	ex722D07017.d	04/07/2022 12:11
29SB197 (3-4)	280-160187-43	ex722D07018.d	04/07/2022 12:18
29SB197 (3-4) MS	280-160187-43 MS	ex722D07019.d	04/07/2022 12:24
29SB197 (3-4) MSD	280-160187-43 MSD	ex722D07020.d	04/07/2022 12:31
29SB197 (3-4) DU	280-160187-43 DU	ex722D07022.d	04/07/2022 12:44
29SB197 (3-4) TRL	280-160187-43 TRL	ex722D07023.d	04/07/2022 12:51
29SB197 (7-7.5)	280-160187-44	ex722D07024.d	04/07/2022 12:57
29SB196 (3-4)	280-160187-45	ex722D07025.d	04/07/2022 13:04
29SB196 (7-7.5)	280-160187-46	ex722D07026.d	04/07/2022 13:10
29SB172 (3-4)	280-160187-48	ex722D07027.d	04/07/2022 13:17
29SB172 (6-7)	280-160187-49	ex722D07028.d	04/07/2022 13:24
29SB172 (11-12)	280-160187-50	ex722D07029.d	04/07/2022 13:30
29SB172 (14.5-15)	280-160187-51	ex722D07030.d	04/07/2022 13:37
29SB180 (14.5-15)	280-160187-52	ex722D07031.d	04/07/2022 13:43
29SB173 (3-4)	280-160187-53	ex722D07033.d	04/07/2022 13:57
29SB173 (6-7)	280-160187-54	ex722D07034.d	04/07/2022 14:03
29SB173 (11-12)	280-160187-55	ex722D07035.d	04/07/2022 14:10

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

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

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
280-160187-28	EB-1	268036	1.23	947752	1.79	1715016	2.87
280-160187-47	EB-02	269012	1.23	863377	1.79	1822978	2.87
CCV 280-570784/18		225789	1.23	864556	1.79	1744336	2.86
CCV 280-570785/18		225789	1.23	864556	1.79	1744336	2.86
MB 280-570516/1-A		259023	1.23	913276	1.78	1773310	2.85
LCS 280-570516/2-A		239390	1.23	977824	1.78	1797572	2.86
LCSD 280-570516/3-A		239796	1.23	904600	1.78	1742268	2.85
GB 280-570095/1-B		258960	1.23	964513	1.78	1853112	2.85
LCSSRM 280-570095/2-B		220935	1.23	972383	1.78	1776045	2.86
280-160187-1	29SB183 (1-2)	283637	1.23	1033606	1.78	1818969	2.86
280-160187-2	29SB183 (3-4)	273991	1.23	1009534	1.79	1841508	2.85
280-160187-2 MS	29SB183 (3-4) MS	242807	1.23	913949	1.79	1855703	2.86
280-160187-2 MSD	29SB183 (3-4) MSD	269718	1.23	980540	1.79	1832635	2.86
CCV 280-570785/28		254189	1.23	963118	1.79	1835590	2.86
280-160187-2 DU	29SB183 (3-4) DU	276526	1.23	1066215	1.78	1881768	2.86
280-160187-2 TRL	29SB183 (3-4) TRL	269268	1.23	1045023	1.78	1887646	2.85
280-160187-3	DUP-01	283598	1.23	1032237	1.78	1834100	2.86
280-160187-4	29SB185 (3-4)	283213	1.23	968700	1.78	1889943	2.86
280-160187-5	29SB185 (7-8)	296041	1.23	1062563	1.78	1881939	2.85
280-160187-6	29SB185 (11-12)	280833	1.23	1096084	1.78	1916133	2.86
280-160187-7	29SB185 (13.5-14)	283500	1.23	1025006	1.79	1902006	2.86
280-160187-8	29SB186 (9-10)	267226	1.23	975987	1.78	1944862	2.86
280-160187-9	29SB186 (11-12)	289965	1.23	1048430	1.78	1850165	2.85
280-160187-10	29SB186 (13.5-14)	295693	1.23	1124085	1.79	1930613	2.85

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.: 280-160187-1

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						
CCV 280-570785/39		238032	1.23	858513	1.79	1862929	2.85
280-160187-11	29SB184 (3-4)	278275	1.23	1015116	1.78	1934122	2.86
280-160187-12	29SB184 (7-8)	260276	1.23	979986	1.78	1906676	2.85
280-160187-13	29SB184 (11-12)	298018	1.23	1065552	1.78	1902393	2.85
280-160187-14	29SB184 (13.5-14)	263871	1.23	1038117	1.78	1964482	2.85
280-160187-15	DUP-02	284165	1.23	968193	1.78	1908977	2.85
280-160187-16	29SB199 (3-4)	291378	1.23	992132	1.79	1944629	2.86
280-160187-17	29SB199 (7-8)	293323	1.23	1056315	1.79	1931085	2.86
280-160187-18	29SB198 (3-4)	269685	1.23	1066277	1.78	1891889	2.86
280-160187-19	29SB198 (7-8)	279614	1.23	986365	1.79	1972545	2.85
280-160187-20	29SB202 (3-4)	251233	1.23	1061658	1.78	1905874	2.86
CCV 280-570785/50		275499	1.23	958739	1.78	1811059	2.86
CCV 280-570786/50		275499	1.23	958739	1.78	1811059	2.86
MB 280-570543/1-A		282722	1.23	1022162	1.78	1852878	2.85
LCS 280-570543/2-A		255604	1.23	1018733	1.78	1796248	2.86
LCSD 280-570543/3-A		268276	1.23	1011016	1.79	1906552	2.85
GB 280-570100/1-B		359075	1.23	1192359	1.79	2235187	2.85
LCSSRM 280-570100/2-B		218925	1.23	1005030	1.78	1833620	2.85
280-160187-21	29SB202 (11-12)	277775	1.23	962050	1.79	1844100	2.86
280-160187-22	29SB202 (15-15.5)	280186	1.23	973382	1.78	1834411	2.86
280-160187-23	29SB200 (15-15.5)	285771	1.23	983818	1.78	1806212	2.86
280-160187-24	DUP-03	306553	1.23	1009827	1.78	1832493	2.86
280-160187-25	29SB201(3-4)	289469	1.23	986702	1.78	1891724	2.86
CCV 280-570786/61		263140	1.23	981347	1.78	1757130	2.86
280-160187-26	29SB201(11-12)	292076	1.23	996825	1.79	1919200	2.86
280-160187-26 MS	29SB201(11-12) MS	238777	1.23	889446	1.78	1793864	2.86
280-160187-26 MSD	29SB201(11-12) MSD	247573	1.23	986779	1.78	1812926	2.85
280-160187-26 DU	29SB201(11-12) DU	246528	1.23	891776	1.78	1842340	2.86
280-160187-26 TRL	29SB201(11-12) TRL	279550	1.23	1025866	1.78	1844160	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.: 280-160187-1

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						
280-160187-27	29SB201(15-15.5)	353387	1.23	1135549	1.77	2139060	2.86
280-160187-29	29SB187 (0-2)	305654	1.23	1057465	1.78	1808620	2.85
280-160187-30	29SB187 (5-7)	306939	1.23	953376	1.78	1832611	2.86
280-160187-31	29SB187 (10-0.5)	276614	1.23	1049058	1.78	1821642	2.86
280-160187-32	29SB189 (0-2)	280750	1.23	1004165	1.79	1814320	2.86
CCV 280-570786/72		252840	1.23	973301	1.78	1775077	2.86
280-160187-33	29SB189 (5-7)	303924	1.23	1029617	1.78	1852140	2.86
280-160187-34	29SB189 (10-10.5)	309315	1.23	974325	1.79	1813514	2.86
280-160187-35	29SB188 (7-9)	305257	1.23	983964	1.79	1824811	2.86
280-160187-36	29SB188 (10-10.5)	291642	1.23	1007303	1.78	1774631	2.86
280-160187-37	29SB195 (7-8)	287079	1.23	1012402	1.79	1924376	2.86
280-160187-38	29SB195 (9.5-10)	298470	1.23	1034181	1.79	1853632	2.86
280-160187-39	29SB194 (7-8)	312341	1.23	1066621	1.79	1866797	2.86
280-160187-40	29SB194 (9.5-10)	300226	1.23	1032080	1.78	1844851	2.86
280-160187-41	DUP-04	281130	1.23	1001280	1.78	1779698	2.86
CCV 280-570786/82		268250	1.23	963190	1.78	1819985	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.: 280-160187-1

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				
280-160187-28	EB-1	5554795	4.05				
280-160187-47	EB-02	5502456	4.05				
CCV 280-570784/18		5453702	4.05				
CCV 280-570785/18		5453702	4.05				
MB 280-570516/1-A		5814306	4.04				
LCS 280-570516/2-A		5591152	4.05				
LCSD 280-570516/3-A		5874037	4.04				
GB 280-570095/1-B		5613353	4.04				
LCSSRM 280-570095/2-B		5914082	4.04				
280-160187-1	29SB183 (1-2)	5606686	4.05				
280-160187-2	29SB183 (3-4)	5985518	4.05				
280-160187-2 MS	29SB183 (3-4) MS	5636927	4.05				
280-160187-2 MSD	29SB183 (3-4) MSD	6035038	4.05				
CCV 280-570785/28		5628167	4.05				
280-160187-2 DU	29SB183 (3-4) DU	6079453	4.04				
280-160187-2 TRL	29SB183 (3-4) TRL	6158902	4.04				
280-160187-3	DUP-01	5998349	4.04				
280-160187-4	29SB185 (3-4)	5853055	4.04				
280-160187-5	29SB185 (7-8)	6149162	4.04				
280-160187-6	29SB185 (11-12)	6206592	4.05				
280-160187-7	29SB185 (13.5-14)	5806142	4.05				
280-160187-8	29SB186 (9-10)	6159542	4.04				
280-160187-9	29SB186 (11-12)	5865015	4.04				
280-160187-10	29SB186 (13.5-14)	6122600	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.: 280-160187-1

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						
CCV 280-570785/39		5786136	4.04				
280-160187-11	29SB184 (3-4)	6135871	4.04				
280-160187-12	29SB184 (7-8)	6070096	4.04				
280-160187-13	29SB184 (11-12)	6298765	4.04				
280-160187-14	29SB184 (13.5-14)	5861868	4.04				
280-160187-15	DUP-02	6292740	4.05				
280-160187-16	29SB199 (3-4)	6319202	4.05				
280-160187-17	29SB199 (7-8)	6245974	4.05				
280-160187-18	29SB198 (3-4)	5752832	4.04				
280-160187-19	29SB198 (7-8)	6211070	4.04				
280-160187-20	29SB202 (3-4)	5893281	4.05				
CCV 280-570785/50		6035894	4.05				
CCV 280-570786/50		6035894	4.05				
MB 280-570543/1-A		5758520	4.05				
LCS 280-570543/2-A		5701496	4.04				
LCSD 280-570543/3-A		7331486	4.05				
GB 280-570100/1-B		6163231	4.05				
LCSSRM 280-570100/2-B		5866970	4.05				
280-160187-21	29SB202 (11-12)	5523131	4.05				
280-160187-22	29SB202 (15-15.5)	5985955	4.04				
280-160187-23	29SB200 (15-15.5)	5652116	4.04				
280-160187-24	DUP-03	5630922	4.05				
280-160187-25	29SB201(3-4)	5936164	4.05				
CCV 280-570786/61		5487519	4.04				
280-160187-26	29SB201(11-12)	5934421	4.04				
280-160187-26 MS	29SB201(11-12) MS	5916588	4.05				
280-160187-26 MSD	29SB201(11-12) MSD	5703778	4.05				
280-160187-26 DU	29SB201(11-12) DU	6100182	4.05				
280-160187-26 TRL	29SB201(11-12) TRL	5676259	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.: 280-160187-1

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						
280-160187-27	29SB201(15-15.5)	6043266	4.05				
280-160187-29	29SB187 (0-2)	6006784	4.05				
280-160187-30	29SB187 (5-7)	5845828	4.05				
280-160187-31	29SB187 (10-0.5)	5464004	4.05				
280-160187-32	29SB189 (0-2)	5915126	4.04				
CCV 280-570786/72		5574967	4.05				
280-160187-33	29SB189 (5-7)	5901263	4.05				
280-160187-34	29SB189 (10-10.5)	5833022	4.05				
280-160187-35	29SB188 (7-9)	5835714	4.04				
280-160187-36	29SB188 (10-10.5)	5875508	4.05				
280-160187-37	29SB195 (7-8)	5876060	4.05				
280-160187-38	29SB195 (9.5-10)	5708759	4.05				
280-160187-39	29SB194 (7-8)	5924044	4.05				
280-160187-40	29SB194 (9.5-10)	5884590	4.05				
280-160187-41	DUP-04	5624060	4.04				
CCV 280-570786/82		5980576	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.: 280-160187-1

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
280-160187-42	29SB191 (9.5-10)	129257	1.25	381296	1.84	1376867	3.02
280-160187-43	29SB197 (3-4)	127080	1.25	381544	1.84	1343854	3.02
280-160187-43 MS	29SB197 (3-4) MS	113305	1.25	435904	1.84	1392070	3.02
280-160187-43 MSD	29SB197 (3-4) MSD	107504	1.25	392651	1.84	1385680	3.02
CCV 280-571108/21		116352	1.25	379799	1.84	1363291	3.03
280-160187-43 DU	29SB197 (3-4) DU	131030	1.25	390503	1.84	1379791	3.02
280-160187-43 TRL	29SB197 (3-4) TRL	117307	1.25	405686	1.84	1340335	3.02
280-160187-44	29SB197 (7-7.5)	115042	1.25	374787	1.84	1373843	3.02
280-160187-45	29SB196 (3-4)	138895	1.25	384921	1.84	1392858	3.02
280-160187-46	29SB196 (7-7.5)	132920	1.25	411618	1.84	1440145	3.02
280-160187-48	29SB172 (3-4)	130864	1.25	386460	1.84	1364410	3.02
280-160187-49	29SB172 (6-7)	124493	1.25	434841	1.84	1431289	3.02
280-160187-50	29SB172 (11-12)	134182	1.25	411516	1.84	1415434	3.02
280-160187-51	29SB172 (14.5-15)	133913	1.25	387099	1.84	1424326	3.02
280-160187-52	29SB180 (14.5-15)	129959	1.25	386804	1.84	1362950	3.02
CCV 280-571108/32		110145	1.25	378008	1.84	1337884	3.02
280-160187-53	29SB173 (3-4)	132180	1.25	409611	1.84	1375237	3.02
280-160187-54	29SB173 (6-7)	109894	1.25	373784	1.84	1336928	3.02
280-160187-55	29SB173 (11-12)	128642	1.25	387696	1.84	1355628	3.03
CCV 280-571108/43		101680	1.25	359456	1.84	1311201	3.03

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.: 280-160187-1

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				
280-160187-42	29SB191 (9.5-10)	4329189	4.33				
280-160187-43	29SB197 (3-4)	4212735	4.33				
280-160187-43 MS	29SB197 (3-4) MS	4400888	4.33				
280-160187-43 MSD	29SB197 (3-4) MSD	4203383	4.33				
CCV 280-571108/21		4212185	4.34				
280-160187-43 DU	29SB197 (3-4) DU	4268766	4.33				
280-160187-43 TRL	29SB197 (3-4) TRL	4261543	4.34				
280-160187-44	29SB197 (7-7.5)	4311845	4.33				
280-160187-45	29SB196 (3-4)	4314255	4.33				
280-160187-46	29SB196 (7-7.5)	4471172	4.33				
280-160187-48	29SB172 (3-4)	4775985	4.32				
280-160187-49	29SB172 (6-7)	4439596	4.33				
280-160187-50	29SB172 (11-12)	4386304	4.33				
280-160187-51	29SB172 (14.5-15)	4317124	4.33				
280-160187-52	29SB180 (14.5-15)	4297314	4.34				
CCV 280-571108/32		4093045	4.33				
280-160187-53	29SB173 (3-4)	4228448	4.33				
280-160187-54	29SB173 (6-7)	4100882	4.34				
280-160187-55	29SB173 (11-12)	4210895	4.33				
CCV 280-571108/43		3997245	4.34				

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.: 280-160187-1

SDG No.:

Client Sample ID: 29SB183 (1-2) | Lab Sample ID: 280-160187-1

Matrix: Solid | Lab File ID: ex722D05027.d

Analysis Method: 8321A | Date Collected: 03/22/2022 12:20

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

Sample wt/vol: 10.17(g) | Date Analyzed: 04/05/2022 12:34

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.: 570785 | 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	0.031
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	0.029
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	95		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\ex722D05027.d
Lims ID: 280-160187-A-1-B
Client ID: 29SB183 (1-2)
Sample Type: Client
Inject. Date: 05-Apr-2022 12:34:49 ALS Bottle#: 21 Worklist Smp#: 24
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-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
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	1.022	1.223	-0.201	0.834	975	-0.4279	2.2	
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		283637	125.0	165	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		1033606	125.0	318	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1818969	129.4	223	
9 Nitroglycerin								
62.0	2.922	2.900	0.044	1.021	1791	-0.0854	2.2	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	845344	95.3	107	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		5606686	125.0	120	

Reagents:

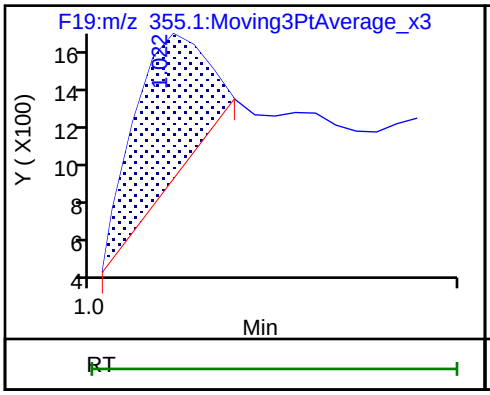
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:09:49 Chrom Revision: 2.3 18-Mar-2022 09:07:22

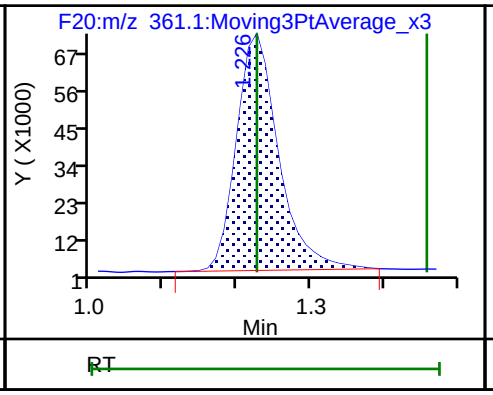
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05027.d
Injection Date: 05-Apr-2022 12:34:49 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-1-B Lab Sample ID: 280-160187-1
Client ID: 29SB183 (1-2)
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

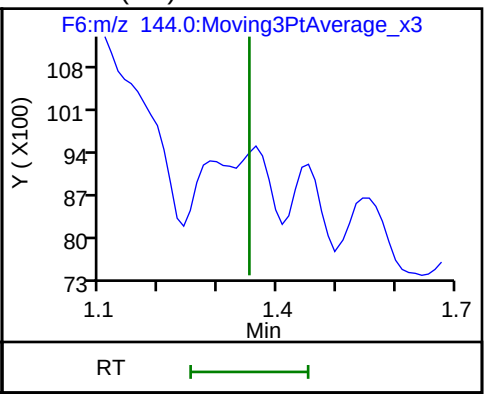
2 HMX



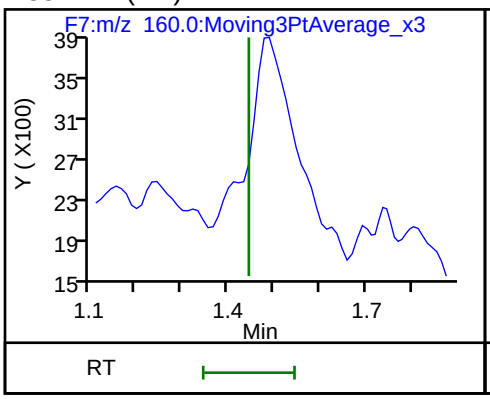
* 1 HMX-13C4



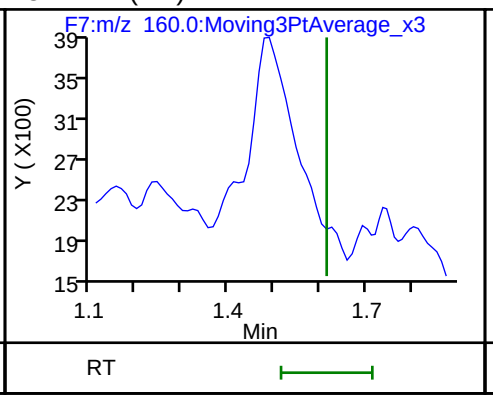
36 TNX (ND)



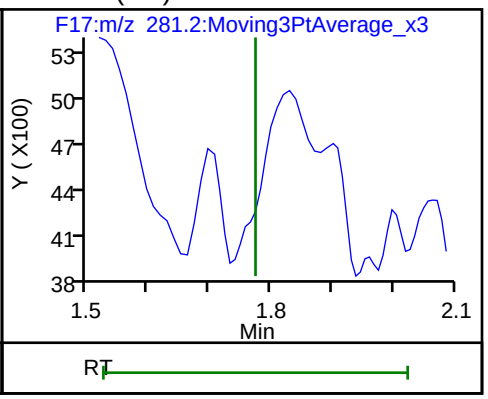
33 DNX (ND)



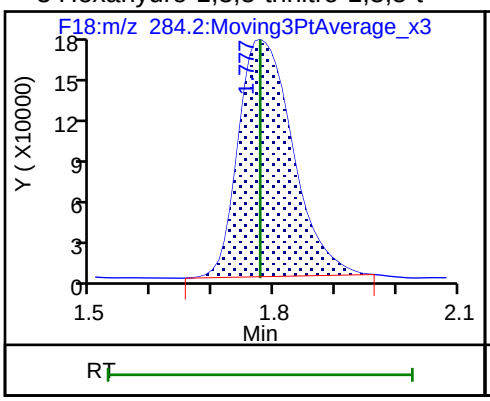
34 MNX (ND)



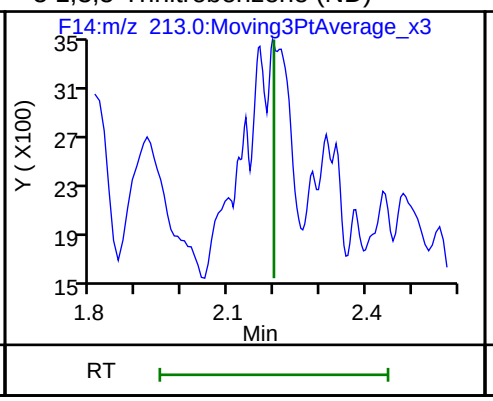
4 RDX (ND)



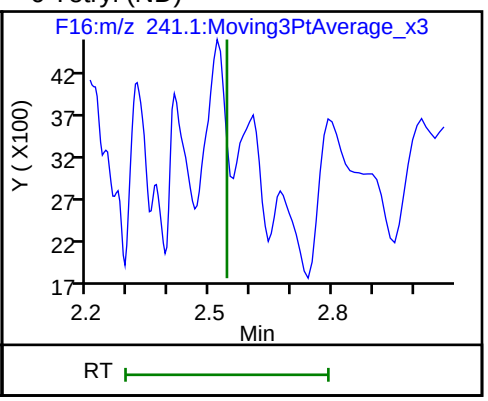
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



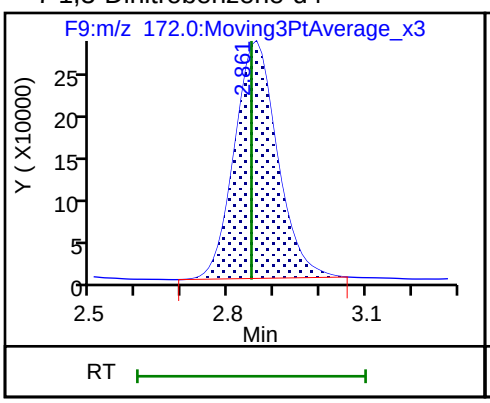
5 1,3,5-Trinitrobenzene (ND)



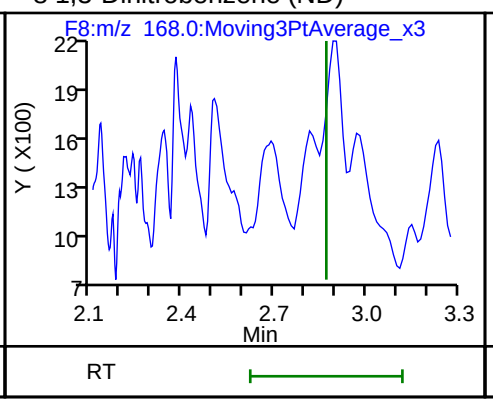
6 Tetryl (ND)



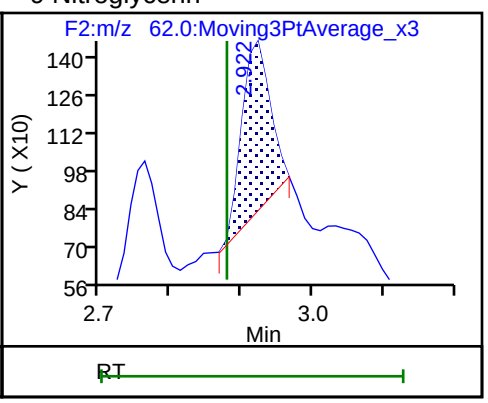
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



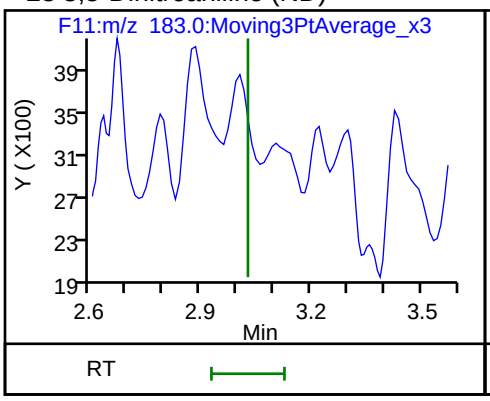
9 Nitroglycerin



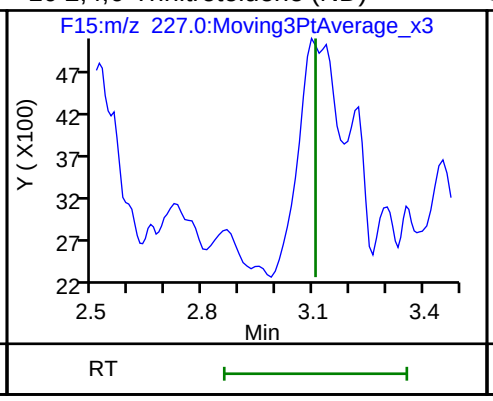
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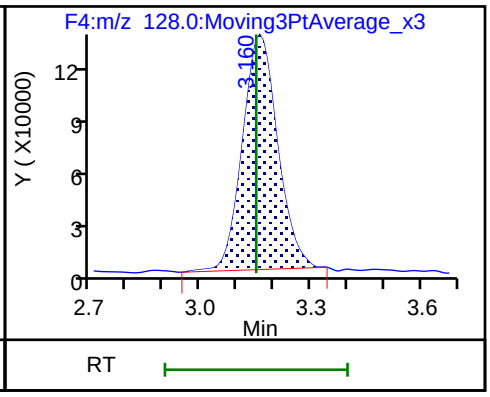
28 3,5-Dinitroaniline (ND)



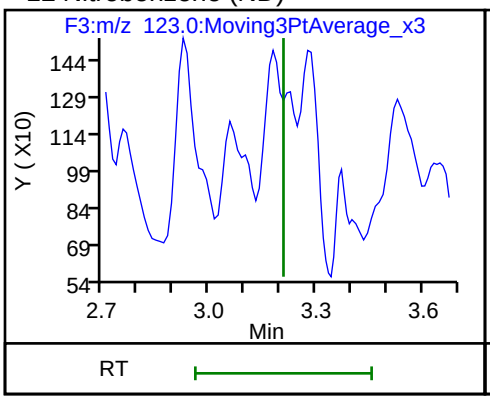
10 2,4,6-Trinitrotoluene (ND)



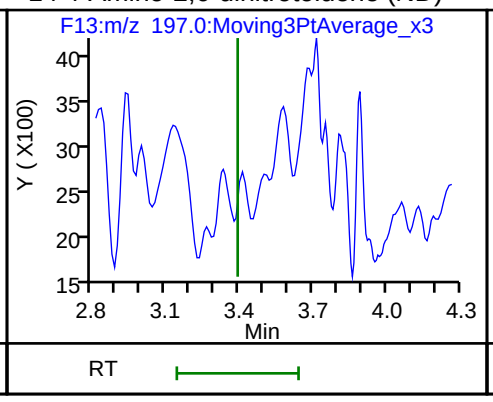
$ 11 Nitrobenzene-d5



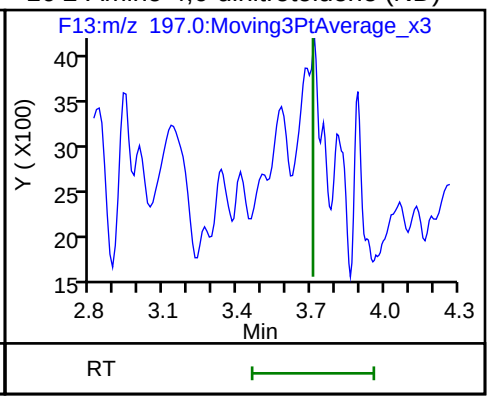
12 Nitrobenzene (ND)



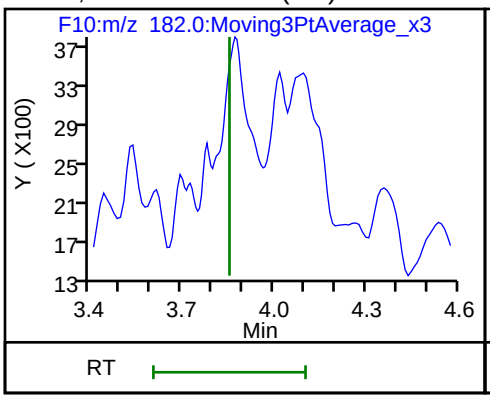
14 4-Amino-2,6-dinitrotoluene (ND)



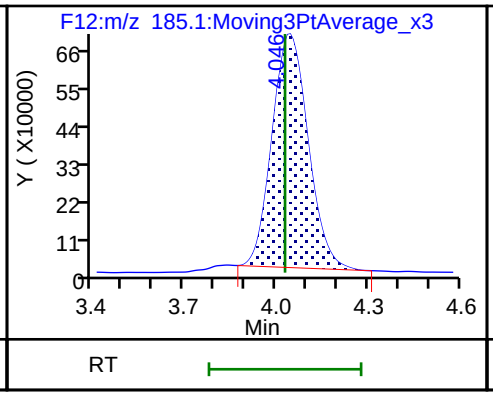
16 2-Amino-4,6-dinitrotoluene (ND)



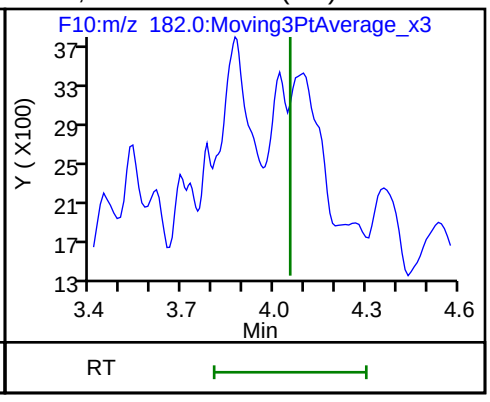
17 2,6-Dinitrotoluene (ND)



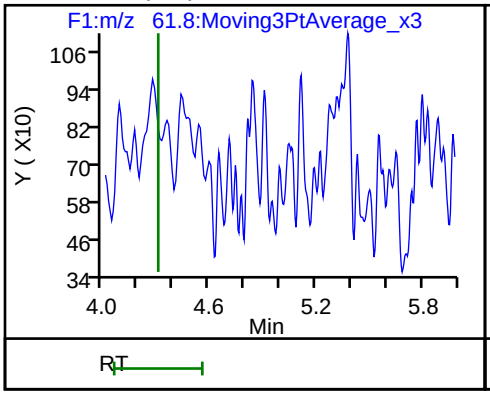
* 18 2,4-dinitrotoluene-d3



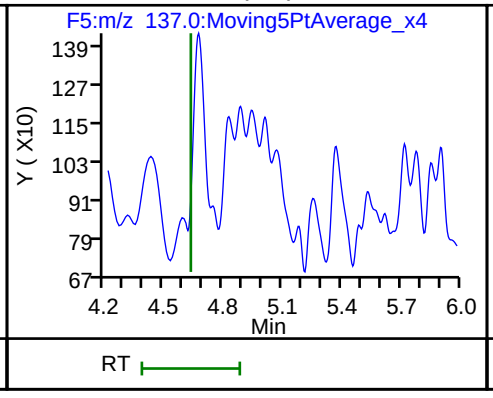
19 2,4-Dinitrotoluene (ND)



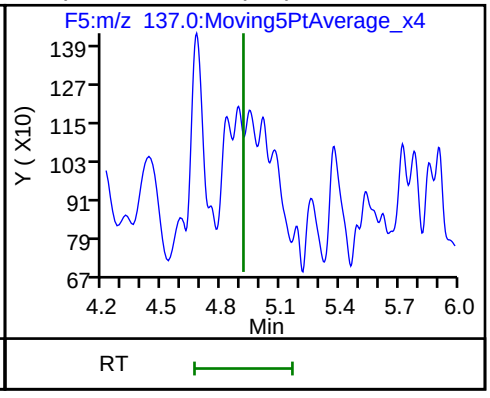
20 PETN (ND)



22 o-Nitrotoluene (ND)



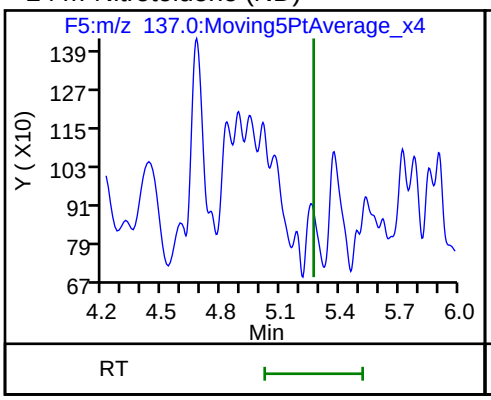
23 p-Nitrotoluene (ND)



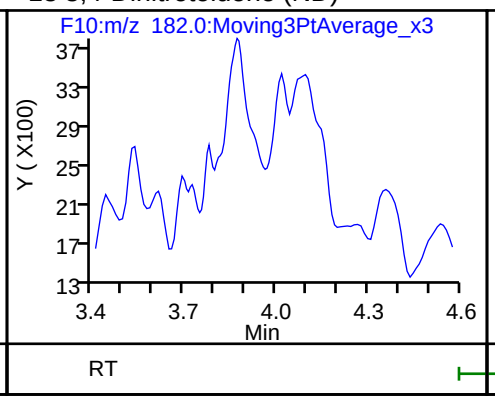
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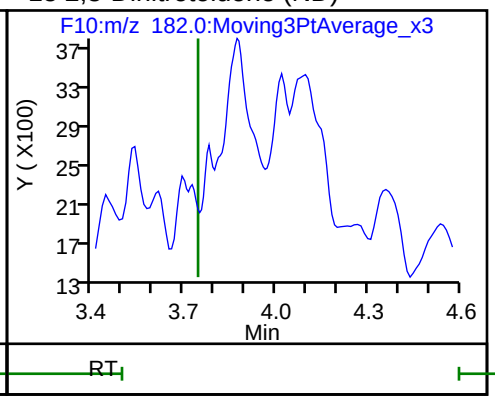
24 m-Nitrotoluene (ND)



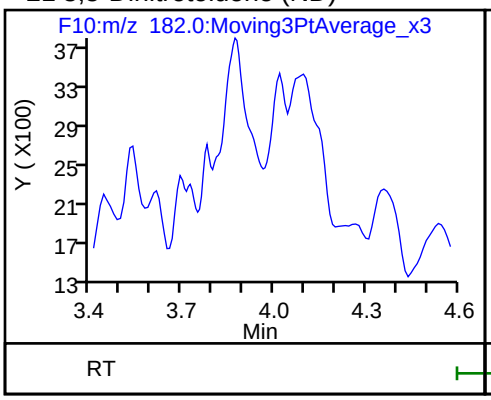
13 3,4-Dinitrotoluene (ND)



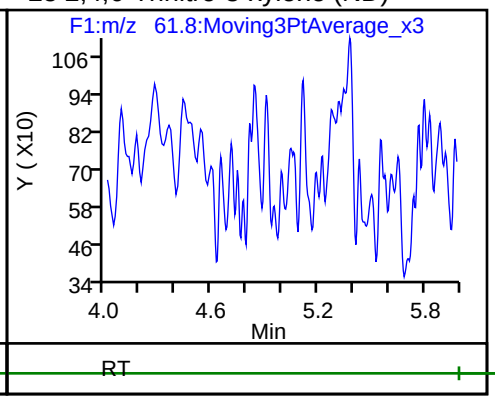
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 07:09:49 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05027.d
Lims ID: 280-160187-A-1-B
Client ID: 29SB183 (1-2)
Sample Type: Client
Inject. Date: 05-Apr-2022 12:34:49 ALS Bottle#: 21 Worklist Smp#: 24
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-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

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	95.3	94.99

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB183 (3-4) | Lab Sample ID: 280-160187-2
Matrix: Solid | Lab File ID: ex722D05028.d
Analysis Method: 8321A | Date Collected: 03/22/2022 12:30
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:56
Sample wt/vol: 10.49(g) | Date Analyzed: 04/05/2022 12:41
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	0.095	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 J1	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 J1 Q	0.095	0.048	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	99		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\ex722D05028.d
Lims ID: 280-160187-A-2-F
Client ID: 29SB183 (3-4)
Sample Type: Client
Inject. Date: 05-Apr-2022 12:41:13 ALS Bottle#: 22 Worklist Smp#: 25
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-2-F
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 13:34:28
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		273991	125.0	133	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.785	1.777	0.008		1009534	125.0	237	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.850	2.850	0.0		1841508	129.4	316	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	891427	99.3	97.8	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		5985518	125.0	104	

QC Flag Legend
Processing Flags

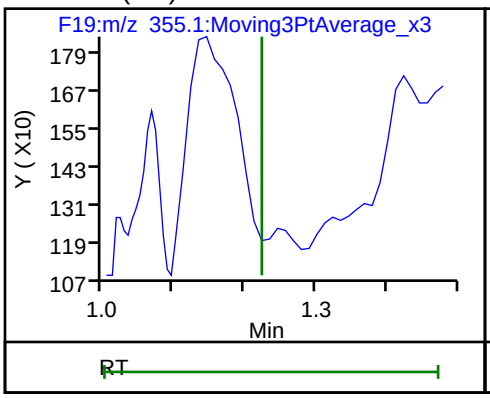
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:09:50 Chrom Revision: 2.3 18-Mar-2022 09:07:22

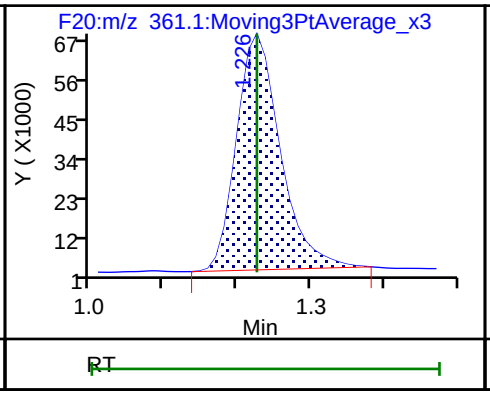
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05028.d
Injection Date: 05-Apr-2022 12:41:13 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-2-F Lab Sample ID: 280-160187-2
Client ID: 29SB183 (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

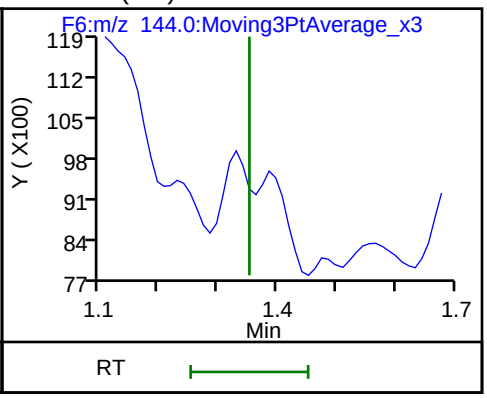
2 HMX (ND)



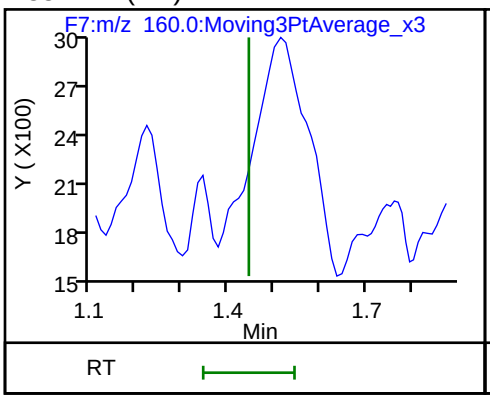
* 1 HMX-13C4



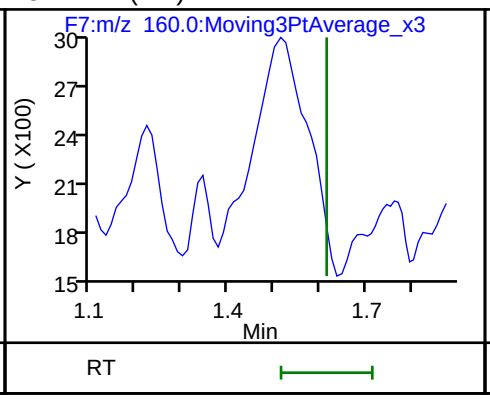
36 TNX (ND)



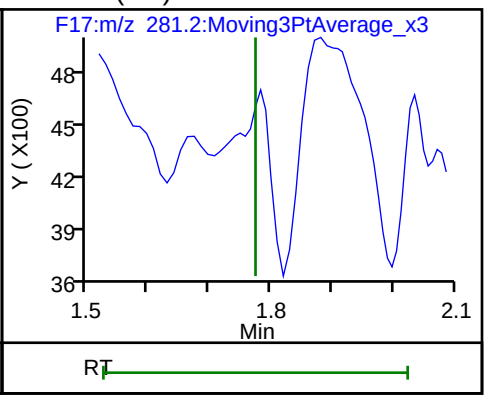
33 DNX (ND)



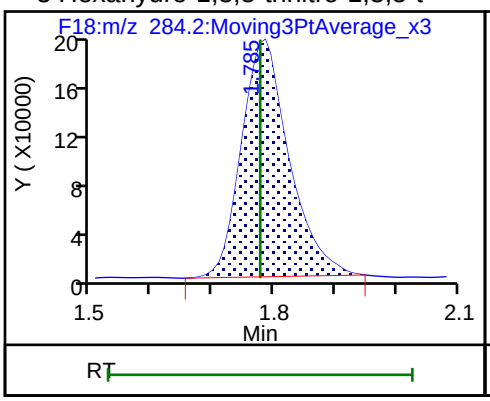
34 MNX (ND)



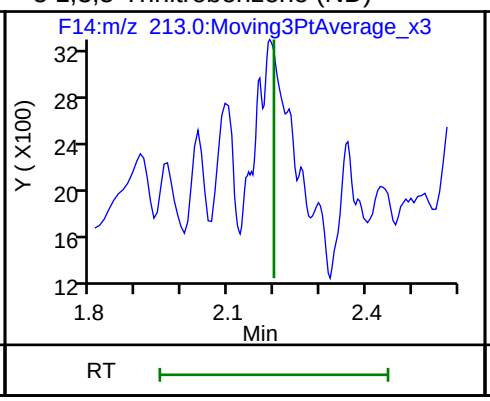
4 RDX (ND)



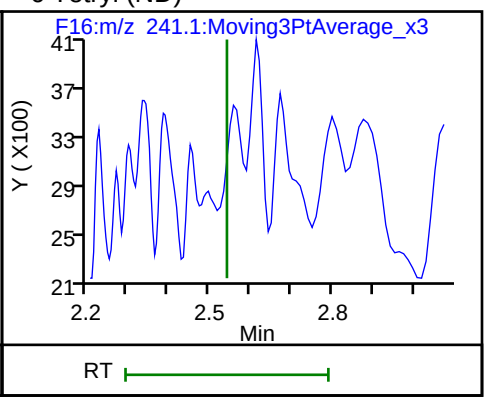
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



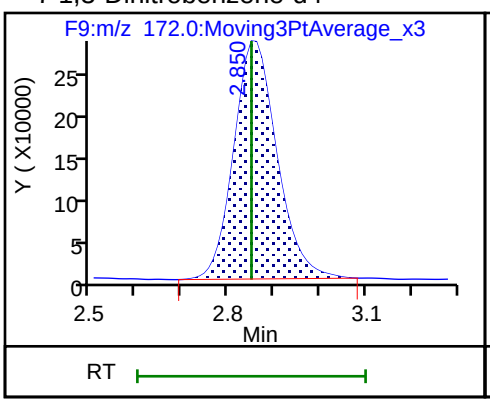
5 1,3,5-Trinitrobenzene (ND)



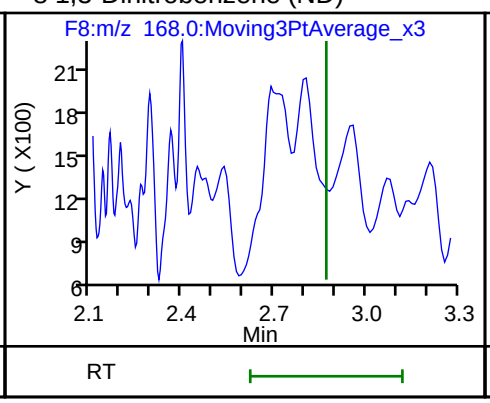
6 Tetryl (ND)



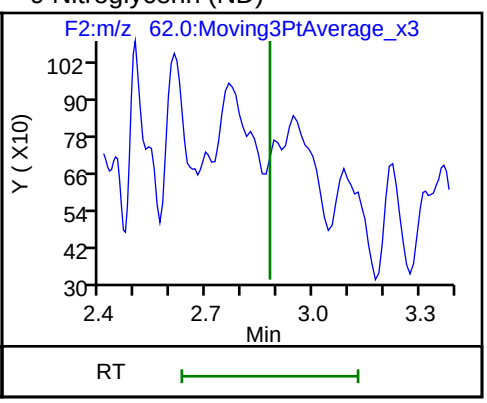
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



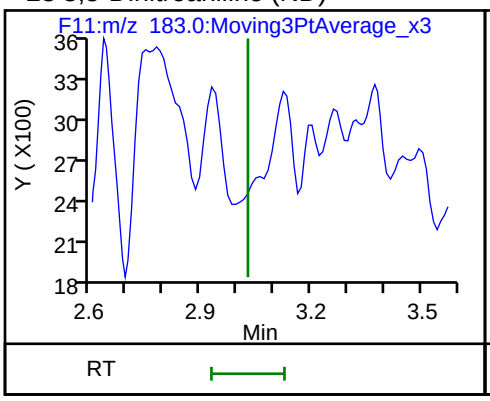
9 Nitroglycerin (ND)



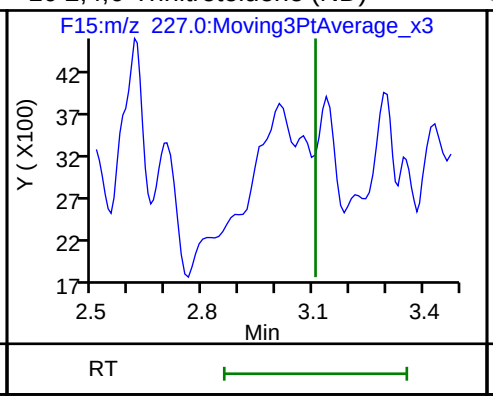
Report Date: 06-Apr-2022 07:09:50 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05028.d

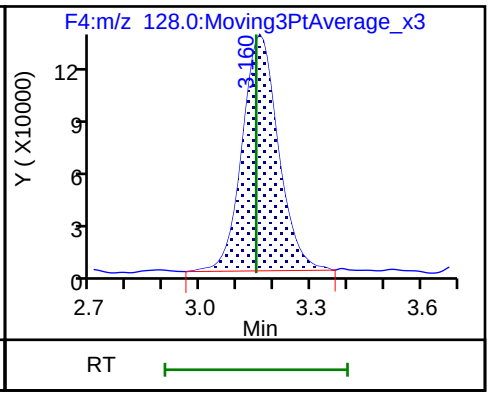
28 3,5-Dinitroaniline (ND)



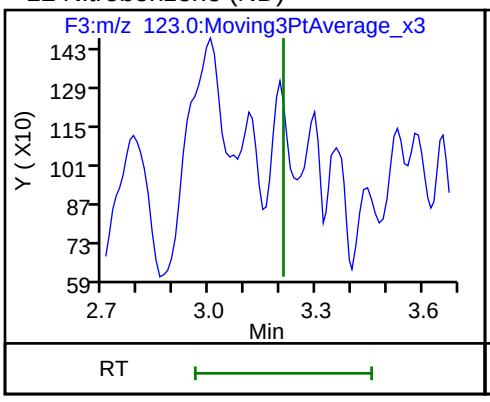
10 2,4,6-Trinitrotoluene (ND)



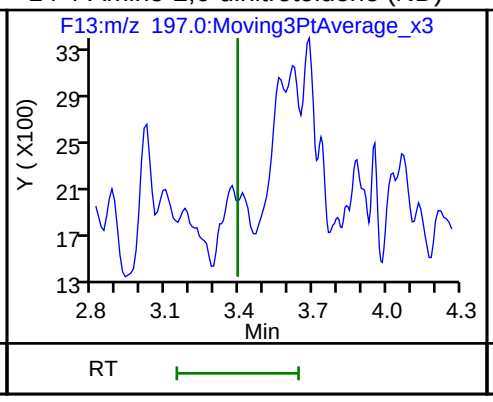
$ 11 Nitrobenzene-d5



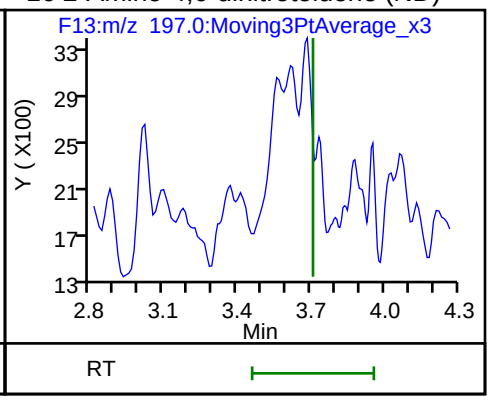
12 Nitrobenzene (ND)



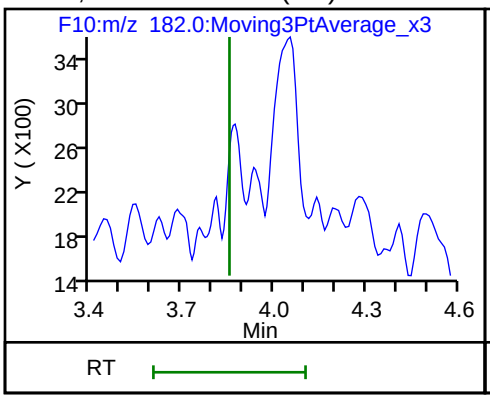
14 4-Amino-2,6-dinitrotoluene (ND)



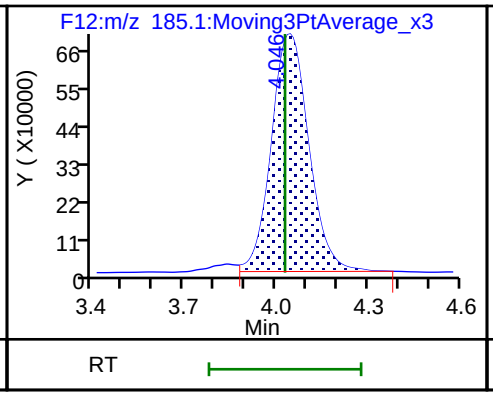
16 2-Amino-4,6-dinitrotoluene (ND)



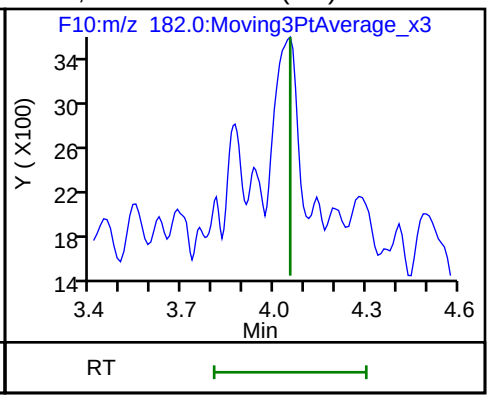
17 2,6-Dinitrotoluene (ND)



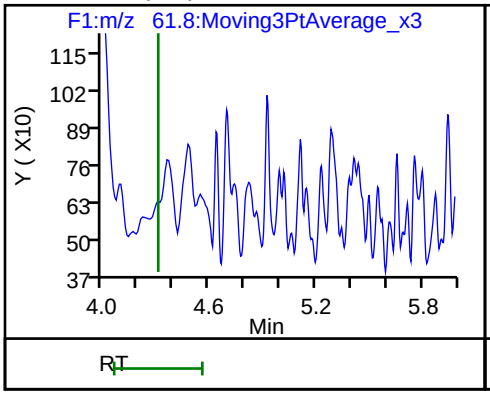
* 18 2,4-dinitrotoluene-d3



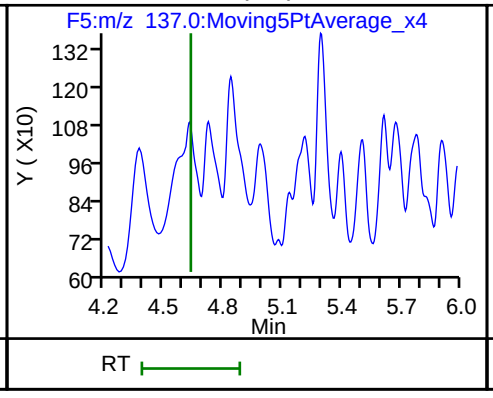
19 2,4-Dinitrotoluene (ND)



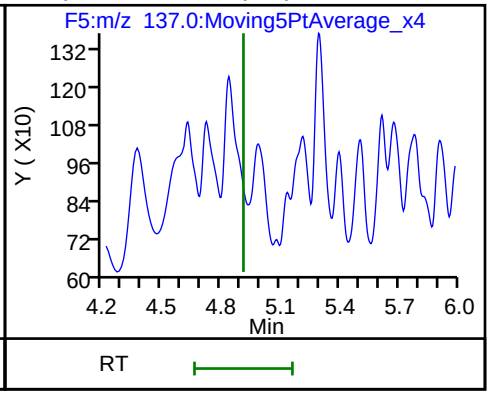
20 PETN (ND)



22 o-Nitrotoluene (ND)

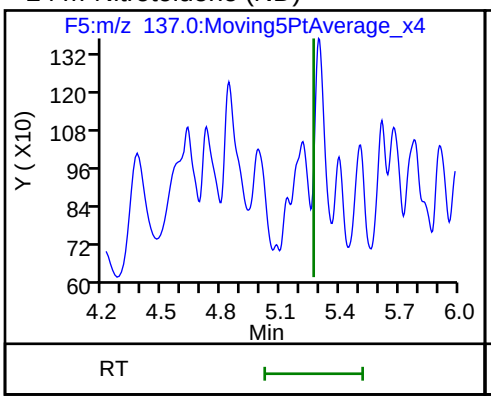


23 p-Nitrotoluene (ND)

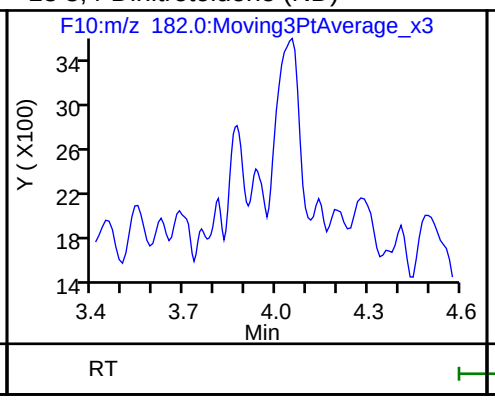


Report Date: 06-Apr-2022 07:09:50
Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05028.d

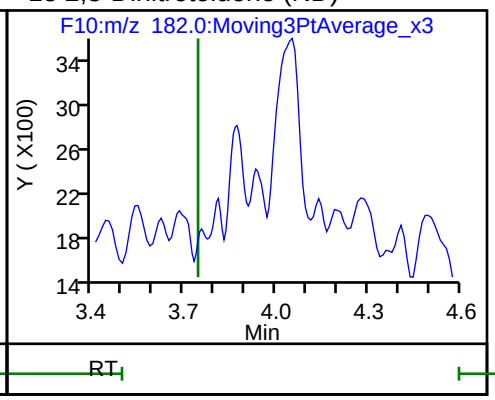
24 m-Nitrotoluene (ND)



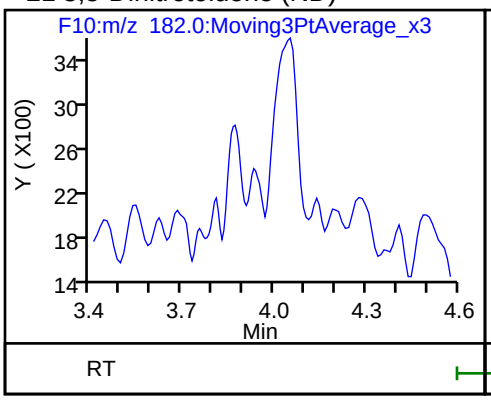
13 3,4-Dinitrotoluene (ND)



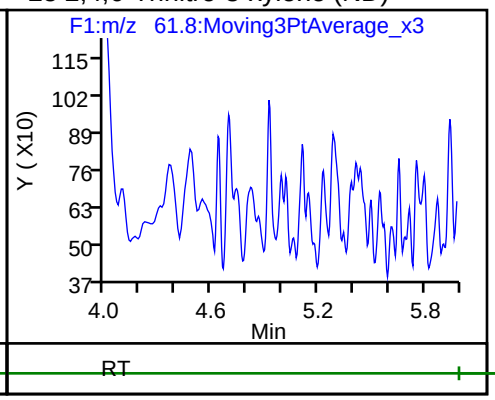
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 07:09:50 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05028.d				
Lims ID:	280-160187-A-2-F				
Client ID:	29SB183 (3-4)				
Sample Type:	Client				
Inject. Date:	05-Apr-2022 12:41:13	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160187-A-2-F				
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 13:34:28		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	99.3	98.98

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: DUP-01 | Lab Sample ID: 280-160187-3
Matrix: Solid | Lab File ID: ex722D05034.d
Analysis Method: 8321A | Date Collected: 03/22/2022 13:40
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:56
Sample wt/vol: 10.21(g) | Date Analyzed: 04/05/2022 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.: 570785 | 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	98		68-140

Report Date: 06-Apr-2022 07:09:54 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\ex722D05034.d
Lims ID: 280-160187-A-3-B
Client ID: DUP-01
Sample Type: Client
Inject. Date: 05-Apr-2022 13:19:37 ALS Bottle#: 27 Worklist Smp#: 31
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-3-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 07:09:52 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 14:51:40
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		283598	125.0	125	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		1032237	125.0	239	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1834100	129.4	192	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.783	875508	97.9	132	
* 18 2,4-dinitrotoluene-d3								
185.1	4.037	4.028	0.009		5998349	125.0	113	

QC Flag Legend
Processing Flags

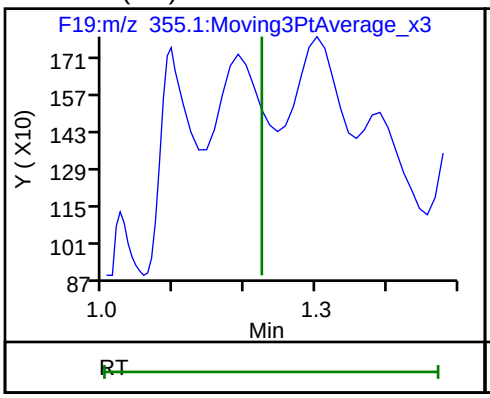
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:09:54 Chrom Revision: 2.3 18-Mar-2022 09:07:22

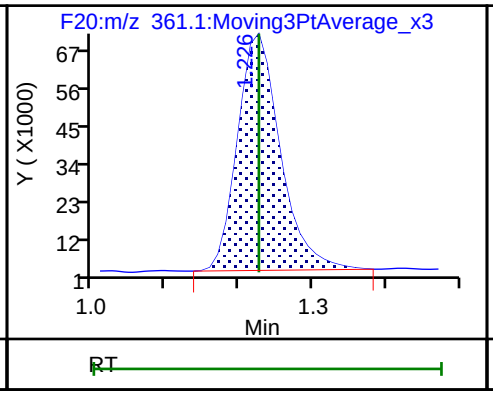
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05034.d
Injection Date: 05-Apr-2022 13:19:37 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-3-B Lab Sample ID: 280-160187-3
Client ID: DUP-01
Operator ID: acm ALS Bottle#: 27 Worklist Smp#: 31
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

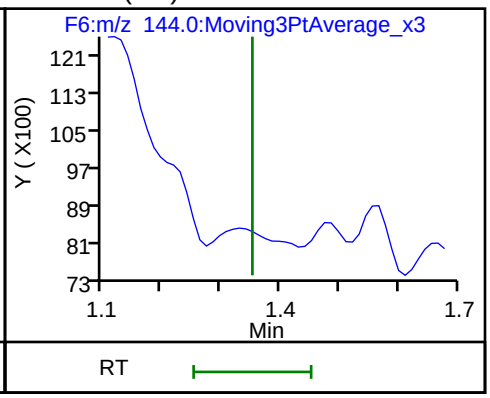
2 HMX (ND)



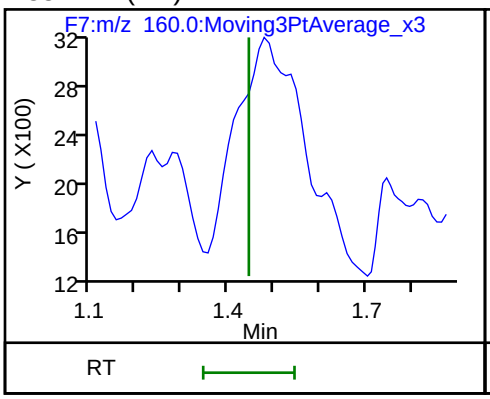
* 1 HMX-13C4



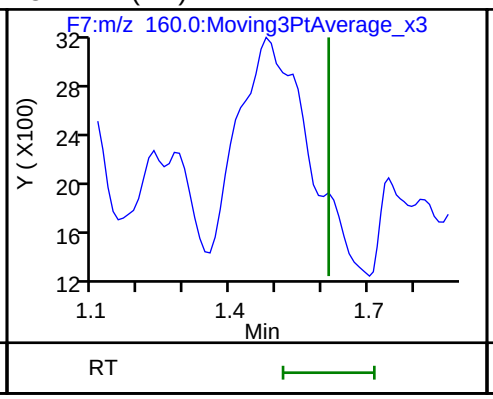
36 TNX (ND)



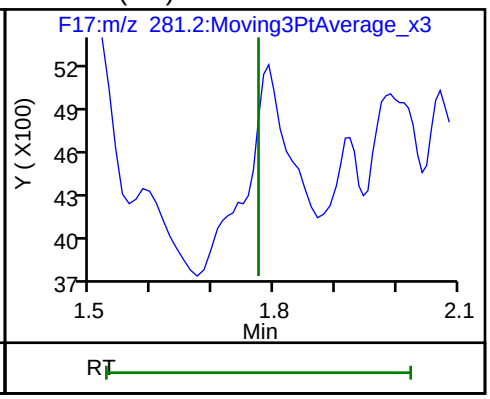
33 DNX (ND)



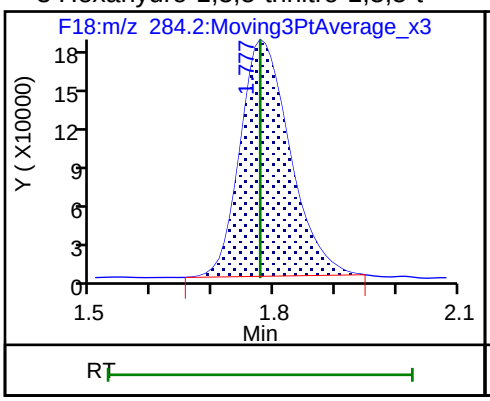
34 MNX (ND)



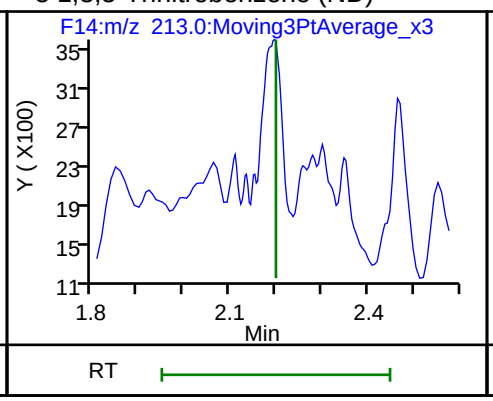
4 RDX (ND)



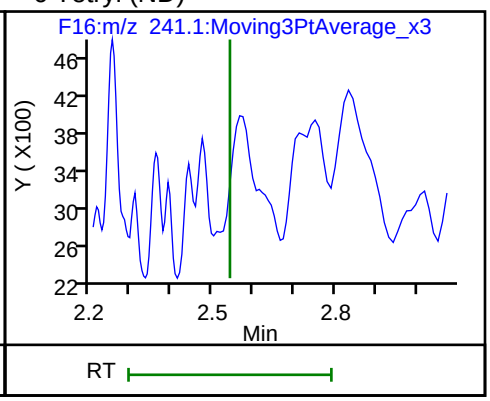
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



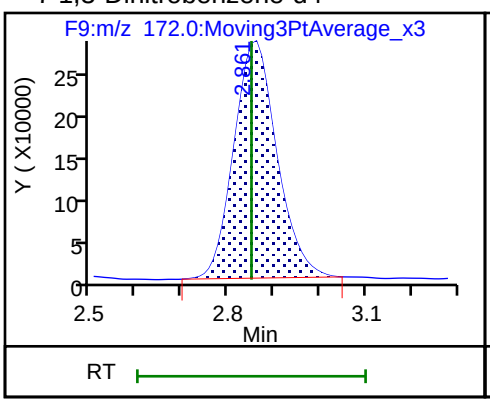
5 1,3,5-Trinitrobenzene (ND)



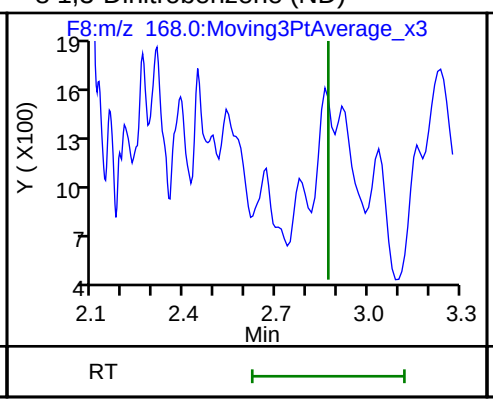
6 Tetryl (ND)



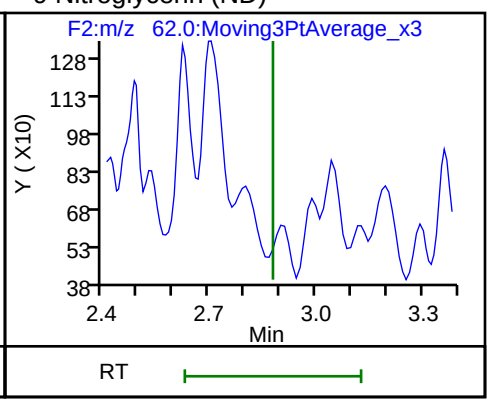
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

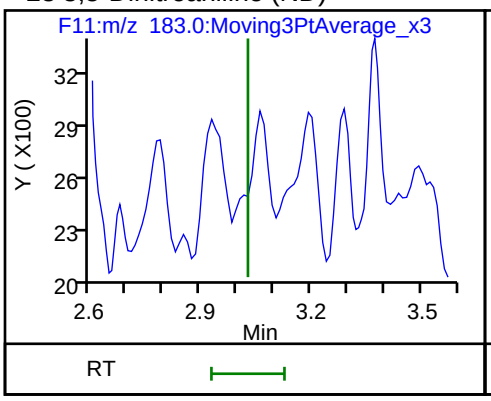


9 Nitroglycerin (ND)

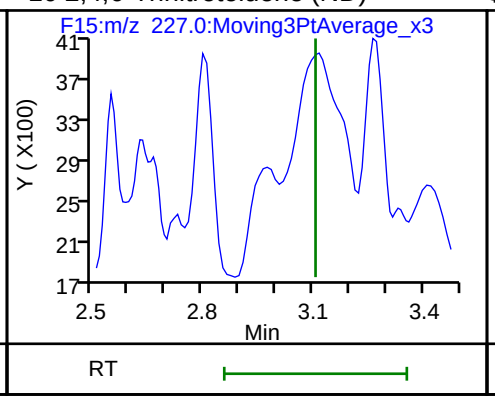


Report Date: 06-Apr-2022 07:09:54 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05034.d

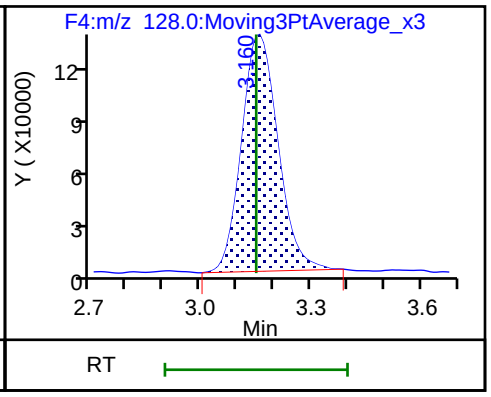
28 3,5-Dinitroaniline (ND)



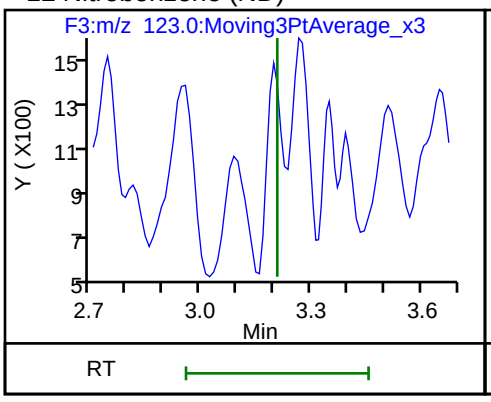
10 2,4,6-Trinitrotoluene (ND)



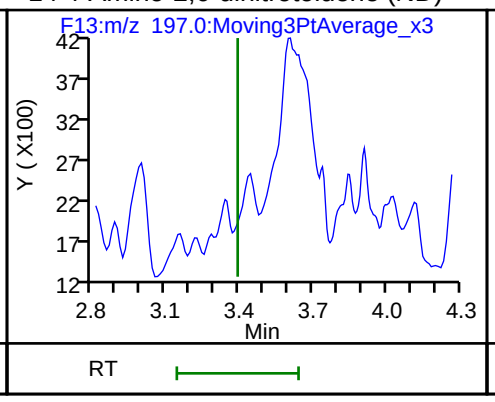
$ 11 Nitrobenzene-d5



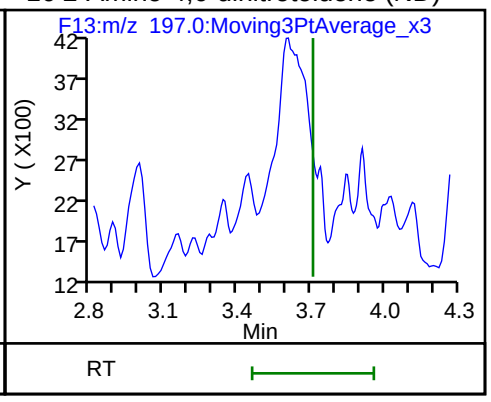
12 Nitrobenzene (ND)



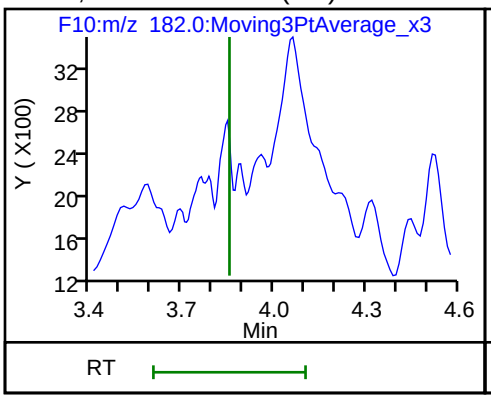
14 4-Amino-2,6-dinitrotoluene (ND)



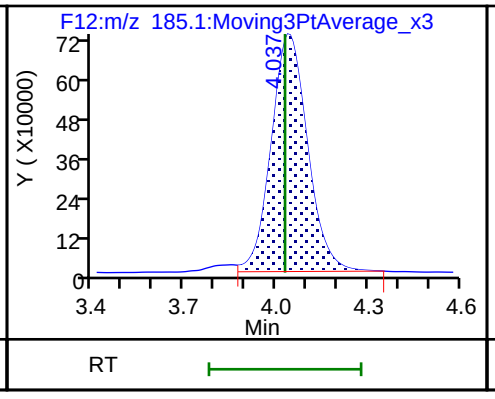
16 2-Amino-4,6-dinitrotoluene (ND)



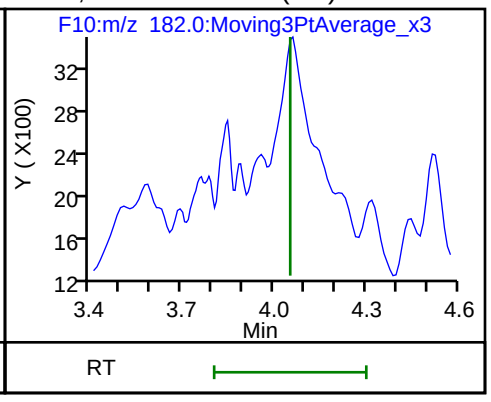
17 2,6-Dinitrotoluene (ND)



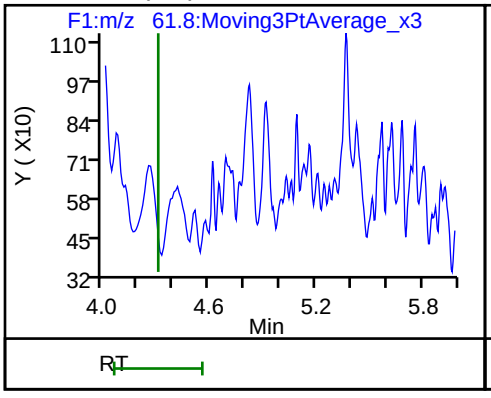
* 18 2,4-dinitrotoluene-d3



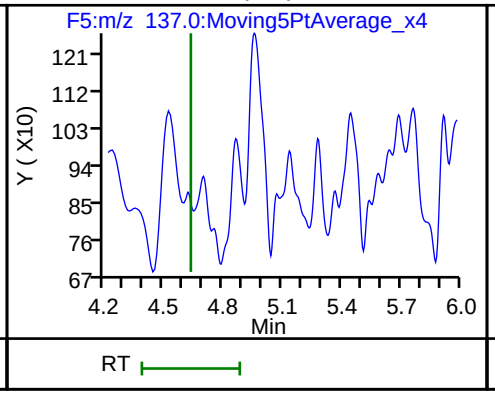
19 2,4-Dinitrotoluene (ND)



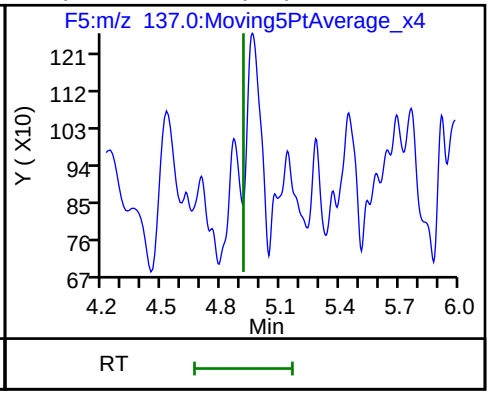
20 PETN (ND)



22 o-Nitrotoluene (ND)

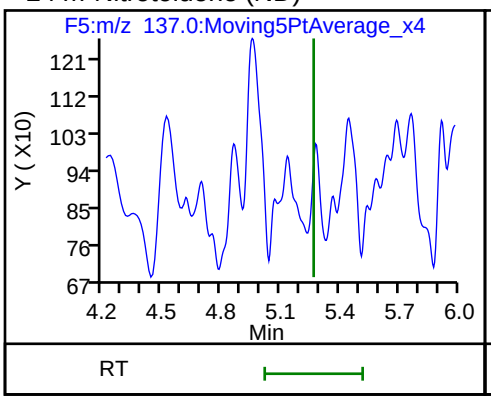


23 p-Nitrotoluene (ND)

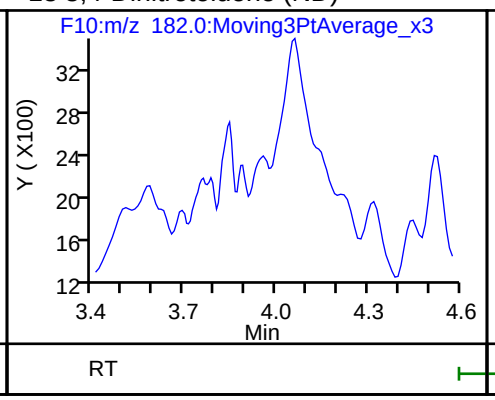


Report Date: 06-Apr-2022 07:09:54 Chrom Revision: 2.3 18-Mar-2022 09:07:22
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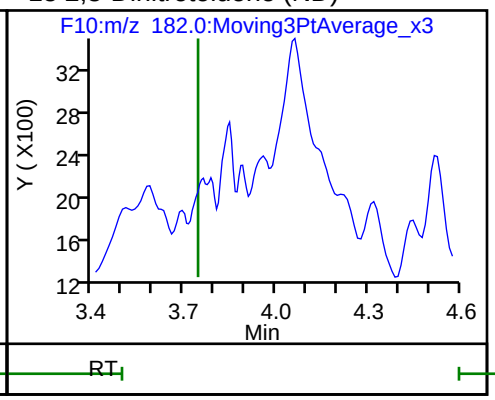
24 m-Nitrotoluene (ND)



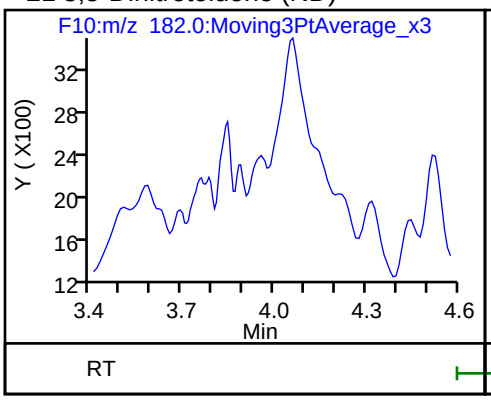
13 3,4-Dinitrotoluene (ND)



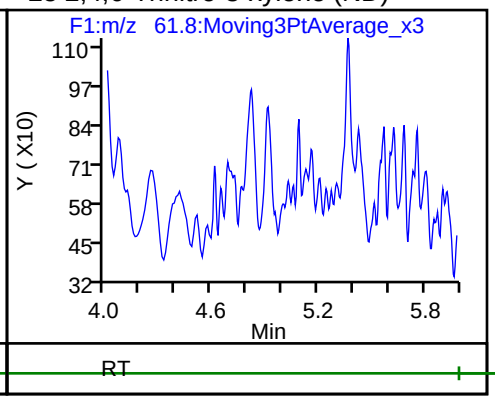
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 07:09:54 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05034.d
Lims ID: 280-160187-A-3-B
Client ID: DUP-01
Sample Type: Client
Inject. Date: 05-Apr-2022 13:19:37 ALS Bottle#: 27 Worklist Smp#: 31
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-3-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 07:09:52 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 14:51:40

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	97.9	97.59

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

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

SDG No.:

Client Sample ID: 29SB185 (3-4) | Lab Sample ID: 280-160187-4

Matrix: Solid | Lab File ID: ex722D05035.d

Analysis Method: 8321A | Date Collected: 03/22/2022 12:40

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

Sample wt/vol: 10.38(g) | Date Analyzed: 04/05/2022 13:26

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.: 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	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 M	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	101		68-140

Report Date: 06-Apr-2022 07:09:55 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\ex722D05035.d
Lims ID: 280-160187-A-4-B
Client ID: 29SB185 (3-4)
Sample Type: Client
Inject. Date: 05-Apr-2022 13:26:01 ALS Bottle#: 28 Worklist Smp#: 32
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-4-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 07:09:52 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 14:51:52
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	1.226	1.226	0.0		283213	125.0	110	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		968700	125.0	241	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1889943	129.4	246	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.783	934748	101.5	130	
* 18 2,4-dinitrotoluene-d3								
185.1	4.037	4.028	0.009		5853055	125.0	113	

QC Flag Legend
Processing Flags

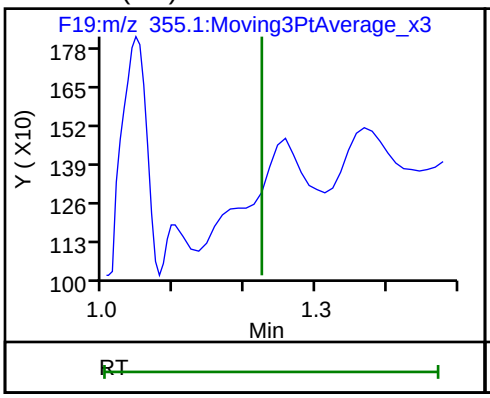
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:09:55 Chrom Revision: 2.3 18-Mar-2022 09:07:22

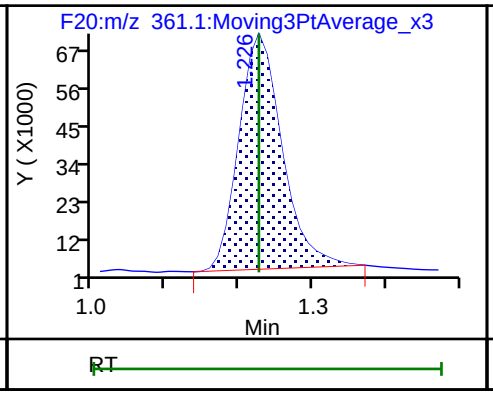
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05035.d
Injection Date: 05-Apr-2022 13:26:01 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-4-B Lab Sample ID: 280-160187-4
Client ID: 29SB185 (3-4)
Operator ID: acm ALS Bottle#: 28 Worklist Smp#: 32
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

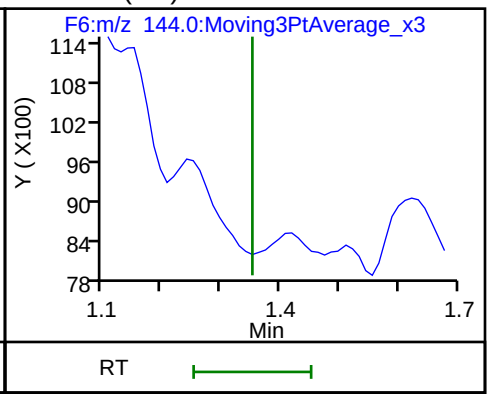
2 HMX (ND)



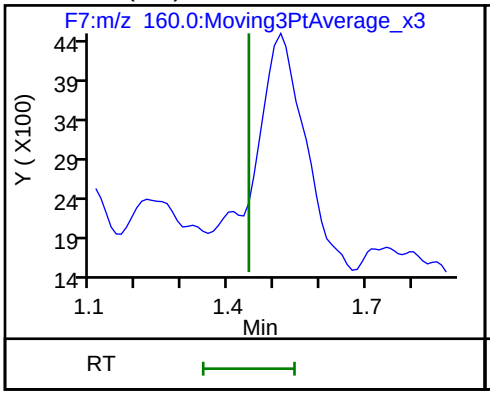
* 1 HMX-13C4



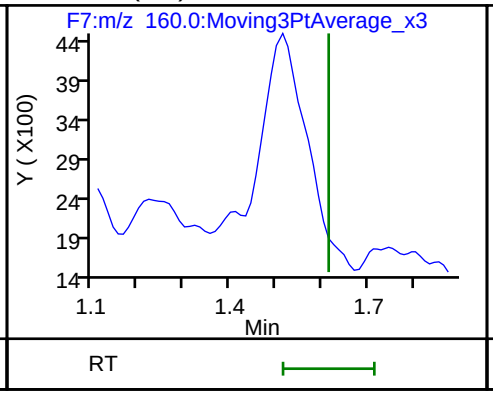
36 TNX (ND)



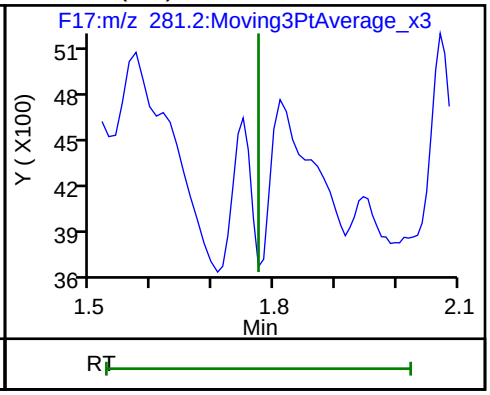
33 DNX (ND)



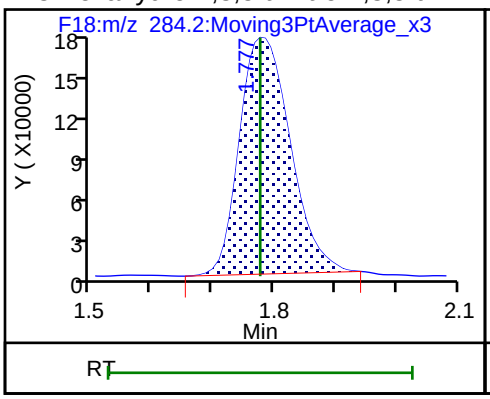
34 MNX (ND)



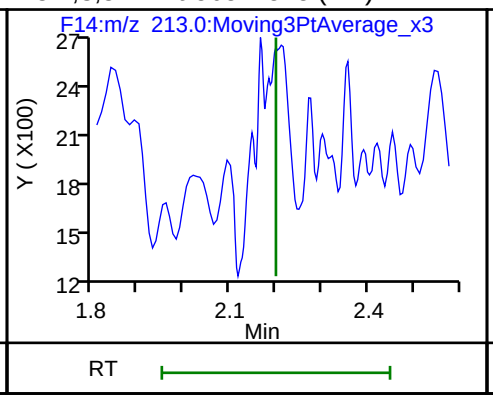
4 RDX (ND)



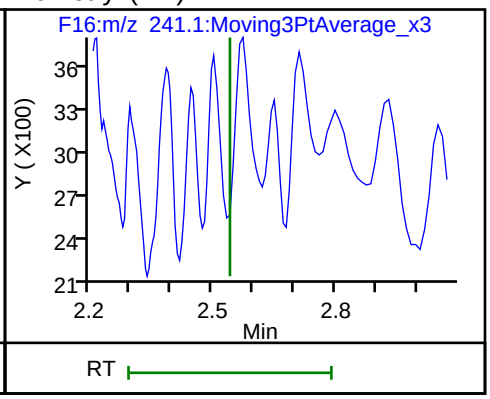
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



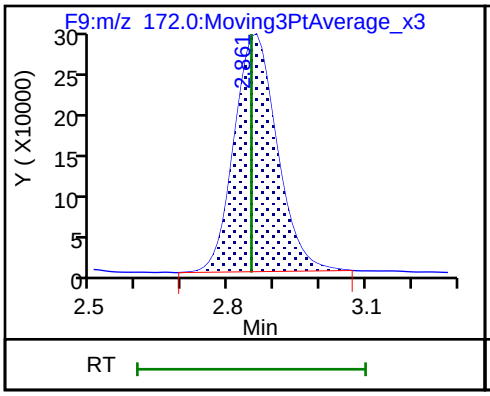
5 1,3,5-Trinitrobenzene (ND)



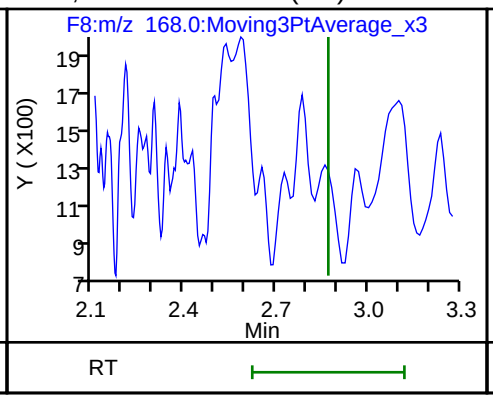
6 Tetryl (ND)



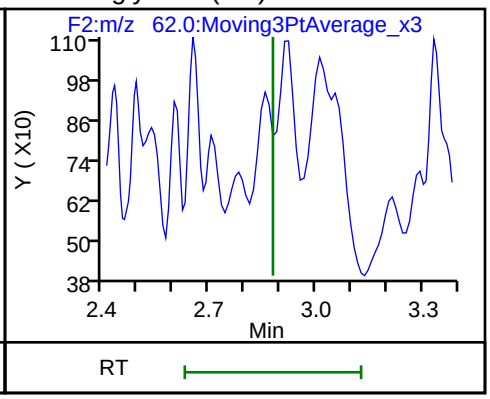
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



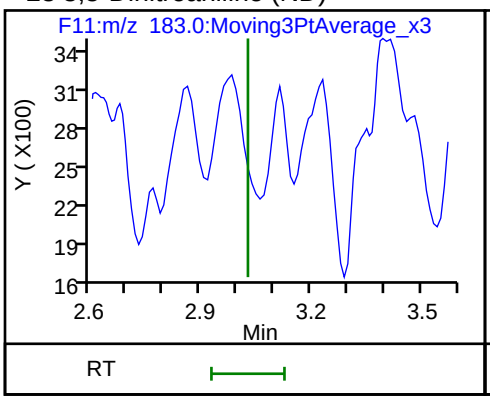
9 Nitroglycerin (ND)



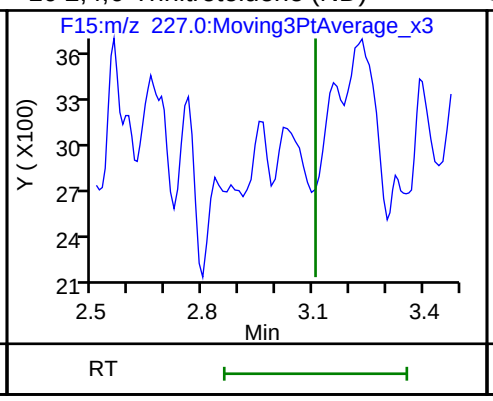
Report Date: 06-Apr-2022 07:09:55 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05035.d

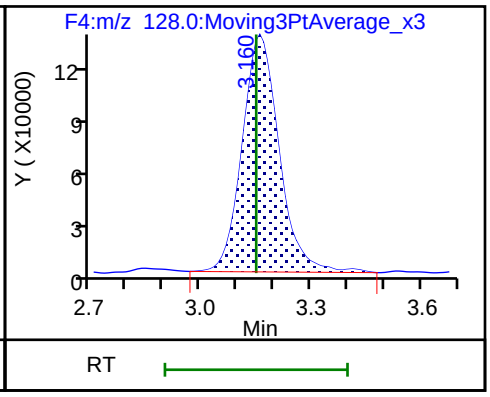
28 3,5-Dinitroaniline (ND)



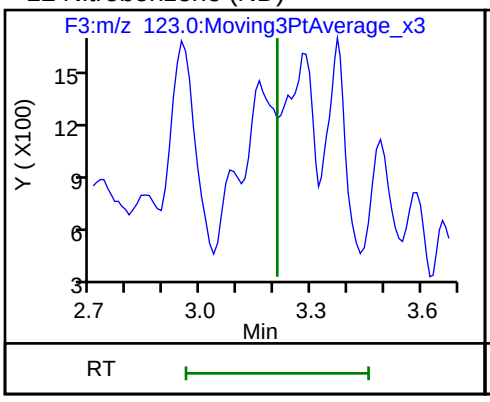
10 2,4,6-Trinitrotoluene (ND)



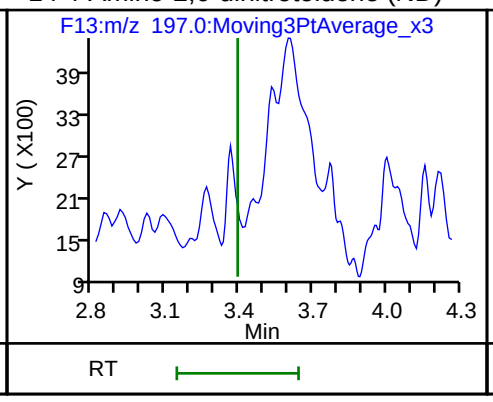
$ 11 Nitrobenzene-d5



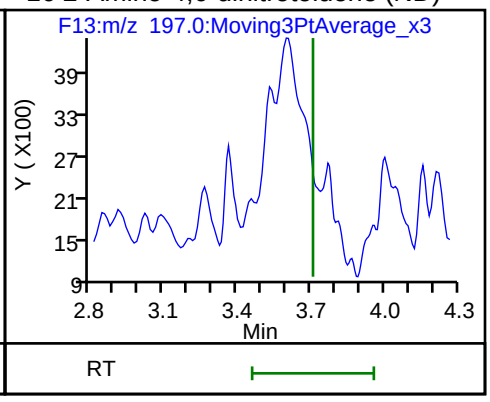
12 Nitrobenzene (ND)



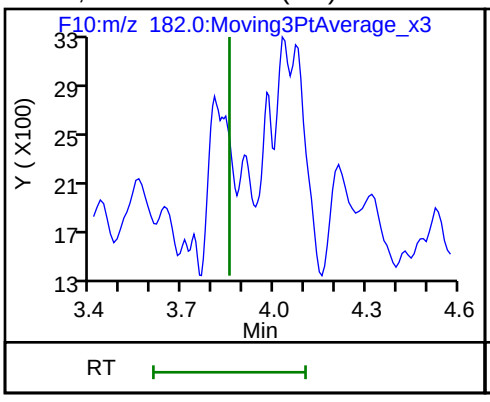
14 4-Amino-2,6-dinitrotoluene (ND)



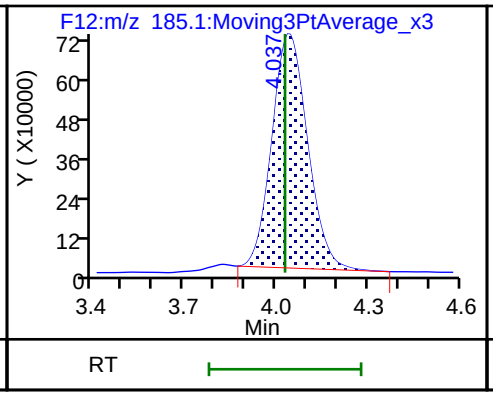
16 2-Amino-4,6-dinitrotoluene (ND)



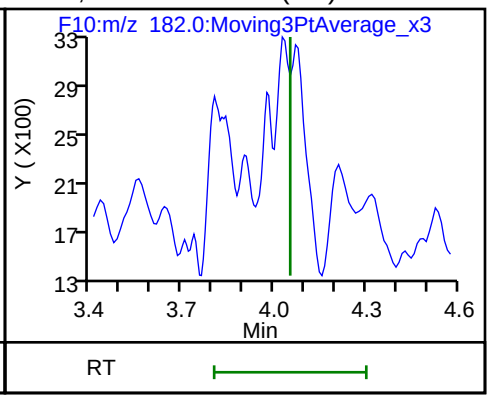
17 2,6-Dinitrotoluene (ND)



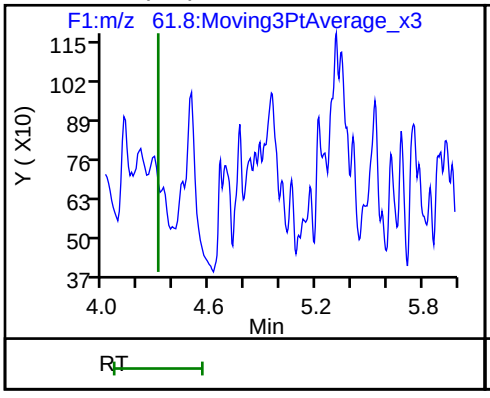
* 18 2,4-dinitrotoluene-d3



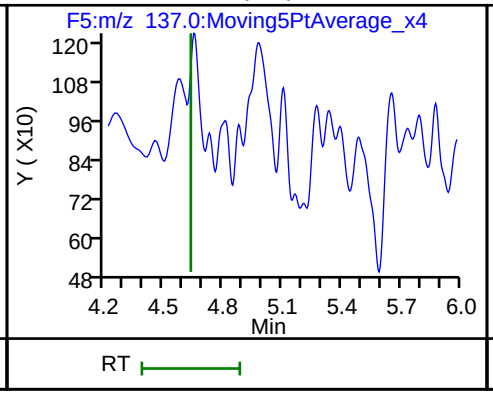
19 2,4-Dinitrotoluene (ND)



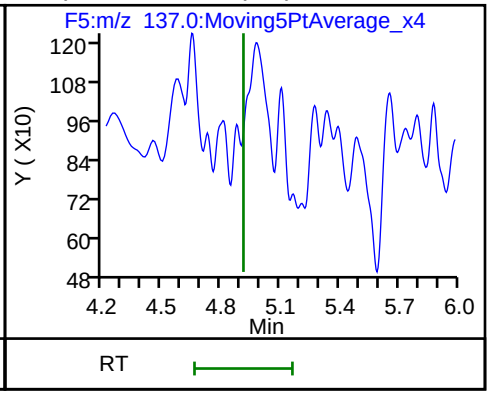
20 PETN (ND)



22 o-Nitrotoluene (ND)



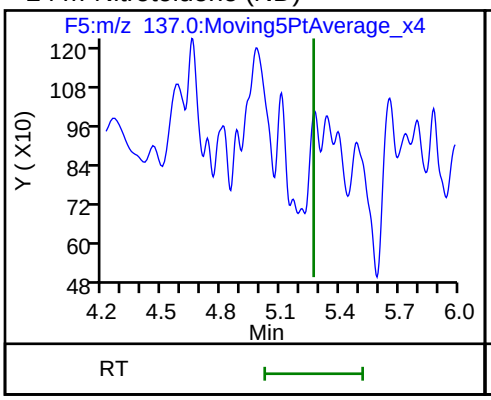
23 p-Nitrotoluene (ND)



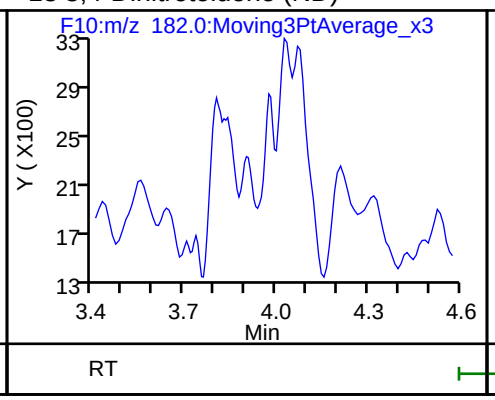
Report Date: 06-Apr-2022 07:09:55 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05035.d

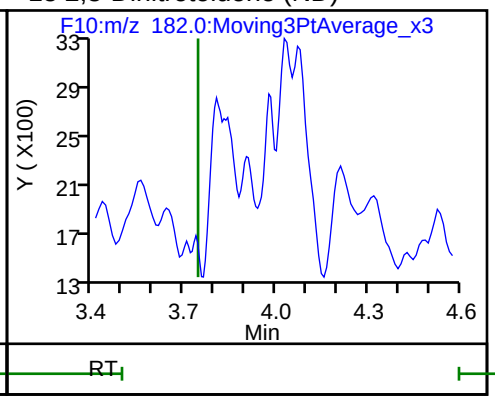
24 m-Nitrotoluene (ND)



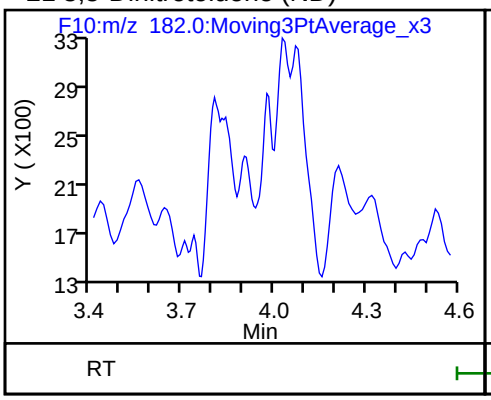
13 3,4-Dinitrotoluene (ND)



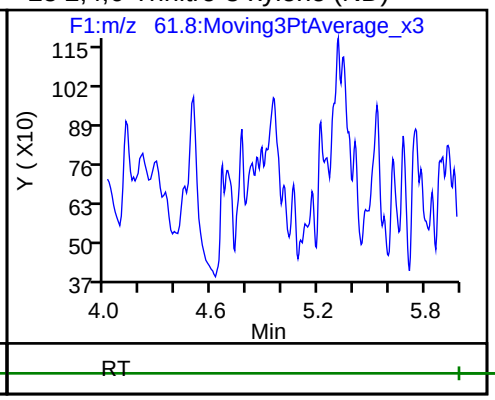
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 07:09:55 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05035.d
Lims ID: 280-160187-A-4-B
Client ID: 29SB185 (3-4)
Sample Type: Client
Inject. Date: 05-Apr-2022 13:26:01 ALS Bottle#: 28 Worklist Smp#: 32
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-4-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 07:09:52 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 14:51:52

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	101.5	101.15

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

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

SDG No.:

Client Sample ID: 29SB185 (7-8) | Lab Sample ID: 280-160187-5

Matrix: Solid | Lab File ID: ex722D05036.d

Analysis Method: 8321A | Date Collected: 03/22/2022 12:50

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

Sample wt/vol: 10.45(g) | Date Analyzed: 04/05/2022 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.: 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	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 M	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 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	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	94		68-140

Report Date: 06-Apr-2022 07:09:56 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\ex722D05036.d
Lims ID: 280-160187-A-5-B
Client ID: 29SB185 (7-8)
Sample Type: Client
Inject. Date: 05-Apr-2022 13:32:25 ALS Bottle#: 29 Worklist Smp#: 33
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-5-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 07:09:52 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 14:52:02
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	1.226	1.226	0.0		296041	125.0	324	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		1062563	125.0	245	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.850	2.850	0.0		1881939	129.4	321	
$ 11 Nitrobenzene-d5								
128.0	3.150	3.164	0.0	0.780	866046	94.4	137	
* 18 2,4-dinitrotoluene-d3								
185.1	4.037	4.028	0.009		6149162	125.0	125	

QC Flag Legend
Processing Flags

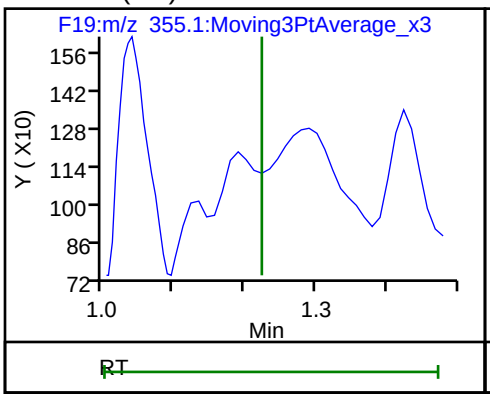
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:09:56 Chrom Revision: 2.3 18-Mar-2022 09:07:22

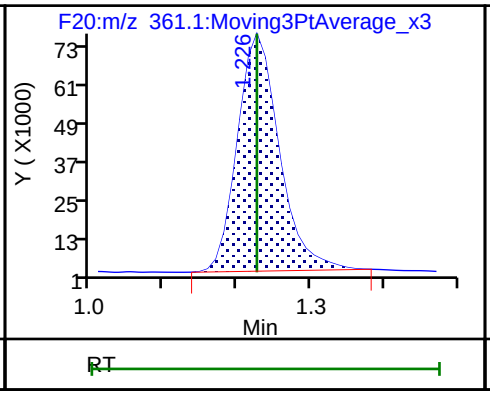
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05036.d
Injection Date: 05-Apr-2022 13:32:25 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-5-B Lab Sample ID: 280-160187-5
Client ID: 29SB185 (7-8)
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

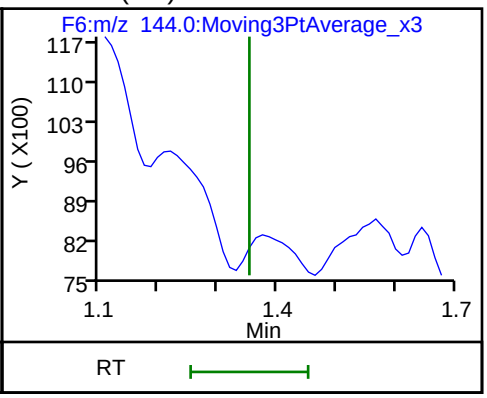
2 HMX (ND)



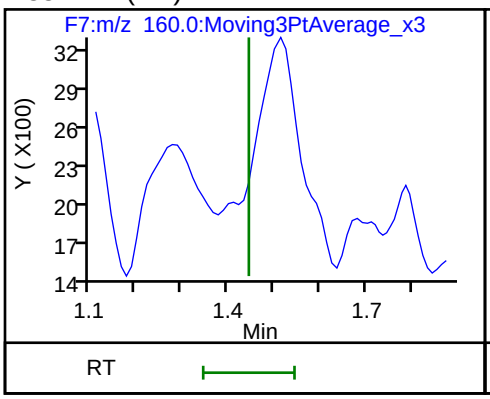
* 1 HMX-13C4



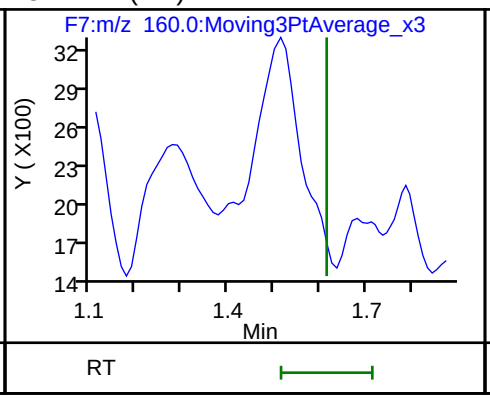
36 TNX (ND)



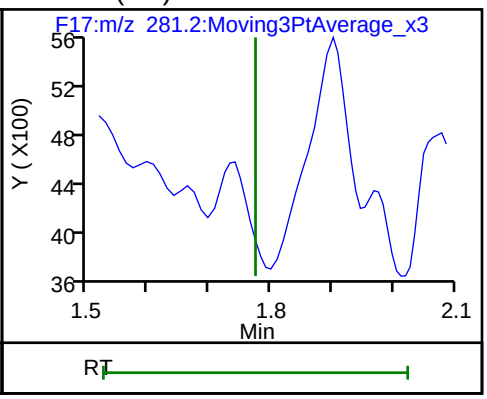
33 DNX (ND)



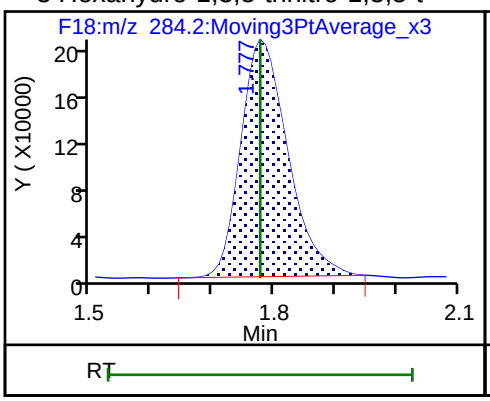
34 MNX (ND)



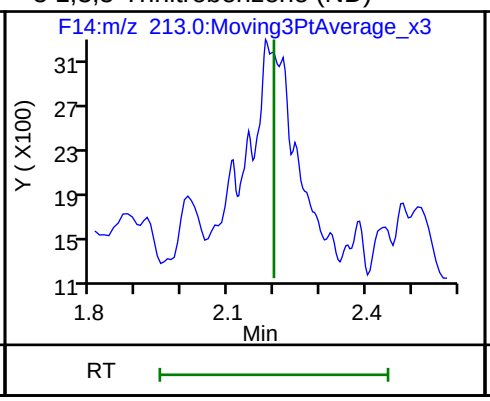
4 RDX (ND)



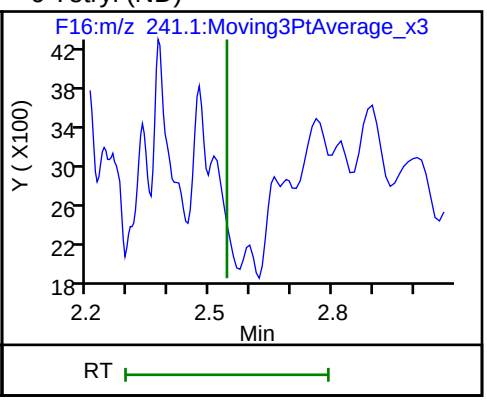
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



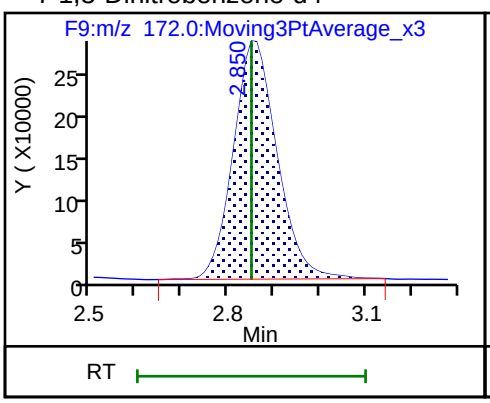
5 1,3,5-Trinitrobenzene (ND)



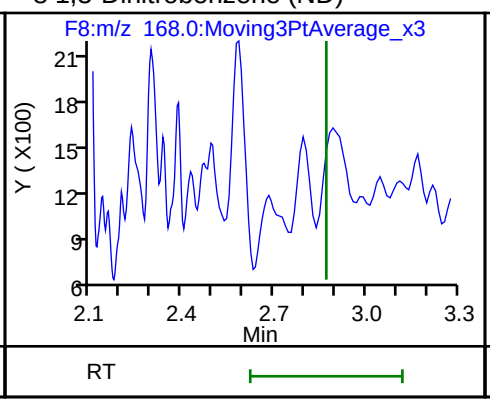
6 Tetryl (ND)



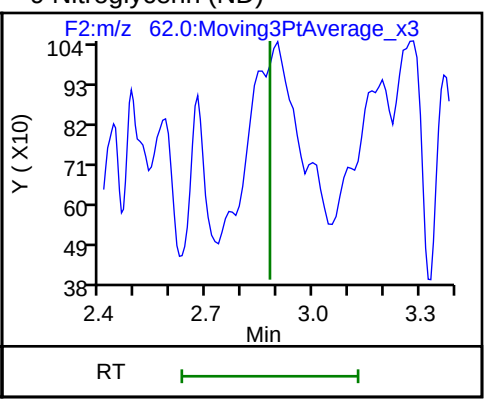
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

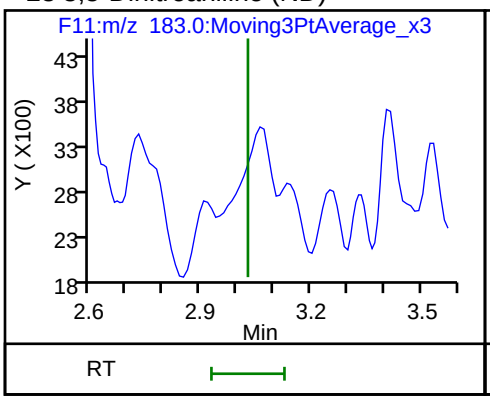


9 Nitroglycerin (ND)

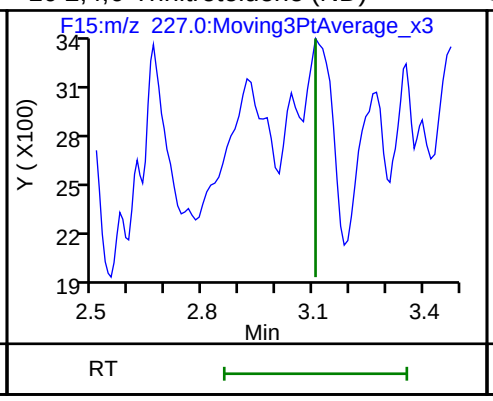


Report Date: 06-Apr-2022 07:09:56 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05036.d

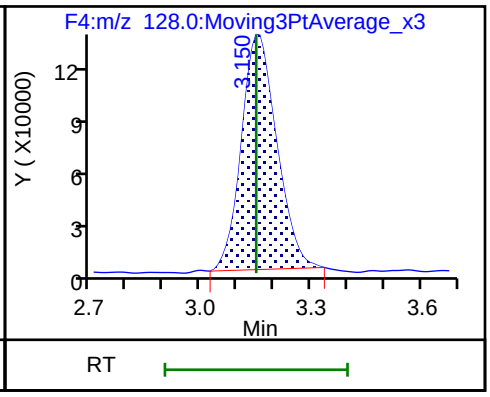
28 3,5-Dinitroaniline (ND)



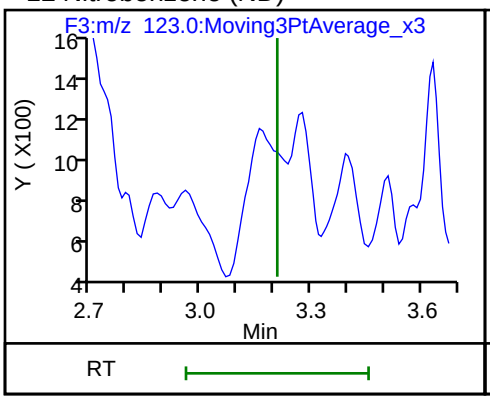
10 2,4,6-Trinitrotoluene (ND)



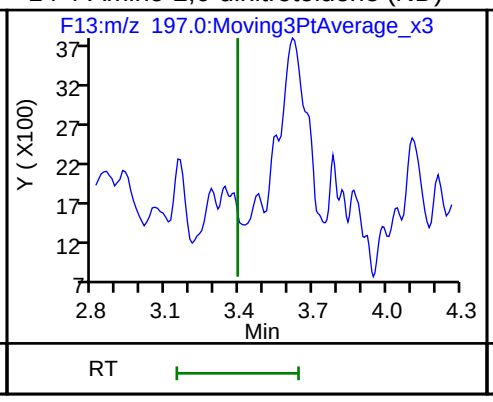
$ 11 Nitrobenzene-d5



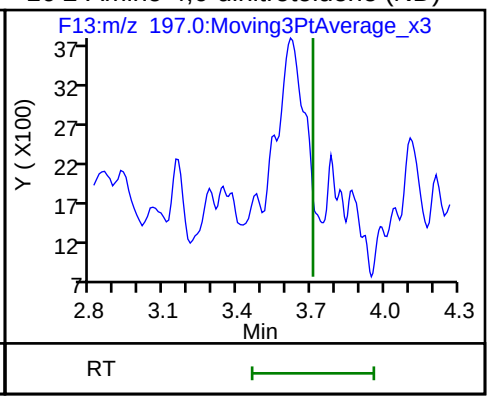
12 Nitrobenzene (ND)



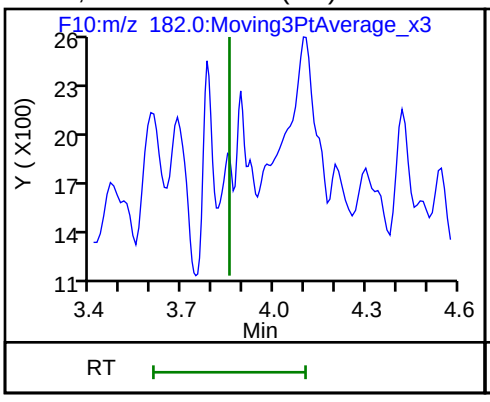
14 4-Amino-2,6-dinitrotoluene (ND)



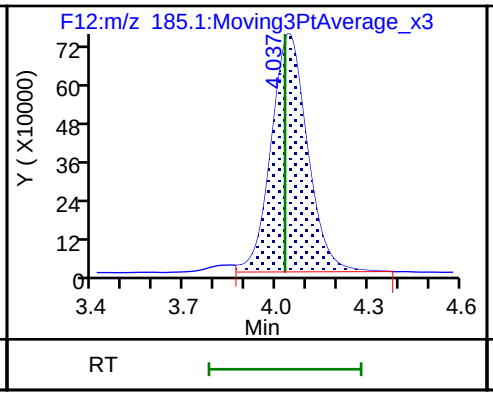
16 2-Amino-4,6-dinitrotoluene (ND)



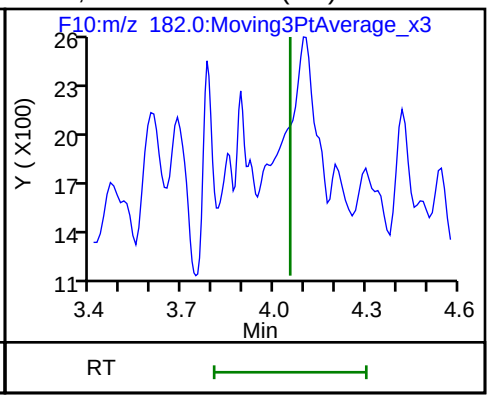
17 2,6-Dinitrotoluene (ND)



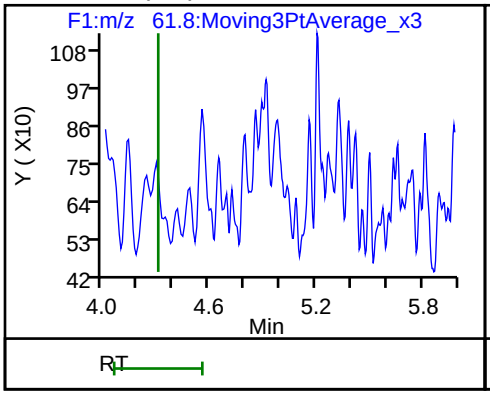
* 18 2,4-dinitrotoluene-d3



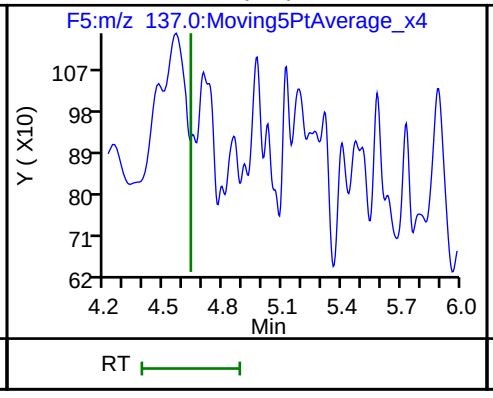
19 2,4-Dinitrotoluene (ND)



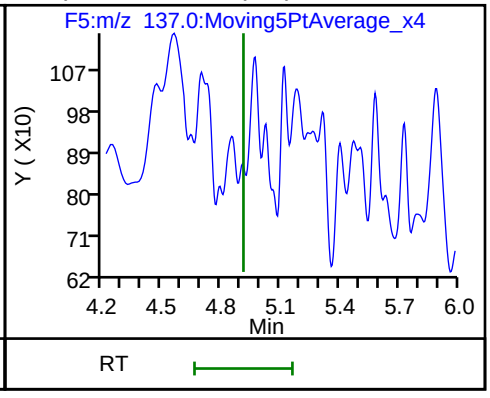
20 PETN (ND)



22 o-Nitrotoluene (ND)

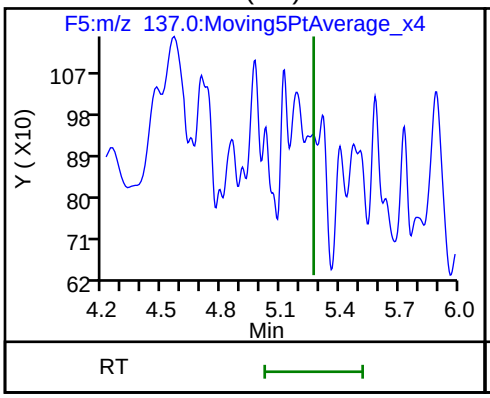


23 p-Nitrotoluene (ND)

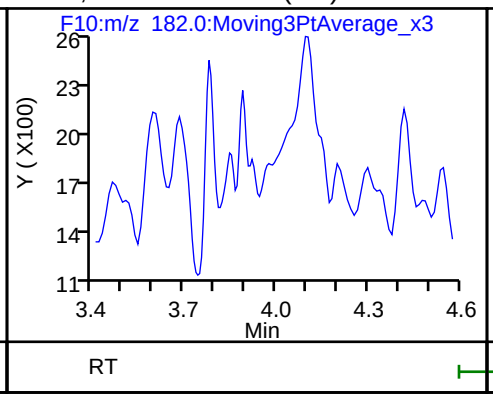


Report Date: 06-Apr-2022 07:09:56 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05036.d

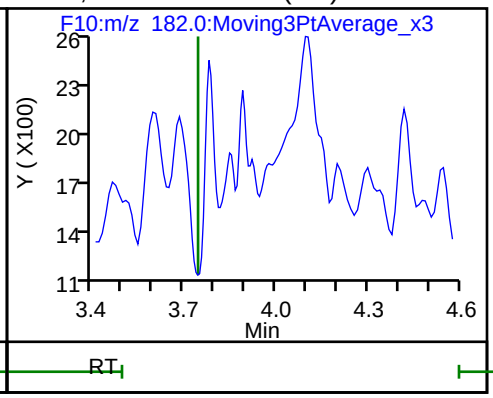
24 m-Nitrotoluene (ND)



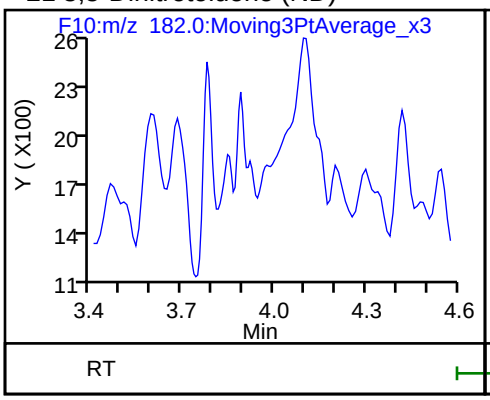
13 3,4-Dinitrotoluene (ND)



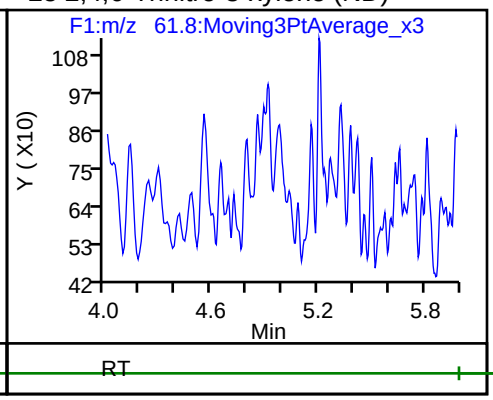
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 07:09:56 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05036.d
Lims ID: 280-160187-A-5-B
Client ID: 29SB185 (7-8)
Sample Type: Client
Inject. Date: 05-Apr-2022 13:32:25 ALS Bottle#: 29 Worklist Smp#: 33
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-5-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 07:09:52 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 14:52:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	94.4	94.05

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB185 (11-12) | Lab Sample ID: 280-160187-6
Matrix: Solid | Lab File ID: ex722D05037.d
Analysis Method: 8321A | Date Collected: 03/22/2022 12:55
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:56
Sample wt/vol: 10.51(g) | Date Analyzed: 04/05/2022 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.: 570785 | 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	102		68-140

Report Date: 06-Apr-2022 07:09:56 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\ex722D05037.d
Lims ID: 280-160187-A-6-B
Client ID: 29SB185 (11-12)
Sample Type: Client
Inject. Date: 05-Apr-2022 13:38:49 ALS Bottle#: 30 Worklist Smp#: 34
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-6-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 07:09:52 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 14:52:11
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	1.226	1.226	0.0		280833	125.0	42.9	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		1096084	125.0	213	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1916133	129.4	244	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	953519	102.1	165	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		6206592	125.0	123	

QC Flag Legend
Processing Flags

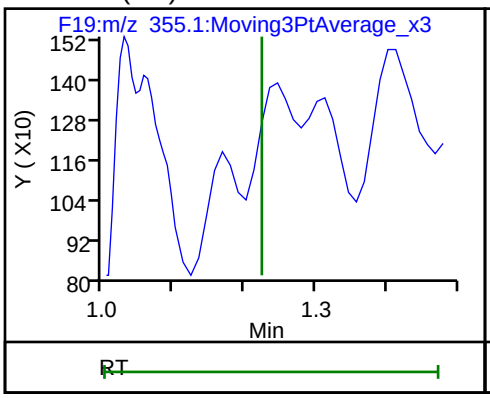
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:09:56 Chrom Revision: 2.3 18-Mar-2022 09:07:22

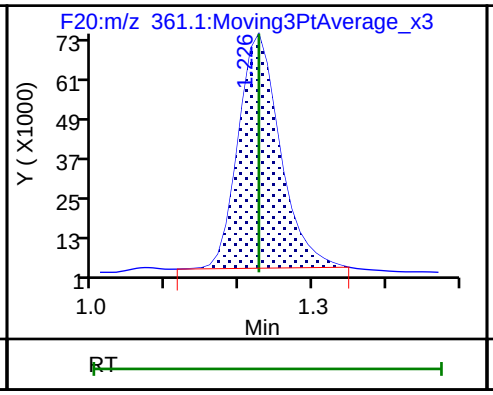
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05037.d
Injection Date: 05-Apr-2022 13:38:49 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-6-B Lab Sample ID: 280-160187-6
Client ID: 29SB185 (11-12)
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

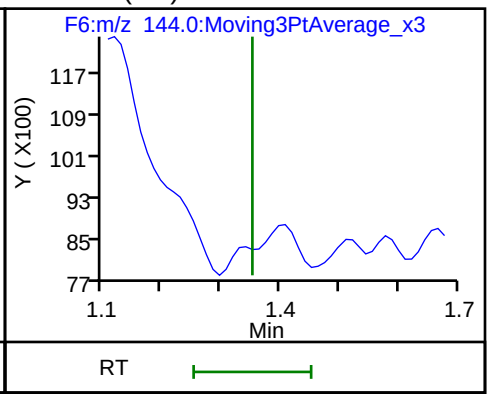
2 HMX (ND)



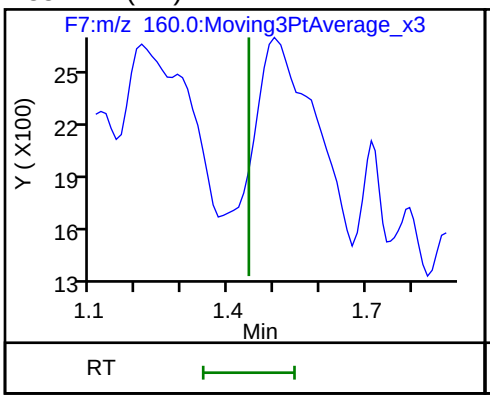
* 1 HMX-13C4



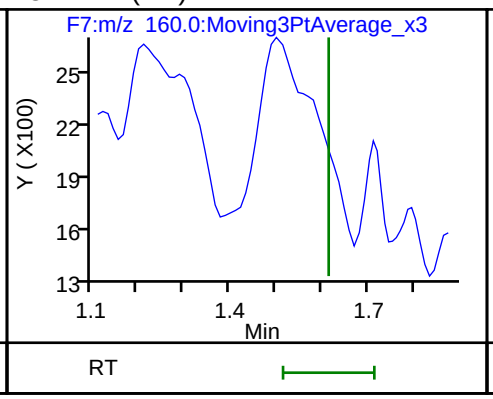
36 TNX (ND)



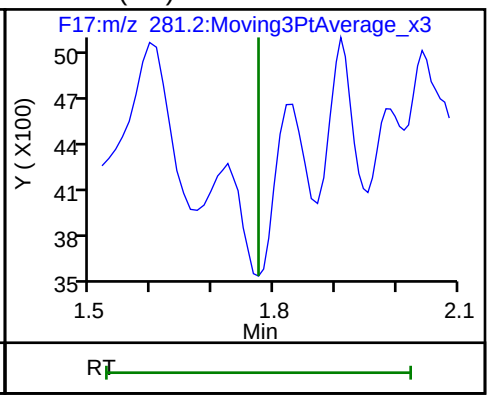
33 DNX (ND)



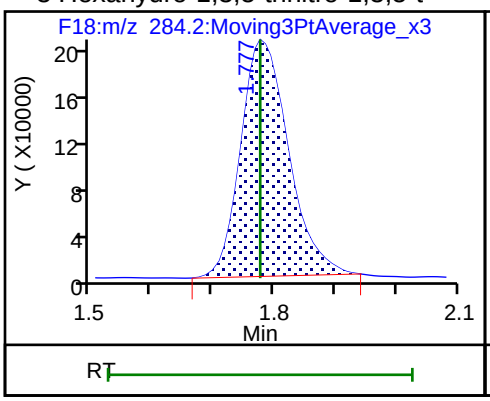
34 MNX (ND)



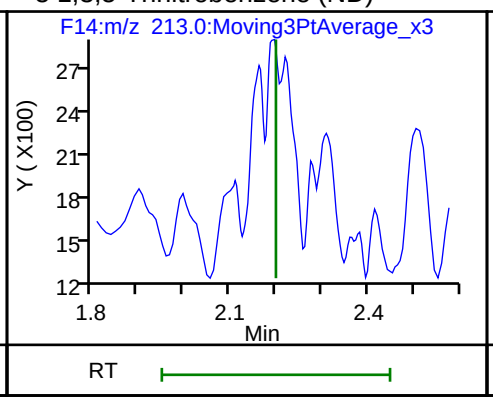
4 RDX (ND)



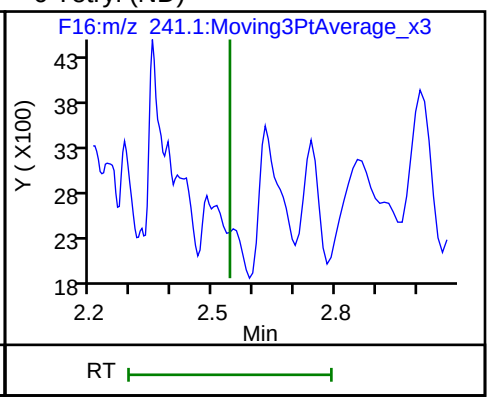
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



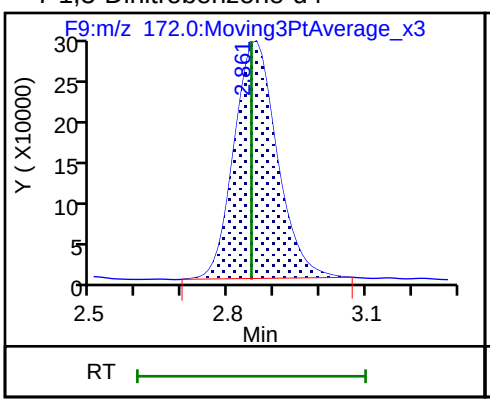
5 1,3,5-Trinitrobenzene (ND)



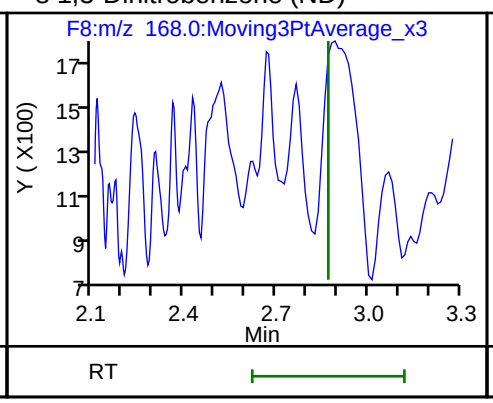
6 Tetryl (ND)



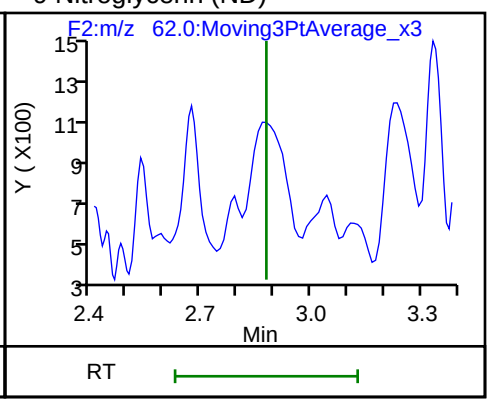
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

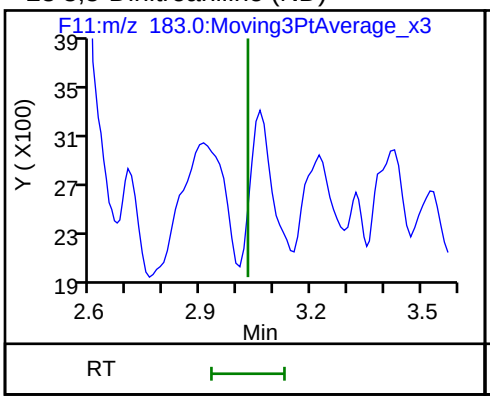


9 Nitroglycerin (ND)

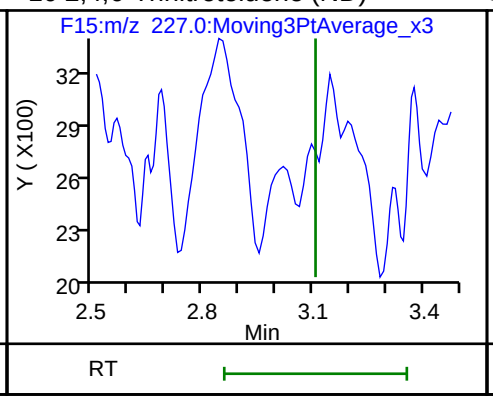


Report Date: 06-Apr-2022 07:09:56 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05037.d

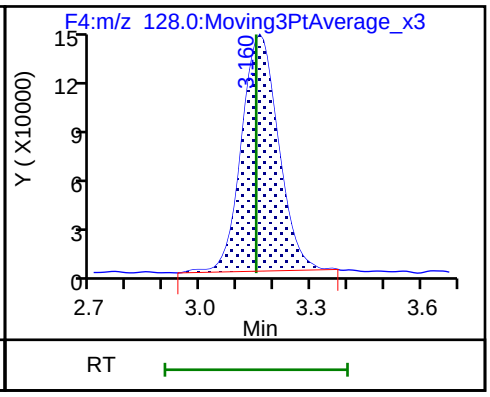
28 3,5-Dinitroaniline (ND)



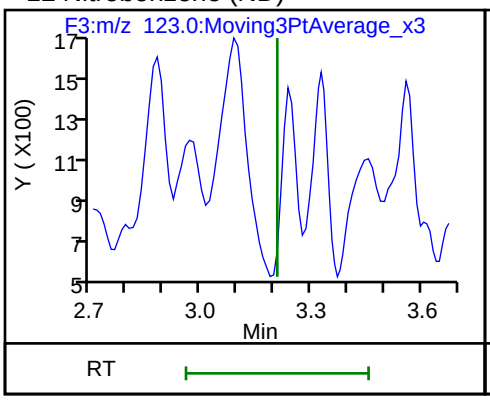
10 2,4,6-Trinitrotoluene (ND)



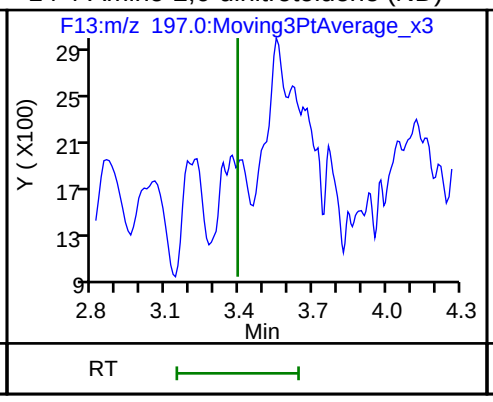
$ 11 Nitrobenzene-d5



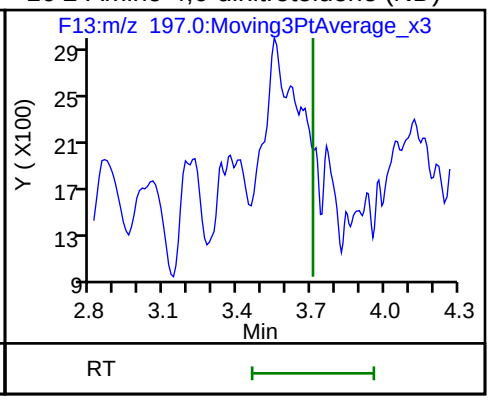
12 Nitrobenzene (ND)



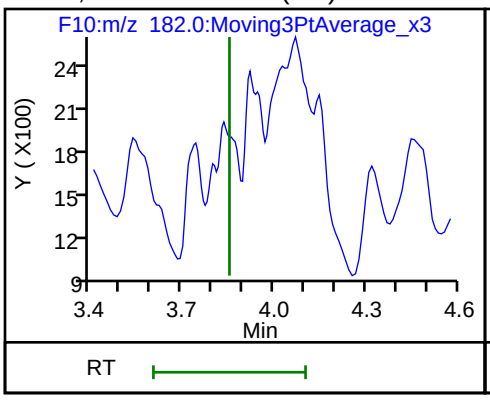
14 4-Amino-2,6-dinitrotoluene (ND)



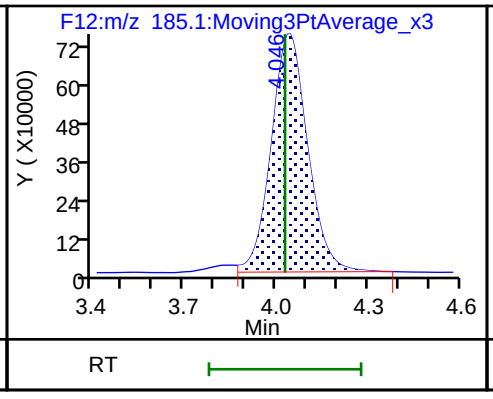
16 2-Amino-4,6-dinitrotoluene (ND)



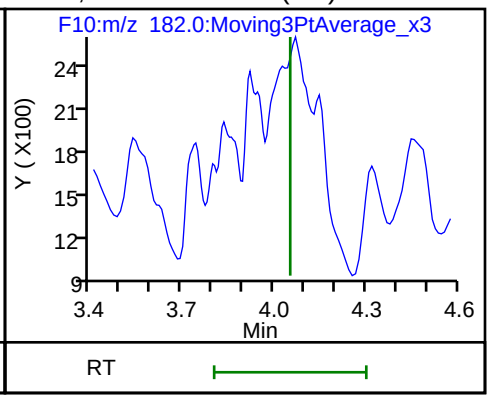
17 2,6-Dinitrotoluene (ND)



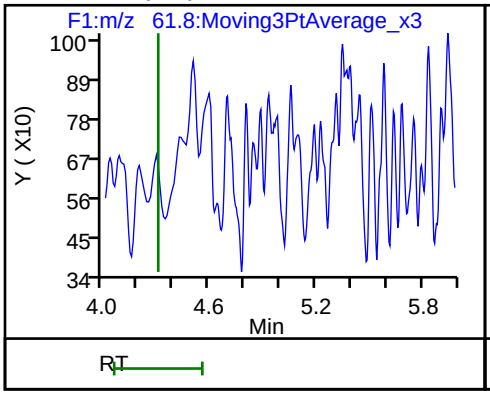
* 18 2,4-dinitrotoluene-d3



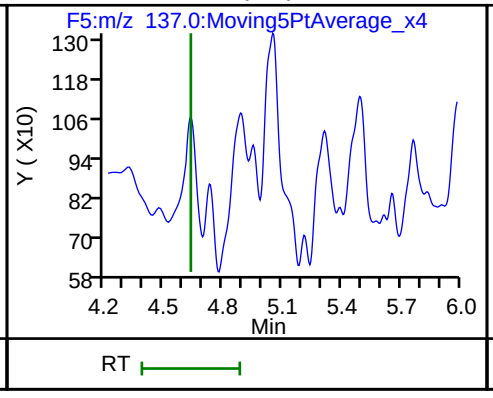
19 2,4-Dinitrotoluene (ND)



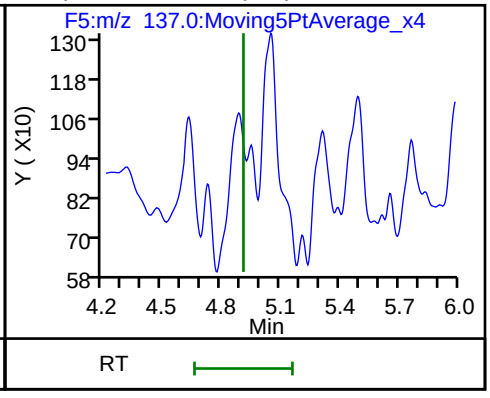
20 PETN (ND)



22 o-Nitrotoluene (ND)

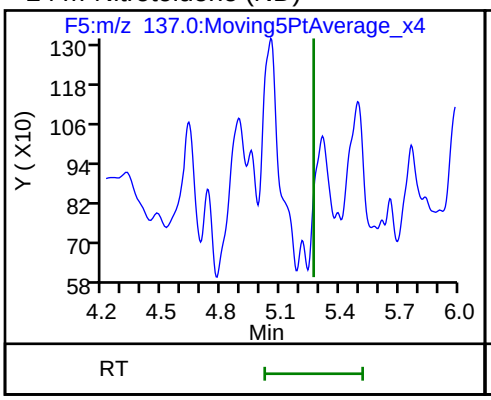


23 p-Nitrotoluene (ND)

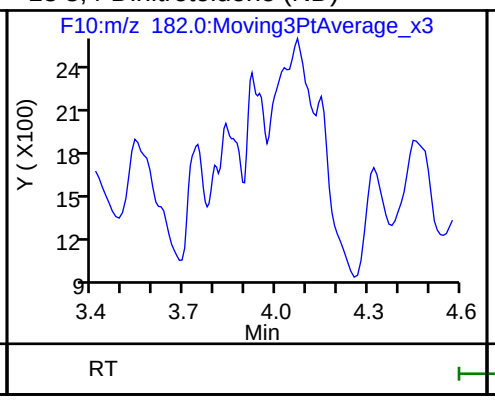


Report Date: 06-Apr-2022 07:09:56 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05037.d

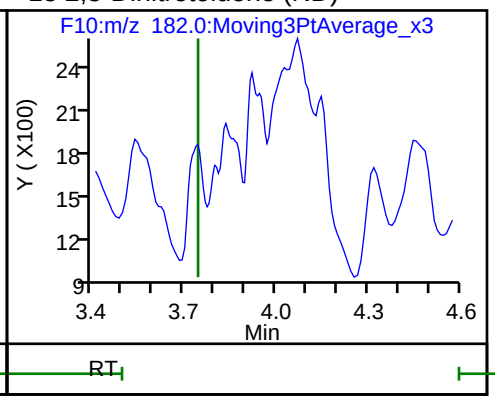
24 m-Nitrotoluene (ND)



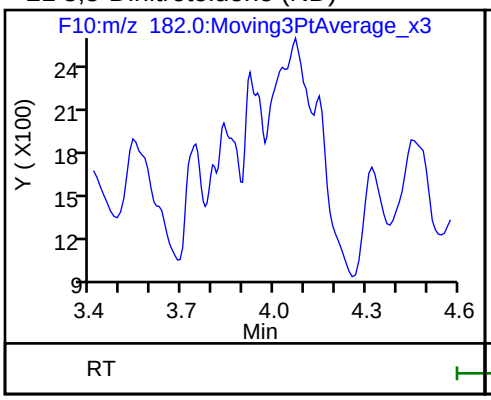
13 3,4-Dinitrotoluene (ND)



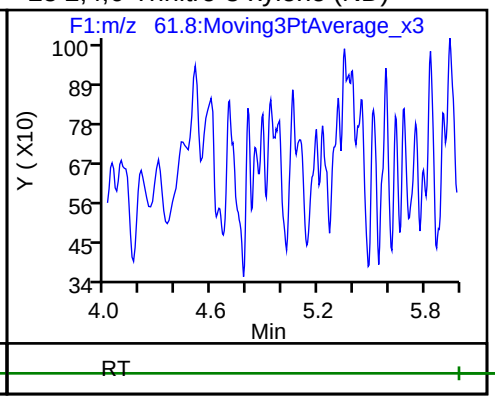
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 07:09:56 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05037.d				
Lims ID:	280-160187-A-6-B				
Client ID:	29SB185 (11-12)				
Sample Type:	Client				
Inject. Date:	05-Apr-2022 13:38:49	ALS Bottle#:	30	Worklist Smp#:	34
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160187-A-6-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 07:09:52	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 14:52:11		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	102.1	101.78

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

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

SDG No.:

Client Sample ID: 29SB185 (13.5-14) | Lab Sample ID: 280-160187-7

Matrix: Solid | Lab File ID: ex722D05038.d

Analysis Method: 8321A | Date Collected: 03/22/2022 13:00

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

Sample wt/vol: 10.17(g) | Date Analyzed: 04/05/2022 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.: 570785 | 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	0.031
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	0.029
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	93		68-140

Report Date: 06-Apr-2022 07:09:57 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\ex722D05038.d
Lims ID: 280-160187-A-7-B
Client ID: 29SB185 (13.5-14)
Sample Type: Client
Inject. Date: 05-Apr-2022 13:45:13 ALS Bottle#: 31 Worklist Smp#: 35
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-7-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 07:09:52 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 14:52:19
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		283500	125.0	165	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.785	1.777	0.008		1025006	125.0	231	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1902006	129.4	277	
$ 11 Nitrobenzene-d5								
128.0	3.150	3.164	0.0	0.779	868956	93.7	114	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		5806142	125.0	116	

QC Flag Legend
Processing Flags

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

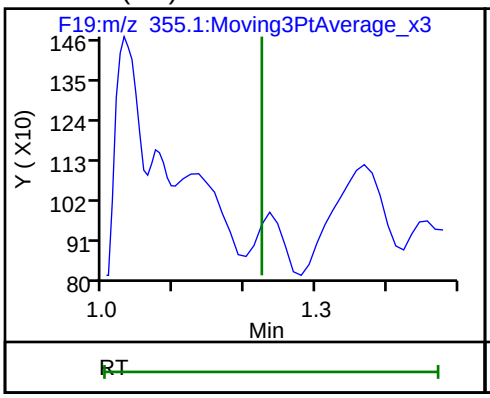
Report Date: 06-Apr-2022 07:09:57 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

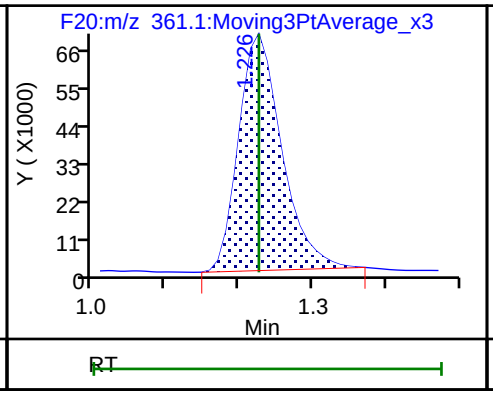
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05038.d

Injection Date:	05-Apr-2022 13:45:13	Instrument ID:	LC_LCMS7
Lims ID:	280-160187-A-7-B	Lab Sample ID:	280-160187-7
Client ID:	29SB185 (13.5-14)		
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

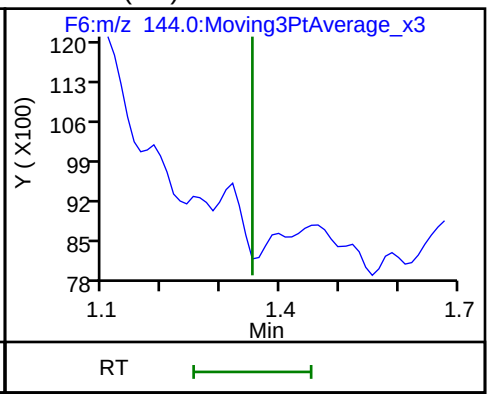
2 HMX (ND)



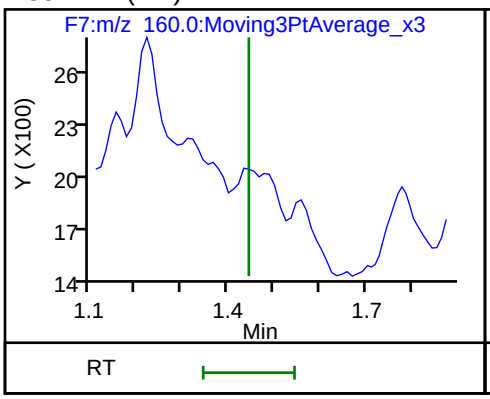
* 1 HMX-13C4



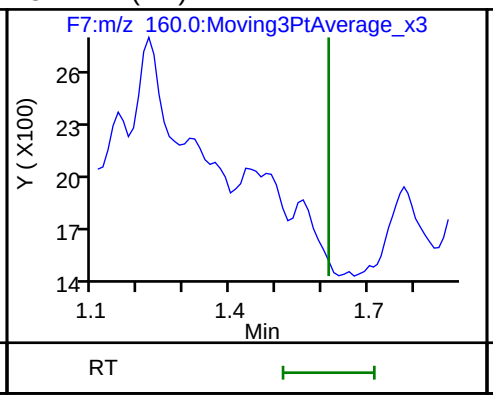
36 TNX (ND)



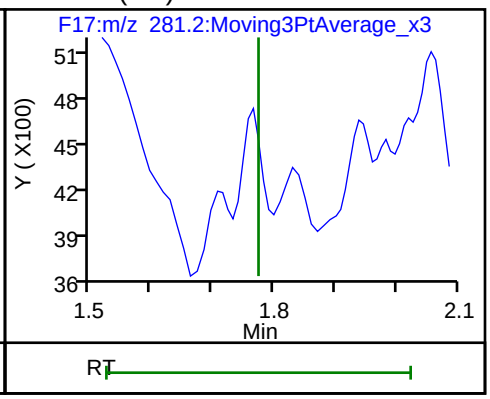
33 DNX (ND)



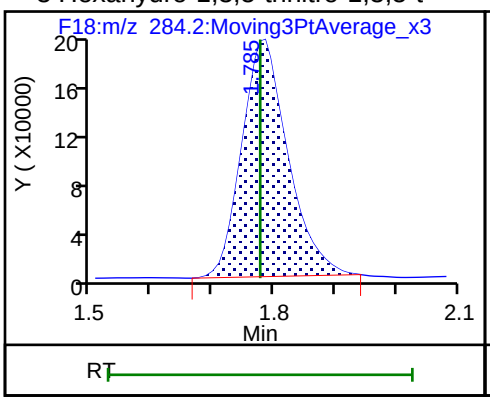
34 MNX (ND)



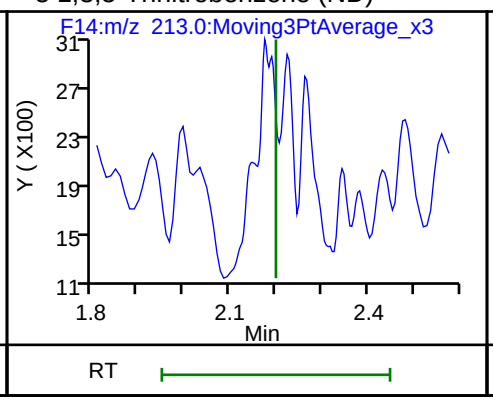
4 RDX (ND)



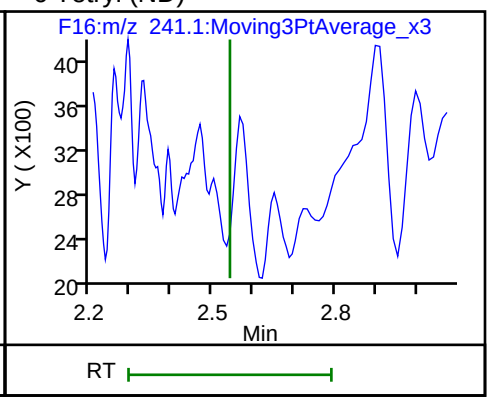
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



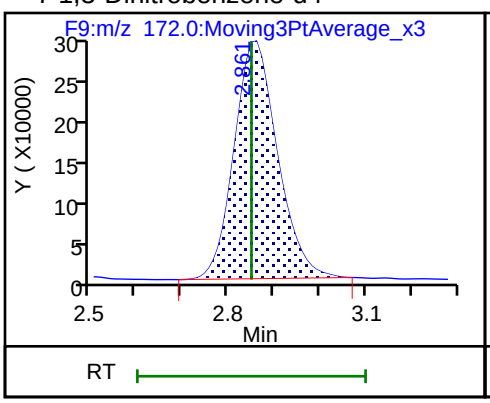
5 1,3,5-Trinitrobenzene (ND)



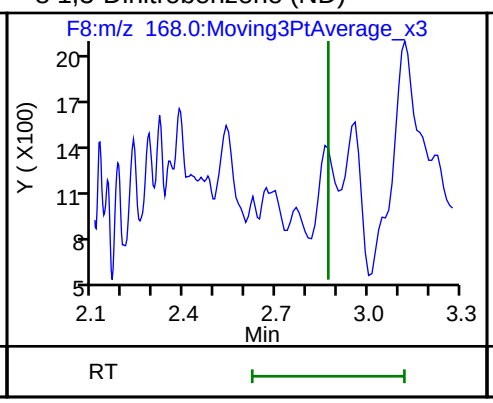
6 Tetryl (ND)



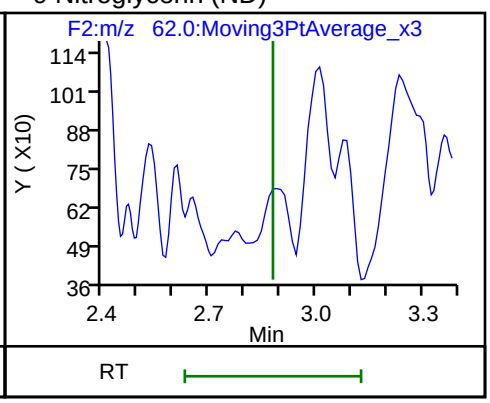
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

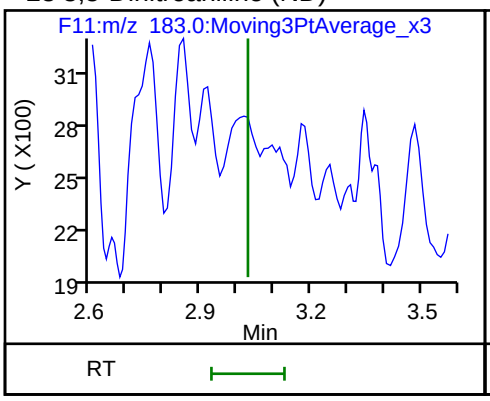


9 Nitroglycerin (ND)

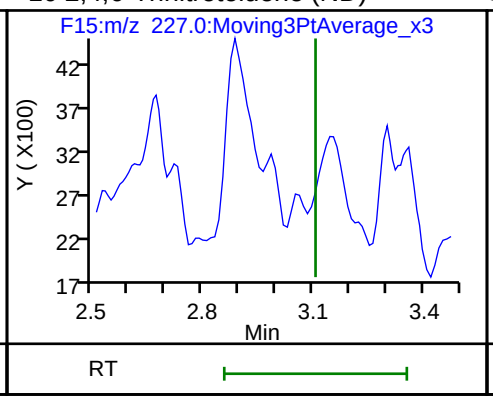


Report Date: 06-Apr-2022 07:09:57 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05038.d

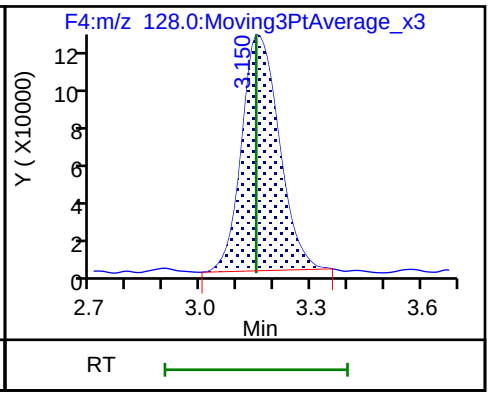
28 3,5-Dinitroaniline (ND)



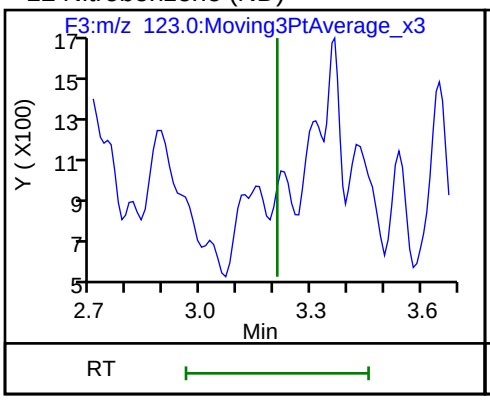
10 2,4,6-Trinitrotoluene (ND)



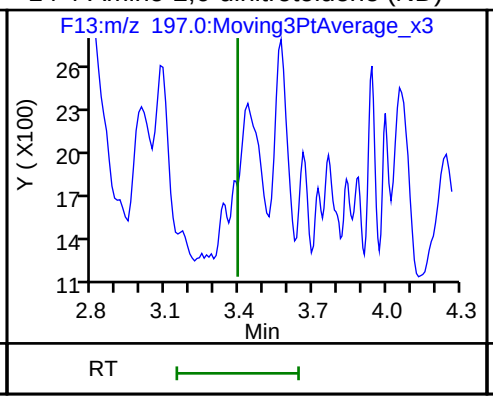
$ 11 Nitrobenzene-d5



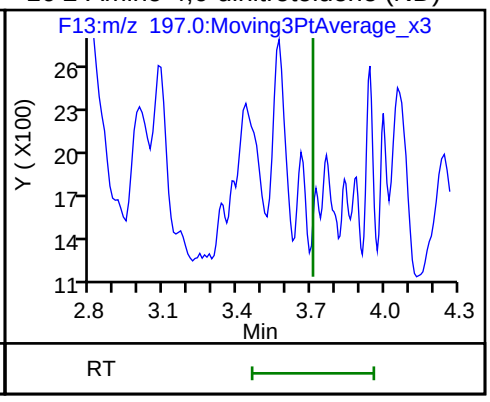
12 Nitrobenzene (ND)



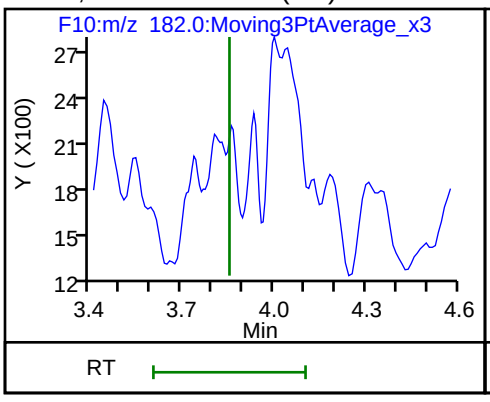
14 4-Amino-2,6-dinitrotoluene (ND)



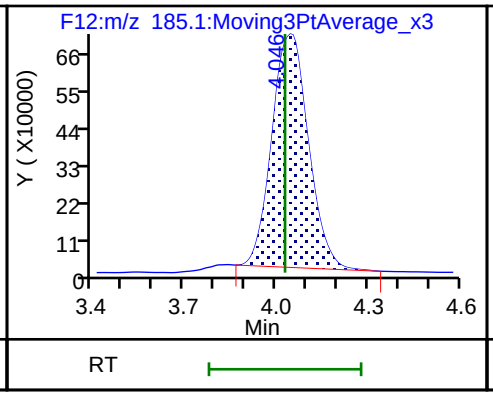
16 2-Amino-4,6-dinitrotoluene (ND)



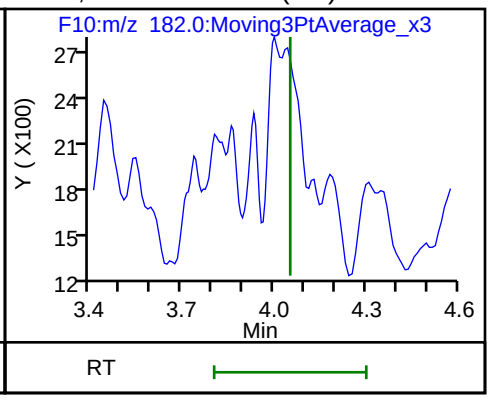
17 2,6-Dinitrotoluene (ND)



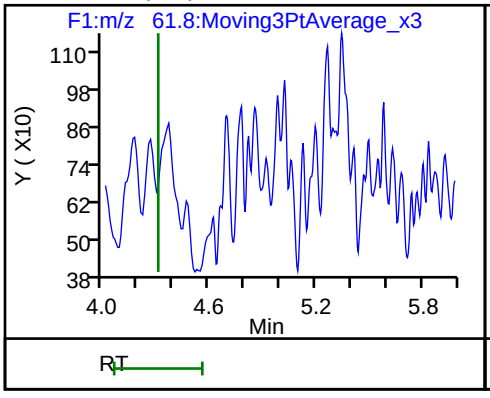
* 18 2,4-dinitrotoluene-d3



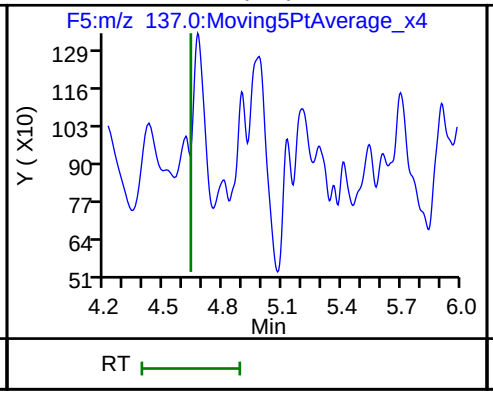
19 2,4-Dinitrotoluene (ND)



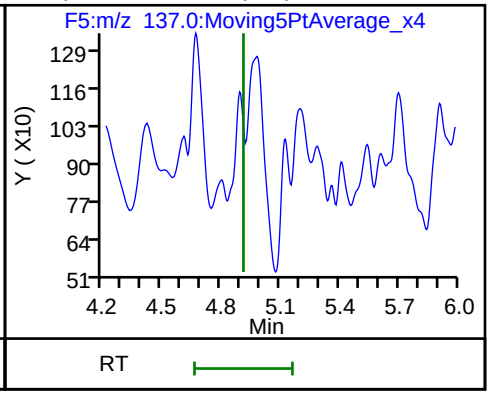
20 PETN (ND)



22 o-Nitrotoluene (ND)

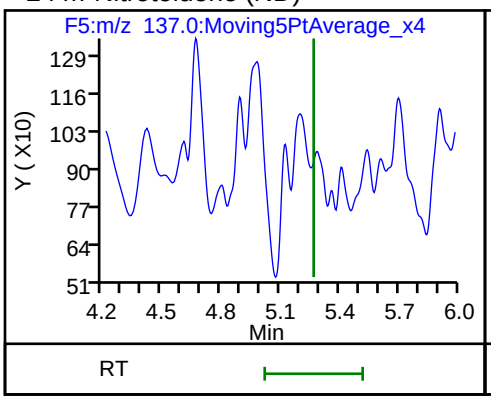


23 p-Nitrotoluene (ND)

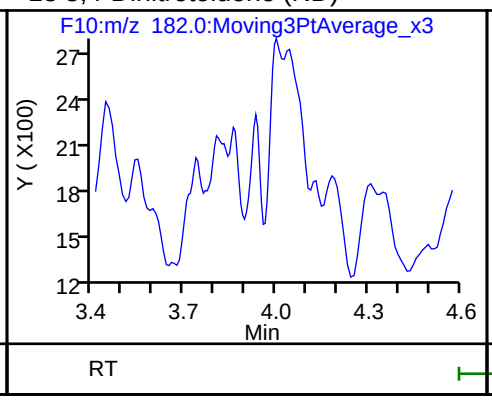


Report Date: 06-Apr-2022 07:09:57 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05038.d

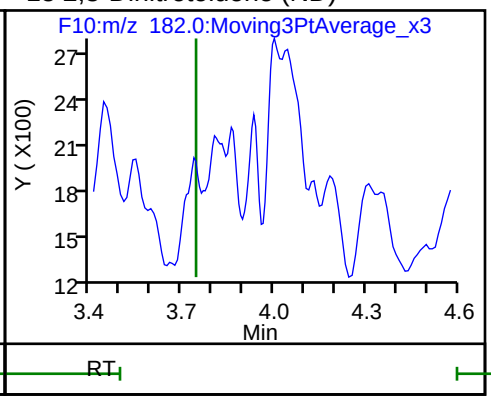
24 m-Nitrotoluene (ND)



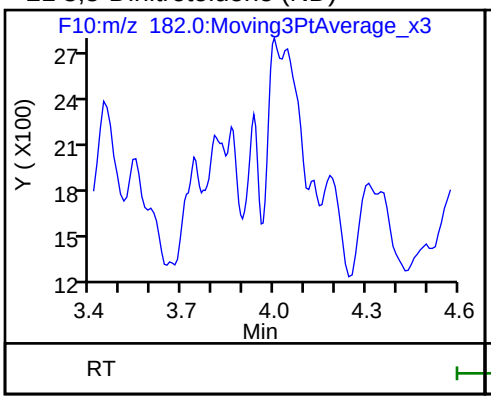
13 3,4-Dinitrotoluene (ND)



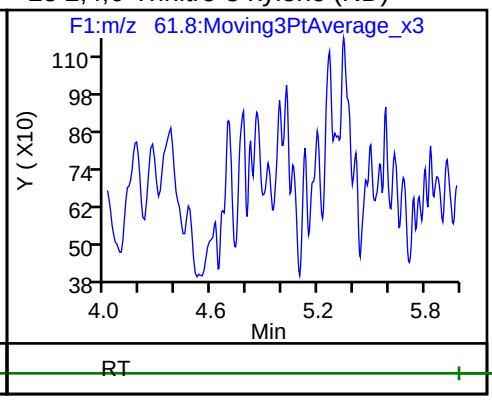
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 07:09:57 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05038.d
Lims ID: 280-160187-A-7-B
Client ID: 29SB185 (13.5-14)
Sample Type: Client
Inject. Date: 05-Apr-2022 13:45:13 ALS Bottle#: 31 Worklist Smp#: 35
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-7-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 07:09:52 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 14:52:19

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	93.7	93.36

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB186 (9-10) | Lab Sample ID: 280-160187-8
Matrix: Solid | Lab File ID: ex722D05039.d
Analysis Method: 8321A | Date Collected: 03/22/2022 13:15
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:56
Sample wt/vol: 10.62(g) | Date Analyzed: 04/05/2022 13:51
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.: 570785 | 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 Q	0.094	0.047	0.037

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

Report Date: 06-Apr-2022 07:09:57 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\ex722D05039.d
Lims ID: 280-160187-A-8-B
Client ID: 29SB186 (9-10)
Sample Type: Client
Inject. Date: 05-Apr-2022 13:51:37 ALS Bottle#: 32 Worklist Smp#: 36
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-8-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 07:09:52 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 14:52:32
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		267226	125.0	269	
33 DNX								
160.0	1.500	1.458	0.056	0.844	9880	-0.8146	3.5	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		975987	125.0	314	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1944862	129.4	344	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.783	938055	98.9	86.8	
* 18 2,4-dinitrotoluene-d3								
185.1	4.037	4.028	0.009		6159542	125.0	118	

QC Flag Legend

Processing Flags

Reagents:

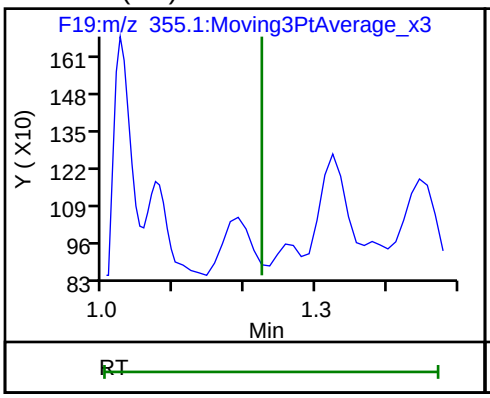
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:09:58 Chrom Revision: 2.3 18-Mar-2022 09:07:22

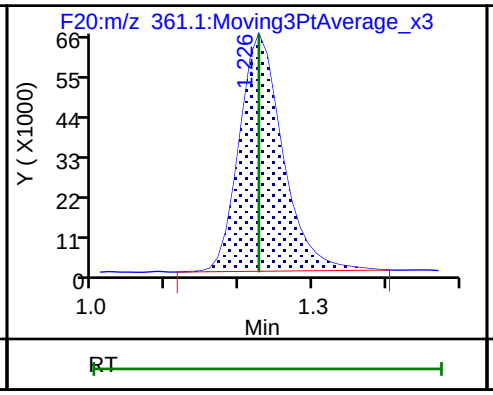
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05039.d
Injection Date: 05-Apr-2022 13:51:37 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-8-B Lab Sample ID: 280-160187-8
Client ID: 29SB186 (9-10)
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

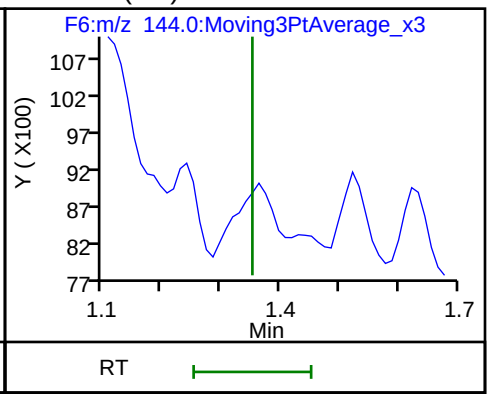
2 HMX (ND)



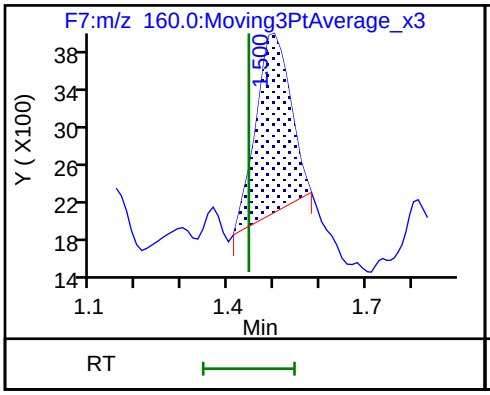
* 1 HMX-13C4



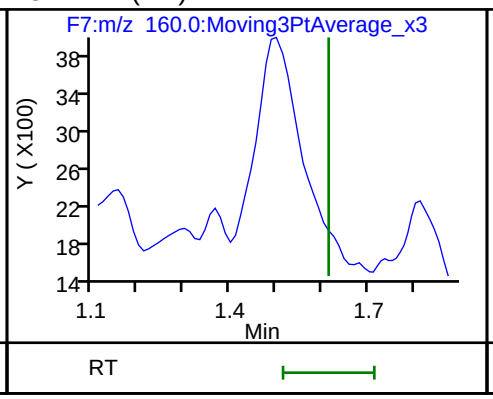
36 TNX (ND)



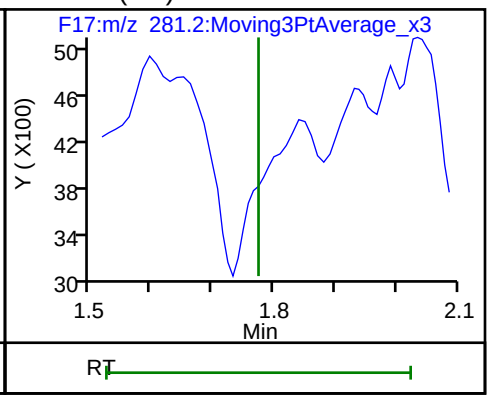
33 DNX



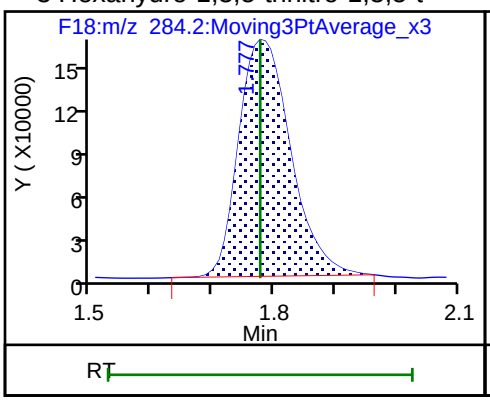
34 MNX (ND)



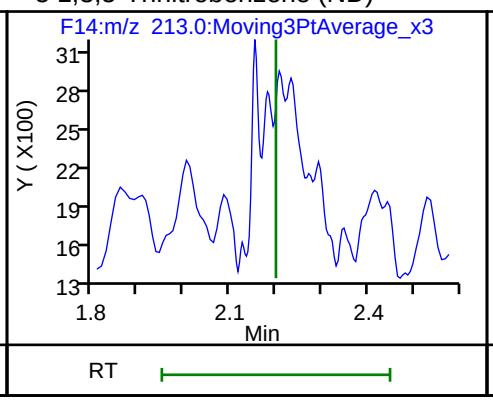
4 RDX (ND)



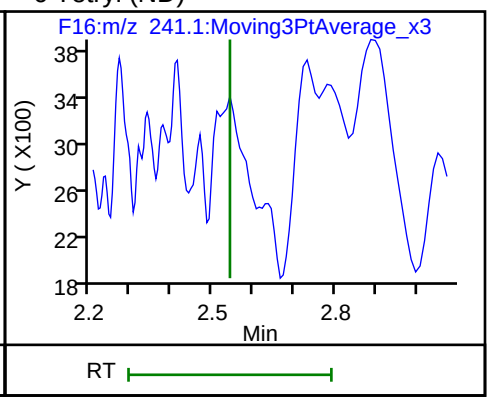
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



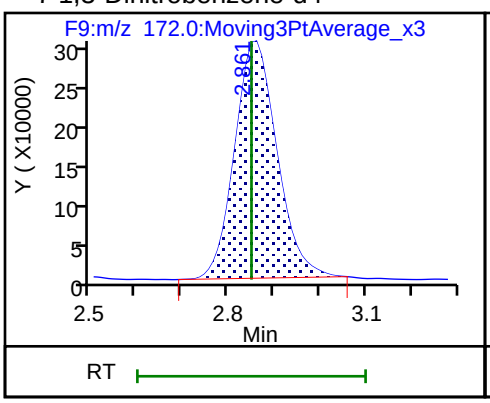
5 1,3,5-Trinitrobenzene (ND)



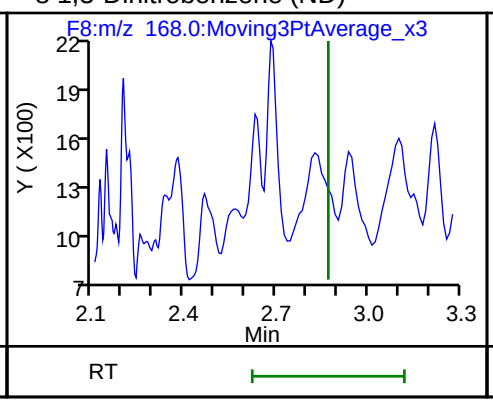
6 Tetryl (ND)



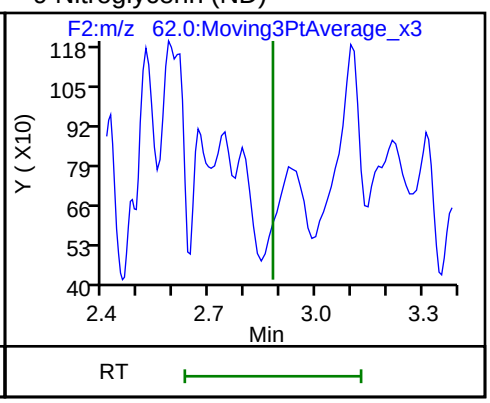
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

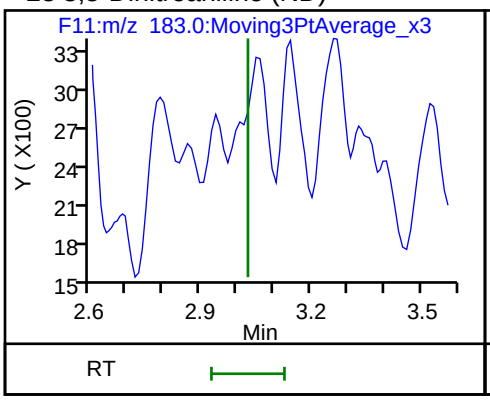


9 Nitroglycerin (ND)

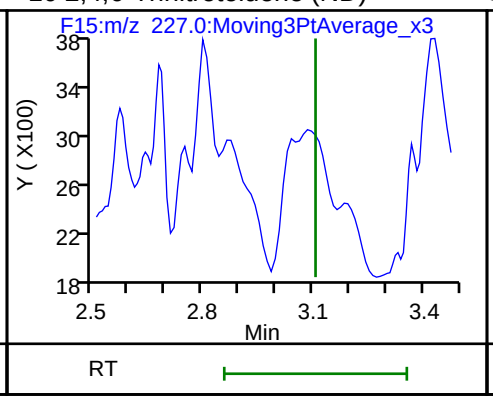


Report Date: 06-Apr-2022 07:09:58 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05039.d

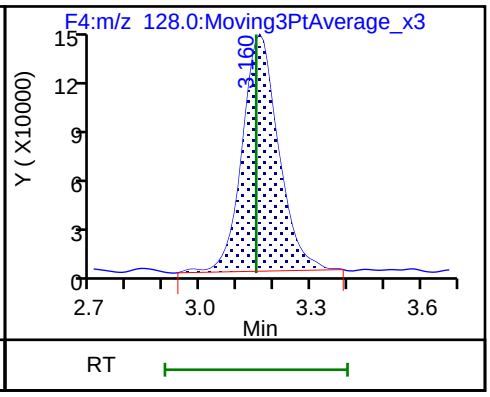
28 3,5-Dinitroaniline (ND)



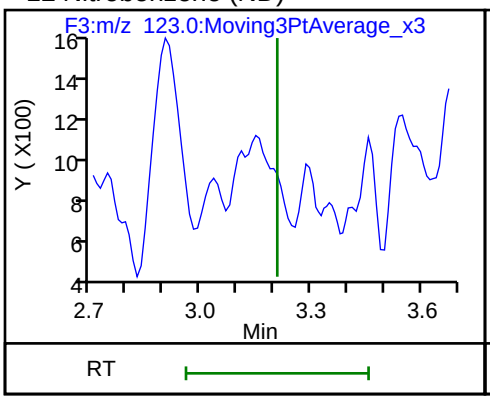
10 2,4,6-Trinitrotoluene (ND)



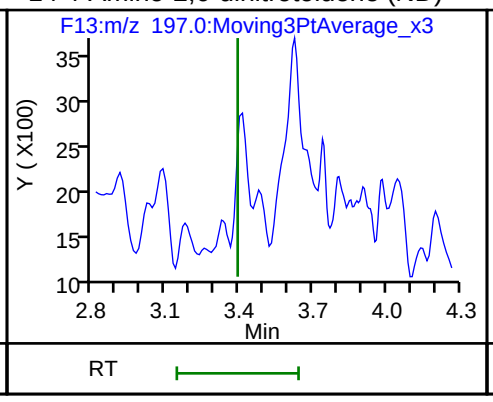
$ 11 Nitrobenzene-d5



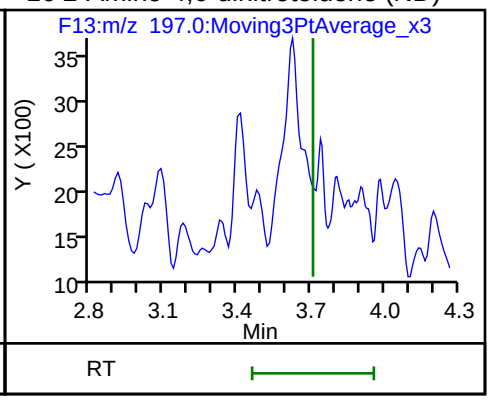
12 Nitrobenzene (ND)



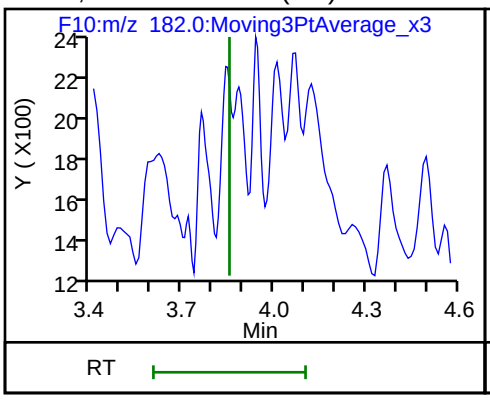
14 4-Amino-2,6-dinitrotoluene (ND)



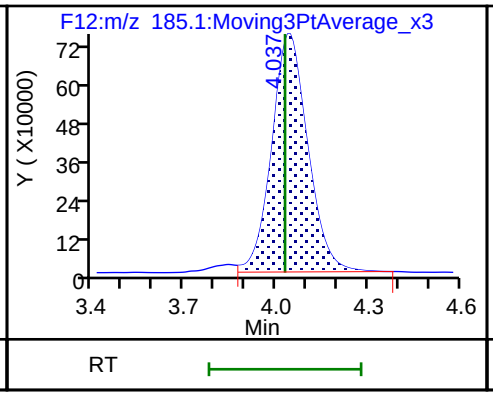
16 2-Amino-4,6-dinitrotoluene (ND)



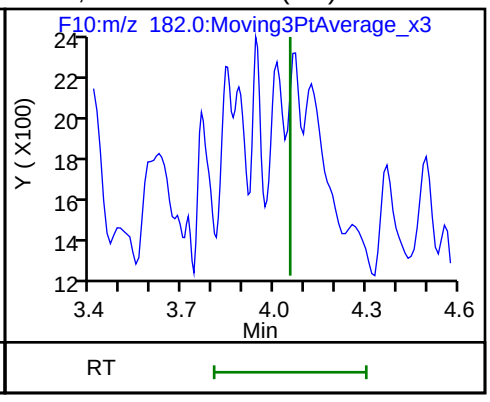
17 2,6-Dinitrotoluene (ND)



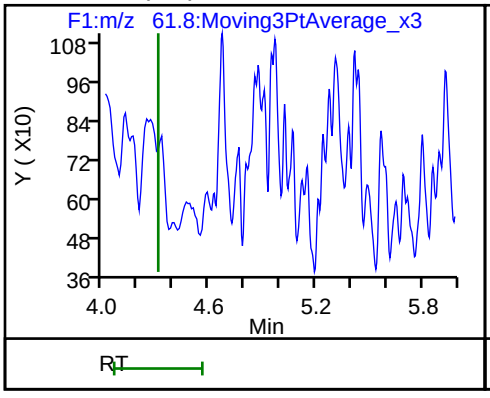
* 18 2,4-dinitrotoluene-d3



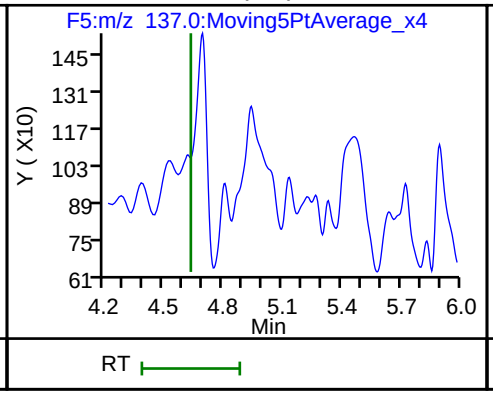
19 2,4-Dinitrotoluene (ND)



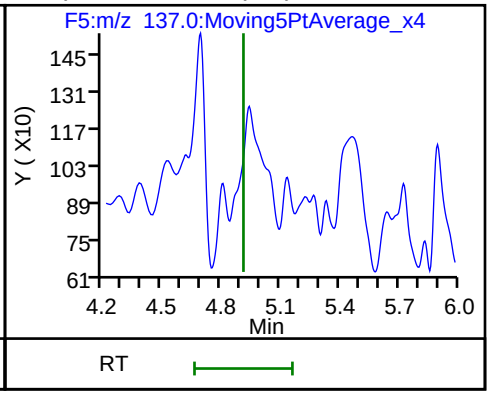
20 PETN (ND)



22 o-Nitrotoluene (ND)



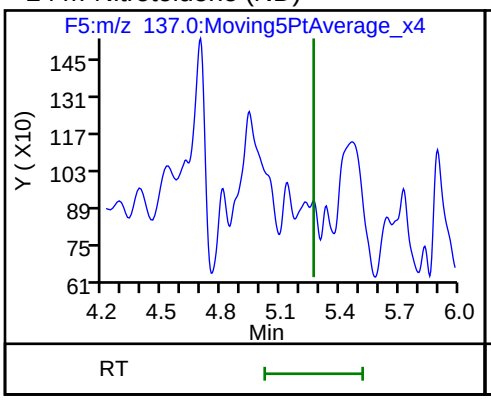
23 p-Nitrotoluene (ND)



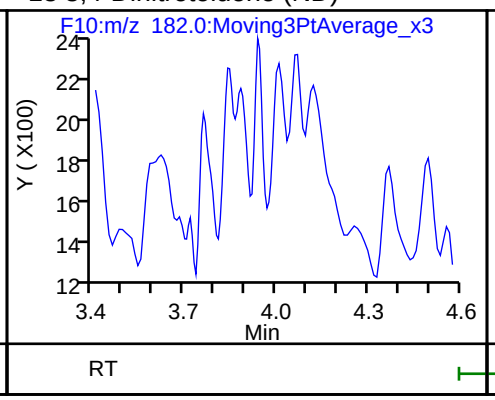
Report Date: 06-Apr-2022 07:09:58 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05039.d

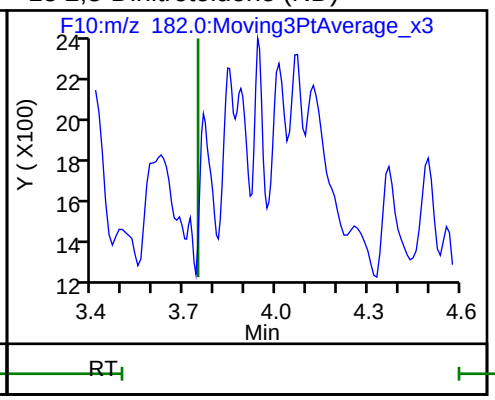
24 m-Nitrotoluene (ND)



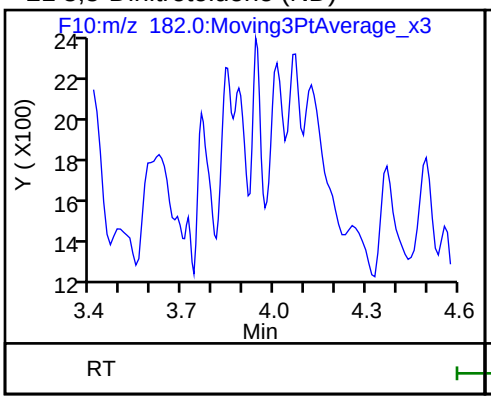
13 3,4-Dinitrotoluene (ND)



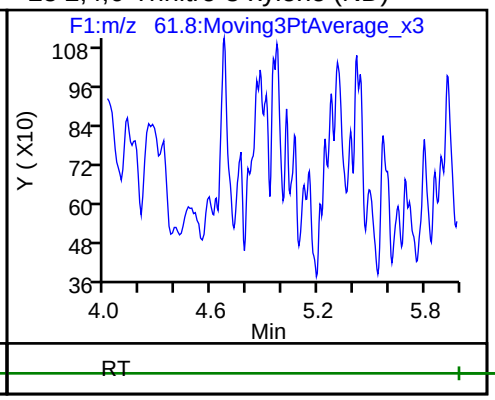
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 07:09:58 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05039.d				
Lims ID:	280-160187-A-8-B				
Client ID:	29SB186 (9-10)				
Sample Type:	Client				
Inject. Date:	05-Apr-2022 13:51:37	ALS Bottle#:	32	Worklist Smp#:	36
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160187-A-8-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 07:09:52	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 14:52:32		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	98.9	98.62

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB186 (11-12) | Lab Sample ID: 280-160187-9
Matrix: Solid | Lab File ID: ex722D05040.d
Analysis Method: 8321A | Date Collected: 03/22/2022 13:18
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:56
Sample wt/vol: 10.28(g) | Date Analyzed: 04/05/2022 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.: 570785 | 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	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	102		68-140

Report Date: 06-Apr-2022 07:09:58 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\ex722D05040.d
Lims ID: 280-160187-A-9-B
Client ID: 29SB186 (11-12)
Sample Type: Client
Inject. Date: 05-Apr-2022 13:58:01 ALS Bottle#: 33 Worklist Smp#: 37
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-9-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 07:09:52 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 14:52:41
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	1.226	1.226	0.0		289965	125.0	128	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		1048430	125.0	256	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.850	2.850	0.0		1850165	129.4	257	
$ 11 Nitrobenzene-d5								
128.0	3.150	3.164	0.0	0.780	925820	102.7	103	
* 18 2,4-dinitrotoluene-d3								
185.1	4.037	4.028	0.009		5865015	125.0	112	

QC Flag Legend
Processing Flags

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

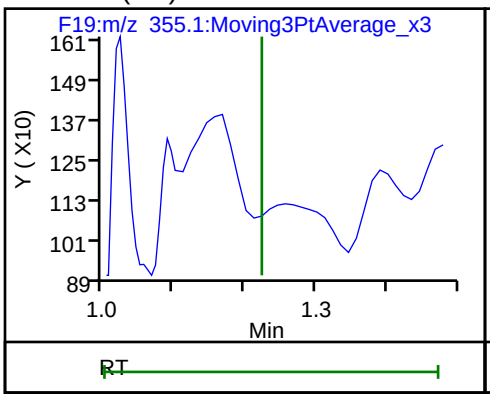
Report Date: 06-Apr-2022 07:09:58 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

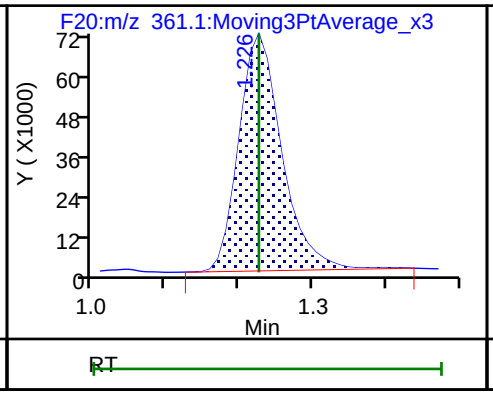
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05040.d

Injection Date:	05-Apr-2022 13:58:01	Instrument ID:	LC_LCMS7
Lims ID:	280-160187-A-9-B	Lab Sample ID:	280-160187-9
Client ID:	29SB186 (11-12)		
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

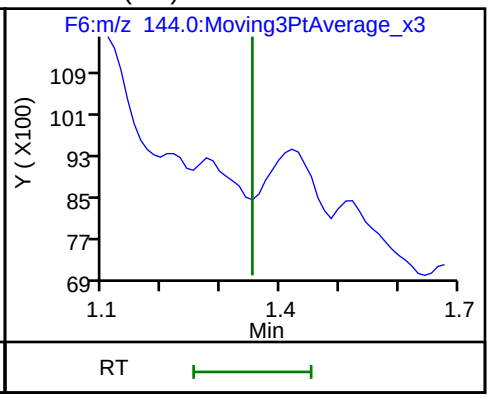
2 HMX (ND)



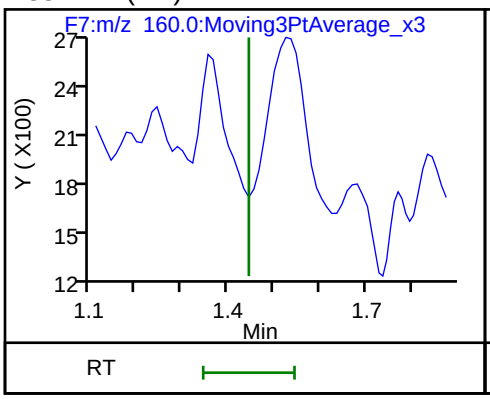
* 1 HMX-13C4



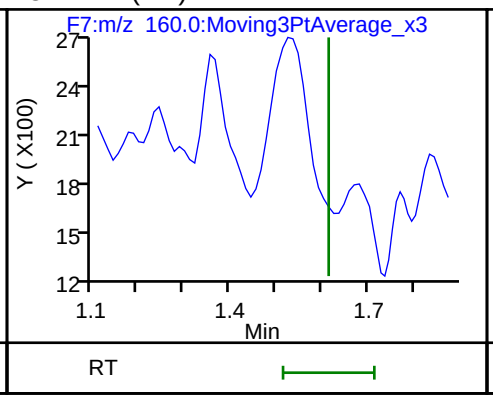
36 TNX (ND)



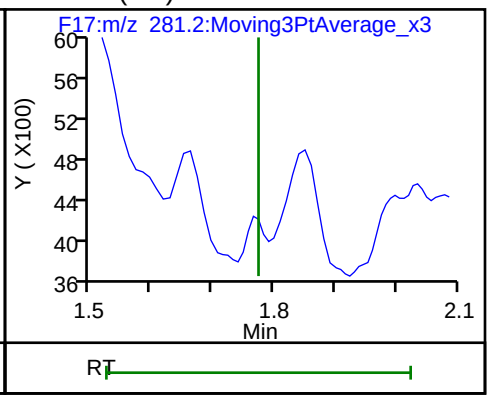
33 DNX (ND)



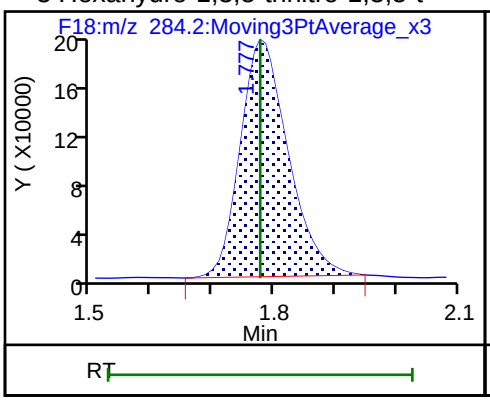
34 MNX (ND)



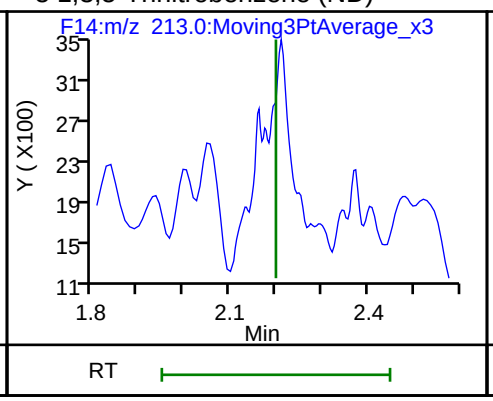
4 RDX (ND)



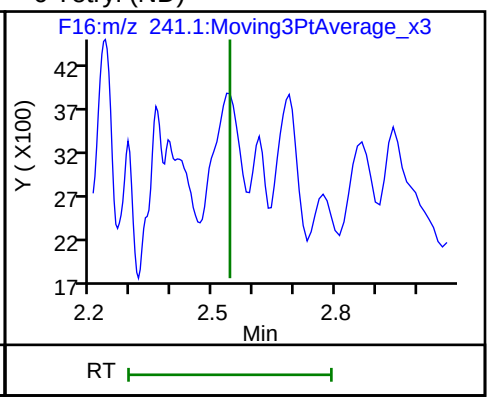
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



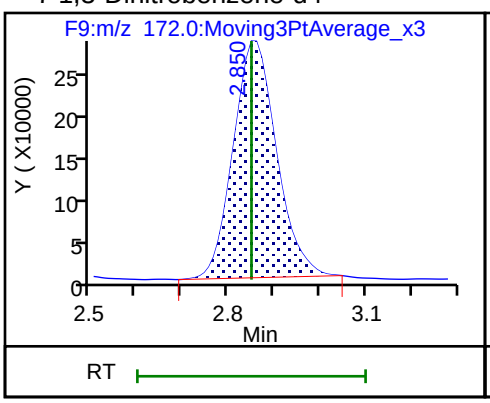
5 1,3,5-Trinitrobenzene (ND)



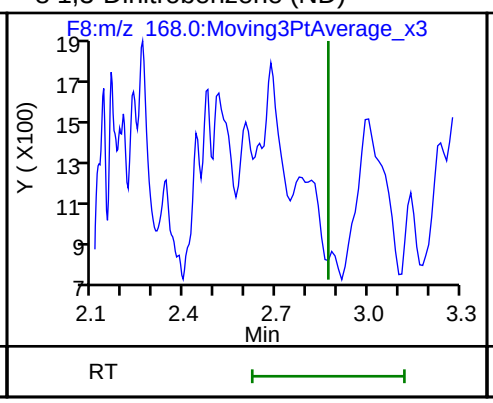
6 Tetryl (ND)



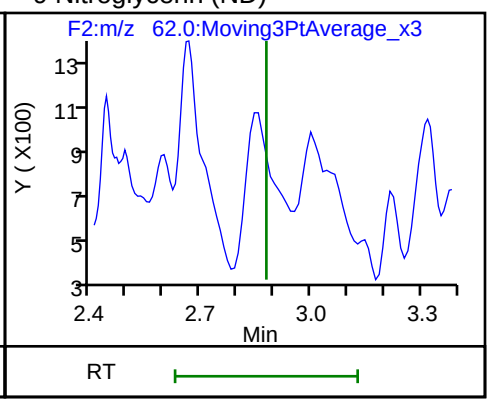
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

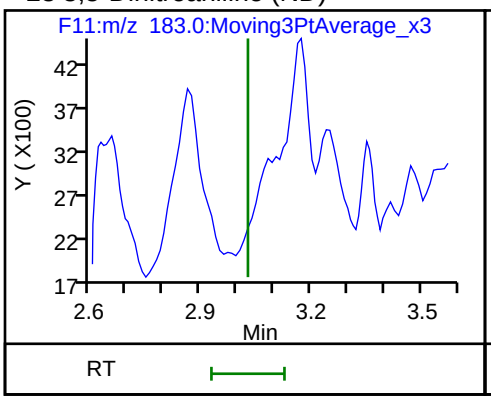


9 Nitroglycerin (ND)

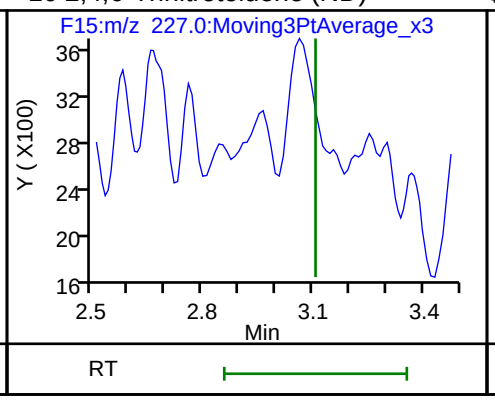


Report Date: 06-Apr-2022 07:09:58 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05040.d

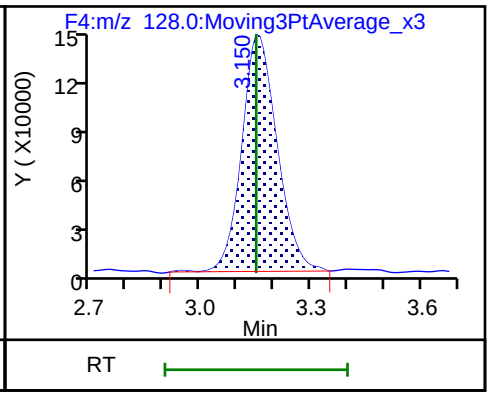
28 3,5-Dinitroaniline (ND)



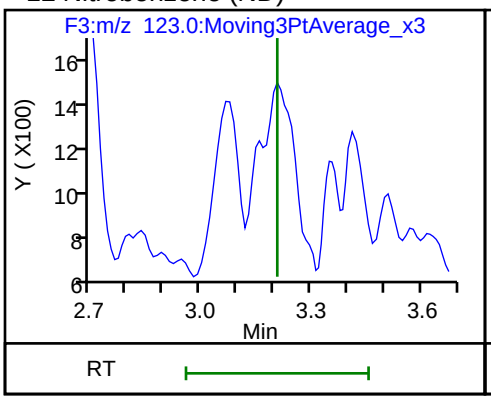
10 2,4,6-Trinitrotoluene (ND)



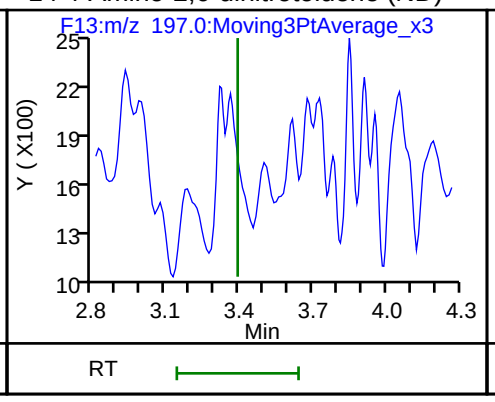
$ 11 Nitrobenzene-d5



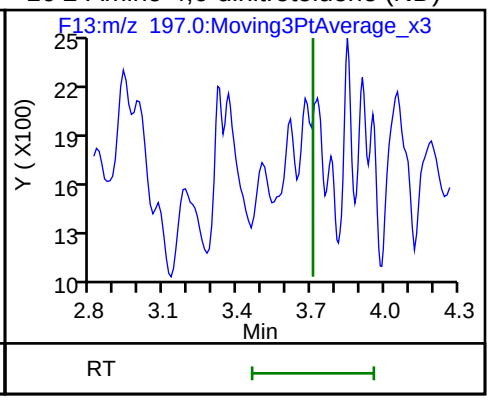
12 Nitrobenzene (ND)



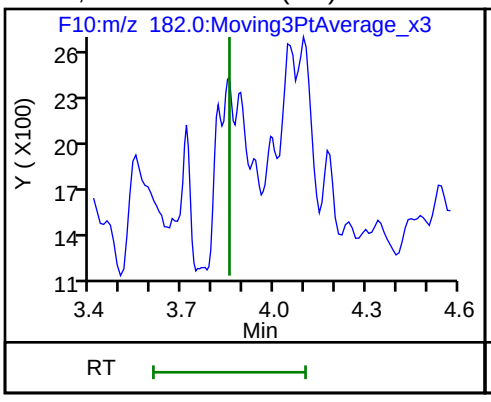
14 4-Amino-2,6-dinitrotoluene (ND)



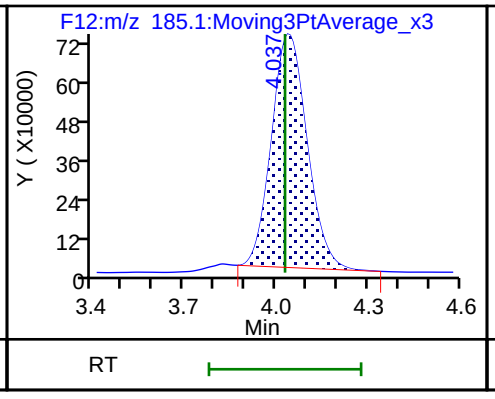
16 2-Amino-4,6-dinitrotoluene (ND)



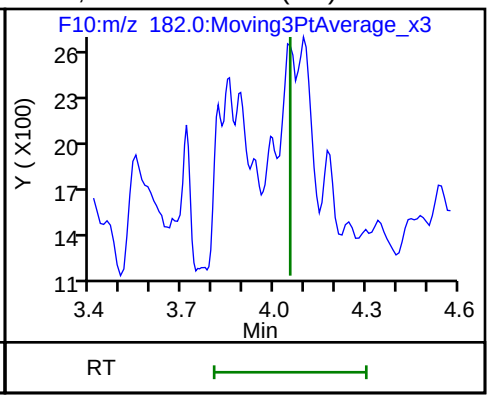
17 2,6-Dinitrotoluene (ND)



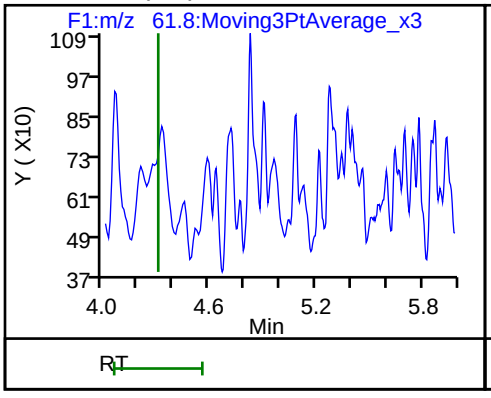
* 18 2,4-dinitrotoluene-d3



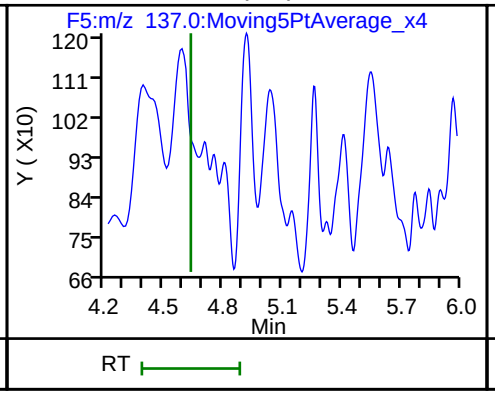
19 2,4-Dinitrotoluene (ND)



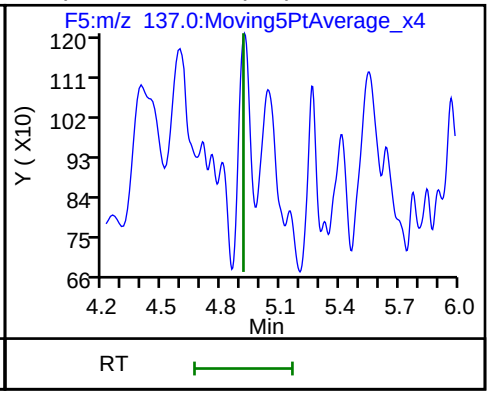
20 PETN (ND)



22 o-Nitrotoluene (ND)

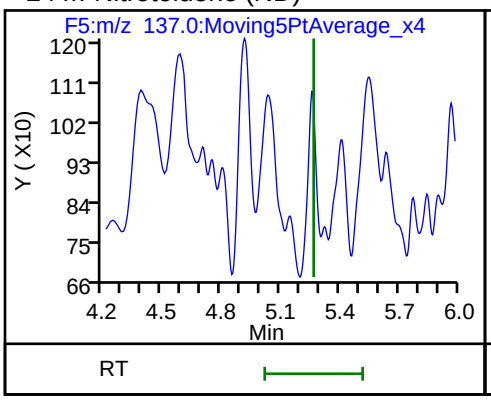


23 p-Nitrotoluene (ND)

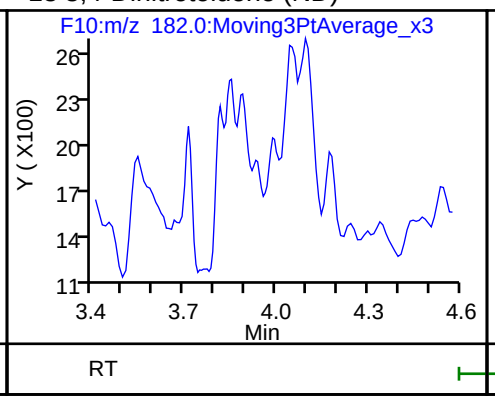


Report Date: 06-Apr-2022 07:09:58 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05040.d

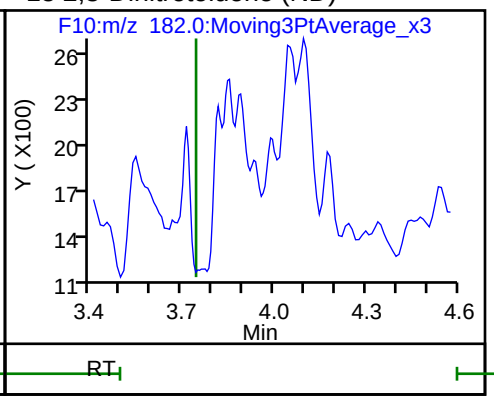
24 m-Nitrotoluene (ND)



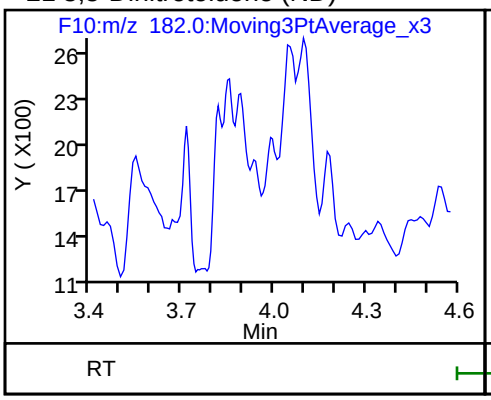
13 3,4-Dinitrotoluene (ND)



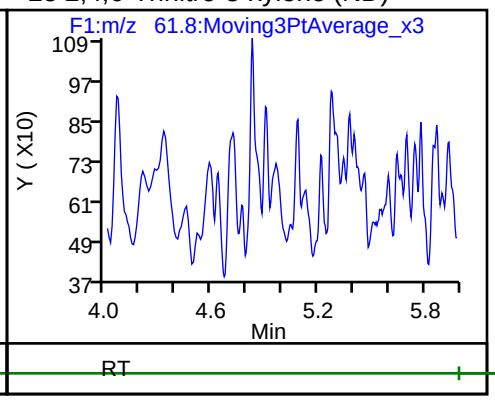
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 07:09:58 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05040.d				
Lims ID:	280-160187-A-9-B				
Client ID:	29SB186 (11-12)				
Sample Type:	Client				
Inject. Date:	05-Apr-2022 13:58:01	ALS Bottle#:	33	Worklist Smp#:	37
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160187-A-9-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 07:09:52	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 14:52:41		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	102.7	102.35

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB186 (13.5-14) | Lab Sample ID: 280-160187-10
Matrix: Solid | Lab File ID: ex722D05041.d
Analysis Method: 8321A | Date Collected: 03/22/2022 13:20
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:56
Sample wt/vol: 10.68(g) | Date Analyzed: 04/05/2022 14:04
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.: 570785 | 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	0.034
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	0.046
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	0.040
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	96		68-140

Report Date: 06-Apr-2022 07:09:59 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\ex722D05041.d
Lims ID: 280-160187-A-10-B
Client ID: 29SB186 (13.5-14)
Sample Type: Client
Inject. Date: 05-Apr-2022 14:04:25 ALS Bottle#: 34 Worklist Smp#: 38
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-10-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 07:09:52 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 14:52:51
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	1.226	1.226	0.0		295693	125.0	159	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.785	1.777	0.008		1124085	125.0	254	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.850	2.850	0.0		1930613	129.4	301	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	906799	96.3	158	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		6122600	125.0	105	

QC Flag Legend
Processing Flags

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

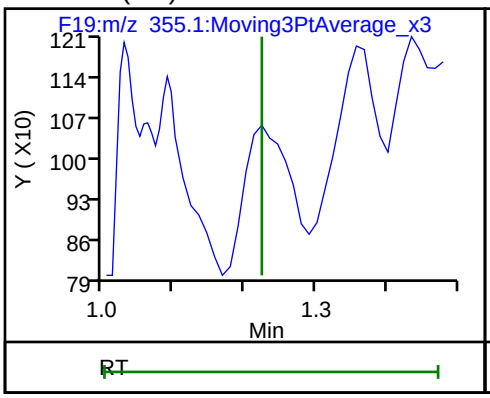
Report Date: 06-Apr-2022 07:09:59 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

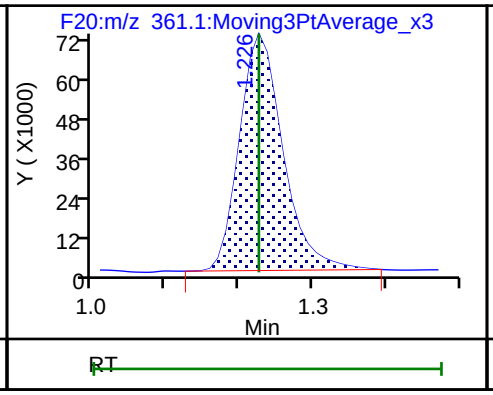
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05041.d

Injection Date:	05-Apr-2022 14:04:25	Instrument ID:	LC_LCMS7
Lims ID:	280-160187-A-10-B	Lab Sample ID:	280-160187-10
Client ID:	29SB186 (13.5-14)		
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

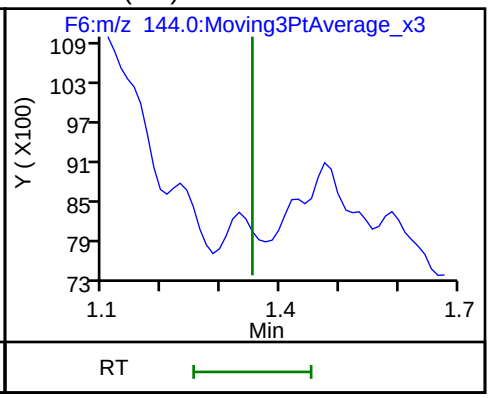
2 HMX (ND)



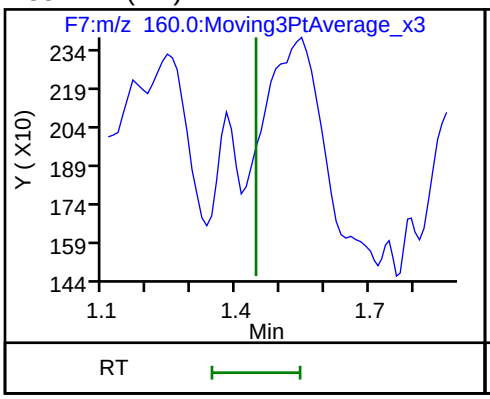
* 1 HMX-13C4



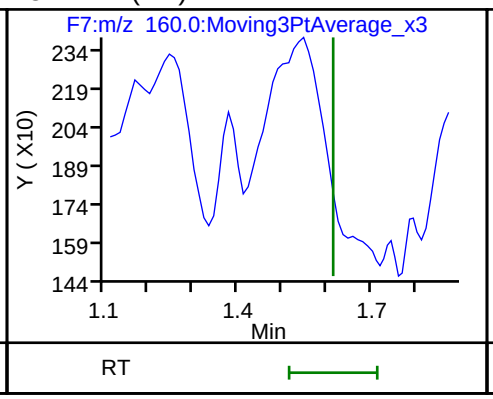
36 TNX (ND)



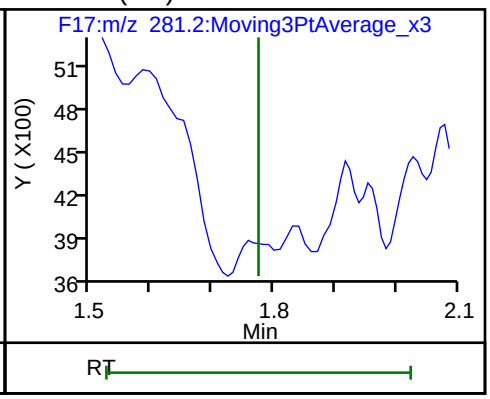
33 DNX (ND)



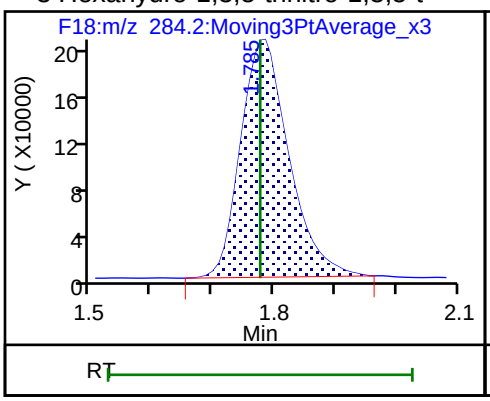
34 MNX (ND)



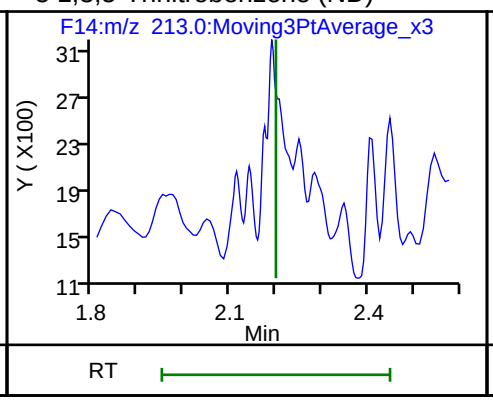
4 RDX (ND)



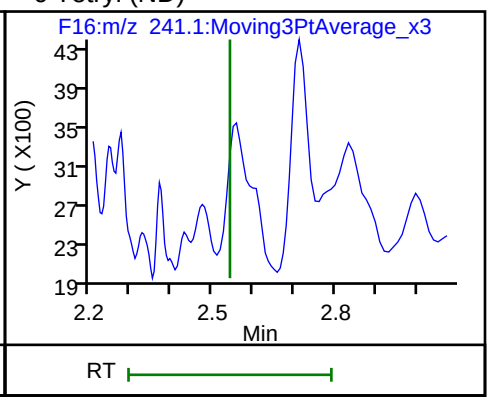
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



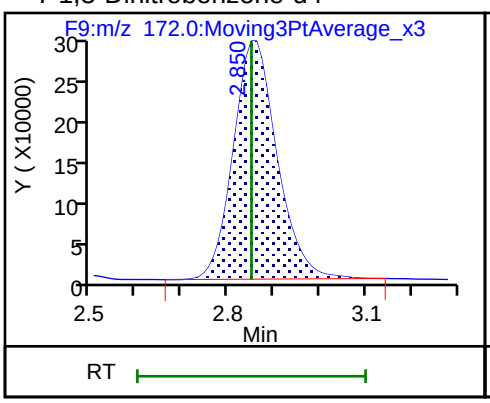
5 1,3,5-Trinitrobenzene (ND)



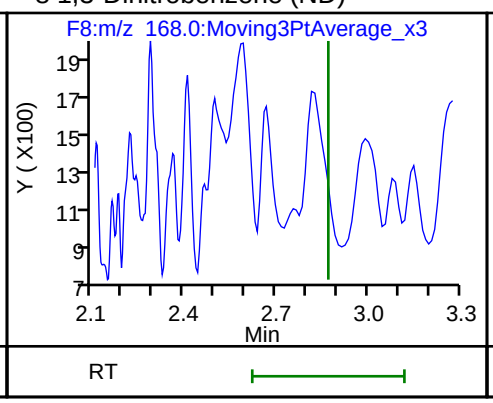
6 Tetryl (ND)



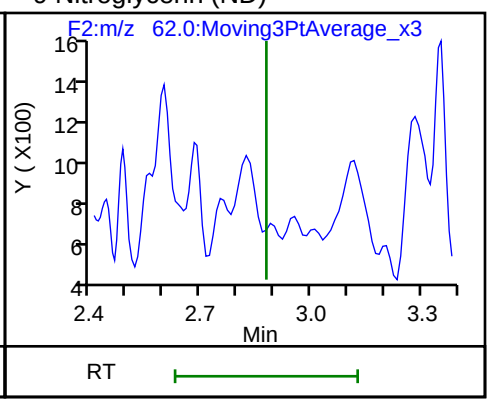
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



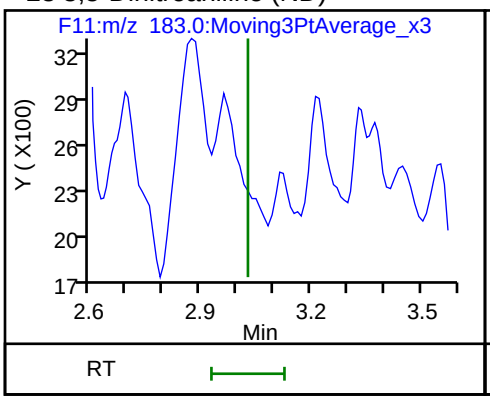
9 Nitroglycerin (ND)



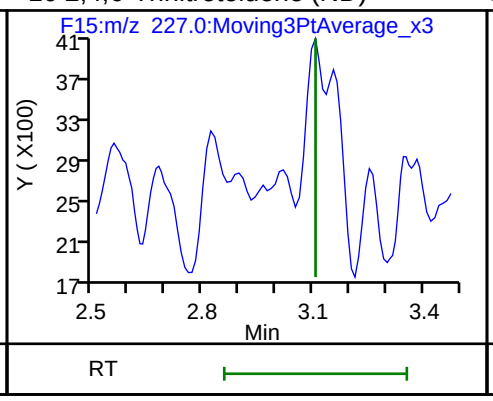
Report Date: 06-Apr-2022 07:09:59 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05041.d

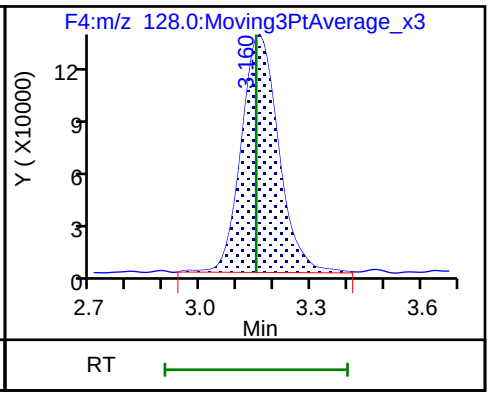
28 3,5-Dinitroaniline (ND)



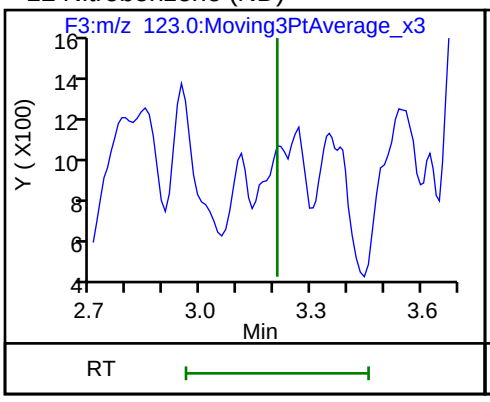
10 2,4,6-Trinitrotoluene (ND)



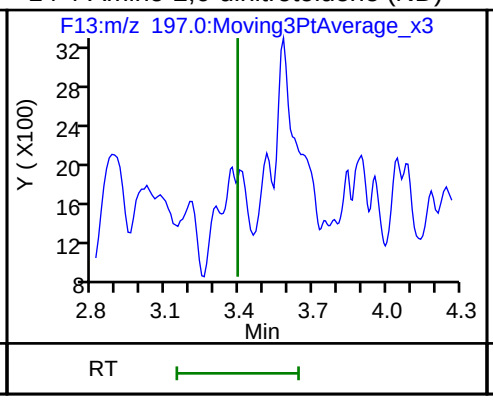
$ 11 Nitrobenzene-d5



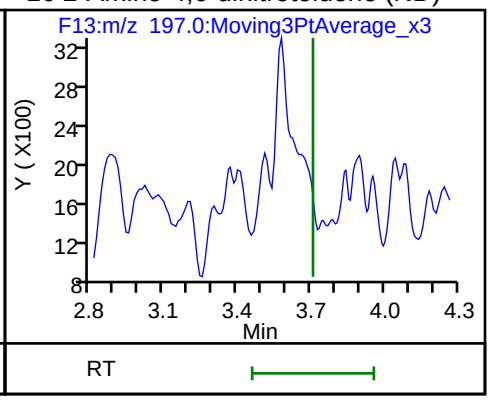
12 Nitrobenzene (ND)



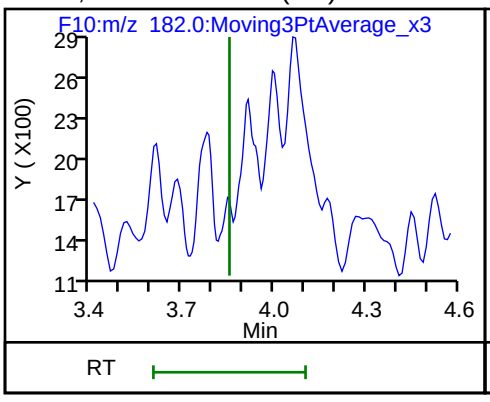
14 4-Amino-2,6-dinitrotoluene (ND)



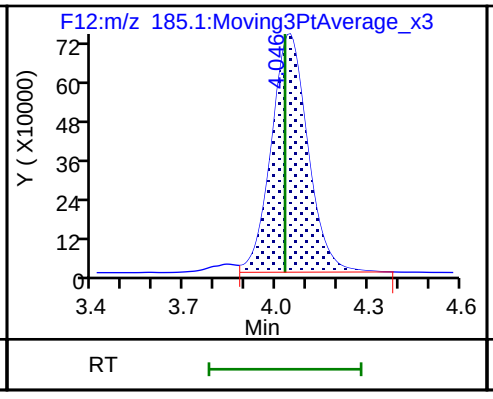
16 2-Amino-4,6-dinitrotoluene (ND)



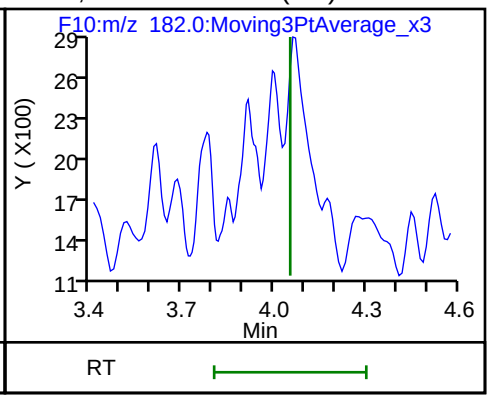
17 2,6-Dinitrotoluene (ND)



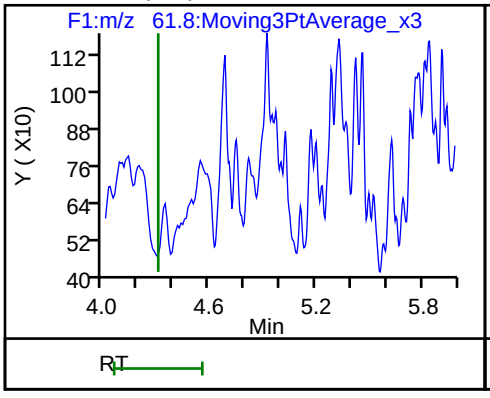
* 18 2,4-dinitrotoluene-d3



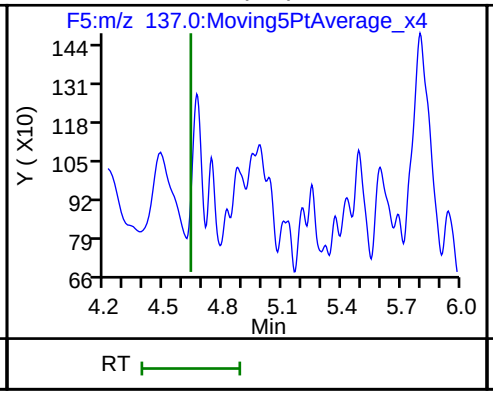
19 2,4-Dinitrotoluene (ND)



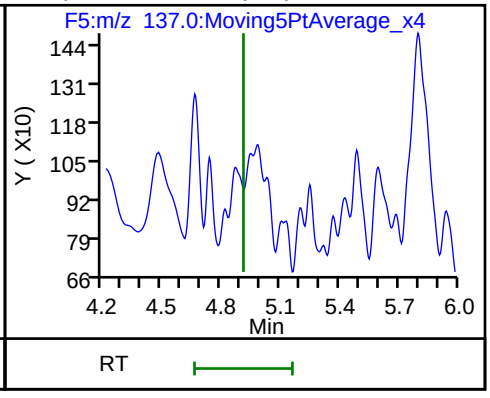
20 PETN (ND)



22 o-Nitrotoluene (ND)



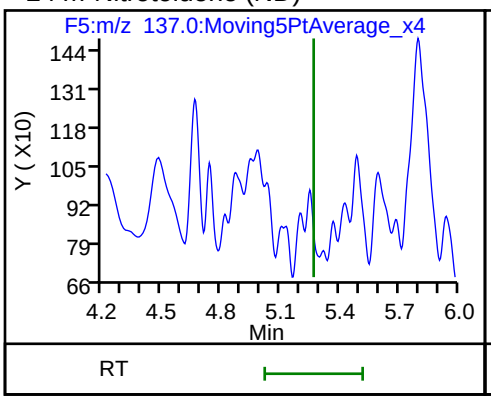
23 p-Nitrotoluene (ND)



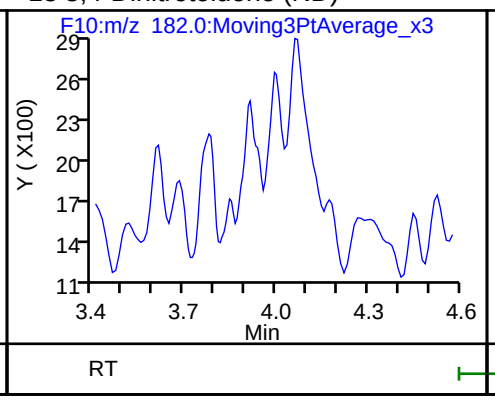
Report Date: 06-Apr-2022 07:09:59 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05041.d

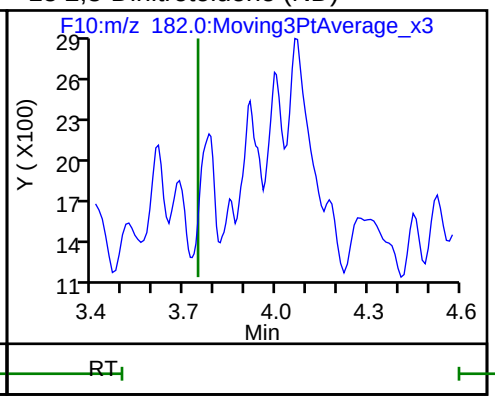
24 m-Nitrotoluene (ND)



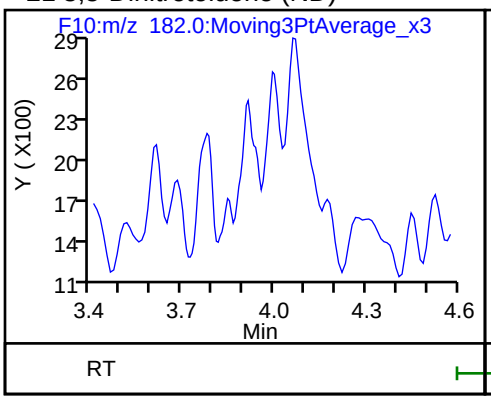
13 3,4-Dinitrotoluene (ND)



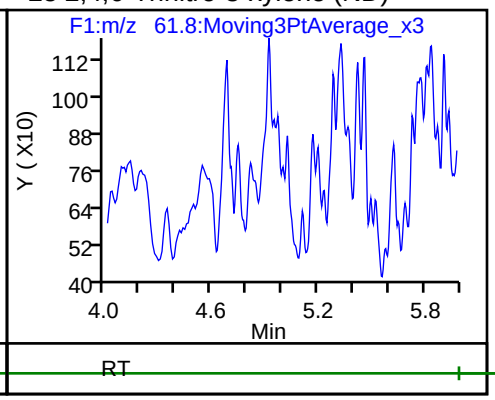
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 07:09:59 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05041.d				
Lims ID:	280-160187-A-10-B				
Client ID:	29SB186 (13.5-14)				
Sample Type:	Client				
Inject. Date:	05-Apr-2022 14:04:25	ALS Bottle#:	34	Worklist Smp#:	38
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160187-A-10-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 07:09:52	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 14:52:51		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	96.3	96.01

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB184 (3-4) | Lab Sample ID: 280-160187-11
Matrix: Solid | Lab File ID: ex722D05043.d
Analysis Method: 8321A | Date Collected: 03/22/2022 13:35
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:56
Sample wt/vol: 10.1(g) | Date Analyzed: 04/05/2022 14:17
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.: 570785 | 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 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	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 M	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: 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\ex722D05043.d
Lims ID: 280-160187-A-11-B
Client ID: 29SB184 (3-4)
Sample Type: Client
Inject. Date: 05-Apr-2022 14:17:13 ALS Bottle#: 35 Worklist Smp#: 40
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-11-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 07:10:00 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: 06-Apr-2022 06:52:40
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		278275	125.0	74.7	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		1015116	125.0	273	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1934122	129.4	349	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.783	910620	96.6	116	
* 18 2,4-dinitrotoluene-d3								
185.1	4.037	4.028	0.009		6135871	125.0	103	

QC Flag Legend
Processing Flags

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

Report Date: 06-Apr-2022 07:10:01 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05043.d

Injection Date: 05-Apr-2022 14:17:13 Instrument ID: LC_LCMS7

Lims ID: 280-160187-A-11-B Lab Sample ID: 280-160187-11

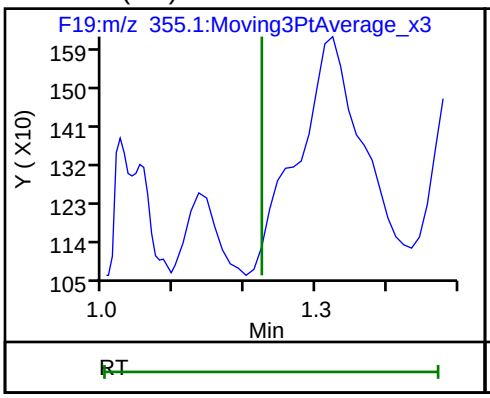
Client ID: 29SB184 (3-4)

Operator ID: acm ALS Bottle#: 35 Worklist Smp#: 40

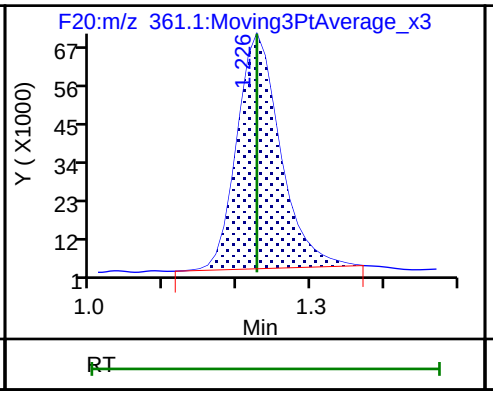
Injection Vol: 10.0 ul Dil. Factor: 1.0000

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

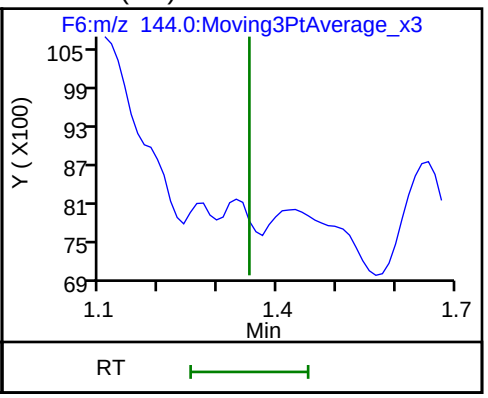
2 HMX (ND)



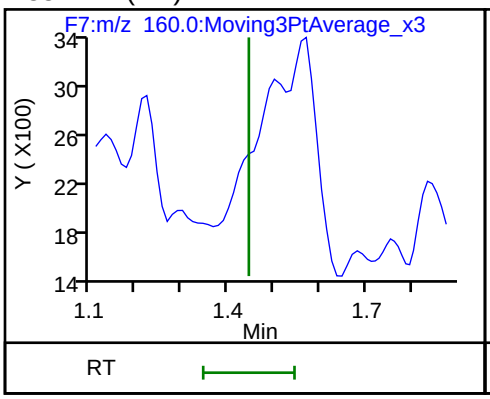
* 1 HMX-13C4



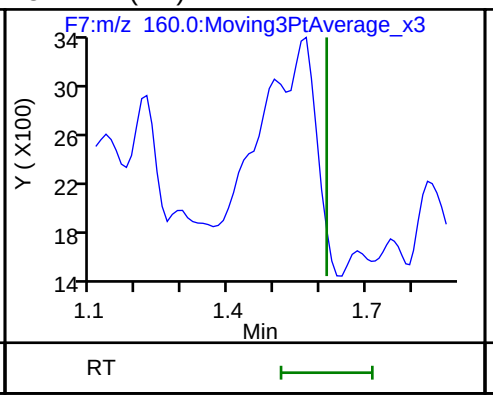
36 TNX (ND)



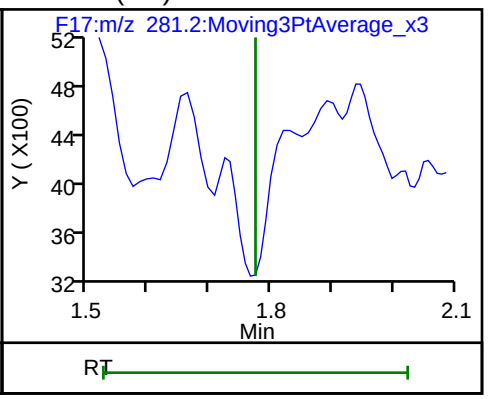
33 DNX (ND)



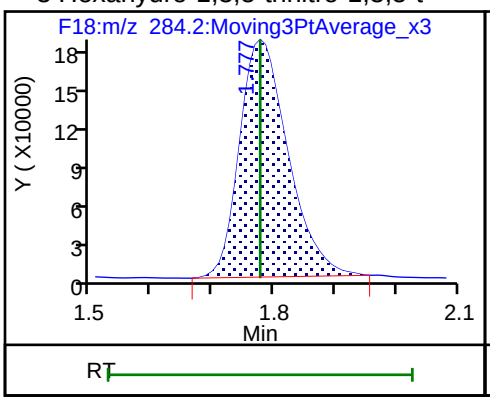
34 MNX (ND)



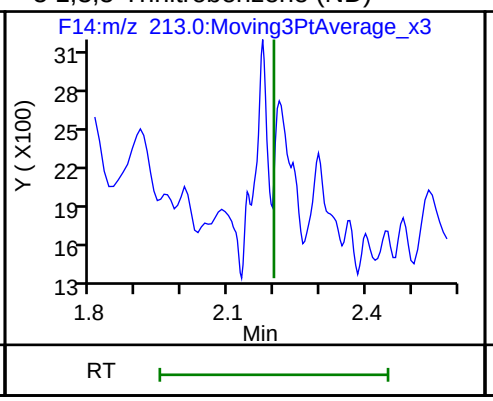
4 RDX (ND)



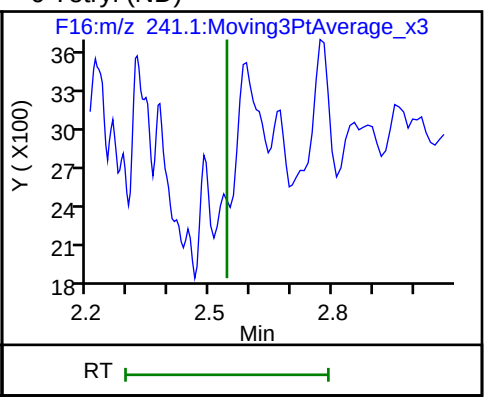
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



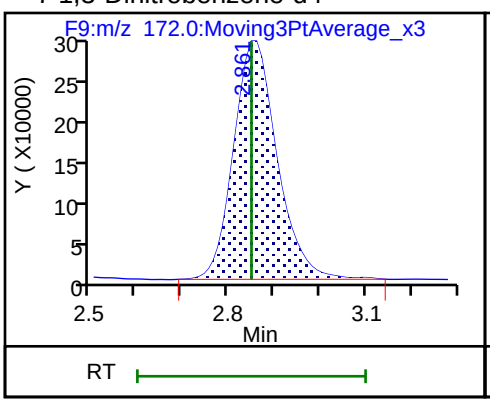
5 1,3,5-Trinitrobenzene (ND)



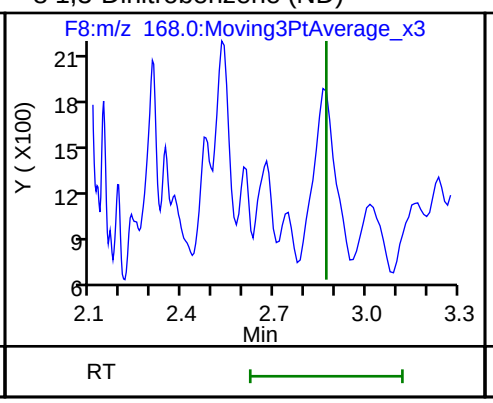
6 Tetryl (ND)



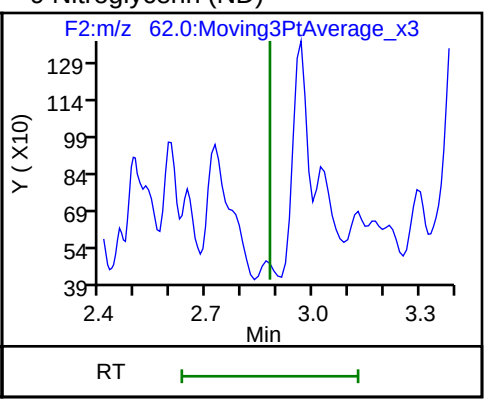
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

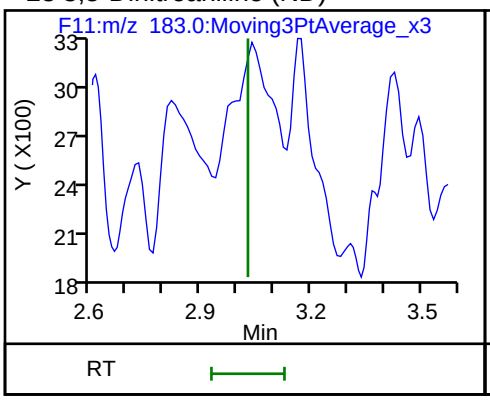


9 Nitroglycerin (ND)

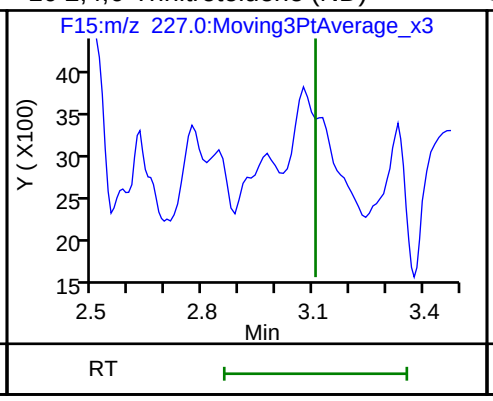


Report Date: 06-Apr-2022 07:10:01 Chrom Revision: 2.3 18-Mar-2022 09:07:22
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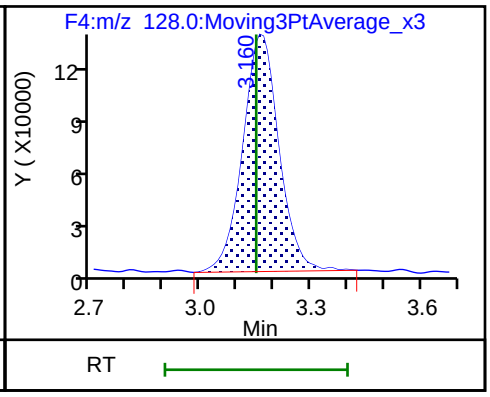
28 3,5-Dinitroaniline (ND)



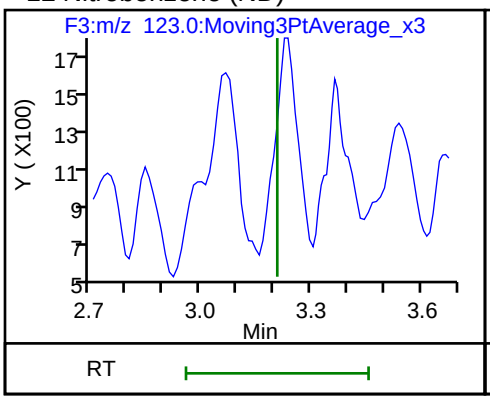
10 2,4,6-Trinitrotoluene (ND)



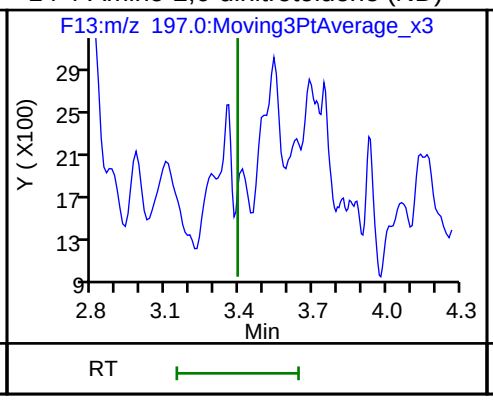
$ 11 Nitrobenzene-d5



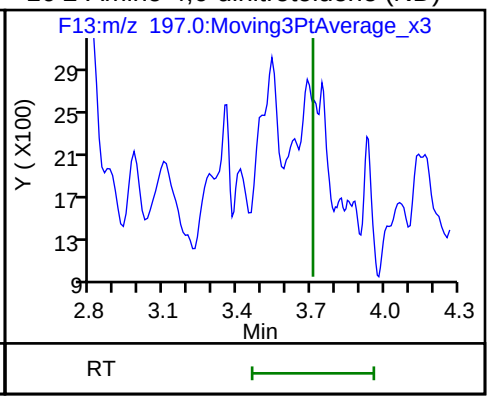
12 Nitrobenzene (ND)



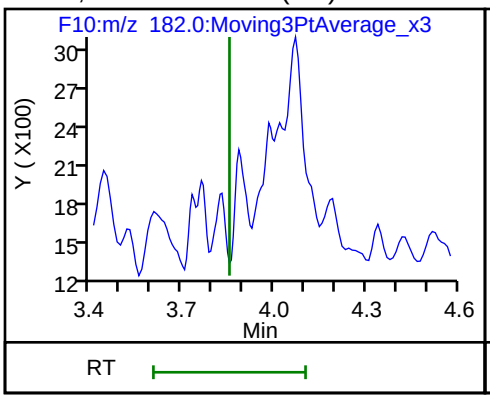
14 4-Amino-2,6-dinitrotoluene (ND)



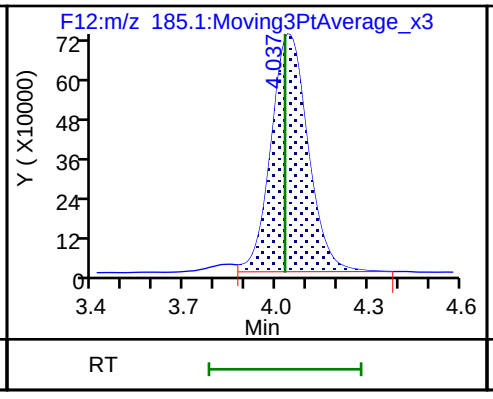
16 2-Amino-4,6-dinitrotoluene (ND)



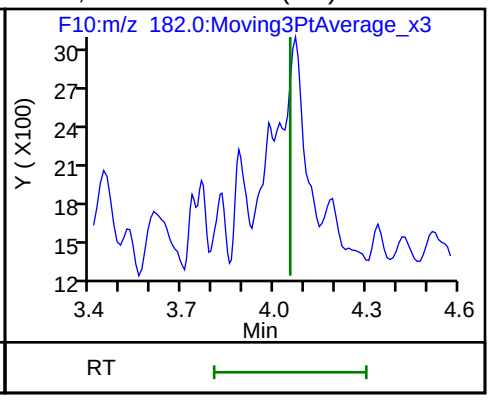
17 2,6-Dinitrotoluene (ND)



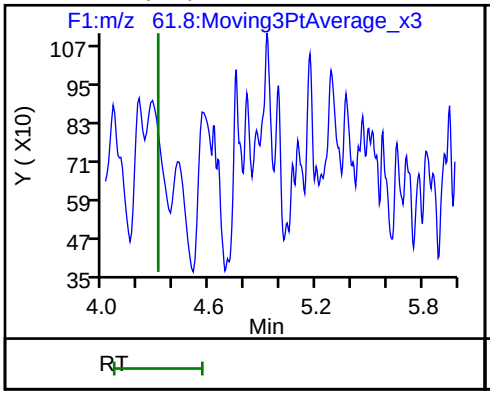
* 18 2,4-dinitrotoluene-d3



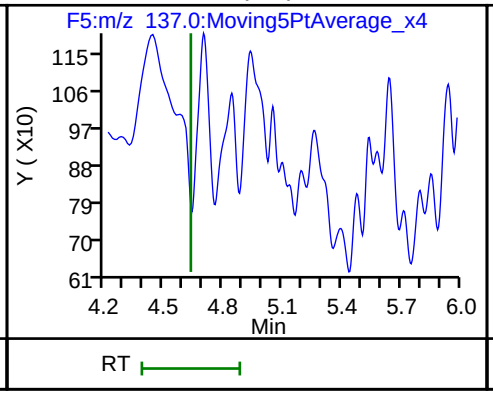
19 2,4-Dinitrotoluene (ND)



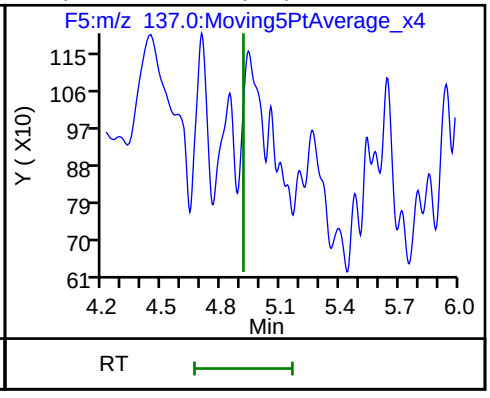
20 PETN (ND)



22 o-Nitrotoluene (ND)



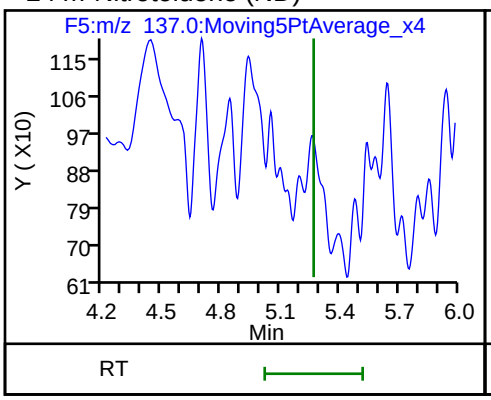
23 p-Nitrotoluene (ND)



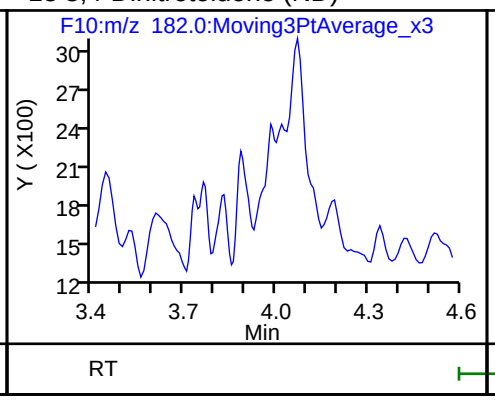
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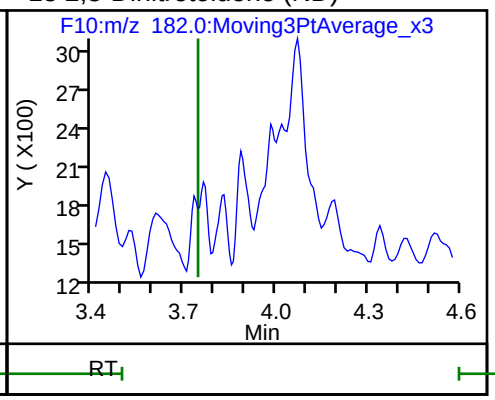
24 m-Nitrotoluene (ND)



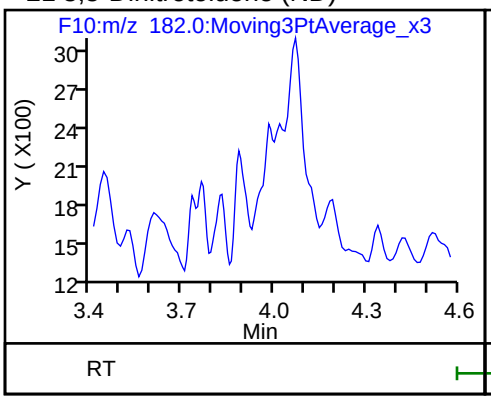
13 3,4-Dinitrotoluene (ND)



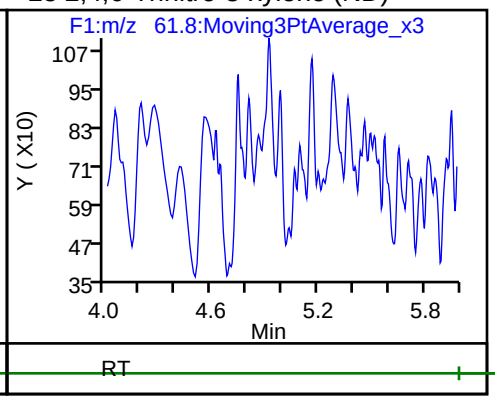
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



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

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05043.d				
Lims ID:	280-160187-A-11-B				
Client ID:	29SB184 (3-4)				
Sample Type:	Client				
Inject. Date:	05-Apr-2022 14:17:13	ALS Bottle#:	35	Worklist Smp#:	40
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160187-A-11-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 07:10:00	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:	06-Apr-2022 06:52:40		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	96.6	96.24

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB184 (7-8) | Lab Sample ID: 280-160187-12
Matrix: Solid | Lab File ID: ex722D05044.d
Analysis Method: 8321A | Date Collected: 03/22/2022 13:38
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:56
Sample wt/vol: 10.1(g) | Date Analyzed: 04/05/2022 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.: 570785 | 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 M	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	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	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	98		68-140

Report Date: 06-Apr-2022 07:10:01 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\ex722D05044.d
Lims ID: 280-160187-A-12-B
Client ID: 29SB184 (7-8)
Sample Type: Client
Inject. Date: 05-Apr-2022 14:23:38 ALS Bottle#: 36 Worklist Smp#: 41
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-12-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 07:10:00 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: 06-Apr-2022 06:52:52
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	1.226	1.226	0.0		260276	125.0	64.3	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		979986	125.0	161	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.850	2.850	0.0		1906676	129.4	233	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.783	914450	98.4	118	
* 18 2,4-dinitrotoluene-d3								
185.1	4.037	4.028	0.009		6070096	125.0	111	

QC Flag Legend
Processing Flags

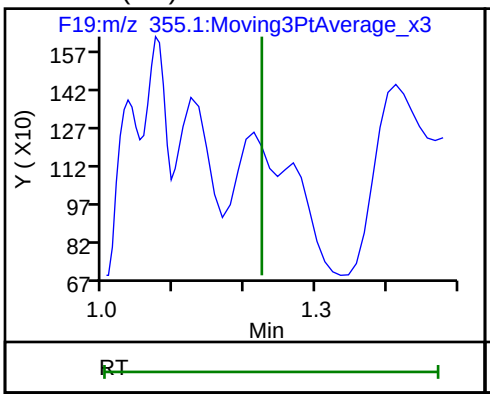
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:10:01 Chrom Revision: 2.3 18-Mar-2022 09:07:22

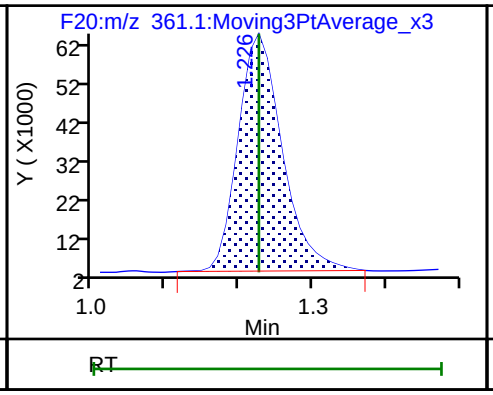
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05044.d
Injection Date: 05-Apr-2022 14:23:38 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-12-B Lab Sample ID: 280-160187-12
Client ID: 29SB184 (7-8)
Operator ID: acm ALS Bottle#: 36 Worklist Smp#: 41
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

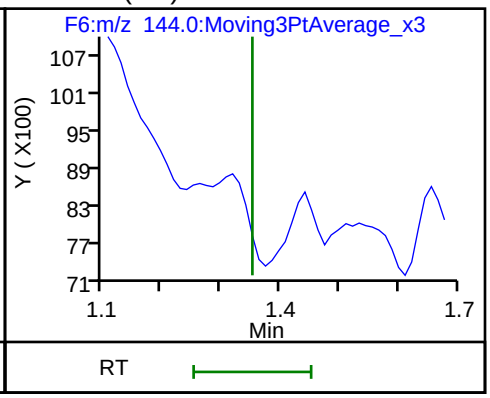
2 HMX (ND)



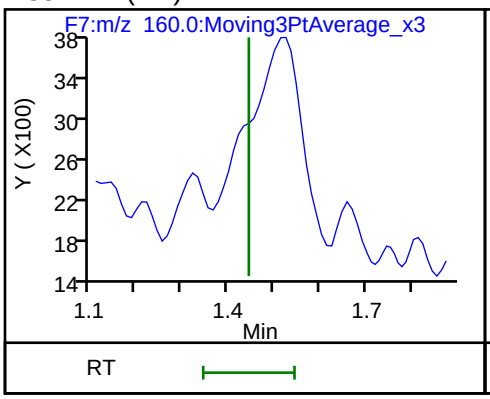
* 1 HMX-13C4



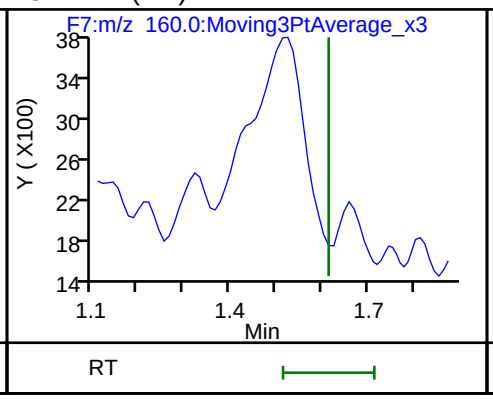
36 TNX (ND)



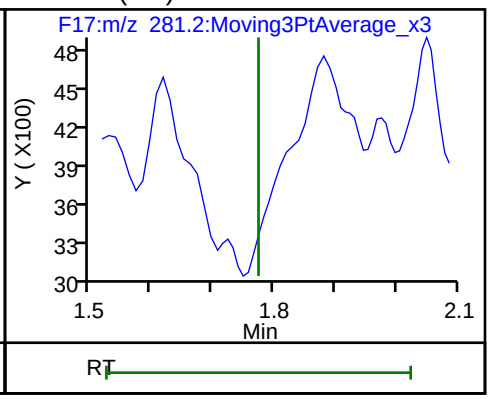
33 DNX (ND)



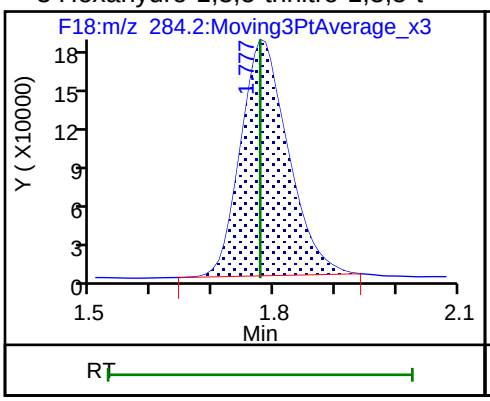
34 MNX (ND)



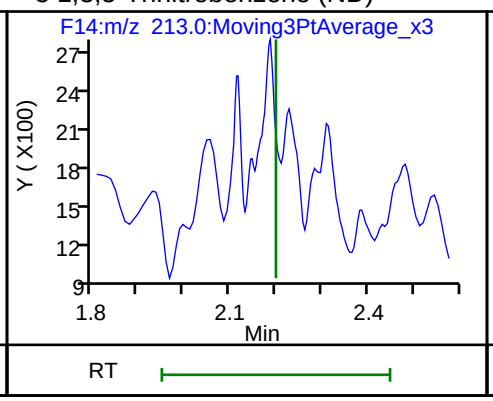
4 RDX (ND)



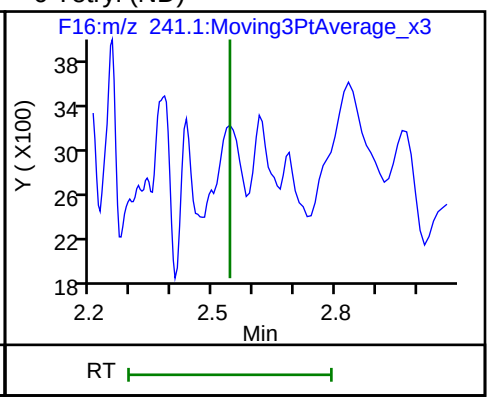
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



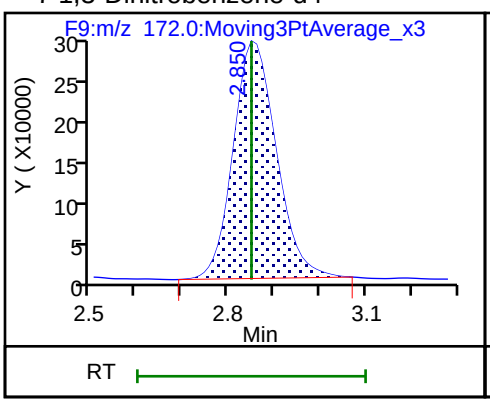
5 1,3,5-Trinitrobenzene (ND)



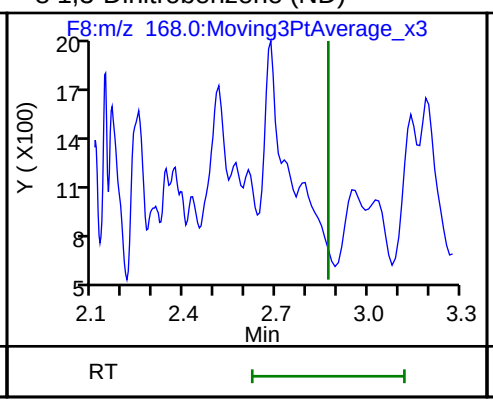
6 Tetryl (ND)



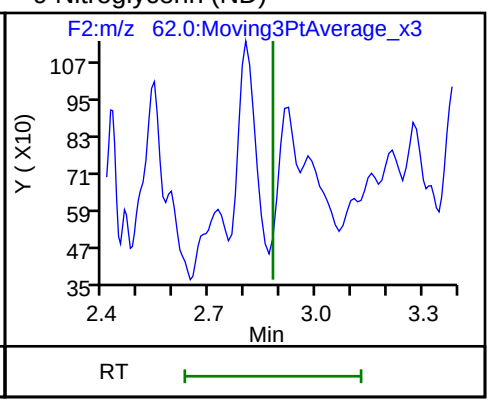
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



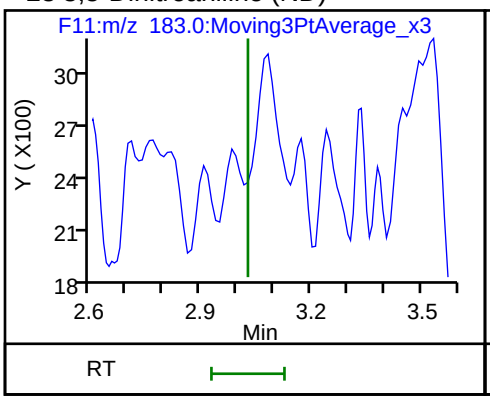
9 Nitroglycerin (ND)



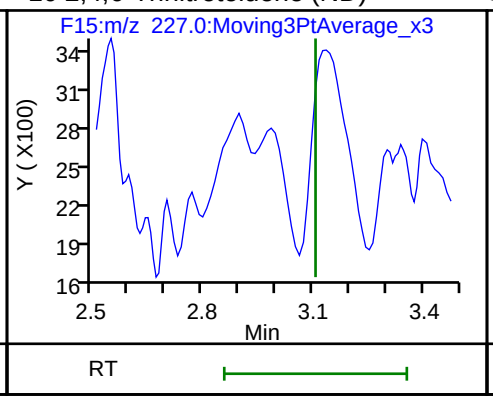
Report Date: 06-Apr-2022 07:10:01 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05044.d

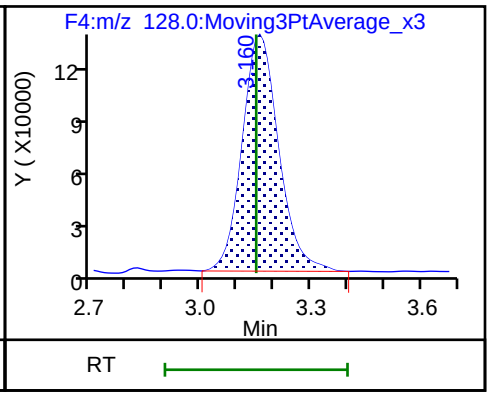
28 3,5-Dinitroaniline (ND)



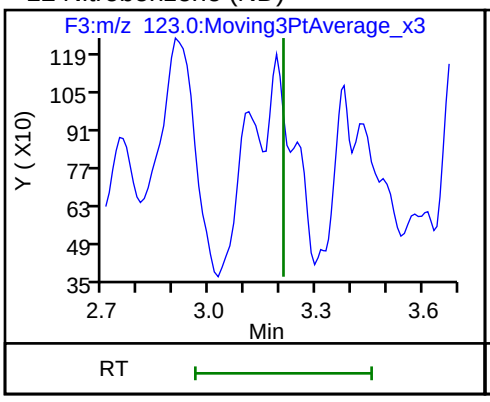
10 2,4,6-Trinitrotoluene (ND)



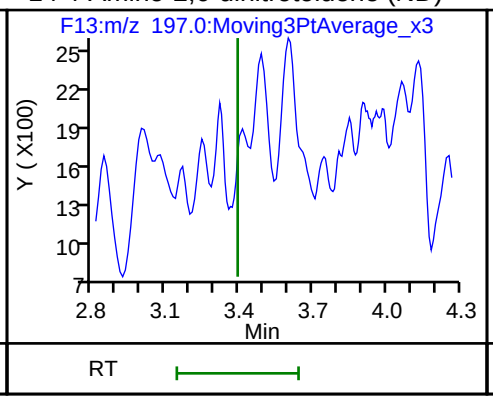
$ 11 Nitrobenzene-d5



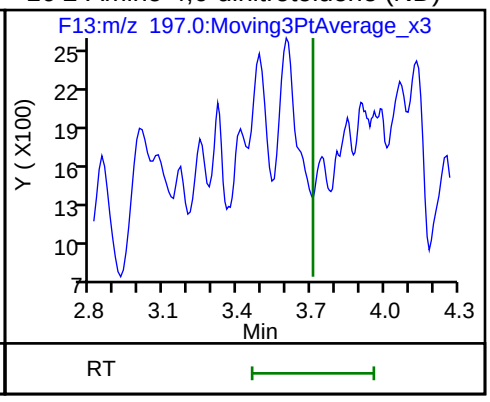
12 Nitrobenzene (ND)



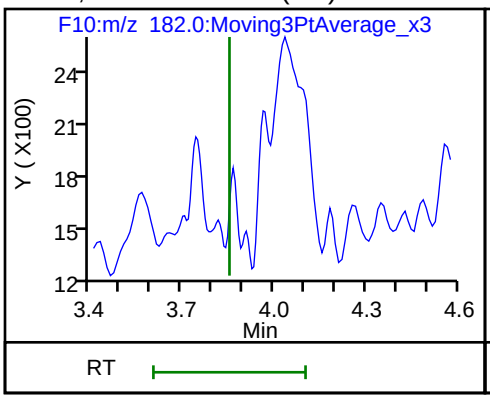
14 4-Amino-2,6-dinitrotoluene (ND)



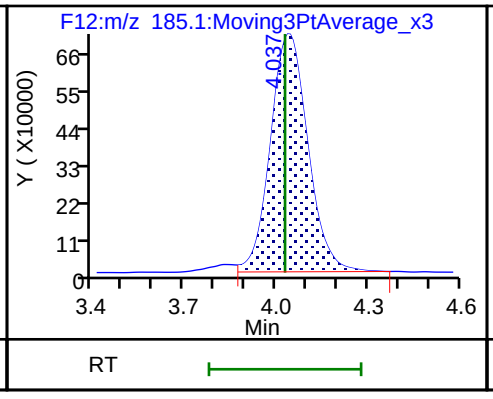
16 2-Amino-4,6-dinitrotoluene (ND)



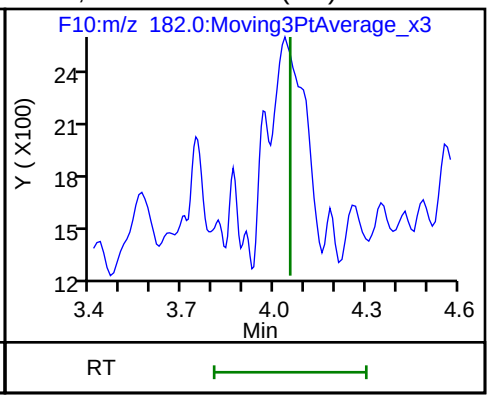
17 2,6-Dinitrotoluene (ND)



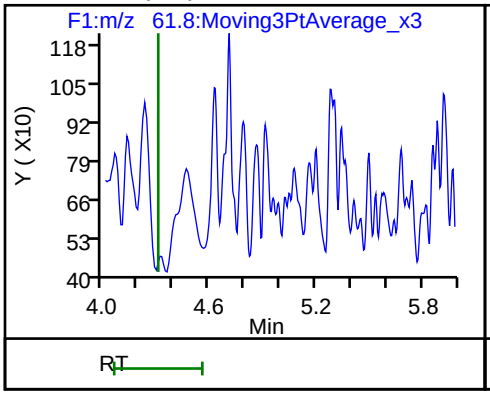
* 18 2,4-dinitrotoluene-d3



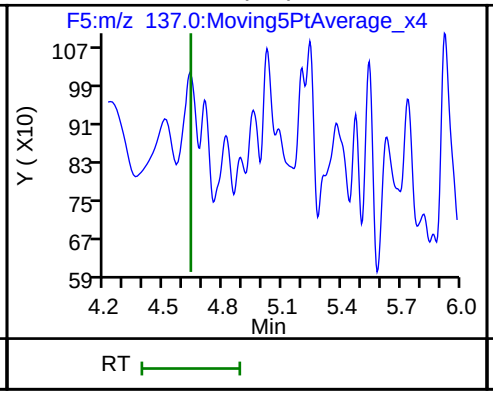
19 2,4-Dinitrotoluene (ND)



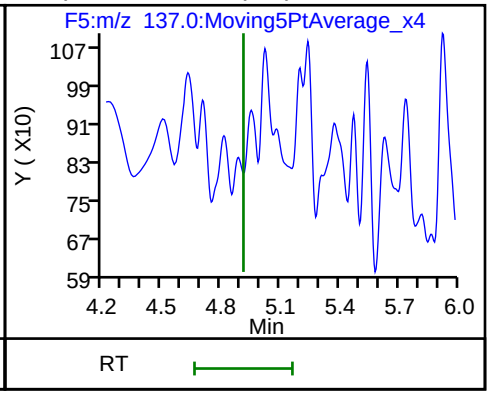
20 PETN (ND)



22 o-Nitrotoluene (ND)

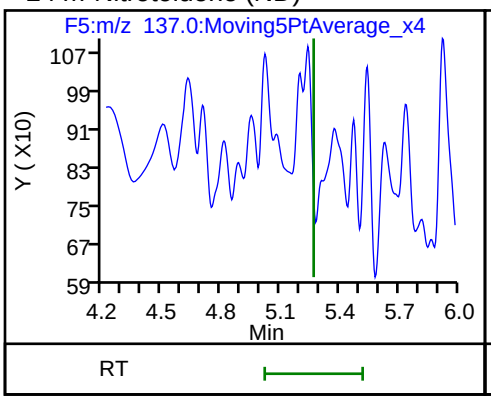


23 p-Nitrotoluene (ND)

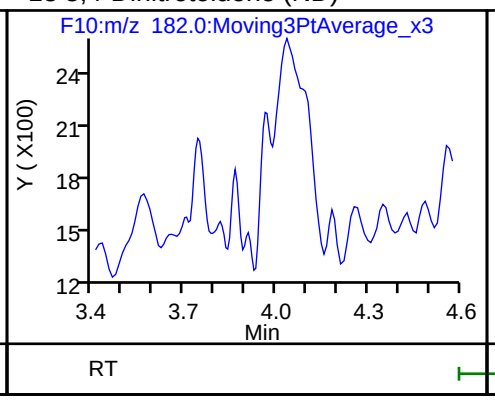


Report Date: 06-Apr-2022 07:10:01 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05044.d

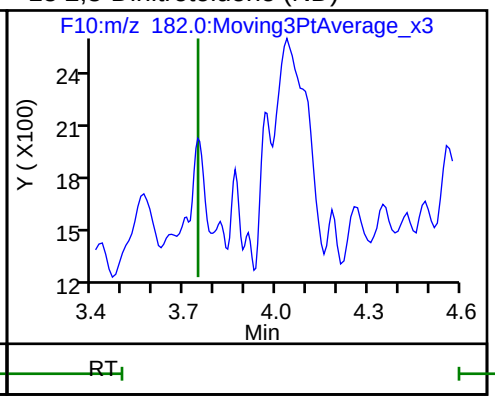
24 m-Nitrotoluene (ND)



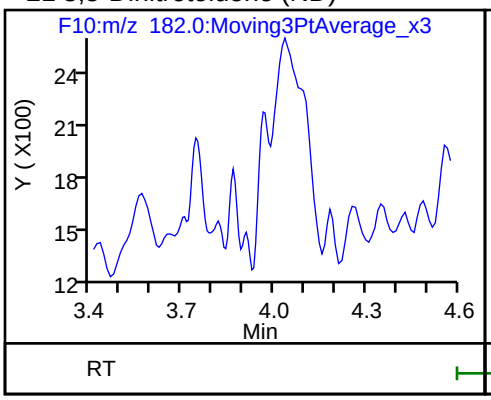
13 3,4-Dinitrotoluene (ND)



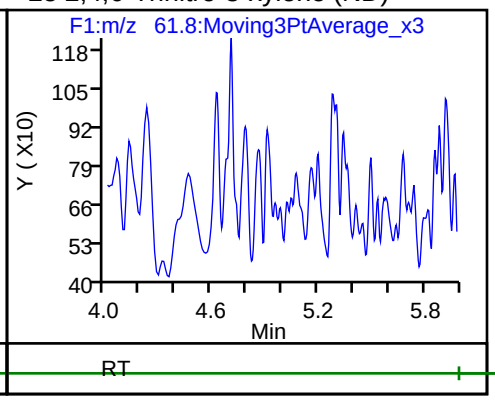
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 07:10:01 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05044.d
Lims ID: 280-160187-A-12-B
Client ID: 29SB184 (7-8)
Sample Type: Client
Inject. Date: 05-Apr-2022 14:23:38 ALS Bottle#: 36 Worklist Smp#: 41
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-12-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 07:10:00 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: 06-Apr-2022 06:52:52

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	98.4	98.06

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

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

SDG No.:

Client Sample ID: 29SB184 (11-12) | Lab Sample ID: 280-160187-13

Matrix: Solid | Lab File ID: ex722D05045.d

Analysis Method: 8321A | Date Collected: 03/22/2022 13:40

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

Sample wt/vol: 10.67(g) | Date Analyzed: 04/05/2022 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.: 570785 | 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	0.034
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	0.046
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	0.040
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	101		68-140

Report Date: 06-Apr-2022 07:10:02 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\ex722D05045.d
Lims ID: 280-160187-A-13-B
Client ID: 29SB184 (11-12)
Sample Type: Client
Inject. Date: 05-Apr-2022 14:30:02 ALS Bottle#: 37 Worklist Smp#: 42
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-13-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 07:10:00 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: 06-Apr-2022 06:53:01
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	1.226	1.226	0.0		298018	125.0	217	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		1065552	125.0	224	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.850	2.850	0.0		1902393	129.4	197	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.783	939040	101.3	99.4	
* 18 2,4-dinitrotoluene-d3								
185.1	4.037	4.028	0.009		6298765	125.0	113	

QC Flag Legend
Processing Flags

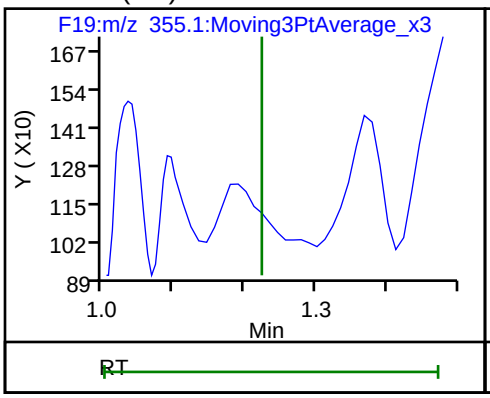
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:10:02 Chrom Revision: 2.3 18-Mar-2022 09:07:22

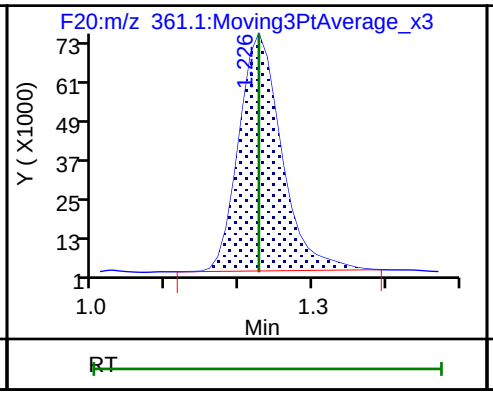
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05045.d
Injection Date: 05-Apr-2022 14:30:02 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-13-B Lab Sample ID: 280-160187-13
Client ID: 29SB184 (11-12)
Operator ID: acm ALS Bottle#: 37 Worklist Smp#: 42
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

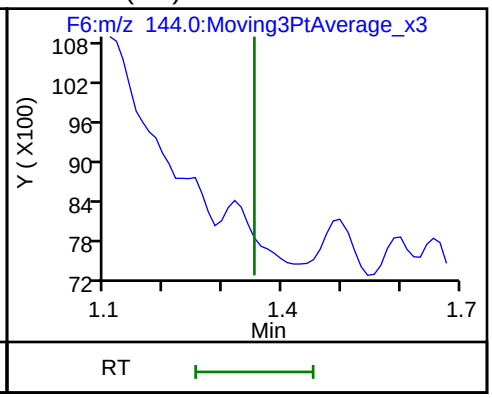
2 HMX (ND)



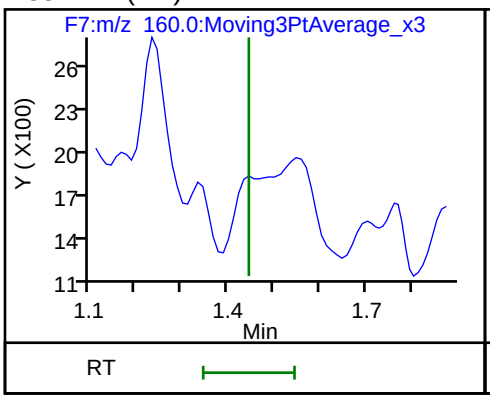
* 1 HMX-13C4



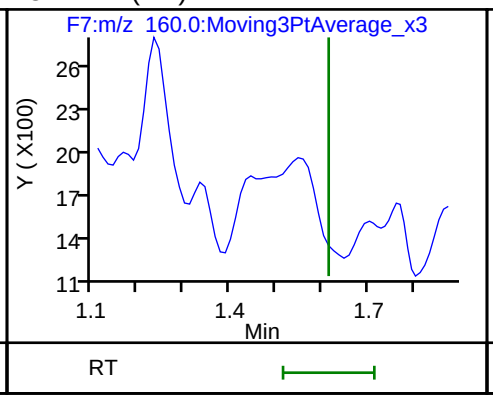
36 TNX (ND)



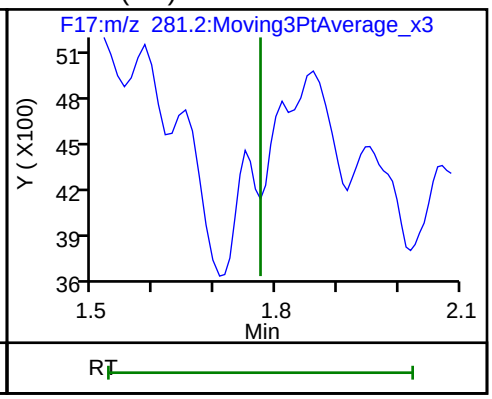
33 DNX (ND)



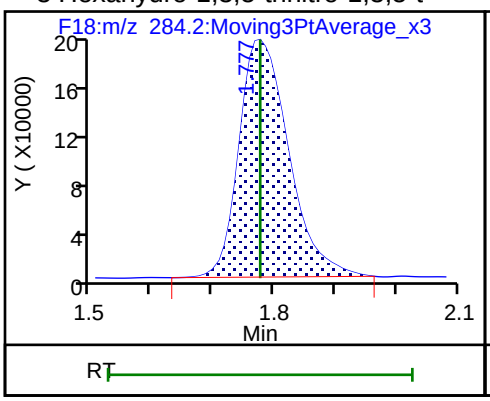
34 MNX (ND)



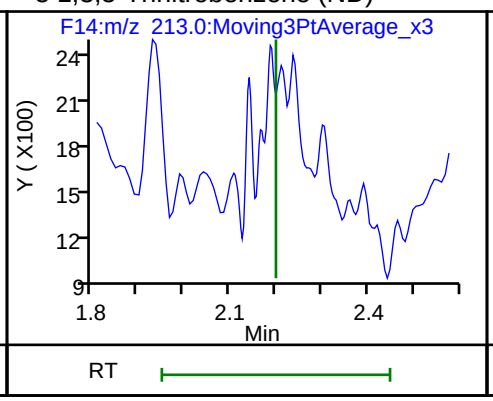
4 RDX (ND)



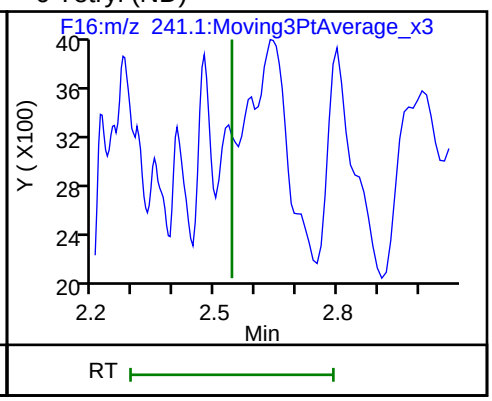
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



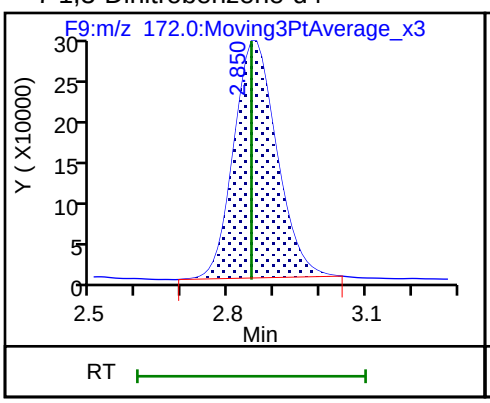
5 1,3,5-Trinitrobenzene (ND)



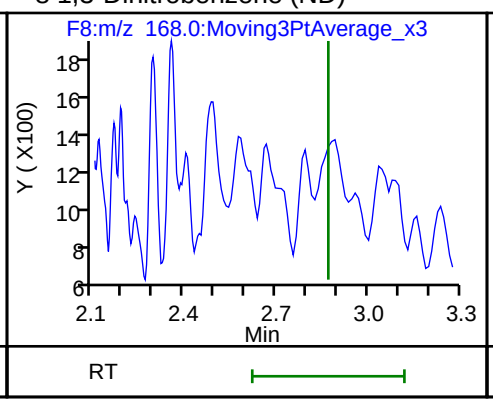
6 Tetryl (ND)



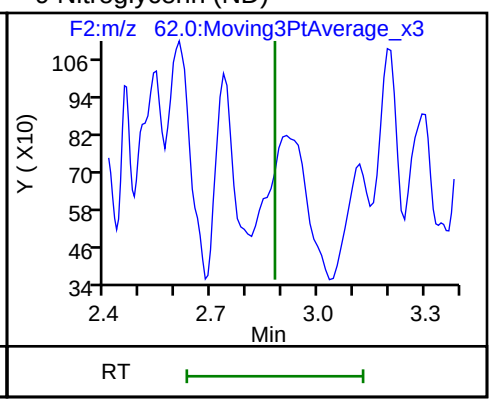
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



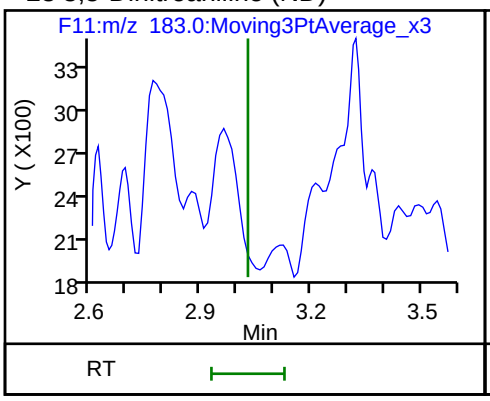
9 Nitroglycerin (ND)



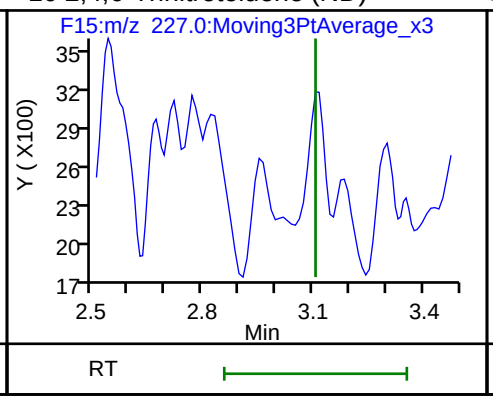
Report Date: 06-Apr-2022 07:10:02 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05045.d

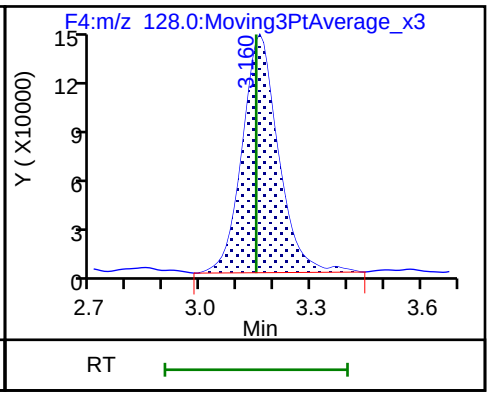
28 3,5-Dinitroaniline (ND)



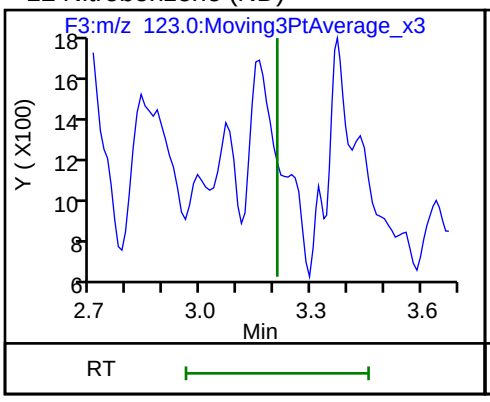
10 2,4,6-Trinitrotoluene (ND)



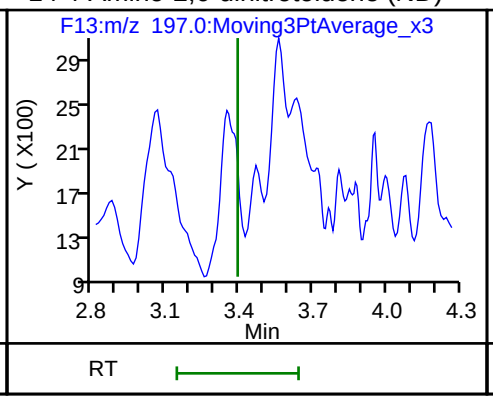
$ 11 Nitrobenzene-d5



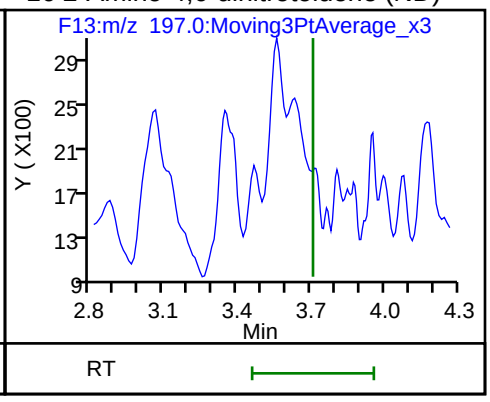
12 Nitrobenzene (ND)



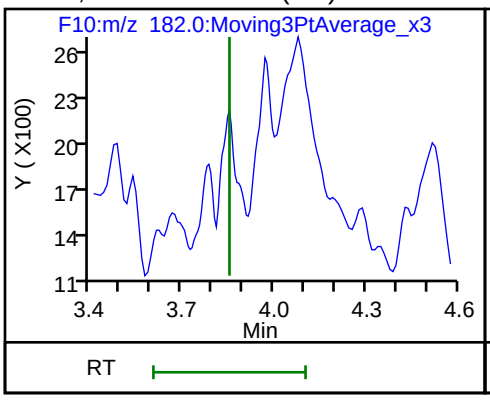
14 4-Amino-2,6-dinitrotoluene (ND)



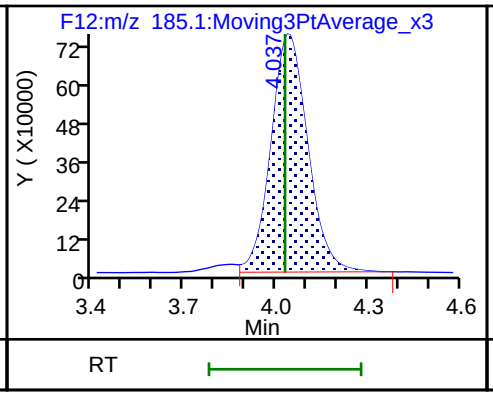
16 2-Amino-4,6-dinitrotoluene (ND)



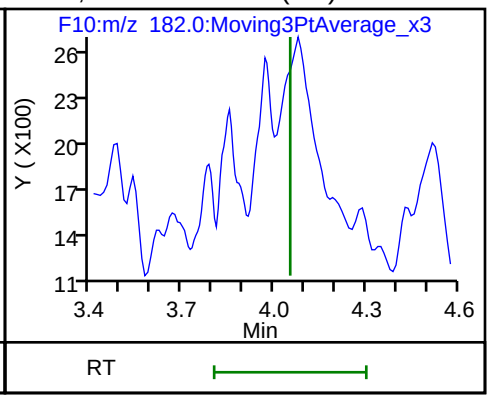
17 2,6-Dinitrotoluene (ND)



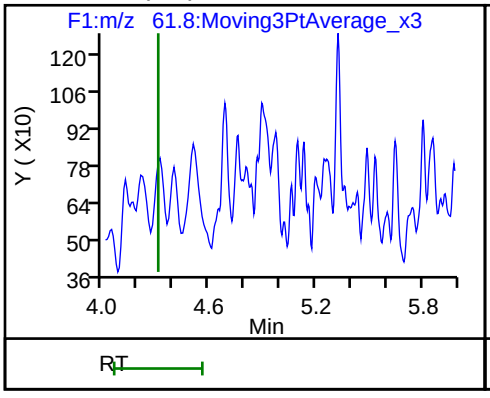
* 18 2,4-dinitrotoluene-d3



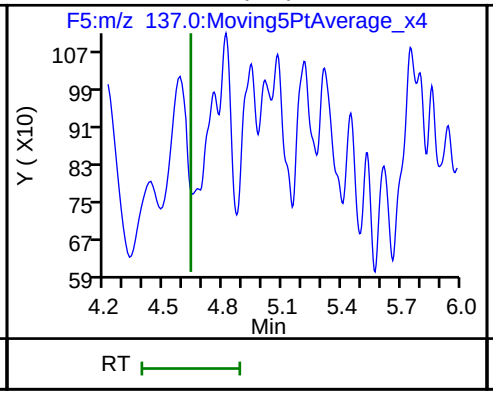
19 2,4-Dinitrotoluene (ND)



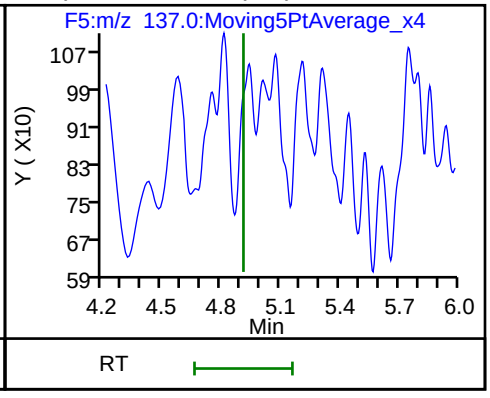
20 PETN (ND)



22 o-Nitrotoluene (ND)



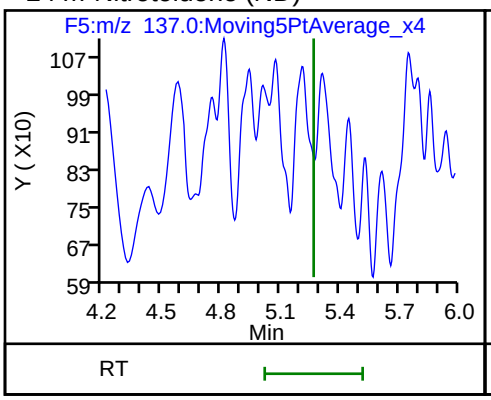
23 p-Nitrotoluene (ND)



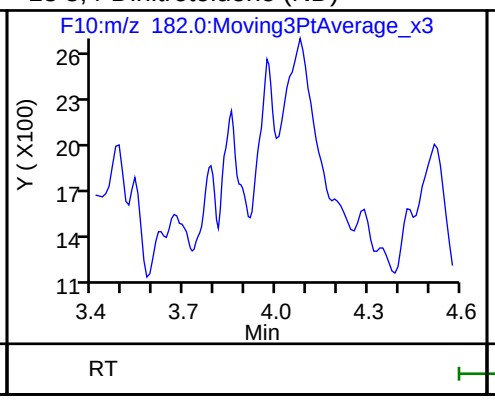
Report Date: 06-Apr-2022 07:10:02 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05045.d

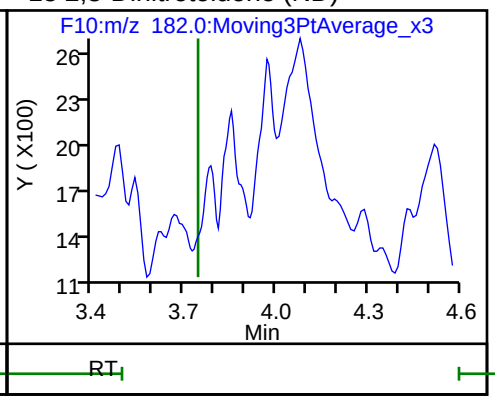
24 m-Nitrotoluene (ND)



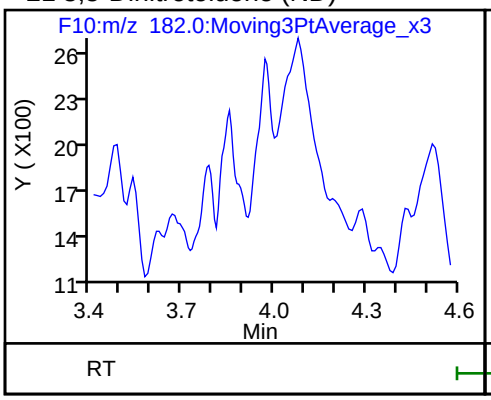
13 3,4-Dinitrotoluene (ND)



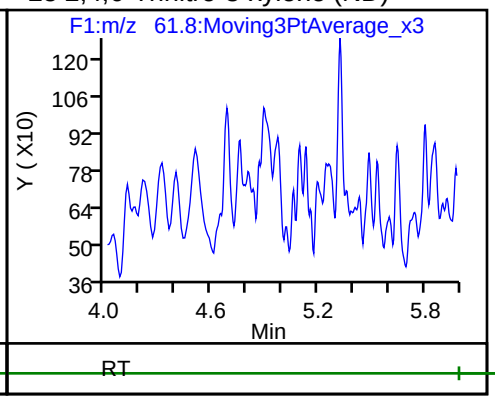
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 07:10:02 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05045.d				
Lims ID:	280-160187-A-13-B				
Client ID:	29SB184 (11-12)				
Sample Type:	Client				
Inject. Date:	05-Apr-2022 14:30:02	ALS Bottle#:	37	Worklist Smp#:	42
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160187-A-13-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 07:10:00	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:	06-Apr-2022 06:53:01		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	101.3	100.95

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

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

SDG No.:

Client Sample ID: 29SB184 (13.5-14) | Lab Sample ID: 280-160187-14

Matrix: Solid | Lab File ID: ex722D05046.d

Analysis Method: 8321A | Date Collected: 03/22/2022 13:43

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

Sample wt/vol: 10.54(g) | Date Analyzed: 04/05/2022 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.: 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	0.043
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	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	0.030
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	0.095	0.047	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	92		68-140

Report Date: 06-Apr-2022 07:10:03 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\ex722D05046.d
Lims ID: 280-160187-A-14-B
Client ID: 29SB184 (13.5-14)
Sample Type: Client
Inject. Date: 05-Apr-2022 14:36:26 ALS Bottle#: 38 Worklist Smp#: 43
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-14-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 07:10:00 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: 06-Apr-2022 06:53:10
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	1.226	1.226	0.0		263871	125.0	206	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		1038117	125.0	216	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.850	2.850	0.0		1964482	129.4	412	
$ 11 Nitrobenzene-d5								
128.0	3.150	3.164	0.0	0.780	886529	92.5	134	
* 18 2,4-dinitrotoluene-d3								
185.1	4.037	4.028	0.009		5861868	125.0	117	

QC Flag Legend
Processing Flags

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

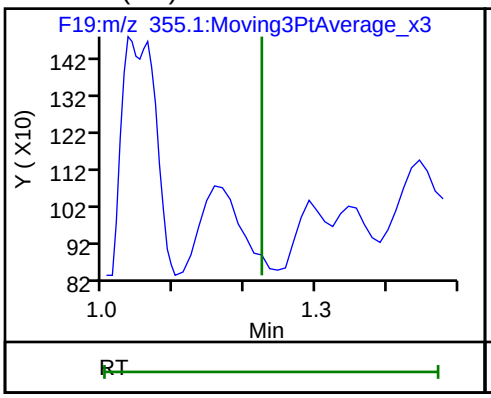
Report Date: 06-Apr-2022 07:10:03 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

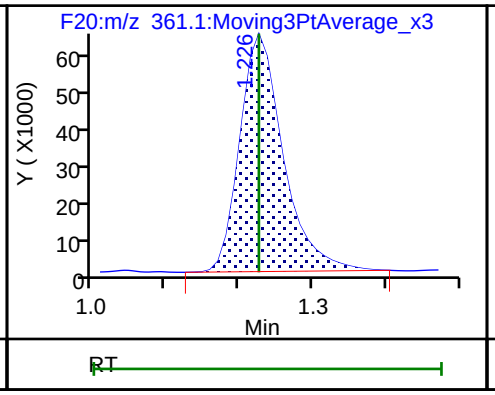
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05046.d

Injection Date:	05-Apr-2022 14:36:26	Instrument ID:	LC_LCMS7		
Lims ID:	280-160187-A-14-B	Lab Sample ID:	280-160187-14		
Client ID:	29SB184 (13.5-14)				
Operator ID:	acm	ALS Bottle#:	38	Worklist Smp#:	43
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		

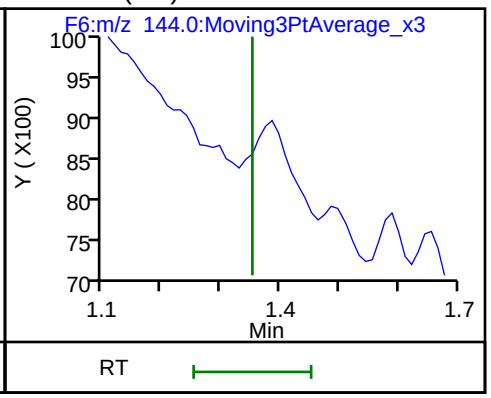
2 HMX (ND)



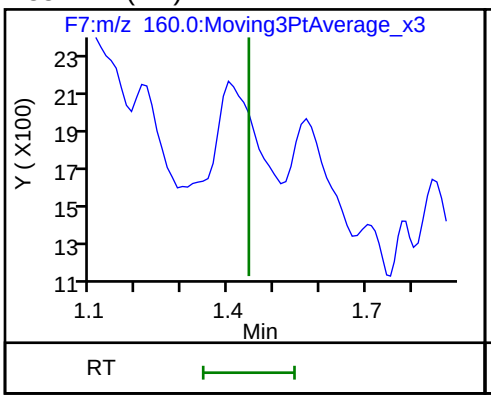
* 1 HMX-13C4



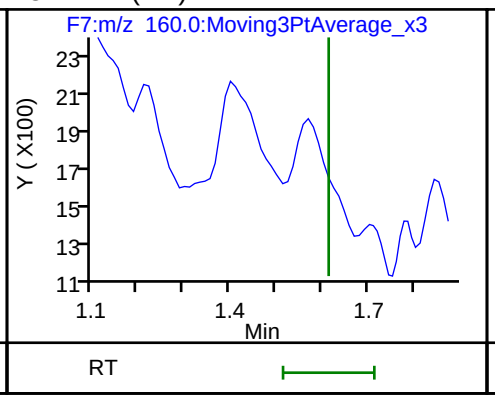
36 TNX (ND)



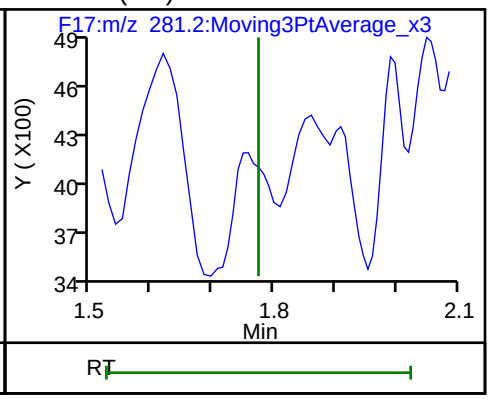
33 DNX (ND)



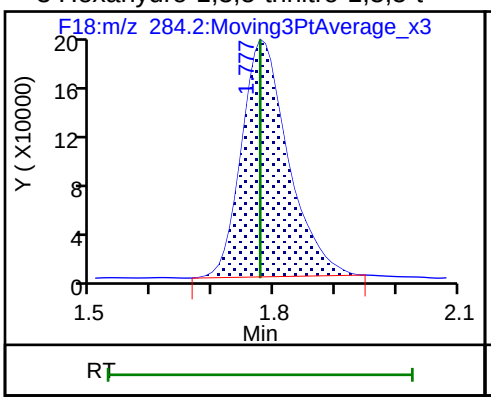
34 MNX (ND)



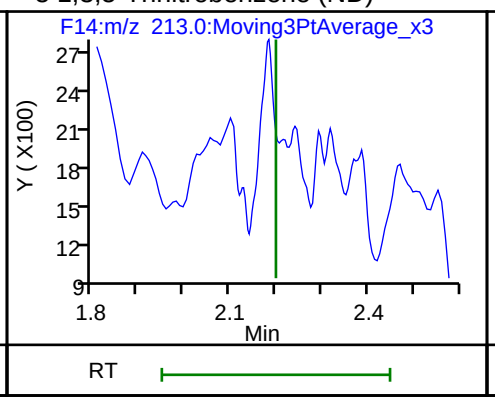
4 RDX (ND)



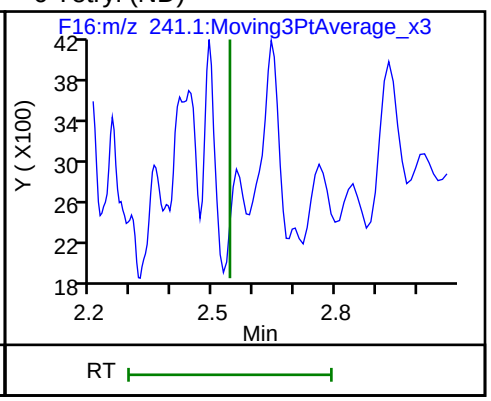
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



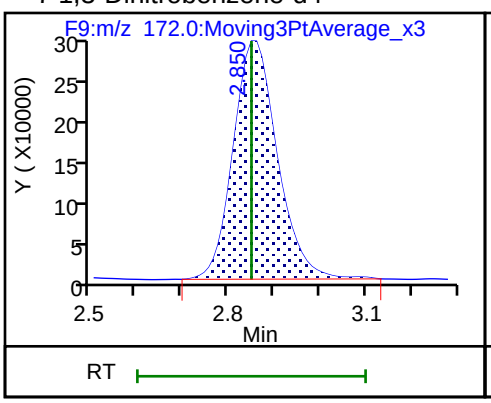
5 1,3,5-Trinitrobenzene (ND)



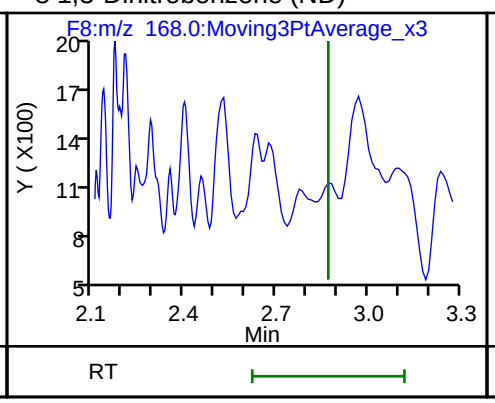
6 Tetryl (ND)



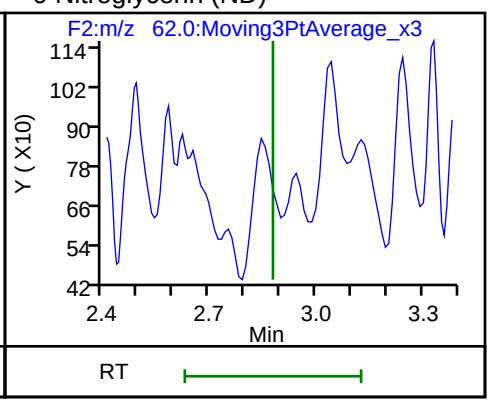
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

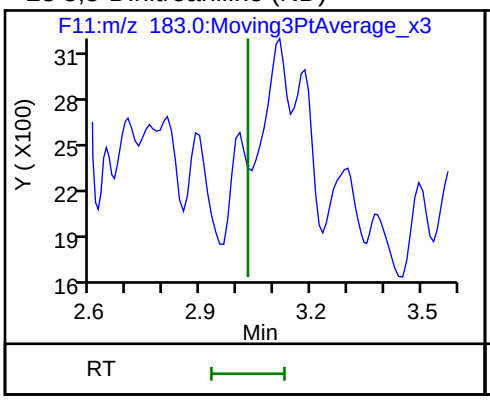


9 Nitroglycerin (ND)

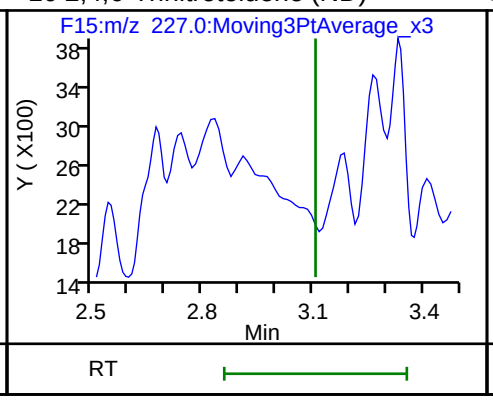


Report Date: 06-Apr-2022 07:10:03 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05046.d

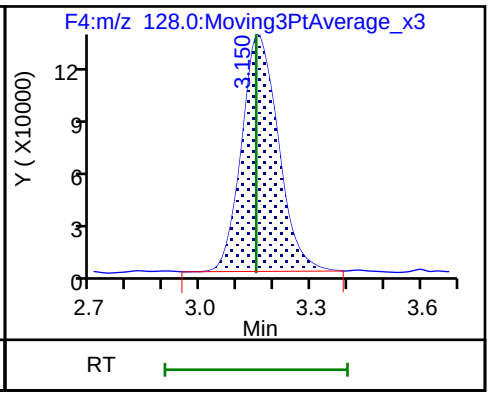
28 3,5-Dinitroaniline (ND)



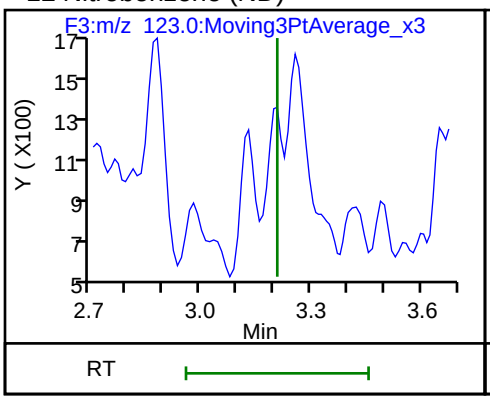
10 2,4,6-Trinitrotoluene (ND)



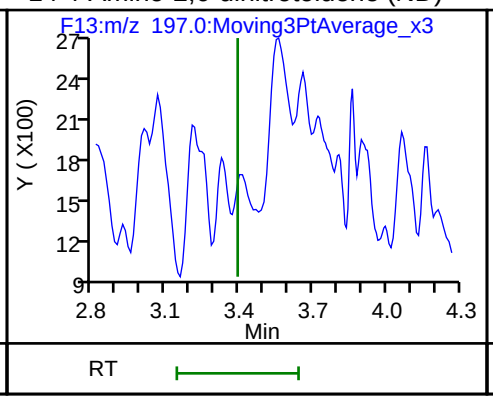
$ 11 Nitrobenzene-d5



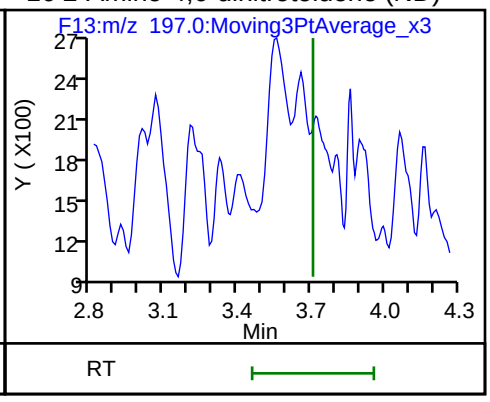
12 Nitrobenzene (ND)



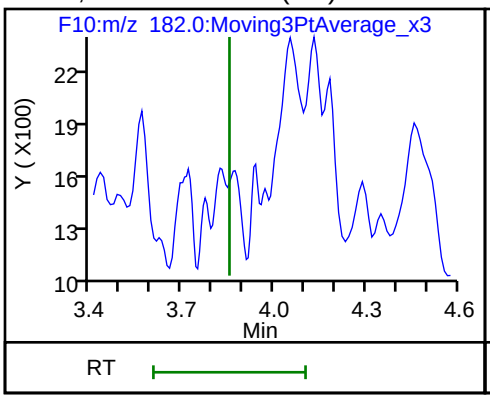
14 4-Amino-2,6-dinitrotoluene (ND)



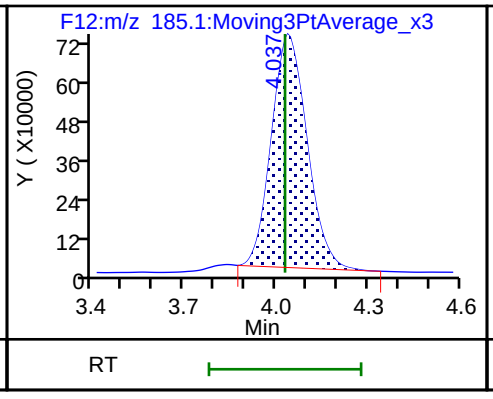
16 2-Amino-4,6-dinitrotoluene (ND)



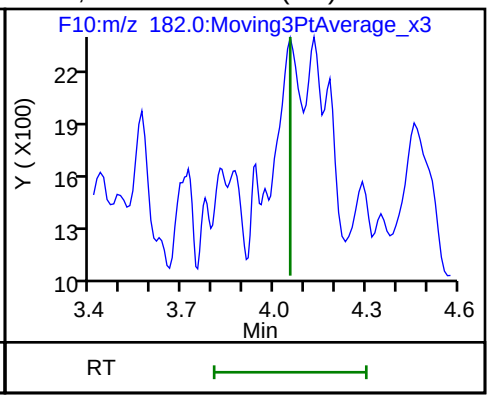
17 2,6-Dinitrotoluene (ND)



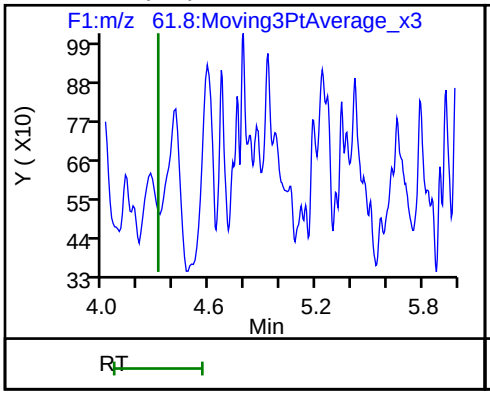
* 18 2,4-dinitrotoluene-d3



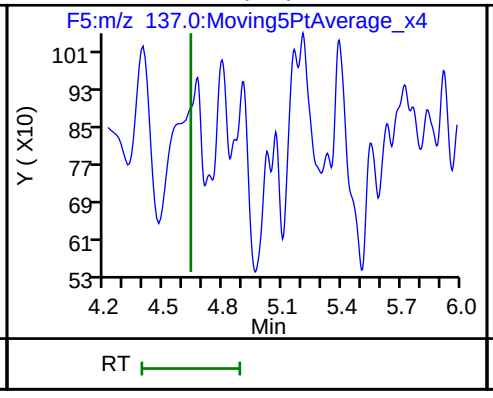
19 2,4-Dinitrotoluene (ND)



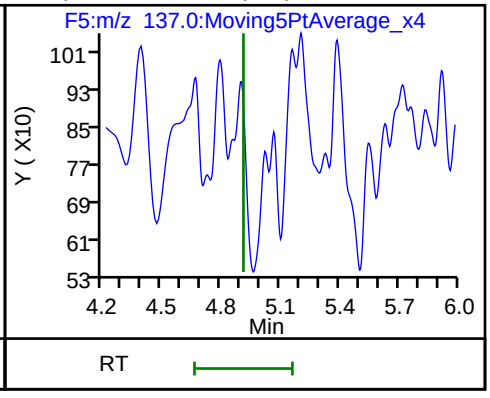
20 PETN (ND)



22 o-Nitrotoluene (ND)



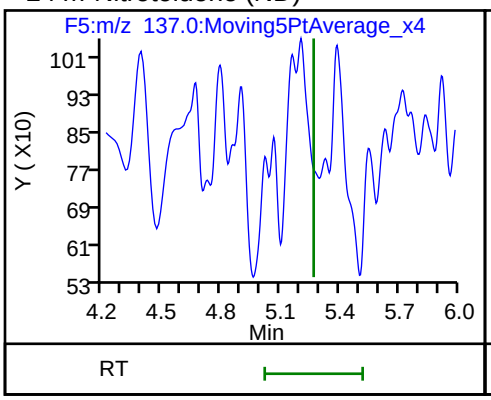
23 p-Nitrotoluene (ND)



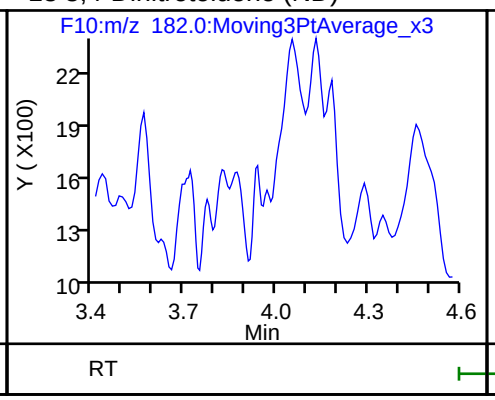
Report Date: 06-Apr-2022 07:10:03 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05046.d

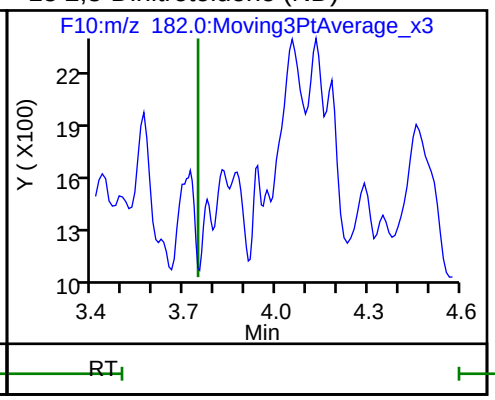
24 m-Nitrotoluene (ND)



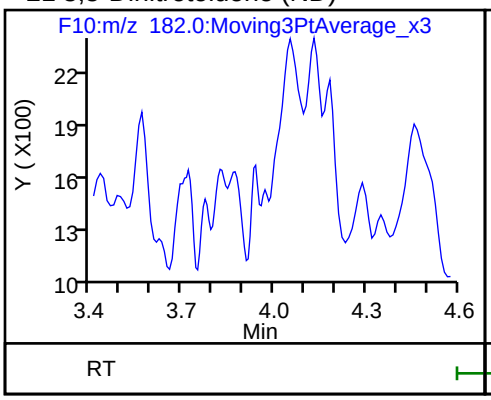
13 3,4-Dinitrotoluene (ND)



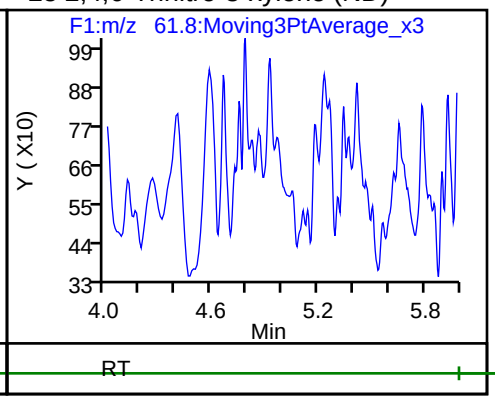
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 07:10:03 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05046.d
Lims ID: 280-160187-A-14-B
Client ID: 29SB184 (13.5-14)
Sample Type: Client
Inject. Date: 05-Apr-2022 14:36:26 ALS Bottle#: 38 Worklist Smp#: 43
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-14-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 07:10:00 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: 06-Apr-2022 06:53:10

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	92.5	92.21

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: DUP-02 | Lab Sample ID: 280-160187-15
Matrix: Solid | Lab File ID: ex722D05047.d
Analysis Method: 8321A | Date Collected: 03/22/2022 14:00
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:56
Sample wt/vol: 10.54(g) | Date Analyzed: 04/05/2022 14:42
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	0.043
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	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	0.030
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	0.095	0.047	0.037

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

Report Date: 06-Apr-2022 07:10:03 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\ex722D05047.d
Lims ID: 280-160187-A-15-B
Client ID: DUP-02
Sample Type: Client
Inject. Date: 05-Apr-2022 14:42:50 ALS Bottle#: 39 Worklist Smp#: 44
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-15-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 07:10:00 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: 06-Apr-2022 06:53:19
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		284165	125.0	198	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		968193	125.0	133	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.850	2.850	0.0		1908977	129.4	265	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	912123	98.0	159	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		6292740	125.0	139	

QC Flag Legend
Processing Flags

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

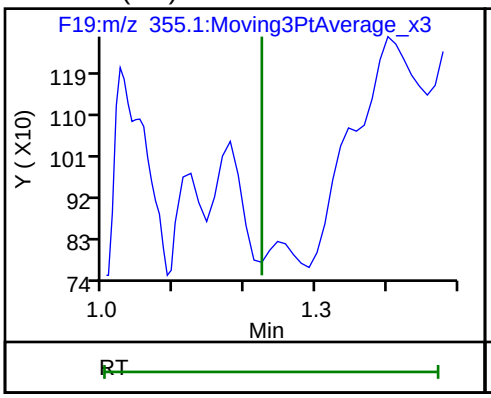
Report Date: 06-Apr-2022 07:10:03 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

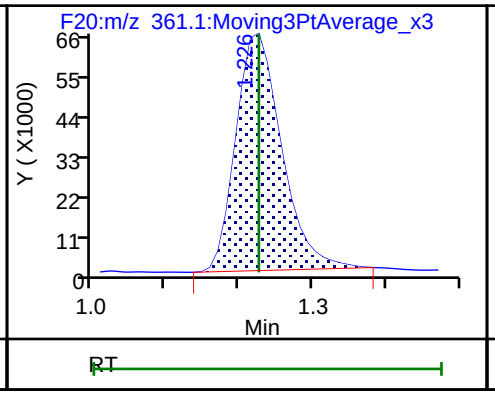
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05047.d

Injection Date:	05-Apr-2022 14:42:50	Instrument ID:	LC_LCMS7
Lims ID:	280-160187-A-15-B	Lab Sample ID:	280-160187-15
Client ID:	DUP-02		
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

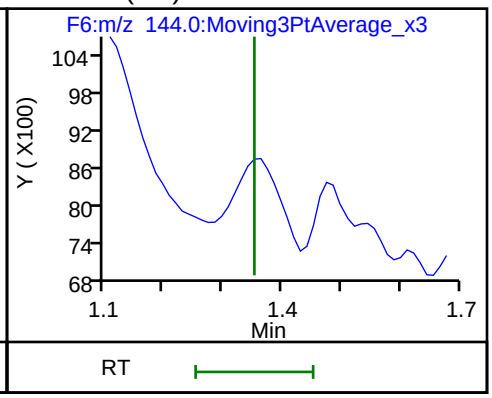
2 HMX (ND)



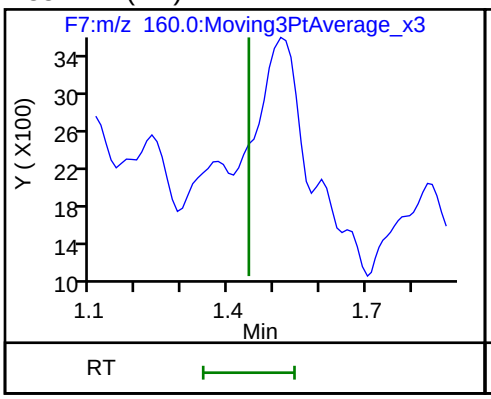
* 1 HMX-13C4



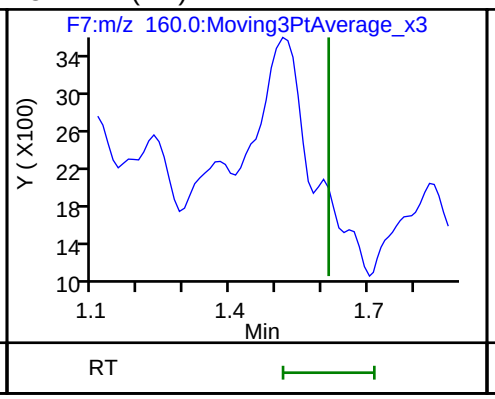
36 TNX (ND)



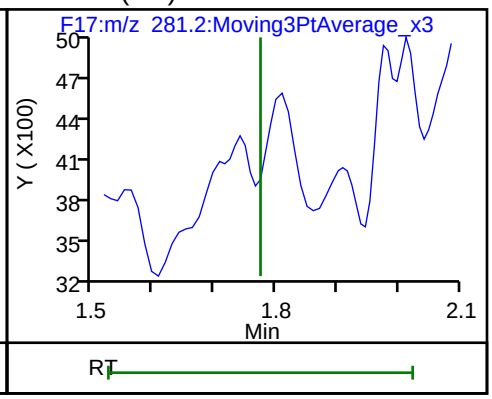
33 DNX (ND)



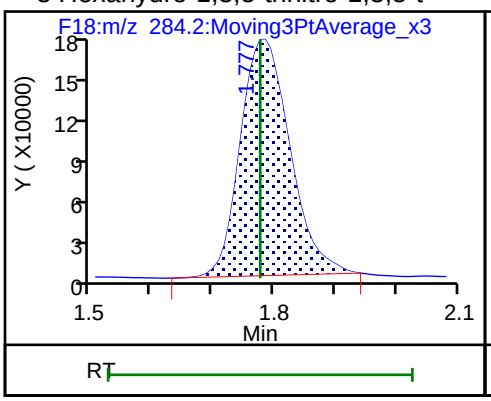
34 MNX (ND)



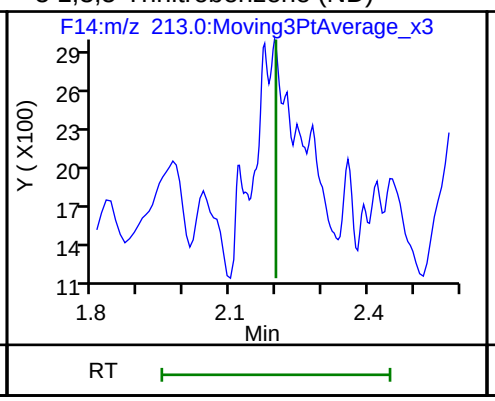
4 RDX (ND)



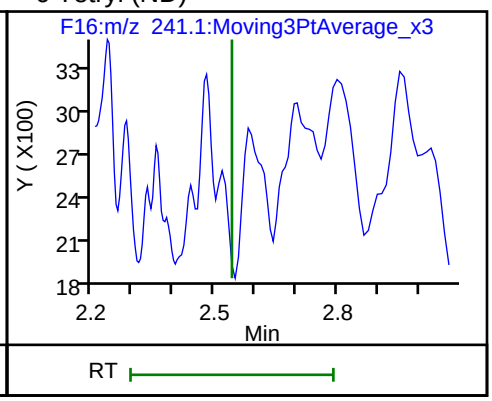
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



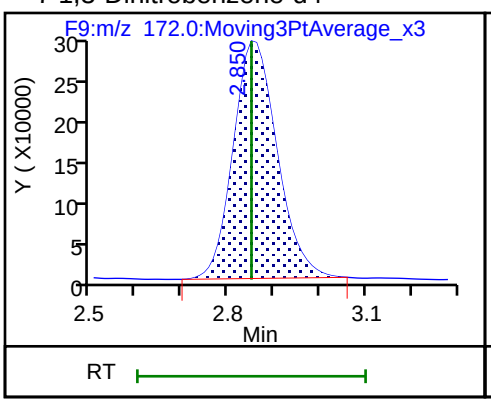
5 1,3,5-Trinitrobenzene (ND)



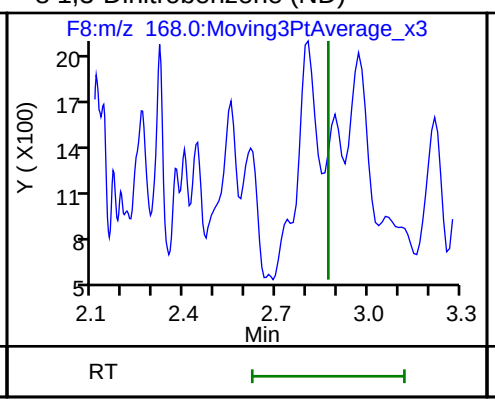
6 Tetryl (ND)



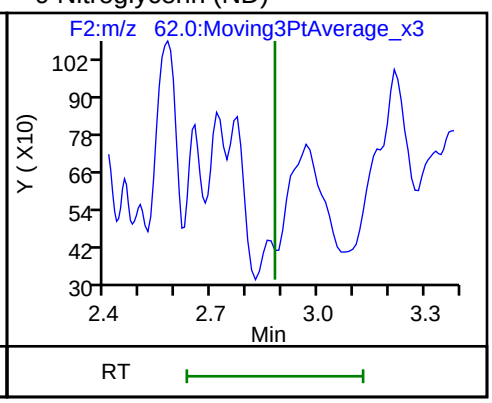
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



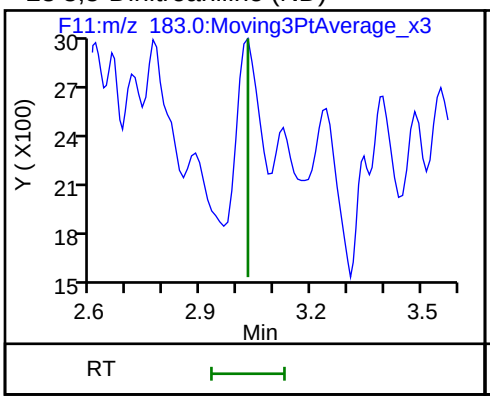
9 Nitroglycerin (ND)



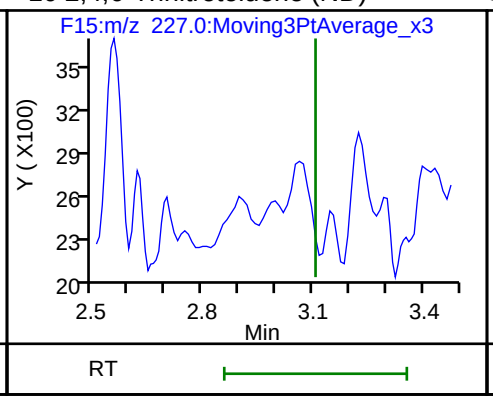
Report Date: 06-Apr-2022 07:10:03 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05047.d

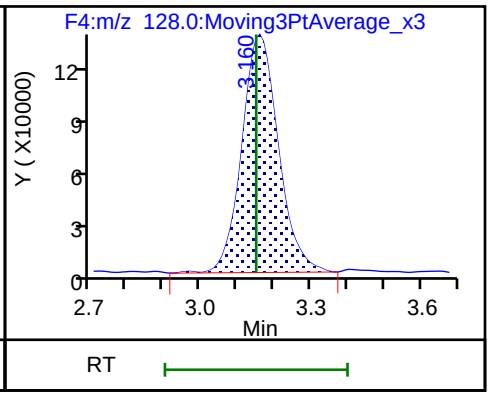
28 3,5-Dinitroaniline (ND)



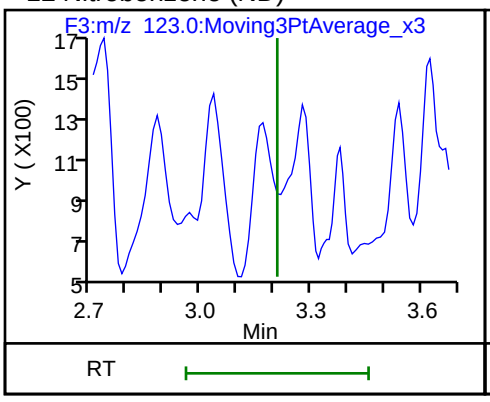
10 2,4,6-Trinitrotoluene (ND)



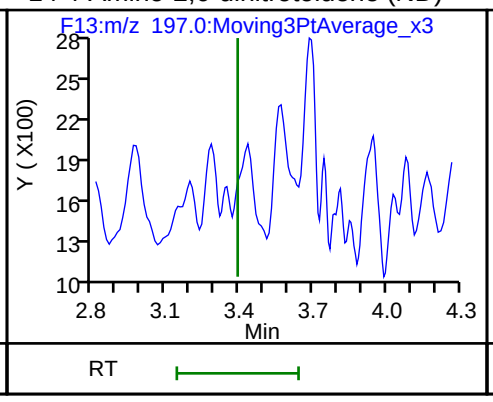
$ 11 Nitrobenzene-d5



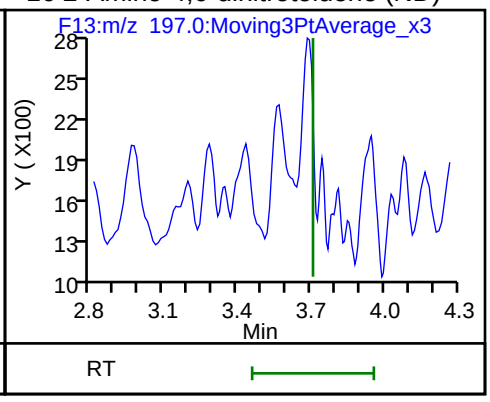
12 Nitrobenzene (ND)



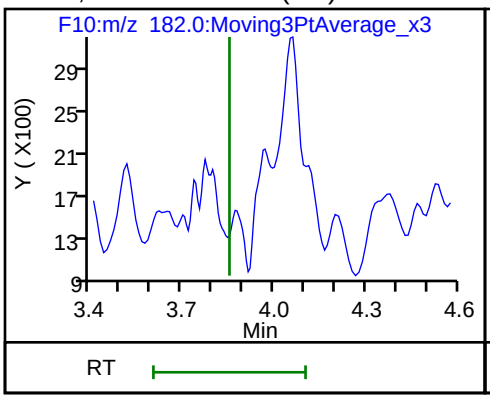
14 4-Amino-2,6-dinitrotoluene (ND)



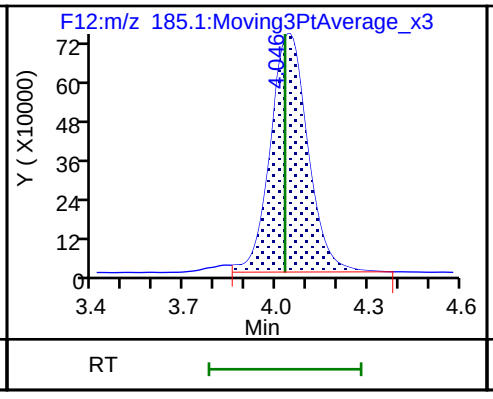
16 2-Amino-4,6-dinitrotoluene (ND)



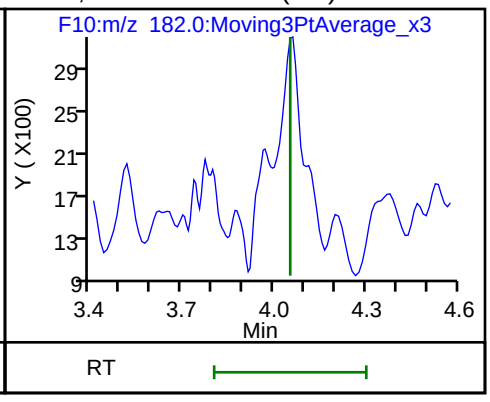
17 2,6-Dinitrotoluene (ND)



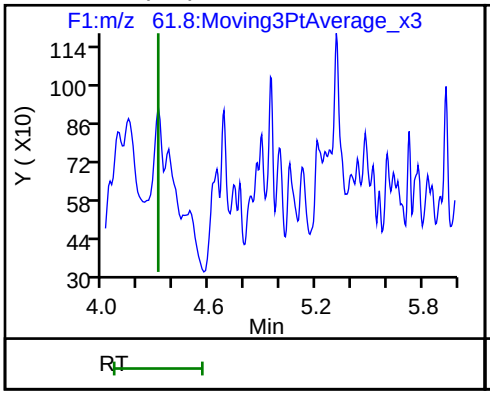
* 18 2,4-dinitrotoluene-d3



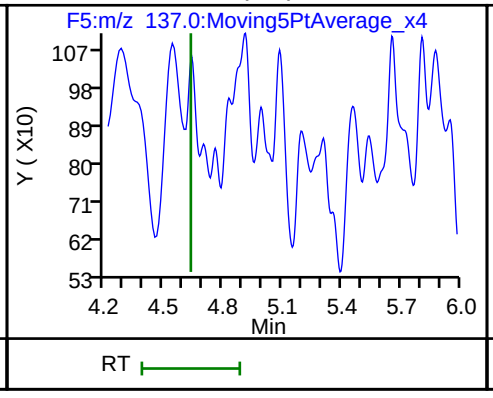
19 2,4-Dinitrotoluene (ND)



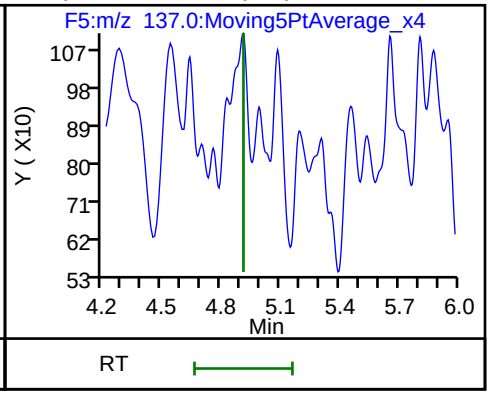
20 PETN (ND)



22 o-Nitrotoluene (ND)

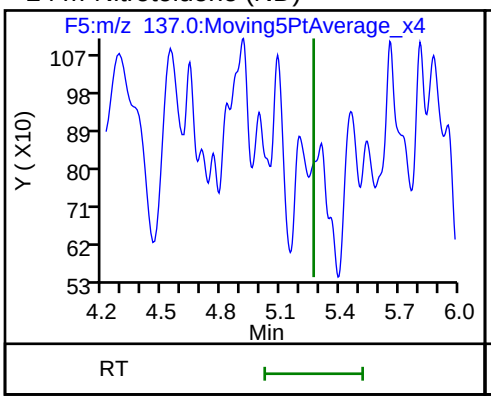


23 p-Nitrotoluene (ND)

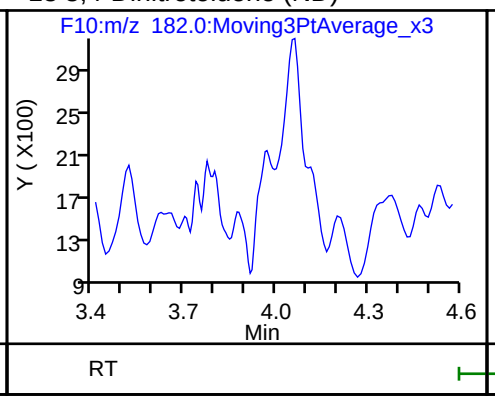


Report Date: 06-Apr-2022 07:10:03 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05047.d

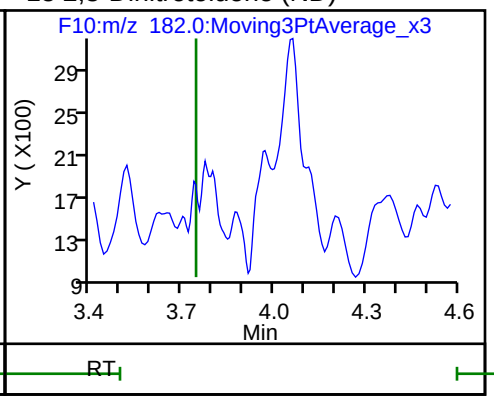
24 m-Nitrotoluene (ND)



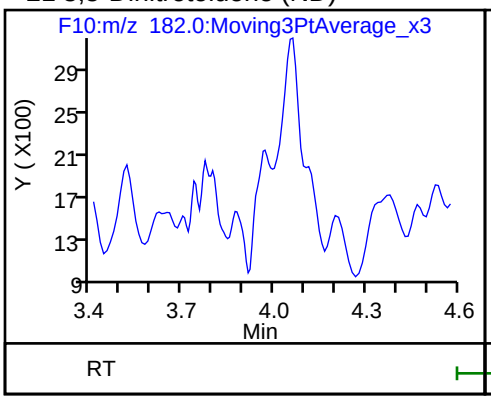
13 3,4-Dinitrotoluene (ND)



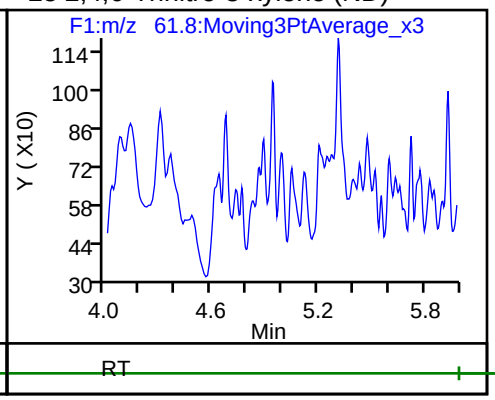
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 07:10:03 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05047.d				
Lims ID:	280-160187-A-15-B				
Client ID:	DUP-02				
Sample Type:	Client				
Inject. Date:	05-Apr-2022 14:42:50	ALS Bottle#:	39	Worklist Smp#:	44
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160187-A-15-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 07:10:00	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:	06-Apr-2022 06:53:19		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	98.0	97.68

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB199 (3-4) | Lab Sample ID: 280-160187-16
Matrix: Solid | Lab File ID: ex722D05048.d
Analysis Method: 8321A | Date Collected: 03/22/2022 14:30
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:56
Sample wt/vol: 10.18(g) | Date Analyzed: 04/05/2022 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.: 570785 | 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 M	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	97		68-140

Report Date: 06-Apr-2022 07:10:04 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\ex722D05048.d
Lims ID: 280-160187-A-16-B
Client ID: 29SB199 (3-4)
Sample Type: Client
Inject. Date: 05-Apr-2022 14:49:14 ALS Bottle#: 40 Worklist Smp#: 45
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-16-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 07:10:00 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: 06-Apr-2022 06:53:32
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		291378	125.0	237	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.785	1.777	0.008		992132	125.0	164	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1944629	129.4	277	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	923887	97.4	248	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		6319202	125.0	113	
19 2,4-Dinitrotoluene								
182.0	4.069	4.087	0.017	1.006	23266	-0.2684	9.3	

QC Flag Legend
Processing Flags

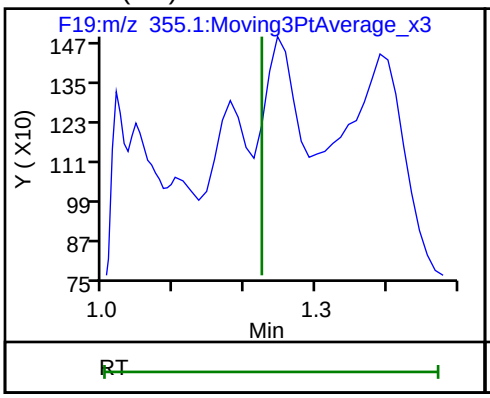
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:10:04 Chrom Revision: 2.3 18-Mar-2022 09:07:22

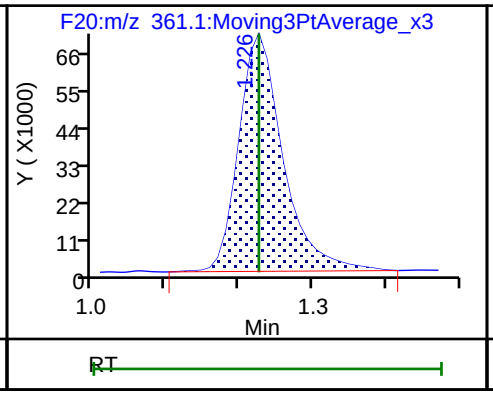
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05048.d
Injection Date: 05-Apr-2022 14:49:14 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-16-B Lab Sample ID: 280-160187-16
Client ID: 29SB199 (3-4)
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

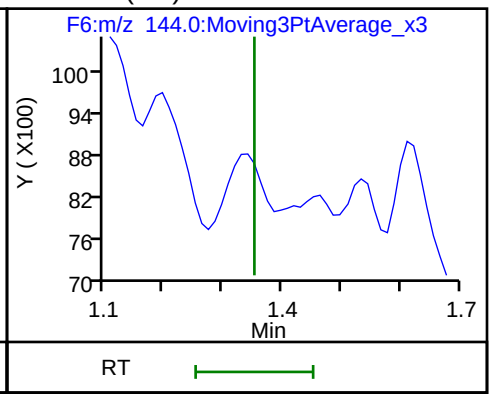
2 HMX (ND)



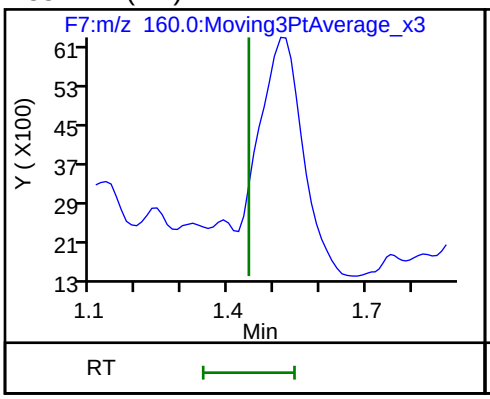
* 1 HMX-13C4



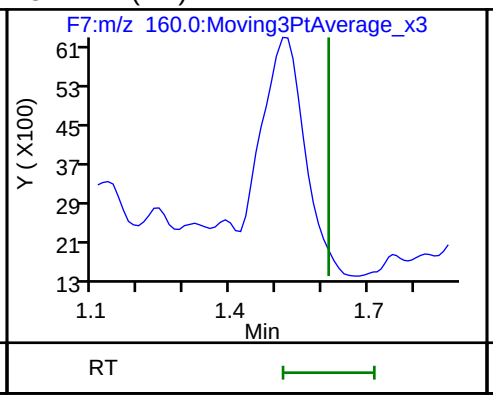
36 TNX (ND)



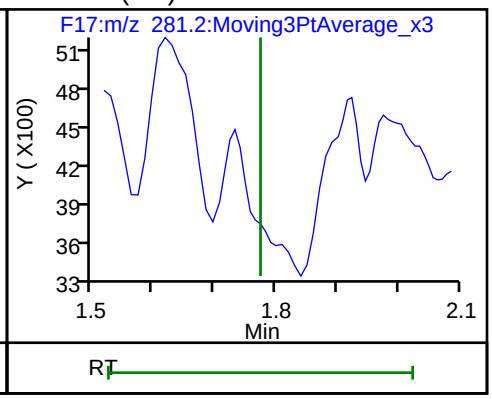
33 DNX (ND)



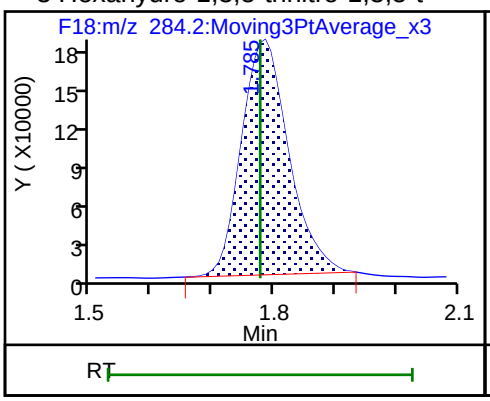
34 MNX (ND)



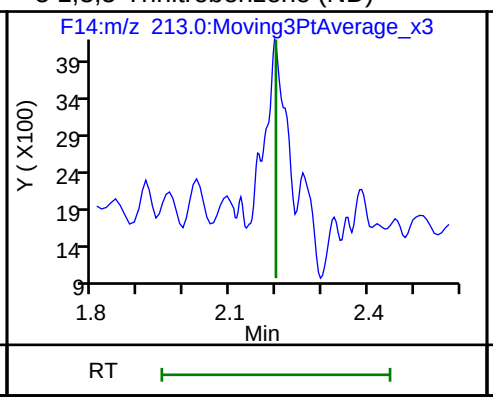
4 RDX (ND)



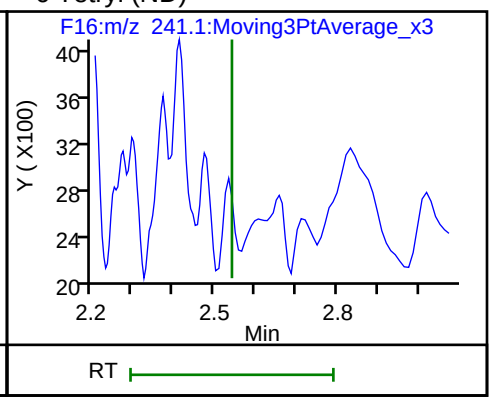
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



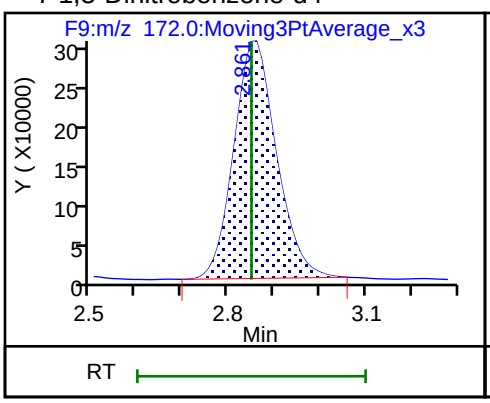
5 1,3,5-Trinitrobenzene (ND)



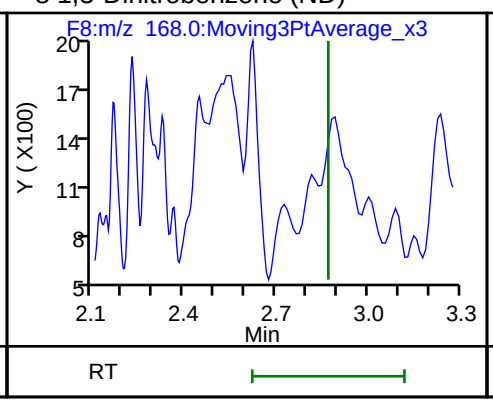
6 Tetryl (ND)



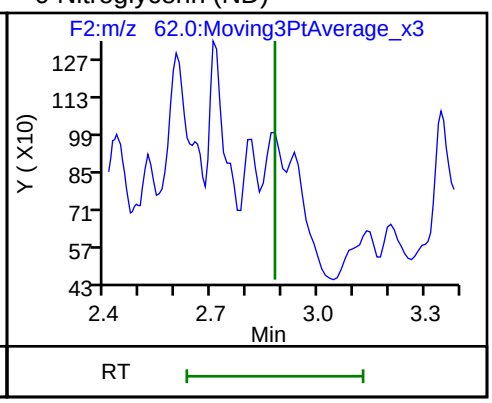
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



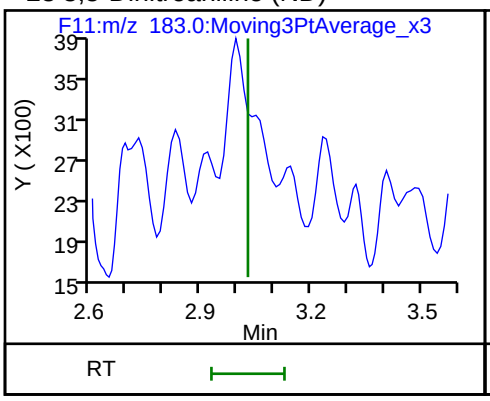
9 Nitroglycerin (ND)



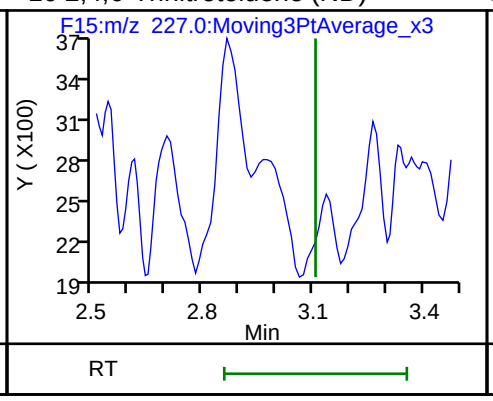
Report Date: 06-Apr-2022 07:10:04 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05048.d

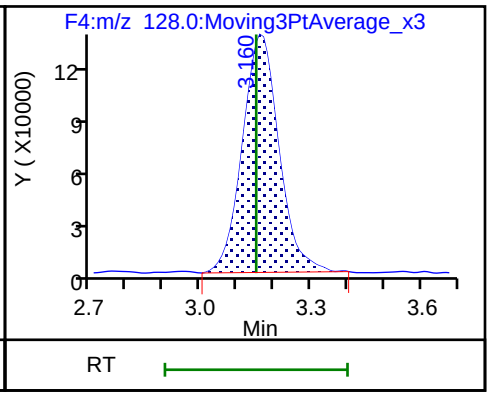
28 3,5-Dinitroaniline (ND)



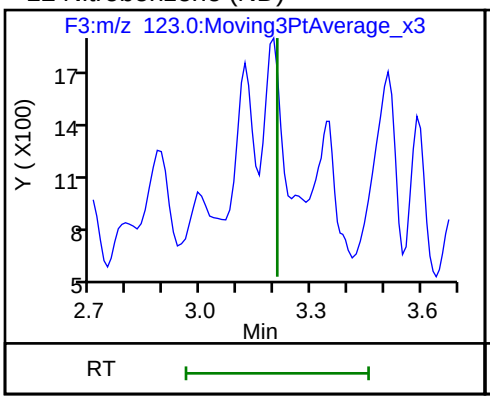
10 2,4,6-Trinitrotoluene (ND)



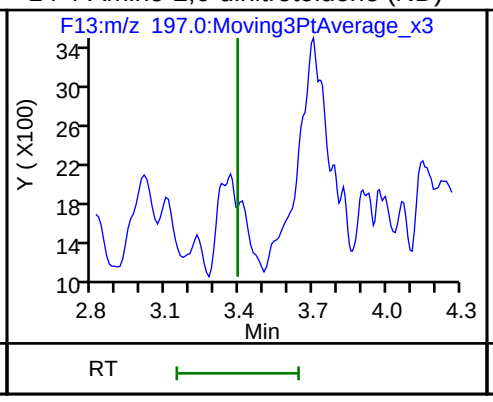
$ 11 Nitrobenzene-d5



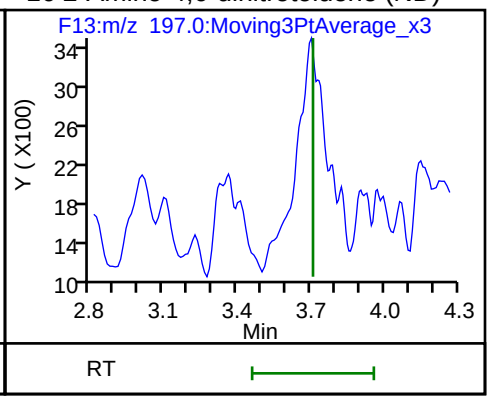
12 Nitrobenzene (ND)



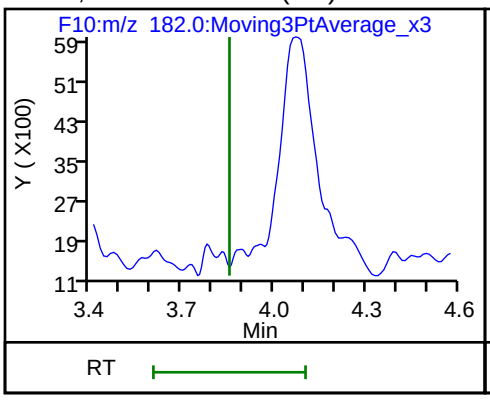
14 4-Amino-2,6-dinitrotoluene (ND)



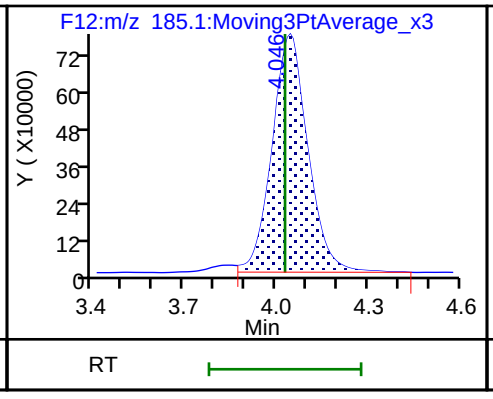
16 2-Amino-4,6-dinitrotoluene (ND)



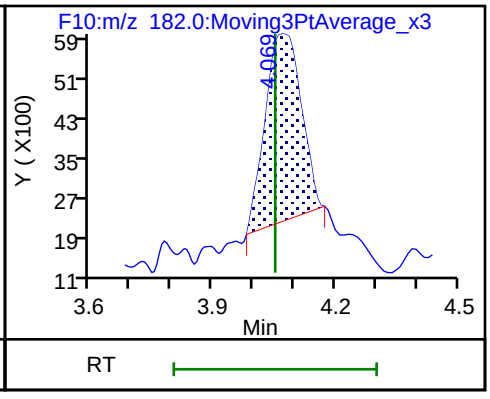
17 2,6-Dinitrotoluene (ND)



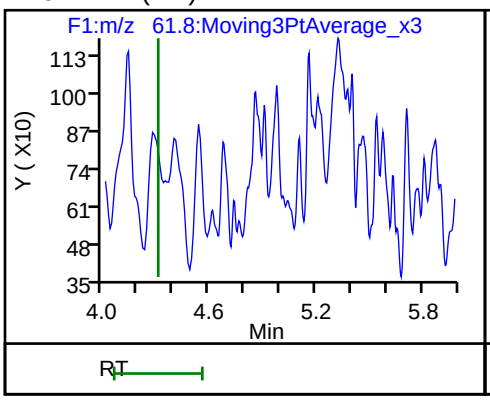
* 18 2,4-dinitrotoluene-d3



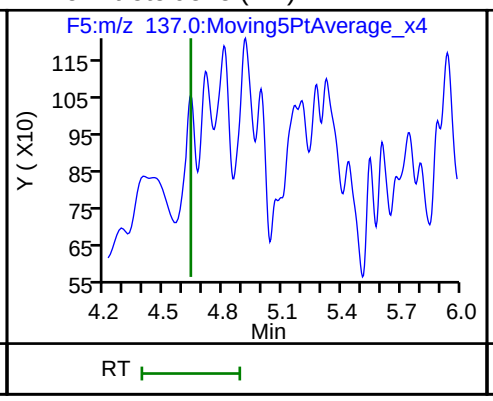
19 2,4-Dinitrotoluene



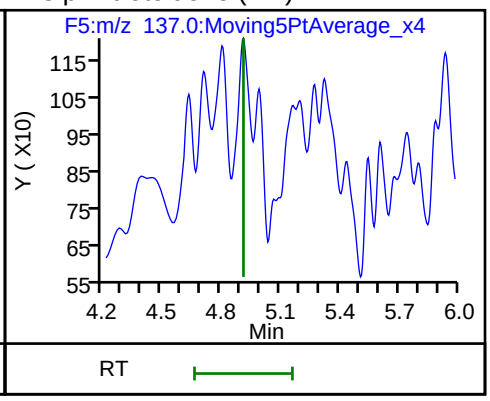
20 PETN (ND)



22 o-Nitrotoluene (ND)



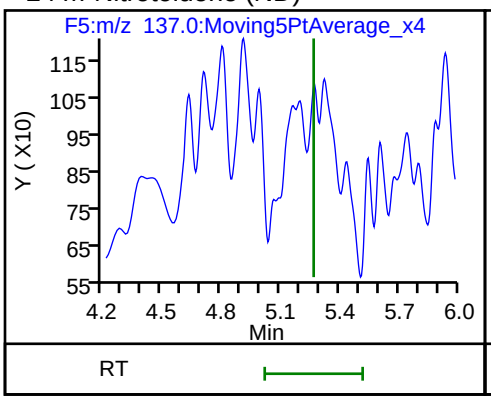
23 p-Nitrotoluene (ND)



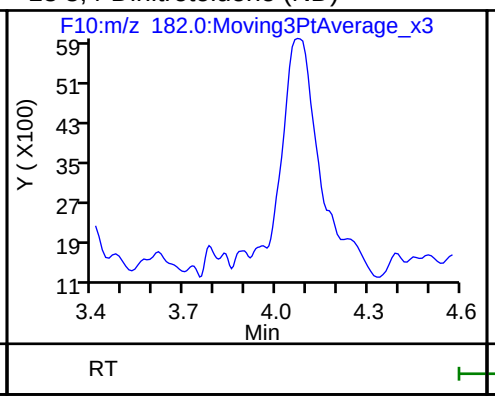
Report Date: 06-Apr-2022 07:10:04 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05048.d

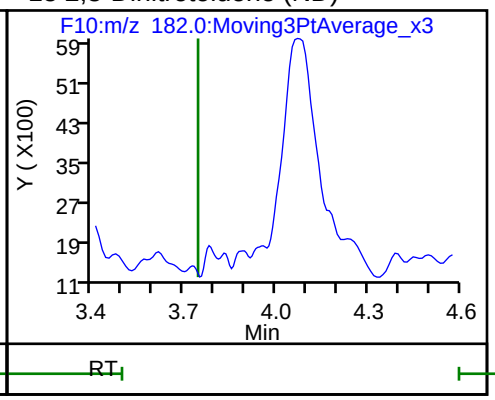
24 m-Nitrotoluene (ND)



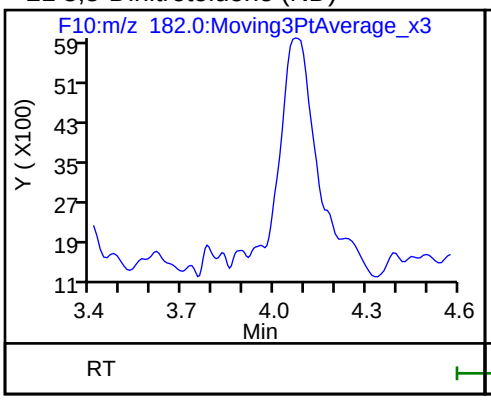
13 3,4-Dinitrotoluene (ND)



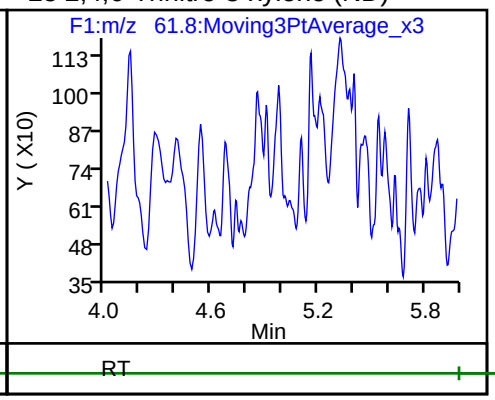
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 07:10:04 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05048.d				
Lims ID:	280-160187-A-16-B				
Client ID:	29SB199 (3-4)				
Sample Type:	Client				
Inject. Date:	05-Apr-2022 14:49:14	ALS Bottle#:	40	Worklist Smp#:	45
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160187-A-16-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 07:10:00	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:	06-Apr-2022 06:53:32		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	97.4	97.13

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB199 (7-8) | Lab Sample ID: 280-160187-17
Matrix: Solid | Lab File ID: ex722D05049.d
Analysis Method: 8321A | Date Collected: 03/22/2022 14:35
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:56
Sample wt/vol: 10.31(g) | Date Analyzed: 04/05/2022 14:55
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	0.097	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	0.045
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	0.042
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	94		68-140

Report Date: 06-Apr-2022 07:10:05 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\ex722D05049.d
Lims ID: 280-160187-A-17-B
Client ID: 29SB199 (7-8)
Sample Type: Client
Inject. Date: 05-Apr-2022 14:55:38 ALS Bottle#: 41 Worklist Smp#: 46
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-17-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 07:10:00 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: 06-Apr-2022 06:53:41
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	1.226	1.226	0.0		293323	125.0	156	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.785	1.777	0.008		1056315	125.0	186	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1931085	129.4	194	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	887008	94.2	147	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		6245974	125.0	114	

QC Flag Legend
Processing Flags

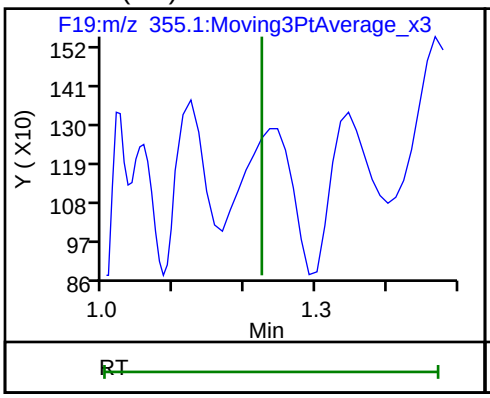
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:10:05 Chrom Revision: 2.3 18-Mar-2022 09:07:22

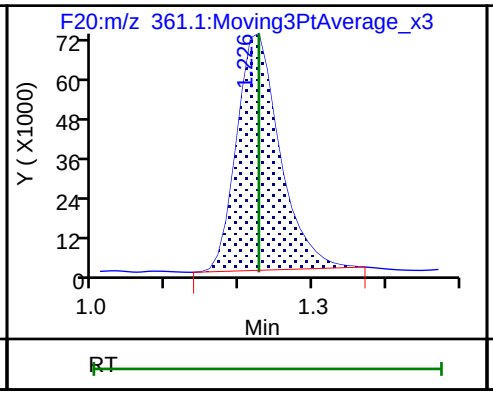
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05049.d
Injection Date: 05-Apr-2022 14:55:38 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-17-B Lab Sample ID: 280-160187-17
Client ID: 29SB199 (7-8)
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

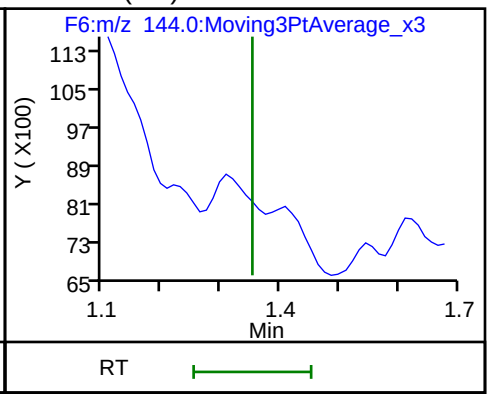
2 HMX (ND)



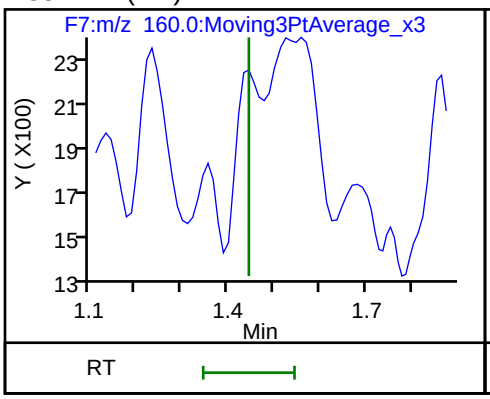
* 1 HMX-13C4



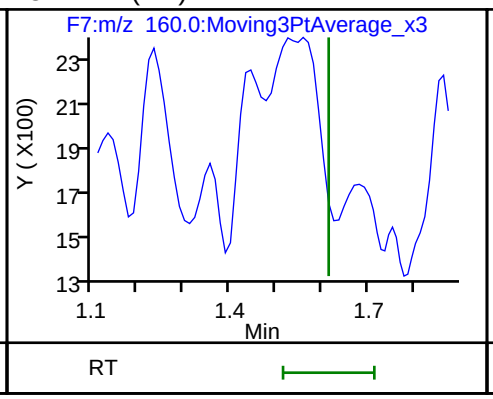
36 TNX (ND)



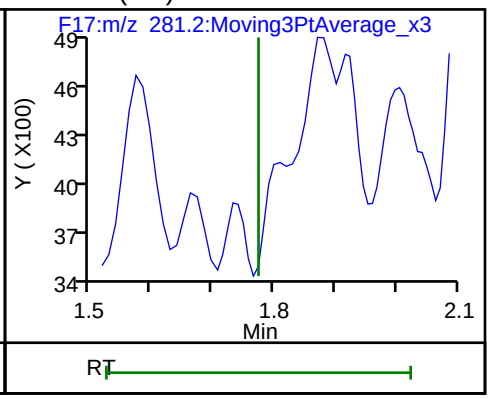
33 DNX (ND)



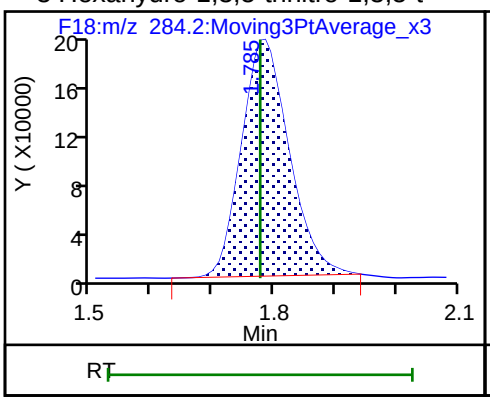
34 MNX (ND)



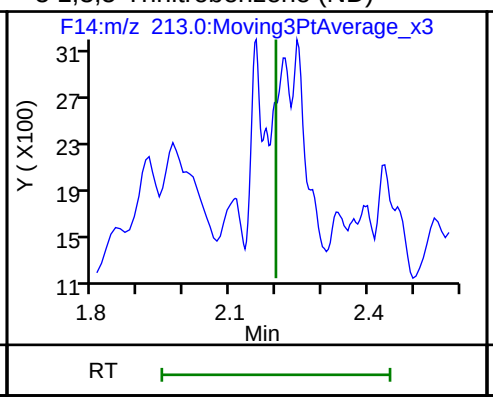
4 RDX (ND)



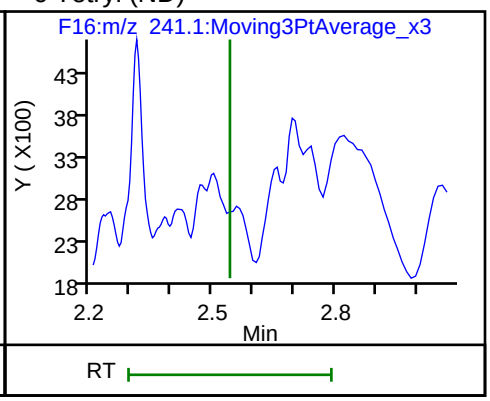
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



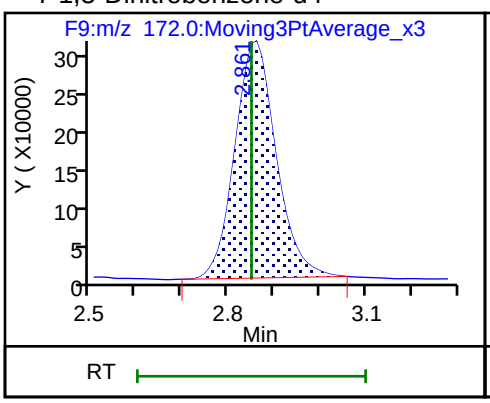
5 1,3,5-Trinitrobenzene (ND)



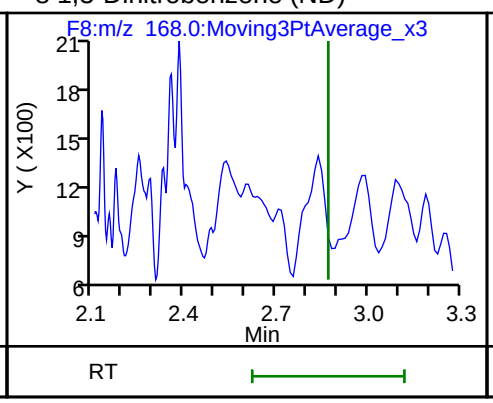
6 Tetryl (ND)



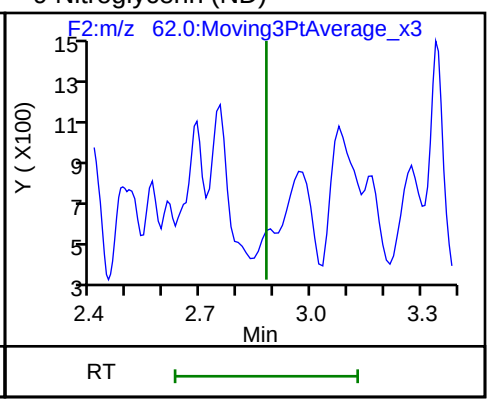
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



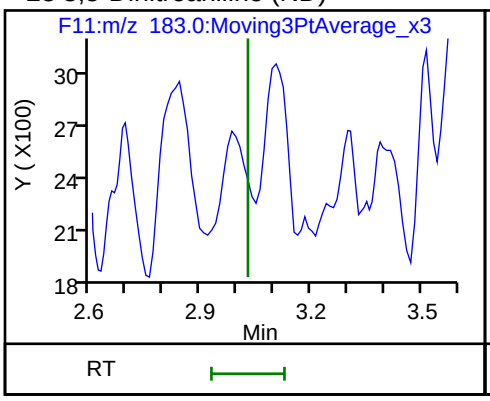
9 Nitroglycerin (ND)



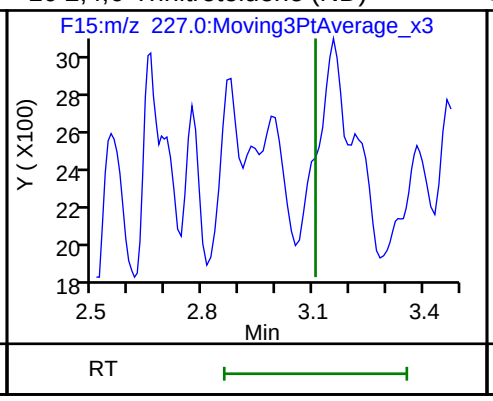
Report Date: 06-Apr-2022 07:10:05 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05049.d

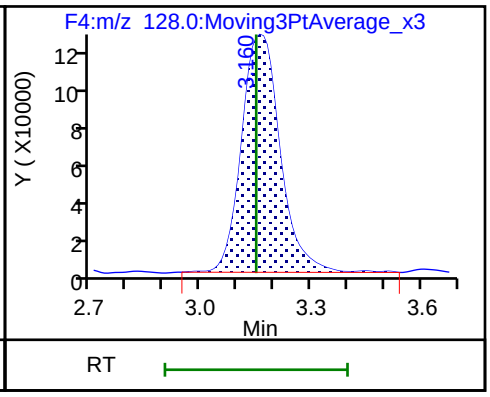
28 3,5-Dinitroaniline (ND)



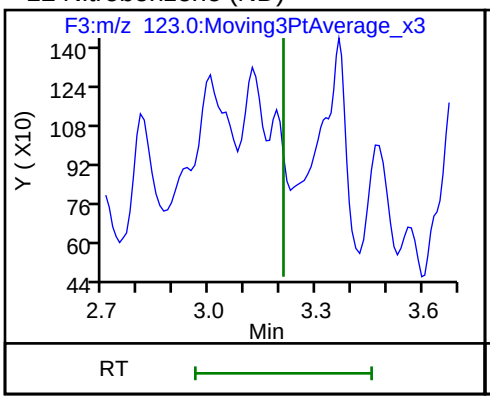
10 2,4,6-Trinitrotoluene (ND)



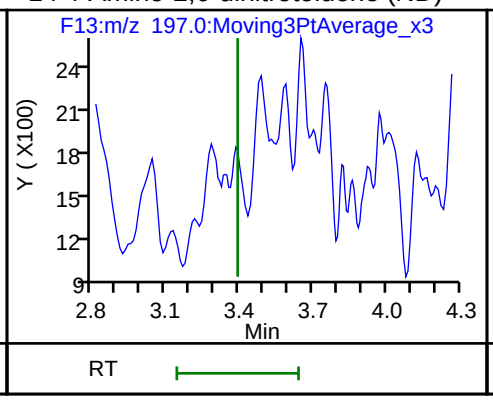
$ 11 Nitrobenzene-d5



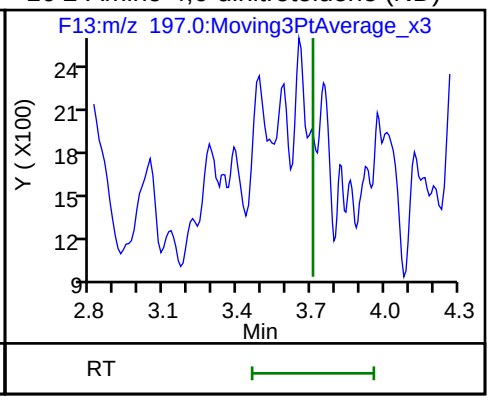
12 Nitrobenzene (ND)



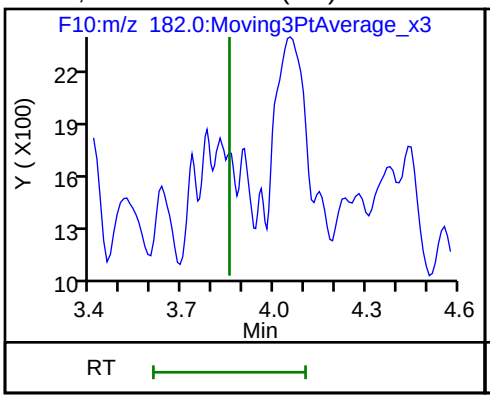
14 4-Amino-2,6-dinitrotoluene (ND)



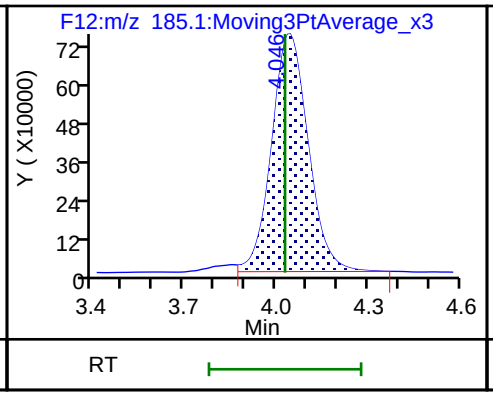
16 2-Amino-4,6-dinitrotoluene (ND)



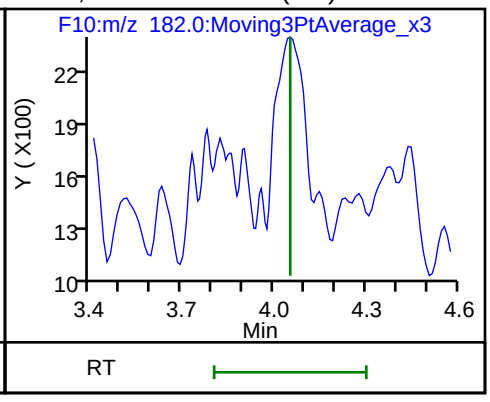
17 2,6-Dinitrotoluene (ND)



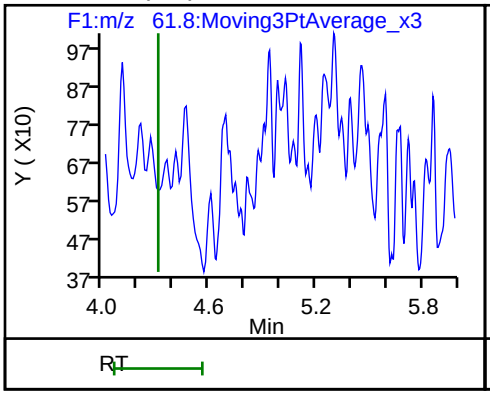
* 18 2,4-dinitrotoluene-d3



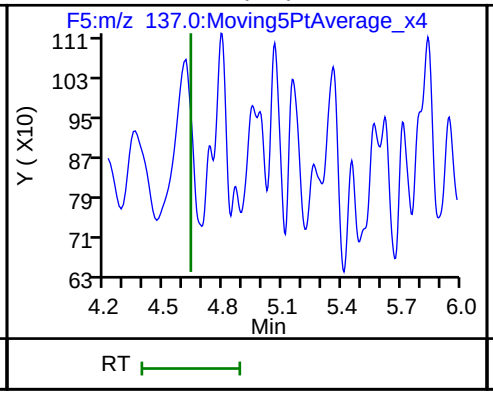
19 2,4-Dinitrotoluene (ND)



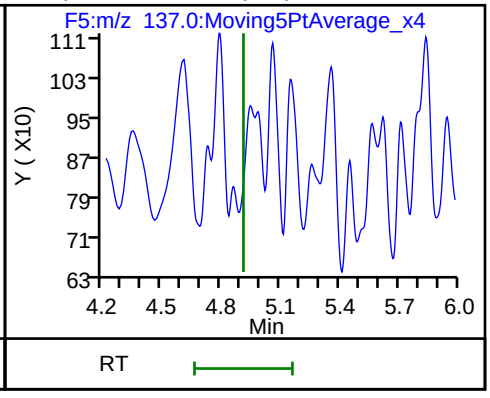
20 PETN (ND)



22 o-Nitrotoluene (ND)



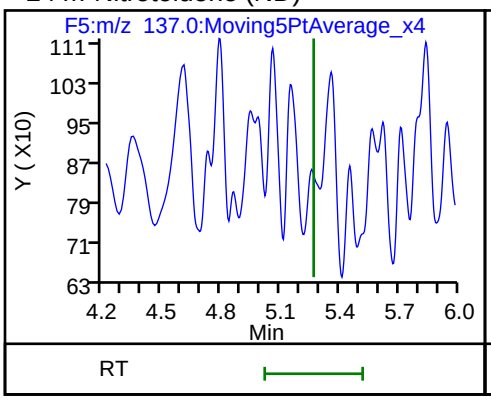
23 p-Nitrotoluene (ND)



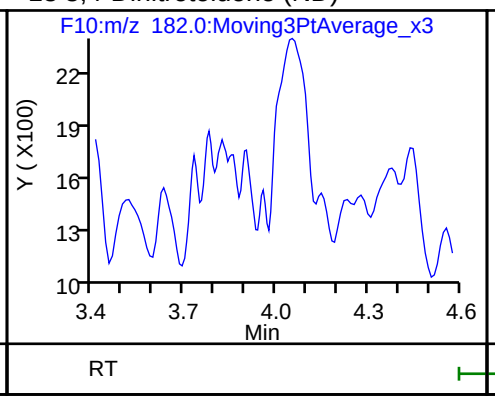
Report Date: 06-Apr-2022 07:10:05 Chrom Revision: 2.3 18-Mar-2022 09:07:22

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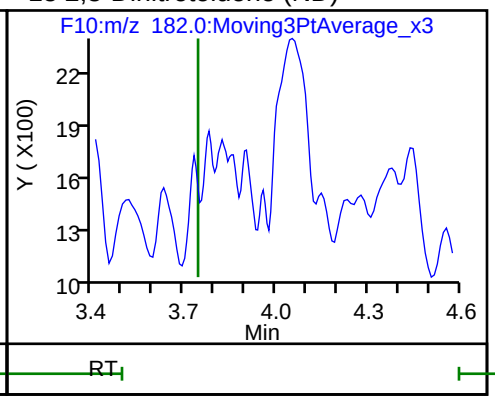
24 m-Nitrotoluene (ND)



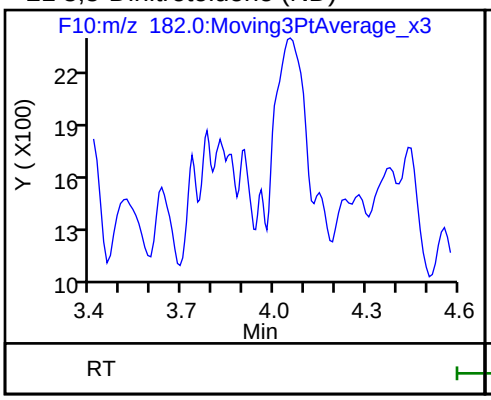
13 3,4-Dinitrotoluene (ND)



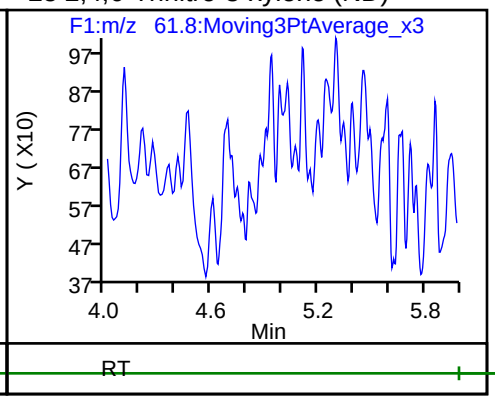
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 07:10:05 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05049.d				
Lims ID:	280-160187-A-17-B				
Client ID:	29SB199 (7-8)				
Sample Type:	Client				
Inject. Date:	05-Apr-2022 14:55:38	ALS Bottle#:	41	Worklist Smp#:	46
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160187-A-17-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 07:10:00	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:	06-Apr-2022 06:53:41		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	94.2	93.87

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB198 (3-4) | Lab Sample ID: 280-160187-18
Matrix: Solid | Lab File ID: ex722D05050.d
Analysis Method: 8321A | Date Collected: 03/22/2022 15:05
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:56
Sample wt/vol: 10.3(g) | Date Analyzed: 04/05/2022 15:02
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	0.049	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	97		68-140

Report Date: 06-Apr-2022 07:10:05 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\ex722D05050.d
Lims ID: 280-160187-A-18-B
Client ID: 29SB198 (3-4)
Sample Type: Client
Inject. Date: 05-Apr-2022 15:02:02 ALS Bottle#: 42 Worklist Smp#: 47
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-18-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 07:10:00 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: 06-Apr-2022 06:53:55
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		269685	125.0	111	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		1066277	125.0	236	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1891889	129.4	243	
28 3,5-Dinitroaniline								
183.0	3.039	3.051	0.012	1.062	92111	0.6846	15.2	
10 2,4,6-Trinitrotoluene								
227.0	3.107	3.134	0.0	0.770	79946	0.4287	16.1	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.783	900832	97.7	123	
* 18 2,4-dinitrotoluene-d3								
185.1	4.037	4.028	0.009		5752832	125.0	103	

QC Flag Legend
Processing Flags

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

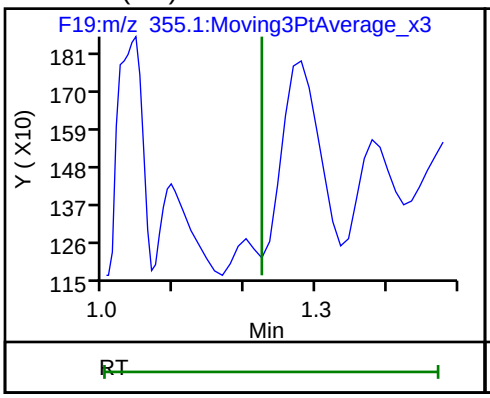
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Eurofins Denver

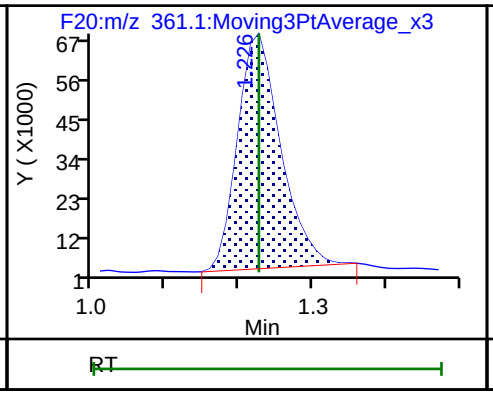
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Injection Date:	05-Apr-2022 15:02:02	Instrument ID:	LC_LCMS7
Lims ID:	280-160187-A-18-B	Lab Sample ID:	280-160187-18
Client ID:	29SB198 (3-4)		
Operator ID:	acm	ALS Bottle#:	42 Worklist Smp#: 47
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl

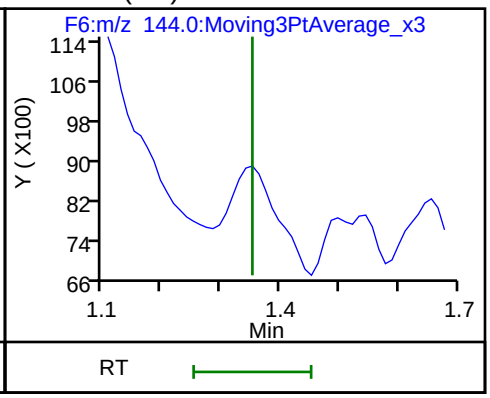
2 HMX (ND)



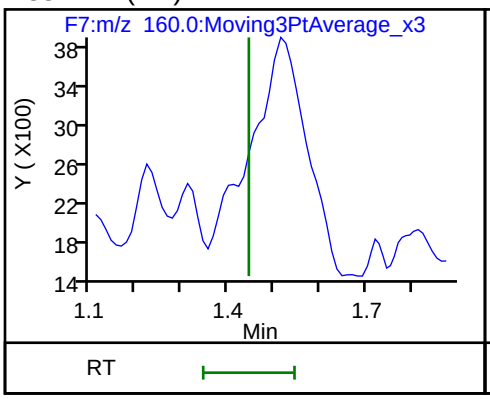
* 1 HMX-13C4



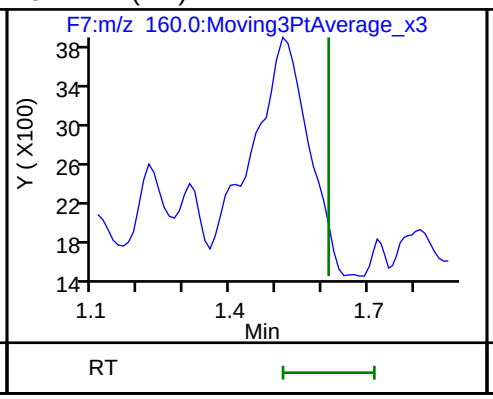
36 TNX (ND)



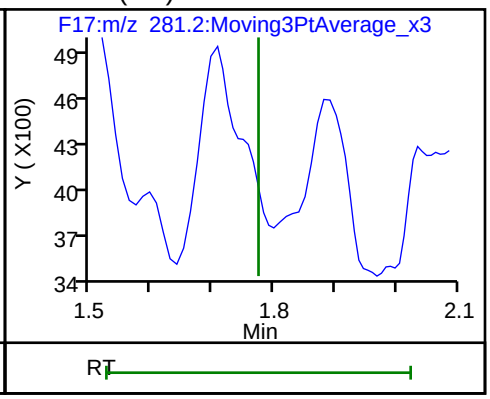
33 DNX (ND)



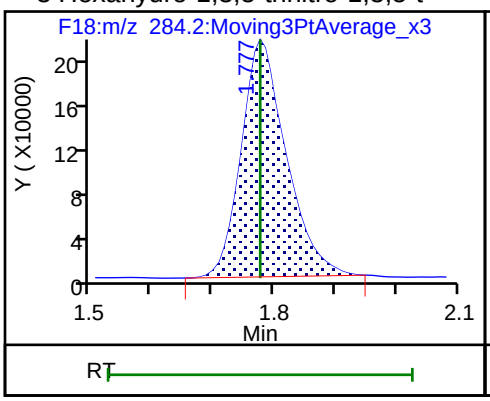
34 MNX (ND)



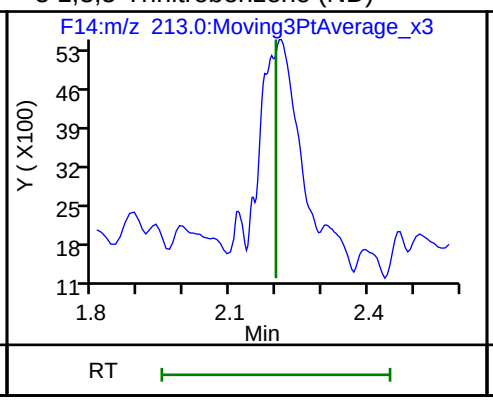
4 RDX (ND)



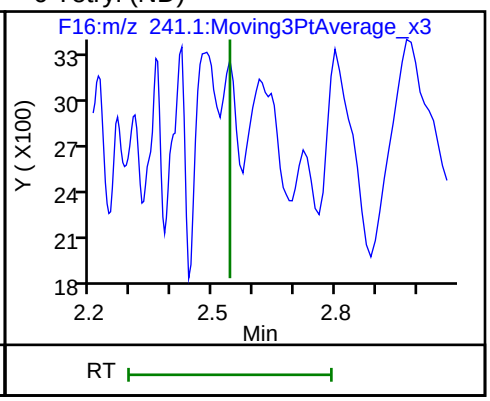
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



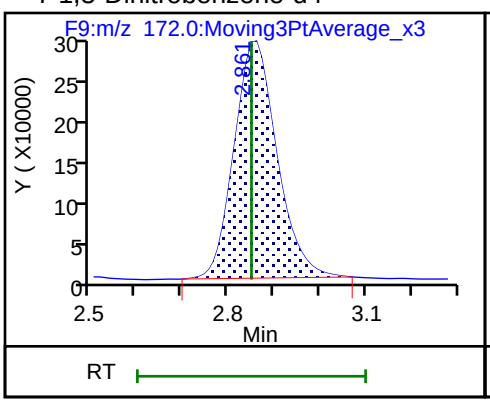
5 1,3,5-Trinitrobenzene (ND)



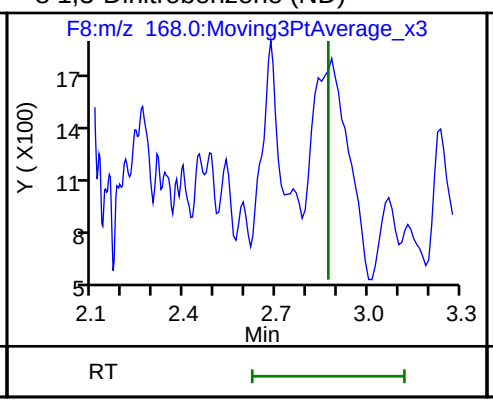
6 Tetryl (ND)



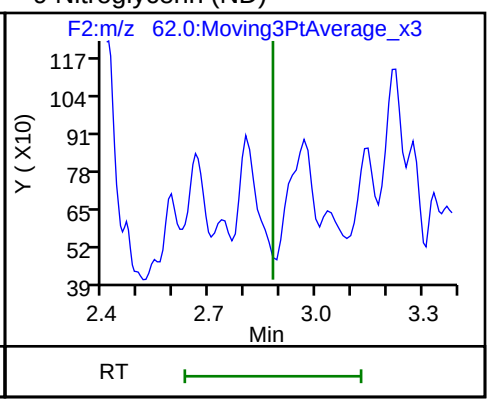
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

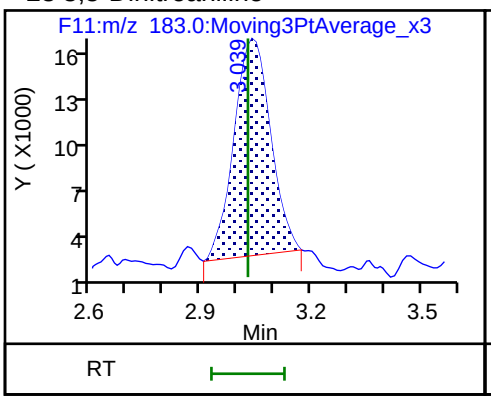


9 Nitroglycerin (ND)

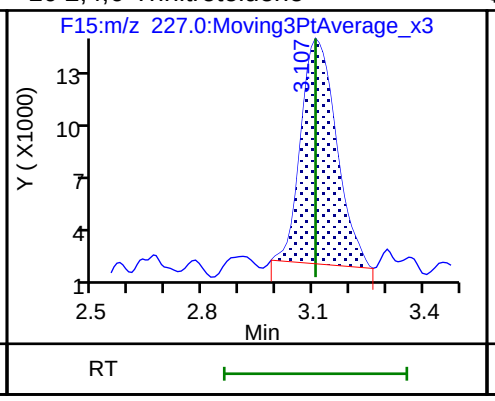


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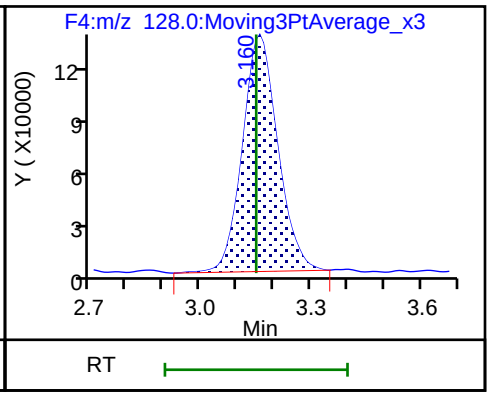
28 3,5-Dinitroaniline



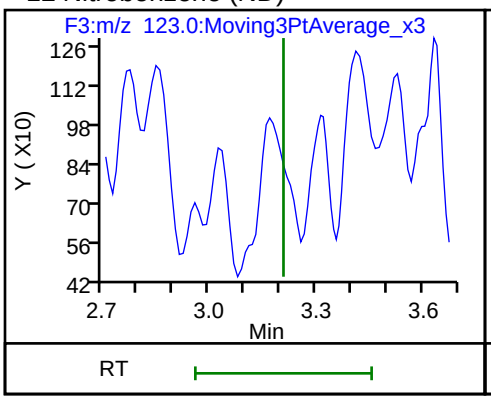
10 2,4,6-Trinitrotoluene



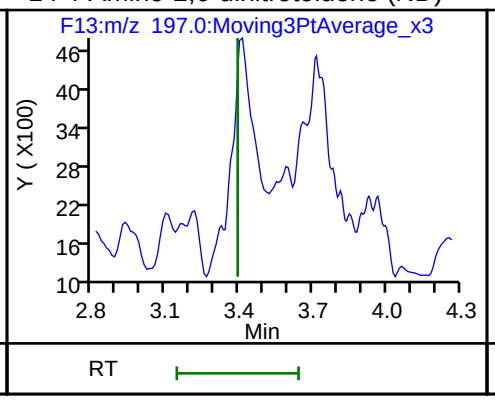
$ 11 Nitrobenzene-d5



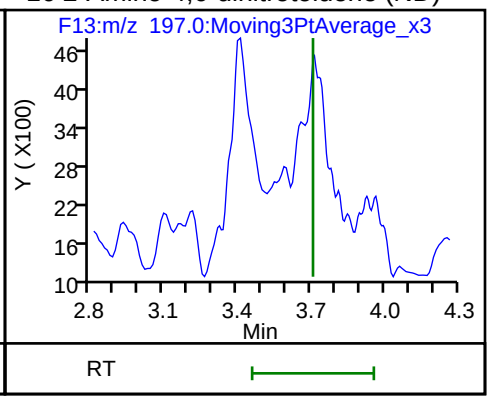
12 Nitrobenzene (ND)



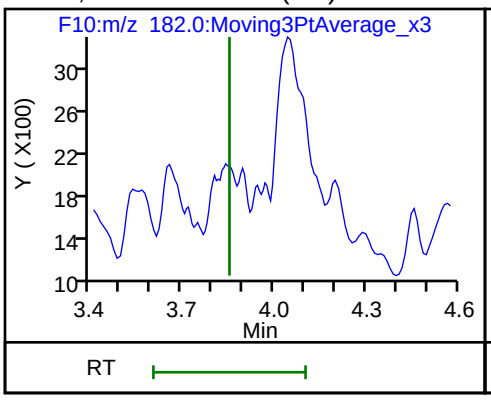
14 4-Amino-2,6-dinitrotoluene (ND)



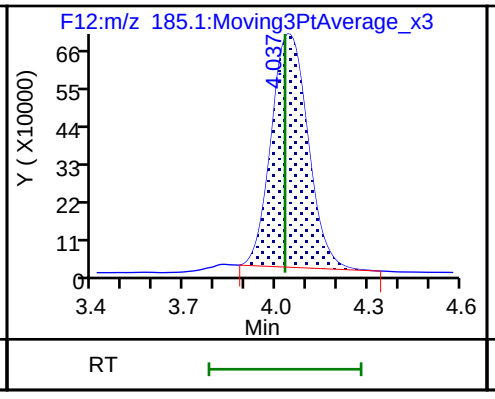
16 2-Amino-4,6-dinitrotoluene (ND)



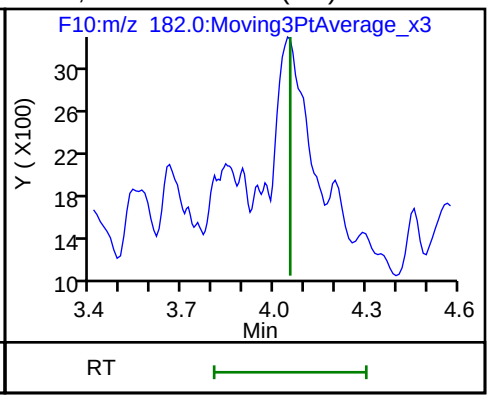
17 2,6-Dinitrotoluene (ND)



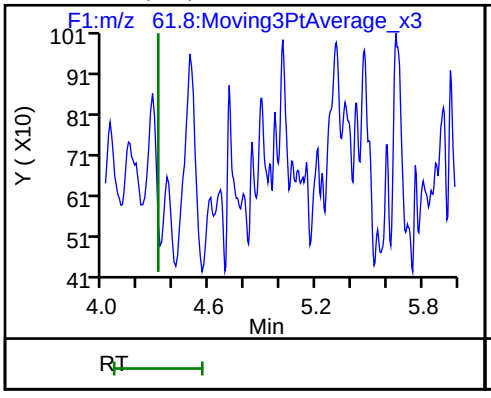
* 18 2,4-dinitrotoluene-d3



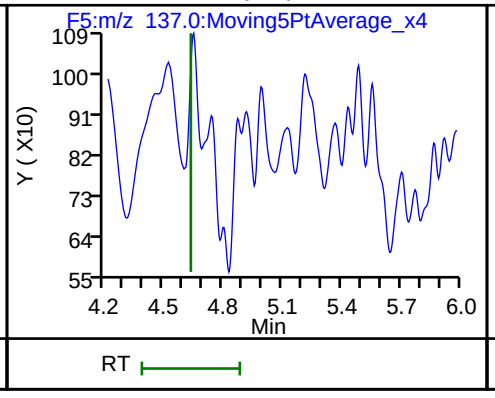
19 2,4-Dinitrotoluene (ND)



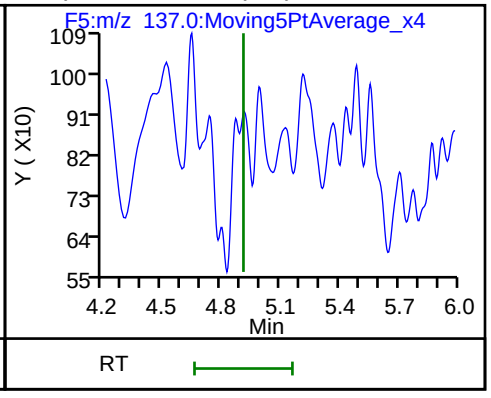
20 PETN (ND)



22 o-Nitrotoluene (ND)

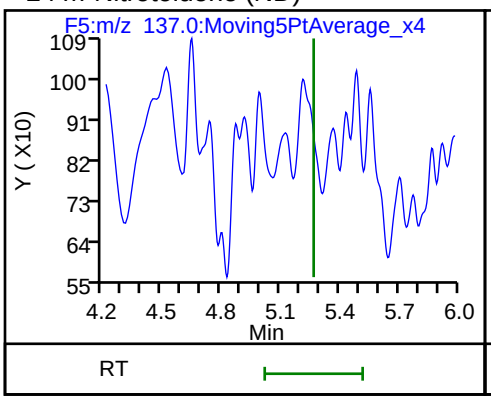


23 p-Nitrotoluene (ND)

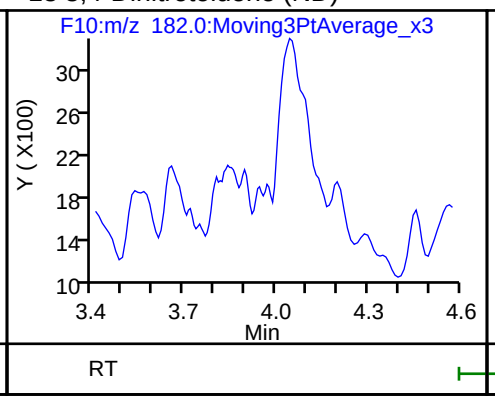


Report Date: 06-Apr-2022 07:10:06 Chrom Revision: 2.3 18-Mar-2022 09:07:22
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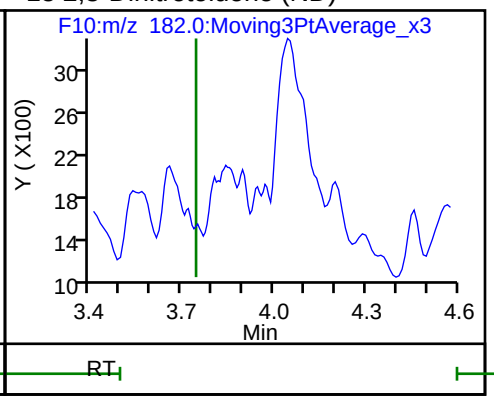
24 m-Nitrotoluene (ND)



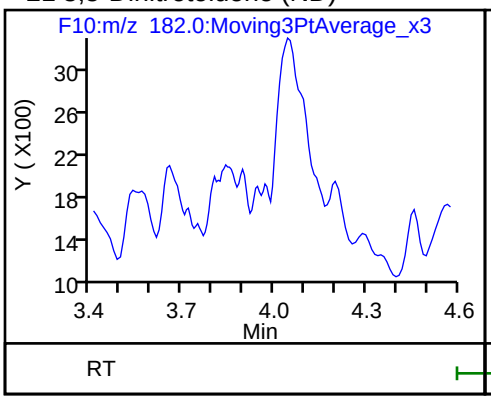
13 3,4-Dinitrotoluene (ND)



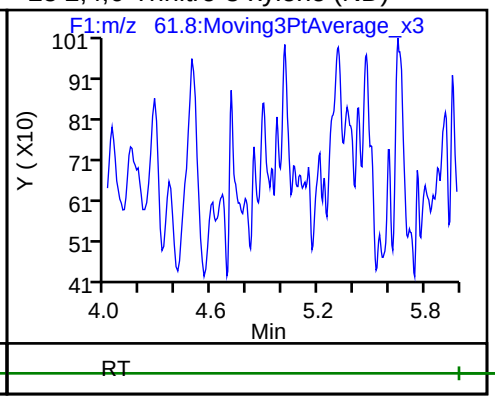
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 07:10:05 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05050.d				
Lims ID:	280-160187-A-18-B				
Client ID:	29SB198 (3-4)				
Sample Type:	Client				
Inject. Date:	05-Apr-2022 15:02:02	ALS Bottle#:	42	Worklist Smp#:	47
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160187-A-18-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 07:10:00	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:	06-Apr-2022 06:53:55		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	97.7	97.34

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

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

SDG No.:

Client Sample ID: 29SB198 (7-8) | Lab Sample ID: 280-160187-19

Matrix: Solid | Lab File ID: ex722D05051.d

Analysis Method: 8321A | Date Collected: 03/22/2022 15:10

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

Sample wt/vol: 10.72(g) | Date Analyzed: 04/05/2022 15:08

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	0.093	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	0.038
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 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	0.035
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 M Q	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 07:10:06 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\ex722D05051.d
Lims ID: 280-160187-A-19-B
Client ID: 29SB198 (7-8)
Sample Type: Client
Inject. Date: 05-Apr-2022 15:08:25 ALS Bottle#: 43 Worklist Smp#: 48
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-19-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 07:10:00 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: 06-Apr-2022 06:54:06
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		279614	125.0	210	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.785	1.777	0.008		986365	125.0	154	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.850	2.850	0.0		1972545	129.4	289	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.783	897542	93.3	86.8	
* 18 2,4-dinitrotoluene-d3								
185.1	4.037	4.028	0.009		6211070	125.0	123	

QC Flag Legend

Processing Flags

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

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

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05051.d

Injection Date: 05-Apr-2022 15:08:25 Instrument ID: LC_LCMS7

Lims ID: 280-160187-A-19-B Lab Sample ID: 280-160187-19

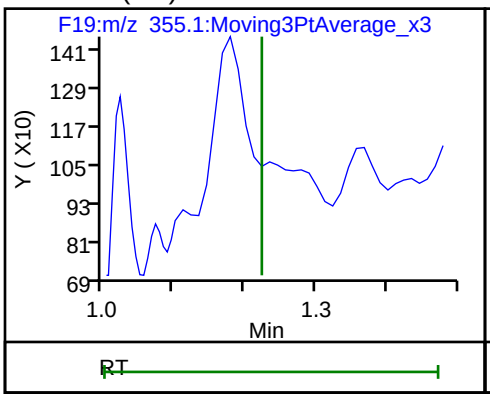
Client ID: 29SB198 (7-8)

Operator ID: acm ALS Bottle#: 43 Worklist Smp#: 48

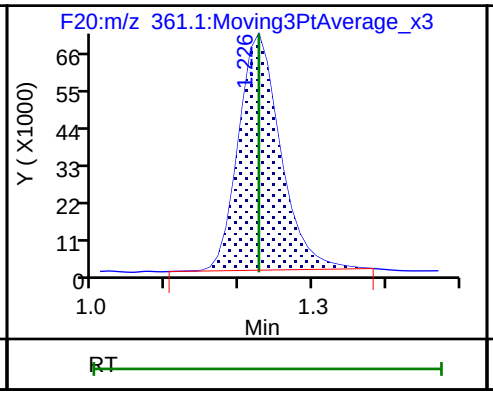
Injection Vol: 10.0 ul Dil. Factor: 1.0000

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

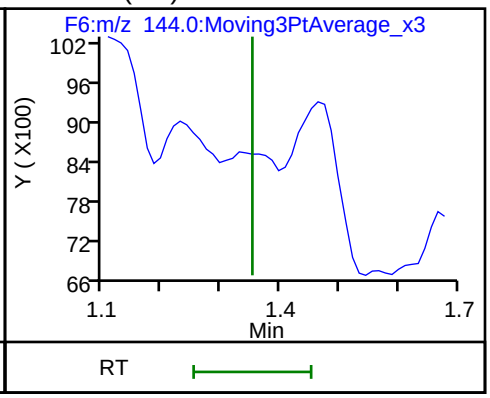
2 HMX (ND)



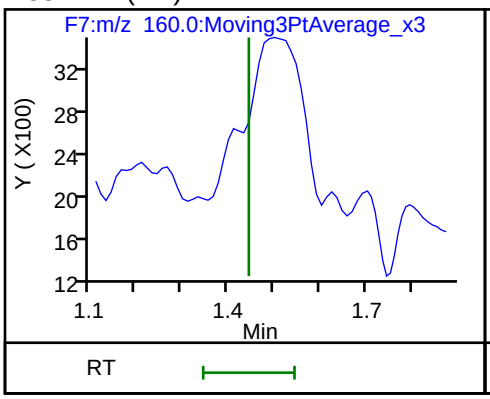
* 1 HMX-13C4



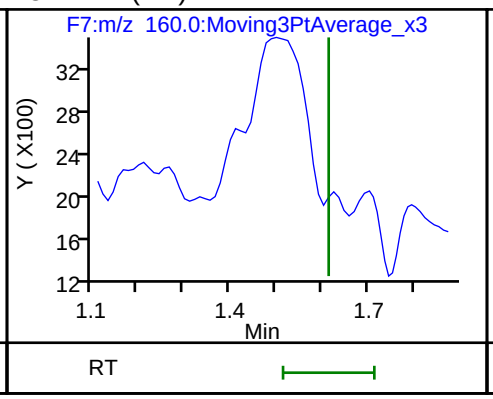
36 TNX (ND)



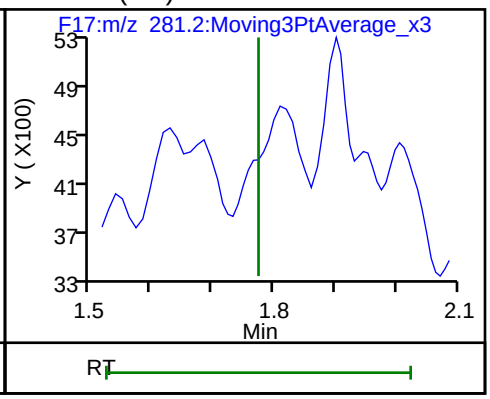
33 DNX (ND)



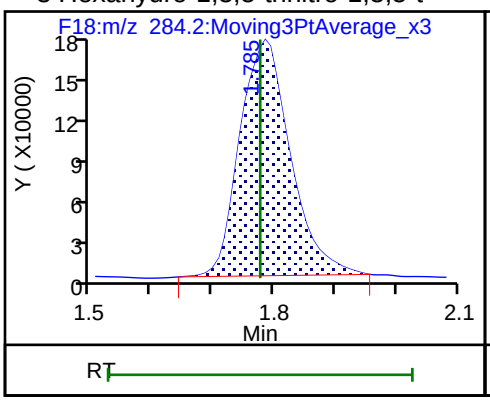
34 MNX (ND)



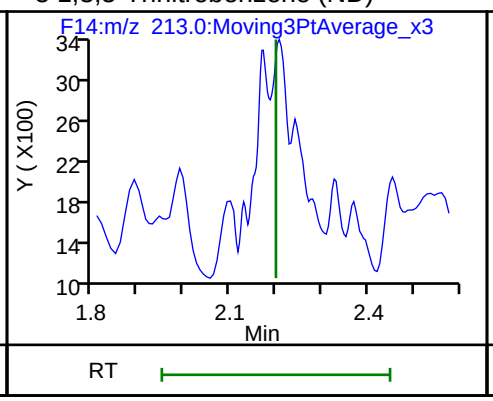
4 RDX (ND)



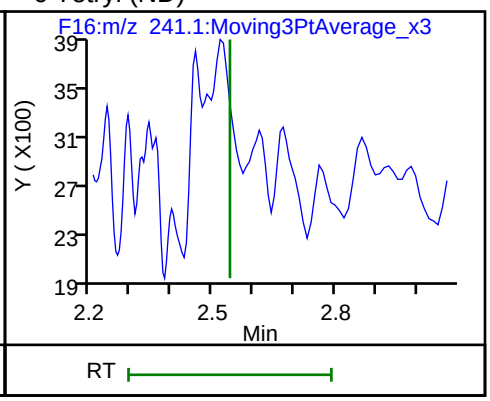
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



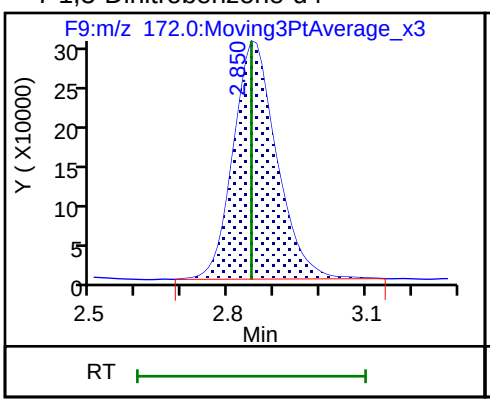
5 1,3,5-Trinitrobenzene (ND)



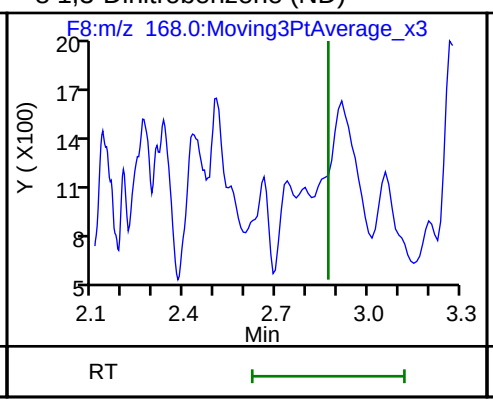
6 Tetryl (ND)



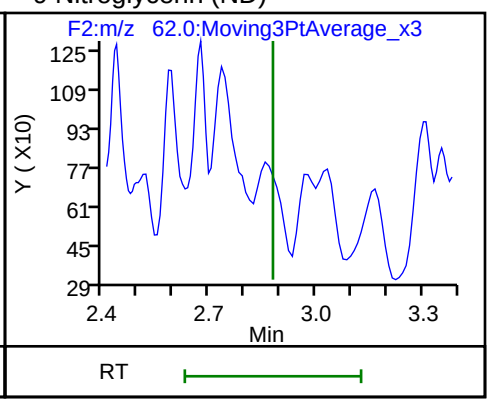
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



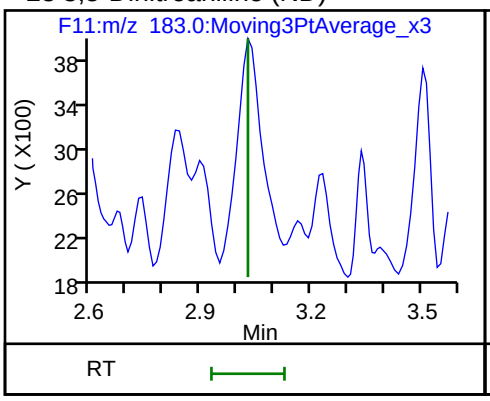
9 Nitroglycerin (ND)



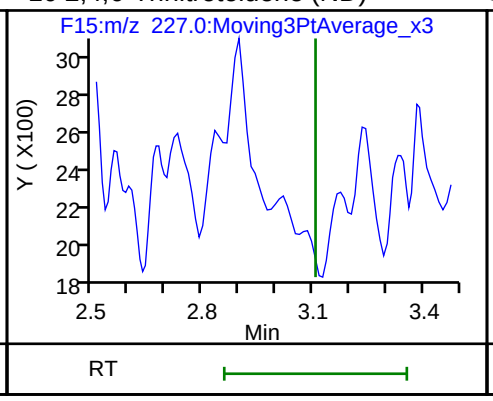
Report Date: 06-Apr-2022 07:10:06 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05051.d

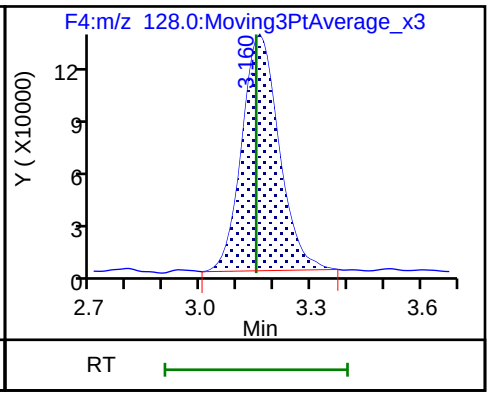
28 3,5-Dinitroaniline (ND)



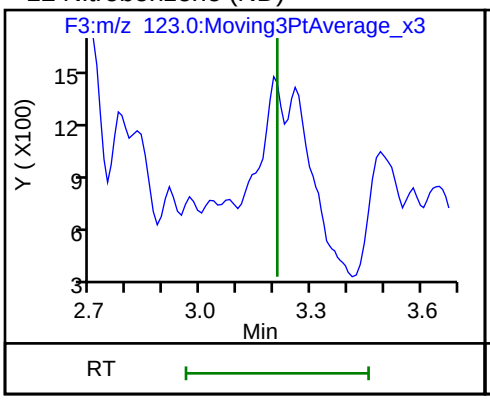
10 2,4,6-Trinitrotoluene (ND)



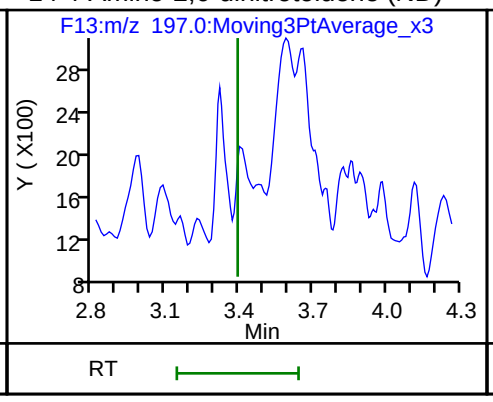
$ 11 Nitrobenzene-d5



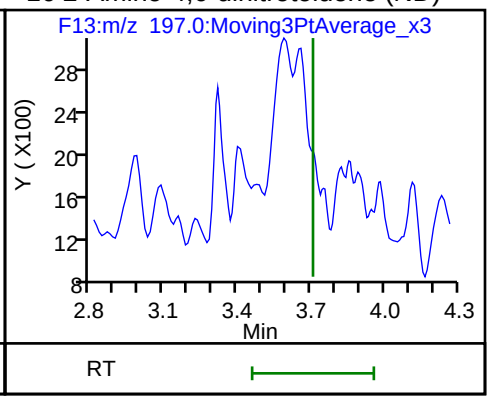
12 Nitrobenzene (ND)



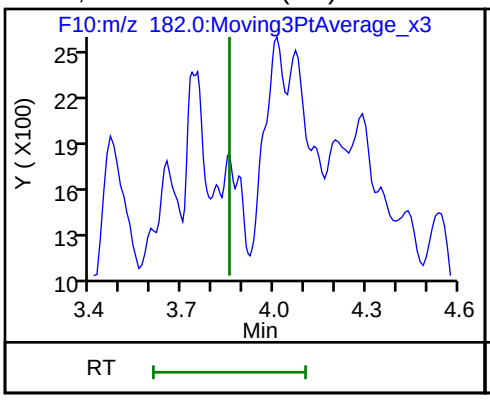
14 4-Amino-2,6-dinitrotoluene (ND)



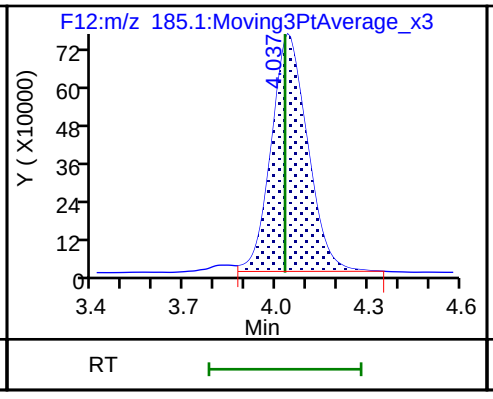
16 2-Amino-4,6-dinitrotoluene (ND)



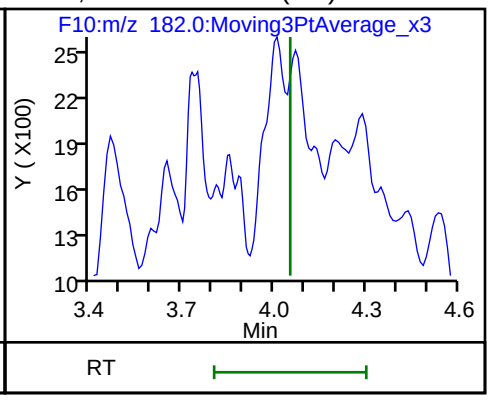
17 2,6-Dinitrotoluene (ND)



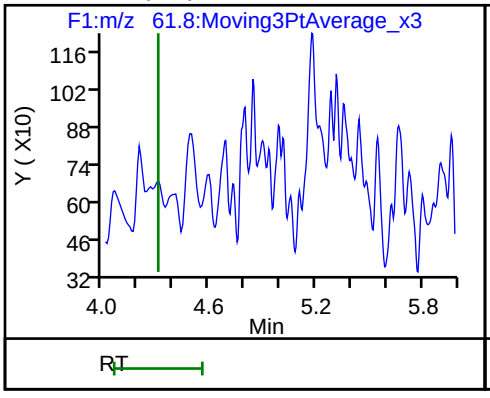
* 18 2,4-dinitrotoluene-d3



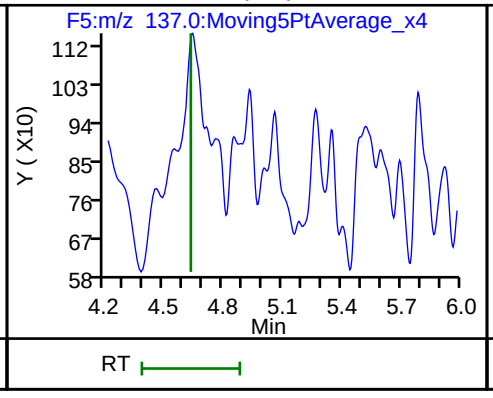
19 2,4-Dinitrotoluene (ND)



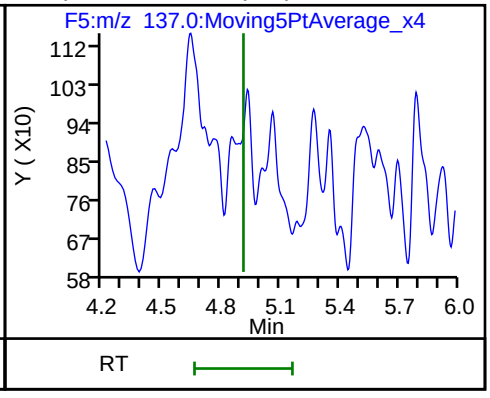
20 PETN (ND)



22 o-Nitrotoluene (ND)



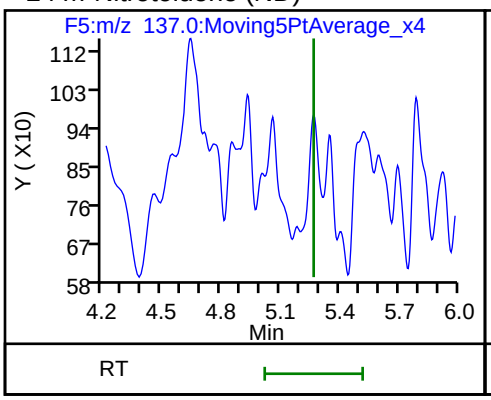
23 p-Nitrotoluene (ND)



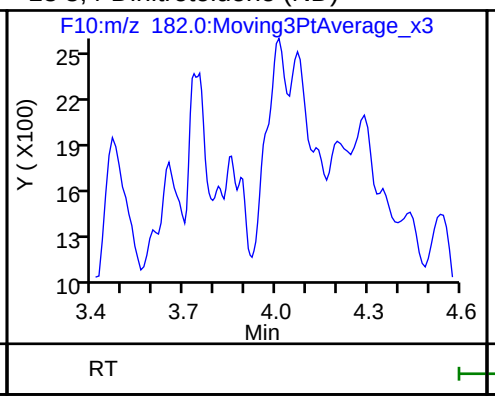
Report Date: 06-Apr-2022 07:10:06 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05051.d

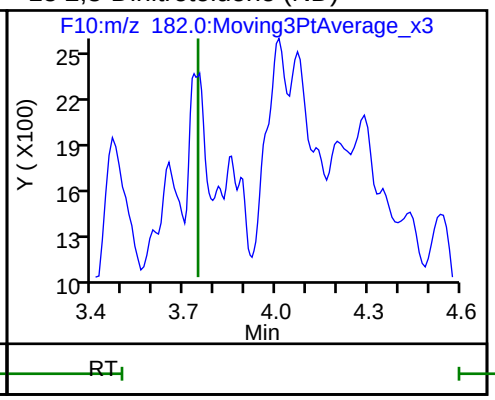
24 m-Nitrotoluene (ND)



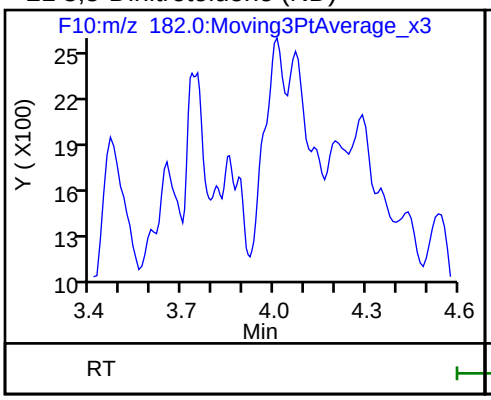
13 3,4-Dinitrotoluene (ND)



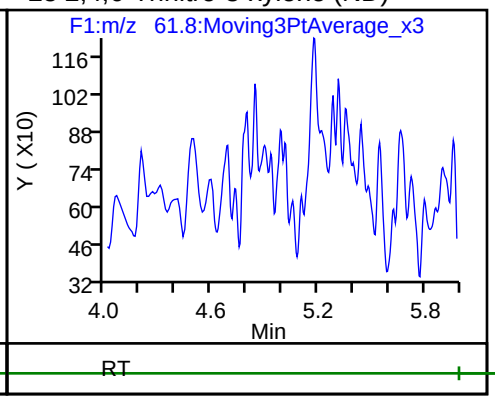
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



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

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05051.d				
Lims ID:	280-160187-A-19-B				
Client ID:	29SB198 (7-8)				
Sample Type:	Client				
Inject. Date:	05-Apr-2022 15:08:25	ALS Bottle#:	43	Worklist Smp#:	48
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160187-A-19-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 07:10:00	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:	06-Apr-2022 06:54:06		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	93.3	92.98

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

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

SDG No.:

Client Sample ID: 29SB202 (3-4) | Lab Sample ID: 280-160187-20

Matrix: Solid | Lab File ID: ex722D05052.d

Analysis Method: 8321A | Date Collected: 03/22/2022 16:30

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

Sample wt/vol: 10.21(g) | Date Analyzed: 04/05/2022 15:14

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	0.049	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	98		68-140

Report Date: 06-Apr-2022 07:10:07 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\ex722D05052.d
Lims ID: 280-160187-A-20-B
Client ID: 29SB202 (3-4)
Sample Type: Client
Inject. Date: 05-Apr-2022 15:14:48 ALS Bottle#: 44 Worklist Smp#: 49
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-20-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 07:10:00 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: 06-Apr-2022 06:54:17
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		251233	125.0	220	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		1061658	125.0	241	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1905874	129.4	305	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	912674	98.2	147	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		5893281	125.0	120	

QC Flag Legend
Processing Flags

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

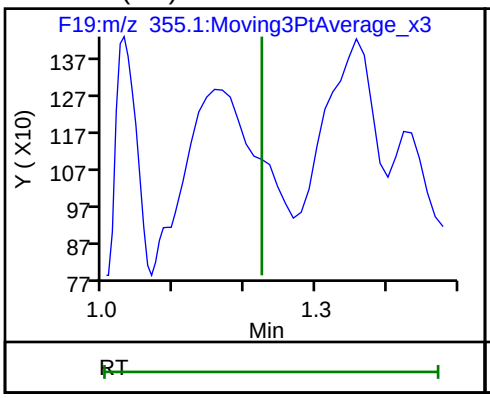
Report Date: 06-Apr-2022 07:10:07 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

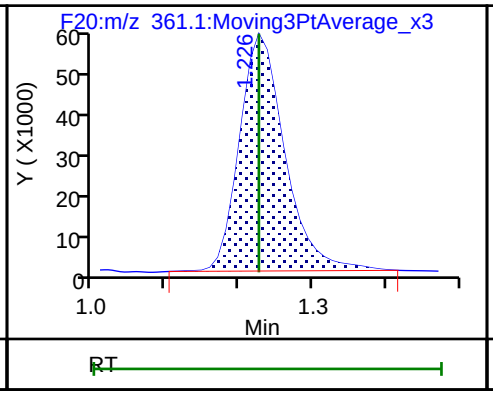
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05052.d

Injection Date:	05-Apr-2022 15:14:48	Instrument ID:	LC_LCMS7		
Lims ID:	280-160187-A-20-B	Lab Sample ID:	280-160187-20		
Client ID:	29SB202 (3-4)				
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		

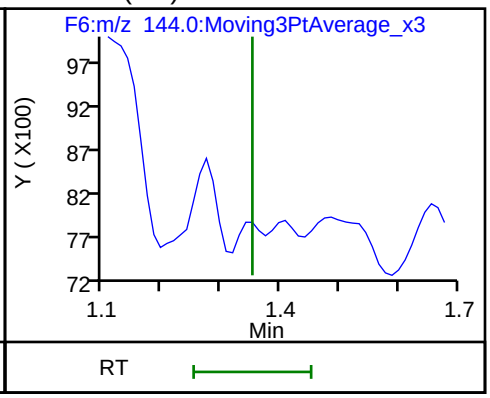
2 HMX (ND)



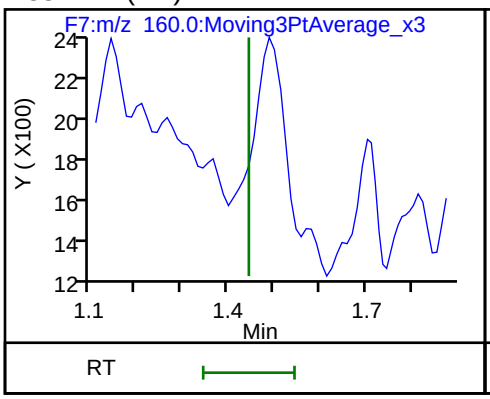
* 1 HMX-13C4



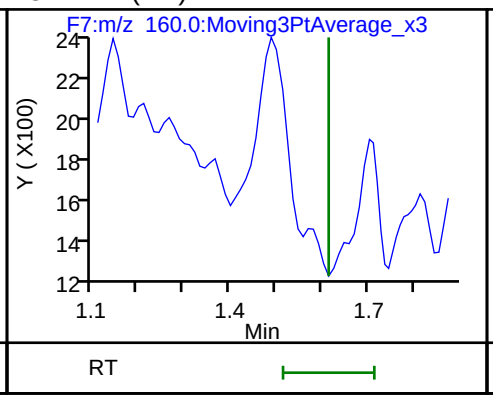
36 TNX (ND)



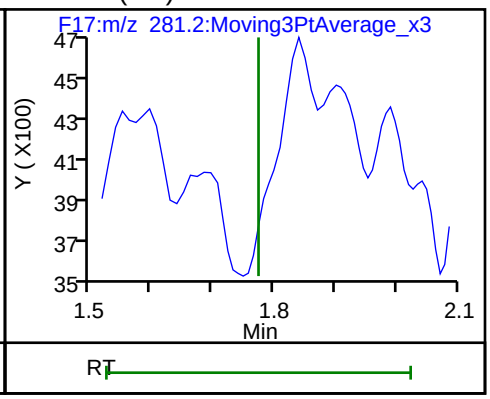
33 DNX (ND)



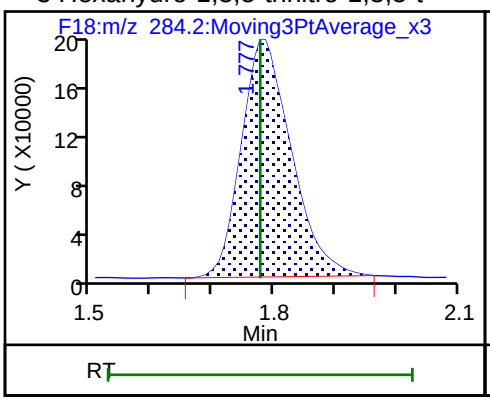
34 MNX (ND)



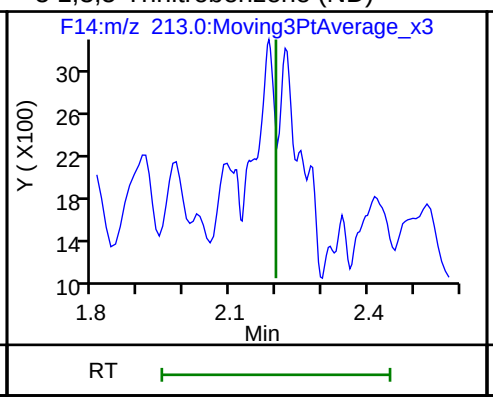
4 RDX (ND)



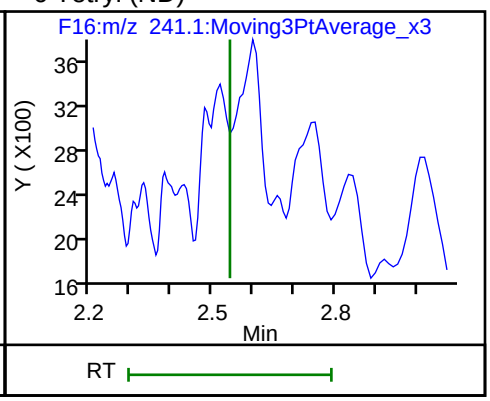
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



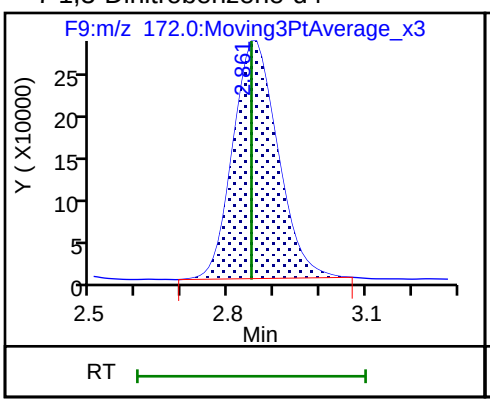
5 1,3,5-Trinitrobenzene (ND)



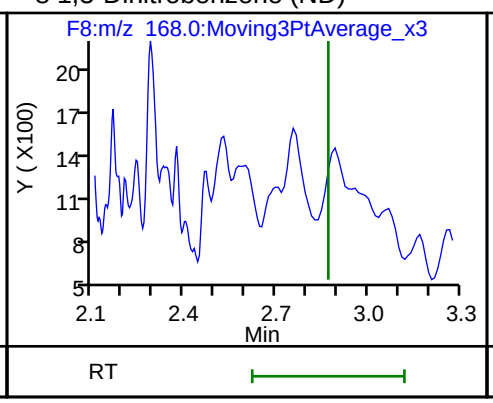
6 Tetryl (ND)



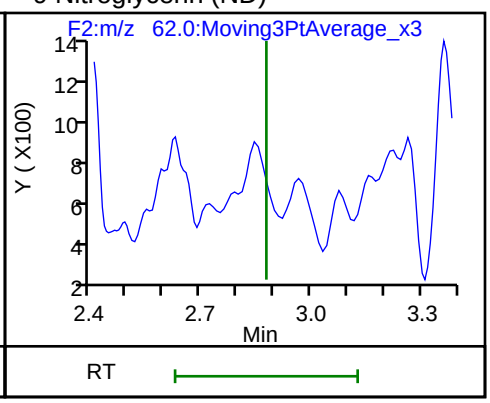
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



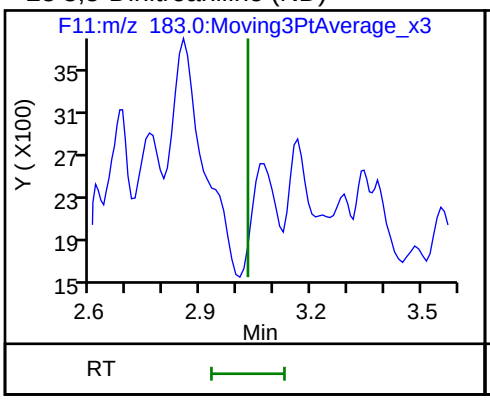
9 Nitroglycerin (ND)



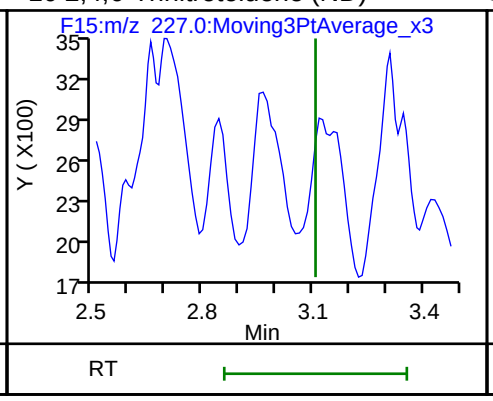
Report Date: 06-Apr-2022 07:10:07 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05052.d

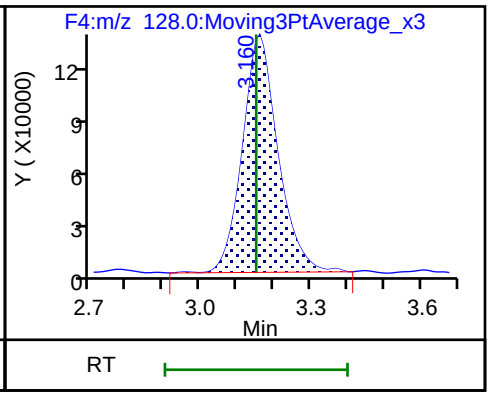
28 3,5-Dinitroaniline (ND)



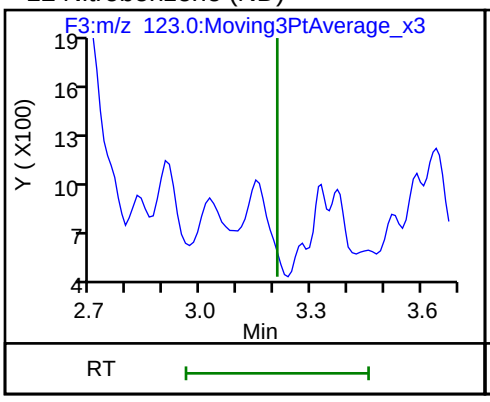
10 2,4,6-Trinitrotoluene (ND)



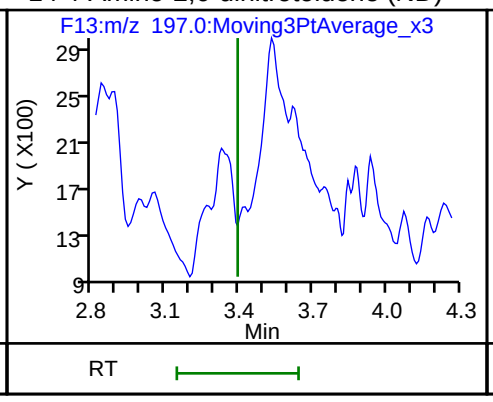
$ 11 Nitrobenzene-d5



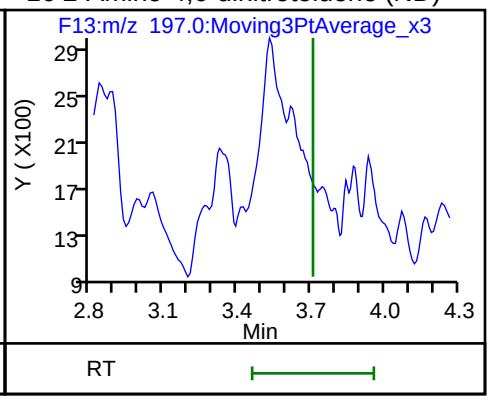
12 Nitrobenzene (ND)



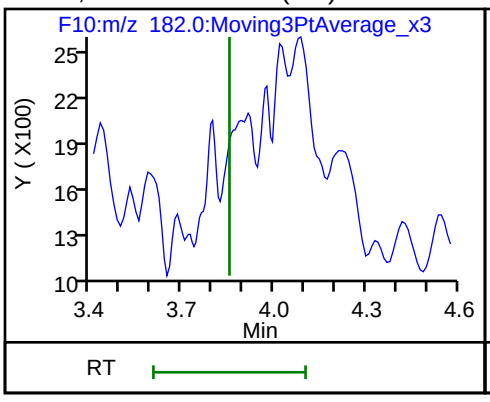
14 4-Amino-2,6-dinitrotoluene (ND)



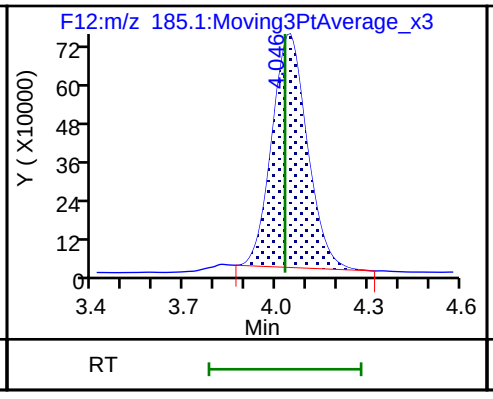
16 2-Amino-4,6-dinitrotoluene (ND)



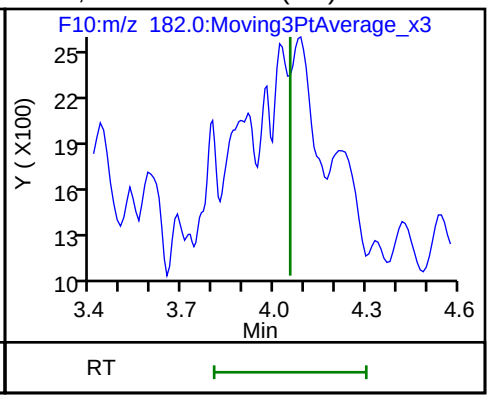
17 2,6-Dinitrotoluene (ND)



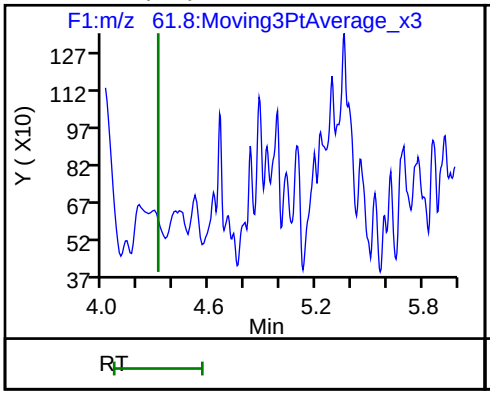
* 18 2,4-dinitrotoluene-d3



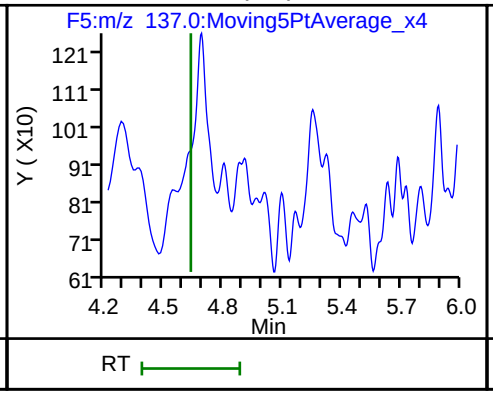
19 2,4-Dinitrotoluene (ND)



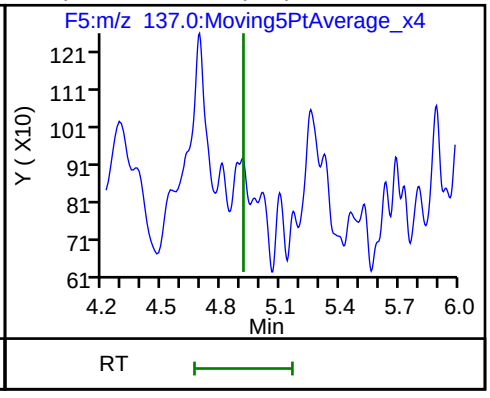
20 PETN (ND)



22 o-Nitrotoluene (ND)



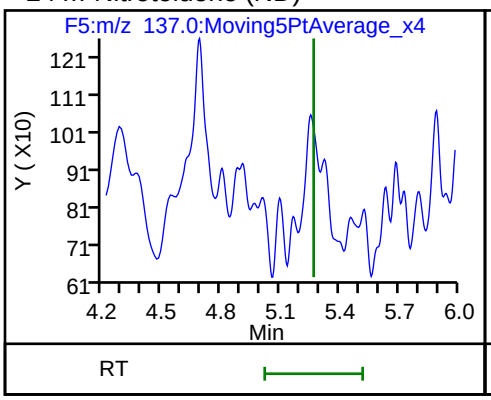
23 p-Nitrotoluene (ND)



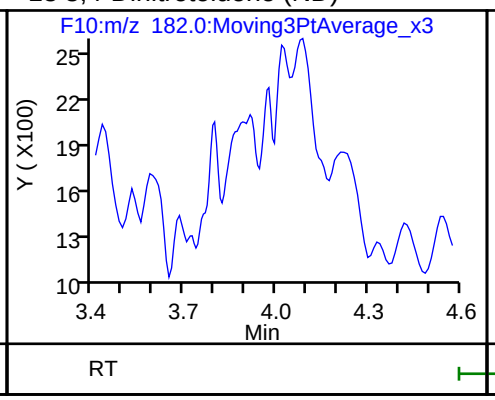
Report Date: 06-Apr-2022 07:10:07 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05052.d

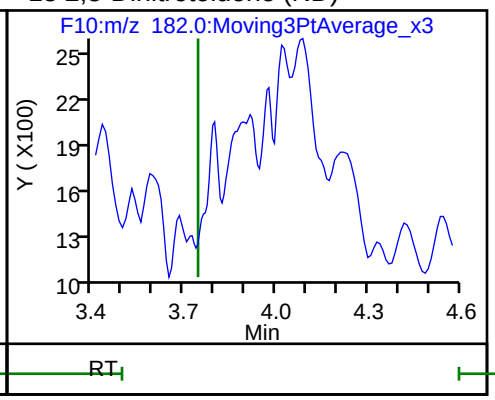
24 m-Nitrotoluene (ND)



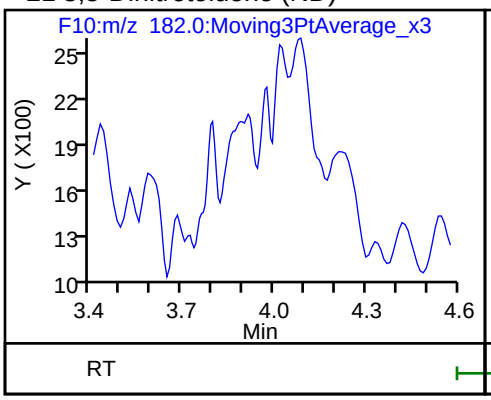
13 3,4-Dinitrotoluene (ND)



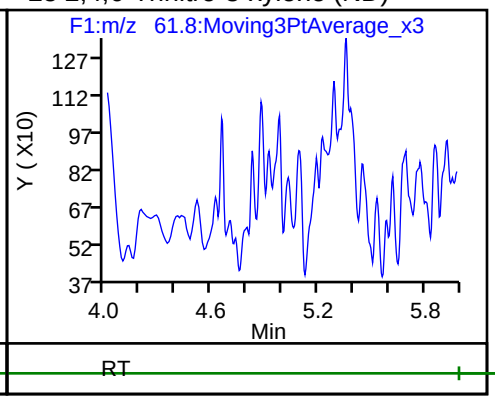
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



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

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05052.d				
Lims ID:	280-160187-A-20-B				
Client ID:	29SB202 (3-4)				
Sample Type:	Client				
Inject. Date:	05-Apr-2022 15:14:48	ALS Bottle#:	44	Worklist Smp#:	49
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160187-A-20-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 07:10:00	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:	06-Apr-2022 06:54:17		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	98.2	97.91

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB202 (11-12) | Lab Sample ID: 280-160187-21
Matrix: Solid | Lab File ID: ex722D05059.d
Analysis Method: 8321A | Date Collected: 03/22/2022 16:35
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:54
Sample wt/vol: 10.6(g) | Date Analyzed: 04/05/2022 15:59
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.: 570786 | 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 Q	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 Q	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 Q	0.094	0.047	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	94		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\ex722D05059.d
Lims ID: 280-160187-A-21-B
Client ID: 29SB202 (11-12)
Sample Type: Client
Inject. Date: 05-Apr-2022 15:59:36 ALS Bottle#: 2 Worklist Smp#: 56
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-21-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 06:55:41
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	1.226	1.226	0.0		277775	125.0	153	
33 DNX								
160.0	1.500	1.458	0.056	0.840	9989	-0.8091	4.2	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.785	1.777	0.008		962050	125.0	173	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1844100	129.4	236	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	849725	94.5	82.3	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		5523131	125.0	123	

QC Flag Legend

Processing Flags

Reagents:

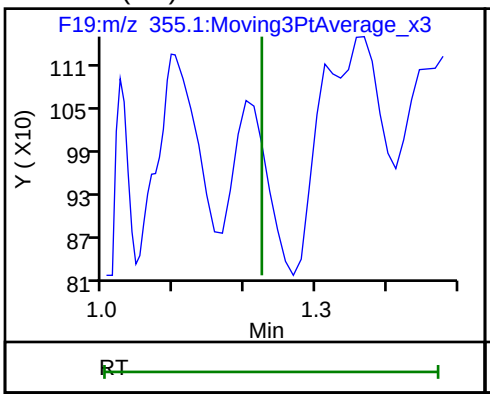
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:10:12 Chrom Revision: 2.3 18-Mar-2022 09:07:22

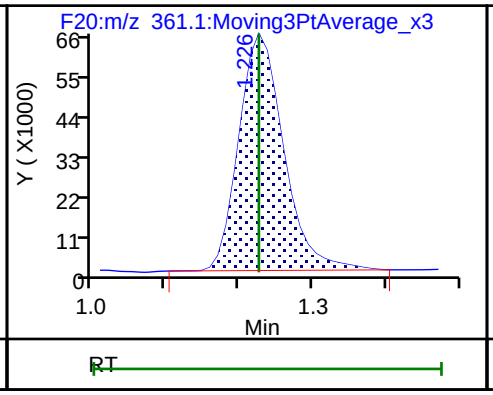
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05059.d
Injection Date: 05-Apr-2022 15:59:36 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-21-B Lab Sample ID: 280-160187-21
Client ID: 29SB202 (11-12)
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

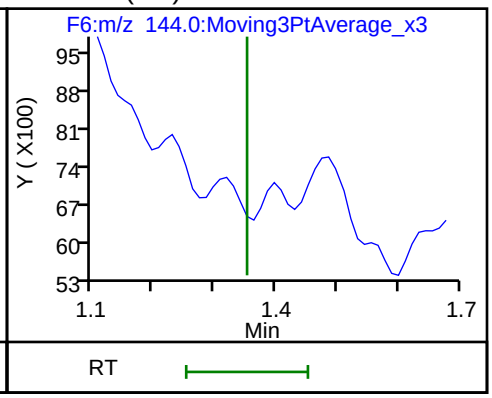
2 HMX (ND)



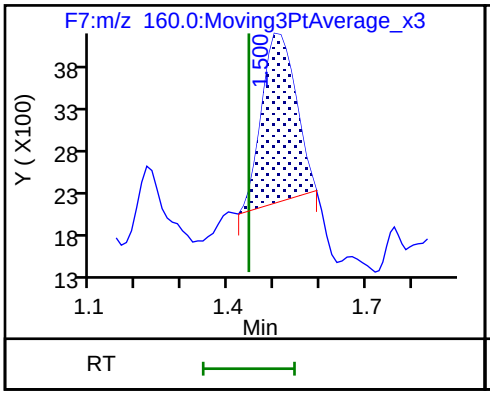
* 1 HMX-13C4



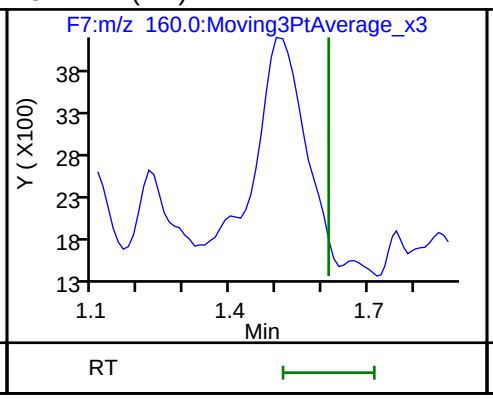
36 TNX (ND)



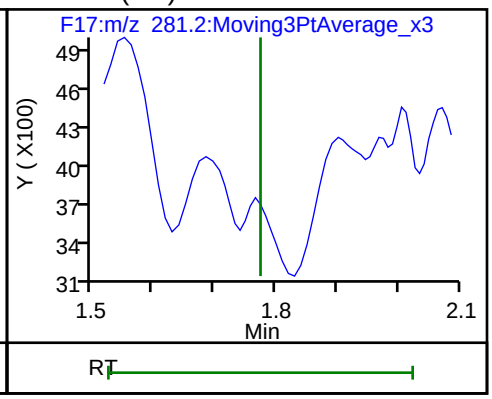
33 DNX



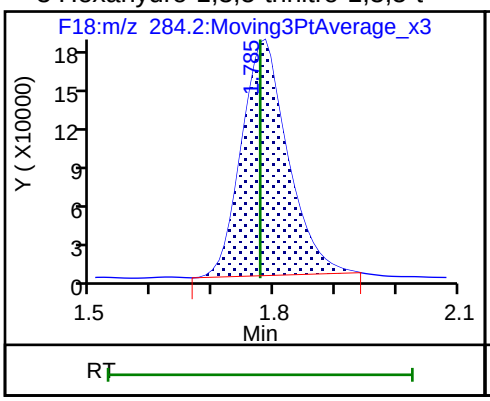
34 MNX (ND)



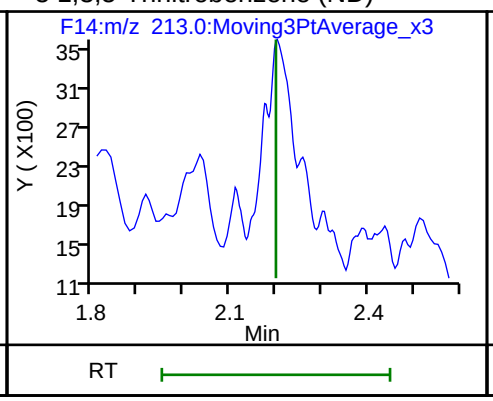
4 RDX (ND)



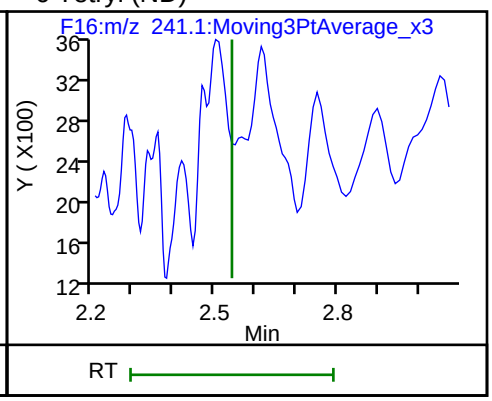
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



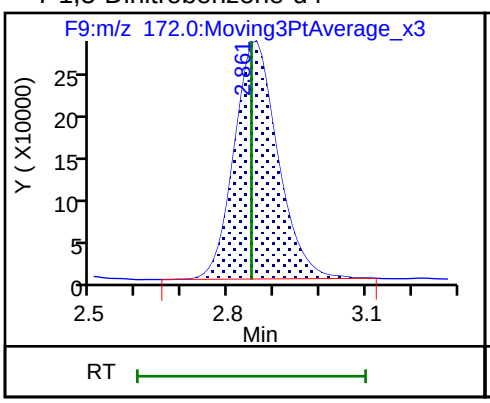
5 1,3,5-Trinitrobenzene (ND)



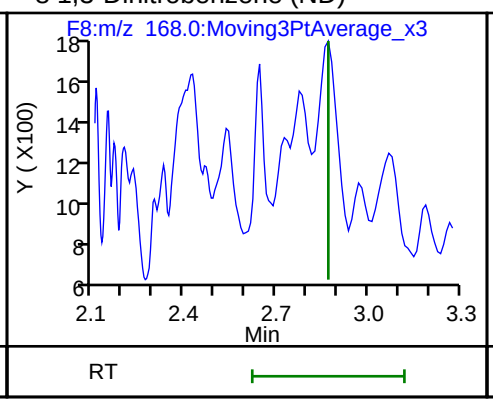
6 Tetryl (ND)



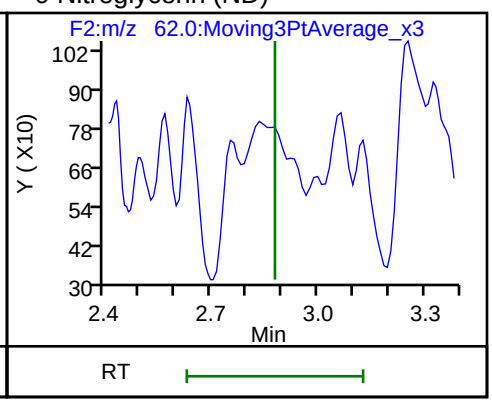
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



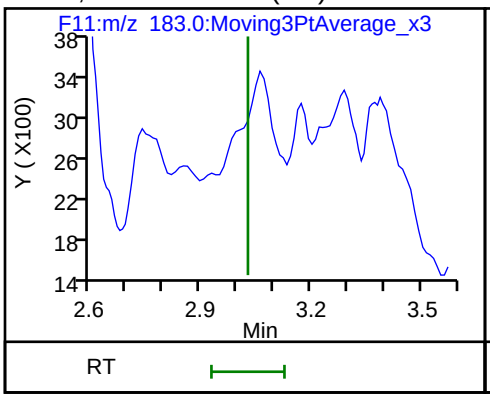
9 Nitroglycerin (ND)



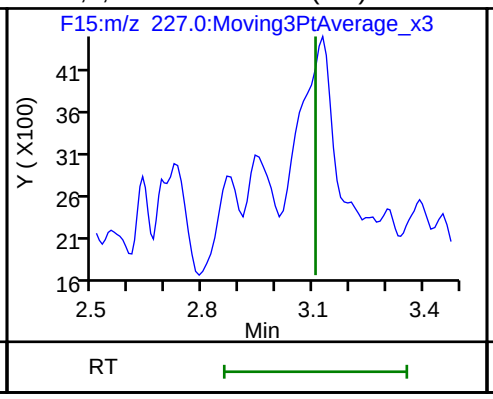
Report Date: 06-Apr-2022 07:10:12 Chrom Revision: 2.3 18-Mar-2022 09:07:22

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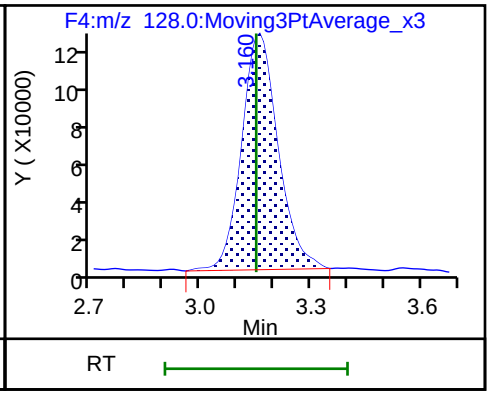
28 3,5-Dinitroaniline (ND)



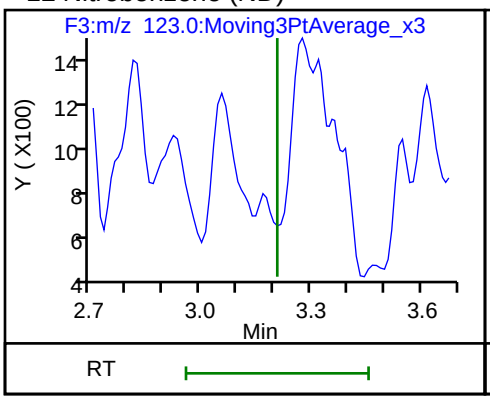
10 2,4,6-Trinitrotoluene (ND)



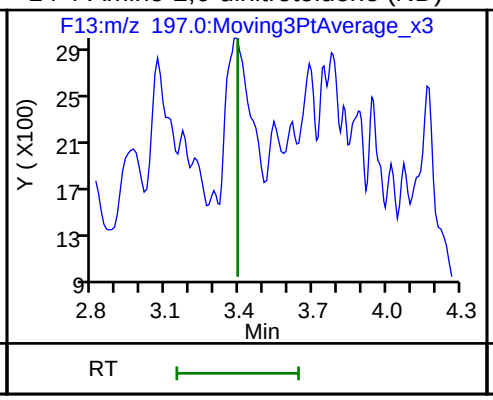
$ 11 Nitrobenzene-d5



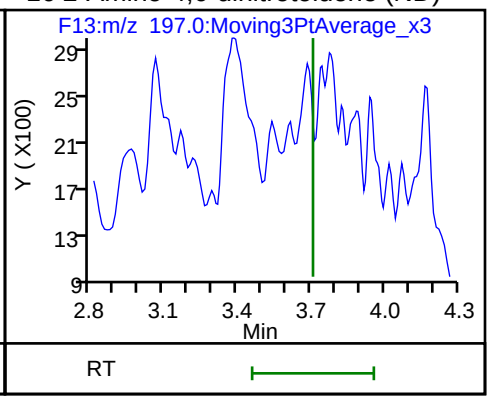
12 Nitrobenzene (ND)



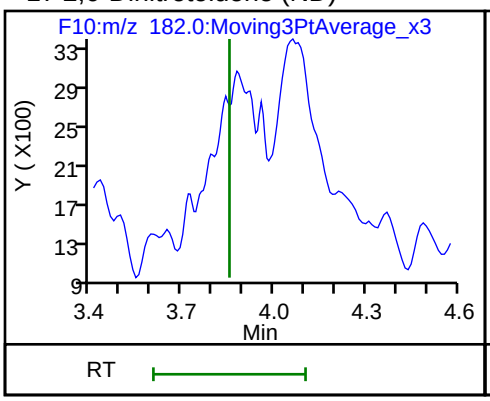
14 4-Amino-2,6-dinitrotoluene (ND)



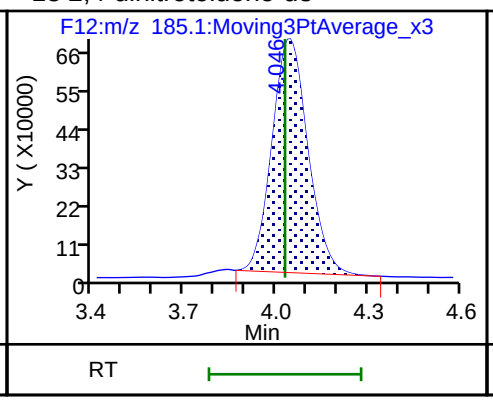
16 2-Amino-4,6-dinitrotoluene (ND)



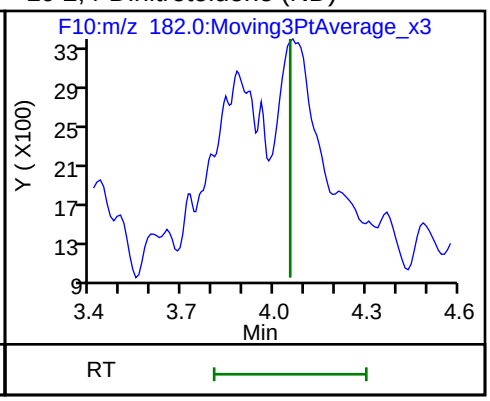
17 2,6-Dinitrotoluene (ND)



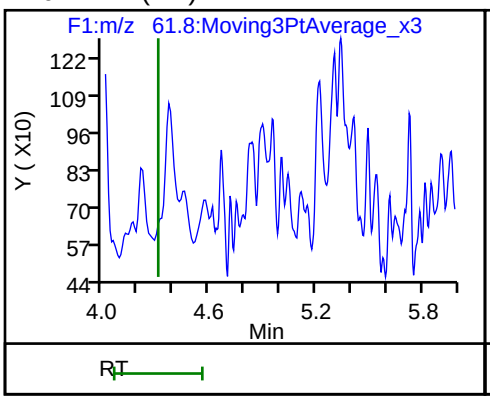
* 18 2,4-dinitrotoluene-d3



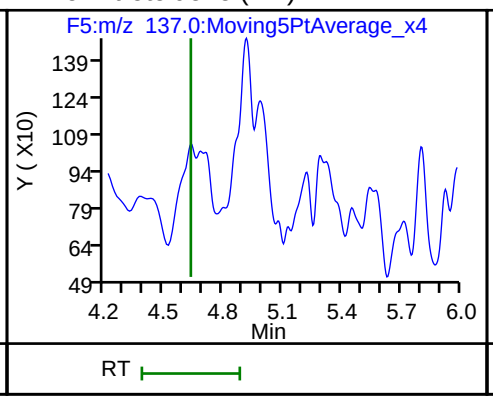
19 2,4-Dinitrotoluene (ND)



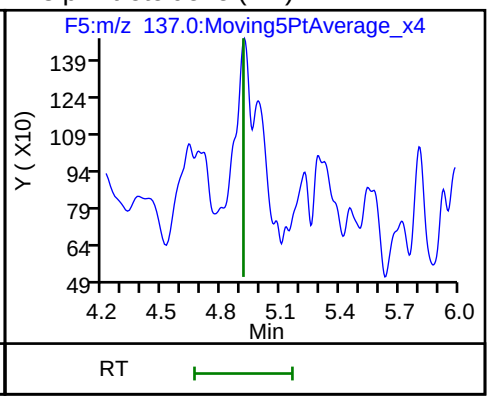
20 PETN (ND)



22 o-Nitrotoluene (ND)



23 p-Nitrotoluene (ND)

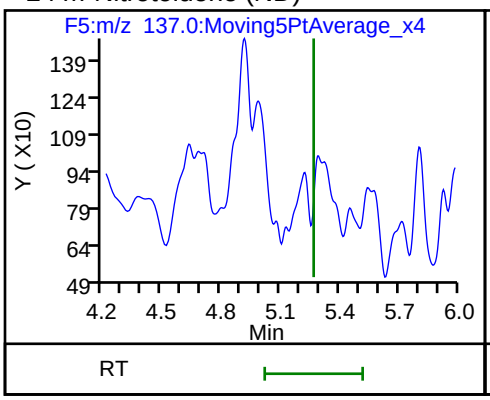


Report Date: 06-Apr-2022 07:10:12

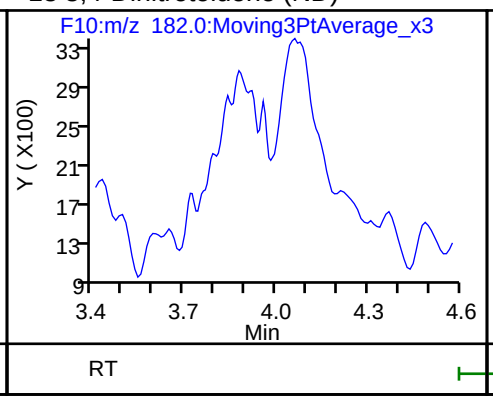
Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05059.d

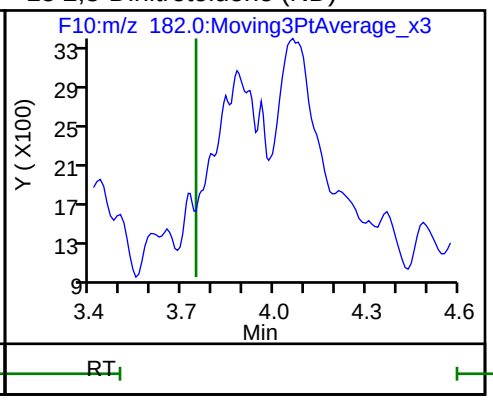
24 m-Nitrotoluene (ND)



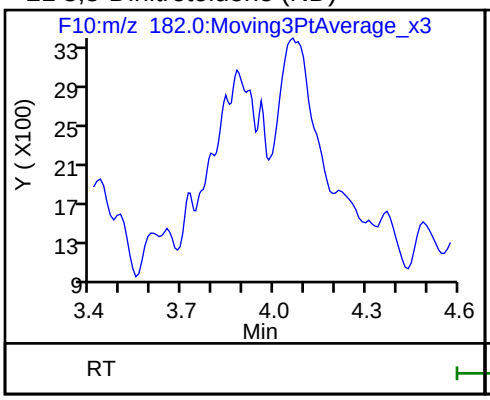
13 3,4-Dinitrotoluene (ND)



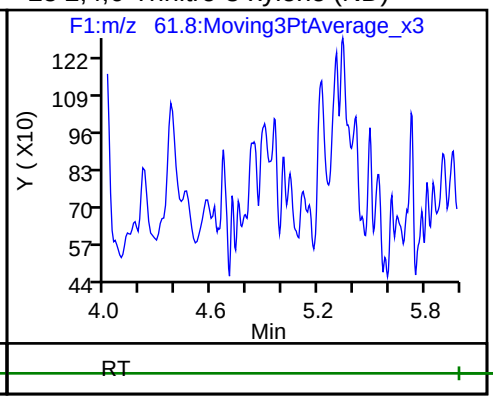
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 07:10:12 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05059.d				
Lims ID:	280-160187-A-21-B				
Client ID:	29SB202 (11-12)				
Sample Type:	Client				
Inject. Date:	05-Apr-2022 15:59:36	ALS Bottle#:	2	Worklist Smp#:	56
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160187-A-21-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 06:55:41		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	94.5	94.17

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB202 (15-15.5) | Lab Sample ID: 280-160187-22
Matrix: Solid | Lab File ID: ex722D05060.d
Analysis Method: 8321A | Date Collected: 03/22/2022 16:40
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:54
Sample wt/vol: 10(g) | Date Analyzed: 04/05/2022 16:06
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.: 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 Q	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 Q	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 Q	0.10	0.050	0.039

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	92		68-140

Report Date: 06-Apr-2022 07:10:13 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\ex722D05060.d
Lims ID: 280-160187-A-22-B
Client ID: 29SB202 (15-15.5)
Sample Type: Client
Inject. Date: 05-Apr-2022 16:06:00 ALS Bottle#: 3 Worklist Smp#: 57
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-22-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 06:55:51
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	1.226	1.226	0.0		280186	125.0	134	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		973382	125.0	289	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1834411	129.4	189	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.783	829039	92.6	126	
* 18 2,4-dinitrotoluene-d3								
185.1	4.037	4.028	0.009		5985955	125.0	475	

QC Flag Legend
Processing Flags

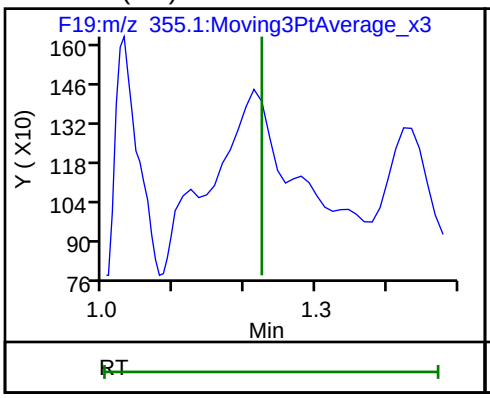
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:10:13 Chrom Revision: 2.3 18-Mar-2022 09:07:22

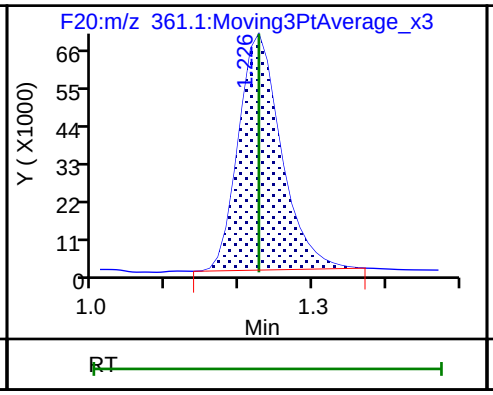
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05060.d
Injection Date: 05-Apr-2022 16:06:00 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-22-B Lab Sample ID: 280-160187-22
Client ID: 29SB202 (15-15.5)
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

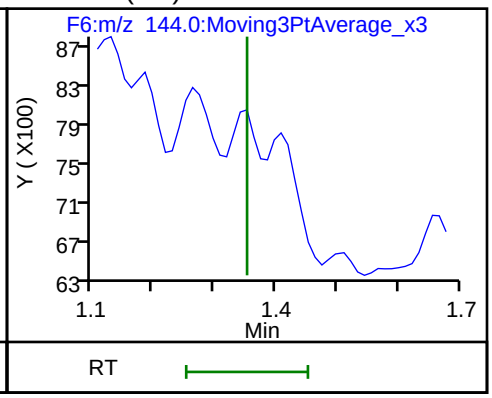
2 HMX (ND)



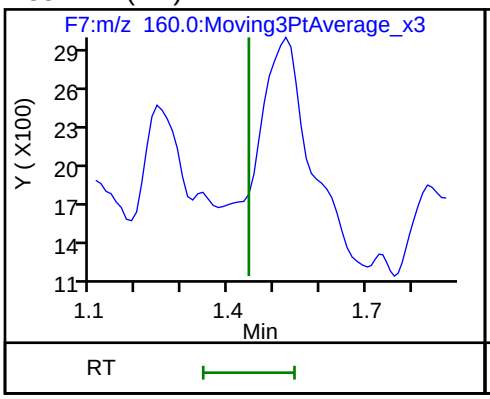
* 1 HMX-13C4



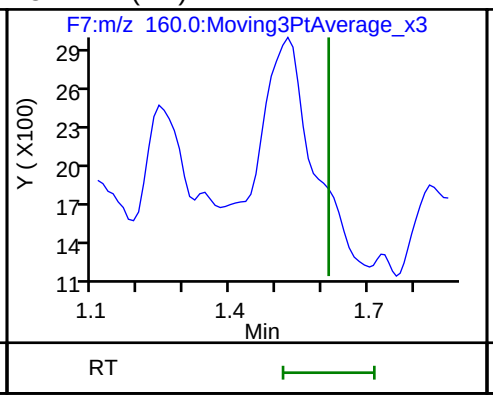
36 TNX (ND)



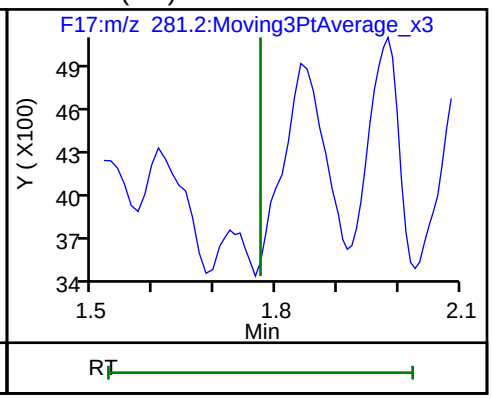
33 DNX (ND)



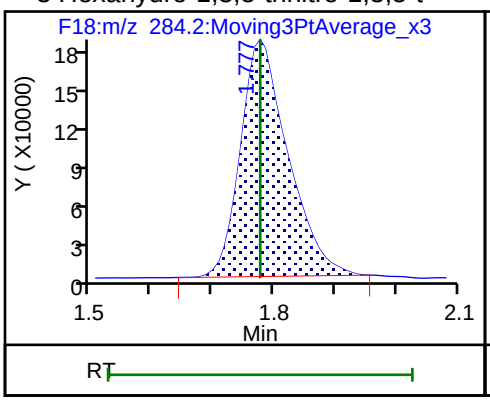
34 MNX (ND)



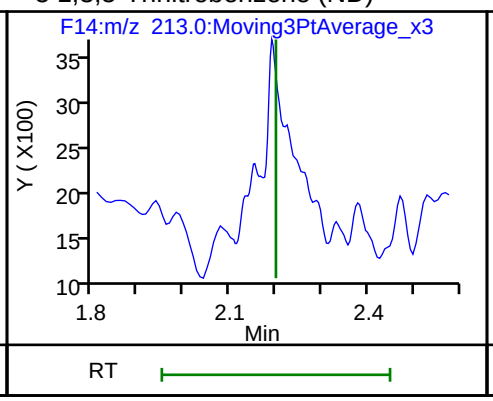
4 RDX (ND)



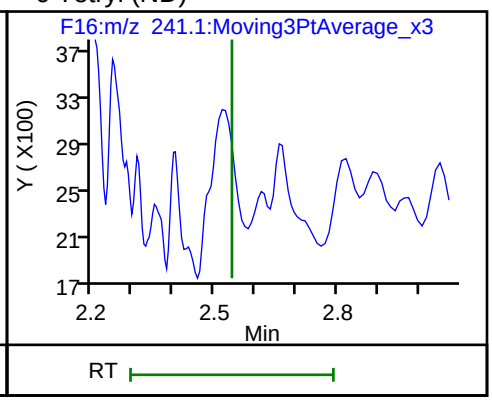
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



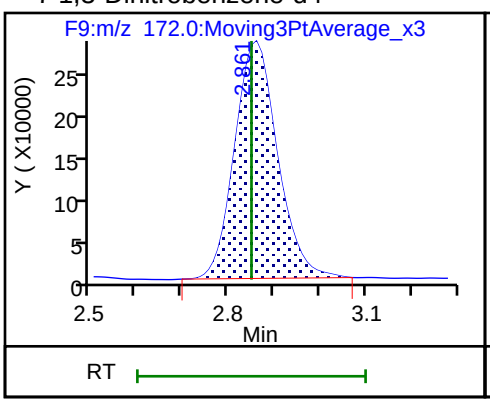
5 1,3,5-Trinitrobenzene (ND)



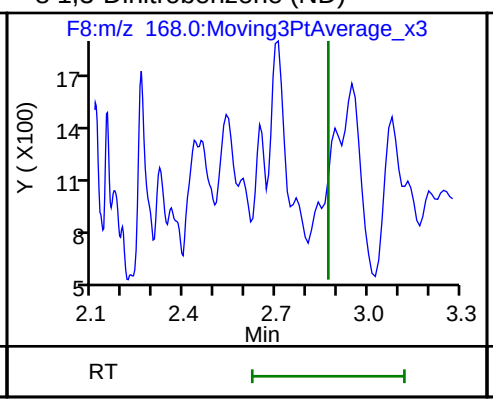
6 Tetryl (ND)



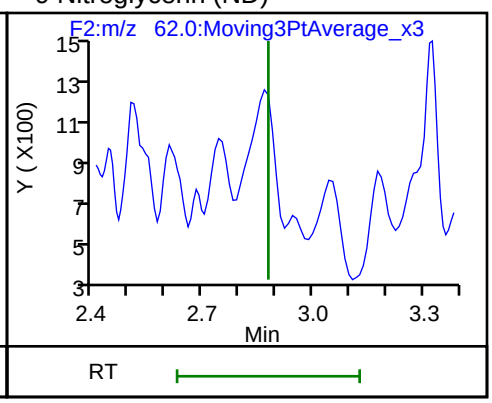
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



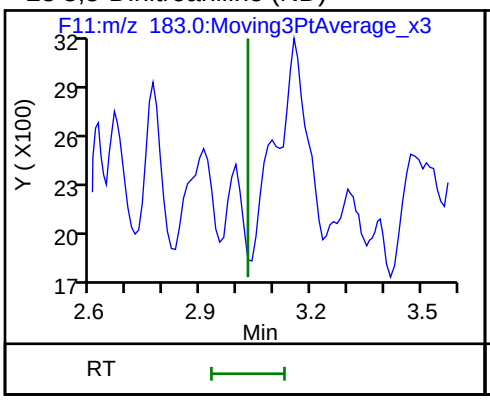
9 Nitroglycerin (ND)



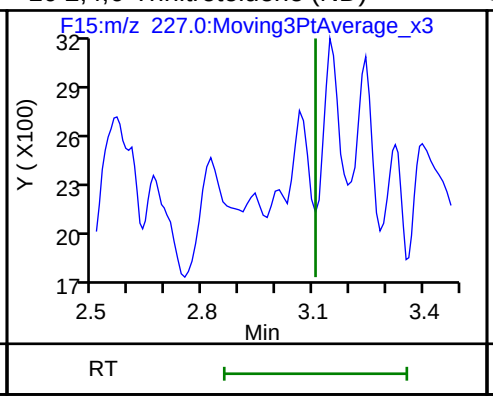
Report Date: 06-Apr-2022 07:10:13 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05060.d

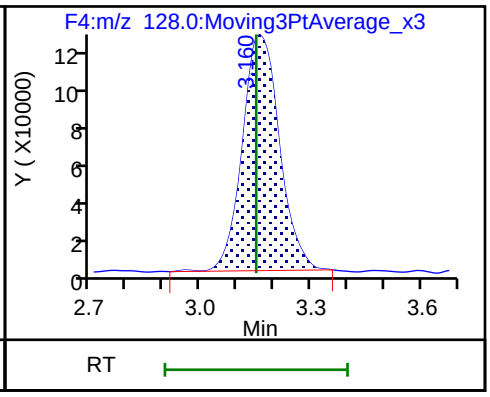
28 3,5-Dinitroaniline (ND)



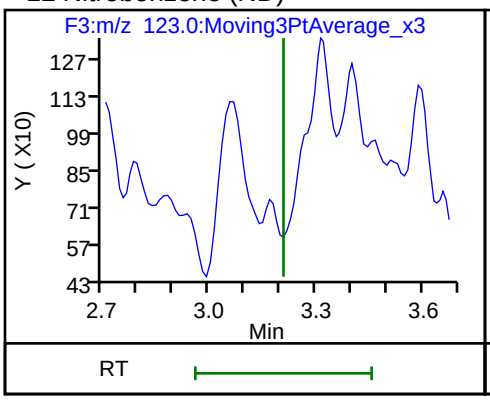
10 2,4,6-Trinitrotoluene (ND)



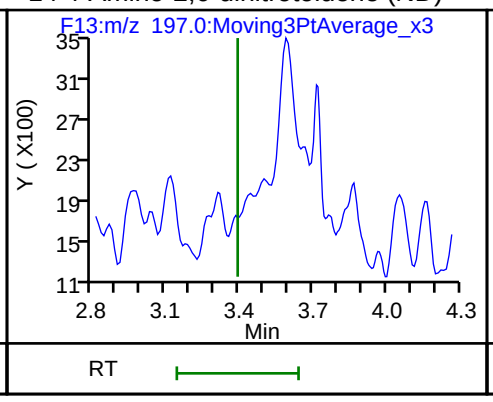
$ 11 Nitrobenzene-d5



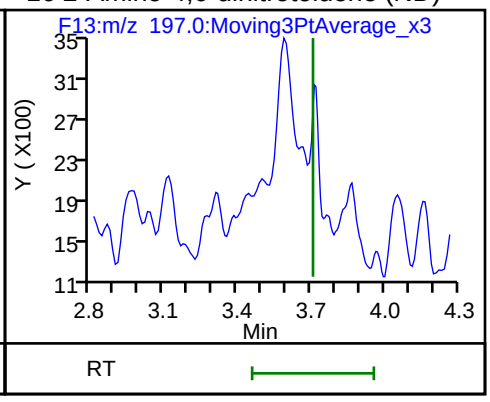
12 Nitrobenzene (ND)



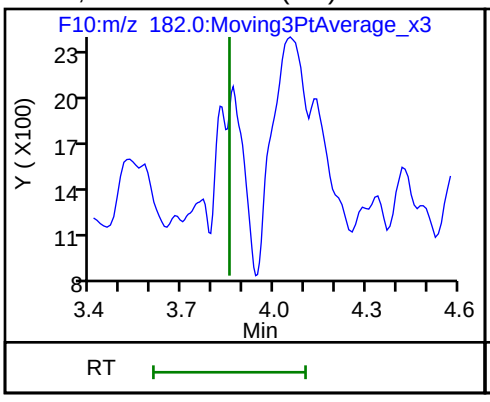
14 4-Amino-2,6-dinitrotoluene (ND)



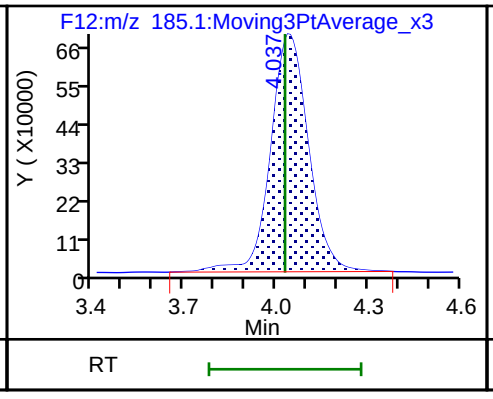
16 2-Amino-4,6-dinitrotoluene (ND)



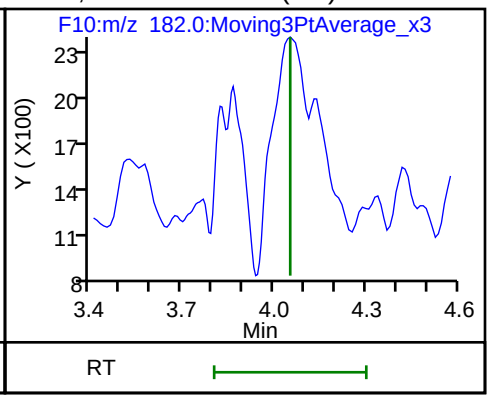
17 2,6-Dinitrotoluene (ND)



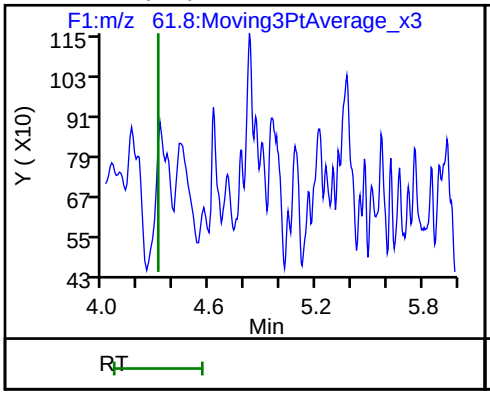
* 18 2,4-dinitrotoluene-d3



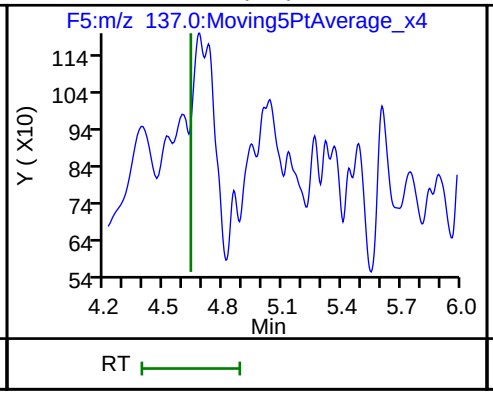
19 2,4-Dinitrotoluene (ND)



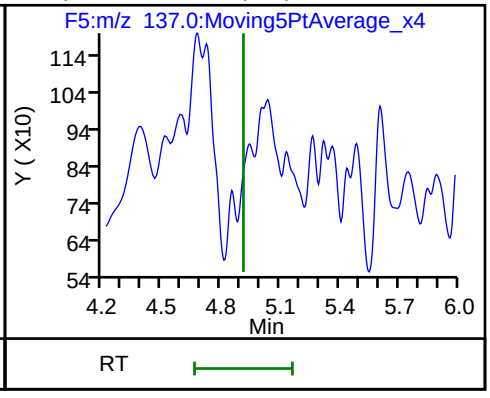
20 PETN (ND)



22 o-Nitrotoluene (ND)

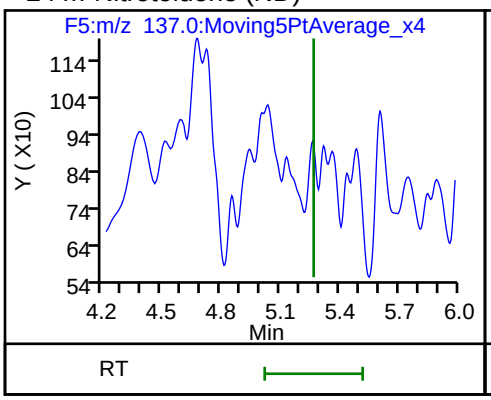


23 p-Nitrotoluene (ND)

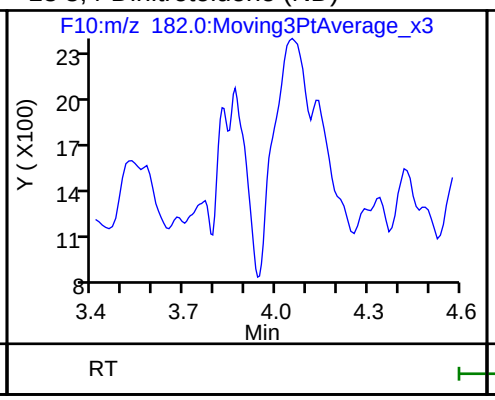


Report Date: 06-Apr-2022 07:10:13
Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05060.d

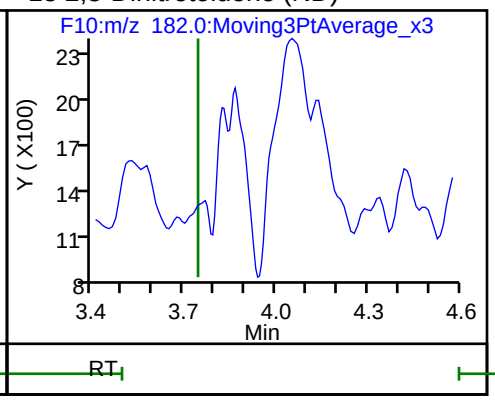
24 m-Nitrotoluene (ND)



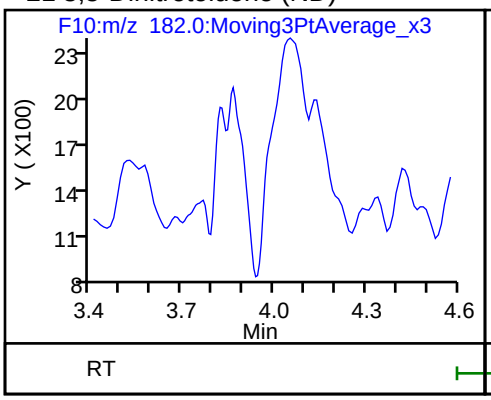
13 3,4-Dinitrotoluene (ND)



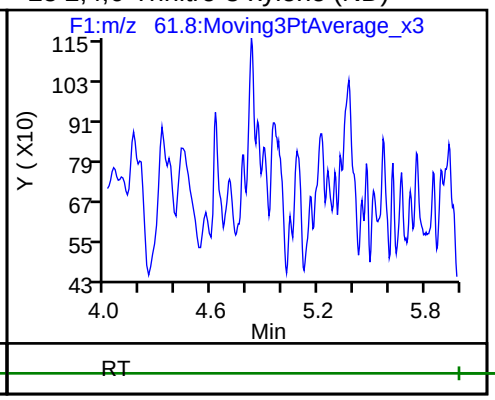
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 07:10:13 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05060.d				
Lims ID:	280-160187-A-22-B				
Client ID:	29SB202 (15-15.5)				
Sample Type:	Client				
Inject. Date:	05-Apr-2022 16:06:00	ALS Bottle#:	3	Worklist Smp#:	57
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160187-A-22-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 06:55:51		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	92.6	92.34

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB200 (15-15.5) | Lab Sample ID: 280-160187-23
Matrix: Solid | Lab File ID: ex722D05061.d
Analysis Method: 8321A | Date Collected: 03/22/2022 16:55
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:54
Sample wt/vol: 10.46(g) | Date Analyzed: 04/05/2022 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.: 570786 | 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 Q	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 Q	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 Q	0.096	0.048	0.037

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

Report Date: 06-Apr-2022 07:10:14 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\ex722D05061.d
Lims ID: 280-160187-A-23-B
Client ID: 29SB200 (15-15.5)
Sample Type: Client
Inject. Date: 05-Apr-2022 16:12:24 ALS Bottle#: 4 Worklist Smp#: 58
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-23-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 06:56:05
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		285771	125.0	123	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		983818	125.0	145	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1806212	129.4	227	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.783	843035	95.7	118	
* 18 2,4-dinitrotoluene-d3								
185.1	4.037	4.028	0.009		5652116	125.0	113	

QC Flag Legend
Processing Flags

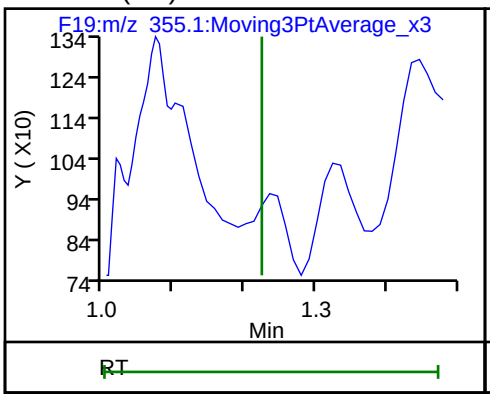
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:10:14 Chrom Revision: 2.3 18-Mar-2022 09:07:22

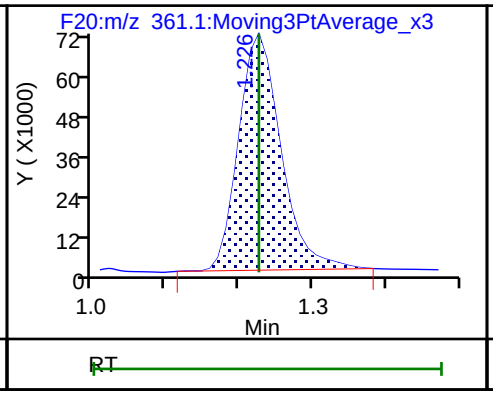
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05061.d
Injection Date: 05-Apr-2022 16:12:24 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-23-B Lab Sample ID: 280-160187-23
Client ID: 29SB200 (15-15.5)
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

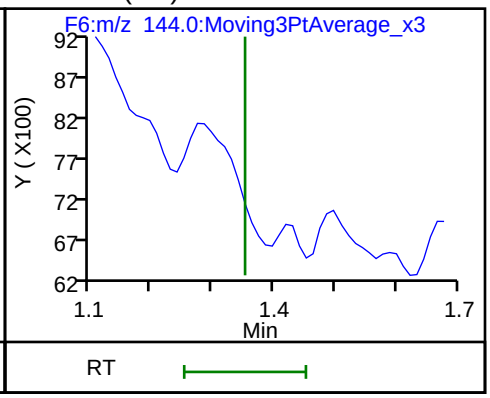
2 HMX (ND)



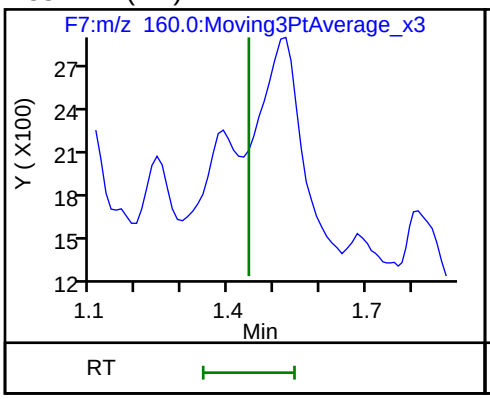
* 1 HMX-13C4



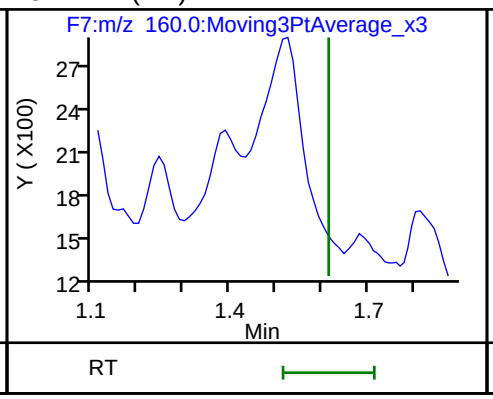
36 TNX (ND)



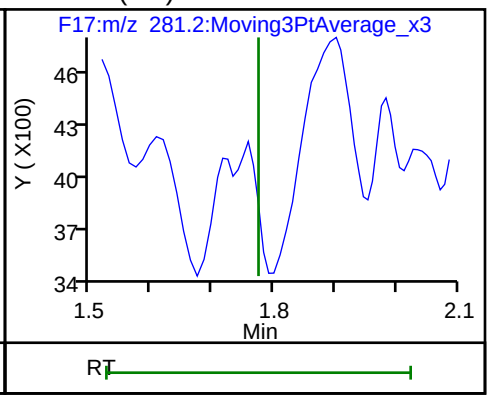
33 DNX (ND)



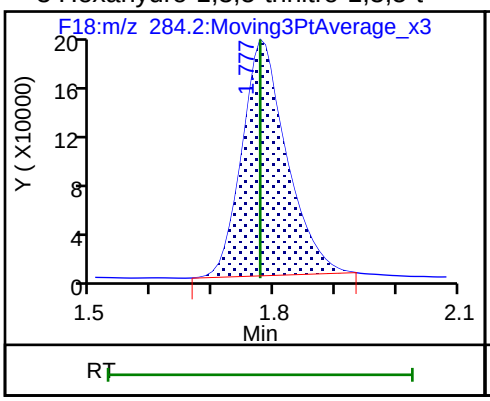
34 MNX (ND)



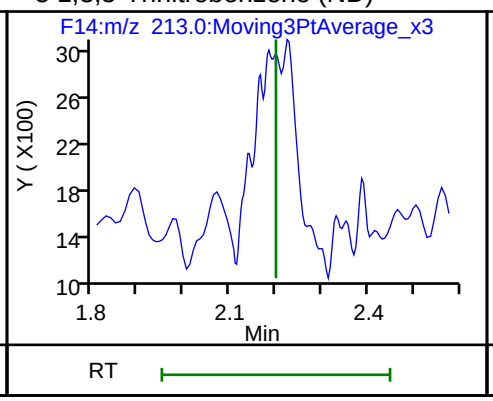
4 RDX (ND)



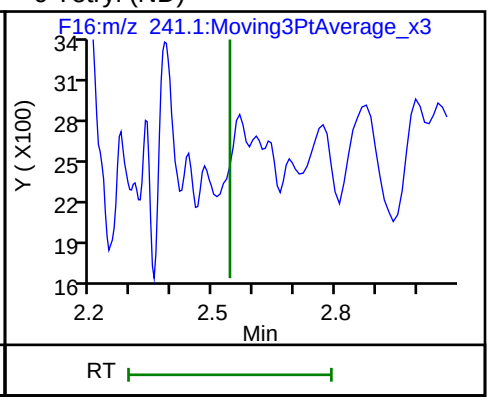
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



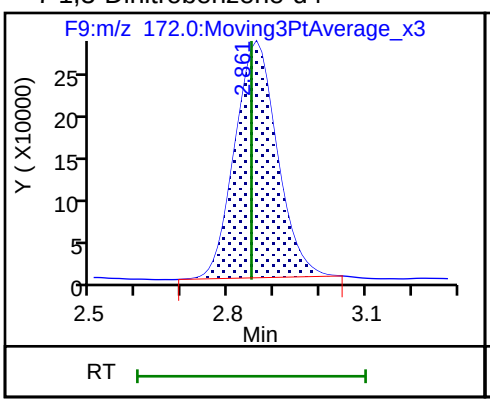
5 1,3,5-Trinitrobenzene (ND)



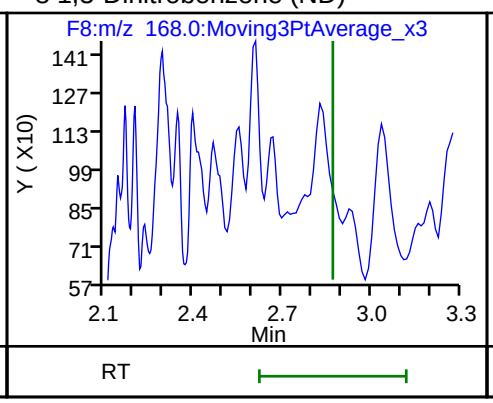
6 Tetryl (ND)



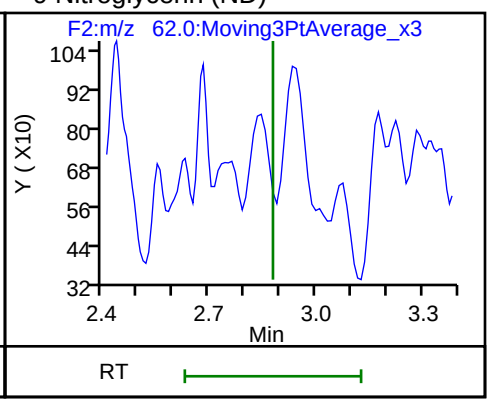
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



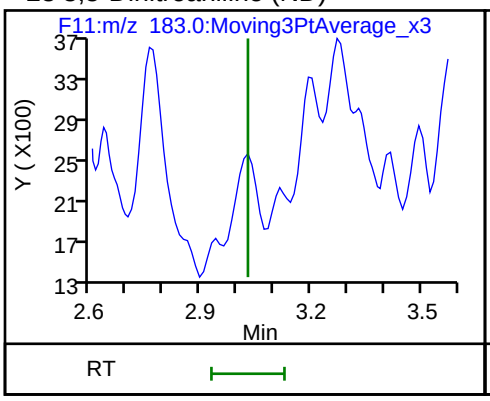
9 Nitroglycerin (ND)



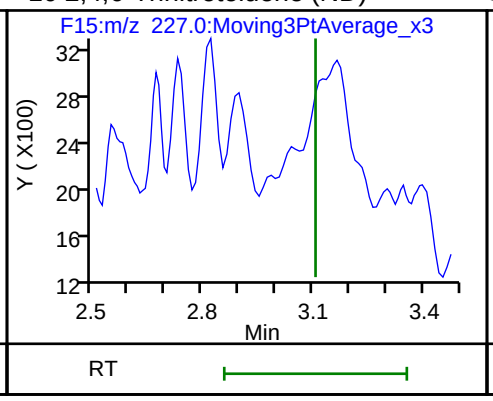
Report Date: 06-Apr-2022 07:10:14 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05061.d

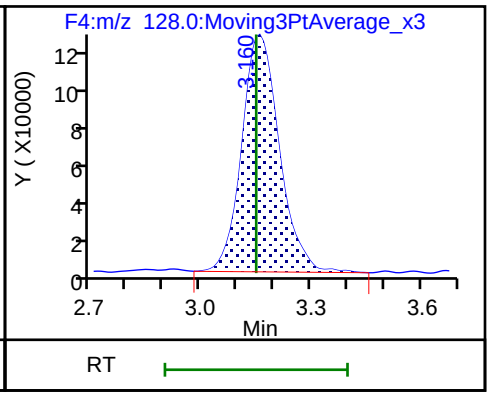
28 3,5-Dinitroaniline (ND)



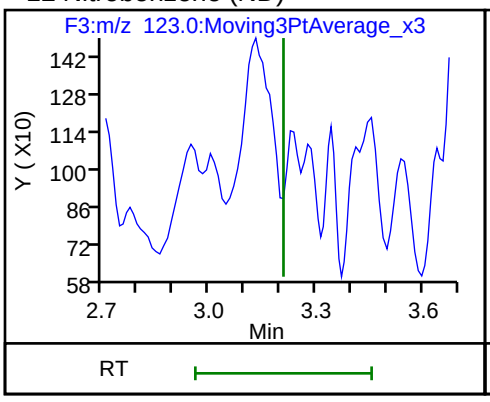
10 2,4,6-Trinitrotoluene (ND)



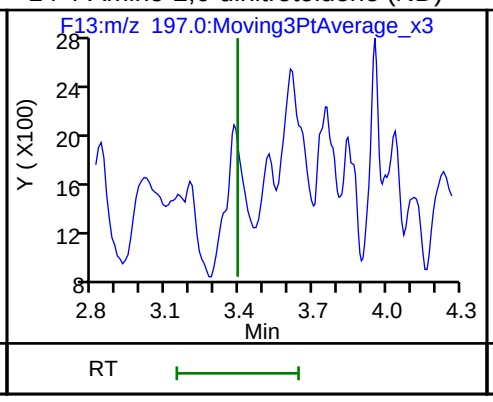
$ 11 Nitrobenzene-d5



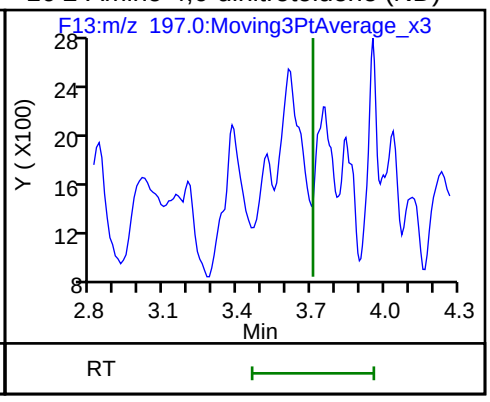
12 Nitrobenzene (ND)



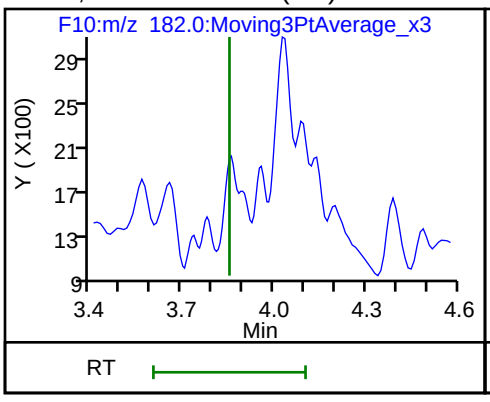
14 4-Amino-2,6-dinitrotoluene (ND)



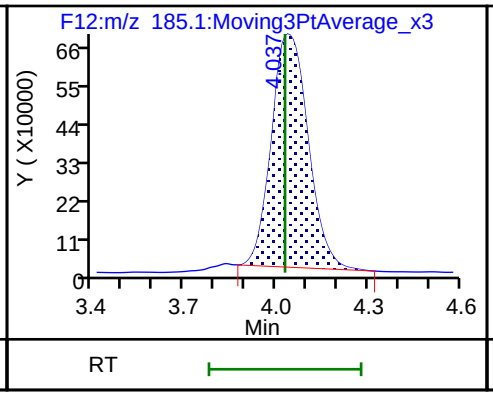
16 2-Amino-4,6-dinitrotoluene (ND)



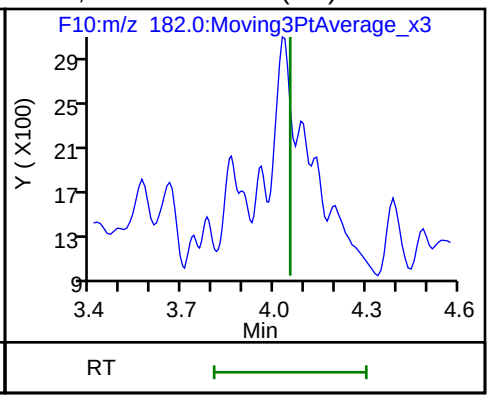
17 2,6-Dinitrotoluene (ND)



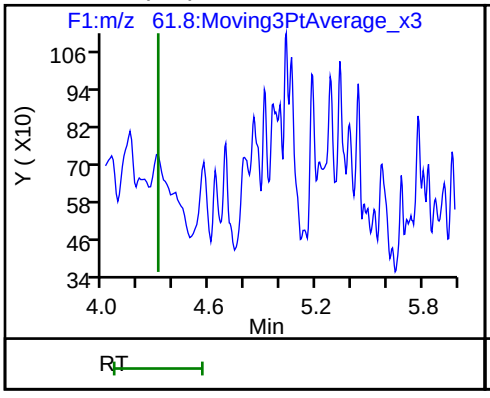
* 18 2,4-dinitrotoluene-d3



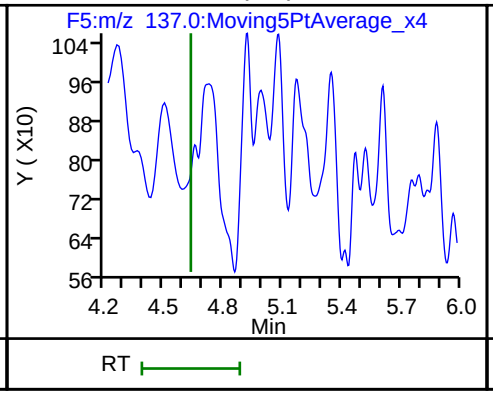
19 2,4-Dinitrotoluene (ND)



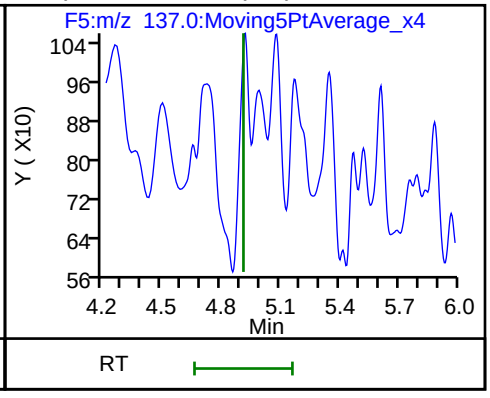
20 PETN (ND)



22 o-Nitrotoluene (ND)

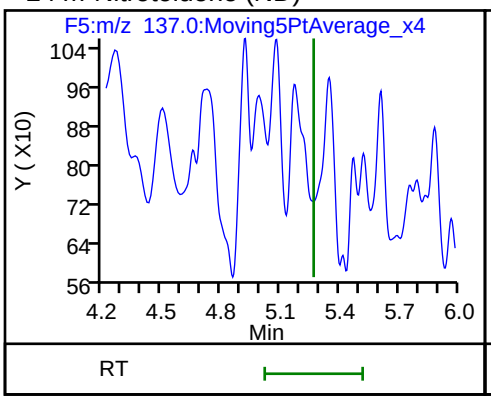


23 p-Nitrotoluene (ND)

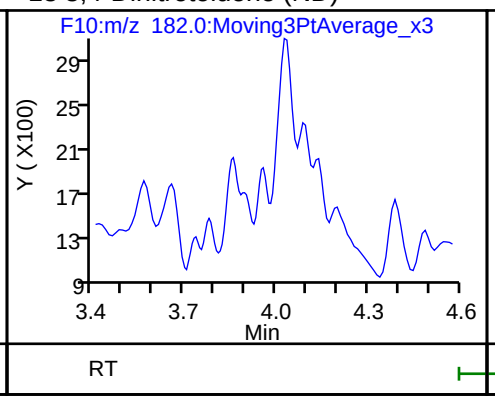


Report Date: 06-Apr-2022 07:10:14
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05061.d

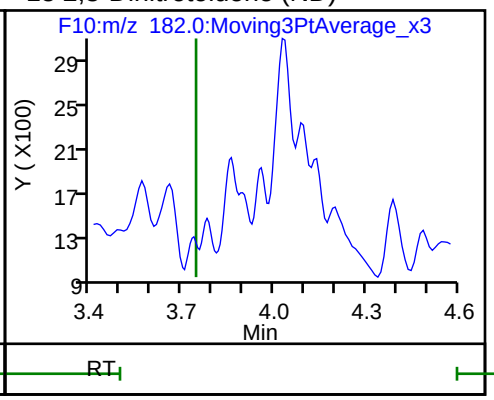
24 m-Nitrotoluene (ND)



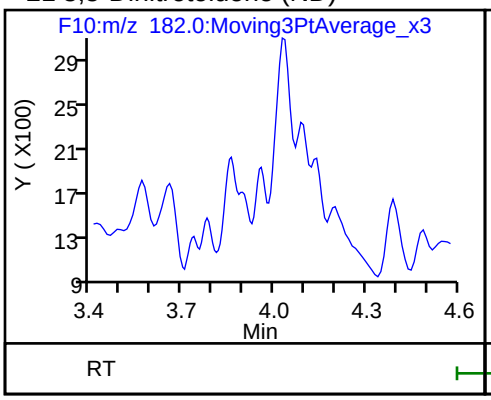
13 3,4-Dinitrotoluene (ND)



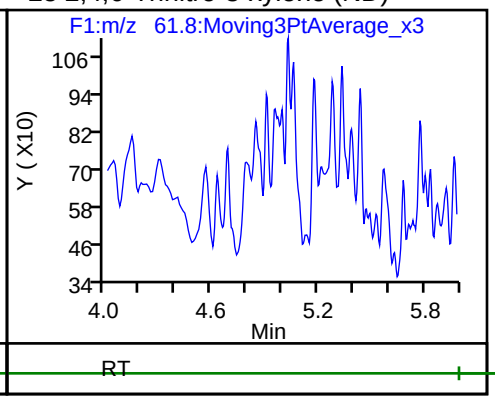
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 07:10:14 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05061.d				
Lims ID:	280-160187-A-23-B				
Client ID:	29SB200 (15-15.5)				
Sample Type:	Client				
Inject. Date:	05-Apr-2022 16:12:24	ALS Bottle#:	4	Worklist Smp#:	58
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160187-A-23-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 06:56:05		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	95.7	95.40

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: DUP-03 | Lab Sample ID: 280-160187-24
Matrix: Solid | Lab File ID: ex722D05062.d
Analysis Method: 8321A | Date Collected: 03/22/2022 18:00
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:54
Sample wt/vol: 10.51(g) | Date Analyzed: 04/05/2022 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.: 570786 | 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 Q	0.095	0.048	0.038
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	0.048	U Q	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 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	94		68-140

Report Date: 06-Apr-2022 07:10:14 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\ex722D05062.d
Lims ID: 280-160187-A-24-B
Client ID: DUP-03
Sample Type: Client
Inject. Date: 05-Apr-2022 16:18:48 ALS Bottle#: 5 Worklist Smp#: 59
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-24-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 06:56:23
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	1.226	1.226	0.0		306553	125.0	328	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		1009827	125.0	344	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1832493	129.4	245	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	841125	94.1	110	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		5630922	125.0	127	

QC Flag Legend
Processing Flags

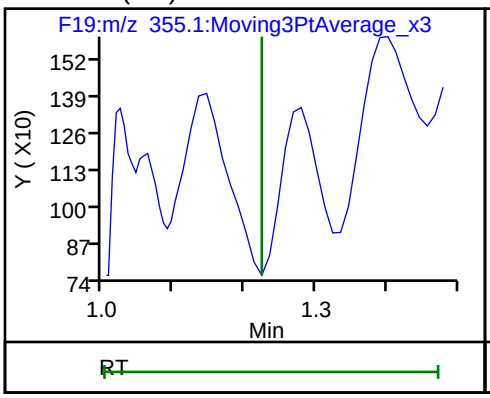
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:10:14 Chrom Revision: 2.3 18-Mar-2022 09:07:22

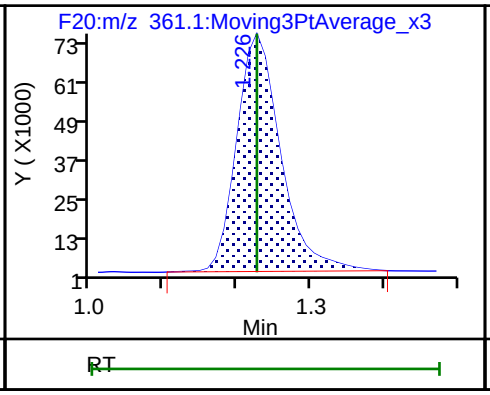
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05062.d
Injection Date: 05-Apr-2022 16:18:48 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-24-B Lab Sample ID: 280-160187-24
Client ID: DUP-03
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

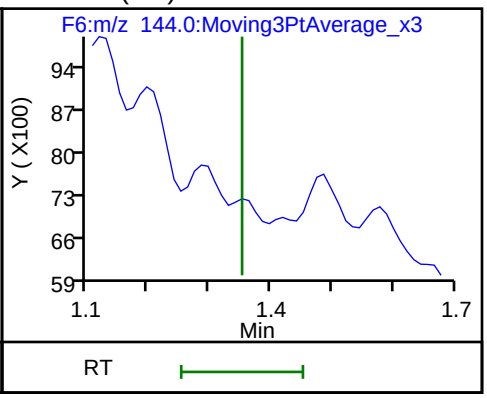
2 HMX (ND)



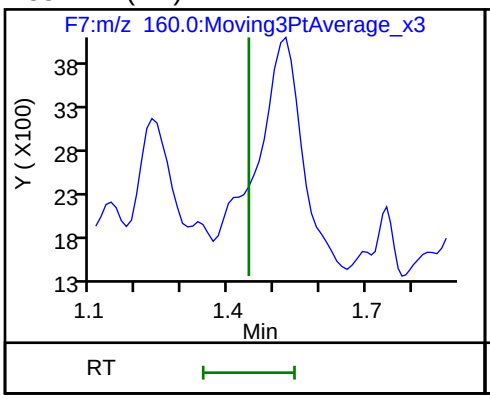
* 1 HMX-13C4



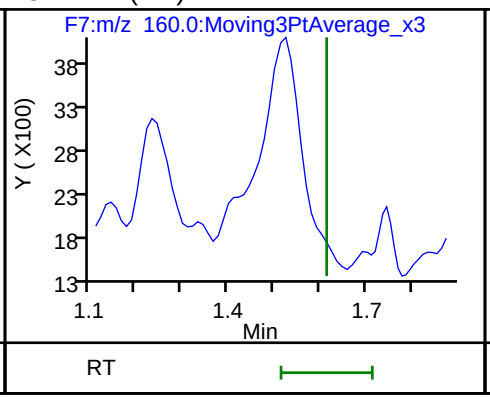
36 TNX (ND)



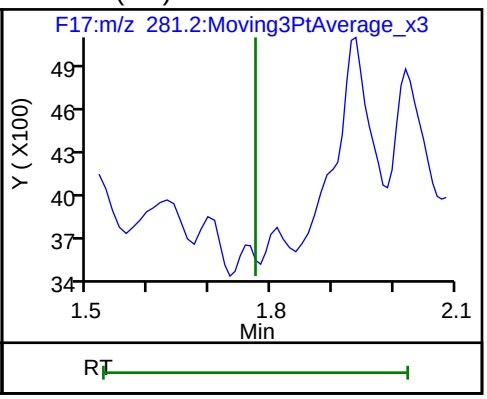
33 DNX (ND)



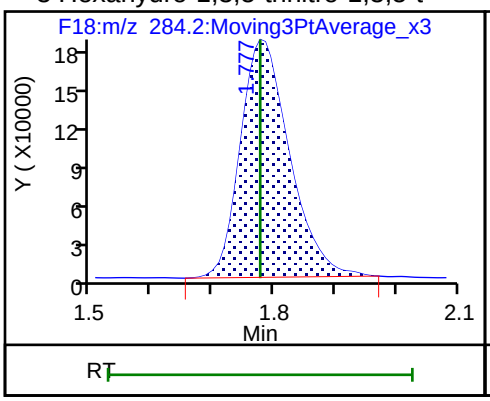
34 MNX (ND)



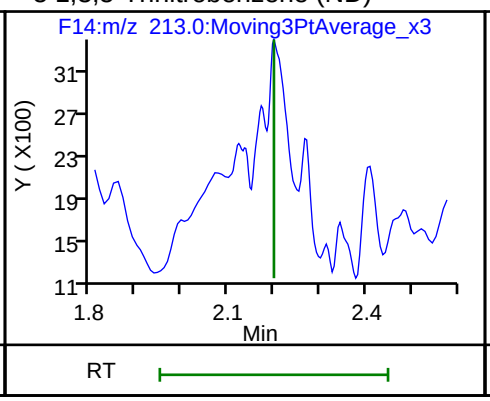
4 RDX (ND)



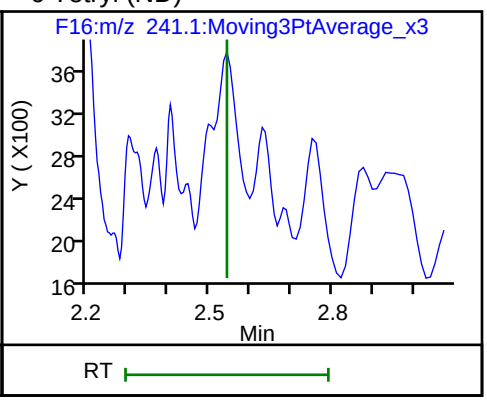
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



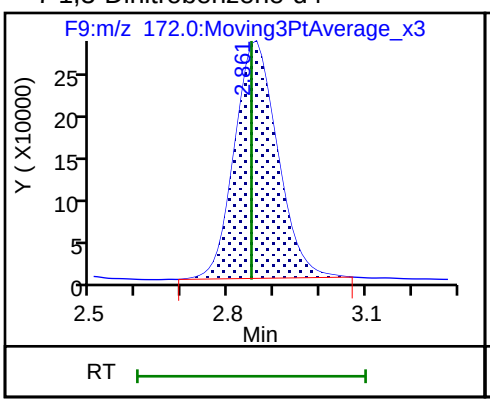
5 1,3,5-Trinitrobenzene (ND)



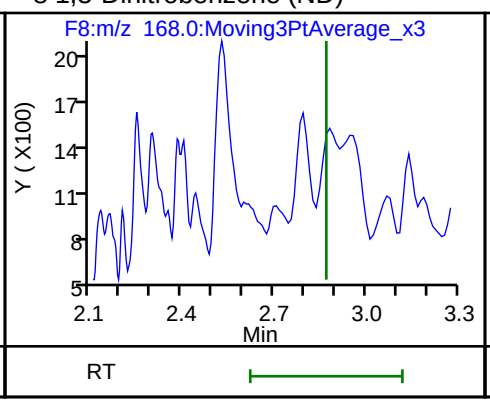
6 Tetryl (ND)



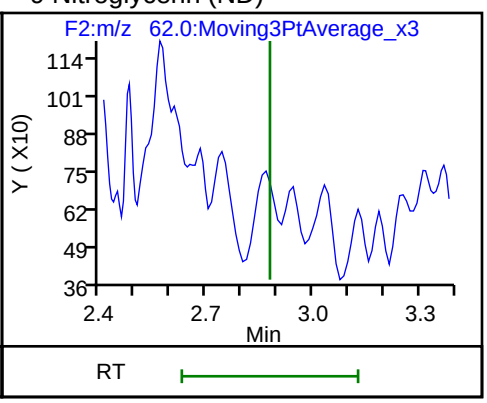
* 7 1,3-Dinitrobenzene-d4



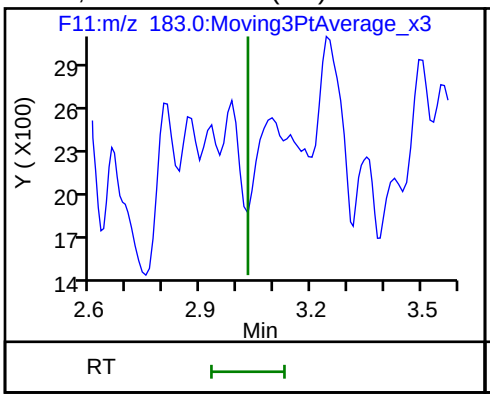
8 1,3-Dinitrobenzene (ND)



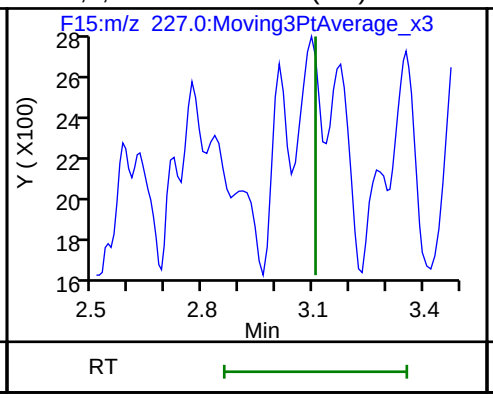
9 Nitroglycerin (ND)



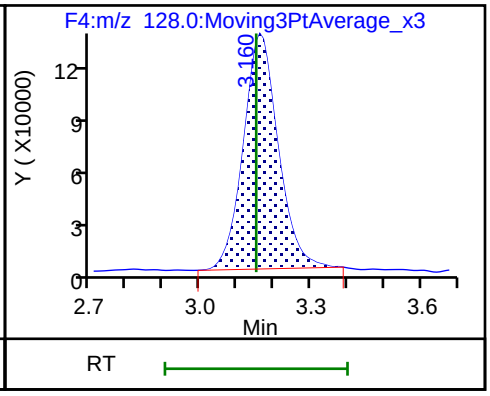
28 3,5-Dinitroaniline (ND)



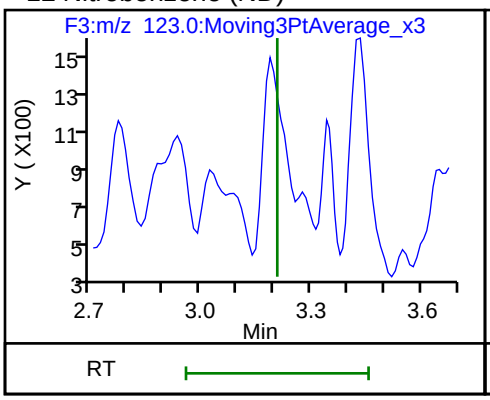
10 2,4,6-Trinitrotoluene (ND)



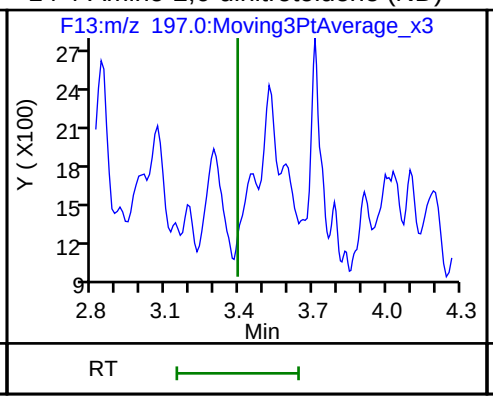
$ 11 Nitrobenzene-d5



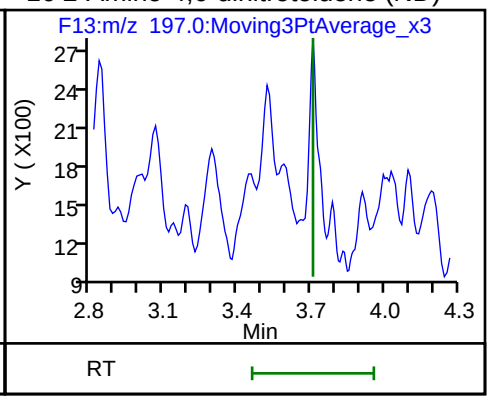
12 Nitrobenzene (ND)



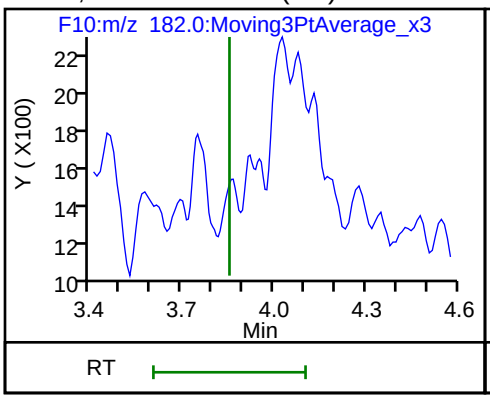
14 4-Amino-2,6-dinitrotoluene (ND)



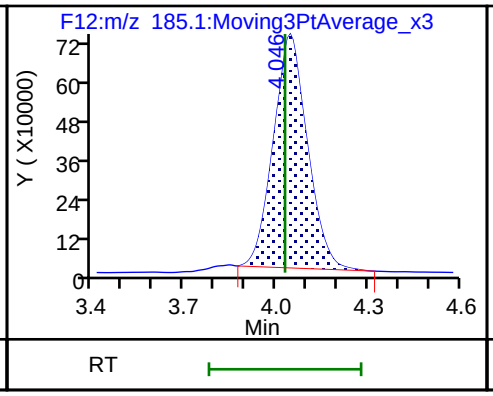
16 2-Amino-4,6-dinitrotoluene (ND)



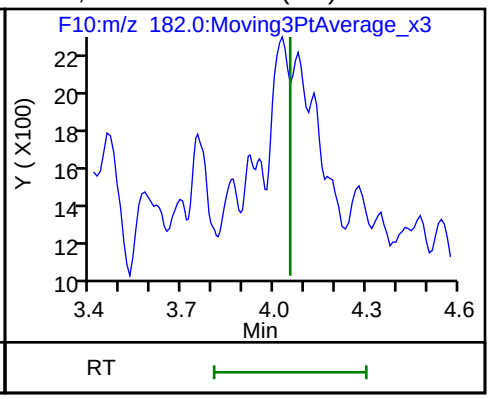
17 2,6-Dinitrotoluene (ND)



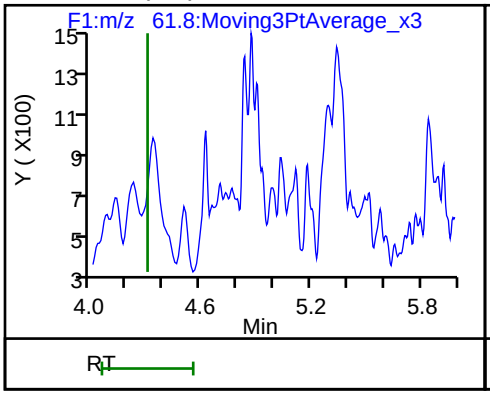
* 18 2,4-dinitrotoluene-d3



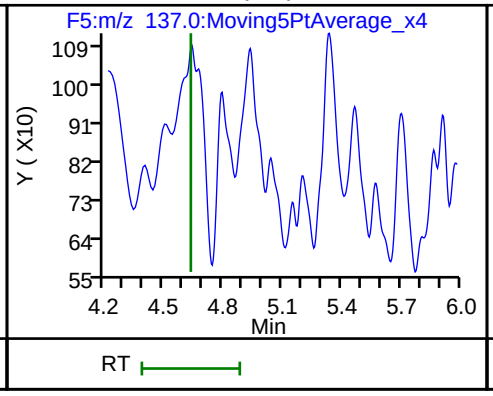
19 2,4-Dinitrotoluene (ND)



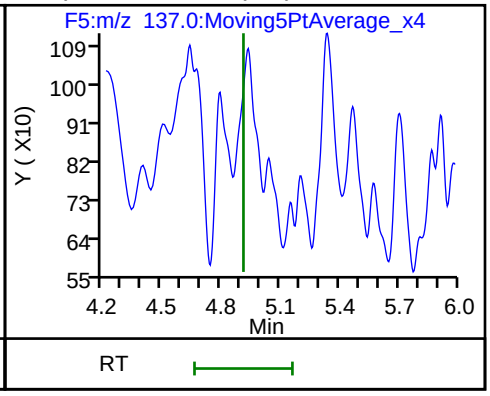
20 PETN (ND)



22 o-Nitrotoluene (ND)



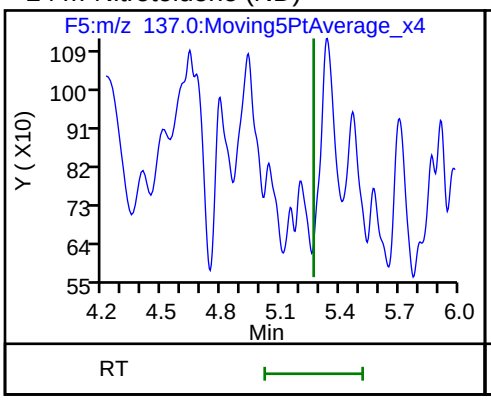
23 p-Nitrotoluene (ND)



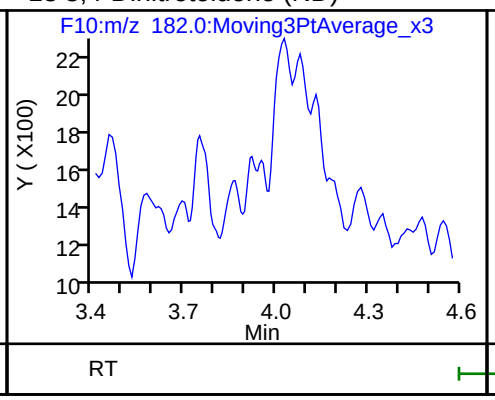
Report Date: 06-Apr-2022 07:10:14 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05062.d

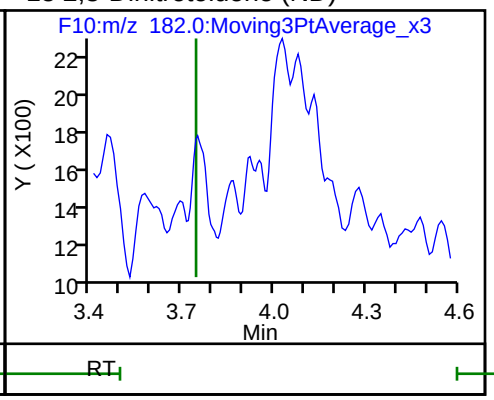
24 m-Nitrotoluene (ND)



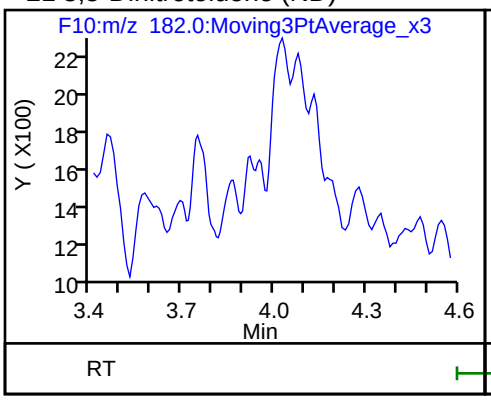
13 3,4-Dinitrotoluene (ND)



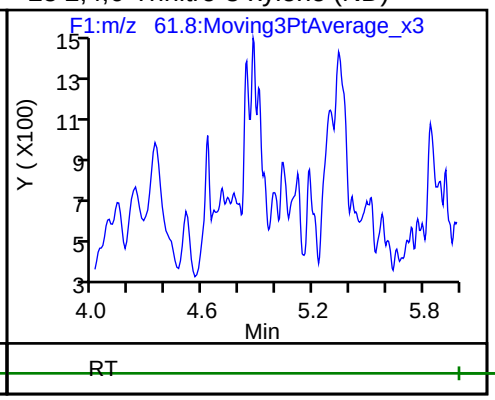
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 07:10:14 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05062.d
Lims ID: 280-160187-A-24-B
Client ID: DUP-03
Sample Type: Client
Inject. Date: 05-Apr-2022 16:18:48 ALS Bottle#: 5 Worklist Smp#: 59
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-24-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 06:56:23

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	94.1	93.80

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB201(3-4) | Lab Sample ID: 280-160187-25
Matrix: Solid | Lab File ID: ex722D05063.d
Analysis Method: 8321A | Date Collected: 03/22/2022 17:18
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:54
Sample wt/vol: 10.33(g) | Date Analyzed: 04/05/2022 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.: 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	0.19		0.097	0.048	0.045
606-20-2	2,6-Dinitrotoluene	0.048	U M 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 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	91		68-140

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\ex722D05063.d
Lims ID: 280-160187-A-25-B
Client ID: 29SB201(3-4)
Sample Type: Client
Inject. Date: 05-Apr-2022 16:25:12 ALS Bottle#: 6 Worklist Smp#: 60
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-25-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 06:56:39
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	1.226	1.226	0.0		289469	125.0	126	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		986702	125.0	157	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1891724	129.4	205	
10 2,4,6-Trinitrotoluene								
227.0	3.117	3.134	0.010	0.770	403701	3.24	74.5	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	844109	91.5	90.0	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		5936164	125.0	130	
19 2,4-Dinitrotoluene								
182.0	4.078	4.087	0.026	1.008	2447695	48.5	184	

QC Flag Legend

Processing Flags

Reagents:

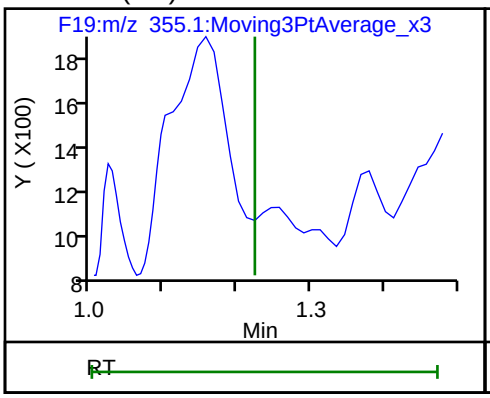
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

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

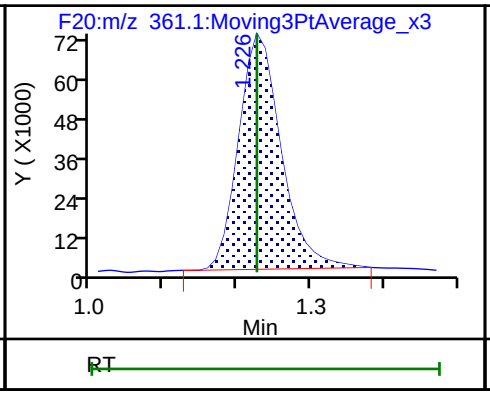
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05063.d
Injection Date: 05-Apr-2022 16:25:12 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-25-B Lab Sample ID: 280-160187-25
Client ID: 29SB201(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

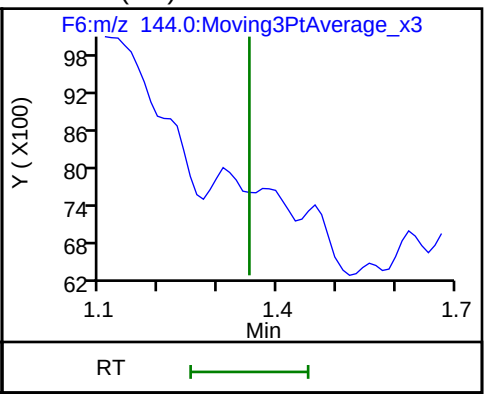
2 HMX (ND)



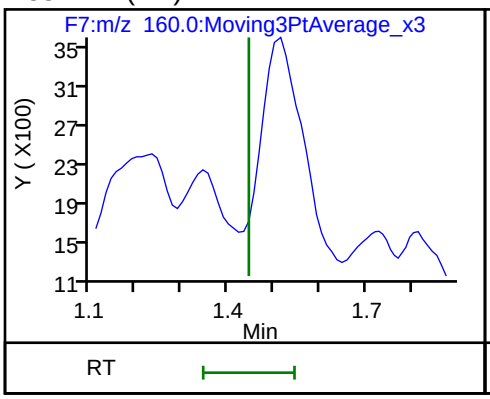
* 1 HMX-13C4



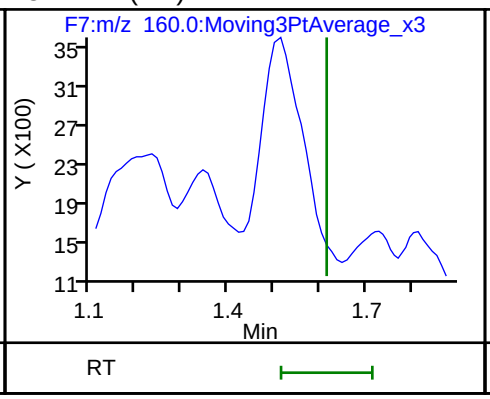
36 TNX (ND)



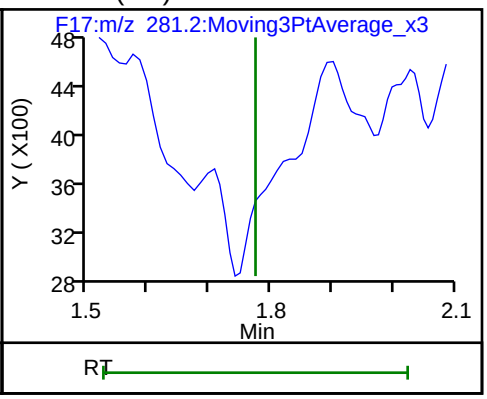
33 DNX (ND)



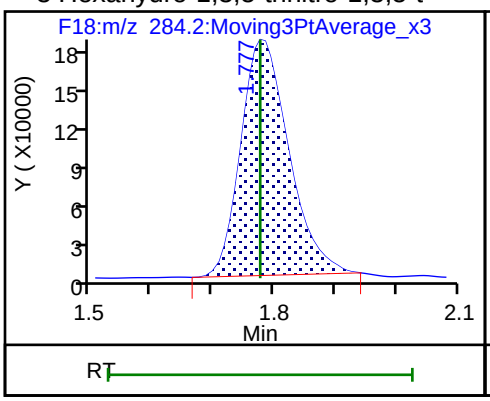
34 MNX (ND)



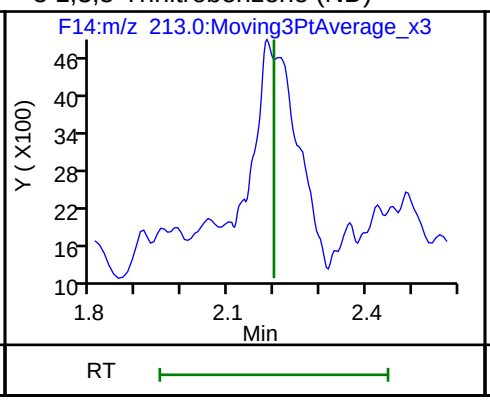
4 RDX (ND)



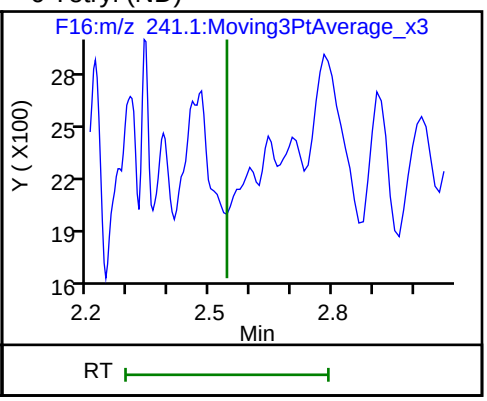
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



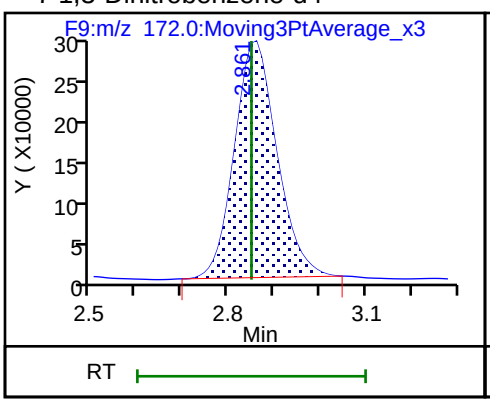
5 1,3,5-Trinitrobenzene (ND)



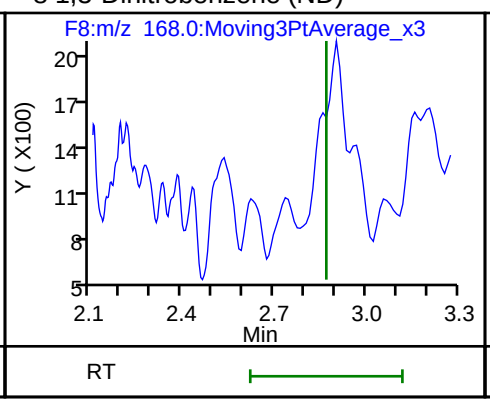
6 Tetryl (ND)



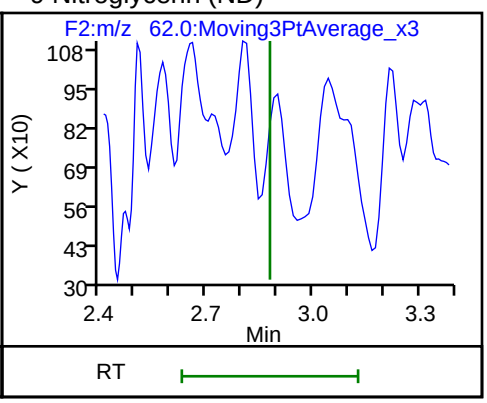
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



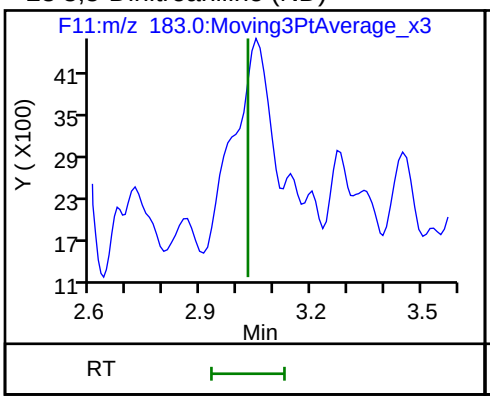
9 Nitroglycerin (ND)



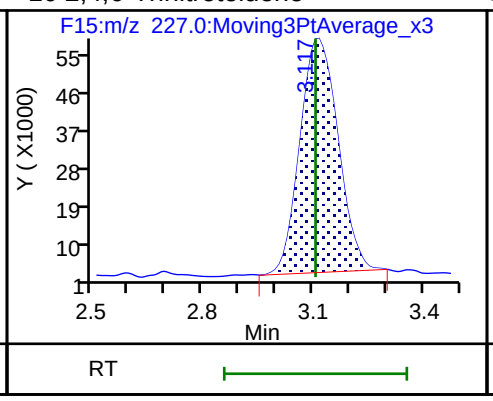
Report Date: 06-Apr-2022 07:10:15 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05063.d

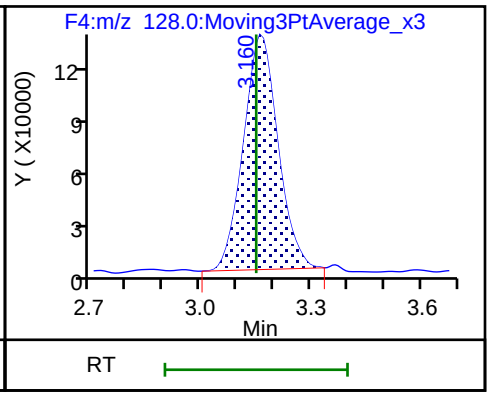
28 3,5-Dinitroaniline (ND)



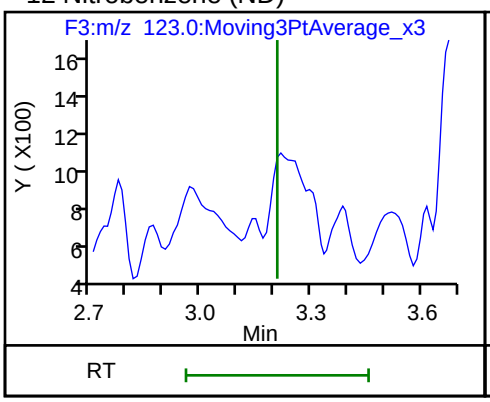
10 2,4,6-Trinitrotoluene



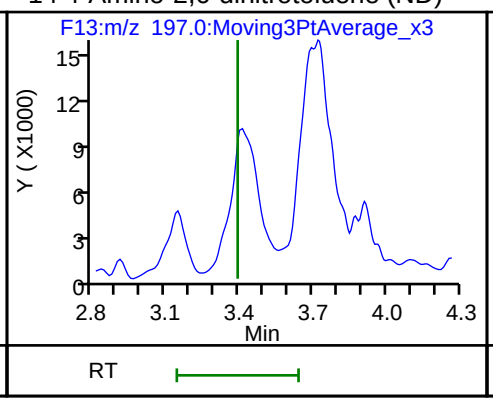
$ 11 Nitrobenzene-d5



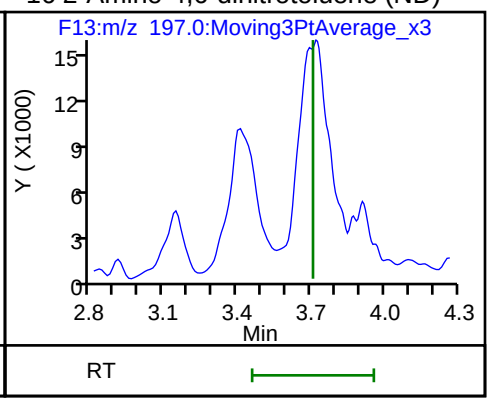
12 Nitrobenzene (ND)



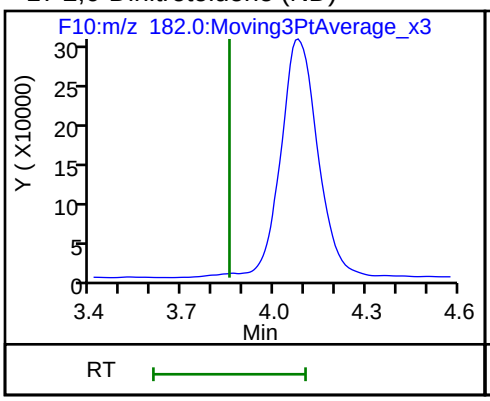
14 4-Amino-2,6-dinitrotoluene (ND)



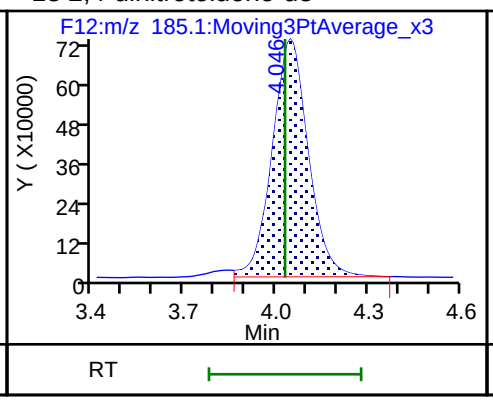
16 2-Amino-4,6-dinitrotoluene (ND)



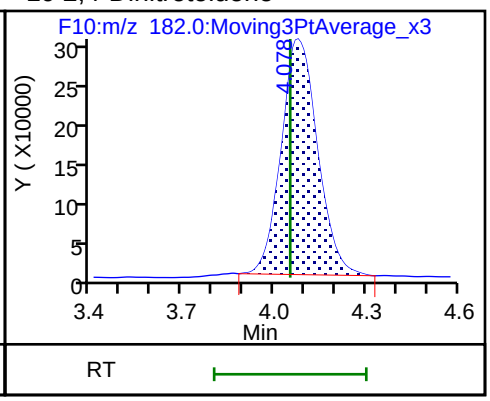
17 2,6-Dinitrotoluene (ND)



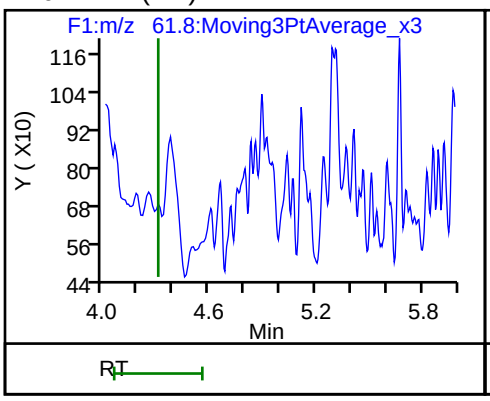
* 18 2,4-dinitrotoluene-d3



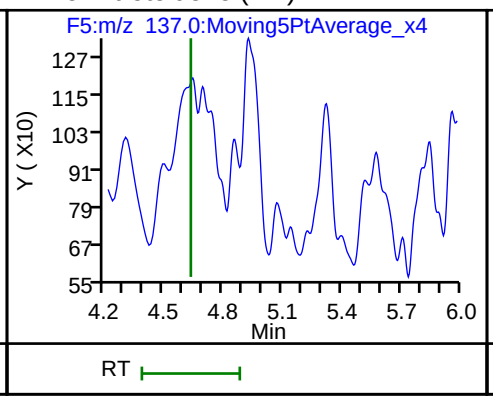
19 2,4-Dinitrotoluene



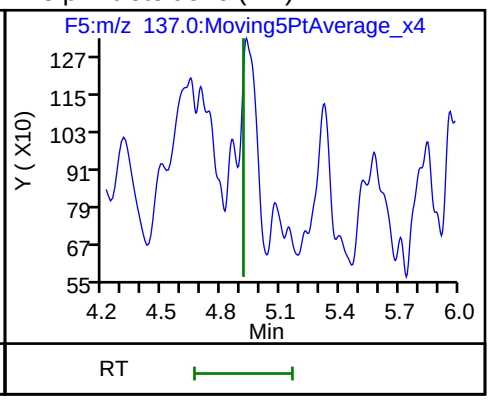
20 PETN (ND)



22 o-Nitrotoluene (ND)



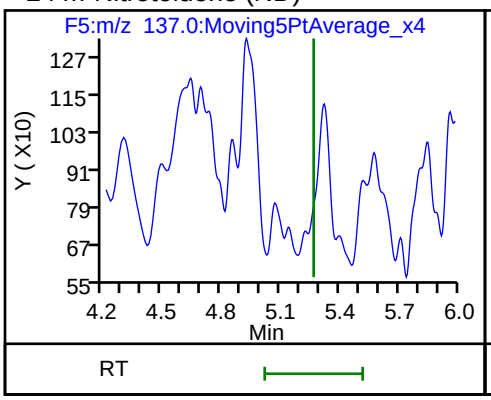
23 p-Nitrotoluene (ND)



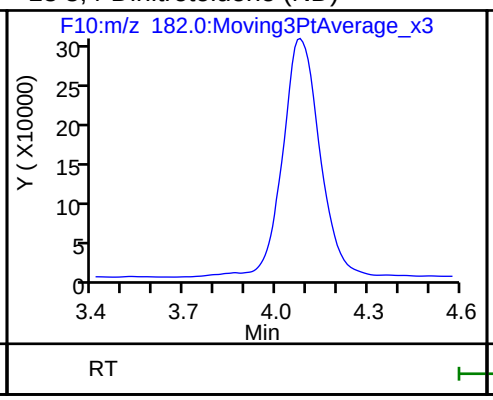
Report Date: 06-Apr-2022 07:10:15 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05063.d

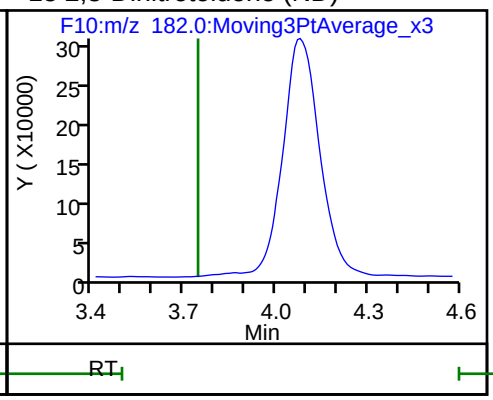
24 m-Nitrotoluene (ND)



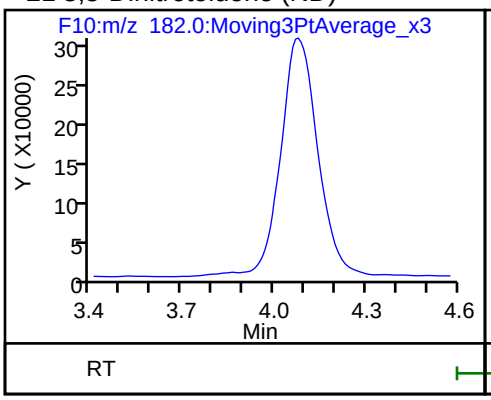
13 3,4-Dinitrotoluene (ND)



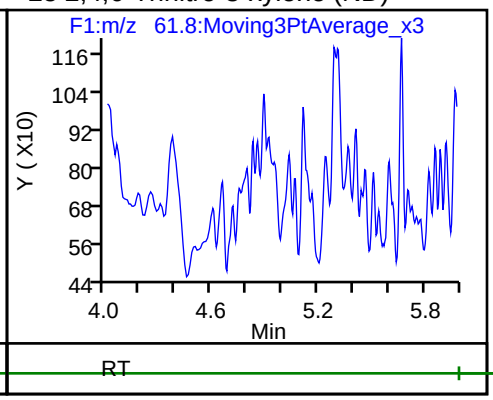
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



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

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05063.d
Lims ID: 280-160187-A-25-B
Client ID: 29SB201(3-4)
Sample Type: Client
Inject. Date: 05-Apr-2022 16:25:12 ALS Bottle#: 6 Worklist Smp#: 60
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-25-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 06:56:39

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	91.5	91.16

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB201(11-12) | Lab Sample ID: 280-160187-26
Matrix: Solid | Lab File ID: ex722D05065.d
Analysis Method: 8321A | Date Collected: 03/22/2022 17:20
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:54
Sample wt/vol: 10.61(g) | Date Analyzed: 04/05/2022 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.: 570786 | 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 Q	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 Q	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 Q J1	0.094	0.047	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	89		68-140

Report Date: 06-Apr-2022 07:10:16 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\ex722D05065.d
Lims ID: 280-160187-A-26-F
Client ID: 29SB201(11-12)
Sample Type: Client
Inject. Date: 05-Apr-2022 16:38:00 ALS Bottle#: 7 Worklist Smp#: 62
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-26-F
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 06:57:11
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	1.226	1.226	0.0		292076	125.0	194	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.785	1.777	0.008		996825	125.0	245	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1919200	129.4	354	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.783	840624	89.8	105	
* 18 2,4-dinitrotoluene-d3								
185.1	4.037	4.028	0.009		5934421	125.0	114	

QC Flag Legend
Processing Flags

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

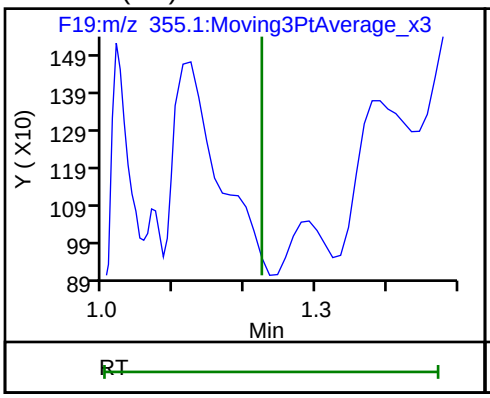
Report Date: 06-Apr-2022 07:10:16 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

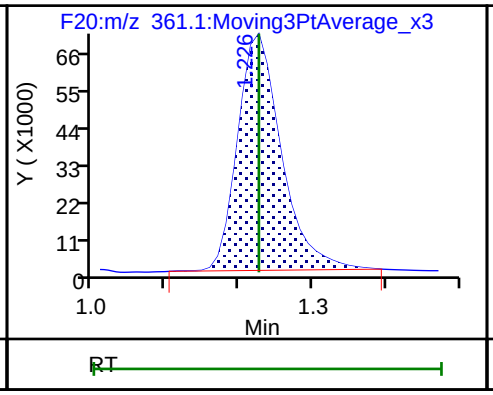
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05065.d

Injection Date:	05-Apr-2022 16:38:00	Instrument ID:	LC_LCMS7
Lims ID:	280-160187-A-26-F	Lab Sample ID:	280-160187-26
Client ID:	29SB201(11-12)		
Operator ID:	acm	ALS Bottle#:	7 Worklist Smp#: 62
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl

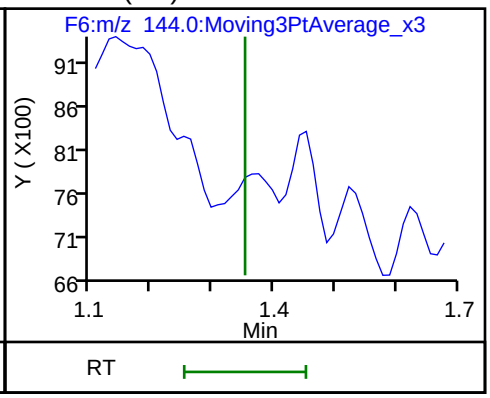
2 HMX (ND)



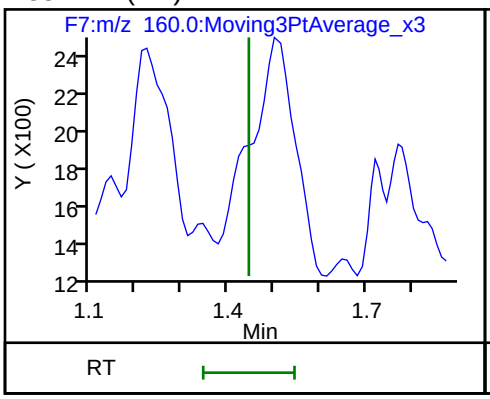
* 1 HMX-13C4



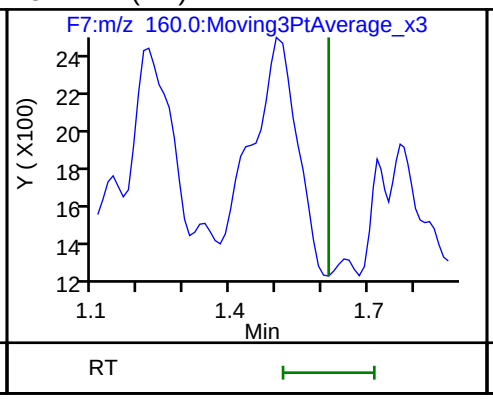
36 TNX (ND)



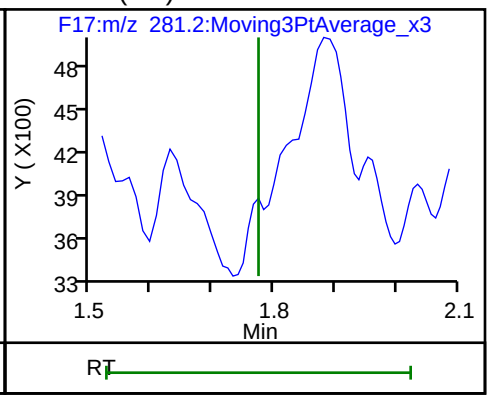
33 DNX (ND)



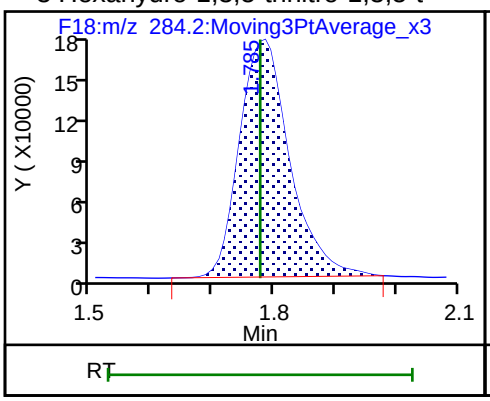
34 MNX (ND)



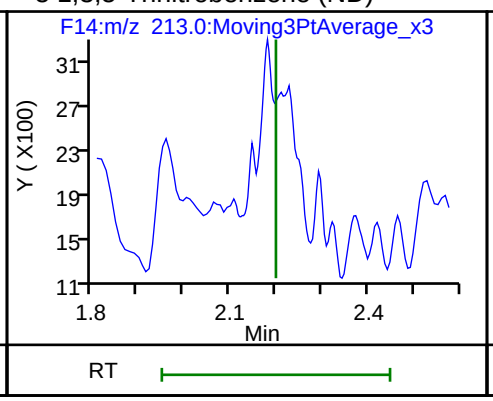
4 RDX (ND)



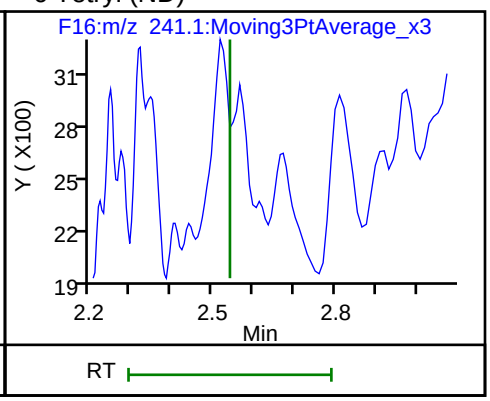
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



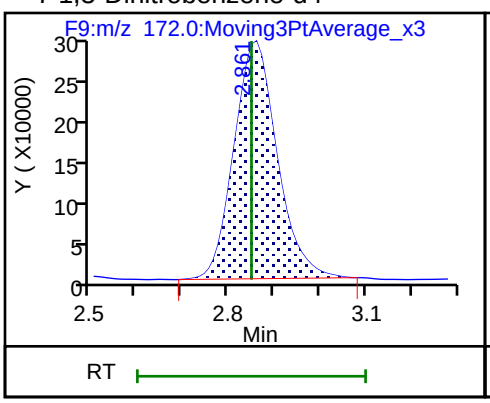
5 1,3,5-Trinitrobenzene (ND)



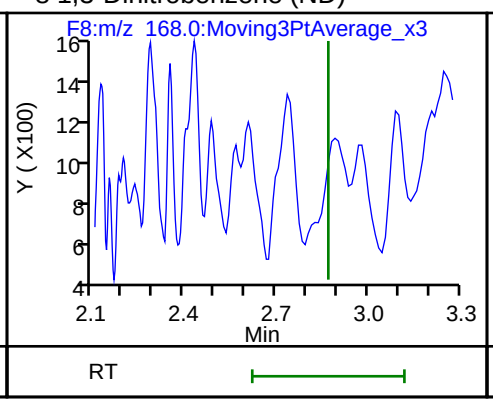
6 Tetryl (ND)



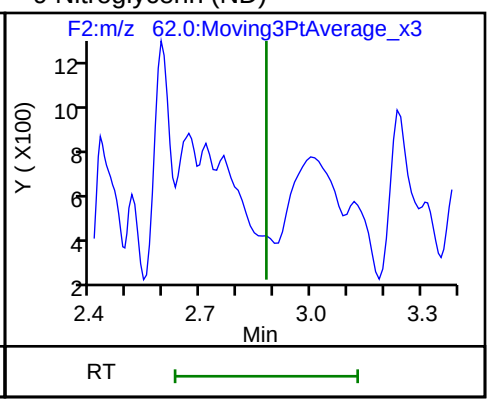
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



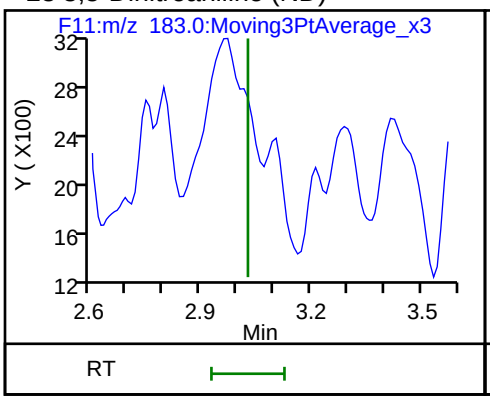
9 Nitroglycerin (ND)



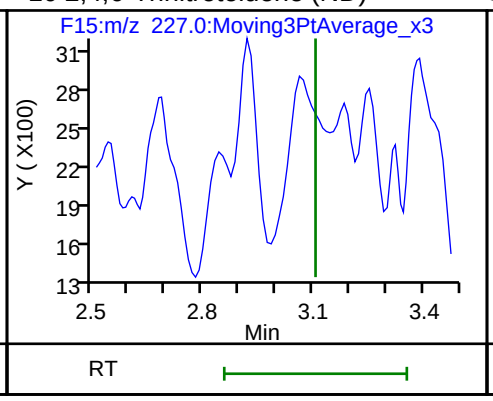
Report Date: 06-Apr-2022 07:10:16 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05065.d

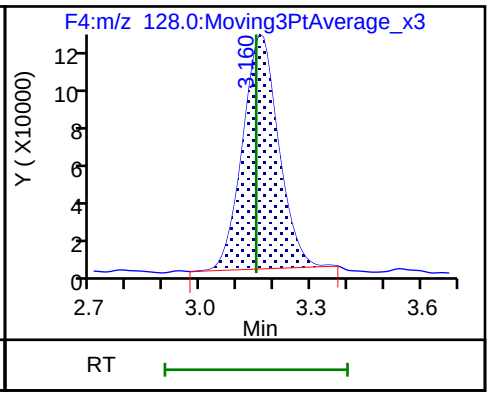
28 3,5-Dinitroaniline (ND)



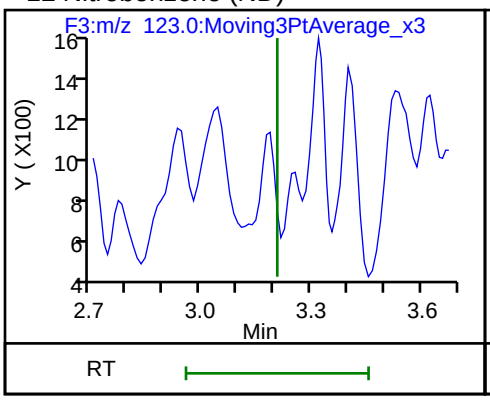
10 2,4,6-Trinitrotoluene (ND)



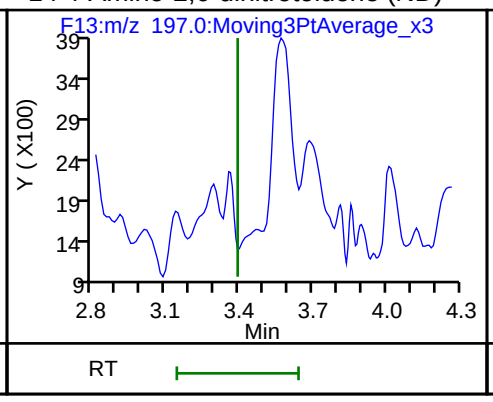
$ 11 Nitrobenzene-d5



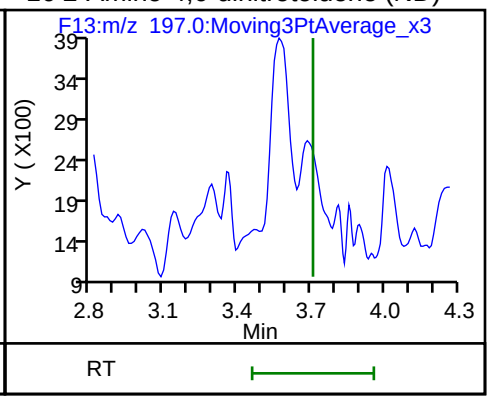
12 Nitrobenzene (ND)



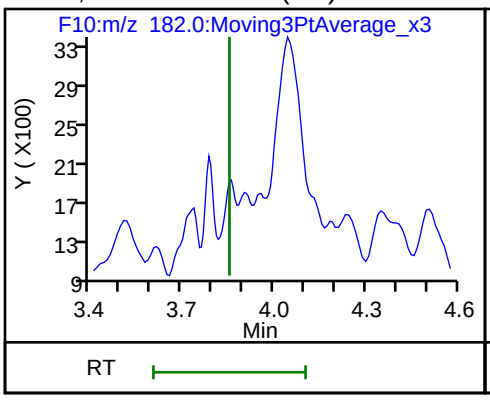
14 4-Amino-2,6-dinitrotoluene (ND)



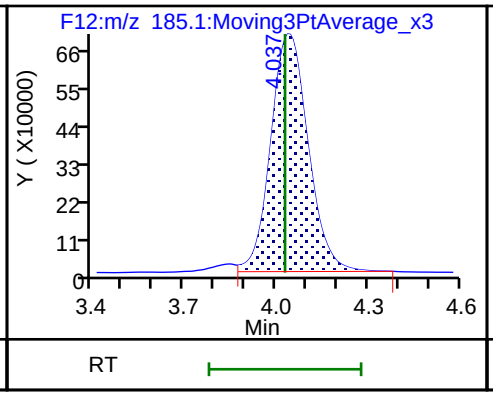
16 2-Amino-4,6-dinitrotoluene (ND)



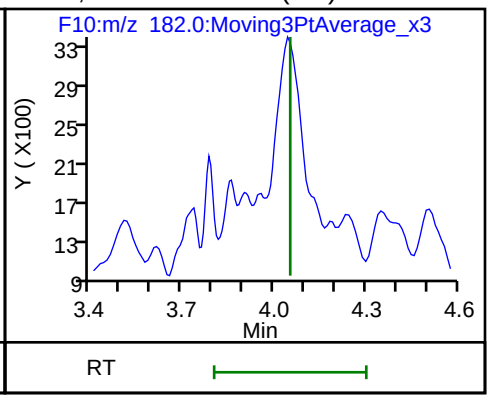
17 2,6-Dinitrotoluene (ND)



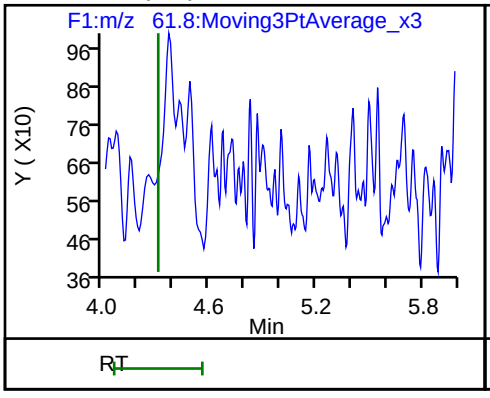
* 18 2,4-dinitrotoluene-d3



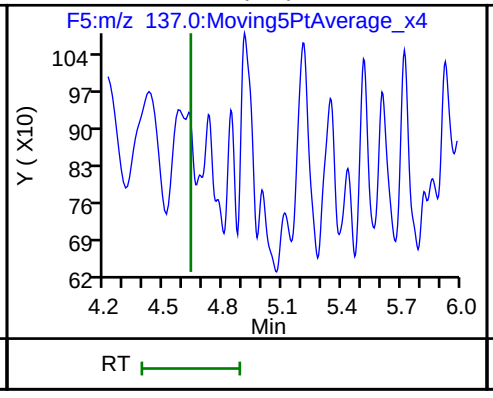
19 2,4-Dinitrotoluene (ND)



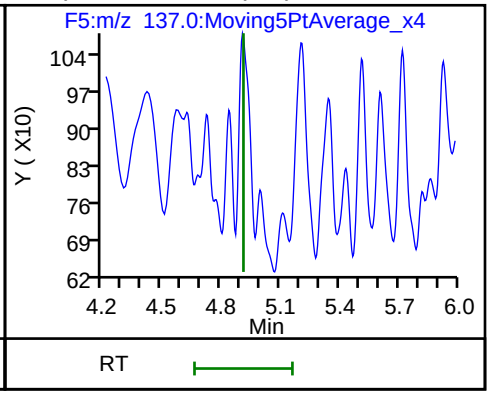
20 PETN (ND)



22 o-Nitrotoluene (ND)

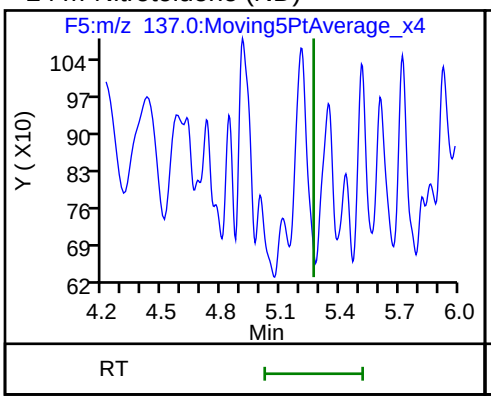


23 p-Nitrotoluene (ND)

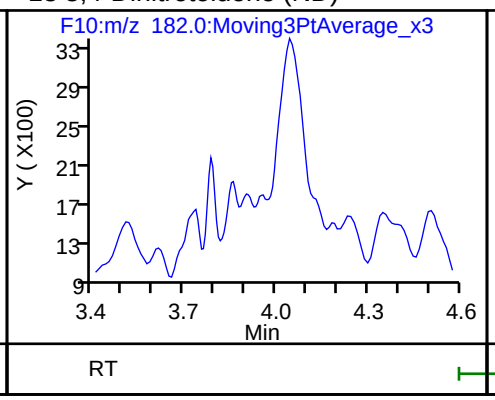


Report Date: 06-Apr-2022 07:10:16
Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05065.d

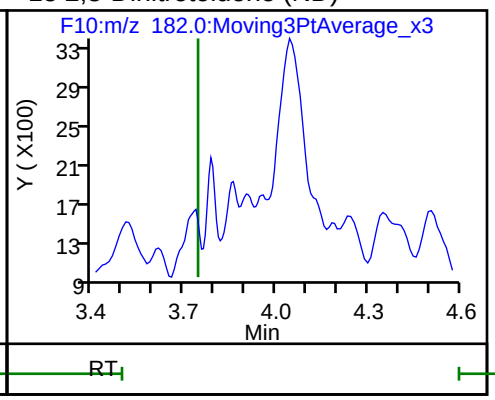
24 m-Nitrotoluene (ND)



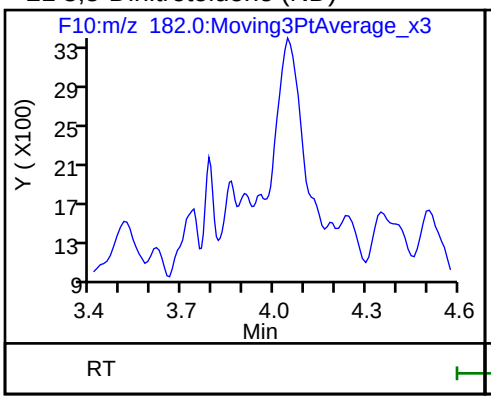
13 3,4-Dinitrotoluene (ND)



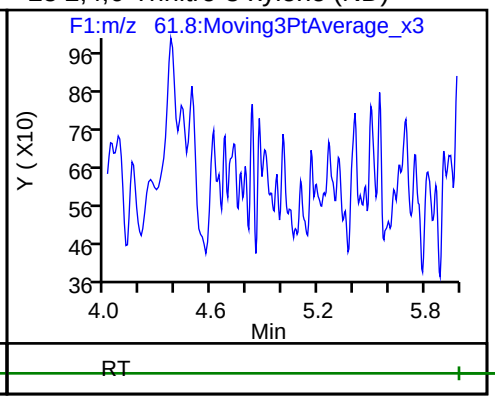
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



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

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05065.d				
Lims ID:	280-160187-A-26-F				
Client ID:	29SB201(11-12)				
Sample Type:	Client				
Inject. Date:	05-Apr-2022 16:38:00	ALS Bottle#:	7	Worklist Smp#:	62
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160187-A-26-F				
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 06:57:11		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	89.8	89.47

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

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

SDG No.:

Client Sample ID: 29SB201(15-15.5) | Lab Sample ID: 280-160187-27

Matrix: Solid | Lab File ID: ex722D05070.d

Analysis Method: 8321A | Date Collected: 03/22/2022 17:25

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

Sample wt/vol: 10.22(g) | Date Analyzed: 04/05/2022 17:10

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.: 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	0.049
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	89		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\ex722D05070.d
Lims ID: 280-160187-A-27-B
Client ID: 29SB201(15-15.5)
Sample Type: Client
Inject. Date: 05-Apr-2022 17:10:00 ALS Bottle#: 12 Worklist Smp#: 67
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-27-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 07:10:15 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 06:57:58
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		353387	125.0	97.2	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.768	1.777	-0.009		1135549	125.0	185	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		2139060	129.4	249	
$ 11 Nitrobenzene-d5								
128.0	3.150	3.164	0.0	0.779	932967	89.4	136	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		6043266	125.0	121	

QC Flag Legend
Processing Flags

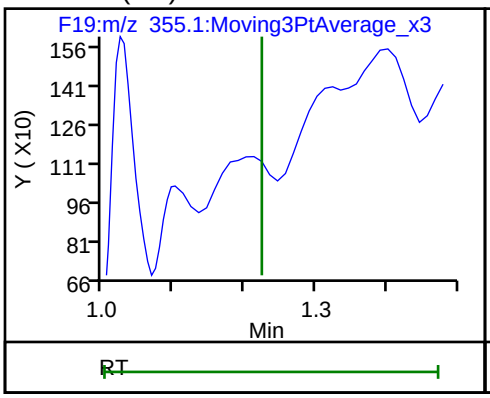
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:10:19 Chrom Revision: 2.3 18-Mar-2022 09:07:22

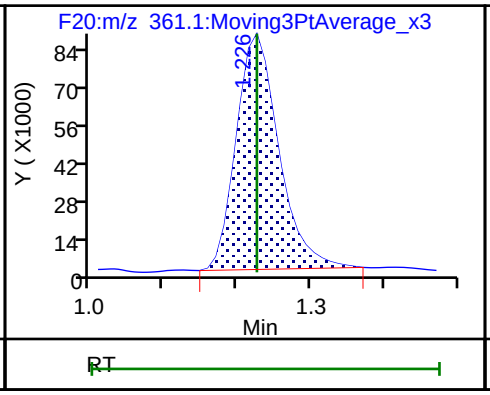
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05070.d
Injection Date: 05-Apr-2022 17:10:00 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-27-B Lab Sample ID: 280-160187-27
Client ID: 29SB201(15-15.5)
Operator ID: acm ALS Bottle#: 12 Worklist Smp#: 67
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

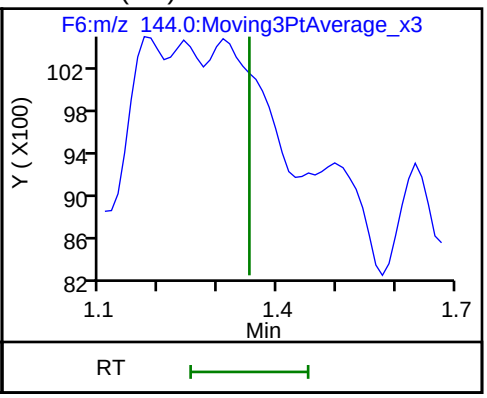
2 HMX (ND)



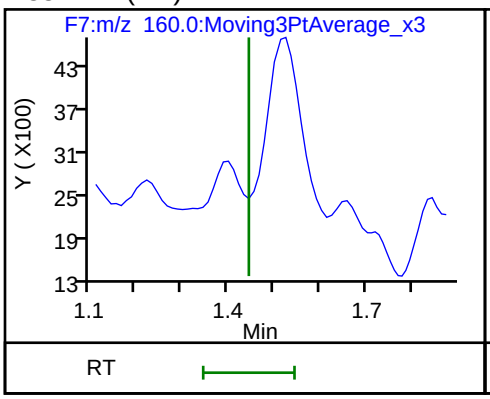
* 1 HMX-13C4



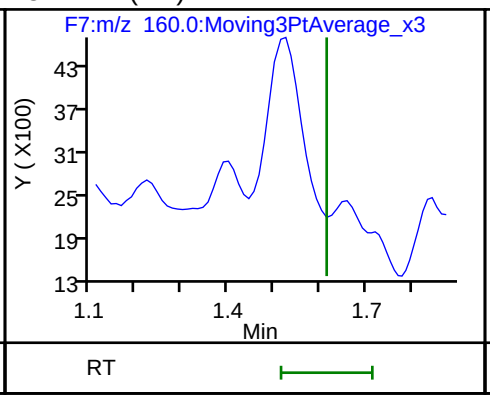
36 TNX (ND)



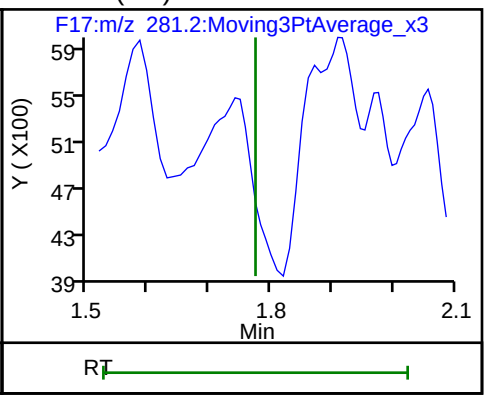
33 DNX (ND)



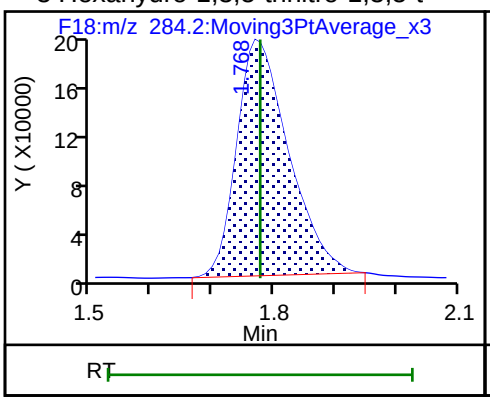
34 MNX (ND)



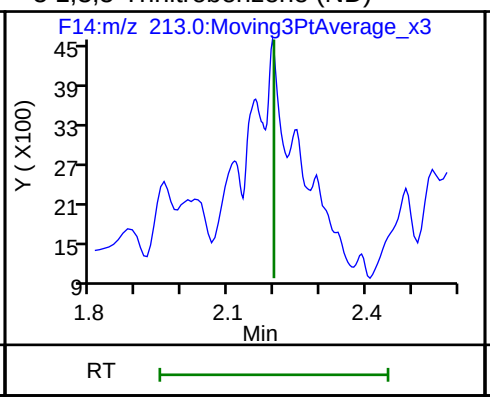
4 RDX (ND)



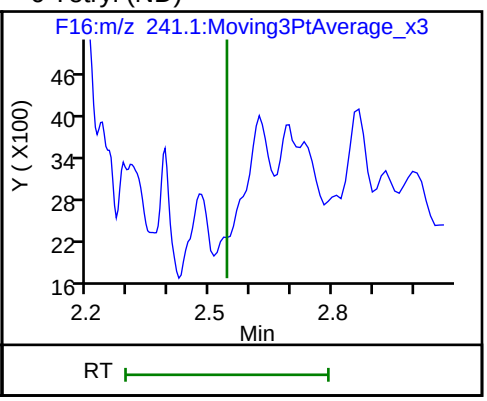
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



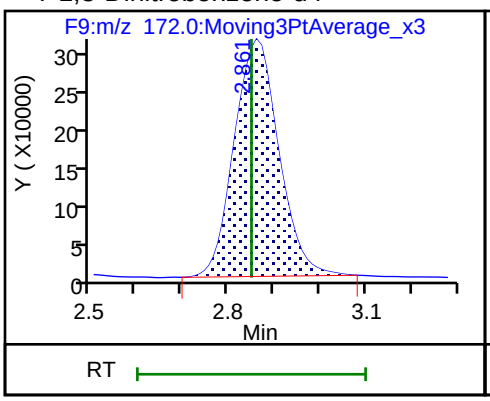
5 1,3,5-Trinitrobenzene (ND)



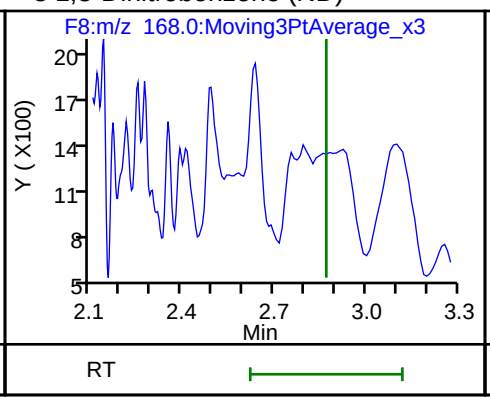
6 Tetryl (ND)



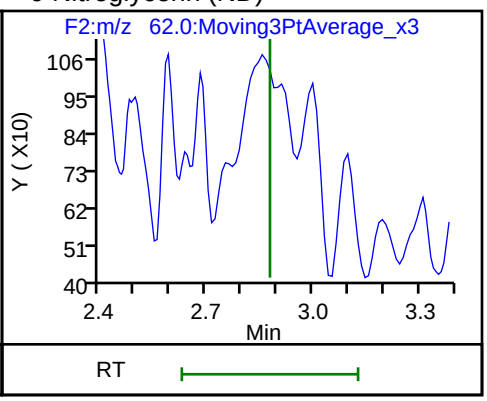
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

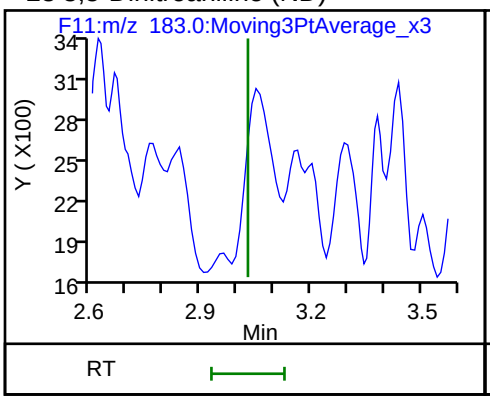


9 Nitroglycerin (ND)

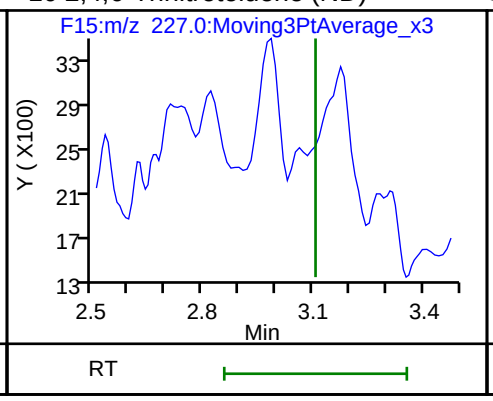


Report Date: 06-Apr-2022 07:10:19 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05070.d

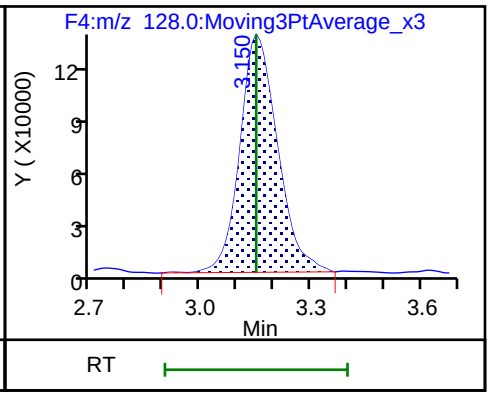
28 3,5-Dinitroaniline (ND)



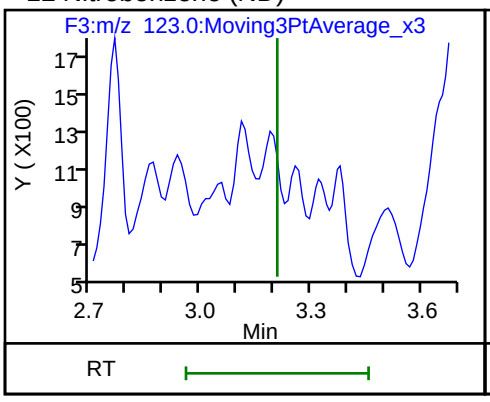
10 2,4,6-Trinitrotoluene (ND)



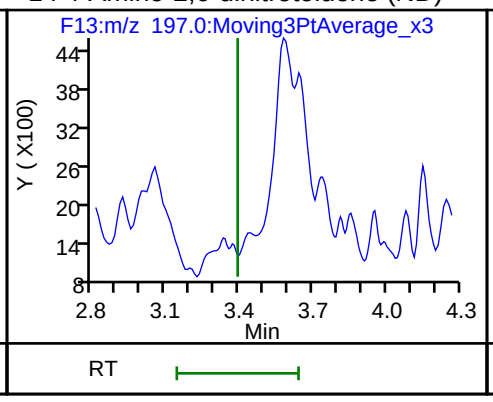
$ 11 Nitrobenzene-d5



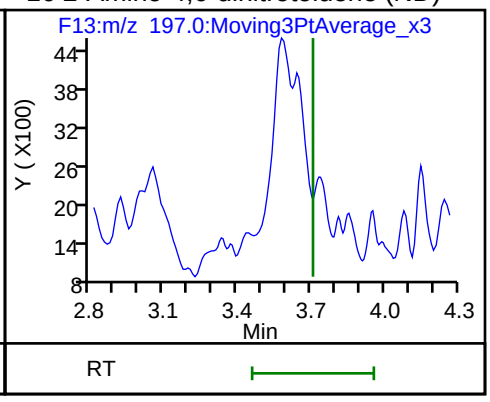
12 Nitrobenzene (ND)



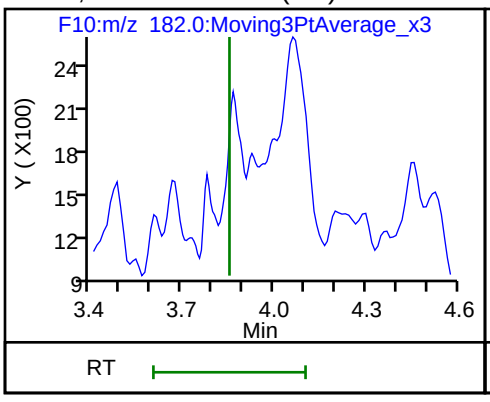
14 4-Amino-2,6-dinitrotoluene (ND)



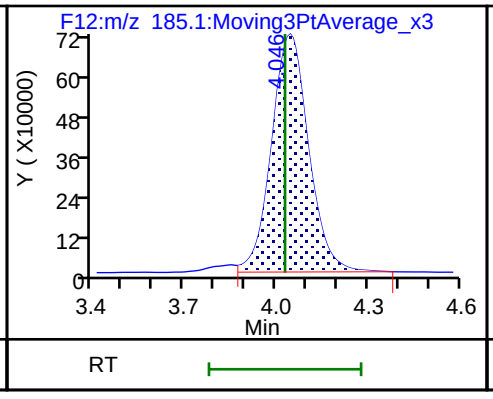
16 2-Amino-4,6-dinitrotoluene (ND)



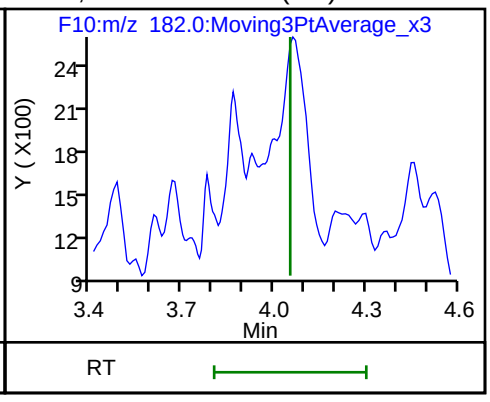
17 2,6-Dinitrotoluene (ND)



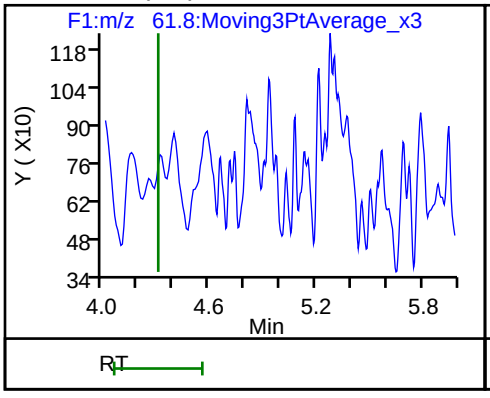
* 18 2,4-dinitrotoluene-d3



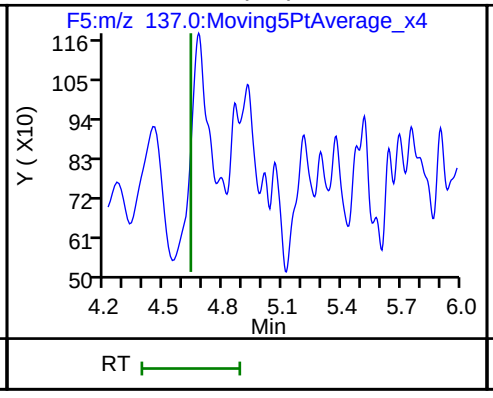
19 2,4-Dinitrotoluene (ND)



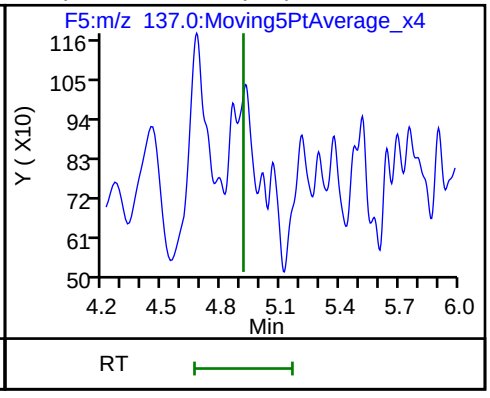
20 PETN (ND)



22 o-Nitrotoluene (ND)

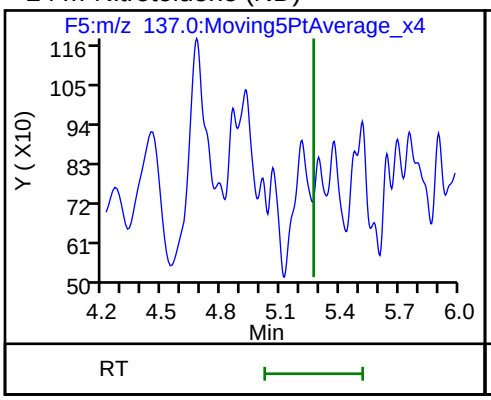


23 p-Nitrotoluene (ND)

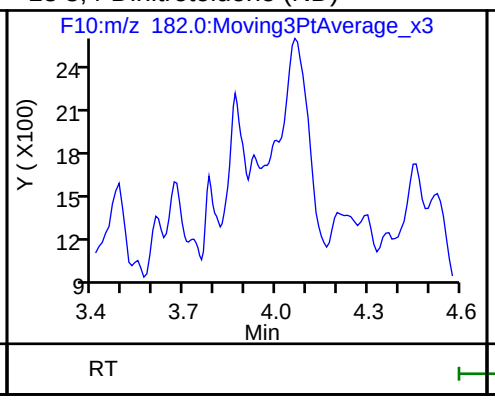


Report Date: 06-Apr-2022 07:10:19 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05070.d

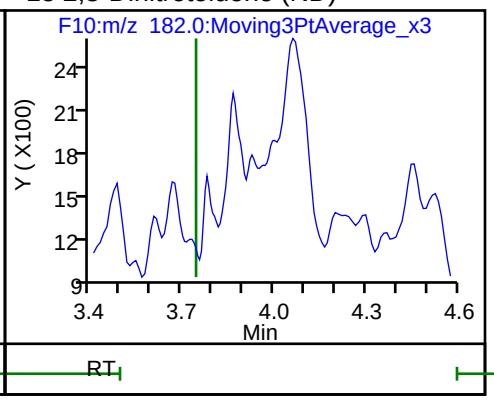
24 m-Nitrotoluene (ND)



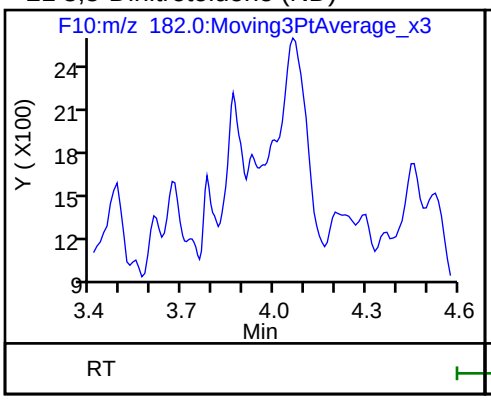
13 3,4-Dinitrotoluene (ND)



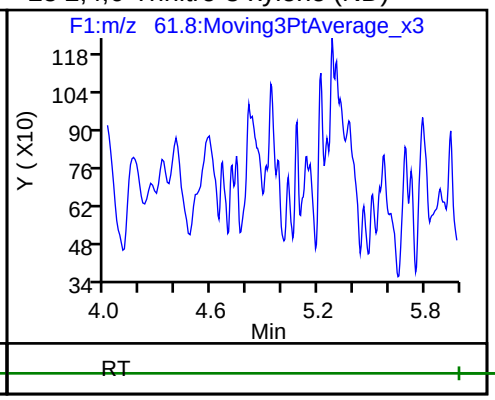
15 2,3-Dinitrotoluene (ND)



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\ex722D05070.d				
Lims ID:	280-160187-A-27-B				
Client ID:	29SB201(15-15.5)				
Sample Type:	Client				
Inject. Date:	05-Apr-2022 17:10:00	ALS Bottle#:	12	Worklist Smp#:	67
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160187-A-27-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 07:10:15	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 06:57:58		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	89.4	89.08

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: EB-1 | Lab Sample ID: 280-160187-28
Matrix: Water | Lab File ID: ex722D05015.d
Analysis Method: 8321A | Date Collected: 03/22/2022 18:05
Extraction Method: 3535 | Date Extracted: 03/29/2022 13:01
Sample wt/vol: 878.8(mL) | Date Analyzed: 04/05/2022 11:37
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	0.068	U	0.11	0.068	0.026
99-65-0	1,3-Dinitrobenzene	0.068	U	0.11	0.068	0.025
118-96-7	2,4,6-Trinitrotoluene	0.068	U	0.11	0.068	0.034
121-14-2	2,4-Dinitrotoluene	0.068	U	0.11	0.068	0.031
606-20-2	2,6-Dinitrotoluene	0.068	U	0.11	0.068	0.028
35572-78-2	2-Amino-4,6-dinitrotoluene	0.068	U	0.11	0.068	0.034
19406-51-0	4-Amino-2,6-dinitrotoluene	0.068	U	0.11	0.068	0.044
2691-41-0	HMX	0.068	U	0.11	0.068	0.038
99-08-1	m-Nitrotoluene	0.068	U	0.11	0.068	0.032
98-95-3	Nitrobenzene	0.068	U	0.17	0.068	0.032
55-63-0	Nitroglycerin	0.068	U	0.17	0.068	0.033
88-72-2	o-Nitrotoluene	0.068	U	0.11	0.068	0.036
78-11-5	PETN	0.068	U M	0.11	0.068	0.040
99-99-0	p-Nitrotoluene	0.068	U	0.11	0.068	0.033
121-82-4	RDX	0.068	U	0.11	0.068	0.031
479-45-8	Tetryl	0.068	U Q	0.11	0.068	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	97		48-130

Report Date: 06-Apr-2022 06:44:11 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\ex722D05015.d
Lims ID: 280-160187-A-28-A
Client ID: EB-1
Sample Type: Client
Inject. Date: 05-Apr-2022 11:37:14 ALS Bottle#: 13 Worklist Smp#: 15
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-28-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 12:47:37
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	1.226	1.226	0.0		268036	125.0	78.9	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.793	1.777	0.016		947752	125.0	115	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.872	2.850	0.022		1715016	129.4	183	
10 2,4,6-Trinitrotoluene								
227.0	3.127	3.107	0.020	0.771	375056	3.32	58.2	
$ 11 Nitrobenzene-d5								
128.0	3.170	3.150	0.020	0.782	814186	97.4	63.5	
* 18 2,4-dinitrotoluene-d3								
185.1	4.054	4.028	0.026		5554795	125.0	109	

QC Flag Legend

Processing Flags

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 06:44:11

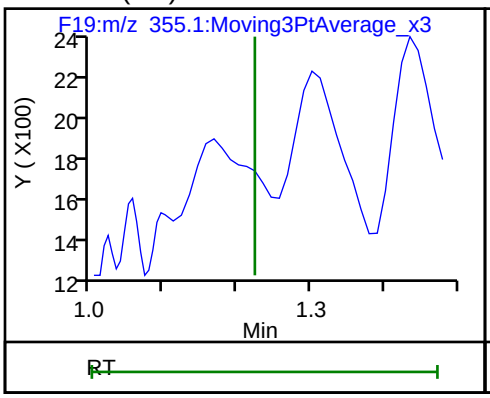
Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

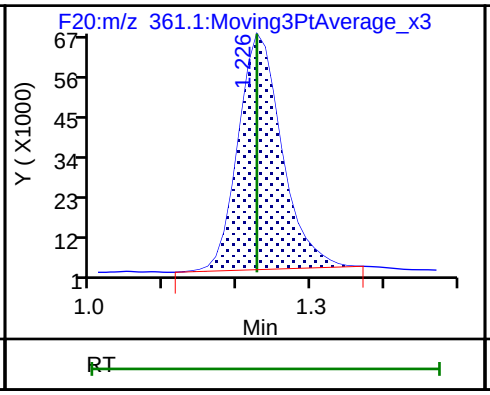
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05015.d

Injection Date:	05-Apr-2022 11:37:14	Instrument ID:	LC_LCMS7		
Lims ID:	280-160187-A-28-A	Lab Sample ID:	280-160187-28		
Client ID:	EB-1				
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		

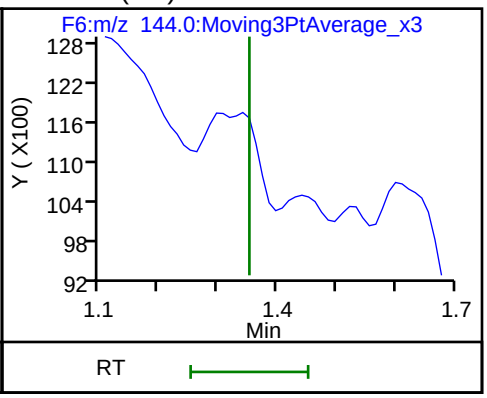
2 HMX (ND)



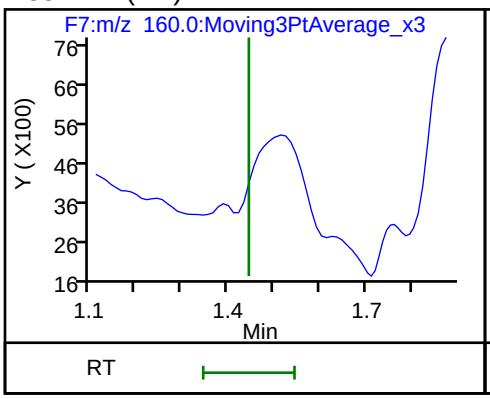
* 1 HMX-13C4



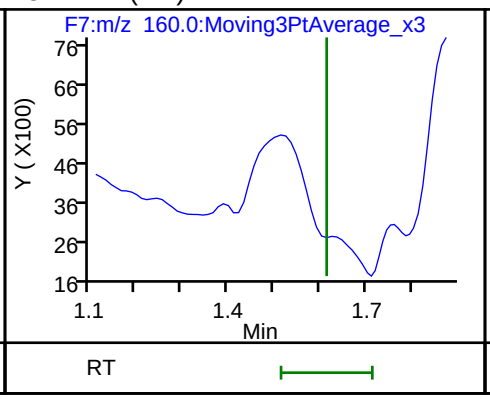
36 TNX (ND)



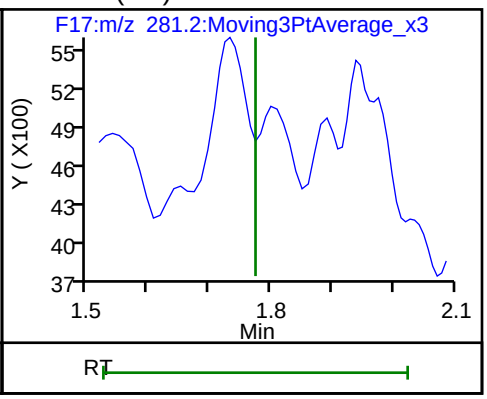
33 DNX (ND)



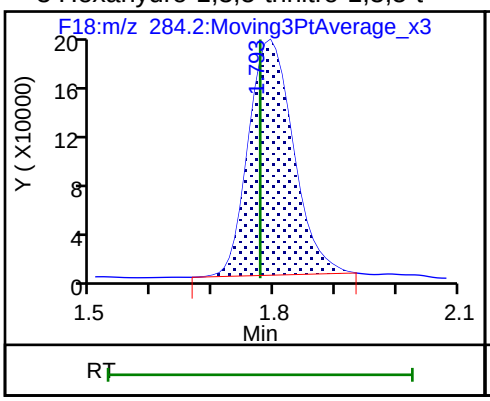
34 MNX (ND)



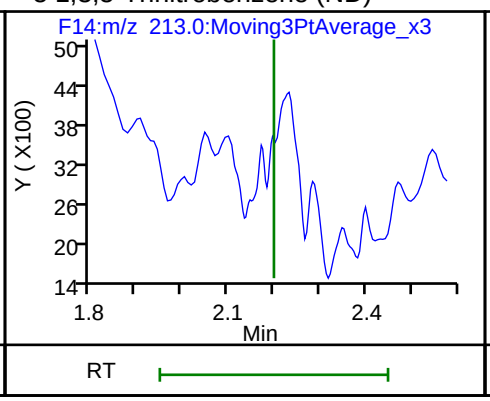
4 RDX (ND)



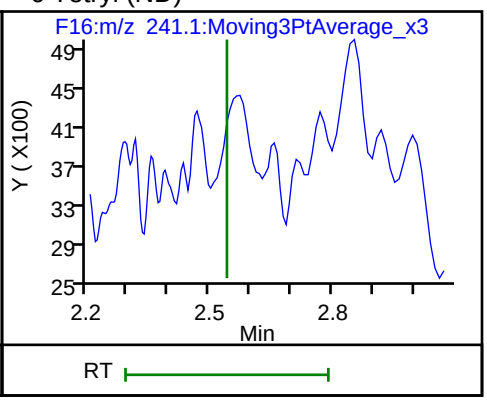
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



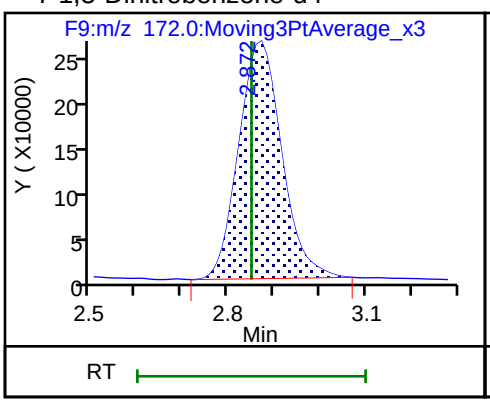
5 1,3,5-Trinitrobenzene (ND)



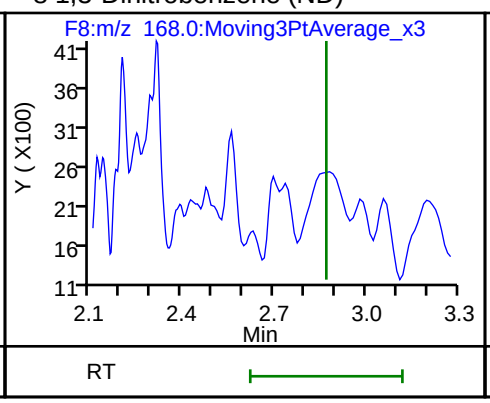
6 Tetryl (ND)



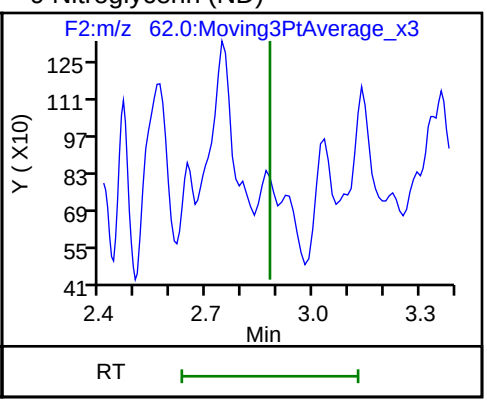
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



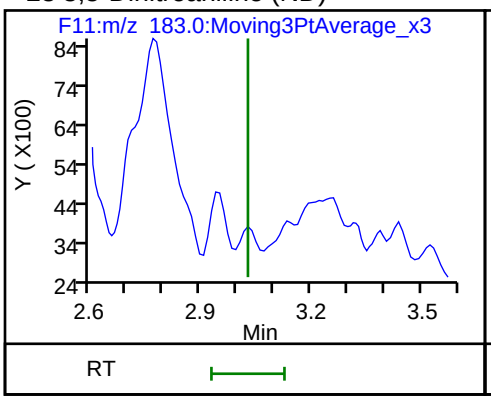
9 Nitroglycerin (ND)



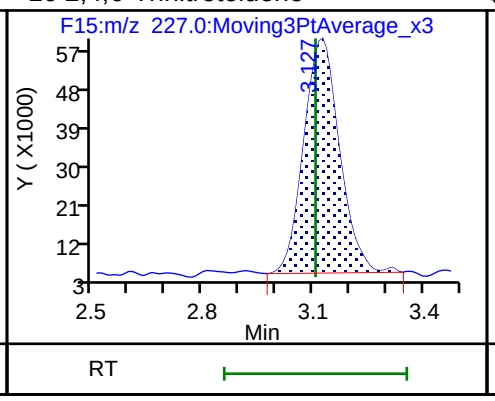
Report Date: 06-Apr-2022 06:44:11 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05015.d

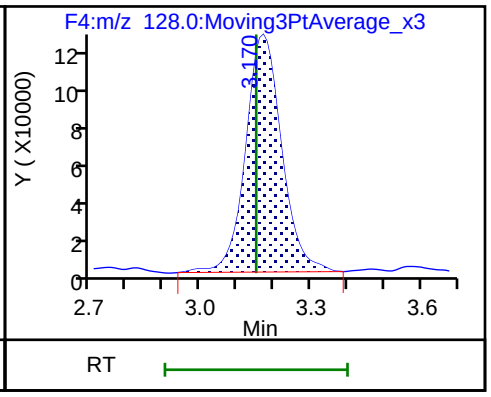
28 3,5-Dinitroaniline (ND)



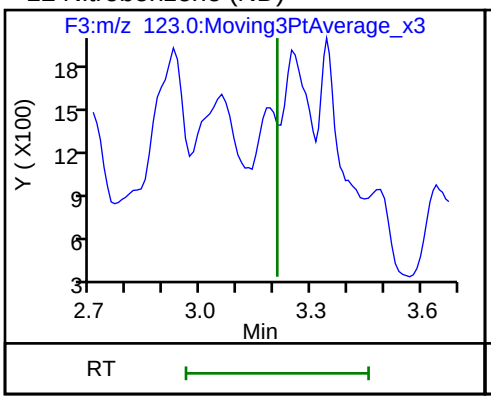
10 2,4,6-Trinitrotoluene



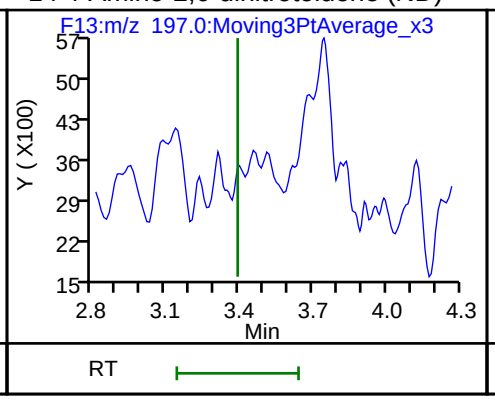
$ 11 Nitrobenzene-d5



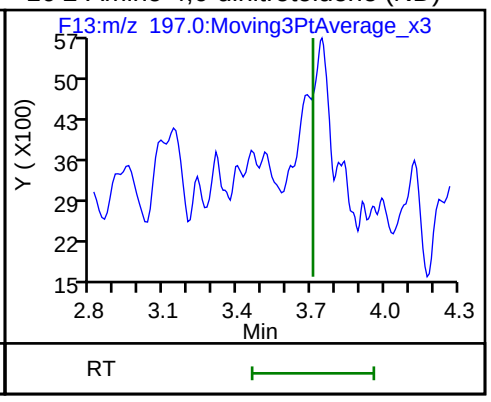
12 Nitrobenzene (ND)



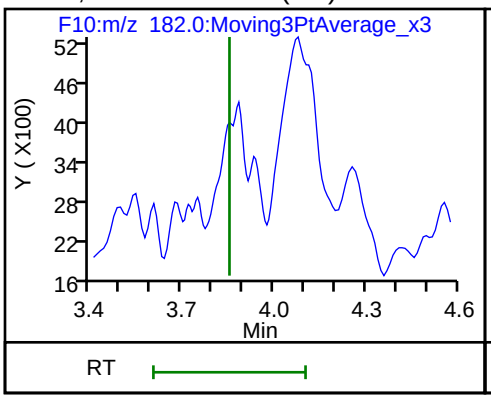
14 4-Amino-2,6-dinitrotoluene (ND)



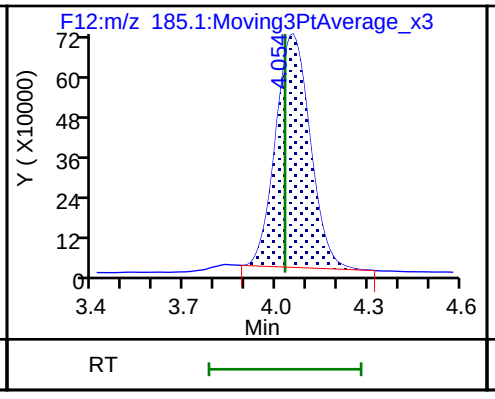
16 2-Amino-4,6-dinitrotoluene (ND)



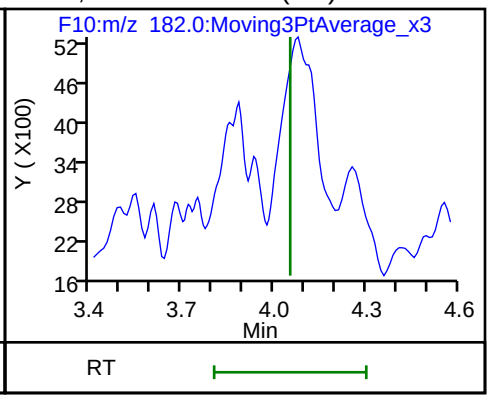
17 2,6-Dinitrotoluene (ND)



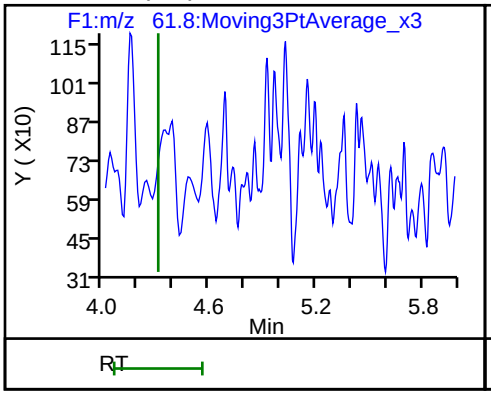
* 18 2,4-dinitrotoluene-d3



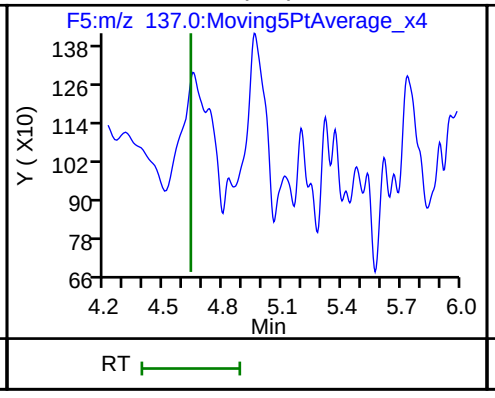
19 2,4-Dinitrotoluene (ND)



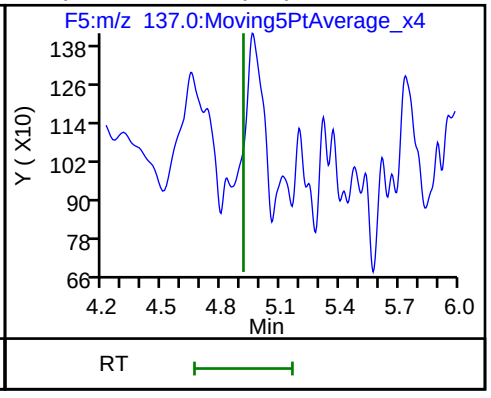
20 PETN (ND)



22 o-Nitrotoluene (ND)



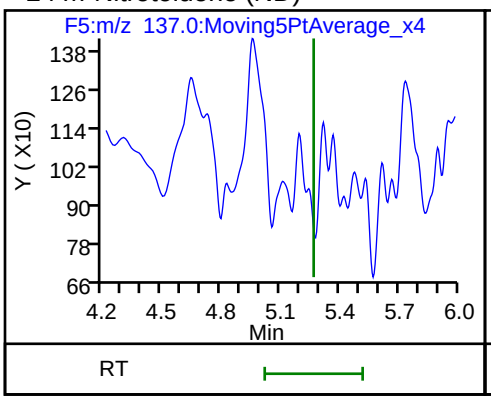
23 p-Nitrotoluene (ND)



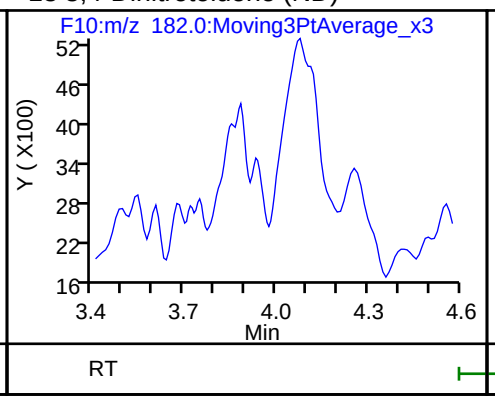
Report Date: 06-Apr-2022 06:44:11 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05015.d

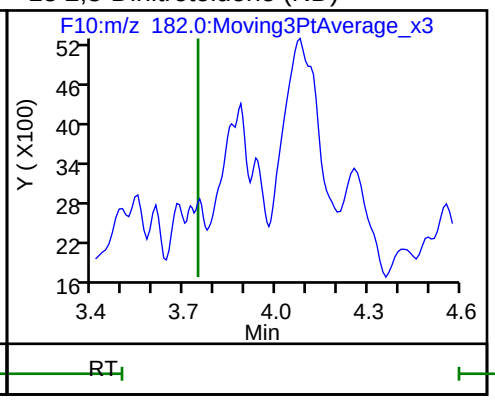
24 m-Nitrotoluene (ND)



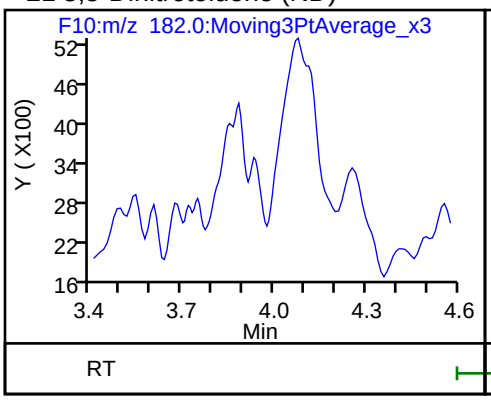
13 3,4-Dinitrotoluene (ND)



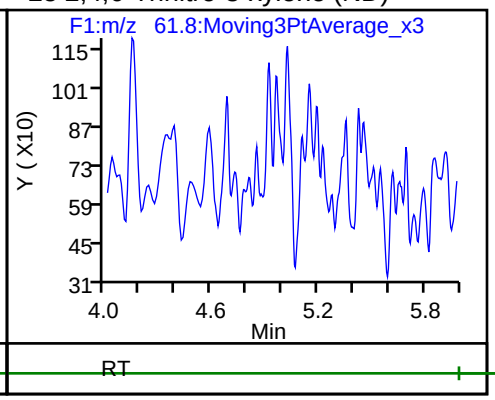
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 06:44:11 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05015.d
Lims ID: 280-160187-A-28-A
Client ID: EB-1
Sample Type: Client
Inject. Date: 05-Apr-2022 11:37:14 ALS Bottle#: 13 Worklist Smp#: 15
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-28-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 12:47:37

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	97.4	97.05

Report Date: 06-Apr-2022 06:44:11 Chrom Revision: 2.3 18-Mar-2022 09:07:22

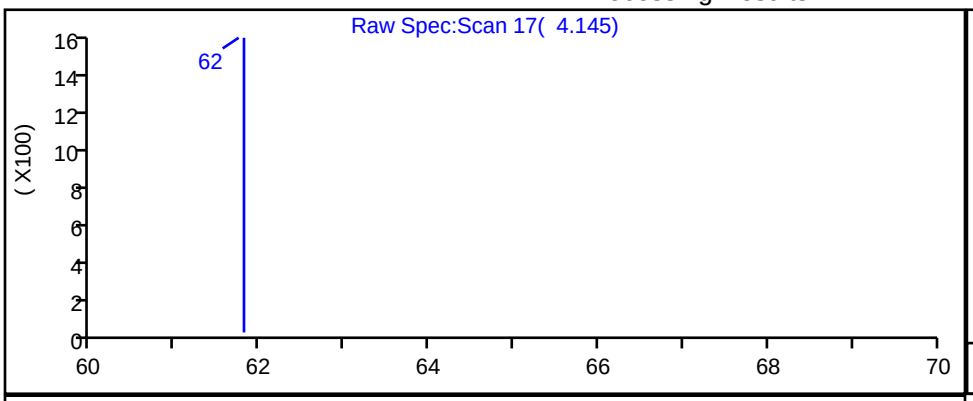
User Disabled Compound Report

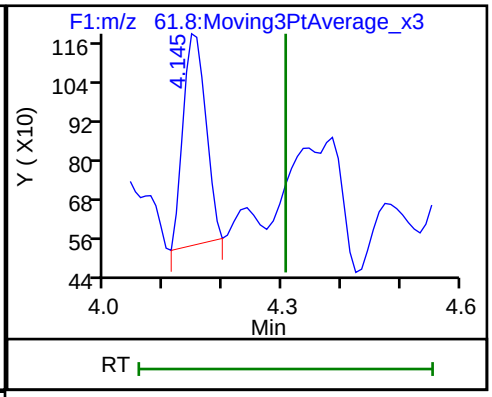
Eurofins Denver

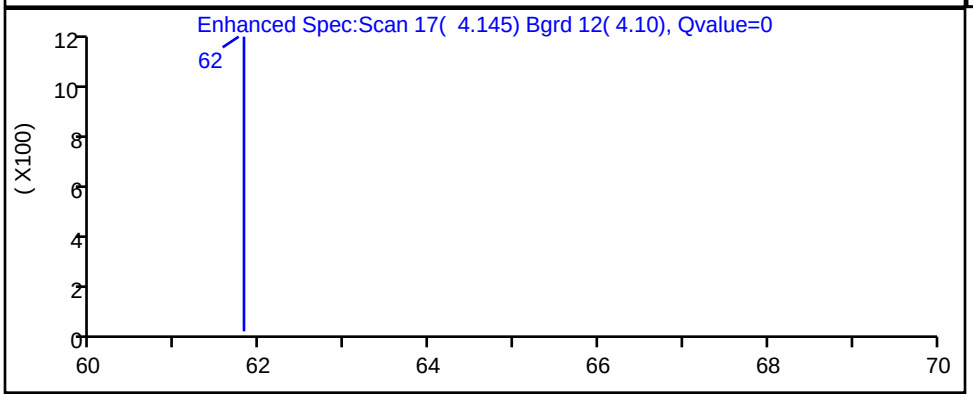
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05015.d				
Injection Date:	05-Apr-2022 11:37:14	Instrument ID:	LC_LCMS7		
Lims ID:	280-160187-A-28-A	Lab Sample ID:	280-160187-28		
Client ID:	EB-1				
Operator ID:	acm	ALS Bottle#:	13	Worklist Smp#:	15
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F1:SIR		

20 PETN, CAS: 78-11-5

Processing Results







RT	Mass	Response	Amount
4.15	61.80	1750	0.797096

Reviewer: meyera, 05-Apr-2022 12:47:29

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB187 (0-2) | Lab Sample ID: 280-160187-29
Matrix: Solid | Lab File ID: ex722D05071.d
Analysis Method: 8321A | Date Collected: 03/23/2022 08:15
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:54
Sample wt/vol: 10.52(g) | Date Analyzed: 04/05/2022 17:16
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.: 570786 | 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	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 Q	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 Q	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 M	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	96		68-140

Report Date: 06-Apr-2022 07:10:20 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\ex722D05071.d
Lims ID: 280-160187-A-29-B
Client ID: 29SB187 (0-2)
Sample Type: Client
Inject. Date: 05-Apr-2022 17:16:23 ALS Bottle#: 13 Worklist Smp#: 68
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-29-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 07:10:15 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 06:58:09
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	1.226	1.226	0.0		305654	125.0	373	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		1057465	125.0	444	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.850	2.850	0.0		1808620	129.4	196	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	845305	95.8	95.0	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		6006784	125.0	113	

QC Flag Legend
Processing Flags

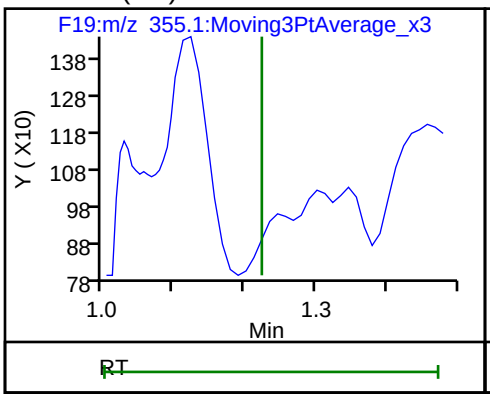
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:10:20 Chrom Revision: 2.3 18-Mar-2022 09:07:22

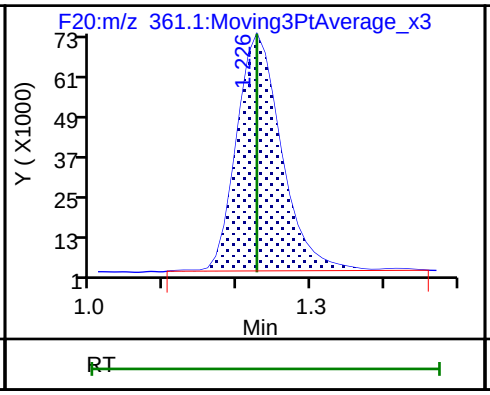
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05071.d
Injection Date: 05-Apr-2022 17:16:23 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-29-B Lab Sample ID: 280-160187-29
Client ID: 29SB187 (0-2)
Operator ID: acm ALS Bottle#: 13 Worklist Smp#: 68
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

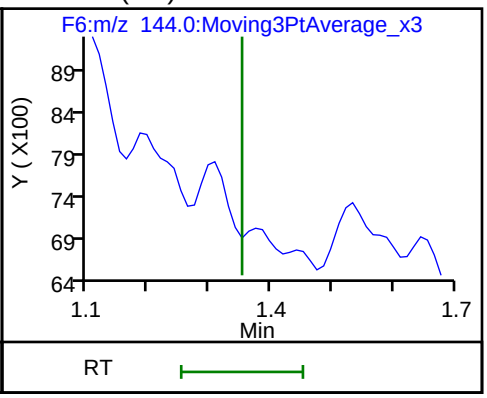
2 HMX (ND)



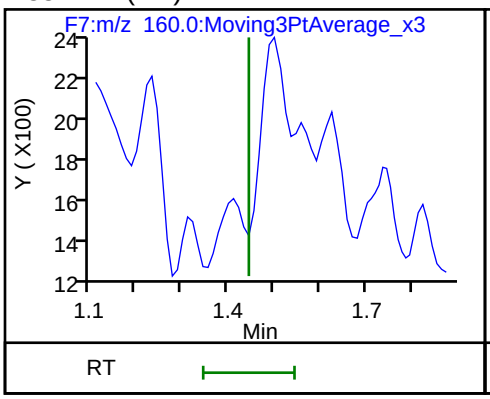
* 1 HMX-13C4



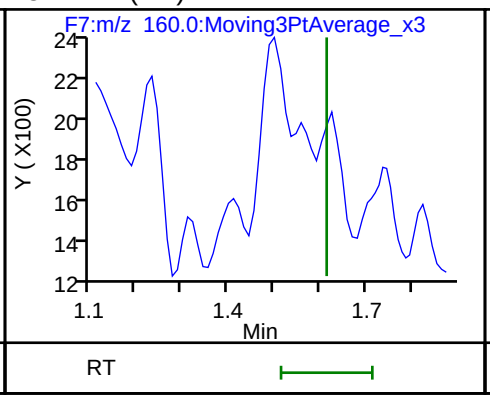
36 TNX (ND)



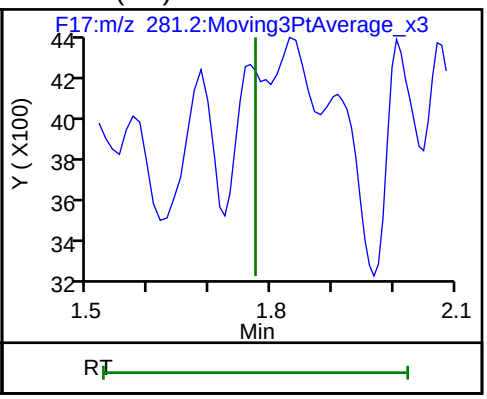
33 DNX (ND)



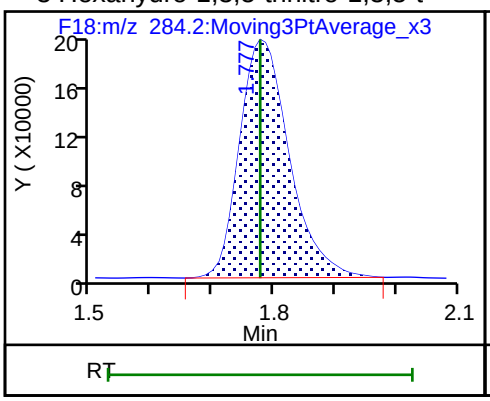
34 MNX (ND)



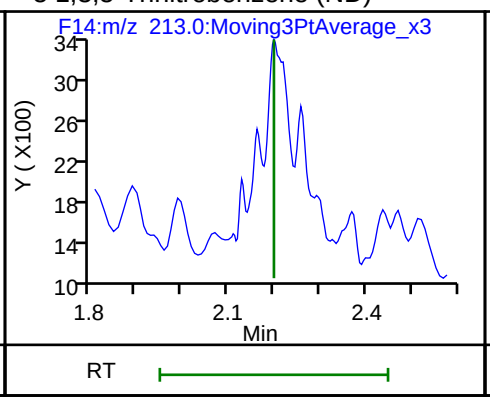
4 RDX (ND)



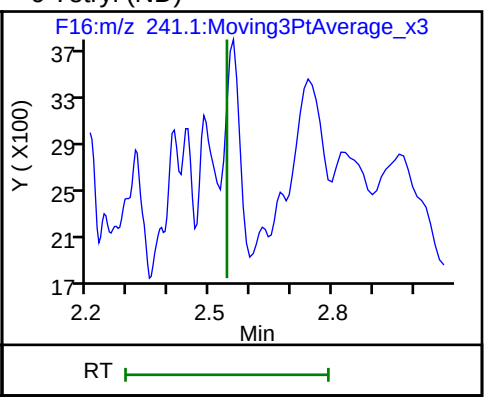
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



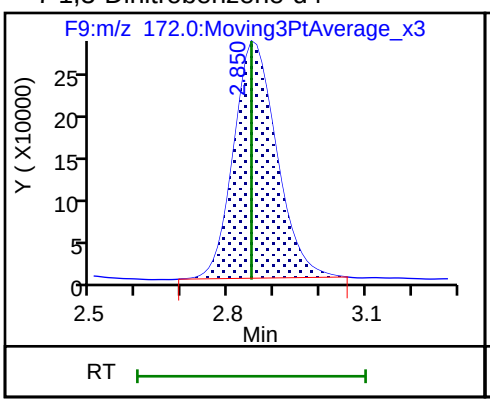
5 1,3,5-Trinitrobenzene (ND)



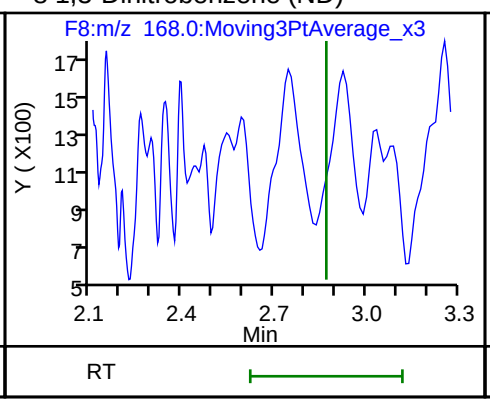
6 Tetryl (ND)



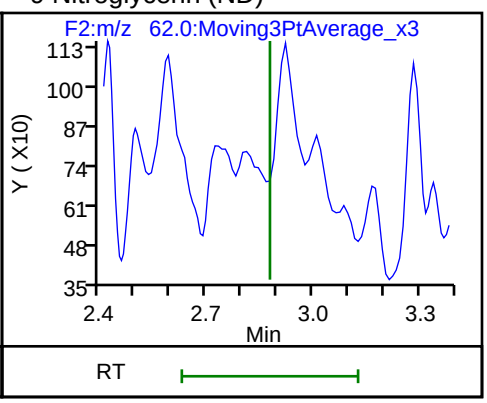
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

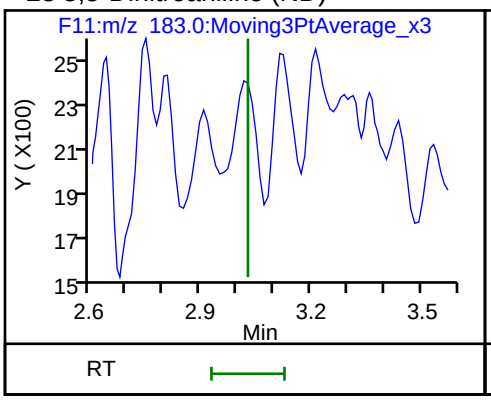


9 Nitroglycerin (ND)

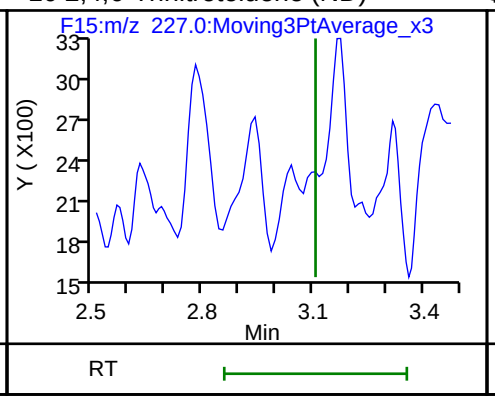


Report Date: 06-Apr-2022 07:10:20 Chrom Revision: 2.3 18-Mar-2022 09:07:22
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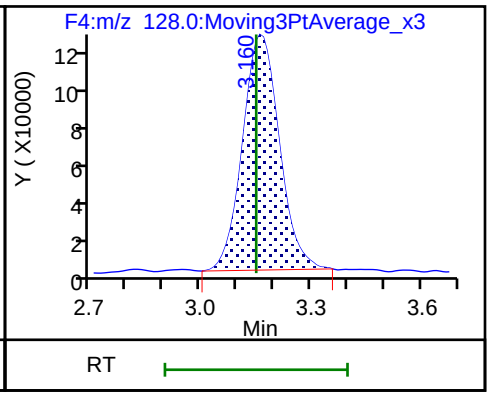
28 3,5-Dinitroaniline (ND)



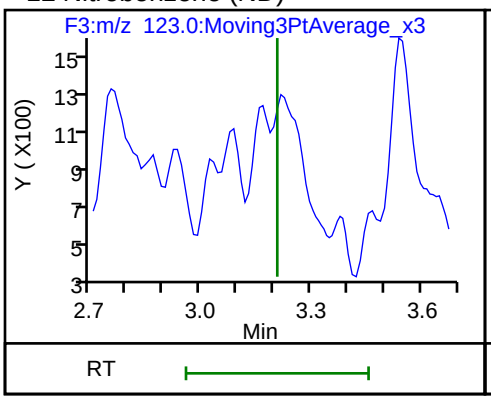
10 2,4,6-Trinitrotoluene (ND)



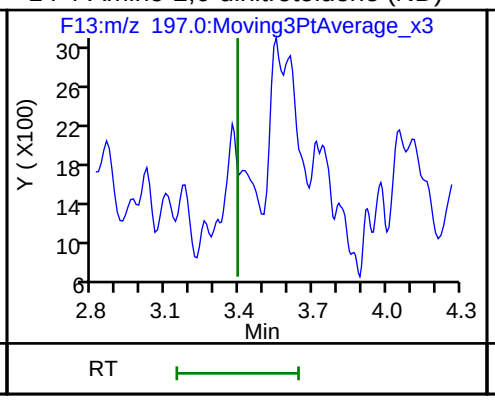
$ 11 Nitrobenzene-d5



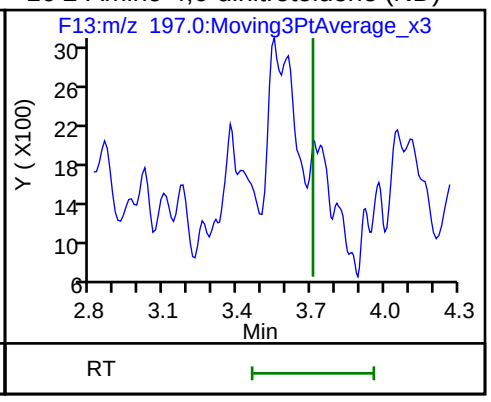
12 Nitrobenzene (ND)



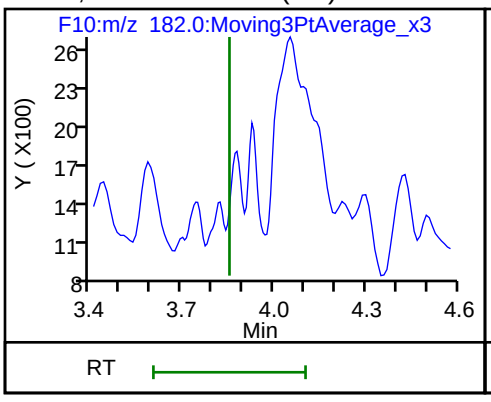
14 4-Amino-2,6-dinitrotoluene (ND)



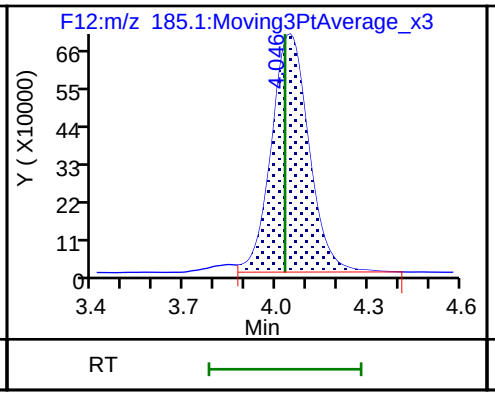
16 2-Amino-4,6-dinitrotoluene (ND)



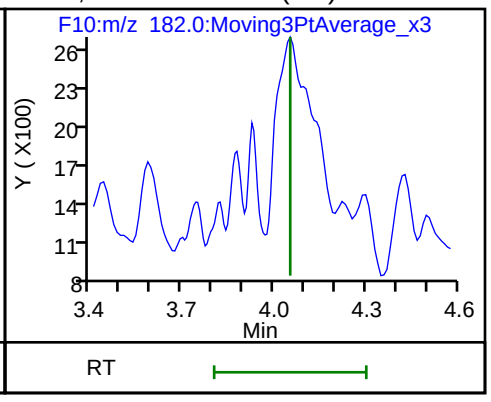
17 2,6-Dinitrotoluene (ND)



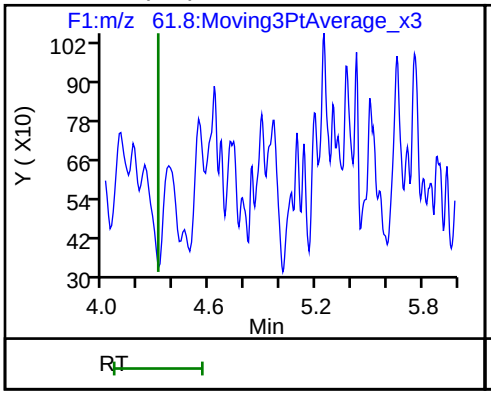
* 18 2,4-dinitrotoluene-d3



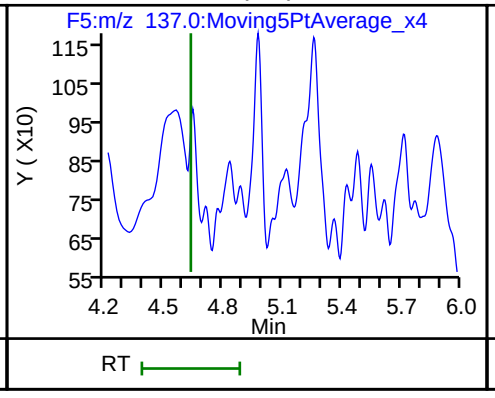
19 2,4-Dinitrotoluene (ND)



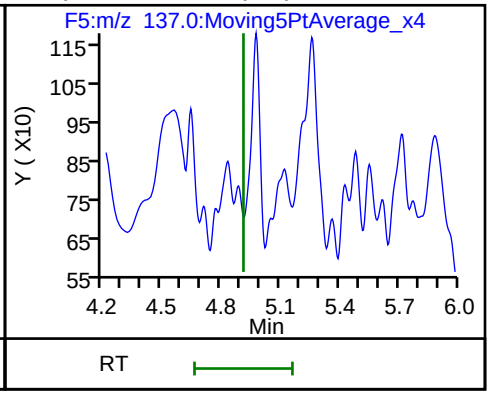
20 PETN (ND)



22 o-Nitrotoluene (ND)

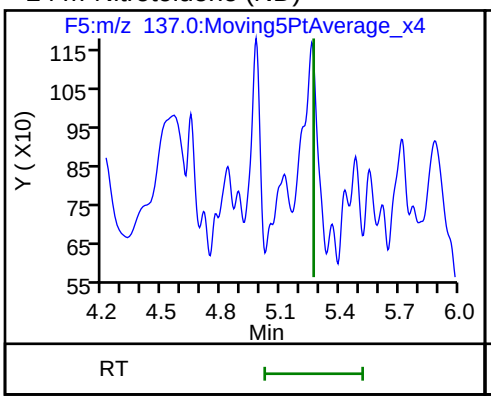


23 p-Nitrotoluene (ND)

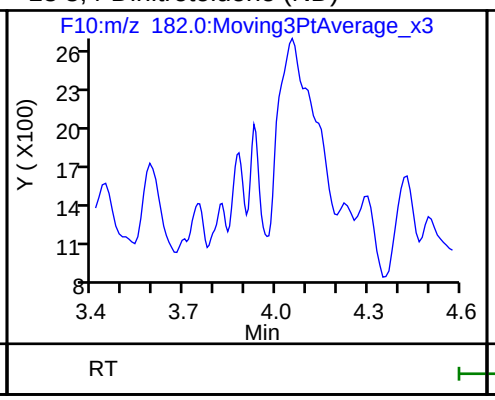


Report Date: 06-Apr-2022 07:10:20 Chrom Revision: 2.3 18-Mar-2022 09:07:22
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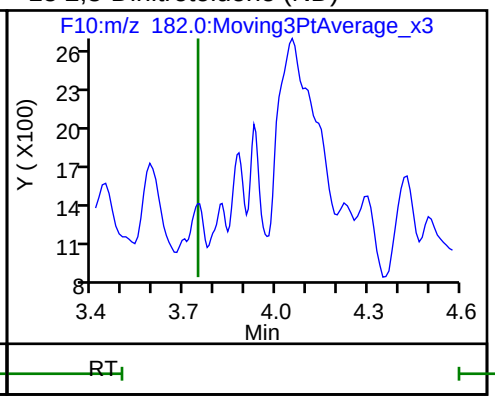
24 m-Nitrotoluene (ND)



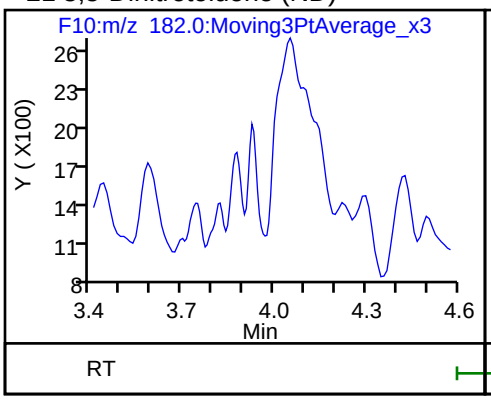
13 3,4-Dinitrotoluene (ND)



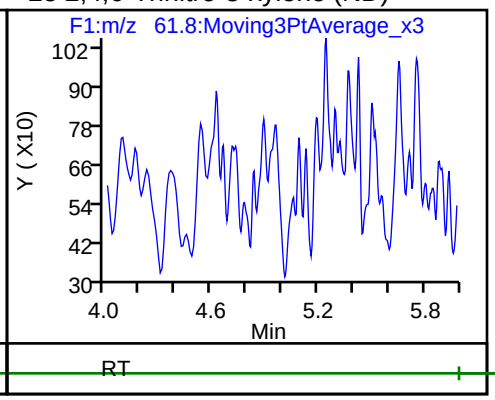
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 07:10:20 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05071.d
Lims ID: 280-160187-A-29-B
Client ID: 29SB187 (0-2)
Sample Type: Client
Inject. Date: 05-Apr-2022 17:16:23 ALS Bottle#: 13 Worklist Smp#: 68
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-29-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 07:10:15 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 06:58:09

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	95.8	95.53

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB187 (5-7) | Lab Sample ID: 280-160187-30
Matrix: Solid | Lab File ID: ex722D05072.d
Analysis Method: 8321A | Date Collected: 03/23/2022 08:25
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:54
Sample wt/vol: 10.44(g) | Date Analyzed: 04/05/2022 17:22
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.: 570786 | 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 Q	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 Q	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	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 M	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

Report Date: 06-Apr-2022 07:10:20 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\ex722D05072.d
Lims ID: 280-160187-A-30-B
Client ID: 29SB187 (5-7)
Sample Type: Client
Inject. Date: 05-Apr-2022 17:22:48 ALS Bottle#: 14 Worklist Smp#: 69
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-30-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 07:10:15 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 06:58:22
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	1.226	1.226	0.0		306939	125.0	246	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		953376	125.0	139	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1832611	129.4	192	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	849243	95.0	129	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		5845828	125.0	120	

QC Flag Legend
Processing Flags

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

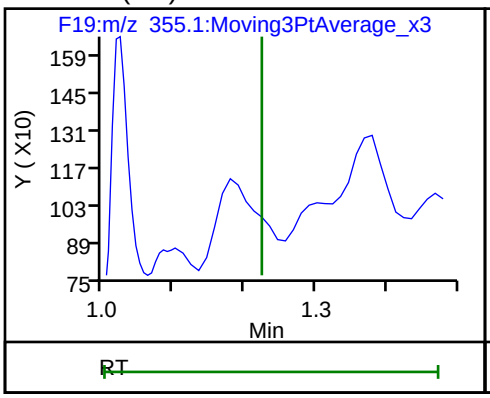
Report Date: 06-Apr-2022 07:10:20 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

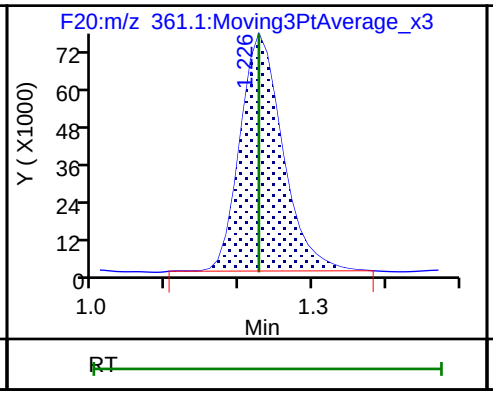
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05072.d

Injection Date:	05-Apr-2022 17:22:48	Instrument ID:	LC_LCMS7
Lims ID:	280-160187-A-30-B	Lab Sample ID:	280-160187-30
Client ID:	29SB187 (5-7)		
Operator ID:	acm	ALS Bottle#:	14 Worklist Smp#: 69
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl

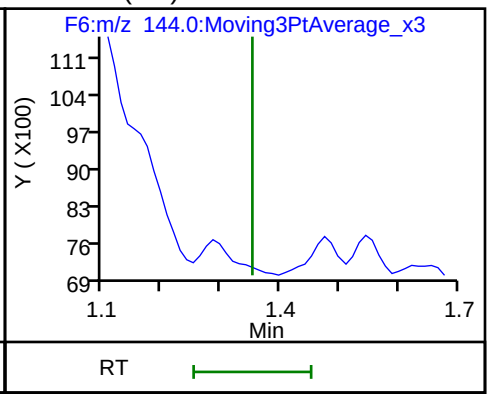
2 HMX (ND)



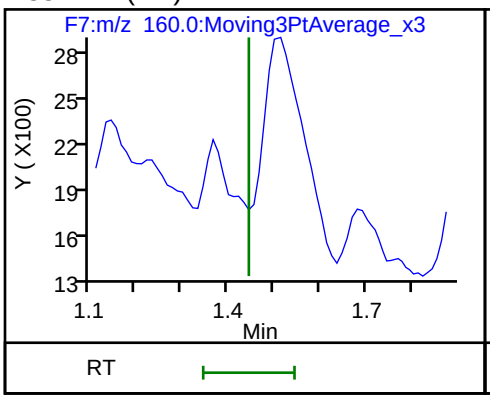
* 1 HMX-13C4



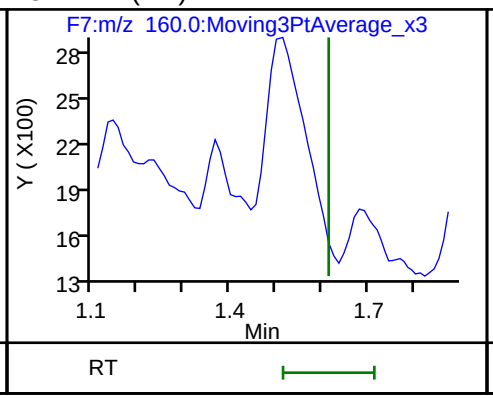
36 TNX (ND)



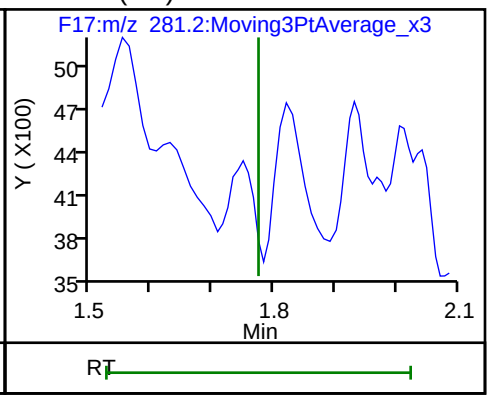
33 DNX (ND)



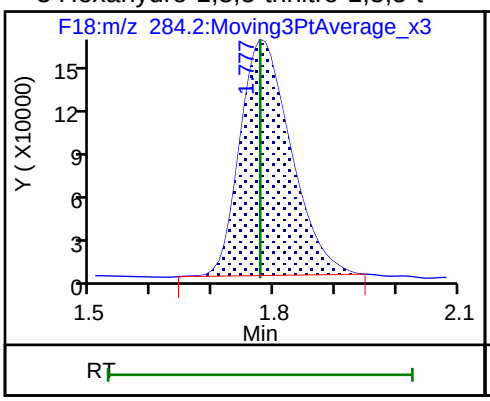
34 MNX (ND)



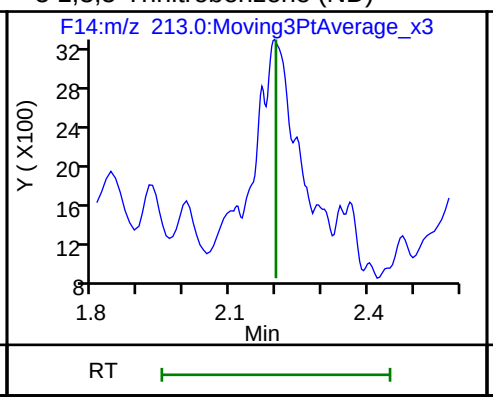
4 RDX (ND)



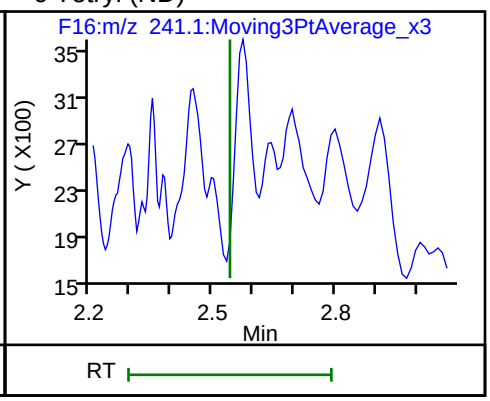
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



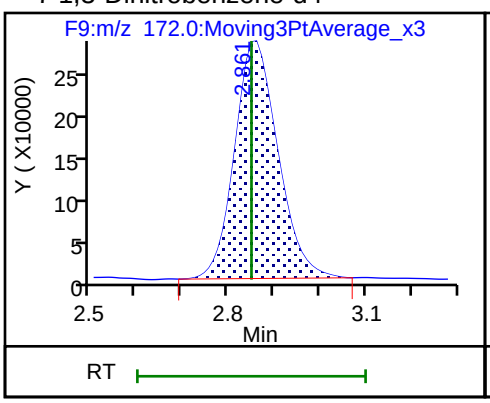
5 1,3,5-Trinitrobenzene (ND)



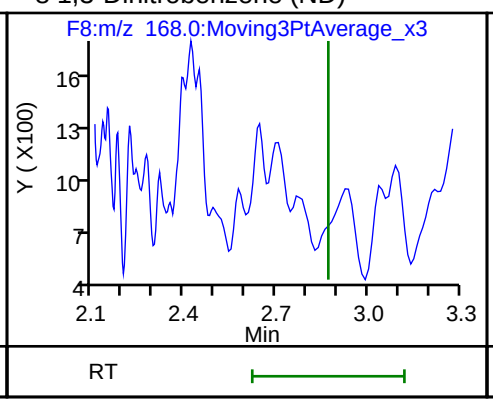
6 Tetryl (ND)



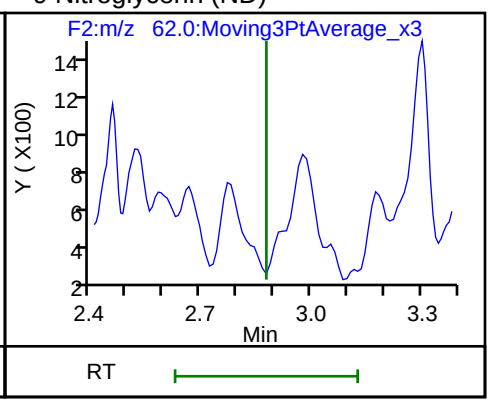
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

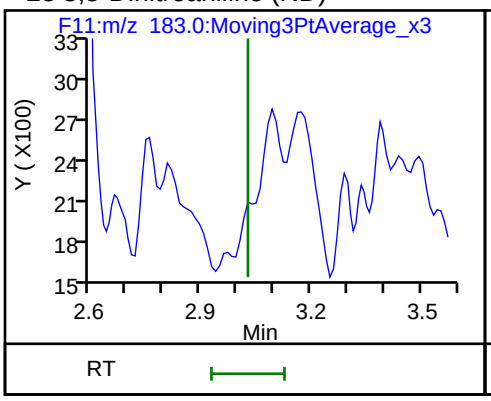


9 Nitroglycerin (ND)

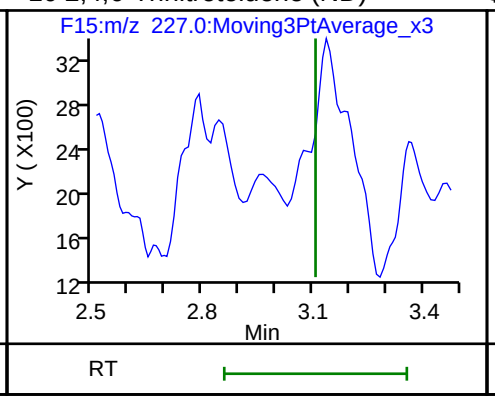


Report Date: 06-Apr-2022 07:10:20 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05072.d

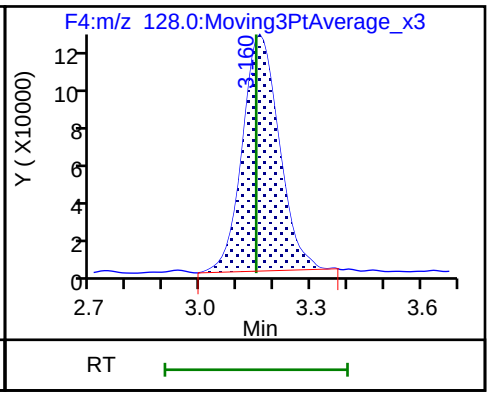
28 3,5-Dinitroaniline (ND)



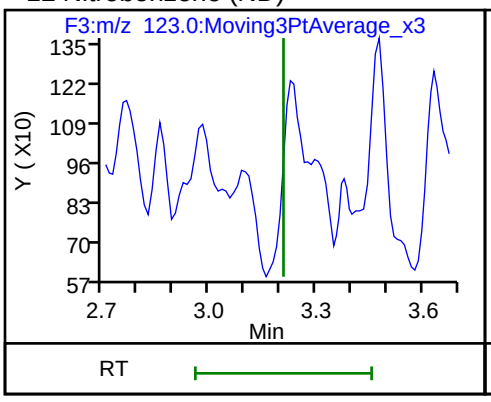
10 2,4,6-Trinitrotoluene (ND)



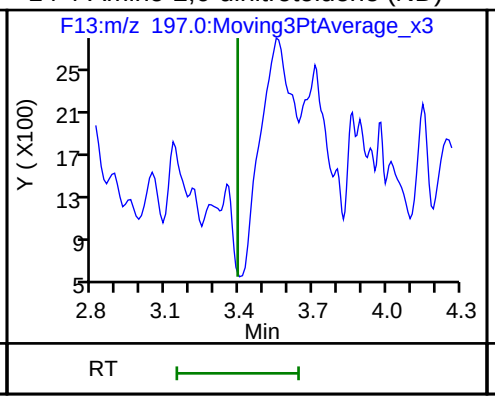
$ 11 Nitrobenzene-d5



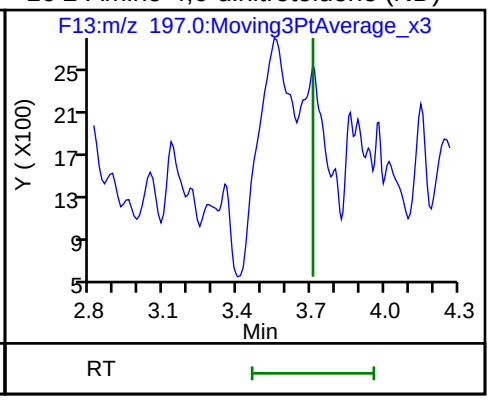
12 Nitrobenzene (ND)



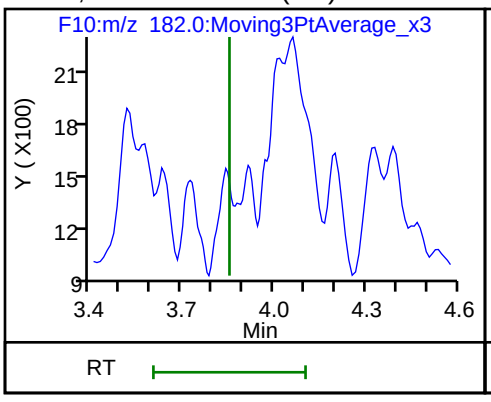
14 4-Amino-2,6-dinitrotoluene (ND)



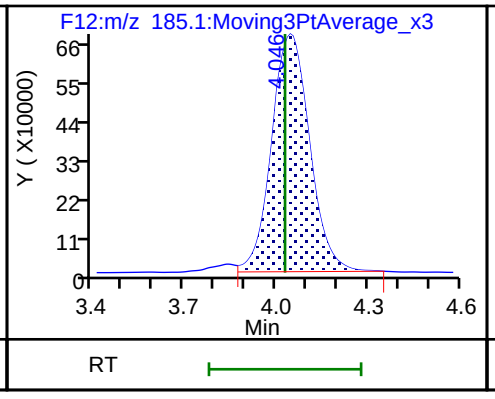
16 2-Amino-4,6-dinitrotoluene (ND)



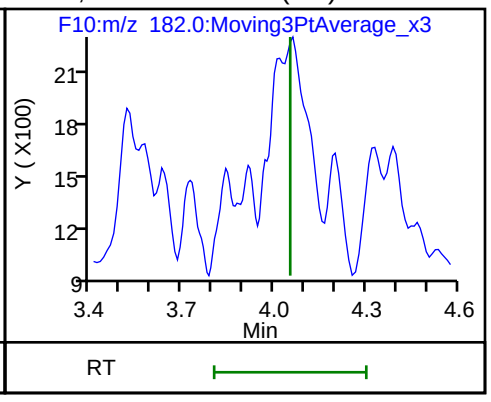
17 2,6-Dinitrotoluene (ND)



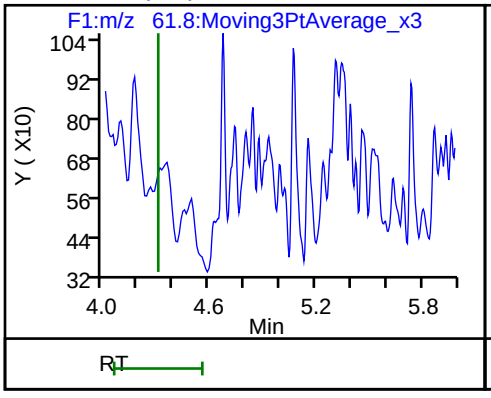
* 18 2,4-dinitrotoluene-d3



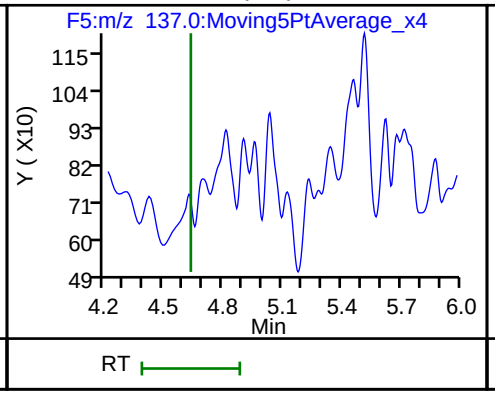
19 2,4-Dinitrotoluene (ND)



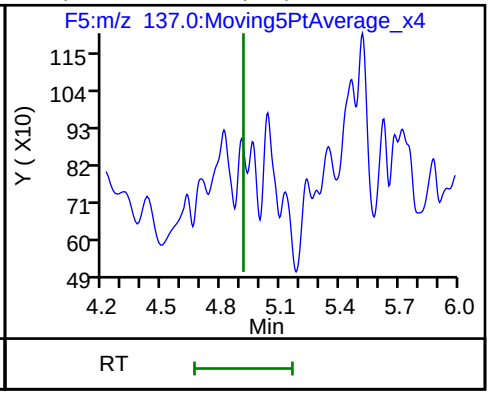
20 PETN (ND)



22 o-Nitrotoluene (ND)

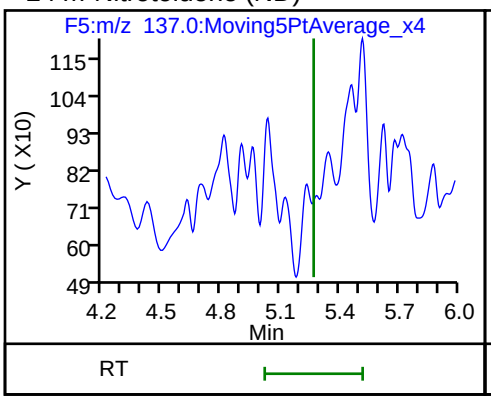


23 p-Nitrotoluene (ND)

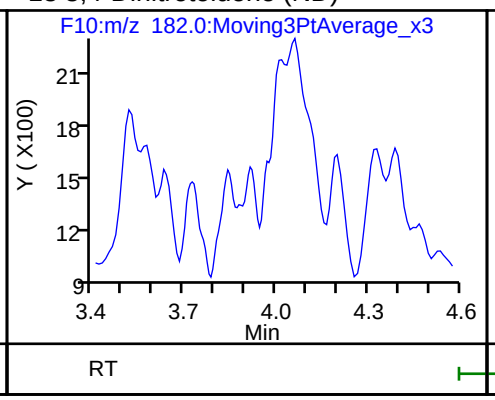


Report Date: 06-Apr-2022 07:10:20
Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05072.d

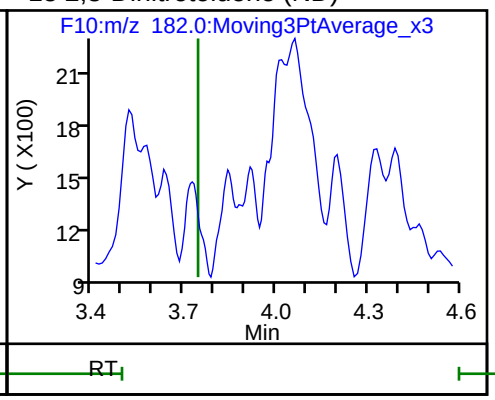
24 m-Nitrotoluene (ND)



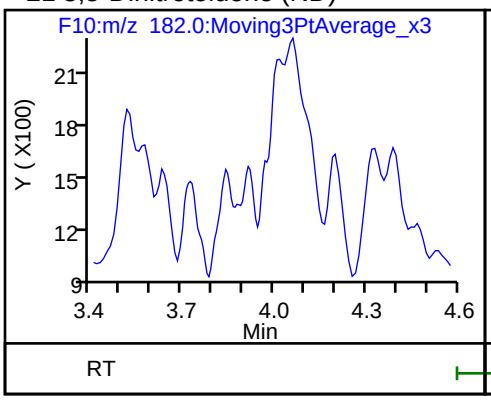
13 3,4-Dinitrotoluene (ND)



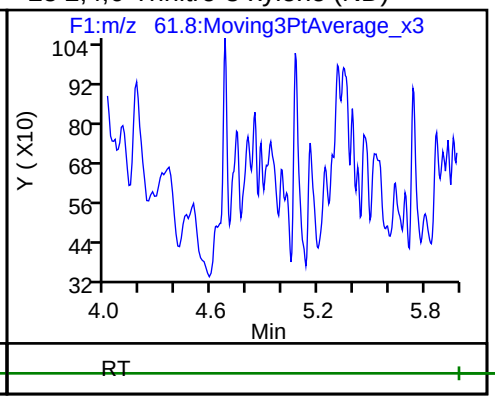
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 07:10:20 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05072.d
Lims ID: 280-160187-A-30-B
Client ID: 29SB187 (5-7)
Sample Type: Client
Inject. Date: 05-Apr-2022 17:22:48 ALS Bottle#: 14 Worklist Smp#: 69
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-30-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 07:10:15 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 06:58:22

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	95.0	94.71

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB187 (10-0.5) | Lab Sample ID: 280-160187-31
Matrix: Solid | Lab File ID: ex722D05073.d
Analysis Method: 8321A | Date Collected: 03/23/2022 08:35
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:54
Sample wt/vol: 10.05(g) | Date Analyzed: 04/05/2022 17:29
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	0.044
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	0.046
606-20-2	2,6-Dinitrotoluene	0.050	U Q	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 Q	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 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 07:10:21 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\ex722D05073.d
Lims ID: 280-160187-A-31-B
Client ID: 29SB187 (10-0.5)
Sample Type: Client
Inject. Date: 05-Apr-2022 17:29:12 ALS Bottle#: 15 Worklist Smp#: 70
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-31-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 07:10:15 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 06:58:35
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	1.226	1.226	0.0		276614	125.0	185	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		1049058	125.0	292	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1821642	129.4	337	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.779	869979	98.0	161	
* 18 2,4-dinitrotoluene-d3								
185.1	4.054	4.028	0.026		5464004	125.0	175	

QC Flag Legend
Processing Flags

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

Report Date: 06-Apr-2022 07:10:21 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05073.d

Injection Date: 05-Apr-2022 17:29:12 Instrument ID: LC_LCMS7

Lims ID: 280-160187-A-31-B Lab Sample ID: 280-160187-31

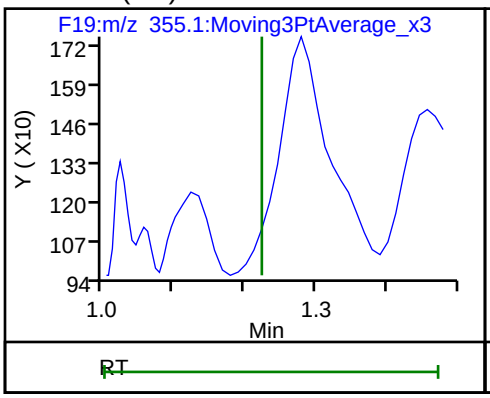
Client ID: 29SB187 (10-0.5)

Operator ID: acm ALS Bottle#: 15 Worklist Smp#: 70

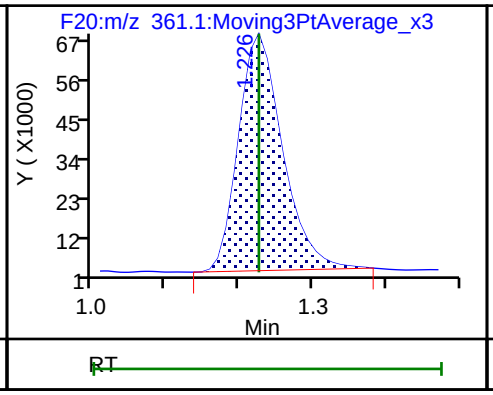
Injection Vol: 10.0 ul Dil. Factor: 1.0000

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

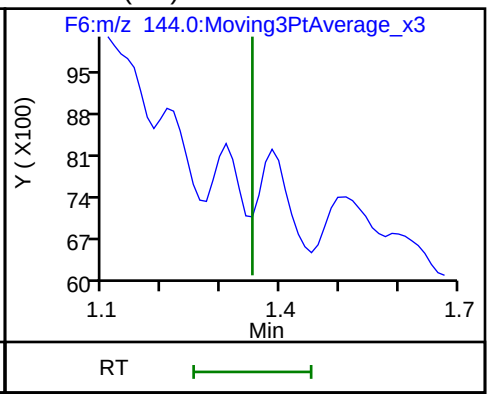
2 HMX (ND)



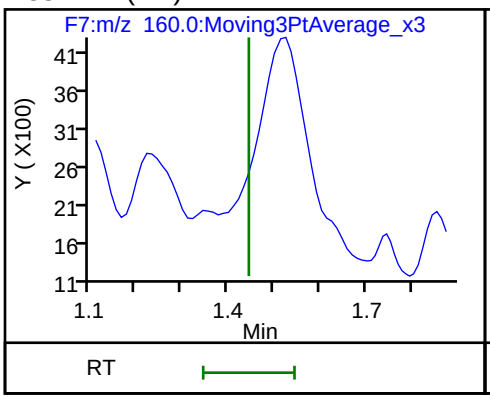
* 1 HMX-13C4



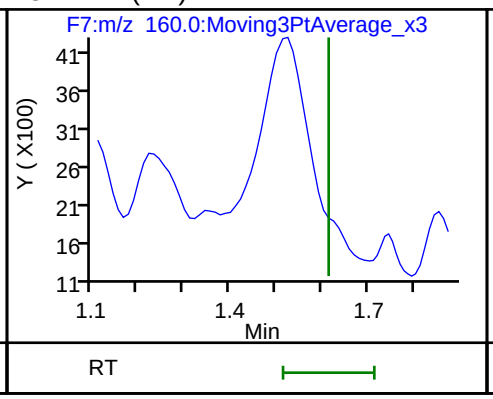
36 TNX (ND)



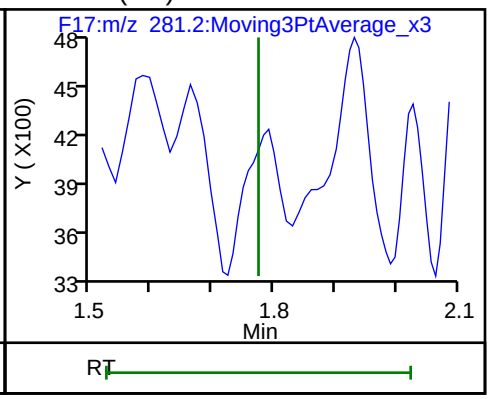
33 DNX (ND)



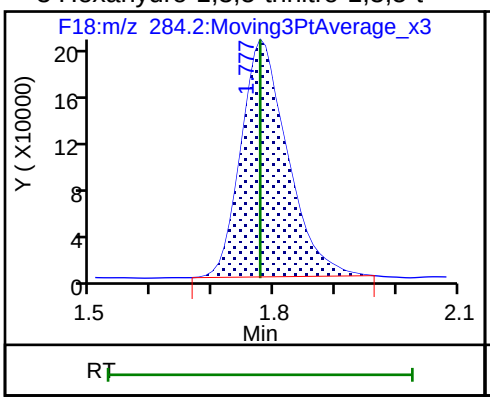
34 MNX (ND)



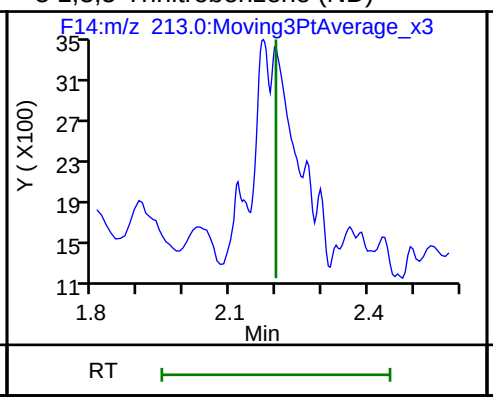
4 RDX (ND)



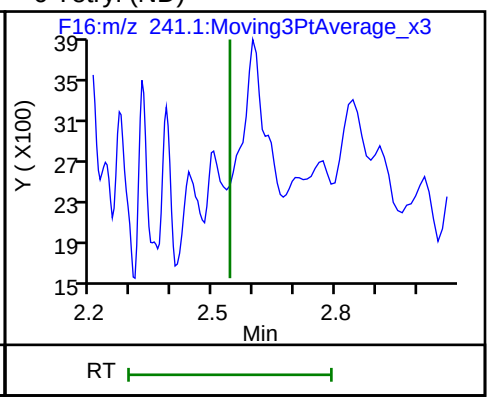
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



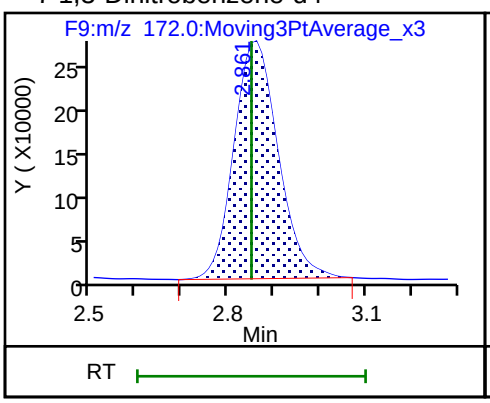
5 1,3,5-Trinitrobenzene (ND)



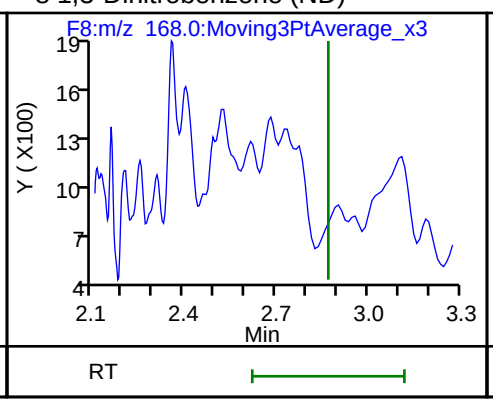
6 Tetryl (ND)



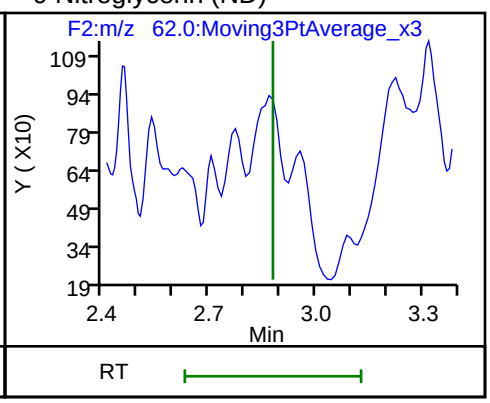
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



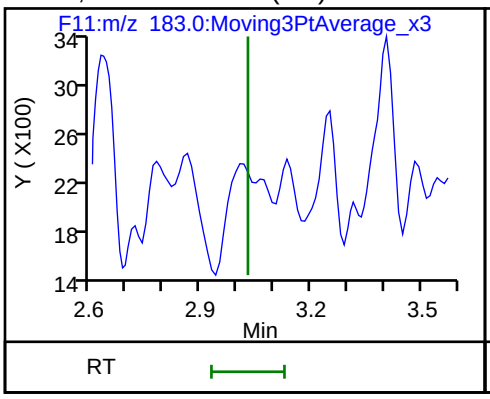
9 Nitroglycerin (ND)



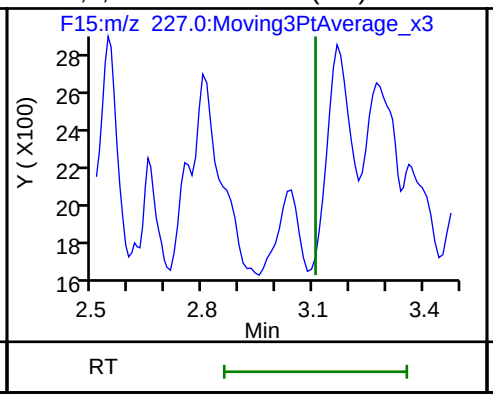
Report Date: 06-Apr-2022 07:10:21 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05073.d

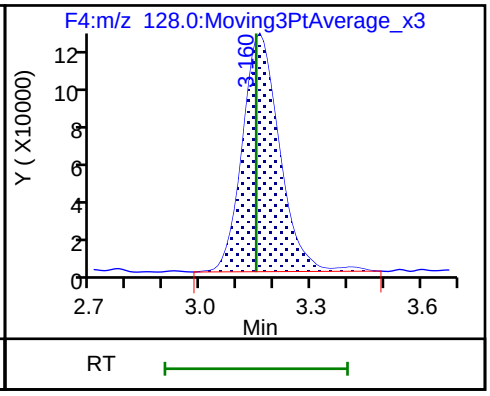
28 3,5-Dinitroaniline (ND)



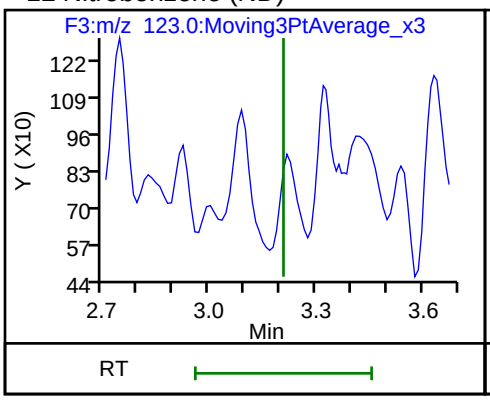
10 2,4,6-Trinitrotoluene (ND)



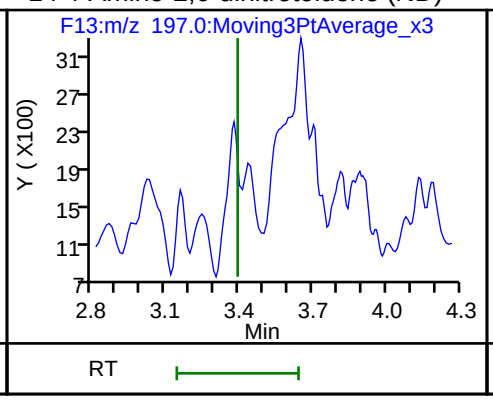
$ 11 Nitrobenzene-d5



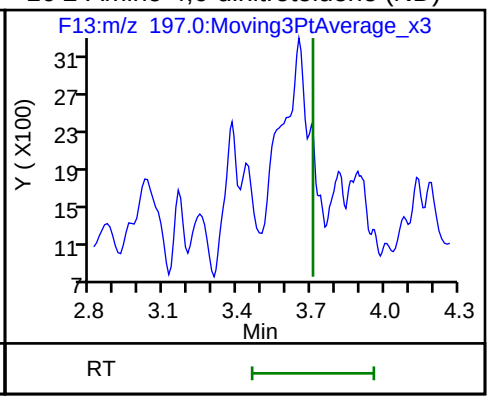
12 Nitrobenzene (ND)



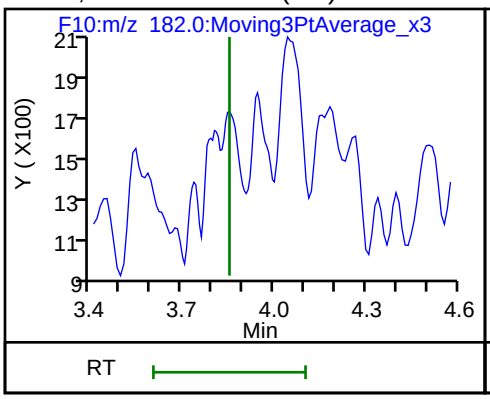
14 4-Amino-2,6-dinitrotoluene (ND)



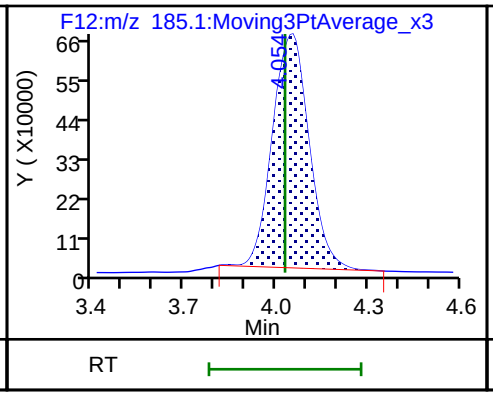
16 2-Amino-4,6-dinitrotoluene (ND)



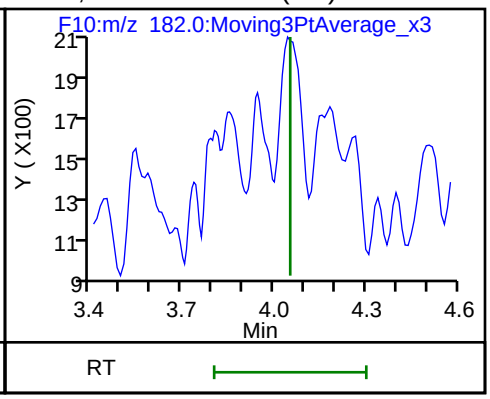
17 2,6-Dinitrotoluene (ND)



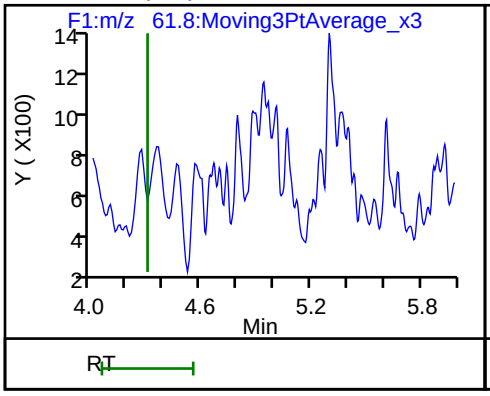
* 18 2,4-dinitrotoluene-d3



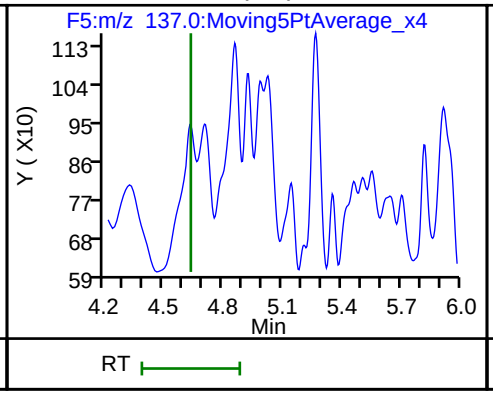
19 2,4-Dinitrotoluene (ND)



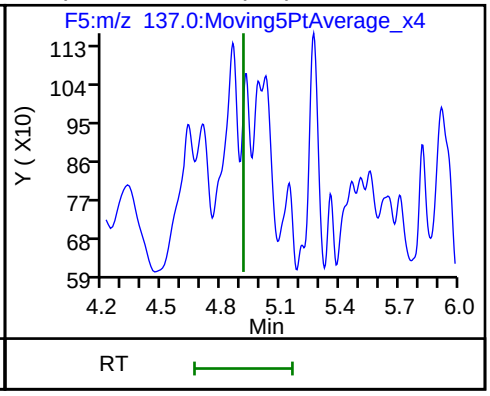
20 PETN (ND)



22 o-Nitrotoluene (ND)



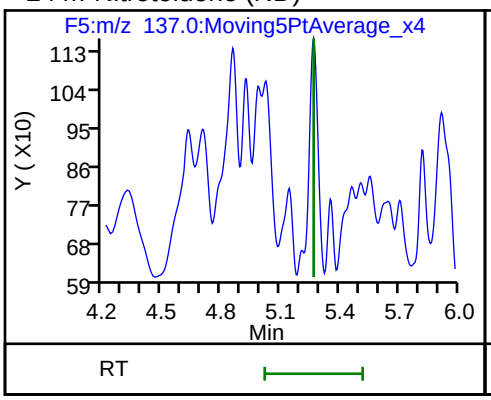
23 p-Nitrotoluene (ND)



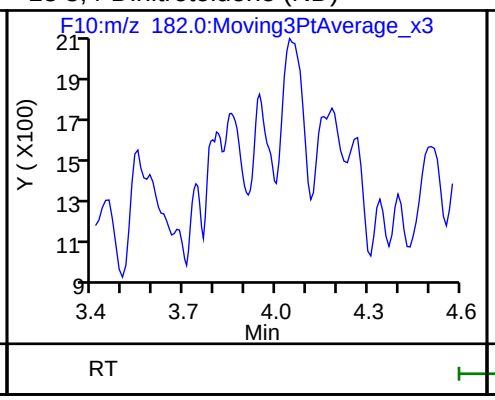
Report Date: 06-Apr-2022 07:10:21 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05073.d

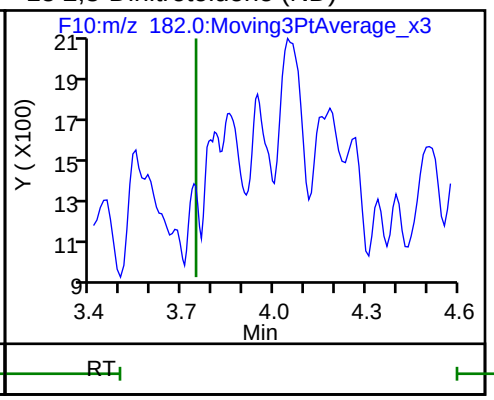
24 m-Nitrotoluene (ND)



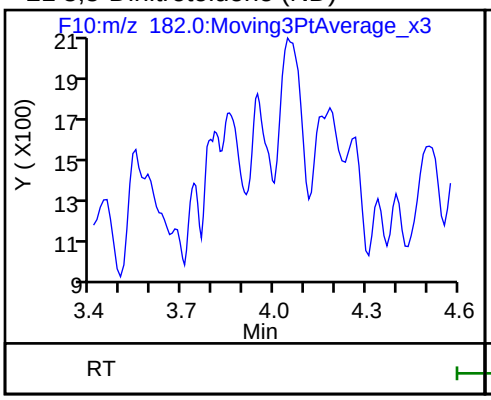
13 3,4-Dinitrotoluene (ND)



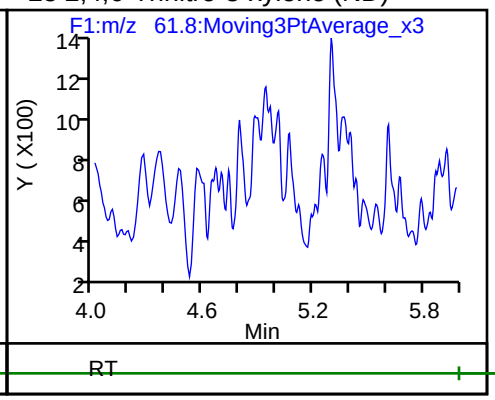
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 07:10:21 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05073.d				
Lims ID:	280-160187-A-31-B				
Client ID:	29SB187 (10-0.5)				
Sample Type:	Client				
Inject. Date:	05-Apr-2022 17:29:12	ALS Bottle#:	15	Worklist Smp#:	70
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160187-A-31-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 07:10:15	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 06:58:35		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	98.0	97.64

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB189 (0-2) | Lab Sample ID: 280-160187-32
Matrix: Solid | Lab File ID: ex722D05074.d
Analysis Method: 8321A | Date Collected: 03/23/2022 08:50
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:54
Sample wt/vol: 10.53(g) | Date Analyzed: 04/05/2022 17:35
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	0.047	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	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 Q	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 Q	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	0.095	0.047	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	93		68-140

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\ex722D05074.d
Lims ID: 280-160187-A-32-B
Client ID: 29SB189 (0-2)
Sample Type: Client
Inject. Date: 05-Apr-2022 17:35:36 ALS Bottle#: 16 Worklist Smp#: 71
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-32-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 07:10:15 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 06:58:47
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	1.226	1.226	0.0		280750	125.0	121	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.785	1.777	0.008		1004165	125.0	232	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1814320	129.4	208	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.783	827151	93.5	86.2	
* 18 2,4-dinitrotoluene-d3								
185.1	4.037	4.028	0.009		5915126	125.0	122	

QC Flag Legend

Processing Flags

Reagents:

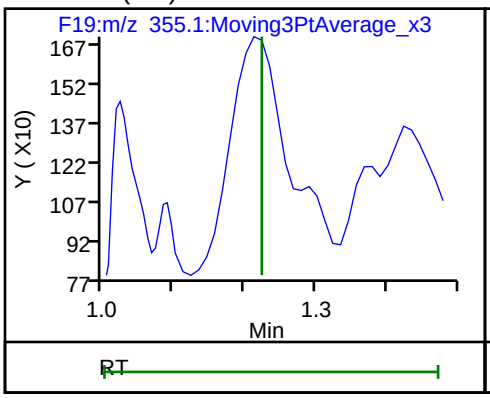
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

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

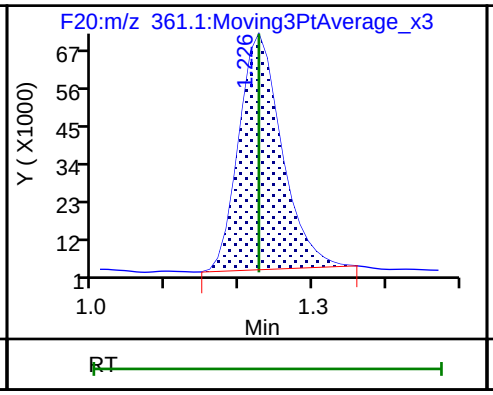
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05074.d
Injection Date: 05-Apr-2022 17:35:36 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-32-B Lab Sample ID: 280-160187-32
Client ID: 29SB189 (0-2)
Operator ID: acm ALS Bottle#: 16 Worklist Smp#: 71
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

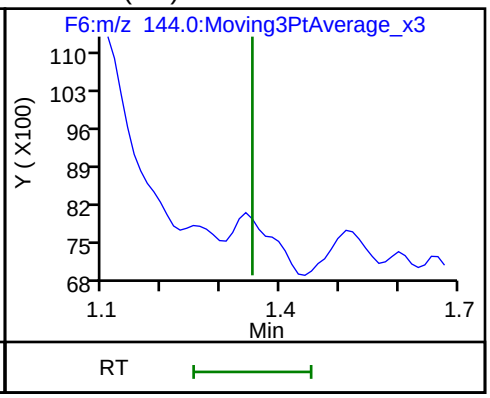
2 HMX (ND)



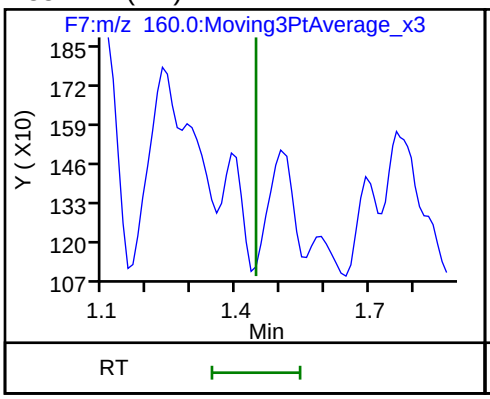
* 1 HMX-13C4



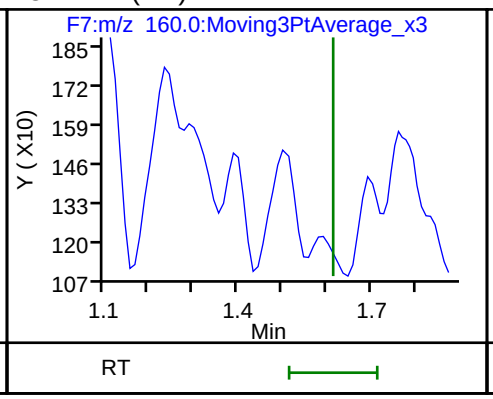
36 TNX (ND)



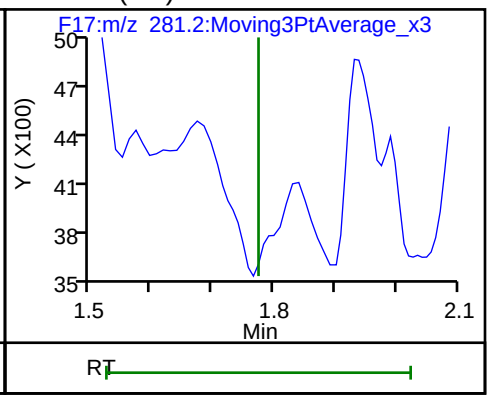
33 DNX (ND)



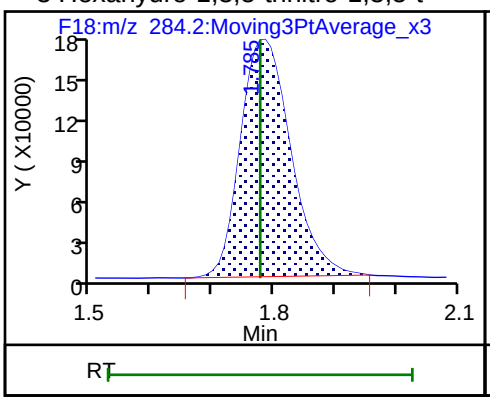
34 MNX (ND)



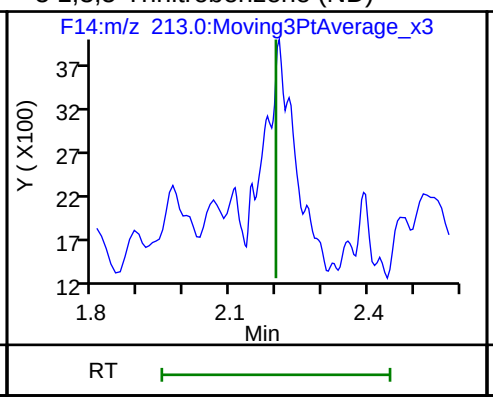
4 RDX (ND)



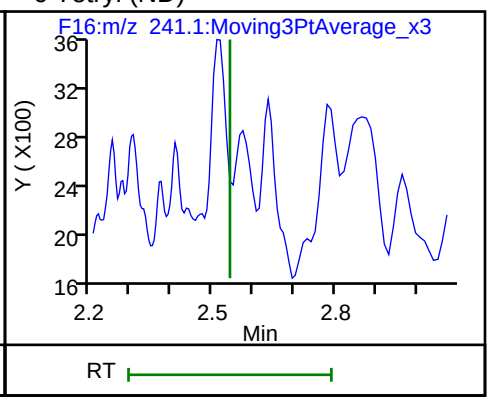
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



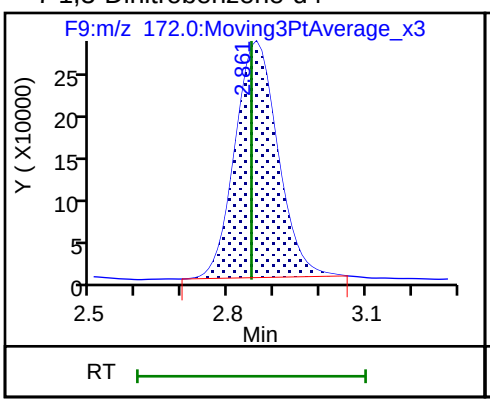
5 1,3,5-Trinitrobenzene (ND)



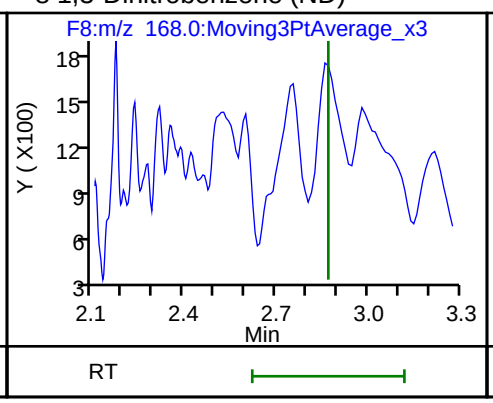
6 Tetryl (ND)



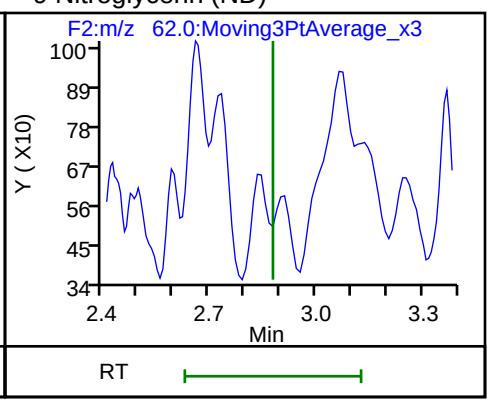
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



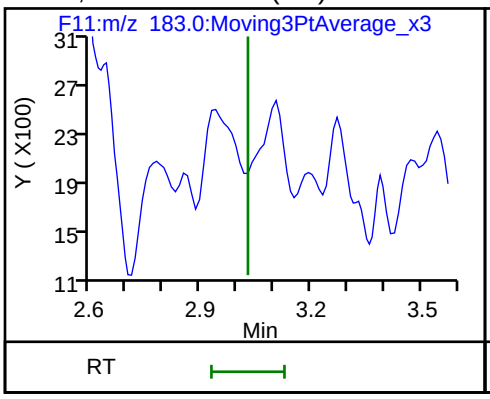
9 Nitroglycerin (ND)



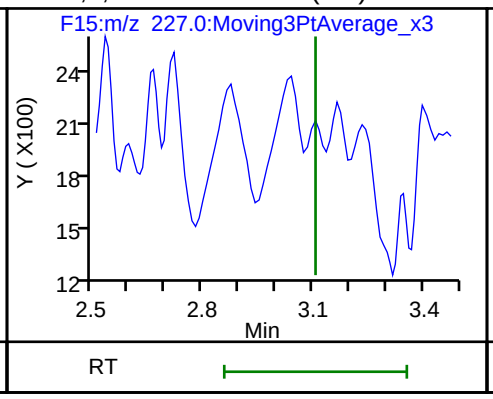
Report Date: 06-Apr-2022 07:10:22 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05074.d

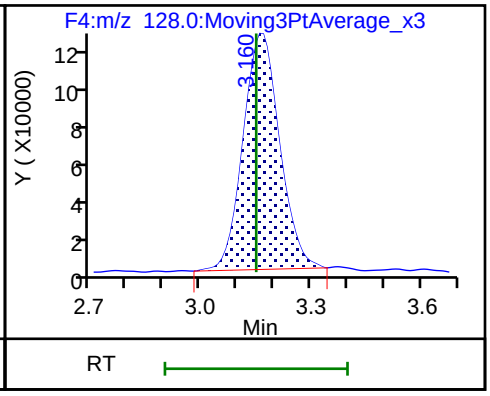
28 3,5-Dinitroaniline (ND)



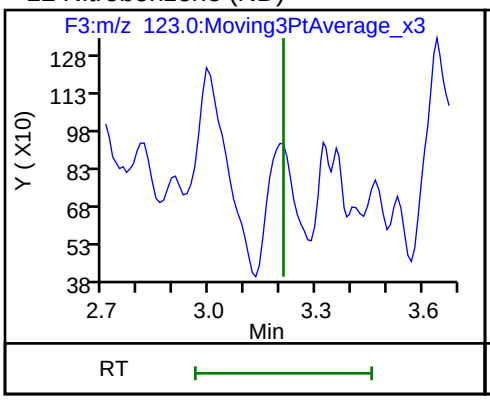
10 2,4,6-Trinitrotoluene (ND)



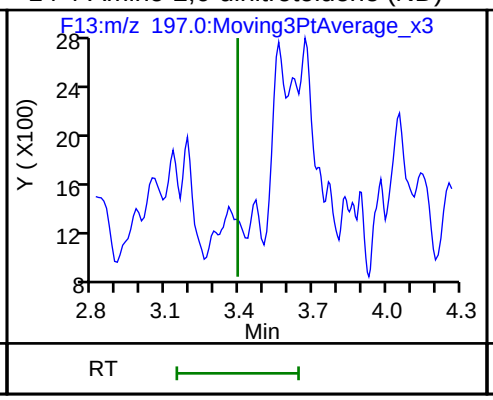
$ 11 Nitrobenzene-d5



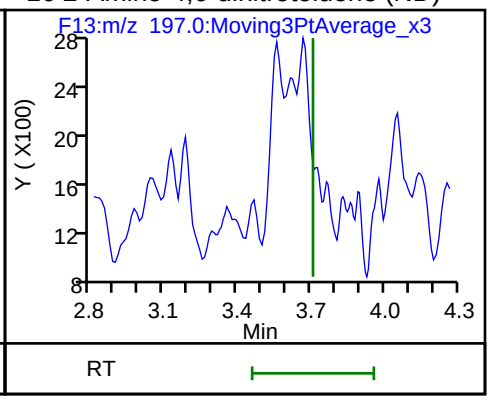
12 Nitrobenzene (ND)



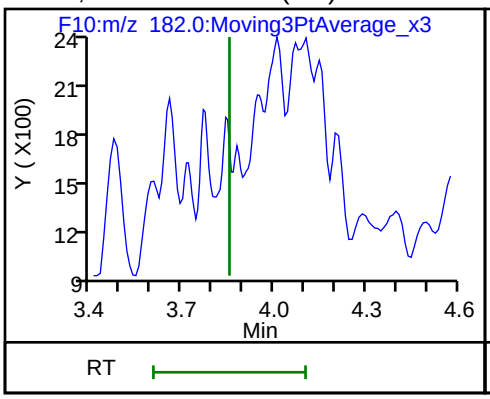
14 4-Amino-2,6-dinitrotoluene (ND)



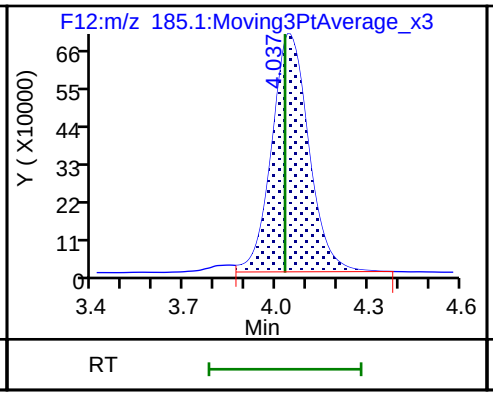
16 2-Amino-4,6-dinitrotoluene (ND)



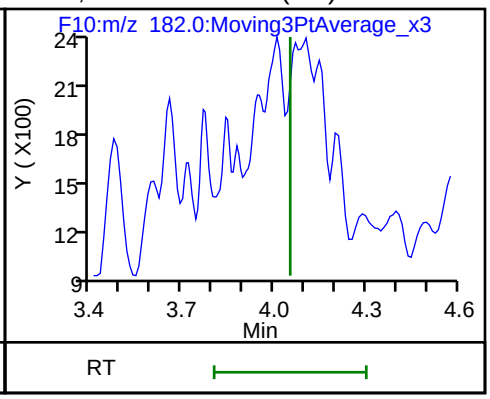
17 2,6-Dinitrotoluene (ND)



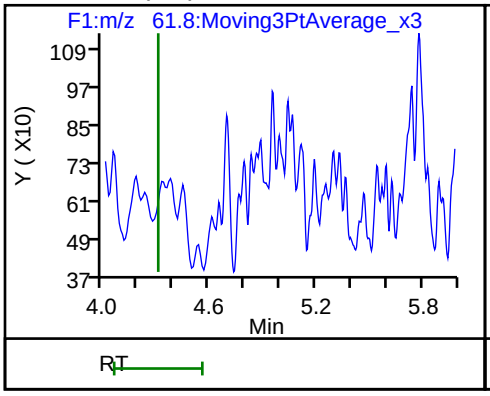
* 18 2,4-dinitrotoluene-d3



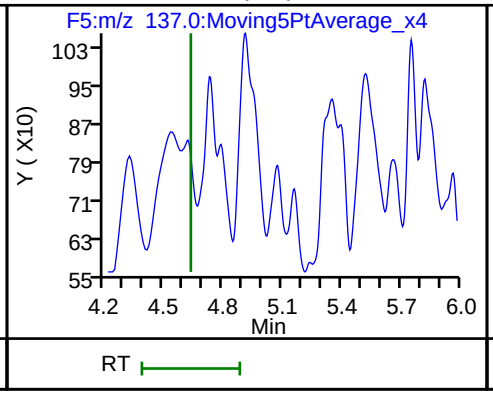
19 2,4-Dinitrotoluene (ND)



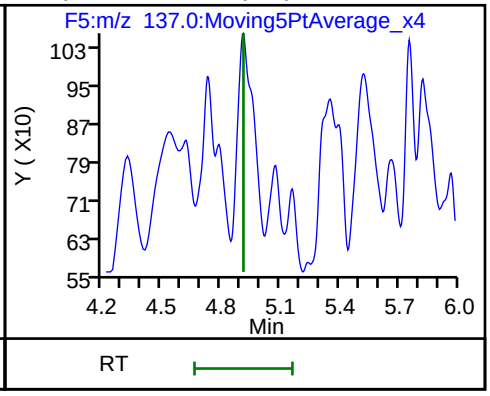
20 PETN (ND)



22 o-Nitrotoluene (ND)



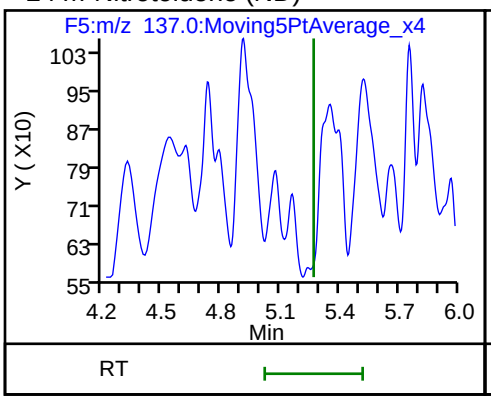
23 p-Nitrotoluene (ND)



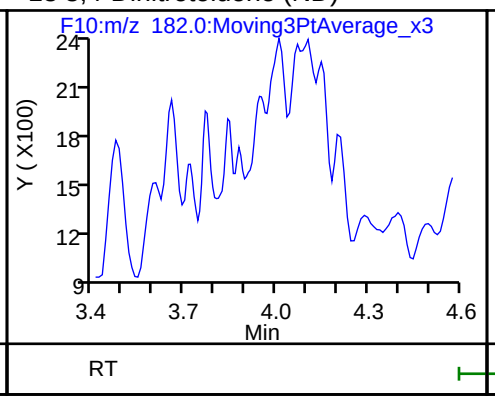
Report Date: 06-Apr-2022 07:10:22 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05074.d

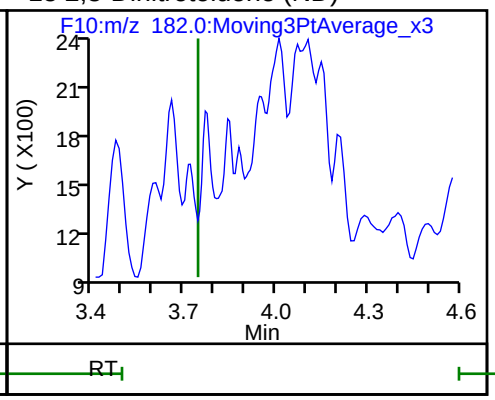
24 m-Nitrotoluene (ND)



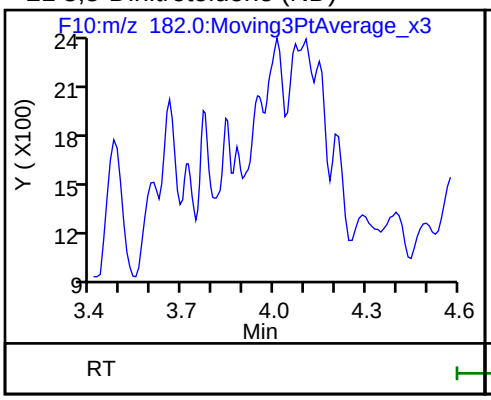
13 3,4-Dinitrotoluene (ND)



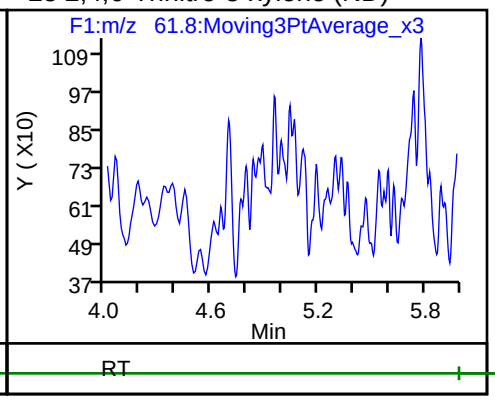
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



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

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05074.d
Lims ID: 280-160187-A-32-B
Client ID: 29SB189 (0-2)
Sample Type: Client
Inject. Date: 05-Apr-2022 17:35:36 ALS Bottle#: 16 Worklist Smp#: 71
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-32-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 07:10:15 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 06:58:47

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: 29SB189 (5-7) | Lab Sample ID: 280-160187-33
Matrix: Solid | Lab File ID: ex722D05076.d
Analysis Method: 8321A | Date Collected: 03/23/2022 08:55
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:54
Sample wt/vol: 10.12(g) | Date Analyzed: 04/05/2022 17:48
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	0.099	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	0.099	0.049	0.046
606-20-2	2,6-Dinitrotoluene	0.049	U Q	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 Q	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	92		68-140

Report Date: 06-Apr-2022 07:10:23 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\ex722D05076.d
Lims ID: 280-160187-A-33-B
Client ID: 29SB189 (5-7)
Sample Type: Client
Inject. Date: 05-Apr-2022 17:48:24 ALS Bottle#: 17 Worklist Smp#: 73
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-33-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 07:10:22 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 06:59:10
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	1.226	1.226	0.0		303924	125.0	146	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		1029617	125.0	109	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1852140	129.4	281	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	830422	91.9	205	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		5901263	125.0	111	

QC Flag Legend
Processing Flags

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

Report Date: 06-Apr-2022 07:10:23

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

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05076.d

Injection Date: 05-Apr-2022 17:48:24 Instrument ID: LC_LCMS7

Lims ID: 280-160187-A-33-B Lab Sample ID: 280-160187-33

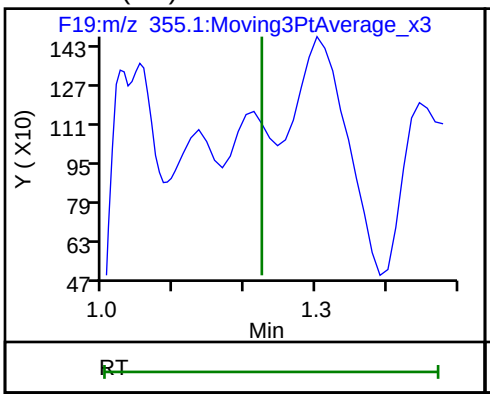
Client ID: 29SB189 (5-7)

Operator ID: acm ALS Bottle#: 17 Worklist Smp#: 73

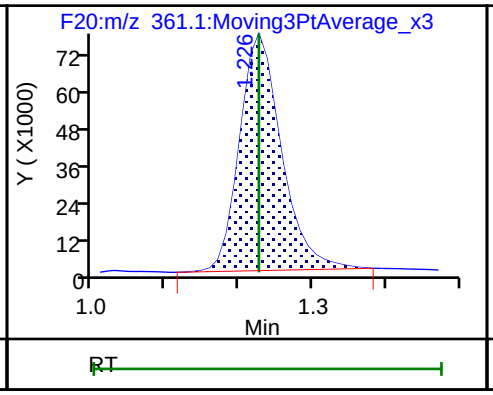
Injection Vol: 10.0 ul Dil. Factor: 1.0000

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

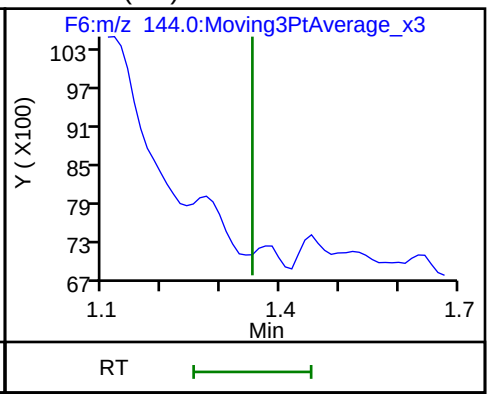
2 HMX (ND)



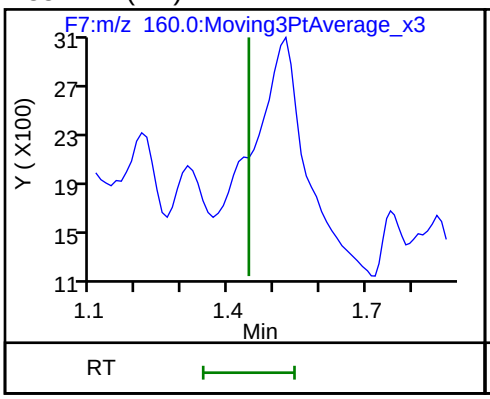
* 1 HMX-13C4



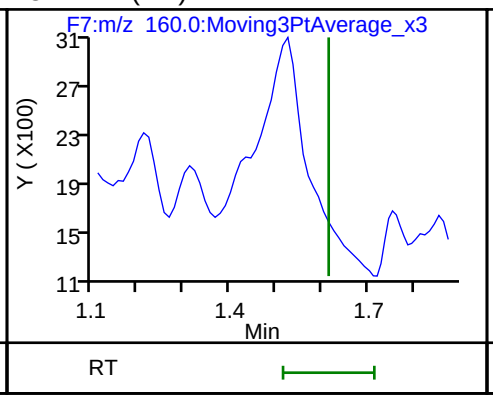
36 TNX (ND)



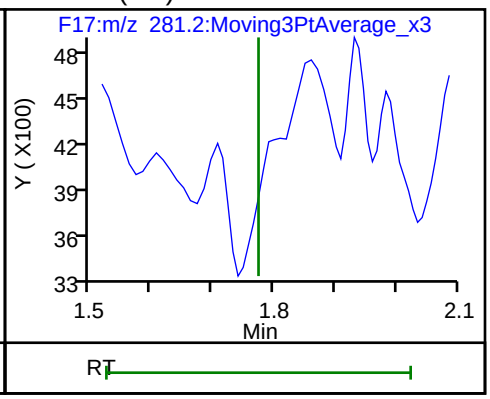
33 DNX (ND)



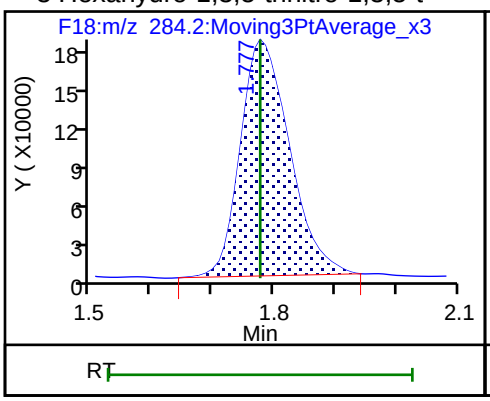
34 MNX (ND)



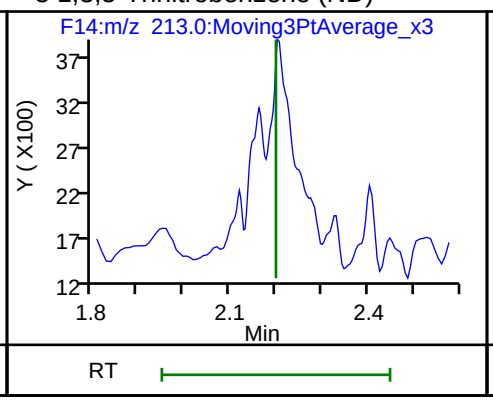
4 RDX (ND)



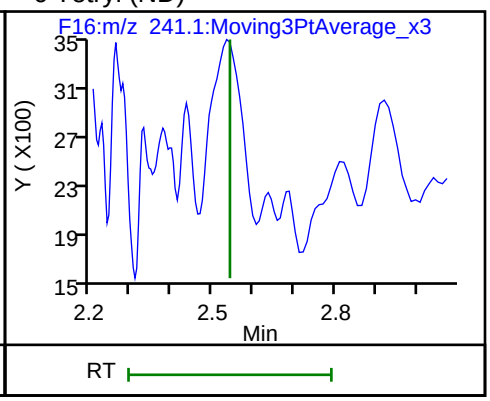
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



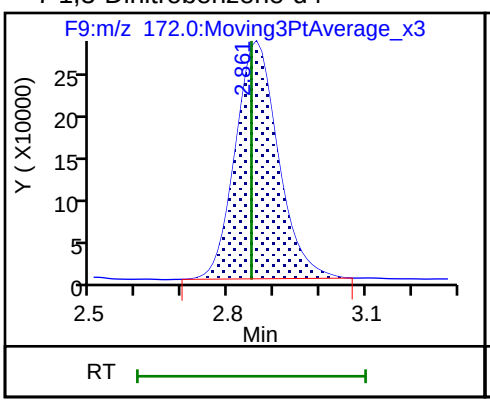
5 1,3,5-Trinitrobenzene (ND)



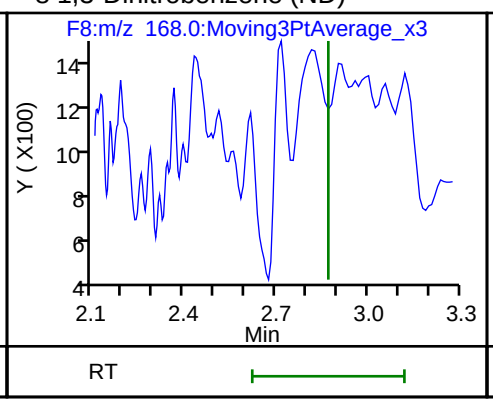
6 Tetryl (ND)



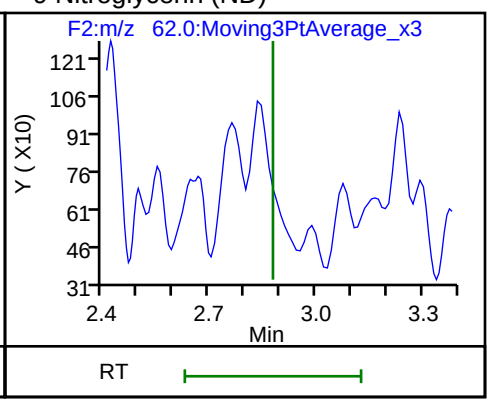
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



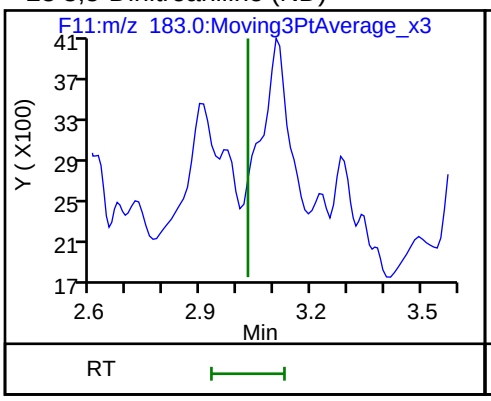
9 Nitroglycerin (ND)



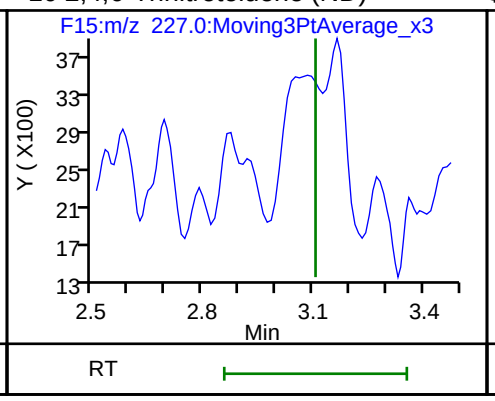
Report Date: 06-Apr-2022 07:10:23 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05076.d

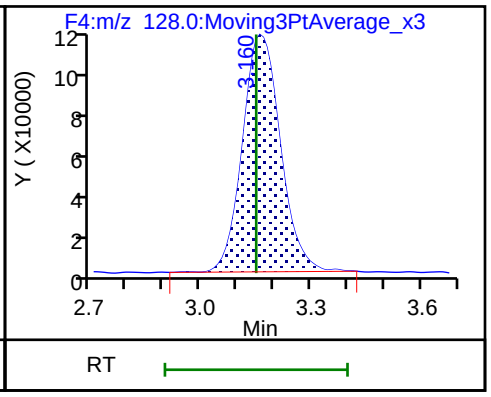
28 3,5-Dinitroaniline (ND)



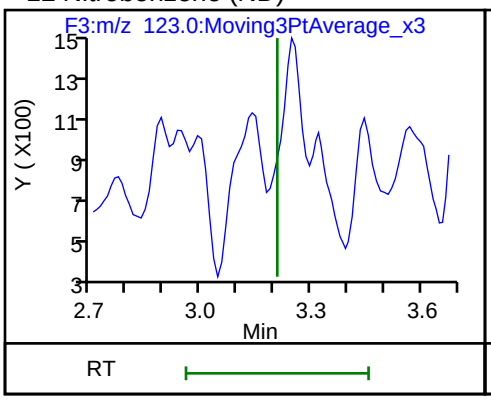
10 2,4,6-Trinitrotoluene (ND)



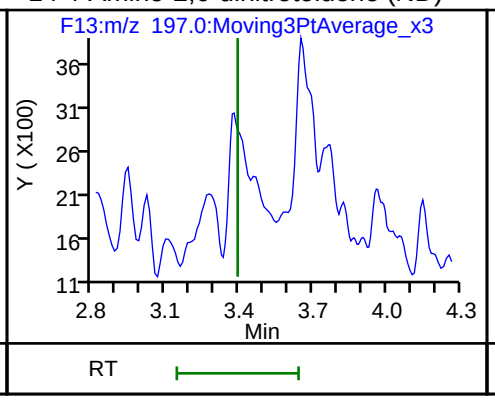
$ 11 Nitrobenzene-d5



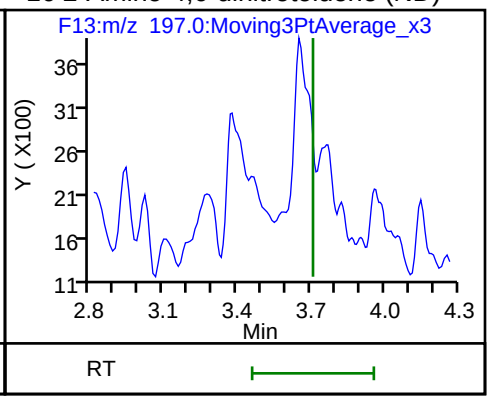
12 Nitrobenzene (ND)



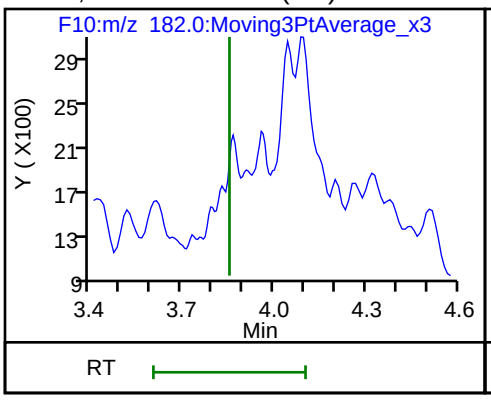
14 4-Amino-2,6-dinitrotoluene (ND)



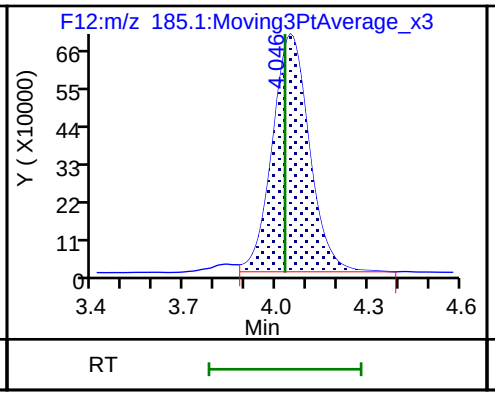
16 2-Amino-4,6-dinitrotoluene (ND)



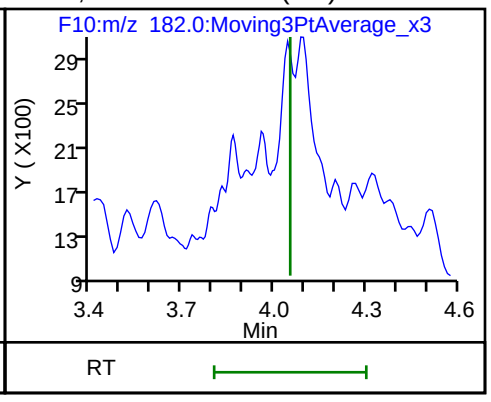
17 2,6-Dinitrotoluene (ND)



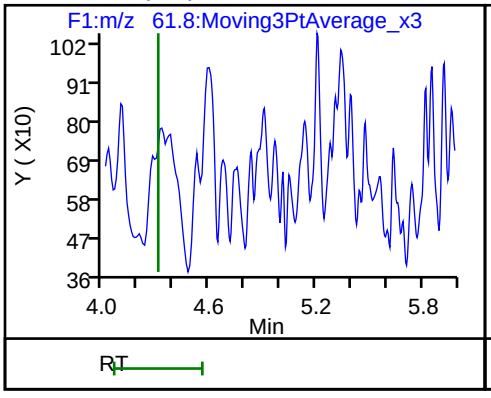
* 18 2,4-dinitrotoluene-d3



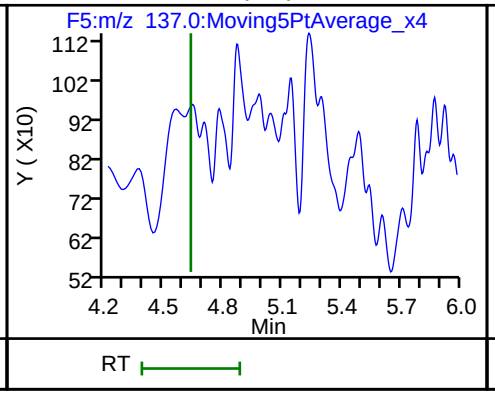
19 2,4-Dinitrotoluene (ND)



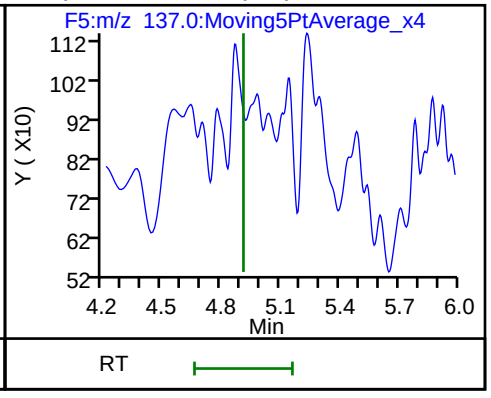
20 PETN (ND)



22 o-Nitrotoluene (ND)



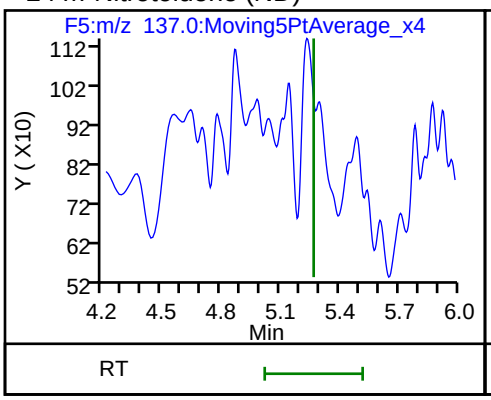
23 p-Nitrotoluene (ND)



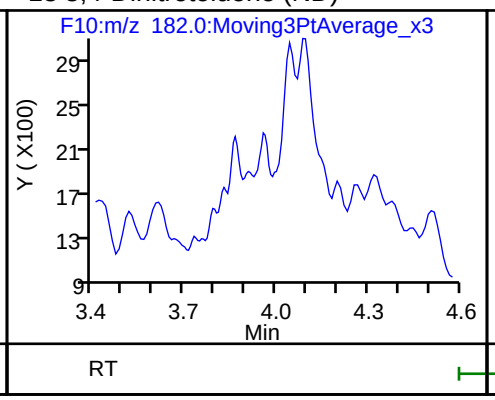
Report Date: 06-Apr-2022 07:10:23 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05076.d

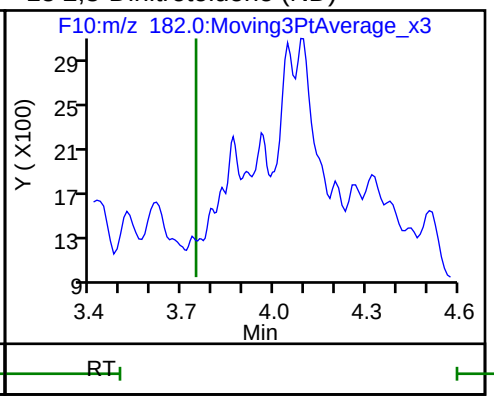
24 m-Nitrotoluene (ND)



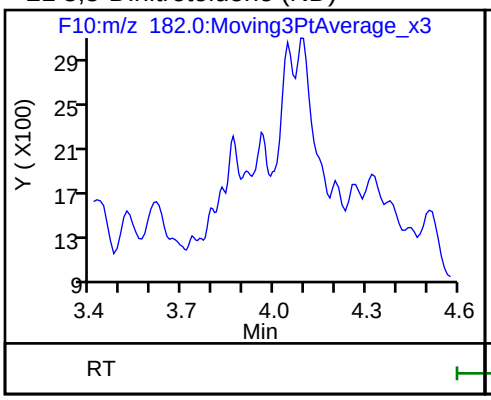
13 3,4-Dinitrotoluene (ND)



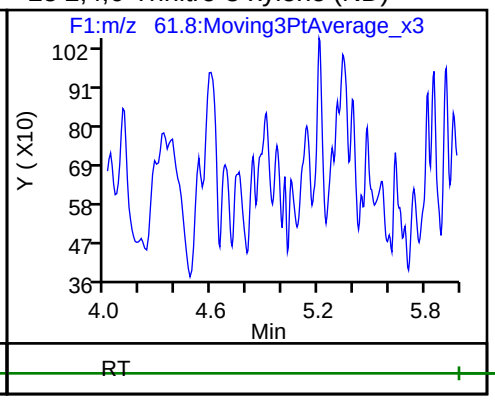
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 07:10:23 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05076.d
Lims ID: 280-160187-A-33-B
Client ID: 29SB189 (5-7)
Sample Type: Client
Inject. Date: 05-Apr-2022 17:48:24 ALS Bottle#: 17 Worklist Smp#: 73
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-33-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 07:10:22 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 06:59:10

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.: 280-160187-1
SDG No.:
Client Sample ID: 29SB189 (10-10.5) | Lab Sample ID: 280-160187-34
Matrix: Solid | Lab File ID: ex722D05077.d
Analysis Method: 8321A | Date Collected: 03/23/2022 08:58
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:54
Sample wt/vol: 10.66(g) | Date Analyzed: 04/05/2022 17:54
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.: 570786 | 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 Q	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 Q	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	101		68-140

Report Date: 06-Apr-2022 07:10:24 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\ex722D05077.d
Lims ID: 280-160187-A-34-B
Client ID: 29SB189 (10-10.5)
Sample Type: Client
Inject. Date: 05-Apr-2022 17:54:48 ALS Bottle#: 18 Worklist Smp#: 74
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-34-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 07:10:22 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 06:59:20
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		309315	125.0	180	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.785	1.777	0.008		974325	125.0	148	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1813514	129.4	226	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	896724	101.5	188	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		5833022	125.0	114	

QC Flag Legend
Processing Flags

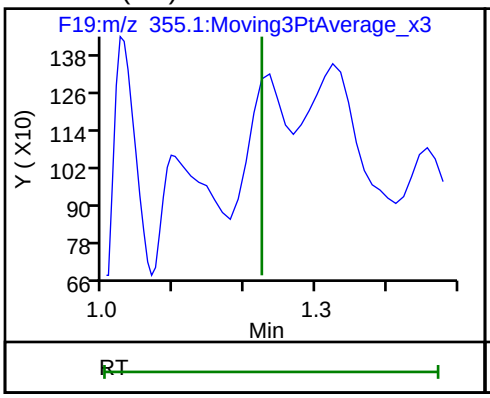
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:10:24 Chrom Revision: 2.3 18-Mar-2022 09:07:22

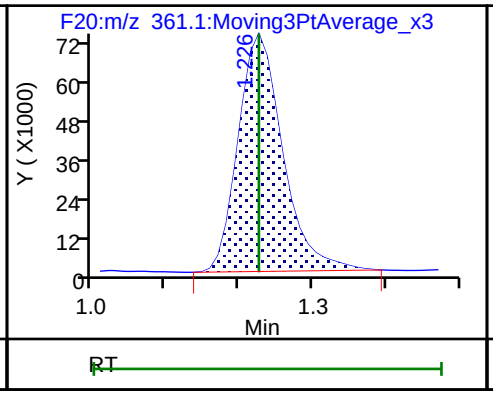
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05077.d
Injection Date: 05-Apr-2022 17:54:48 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-34-B Lab Sample ID: 280-160187-34
Client ID: 29SB189 (10-10.5)
Operator ID: acm ALS Bottle#: 18 Worklist Smp#: 74
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

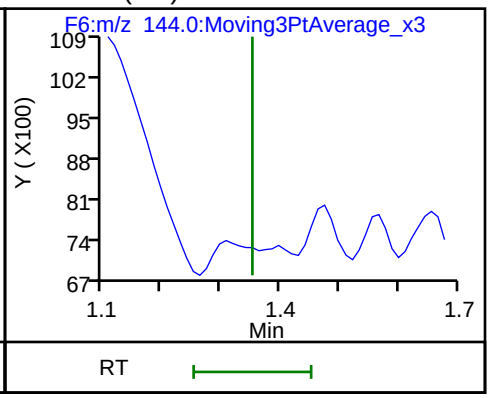
2 HMX (ND)



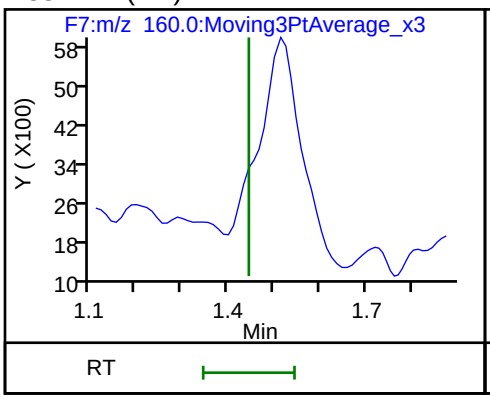
* 1 HMX-13C4



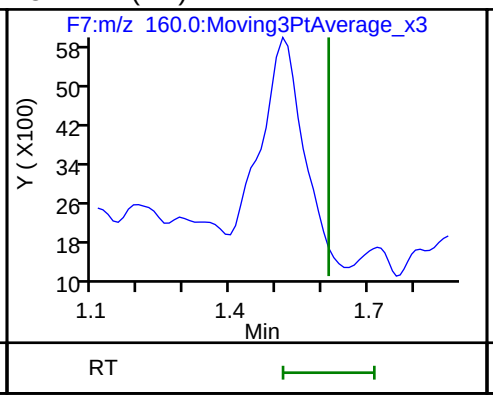
36 TNX (ND)



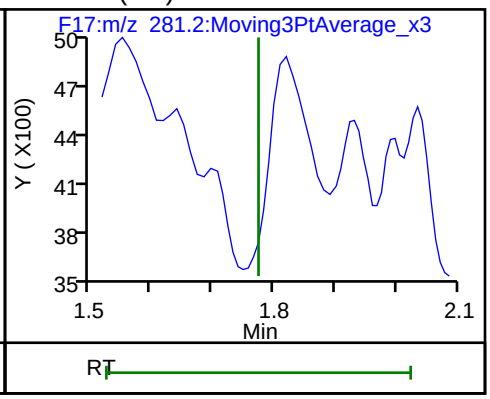
33 DNX (ND)



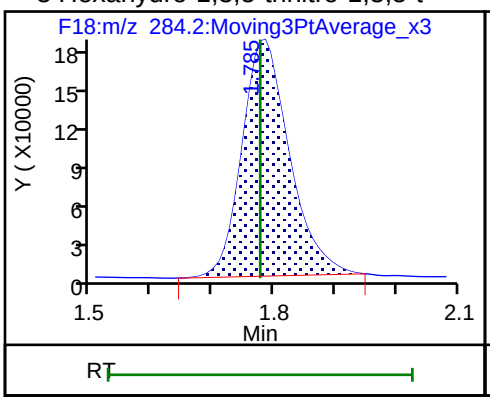
34 MNX (ND)



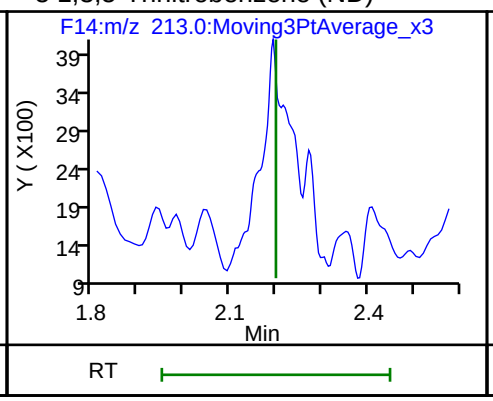
4 RDX (ND)



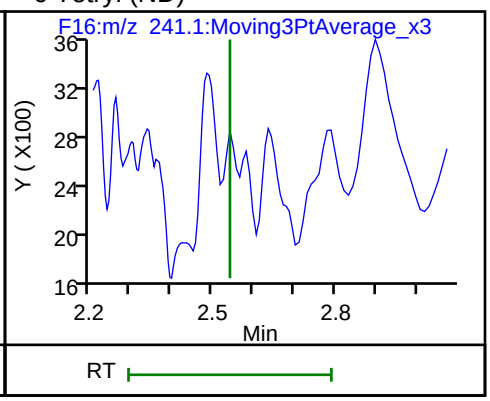
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



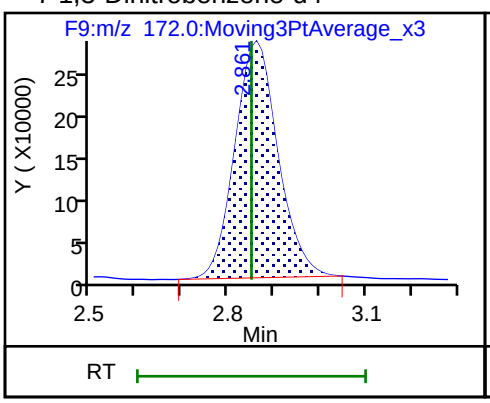
5 1,3,5-Trinitrobenzene (ND)



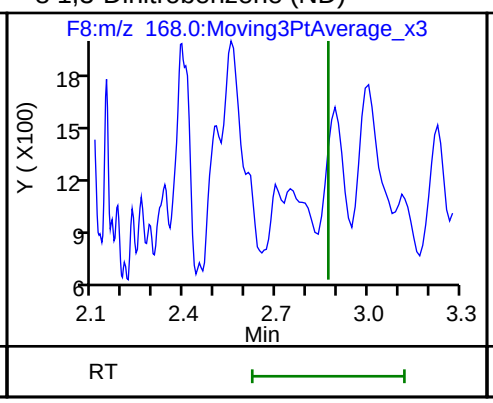
6 Tetryl (ND)



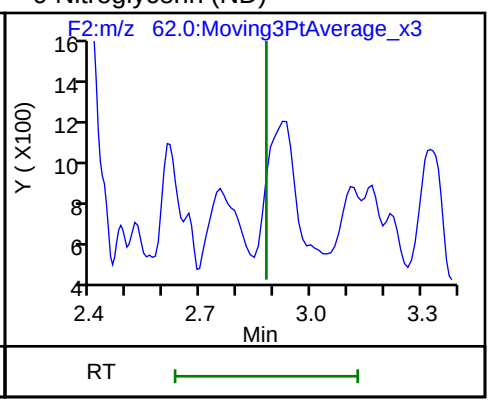
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



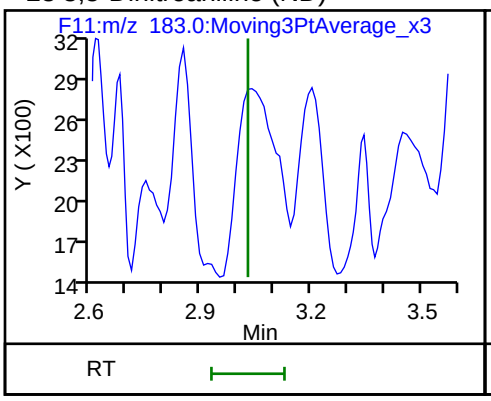
9 Nitroglycerin (ND)



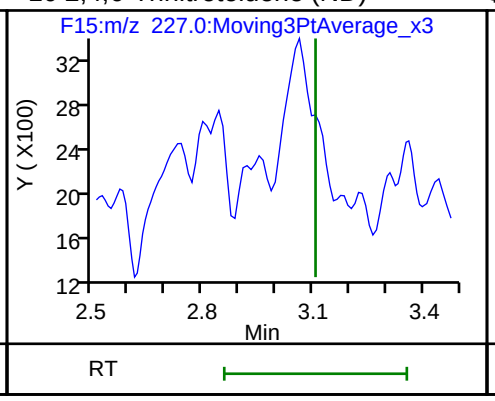
Report Date: 06-Apr-2022 07:10:24 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05077.d

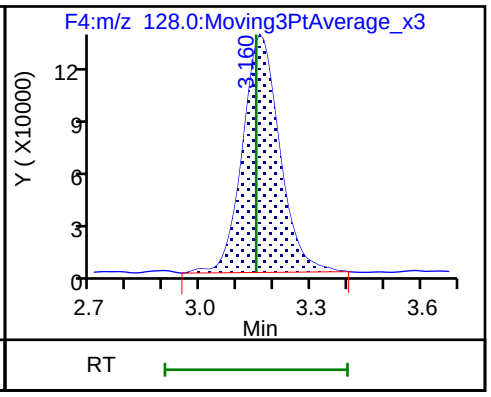
28 3,5-Dinitroaniline (ND)



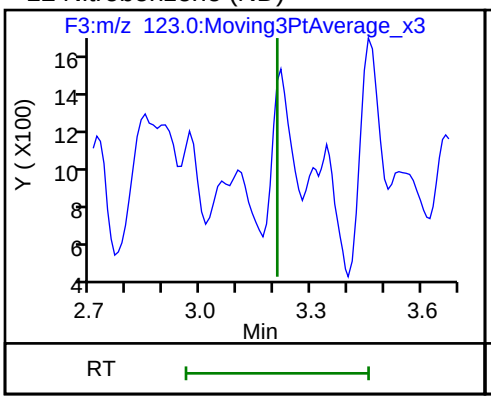
10 2,4,6-Trinitrotoluene (ND)



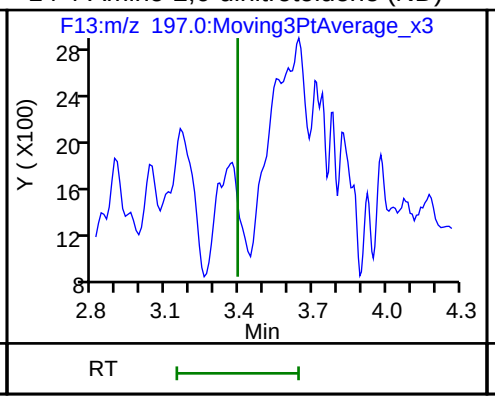
$ 11 Nitrobenzene-d5



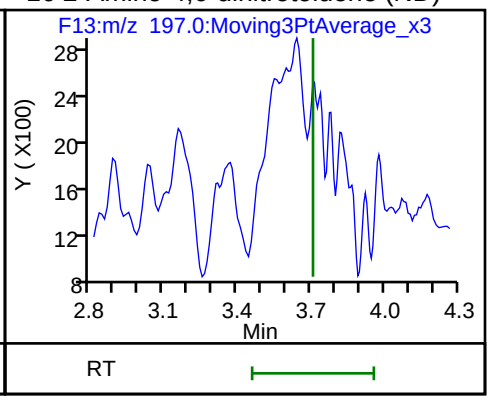
12 Nitrobenzene (ND)



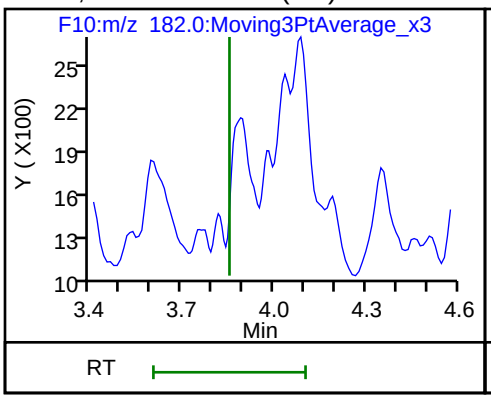
14 4-Amino-2,6-dinitrotoluene (ND)



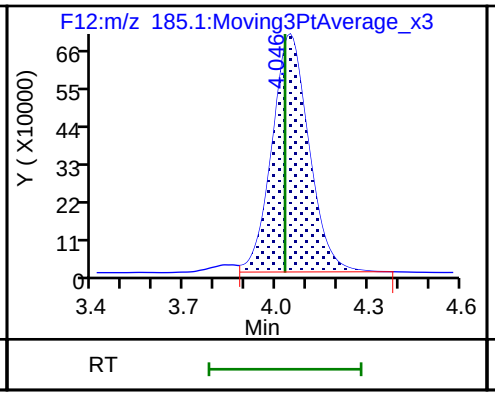
16 2-Amino-4,6-dinitrotoluene (ND)



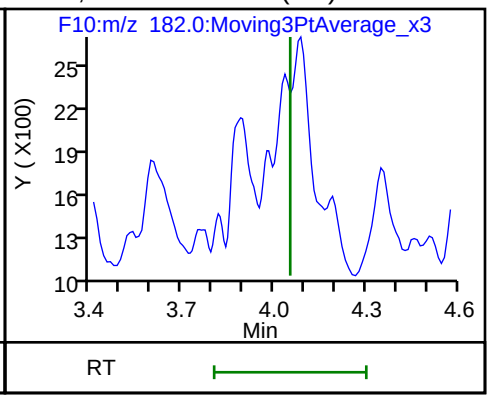
17 2,6-Dinitrotoluene (ND)



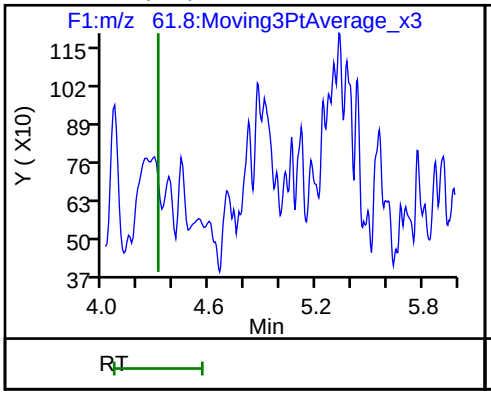
* 18 2,4-dinitrotoluene-d3



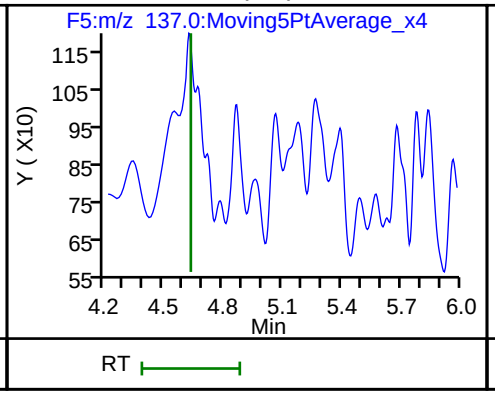
19 2,4-Dinitrotoluene (ND)



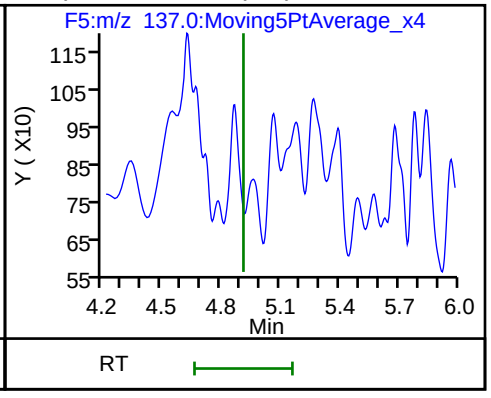
20 PETN (ND)



22 o-Nitrotoluene (ND)



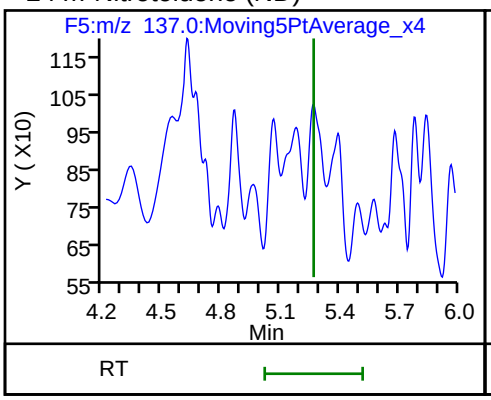
23 p-Nitrotoluene (ND)



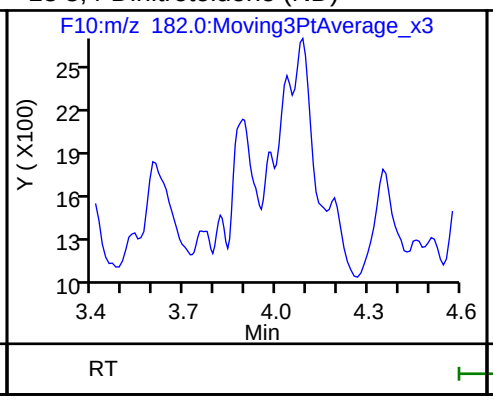
Report Date: 06-Apr-2022 07:10:24 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05077.d

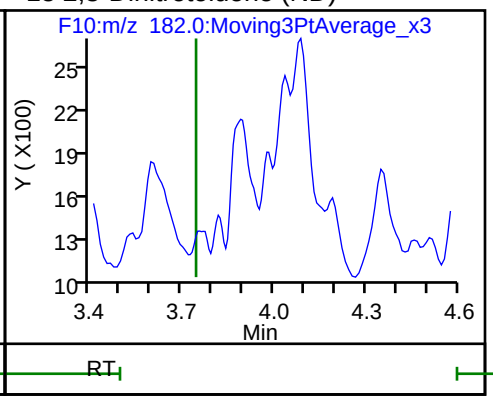
24 m-Nitrotoluene (ND)



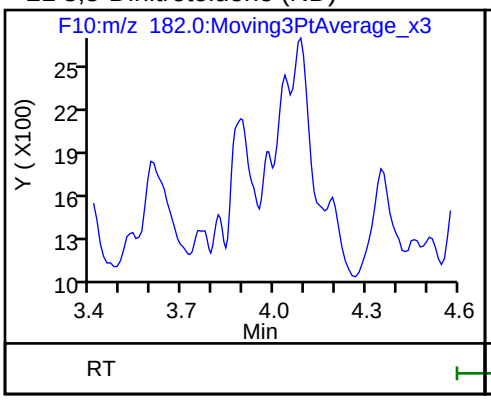
13 3,4-Dinitrotoluene (ND)



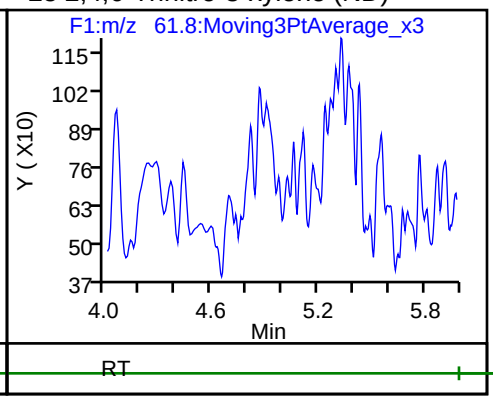
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 07:10:24 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05077.d				
Lims ID:	280-160187-A-34-B				
Client ID:	29SB189 (10-10.5)				
Sample Type:	Client				
Inject. Date:	05-Apr-2022 17:54:48	ALS Bottle#:	18	Worklist Smp#:	74
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160187-A-34-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 07:10:22	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 06:59:20		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	101.5	101.13

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB188 (7-9) | Lab Sample ID: 280-160187-35
Matrix: Solid | Lab File ID: ex722D05078.d
Analysis Method: 8321A | Date Collected: 03/23/2022 09:00
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:54
Sample wt/vol: 10.1(g) | Date Analyzed: 04/05/2022 18:01
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	0.099	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 Q	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 Q	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	92		68-140

Report Date: 06-Apr-2022 07:10:24 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\ex722D05078.d
Lims ID: 280-160187-A-35-B
Client ID: 29SB188 (7-9)
Sample Type: Client
Inject. Date: 05-Apr-2022 18:01:12 ALS Bottle#: 19 Worklist Smp#: 75
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-35-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 07:10:22 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 06:59:39
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	1.226	1.226	0.0		305257	125.0	468	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.785	1.777	0.008		983964	125.0	164	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1824811	129.4	501	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.783	818272	91.9	103	
* 18 2,4-dinitrotoluene-d3								
185.1	4.037	4.028	0.009		5835714	125.0	136	

QC Flag Legend
Processing Flags

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

Report Date: 06-Apr-2022 07:10:24

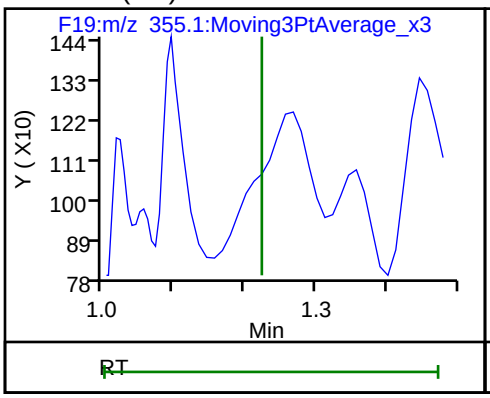
Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

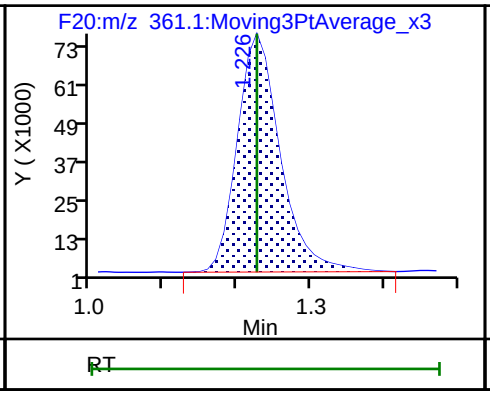
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05078.d

Injection Date:	05-Apr-2022 18:01:12	Instrument ID:	LC_LCMS7
Lims ID:	280-160187-A-35-B	Lab Sample ID:	280-160187-35
Client ID:	29SB188 (7-9)		
Operator ID:	acm	ALS Bottle#:	19 Worklist Smp#: 75
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl

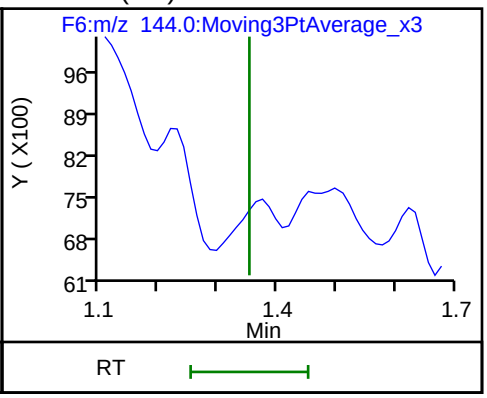
2 HMX (ND)



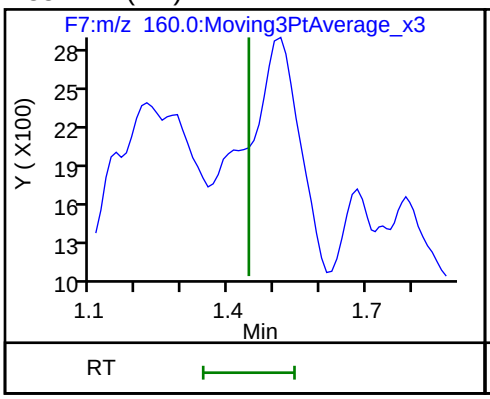
* 1 HMX-13C4



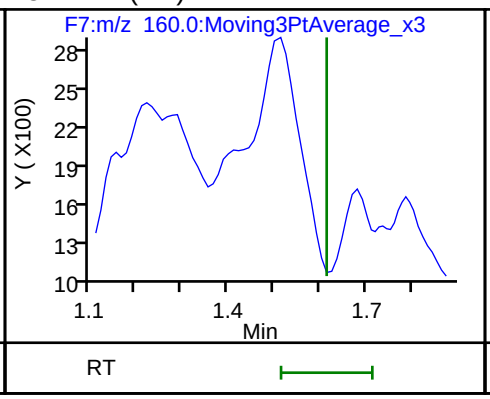
36 TNX (ND)



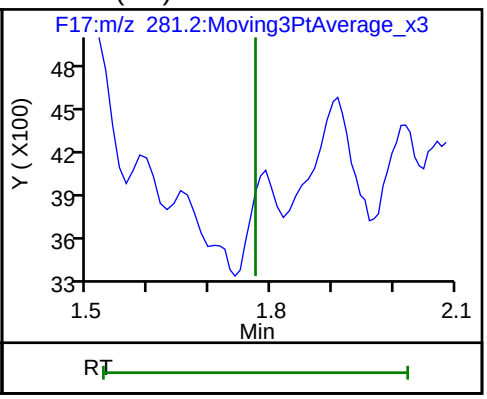
33 DNX (ND)



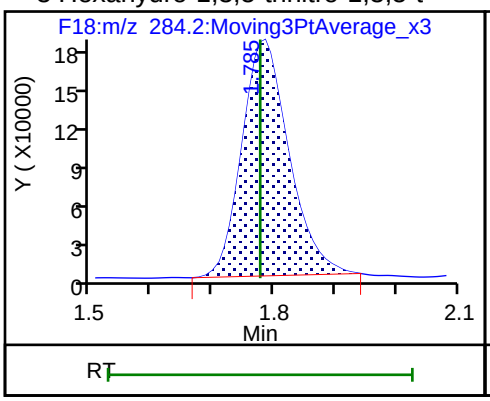
34 MNX (ND)



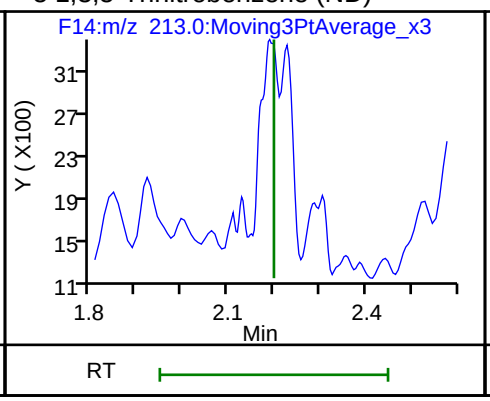
4 RDX (ND)



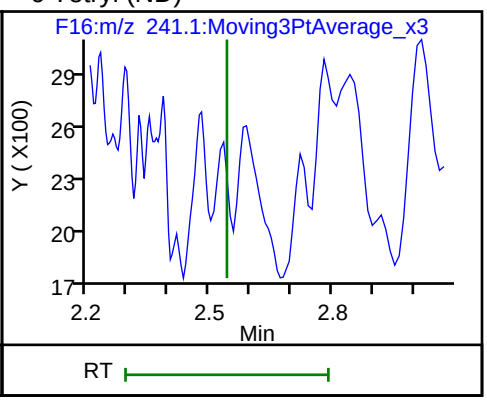
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



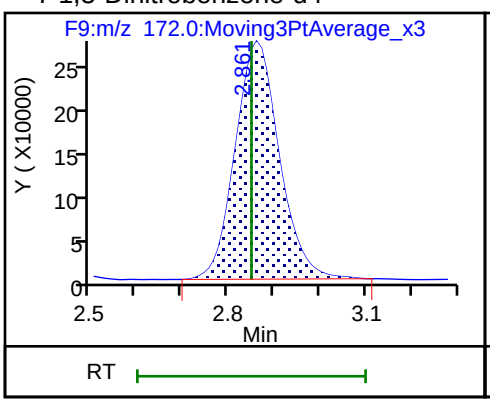
5 1,3,5-Trinitrobenzene (ND)



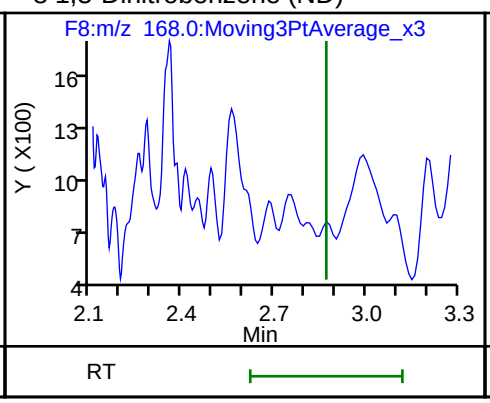
6 Tetryl (ND)



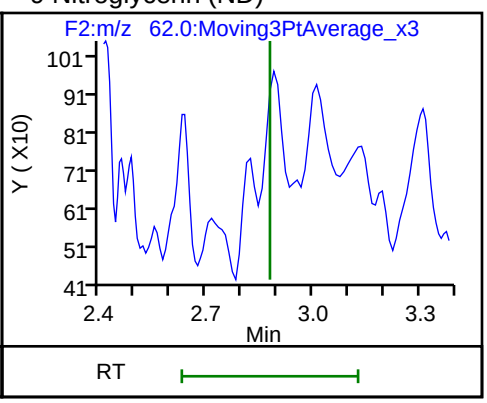
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



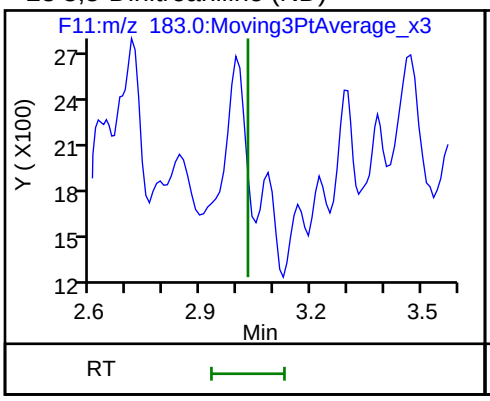
9 Nitroglycerin (ND)



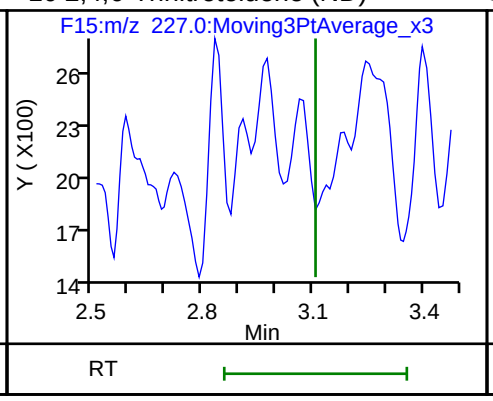
Report Date: 06-Apr-2022 07:10:24 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05078.d

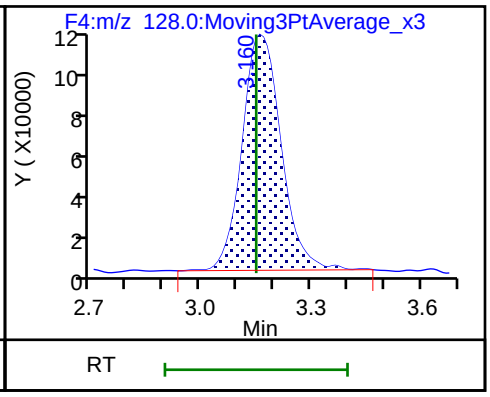
28 3,5-Dinitroaniline (ND)



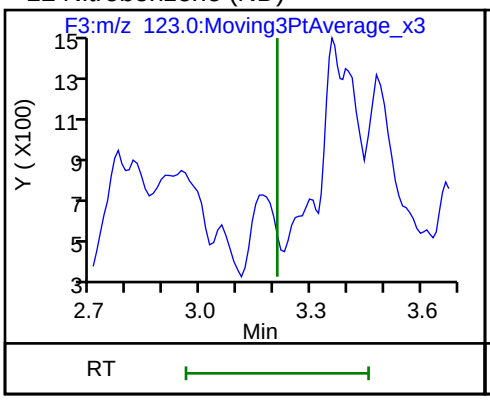
10 2,4,6-Trinitrotoluene (ND)



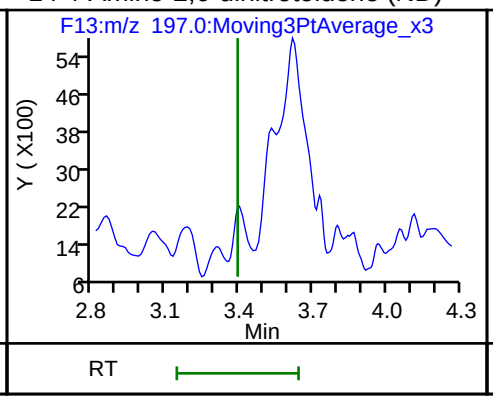
$ 11 Nitrobenzene-d5



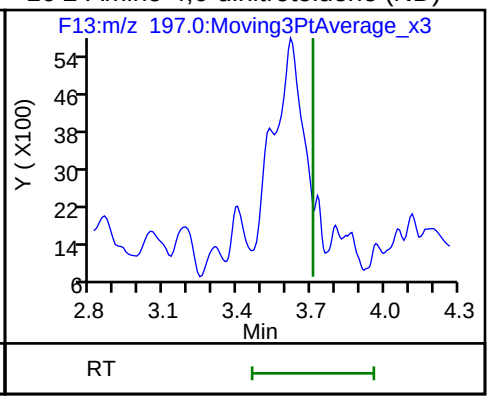
12 Nitrobenzene (ND)



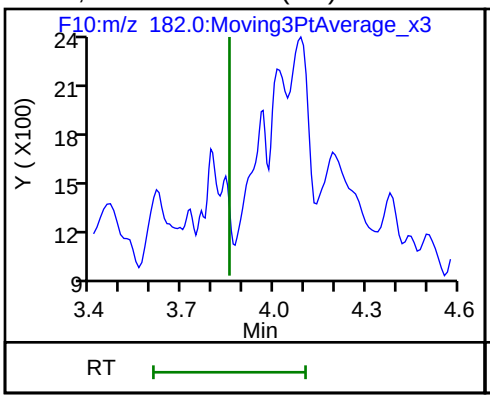
14 4-Amino-2,6-dinitrotoluene (ND)



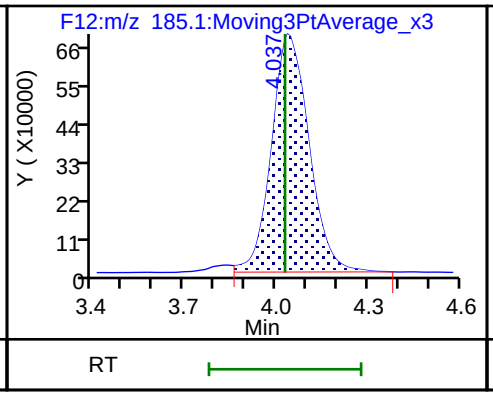
16 2-Amino-4,6-dinitrotoluene (ND)



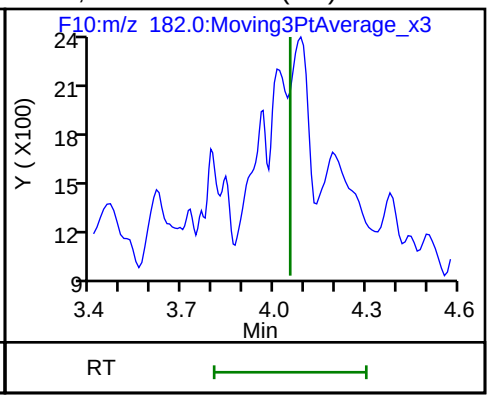
17 2,6-Dinitrotoluene (ND)



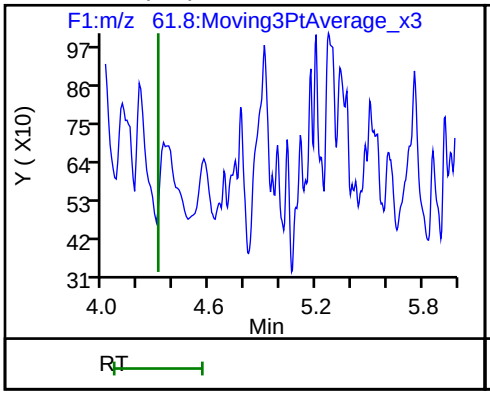
* 18 2,4-dinitrotoluene-d3



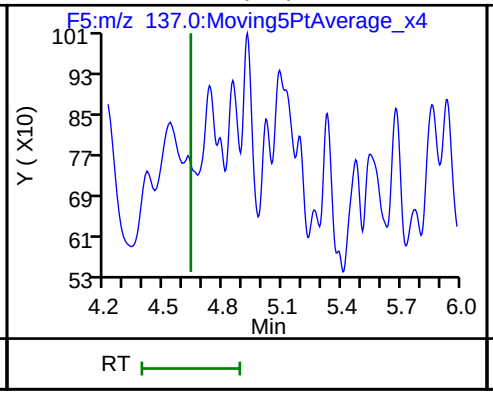
19 2,4-Dinitrotoluene (ND)



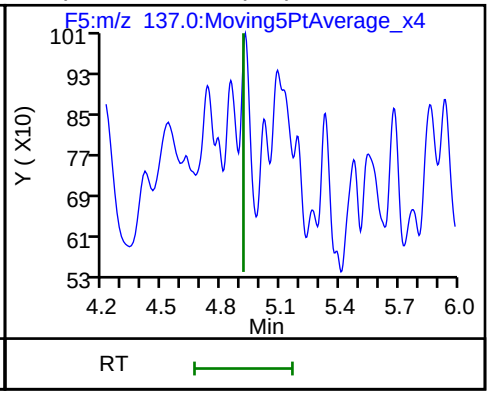
20 PETN (ND)



22 o-Nitrotoluene (ND)



23 p-Nitrotoluene (ND)

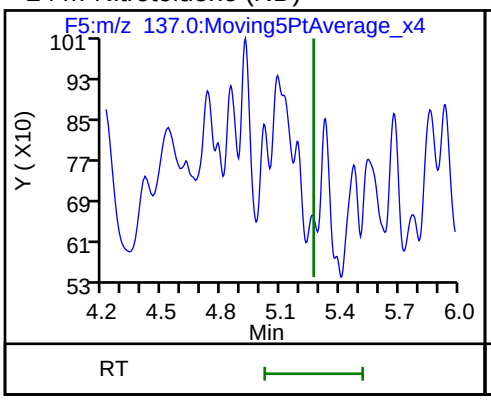


Chrom Revision: 2.3 18-Mar-2022 09:07:22

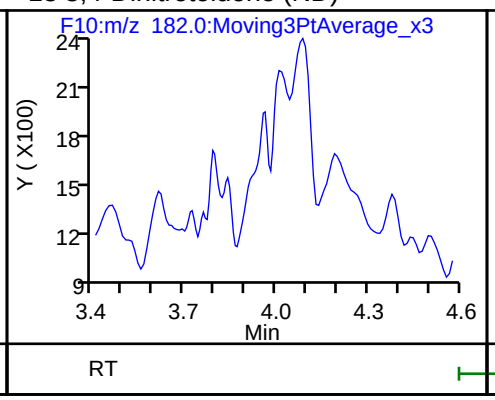
Report Date: 06-Apr-2022 07:10:24

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05078.d

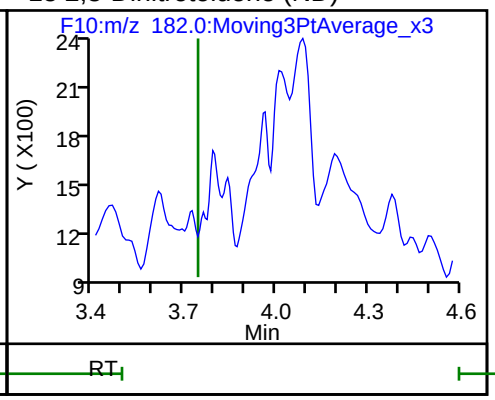
24 m-Nitrotoluene (ND)



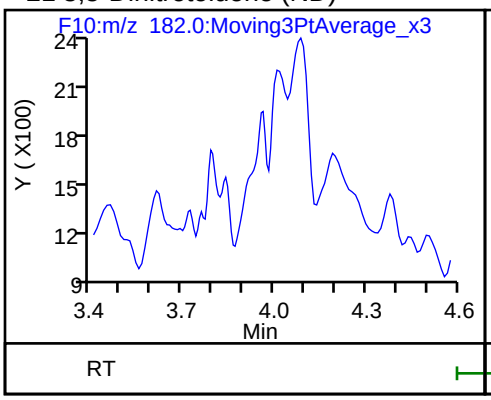
13 3,4-Dinitrotoluene (ND)



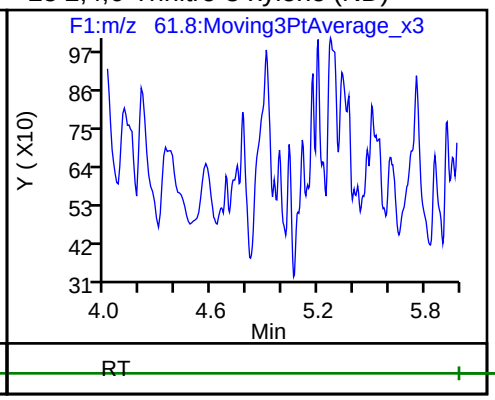
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 07:10:24 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05078.d
Lims ID: 280-160187-A-35-B
Client ID: 29SB188 (7-9)
Sample Type: Client
Inject. Date: 05-Apr-2022 18:01:12 ALS Bottle#: 19 Worklist Smp#: 75
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-35-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 07:10:22 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 06:59:39

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	91.9	91.62

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB188 (10-10.5) | Lab Sample ID: 280-160187-36
Matrix: Solid | Lab File ID: ex722D05079.d
Analysis Method: 8321A | Date Collected: 03/23/2022 09:05
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:54
Sample wt/vol: 10.5(g) | Date Analyzed: 04/05/2022 18:07
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.: 570786 | 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 M	0.095	0.048	0.044
606-20-2	2,6-Dinitrotoluene	0.048	U M Q	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 Q	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	99		68-140

Report Date: 06-Apr-2022 07:10:25 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\ex722D05079.d
Lims ID: 280-160187-A-36-B
Client ID: 29SB188 (10-10.5)
Sample Type: Client
Inject. Date: 05-Apr-2022 18:07:36 ALS Bottle#: 20 Worklist Smp#: 76
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-36-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 07:10:22 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 06:59:53
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	1.223	0.011	1.007	1565	-0.3176	0.7	
* 1 HMX-13C4								
361.1	1.226	1.226	0.0		291642	125.0	173	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		1007303	125.0	198	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1774631	129.4	243	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	859631	99.4	125	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		5875508	125.0	111	

QC Flag Legend

Processing Flags

Reagents:

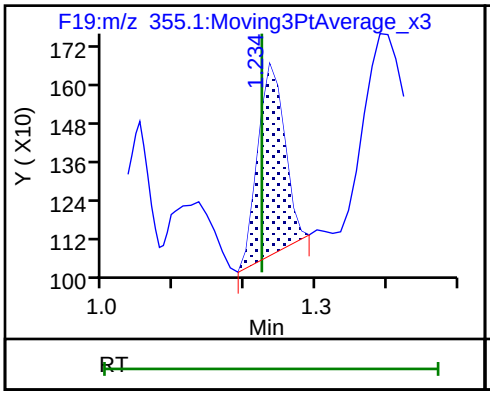
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:10:25 Chrom Revision: 2.3 18-Mar-2022 09:07:22

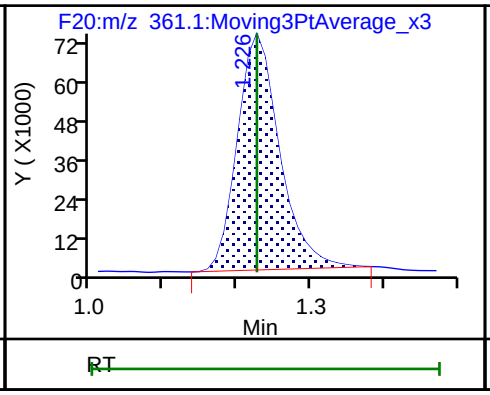
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05079.d
Injection Date: 05-Apr-2022 18:07:36 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-36-B Lab Sample ID: 280-160187-36
Client ID: 29SB188 (10-10.5)
Operator ID: acm ALS Bottle#: 20 Worklist Smp#: 76
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

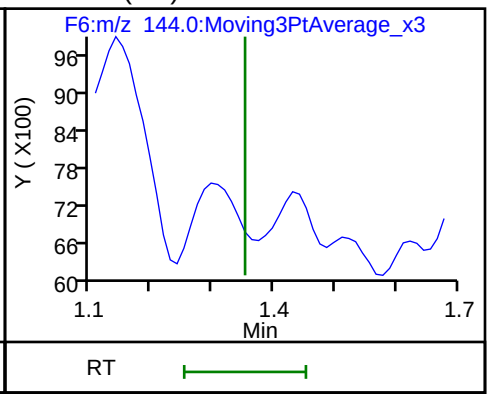
2 HMX



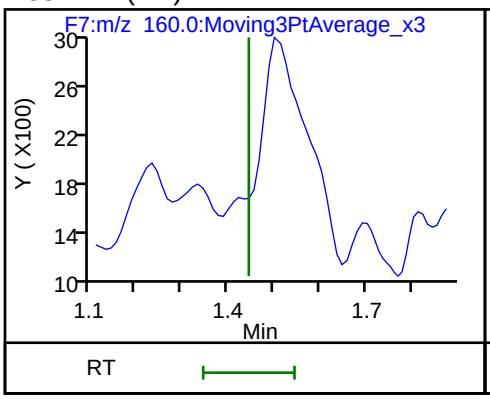
* 1 HMX-13C4



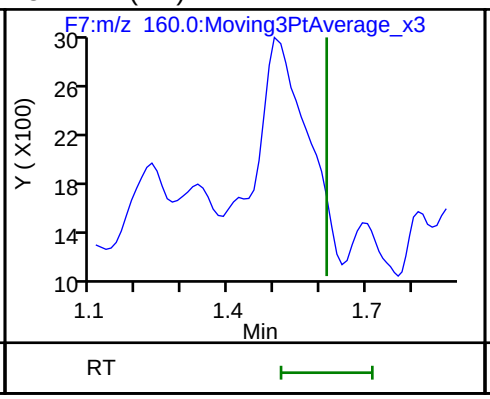
36 TNX (ND)



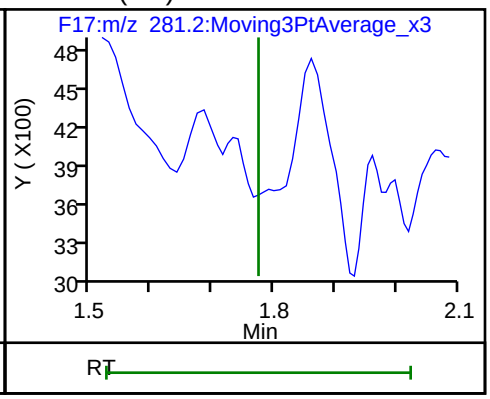
33 DNX (ND)



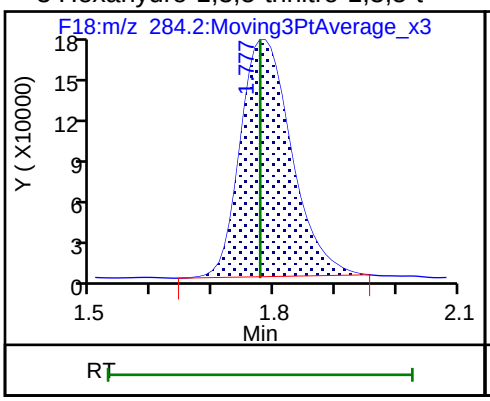
34 MNX (ND)



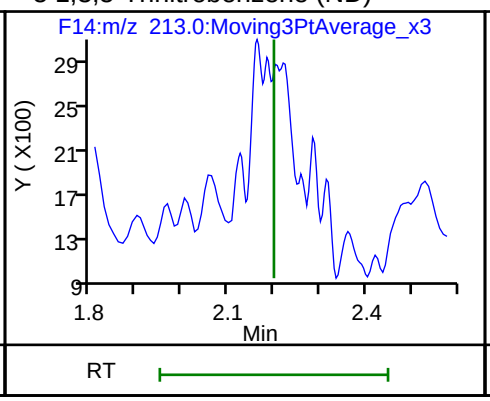
4 RDX (ND)



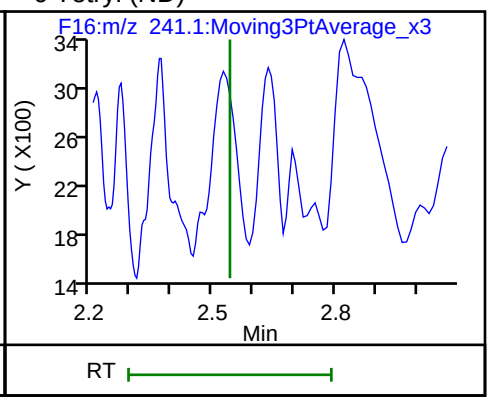
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



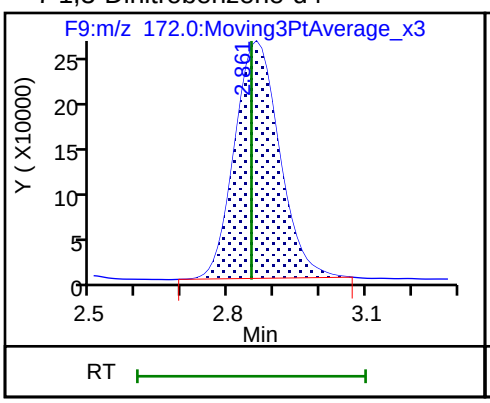
5 1,3,5-Trinitrobenzene (ND)



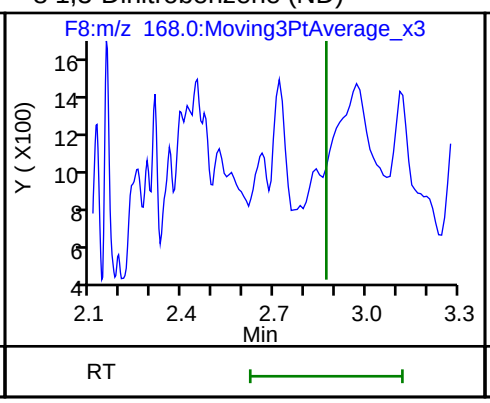
6 Tetryl (ND)



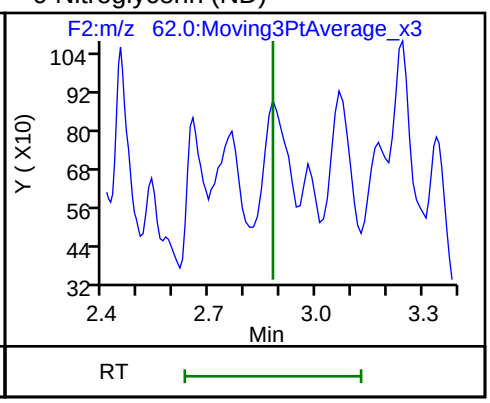
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

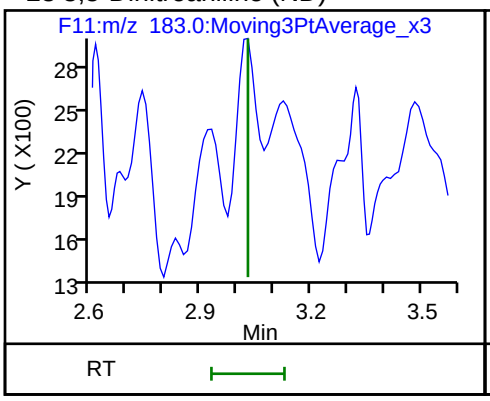


9 Nitroglycerin (ND)

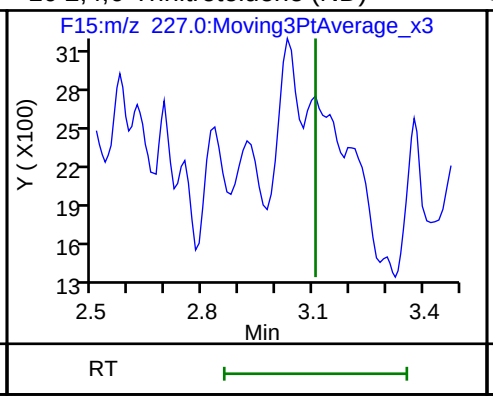


Report Date: 06-Apr-2022 07:10:25 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05079.d

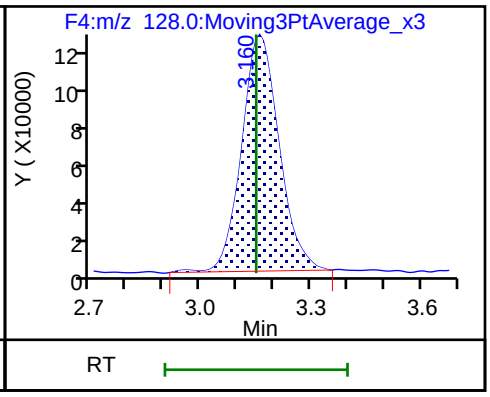
28 3,5-Dinitroaniline (ND)



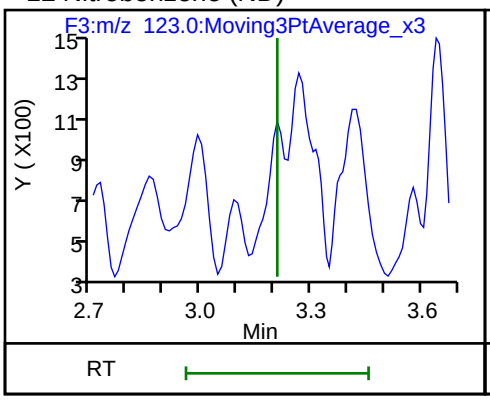
10 2,4,6-Trinitrotoluene (ND)



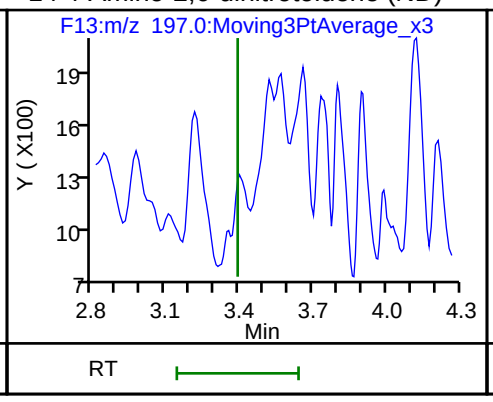
$ 11 Nitrobenzene-d5



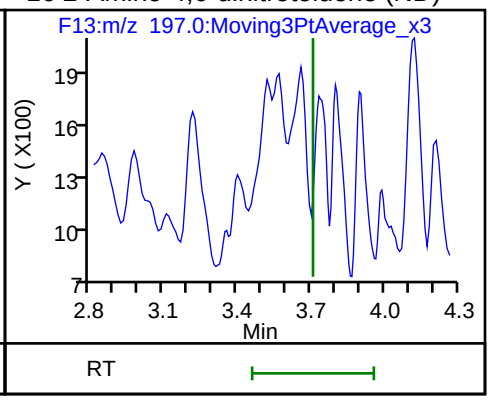
12 Nitrobenzene (ND)



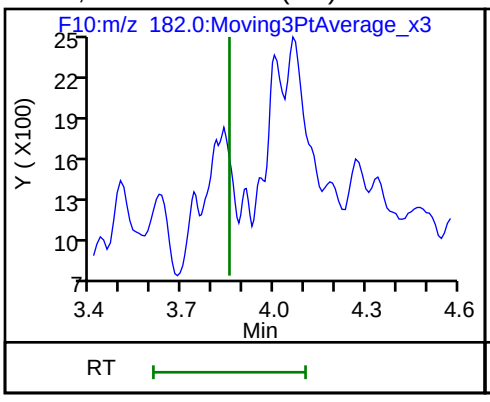
14 4-Amino-2,6-dinitrotoluene (ND)



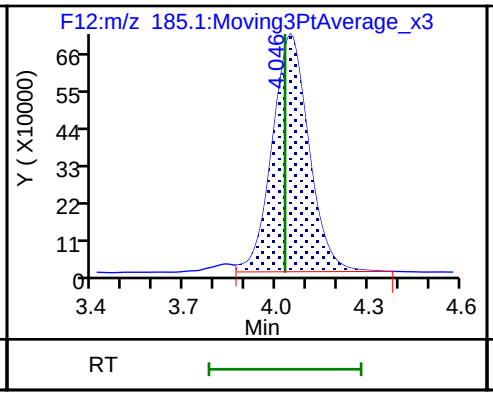
16 2-Amino-4,6-dinitrotoluene (ND)



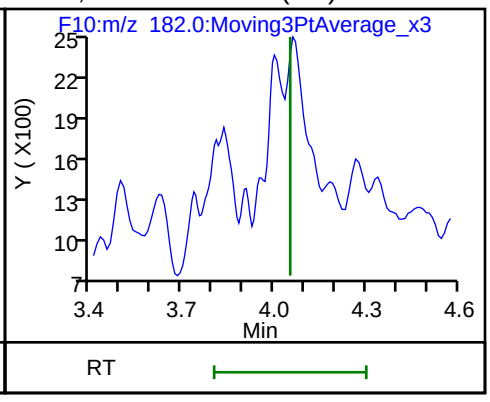
17 2,6-Dinitrotoluene (ND)



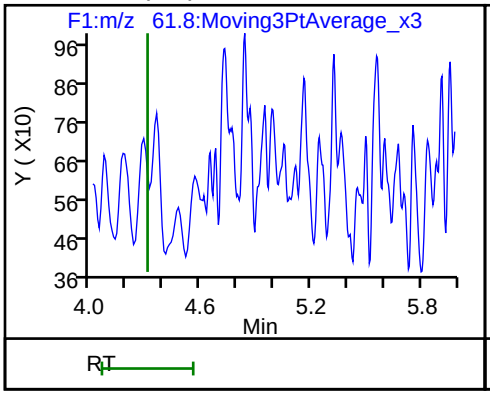
* 18 2,4-dinitrotoluene-d3



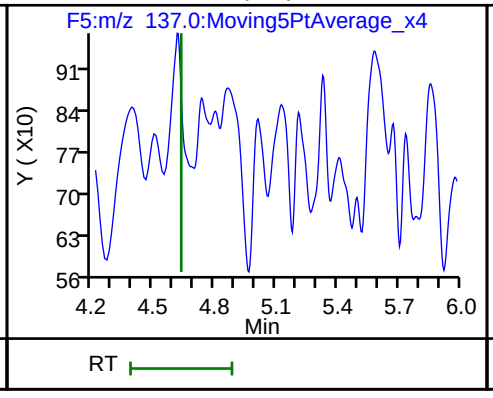
19 2,4-Dinitrotoluene (ND)



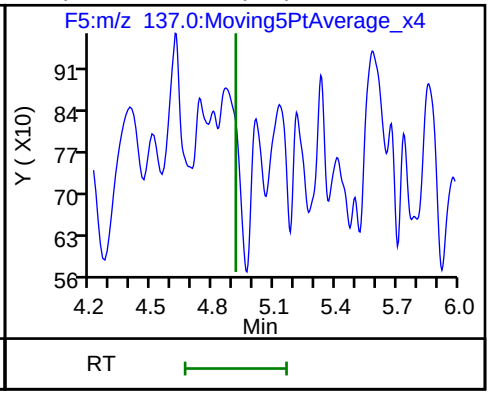
20 PETN (ND)



22 o-Nitrotoluene (ND)



23 p-Nitrotoluene (ND)

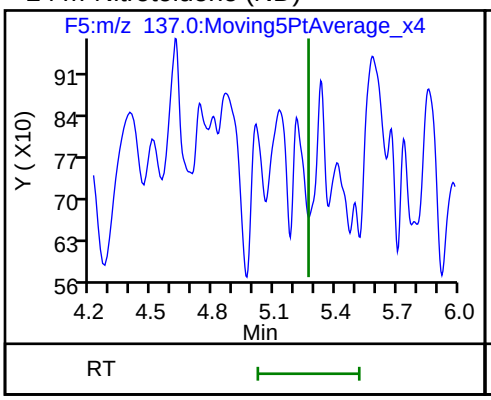


Report Date: 06-Apr-2022 07:10:25

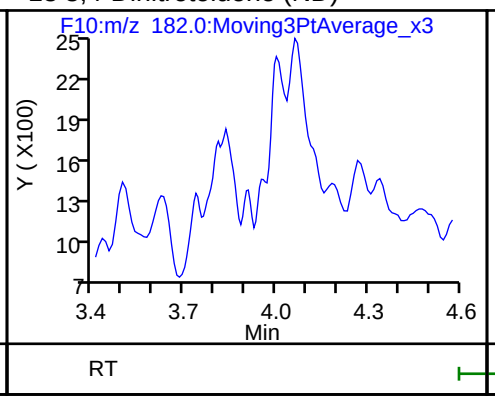
Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05079.d

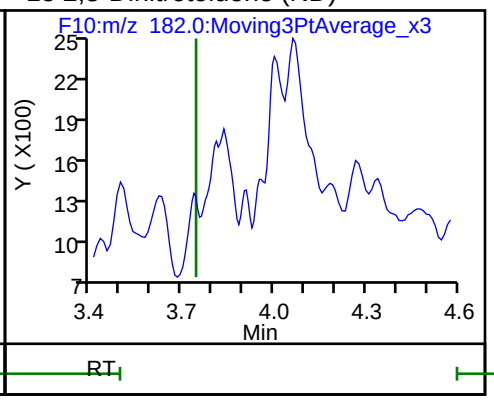
24 m-Nitrotoluene (ND)



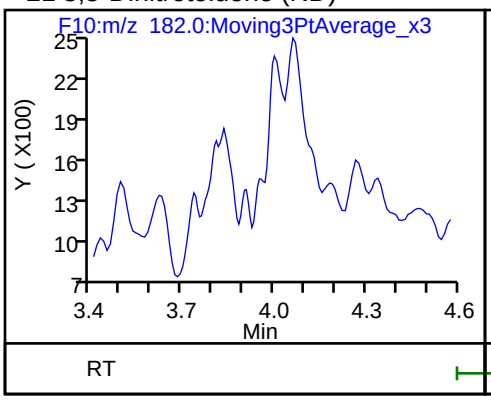
13 3,4-Dinitrotoluene (ND)



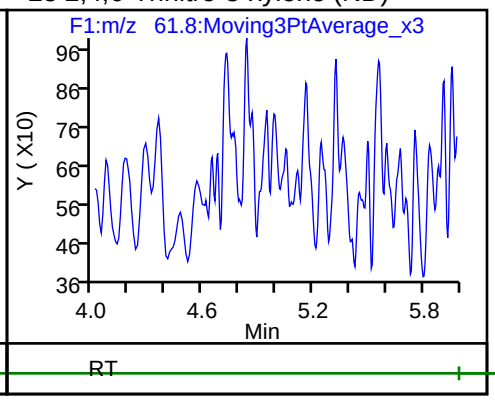
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 07:10:25 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05079.d				
Lims ID:	280-160187-A-36-B				
Client ID:	29SB188 (10-10.5)				
Sample Type:	Client				
Inject. Date:	05-Apr-2022 18:07:36	ALS Bottle#:	20	Worklist Smp#:	76
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160187-A-36-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 07:10:22	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 06:59:53		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	99.4	99.05

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB195 (7-8) | Lab Sample ID: 280-160187-37
Matrix: Solid | Lab File ID: ex722D05080.d
Analysis Method: 8321A | Date Collected: 03/23/2022 10:10
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:54
Sample wt/vol: 10.38(g) | Date Analyzed: 04/05/2022 18:14
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	0.096	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 Q	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 Q	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	89		68-140

Report Date: 06-Apr-2022 07:10:25 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\ex722D05080.d
Lims ID: 280-160187-A-37-B
Client ID: 29SB195 (7-8)
Sample Type: Client
Inject. Date: 05-Apr-2022 18:14:00 ALS Bottle#: 21 Worklist Smp#: 77
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-37-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 07:10:22 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 07:00:09
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	1.226	1.226	0.0		287079	125.0	208	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.785	1.777	0.008		1012402	125.0	153	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1924376	129.4	275	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	838730	89.3	98.8	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		5876060	125.0	139	

QC Flag Legend
Processing Flags

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

Report Date: 06-Apr-2022 07:10:26 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05080.d

Injection Date: 05-Apr-2022 18:14:00 Instrument ID: LC_LCMS7

Lims ID: 280-160187-A-37-B Lab Sample ID: 280-160187-37

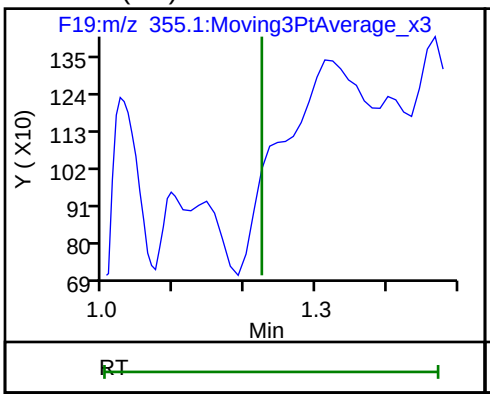
Client ID: 29SB195 (7-8)

Operator ID: acm ALS Bottle#: 21 Worklist Smp#: 77

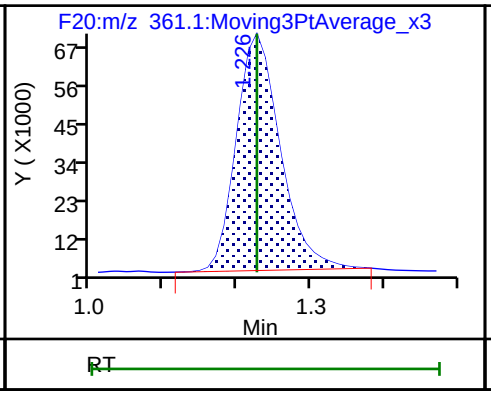
Injection Vol: 10.0 ul Dil. Factor: 1.0000

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

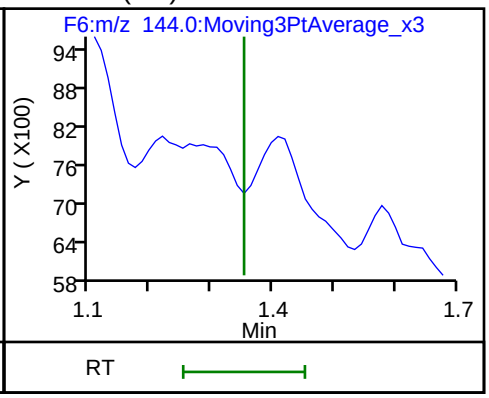
2 HMX (ND)



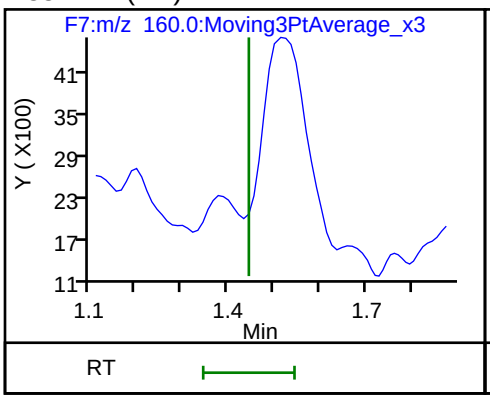
* 1 HMX-13C4



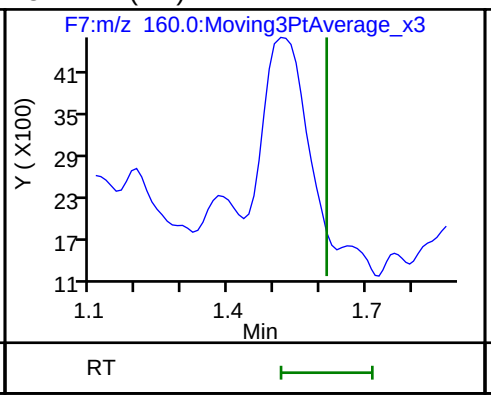
36 TNX (ND)



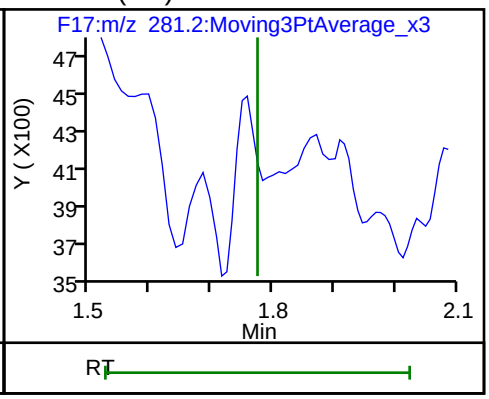
33 DNX (ND)



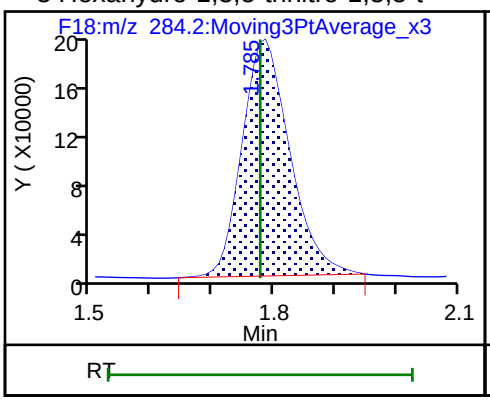
34 MNX (ND)



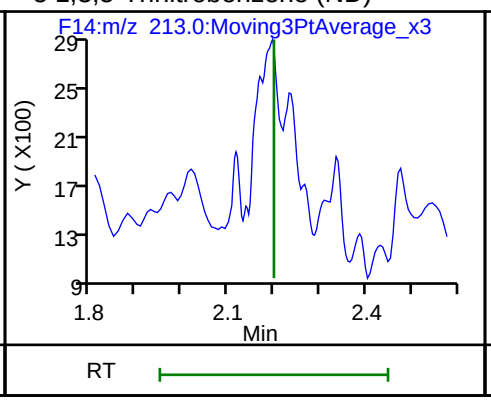
4 RDX (ND)



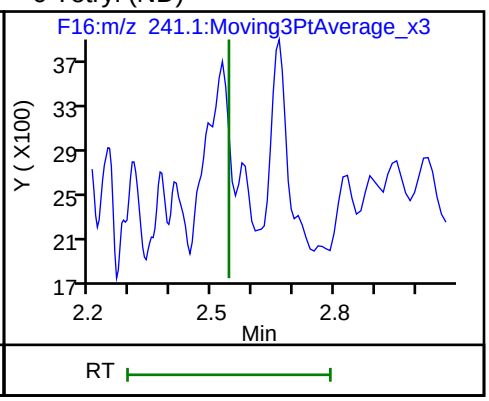
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



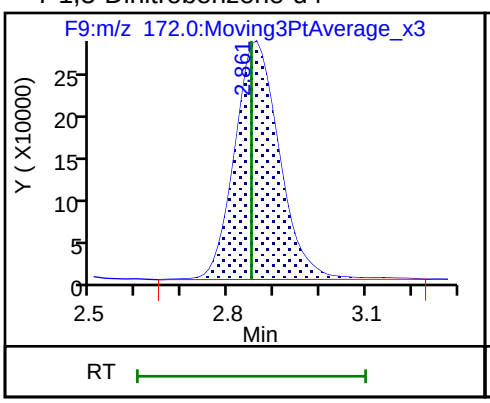
5 1,3,5-Trinitrobenzene (ND)



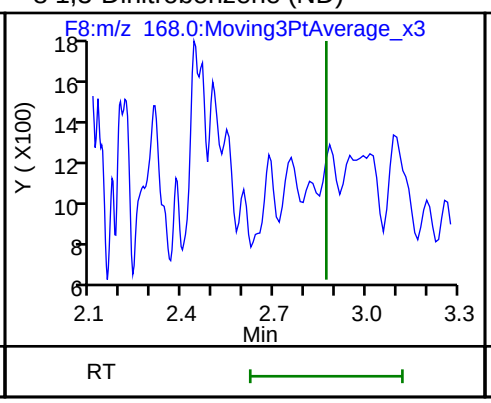
6 Tetryl (ND)



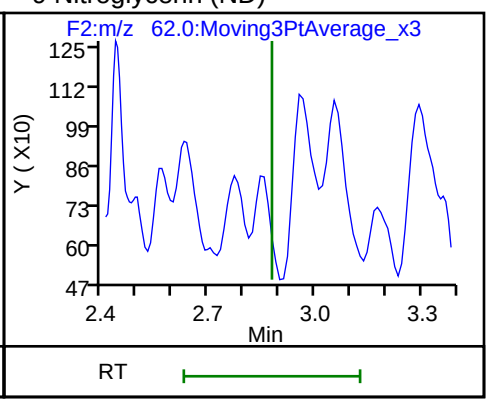
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

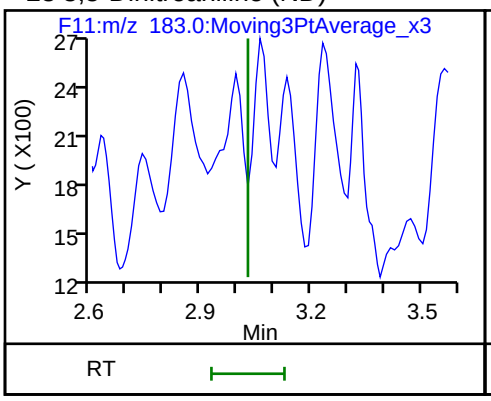


9 Nitroglycerin (ND)

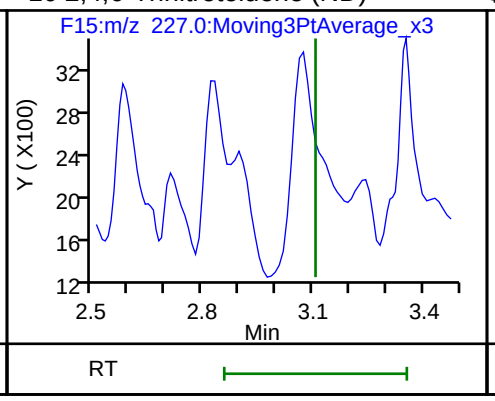


Report Date: 06-Apr-2022 07:10:26 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05080.d

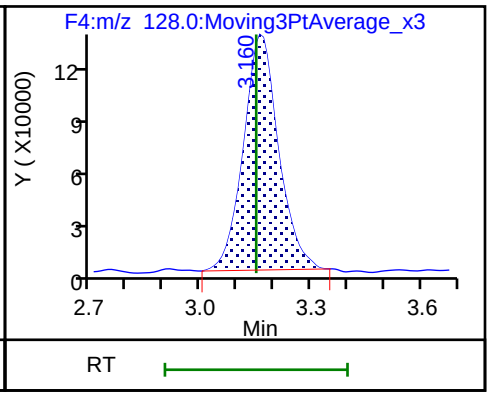
28 3,5-Dinitroaniline (ND)



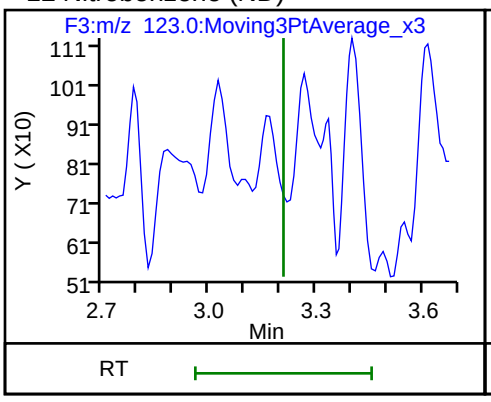
10 2,4,6-Trinitrotoluene (ND)



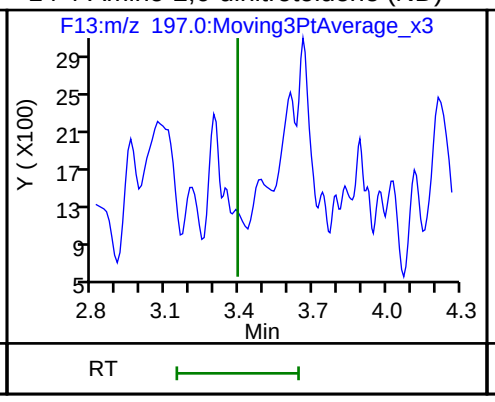
$ 11 Nitrobenzene-d5



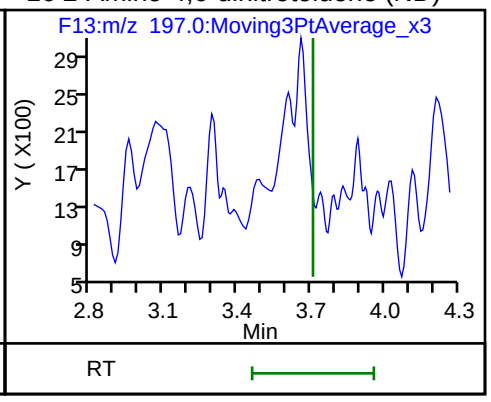
12 Nitrobenzene (ND)



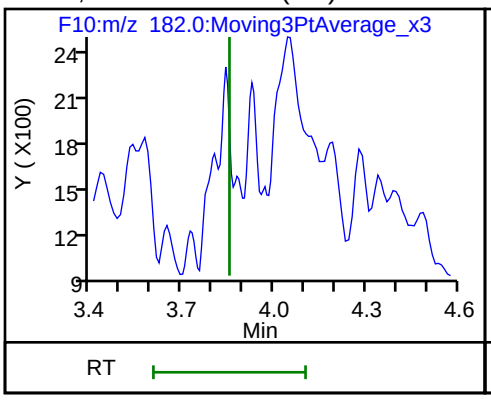
14 4-Amino-2,6-dinitrotoluene (ND)



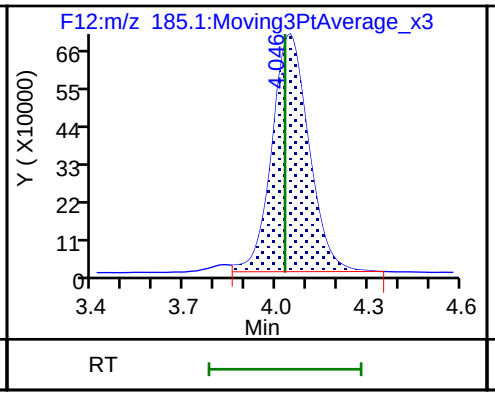
16 2-Amino-4,6-dinitrotoluene (ND)



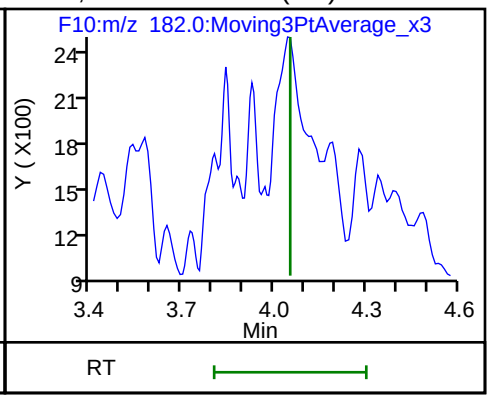
17 2,6-Dinitrotoluene (ND)



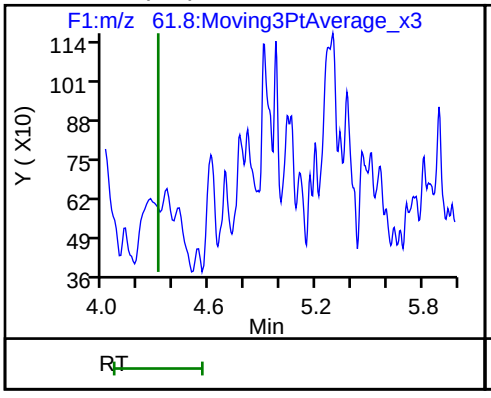
* 18 2,4-dinitrotoluene-d3



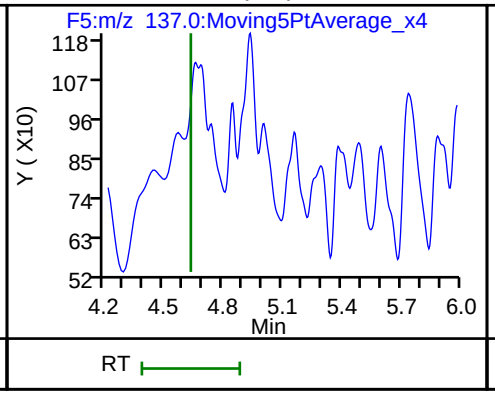
19 2,4-Dinitrotoluene (ND)



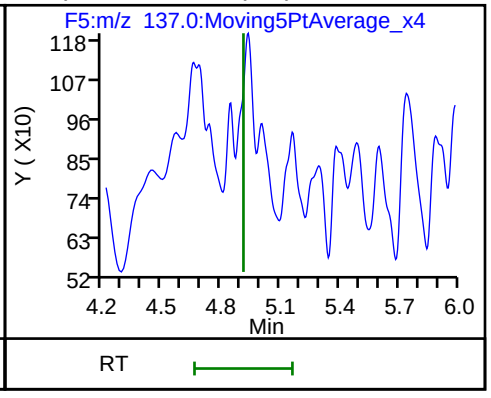
20 PETN (ND)



22 o-Nitrotoluene (ND)

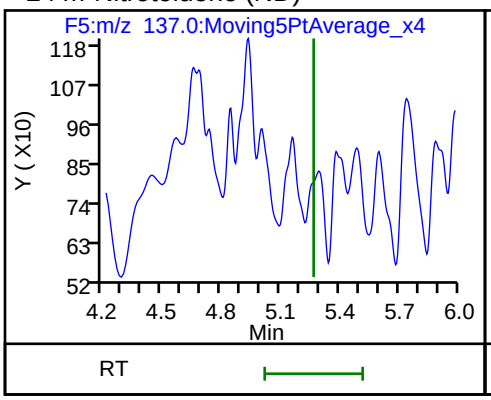


23 p-Nitrotoluene (ND)

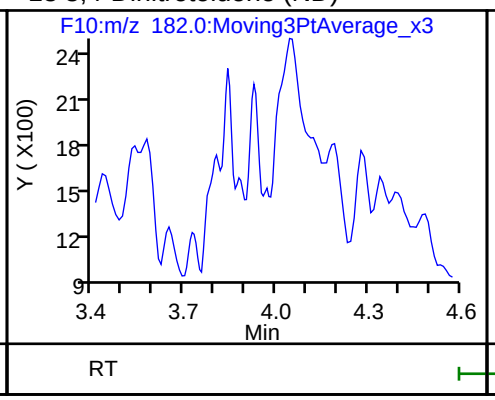


Report Date: 06-Apr-2022 07:10:26
Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05080.d

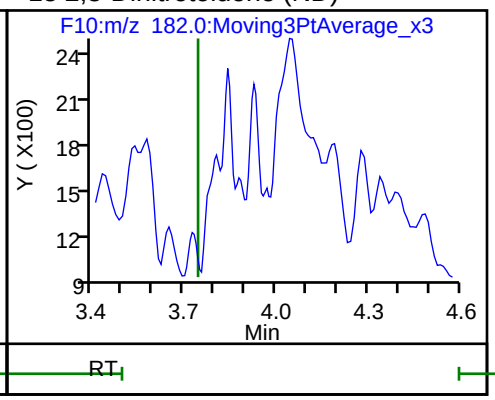
24 m-Nitrotoluene (ND)



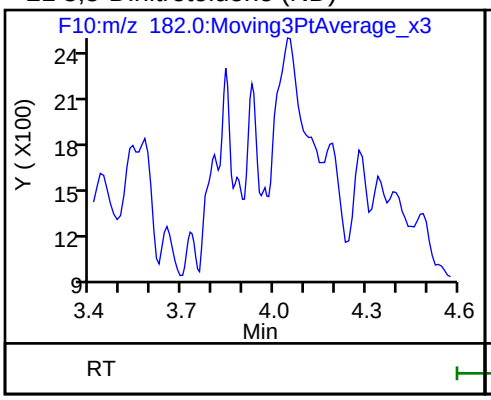
13 3,4-Dinitrotoluene (ND)



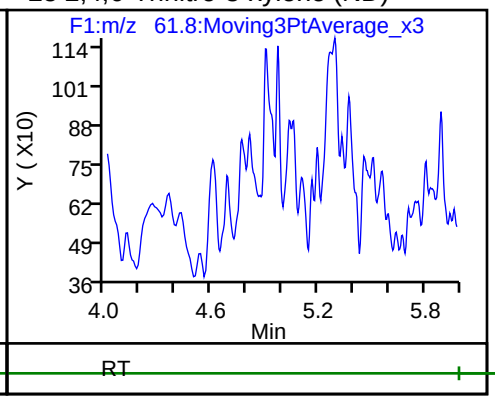
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 07:10:26 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05080.d				
Lims ID:	280-160187-A-37-B				
Client ID:	29SB195 (7-8)				
Sample Type:	Client				
Inject. Date:	05-Apr-2022 18:14:00	ALS Bottle#:	21	Worklist Smp#:	77
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160187-A-37-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 07:10:22	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 07:00:09		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	89.3	89.02

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB195 (9.5-10) | Lab Sample ID: 280-160187-38
Matrix: Solid | Lab File ID: ex722D05081.d
Analysis Method: 8321A | Date Collected: 03/23/2022 10:15
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:54
Sample wt/vol: 10.55(g) | Date Analyzed: 04/05/2022 18:20
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.: 570786 | 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 Q	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 Q	0.095	0.047	0.029
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	0.027
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	97		68-140

Report Date: 06-Apr-2022 07:10:26 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\ex722D05081.d
Lims ID: 280-160187-A-38-B
Client ID: 29SB195 (9.5-10)
Sample Type: Client
Inject. Date: 05-Apr-2022 18:20:24 ALS Bottle#: 22 Worklist Smp#: 78
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-38-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 07:10:22 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 07:00:21
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	1.226	1.226	0.0		298470	125.0	283	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.785	1.777	0.008		1034181	125.0	203	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1853632	129.4	267	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	883180	97.7	175	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		5708759	125.0	113	

QC Flag Legend
Processing Flags

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

Report Date: 06-Apr-2022 07:10:26 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05081.d

Injection Date: 05-Apr-2022 18:20:24 Instrument ID: LC_LCMS7

Lims ID: 280-160187-A-38-B Lab Sample ID: 280-160187-38

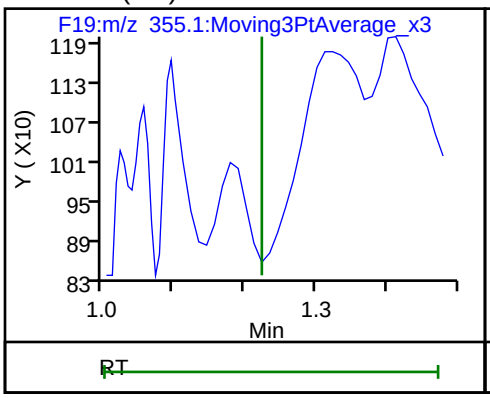
Client ID: 29SB195 (9.5-10)

Operator ID: acm ALS Bottle#: 22 Worklist Smp#: 78

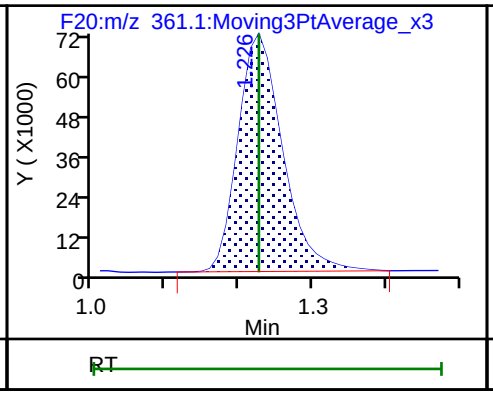
Injection Vol: 10.0 ul Dil. Factor: 1.0000

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

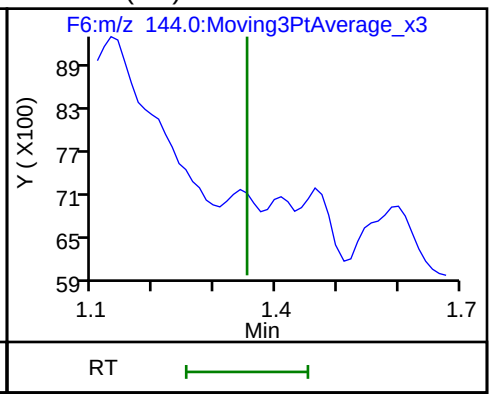
2 HMX (ND)



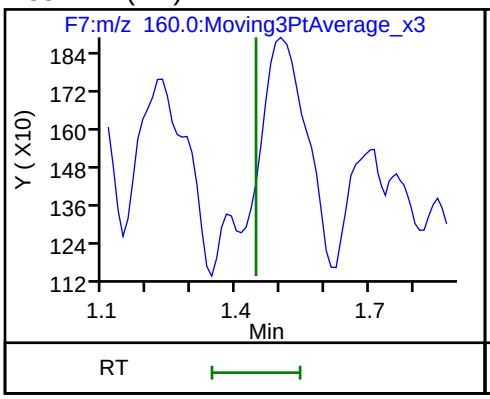
* 1 HMX-13C4



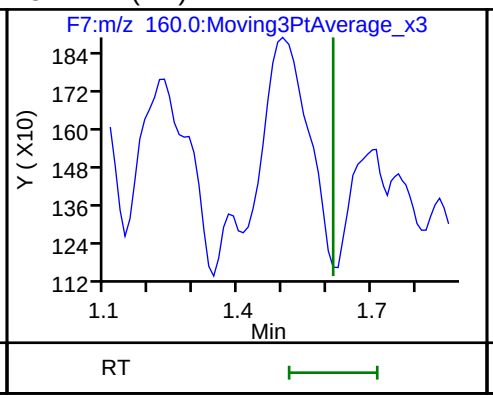
36 TNX (ND)



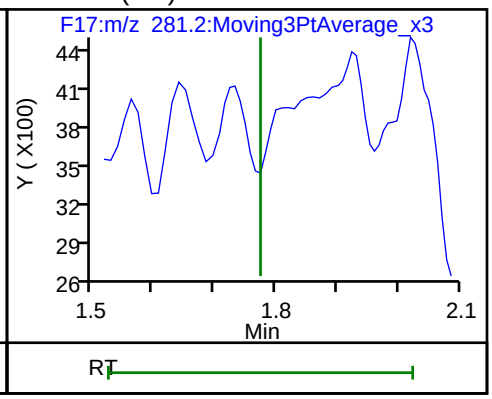
33 DNX (ND)



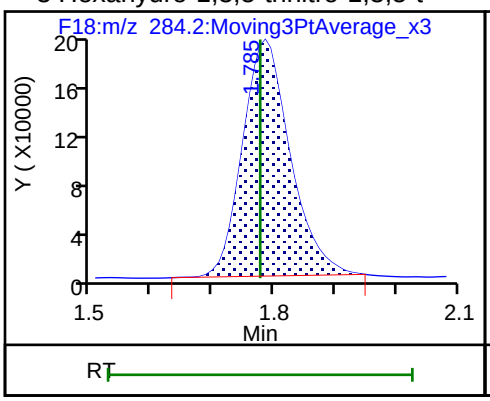
34 MNX (ND)



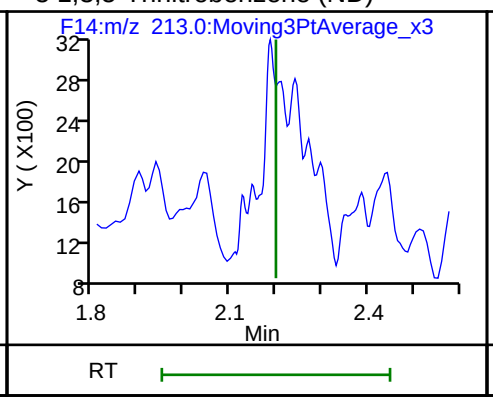
4 RDX (ND)



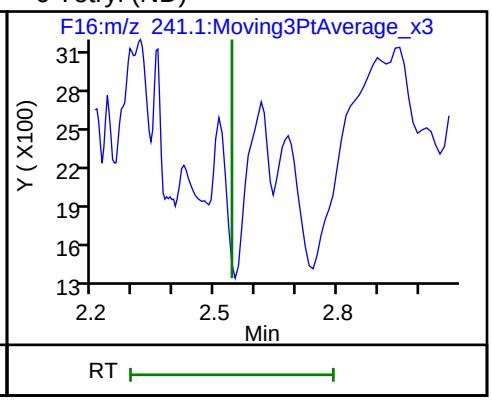
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



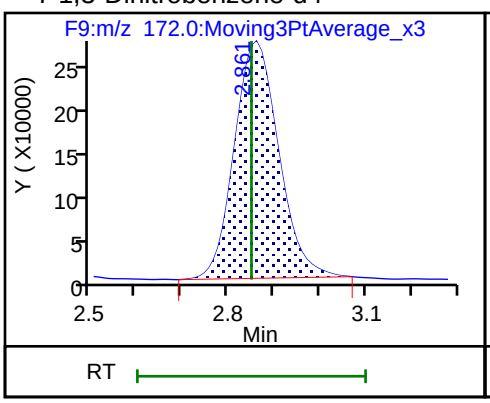
5 1,3,5-Trinitrobenzene (ND)



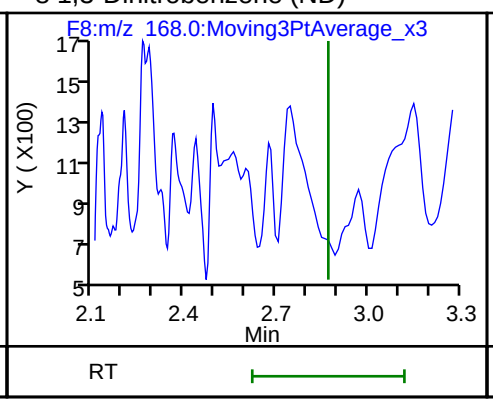
6 Tetryl (ND)



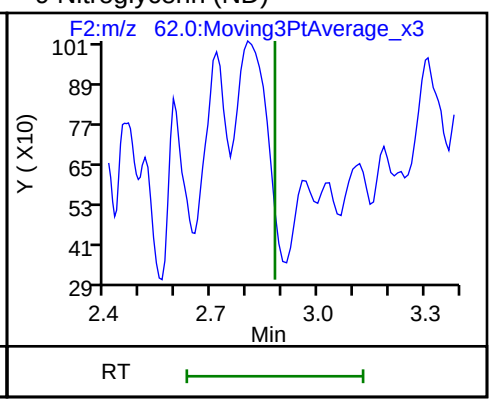
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



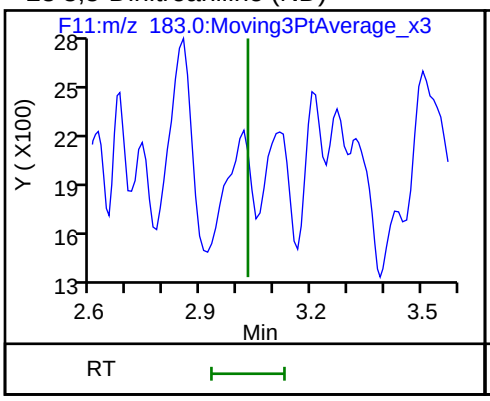
9 Nitroglycerin (ND)



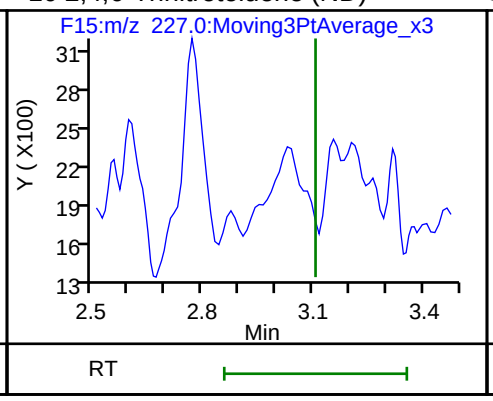
Report Date: 06-Apr-2022 07:10:26 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05081.d

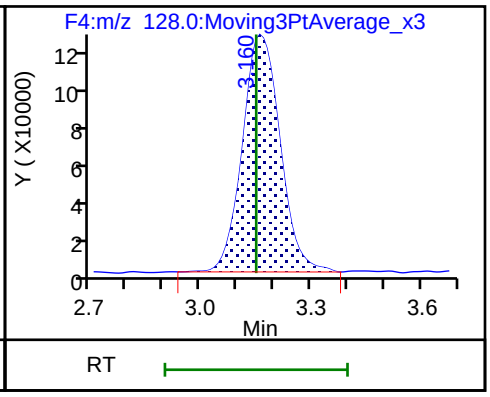
28 3,5-Dinitroaniline (ND)



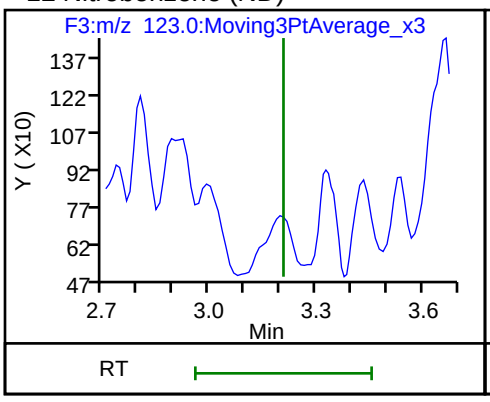
10 2,4,6-Trinitrotoluene (ND)



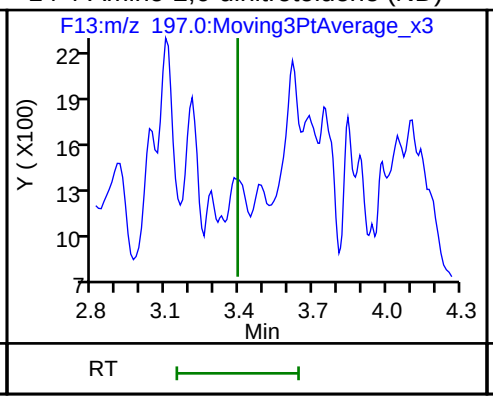
$ 11 Nitrobenzene-d5



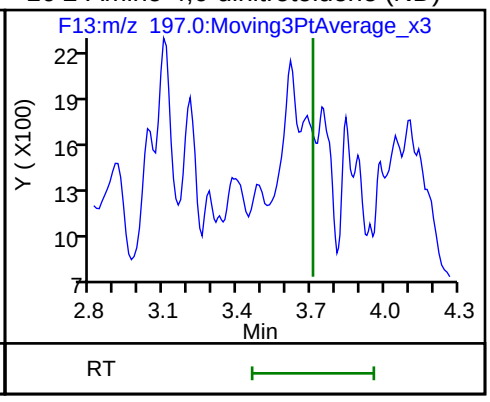
12 Nitrobenzene (ND)



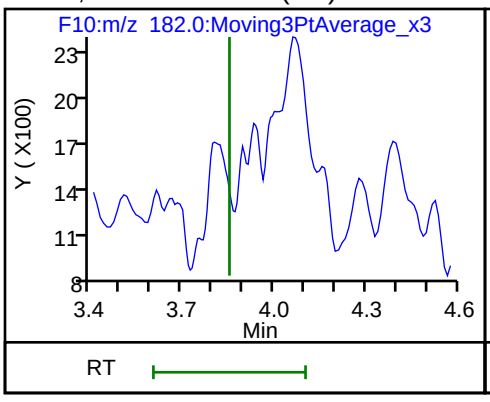
14 4-Amino-2,6-dinitrotoluene (ND)



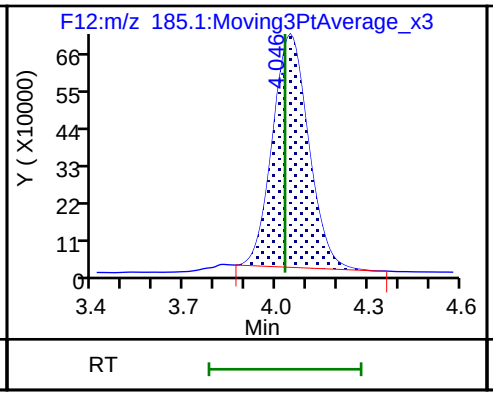
16 2-Amino-4,6-dinitrotoluene (ND)



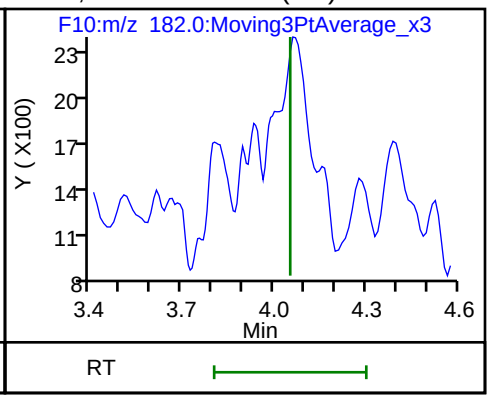
17 2,6-Dinitrotoluene (ND)



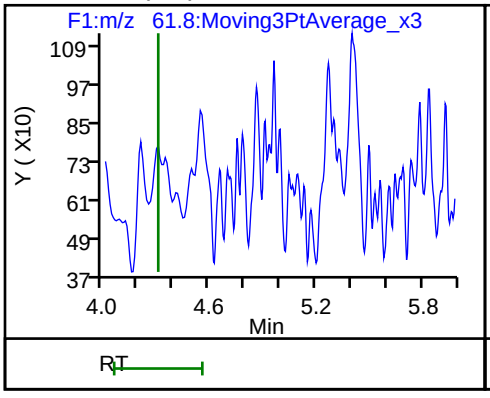
* 18 2,4-dinitrotoluene-d3



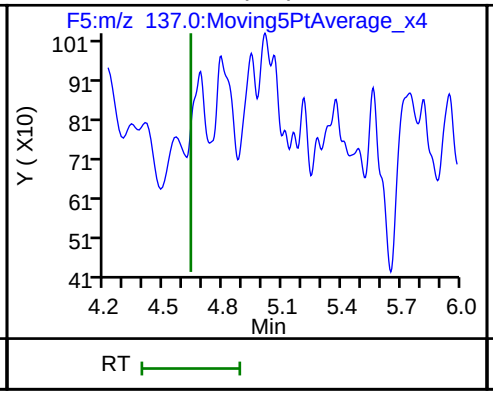
19 2,4-Dinitrotoluene (ND)



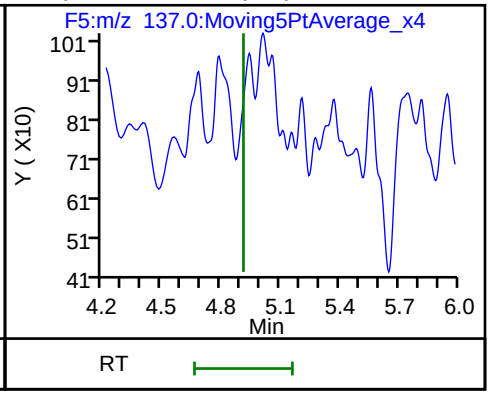
20 PETN (ND)



22 o-Nitrotoluene (ND)

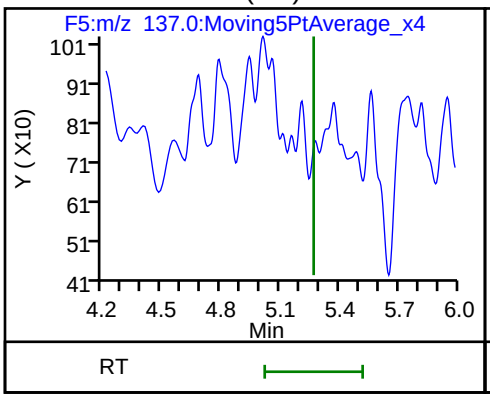


23 p-Nitrotoluene (ND)

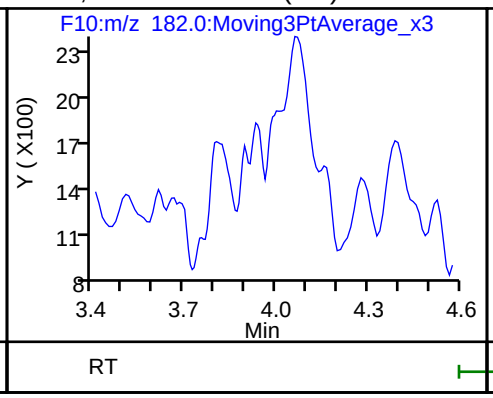


Report Date: 06-Apr-2022 07:10:26
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05081.d

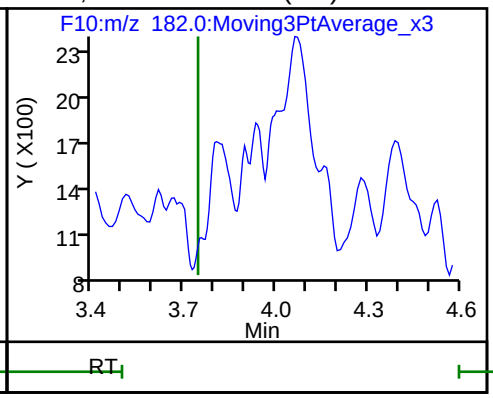
24 m-Nitrotoluene (ND)



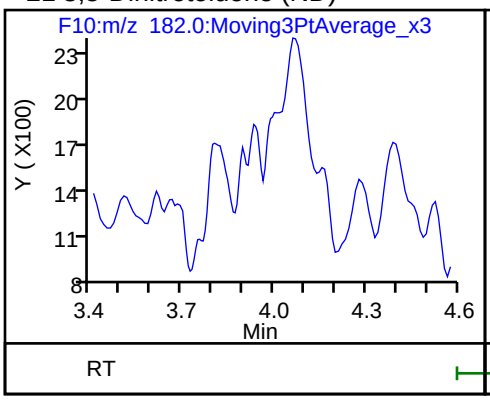
13 3,4-Dinitrotoluene (ND)



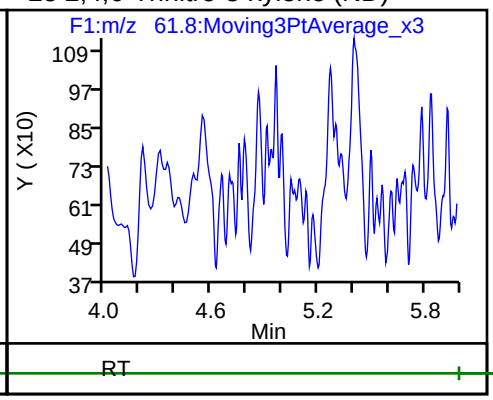
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 07:10:26 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05081.d				
Lims ID:	280-160187-A-38-B				
Client ID:	29SB195 (9.5-10)				
Sample Type:	Client				
Inject. Date:	05-Apr-2022 18:20:24	ALS Bottle#:	22	Worklist Smp#:	78
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160187-A-38-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 07:10:22	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 07:00:21		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	97.7	97.41

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

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

SDG No.:

Client Sample ID: 29SB194 (7-8) | Lab Sample ID: 280-160187-39

Matrix: Solid | Lab File ID: ex722D05082.d

Analysis Method: 8321A | Date Collected: 03/23/2022 10:20

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

Sample wt/vol: 10.18(g) | Date Analyzed: 04/05/2022 18:26

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.: 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	0.040
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 Q	0.098	0.049	0.031
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	0.049
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	95		68-140

Report Date: 06-Apr-2022 07:10:27 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\ex722D05082.d
Lims ID: 280-160187-A-39-B
Client ID: 29SB194 (7-8)
Sample Type: Client
Inject. Date: 05-Apr-2022 18:26:48 ALS Bottle#: 23 Worklist Smp#: 79
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-39-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 07:10:22 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 07:00:33
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	1.226	1.226	0.0		312341	125.0	280	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.785	1.777	0.008		1066621	125.0	430	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1866797	129.4	337	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	867586	95.3	124	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		5924044	125.0	138	

QC Flag Legend
Processing Flags

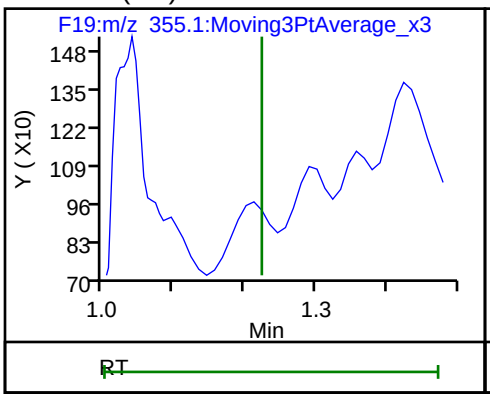
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:10:27 Chrom Revision: 2.3 18-Mar-2022 09:07:22

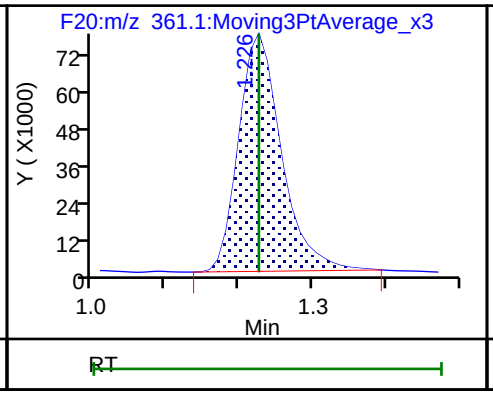
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05082.d
Injection Date: 05-Apr-2022 18:26:48 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-39-B Lab Sample ID: 280-160187-39
Client ID: 29SB194 (7-8)
Operator ID: acm ALS Bottle#: 23 Worklist Smp#: 79
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

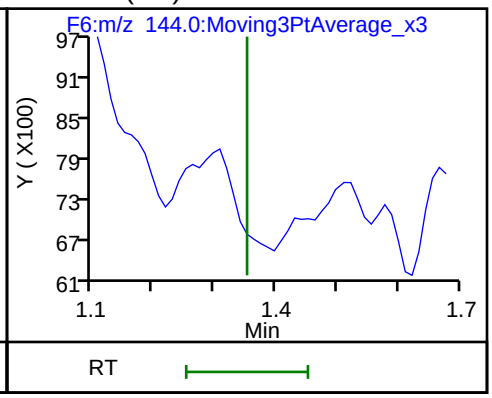
2 HMX (ND)



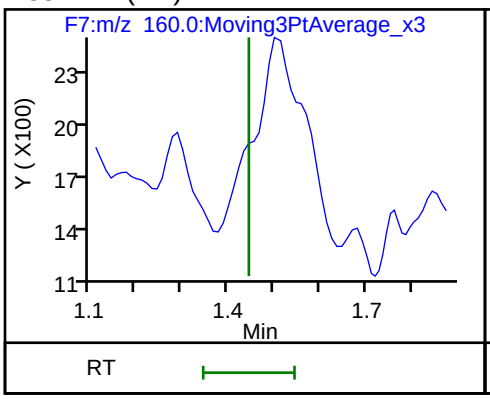
* 1 HMX-13C4



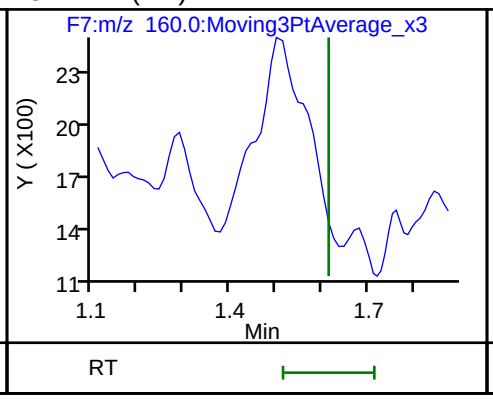
36 TNX (ND)



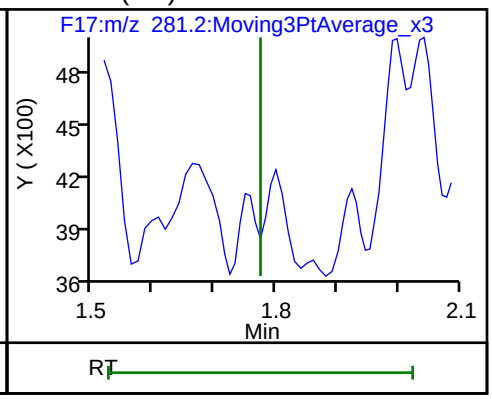
33 DNX (ND)



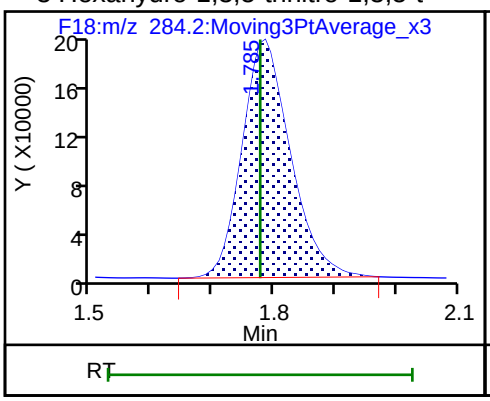
34 MNX (ND)



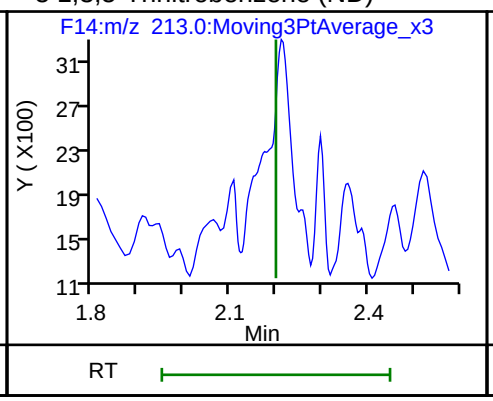
4 RDX (ND)



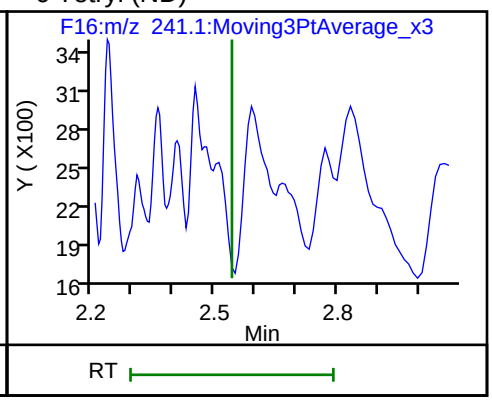
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



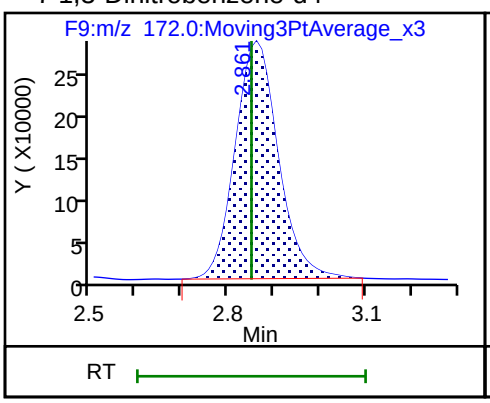
5 1,3,5-Trinitrobenzene (ND)



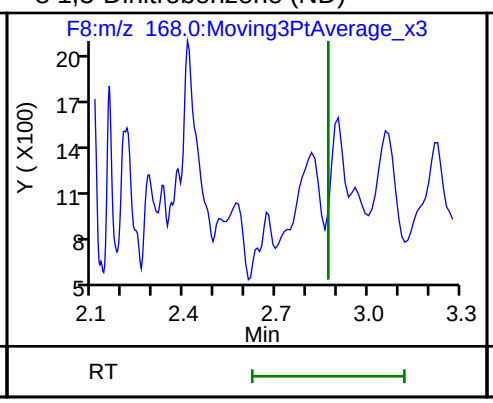
6 Tetryl (ND)



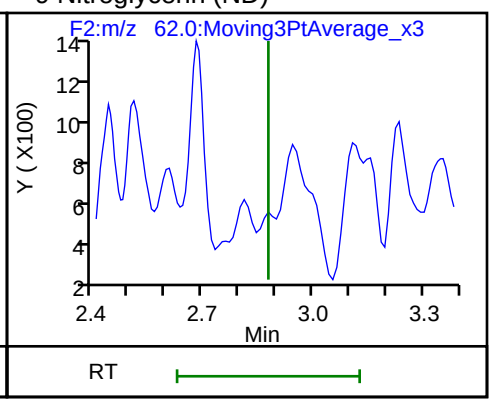
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



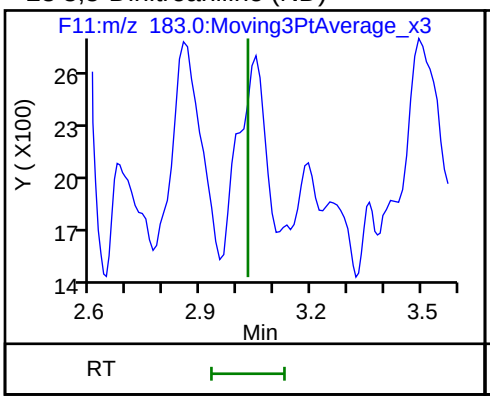
9 Nitroglycerin (ND)



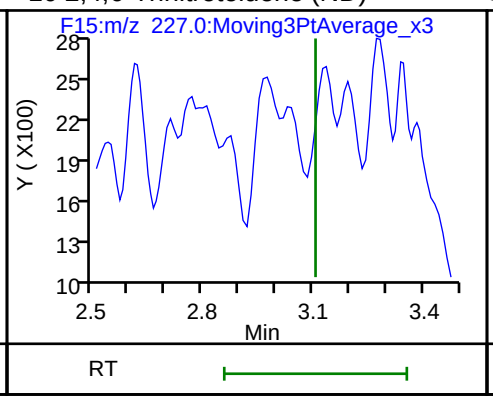
Report Date: 06-Apr-2022 07:10:27 Chrom Revision: 2.3 18-Mar-2022 09:07:22

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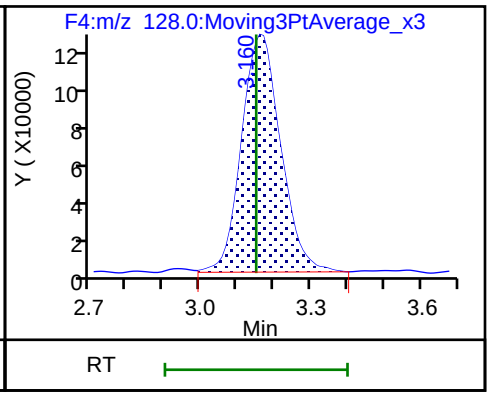
28 3,5-Dinitroaniline (ND)



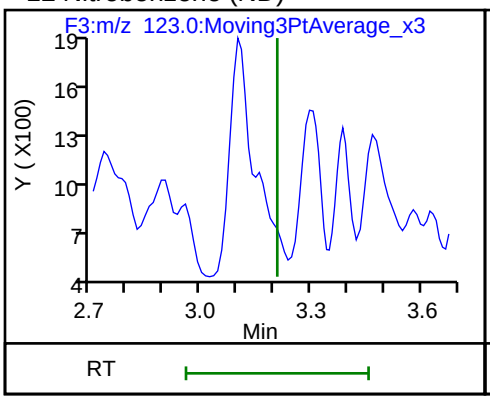
10 2,4,6-Trinitrotoluene (ND)



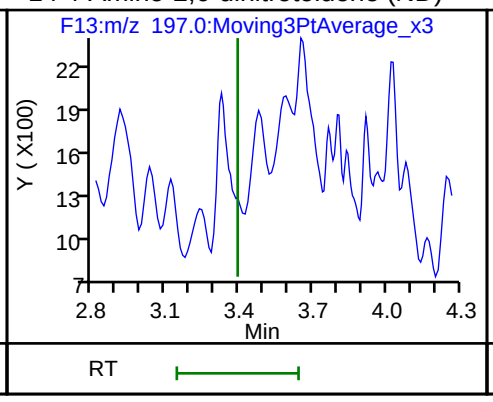
$ 11 Nitrobenzene-d5



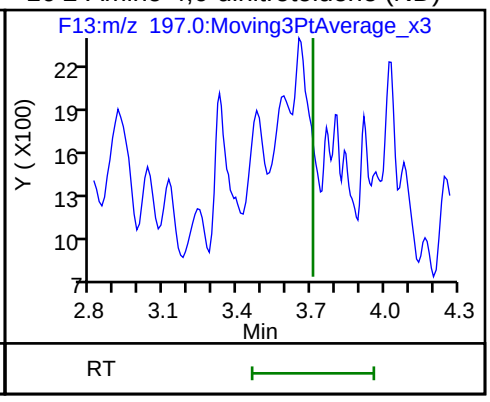
12 Nitrobenzene (ND)



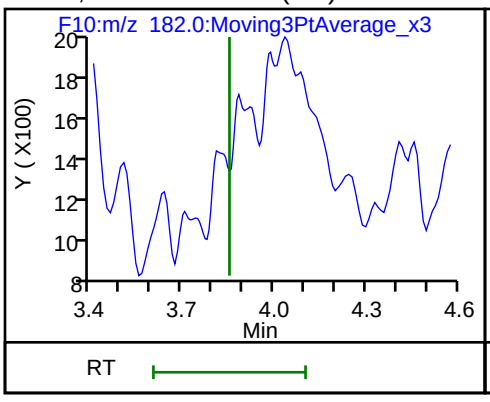
14 4-Amino-2,6-dinitrotoluene (ND)



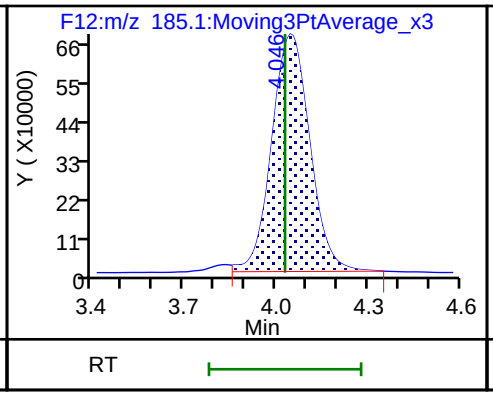
16 2-Amino-4,6-dinitrotoluene (ND)



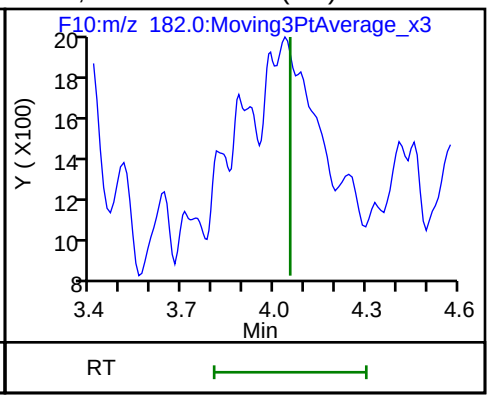
17 2,6-Dinitrotoluene (ND)



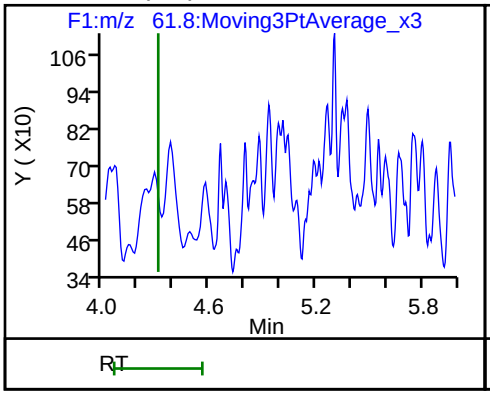
* 18 2,4-dinitrotoluene-d3



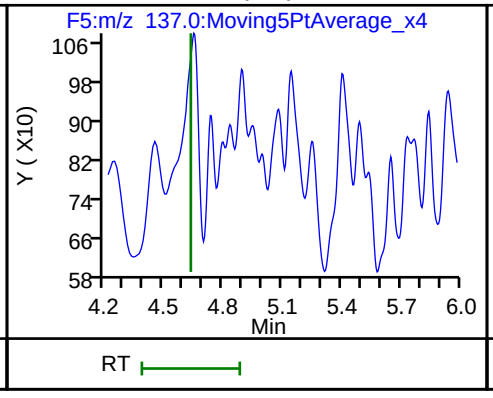
19 2,4-Dinitrotoluene (ND)



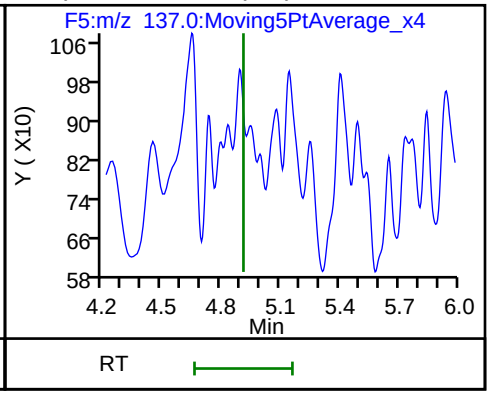
20 PETN (ND)



22 o-Nitrotoluene (ND)



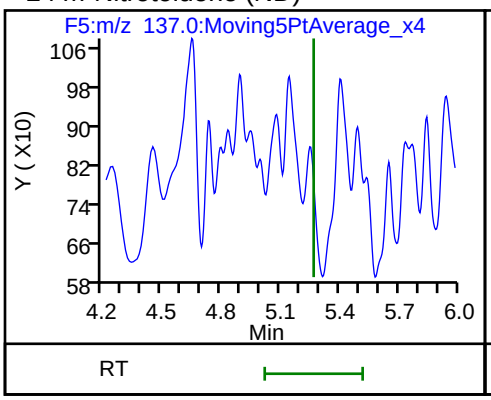
23 p-Nitrotoluene (ND)



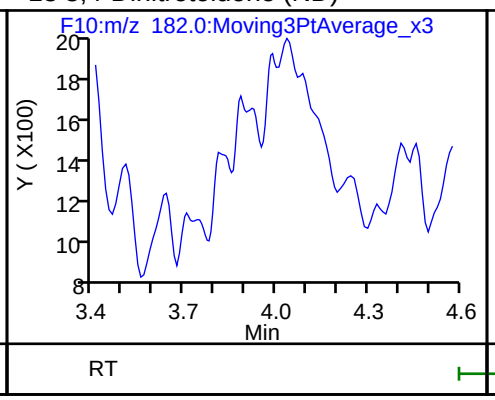
Report Date: 06-Apr-2022 07:10:27 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05082.d

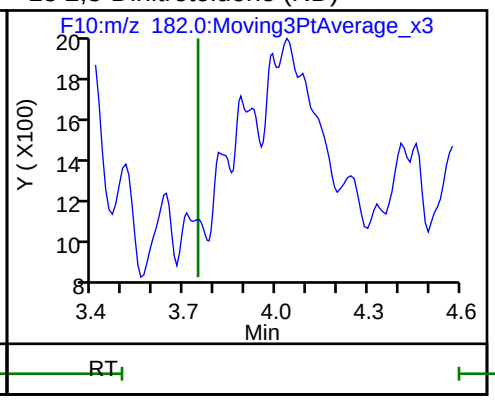
24 m-Nitrotoluene (ND)



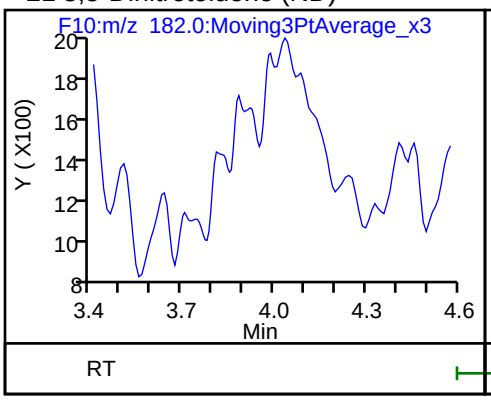
13 3,4-Dinitrotoluene (ND)



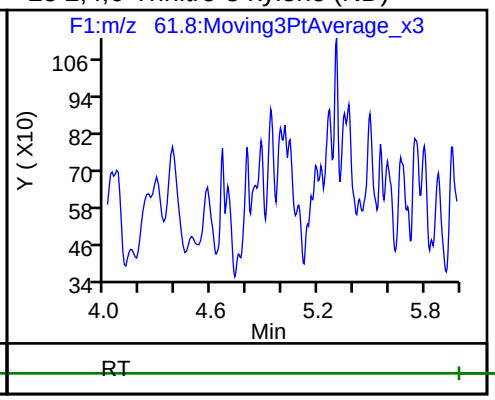
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 07:10:27 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05082.d				
Lims ID:	280-160187-A-39-B				
Client ID:	29SB194 (7-8)				
Sample Type:	Client				
Inject. Date:	05-Apr-2022 18:26:48	ALS Bottle#:	23	Worklist Smp#:	79
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160187-A-39-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 07:10:22	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 07:00:33		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	95.3	94.99

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

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

SDG No.:

Client Sample ID: 29SB194 (9.5-10) | Lab Sample ID: 280-160187-40

Matrix: Solid | Lab File ID: ex722D05083.d

Analysis Method: 8321A | Date Collected: 03/23/2022 10:25

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

Sample wt/vol: 10.71(g) | Date Analyzed: 04/05/2022 18:33

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.: 570786 | 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 Q	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 Q	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	0.035
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	87		68-140

Report Date: 06-Apr-2022 07:10:27 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\ex722D05083.d
Lims ID: 280-160187-A-40-B
Client ID: 29SB194 (9.5-10)
Sample Type: Client
Inject. Date: 05-Apr-2022 18:33:12 ALS Bottle#: 24 Worklist Smp#: 80
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-40-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 07:10:22 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 07:00:42
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	1.226	1.226	0.0		300226	125.0	251	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		1032080	125.0	234	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1844851	129.4	222	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.781	785634	87.2	119	
* 18 2,4-dinitrotoluene-d3								
185.1	4.046	4.028	0.018		5884590	125.0	236	

QC Flag Legend
Processing Flags

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

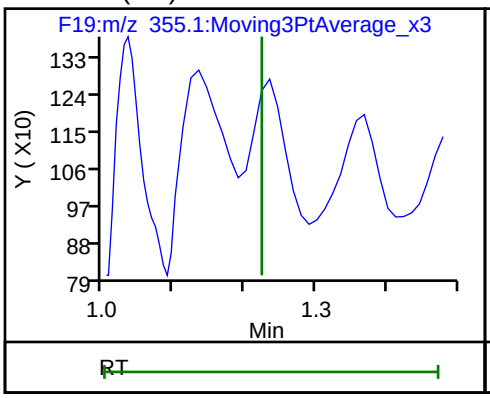
Report Date: 06-Apr-2022 07:10:27 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

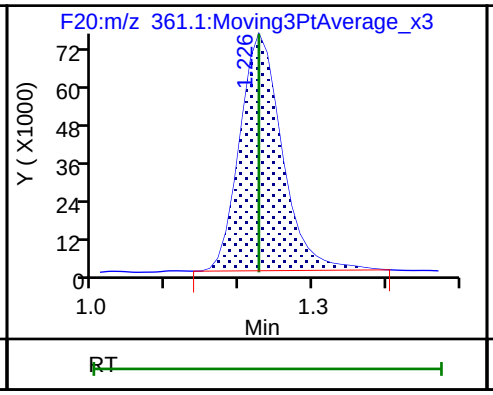
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05083.d

Injection Date:	05-Apr-2022 18:33:12	Instrument ID:	LC_LCMS7
Lims ID:	280-160187-A-40-B	Lab Sample ID:	280-160187-40
Client ID:	29SB194 (9.5-10)		
Operator ID:	acm	ALS Bottle#:	24 Worklist Smp#: 80
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl

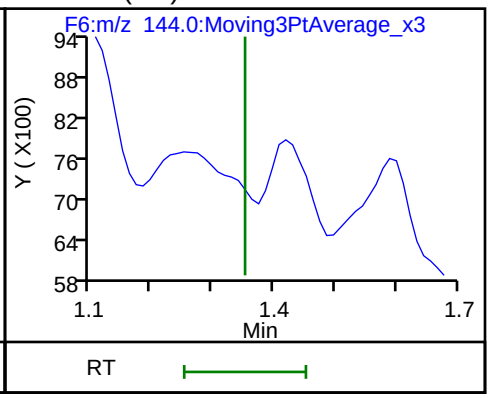
2 HMX (ND)



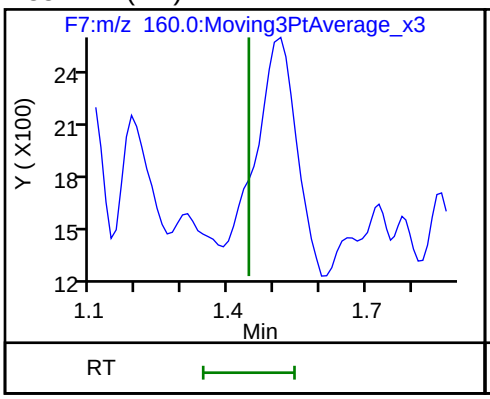
* 1 HMX-13C4



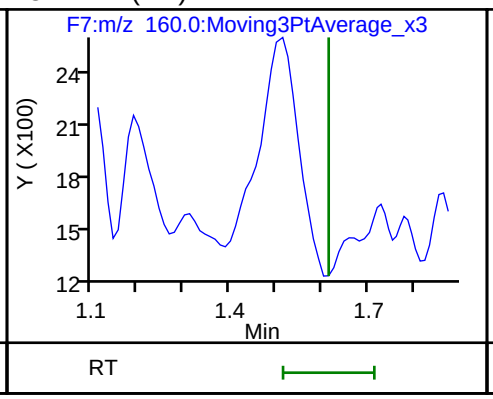
36 TNX (ND)



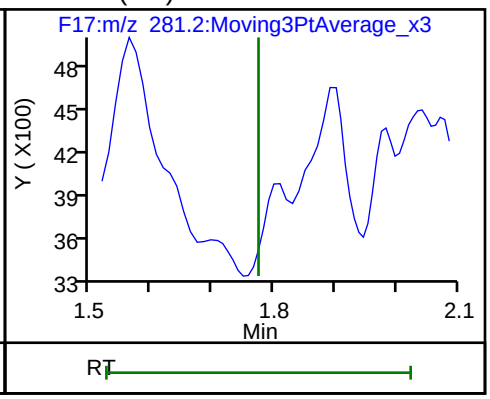
33 DNX (ND)



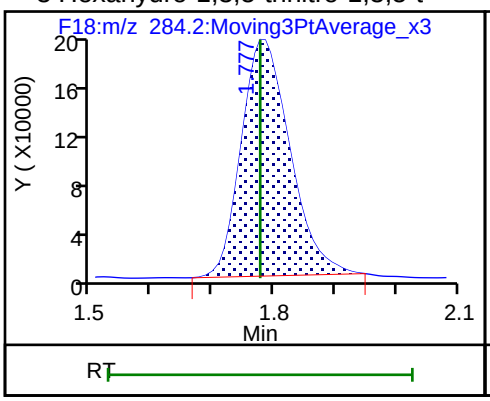
34 MNX (ND)



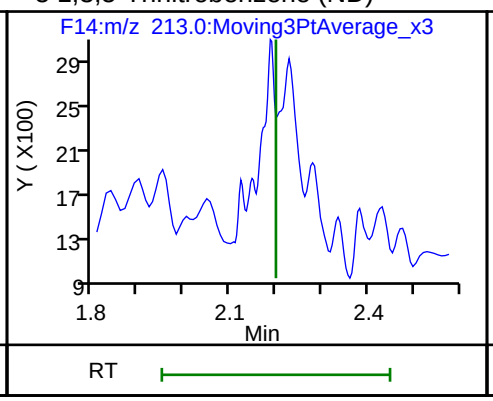
4 RDX (ND)



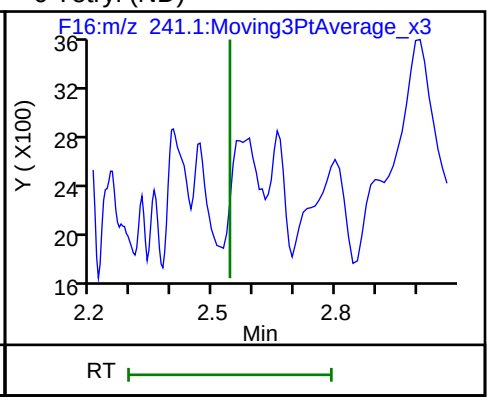
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



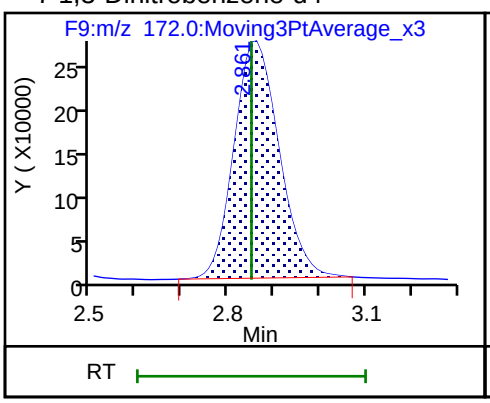
5 1,3,5-Trinitrobenzene (ND)



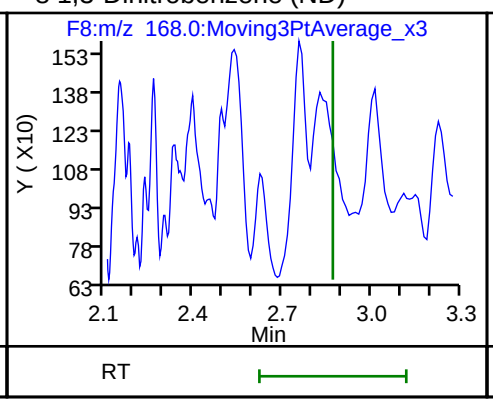
6 Tetryl (ND)



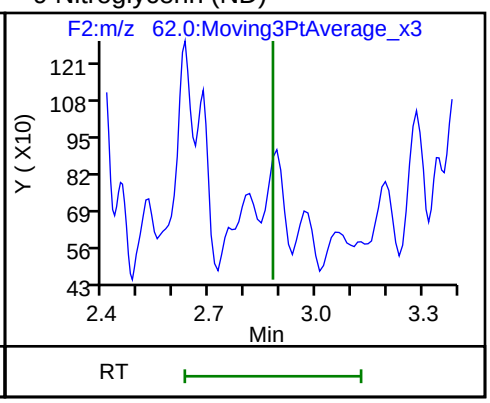
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



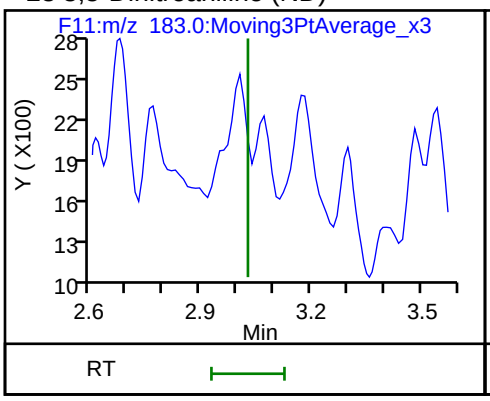
9 Nitroglycerin (ND)



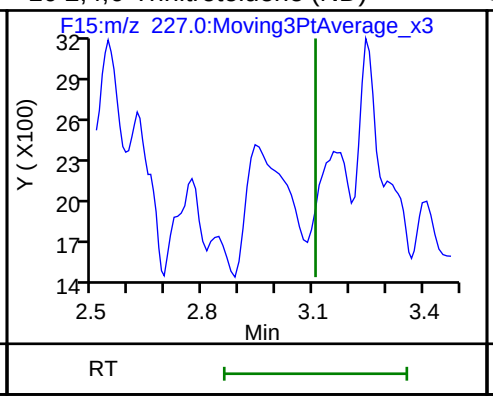
Report Date: 06-Apr-2022 07:10:27 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05083.d

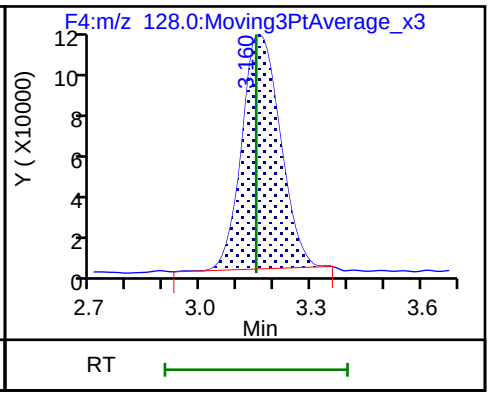
28 3,5-Dinitroaniline (ND)



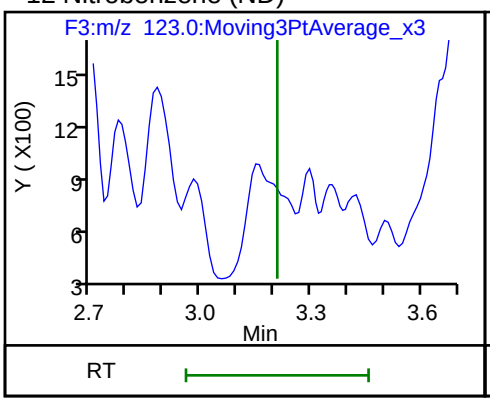
10 2,4,6-Trinitrotoluene (ND)



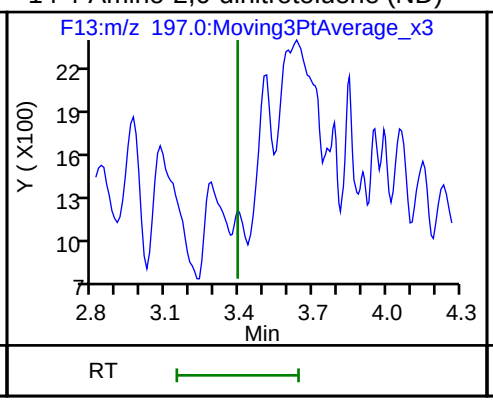
$ 11 Nitrobenzene-d5



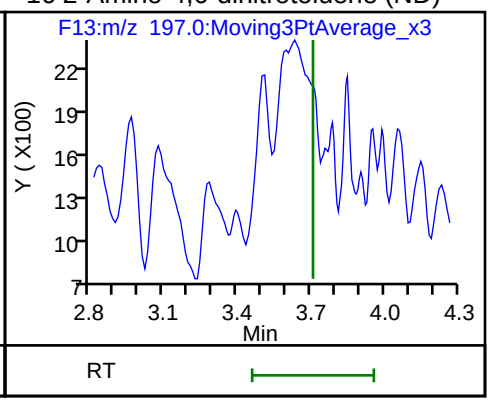
12 Nitrobenzene (ND)



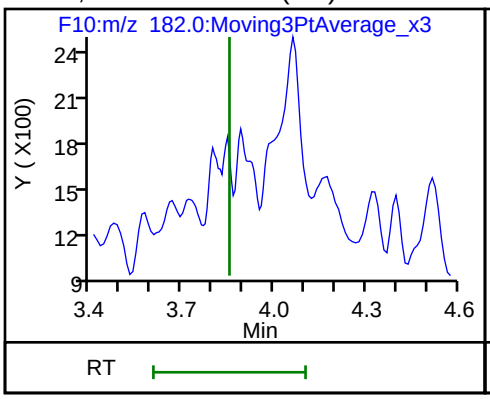
14 4-Amino-2,6-dinitrotoluene (ND)



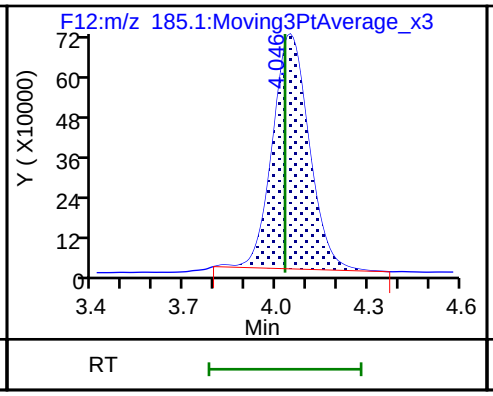
16 2-Amino-4,6-dinitrotoluene (ND)



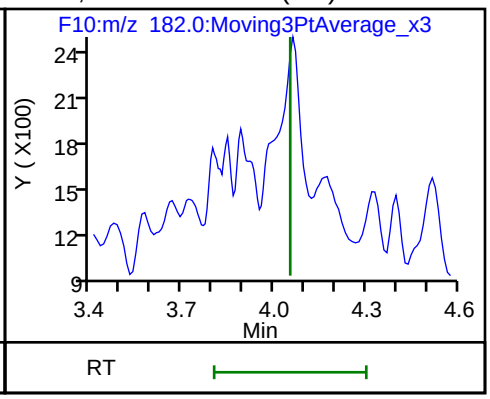
17 2,6-Dinitrotoluene (ND)



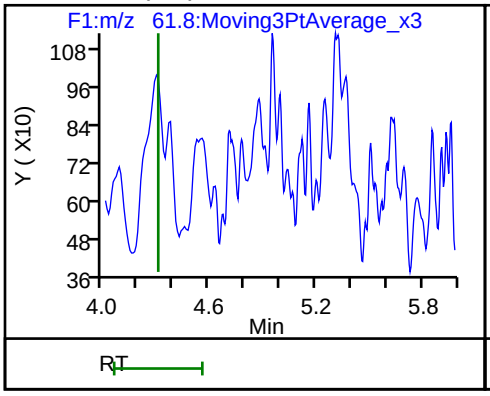
* 18 2,4-dinitrotoluene-d3



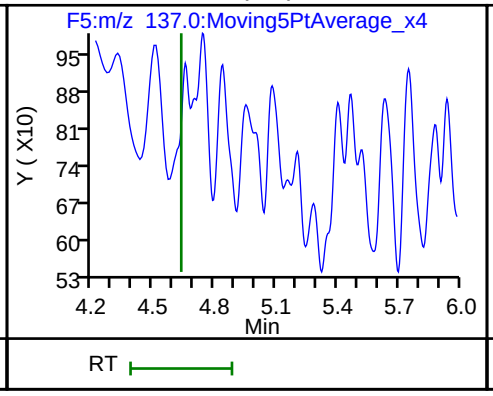
19 2,4-Dinitrotoluene (ND)



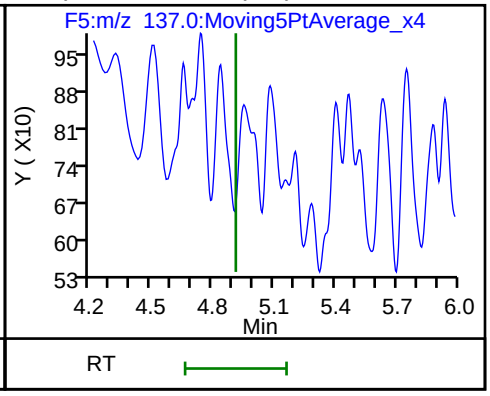
20 PETN (ND)



22 o-Nitrotoluene (ND)



23 p-Nitrotoluene (ND)

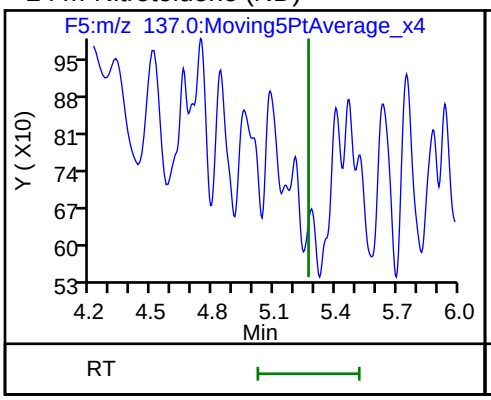


Chrom Revision: 2.3 18-Mar-2022 09:07:22

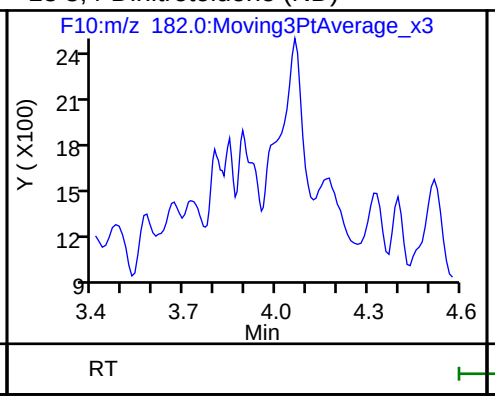
Report Date: 06-Apr-2022 07:10:28

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05083.d

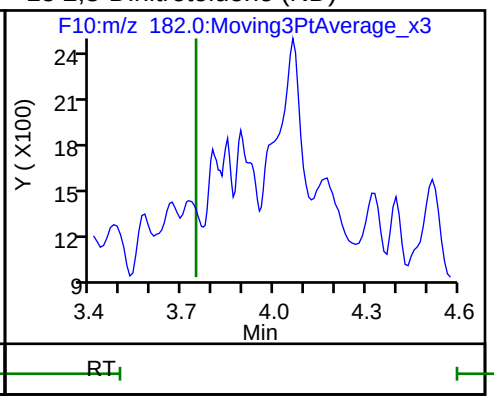
24 m-Nitrotoluene (ND)



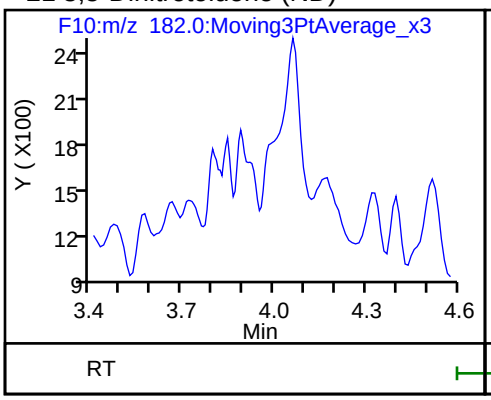
13 3,4-Dinitrotoluene (ND)



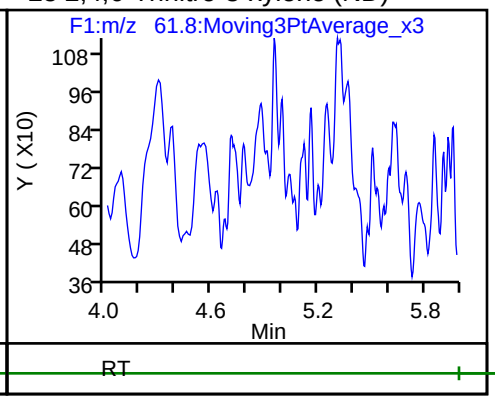
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 07:10:27 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05083.d				
Lims ID:	280-160187-A-40-B				
Client ID:	29SB194 (9.5-10)				
Sample Type:	Client				
Inject. Date:	05-Apr-2022 18:33:12	ALS Bottle#:	24	Worklist Smp#:	80
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160187-A-40-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 07:10:22	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 07:00:42		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	87.2	86.96

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: DUP-04 | Lab Sample ID: 280-160187-41
Matrix: Solid | Lab File ID: ex722D05084.d
Analysis Method: 8321A | Date Collected: 03/23/2022 12:00
Extraction Method: 8330B | Date Extracted: 04/01/2022 16:54
Sample wt/vol: 10.57(g) | Date Analyzed: 04/05/2022 18:39
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.: 570786 | 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 Q	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 Q	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	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 07:10:28 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\ex722D05084.d
Lims ID: 280-160187-A-41-B
Client ID: DUP-04
Sample Type: Client
Inject. Date: 05-Apr-2022 18:39:35 ALS Bottle#: 25 Worklist Smp#: 81
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-41-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 07:10:22 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 07:00:55
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		281130	125.0	234	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.777	1.777	0.0		1001280	125.0	194	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.861	2.850	0.011		1779698	129.4	256	
$ 11 Nitrobenzene-d5								
128.0	3.160	3.164	0.010	0.783	889150	102.5	109	
* 18 2,4-dinitrotoluene-d3								
185.1	4.037	4.028	0.009		5624060	125.0	115	

QC Flag Legend
Processing Flags

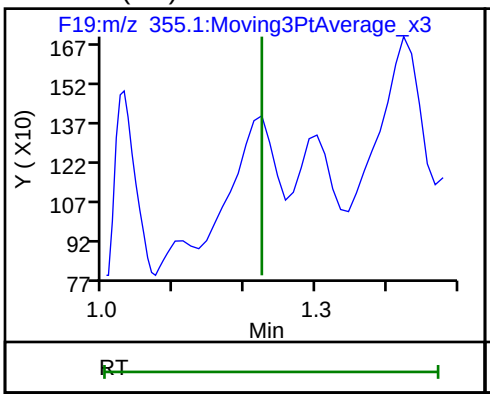
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 07:10:28 Chrom Revision: 2.3 18-Mar-2022 09:07:22

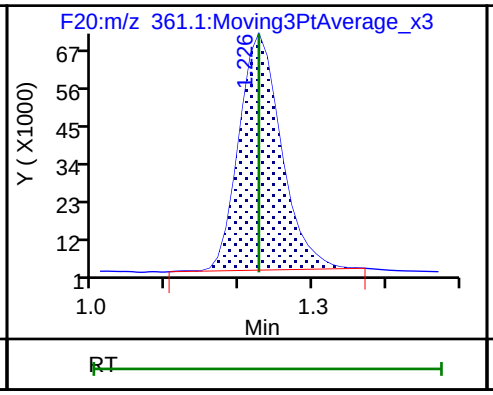
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05084.d
Injection Date: 05-Apr-2022 18:39:35 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-41-B Lab Sample ID: 280-160187-41
Client ID: DUP-04
Operator ID: acm ALS Bottle#: 25 Worklist Smp#: 81
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl

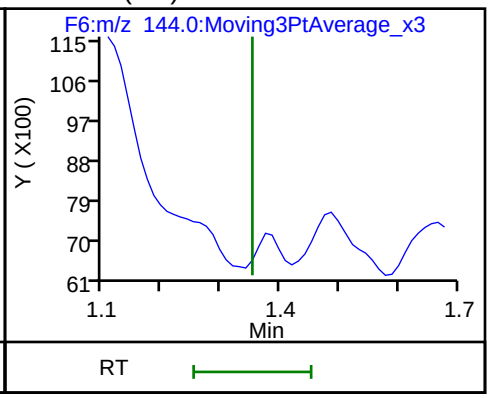
2 HMX (ND)



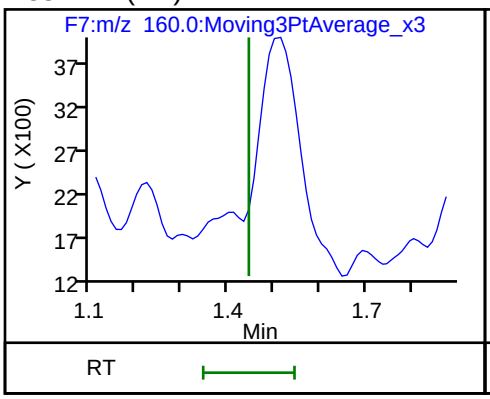
* 1 HMX-13C4



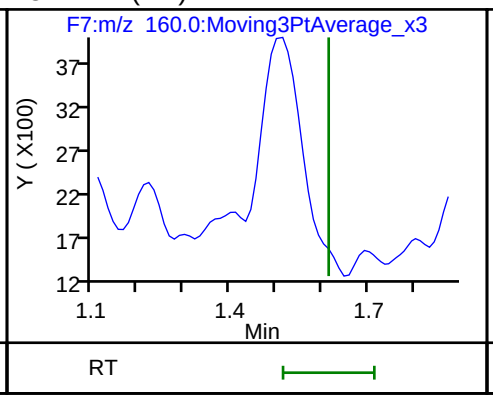
36 TNX (ND)



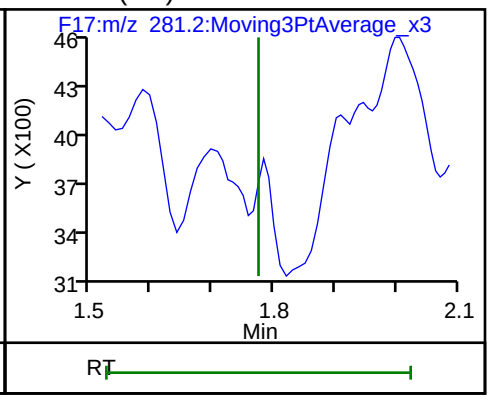
33 DNX (ND)



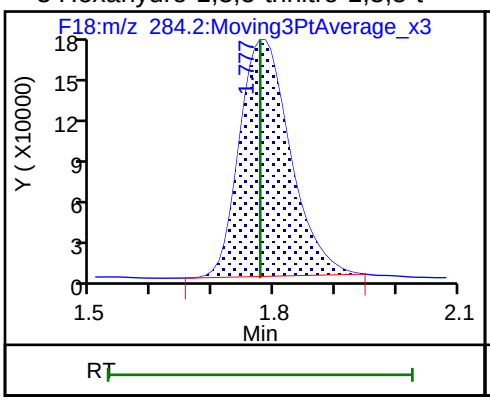
34 MNX (ND)



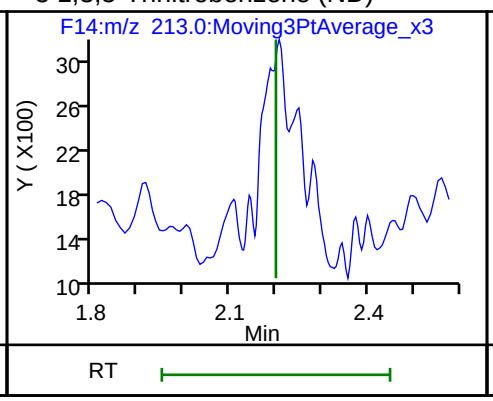
4 RDX (ND)



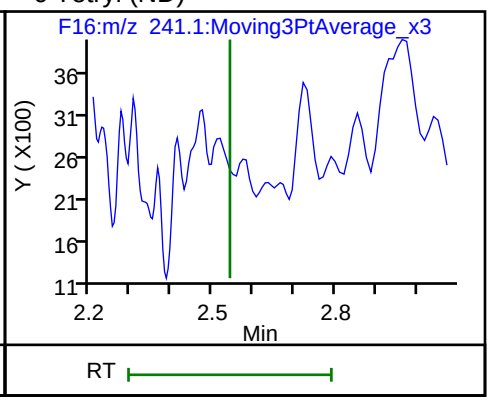
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



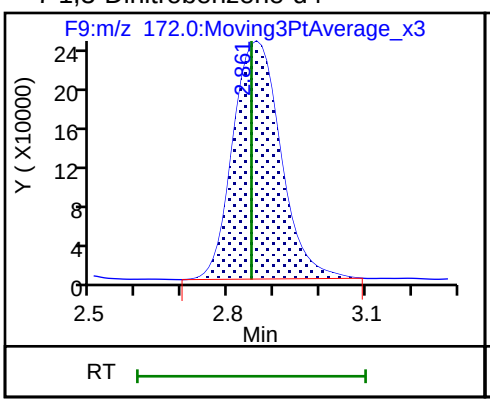
5 1,3,5-Trinitrobenzene (ND)



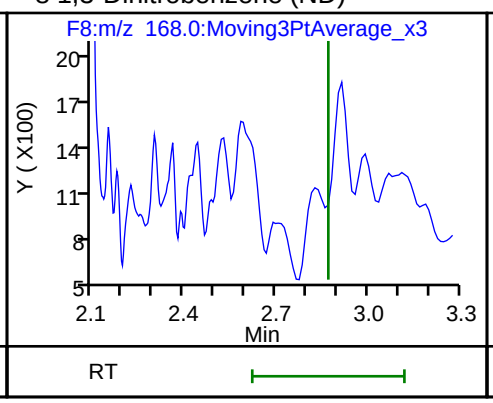
6 Tetryl (ND)



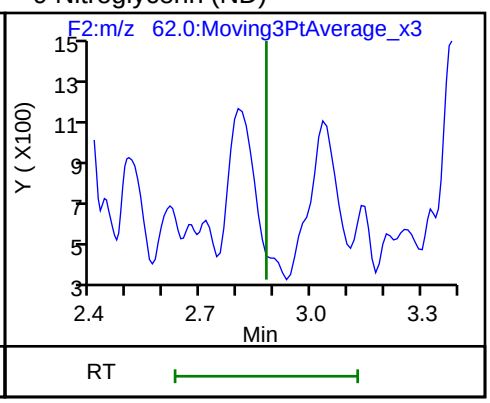
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



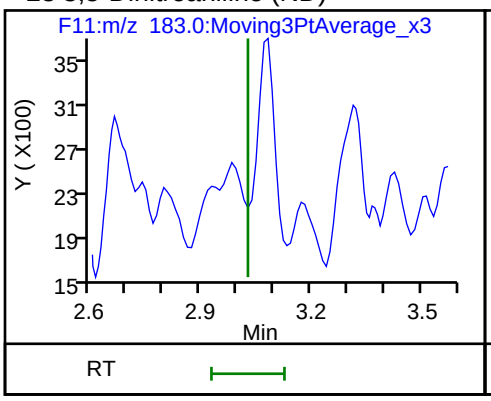
9 Nitroglycerin (ND)



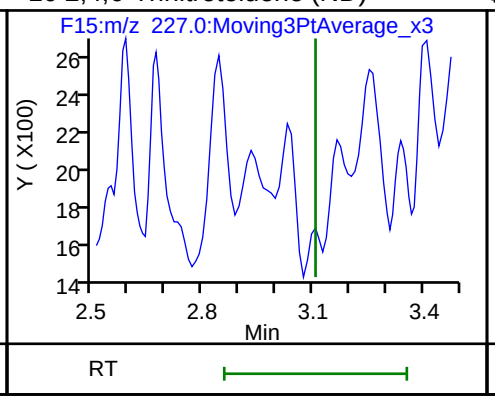
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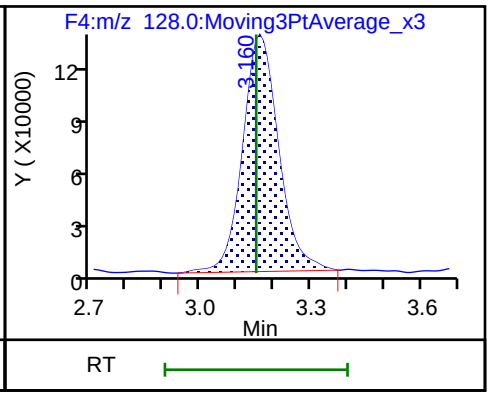
28 3,5-Dinitroaniline (ND)



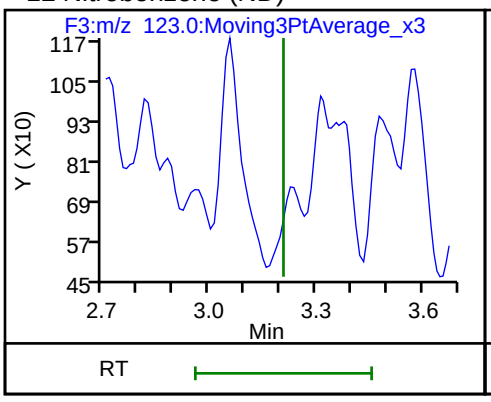
10 2,4,6-Trinitrotoluene (ND)



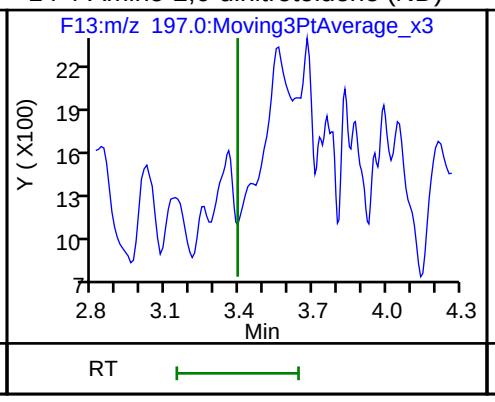
$ 11 Nitrobenzene-d5



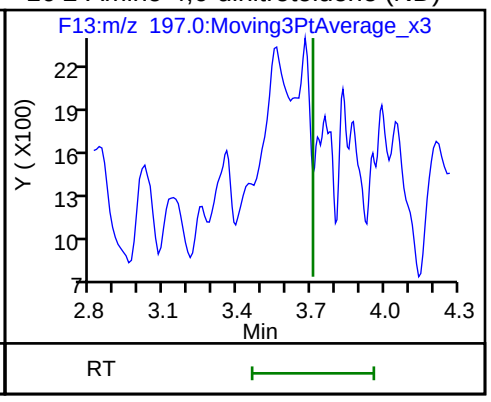
12 Nitrobenzene (ND)



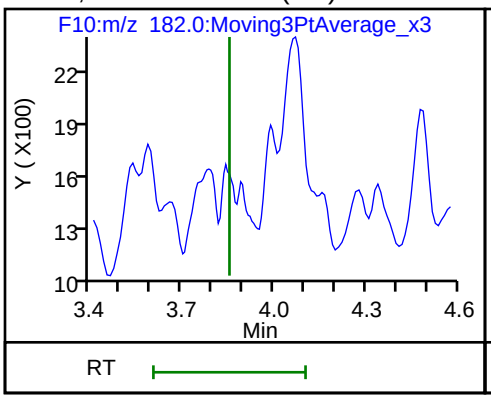
14 4-Amino-2,6-dinitrotoluene (ND)



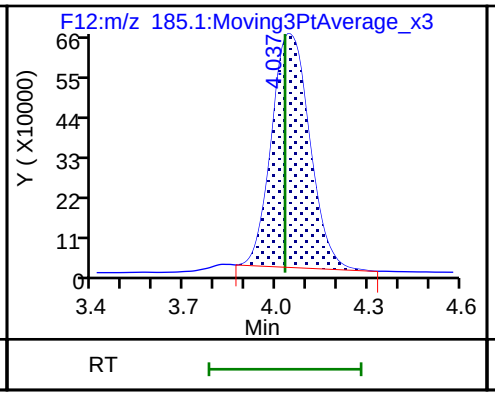
16 2-Amino-4,6-dinitrotoluene (ND)



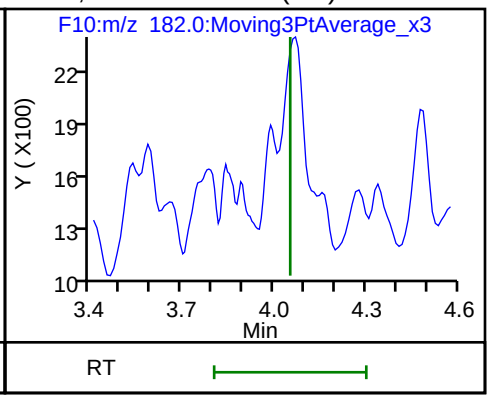
17 2,6-Dinitrotoluene (ND)



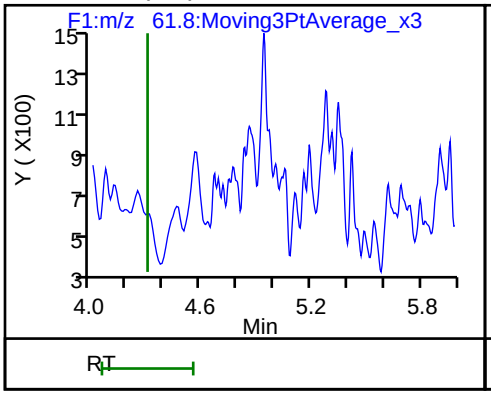
* 18 2,4-dinitrotoluene-d3



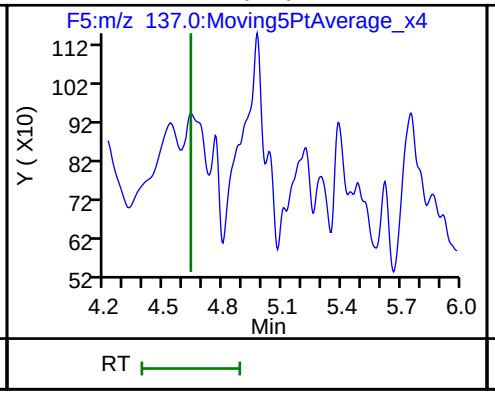
19 2,4-Dinitrotoluene (ND)



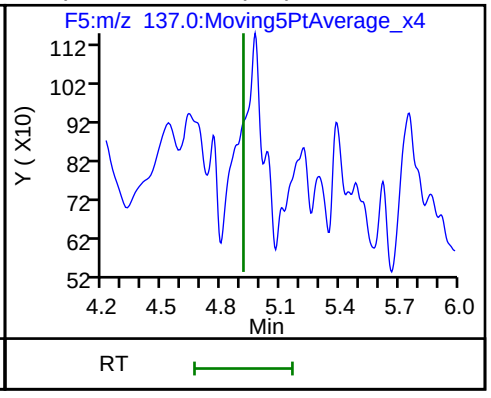
20 PETN (ND)



22 o-Nitrotoluene (ND)



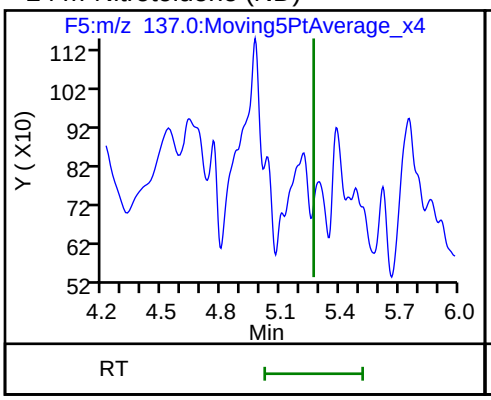
23 p-Nitrotoluene (ND)



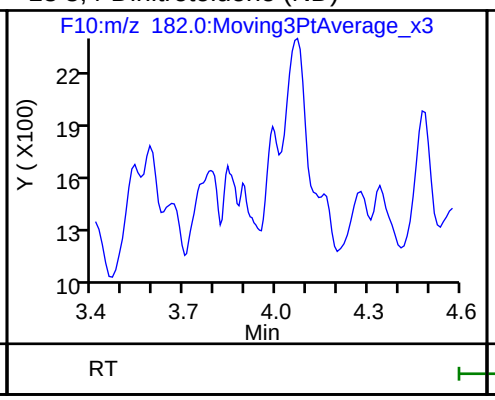
Report Date: 06-Apr-2022 07:10:28 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05084.d

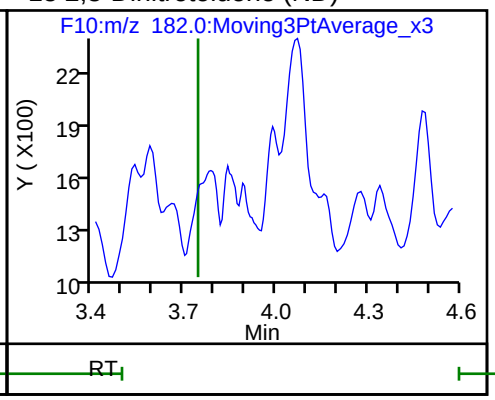
24 m-Nitrotoluene (ND)



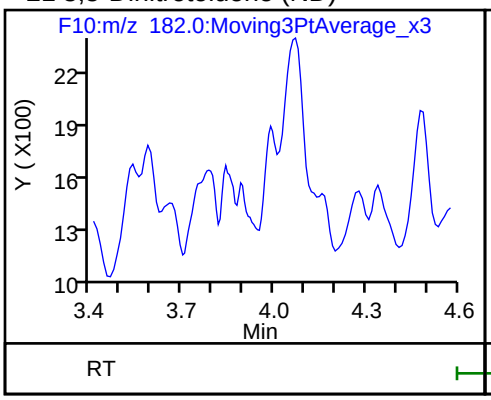
13 3,4-Dinitrotoluene (ND)



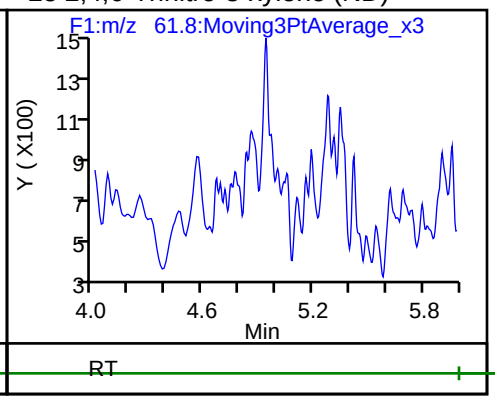
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 07:10:28 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05084.d
Lims ID: 280-160187-A-41-B
Client ID: DUP-04
Sample Type: Client
Inject. Date: 05-Apr-2022 18:39:35 ALS Bottle#: 25 Worklist Smp#: 81
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-41-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 07:10:22 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 07:00:55

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	102.5	102.19

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB191 (9.5-10) | Lab Sample ID: 280-160187-42
Matrix: Solid | Lab File ID: ex722D07017.d
Analysis Method: 8321A | Date Collected: 03/23/2022 10:40
Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57
Sample wt/vol: 10.43(g) | Date Analyzed: 04/07/2022 12:11
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.: 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
121-14-2	2,4-Dinitrotoluene	0.11		0.096	0.048	0.045
606-20-2	2,6-Dinitrotoluene	0.048	U M	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 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	0.12	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	96		68-140

Report Date: 08-Apr-2022 07:32:25 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\ex722D07017.d
Lims ID: 280-160187-A-42-B
Client ID: 29SB191 (9.5-10)
Sample Type: Client
Inject. Date: 07-Apr-2022 12:11:36 ALS Bottle#: 15 Worklist Smp#: 17
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-42-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 13:08:24
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		129257	125.0	127	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		381296	125.0	93.7	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.030	-0.011		1376867	129.4	185	
28 3,5-Dinitroaniline								
183.0	3.230	3.230	0.0	1.070	39483	0.4294	7.4	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.775	646887	96.8	127	
* 18 2,4-dinitrotoluene-d3								
185.1	4.332	4.341	-0.009		4329189	125.0	111	
19 2,4-Dinitrotoluene								
182.0	4.373	4.373	0.0	1.009	1063037	28.8	102	

QC Flag Legend

Processing Flags

Reagents:

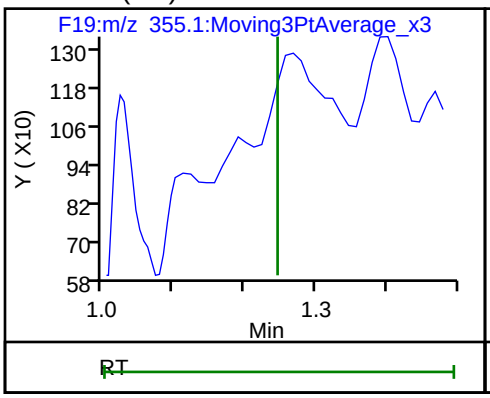
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 08-Apr-2022 07:32:25 Chrom Revision: 2.3 18-Mar-2022 09:07:22

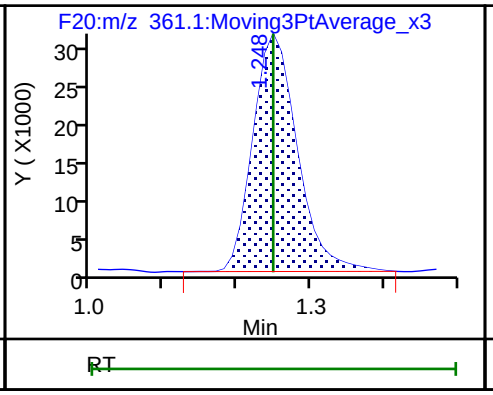
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07017.d
Injection Date: 07-Apr-2022 12:11:36 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-42-B Lab Sample ID: 280-160187-42
Client ID: 29SB191 (9.5-10)
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

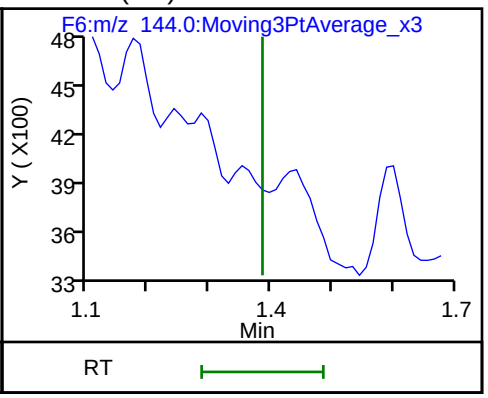
2 HMX (ND)



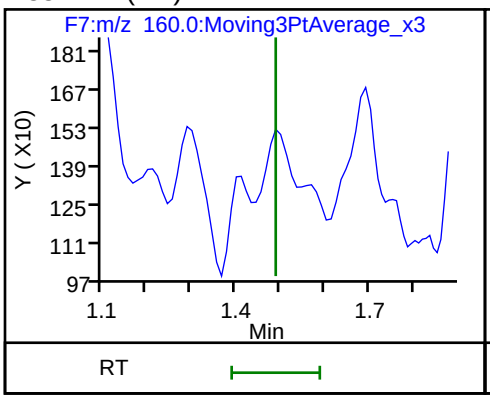
* 1 HMX-13C4



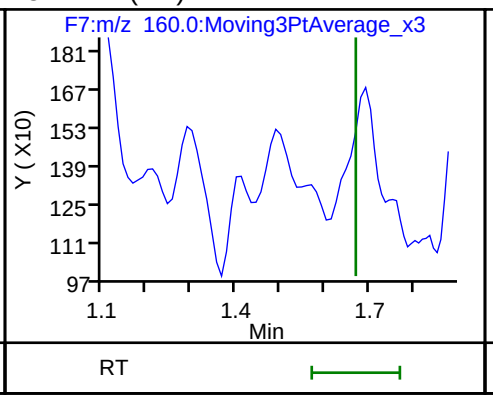
36 TNX (ND)



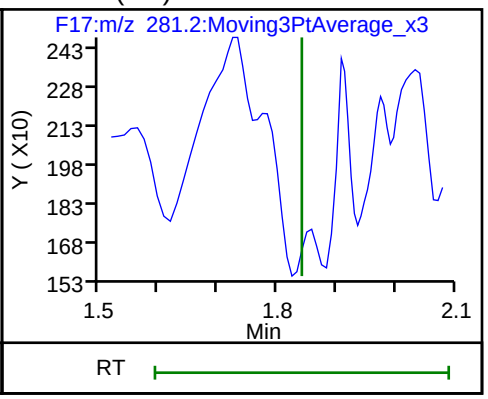
33 DNX (ND)



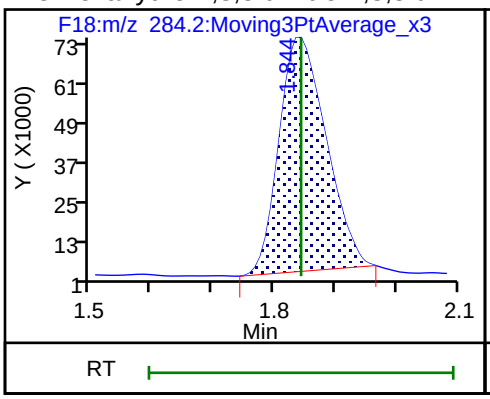
34 MNX (ND)



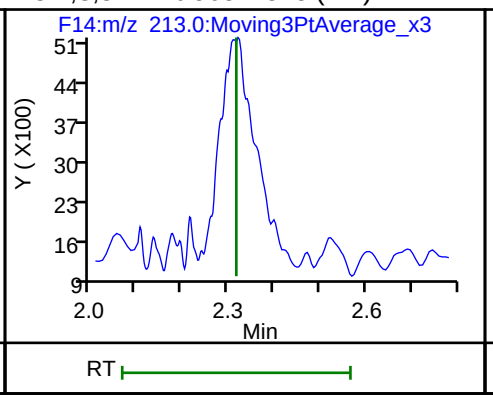
4 RDX (ND)



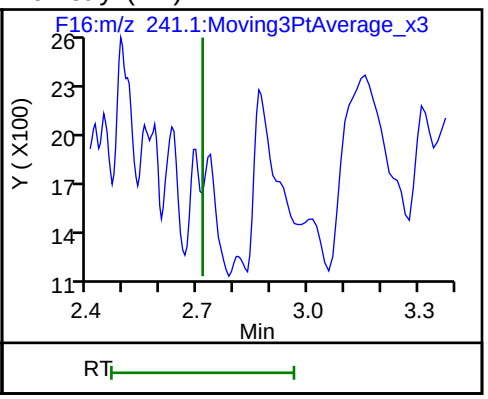
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



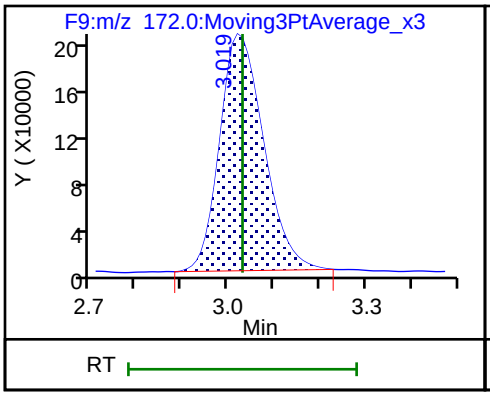
5 1,3,5-Trinitrobenzene (ND)



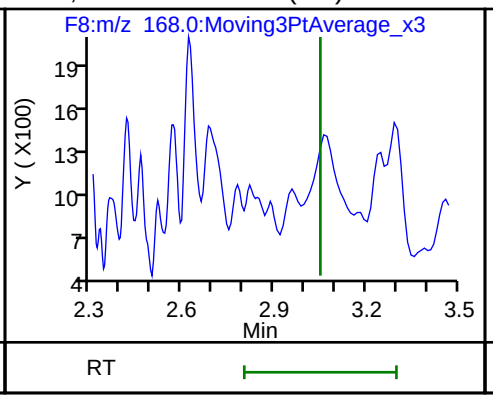
6 Tetryl (ND)



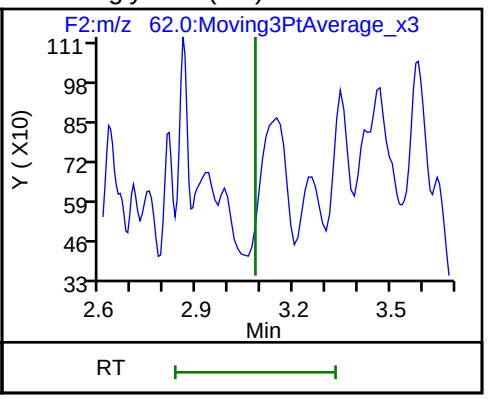
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



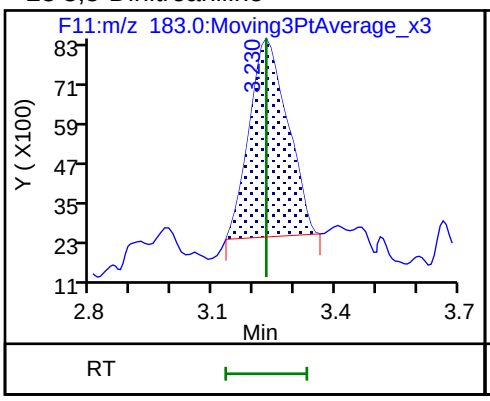
9 Nitroglycerin (ND)



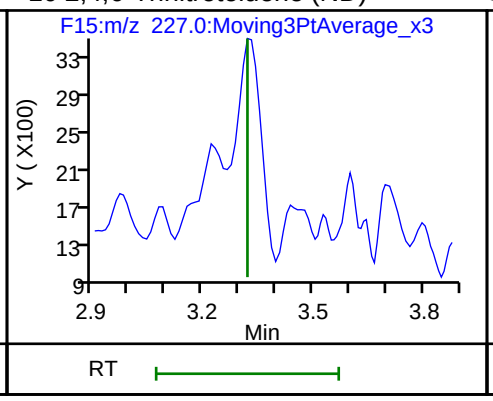
Report Date: 08-Apr-2022 07:32:25 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07017.d

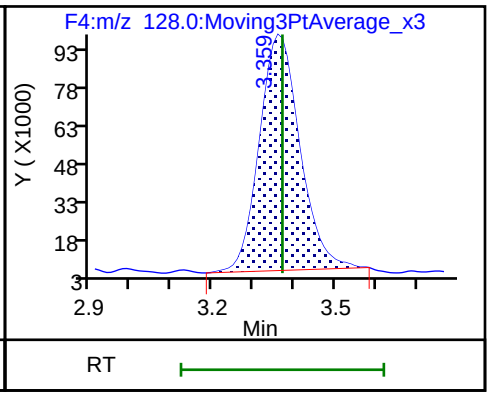
28 3,5-Dinitroaniline



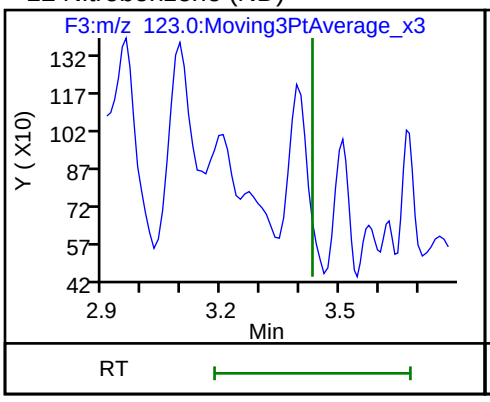
10 2,4,6-Trinitrotoluene (ND)



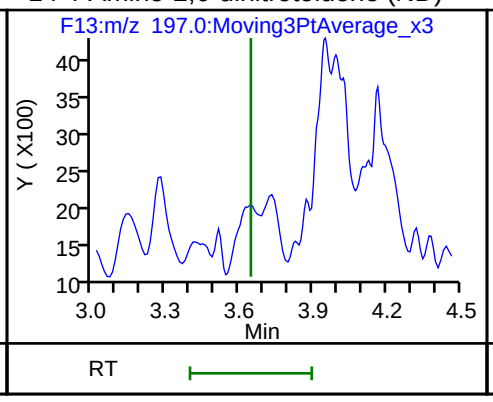
$ 11 Nitrobenzene-d5



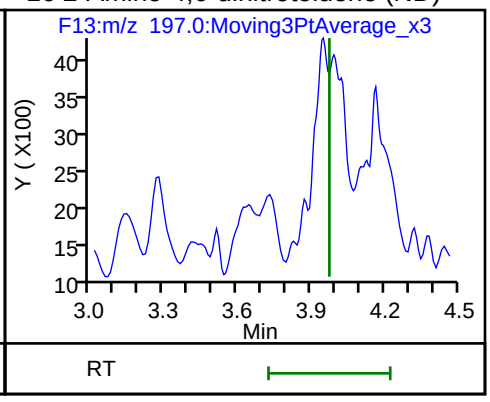
12 Nitrobenzene (ND)



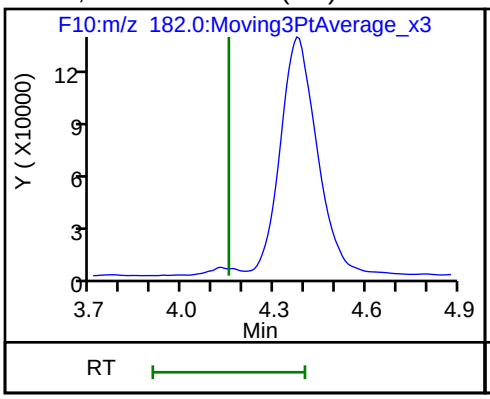
14 4-Amino-2,6-dinitrotoluene (ND)



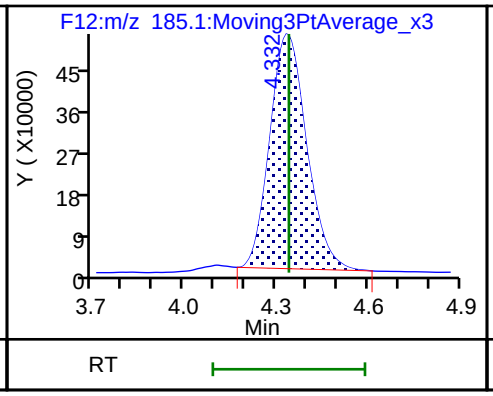
16 2-Amino-4,6-dinitrotoluene (ND)



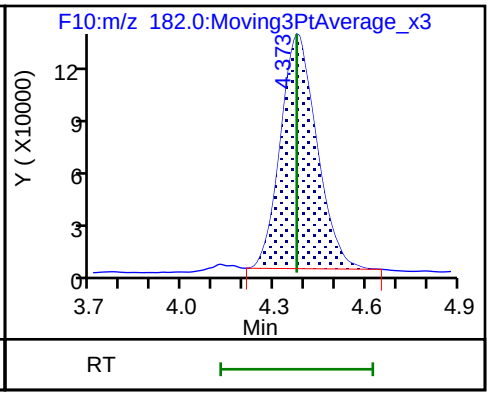
17 2,6-Dinitrotoluene (ND)



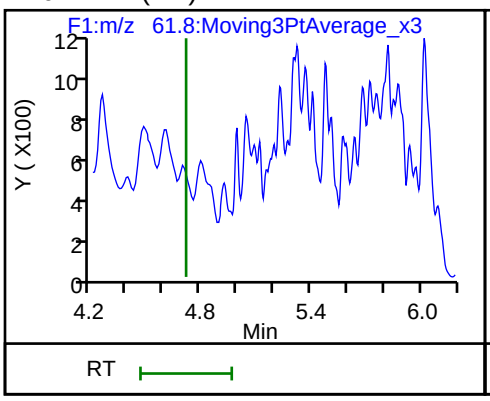
* 18 2,4-dinitrotoluene-d3



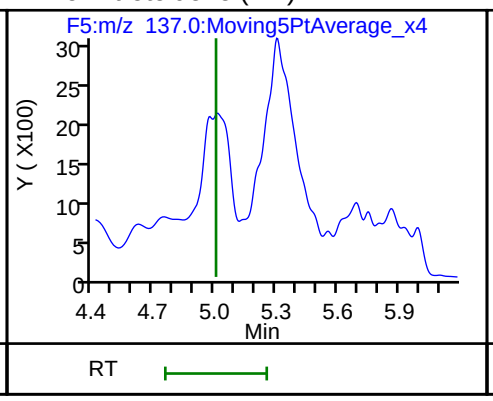
19 2,4-Dinitrotoluene



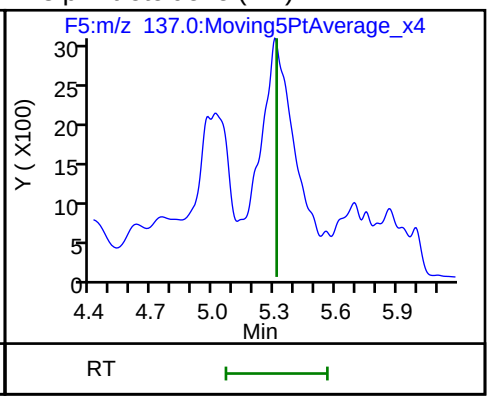
20 PETN (ND)



22 o-Nitrotoluene (ND)



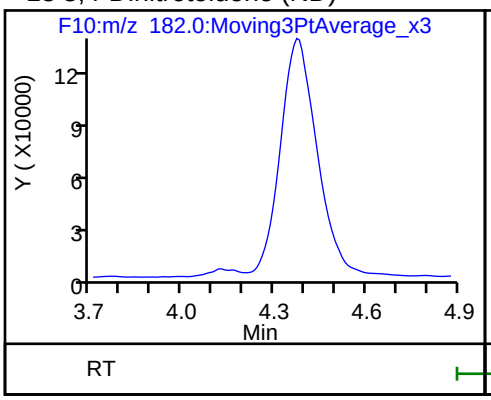
23 p-Nitrotoluene (ND)



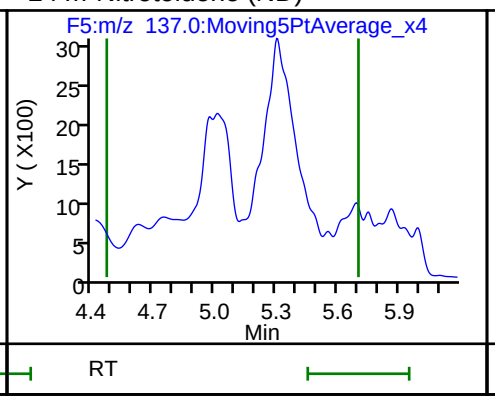
Report Date: 08-Apr-2022 07:32:25 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07017.d

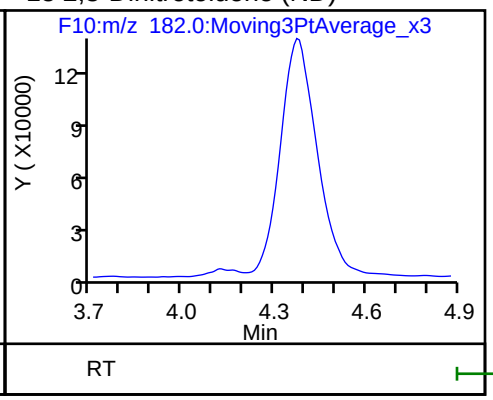
13 3,4-Dinitrotoluene (ND)



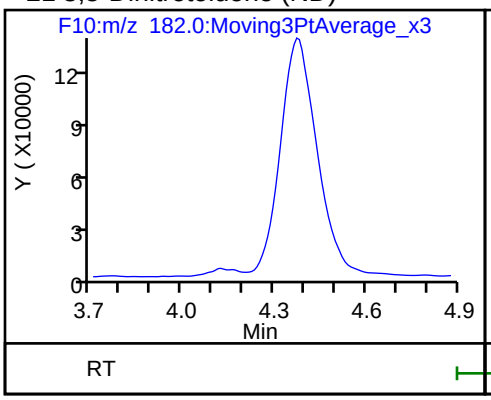
24 m-Nitrotoluene (ND)



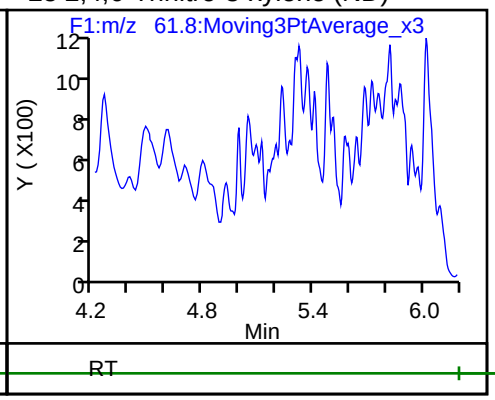
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 08-Apr-2022 07:32:25 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07017.d
Lims ID: 280-160187-A-42-B
Client ID: 29SB191 (9.5-10)
Sample Type: Client
Inject. Date: 07-Apr-2022 12:11:36 ALS Bottle#: 15 Worklist Smp#: 17
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-42-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 13:08:24

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	96.8	96.47

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB197 (3-4) | Lab Sample ID: 280-160187-43
Matrix: Solid | Lab File ID: ex722D07018.d
Analysis Method: 8321A | Date Collected: 03/23/2022 11:35
Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57
Sample wt/vol: 10.53(g) | Date Analyzed: 04/07/2022 12:18
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.: 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	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 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	98		68-140

Report Date: 08-Apr-2022 07:32:25 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\ex722D07018.d
Lims ID: 280-160187-A-43-F
Client ID: 29SB197 (3-4)
Sample Type: Client
Inject. Date: 07-Apr-2022 12:18:12 ALS Bottle#: 16 Worklist Smp#: 18
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-43-F
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 13:09:21
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		127080	125.0	89.9	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		381544	125.0	186	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.030	-0.011		1343854	129.4	390	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.775	638388	97.8	117	
* 18 2,4-dinitrotoluene-d3								
185.1	4.332	4.341	-0.009		4212735	125.0	115	

QC Flag Legend
Processing Flags

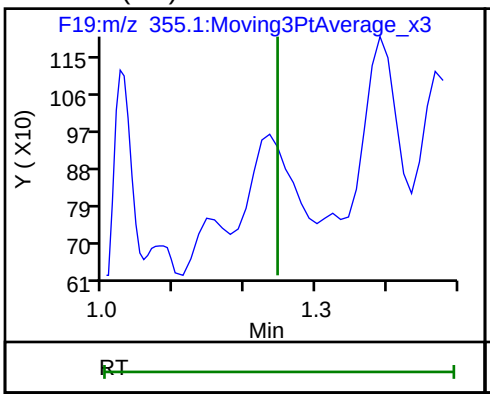
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 08-Apr-2022 07:32:25 Chrom Revision: 2.3 18-Mar-2022 09:07:22

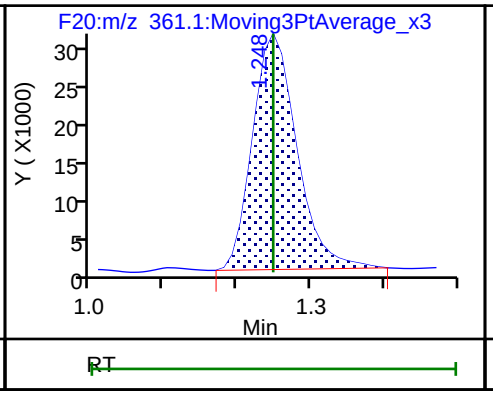
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07018.d
Injection Date: 07-Apr-2022 12:18:12 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-43-F Lab Sample ID: 280-160187-43
Client ID: 29SB197 (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

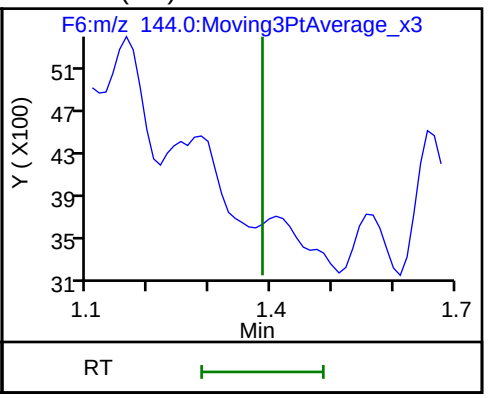
2 HMX (ND)



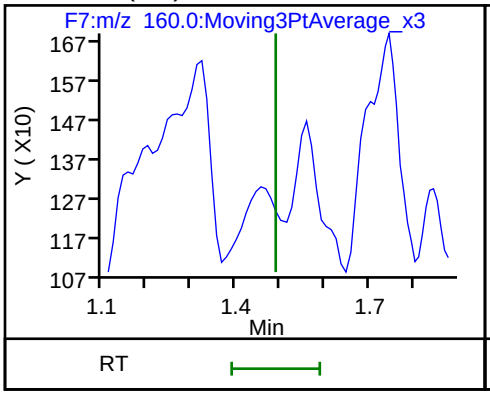
* 1 HMX-13C4



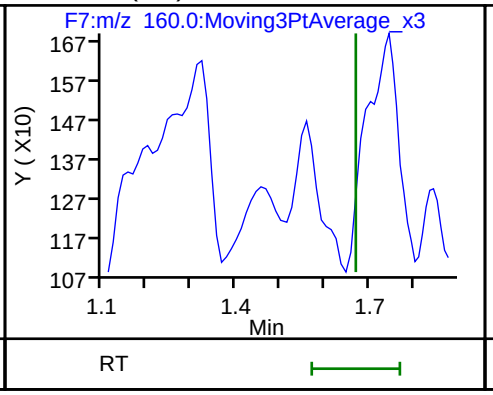
36 TNX (ND)



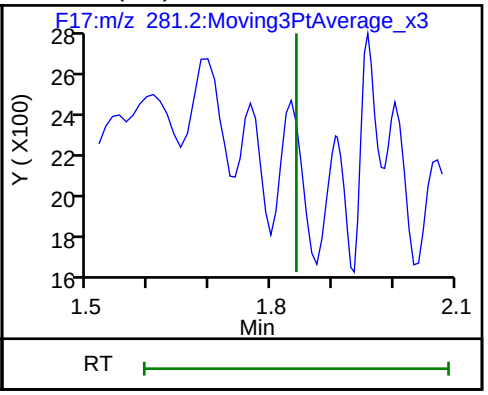
33 DNX (ND)



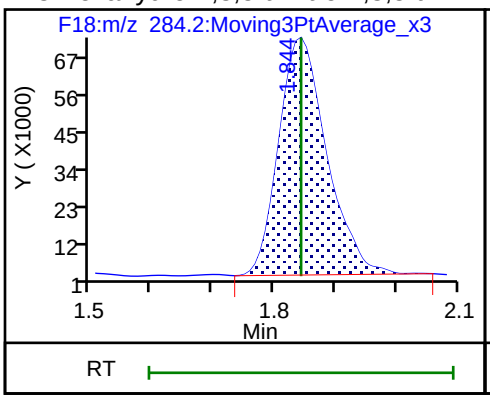
34 MNX (ND)



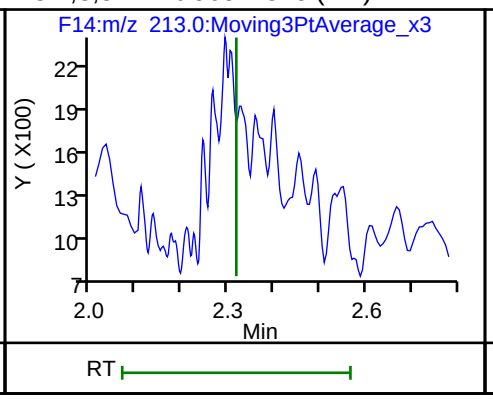
4 RDX (ND)



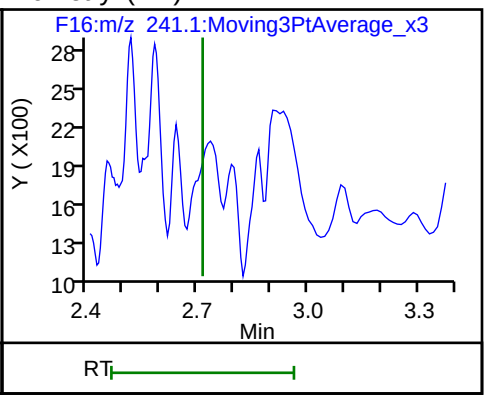
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



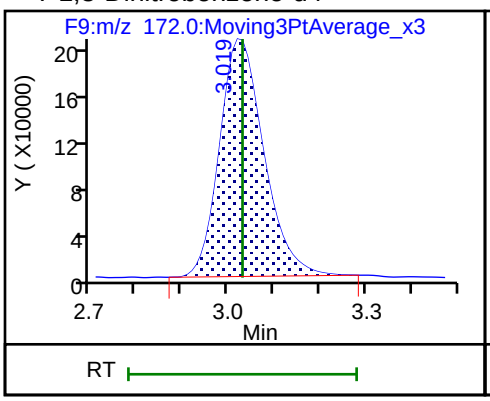
5 1,3,5-Trinitrobenzene (ND)



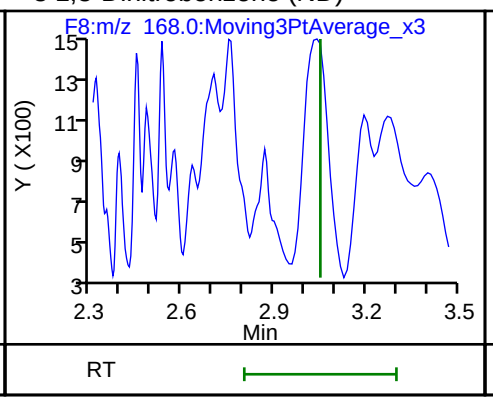
6 Tetryl (ND)



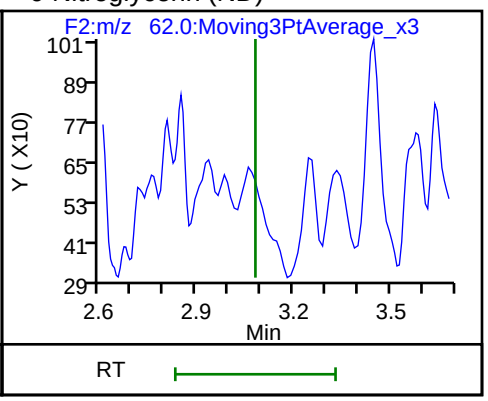
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



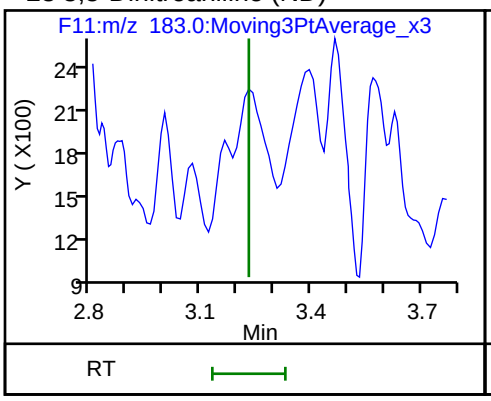
9 Nitroglycerin (ND)



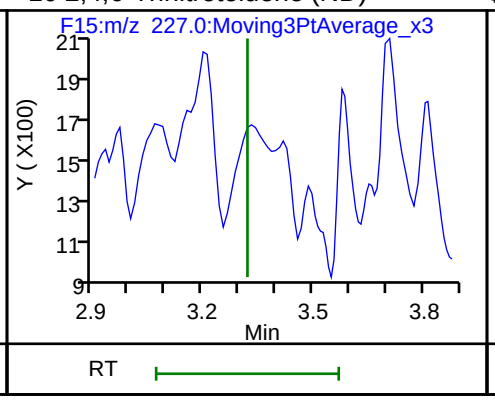
Report Date: 08-Apr-2022 07:32:26 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07018.d

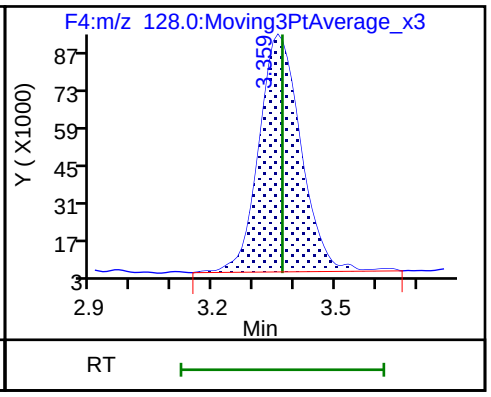
28 3,5-Dinitroaniline (ND)



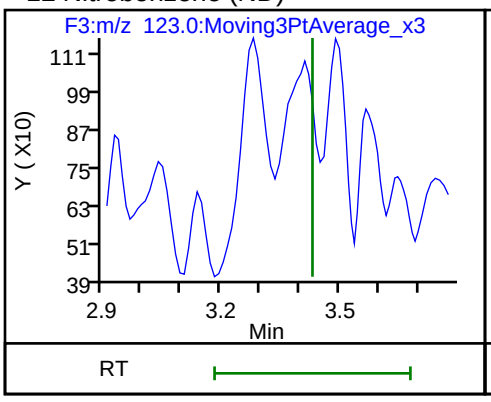
10 2,4,6-Trinitrotoluene (ND)



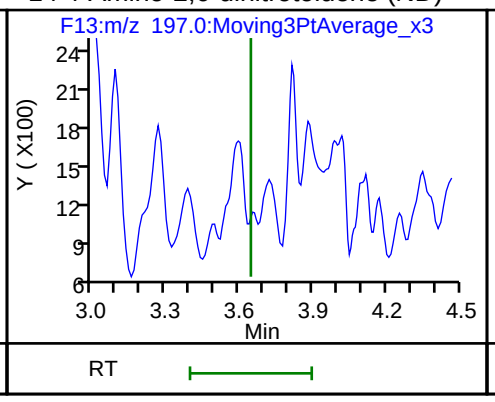
$ 11 Nitrobenzene-d5



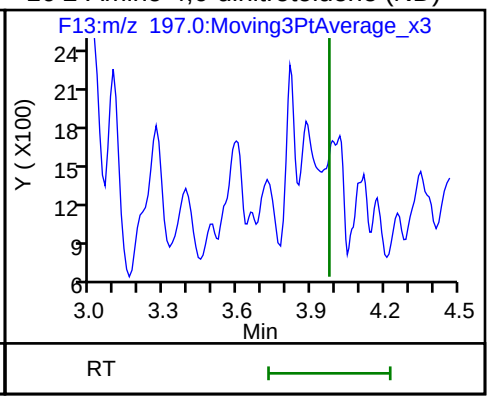
12 Nitrobenzene (ND)



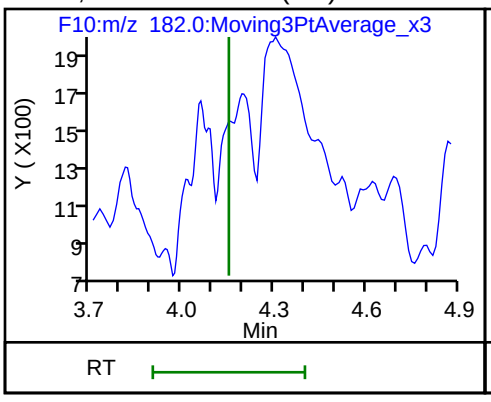
14 4-Amino-2,6-dinitrotoluene (ND)



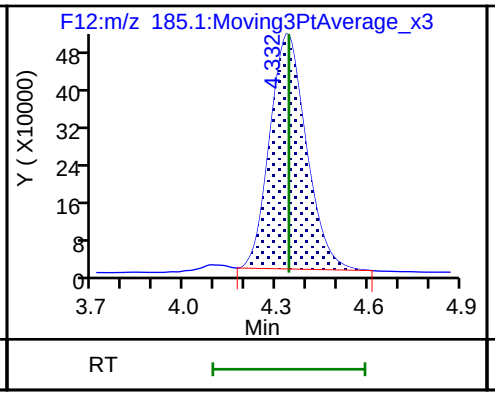
16 2-Amino-4,6-dinitrotoluene (ND)



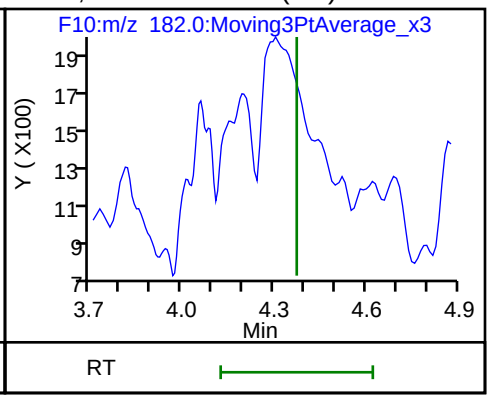
17 2,6-Dinitrotoluene (ND)



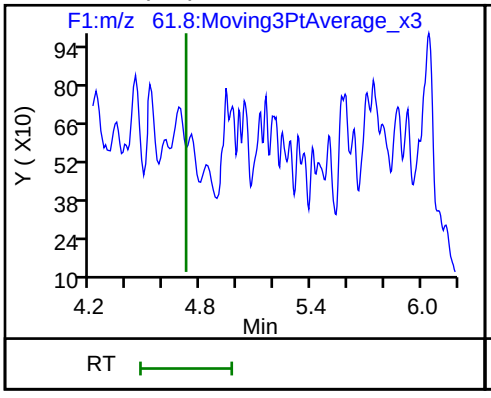
* 18 2,4-dinitrotoluene-d3



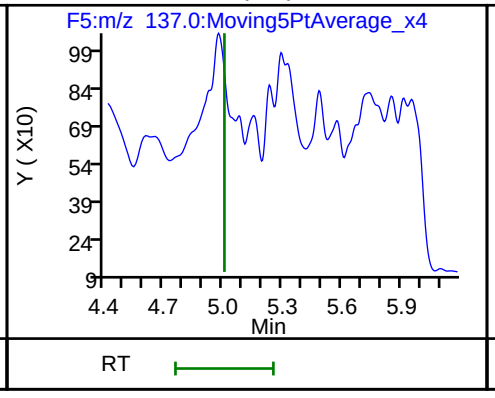
19 2,4-Dinitrotoluene (ND)



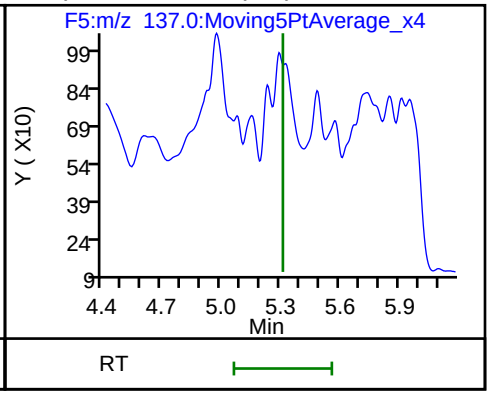
20 PETN (ND)



22 o-Nitrotoluene (ND)



23 p-Nitrotoluene (ND)

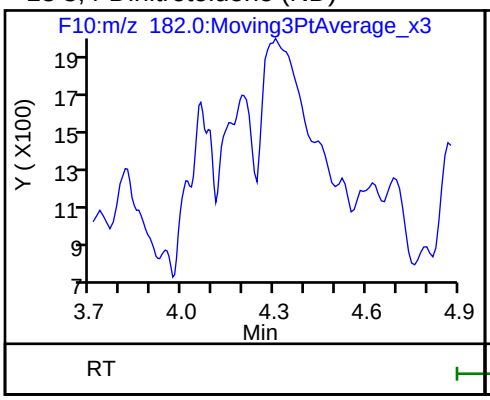


Report Date: 08-Apr-2022 07:32:26

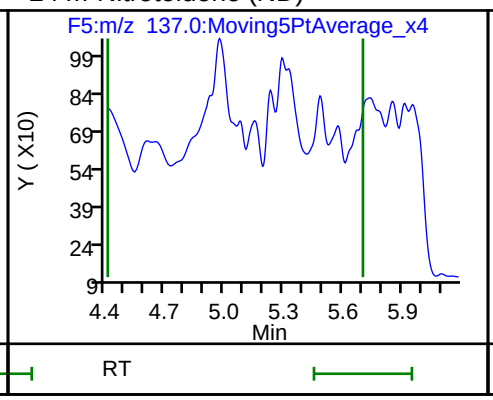
Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07018.d

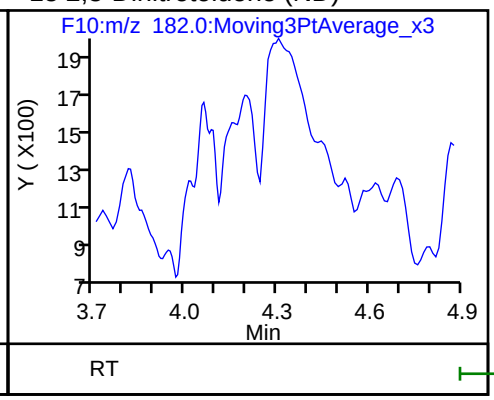
13 3,4-Dinitrotoluene (ND)



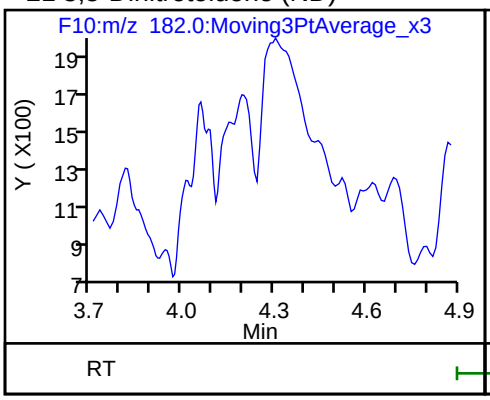
24 m-Nitrotoluene (ND)



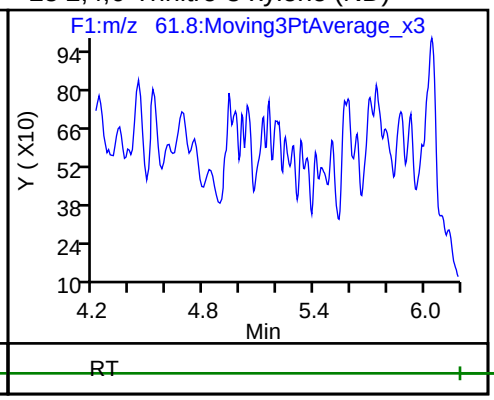
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 08-Apr-2022 07:32:25 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07018.d
Lims ID: 280-160187-A-43-F
Client ID: 29SB197 (3-4)
Sample Type: Client
Inject. Date: 07-Apr-2022 12:18:12 ALS Bottle#: 16 Worklist Smp#: 18
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-43-F
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 13:09:21

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	97.8	97.52

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB197 (7-7.5) | Lab Sample ID: 280-160187-44
Matrix: Solid | Lab File ID: ex722D07024.d
Analysis Method: 8321A | Date Collected: 03/23/2022 11:40
Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57
Sample wt/vol: 10.45(g) | Date Analyzed: 04/07/2022 12:57
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.: 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
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 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	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	92		68-140

Report Date: 08-Apr-2022 07:47:08 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\ex722D07024.d
Lims ID: 280-160187-A-44-B
Client ID: 29SB197 (7-7.5)
Sample Type: Client
Inject. Date: 07-Apr-2022 12:57:47 ALS Bottle#: 21 Worklist Smp#: 24
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-44-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 07:47:08 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 13:51:34
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		115042	125.0	122	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								M
284.2	1.844	1.844	0.0		374787	125.0	104	M
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.030	-0.011		1373843	129.4	655	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.775	611804	91.8	118	
* 18 2,4-dinitrotoluene-d3								
185.1	4.332	4.341	-0.009		4311845	125.0	115	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

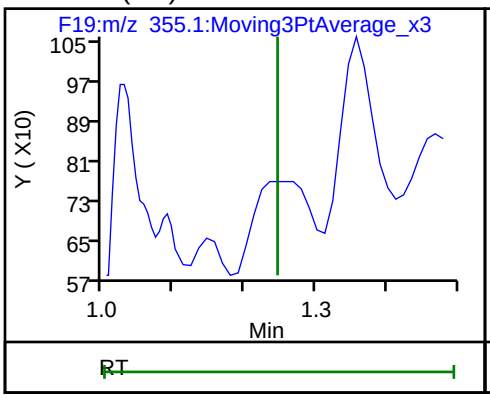
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 08-Apr-2022 07:47:08 Chrom Revision: 2.3 18-Mar-2022 09:07:22

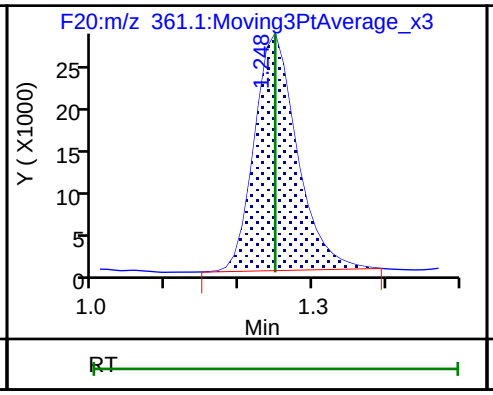
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07024.d
Injection Date: 07-Apr-2022 12:57:47 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-44-B Lab Sample ID: 280-160187-44
Client ID: 29SB197 (7-7.5)
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

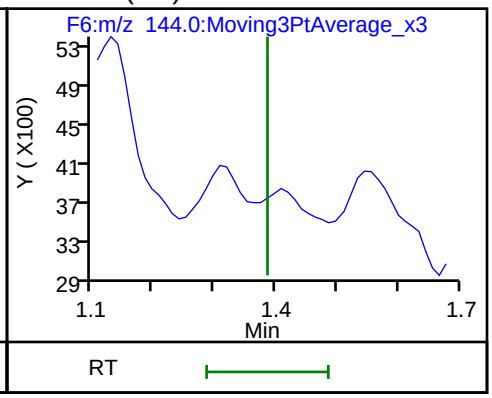
2 HMX (ND)



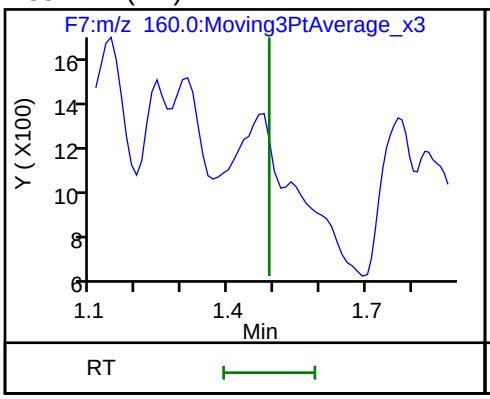
* 1 HMX-13C4



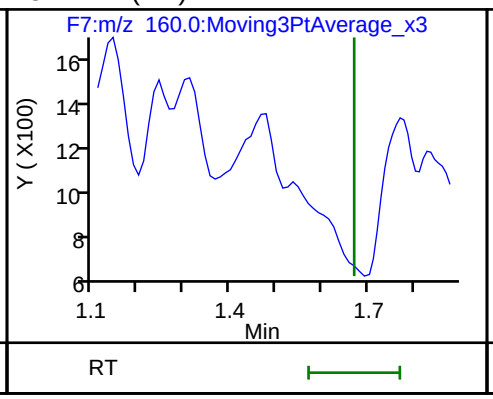
36 TNX (ND)



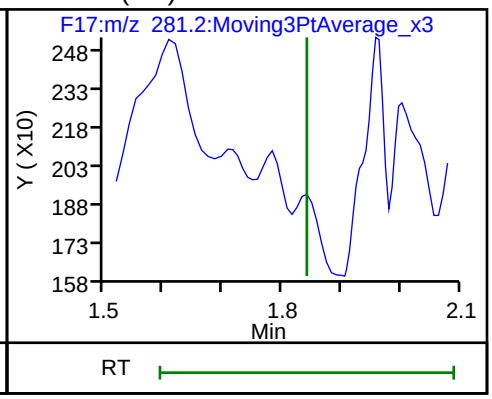
33 DNX (ND)



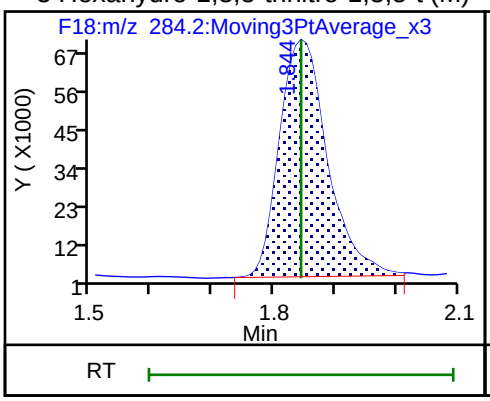
34 MNX (ND)



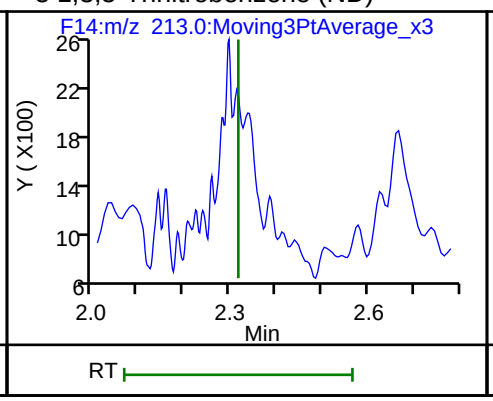
4 RDX (ND)



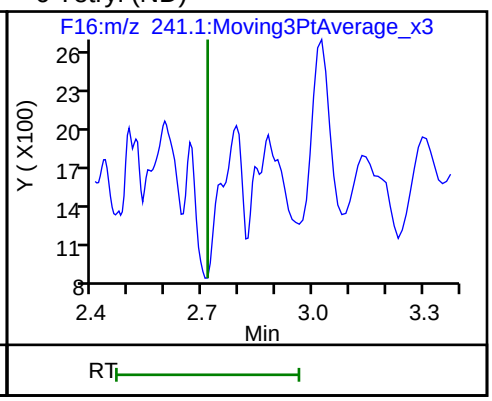
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t (M)



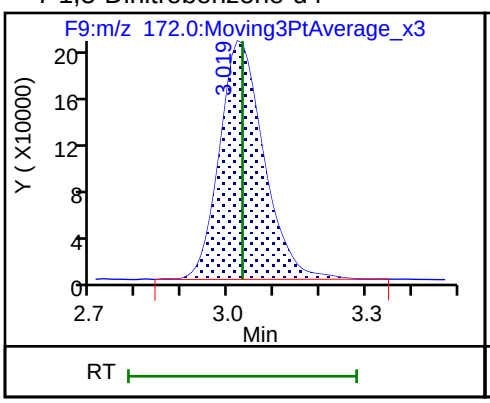
5 1,3,5-Trinitrobenzene (ND)



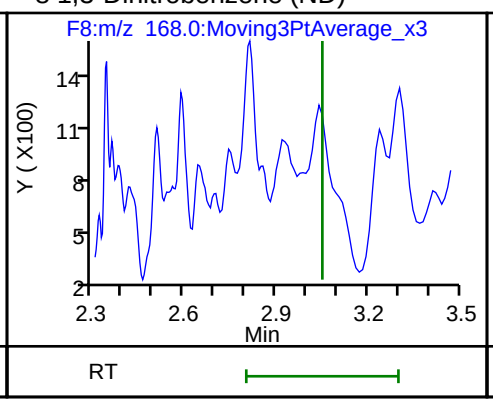
6 Tetryl (ND)



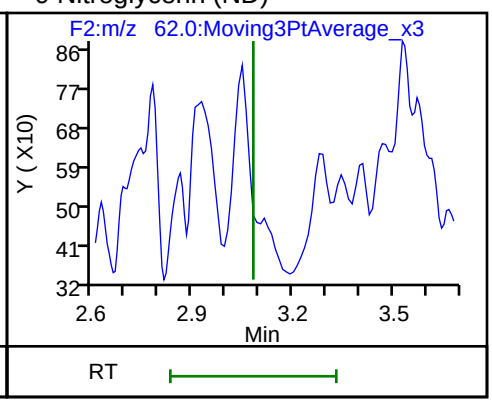
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

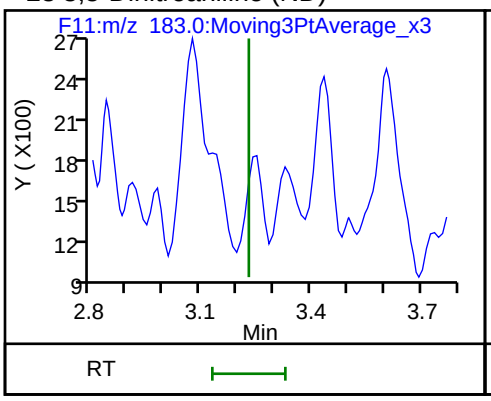


9 Nitroglycerin (ND)

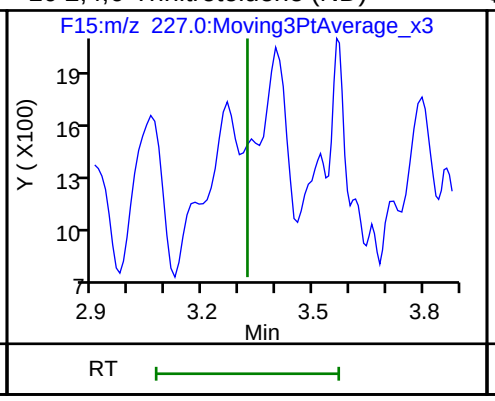


Report Date: 08-Apr-2022 07:47:08 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07024.d

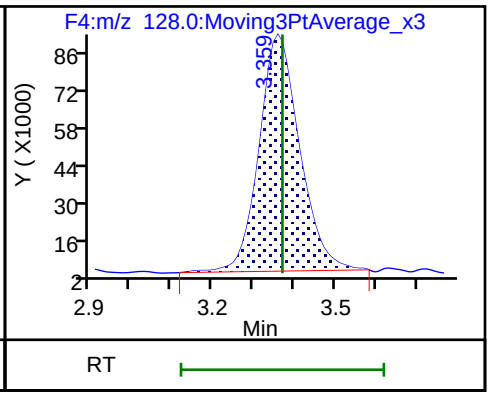
28 3,5-Dinitroaniline (ND)



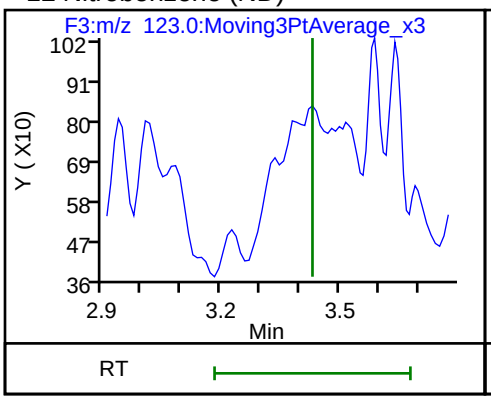
10 2,4,6-Trinitrotoluene (ND)



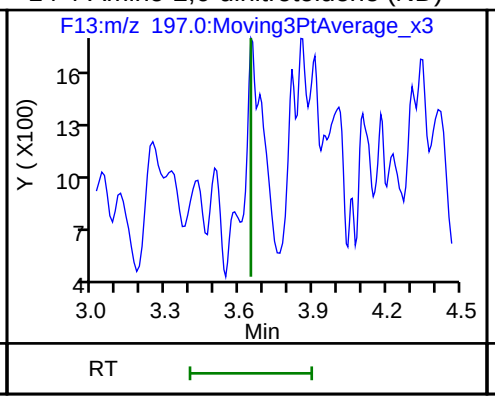
$ 11 Nitrobenzene-d5



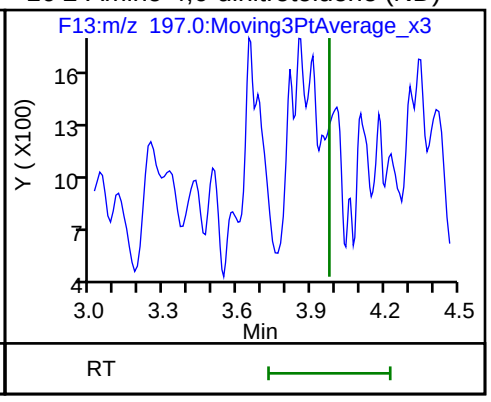
12 Nitrobenzene (ND)



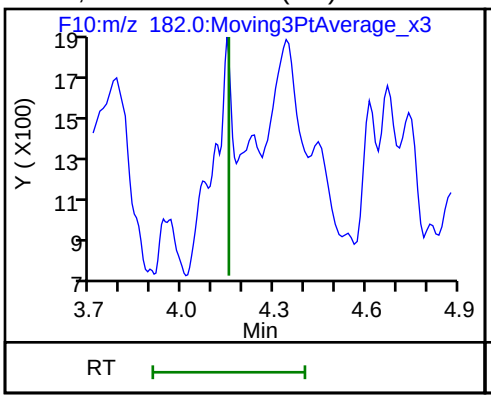
14 4-Amino-2,6-dinitrotoluene (ND)



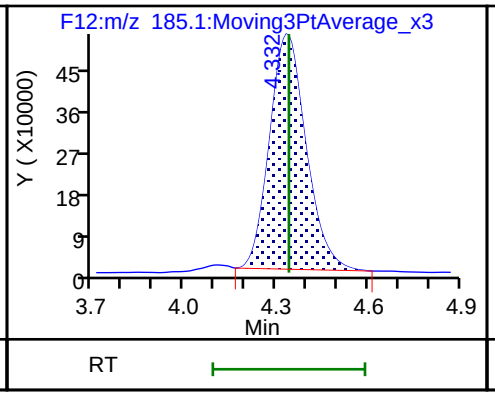
16 2-Amino-4,6-dinitrotoluene (ND)



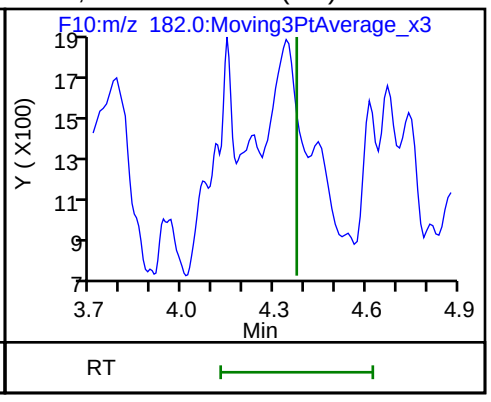
17 2,6-Dinitrotoluene (ND)



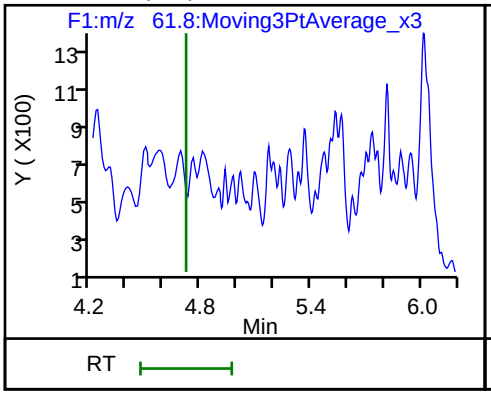
* 18 2,4-dinitrotoluene-d3



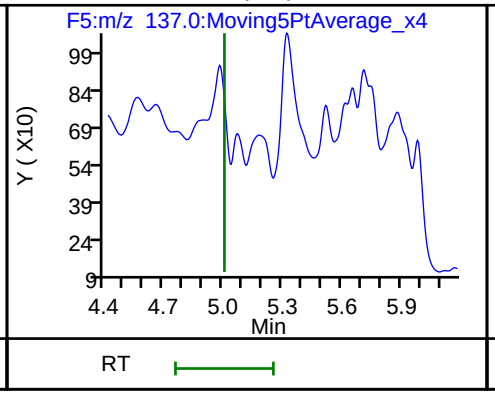
19 2,4-Dinitrotoluene (ND)



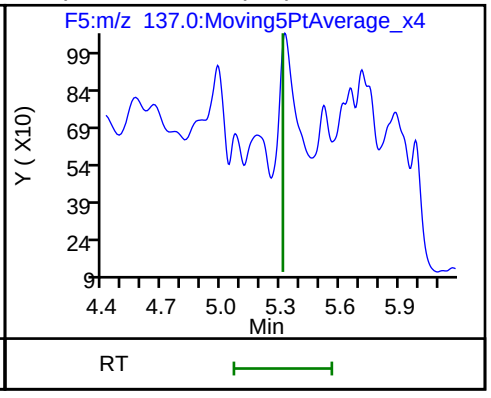
20 PETN (ND)



22 o-Nitrotoluene (ND)

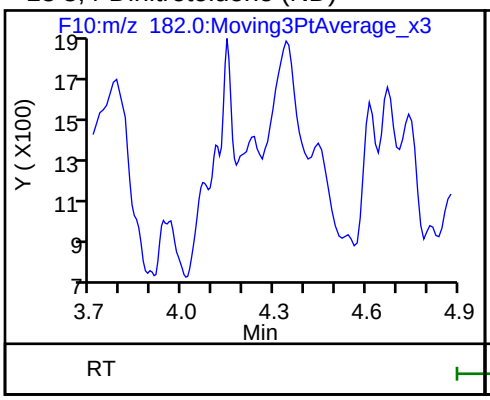


23 p-Nitrotoluene (ND)

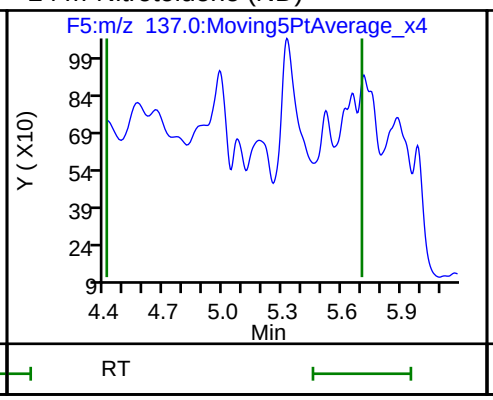


Report Date: 08-Apr-2022 07:47:08
Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07024.d

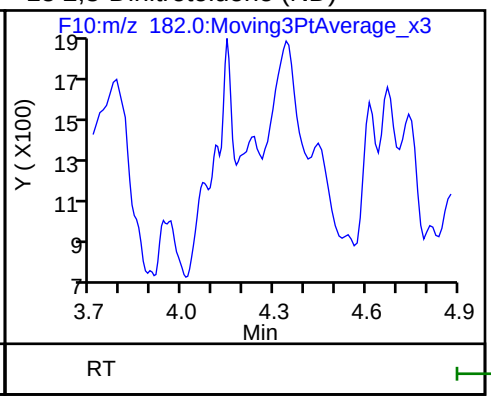
13 3,4-Dinitrotoluene (ND)



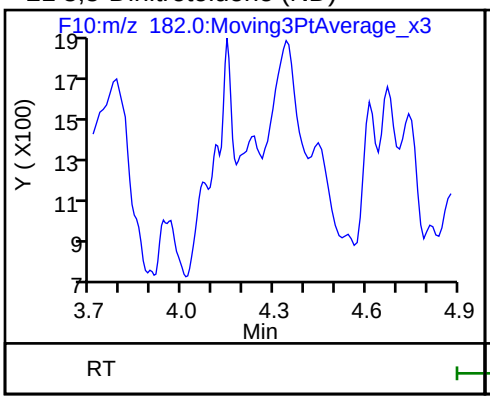
24 m-Nitrotoluene (ND)



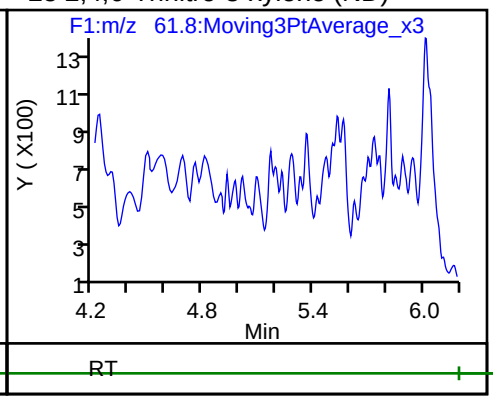
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 08-Apr-2022 07:47:08 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07024.d
Lims ID: 280-160187-A-44-B
Client ID: 29SB197 (7-7.5)
Sample Type: Client
Inject. Date: 07-Apr-2022 12:57:47 ALS Bottle#: 21 Worklist Smp#: 24
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-44-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 07:47:08 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 13:51:34

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	91.8	91.52

Report Date: 08-Apr-2022 07:47:08 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

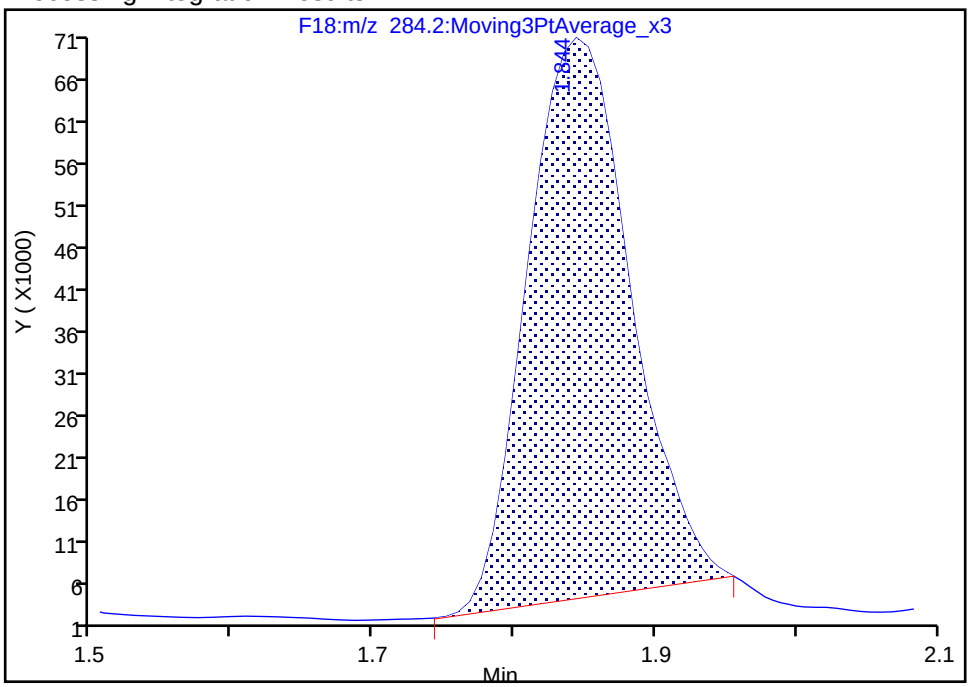
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07024.d				
Injection Date:	07-Apr-2022 12:57:47	Instrument ID:	LC_LCMS7		
Lims ID:	280-160187-A-44-B	Lab Sample ID:	280-160187-44		
Client ID:	29SB197 (7-7.5)				
Operator ID:	acm	ALS Bottle#:	21	Worklist Smp#:	24
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F18:SIR		

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

Signal: 1

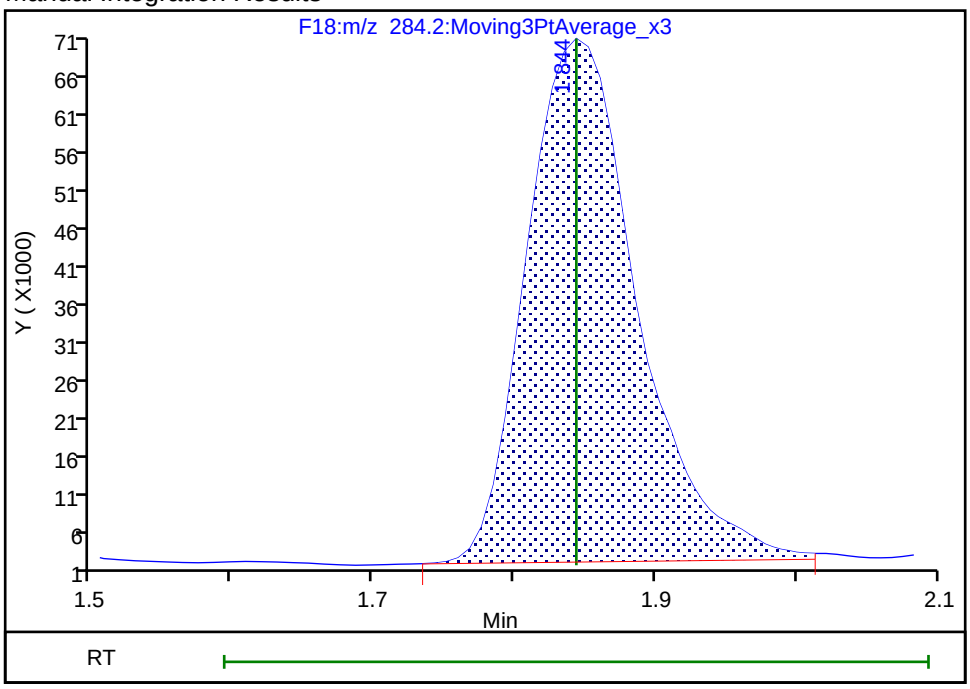
Processing Integration Results

RT: 1.84
Area: 338763
Amount: 125.0000
Amount Units: ug/l



Manual Integration Results

RT: 1.84
Area: 374787
Amount: 125.0000
Amount Units: ug/l



Reviewer: meyera, 08-Apr-2022 07:47:06

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: 29SB196 (3-4) | Lab Sample ID: 280-160187-45
Matrix: Solid | Lab File ID: ex722D07025.d
Analysis Method: 8321A | Date Collected: 03/23/2022 11:45
Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57
Sample wt/vol: 10.24(g) | Date Analyzed: 04/07/2022 13:04
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.: 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	0.049	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	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	96		68-140

Report Date: 08-Apr-2022 07:32:30 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\ex722D07025.d
Lims ID: 280-160187-A-45-B
Client ID: 29SB196 (3-4)
Sample Type: Client
Inject. Date: 07-Apr-2022 13:04:23 ALS Bottle#: 22 Worklist Smp#: 25
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-45-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 07:32:27 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 13:51:46
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		138895	125.0	178	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		384921	125.0	91.8	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.030	-0.011		1392858	129.4	231	
$ 11 Nitrobenzene-d5								
128.0	3.348	3.370	-0.022	0.773	653008	96.6	54.8	
* 18 2,4-dinitrotoluene-d3								
185.1	4.332	4.341	-0.009		4314255	125.0	117	

QC Flag Legend
Processing Flags

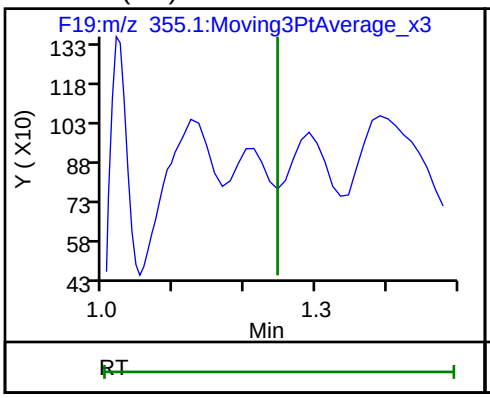
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 08-Apr-2022 07:32:30 Chrom Revision: 2.3 18-Mar-2022 09:07:22

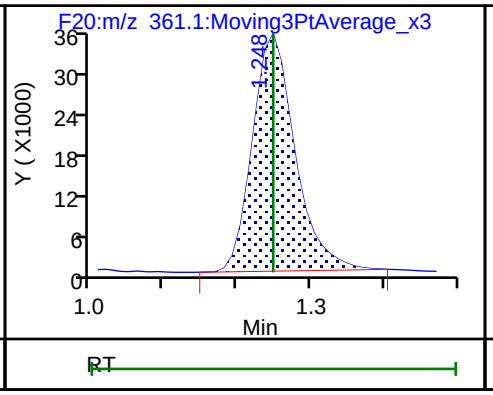
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07025.d
Injection Date: 07-Apr-2022 13:04:23 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-45-B Lab Sample ID: 280-160187-45
Client ID: 29SB196 (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

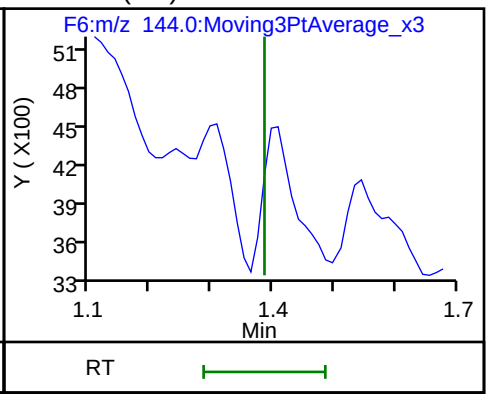
2 HMX (ND)



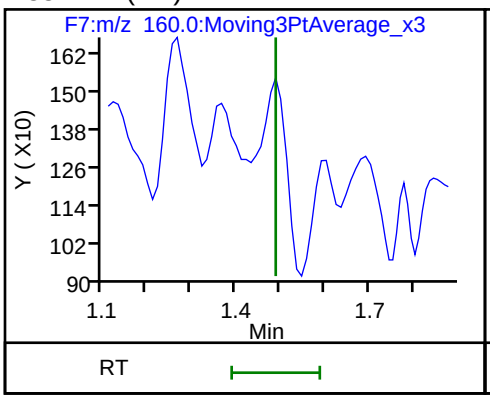
* 1 HMX-13C4



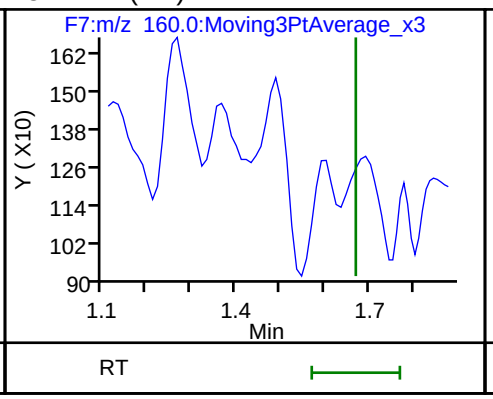
36 TNX (ND)



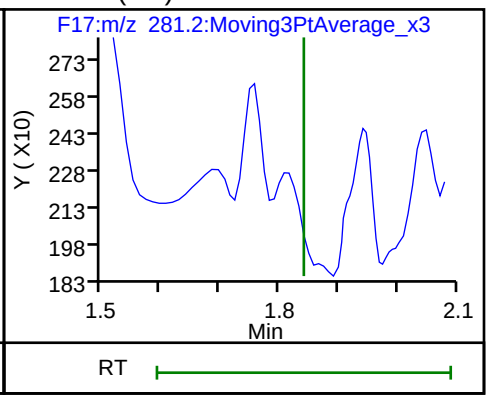
33 DNX (ND)



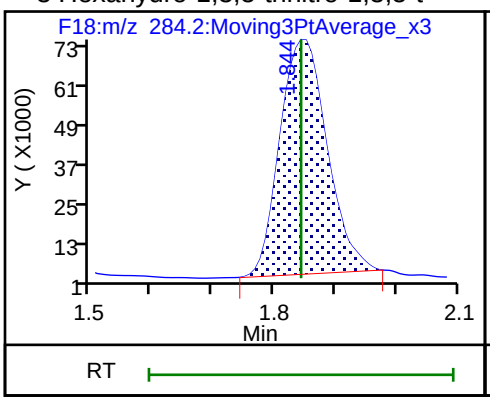
34 MNX (ND)



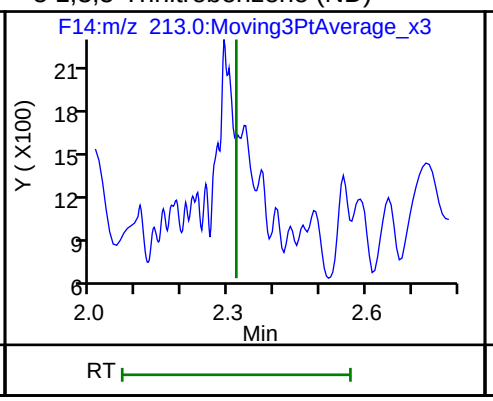
4 RDX (ND)



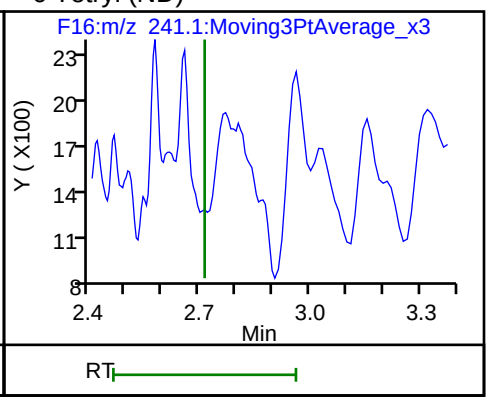
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



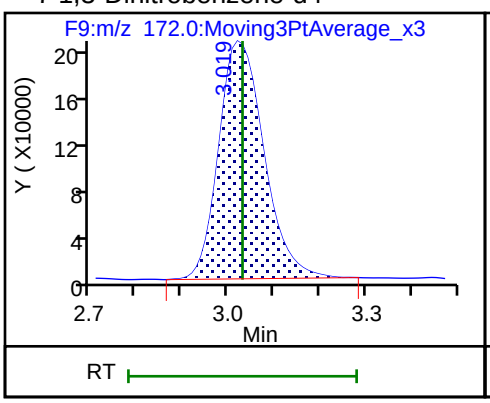
5 1,3,5-Trinitrobenzene (ND)



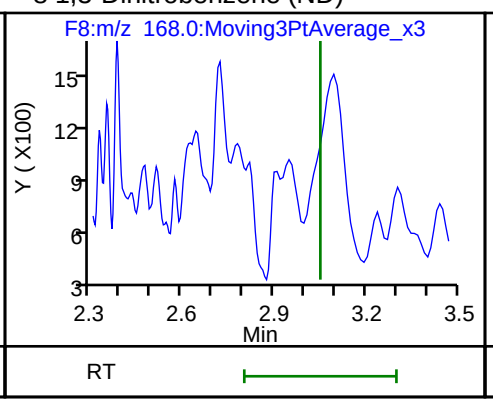
6 Tetryl (ND)



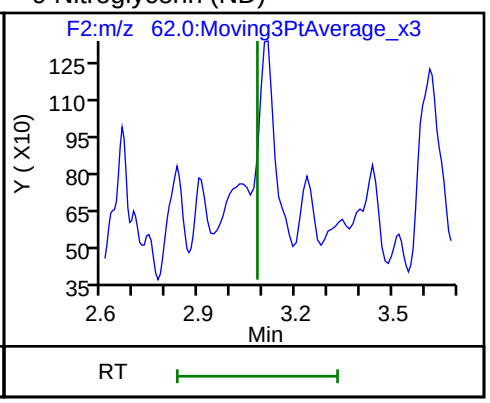
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



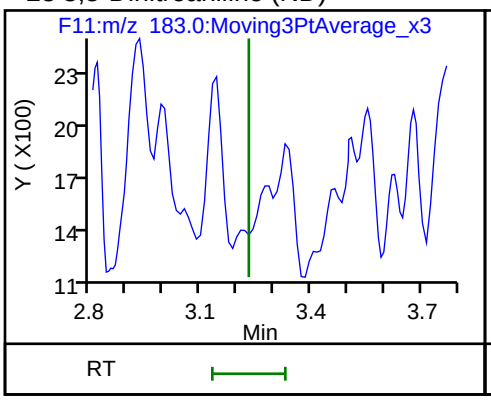
9 Nitroglycerin (ND)



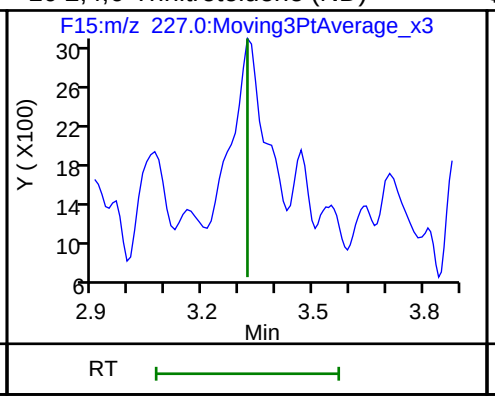
Report Date: 08-Apr-2022 07:32:30 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07025.d

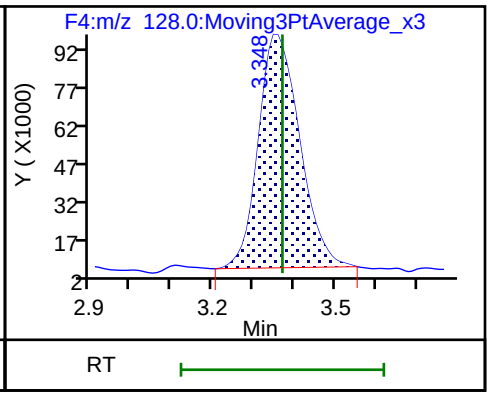
28 3,5-Dinitroaniline (ND)



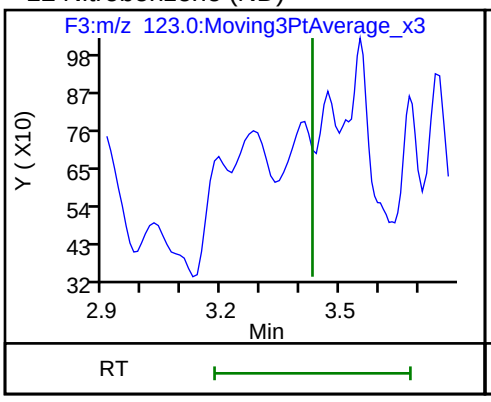
10 2,4,6-Trinitrotoluene (ND)



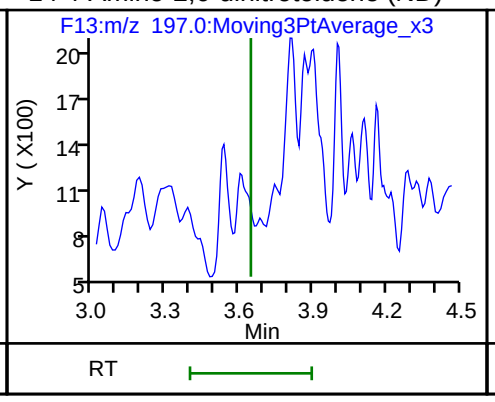
$ 11 Nitrobenzene-d5



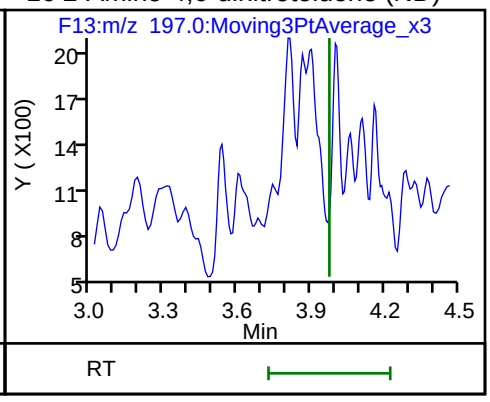
12 Nitrobenzene (ND)



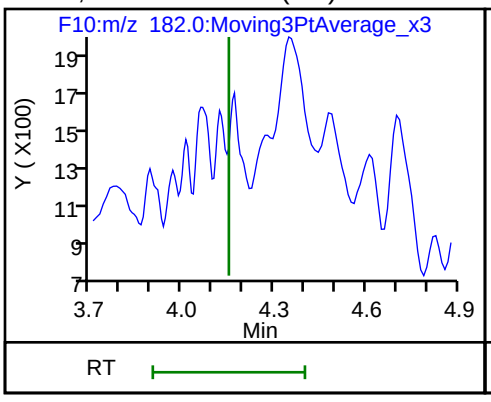
14 4-Amino-2,6-dinitrotoluene (ND)



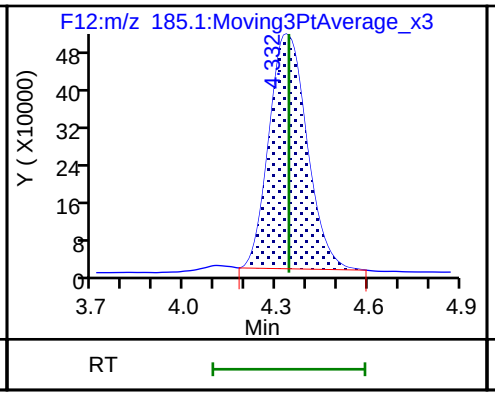
16 2-Amino-4,6-dinitrotoluene (ND)



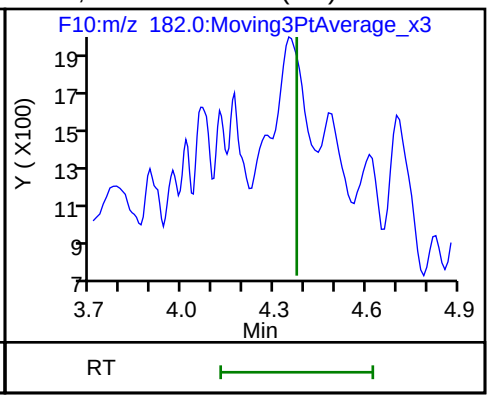
17 2,6-Dinitrotoluene (ND)



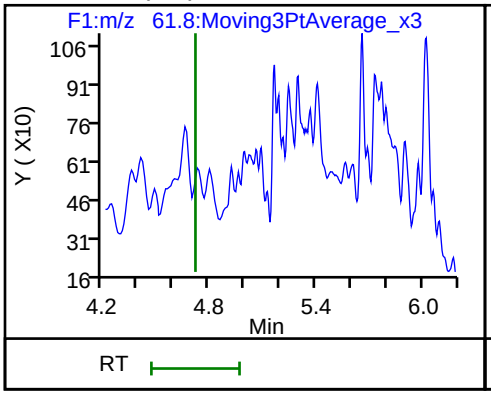
* 18 2,4-dinitrotoluene-d3



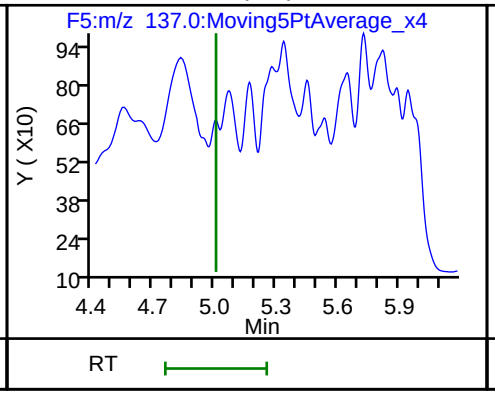
19 2,4-Dinitrotoluene (ND)



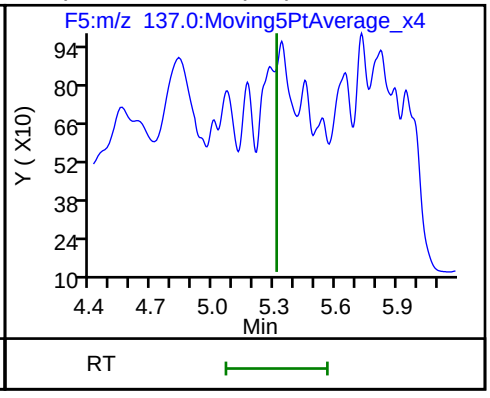
20 PETN (ND)



22 o-Nitrotoluene (ND)



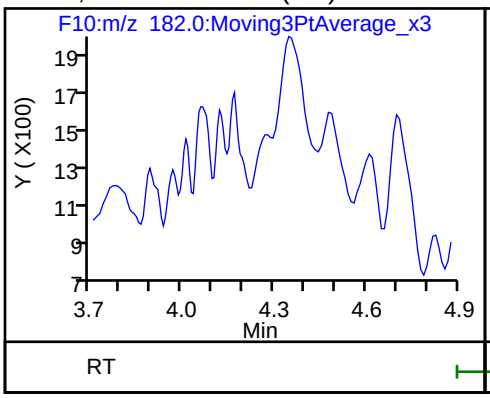
23 p-Nitrotoluene (ND)



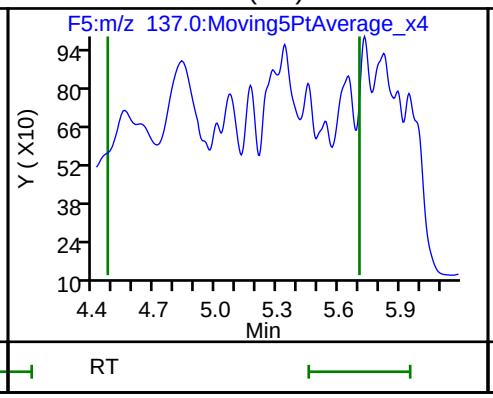
Report Date: 08-Apr-2022 07:32:30 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07025.d

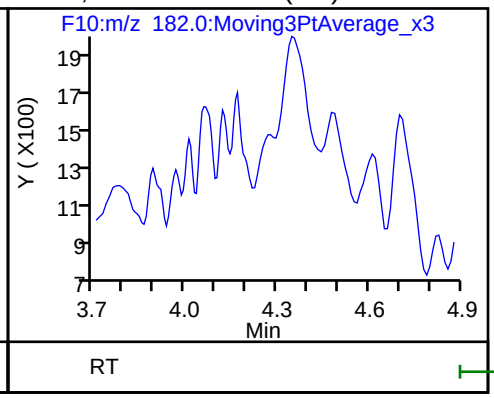
13 3,4-Dinitrotoluene (ND)



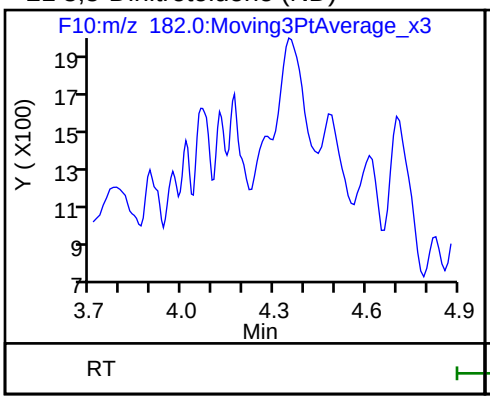
24 m-Nitrotoluene (ND)



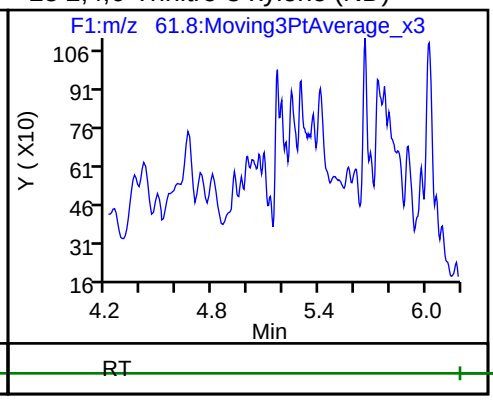
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 08-Apr-2022 07:32:30 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07025.d				
Lims ID:	280-160187-A-45-B				
Client ID:	29SB196 (3-4)				
Sample Type:	Client				
Inject. Date:	07-Apr-2022 13:04:23	ALS Bottle#:	22	Worklist Smp#:	25
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160187-A-45-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 07:32:27	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 13:51:46		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	96.6	96.27

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB196 (7-7.5) | Lab Sample ID: 280-160187-46
Matrix: Solid | Lab File ID: ex722D07026.d
Analysis Method: 8321A | Date Collected: 03/23/2022 11:50
Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57
Sample wt/vol: 10.37(g) | Date Analyzed: 04/07/2022 13:10
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.: 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
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	92		68-140

Report Date: 08-Apr-2022 07:32:31 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\ex722D07026.d
Lims ID: 280-160187-A-46-B
Client ID: 29SB196 (7-7.5)
Sample Type: Client
Inject. Date: 07-Apr-2022 13:10:58 ALS Bottle#: 23 Worklist Smp#: 26
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-46-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 07:32:27 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 13:51:58
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		132920	125.0	124	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		411618	125.0	146	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.030	-0.011		1440145	129.4	280	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.775	642374	92.0	137	
* 18 2,4-dinitrotoluene-d3								
185.1	4.332	4.341	-0.009		4471172	125.0	123	

QC Flag Legend
Processing Flags

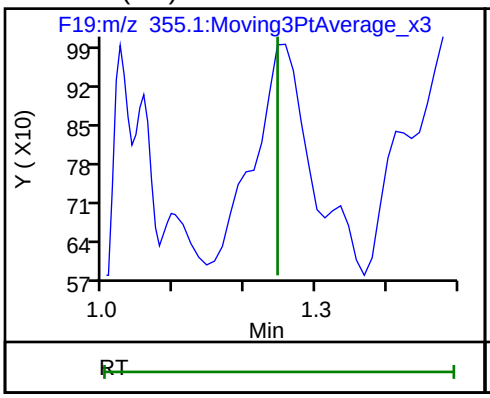
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 08-Apr-2022 07:32:31 Chrom Revision: 2.3 18-Mar-2022 09:07:22

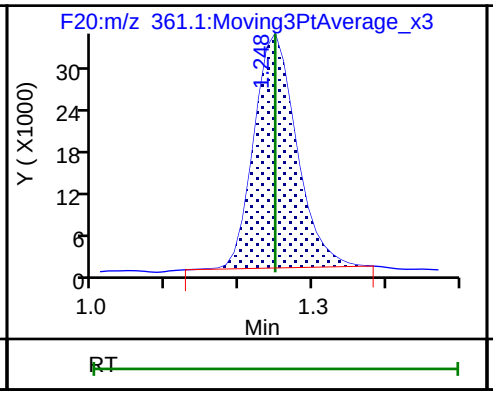
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07026.d
Injection Date: 07-Apr-2022 13:10:58 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-46-B Lab Sample ID: 280-160187-46
Client ID: 29SB196 (7-7.5)
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

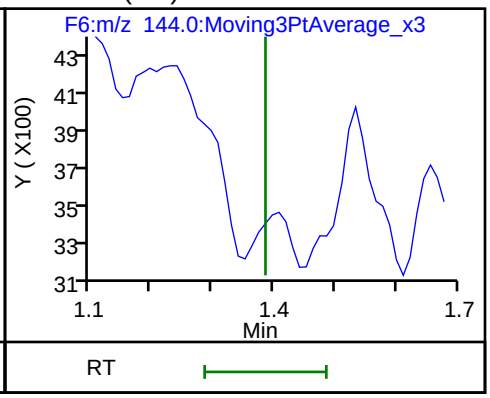
2 HMX (ND)



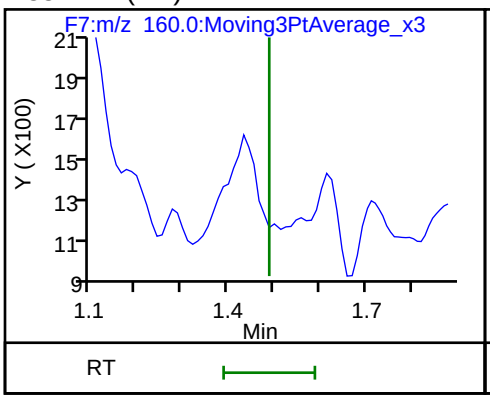
* 1 HMX-13C4



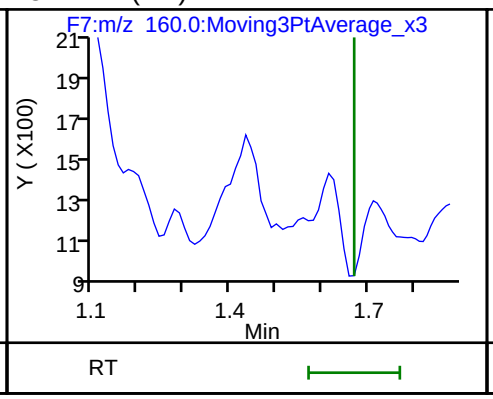
36 TNX (ND)



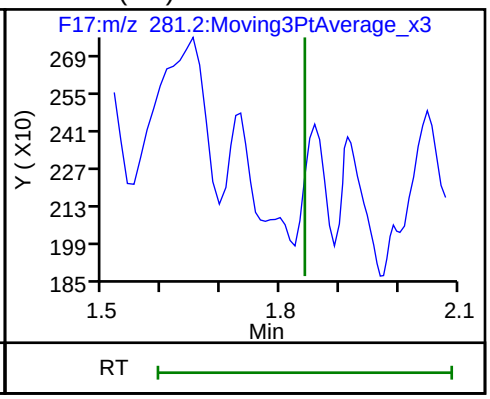
33 DNX (ND)



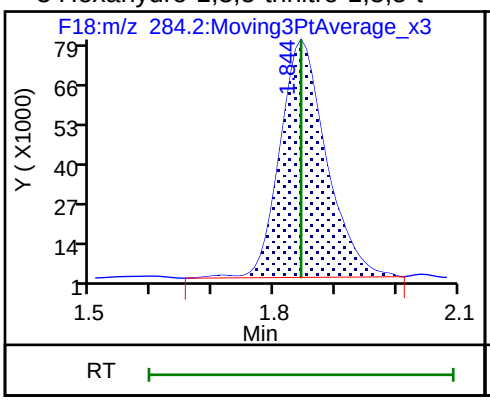
34 MNX (ND)



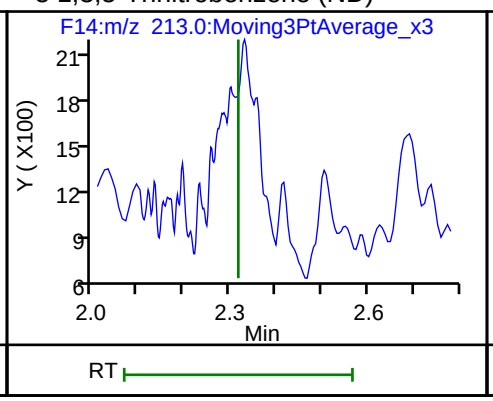
4 RDX (ND)



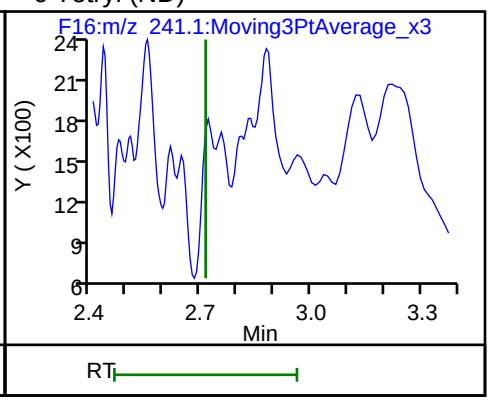
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



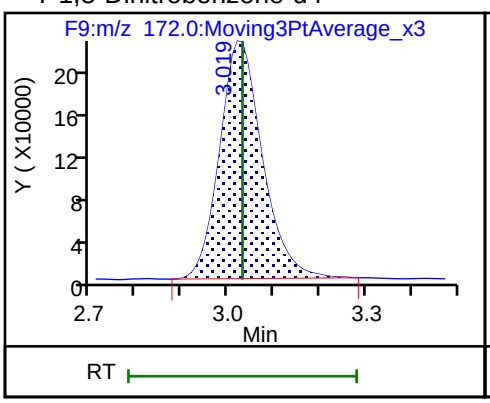
5 1,3,5-Trinitrobenzene (ND)



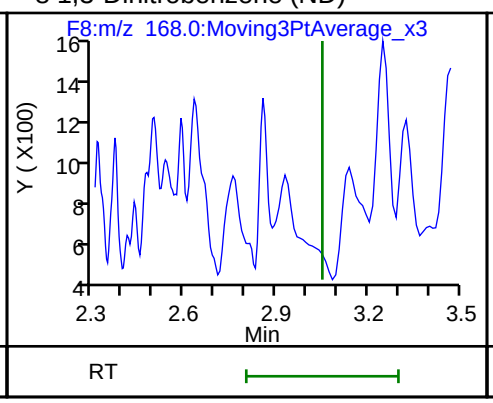
6 Tetryl (ND)



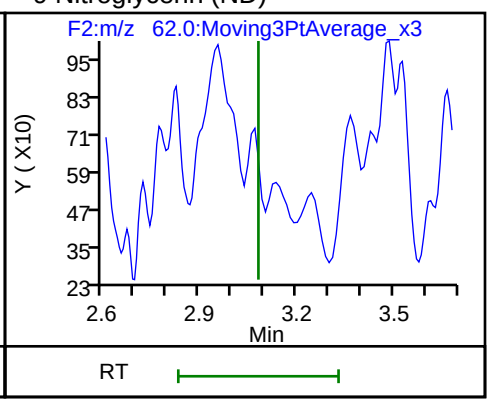
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



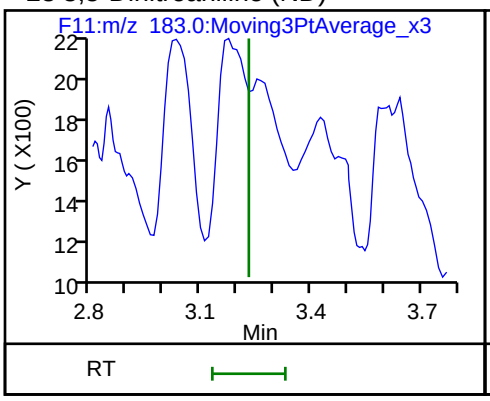
9 Nitroglycerin (ND)



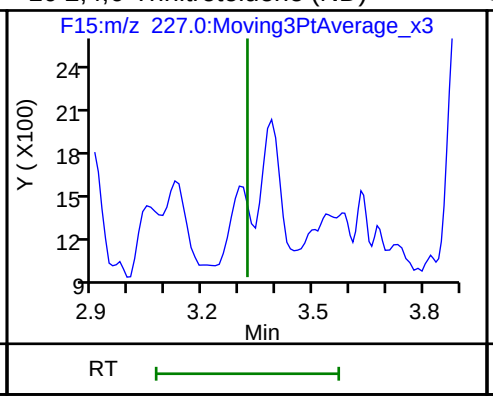
Report Date: 08-Apr-2022 07:32:31 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07026.d

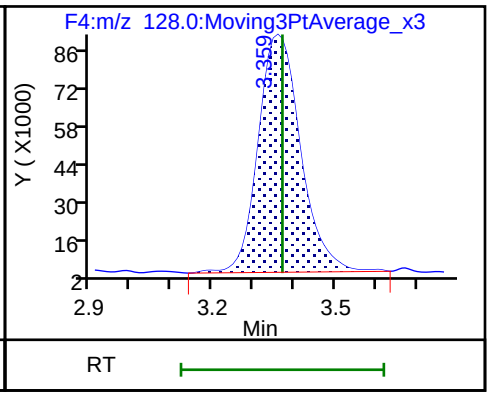
28 3,5-Dinitroaniline (ND)



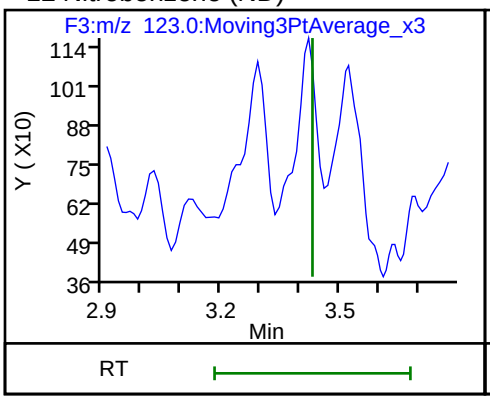
10 2,4,6-Trinitrotoluene (ND)



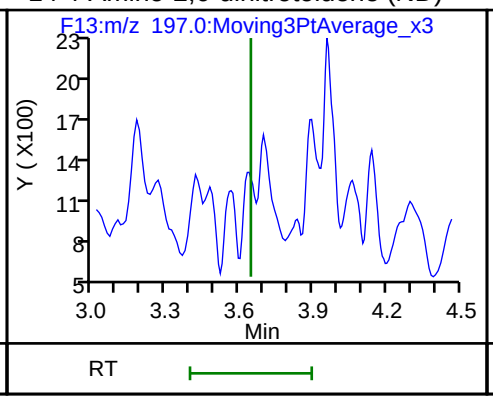
$ 11 Nitrobenzene-d5



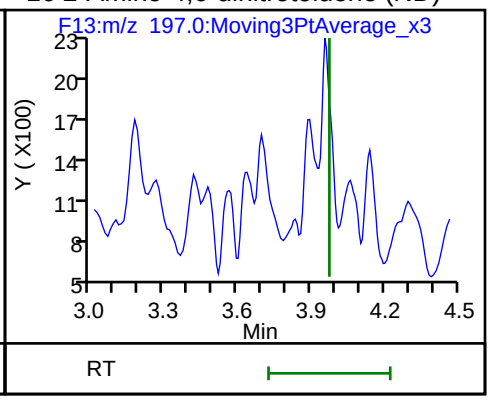
12 Nitrobenzene (ND)



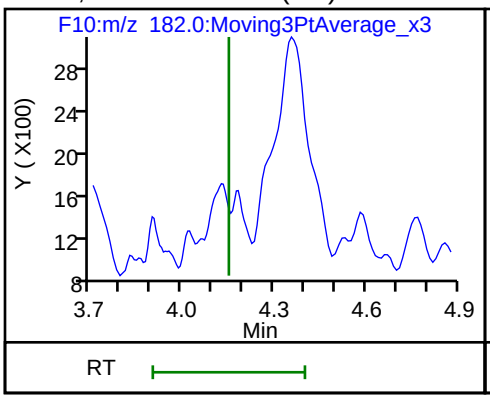
14 4-Amino-2,6-dinitrotoluene (ND)



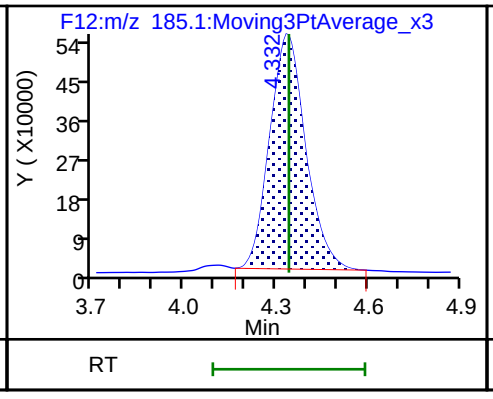
16 2-Amino-4,6-dinitrotoluene (ND)



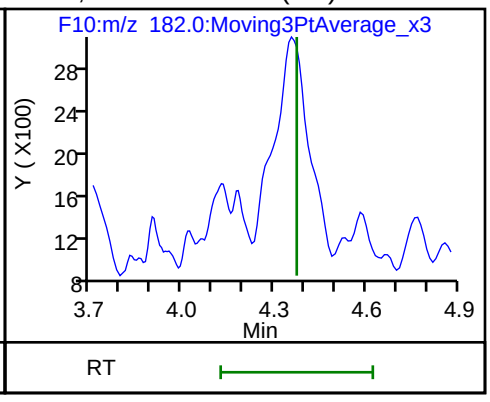
17 2,6-Dinitrotoluene (ND)



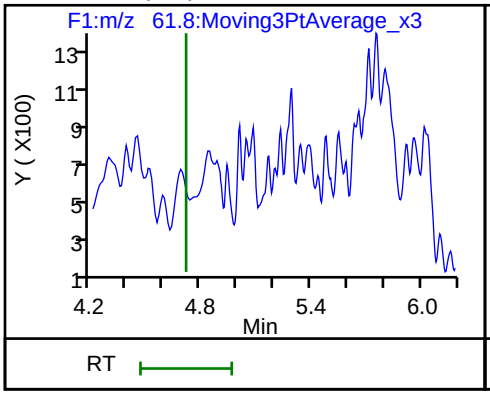
* 18 2,4-dinitrotoluene-d3



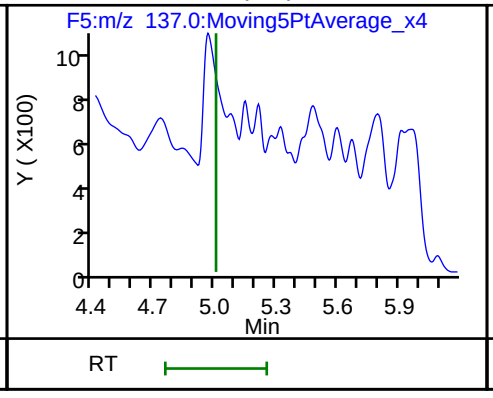
19 2,4-Dinitrotoluene (ND)



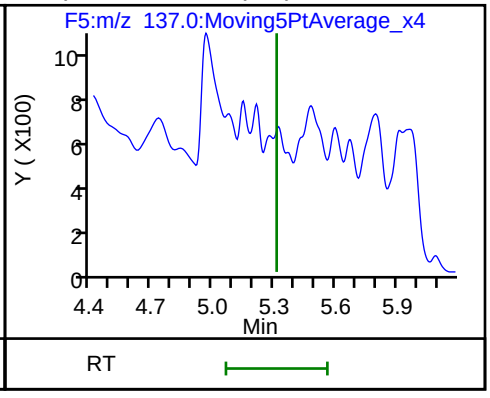
20 PETN (ND)



22 o-Nitrotoluene (ND)

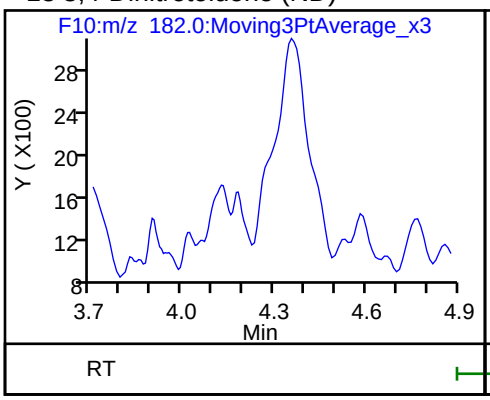


23 p-Nitrotoluene (ND)

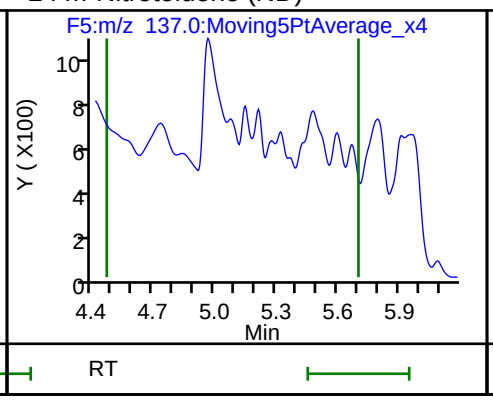


Report Date: 08-Apr-2022 07:32:31 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07026.d

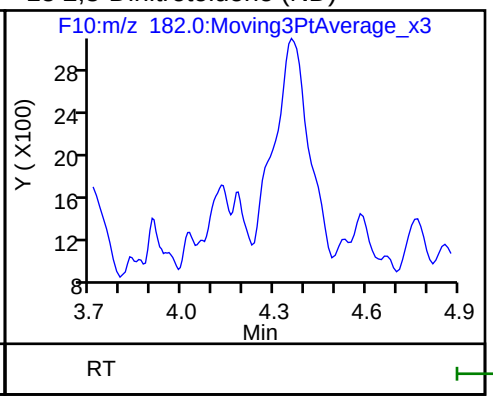
13 3,4-Dinitrotoluene (ND)



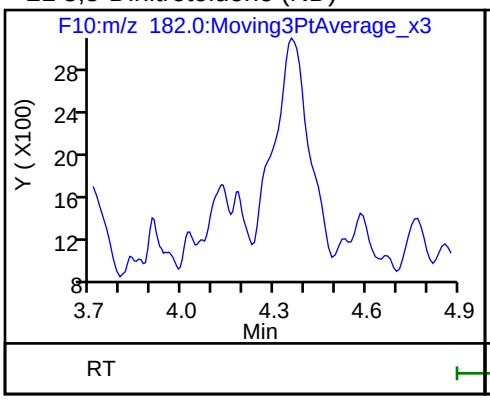
24 m-Nitrotoluene (ND)



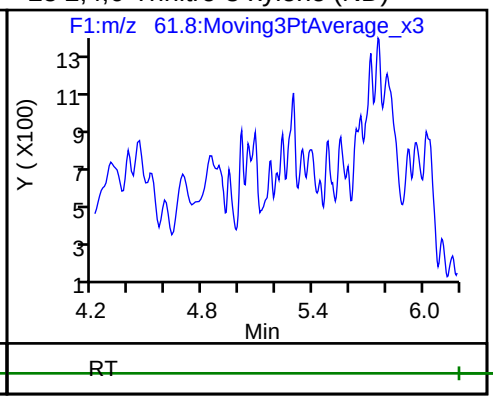
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 08-Apr-2022 07:32:31 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07026.d				
Lims ID:	280-160187-A-46-B				
Client ID:	29SB196 (7-7.5)				
Sample Type:	Client				
Inject. Date:	07-Apr-2022 13:10:58	ALS Bottle#:	23	Worklist Smp#:	26
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160187-A-46-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 07:32:27	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 13:51:58		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	92.0	91.67

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: EB-02 | Lab Sample ID: 280-160187-47
Matrix: Water | Lab File ID: ex722D05016.d
Analysis Method: 8321A | Date Collected: 03/23/2022 13:55
Extraction Method: 3535 | Date Extracted: 03/29/2022 13:01
Sample wt/vol: 828.2(mL) | Date Analyzed: 04/05/2022 11:43
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	0.072	U	0.12	0.072	0.028
99-65-0	1,3-Dinitrobenzene	0.072	U	0.12	0.072	0.027
118-96-7	2,4,6-Trinitrotoluene	0.072	U	0.12	0.072	0.036
121-14-2	2,4-Dinitrotoluene	0.072	U	0.12	0.072	0.033
606-20-2	2,6-Dinitrotoluene	0.072	U	0.12	0.072	0.030
35572-78-2	2-Amino-4,6-dinitrotoluene	0.072	U	0.12	0.072	0.036
19406-51-0	4-Amino-2,6-dinitrotoluene	0.072	U	0.12	0.072	0.047
2691-41-0	HMX	0.072	U M	0.12	0.072	0.040
99-08-1	m-Nitrotoluene	0.072	U	0.12	0.072	0.034
98-95-3	Nitrobenzene	0.072	U	0.18	0.072	0.034
55-63-0	Nitroglycerin	0.072	U	0.18	0.072	0.035
88-72-2	o-Nitrotoluene	0.072	U	0.12	0.072	0.039
78-11-5	PETN	0.072	U	0.12	0.072	0.042
99-99-0	p-Nitrotoluene	0.072	U	0.12	0.072	0.035
121-82-4	RDX	0.072	U	0.12	0.072	0.033
479-45-8	Tetryl	0.072	U Q	0.12	0.072	0.034

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	94		48-130

Report Date: 06-Apr-2022 06:44:11 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\ex722D05016.d
Lims ID: 280-160187-A-47-A
Client ID: EB-02
Sample Type: Client
Inject. Date: 05-Apr-2022 11:43:38 ALS Bottle#: 14 Worklist Smp#: 16
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-47-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 12:47:52
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	1.226	1.226	0.0		269012	125.0	169	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.793	1.777	0.016		863377	125.0	143	
* 7 1,3-Dinitrobenzene-d4								
172.0	2.872	2.850	0.022		1822978	129.4	215	
10 2,4,6-Trinitrotoluene								
227.0	3.127	3.107	0.020	0.771	68185	0.3491	11.2	
$ 11 Nitrobenzene-d5								
128.0	3.170	3.150	0.020	0.782	842219	94.7	86.8	
* 18 2,4-dinitrotoluene-d3								
185.1	4.054	4.028	0.026		5502456	125.0	114	

QC Flag Legend

Processing Flags

Reagents:

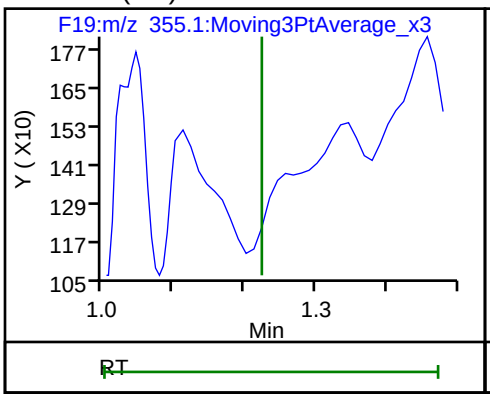
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 06-Apr-2022 06:44:11 Chrom Revision: 2.3 18-Mar-2022 09:07:22

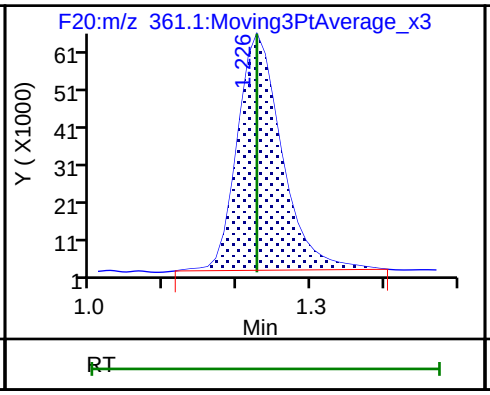
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05016.d
Injection Date: 05-Apr-2022 11:43:38 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-47-A Lab Sample ID: 280-160187-47
Client ID: EB-02
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

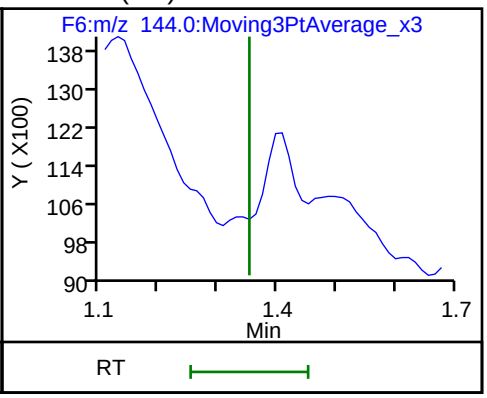
2 HMX (ND)



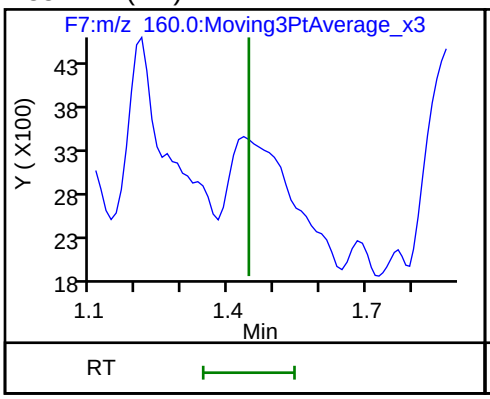
* 1 HMX-13C4



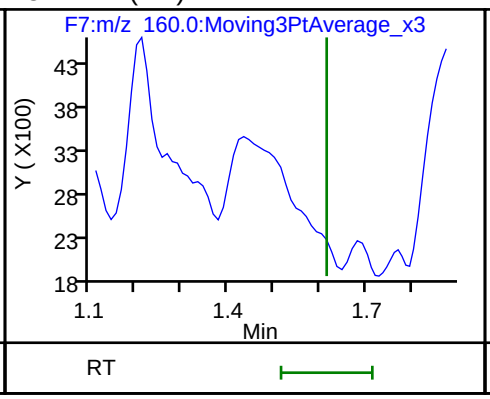
36 TNX (ND)



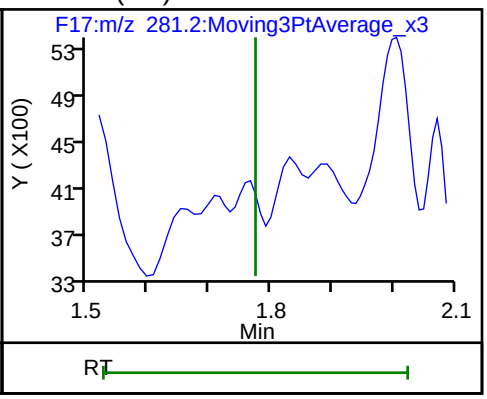
33 DNX (ND)



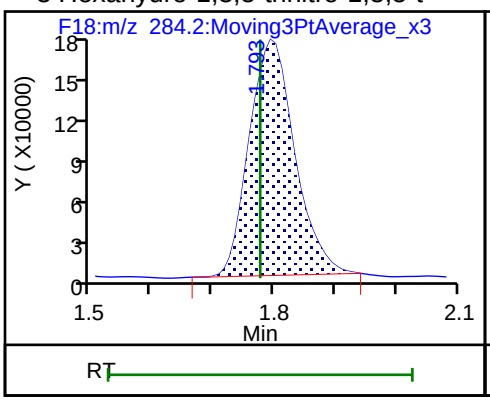
34 MNX (ND)



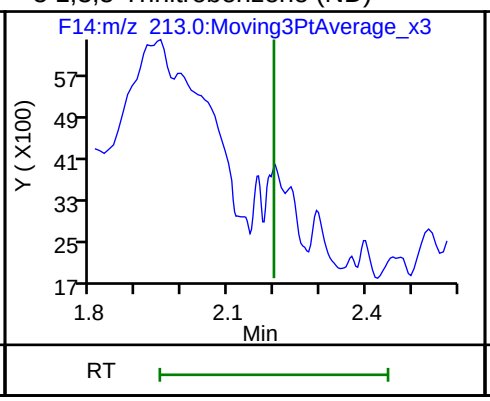
4 RDX (ND)



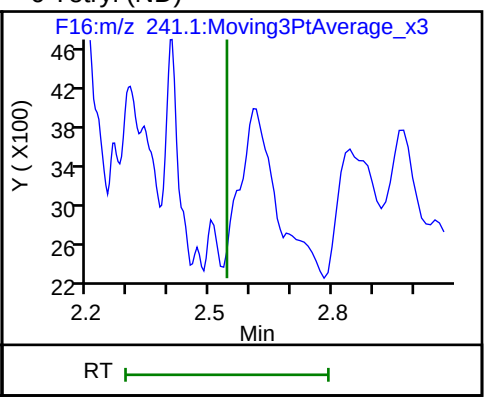
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



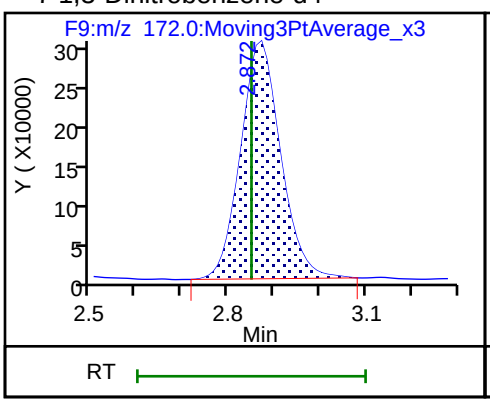
5 1,3,5-Trinitrobenzene (ND)



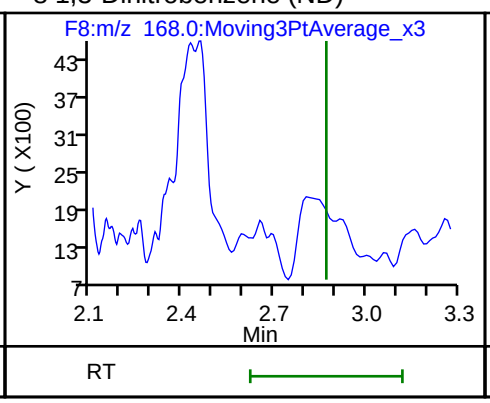
6 Tetryl (ND)



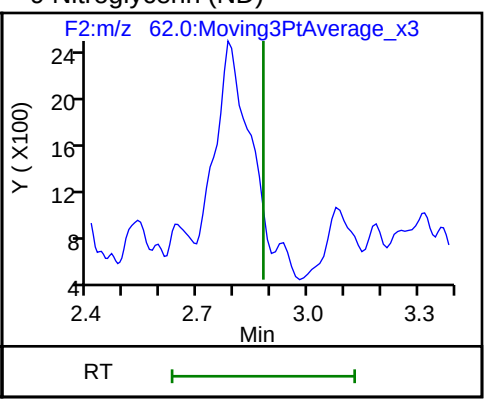
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



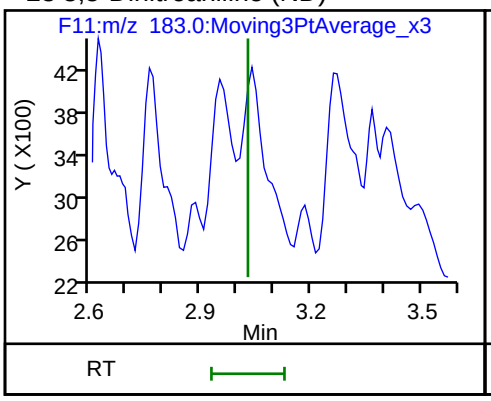
9 Nitroglycerin (ND)



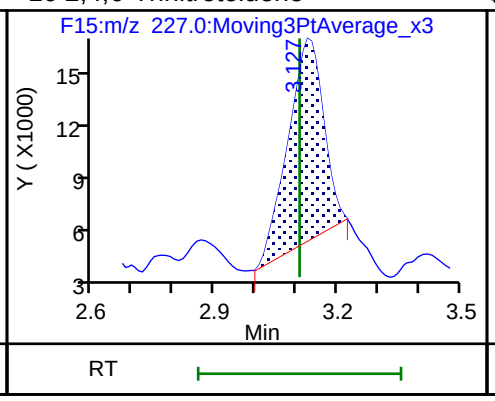
Report Date: 06-Apr-2022 06:44:11 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05016.d

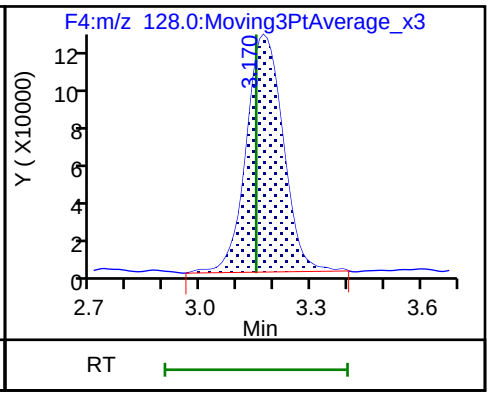
28 3,5-Dinitroaniline (ND)



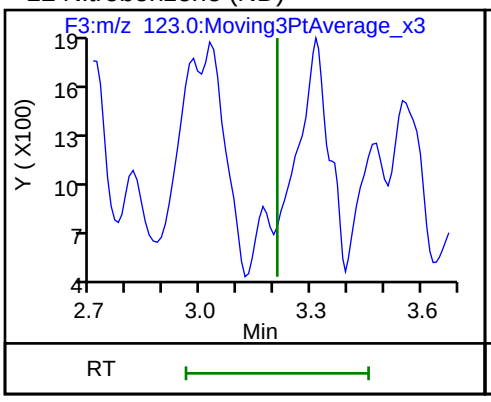
10 2,4,6-Trinitrotoluene



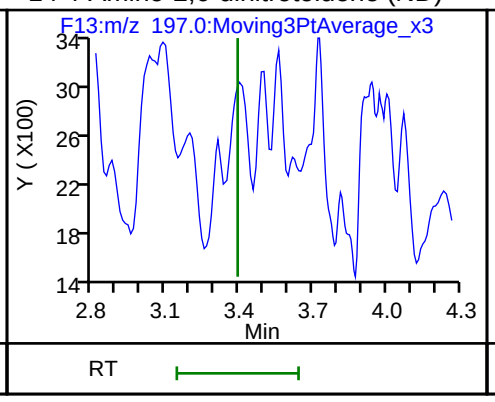
$ 11 Nitrobenzene-d5



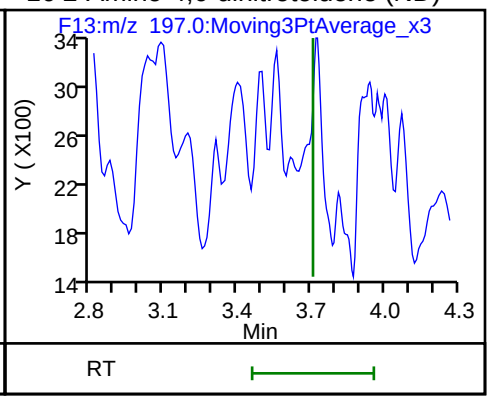
12 Nitrobenzene (ND)



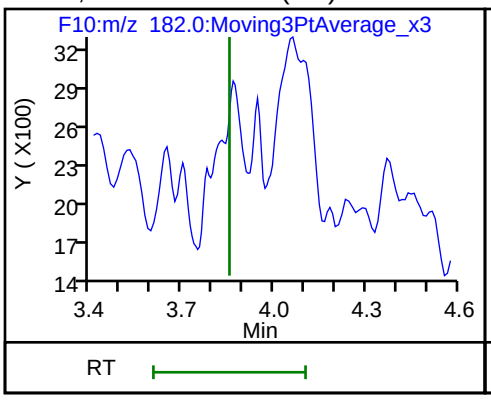
14 4-Amino-2,6-dinitrotoluene (ND)



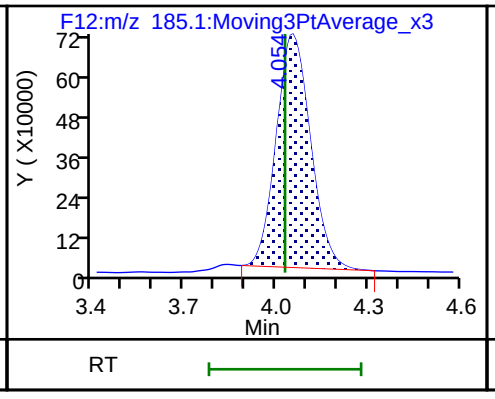
16 2-Amino-4,6-dinitrotoluene (ND)



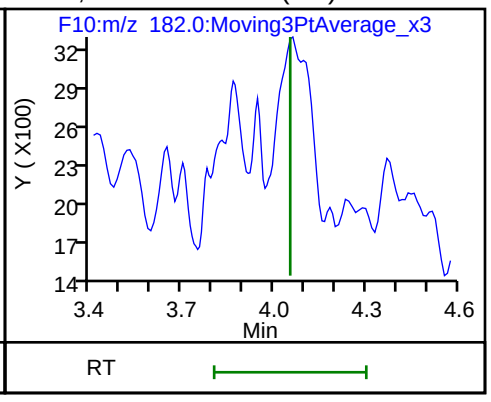
17 2,6-Dinitrotoluene (ND)



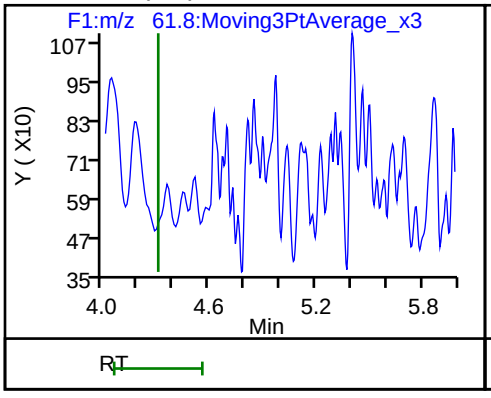
* 18 2,4-dinitrotoluene-d3



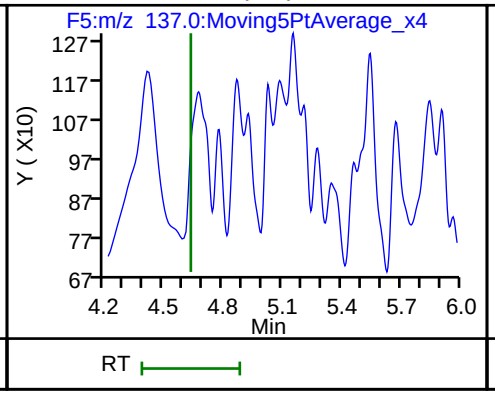
19 2,4-Dinitrotoluene (ND)



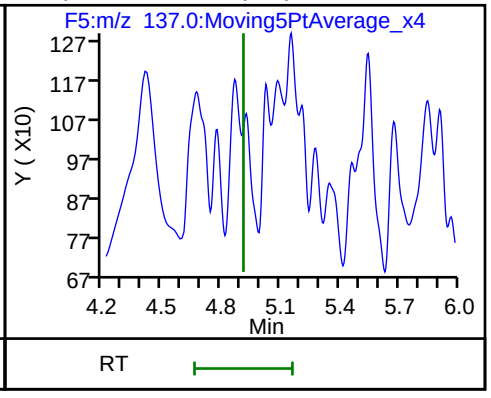
20 PETN (ND)



22 o-Nitrotoluene (ND)



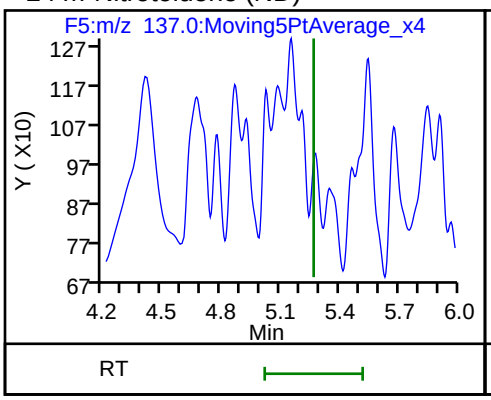
23 p-Nitrotoluene (ND)



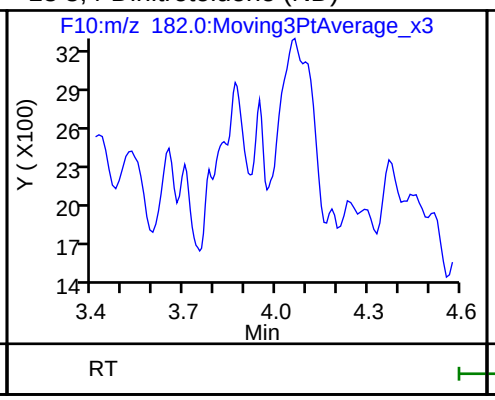
Report Date: 06-Apr-2022 06:44:12 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05016.d

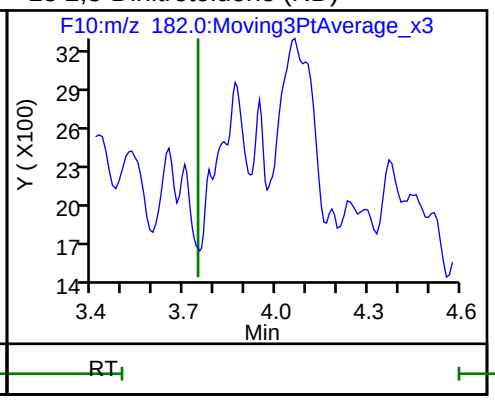
24 m-Nitrotoluene (ND)



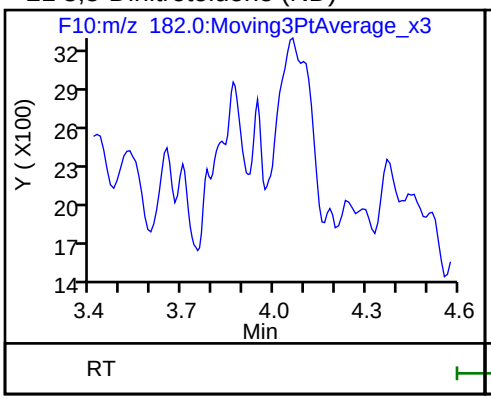
13 3,4-Dinitrotoluene (ND)



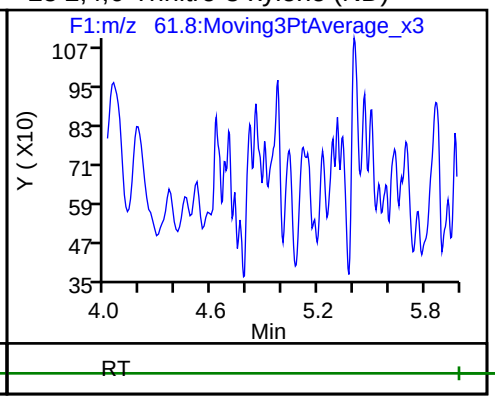
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 06-Apr-2022 06:44:11 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05016.d
Lims ID: 280-160187-A-47-A
Client ID: EB-02
Sample Type: Client
Inject. Date: 05-Apr-2022 11:43:38 ALS Bottle#: 14 Worklist Smp#: 16
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-47-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 12:47:52

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	94.7	94.42

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB172 (3-4) | Lab Sample ID: 280-160187-48
Matrix: Solid | Lab File ID: ex722D07027.d
Analysis Method: 8321A | Date Collected: 03/24/2022 08:40
Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57
Sample wt/vol: 10.34(g) | Date Analyzed: 04/07/2022 13:17
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.: 571108 | 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 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	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 Q	0.097	0.048	0.038

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

Report Date: 08-Apr-2022 07:32:31 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\ex722D07027.d
Lims ID: 280-160187-A-48-B
Client ID: 29SB172 (3-4)
Sample Type: Client
Inject. Date: 07-Apr-2022 13:17:34 ALS Bottle#: 24 Worklist Smp#: 27
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-48-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 07:32:27 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 13:52:18
Ratio Calibration: Initial Calibration Level: 5

Signal	RT	ADJ RT	DLT RT	REL RT	Response	Amount ug/l	S/N	Flags
* 1 HMX-13C4								
361.1	1.248	1.248	0.0		130864	125.0	77.4	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								M
284.2	1.844	1.844	0.0		386460	125.0	295	M
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.030	-0.011		1364410	129.4	225	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.777	621682	93.9	64.6	
* 18 2,4-dinitrotoluene-d3								
185.1	4.324	4.341	-0.017		4775985	125.0	108	

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 07:32:31 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07027.d

Injection Date: 07-Apr-2022 13:17:34 Instrument ID: LC_LCMS7

Lims ID: 280-160187-A-48-B Lab Sample ID: 280-160187-48

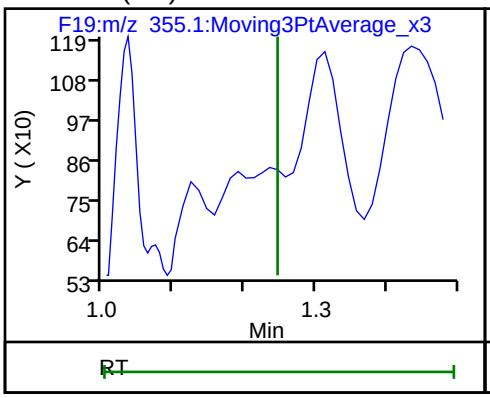
Client ID: 29SB172 (3-4)

Operator ID: acm ALS Bottle#: 24 Worklist Smp#: 27

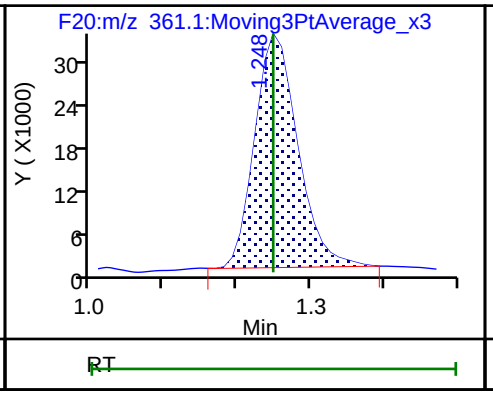
Injection Vol: 10.0 ul Dil. Factor: 1.0000

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

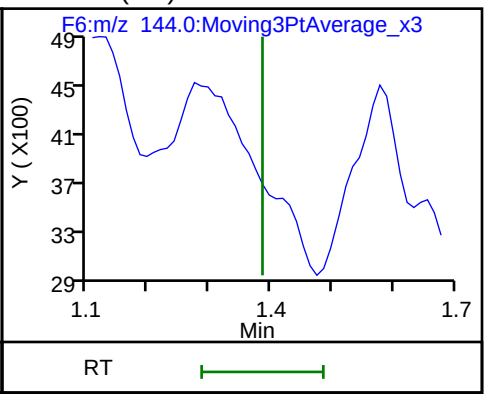
2 HMX (ND)



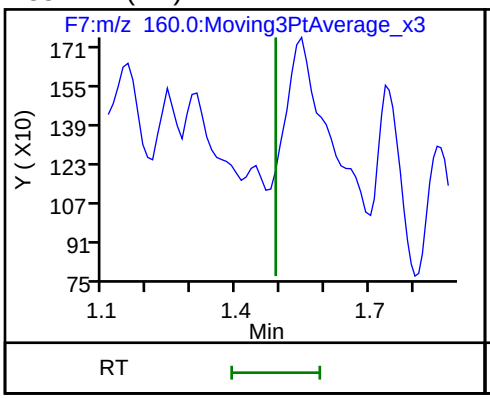
* 1 HMX-13C4



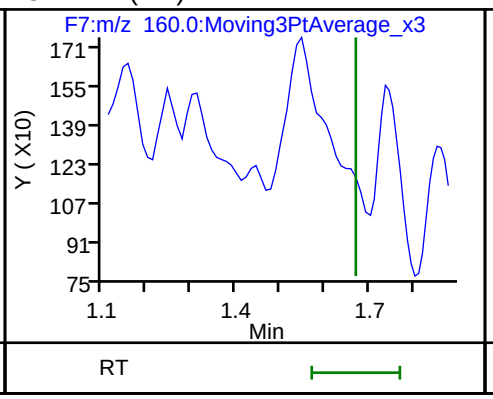
36 TNX (ND)



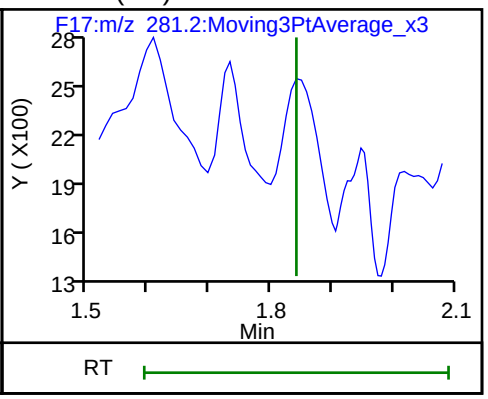
33 DNX (ND)



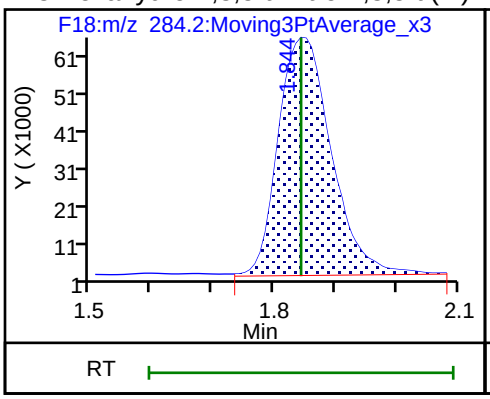
34 MNX (ND)



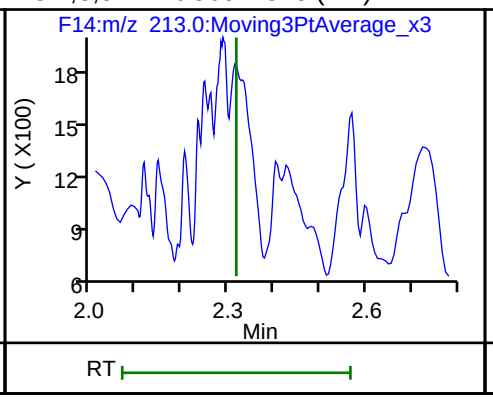
4 RDX (ND)



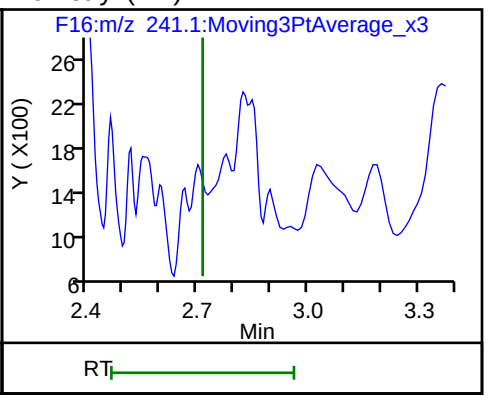
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t (M)



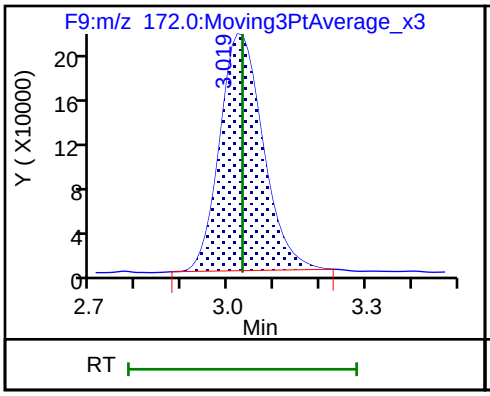
5 1,3,5-Trinitrobenzene (ND)



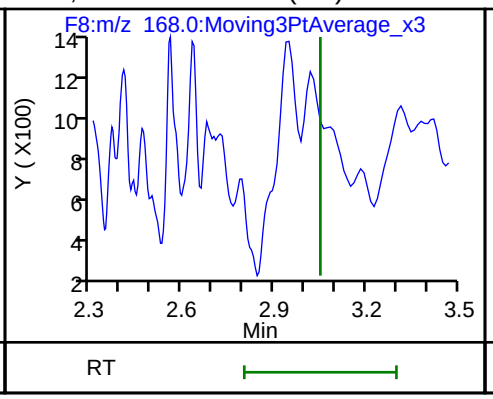
6 Tetryl (ND)



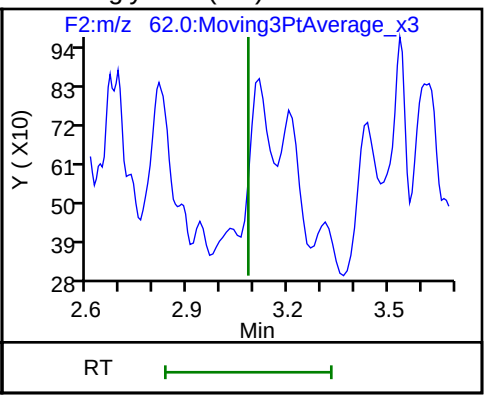
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



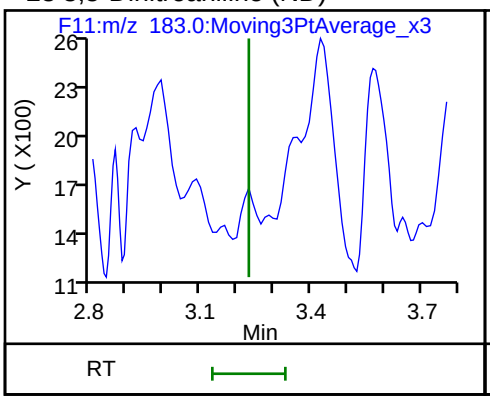
9 Nitroglycerin (ND)



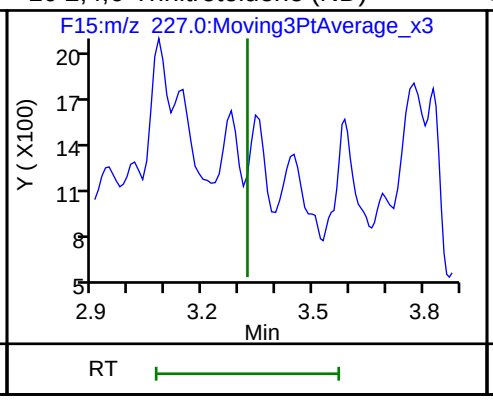
Report Date: 08-Apr-2022 07:32:31 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07027.d

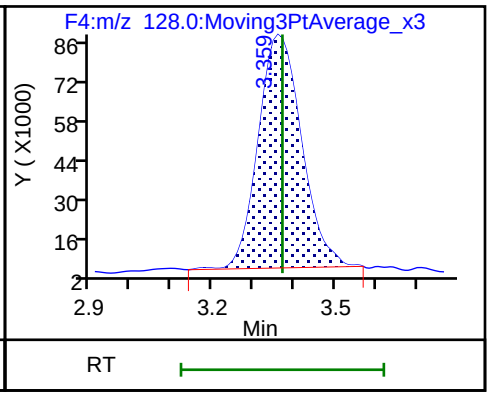
28 3,5-Dinitroaniline (ND)



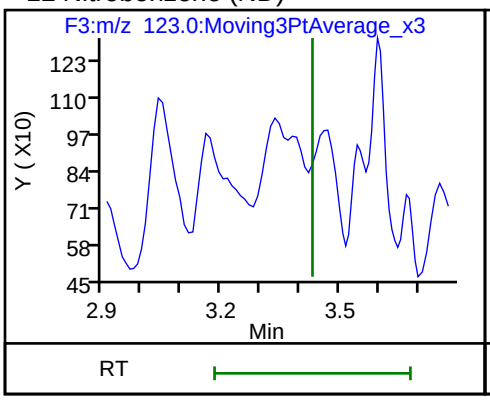
10 2,4,6-Trinitrotoluene (ND)



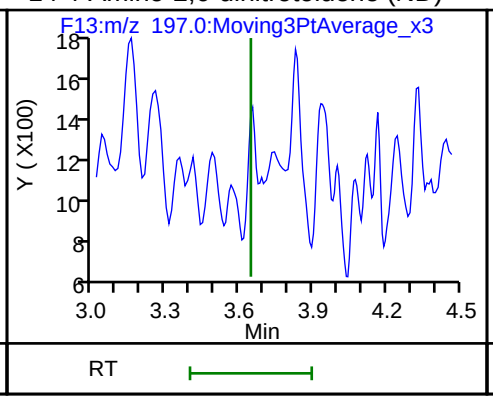
$ 11 Nitrobenzene-d5



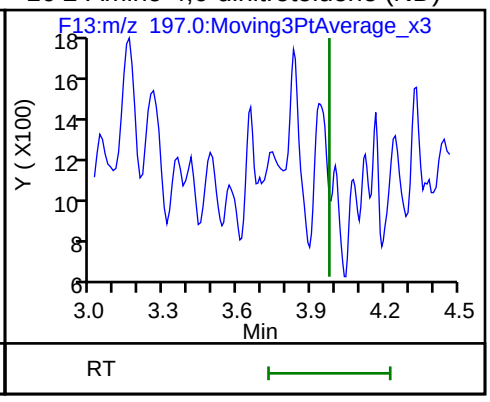
12 Nitrobenzene (ND)



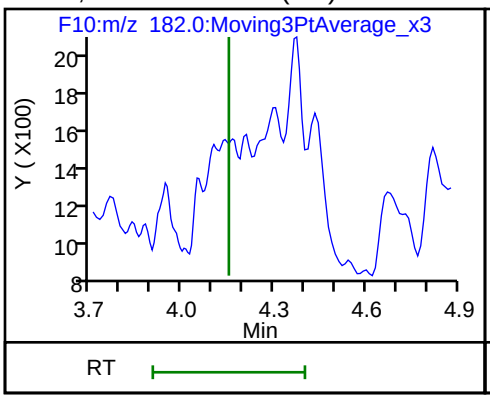
14 4-Amino-2,6-dinitrotoluene (ND)



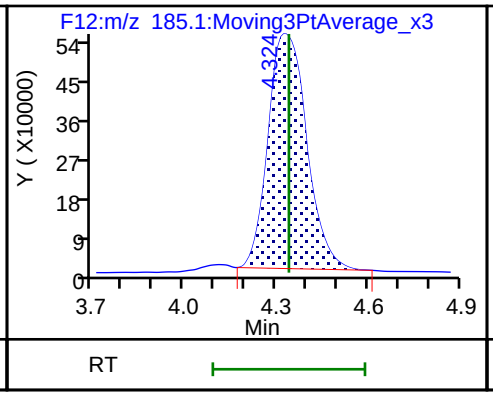
16 2-Amino-4,6-dinitrotoluene (ND)



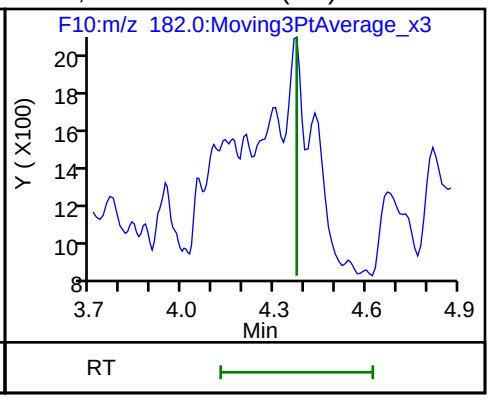
17 2,6-Dinitrotoluene (ND)



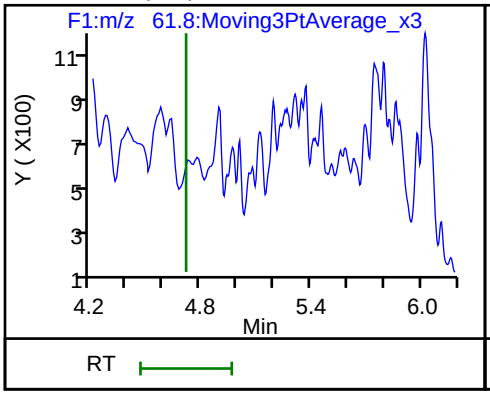
* 18 2,4-dinitrotoluene-d3



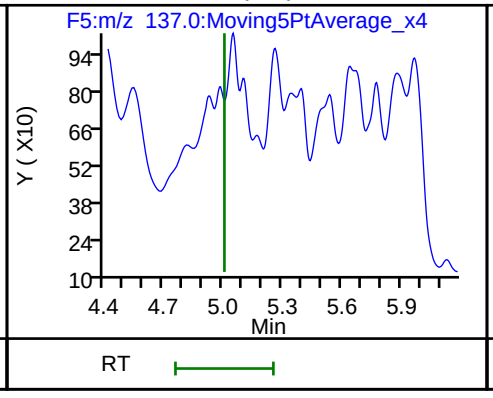
19 2,4-Dinitrotoluene (ND)



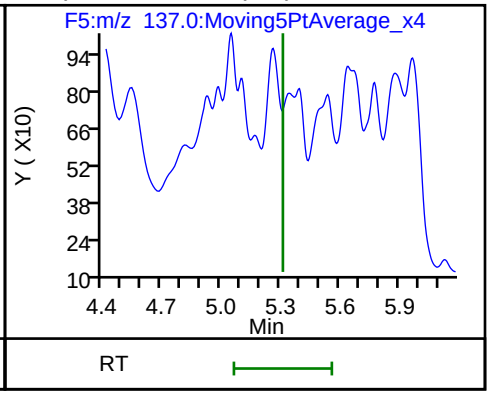
20 PETN (ND)



22 o-Nitrotoluene (ND)



23 p-Nitrotoluene (ND)

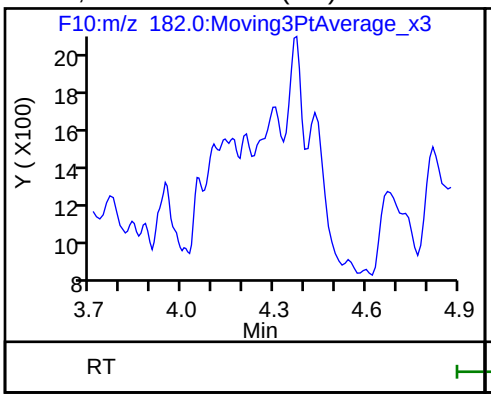


Report Date: 08-Apr-2022 07:32:31

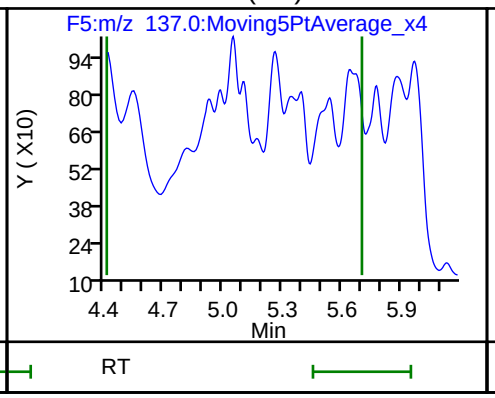
Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07027.d

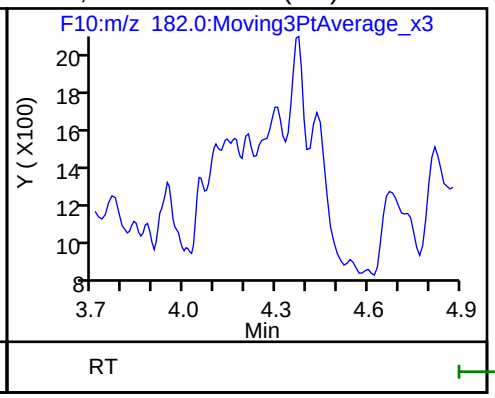
13 3,4-Dinitrotoluene (ND)



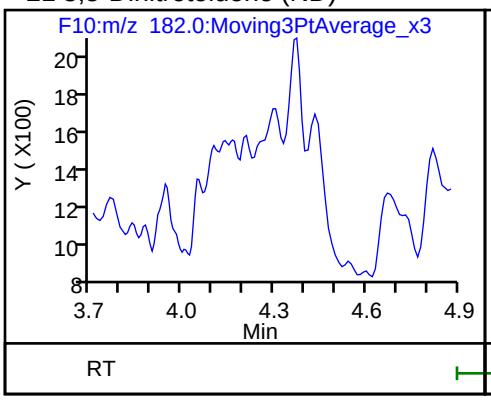
24 m-Nitrotoluene (ND)



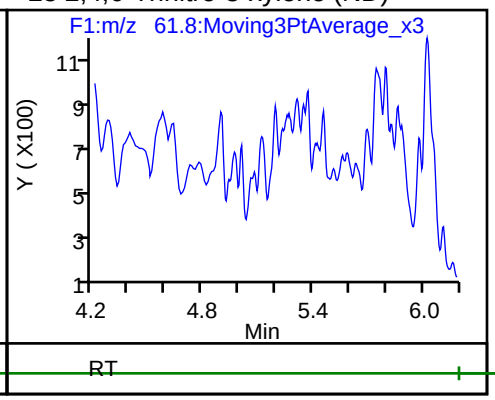
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 08-Apr-2022 07:32:31 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07027.d				
Lims ID:	280-160187-A-48-B				
Client ID:	29SB172 (3-4)				
Sample Type:	Client				
Inject. Date:	07-Apr-2022 13:17:34	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160187-A-48-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 07:32:27	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 13:52:18		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	93.9	93.61

Report Date: 08-Apr-2022 07:32:31 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

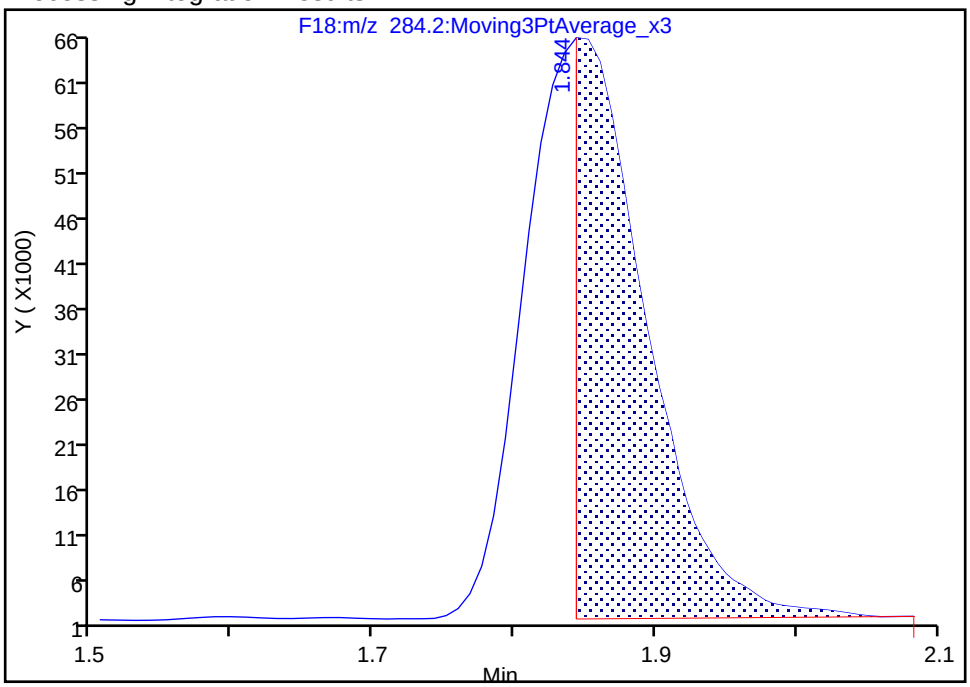
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07027.d				
Injection Date:	07-Apr-2022 13:17:34	Instrument ID:	LC_LCMS7		
Lims ID:	280-160187-A-48-B	Lab Sample ID:	280-160187-48		
Client ID:	29SB172 (3-4)				
Operator ID:	acm	ALS Bottle#:	24	Worklist Smp#:	27
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F18:SIR		

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

Signal: 1

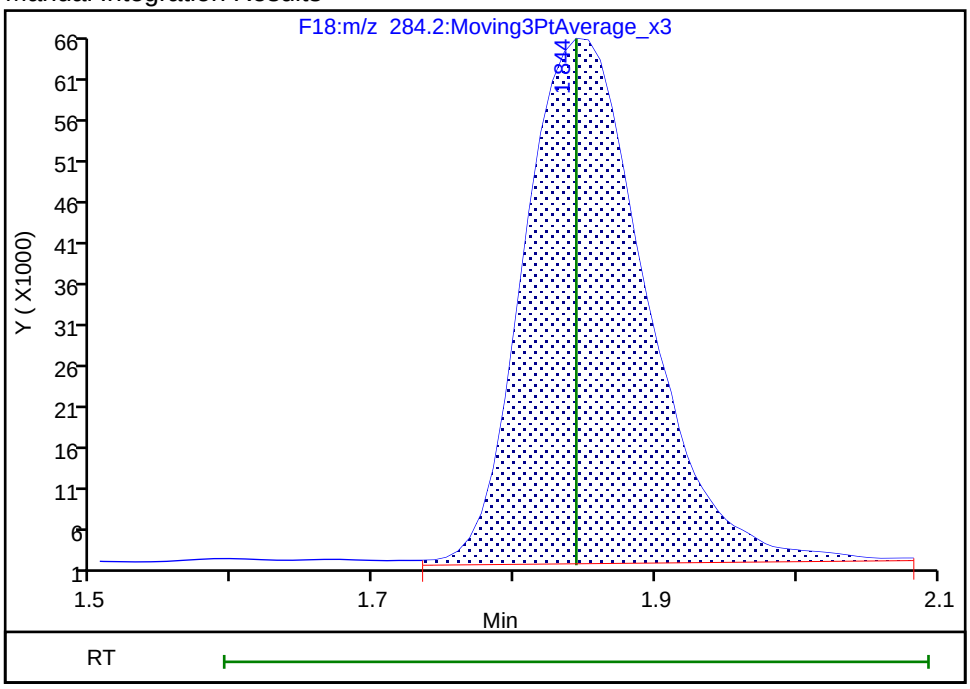
Processing Integration Results

RT: 1.84
Area: 218006
Amount: 125.0000
Amount Units: ug/l



Manual Integration Results

RT: 1.84
Area: 386460
Amount: 125.0000
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 13:52:13

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: 29SB172 (6-7) | Lab Sample ID: 280-160187-49
Matrix: Solid | Lab File ID: ex722D07028.d
Analysis Method: 8321A | Date Collected: 03/24/2022 08:42
Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57
Sample wt/vol: 10.66(g) | Date Analyzed: 04/07/2022 13:24
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	0.047	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 Q	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 M	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	94		68-140

Report Date: 08-Apr-2022 07:32:32 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\ex722D07028.d
Lims ID: 280-160187-A-49-B
Client ID: 29SB172 (6-7)
Sample Type: Client
Inject. Date: 07-Apr-2022 13:24:10 ALS Bottle#: 25 Worklist Smp#: 28
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-49-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 07:32:27 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 13:52:33
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		124493	125.0	135	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		434841	125.0	146	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.030	-0.011		1431289	129.4	418	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.775	657560	94.7	121	
* 18 2,4-dinitrotoluene-d3								
185.1	4.332	4.341	-0.009		4439596	125.0	114	

QC Flag Legend
Processing Flags

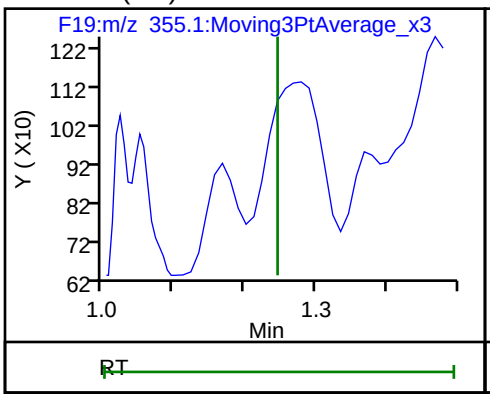
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

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

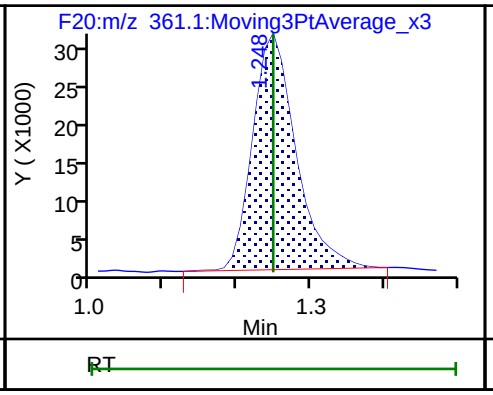
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07028.d
Injection Date: 07-Apr-2022 13:24:10 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-49-B Lab Sample ID: 280-160187-49
Client ID: 29SB172 (6-7)
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

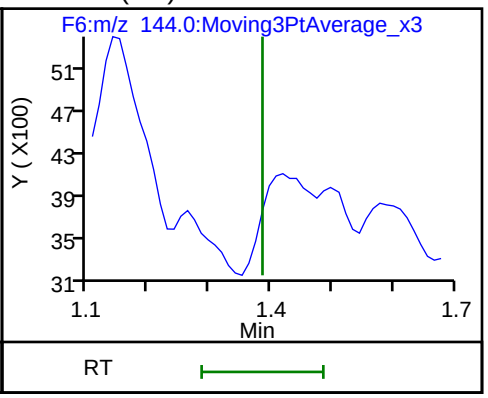
2 HMX (ND)



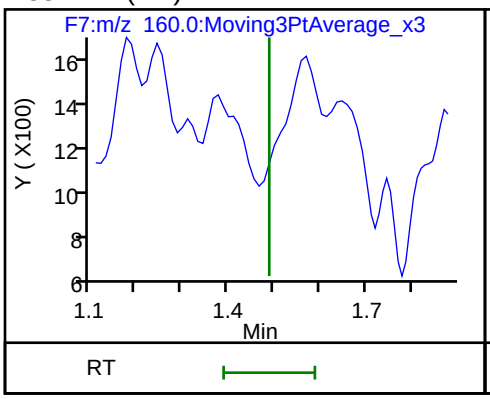
* 1 HMX-13C4



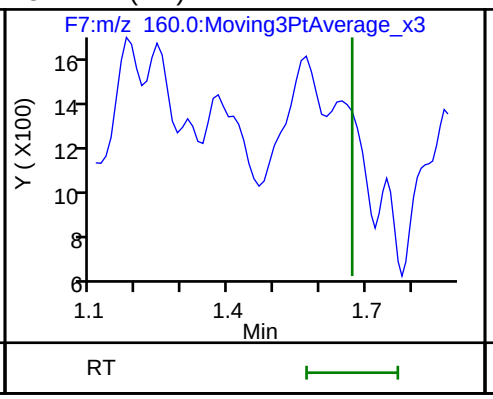
36 TNX (ND)



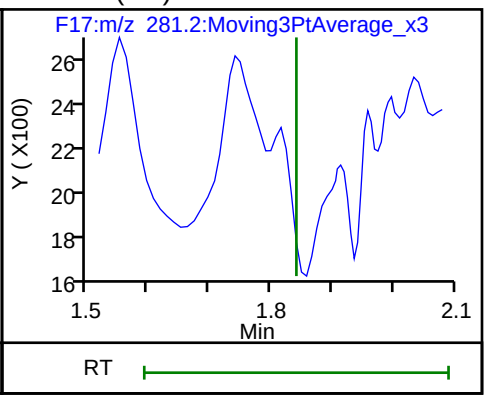
33 DNX (ND)



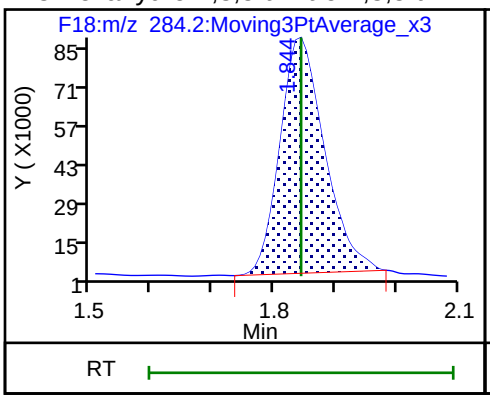
34 MNX (ND)



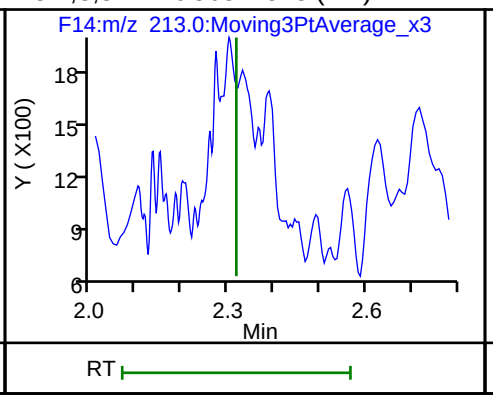
4 RDX (ND)



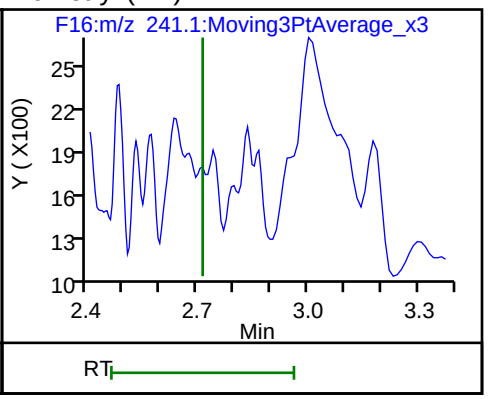
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



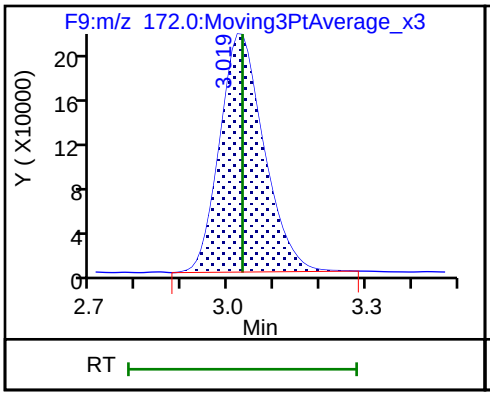
5 1,3,5-Trinitrobenzene (ND)



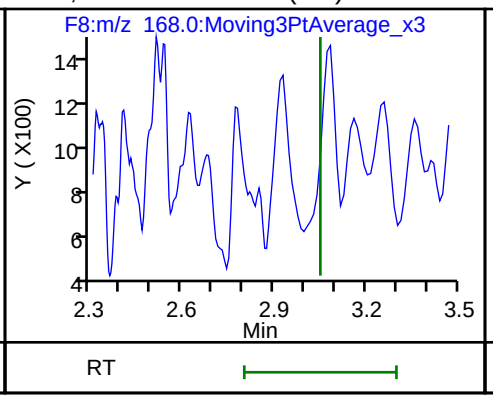
6 Tetryl (ND)



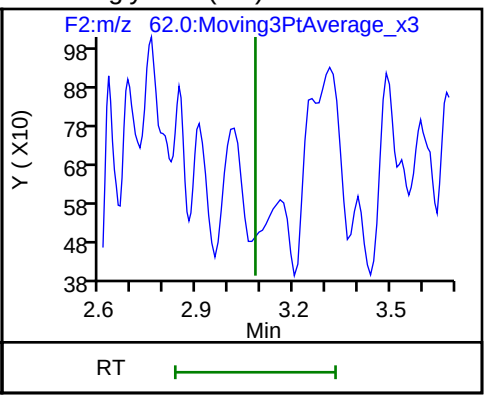
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

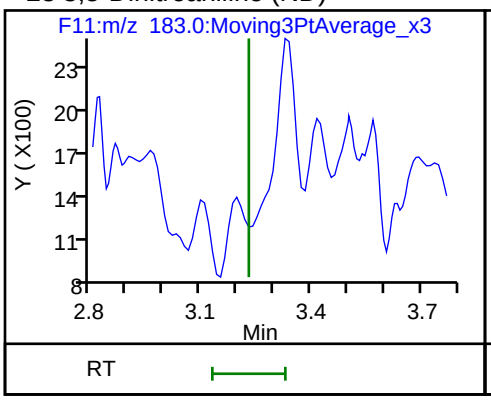


9 Nitroglycerin (ND)

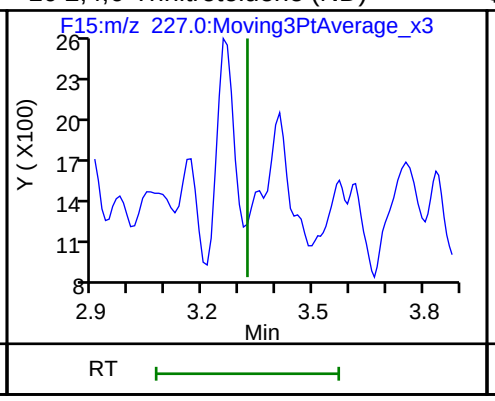


Report Date: 08-Apr-2022 07:32:32 Chrom Revision: 2.3 18-Mar-2022 09:07:22
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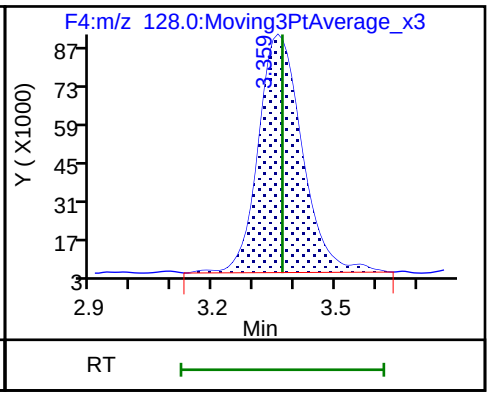
28 3,5-Dinitroaniline (ND)



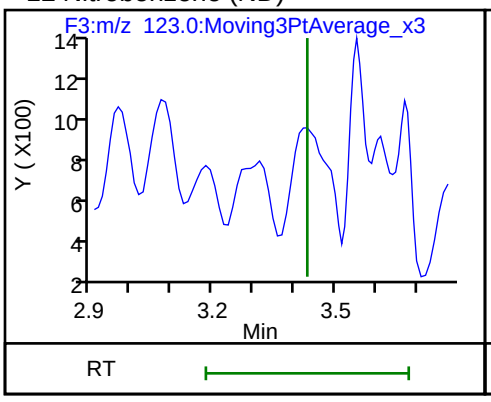
10 2,4,6-Trinitrotoluene (ND)



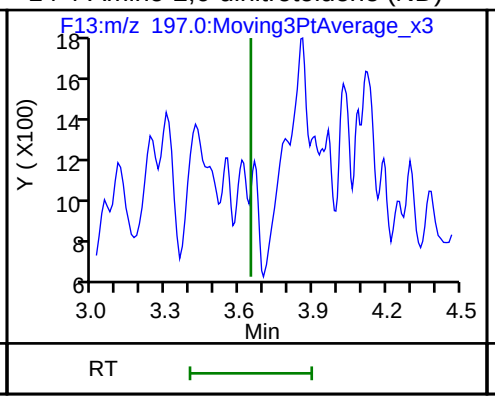
$ 11 Nitrobenzene-d5



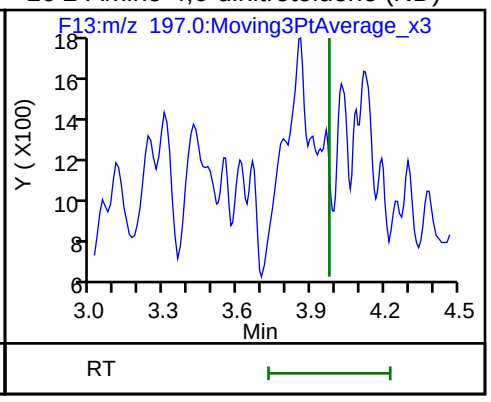
12 Nitrobenzene (ND)



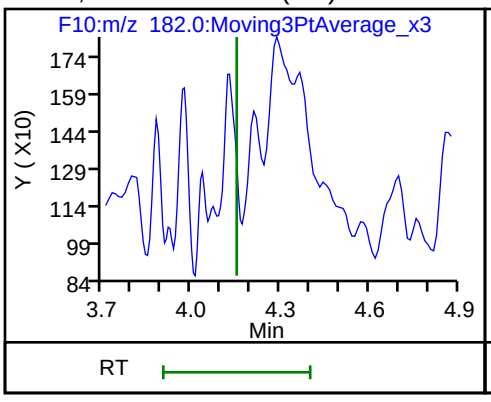
14 4-Amino-2,6-dinitrotoluene (ND)



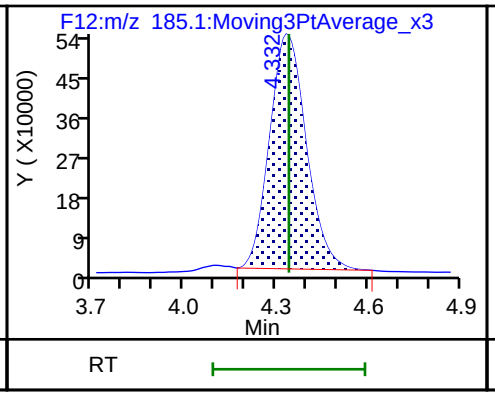
16 2-Amino-4,6-dinitrotoluene (ND)



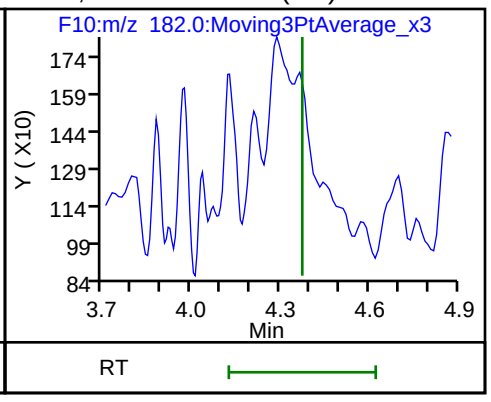
17 2,6-Dinitrotoluene (ND)



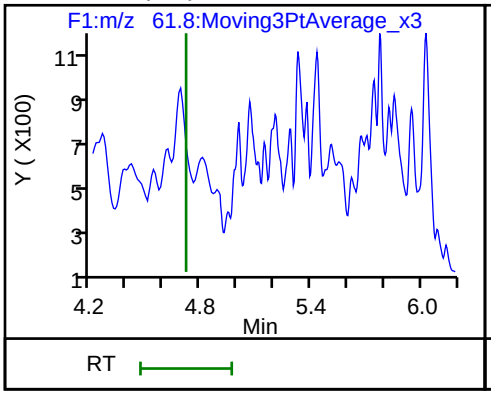
* 18 2,4-dinitrotoluene-d3



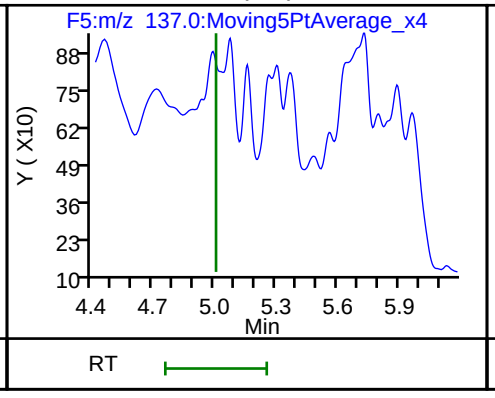
19 2,4-Dinitrotoluene (ND)



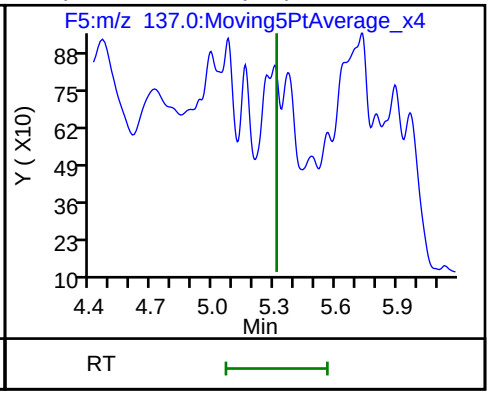
20 PETN (ND)



22 o-Nitrotoluene (ND)



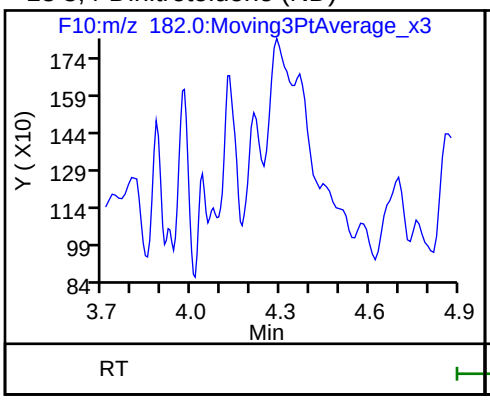
23 p-Nitrotoluene (ND)



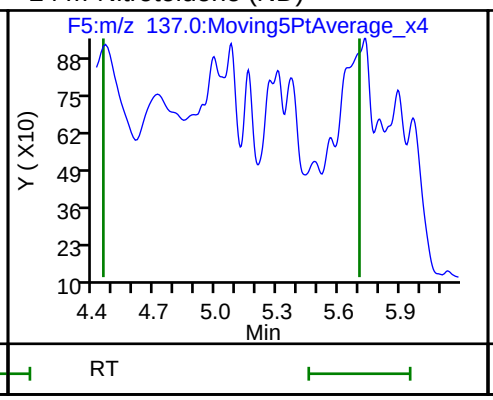
Report Date: 08-Apr-2022 07:32:32 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07028.d

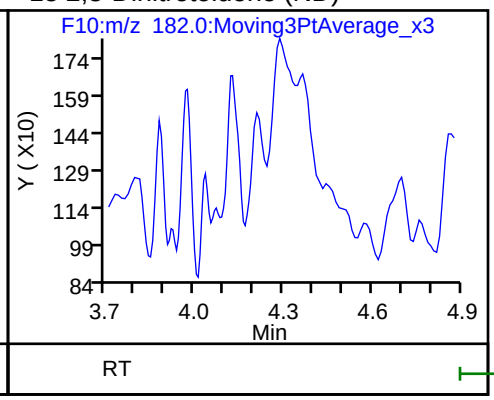
13 3,4-Dinitrotoluene (ND)



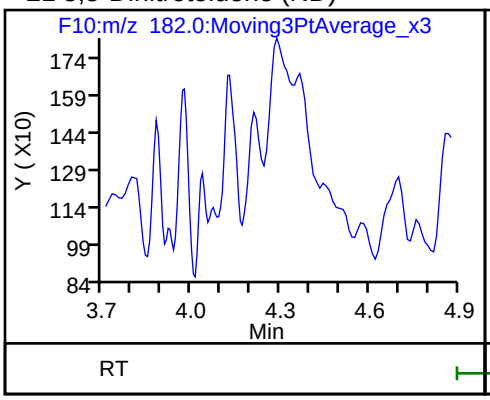
24 m-Nitrotoluene (ND)



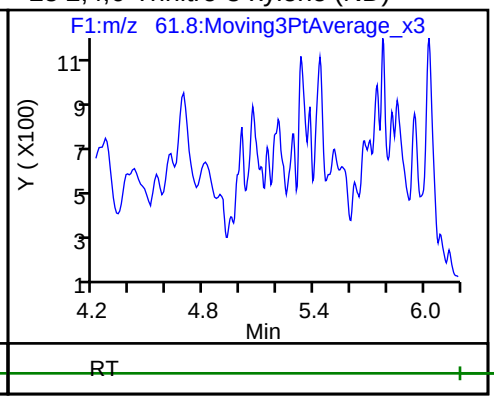
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



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

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07028.d
Lims ID: 280-160187-A-49-B
Client ID: 29SB172 (6-7)
Sample Type: Client
Inject. Date: 07-Apr-2022 13:24:10 ALS Bottle#: 25 Worklist Smp#: 28
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-49-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 07:32:27 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 13:52:33

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	94.7	94.37

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB172 (11-12) | Lab Sample ID: 280-160187-50
Matrix: Solid | Lab File ID: ex722D07029.d
Analysis Method: 8321A | Date Collected: 03/24/2022 08:45
Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57
Sample wt/vol: 10.35(g) | Date Analyzed: 04/07/2022 13:30
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	0.097	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 Q	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 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 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	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	93		68-140

Report Date: 08-Apr-2022 07:32:32 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\ex722D07029.d
Lims ID: 280-160187-A-50-B
Client ID: 29SB172 (11-12)
Sample Type: Client
Inject. Date: 07-Apr-2022 13:30:46 ALS Bottle#: 26 Worklist Smp#: 29
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-50-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 07:32:27 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 13:52:47
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		134182	125.0	123	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.835	1.844	-0.009		411516	125.0	116	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.030	-0.011		1415434	129.4	337	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.775	638248	93.0	87.6	
* 18 2,4-dinitrotoluene-d3								
185.1	4.332	4.341	-0.009		4386304	125.0	114	

QC Flag Legend
Processing Flags

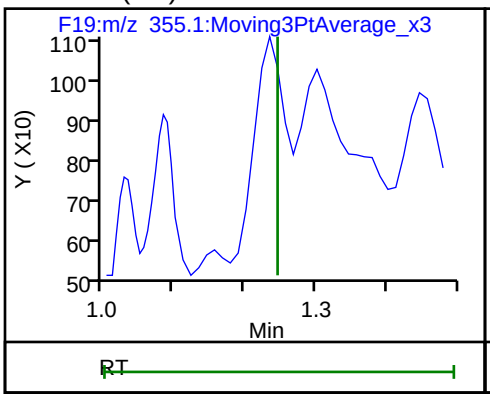
Reagents:
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

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

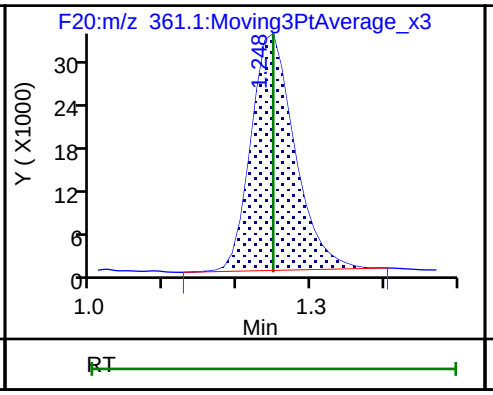
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07029.d
Injection Date: 07-Apr-2022 13:30:46 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-50-B Lab Sample ID: 280-160187-50
Client ID: 29SB172 (11-12)
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

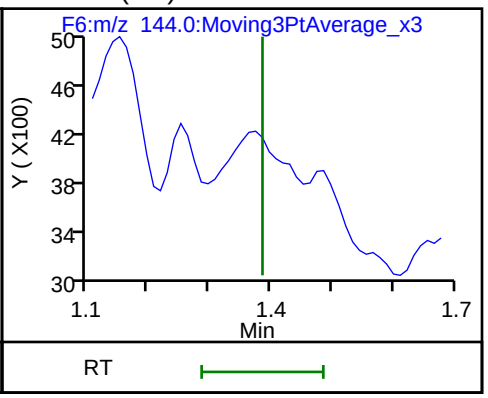
2 HMX (ND)



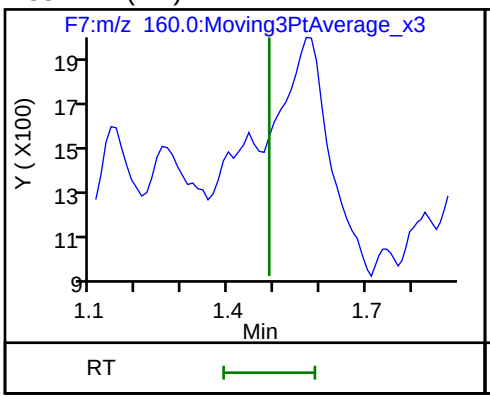
* 1 HMX-13C4



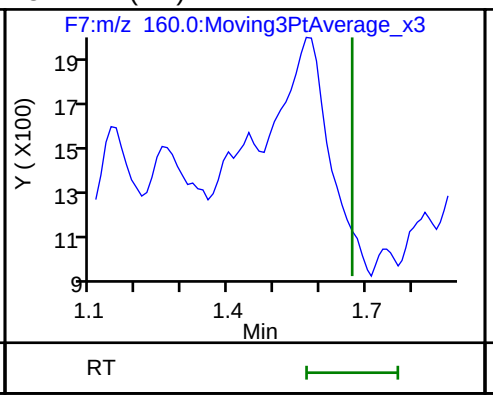
36 TNX (ND)



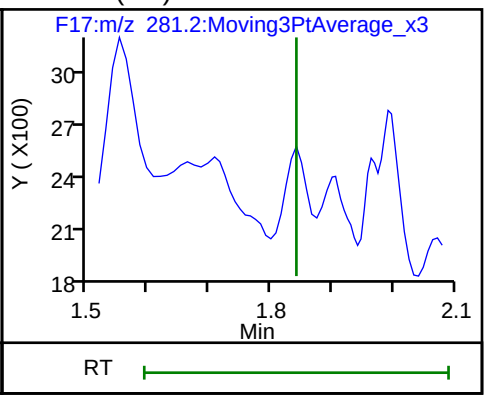
33 DNX (ND)



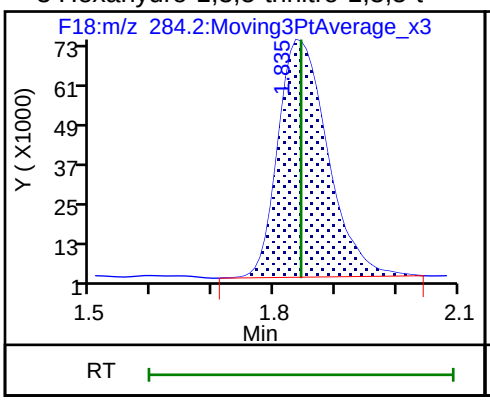
34 MNX (ND)



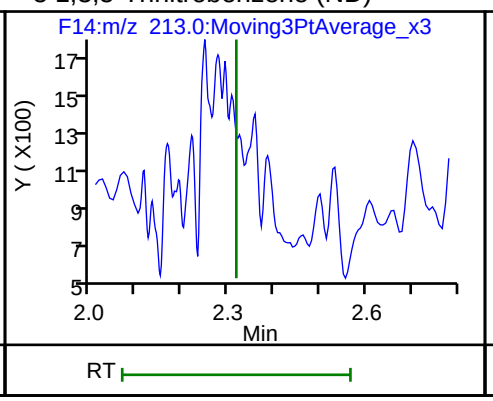
4 RDX (ND)



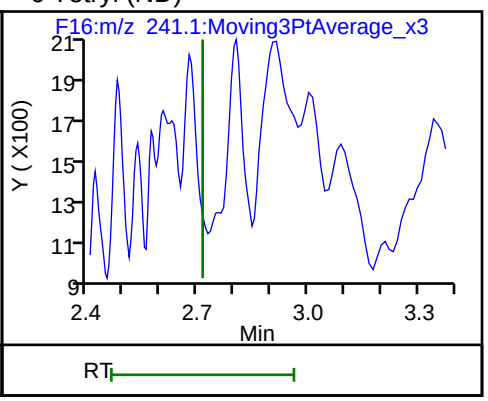
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



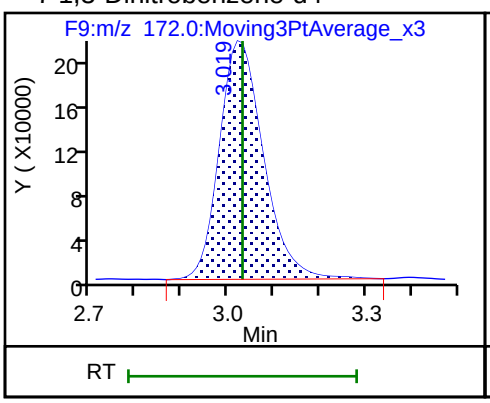
5 1,3,5-Trinitrobenzene (ND)



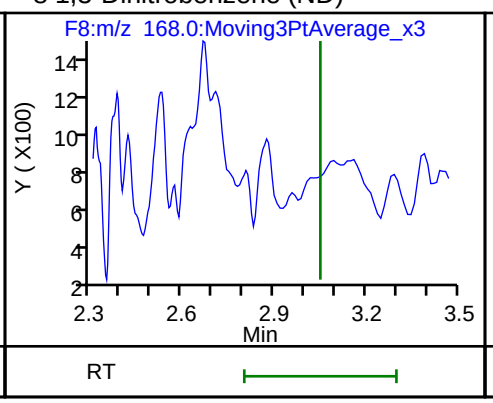
6 Tetryl (ND)



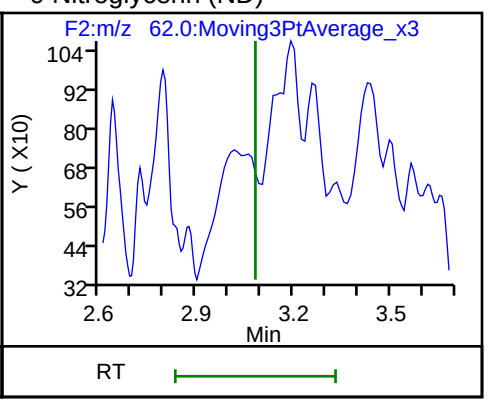
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



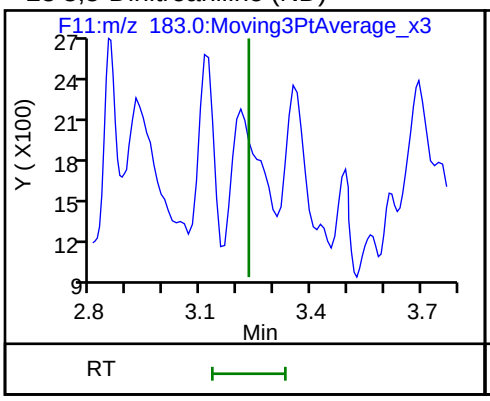
9 Nitroglycerin (ND)



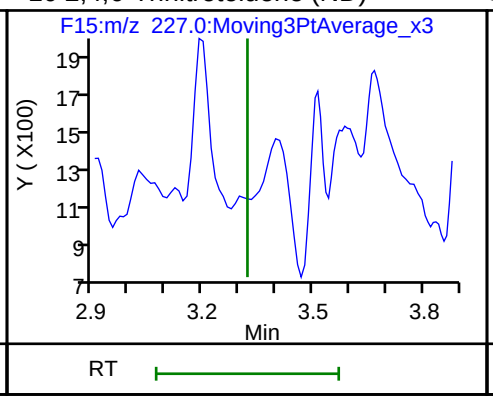
Report Date: 08-Apr-2022 07:32:32 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07029.d

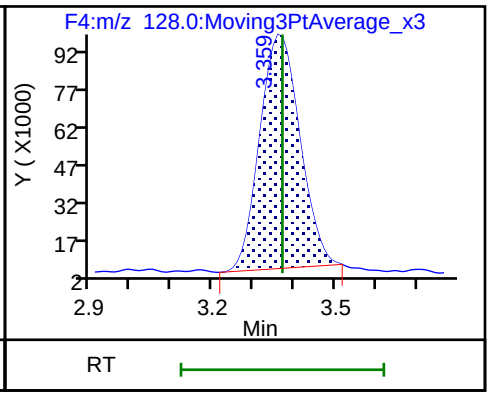
28 3,5-Dinitroaniline (ND)



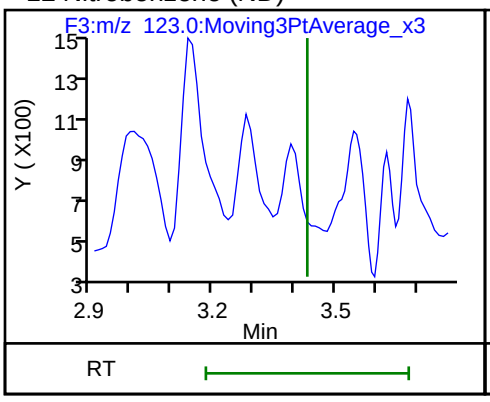
10 2,4,6-Trinitrotoluene (ND)



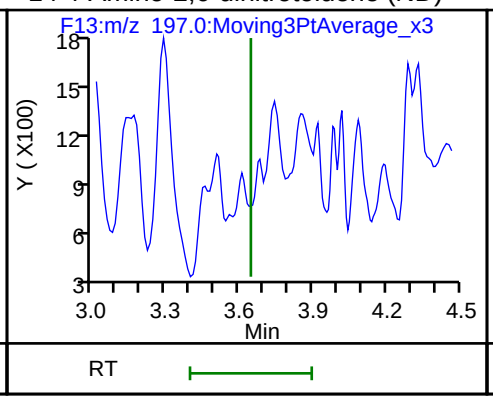
$ 11 Nitrobenzene-d5



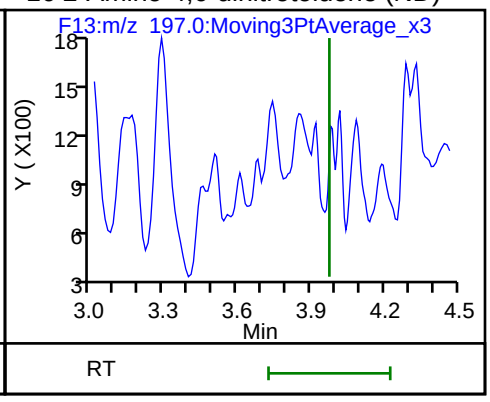
12 Nitrobenzene (ND)



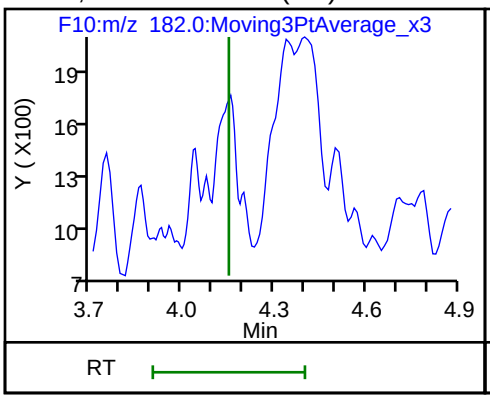
14 4-Amino-2,6-dinitrotoluene (ND)



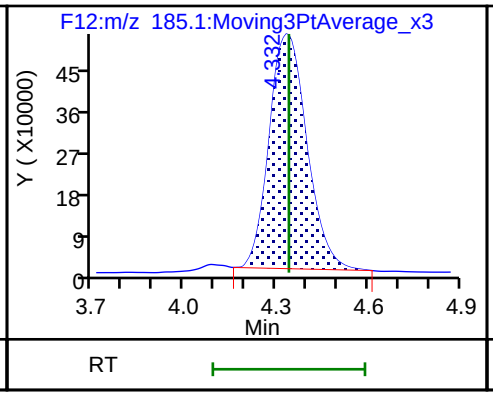
16 2-Amino-4,6-dinitrotoluene (ND)



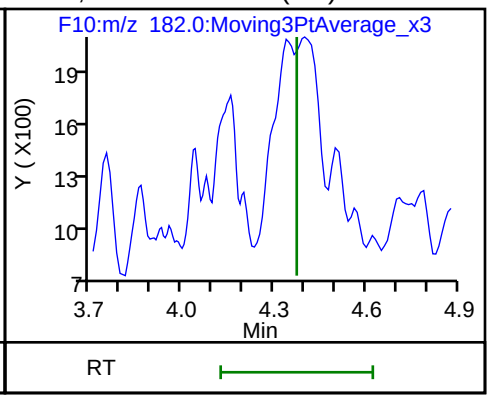
17 2,6-Dinitrotoluene (ND)



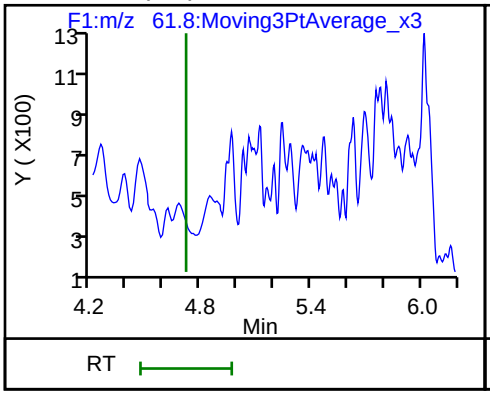
* 18 2,4-dinitrotoluene-d3



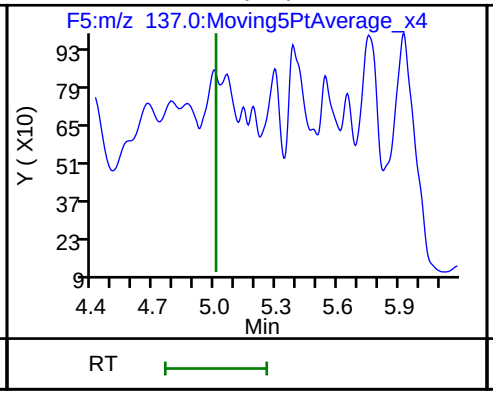
19 2,4-Dinitrotoluene (ND)



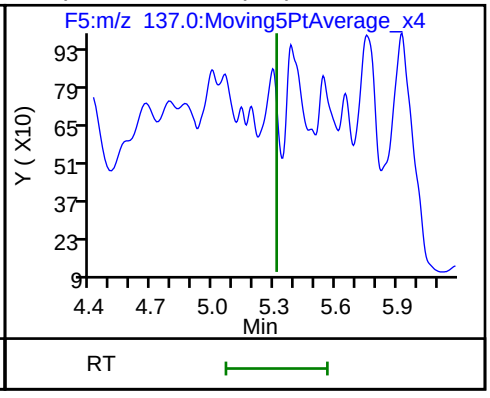
20 PETN (ND)



22 o-Nitrotoluene (ND)



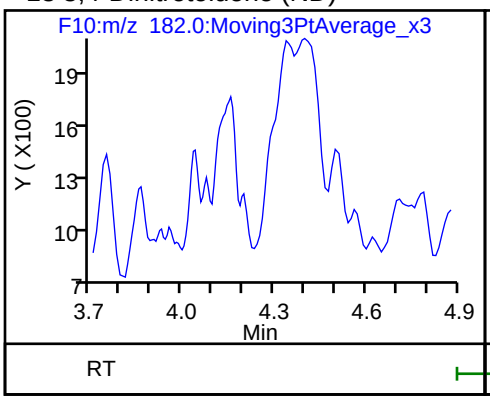
23 p-Nitrotoluene (ND)



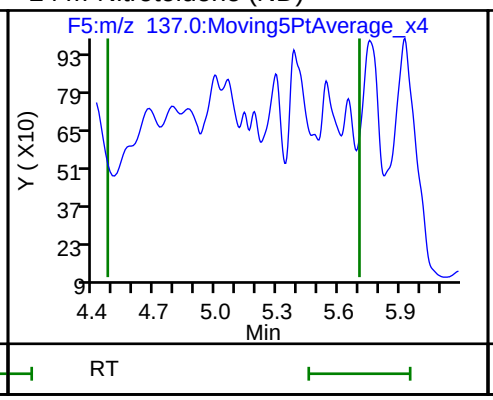
Report Date: 08-Apr-2022 07:32:32 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07029.d

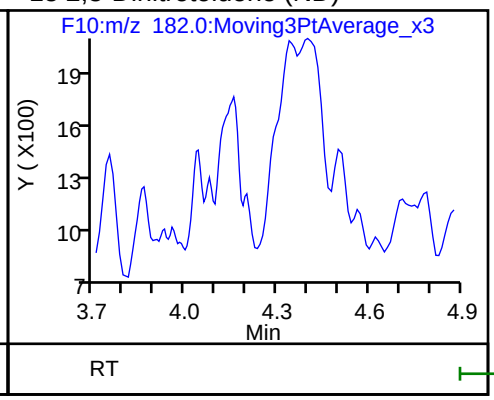
13 3,4-Dinitrotoluene (ND)



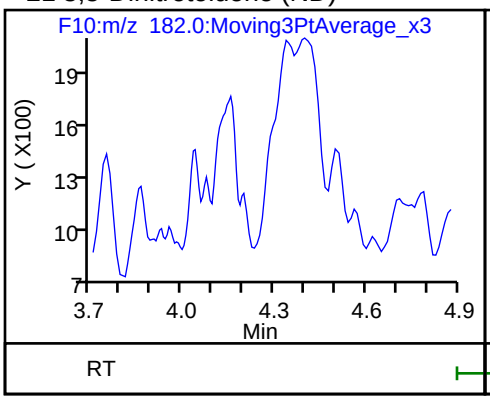
24 m-Nitrotoluene (ND)



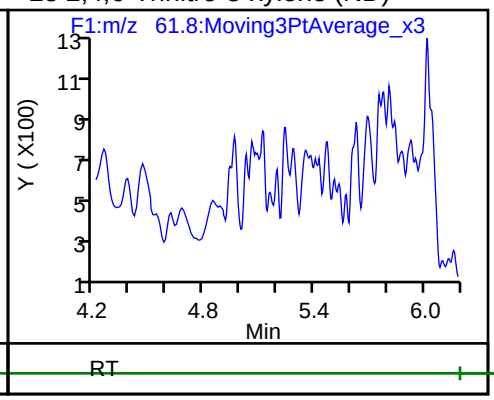
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



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

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07029.d
Lims ID: 280-160187-A-50-B
Client ID: 29SB172 (11-12)
Sample Type: Client
Inject. Date: 07-Apr-2022 13:30:46 ALS Bottle#: 26 Worklist Smp#: 29
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-50-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 07:32:27 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 13:52:47

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	93.0	92.65

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

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

SDG No.:

Client Sample ID: 29SB172 (14.5-15) | Lab Sample ID: 280-160187-51

Matrix: Solid | Lab File ID: ex722D07030.d

Analysis Method: 8321A | Date Collected: 03/24/2022 08:48

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

Sample wt/vol: 10.16(g) | Date Analyzed: 04/07/2022 13:37

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.: 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 M Q	0.098	0.049	0.036
121-14-2	2,4-Dinitrotoluene	0.11	M	0.098	0.049	0.046
606-20-2	2,6-Dinitrotoluene	0.049	U M	0.098	0.049	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.049	U M	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 M	0.098	0.049	0.045
99-08-1	m-Nitrotoluene	0.049	U	0.098	0.049	0.043
98-95-3	Nitrobenzene	0.049	U	0.11	0.049	0.037
55-63-0	Nitroglycerin	0.049	U	0.098	0.049	0.029
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	0.049
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	86		68-140

Report Date: 08-Apr-2022 07:32:33 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\ex722D07030.d
Lims ID: 280-160187-A-51-B
Client ID: 29SB172 (14.5-15)
Sample Type: Client
Inject. Date: 07-Apr-2022 13:37:22 ALS Bottle#: 27 Worklist Smp#: 30
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-51-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 07:32:27 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 13:59:06
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		133913	125.0	164	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		387099	125.0	135	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.030	-0.011		1424326	129.4	480	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.775	594414	86.2	57.6	
14 4-Amino-2,6-dinitrotoluene								M
197.0	3.638	3.645	-0.007	0.840	15849	-0.1728	5.3	M
16 2-Amino-4,6-dinitrotoluene								M
197.0	3.945	3.976	-0.031	0.911	58684	0.4491	12.9	M
17 2,6-Dinitrotoluene								M
182.0	4.126	4.150	-0.024	0.952	52412	0.2812	12.7	M
* 18 2,4-dinitrotoluene-d3								
185.1	4.332	4.341	-0.009		4317124	125.0	120	
19 2,4-Dinitrotoluene								M
182.0	4.373	4.373	0.0	1.009	1020366	27.7	210	M
22 o-Nitrotoluene								M
137.0	4.992	5.002	-0.010	1.152	17154	1.23	3.7	M
23 p-Nitrotoluene								M
137.0	5.296	5.311	-0.015	1.222	27889	2.44	5.9	M

QC Flag Legend

Processing Flags

Report Date: 08-Apr-2022 07:32:33 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Review Flags

M - Manually Integrated

Reagents:

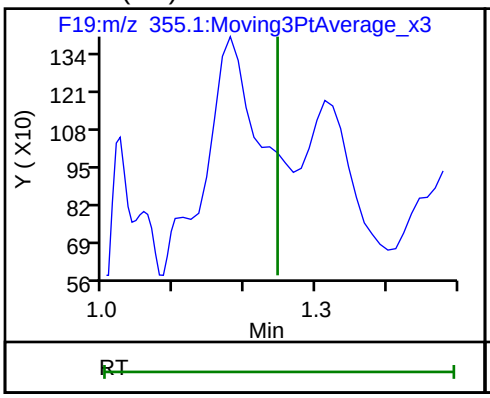
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 08-Apr-2022 07:32:33 Chrom Revision: 2.3 18-Mar-2022 09:07:22

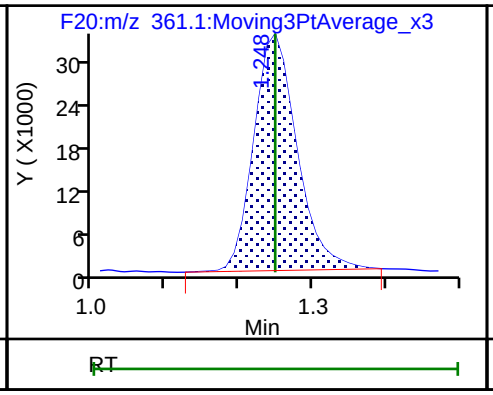
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07030.d
Injection Date: 07-Apr-2022 13:37:22 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-51-B Lab Sample ID: 280-160187-51
Client ID: 29SB172 (14.5-15)
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

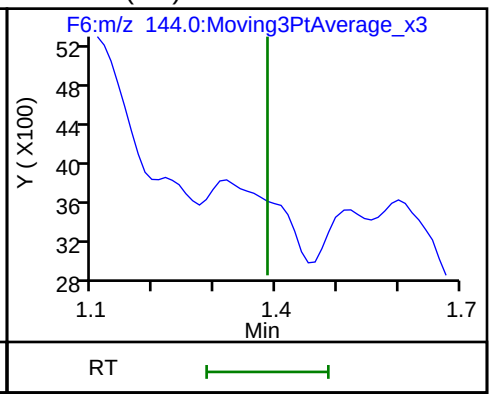
2 HMX (ND)



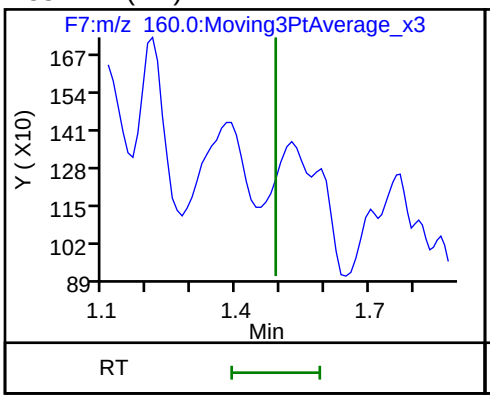
* 1 HMX-13C4



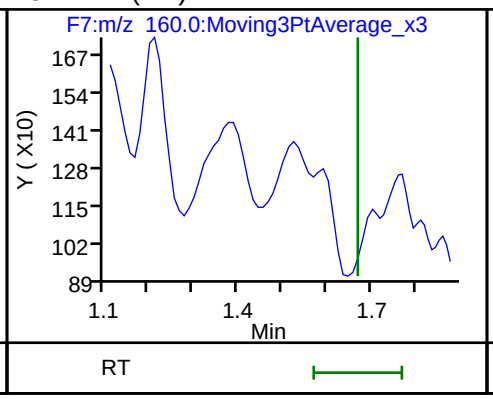
36 TNX (ND)



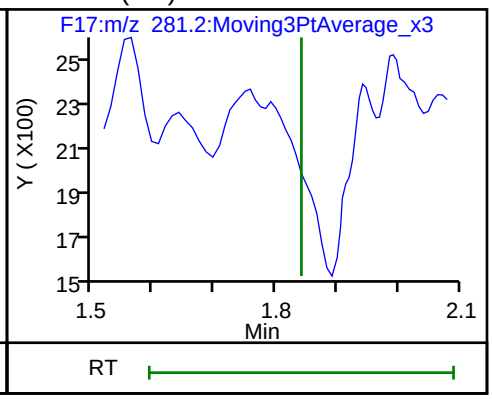
33 DNX (ND)



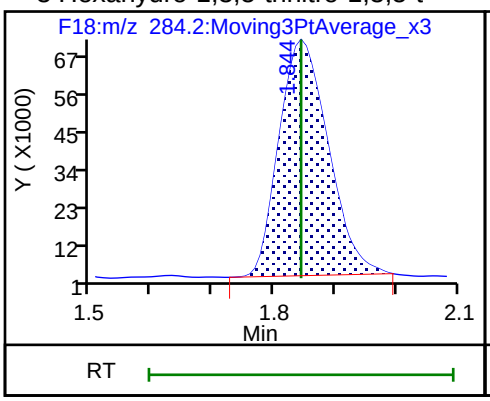
34 MNX (ND)



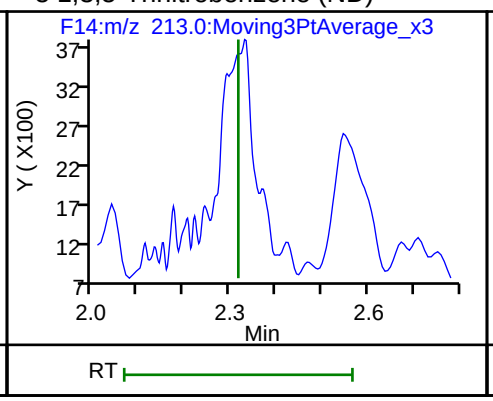
4 RDX (ND)



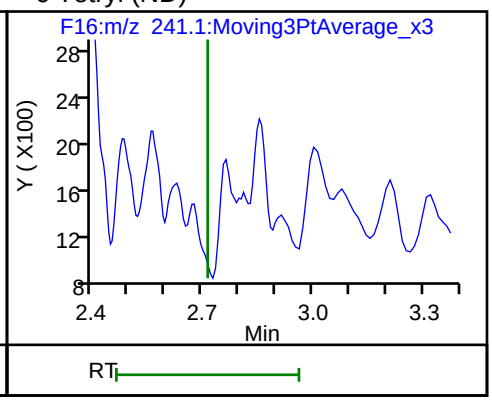
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



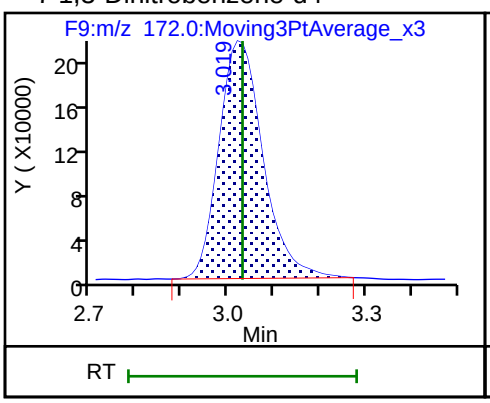
5 1,3,5-Trinitrobenzene (ND)



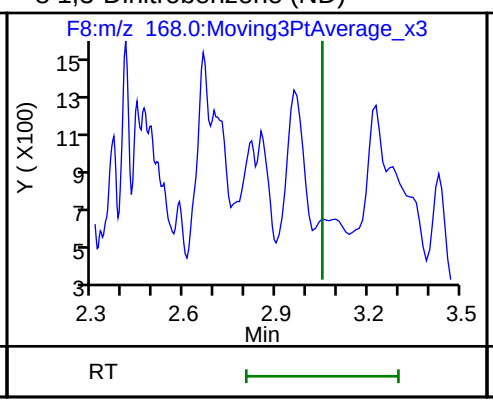
6 Tetryl (ND)



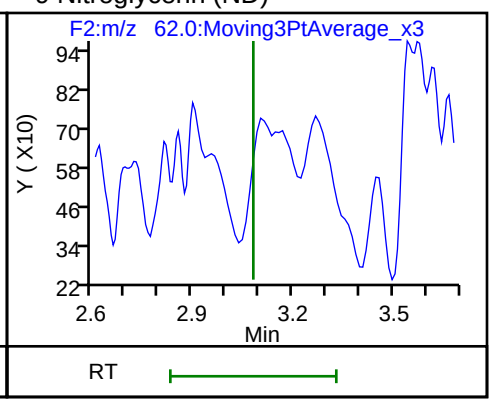
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

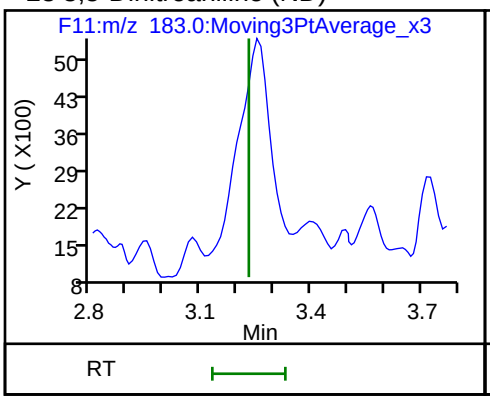


9 Nitroglycerin (ND)

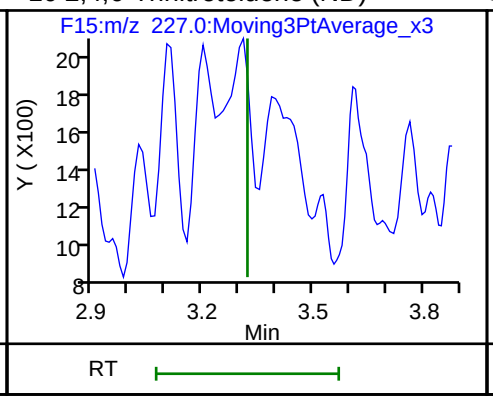


Report Date: 08-Apr-2022 07:32:33 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07030.d

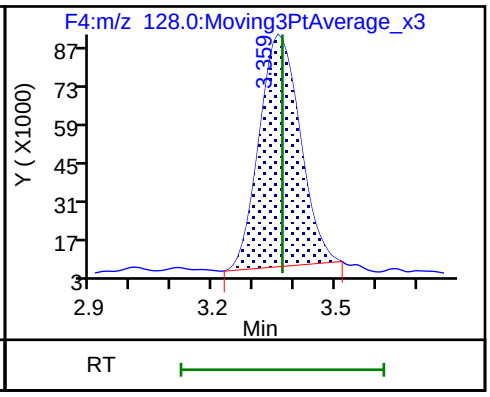
28 3,5-Dinitroaniline (ND)



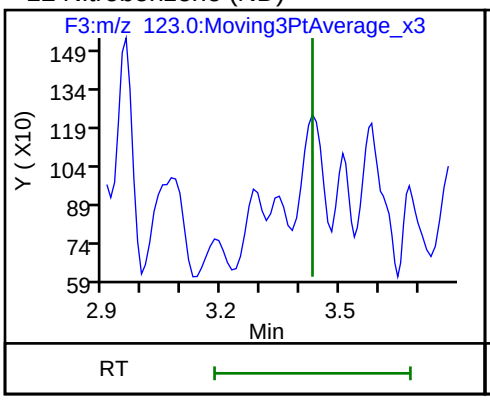
10 2,4,6-Trinitrotoluene (ND)



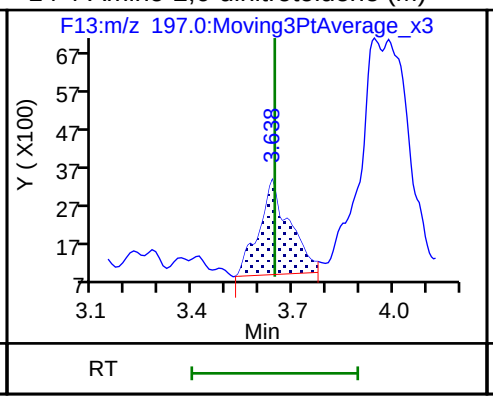
$ 11 Nitrobenzene-d5



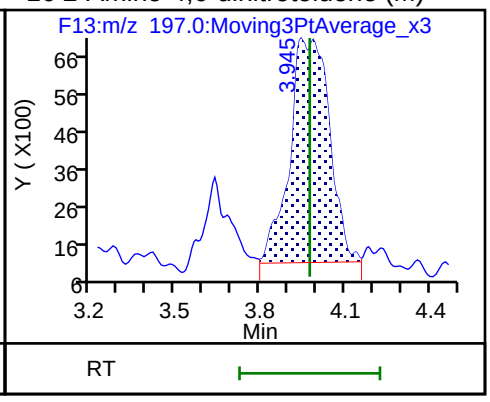
12 Nitrobenzene (ND)



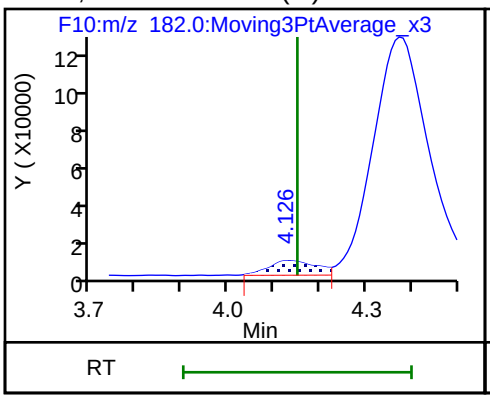
14 4-Amino-2,6-dinitrotoluene (M)



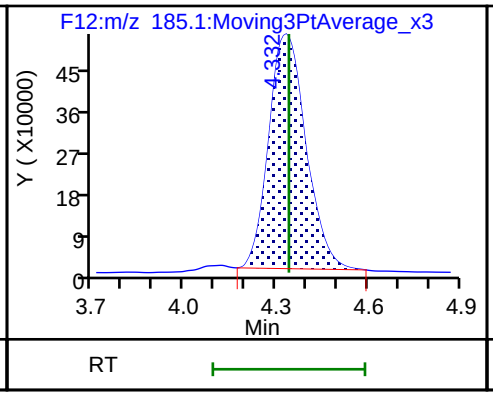
16 2-Amino-4,6-dinitrotoluene (M)



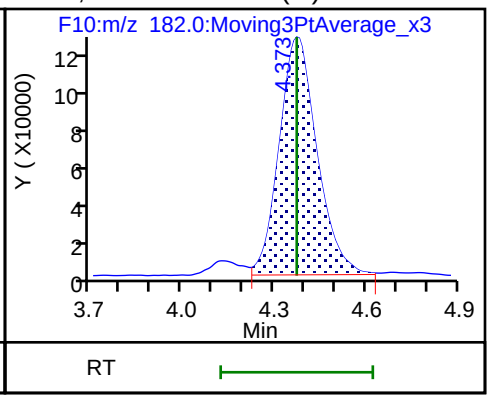
17 2,6-Dinitrotoluene (M)



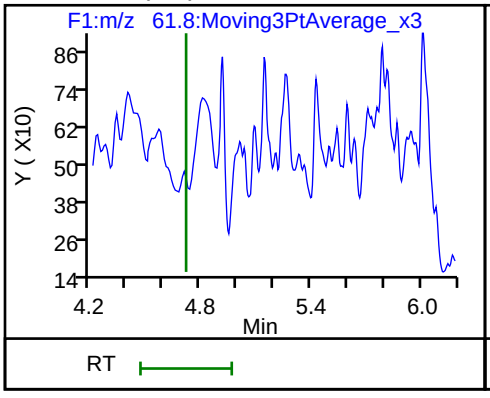
* 18 2,4-dinitrotoluene-d3



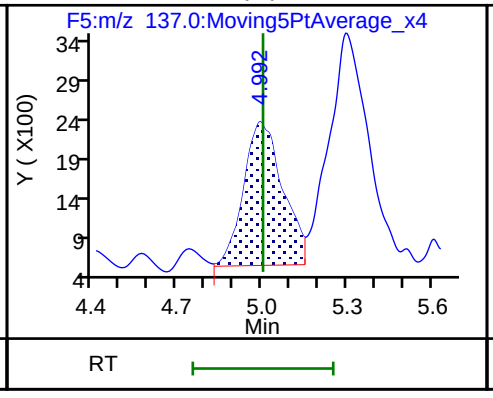
19 2,4-Dinitrotoluene (M)



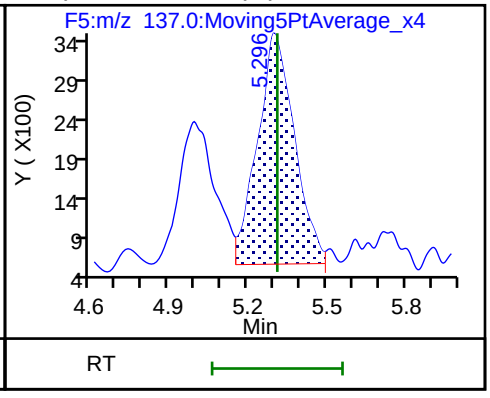
20 PETN (ND)



22 o-Nitrotoluene (M)



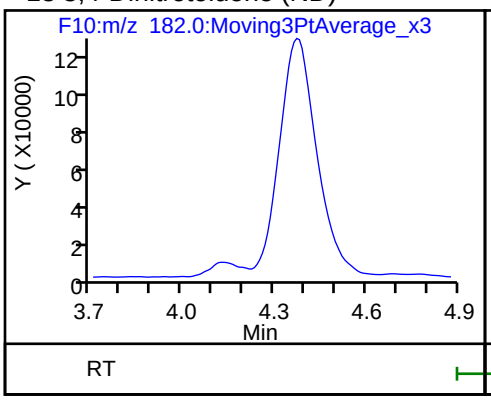
23 p-Nitrotoluene (M)



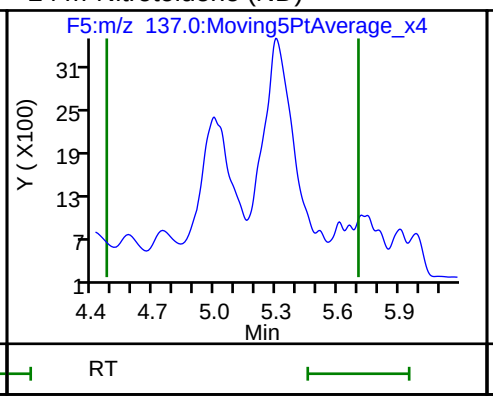
Report Date: 08-Apr-2022 07:32:33 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07030.d

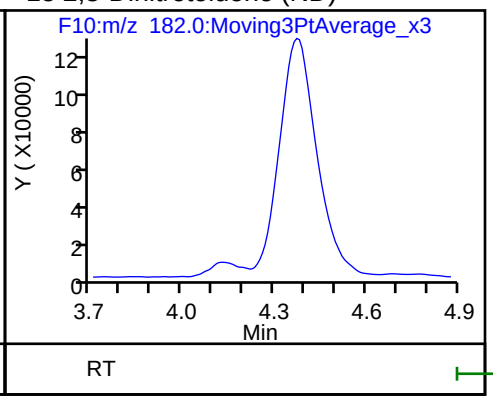
13 3,4-Dinitrotoluene (ND)



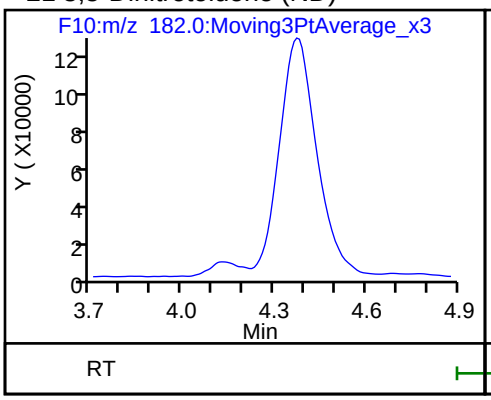
24 m-Nitrotoluene (ND)



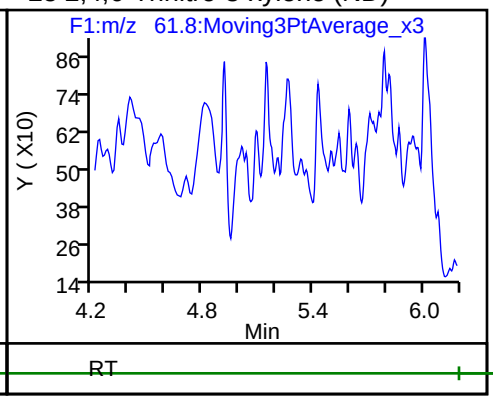
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 08-Apr-2022 07:32:33 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07030.d				
Lims ID:	280-160187-A-51-B				
Client ID:	29SB172 (14.5-15)				
Sample Type:	Client				
Inject. Date:	07-Apr-2022 13:37:22	ALS Bottle#:	27	Worklist Smp#:	30
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160187-A-51-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 07:32:27	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 13:59:06		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	86.2	85.88

Report Date: 08-Apr-2022 07:32:33 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

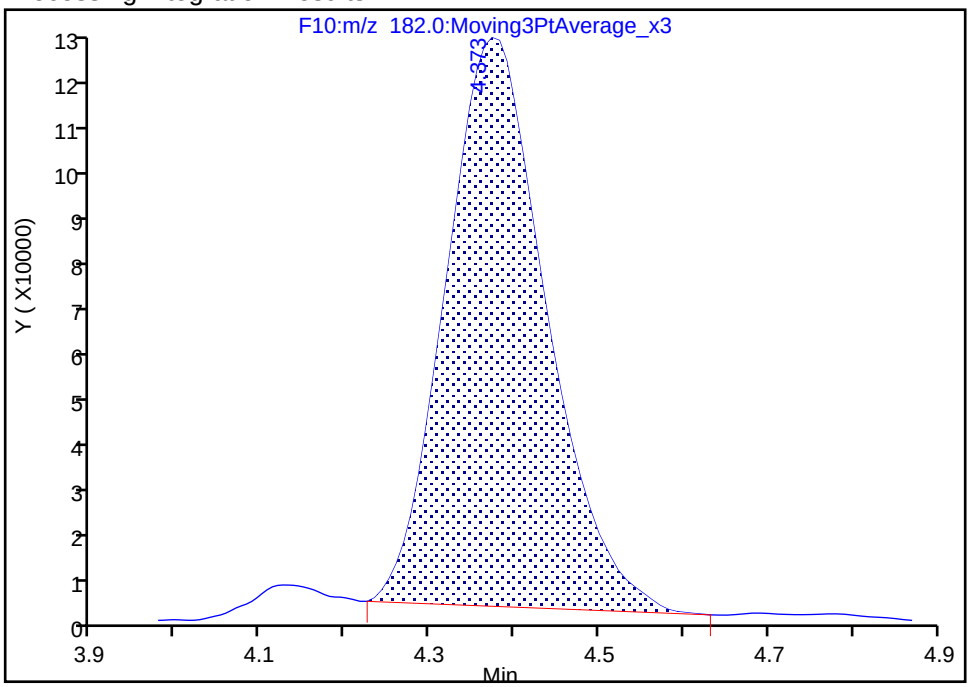
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07030.d				
Injection Date:	07-Apr-2022 13:37:22	Instrument ID:	LC_LCMS7		
Lims ID:	280-160187-A-51-B	Lab Sample ID:	280-160187-51		
Client ID:	29SB172 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	27	Worklist Smp#:	30
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F10:SIR		

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

Signal: 1

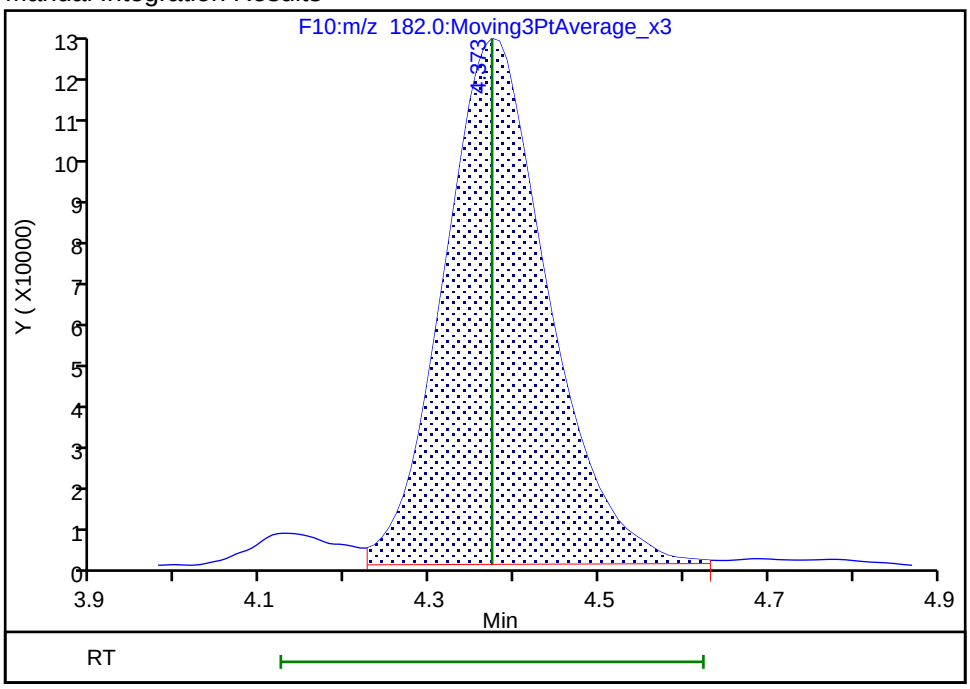
Processing Integration Results

RT: 4.37
Area: 965087
Amount: 26.195050
Amount Units: ug/l



Manual Integration Results

RT: 4.37
Area: 1020366
Amount: 27.730775
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 13:53:21

Audit Action: Assigned New Baseline Audit Reason: Baseline

Report Date: 08-Apr-2022 07:32:33 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

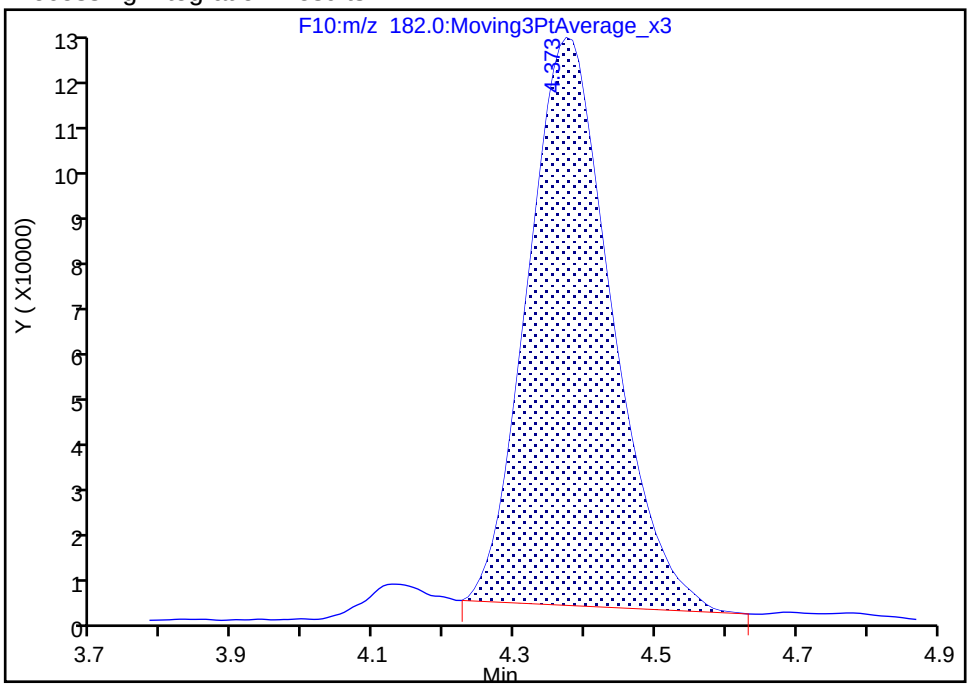
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07030.d				
Injection Date:	07-Apr-2022 13:37:22	Instrument ID:	LC_LCMS7		
Lims ID:	280-160187-A-51-B	Lab Sample ID:	280-160187-51		
Client ID:	29SB172 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	27	Worklist Smp#:	30
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F10:SIR		

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

Signal: 1

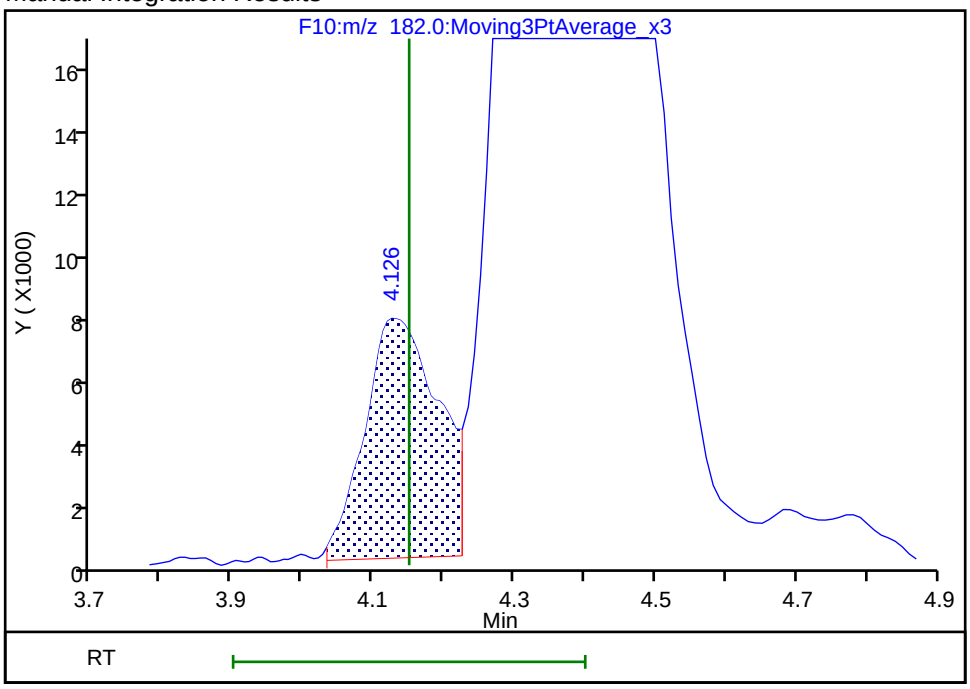
Processing Integration Results

RT: 4.37
Area: 965087
Amount: 13.174455
Amount Units: ug/l



Manual Integration Results

RT: 4.13
Area: 52412
Amount: 0.281249
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 13:53:21

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 08-Apr-2022 07:32:33 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

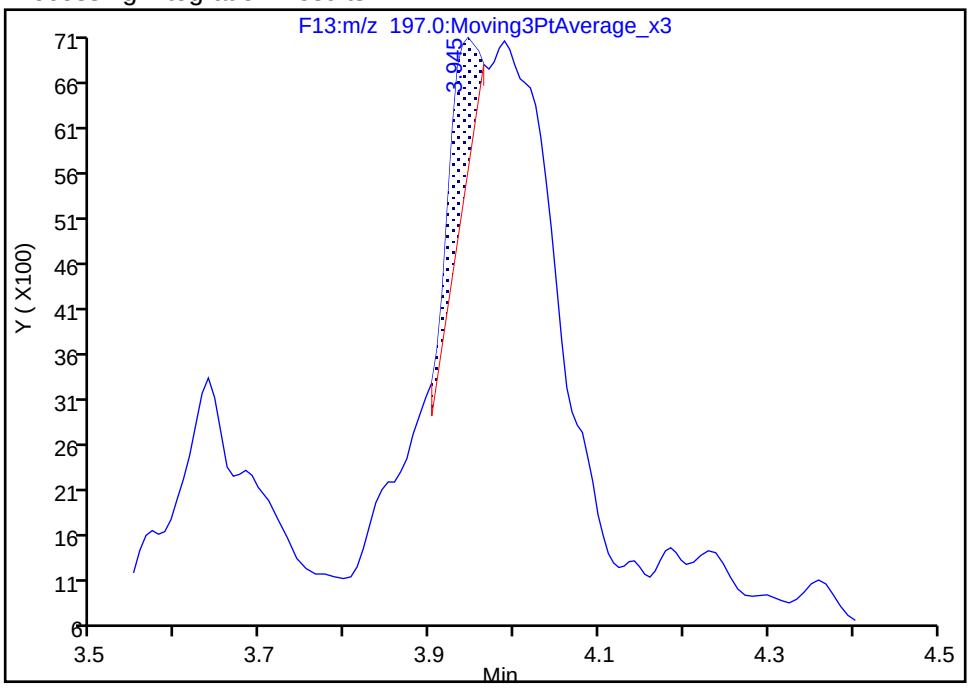
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07030.d				
Injection Date:	07-Apr-2022 13:37:22	Instrument ID:	LC_LCMS7		
Lims ID:	280-160187-A-51-B	Lab Sample ID:	280-160187-51		
Client ID:	29SB172 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	27	Worklist Smp#:	30
Injection Vol:	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

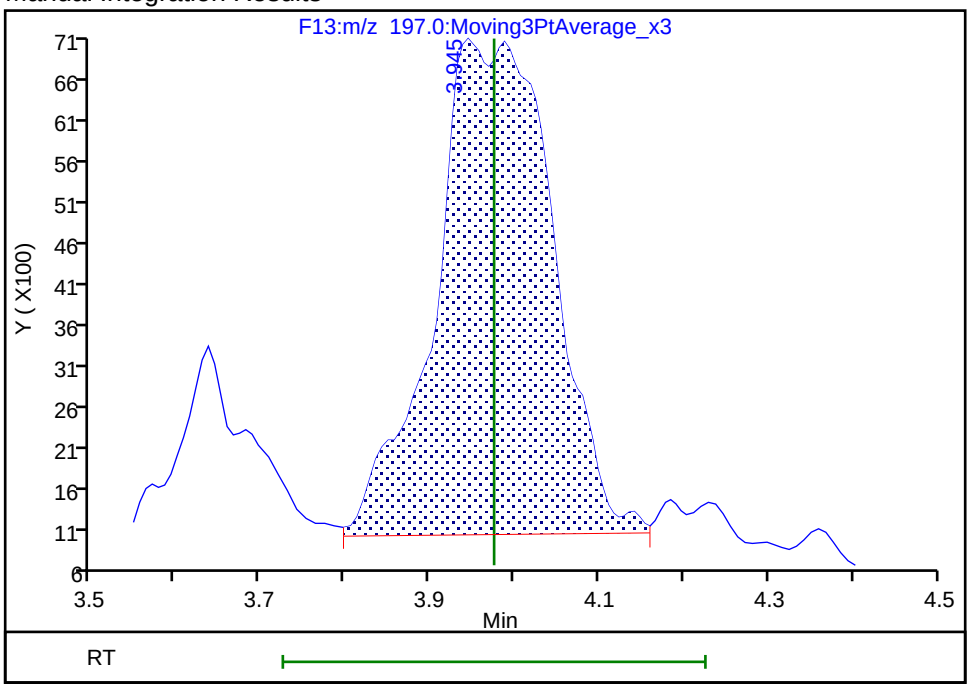
Processing Integration Results

RT: 3.94
Area: 3872
Amount: -0.345708
Amount Units: ug/l



Manual Integration Results

RT: 3.94
Area: 58684
Amount: 0.449118
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 13:53:03

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 08-Apr-2022 07:32:33 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

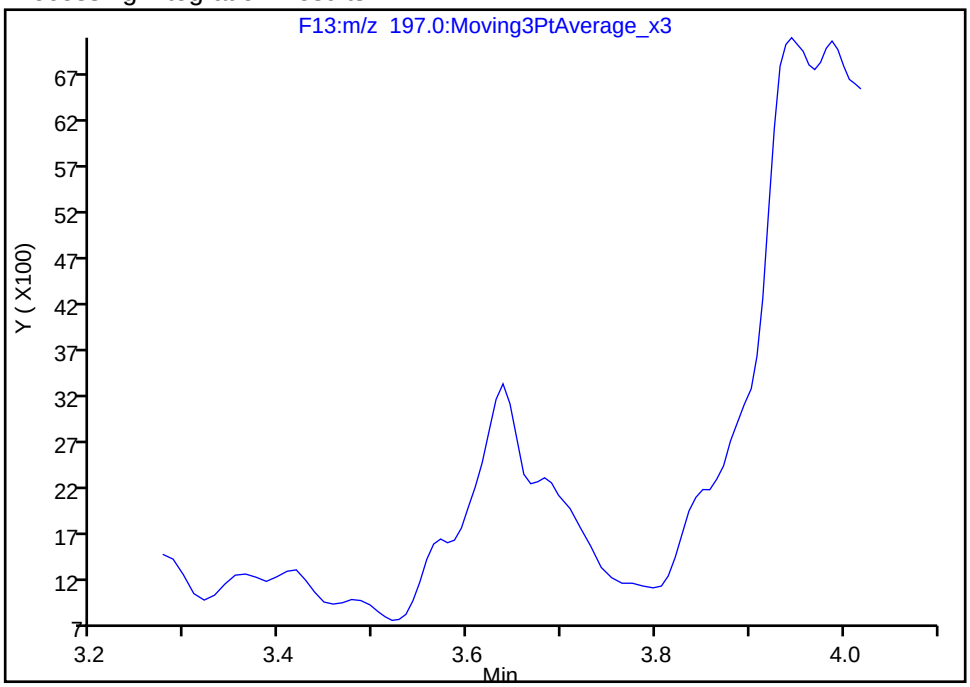
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07030.d				
Injection Date:	07-Apr-2022 13:37:22	Instrument ID:	LC_LCMS7		
Lims ID:	280-160187-A-51-B	Lab Sample ID:	280-160187-51		
Client ID:	29SB172 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	27	Worklist Smp#:	30
Injection Vol:	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

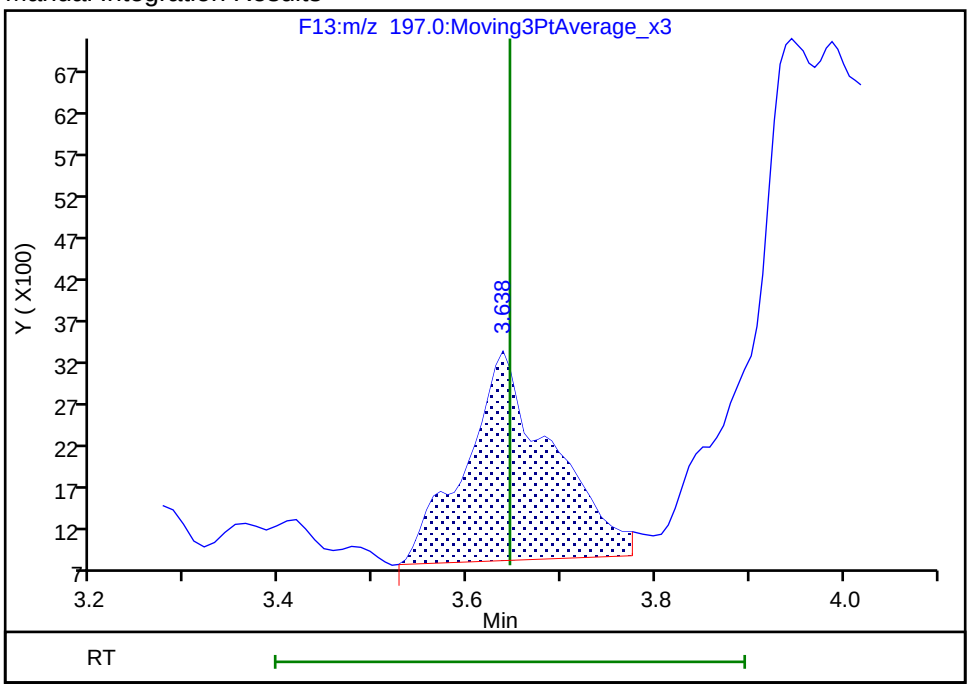
Not Detected
Expected RT: 3.65

Processing Integration Results



Manual Integration Results

RT: 3.64
Area: 15849
Amount: -0.172821
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 13:53:07
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 08-Apr-2022 07:32:33 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

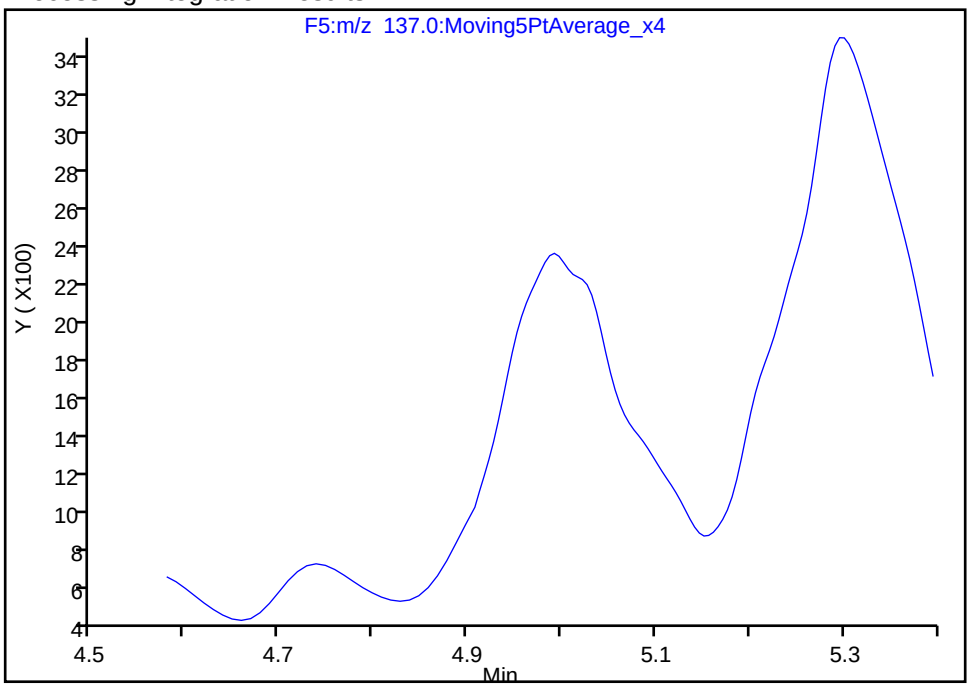
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07030.d				
Injection Date:	07-Apr-2022 13:37:22	Instrument ID:	LC_LCMS7		
Lims ID:	280-160187-A-51-B	Lab Sample ID:	280-160187-51		
Client ID:	29SB172 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	27	Worklist Smp#:	30
Injection Vol:	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

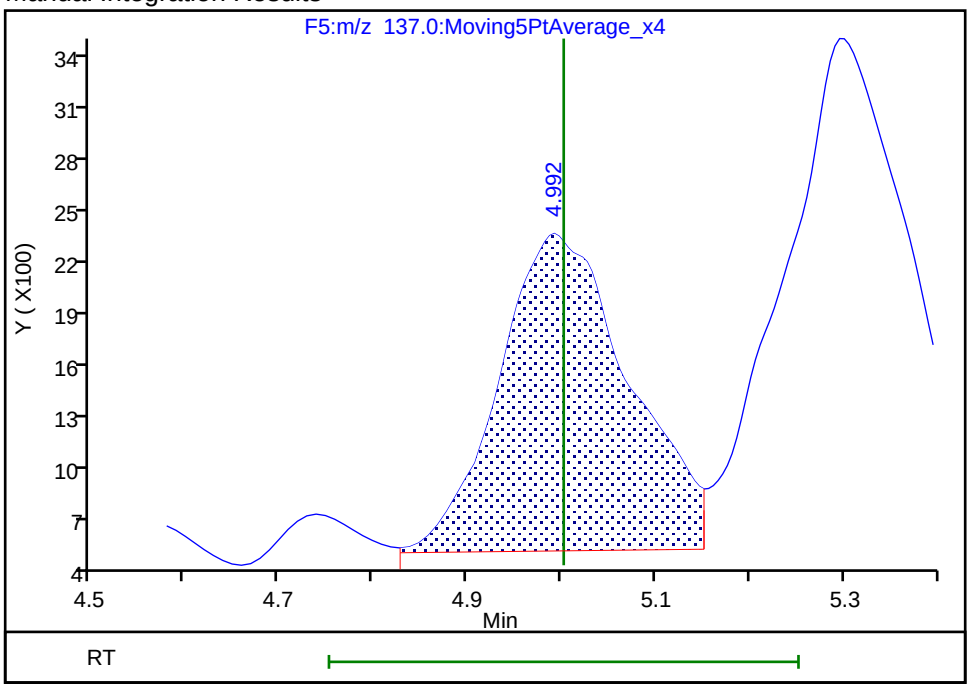
Not Detected
Expected RT: 5.00

Processing Integration Results



Manual Integration Results

RT: 4.99
Area: 17154
Amount: 1.228598
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 13:53:44
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 08-Apr-2022 07:32:33 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

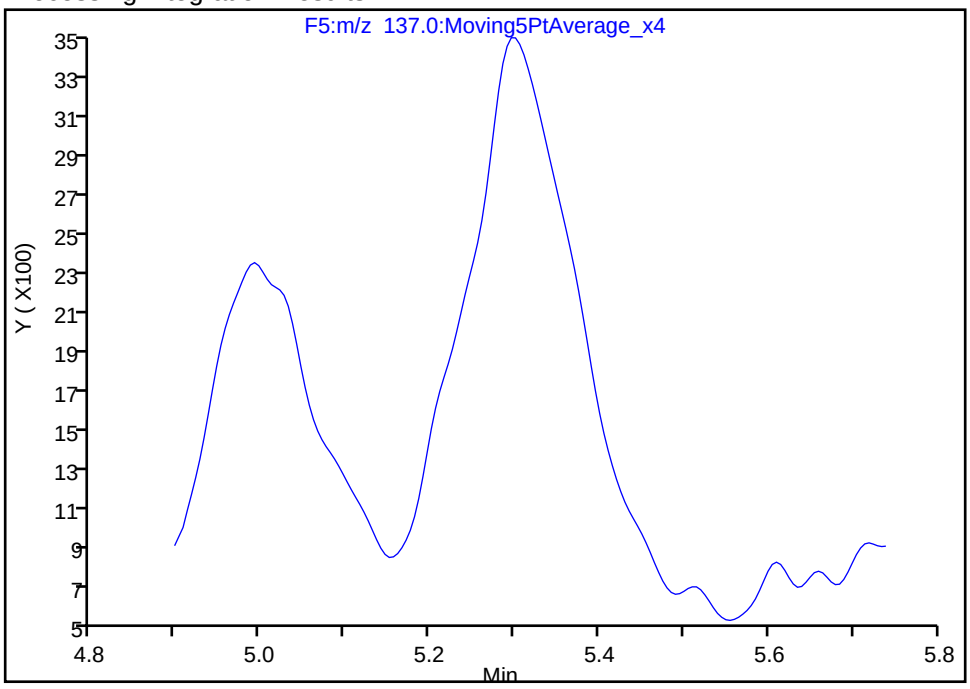
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07030.d				
Injection Date:	07-Apr-2022 13:37:22	Instrument ID:	LC_LCMS7		
Lims ID:	280-160187-A-51-B	Lab Sample ID:	280-160187-51		
Client ID:	29SB172 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	27	Worklist Smp#:	30
Injection Vol:	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

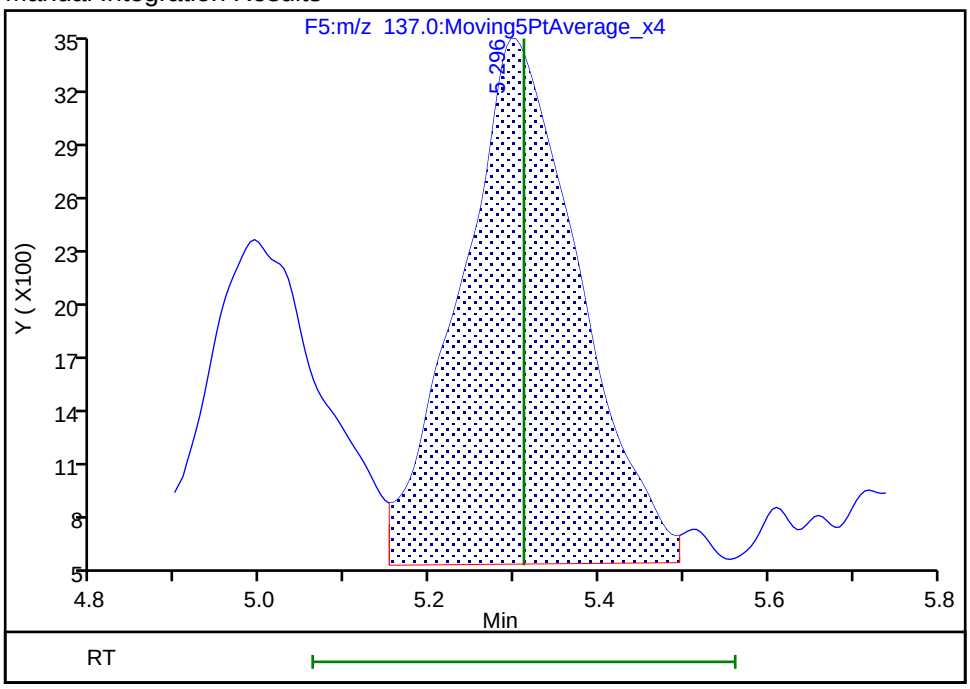
Not Detected
Expected RT: 5.31

Processing Integration Results



Manual Integration Results

RT: 5.30
Area: 27889
Amount: 2.441299
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 13:53:37
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: 29SB180 (14.5-15) | Lab Sample ID: 280-160187-52
Matrix: Solid | Lab File ID: ex722D07031.d
Analysis Method: 8321A | Date Collected: 03/24/2022 08:55
Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57
Sample wt/vol: 10.23(g) | Date Analyzed: 04/07/2022 13:43
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	0.049	U	0.098	0.049	0.044
99-65-0	1,3-Dinitrobenzene	0.049	U M	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	0.56	M	0.098	0.049	0.046
606-20-2	2,6-Dinitrotoluene	0.072	J M	0.098	0.049	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.054	J	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 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
88-72-2	o-Nitrotoluene	0.15		0.098	0.049	0.042
78-11-5	PETN	0.049	U	0.098	0.049	0.033
99-99-0	p-Nitrotoluene	0.20		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: 08-Apr-2022 07:32:34 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\ex722D07031.d
Lims ID: 280-160187-A-52-B
Client ID: 29SB180 (14.5-15)
Sample Type: Client
Inject. Date: 07-Apr-2022 13:43:58 ALS Bottle#: 28 Worklist Smp#: 31
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-52-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 07:32:27 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 14:40:27
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		129959	125.0	134	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		386804	125.0	142	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.030	-0.011		1362950	129.4	237	
28 3,5-Dinitroaniline								
183.0	3.241	3.230	0.011	1.073	108240	1.79	28.2	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.774	643912	97.3	92.4	
14 4-Amino-2,6-dinitrotoluene								
197.0	3.630	3.645	-0.015	0.836	70647	0.8623	15.1	
16 2-Amino-4,6-dinitrotoluene								
197.0	3.970	3.976	-0.006	0.914	978571	13.9	187	
17 2,6-Dinitrotoluene								M
182.0	4.138	4.150	-0.012	0.953	1327237	18.4	41.8	M
* 18 2,4-dinitrotoluene-d3								
185.1	4.341	4.341	0.0		4297314	125.0	111	
19 2,4-Dinitrotoluene								M
182.0	4.373	4.373	0.0	1.007	5112298	142.1	150	M
22 o-Nitrotoluene								
137.0	4.992	5.002	-0.010	1.150	405004	37.2	97.9	
23 p-Nitrotoluene								
137.0	5.306	5.311	-0.005	1.222	488386	51.8	114	
24 m-Nitrotoluene								M
137.0	5.685	5.704	-0.019	1.309	34430	5.75	7.9	M

Report Date: 08-Apr-2022 07:32:34 Chrom Revision: 2.3 18-Mar-2022 09:07:22

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

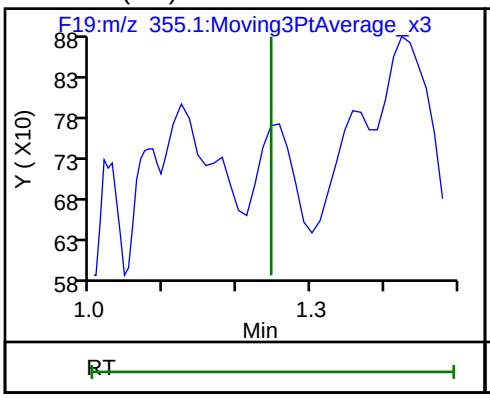
EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 08-Apr-2022 07:32:34 Chrom Revision: 2.3 18-Mar-2022 09:07:22

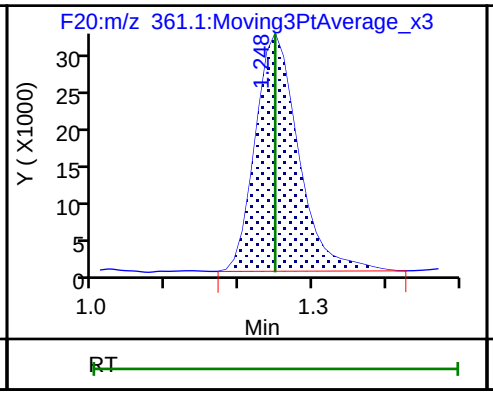
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07031.d
Injection Date: 07-Apr-2022 13:43:58 Instrument ID: LC_LCMS7
Lims ID: 280-160187-A-52-B Lab Sample ID: 280-160187-52
Client ID: 29SB180 (14.5-15)
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

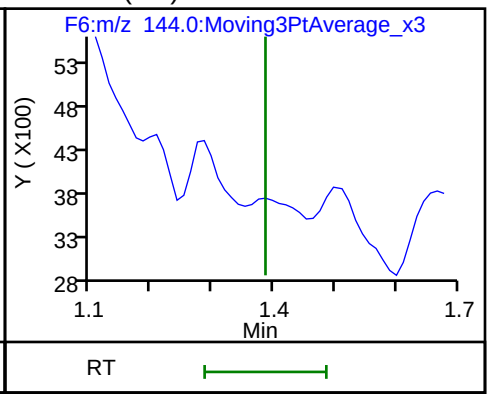
2 HMX (ND)



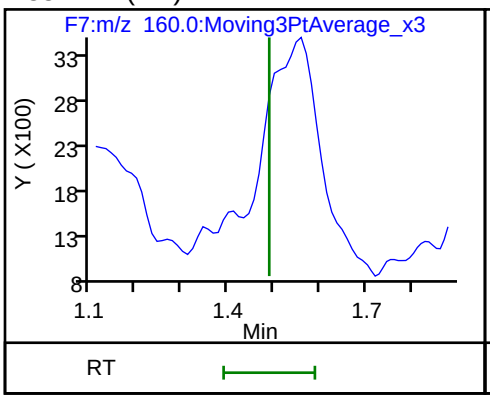
* 1 HMX-13C4



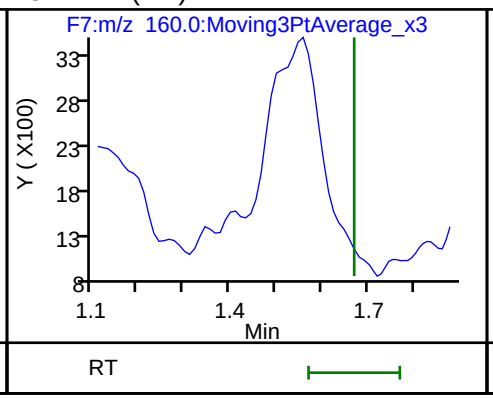
36 TNX (ND)



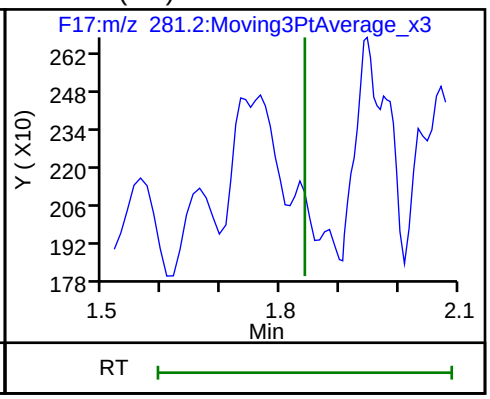
33 DNX (ND)



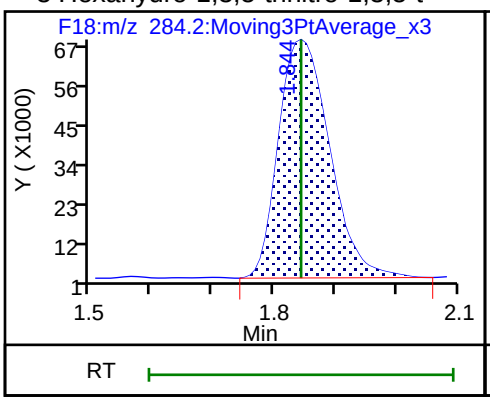
34 MNX (ND)



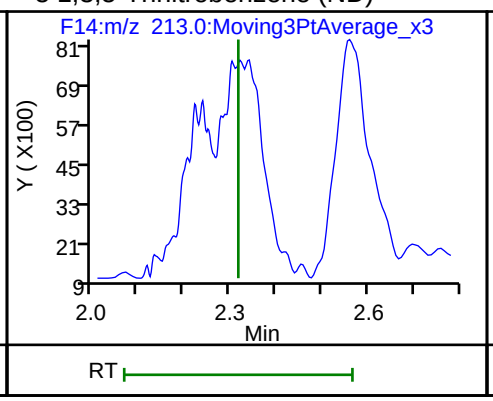
4 RDX (ND)



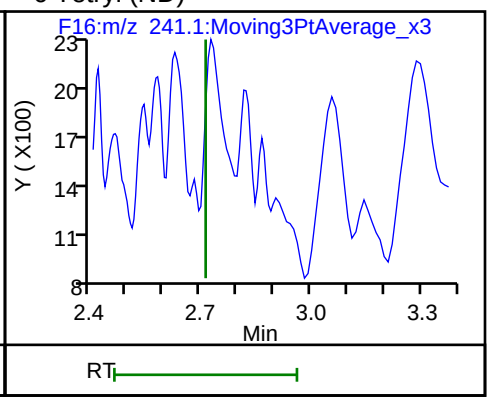
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



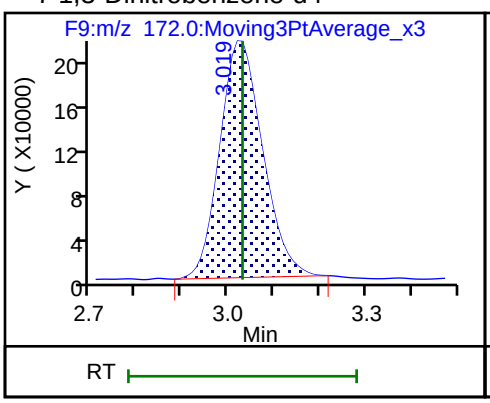
5 1,3,5-Trinitrobenzene (ND)



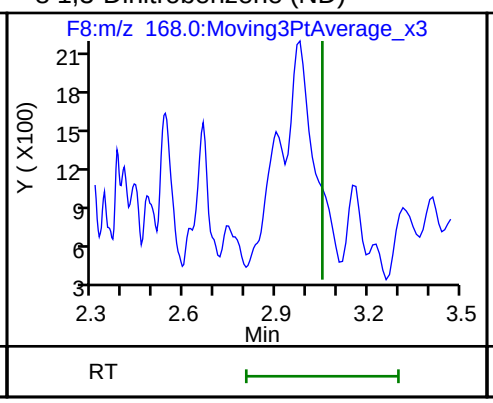
6 Tetryl (ND)



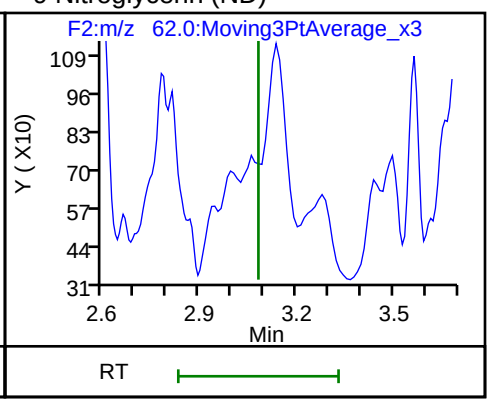
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)



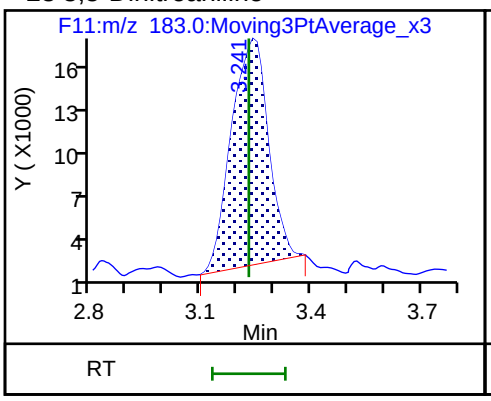
9 Nitroglycerin (ND)



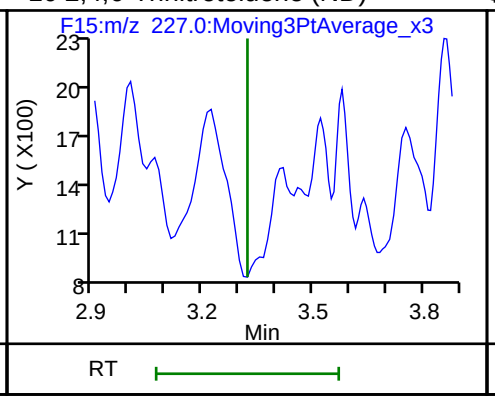
Report Date: 08-Apr-2022 07:32:34 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07031.d

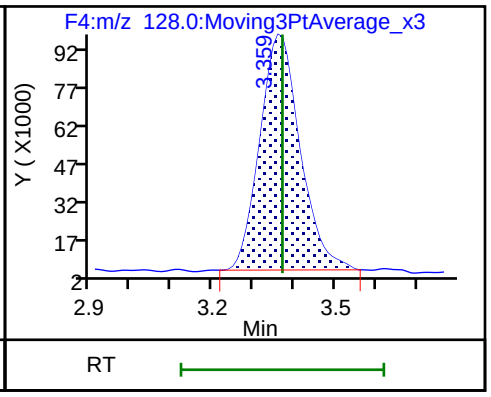
28 3,5-Dinitroaniline



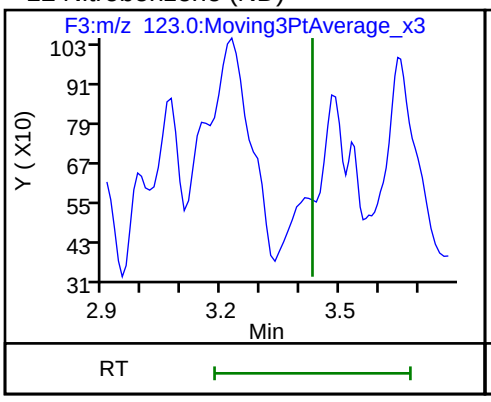
10 2,4,6-Trinitrotoluene (ND)



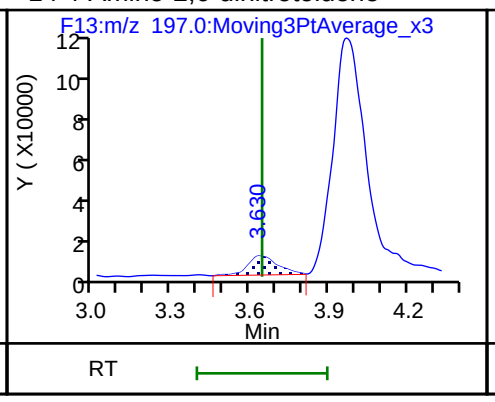
$ 11 Nitrobenzene-d5



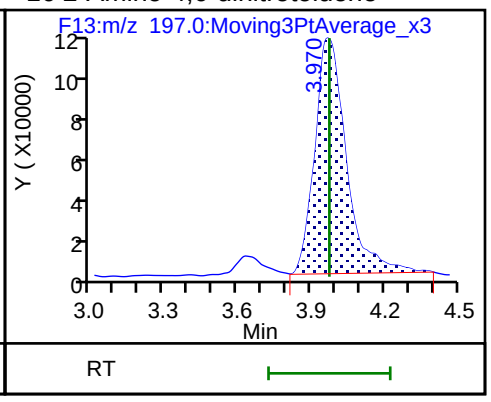
12 Nitrobenzene (ND)



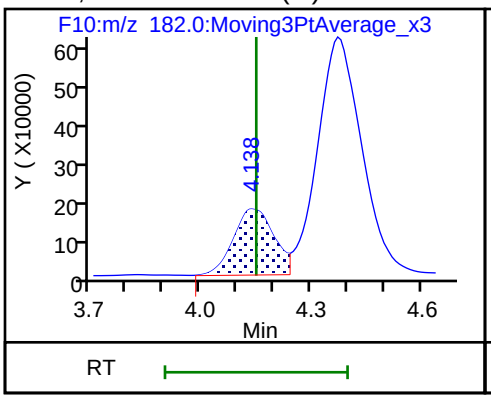
14 4-Amino-2,6-dinitrotoluene



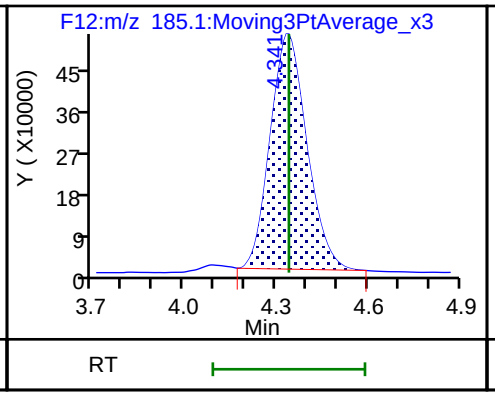
16 2-Amino-4,6-dinitrotoluene



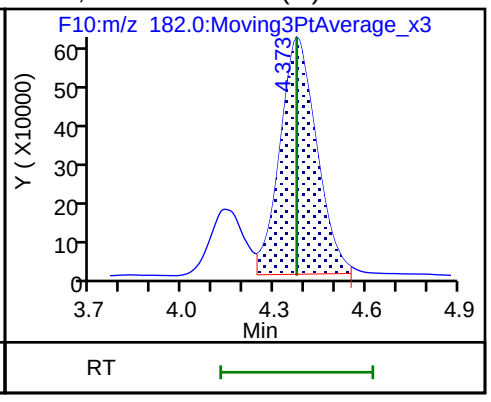
17 2,6-Dinitrotoluene (M)



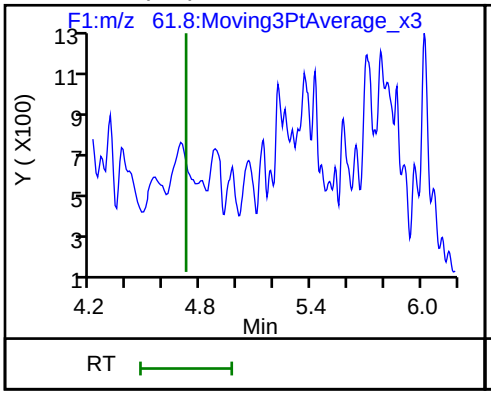
* 18 2,4-dinitrotoluene-d3



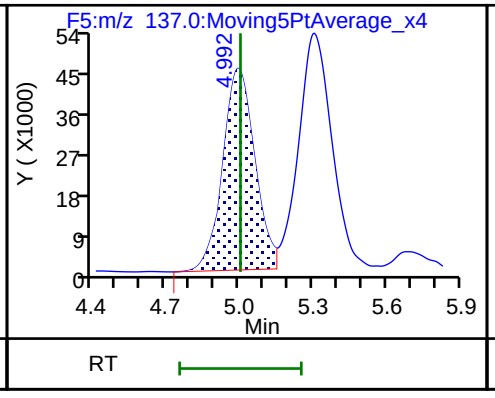
19 2,4-Dinitrotoluene (M)



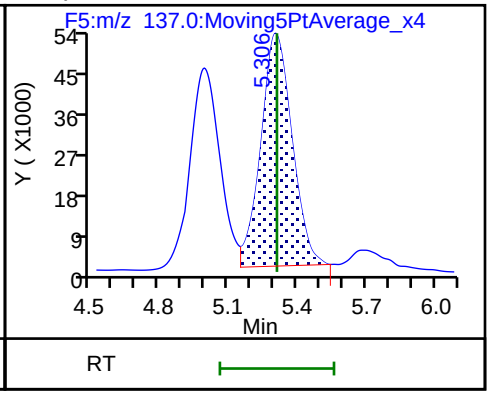
20 PETN (ND)



22 o-Nitrotoluene



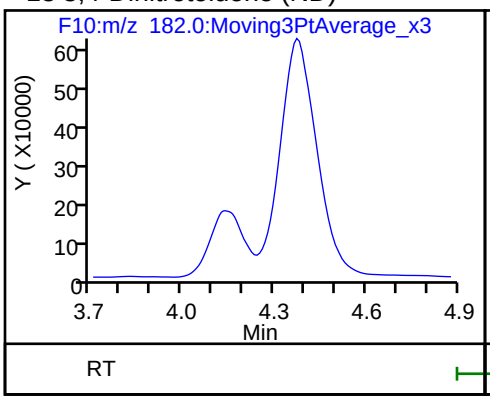
23 p-Nitrotoluene



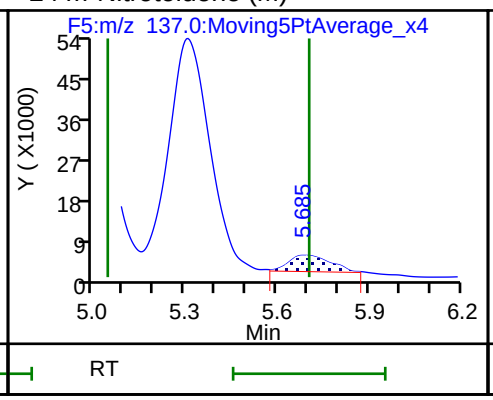
Report Date: 08-Apr-2022 07:32:34 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07031.d

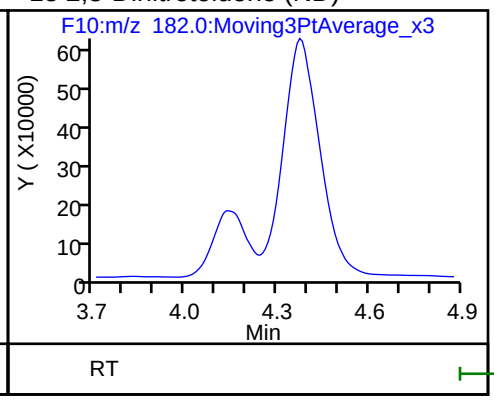
13 3,4-Dinitrotoluene (ND)



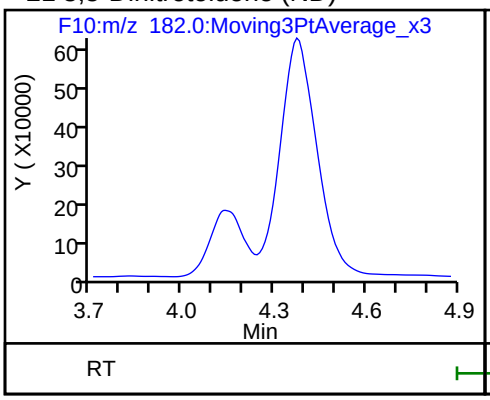
24 m-Nitrotoluene (M)



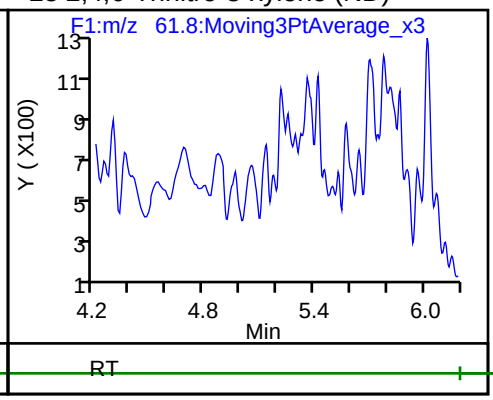
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 08-Apr-2022 07:32:34 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07031.d				
Lims ID:	280-160187-A-52-B				
Client ID:	29SB180 (14.5-15)				
Sample Type:	Client				
Inject. Date:	07-Apr-2022 13:43:58	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160187-A-52-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 07:32:27	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 14:40:27		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	97.3	96.99

Report Date: 08-Apr-2022 07:32:34 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

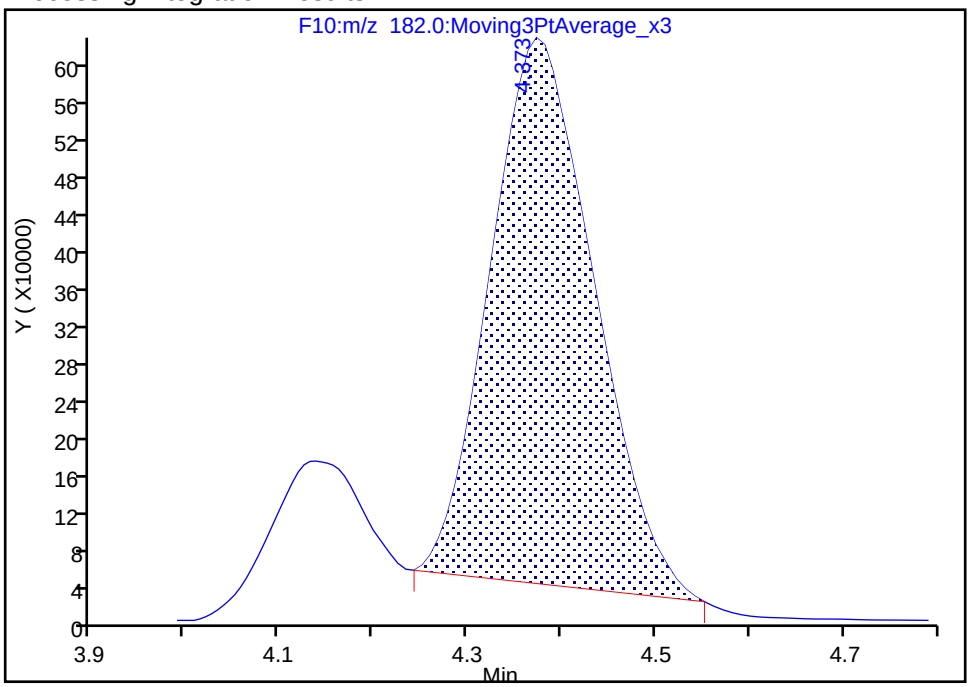
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07031.d				
Injection Date:	07-Apr-2022 13:43:58	Instrument ID:	LC_LCMS7		
Lims ID:	280-160187-A-52-B	Lab Sample ID:	280-160187-52		
Client ID:	29SB180 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F10:SIR		

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

Signal: 1

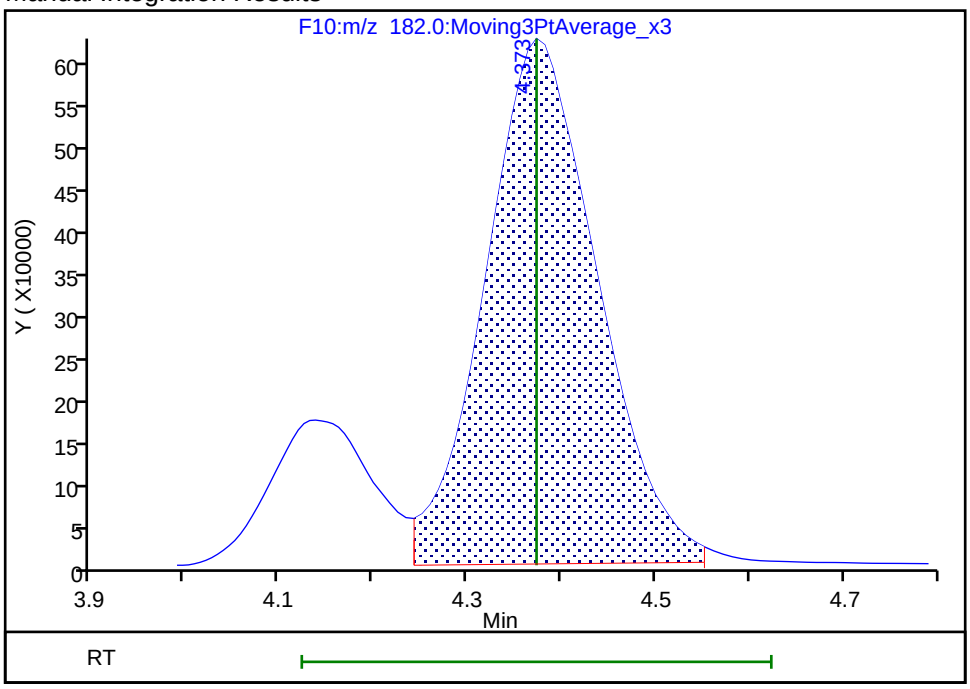
Processing Integration Results

RT: 4.37
Area: 4436561
Amount: 123.2054
Amount Units: ug/l



Manual Integration Results

RT: 4.37
Area: 5112298
Amount: 142.0648
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 14:40:02

Audit Action: Assigned New Baseline Audit Reason: Baseline

Report Date: 08-Apr-2022 07:32:34 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

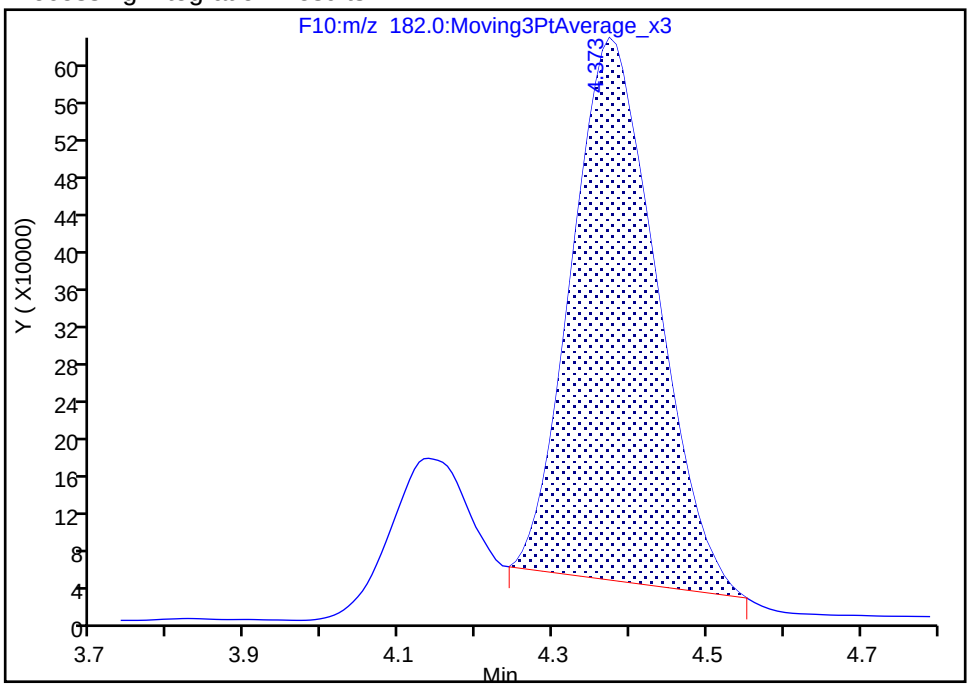
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07031.d				
Injection Date:	07-Apr-2022 13:43:58	Instrument ID:	LC_LCMS7		
Lims ID:	280-160187-A-52-B	Lab Sample ID:	280-160187-52		
Client ID:	29SB180 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F10:SIR		

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

Signal: 1

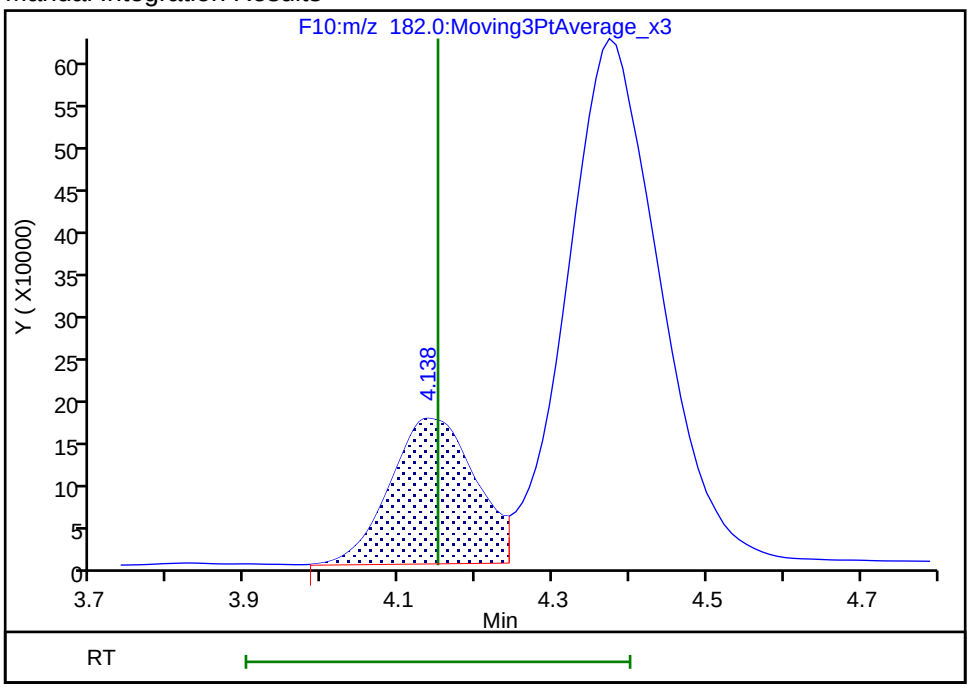
Processing Integration Results

RT: 4.37
Area: 4436561
Amount: 62.504303
Amount Units: ug/l



Manual Integration Results

RT: 4.14
Area: 1327237
Amount: 18.376920
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 14:40:12

Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 08-Apr-2022 07:32:34 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Manual Integration/User Assign Peak Report

Eurofins Denver

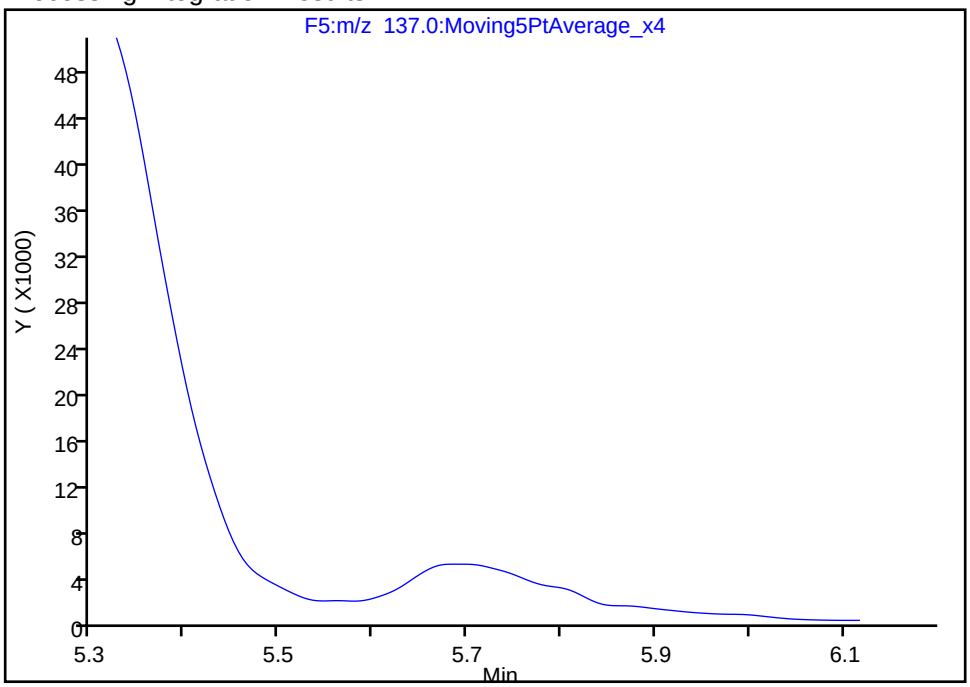
Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07031.d				
Injection Date:	07-Apr-2022 13:43:58	Instrument ID:	LC_LCMS7		
Lims ID:	280-160187-A-52-B	Lab Sample ID:	280-160187-52		
Client ID:	29SB180 (14.5-15)				
Operator ID:	acm	ALS Bottle#:	28	Worklist Smp#:	31
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F5:SIR		

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

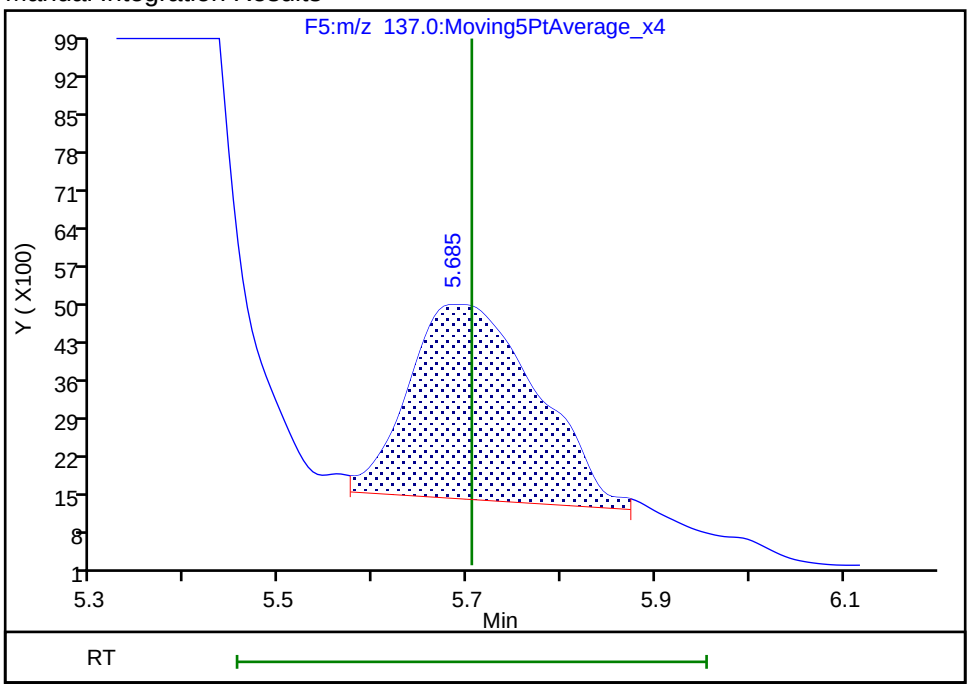
Not Detected
Expected RT: 5.70

Processing Integration Results



Manual Integration Results

RT: 5.68
Area: 34430
Amount: 5.752938
Amount Units: ug/l



Reviewer: meyera, 07-Apr-2022 14:40:23
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: 29SB173 (3-4) | Lab Sample ID: 280-160187-53
Matrix: Solid | Lab File ID: ex722D07033.d
Analysis Method: 8321A | Date Collected: 03/24/2022 09:08
Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57
Sample wt/vol: 10.4(g) | Date Analyzed: 04/07/2022 13:57
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.: 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
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 M	0.12	0.048	0.041
479-45-8	Tetryl	0.048	U M Q	0.096	0.048	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	96		68-140

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\ex722D07033.d
Lims ID: 280-160187-A-53-B
Client ID: 29SB173 (3-4)
Sample Type: Client
Inject. Date: 07-Apr-2022 13:57:10 ALS Bottle#: 29 Worklist Smp#: 33
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-53-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 14:41:13
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		132180	125.0	117	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		409611	125.0	205	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.030	-0.011		1375237	129.4	221	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.775	643080	96.3	99.8	
* 18 2,4-dinitrotoluene-d3								
185.1	4.332	4.341	-0.009		4228448	125.0	114	

QC Flag Legend
Processing Flags

Reagents:
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\ex722D07033.d

Injection Date: 07-Apr-2022 13:57:10 Instrument ID: LC_LCMS7

Lims ID: 280-160187-A-53-B Lab Sample ID: 280-160187-53

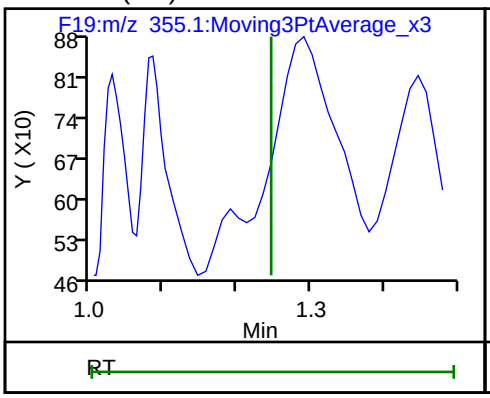
Client ID: 29SB173 (3-4)

Operator ID: acm ALS Bottle#: 29 Worklist Smp#: 33

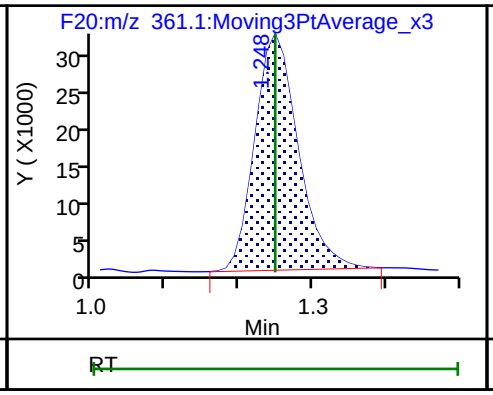
Injection Vol: 10.0 ul Dil. Factor: 1.0000

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

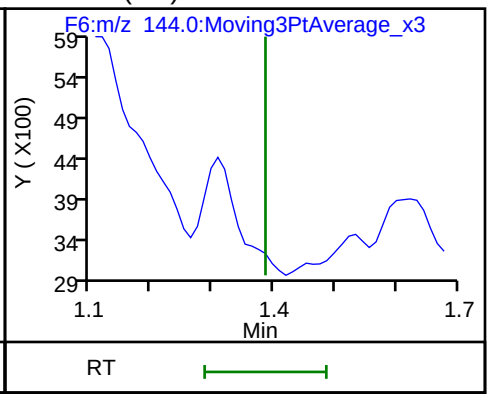
2 HMX (ND)



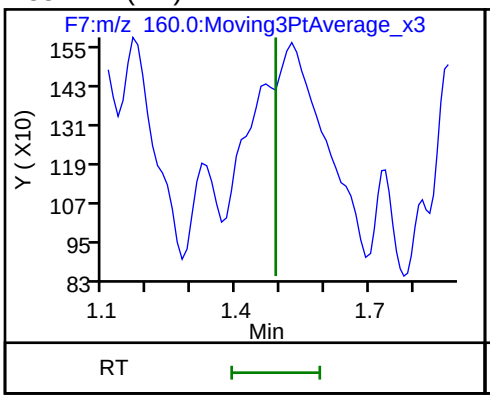
* 1 HMX-13C4



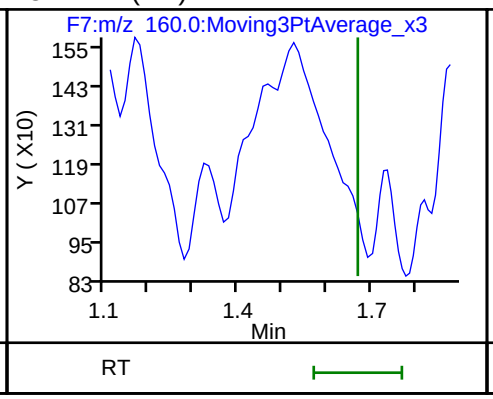
36 TNX (ND)



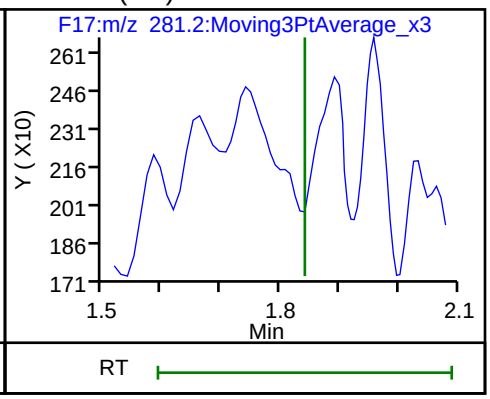
33 DNX (ND)



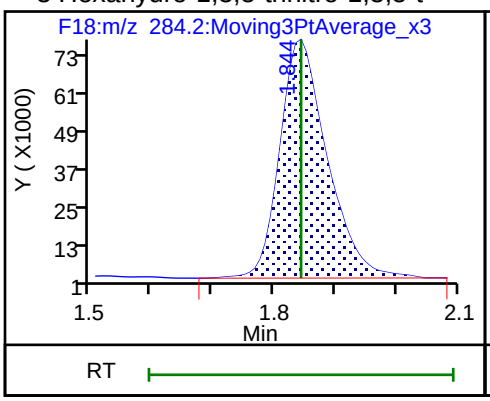
34 MNX (ND)



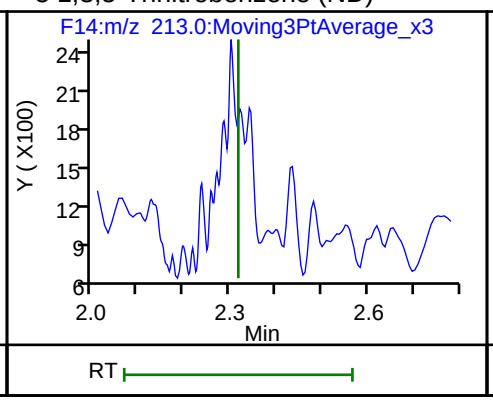
4 RDX (ND)



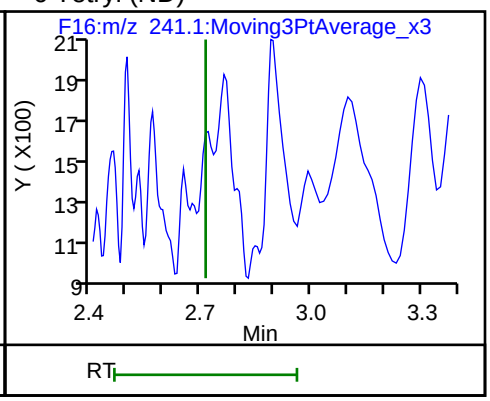
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



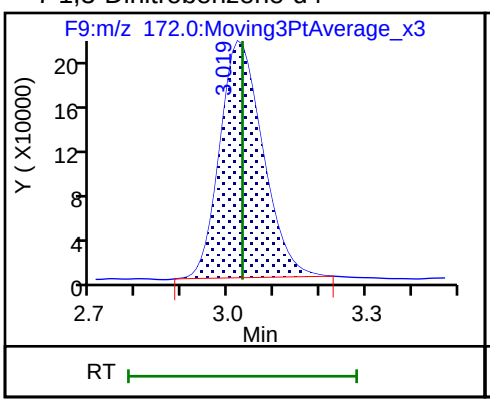
5 1,3,5-Trinitrobenzene (ND)



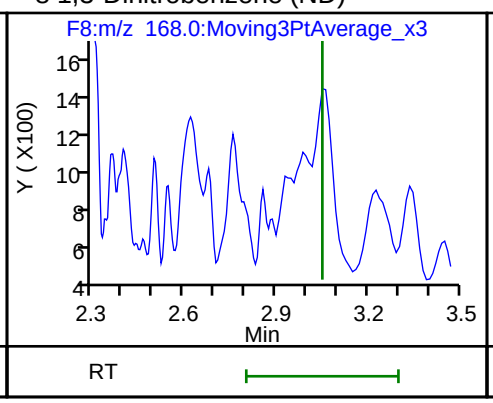
6 Tetryl (ND)



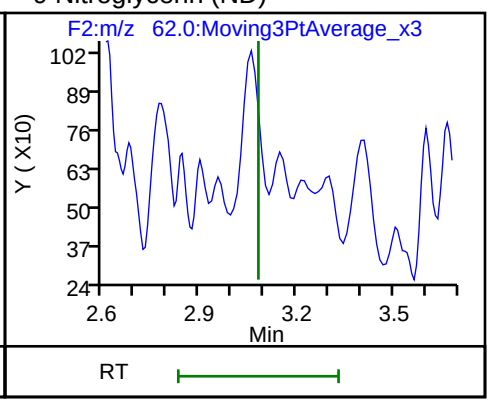
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

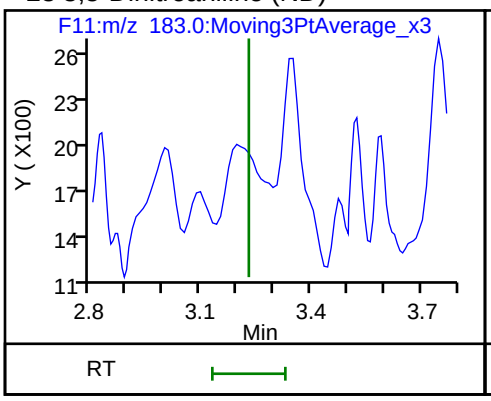


9 Nitroglycerin (ND)

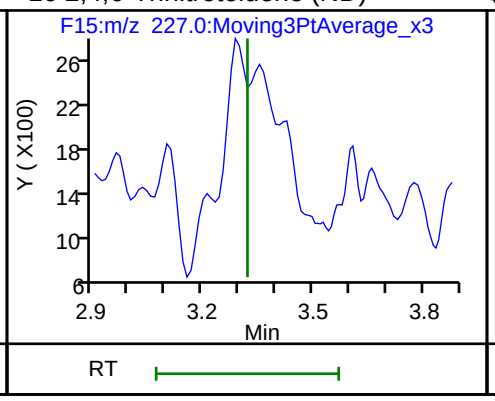


Report Date: 08-Apr-2022 07:32:35 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07033.d

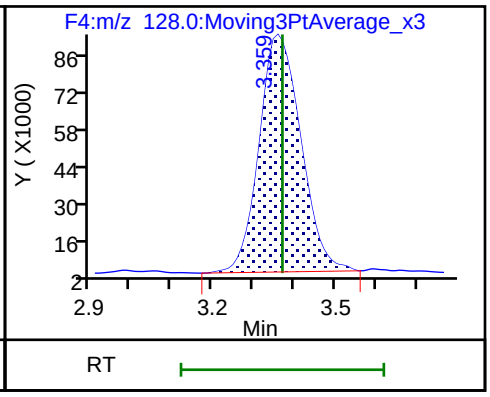
28 3,5-Dinitroaniline (ND)



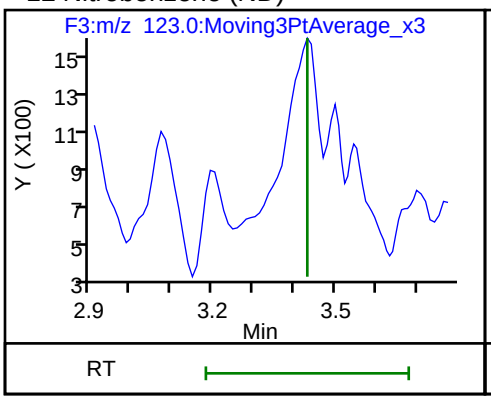
10 2,4,6-Trinitrotoluene (ND)



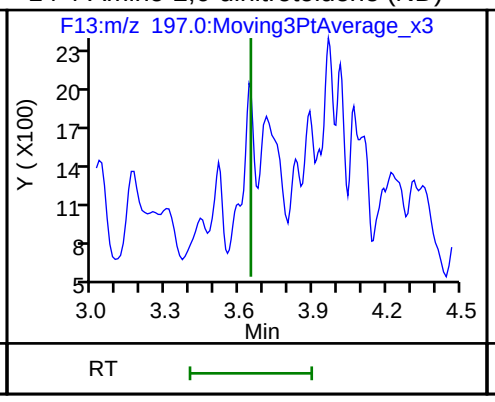
$ 11 Nitrobenzene-d5



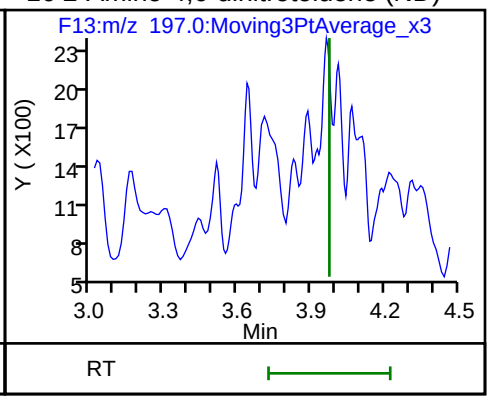
12 Nitrobenzene (ND)



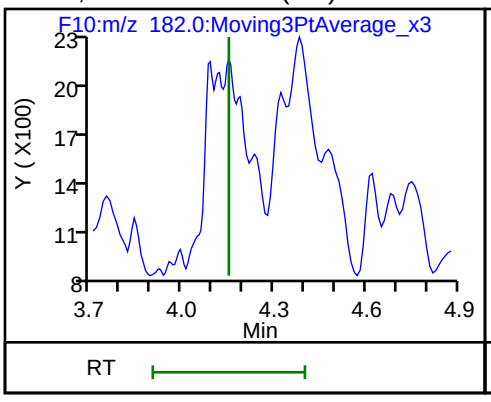
14 4-Amino-2,6-dinitrotoluene (ND)



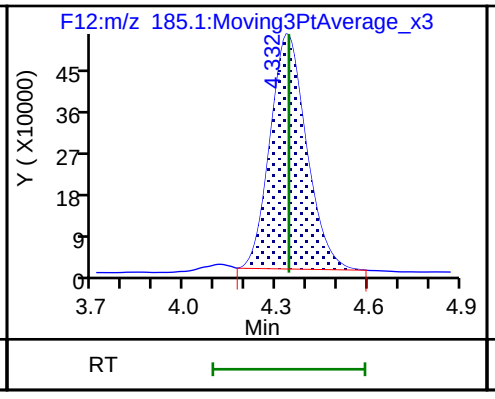
16 2-Amino-4,6-dinitrotoluene (ND)



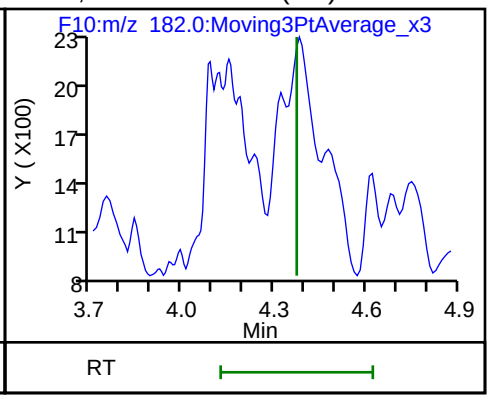
17 2,6-Dinitrotoluene (ND)



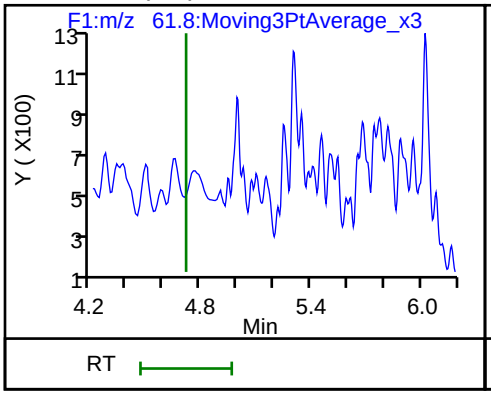
* 18 2,4-dinitrotoluene-d3



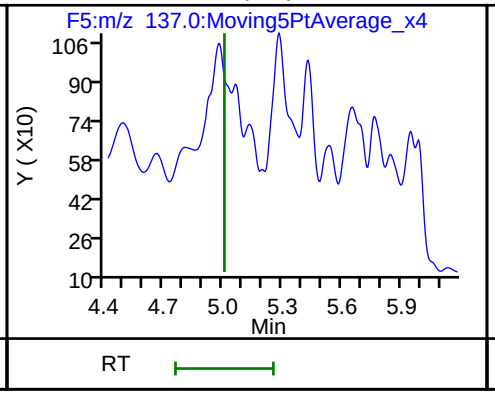
19 2,4-Dinitrotoluene (ND)



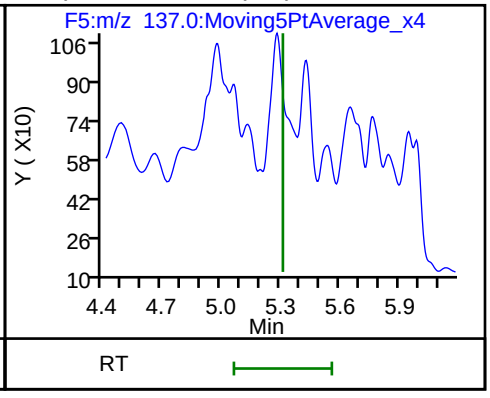
20 PETN (ND)



22 o-Nitrotoluene (ND)



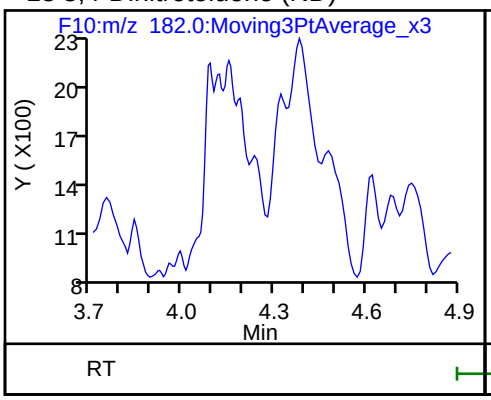
23 p-Nitrotoluene (ND)



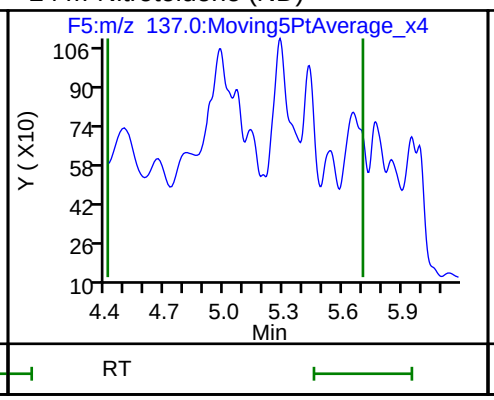
Report Date: 08-Apr-2022 07:32:35 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07033.d

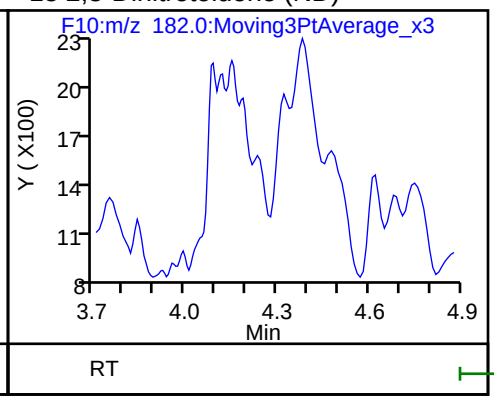
13 3,4-Dinitrotoluene (ND)



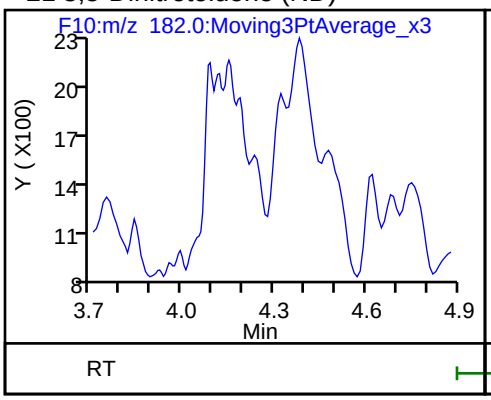
24 m-Nitrotoluene (ND)



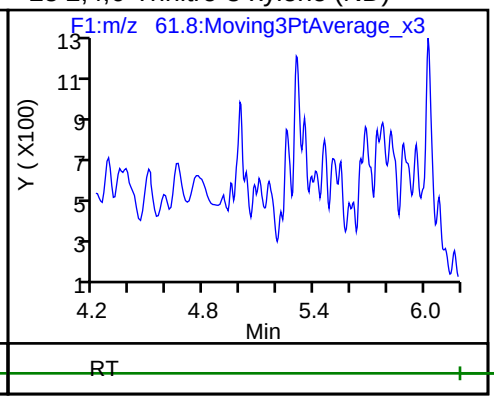
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



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

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07033.d				
Lims ID:	280-160187-A-53-B				
Client ID:	29SB173 (3-4)				
Sample Type:	Client				
Inject. Date:	07-Apr-2022 13:57:10	ALS Bottle#:	29	Worklist Smp#:	33
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-160187-A-53-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 14:41:13		

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	96.3	96.02

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB173 (6-7) | Lab Sample ID: 280-160187-54
Matrix: Solid | Lab File ID: ex722D07034.d
Analysis Method: 8321A | Date Collected: 03/24/2022 09:10
Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57
Sample wt/vol: 10.46(g) | Date Analyzed: 04/07/2022 14:03
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.: 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
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	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: 08-Apr-2022 07:32:36 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\ex722D07034.d
Lims ID: 280-160187-A-54-B
Client ID: 29SB173 (6-7)
Sample Type: Client
Inject. Date: 07-Apr-2022 14:03:46 ALS Bottle#: 30 Worklist Smp#: 34
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-54-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 14:41:22
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		109894	125.0	84.4	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		373784	125.0	86.6	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.019	3.030	-0.011		1336928	129.4	243	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.774	629677	97.0	141	
* 18 2,4-dinitrotoluene-d3								
185.1	4.341	4.341	0.0		4100882	125.0	108	

QC Flag Legend
Processing Flags

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

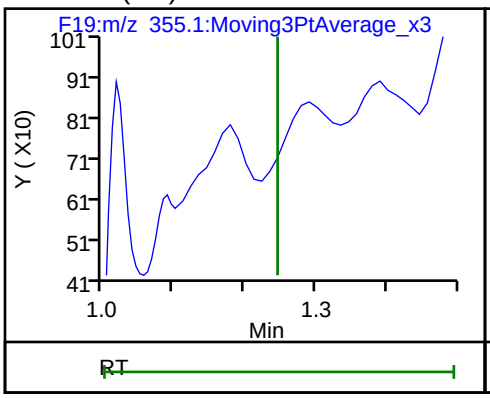
Report Date: 08-Apr-2022 07:32:36 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

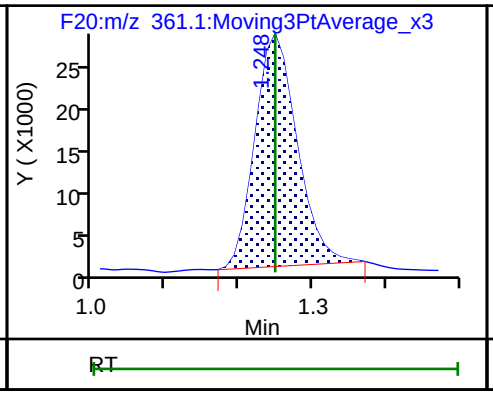
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07034.d

Injection Date:	07-Apr-2022 14:03:46	Instrument ID:	LC_LCMS7
Lims ID:	280-160187-A-54-B	Lab Sample ID:	280-160187-54
Client ID:	29SB173 (6-7)		
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

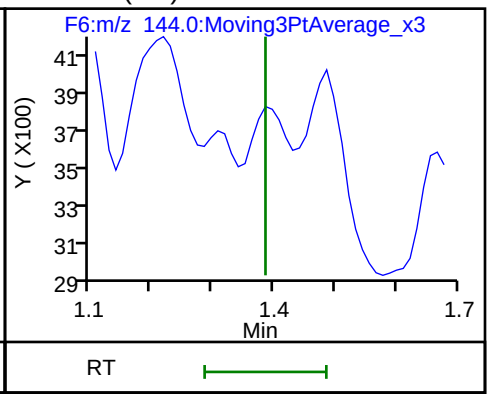
2 HMX (ND)



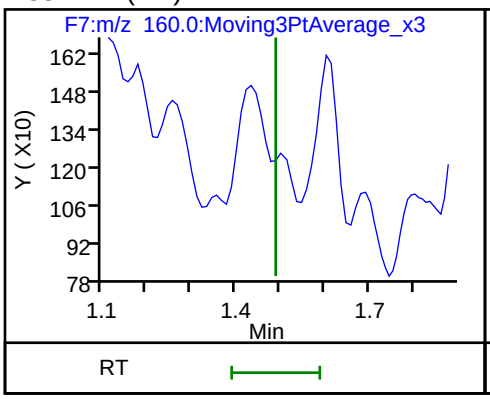
* 1 HMX-13C4



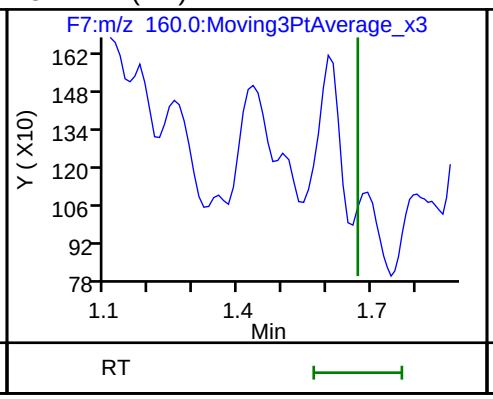
36 TNX (ND)



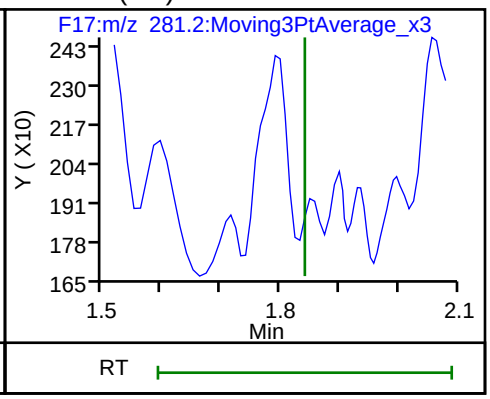
33 DNX (ND)



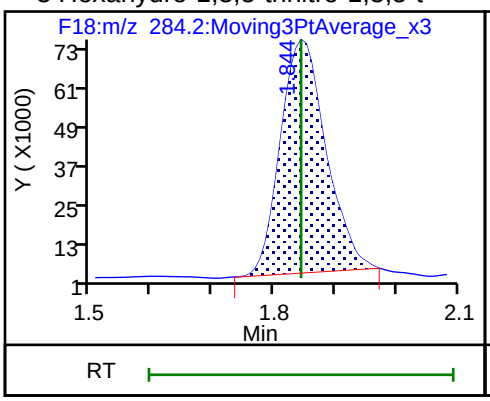
34 MNX (ND)



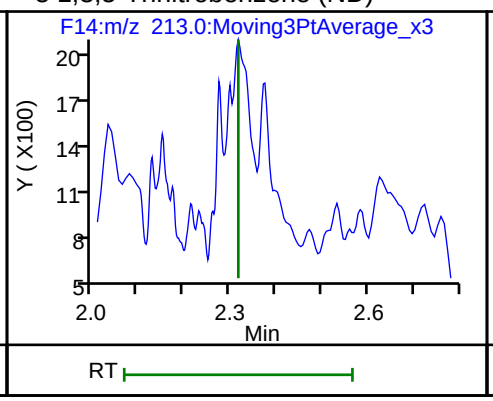
4 RDX (ND)



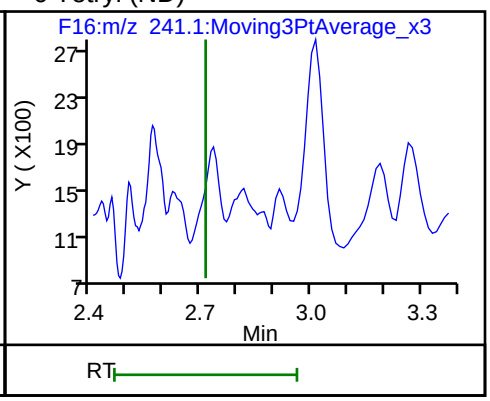
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



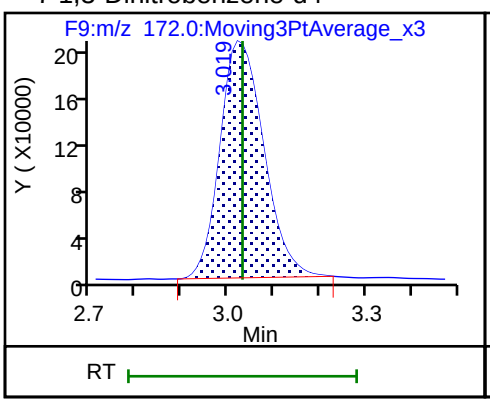
5 1,3,5-Trinitrobenzene (ND)



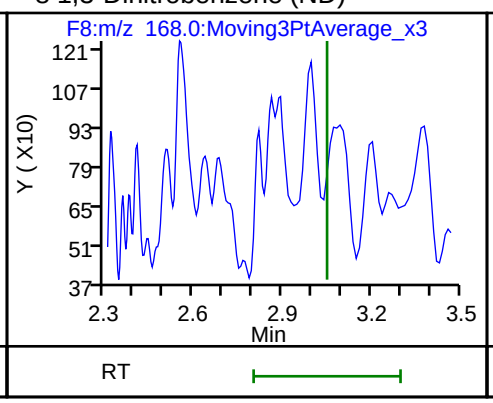
6 Tetryl (ND)



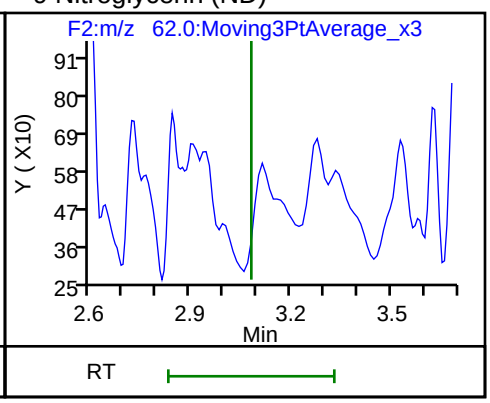
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

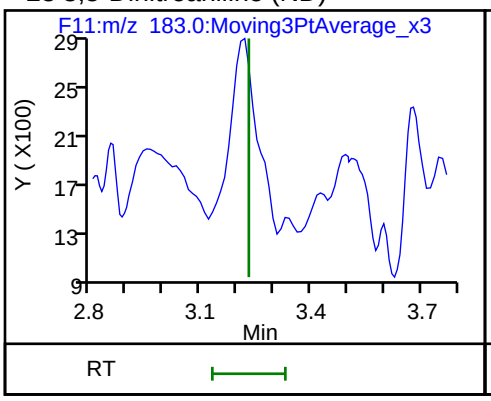


9 Nitroglycerin (ND)

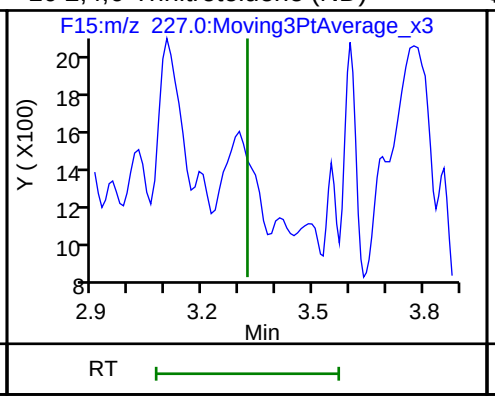


Report Date: 08-Apr-2022 07:32:36 Chrom Revision: 2.3 18-Mar-2022 09:07:22
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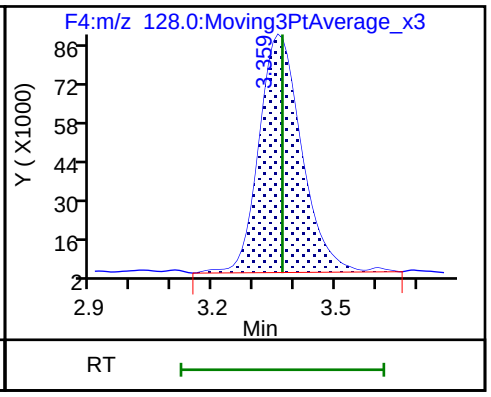
28 3,5-Dinitroaniline (ND)



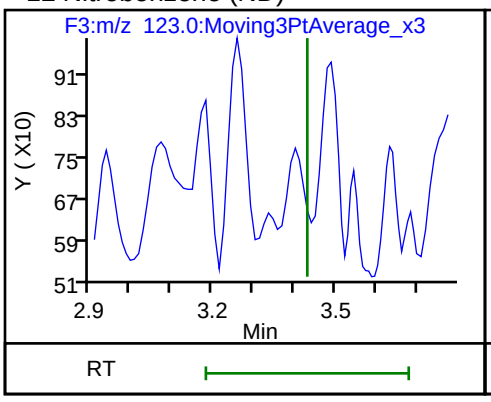
10 2,4,6-Trinitrotoluene (ND)



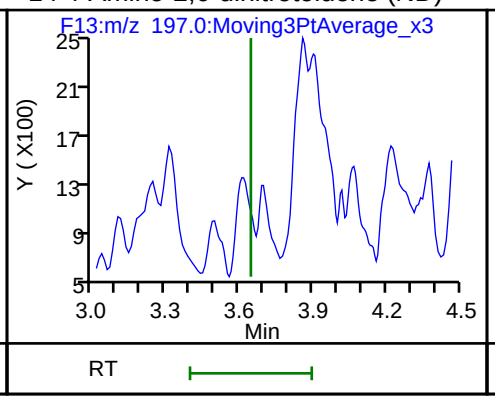
$ 11 Nitrobenzene-d5



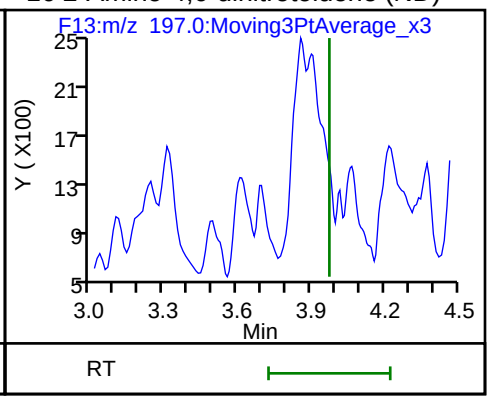
12 Nitrobenzene (ND)



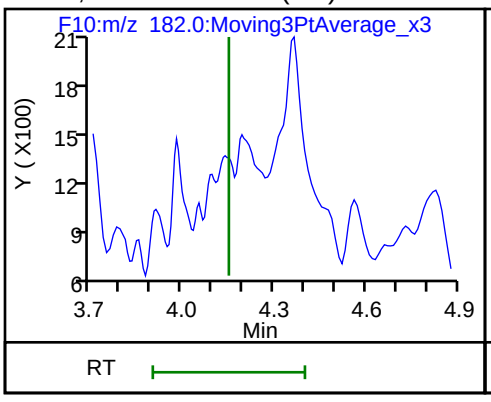
14 4-Amino-2,6-dinitrotoluene (ND)



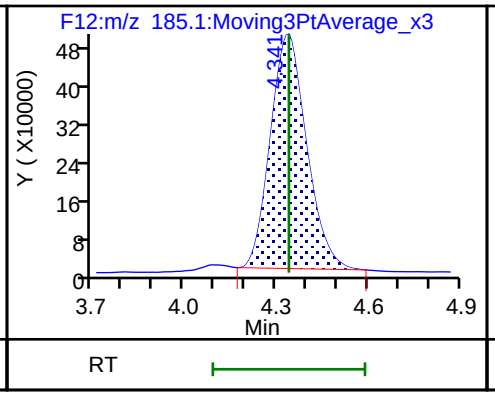
16 2-Amino-4,6-dinitrotoluene (ND)



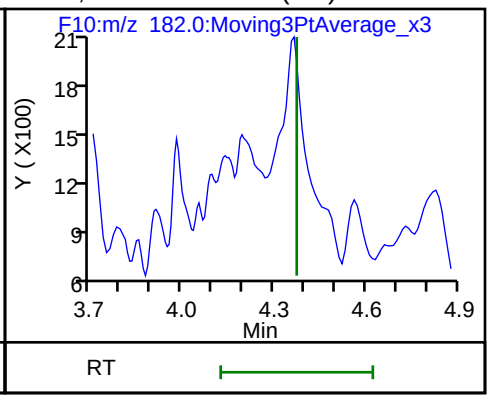
17 2,6-Dinitrotoluene (ND)



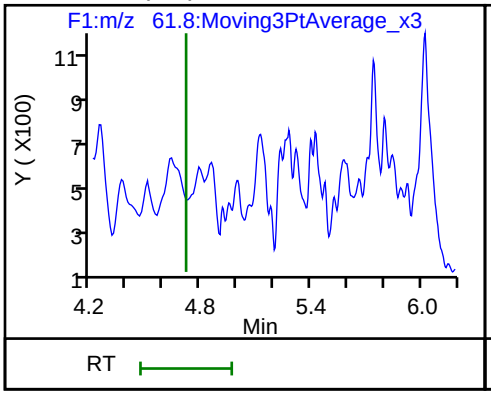
* 18 2,4-dinitrotoluene-d3



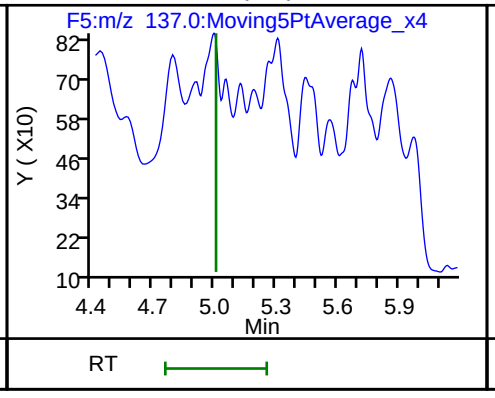
19 2,4-Dinitrotoluene (ND)



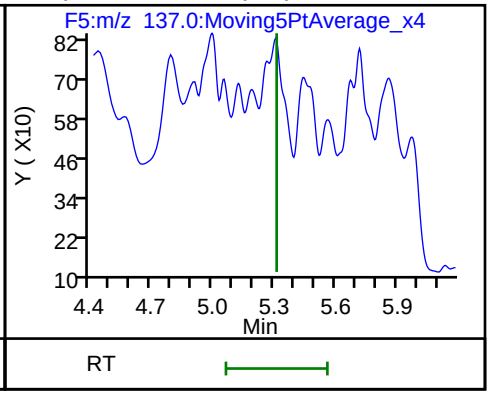
20 PETN (ND)



22 o-Nitrotoluene (ND)



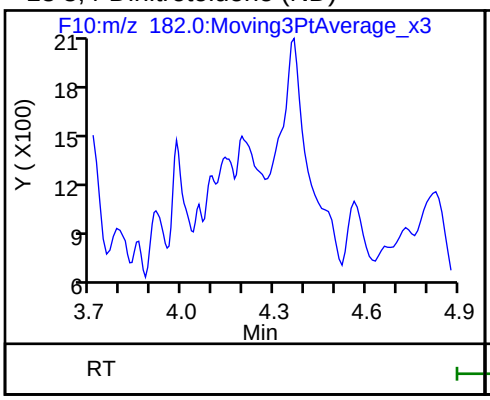
23 p-Nitrotoluene (ND)



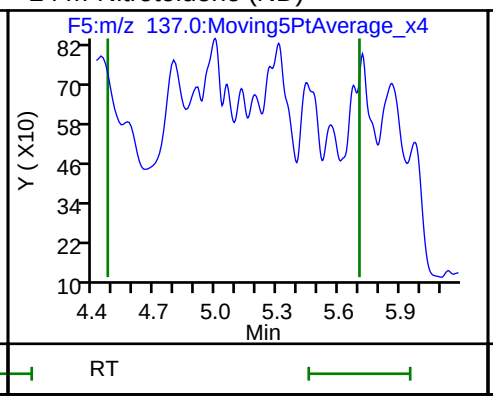
Report Date: 08-Apr-2022 07:32:36 Chrom Revision: 2.3 18-Mar-2022 09:07:22

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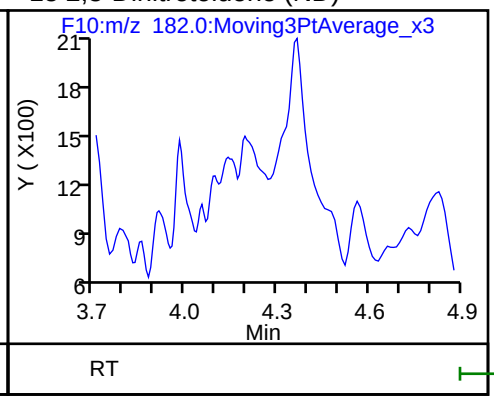
13 3,4-Dinitrotoluene (ND)



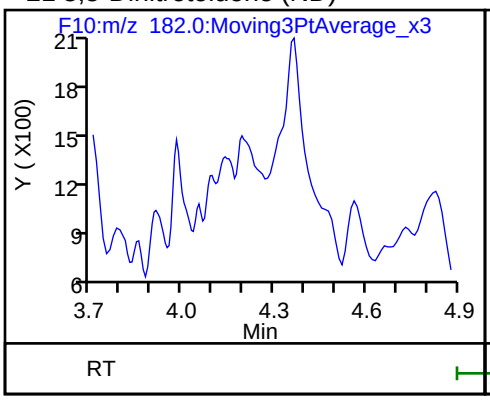
24 m-Nitrotoluene (ND)



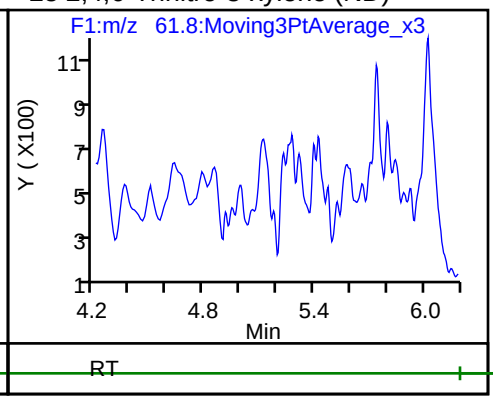
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 08-Apr-2022 07:32:36 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07034.d
Lims ID: 280-160187-A-54-B
Client ID: 29SB173 (6-7)
Sample Type: Client
Inject. Date: 07-Apr-2022 14:03:46 ALS Bottle#: 30 Worklist Smp#: 34
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-54-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 14:41:22

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	97.0	96.70

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-160187-1
SDG No.:
Client Sample ID: 29SB173 (11-12) | Lab Sample ID: 280-160187-55
Matrix: Solid | Lab File ID: ex722D07035.d
Analysis Method: 8321A | Date Collected: 03/24/2022 09:12
Extraction Method: 8330B | Date Extracted: 04/04/2022 16:57
Sample wt/vol: 10.47(g) | Date Analyzed: 04/07/2022 14:10
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.: 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
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	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.048	U M	0.096	0.048	0.047
19406-51-0	4-Amino-2,6-dinitrotoluene	0.048	U M	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 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	0.048	U M	0.096	0.048	0.041
78-11-5	PETN	0.048	U	0.096	0.048	0.032
99-99-0	p-Nitrotoluene	0.048	U M	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: 08-Apr-2022 07:32:37 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\ex722D07035.d
Lims ID: 280-160187-A-55-B
Client ID: 29SB173 (11-12)
Sample Type: Client
Inject. Date: 07-Apr-2022 14:10:23 ALS Bottle#: 31 Worklist Smp#: 35
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-55-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 14:41:45
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	1.248	1.248	0.0		128642	125.0	110	
33 DNX								
160.0	1.547	1.489	0.058	0.839	10638	-0.4230	4.3	
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t								
284.2	1.844	1.844	0.0		387696	125.0	158	
* 7 1,3-Dinitrobenzene-d4								
172.0	3.030	3.030	0.0		1355628	129.4	457	
$ 11 Nitrobenzene-d5								
128.0	3.359	3.370	-0.011	0.775	641975	97.5	165	
* 18 2,4-dinitrotoluene-d3								
185.1	4.332	4.341	-0.009		4210895	125.0	110	

QC Flag Legend

Processing Flags

Reagents:

EXPWORKINGIS_00089 Amount Added: 20.00 Units: uL Run Reagent

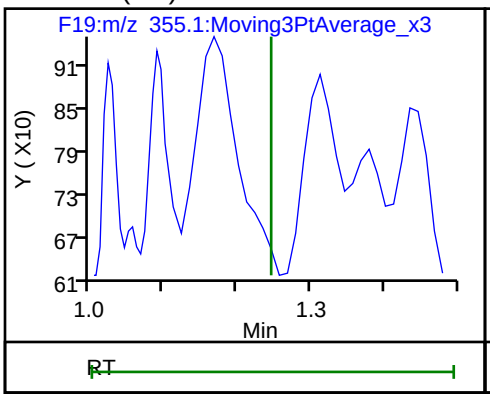
Report Date: 08-Apr-2022 07:32:37 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver

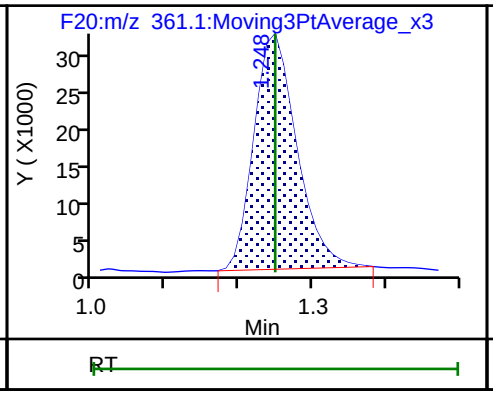
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07035.d

Injection Date:	07-Apr-2022 14:10:23	Instrument ID:	LC_LCMS7
Lims ID:	280-160187-A-55-B	Lab Sample ID:	280-160187-55
Client ID:	29SB173 (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

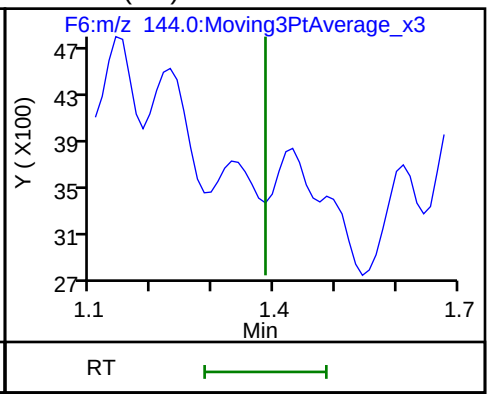
2 HMX (ND)



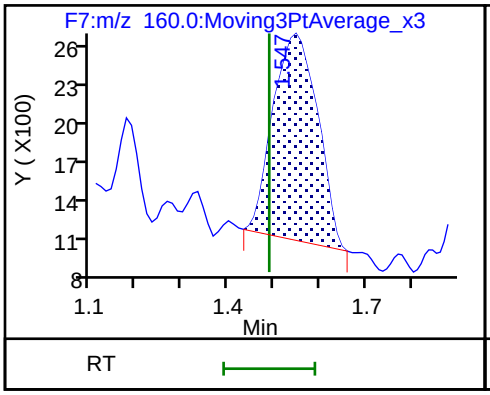
* 1 HMX-13C4



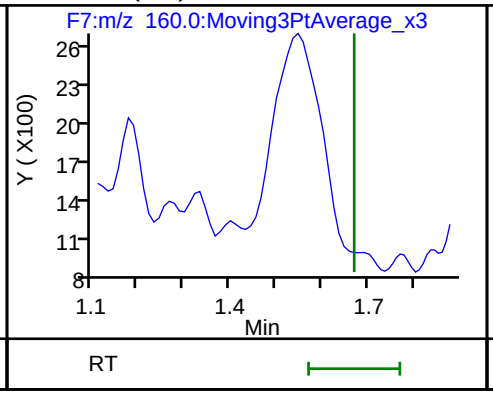
36 TNX (ND)



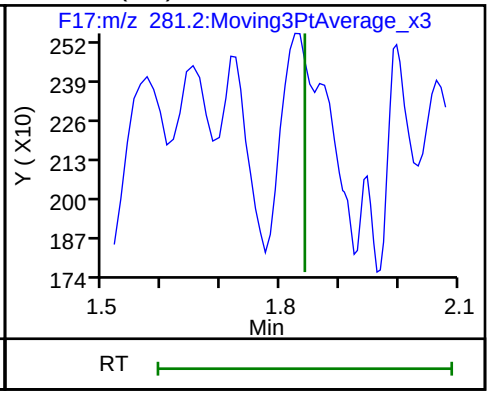
33 DNX



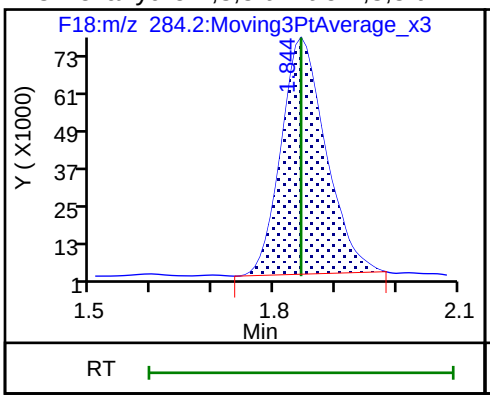
34 MNX (ND)



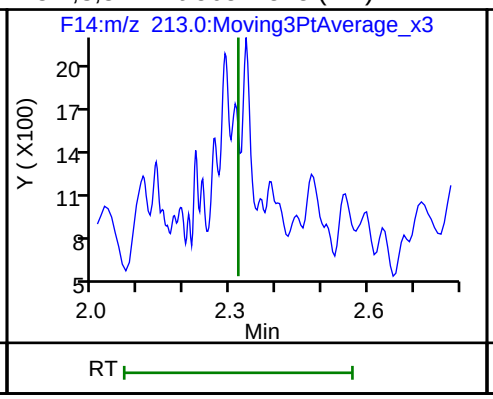
4 RDX (ND)



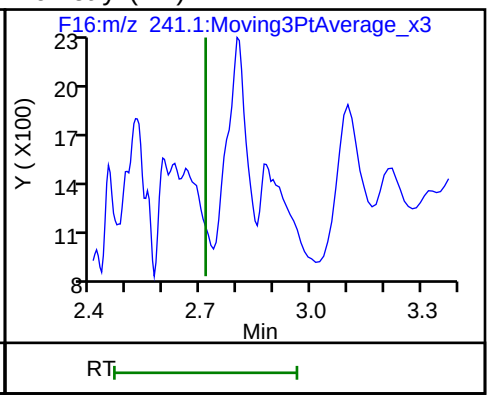
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



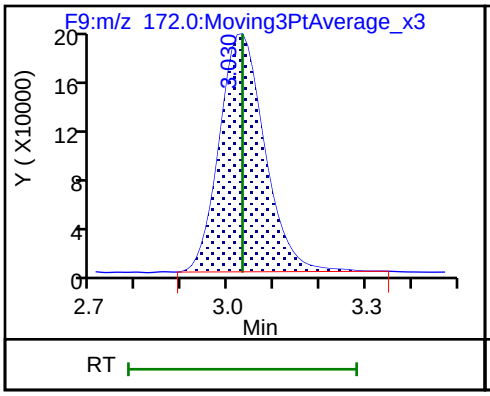
5 1,3,5-Trinitrobenzene (ND)



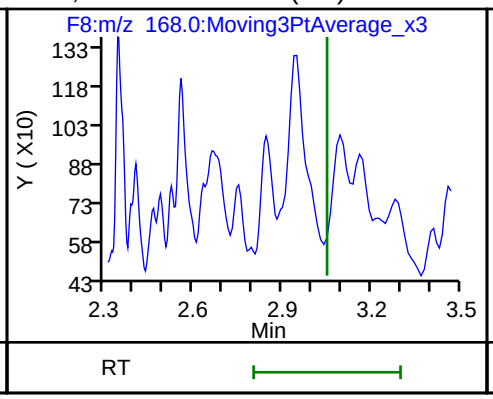
6 Tetryl (ND)



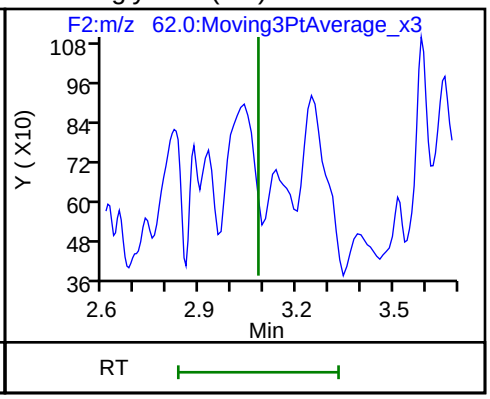
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (ND)

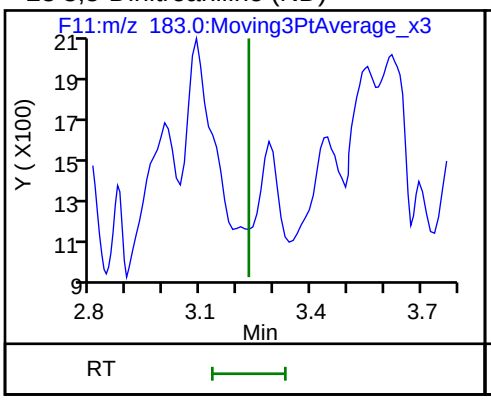


9 Nitroglycerin (ND)

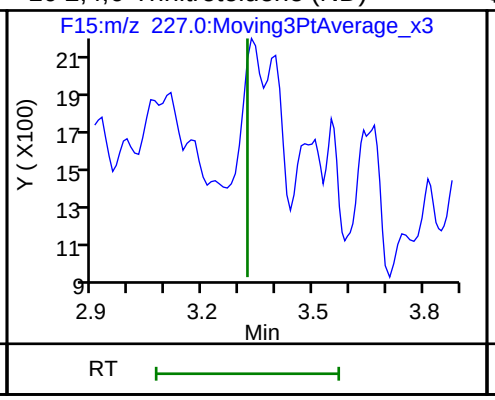


Report Date: 08-Apr-2022 07:32:37 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07035.d

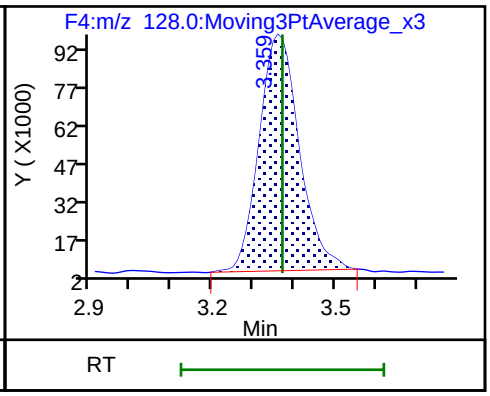
28 3,5-Dinitroaniline (ND)



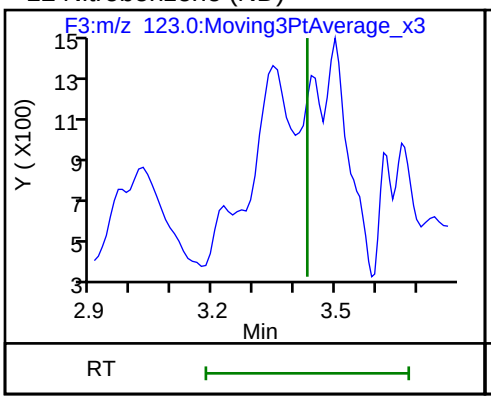
10 2,4,6-Trinitrotoluene (ND)



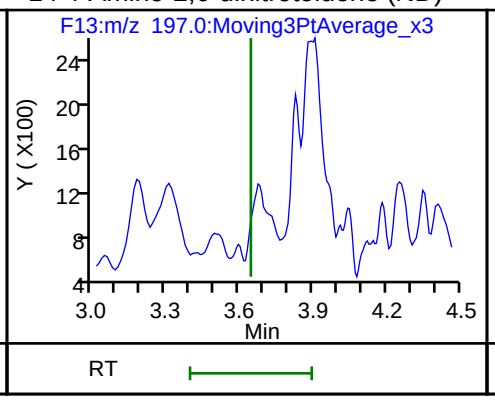
$ 11 Nitrobenzene-d5



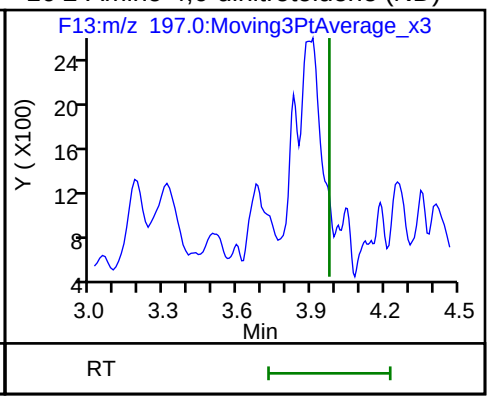
12 Nitrobenzene (ND)



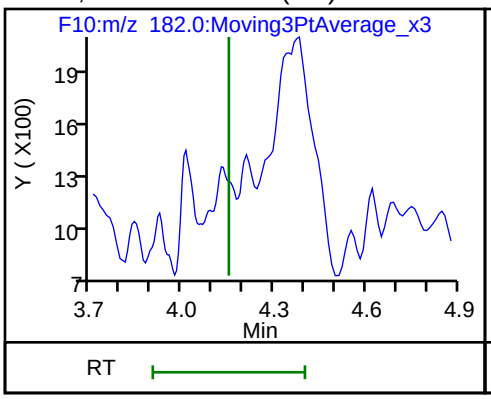
14 4-Amino-2,6-dinitrotoluene (ND)



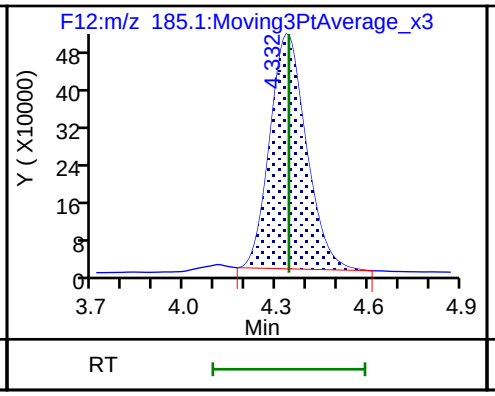
16 2-Amino-4,6-dinitrotoluene (ND)



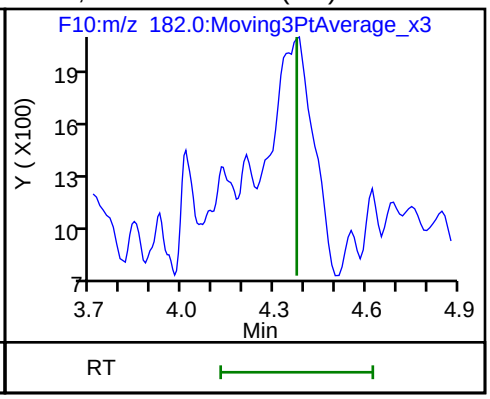
17 2,6-Dinitrotoluene (ND)



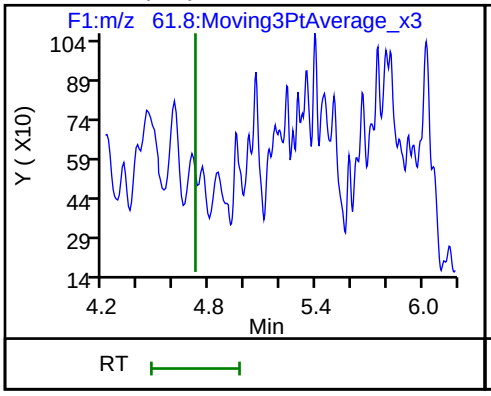
* 18 2,4-dinitrotoluene-d3



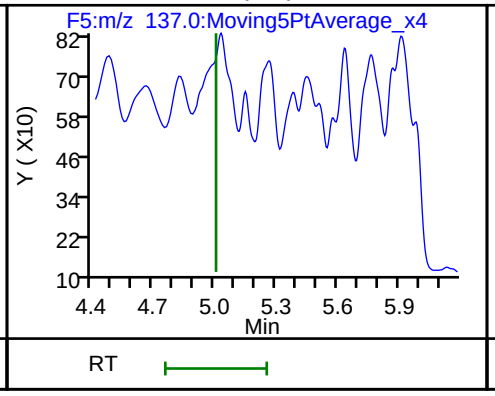
19 2,4-Dinitrotoluene (ND)



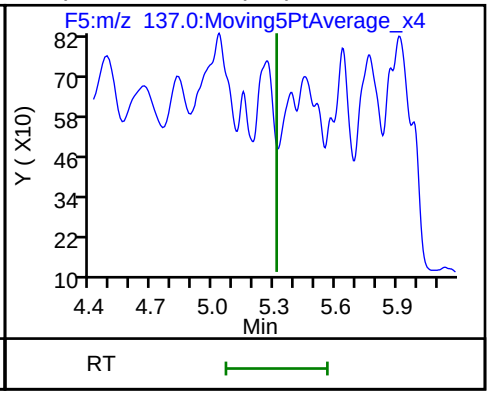
20 PETN (ND)



22 o-Nitrotoluene (ND)



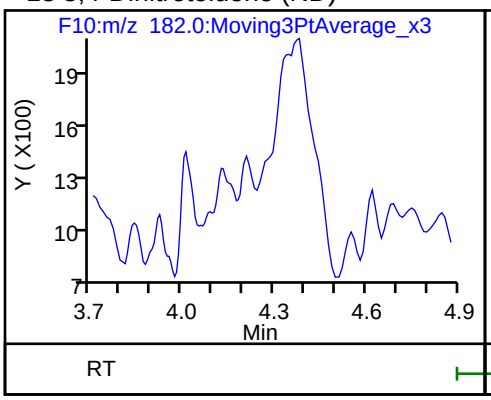
23 p-Nitrotoluene (ND)



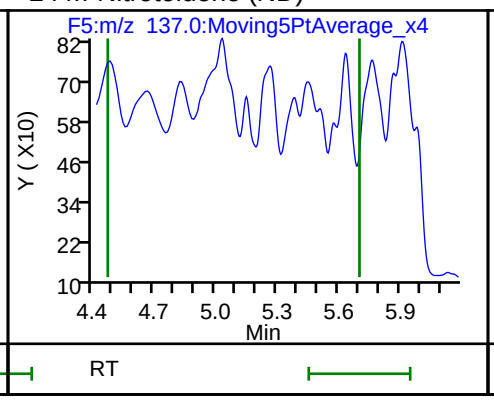
Report Date: 08-Apr-2022 07:32:37 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07035.d

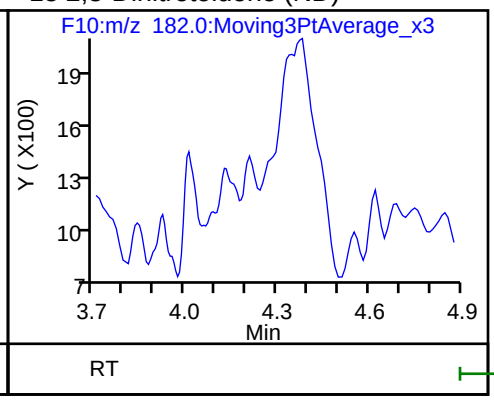
13 3,4-Dinitrotoluene (ND)



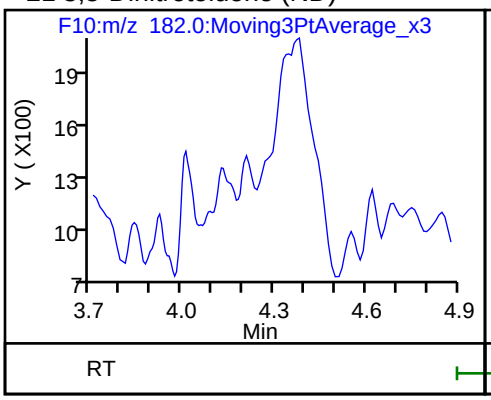
24 m-Nitrotoluene (ND)



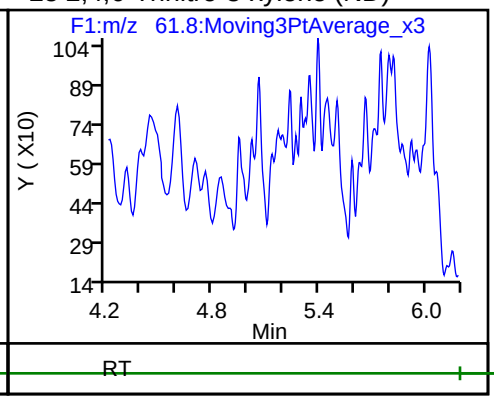
15 2,3-Dinitrotoluene (ND)



21 3,5-Dinitrotoluene (ND)



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



Report Date: 08-Apr-2022 07:32:37 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07035.d
Lims ID: 280-160187-A-55-B
Client ID: 29SB173 (11-12)
Sample Type: Client
Inject. Date: 07-Apr-2022 14:10:23 ALS Bottle#: 31 Worklist Smp#: 35
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-160187-A-55-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 14:41:45

Compound	Amount Added	Amount Recovered	% Rec.
$ 11 Nitrobenzene-d5	100.3	97.5	97.22

FORM VI
LCMS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

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

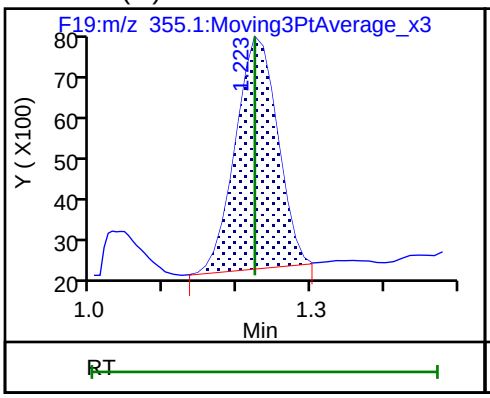
8321EXcalprim_00029	Amount Added: 0.50	Units: uL	
8321NB-D5-cal_00021	Amount Added: 0.50	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 05-Apr-2022 14:53:59 Chrom Revision: 2.3 18-Mar-2022 09:07:22

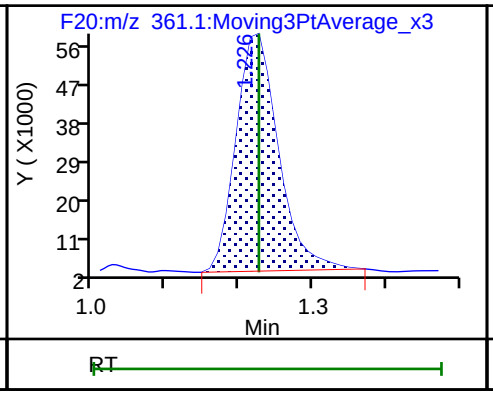
Eurofins Denver

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

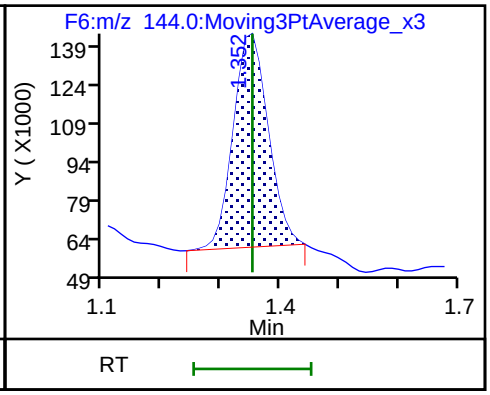
2 HMX (M)



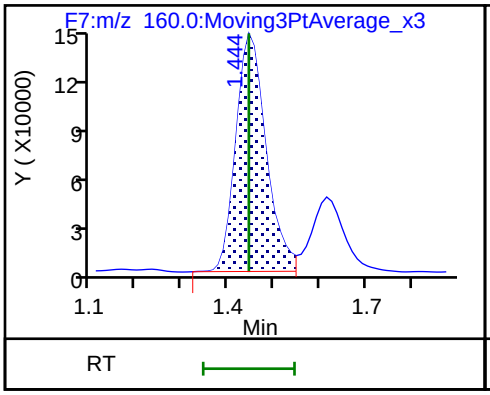
* 1 HMX-13C4



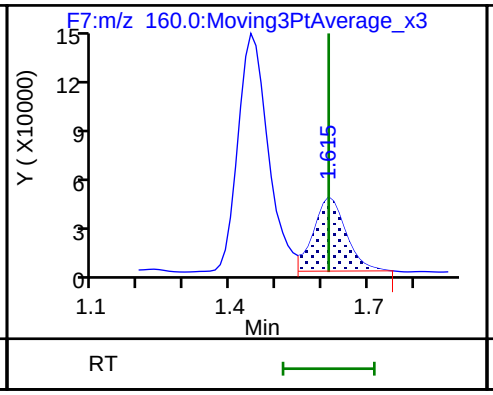
36 TNX



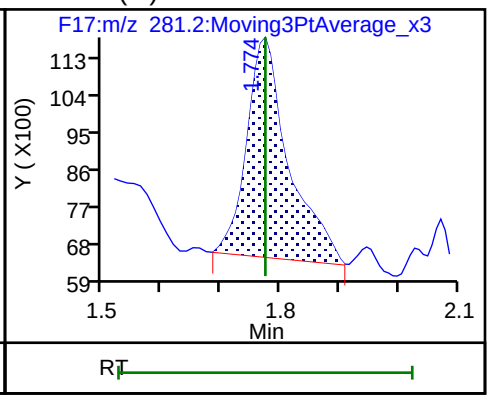
33 DNX



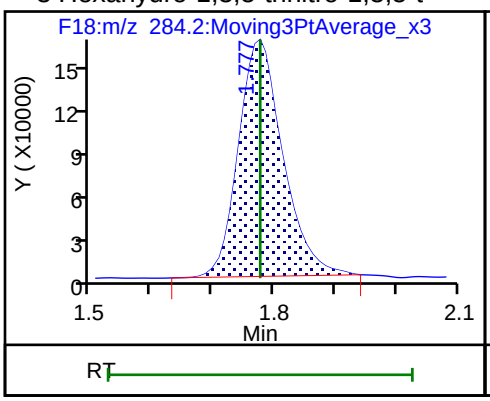
34 MNX



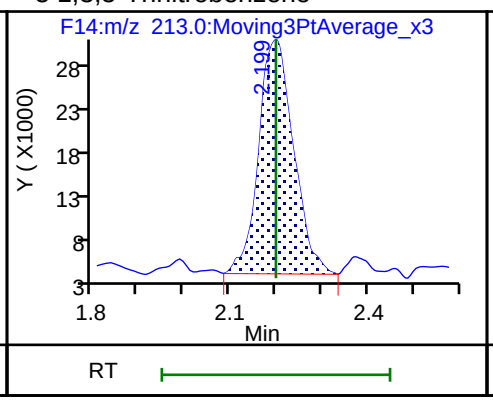
4 RDX (M)



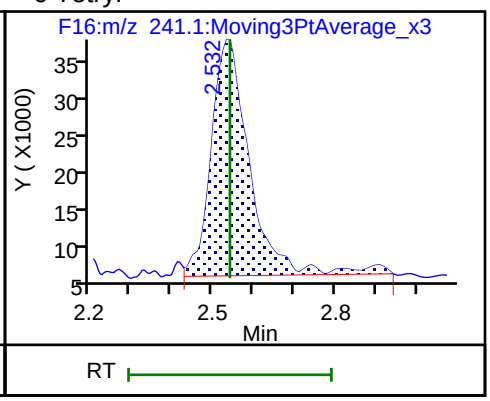
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



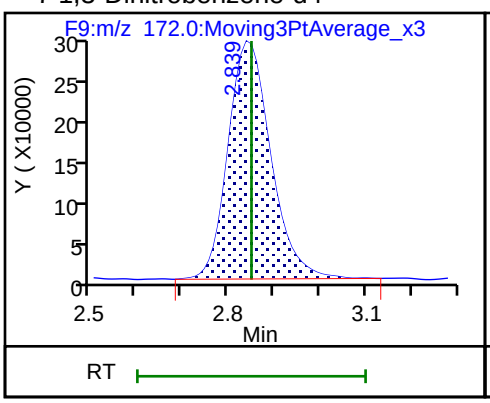
5 1,3,5-Trinitrobenzene



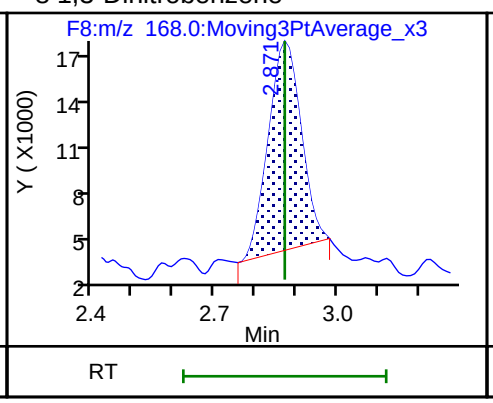
6 Tetryl



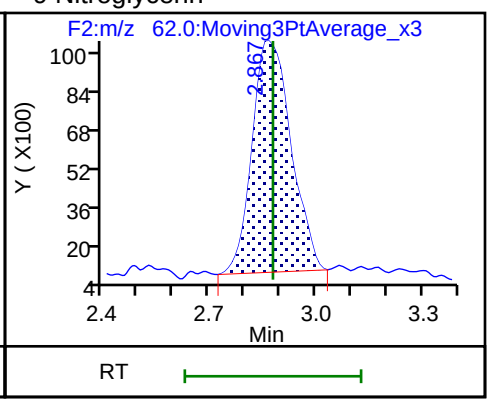
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



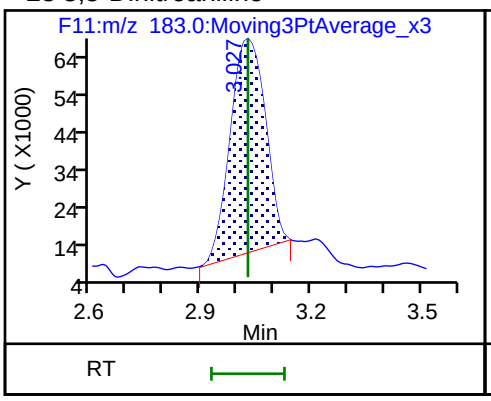
9 Nitroglycerin



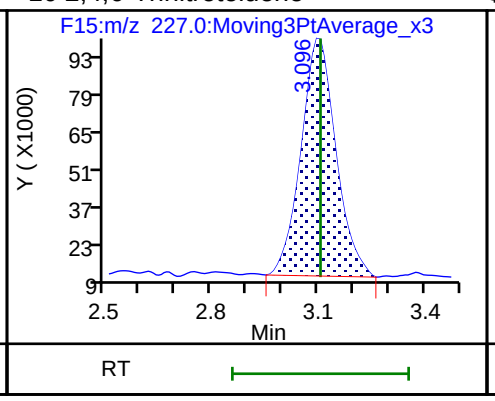
Report Date: 05-Apr-2022 14:53:59 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05003.d

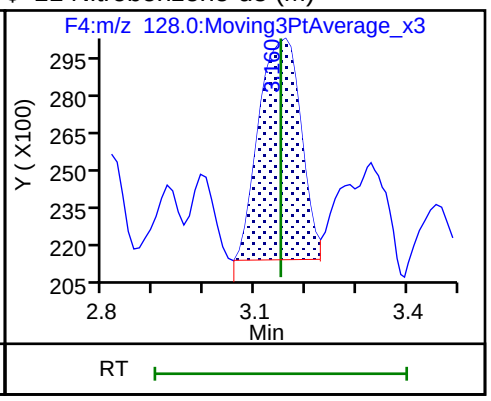
28 3,5-Dinitroaniline



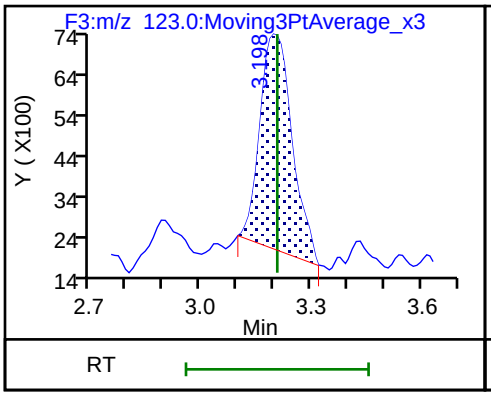
10 2,4,6-Trinitrotoluene



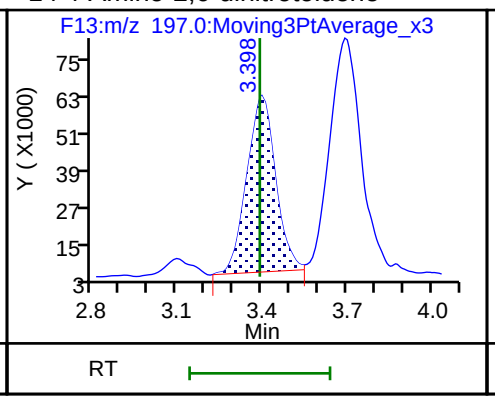
$ 11 Nitrobenzene-d5 (M)



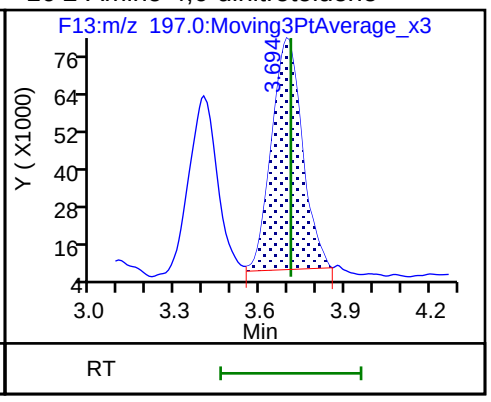
12 Nitrobenzene



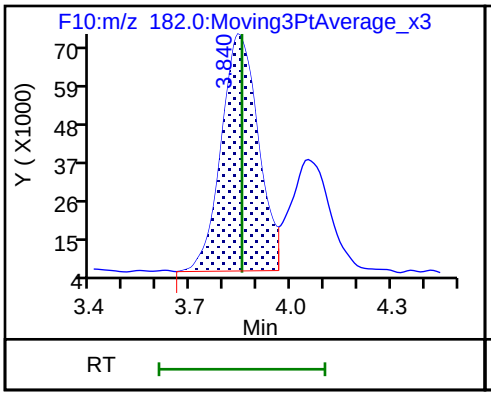
14 4-Amino-2,6-dinitrotoluene



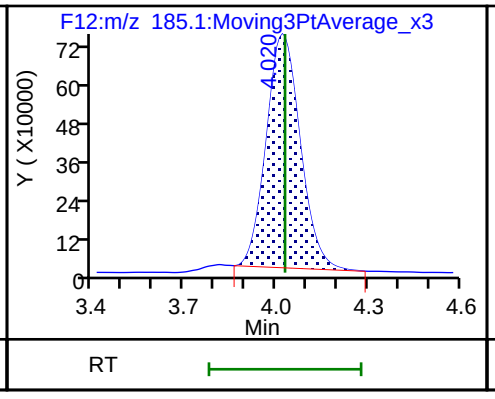
16 2-Amino-4,6-dinitrotoluene



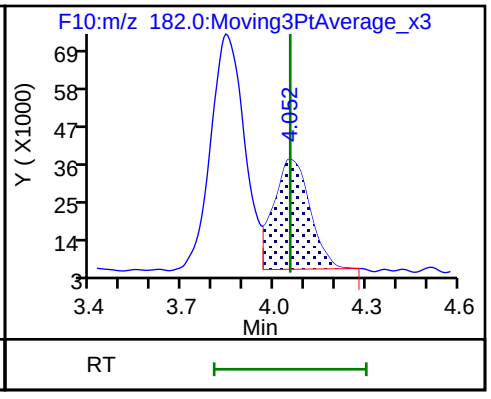
17 2,6-Dinitrotoluene



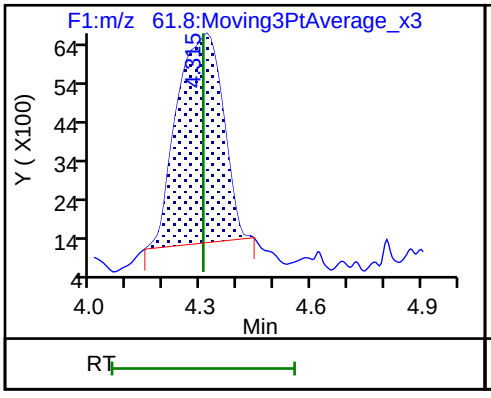
* 18 2,4-dinitrotoluene-d3



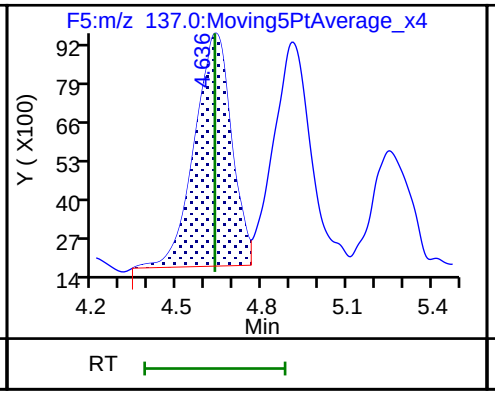
19 2,4-Dinitrotoluene



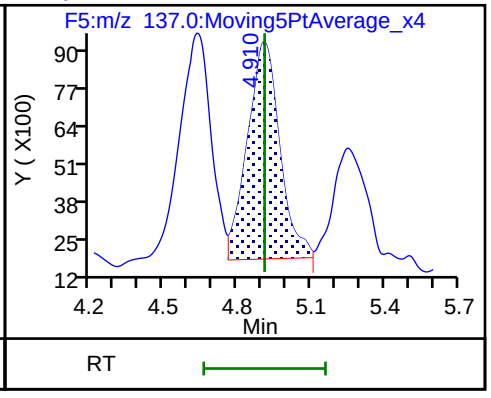
20 PETN



22 o-Nitrotoluene



23 p-Nitrotoluene

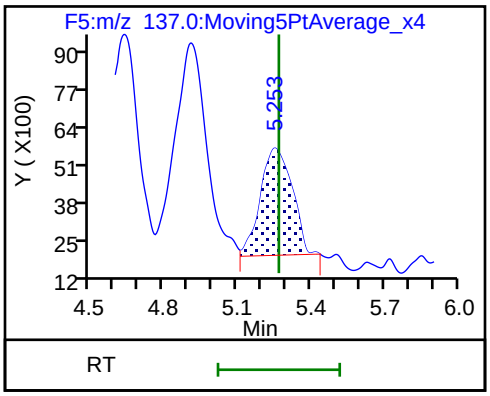


Report Date: 05-Apr-2022 14:53:59

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

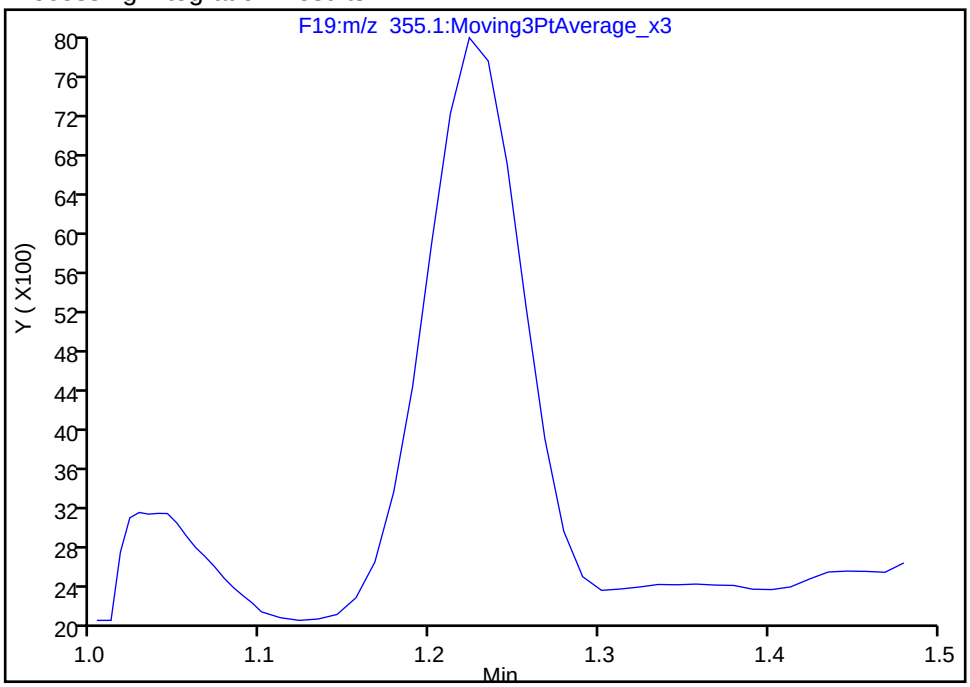
Injection Date:	05-Apr-2022 10:20:28	Instrument ID:	LC_LCMS7
Lims ID:	STD001		
Client ID:			
Operator ID:	acm	ALS Bottle#:	2 Worklist Smp#: 3
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F19:SIR

2 HMX, CAS: 2691-41-0

Signal: 1

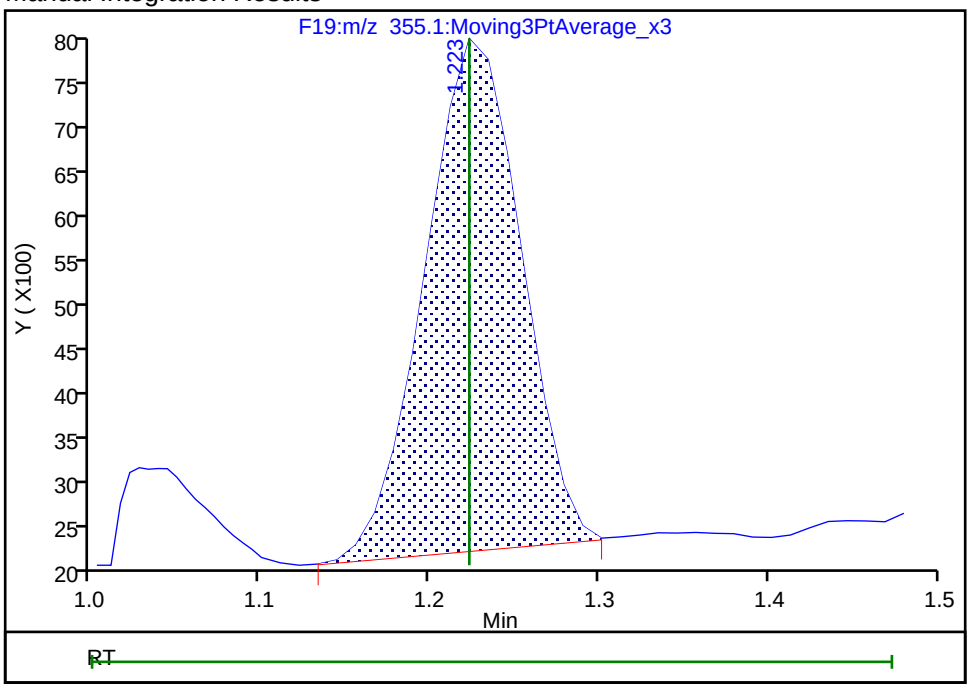
Not Detected
Expected RT: 1.22

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

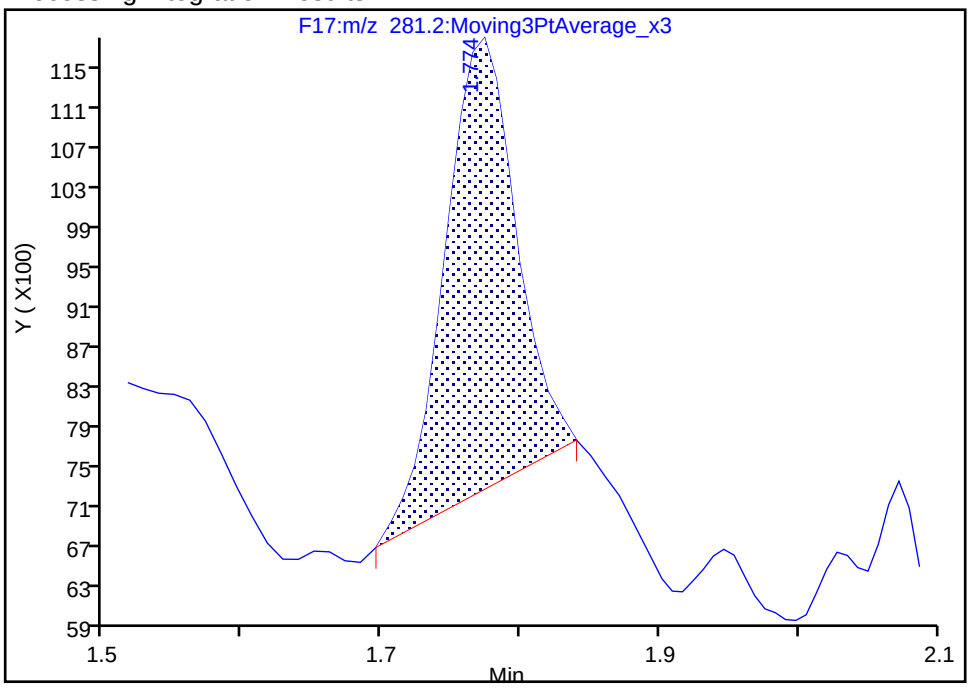
Injection Date:	05-Apr-2022 10:20:28	Instrument ID:	LC_LCMS7
Lims ID:	STD001		
Client ID:			
Operator ID:	acm	ALS Bottle#:	2 Worklist Smp#: 3
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F17:SIR

4 RDX, CAS: 121-82-4

Signal: 1

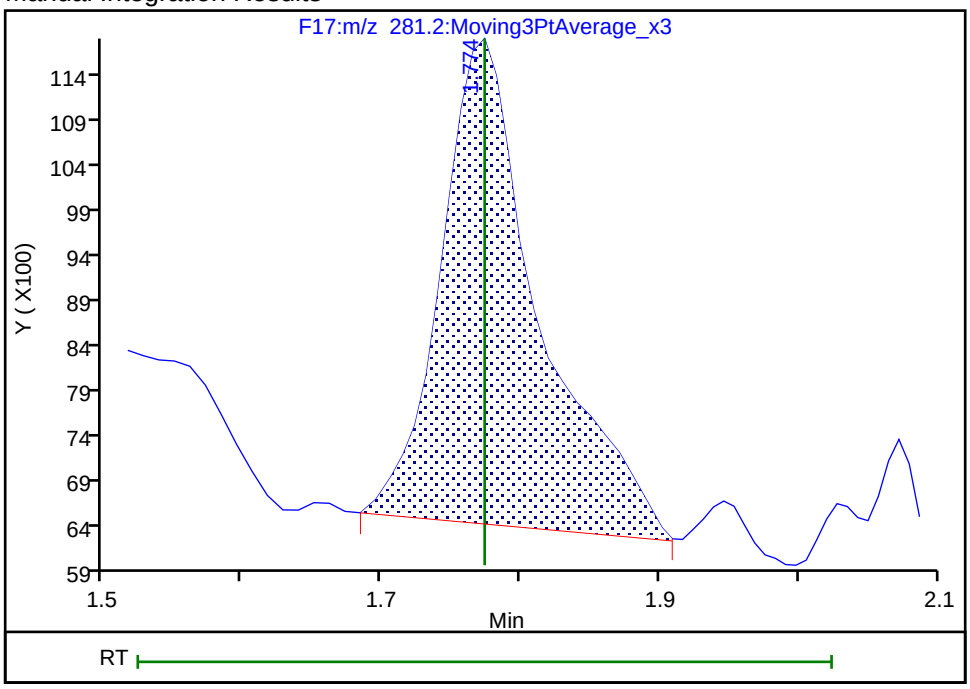
Processing Integration Results

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

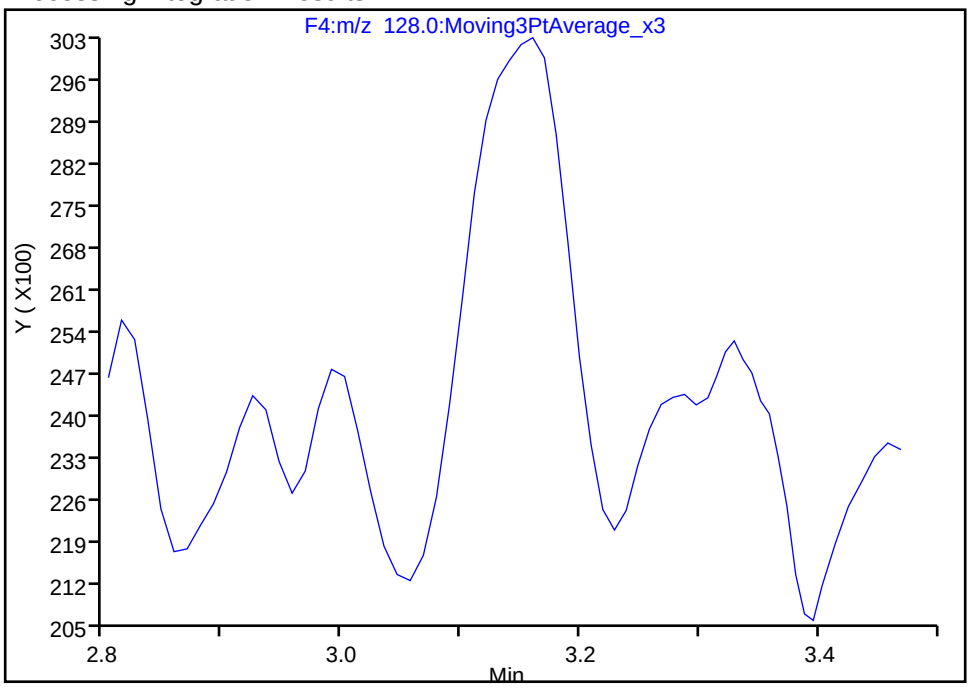
$ 11 Nitrobenzene-d5, CAS: 4165-60-0

Signal: 1

Not Detected

Expected RT: 3.15

Processing Integration Results



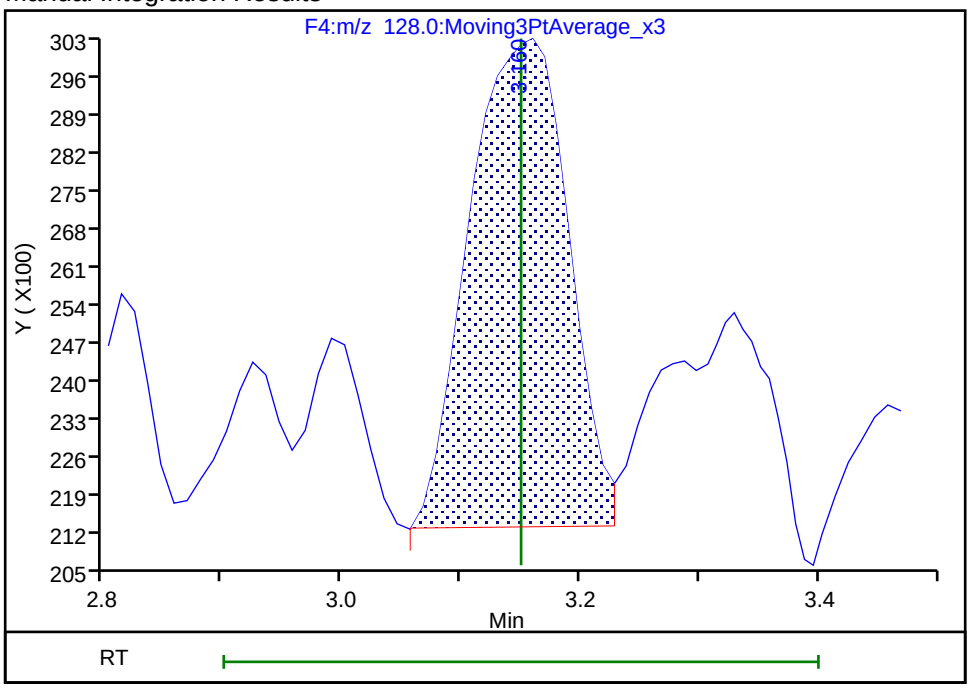
Manual Integration Results

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

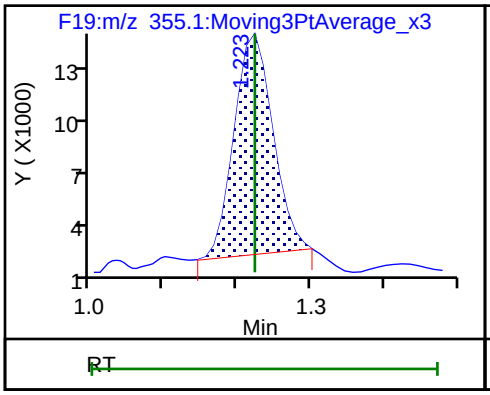
Client ID:

Operator ID: acm ALS Bottle#: 3 Worklist Smp#: 4

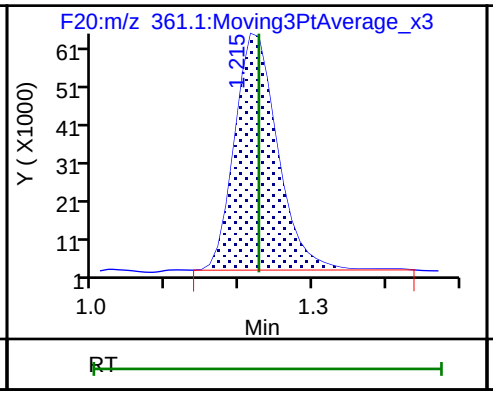
Injection Vol: 10.0 ul Dil. Factor: 1.0000

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

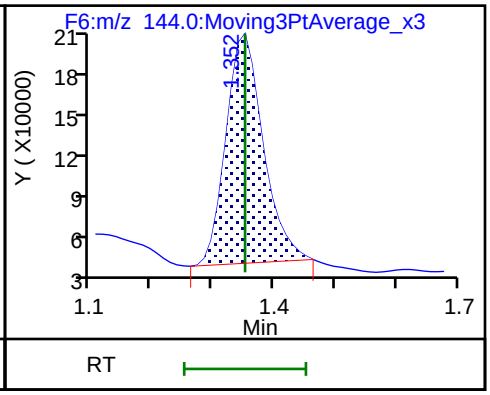
2 HMX



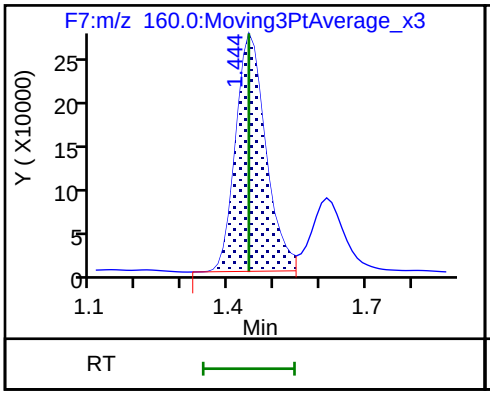
* 1 HMX-13C4



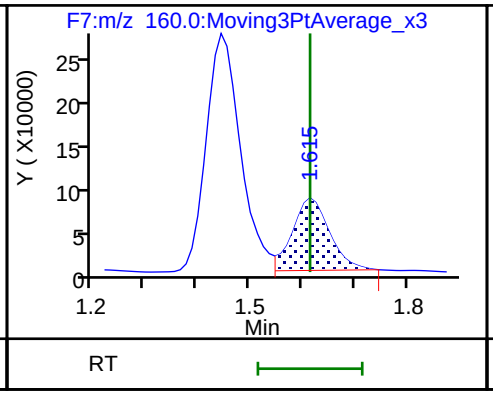
36 TNX



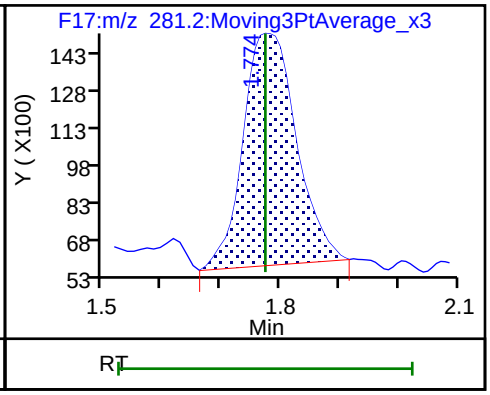
33 DNX



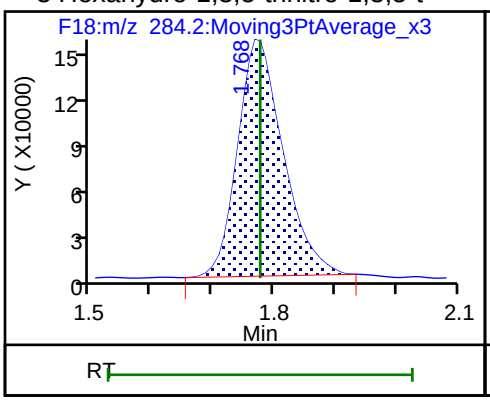
34 MNX



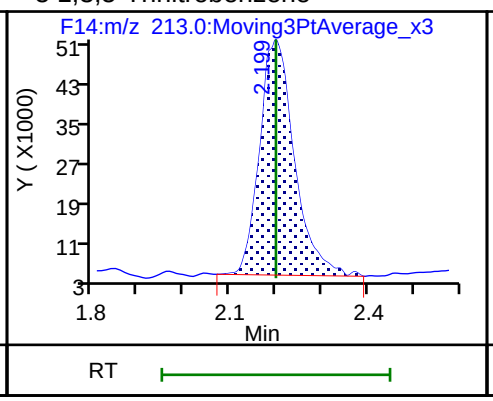
4 RDX



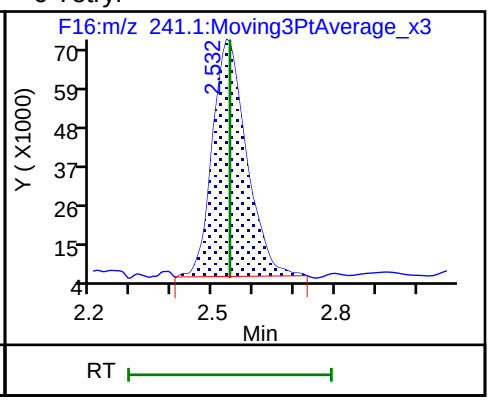
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



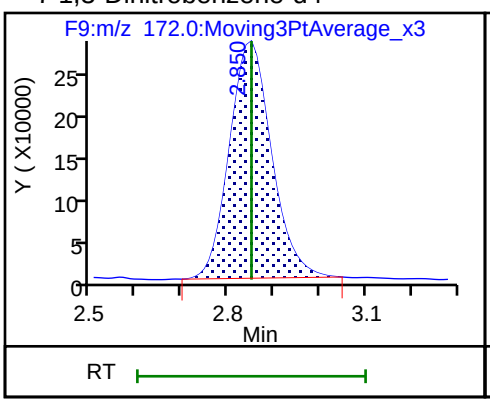
5 1,3,5-Trinitrobenzene



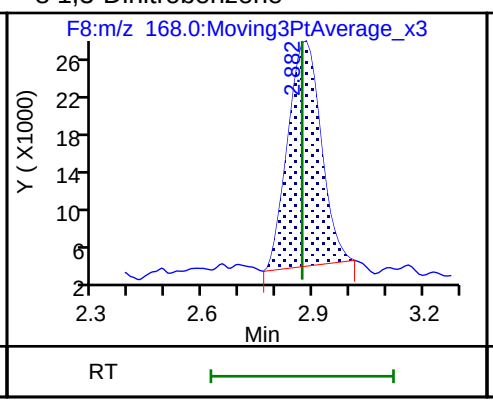
6 Tetryl



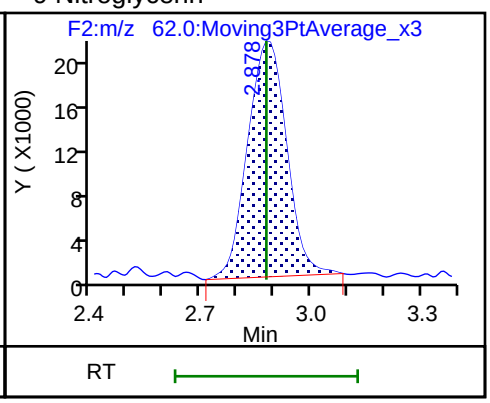
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

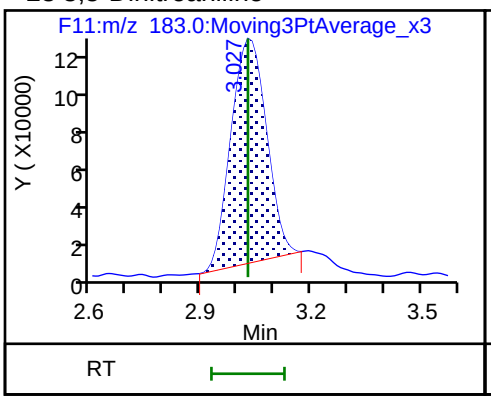


9 Nitroglycerin

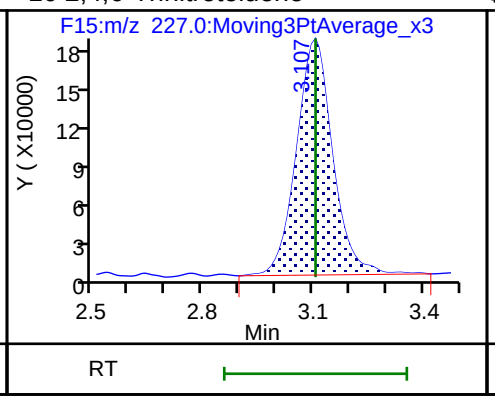


Report Date: 05-Apr-2022 14:54:00 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05004.d

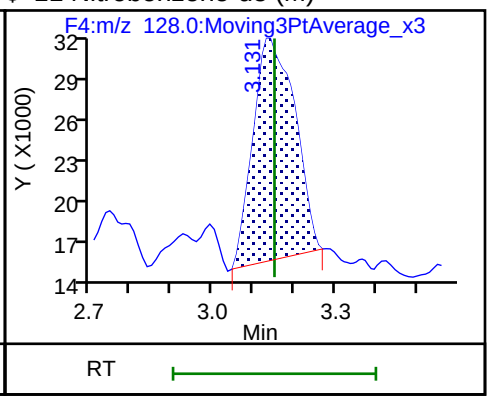
28 3,5-Dinitroaniline



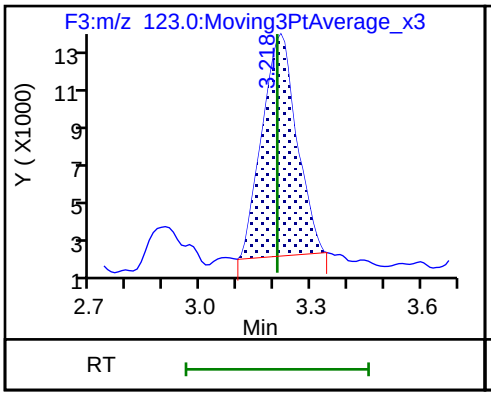
10 2,4,6-Trinitrotoluene



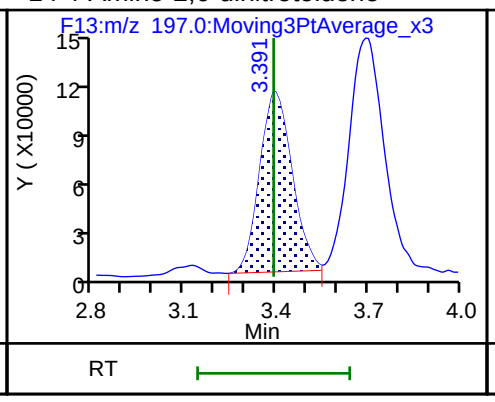
$ 11 Nitrobenzene-d5 (M)



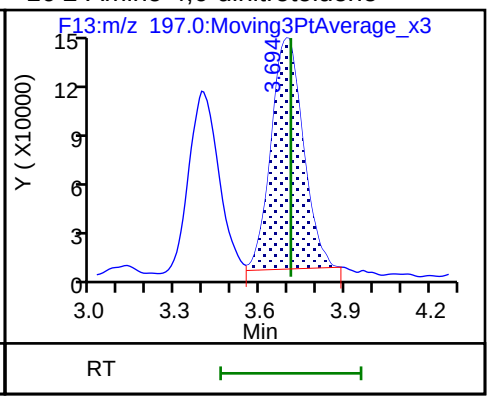
12 Nitrobenzene



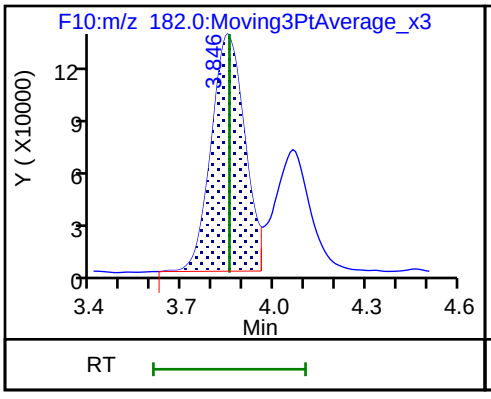
14 4-Amino-2,6-dinitrotoluene



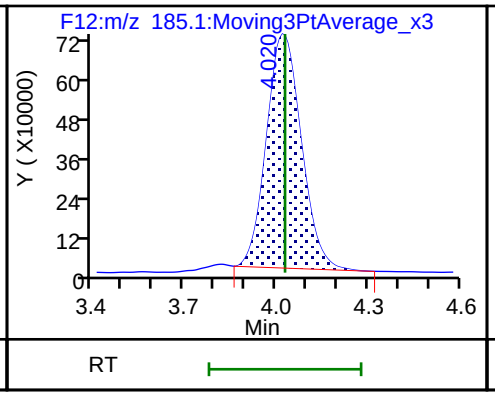
16 2-Amino-4,6-dinitrotoluene



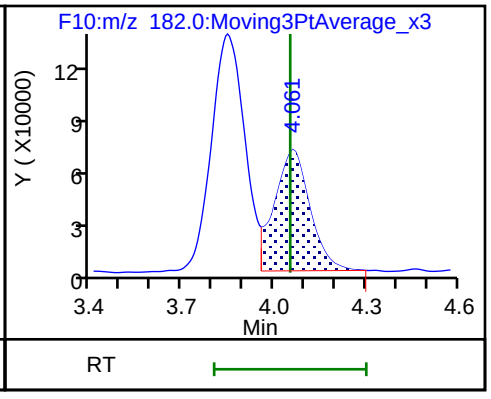
17 2,6-Dinitrotoluene



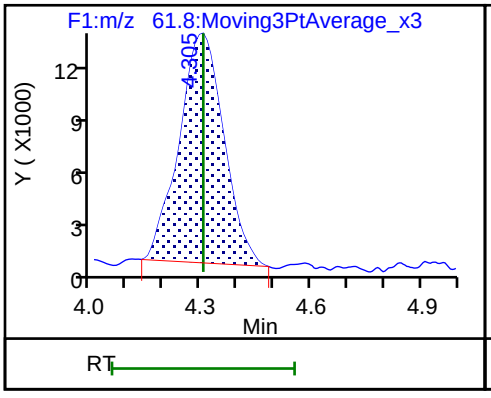
* 18 2,4-dinitrotoluene-d3



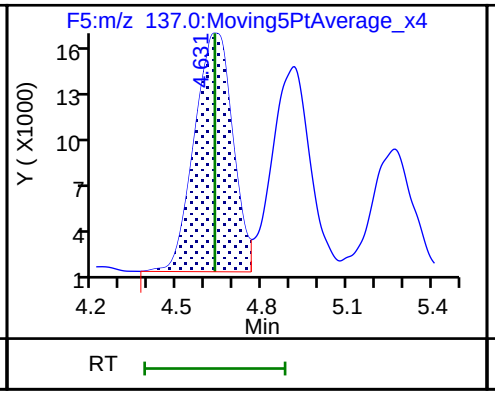
19 2,4-Dinitrotoluene



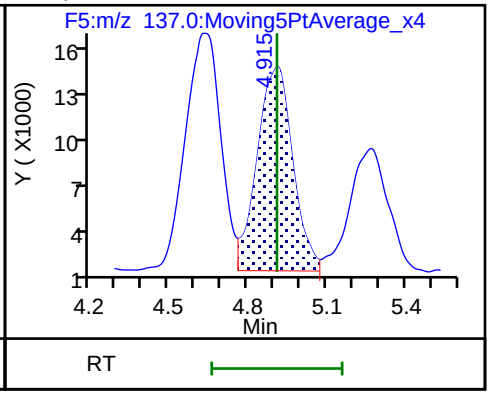
20 PETN



22 o-Nitrotoluene



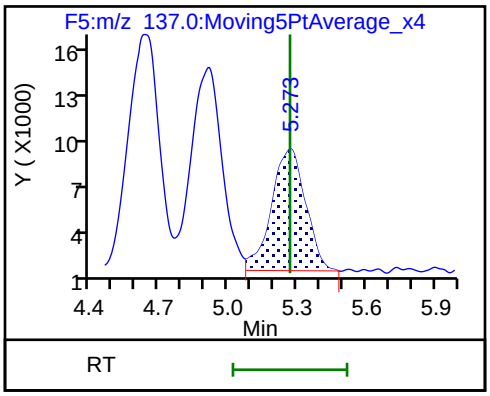
23 p-Nitrotoluene



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

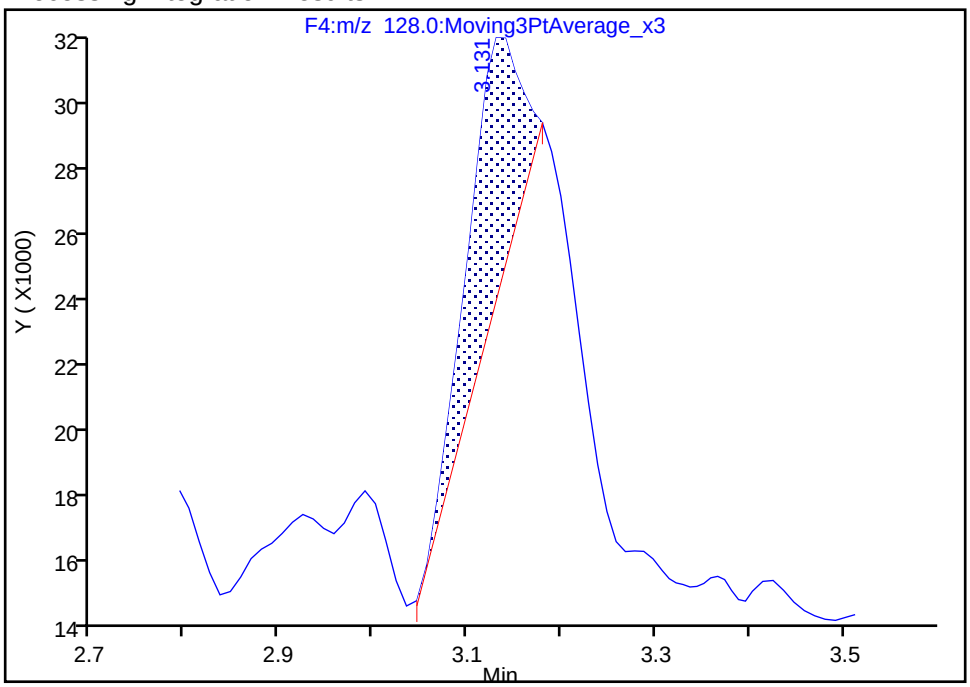
Injection Date:	05-Apr-2022 10:26:51	Instrument ID:	LC_LCMS7
Lims ID:	STD002		
Client ID:			
Operator ID:	acm	ALS Bottle#:	3 Worklist Smp#: 4
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F4:SIR

$ 11 Nitrobenzene-d5, CAS: 4165-60-0

Signal: 1

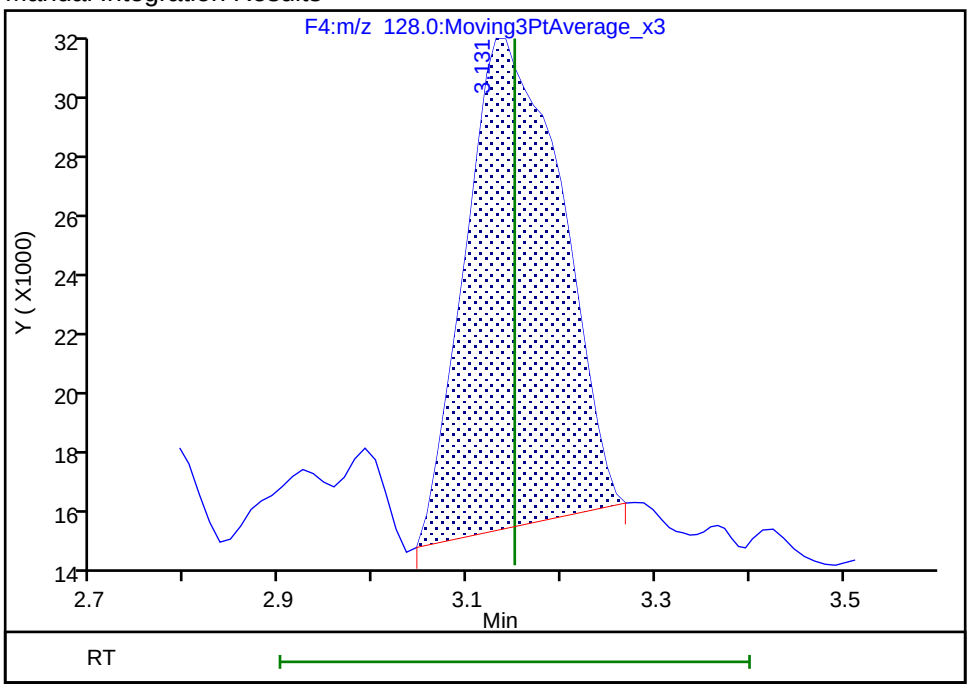
Processing Integration Results

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:

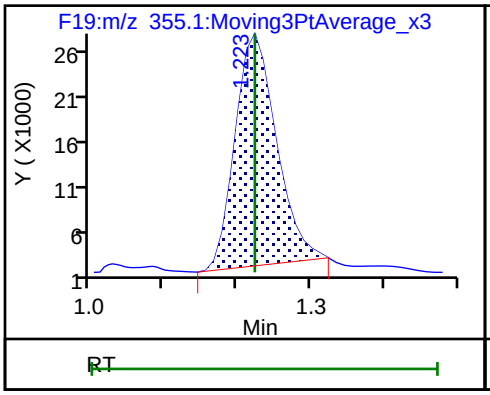
8321EXcalprim_00029	Amount Added: 2.50	Units: uL	
8321NB-D5-cal_00021	Amount Added: 2.50	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 05-Apr-2022 14:54:01 Chrom Revision: 2.3 18-Mar-2022 09:07:22

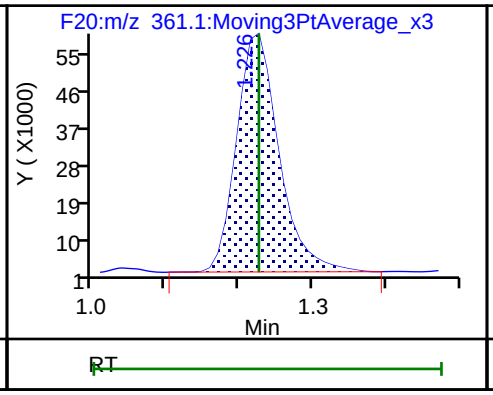
Eurofins Denver

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

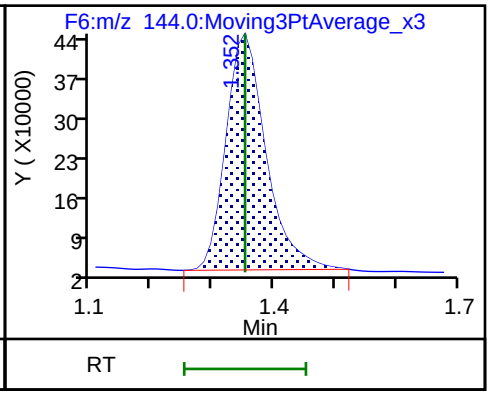
2 HMX



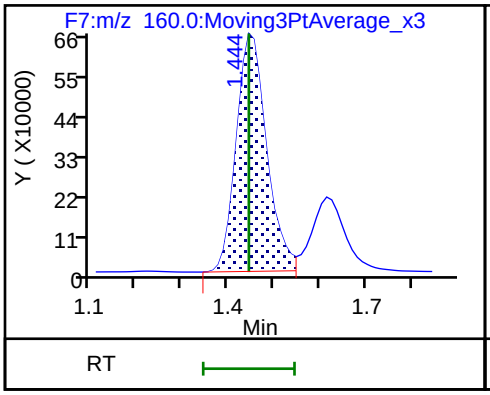
* 1 HMX-13C4



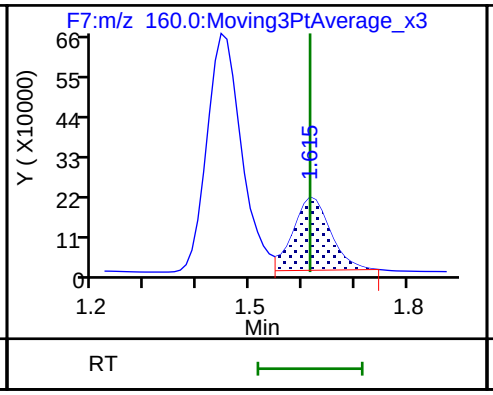
36 TNX



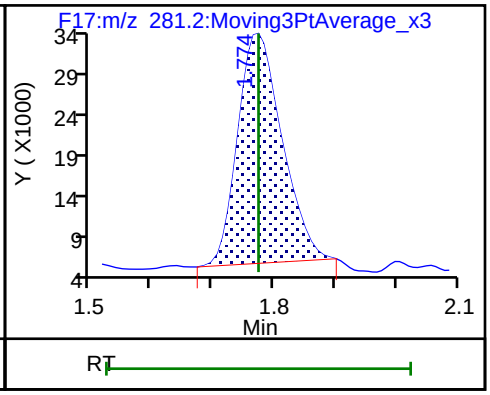
33 DNX



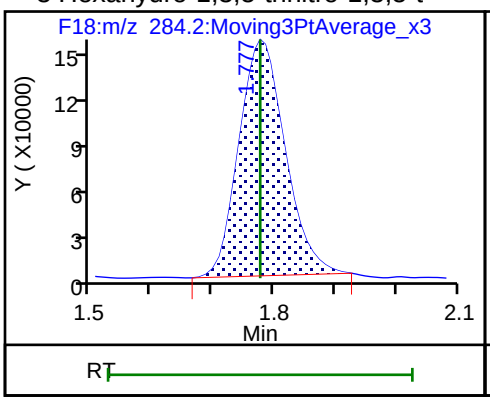
34 MNX



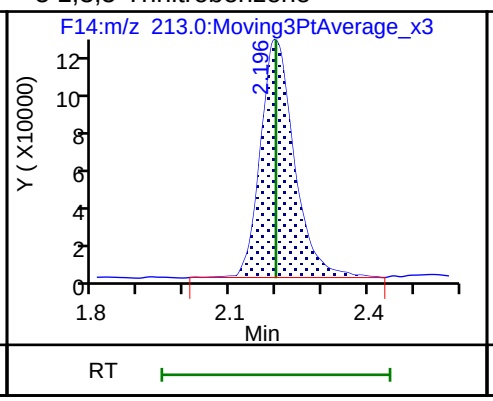
4 RDX



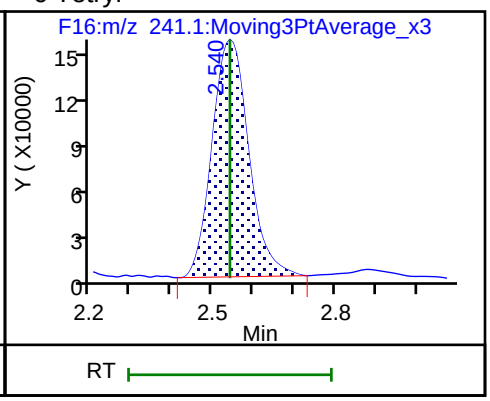
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



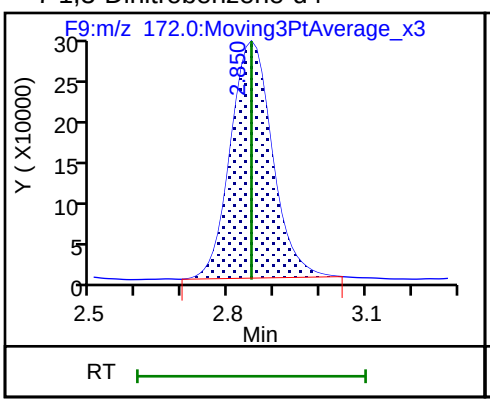
5 1,3,5-Trinitrobenzene



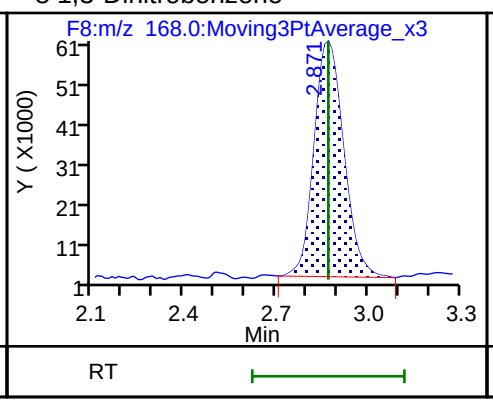
6 Tetryl



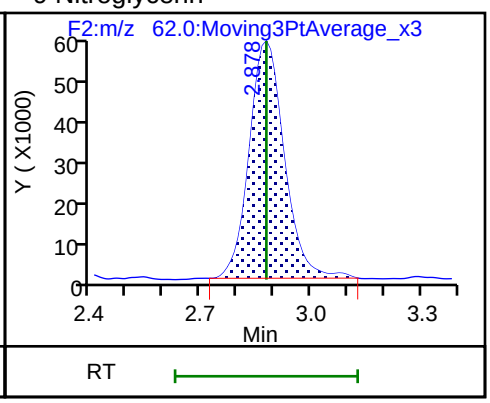
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

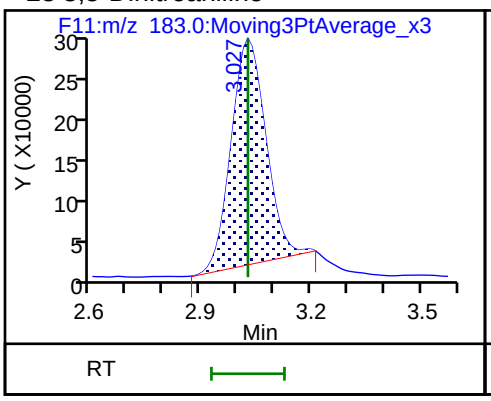


9 Nitroglycerin

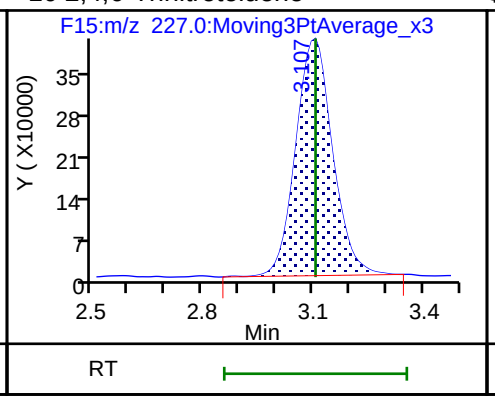


Report Date: 05-Apr-2022 14:54:01 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05005.d

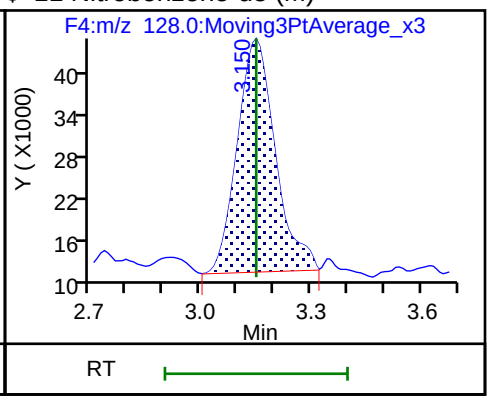
28 3,5-Dinitroaniline



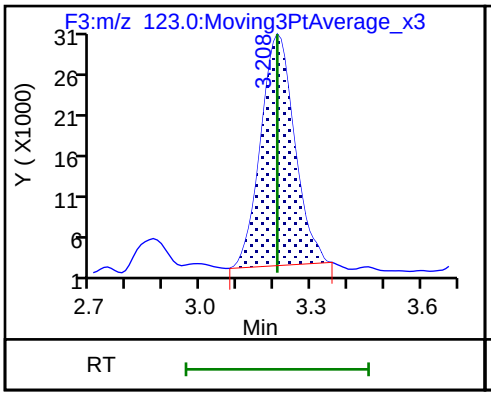
10 2,4,6-Trinitrotoluene



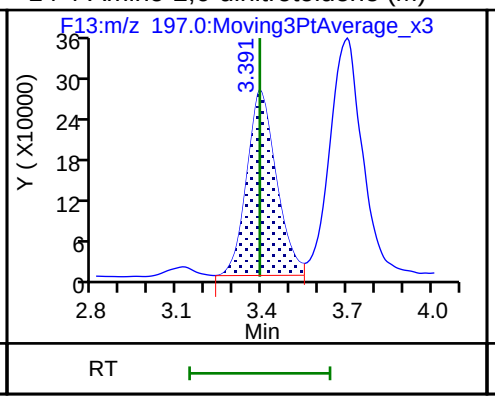
$ 11 Nitrobenzene-d5 (M)



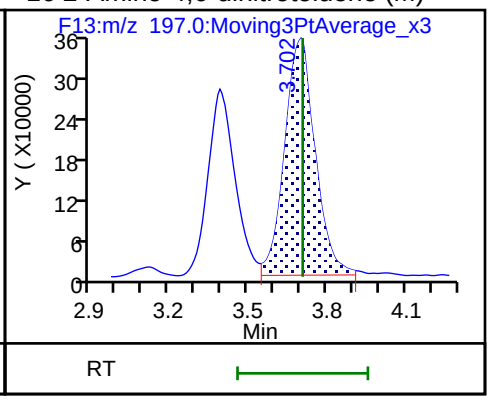
12 Nitrobenzene



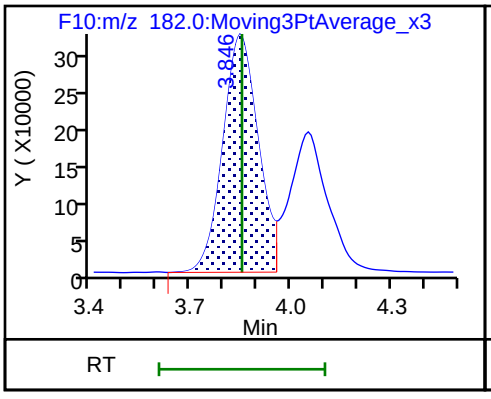
14 4-Amino-2,6-dinitrotoluene (M)



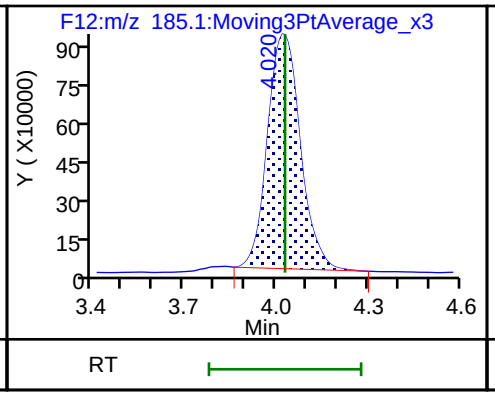
16 2-Amino-4,6-dinitrotoluene (M)



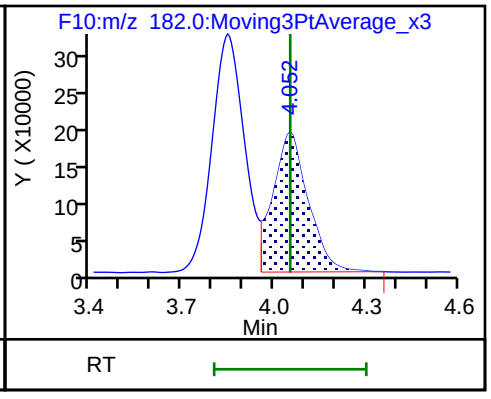
17 2,6-Dinitrotoluene



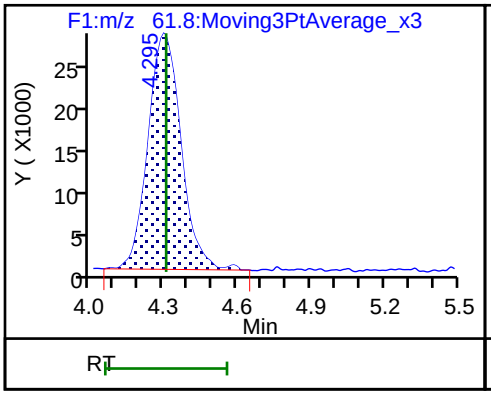
* 18 2,4-dinitrotoluene-d3



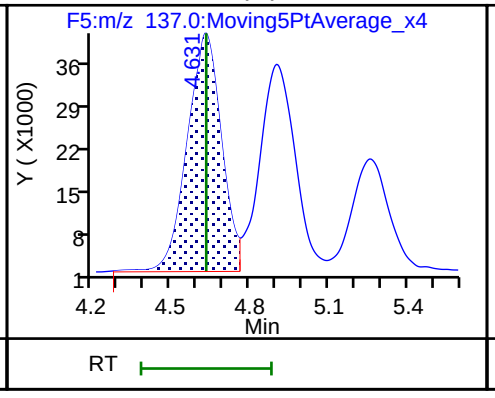
19 2,4-Dinitrotoluene



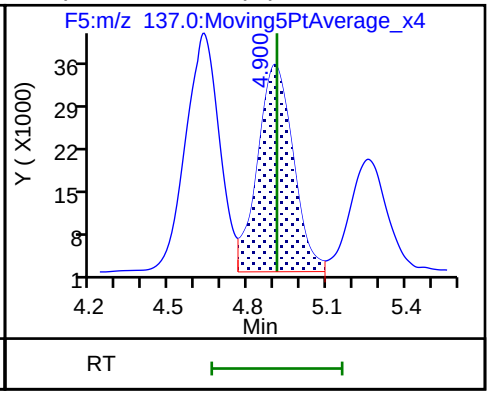
20 PETN



22 o-Nitrotoluene (M)



23 p-Nitrotoluene (M)

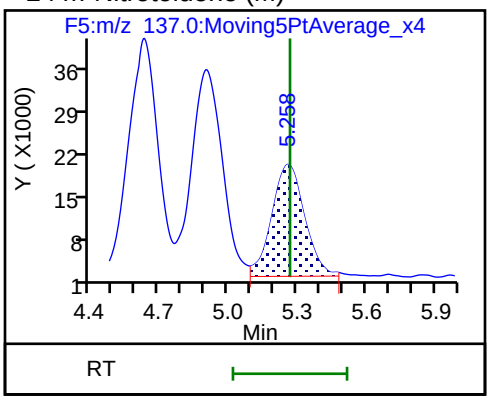


Chrom Revision: 2.3 18-Mar-2022 09:07:22

Report Date: 05-Apr-2022 14:54:01

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

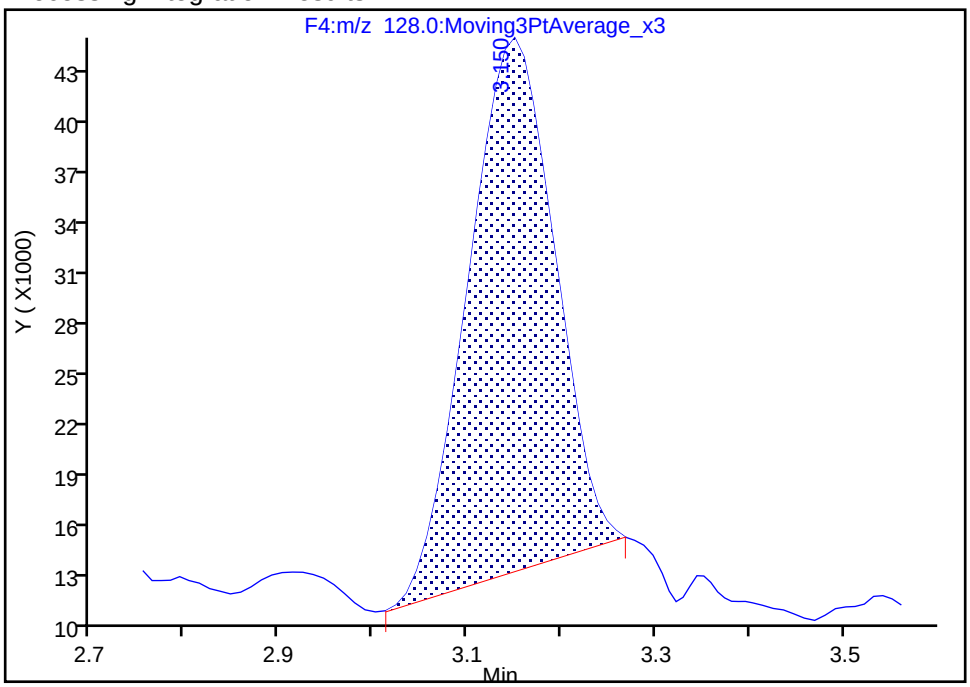
Injection Date:	05-Apr-2022 10:33:15	Instrument ID:	LC_LCMS7		
Lims ID:	STD003				
Client ID:					
Operator ID:	acm	ALS Bottle#:	4	Worklist Smp#:	5
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	8330_SIR	Limit Group:	LC - 8321A Expl		
Column:		Detector	F4:SIR		

$ 11 Nitrobenzene-d5, CAS: 4165-60-0

Signal: 1

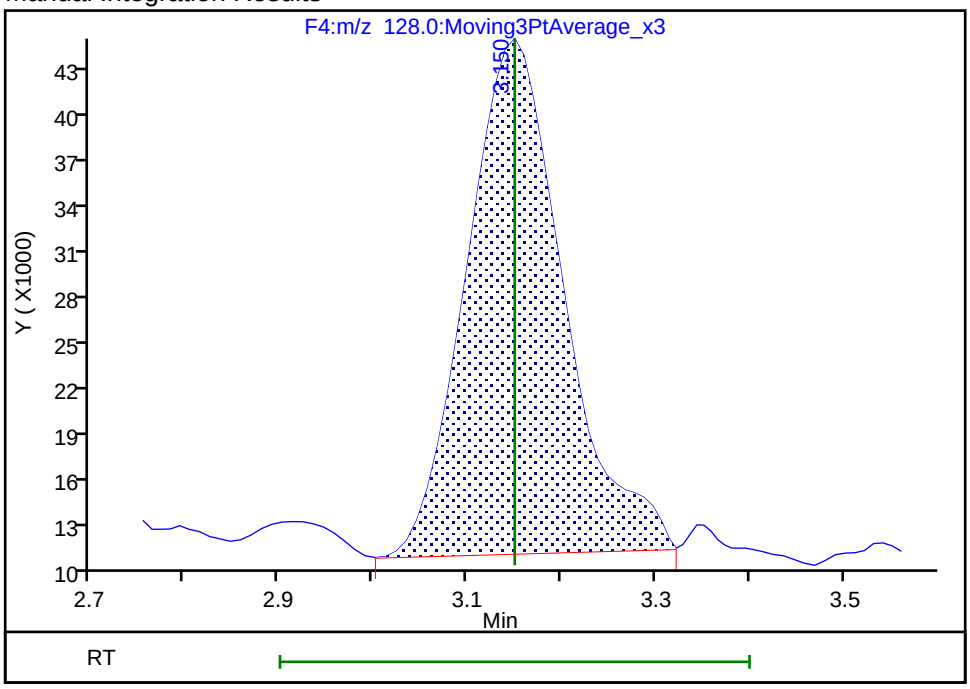
Processing Integration Results

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

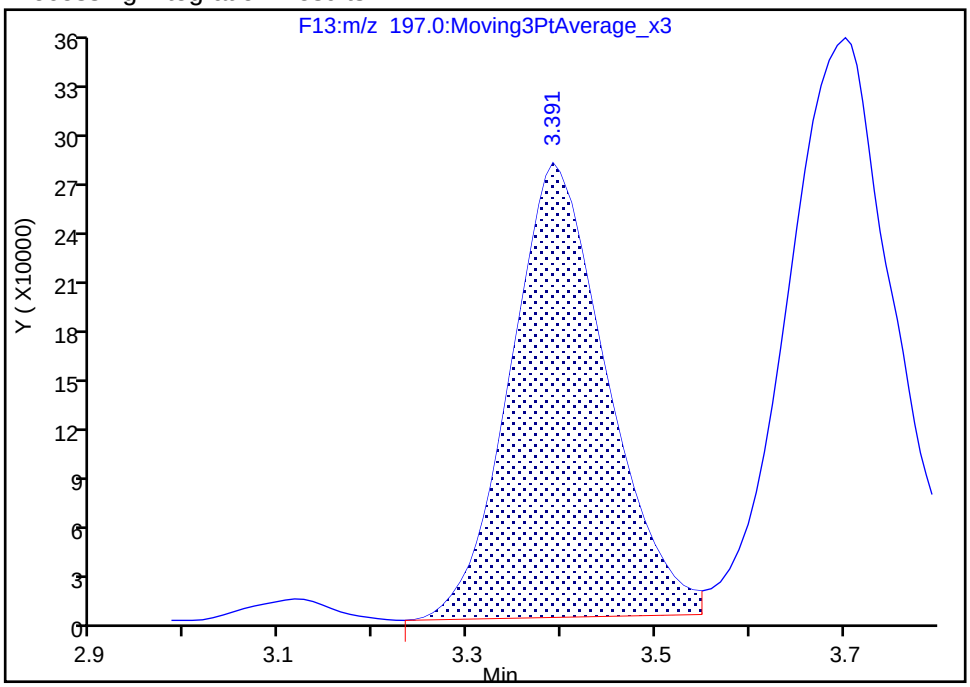
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05005.d
Injection Date: 05-Apr-2022 10:33:15 Instrument ID: LC_LCMS7
Lims ID: STD003
Client ID:
Operator ID: acm ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F13:SIR

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

Signal: 1

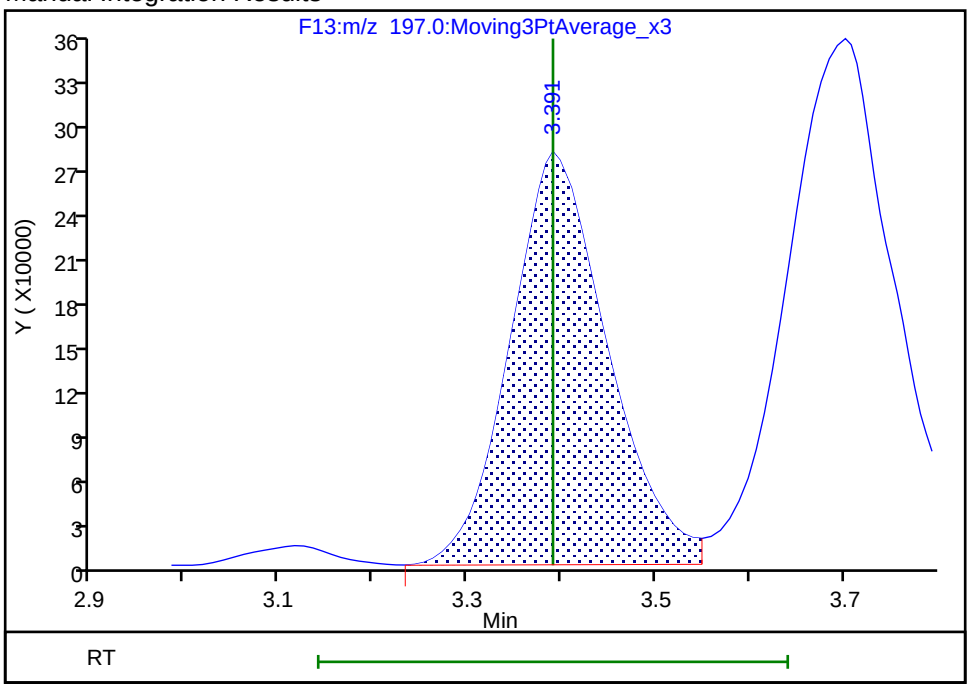
Processing Integration Results

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

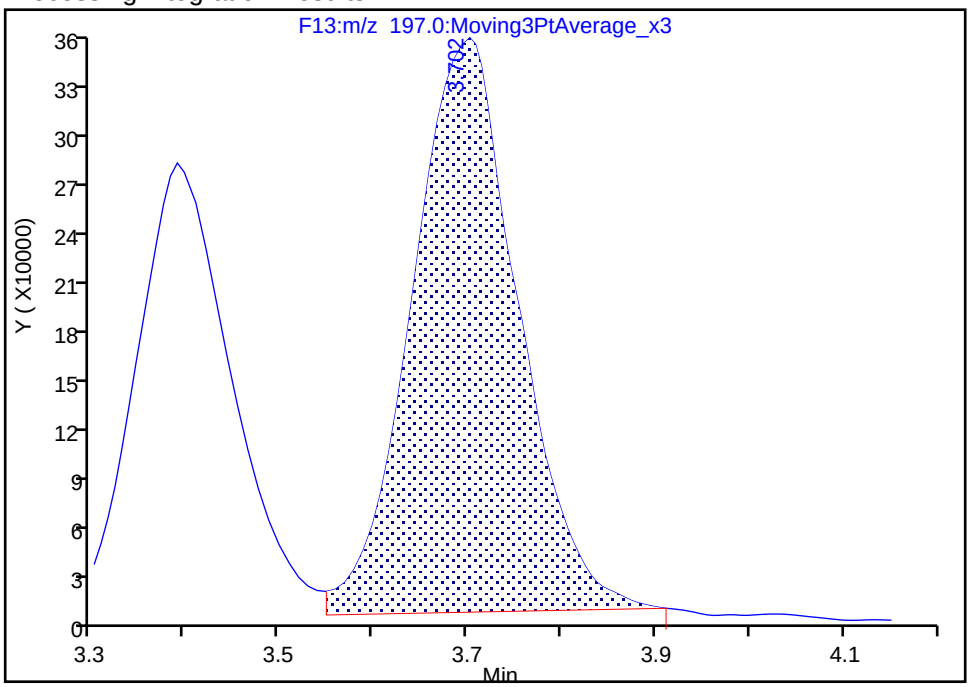
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05005.d
Injection Date: 05-Apr-2022 10:33:15 Instrument ID: LC_LCMS7
Lims ID: STD003
Client ID:
Operator ID: acm ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F13:SIR

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

Signal: 1

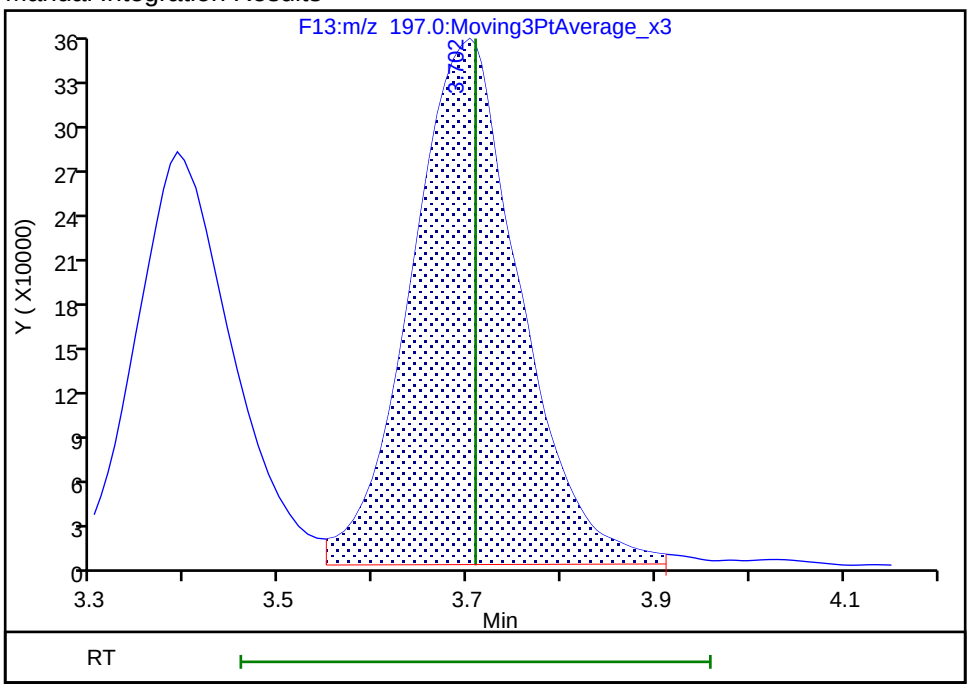
Processing Integration Results

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

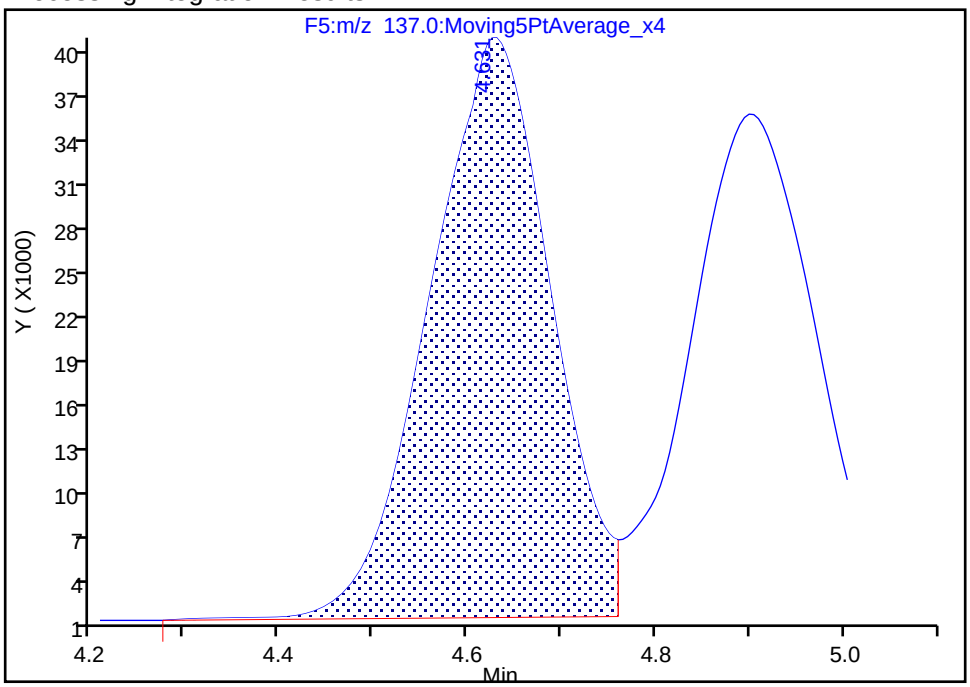
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05005.d
Injection Date: 05-Apr-2022 10:33:15 Instrument ID: LC_LCMS7
Lims ID: STD003
Client ID:
Operator ID: acm ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F5:SIR

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

Signal: 1

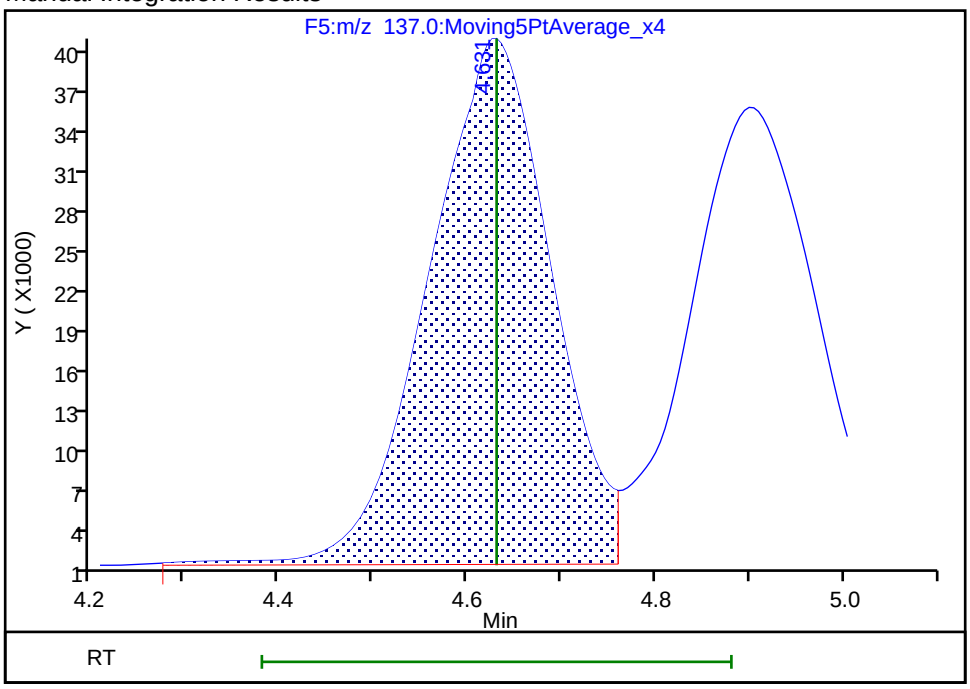
Processing Integration Results

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

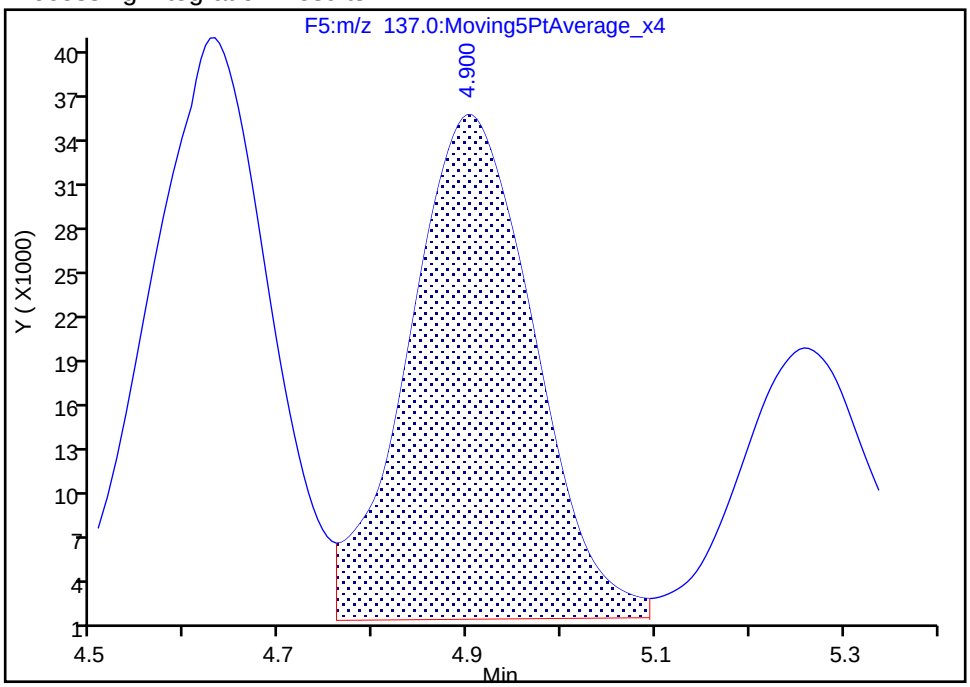
Column: Detector F5:SIR

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

Signal: 1

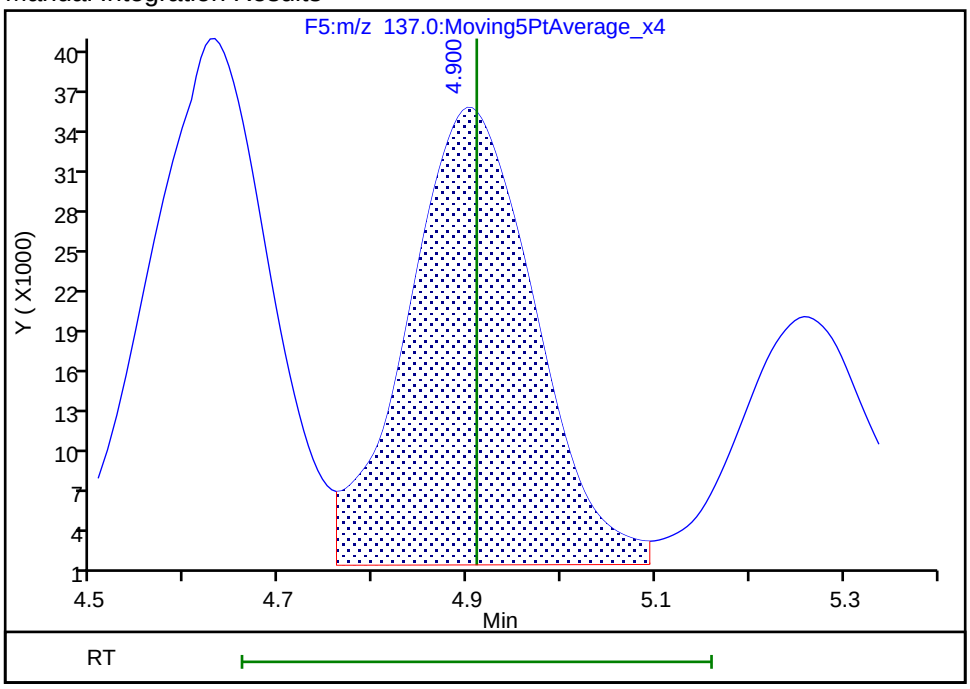
Processing Integration Results

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

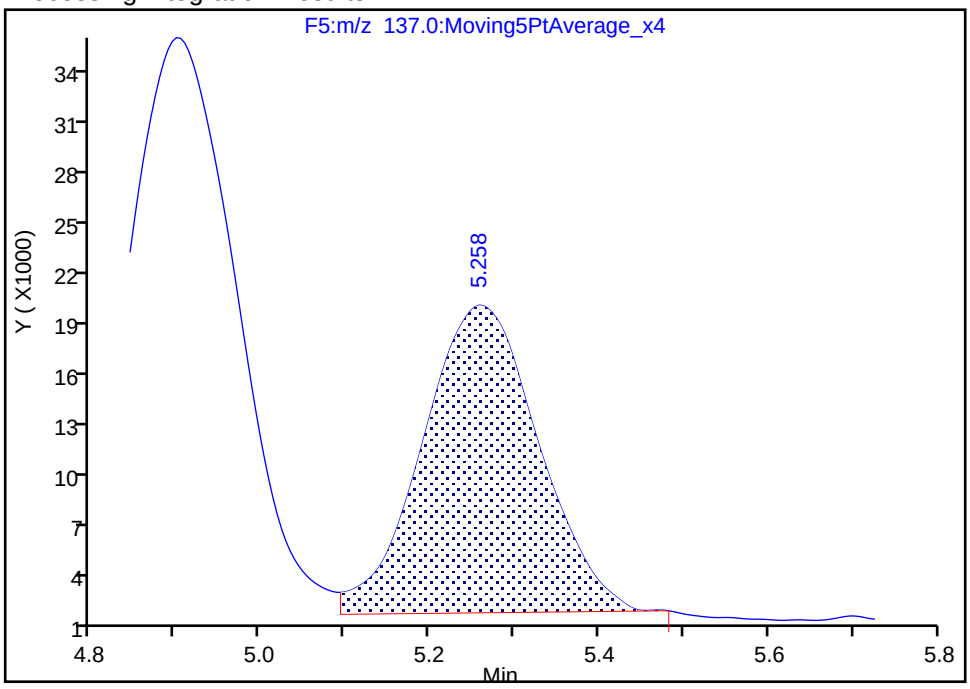
Column: Detector F5:SIR

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

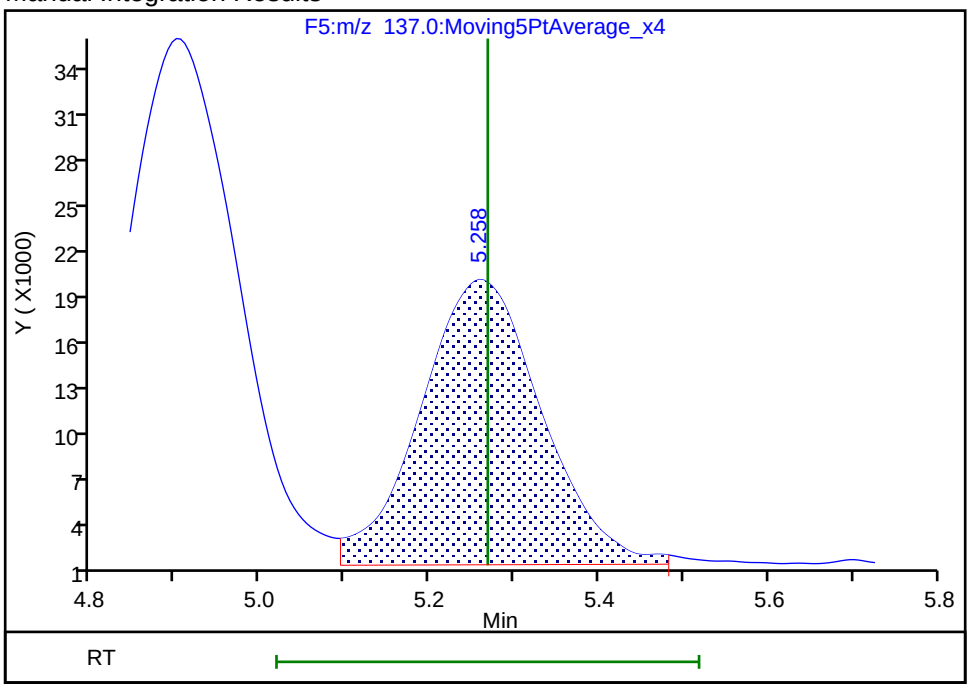
Processing Integration Results

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:

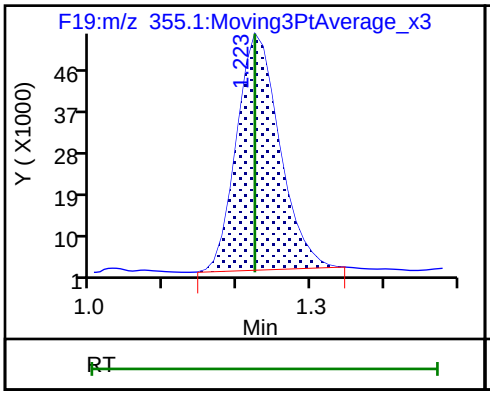
8321EXcalprim_00029	Amount Added: 5.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 5.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 05-Apr-2022 14:54:02 Chrom Revision: 2.3 18-Mar-2022 09:07:22

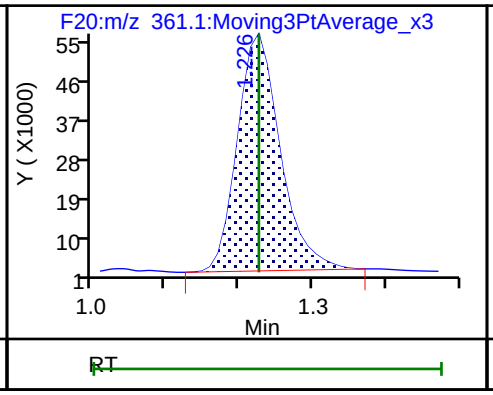
Eurofins Denver

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

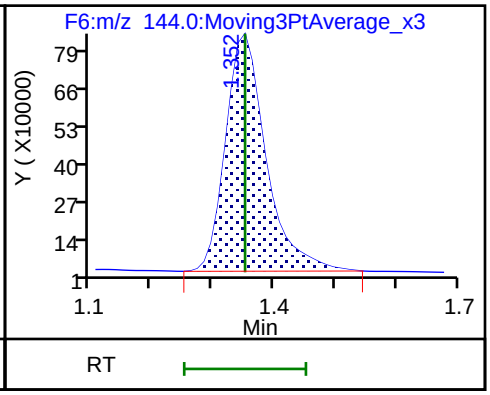
2 HMX



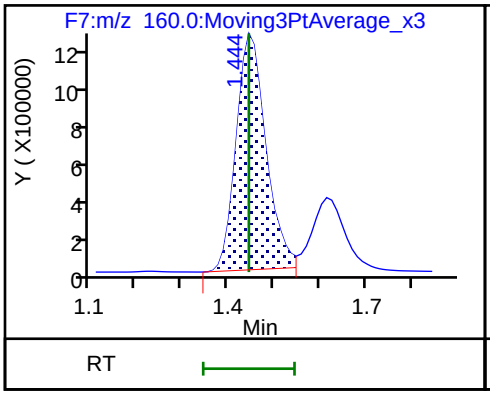
* 1 HMX-13C4



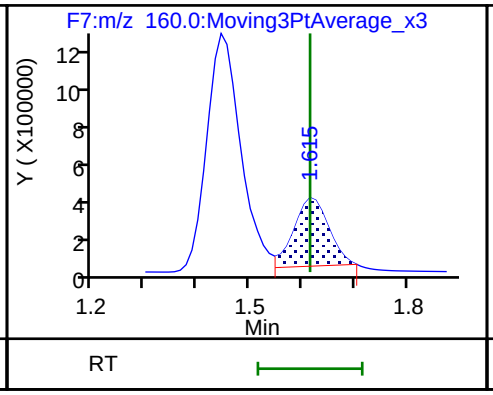
36 TNX



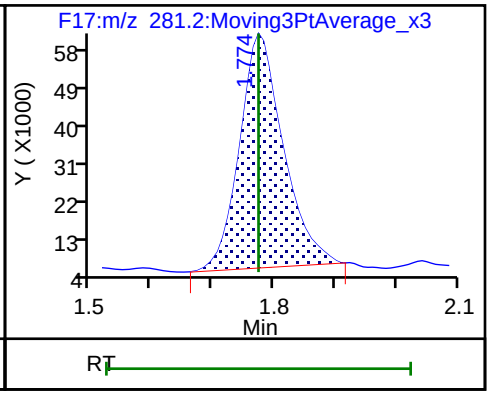
33 DNX



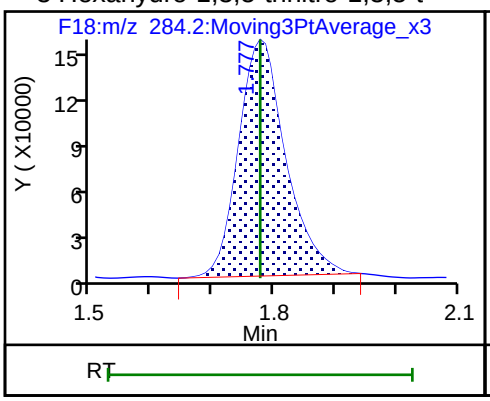
34 MNX



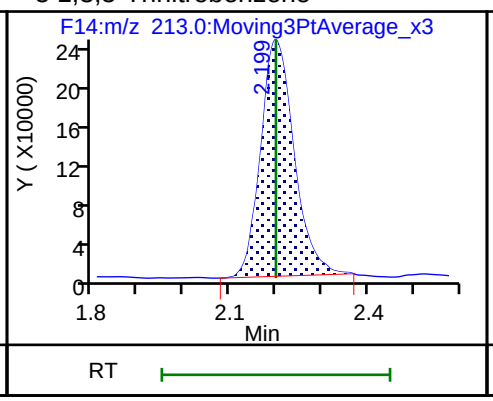
4 RDX



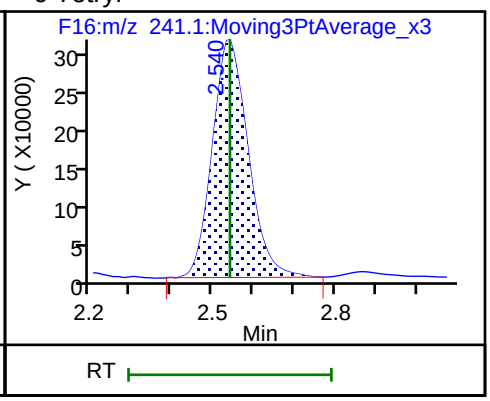
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



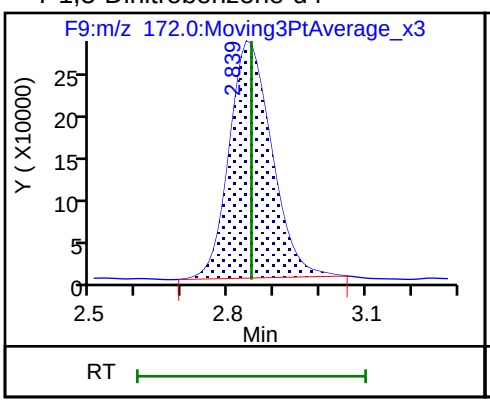
5 1,3,5-Trinitrobenzene



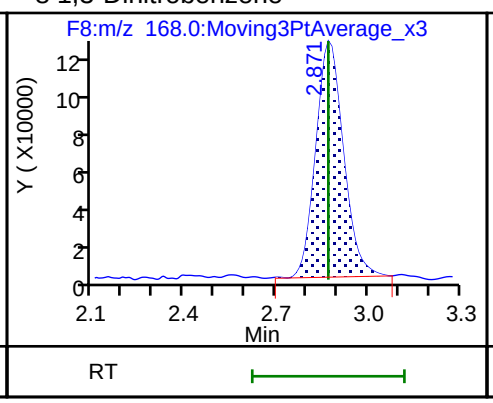
6 Tetryl



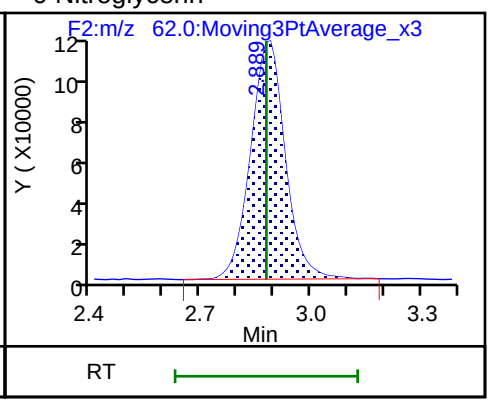
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



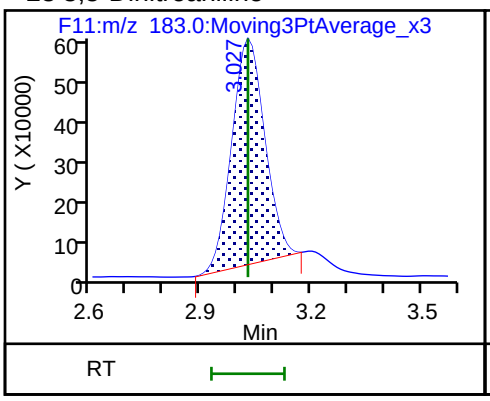
9 Nitroglycerin



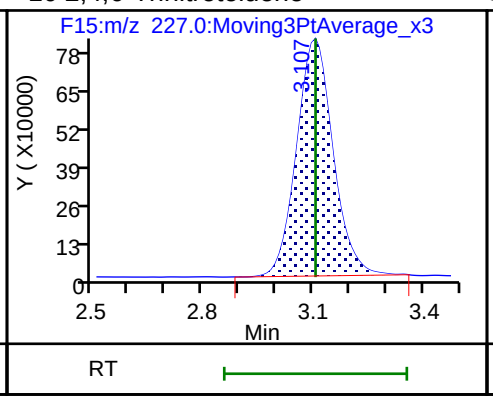
Report Date: 05-Apr-2022 14:54:02 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05006.d

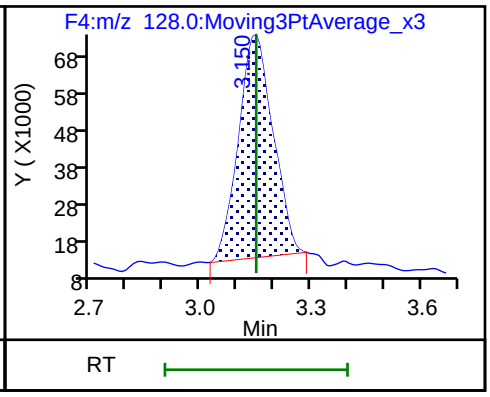
28 3,5-Dinitroaniline



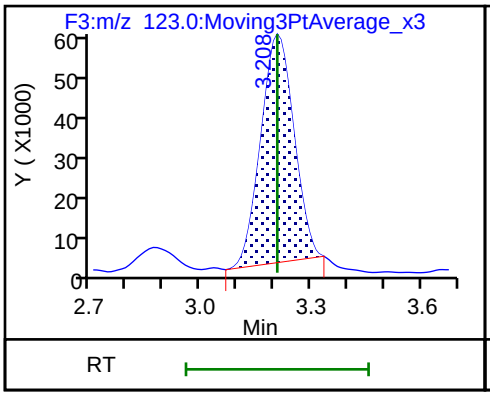
10 2,4,6-Trinitrotoluene



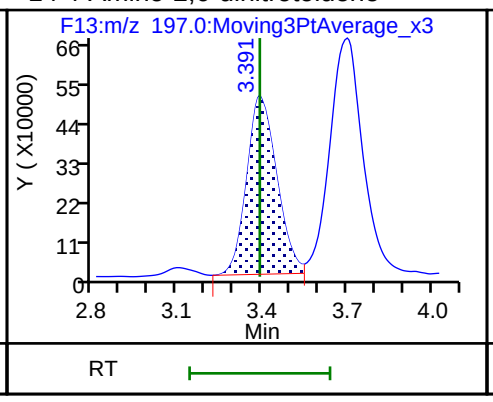
$ 11 Nitrobenzene-d5



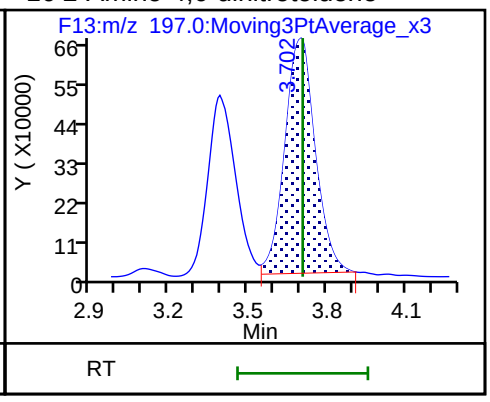
12 Nitrobenzene



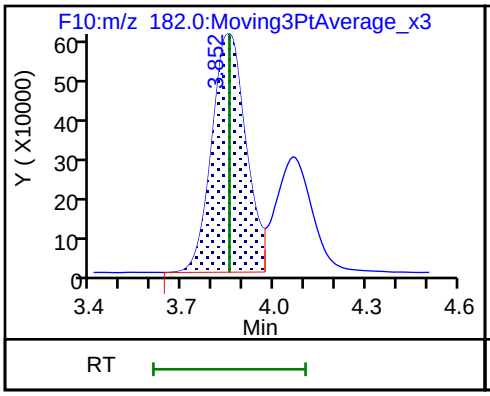
14 4-Amino-2,6-dinitrotoluene



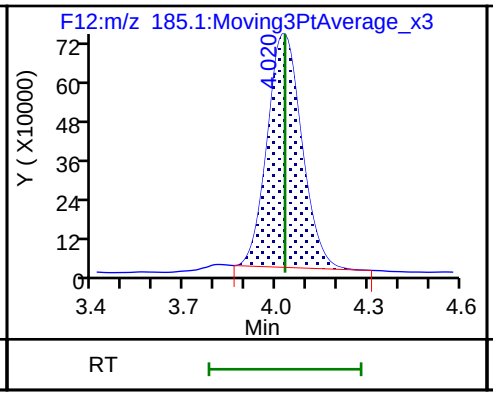
16 2-Amino-4,6-dinitrotoluene



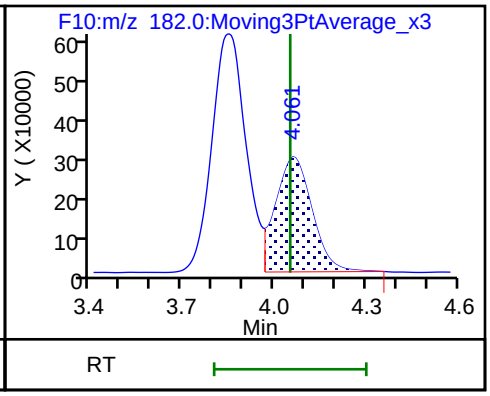
17 2,6-Dinitrotoluene



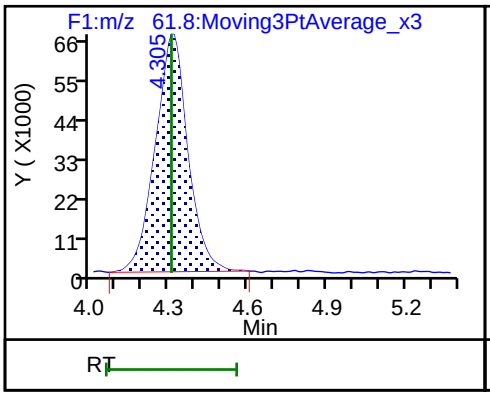
* 18 2,4-dinitrotoluene-d3



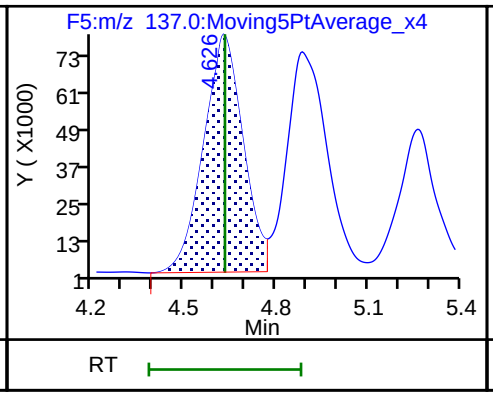
19 2,4-Dinitrotoluene



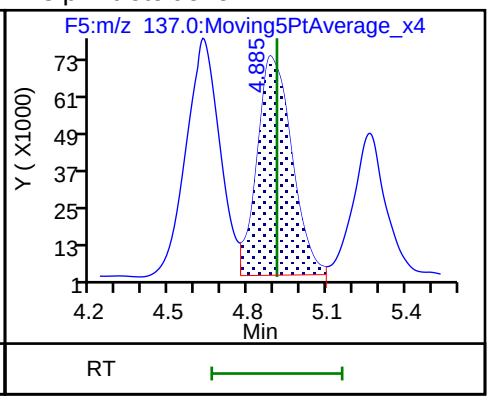
20 PETN



22 o-Nitrotoluene



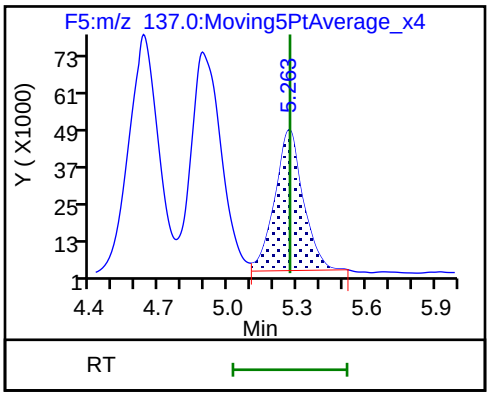
23 p-Nitrotoluene



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:

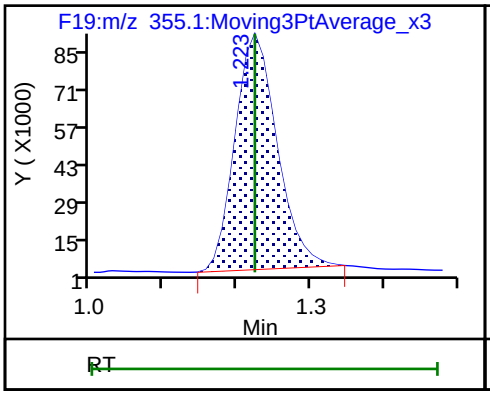
8321EXcalprim_00029	Amount Added: 10.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 10.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 05-Apr-2022 14:54:03 Chrom Revision: 2.3 18-Mar-2022 09:07:22

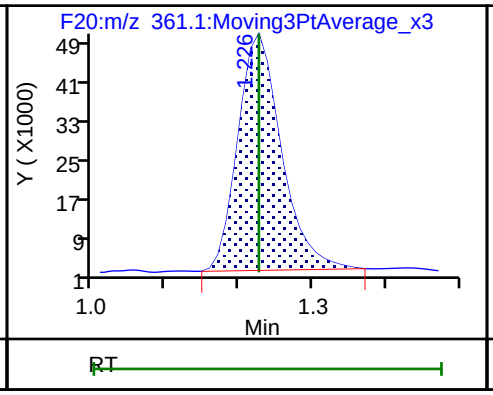
Eurofins Denver

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

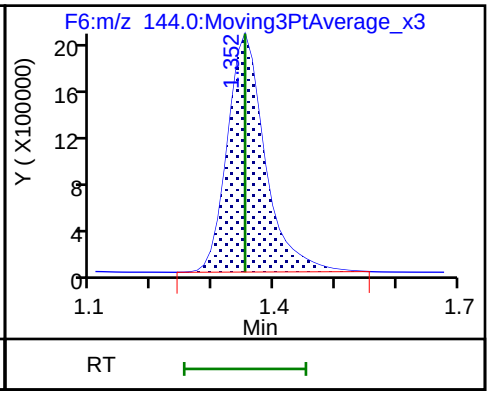
2 HMX



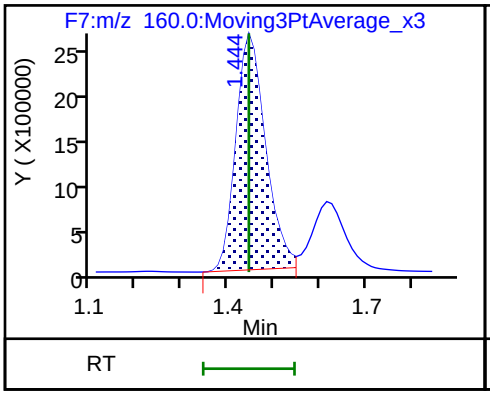
* 1 HMX-13C4



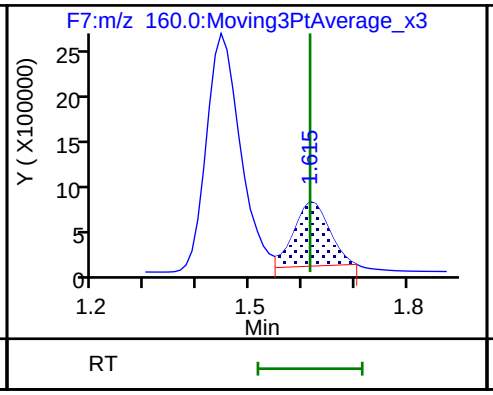
36 TNX



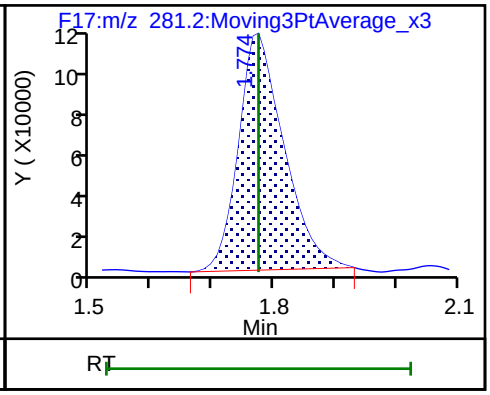
33 DNX



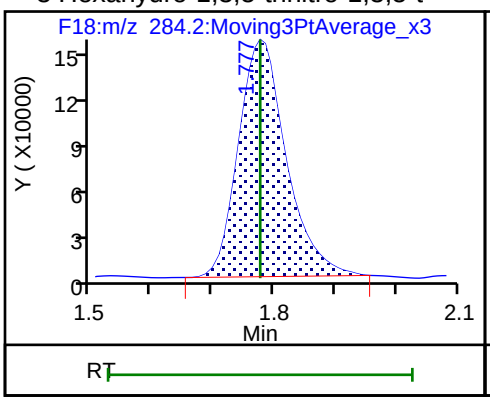
34 MNX



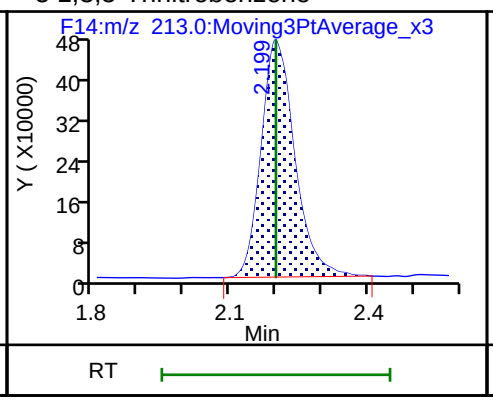
4 RDX



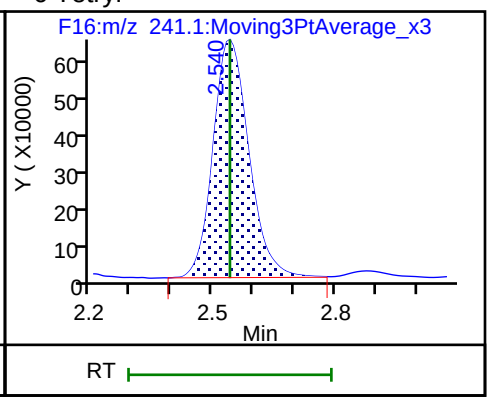
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



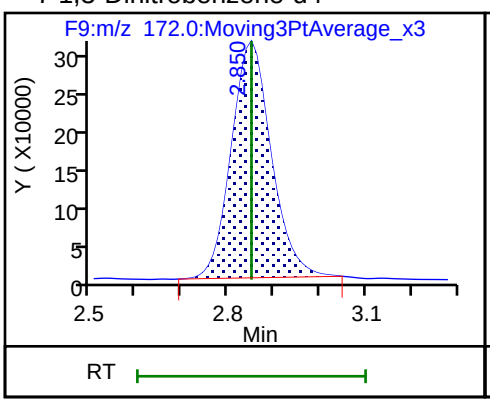
5 1,3,5-Trinitrobenzene



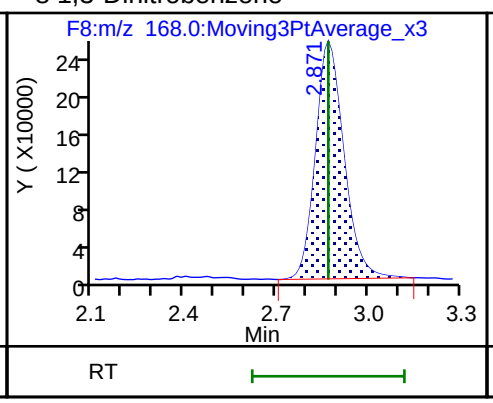
6 Tetryl



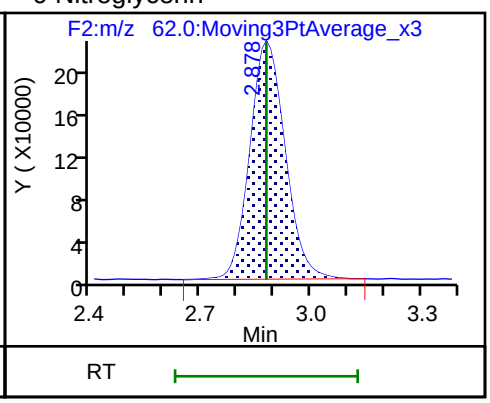
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



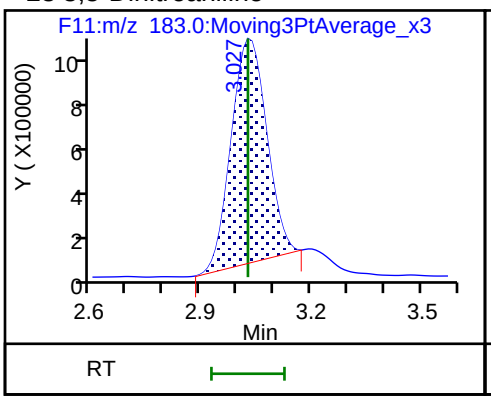
9 Nitroglycerin



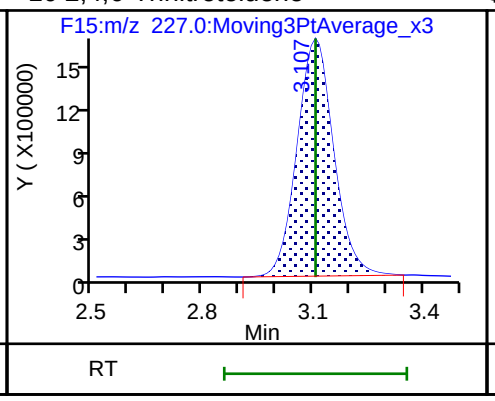
Report Date: 05-Apr-2022 14:54:03 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05007.d

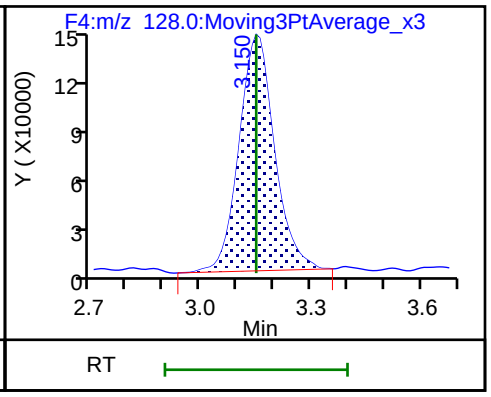
28 3,5-Dinitroaniline



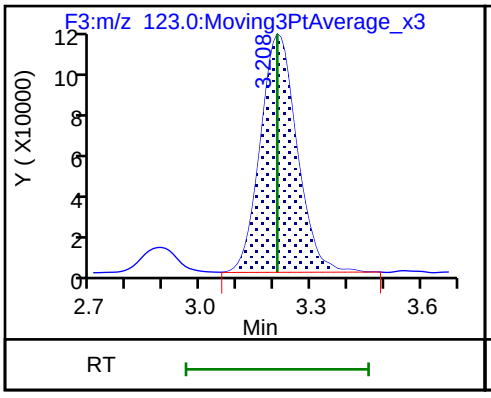
10 2,4,6-Trinitrotoluene



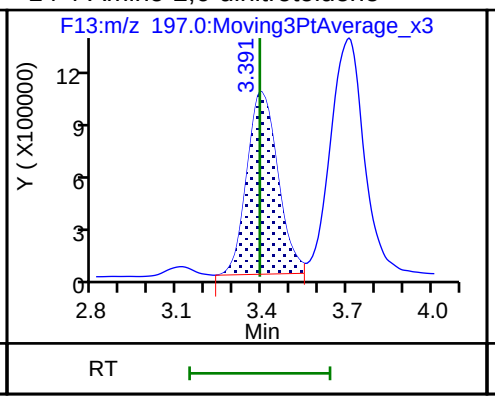
$ 11 Nitrobenzene-d5



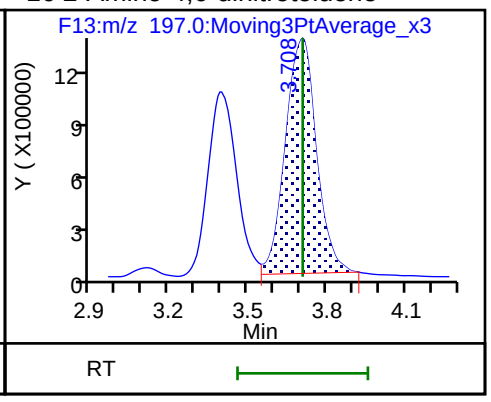
12 Nitrobenzene



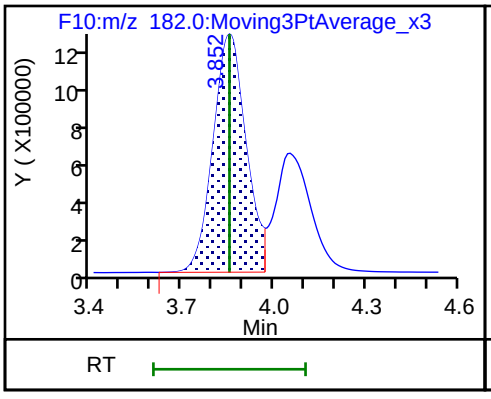
14 4-Amino-2,6-dinitrotoluene



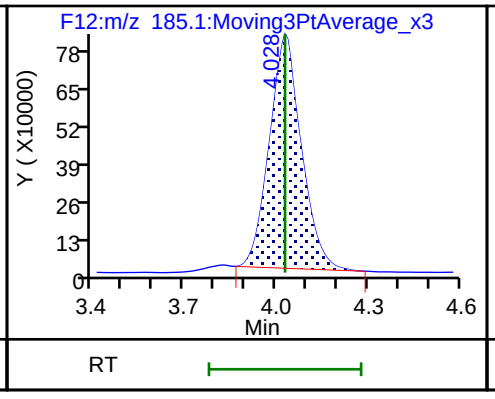
16 2-Amino-4,6-dinitrotoluene



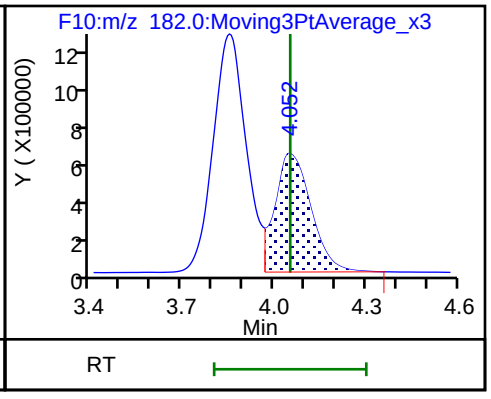
17 2,6-Dinitrotoluene



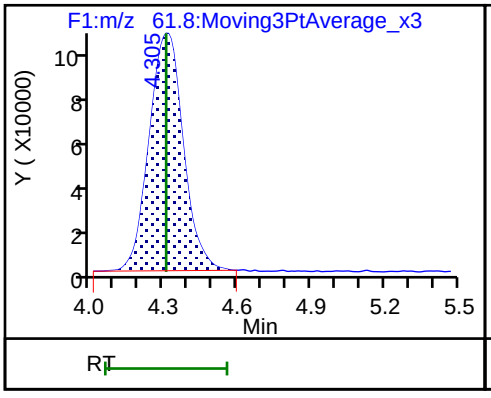
* 18 2,4-dinitrotoluene-d3



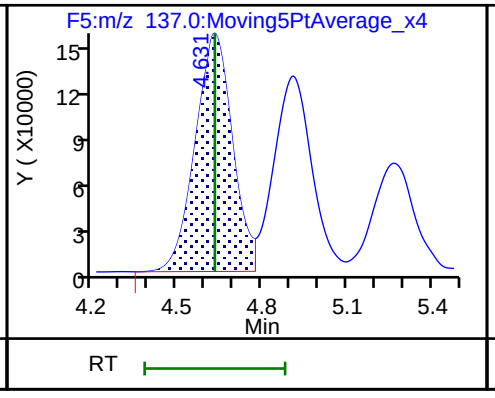
19 2,4-Dinitrotoluene



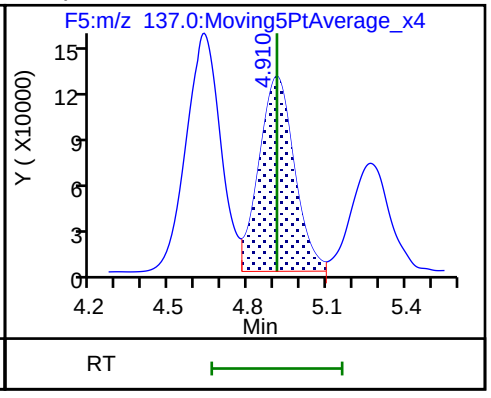
20 PETN



22 o-Nitrotoluene



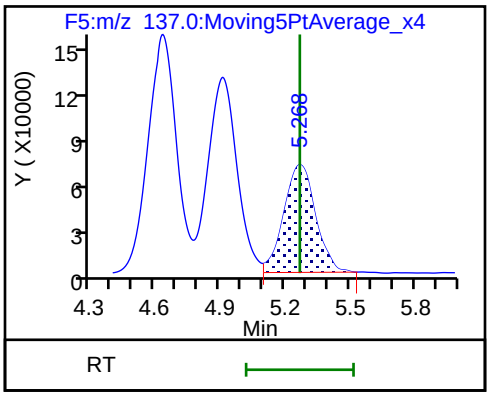
23 p-Nitrotoluene



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



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:

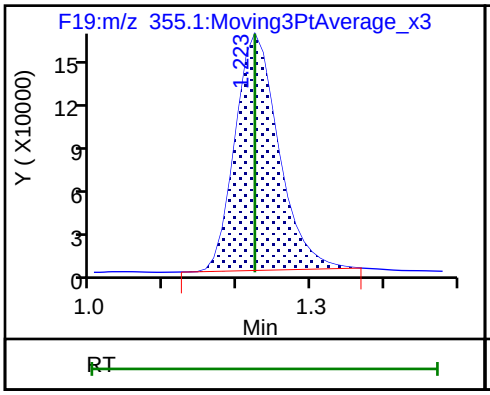
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8321NB-D5-cal_00021	Amount Added: 20.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 05-Apr-2022 14:54:04 Chrom Revision: 2.3 18-Mar-2022 09:07:22

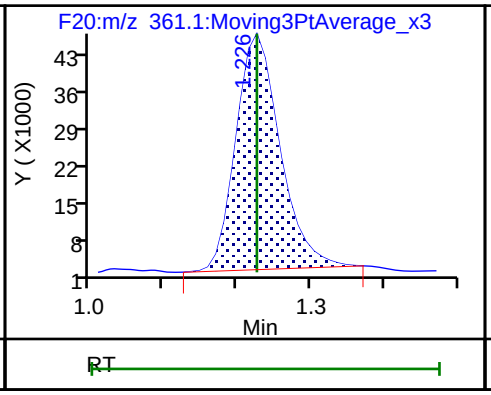
Eurofins Denver

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

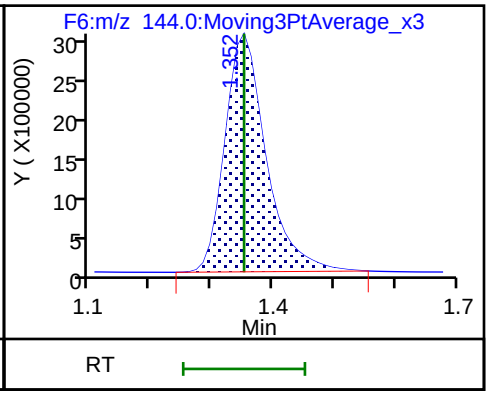
2 HMX



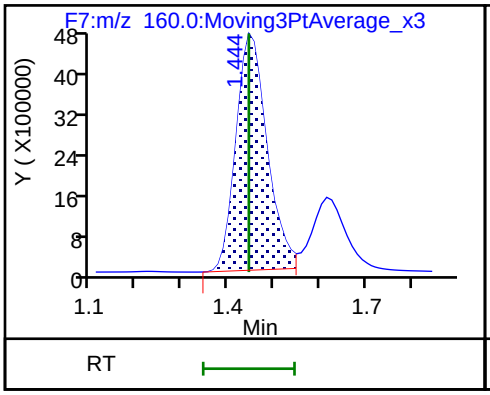
* 1 HMX-13C4



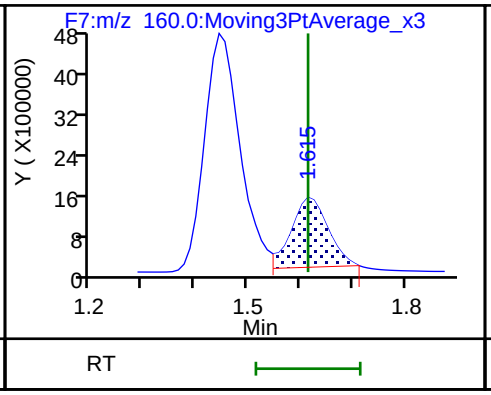
36 TNX



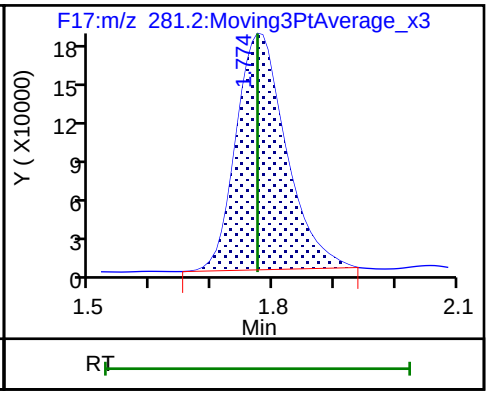
33 DNX



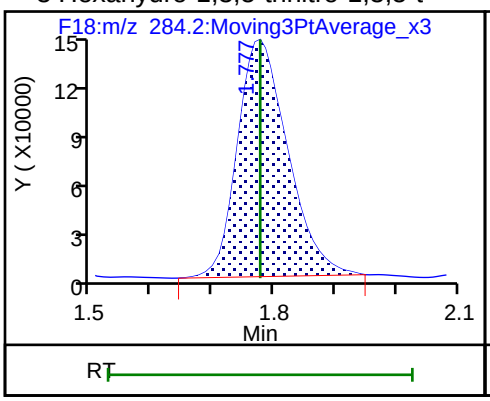
34 MNX



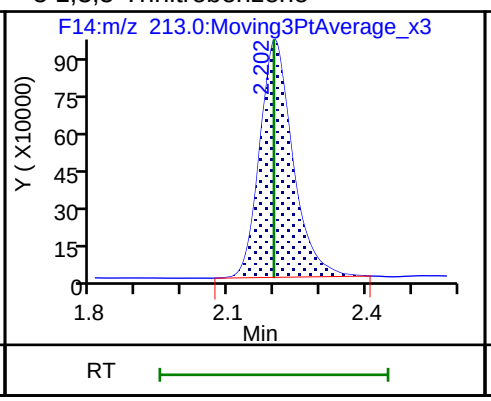
4 RDX



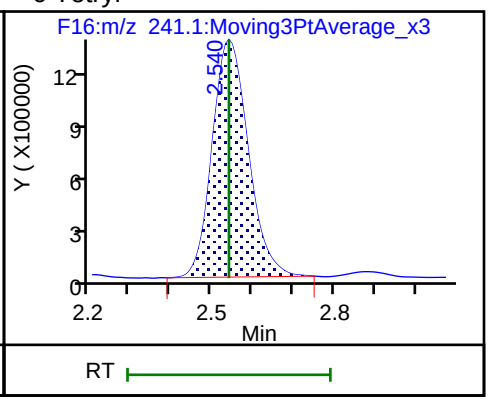
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



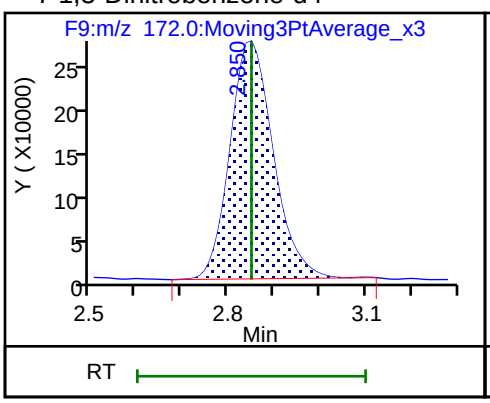
5 1,3,5-Trinitrobenzene



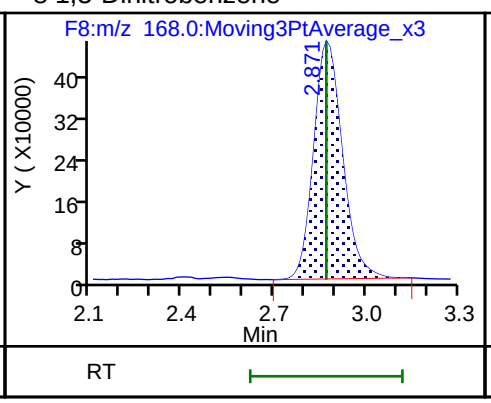
6 Tetryl



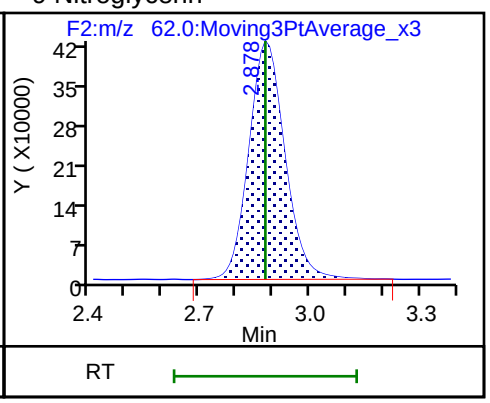
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

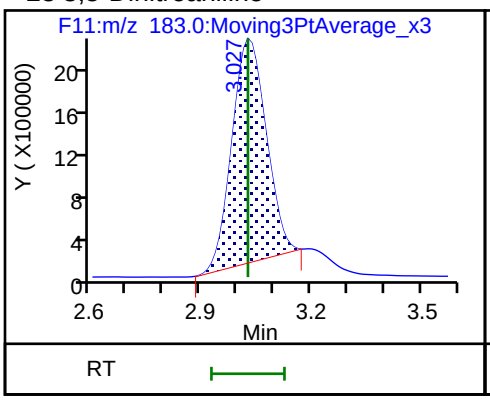


9 Nitroglycerin

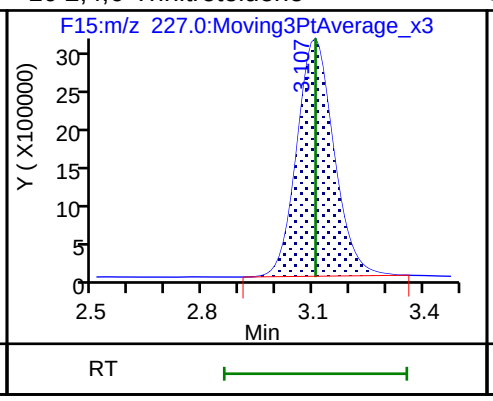


Report Date: 05-Apr-2022 14:54:04 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05008.d

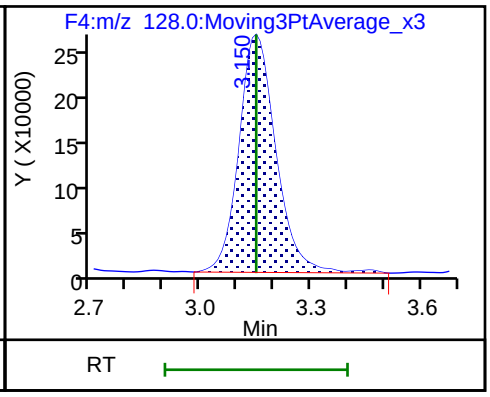
28 3,5-Dinitroaniline



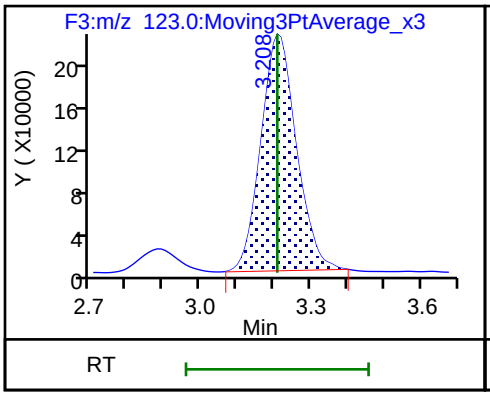
10 2,4,6-Trinitrotoluene



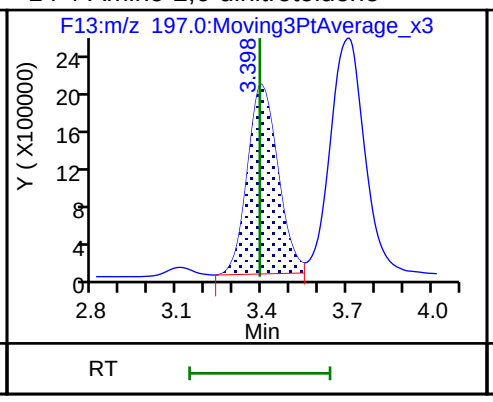
$ 11 Nitrobenzene-d5



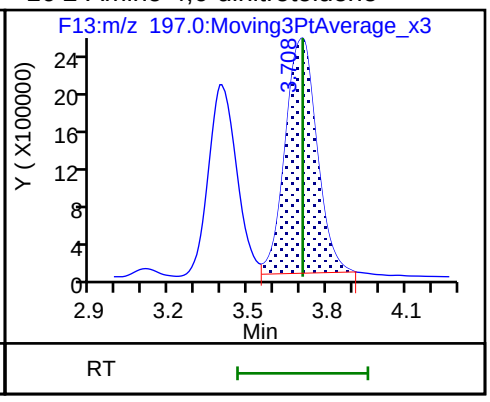
12 Nitrobenzene



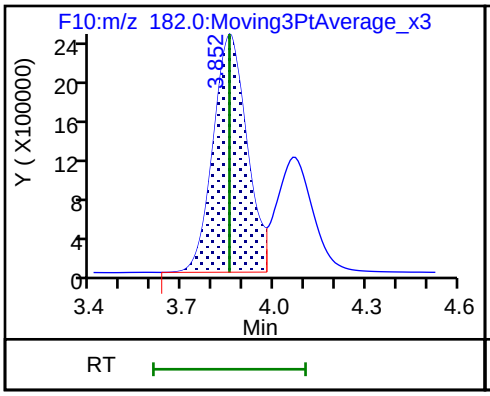
14 4-Amino-2,6-dinitrotoluene



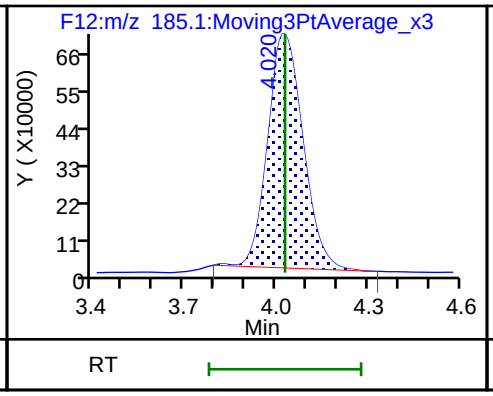
16 2-Amino-4,6-dinitrotoluene



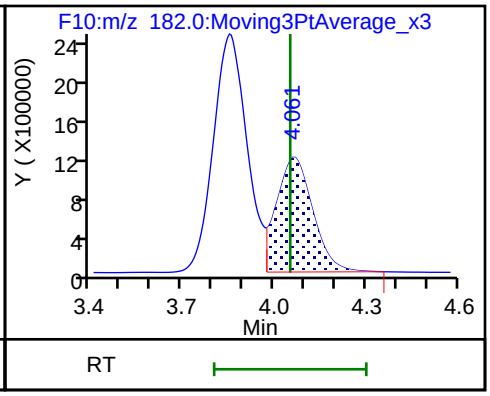
17 2,6-Dinitrotoluene



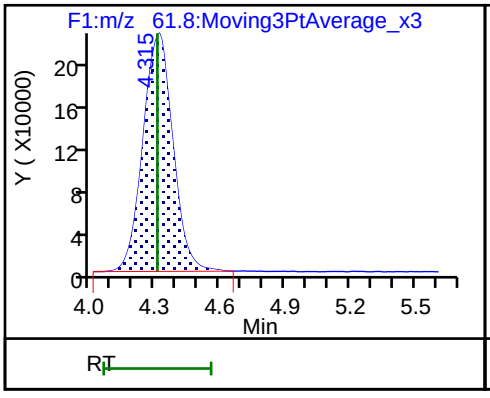
* 18 2,4-dinitrotoluene-d3



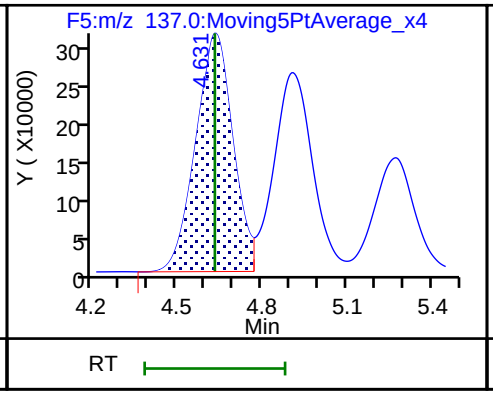
19 2,4-Dinitrotoluene



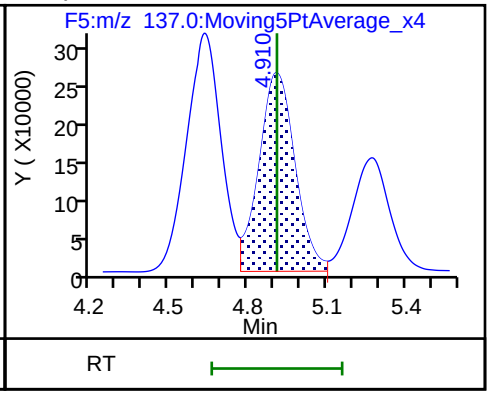
20 PETN



22 o-Nitrotoluene



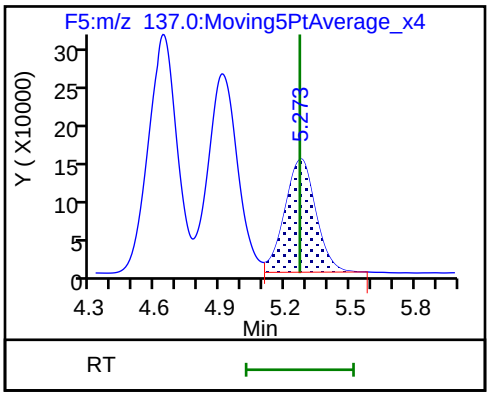
23 p-Nitrotoluene



Report Date: 05-Apr-2022 14:54:04 Chrom Revision: 2.3 18-Mar-2022 09:07:22

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

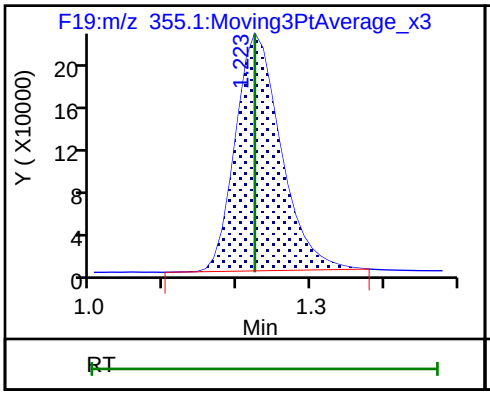
Client ID:

Operator ID: acm ALS Bottle#: 8 Worklist Smp#: 9

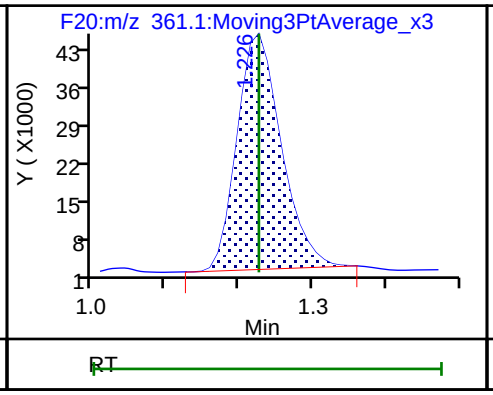
Injection Vol: 10.0 ul Dil. Factor: 1.0000

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

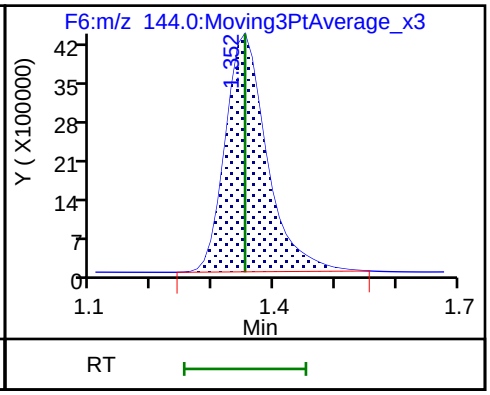
2 HMX



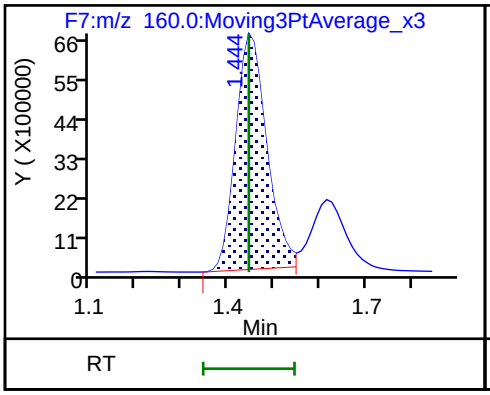
* 1 HMX-13C4



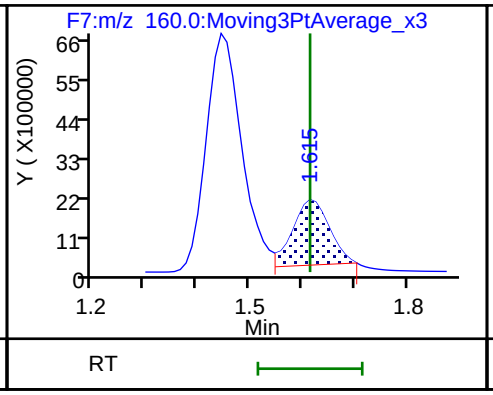
36 TNX



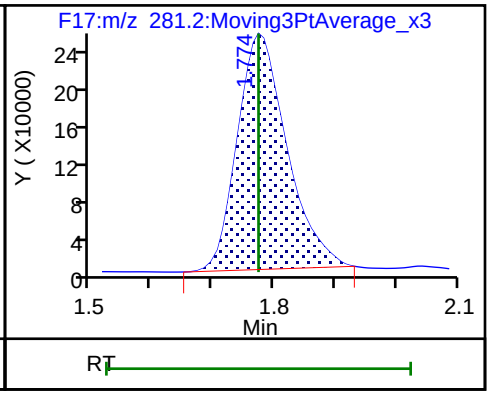
33 DNX



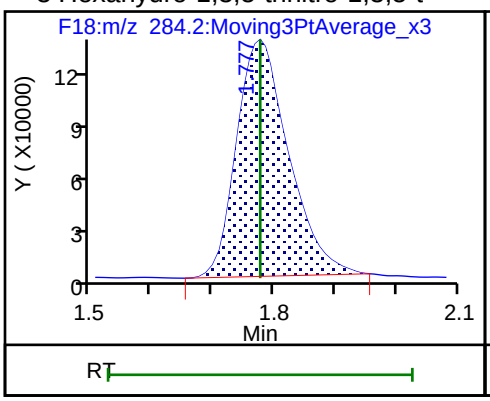
34 MNX



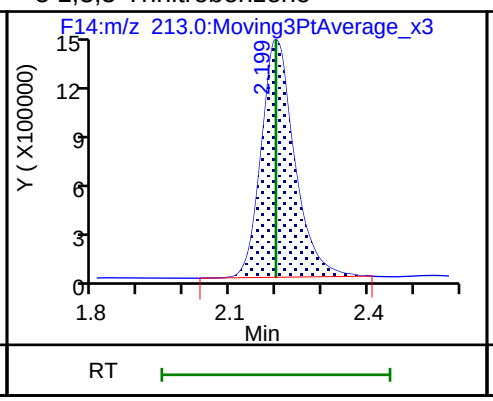
4 RDX



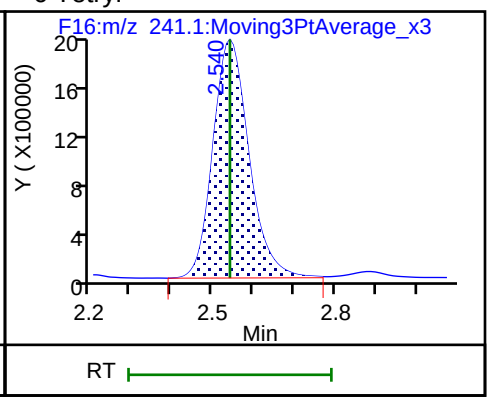
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



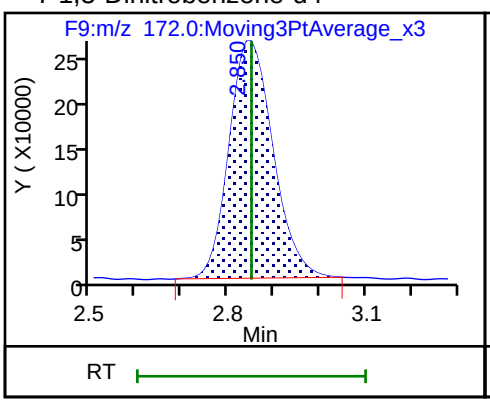
5 1,3,5-Trinitrobenzene



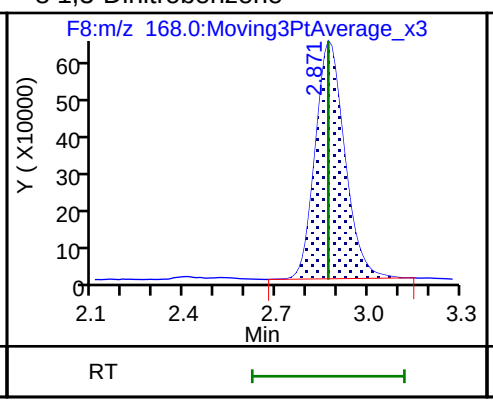
6 Tetryl



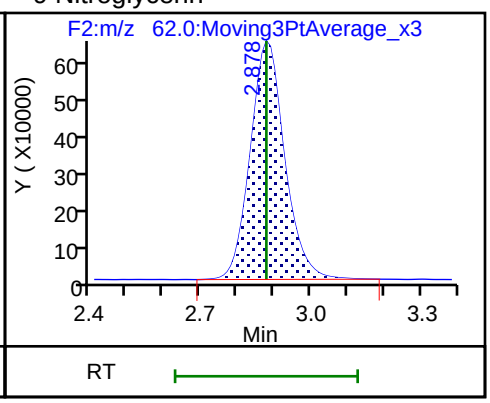
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

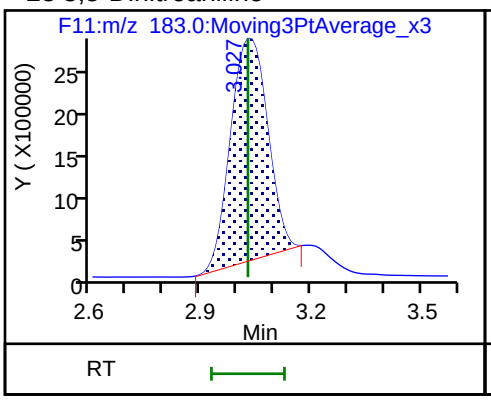


9 Nitroglycerin

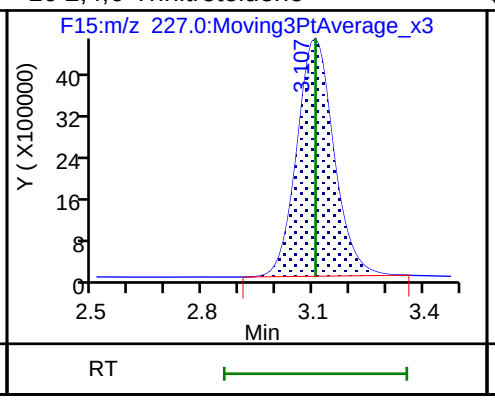


Report Date: 05-Apr-2022 14:54:05 Chrom Revision: 2.3 18-Mar-2022 09:07:22
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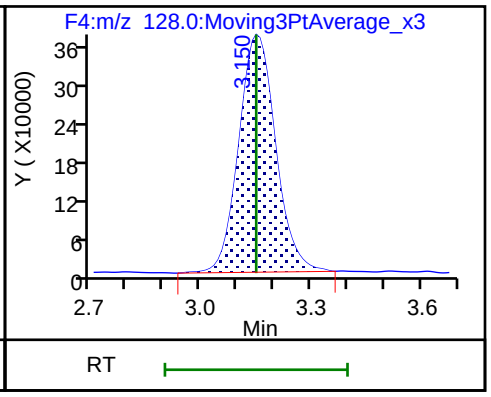
28 3,5-Dinitroaniline



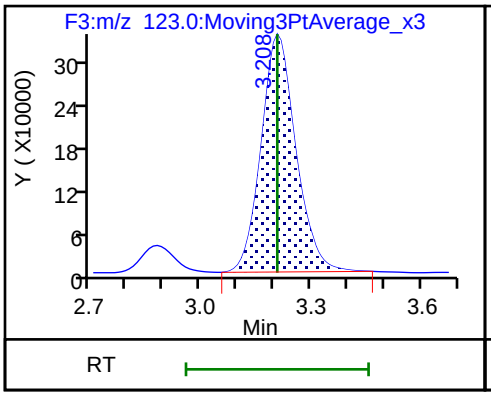
10 2,4,6-Trinitrotoluene



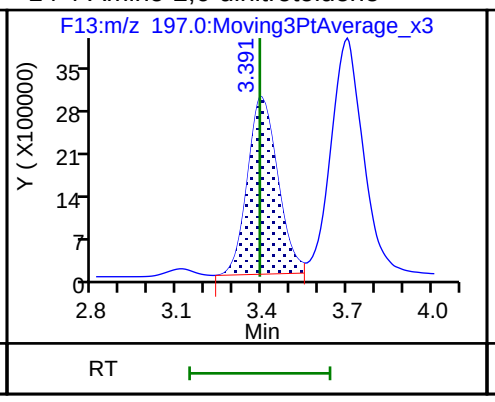
$ 11 Nitrobenzene-d5



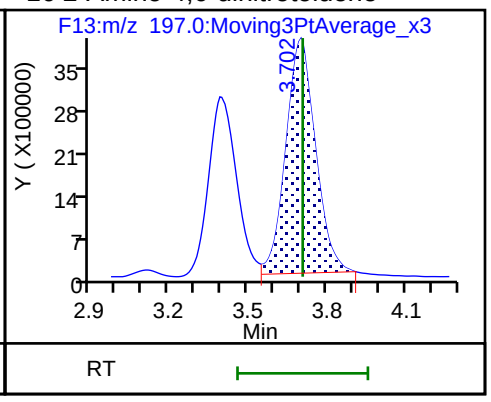
12 Nitrobenzene



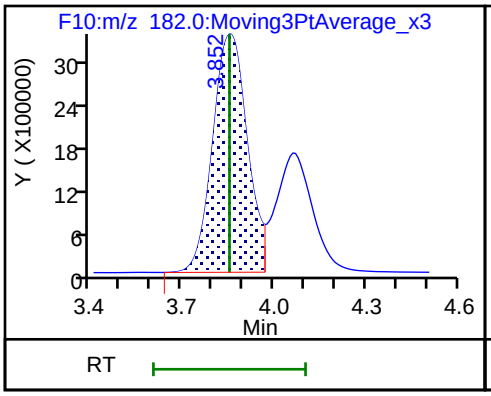
14 4-Amino-2,6-dinitrotoluene



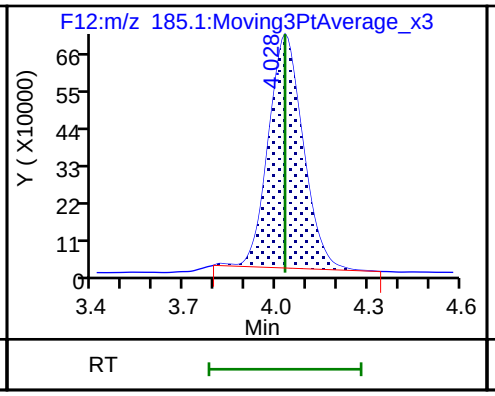
16 2-Amino-4,6-dinitrotoluene



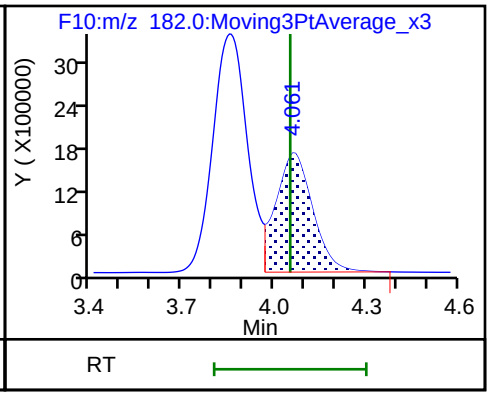
17 2,6-Dinitrotoluene



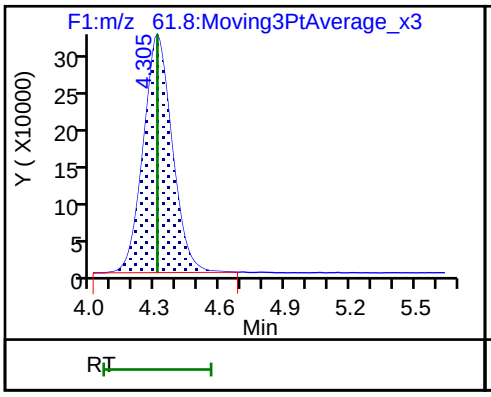
* 18 2,4-dinitrotoluene-d3



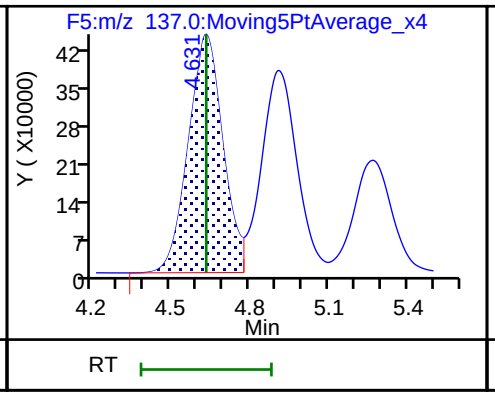
19 2,4-Dinitrotoluene



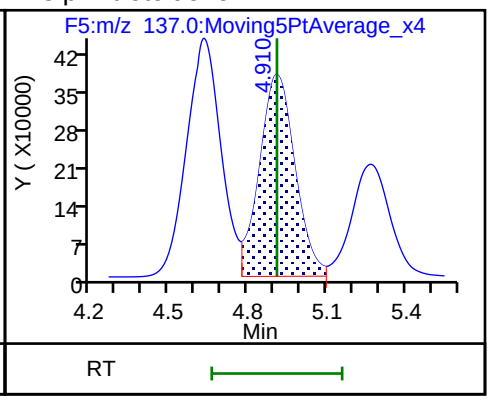
20 PETN



22 o-Nitrotoluene

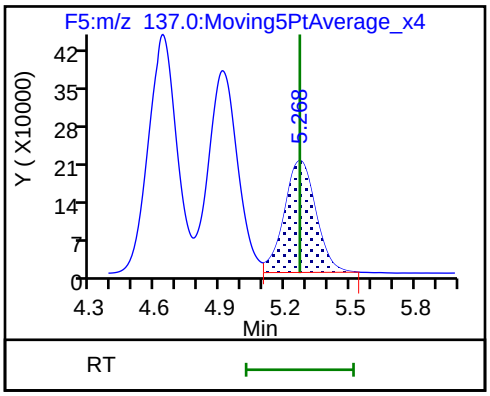


23 p-Nitrotoluene



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

24 m-Nitrotoluene



Calibration / HMX

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

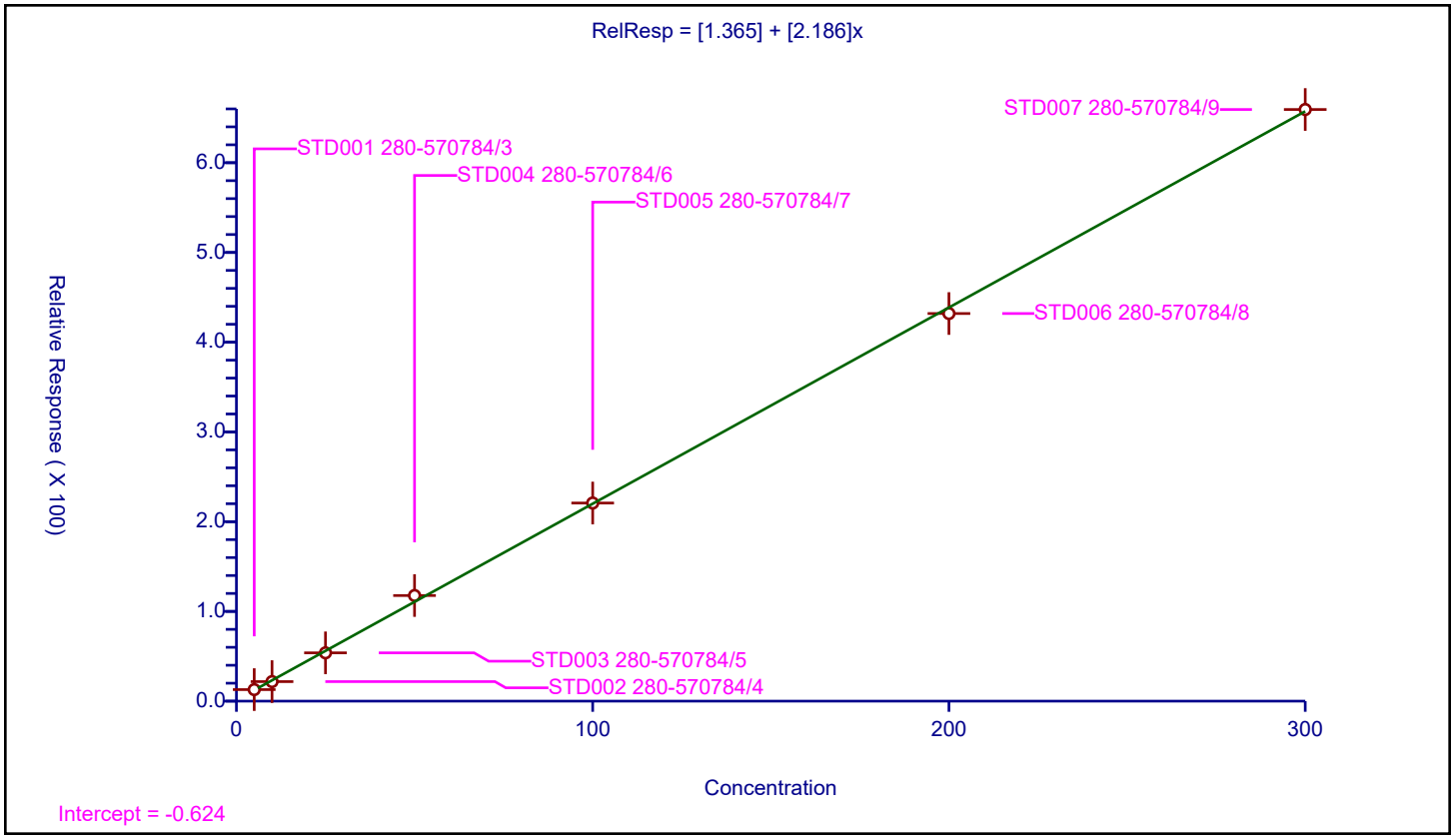
Curve Coefficients

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

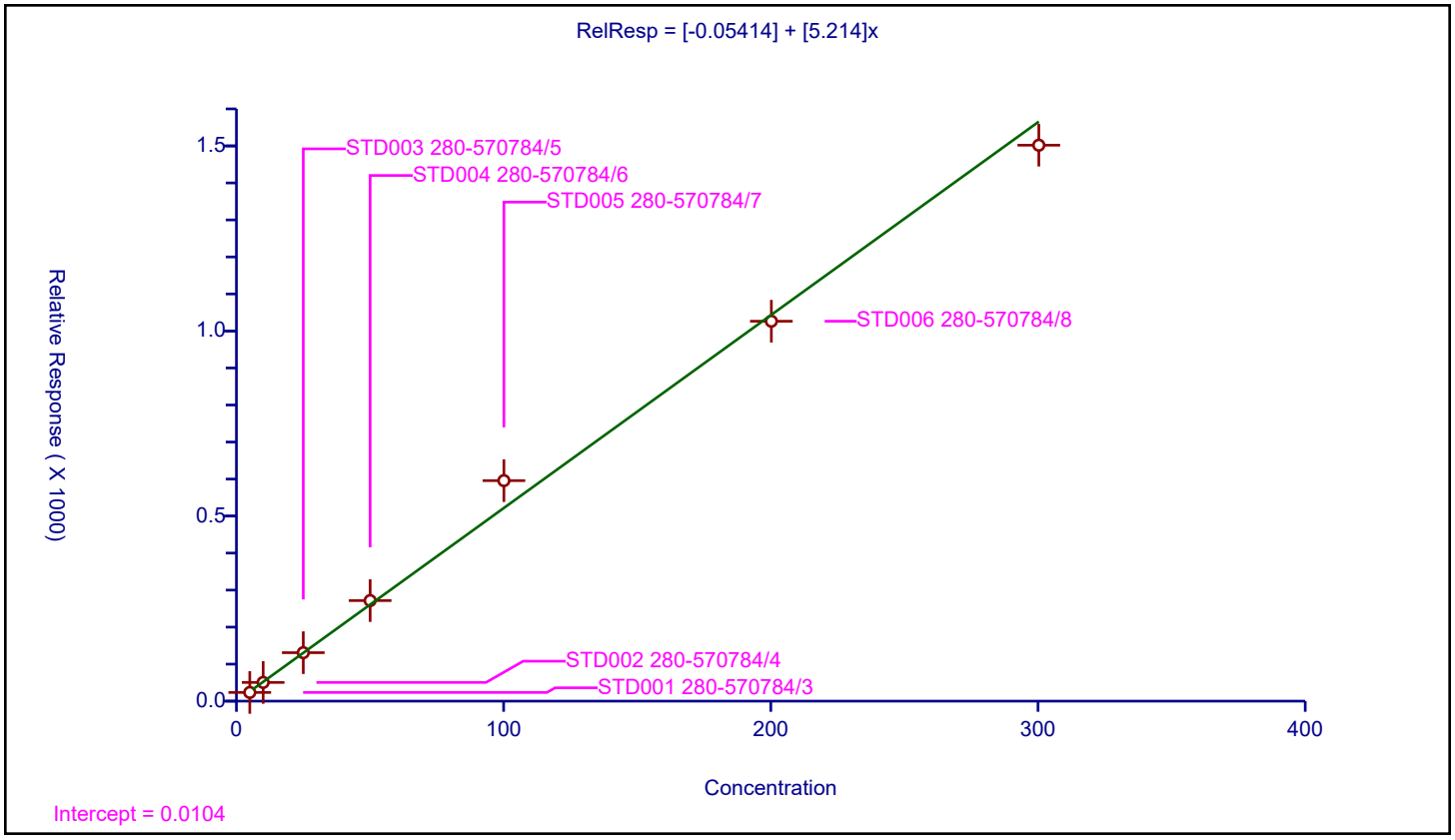
Curve Coefficients

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

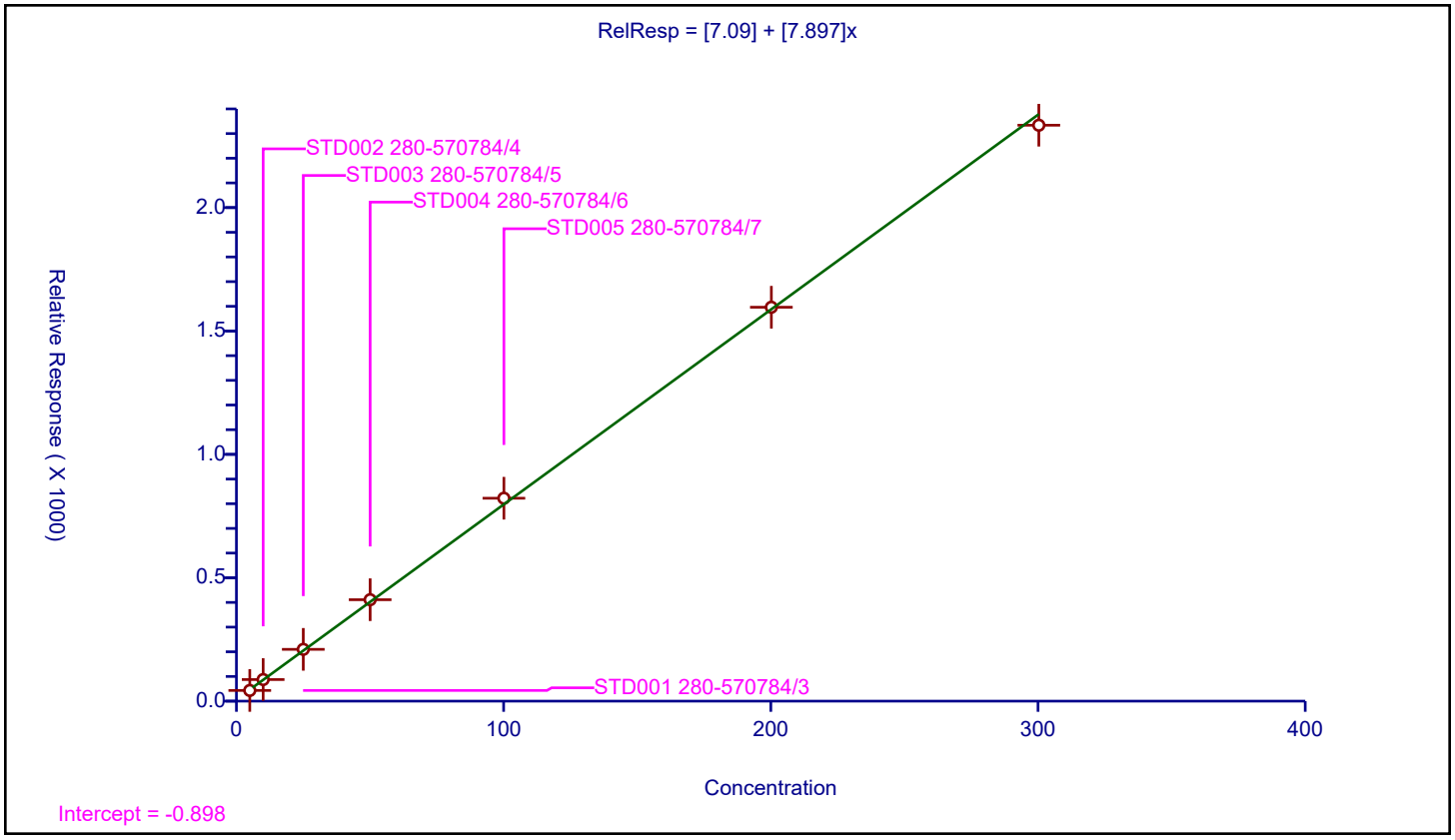
Curve Coefficients

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

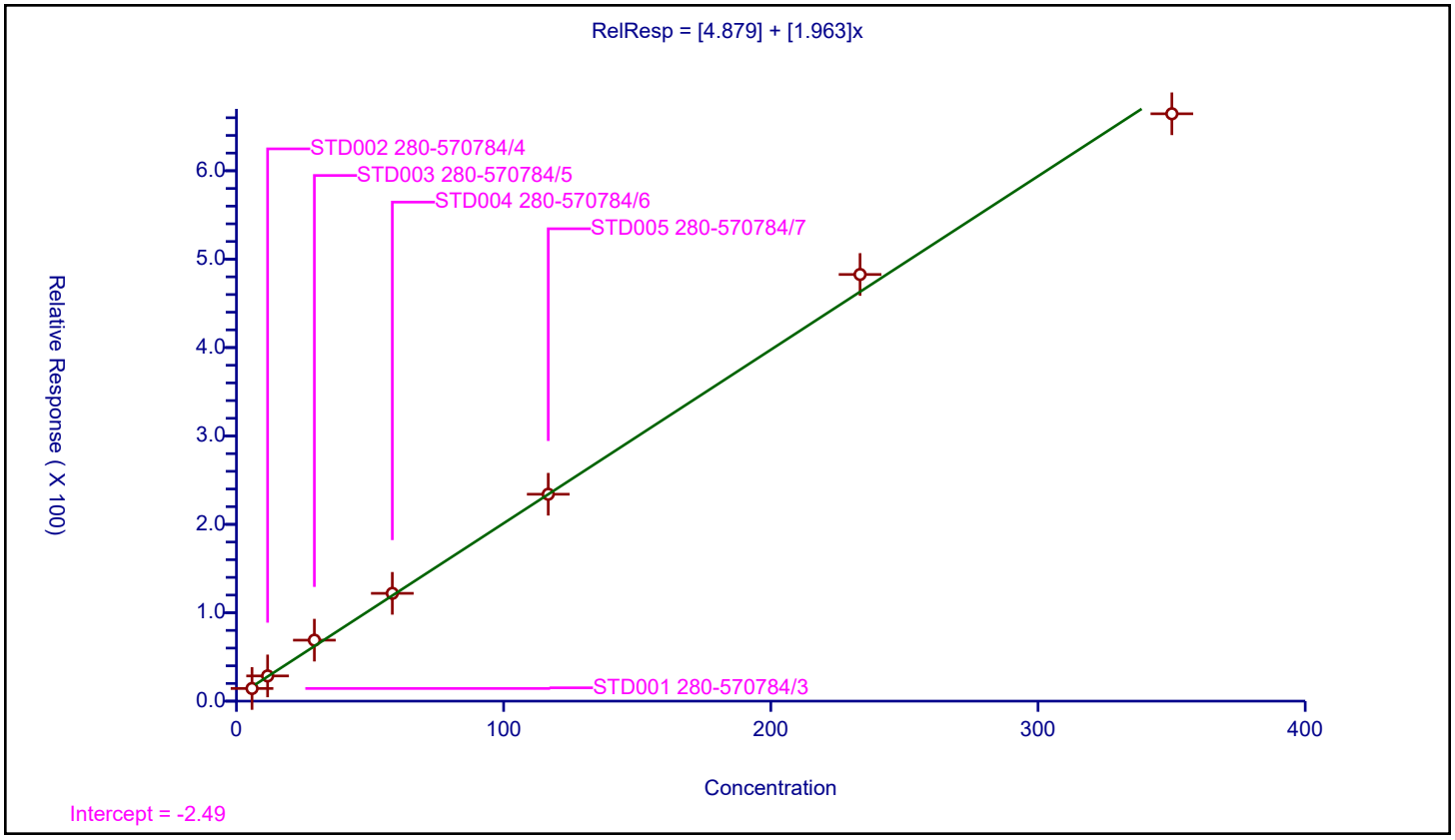
Curve Coefficients

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

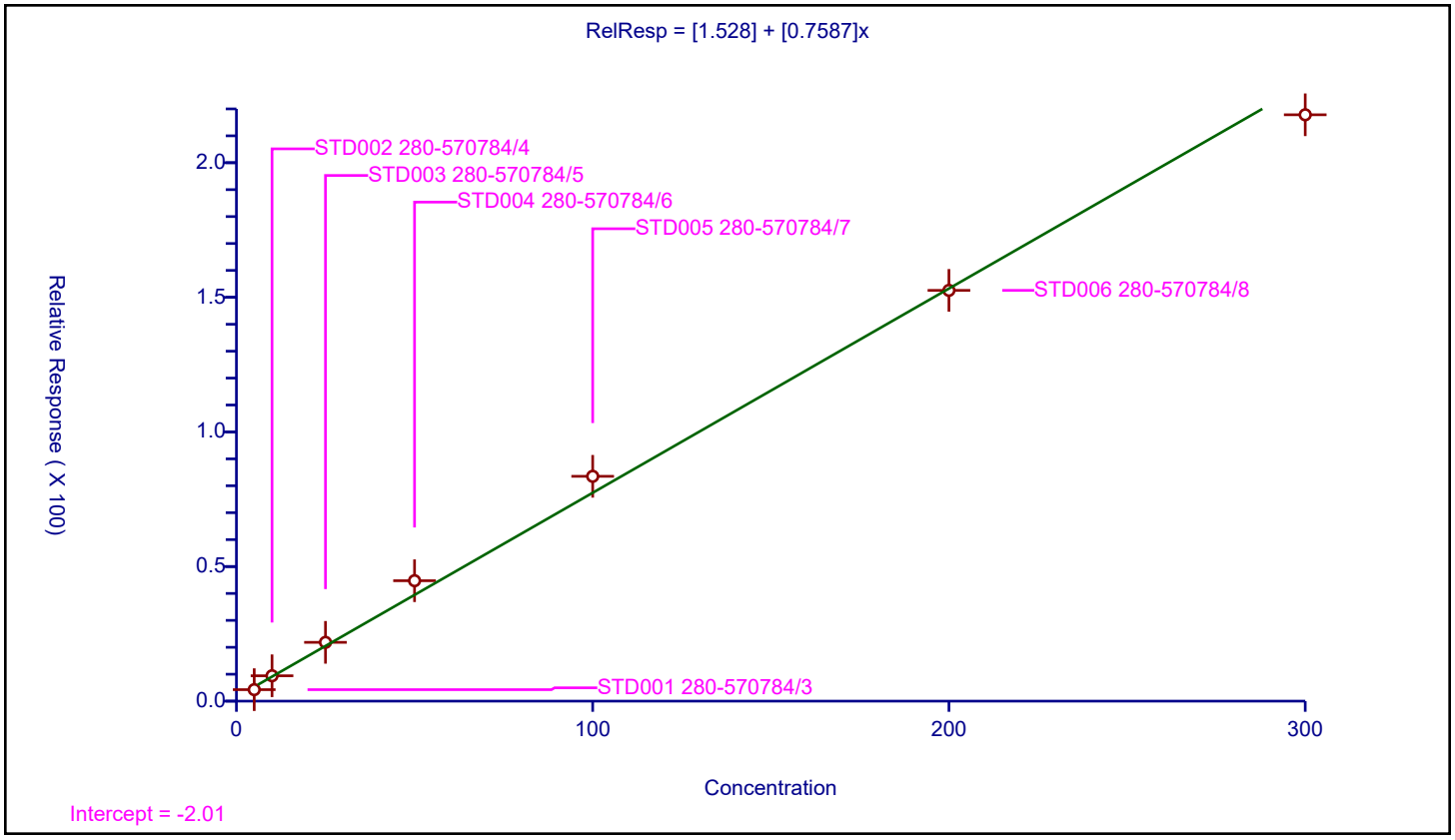
Curve Coefficients

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

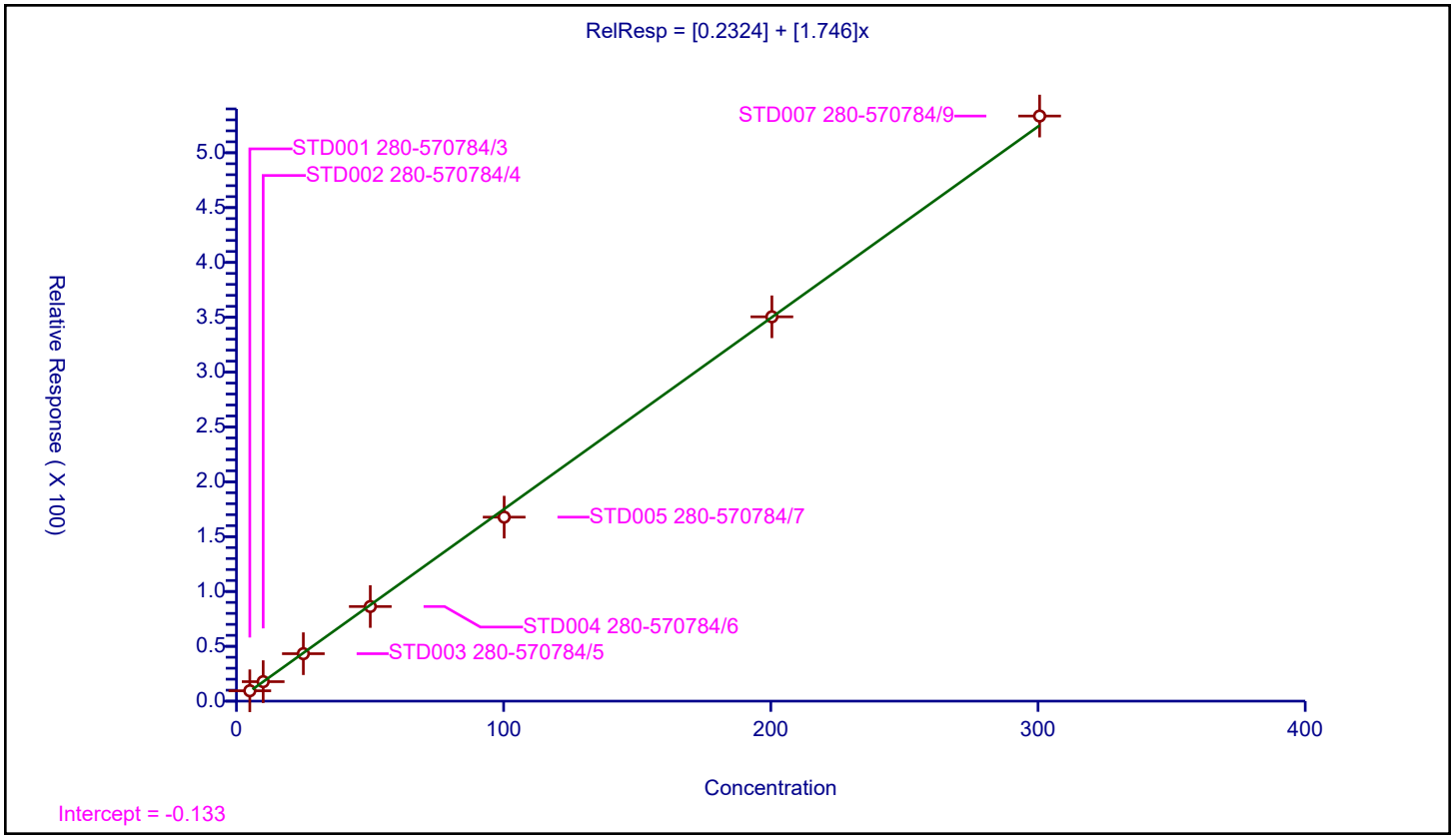
Curve Coefficients

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

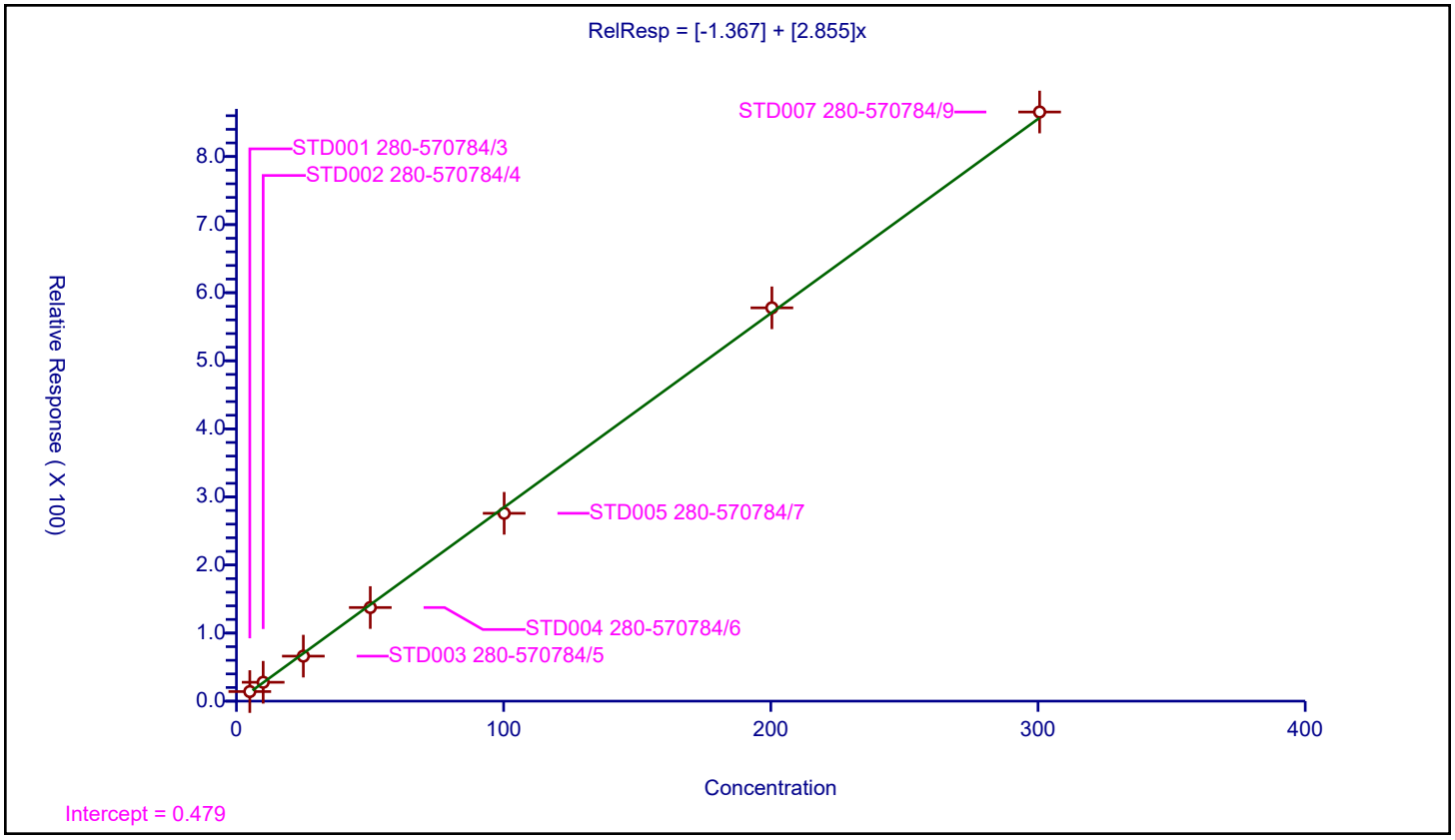
Curve Coefficients

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

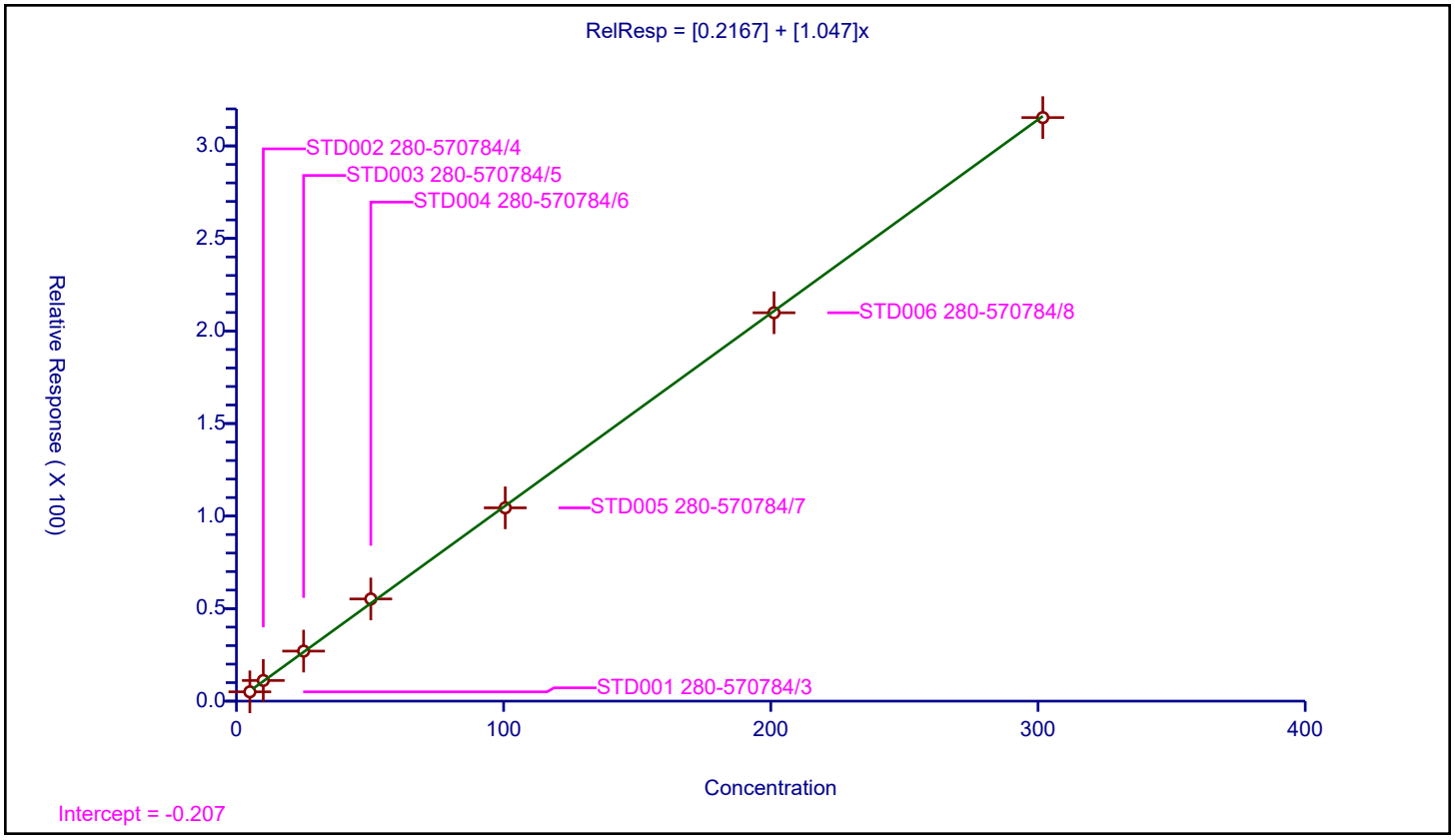
Curve Coefficients

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

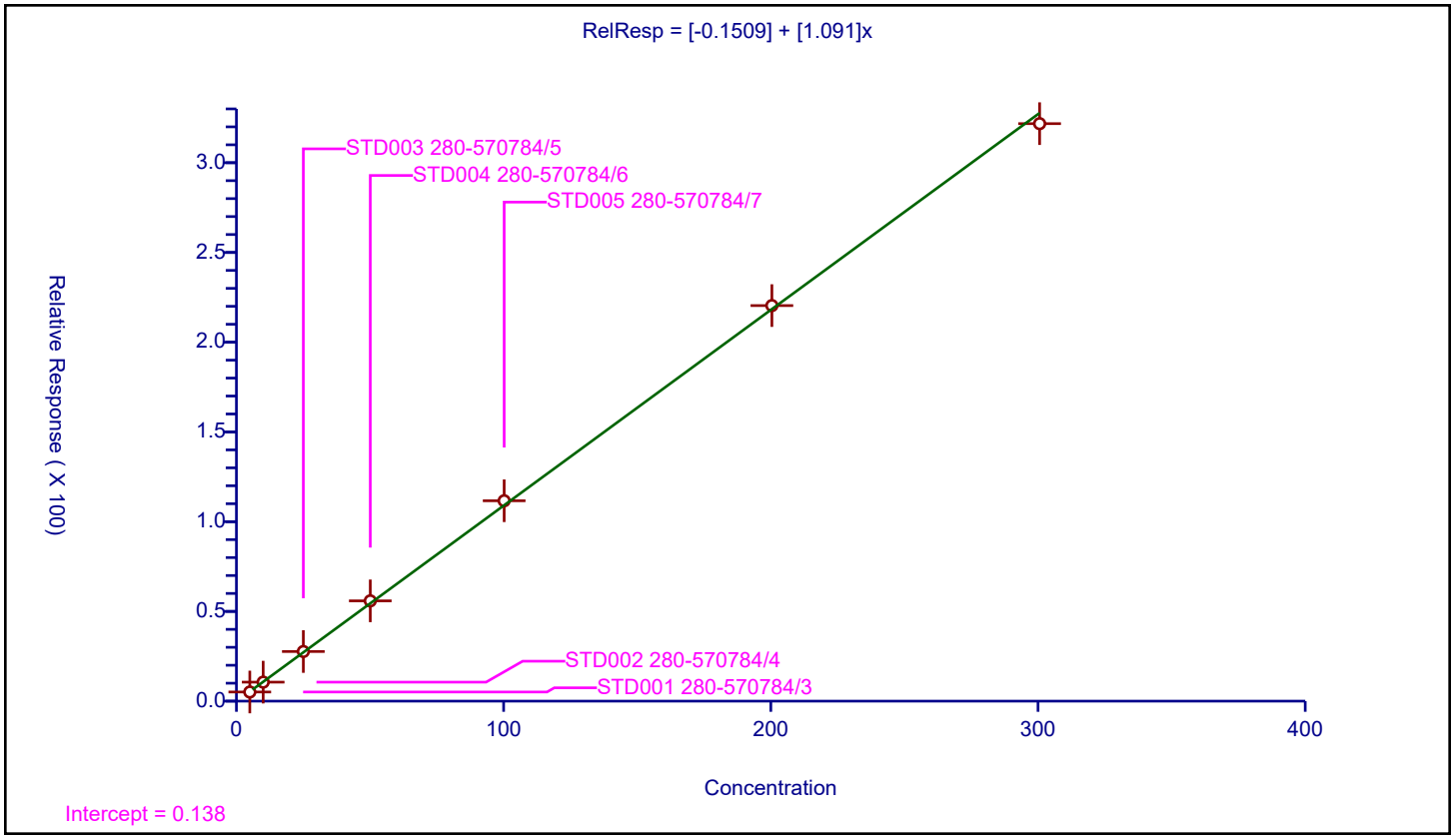
Curve Coefficients

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

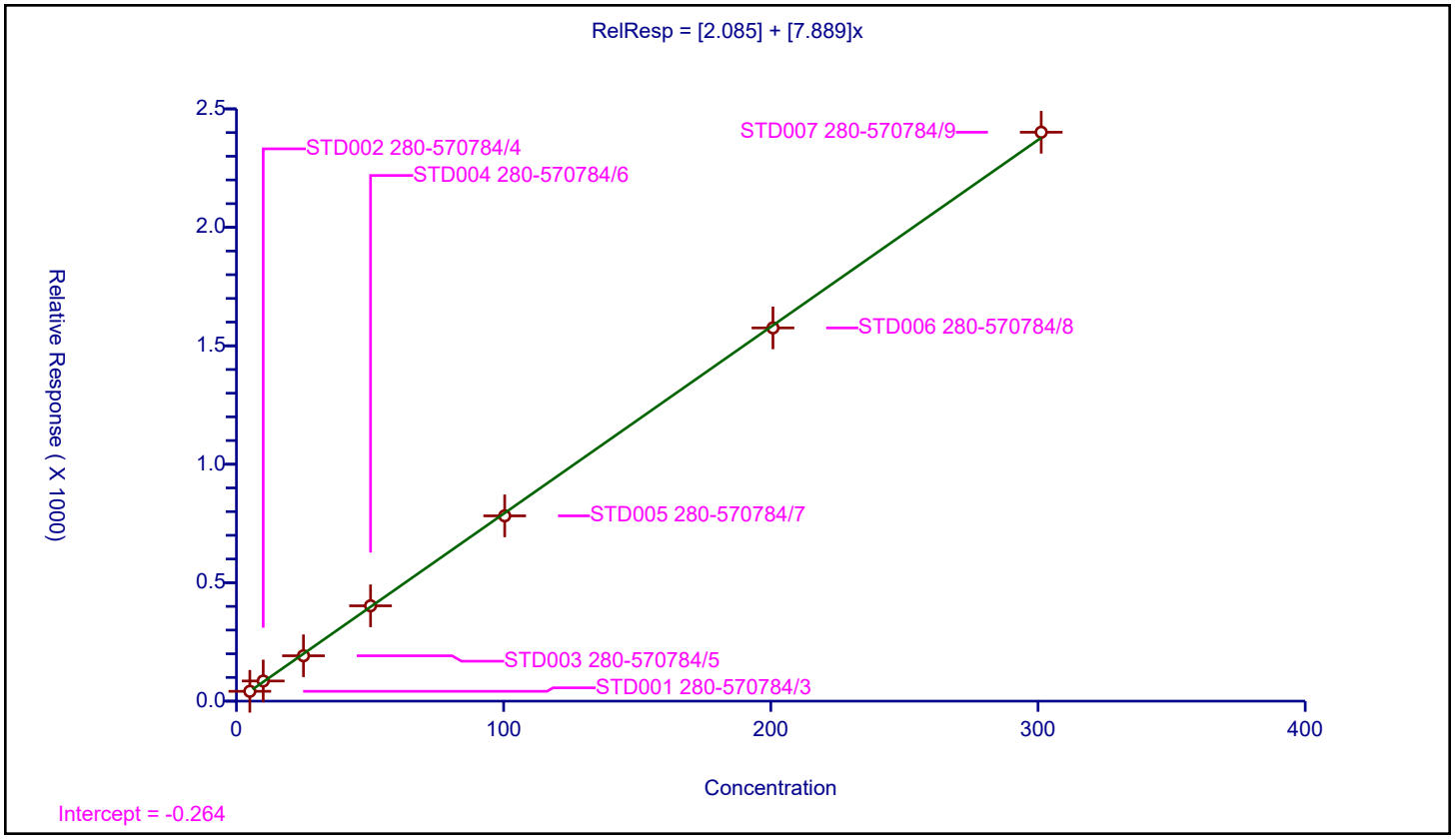
Curve Coefficients

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

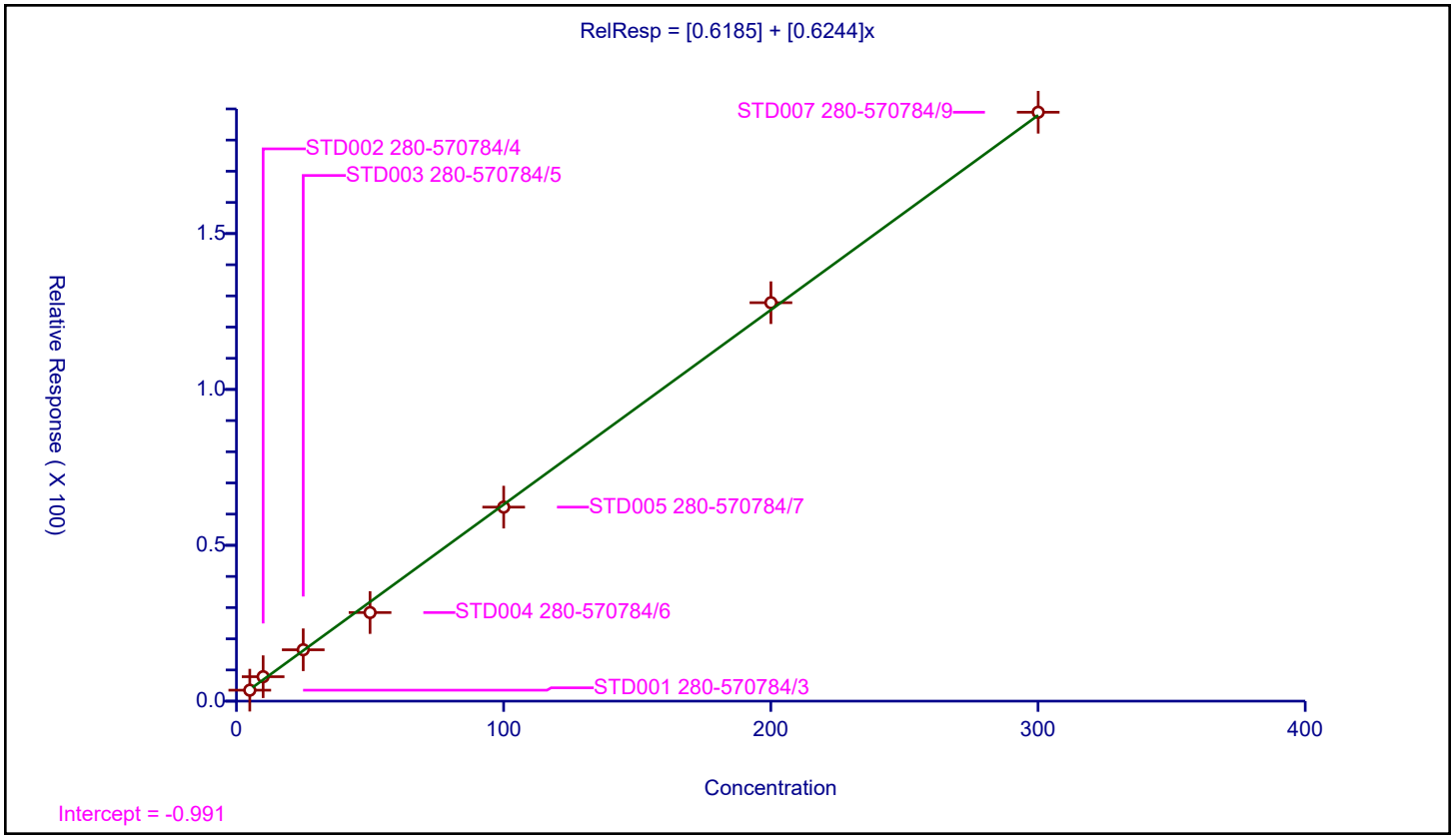
Curve Coefficients

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

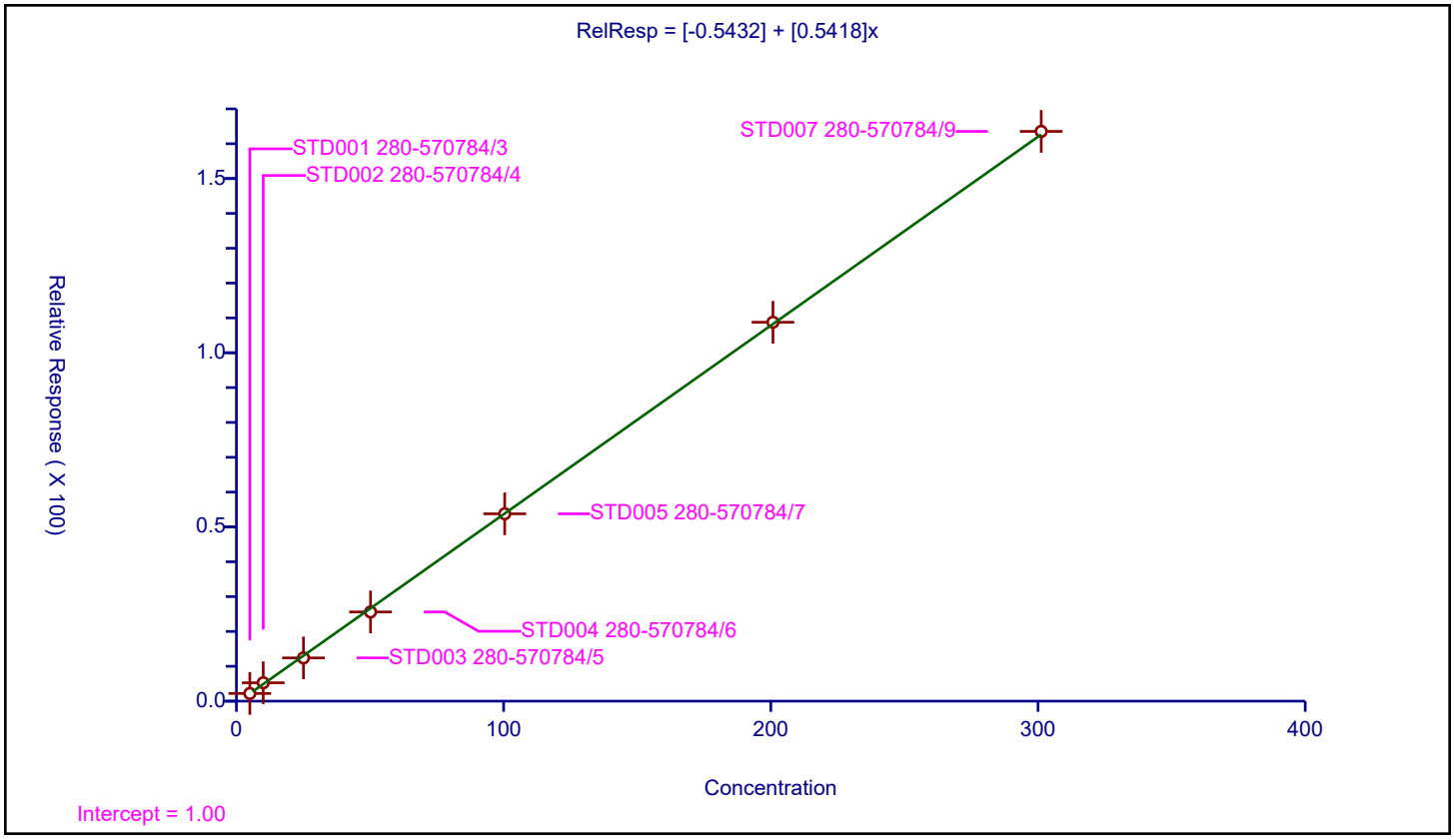
Curve Coefficients

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

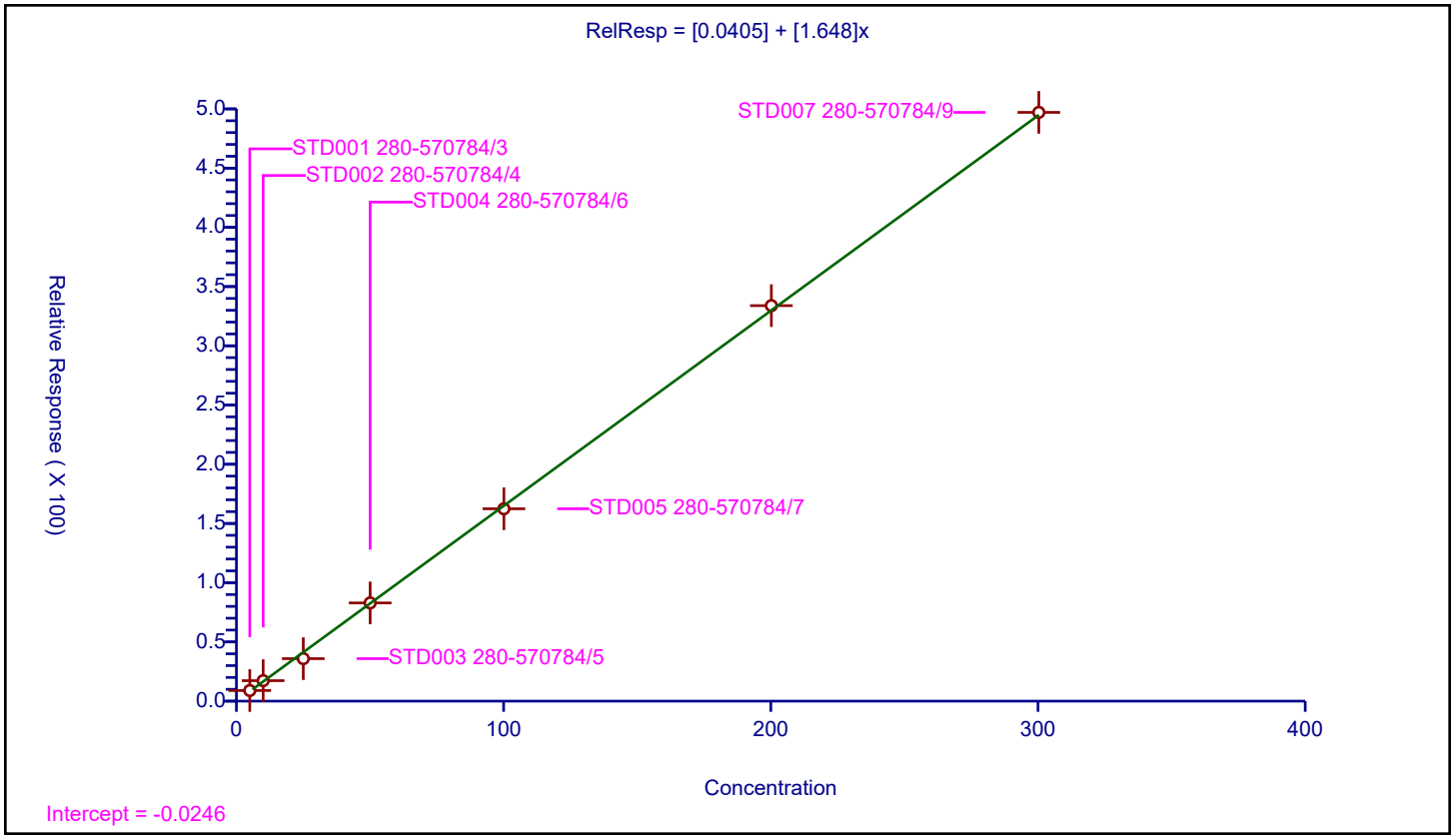
Curve Coefficients

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

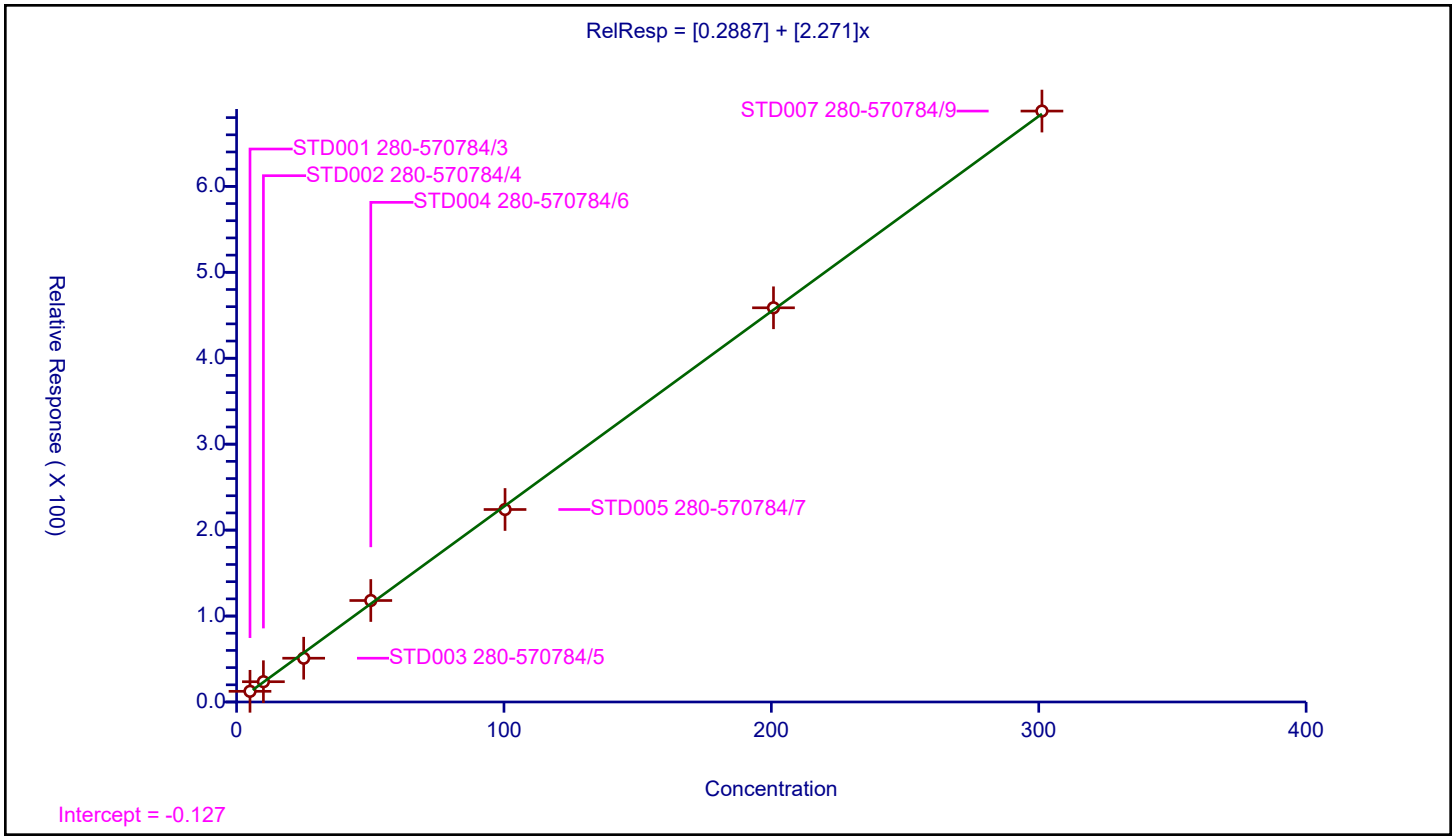
Curve Coefficients

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

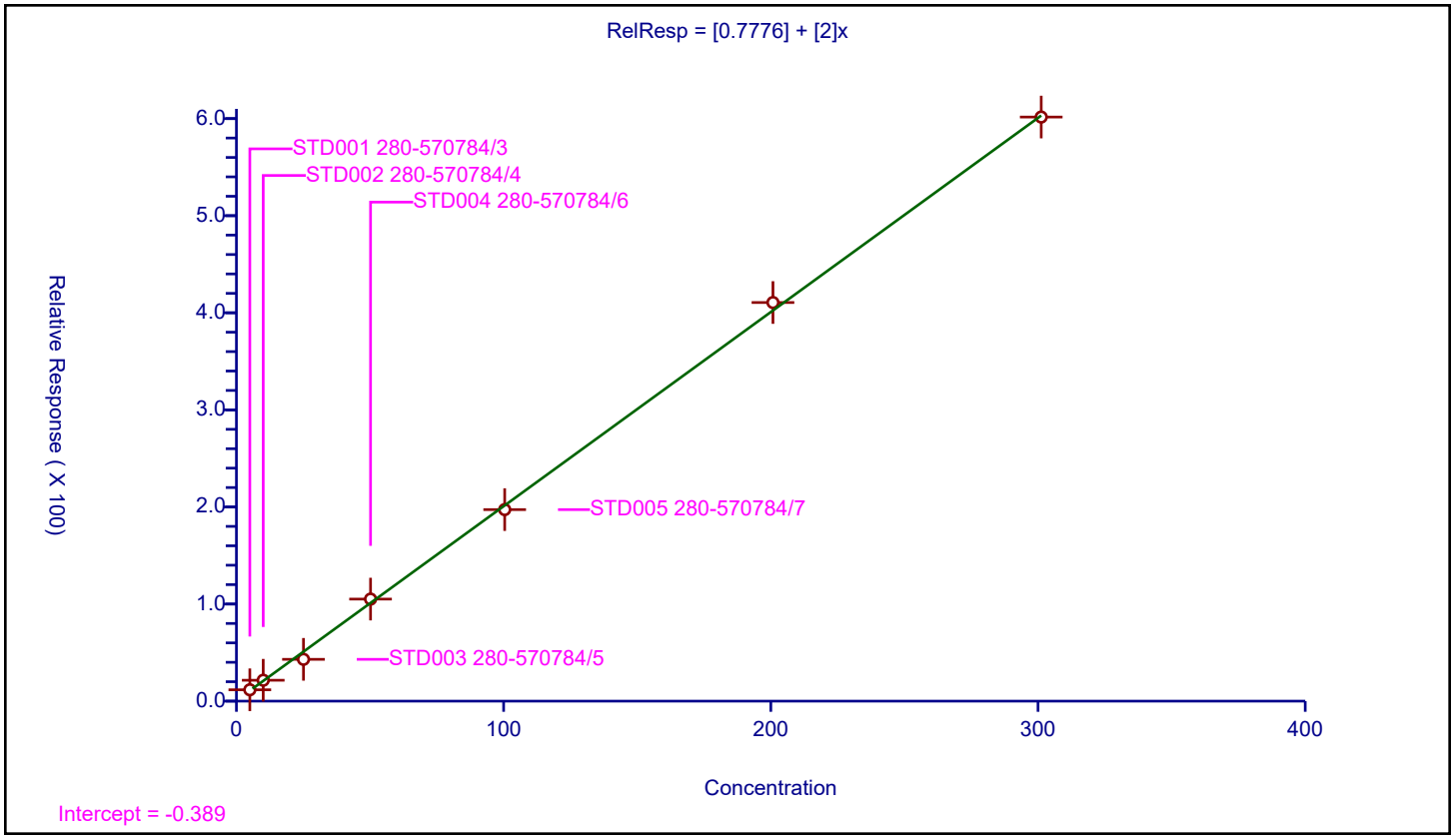
Curve Coefficients

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

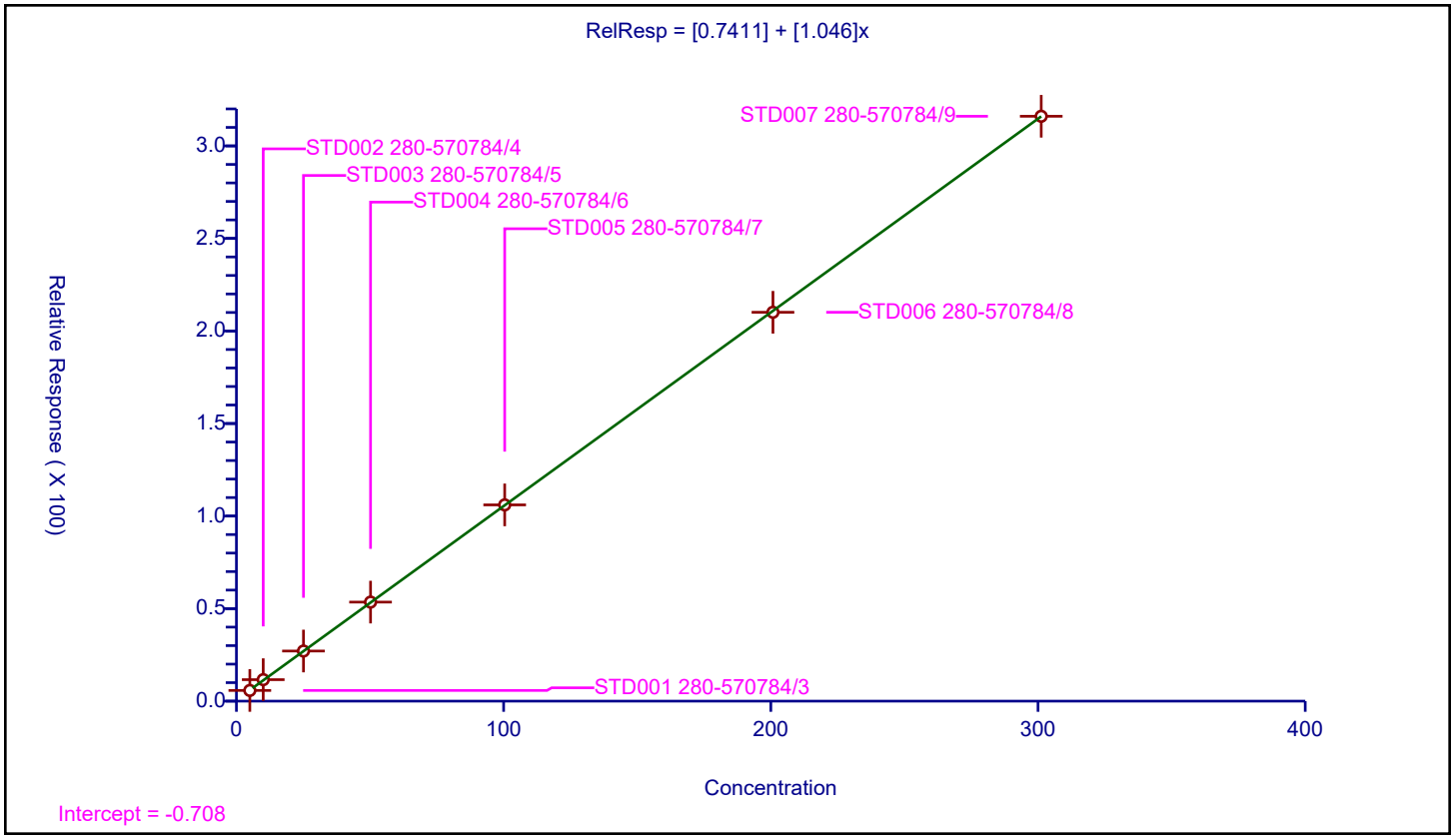
Curve Coefficients

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

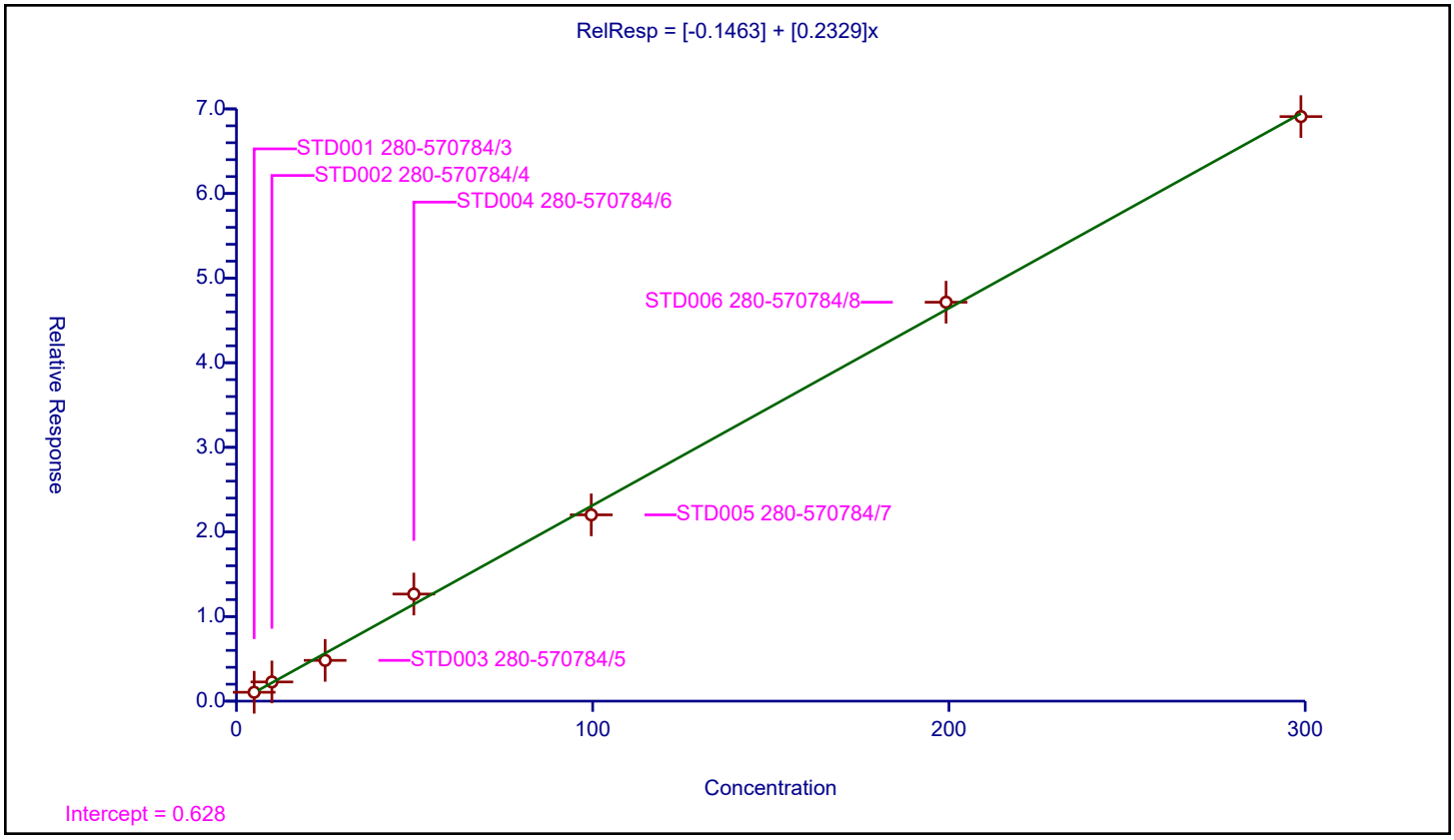
Curve Coefficients

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

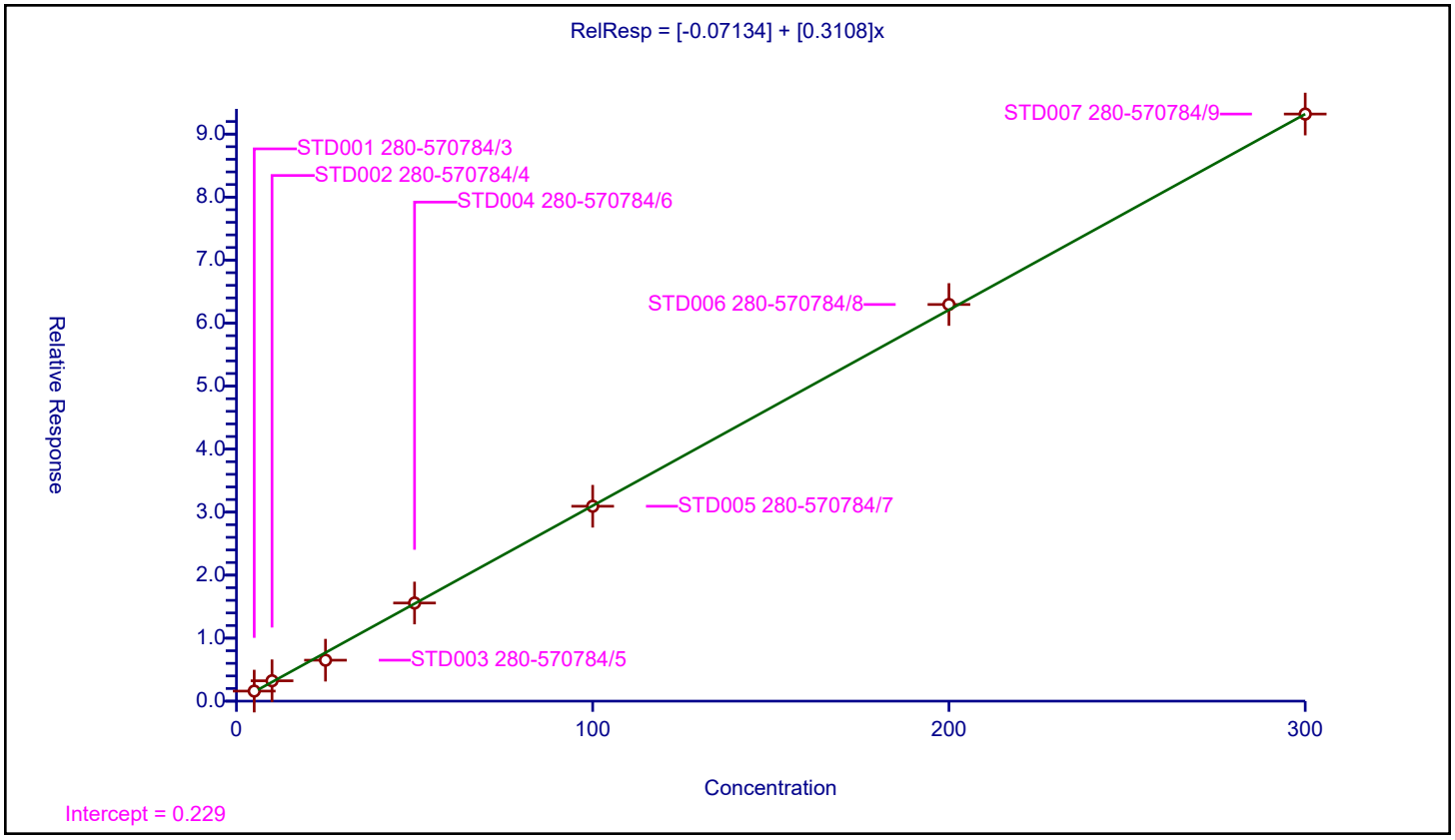
Curve Coefficients

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

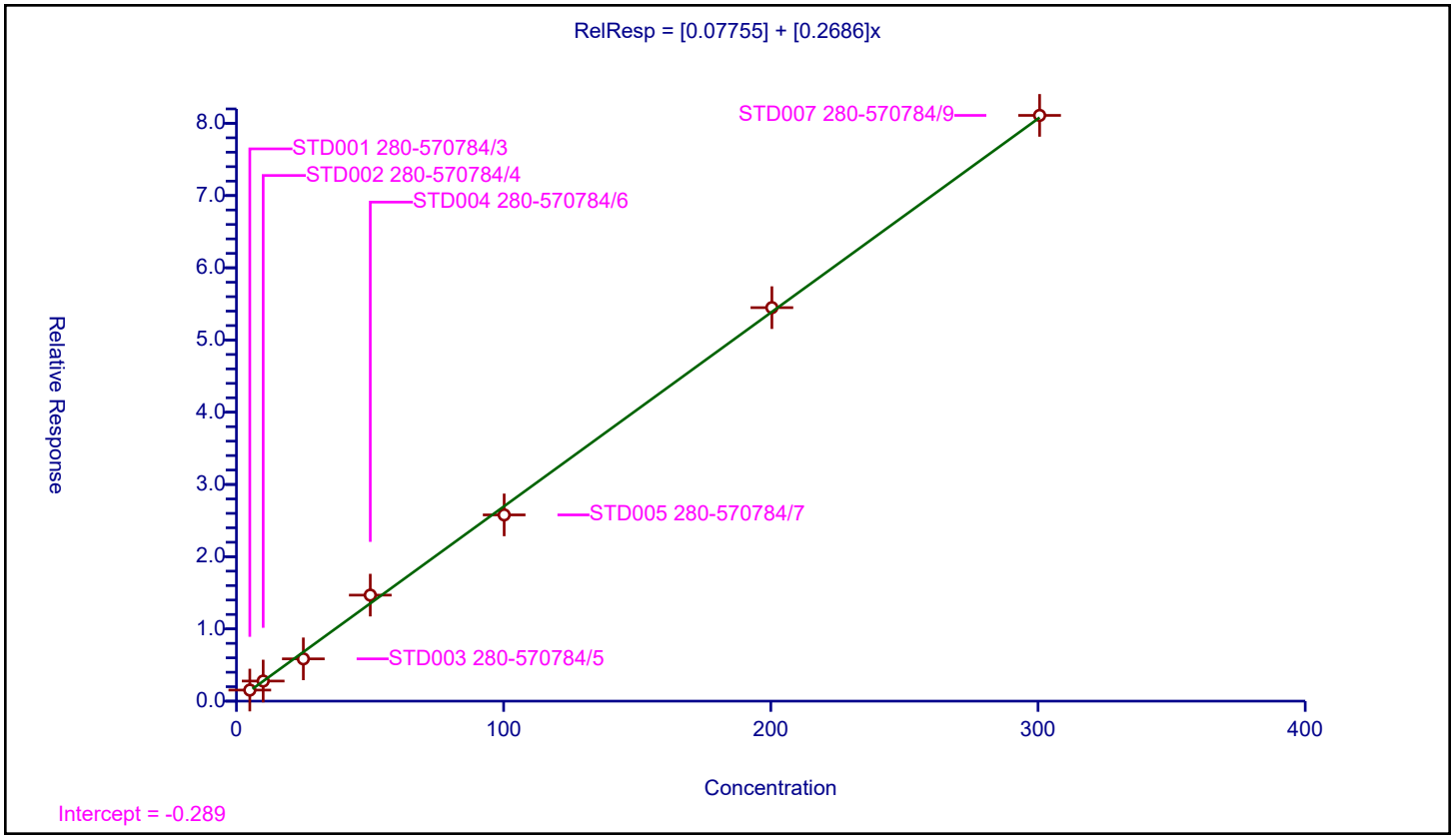
Curve Coefficients

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

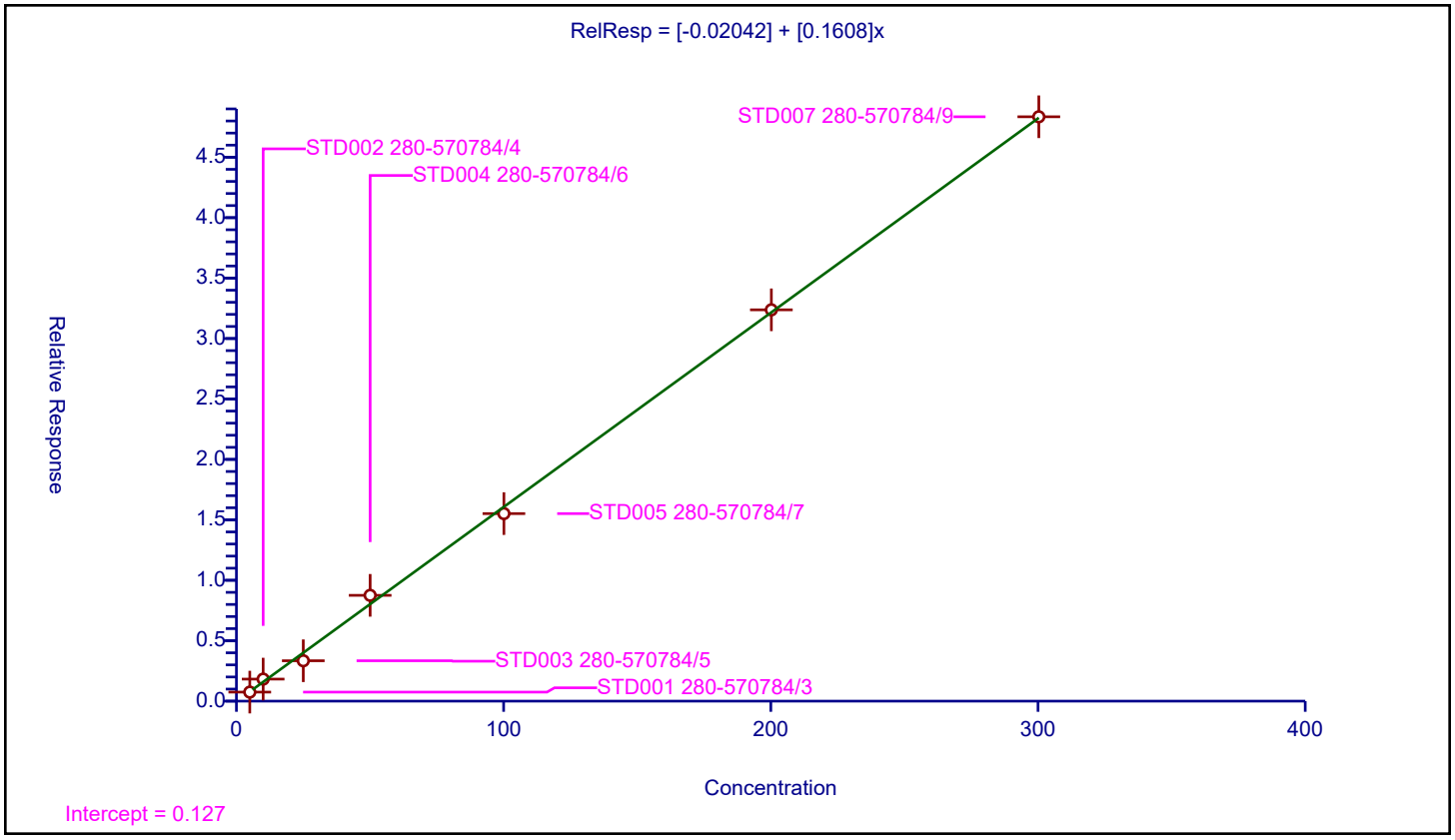
Curve Coefficients

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.: 280-160187-1 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.: 280-160187-1 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.: 280-160187-1 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.: 280-160187-1 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:

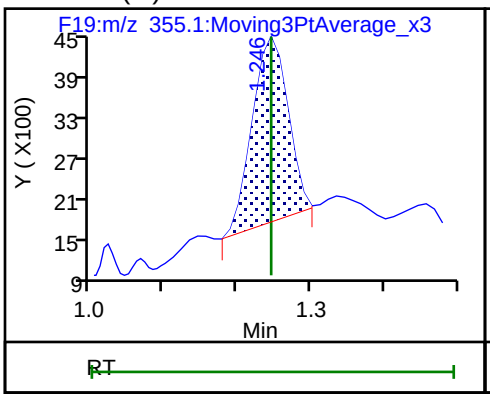
8321EXcalprim_00029	Amount Added: 0.50	Units: uL	
8321NB-D5-cal_00021	Amount Added: 0.50	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 08-Apr-2022 07:31:45 Chrom Revision: 2.3 18-Mar-2022 09:07:22

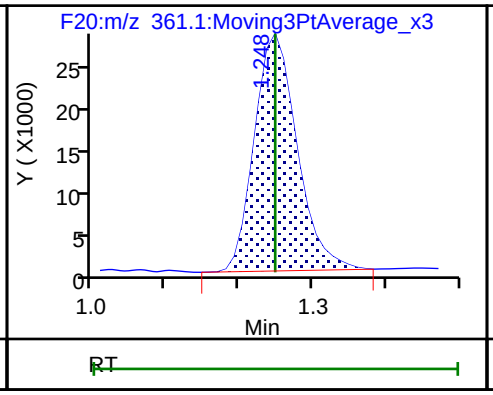
Eurofins Denver

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

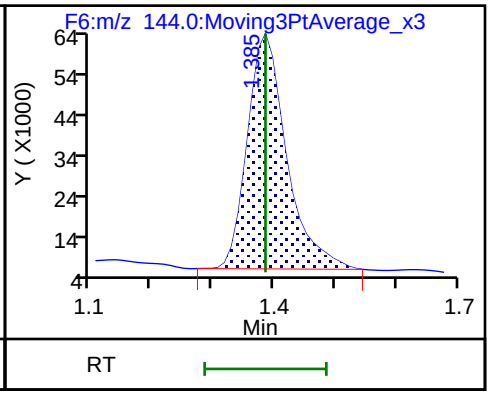
2 HMX (M)



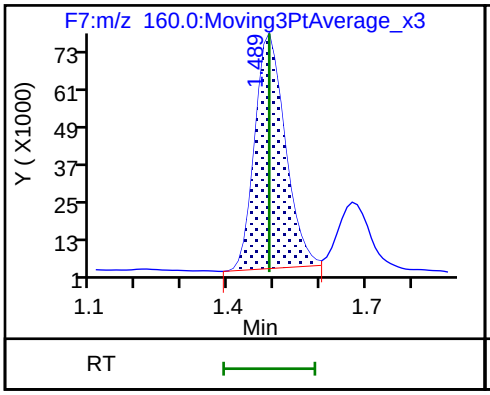
* 1 HMX-13C4



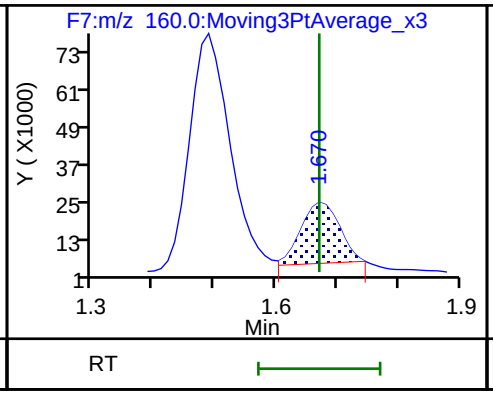
36 TNX



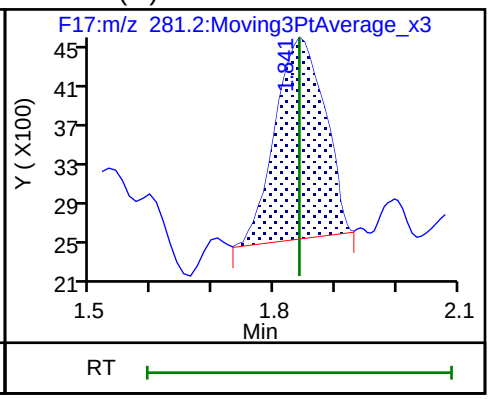
33 DNX



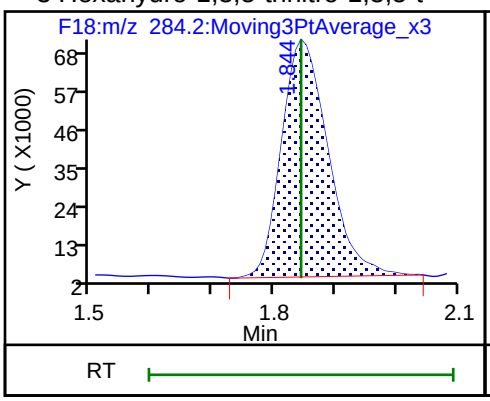
34 MNX



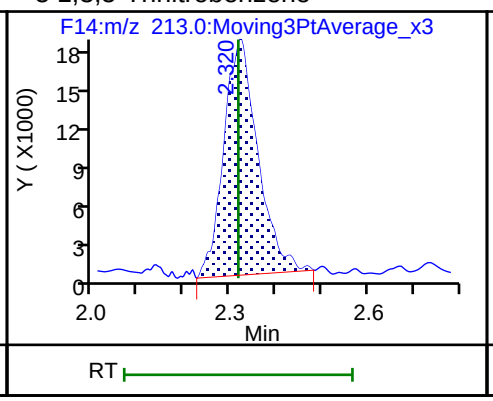
4 RDX (M)



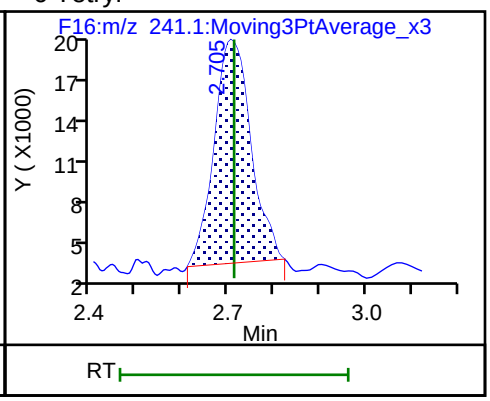
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



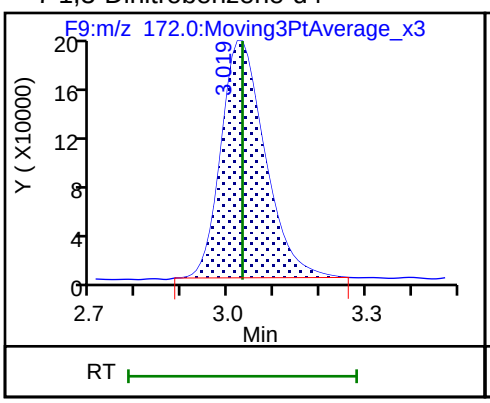
5 1,3,5-Trinitrobenzene



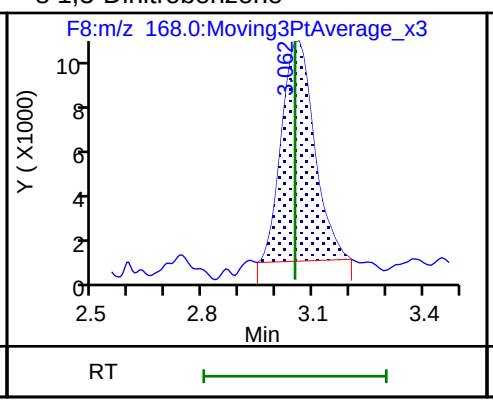
6 Tetryl



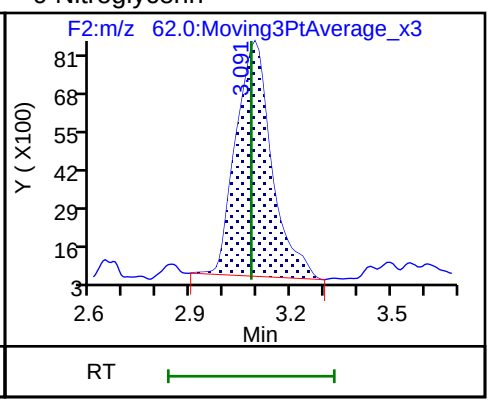
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



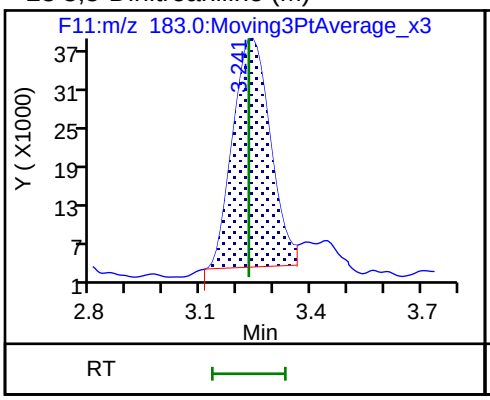
9 Nitroglycerin



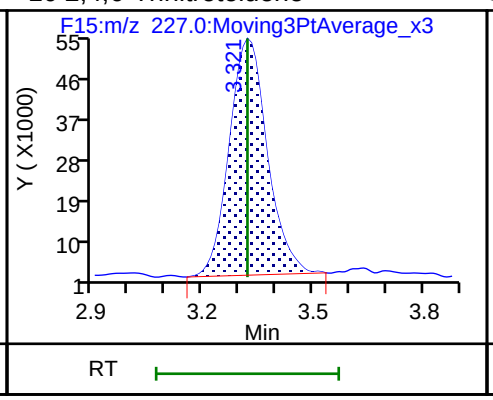
Report Date: 08-Apr-2022 07:31:45 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07003.d

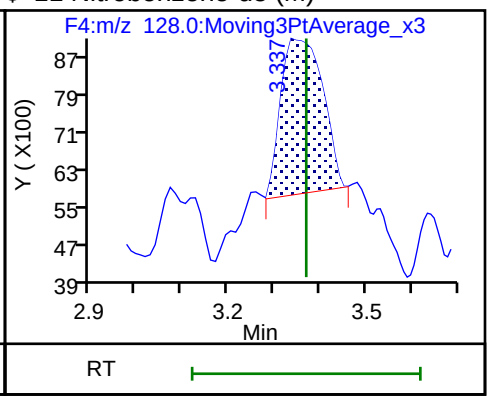
28 3,5-Dinitroaniline (M)



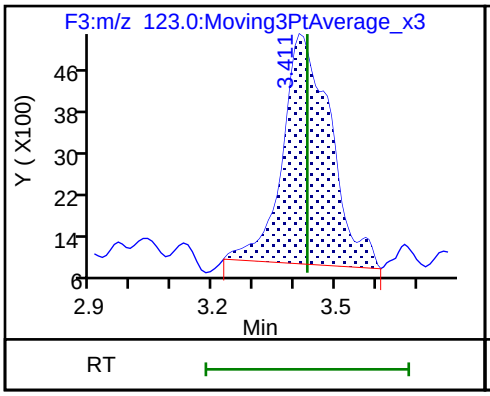
10 2,4,6-Trinitrotoluene



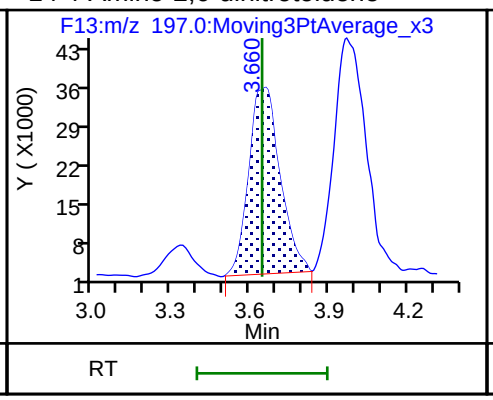
$ 11 Nitrobenzene-d5 (M)



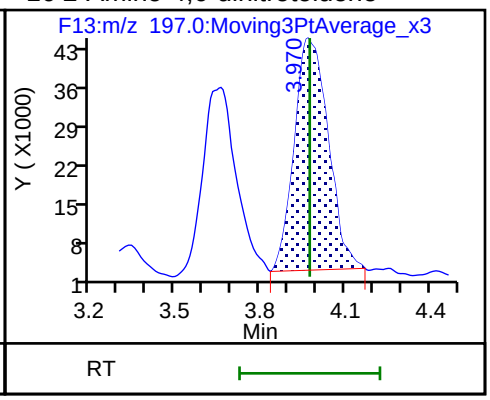
12 Nitrobenzene



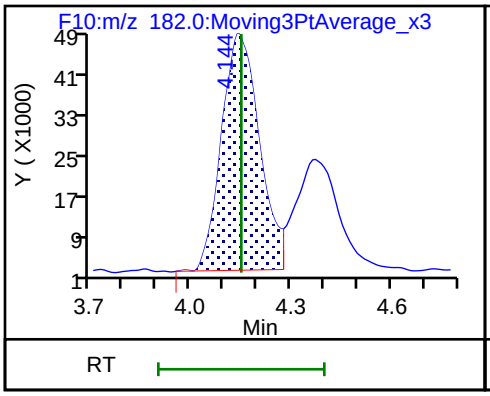
14 4-Amino-2,6-dinitrotoluene



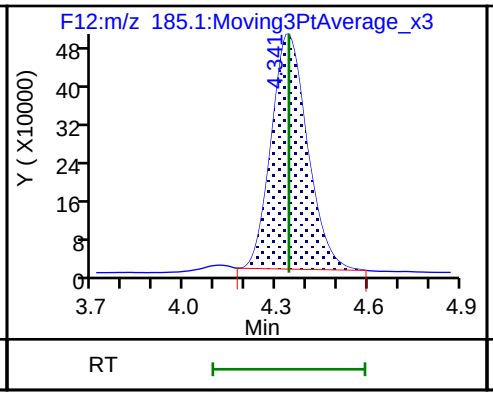
16 2-Amino-4,6-dinitrotoluene



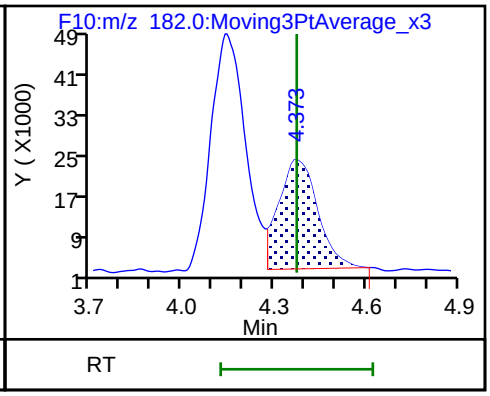
17 2,6-Dinitrotoluene



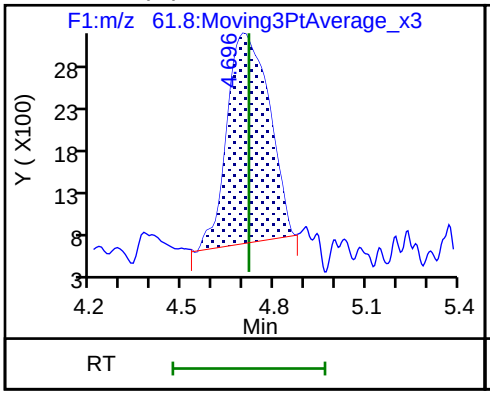
* 18 2,4-dinitrotoluene-d3



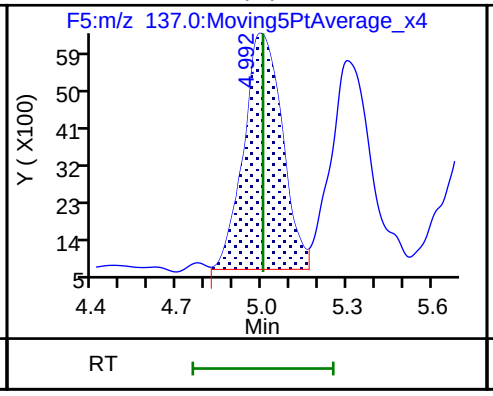
19 2,4-Dinitrotoluene



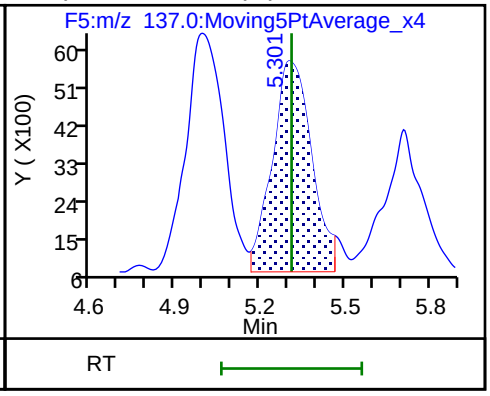
20 PETN (M)



22 o-Nitrotoluene (M)

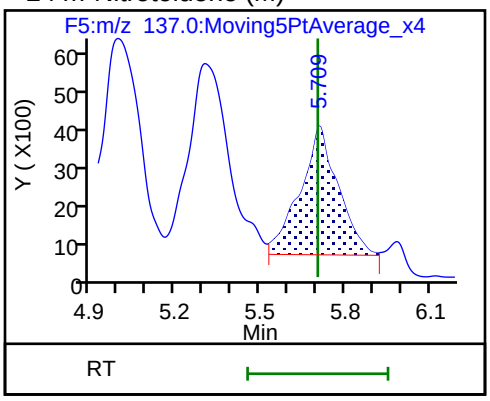


23 p-Nitrotoluene (M)



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

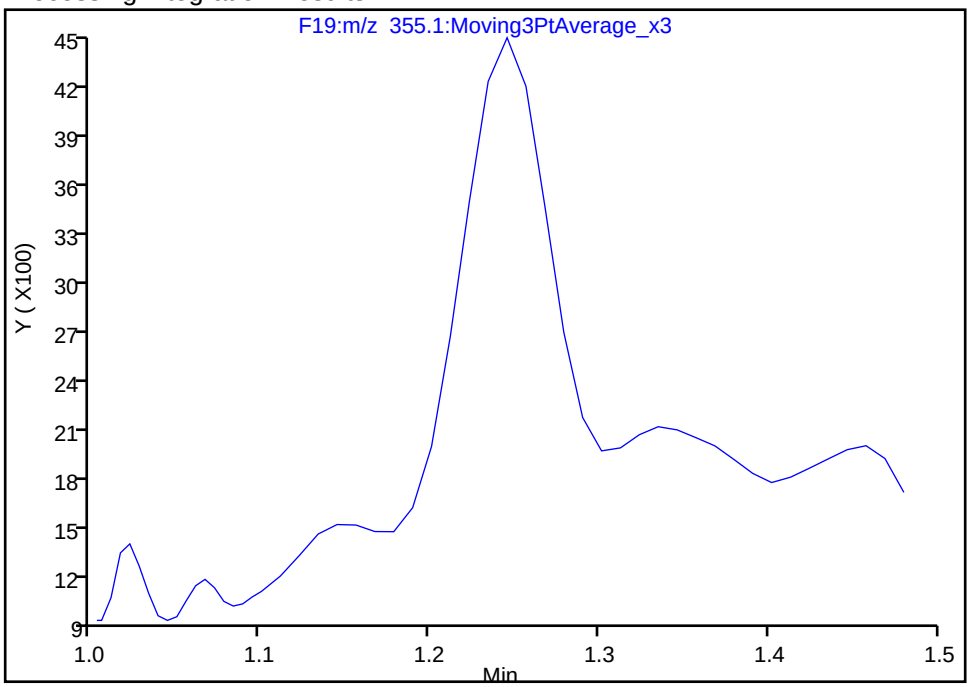
2 HMX, CAS: 2691-41-0

Signal: 1

Not Detected

Expected RT: 1.25

Processing Integration Results



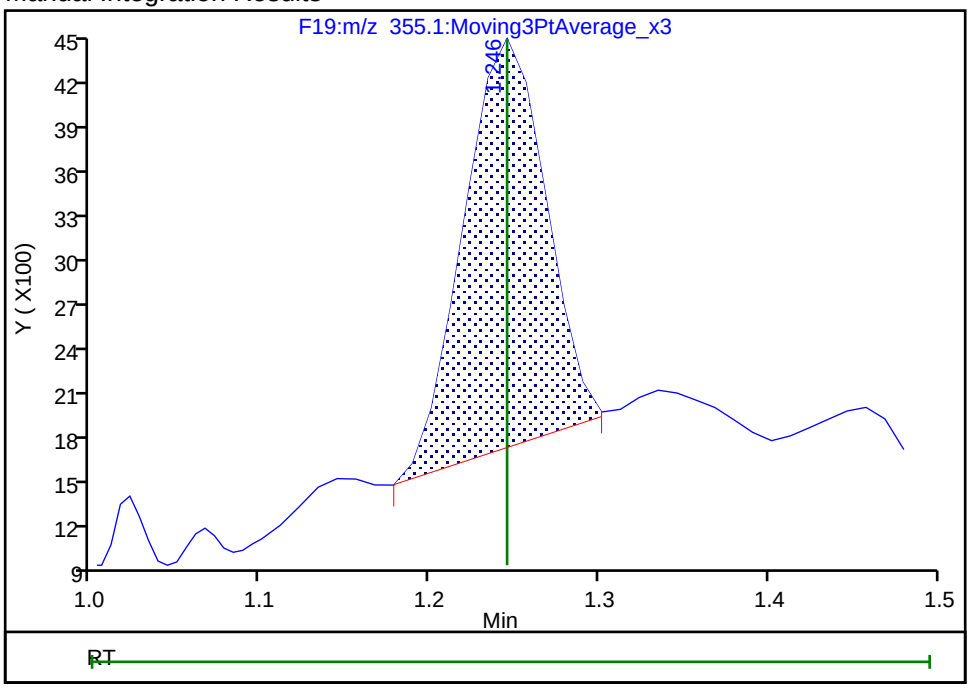
Manual Integration Results

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

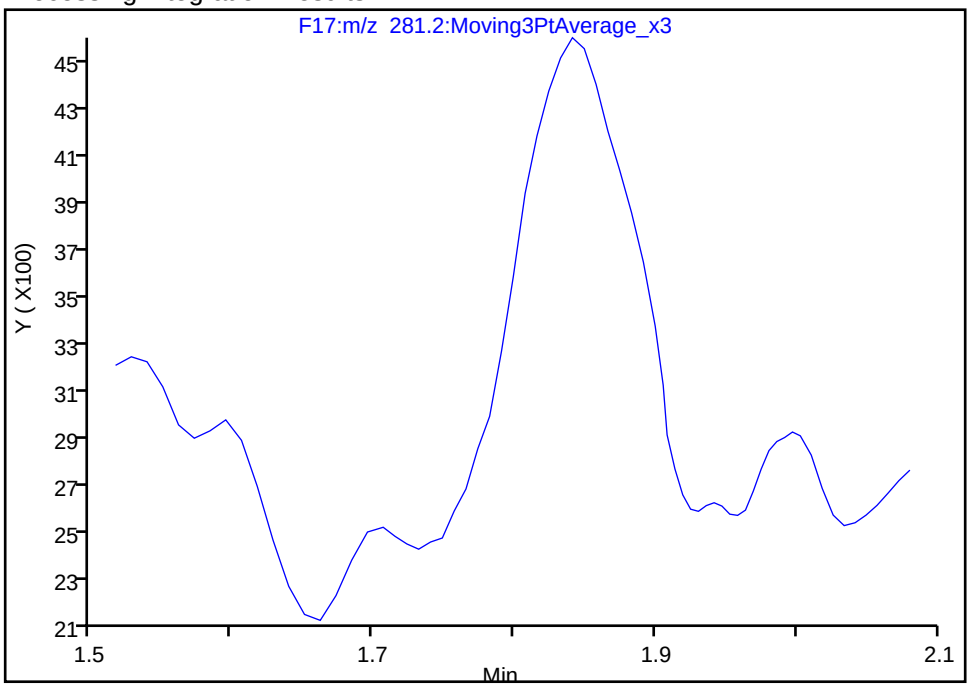
4 RDX, CAS: 121-82-4

Signal: 1

Not Detected

Expected RT: 1.84

Processing Integration Results



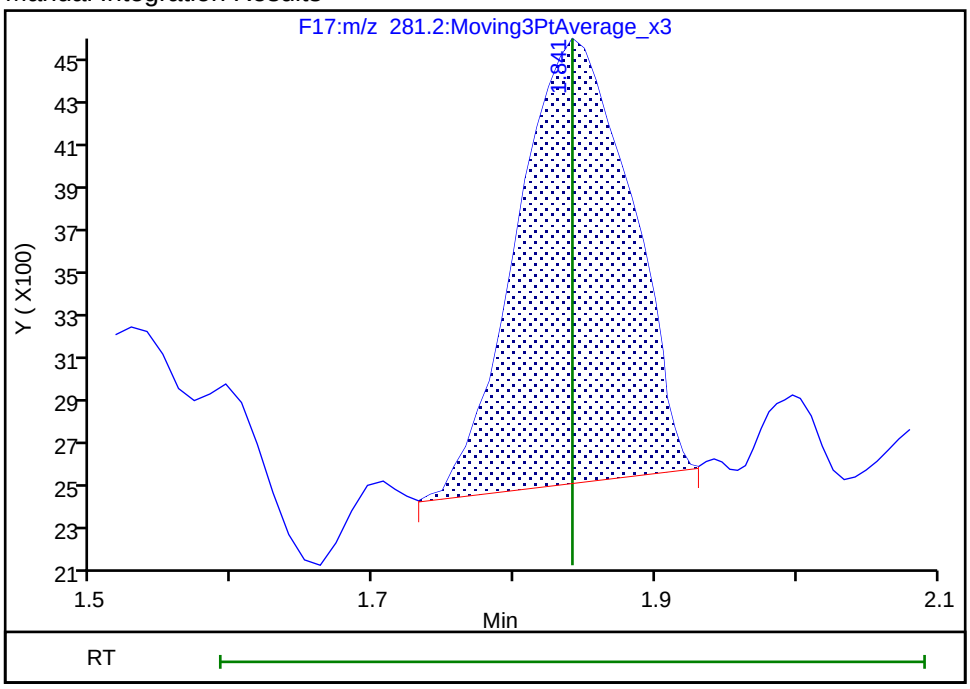
Manual Integration Results

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

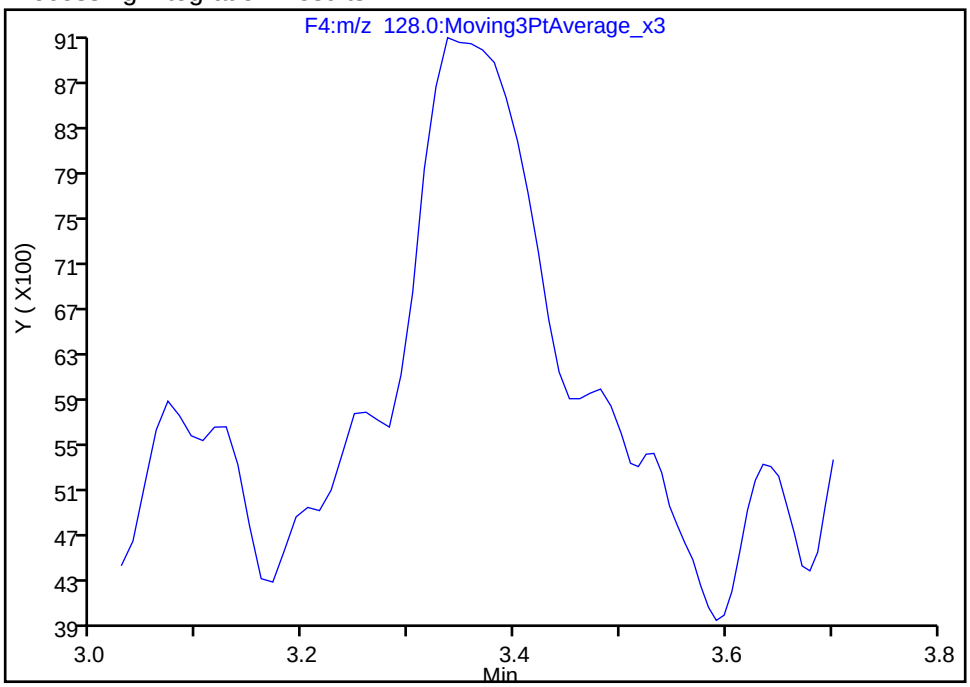
$ 11 Nitrobenzene-d5, CAS: 4165-60-0

Signal: 1

Processing Integration Results

Not Detected

Expected RT: 3.37



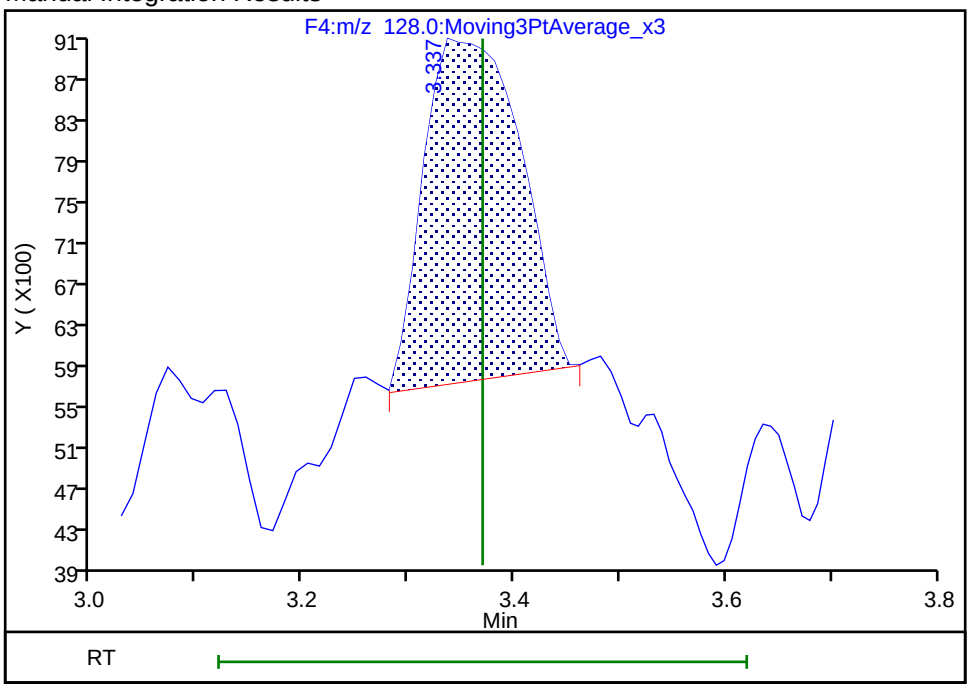
Manual Integration Results

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

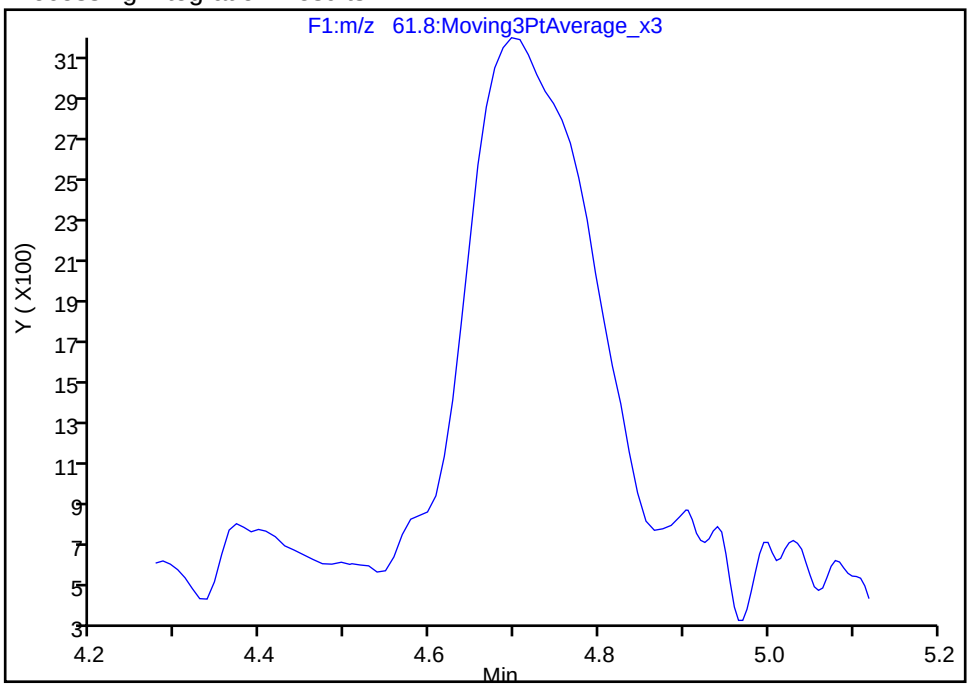
20 PETN, CAS: 78-11-5

Signal: 1

Not Detected

Expected RT: 4.72

Processing Integration Results



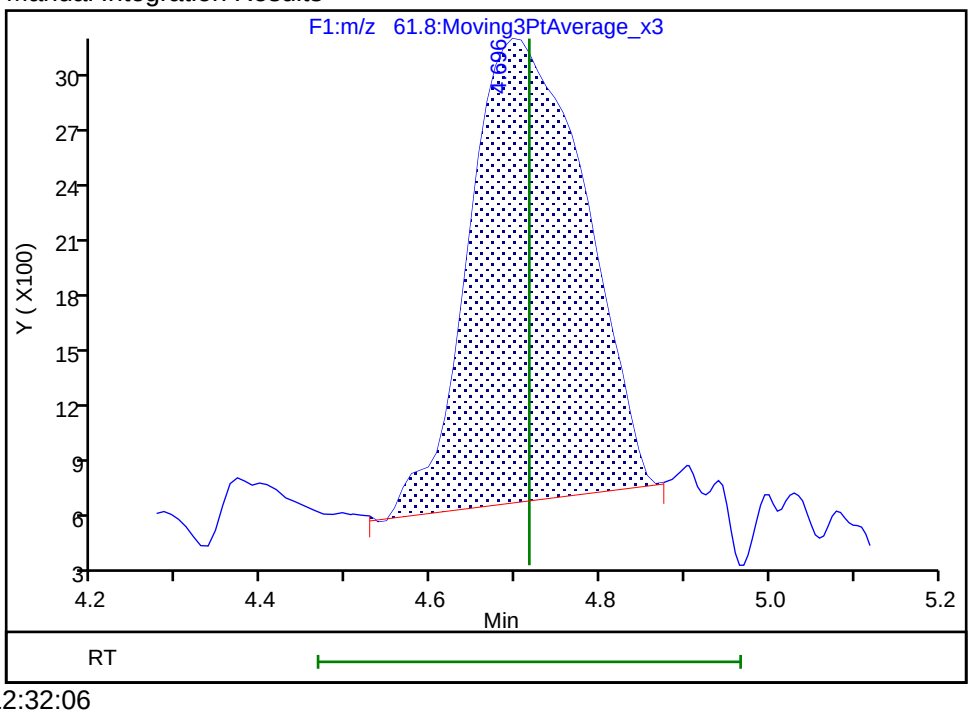
Manual Integration Results

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

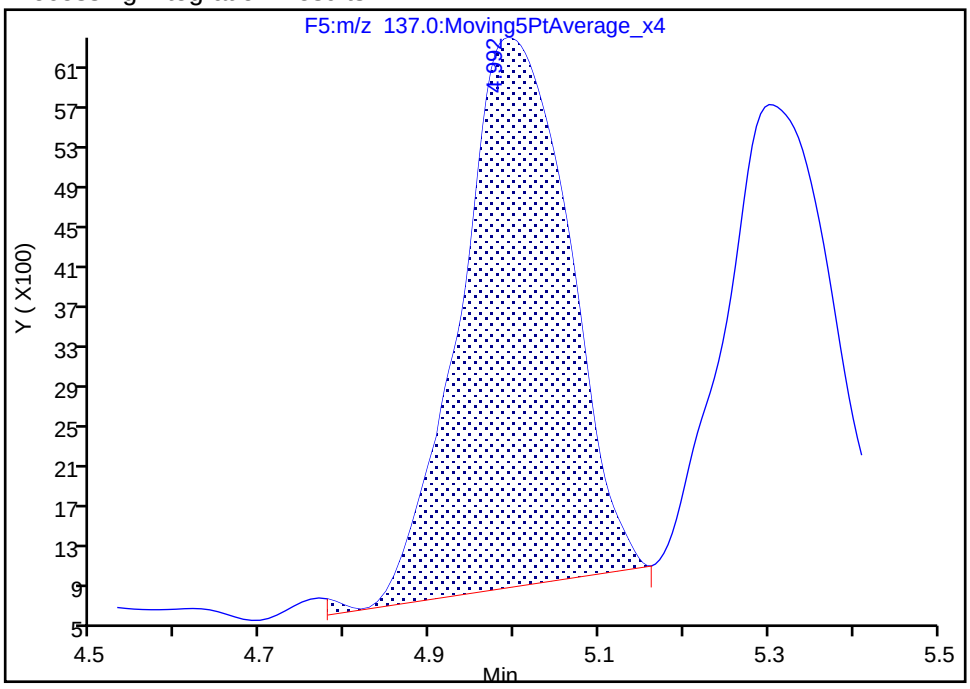
Column: Detector F5:SIR

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

Signal: 1

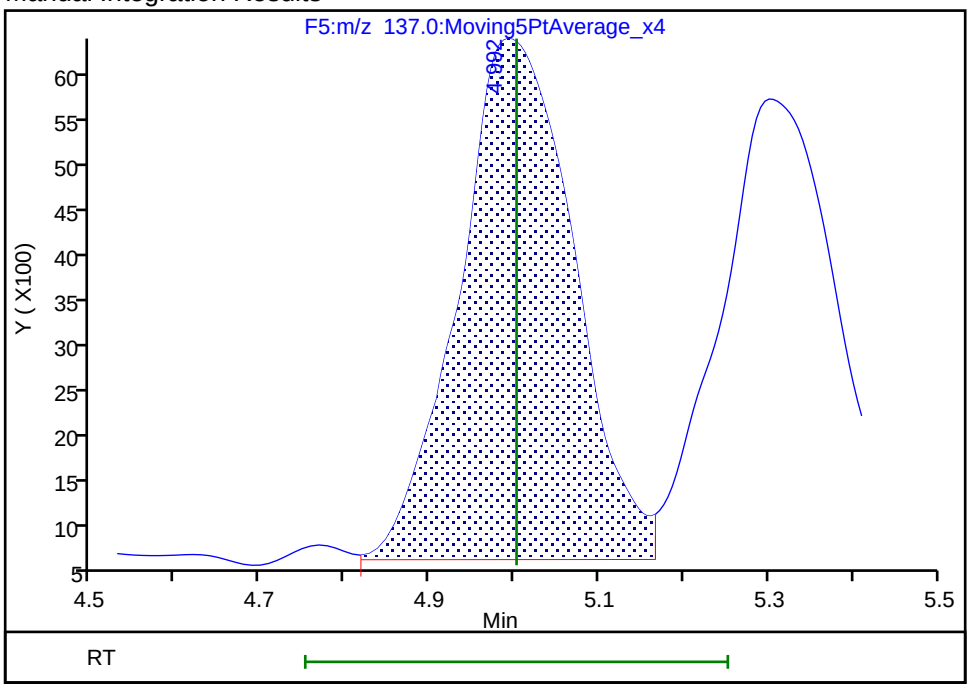
Processing Integration Results

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

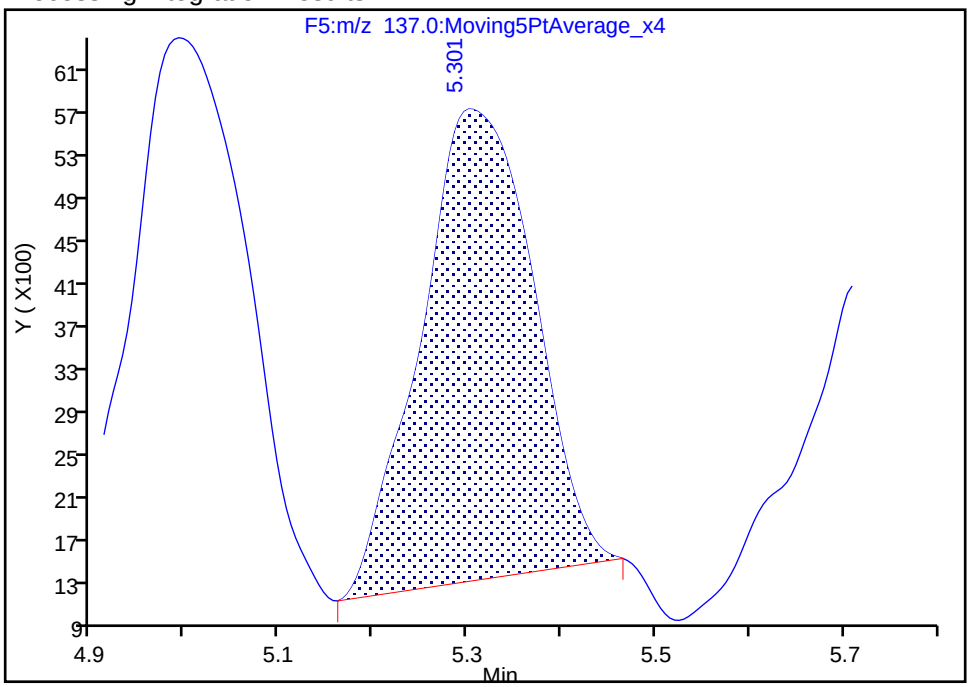
Column: Detector F5:SIR

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

Signal: 1

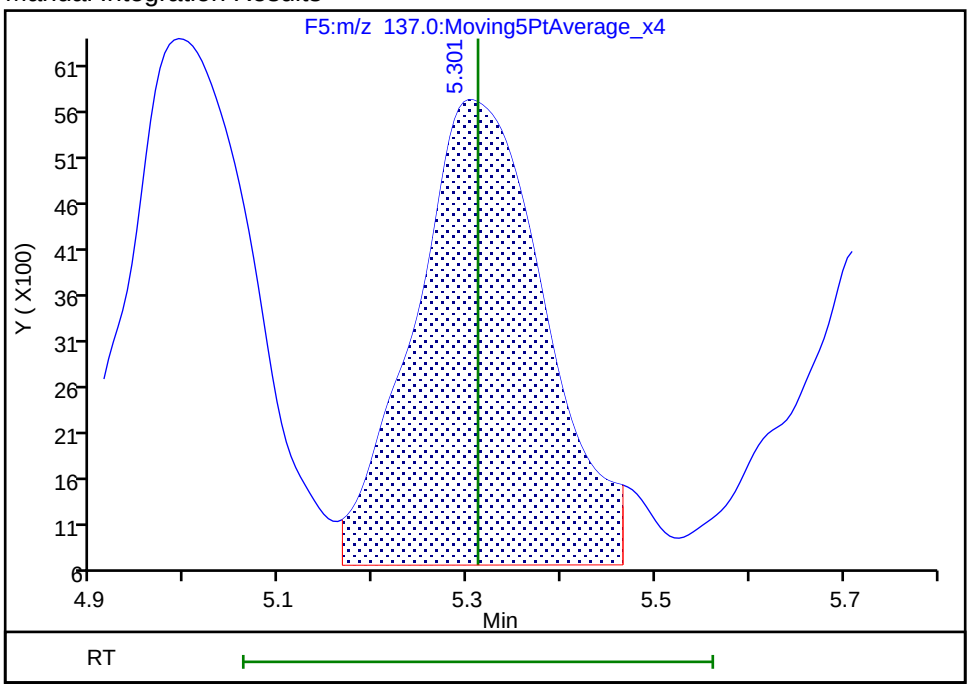
Processing Integration Results

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

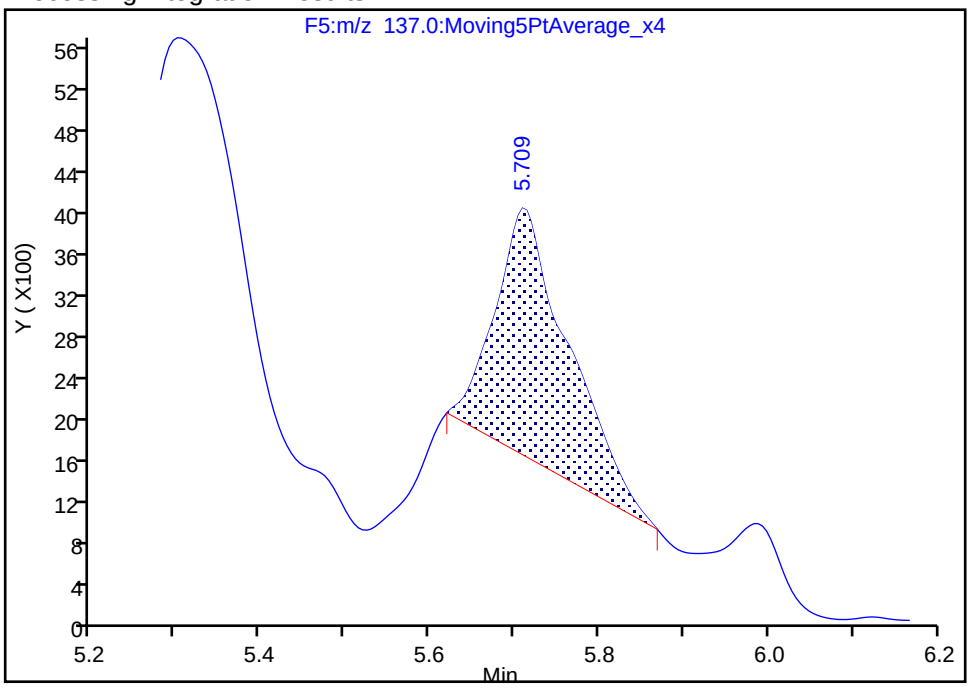
Injection Date:	07-Apr-2022 10:39:13	Instrument ID:	LC_LCMS7
Lims ID:	STD001		
Client ID:			
Operator ID:	acm	ALS Bottle#:	2 Worklist Smp#: 3
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	8330_SIR	Limit Group:	LC - 8321A Expl
Column:		Detector	F5:SIR

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

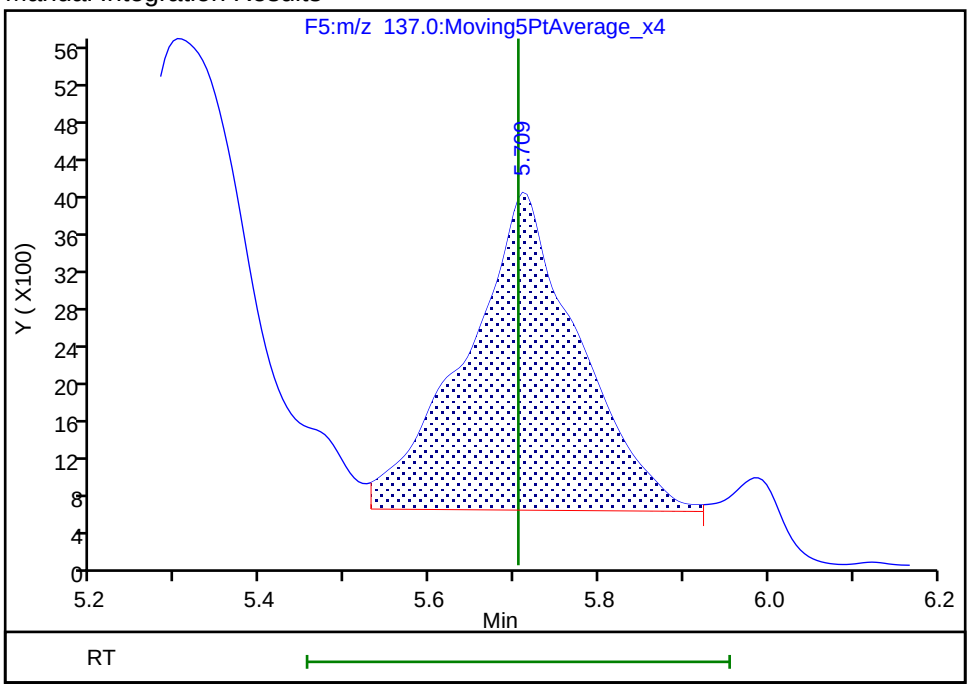
Processing Integration Results

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

Report Date: 08-Apr-2022 07:31:46 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\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:

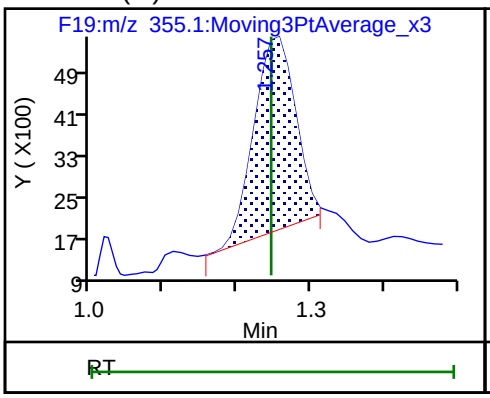
8321EXcalprim_00029	Amount Added: 1.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 1.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 08-Apr-2022 07:31:46 Chrom Revision: 2.3 18-Mar-2022 09:07:22

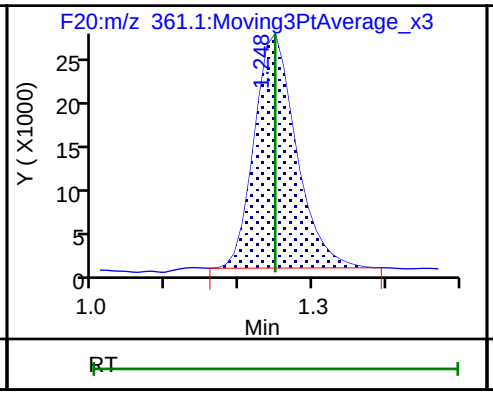
Eurofins Denver

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

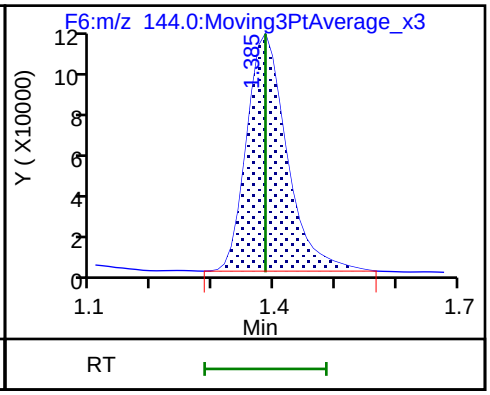
2 HMX (M)



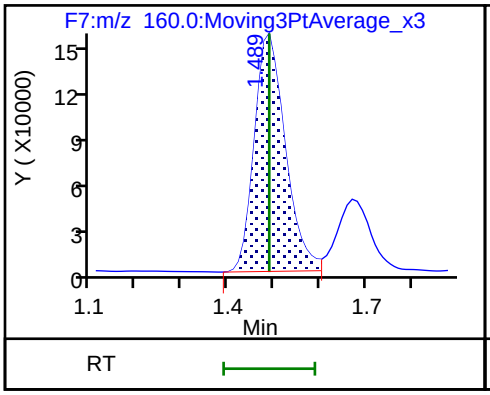
* 1 HMX-13C4



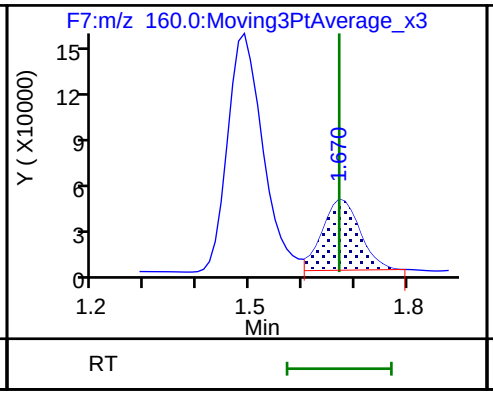
36 TNX



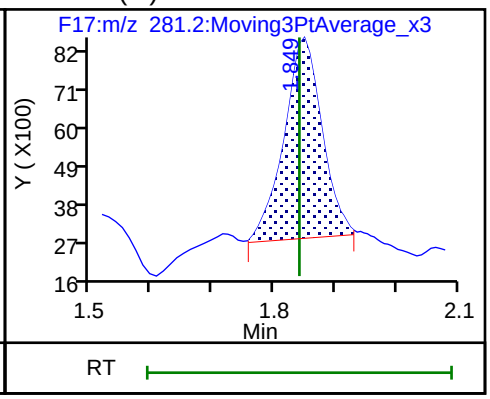
33 DNX



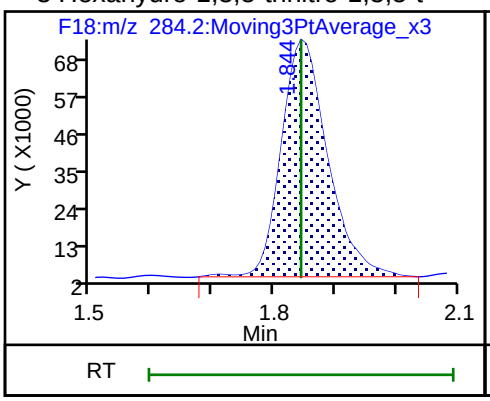
34 MNX



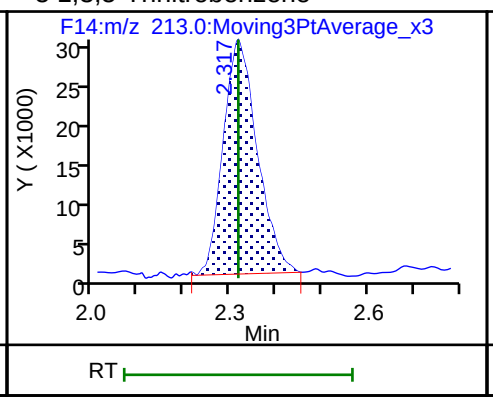
4 RDX (M)



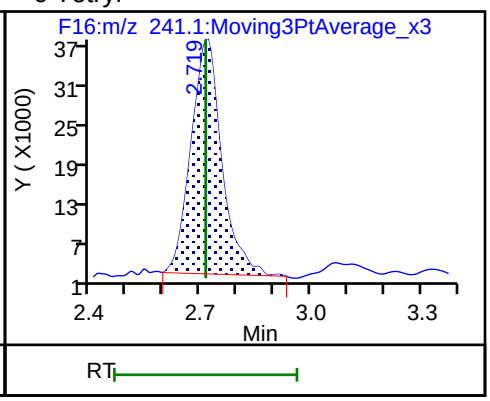
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



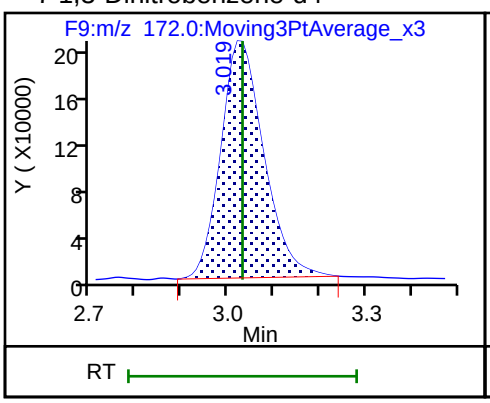
5 1,3,5-Trinitrobenzene



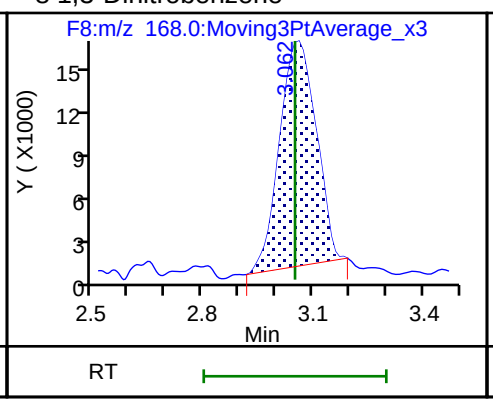
6 Tetryl



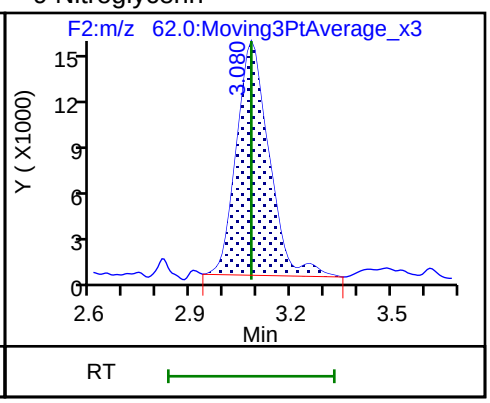
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



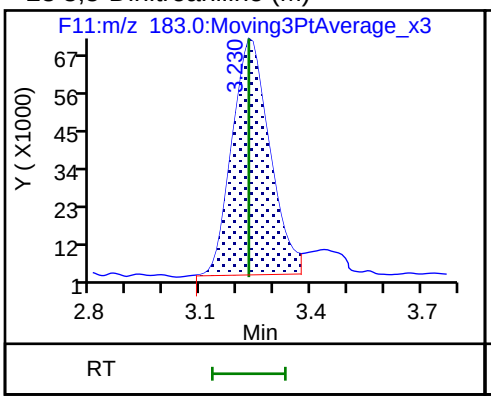
9 Nitroglycerin



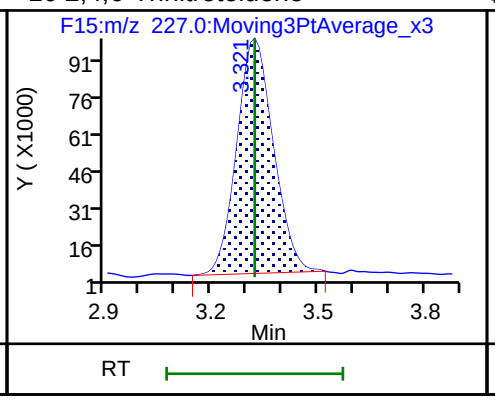
Report Date: 08-Apr-2022 07:31:46 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07004.d

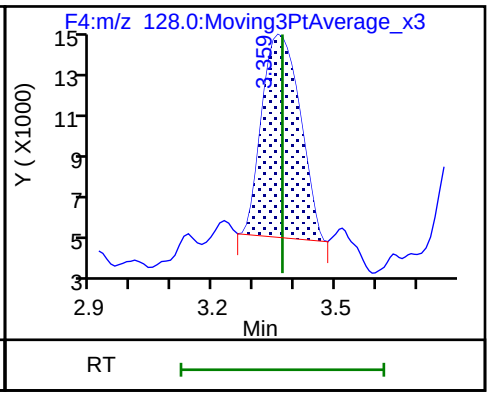
28 3,5-Dinitroaniline (M)



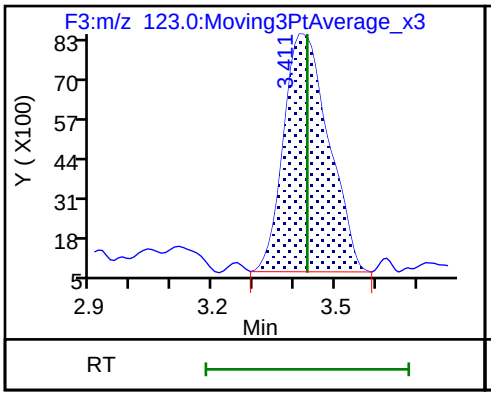
10 2,4,6-Trinitrotoluene



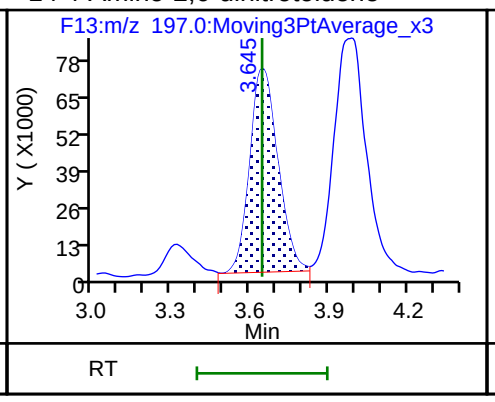
$ 11 Nitrobenzene-d5



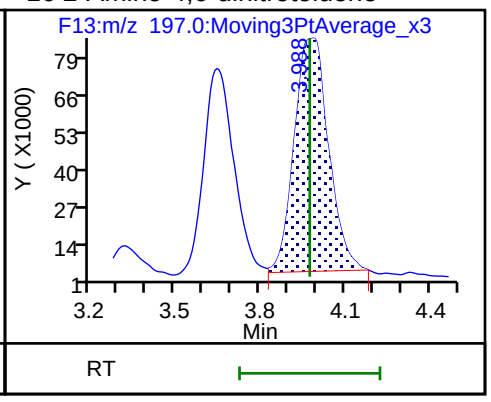
12 Nitrobenzene



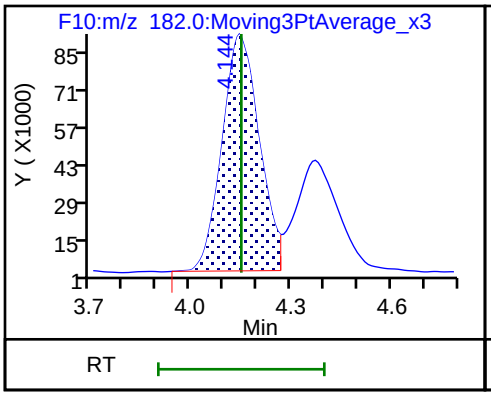
14 4-Amino-2,6-dinitrotoluene



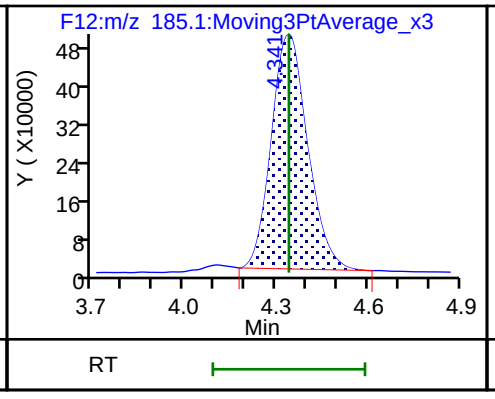
16 2-Amino-4,6-dinitrotoluene



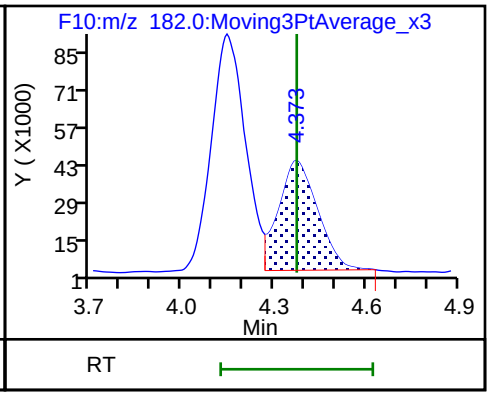
17 2,6-Dinitrotoluene



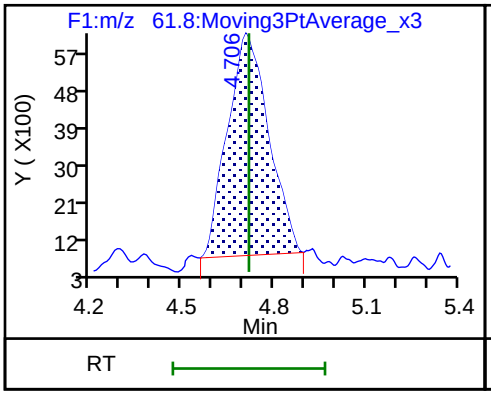
* 18 2,4-dinitrotoluene-d3



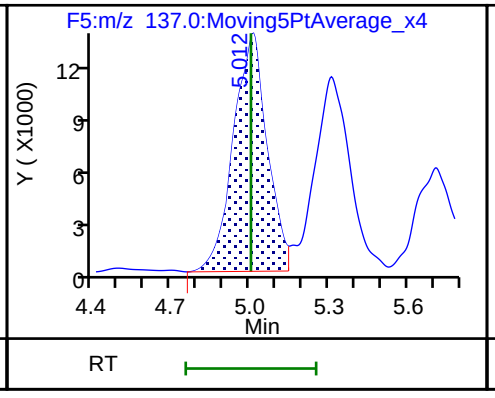
19 2,4-Dinitrotoluene



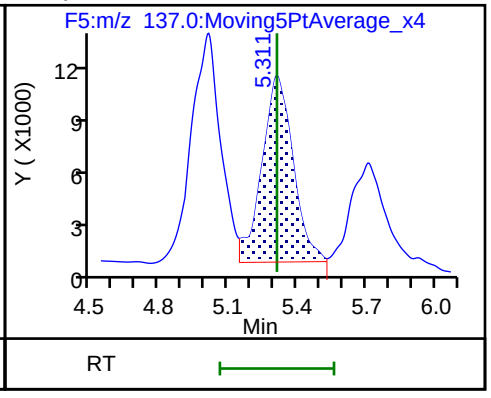
20 PETN



22 o-Nitrotoluene



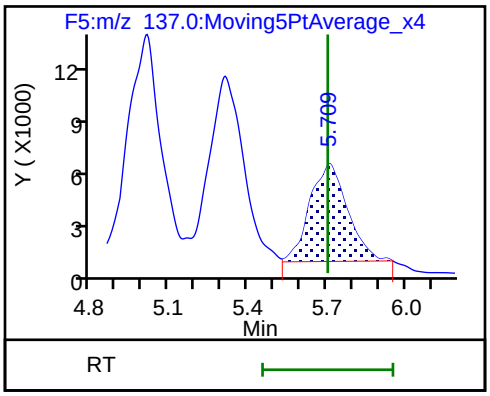
23 p-Nitrotoluene



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

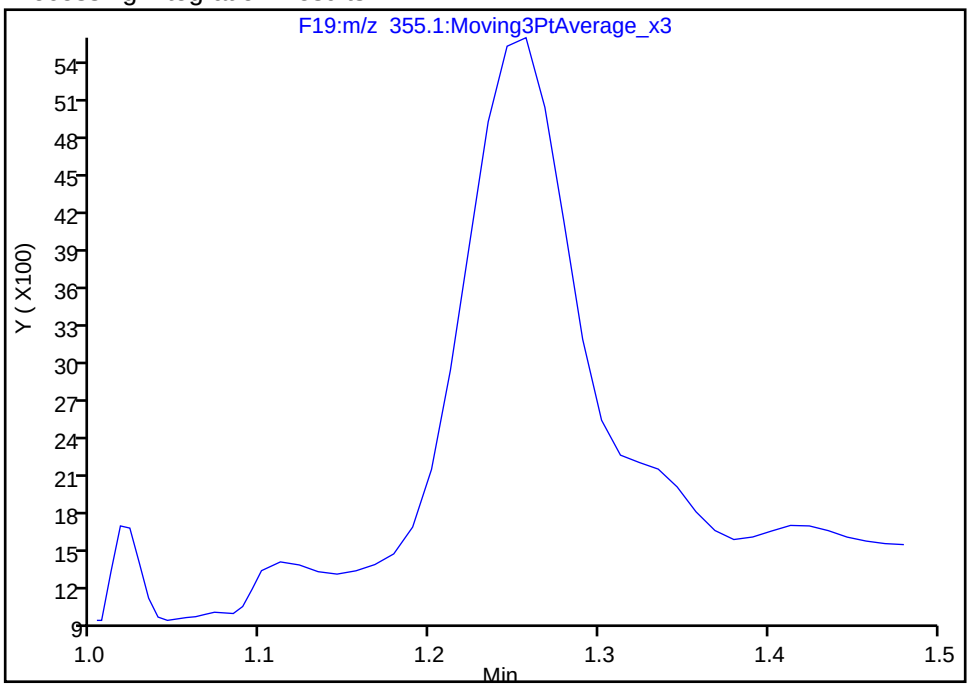
2 HMX, CAS: 2691-41-0

Signal: 1

Not Detected

Expected RT: 1.25

Processing Integration Results



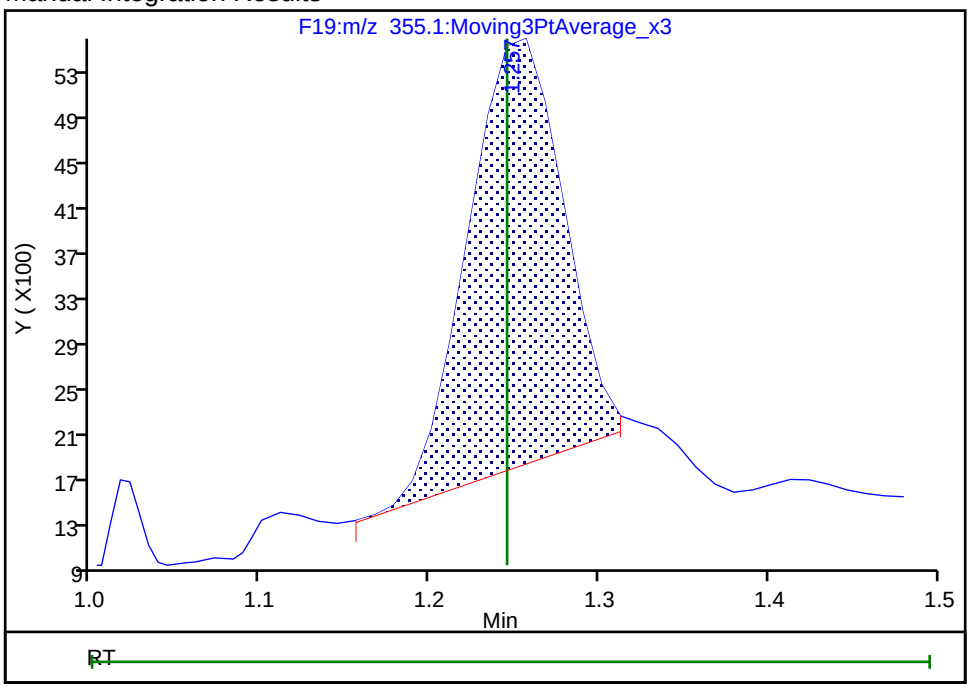
Manual Integration Results

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

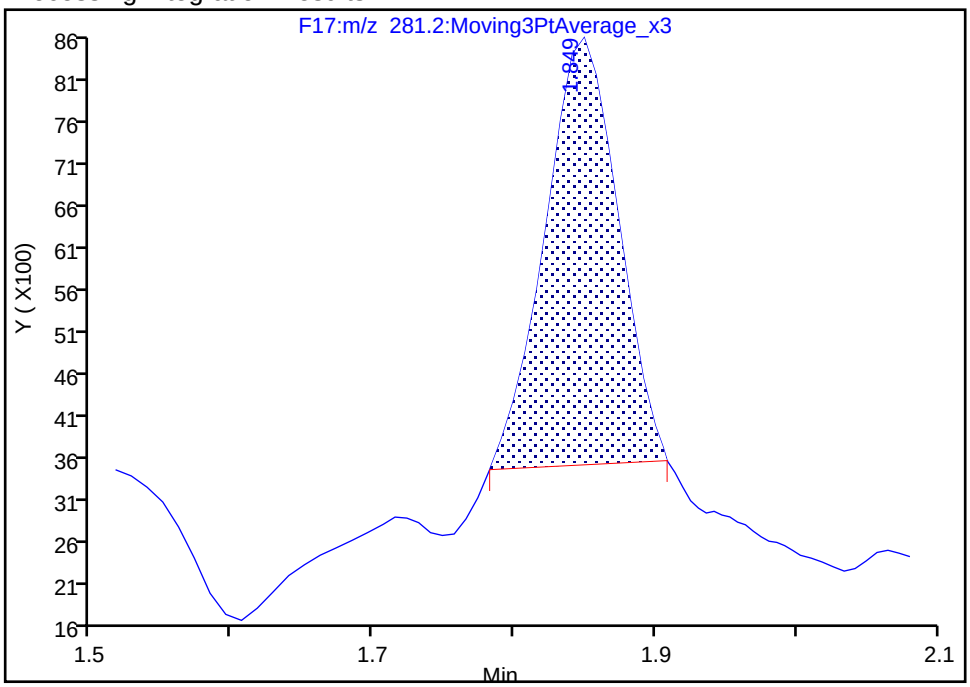
Column: Detector F17:SIR

4 RDX, CAS: 121-82-4

Signal: 1

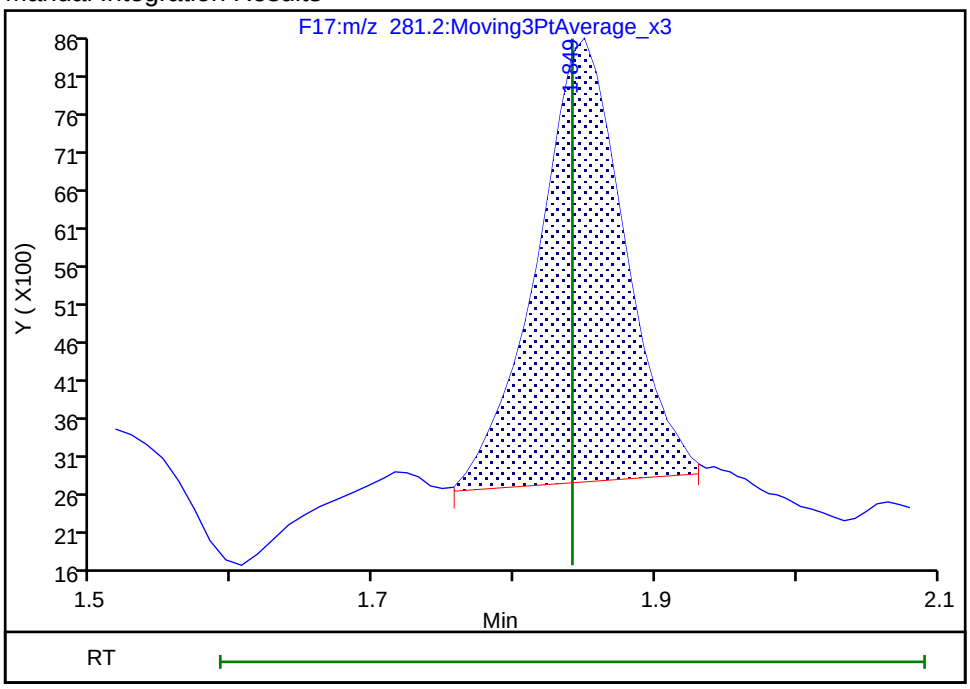
Processing Integration Results

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:

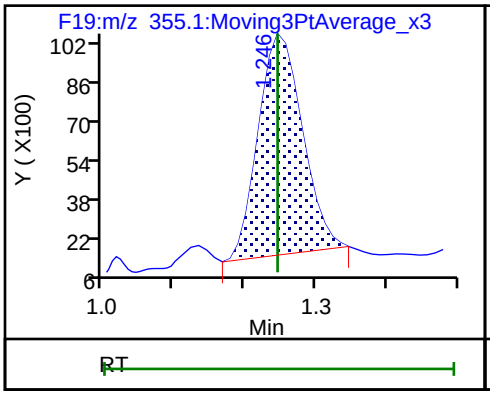
8321EXcalprim_00029	Amount Added: 2.50	Units: uL	
8321NB-D5-cal_00021	Amount Added: 2.50	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 08-Apr-2022 07:31:47 Chrom Revision: 2.3 18-Mar-2022 09:07:22

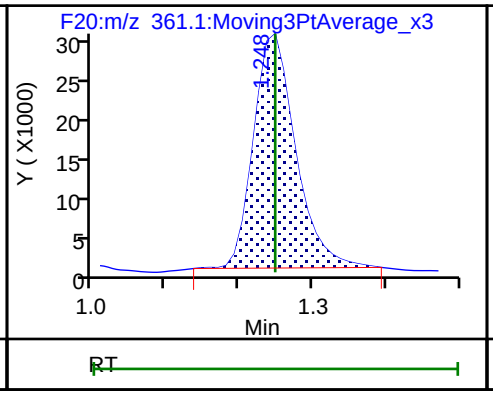
Eurofins Denver

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

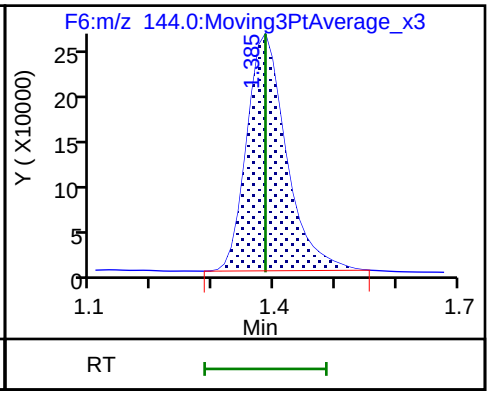
2 HMX



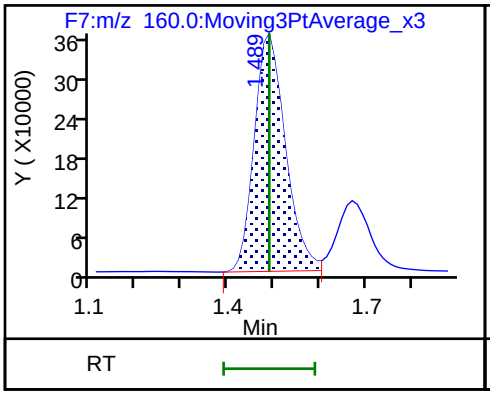
* 1 HMX-13C4



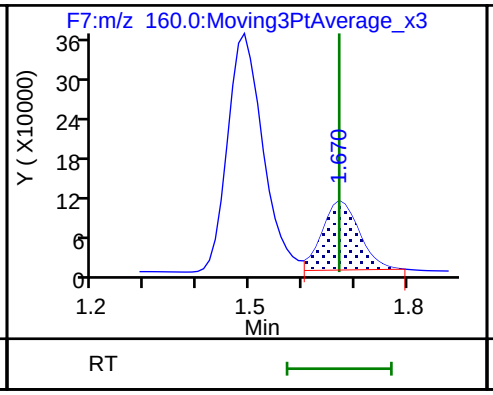
36 TNX



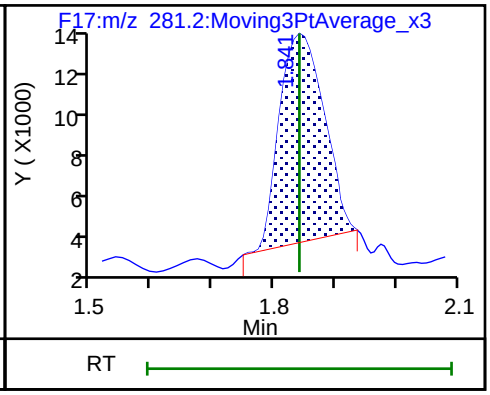
33 DNX



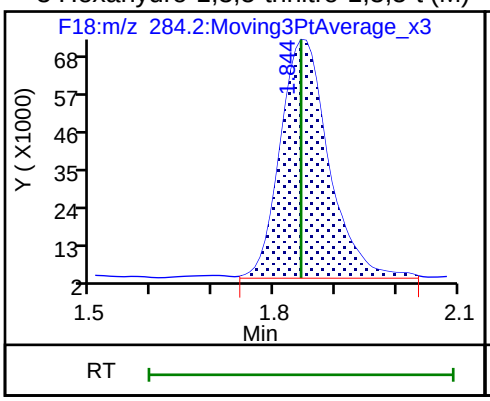
34 MNX



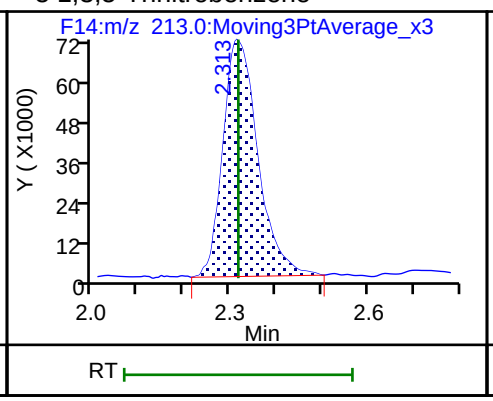
4 RDX



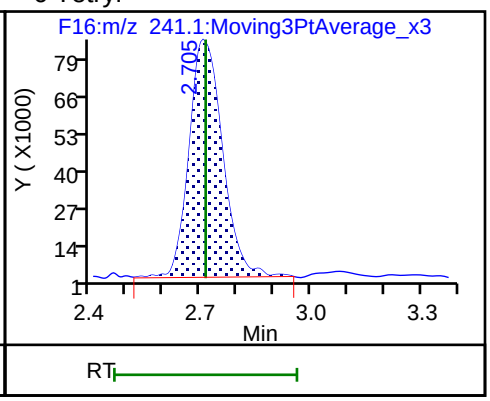
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t (M)



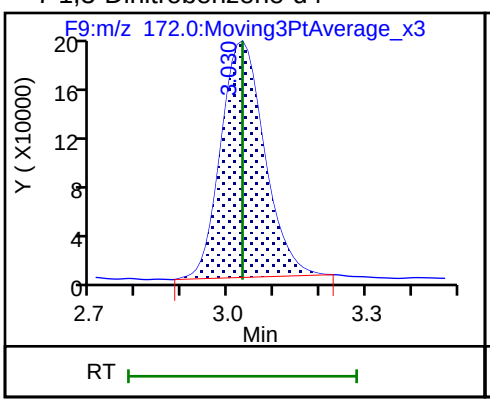
5 1,3,5-Trinitrobenzene



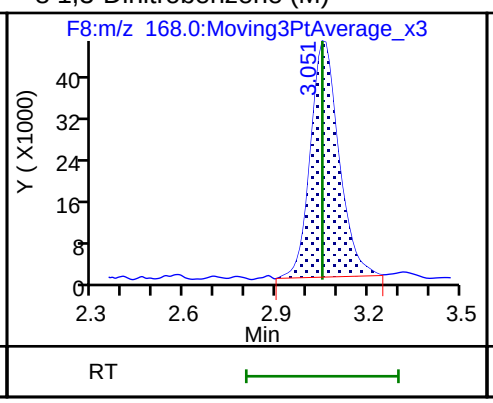
6 Tetryl



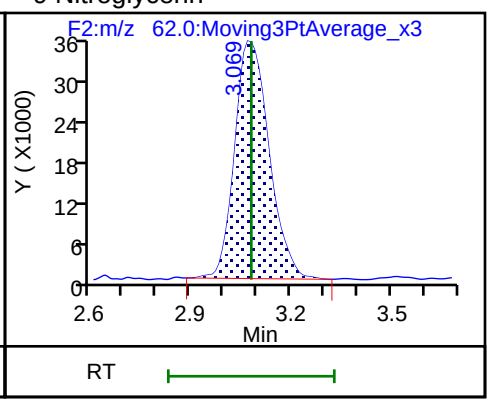
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene (M)

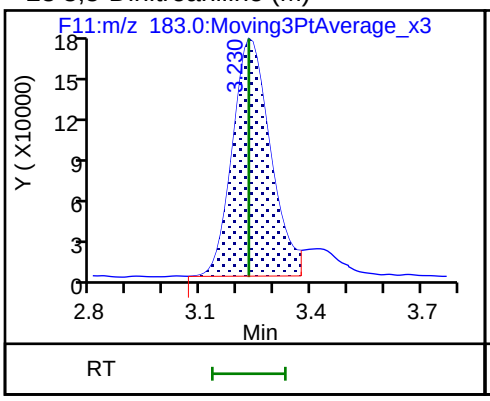


9 Nitroglycerin

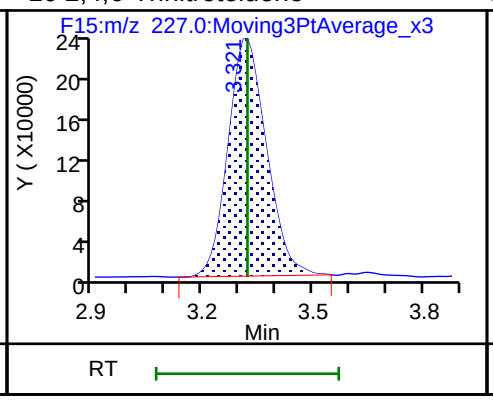


Report Date: 08-Apr-2022 07:31:47 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07005.d

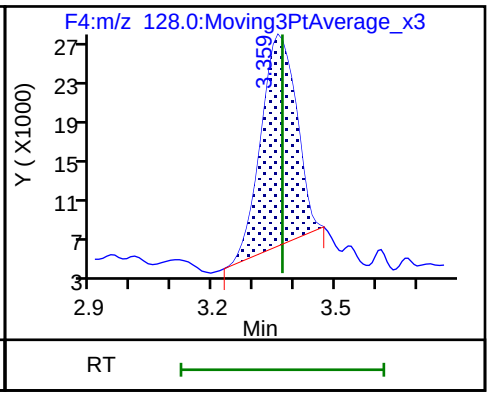
28 3,5-Dinitroaniline (M)



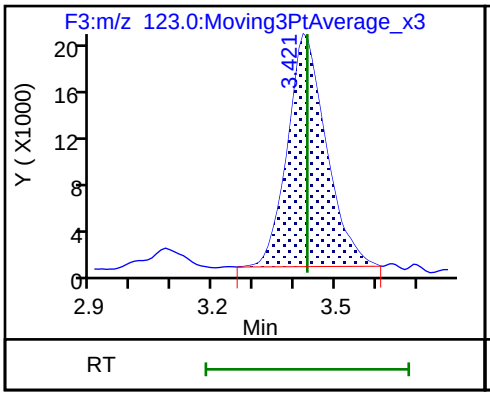
10 2,4,6-Trinitrotoluene



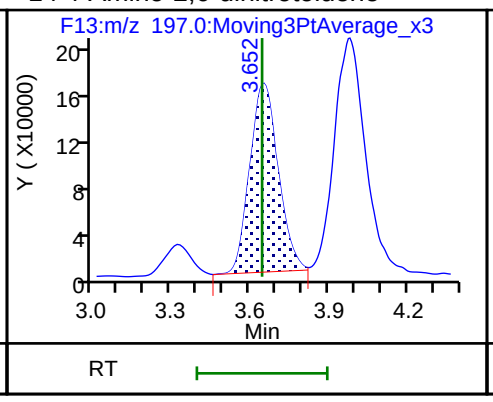
$ 11 Nitrobenzene-d5



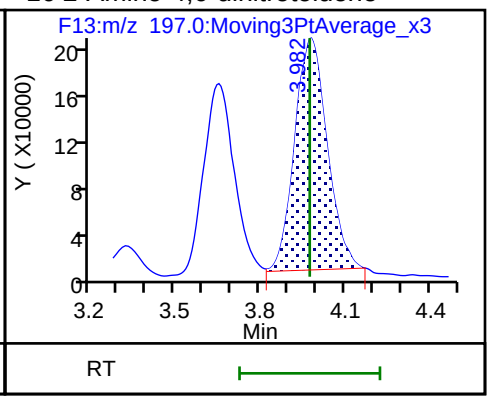
12 Nitrobenzene



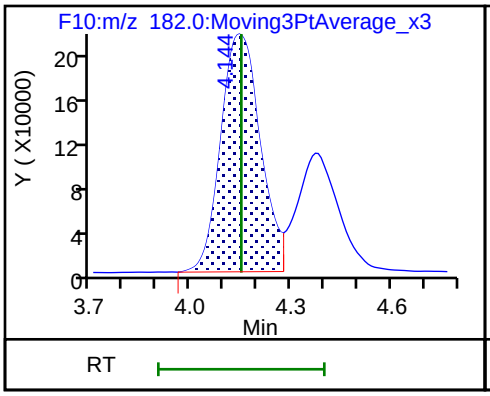
14 4-Amino-2,6-dinitrotoluene



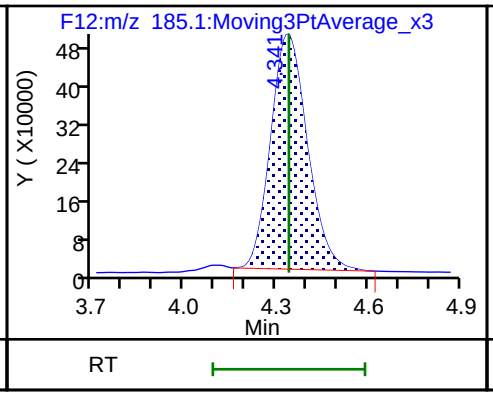
16 2-Amino-4,6-dinitrotoluene



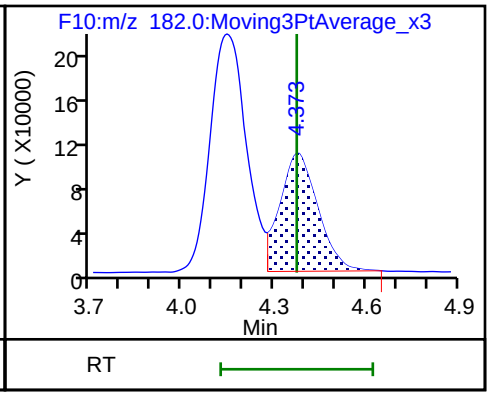
17 2,6-Dinitrotoluene



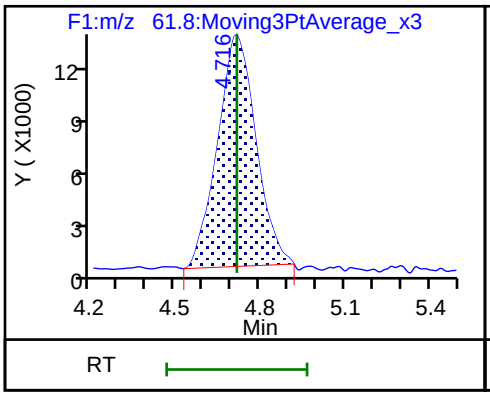
* 18 2,4-dinitrotoluene-d3



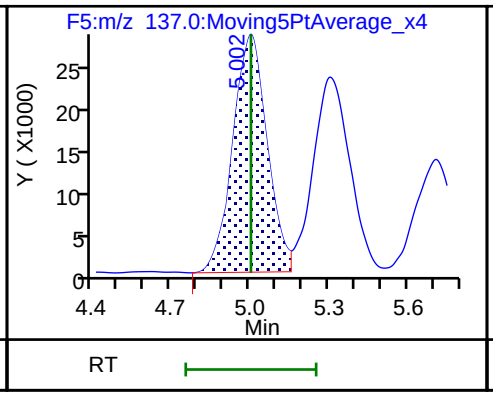
19 2,4-Dinitrotoluene



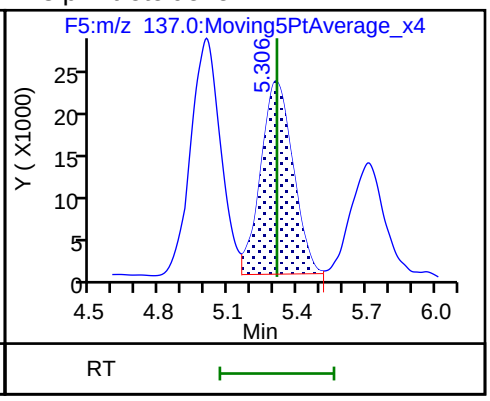
20 PETN



22 o-Nitrotoluene



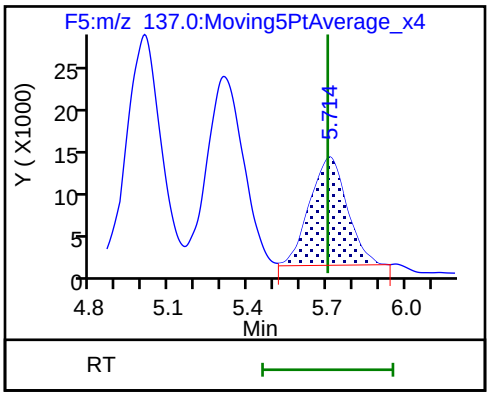
23 p-Nitrotoluene



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

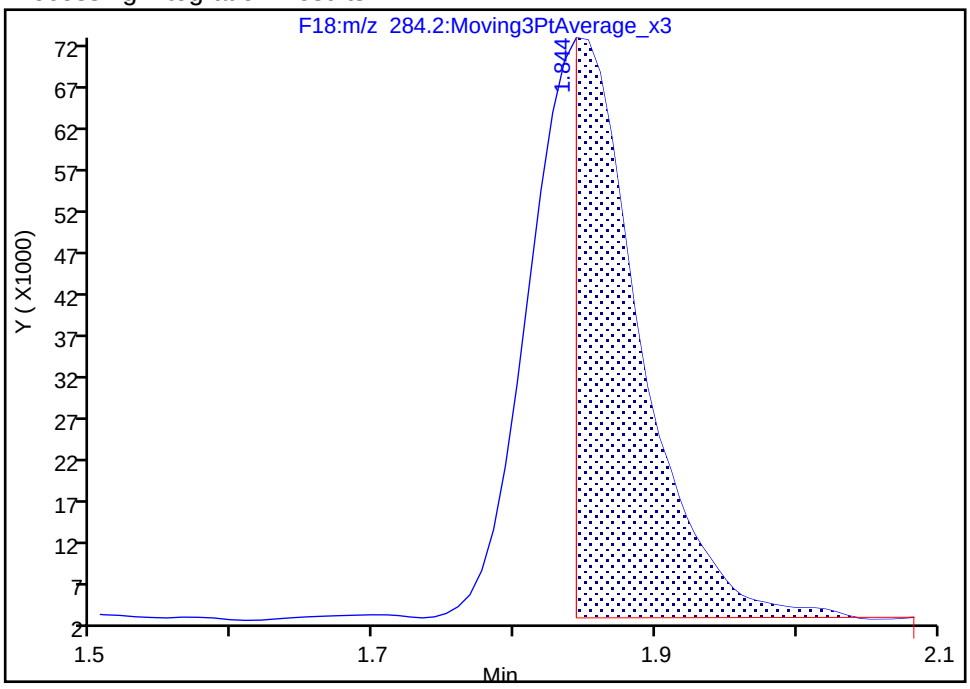
Column: Detector F18:SIR

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

Signal: 1

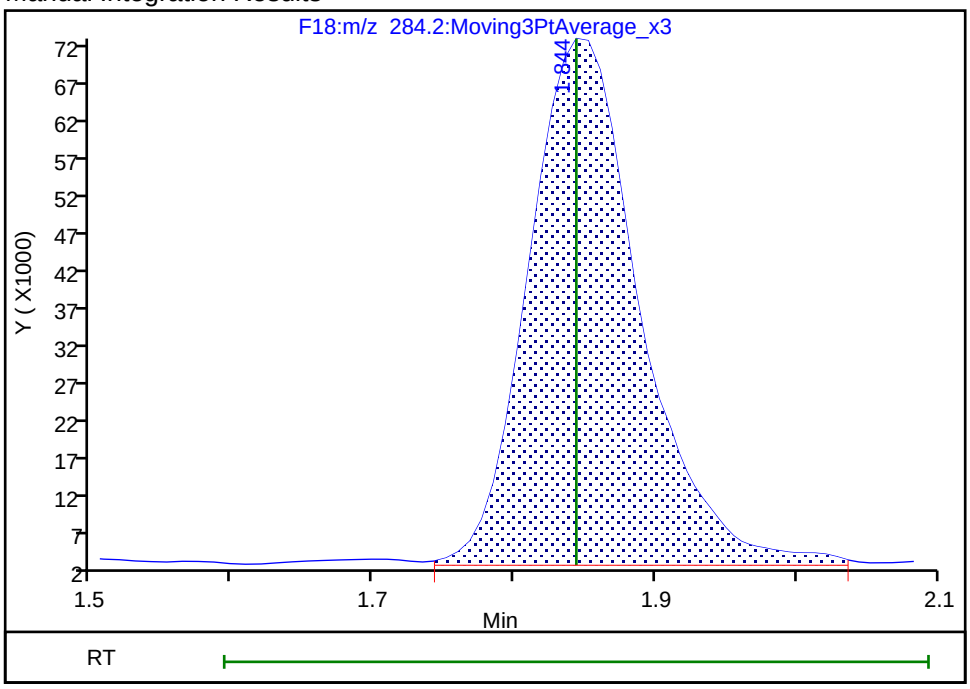
Processing Integration Results

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

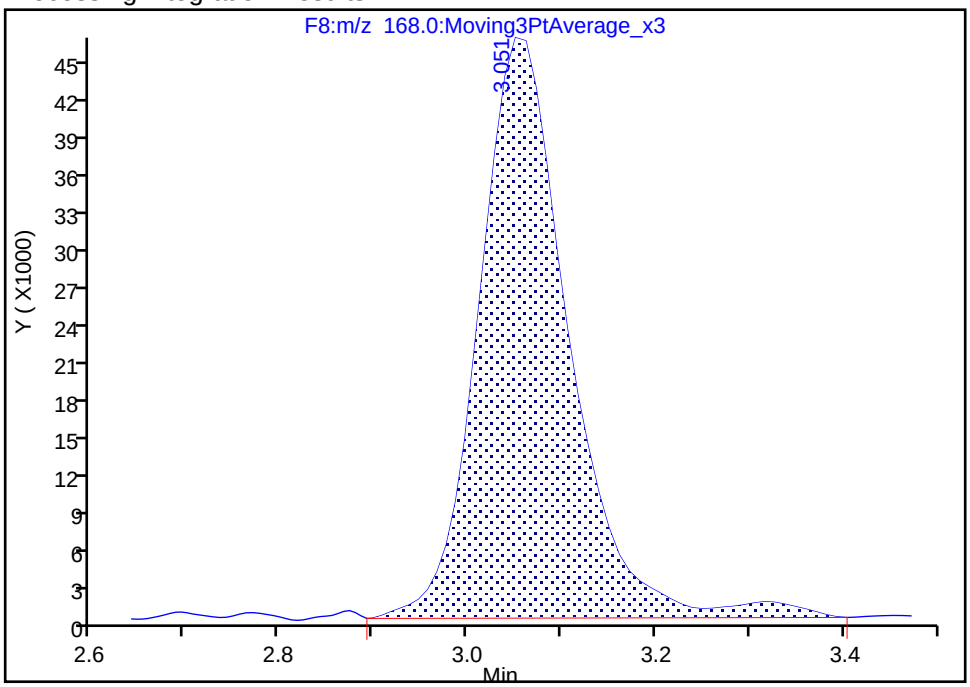
Column: Detector F8:SIR

8 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

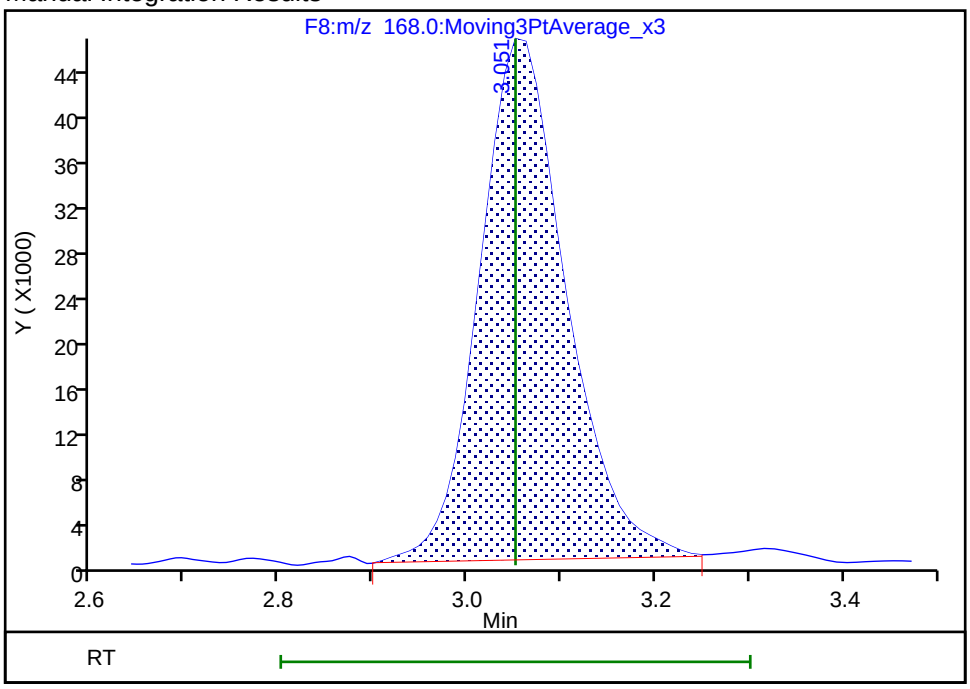
Processing Integration Results

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:

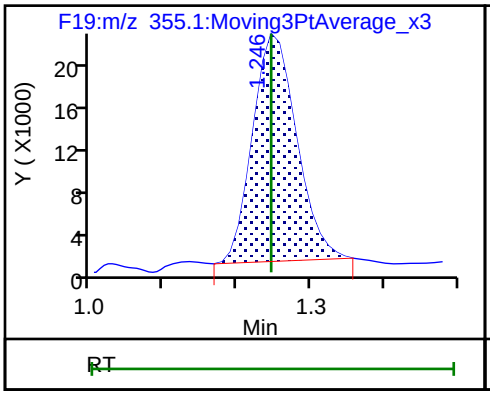
8321EXcalprim_00029	Amount Added: 5.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 5.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 08-Apr-2022 07:31:48 Chrom Revision: 2.3 18-Mar-2022 09:07:22

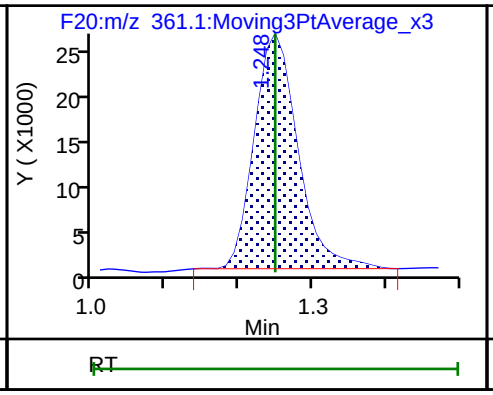
Eurofins Denver

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

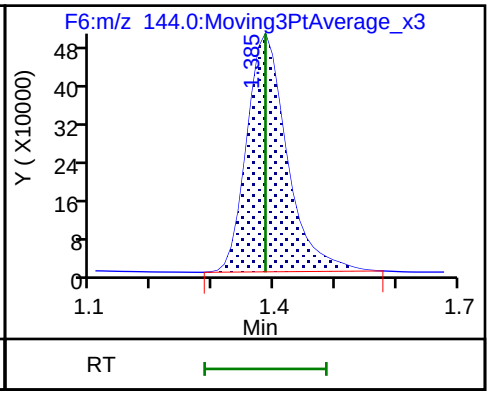
2 HMX



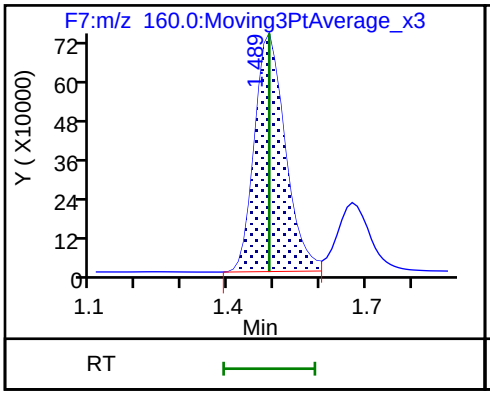
* 1 HMX-13C4



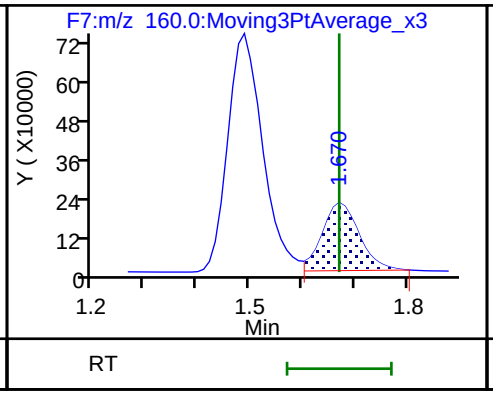
36 TNX



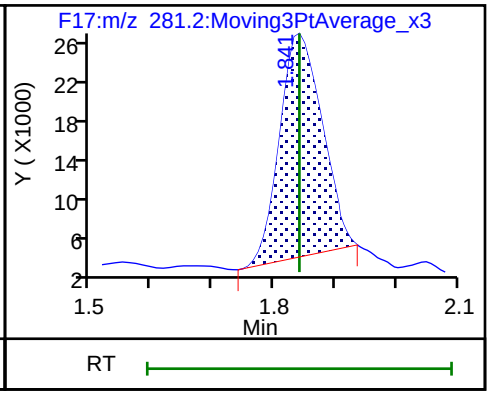
33 DNX



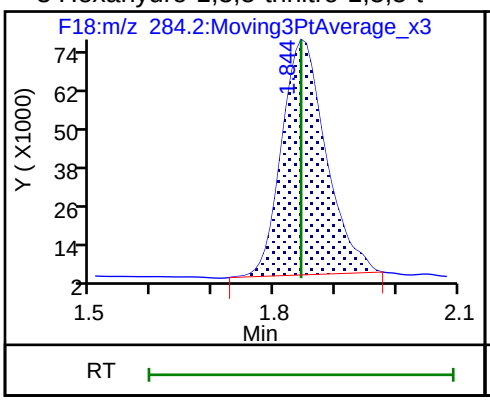
34 MNX



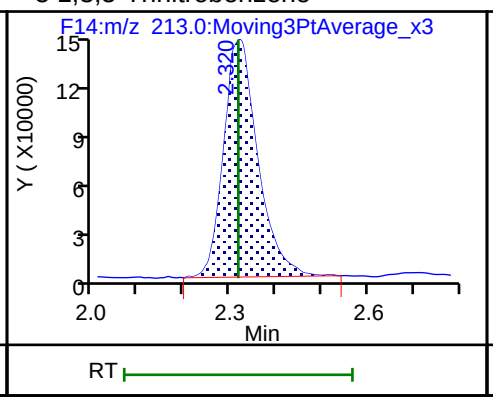
4 RDX



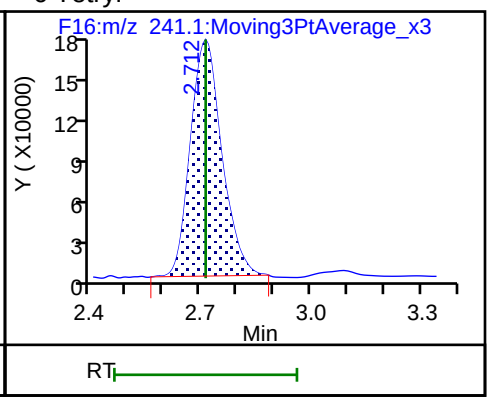
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



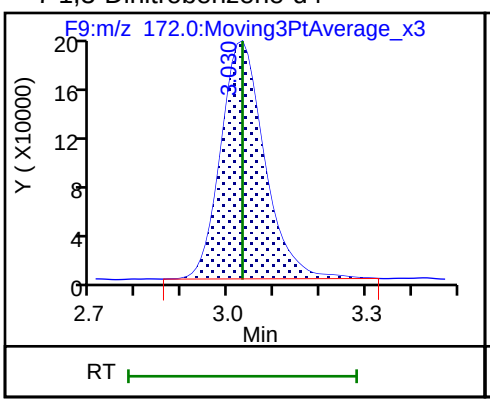
5 1,3,5-Trinitrobenzene



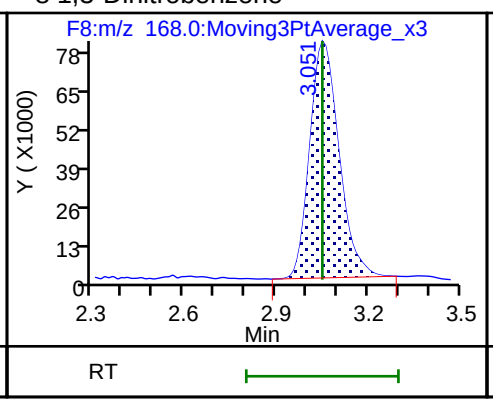
6 Tetryl



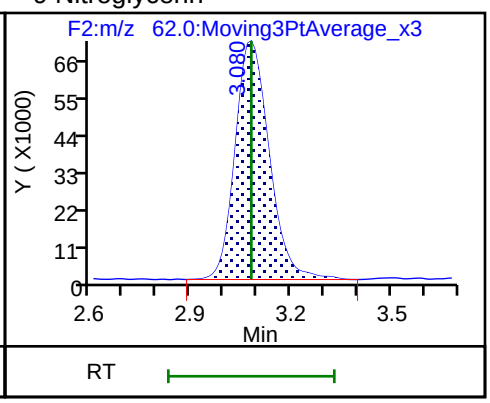
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

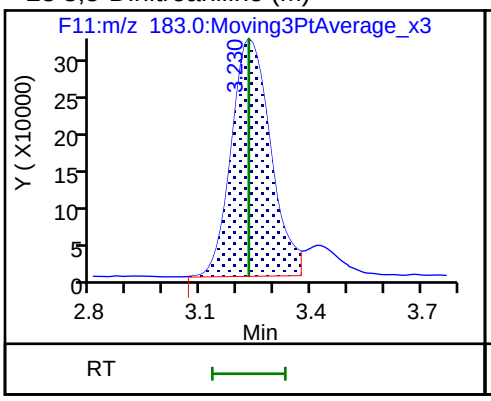


9 Nitroglycerin

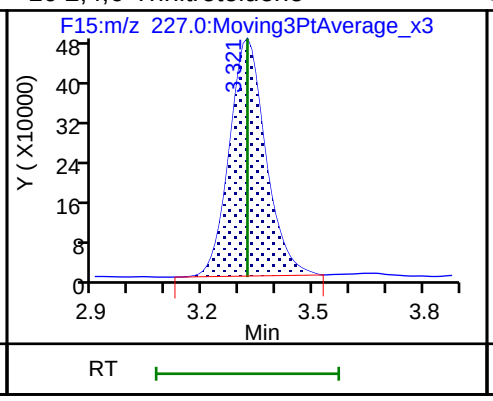


Report Date: 08-Apr-2022 07:31:48 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07006.d

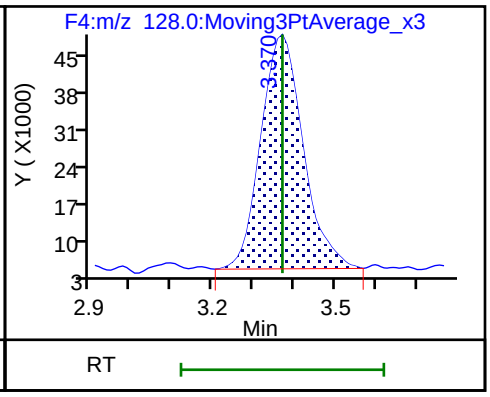
28 3,5-Dinitroaniline (M)



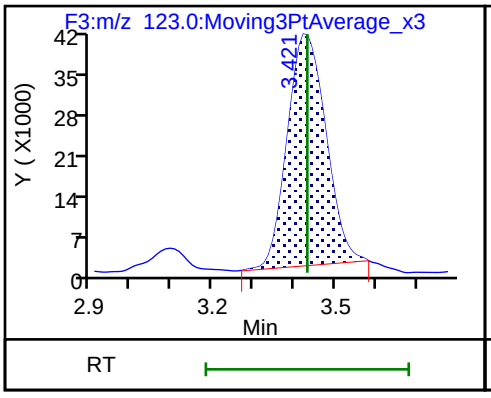
10 2,4,6-Trinitrotoluene



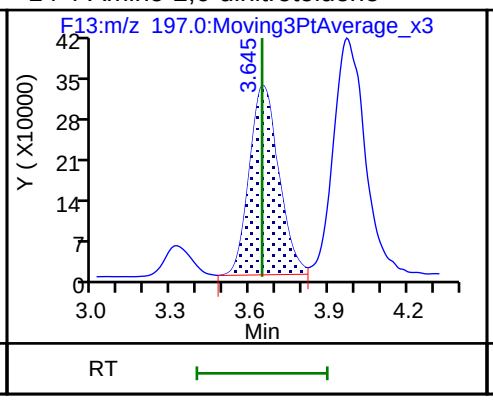
$ 11 Nitrobenzene-d5



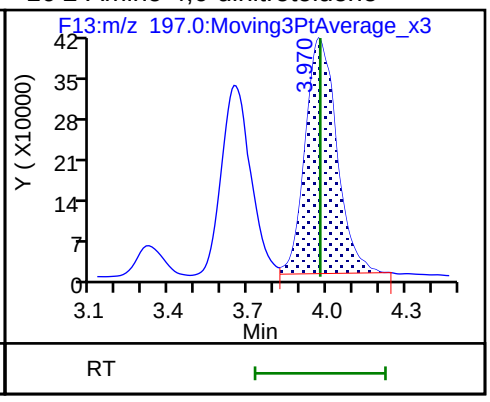
12 Nitrobenzene



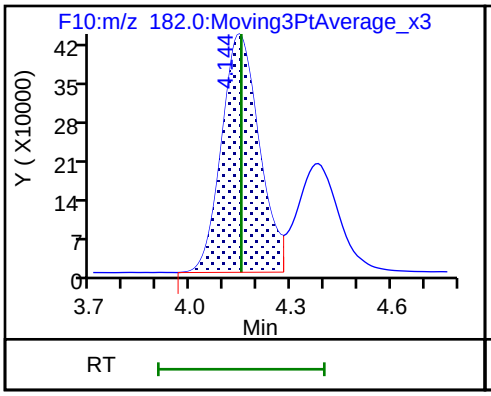
14 4-Amino-2,6-dinitrotoluene



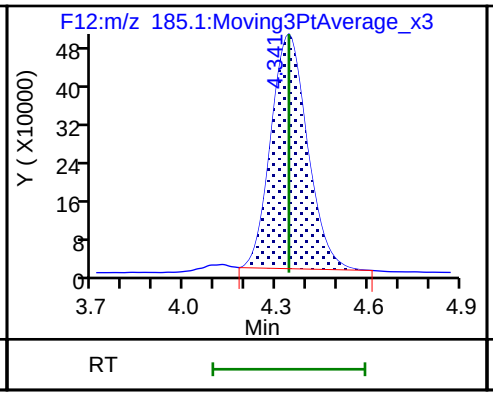
16 2-Amino-4,6-dinitrotoluene



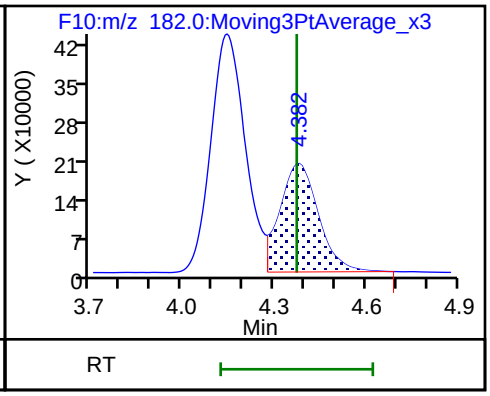
17 2,6-Dinitrotoluene



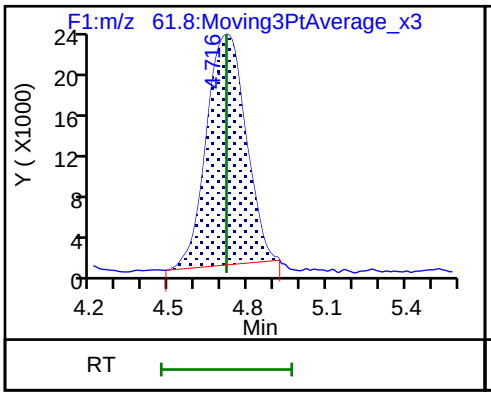
* 18 2,4-dinitrotoluene-d3



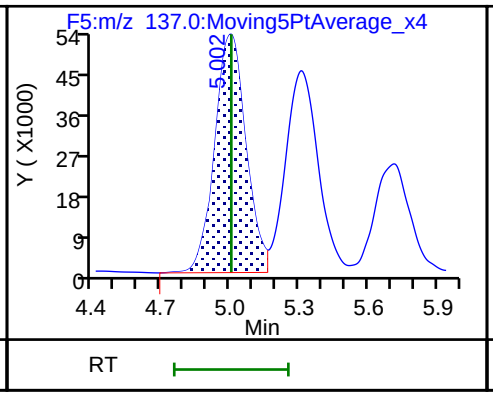
19 2,4-Dinitrotoluene



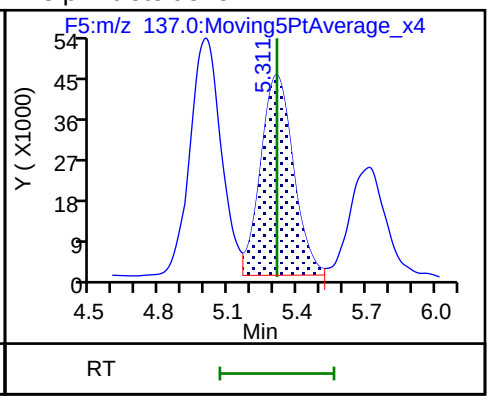
20 PETN



22 o-Nitrotoluene



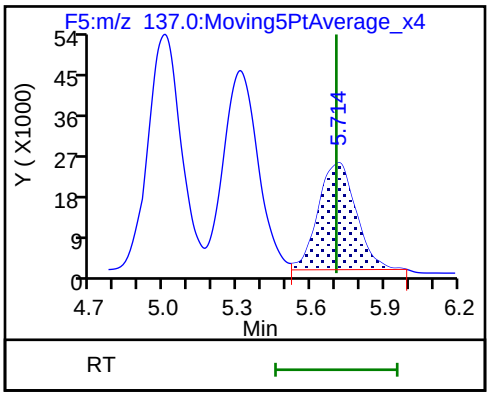
23 p-Nitrotoluene



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:

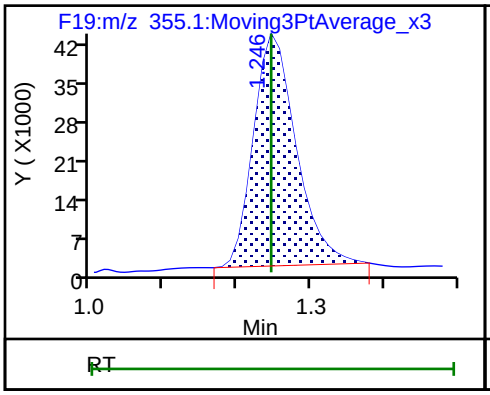
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8321NB-D5-cal_00021	Amount Added: 10.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 08-Apr-2022 07:31:49 Chrom Revision: 2.3 18-Mar-2022 09:07:22

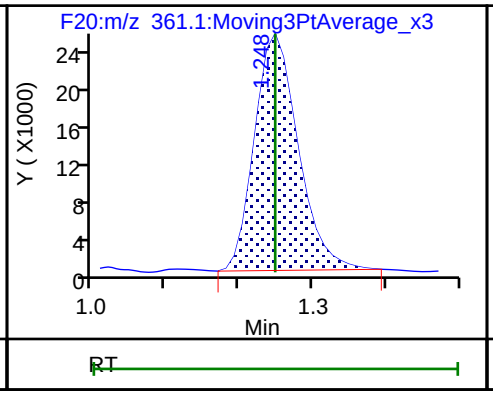
Eurofins Denver

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

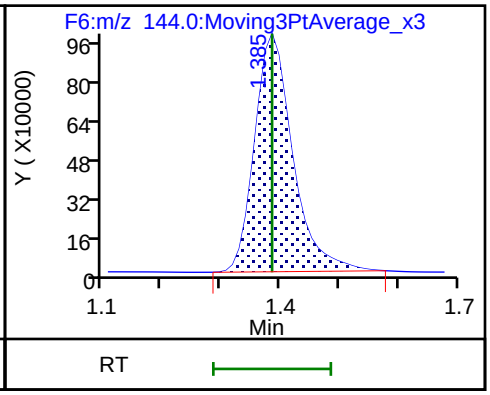
2 HMX



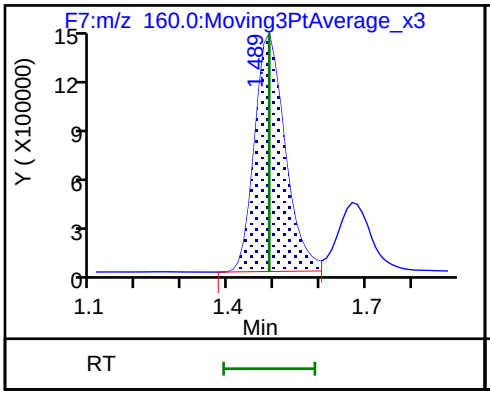
* 1 HMX-13C4



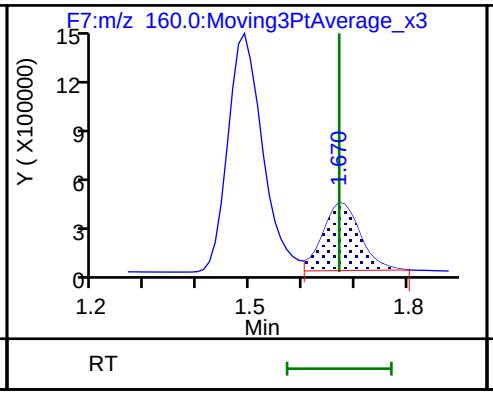
36 TNX



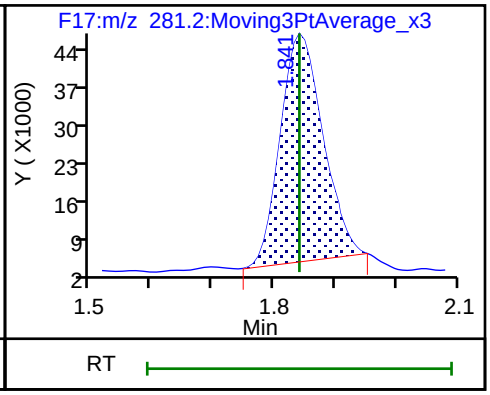
33 DNX



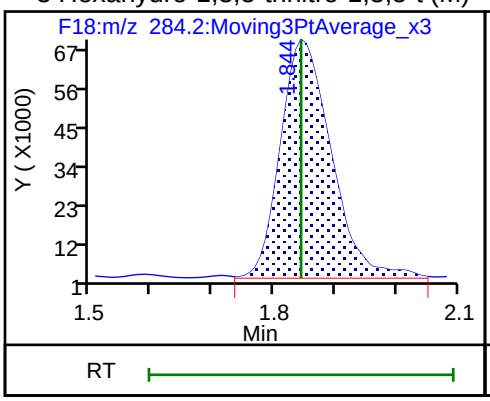
34 MNX



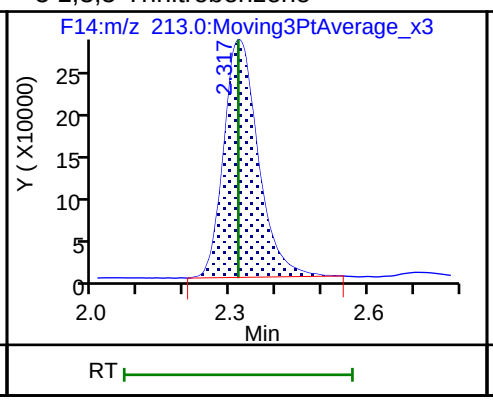
4 RDX



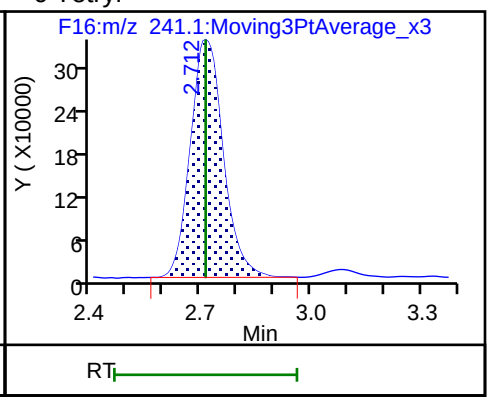
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t (M)



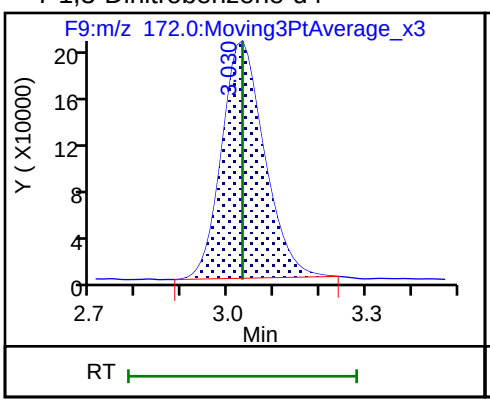
5 1,3,5-Trinitrobenzene



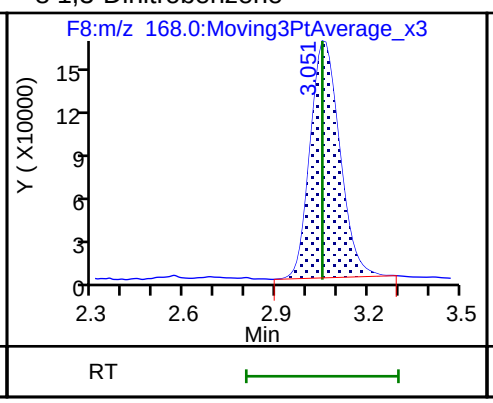
6 Tetryl



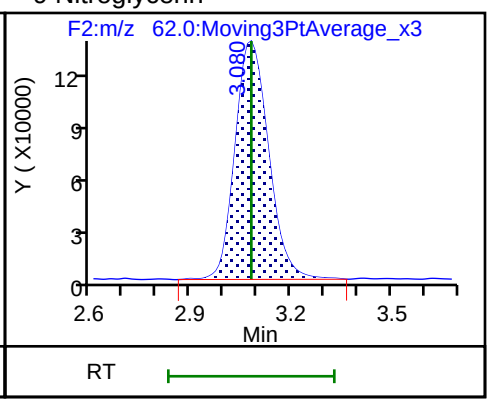
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

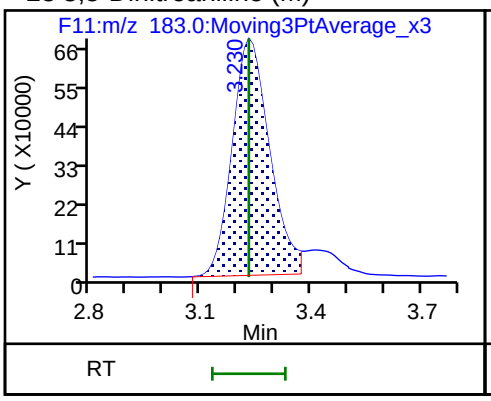


9 Nitroglycerin

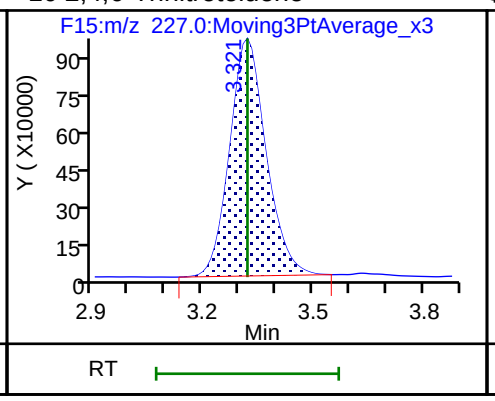


Report Date: 08-Apr-2022 07:31:49 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07007.d

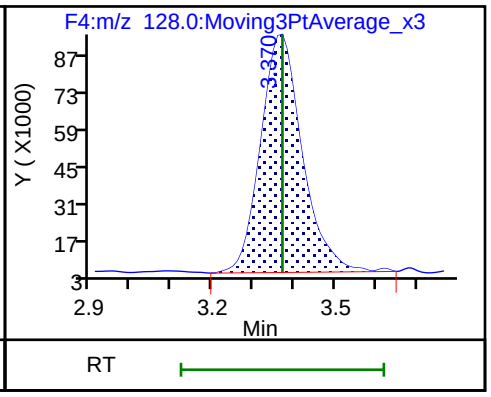
28 3,5-Dinitroaniline (M)



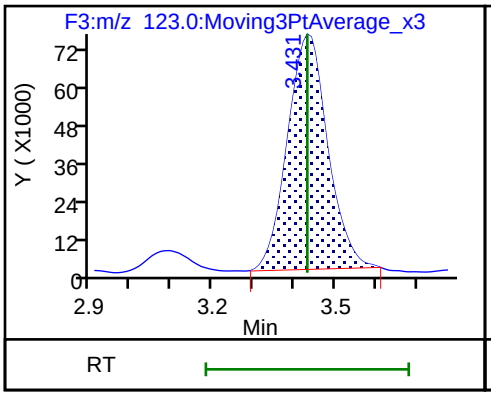
10 2,4,6-Trinitrotoluene



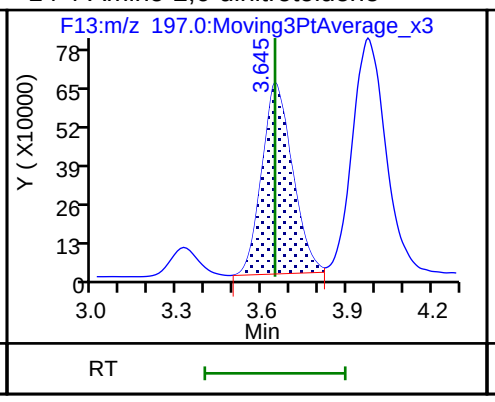
$ 11 Nitrobenzene-d5



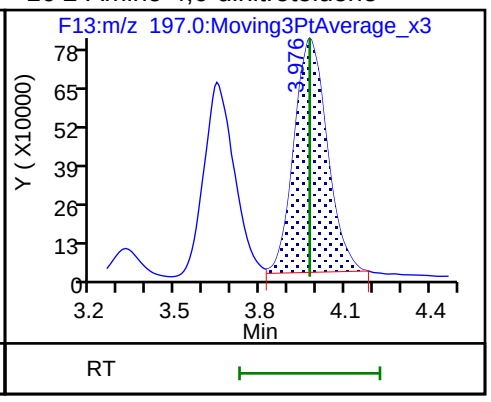
12 Nitrobenzene



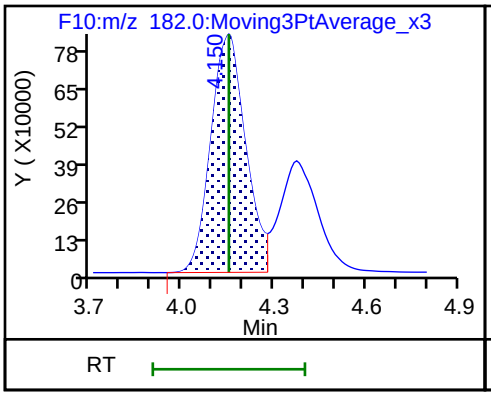
14 4-Amino-2,6-dinitrotoluene



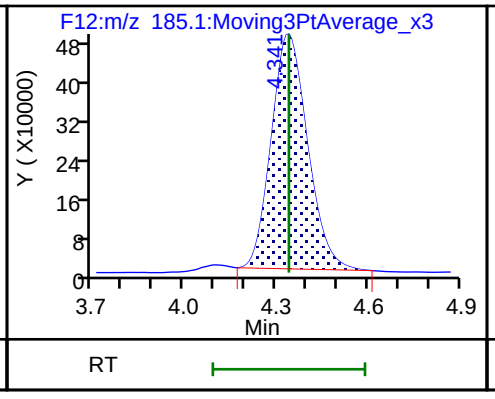
16 2-Amino-4,6-dinitrotoluene



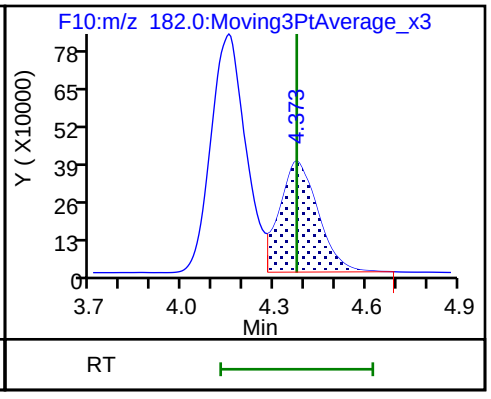
17 2,6-Dinitrotoluene



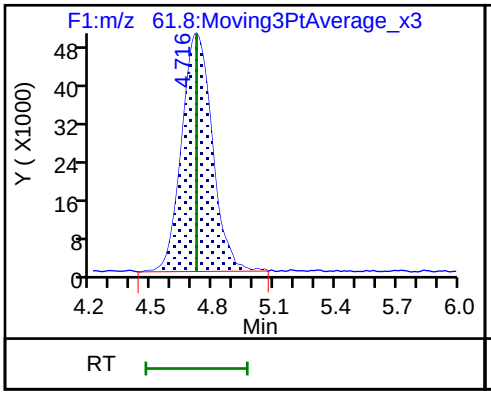
* 18 2,4-dinitrotoluene-d3



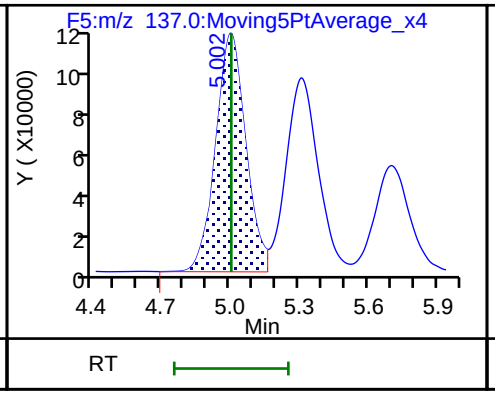
19 2,4-Dinitrotoluene



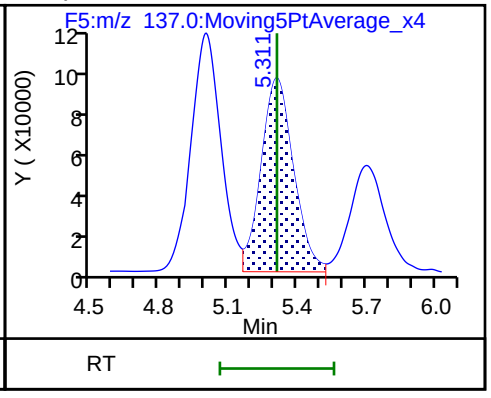
20 PETN



22 o-Nitrotoluene



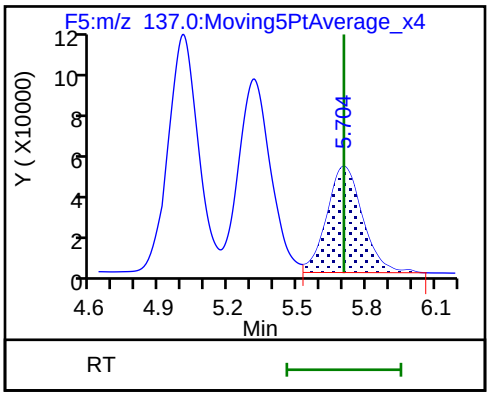
23 p-Nitrotoluene



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

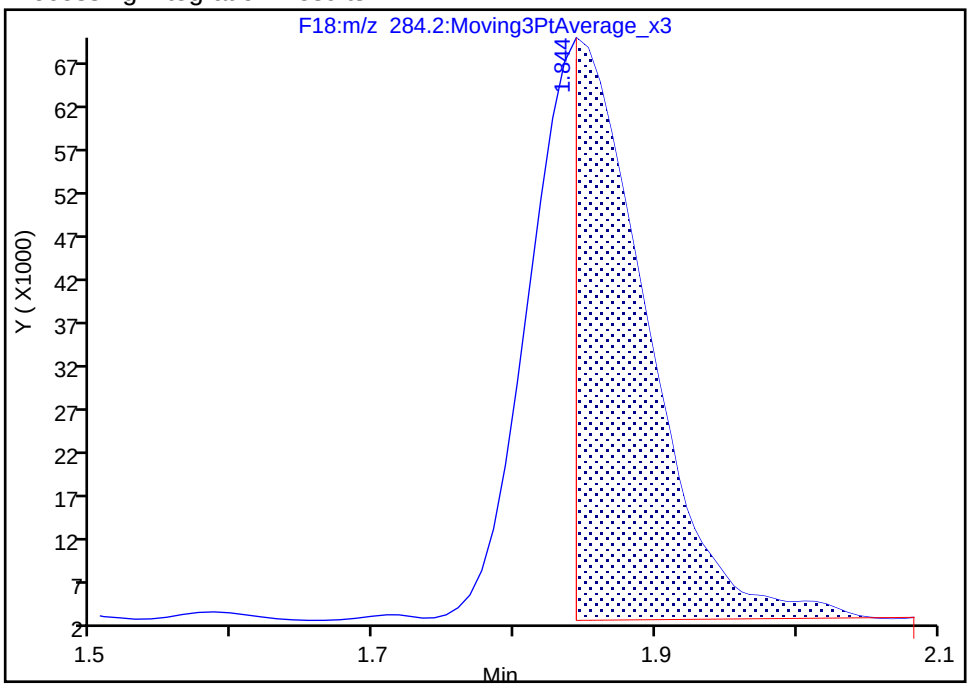
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07007.d
Injection Date: 07-Apr-2022 11:05:36 Instrument ID: LC_LCMS7
Lims ID: STD005
Client ID:
Operator ID: acm ALS Bottle#: 6 Worklist Smp#: 7
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 8330_SIR Limit Group: LC - 8321A Expl
Column: Detector F18:SIR

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

Signal: 1

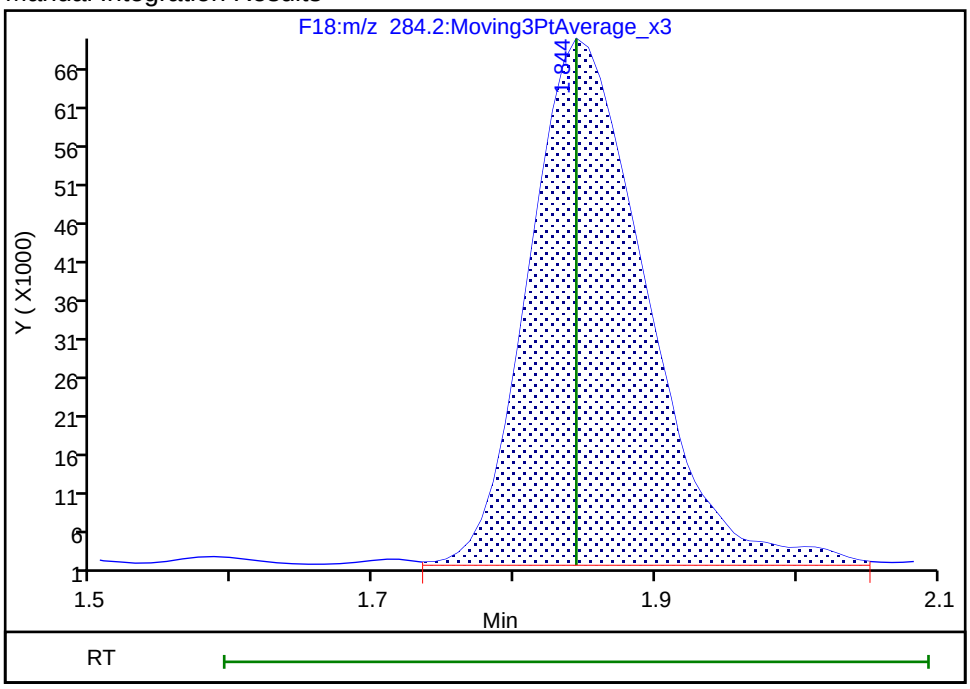
Processing Integration Results

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

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\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:

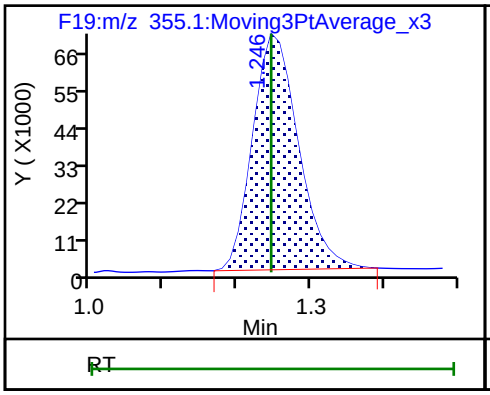
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8321NB-D5-cal_00021	Amount Added: 20.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 08-Apr-2022 07:31:49 Chrom Revision: 2.3 18-Mar-2022 09:07:22

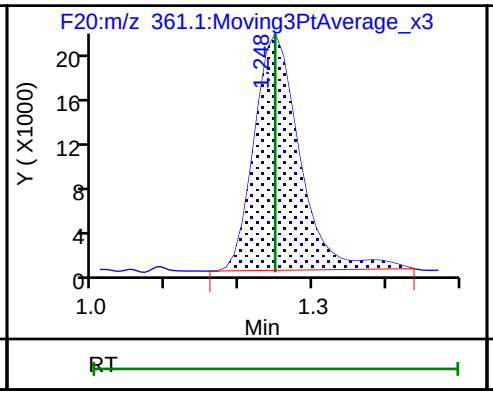
Eurofins Denver

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

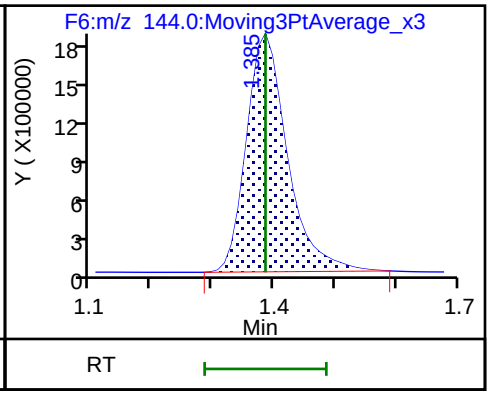
2 HMX



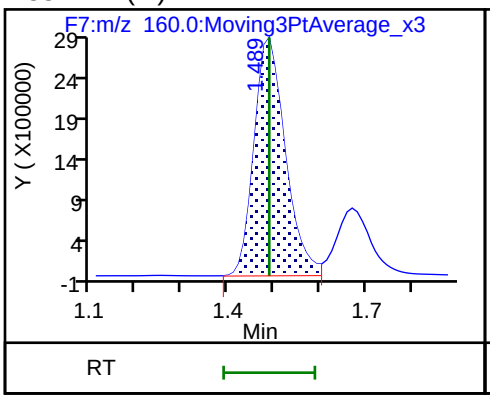
* 1 HMX-13C4



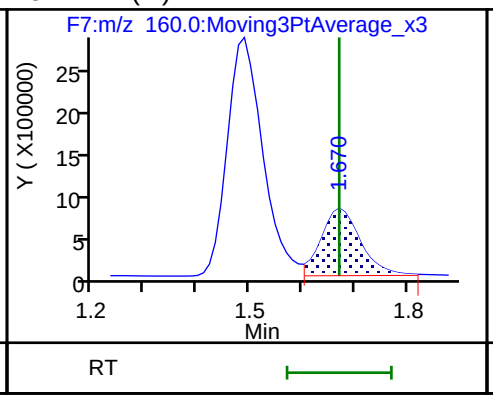
36 TNX



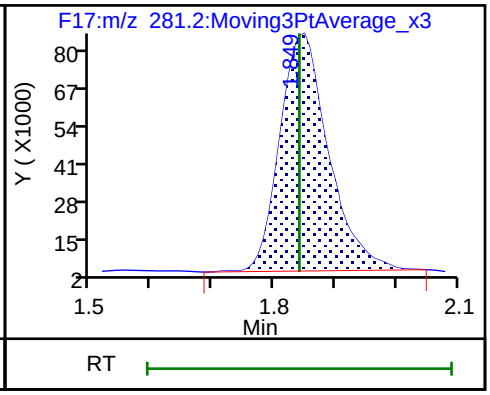
33 DNX (M)



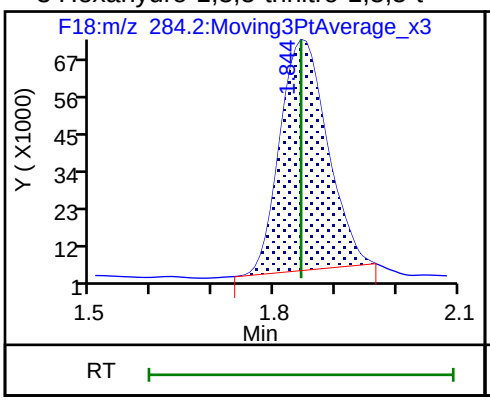
34 MNX (M)



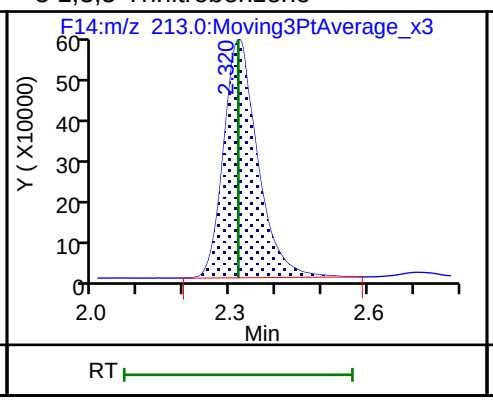
4 RDX



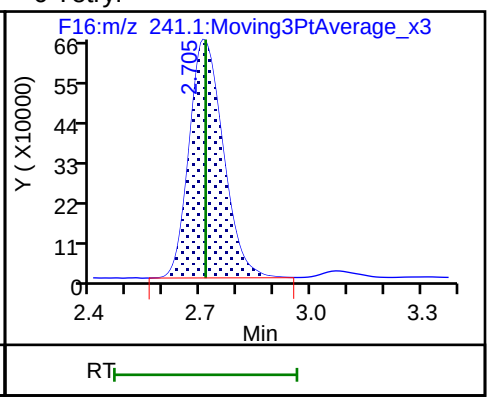
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



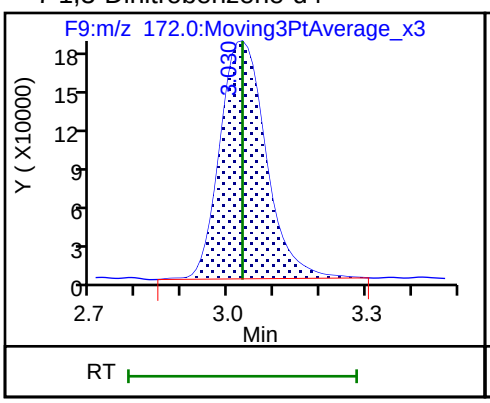
5 1,3,5-Trinitrobenzene



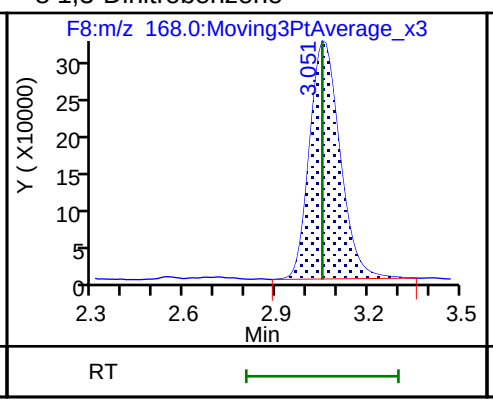
6 Tetryl



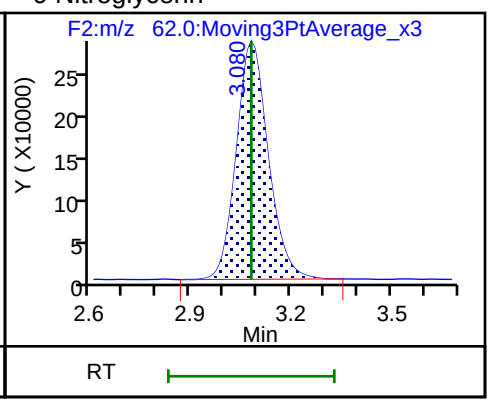
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



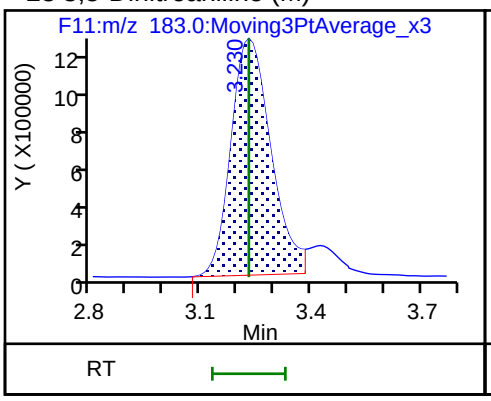
9 Nitroglycerin



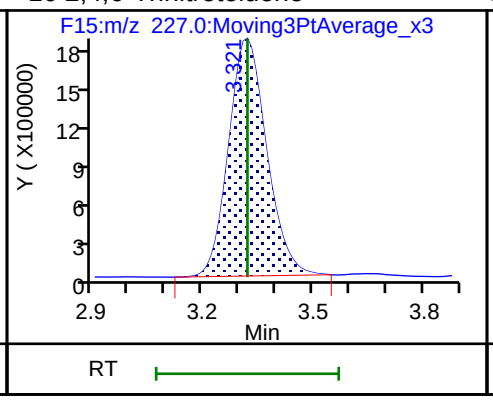
Report Date: 08-Apr-2022 07:31:49 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07008.d

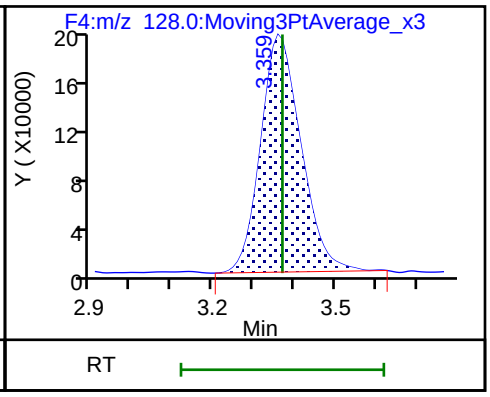
28 3,5-Dinitroaniline (M)



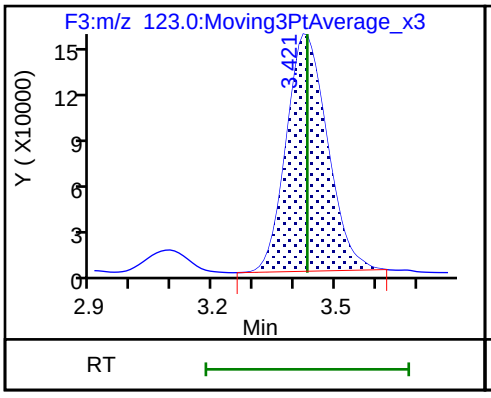
10 2,4,6-Trinitrotoluene



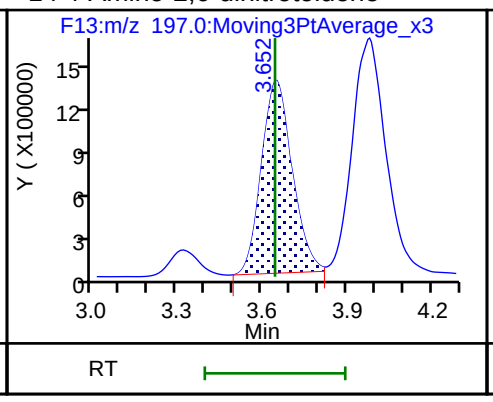
$ 11 Nitrobenzene-d5



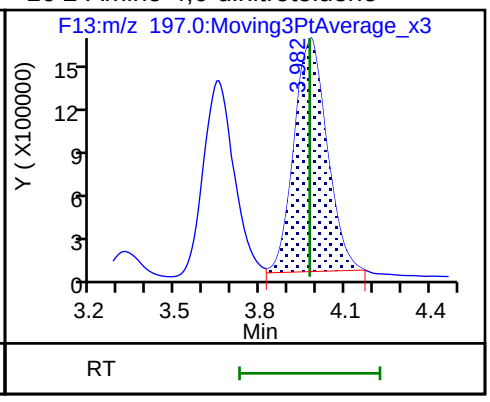
12 Nitrobenzene



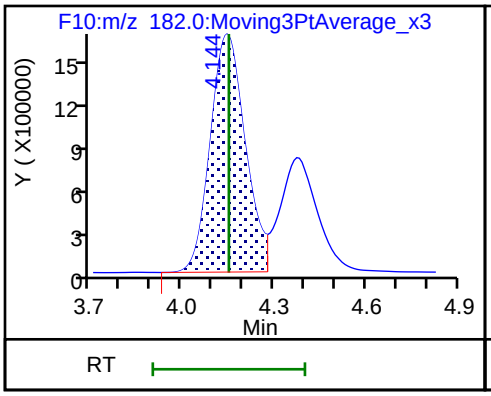
14 4-Amino-2,6-dinitrotoluene



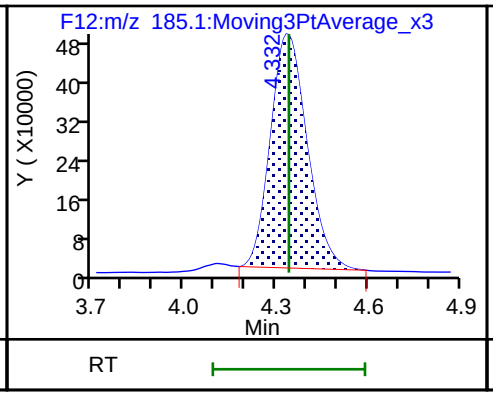
16 2-Amino-4,6-dinitrotoluene



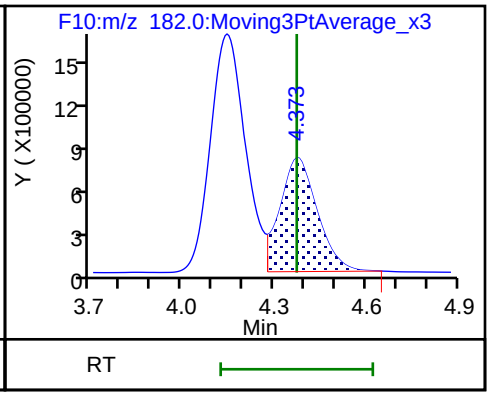
17 2,6-Dinitrotoluene



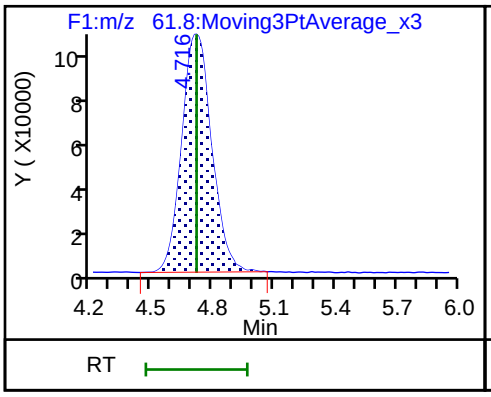
* 18 2,4-dinitrotoluene-d3



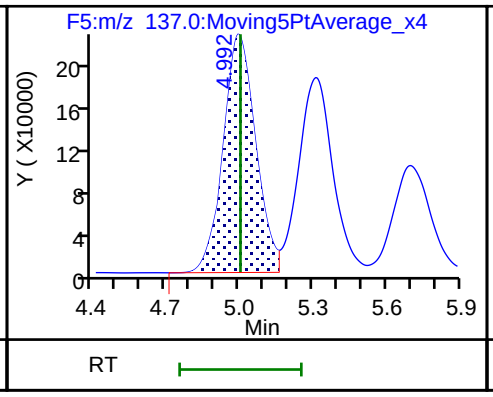
19 2,4-Dinitrotoluene



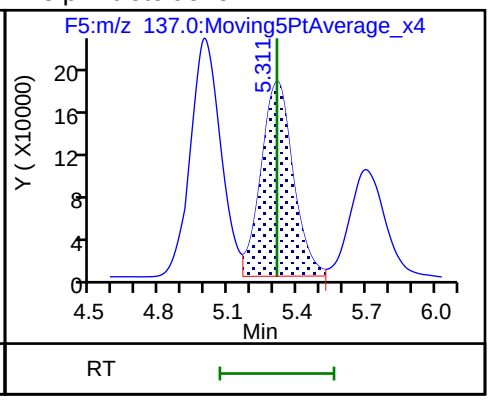
20 PETN



22 o-Nitrotoluene



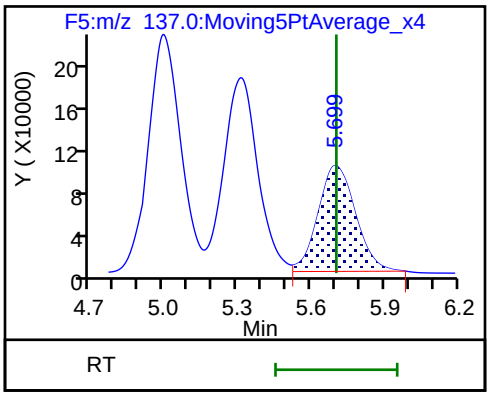
23 p-Nitrotoluene



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

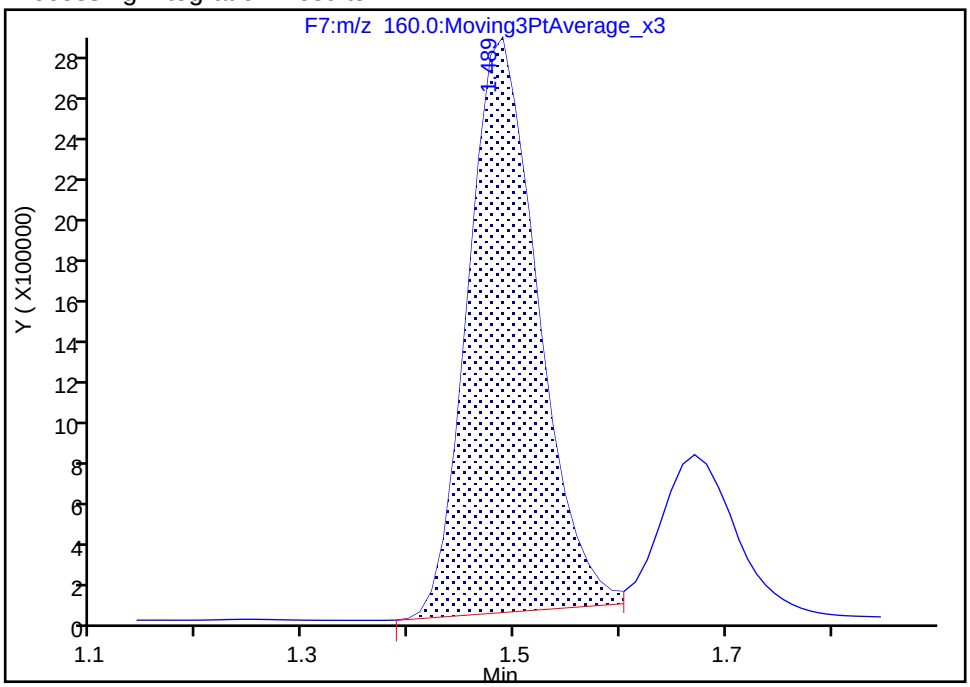
Column: Detector F7:SIR

33 DNX, CAS: 80251-29-2

Signal: 1

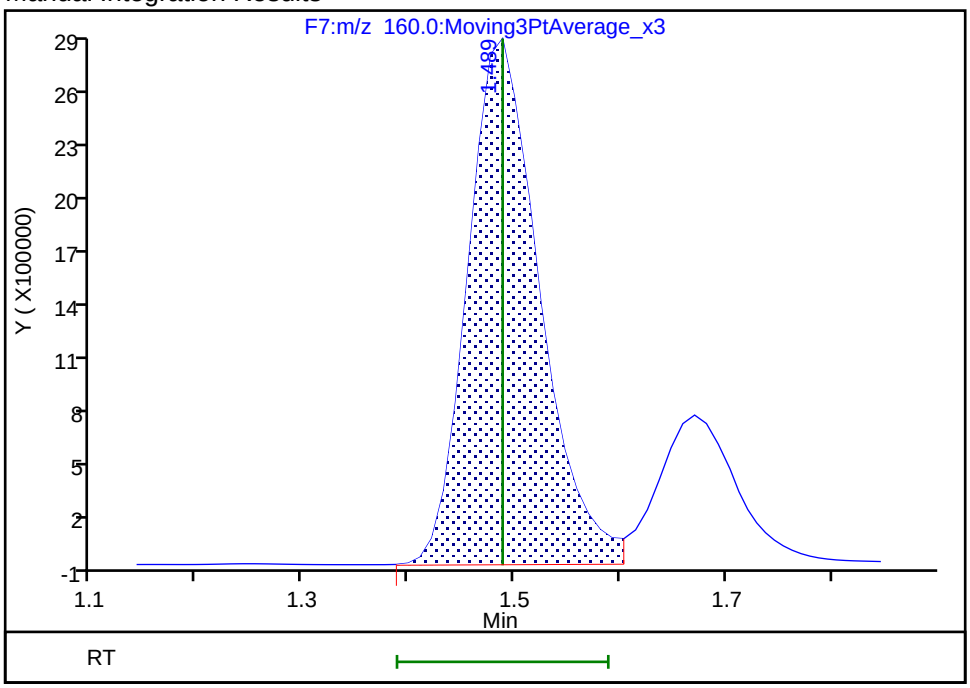
Processing Integration Results

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

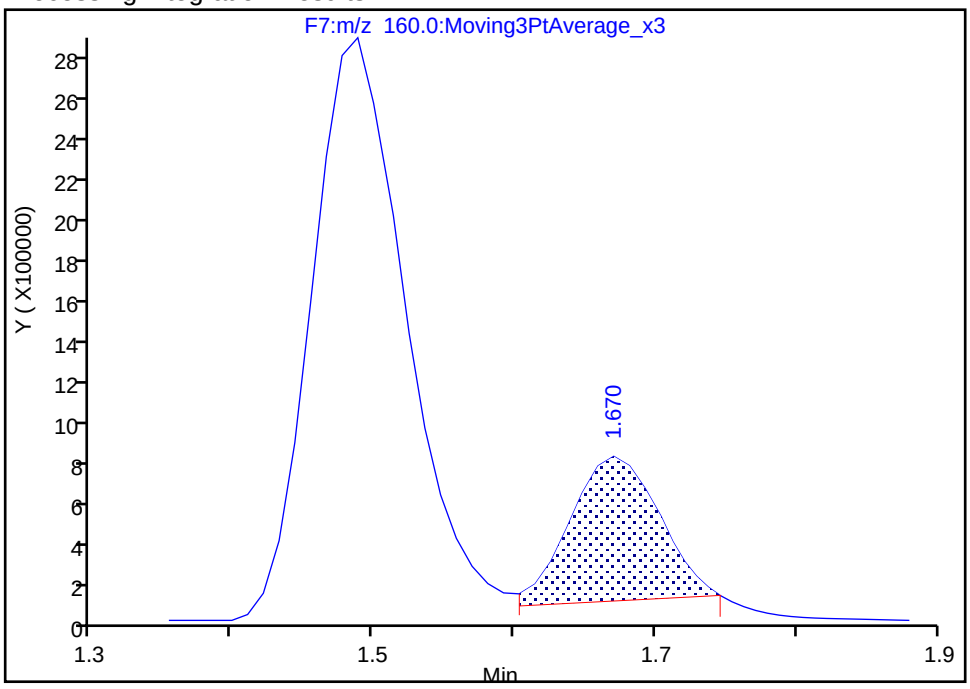
Column: Detector F7:SIR

34 MNX, CAS: 5755-27-1

Signal: 1

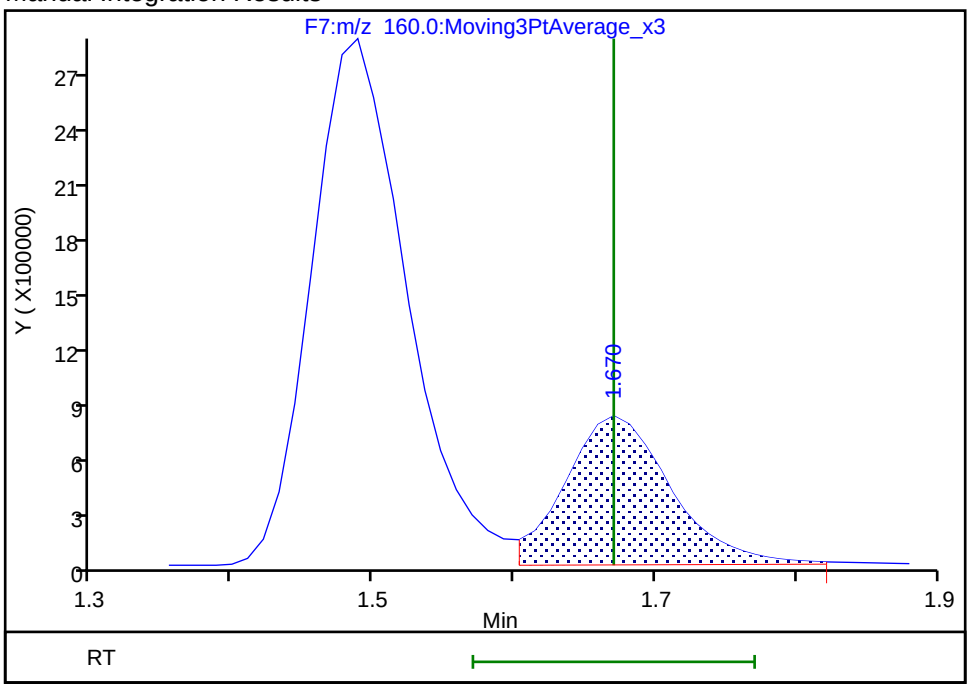
Processing Integration Results

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:

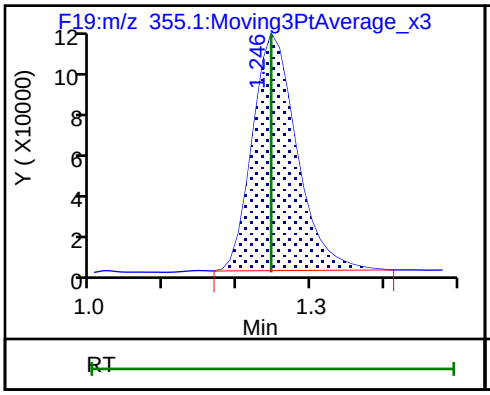
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8321NB-D5-cal_00021	Amount Added: 30.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 08-Apr-2022 07:31:50 Chrom Revision: 2.3 18-Mar-2022 09:07:22

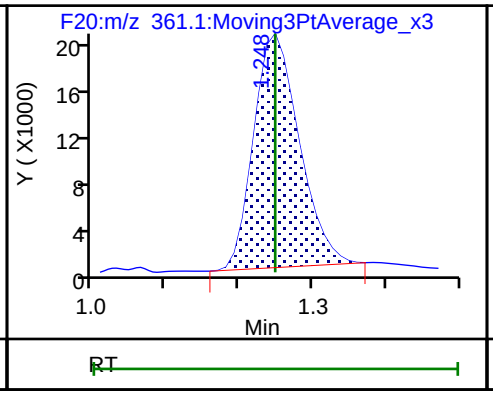
Eurofins Denver

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

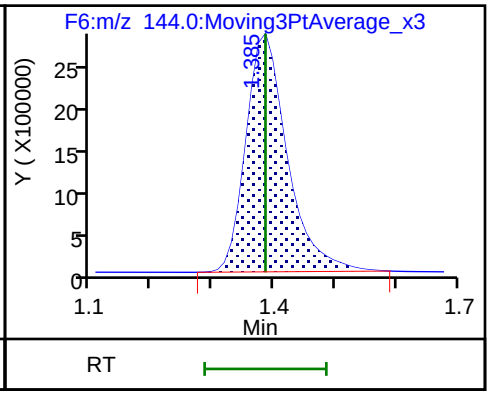
2 HMX



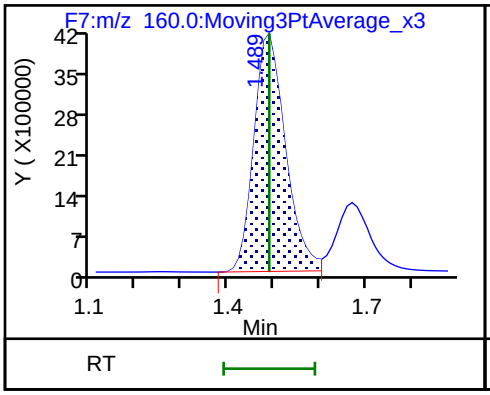
* 1 HMX-13C4



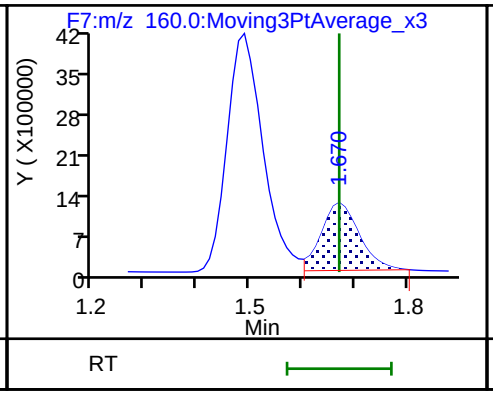
36 TNX



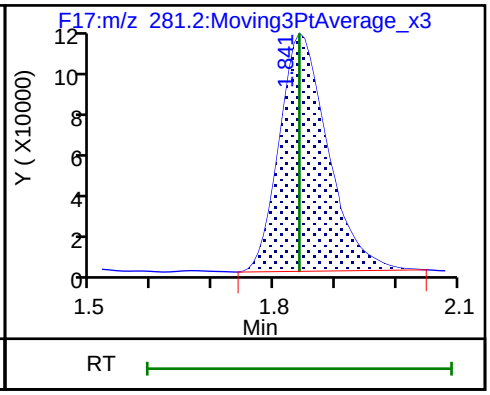
33 DNX



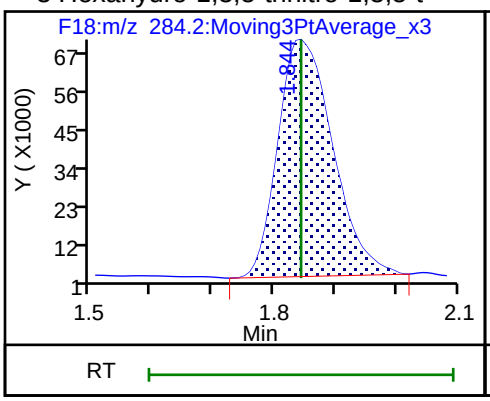
34 MNX



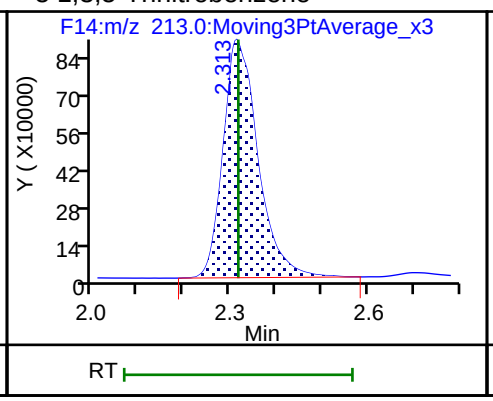
4 RDX



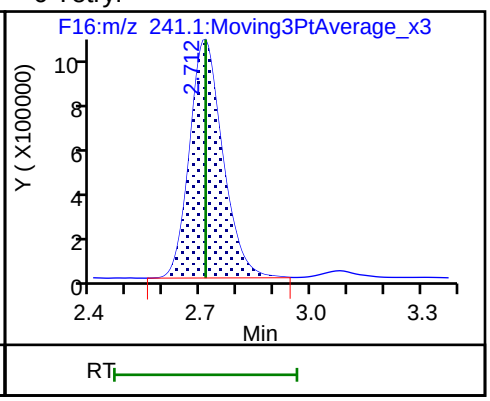
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



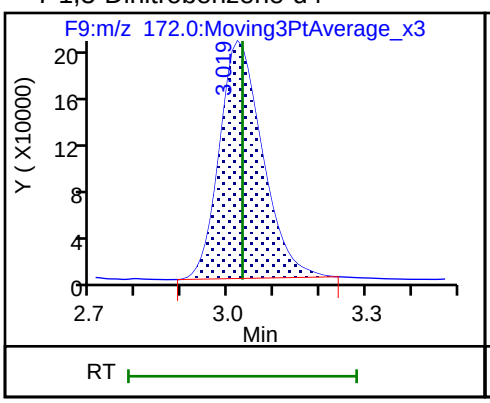
5 1,3,5-Trinitrobenzene



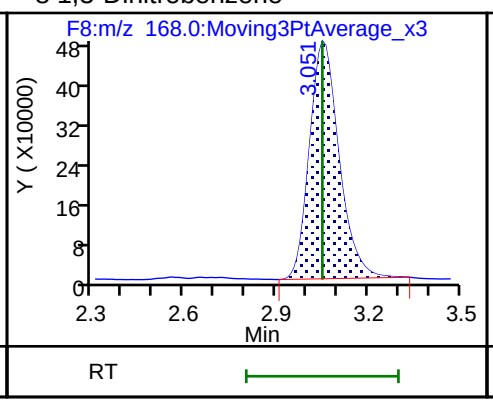
6 Tetryl



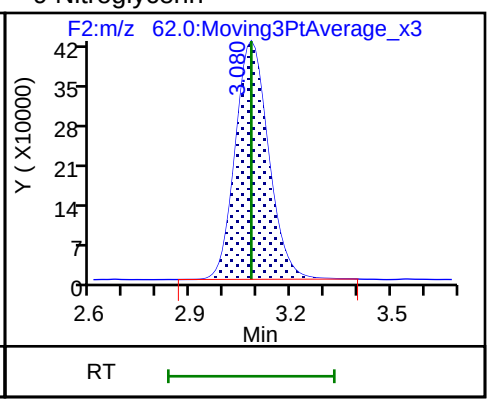
* 7 1,3-Dinitrobenzene-d4



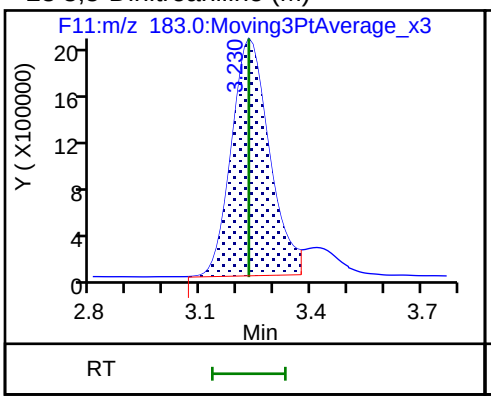
8 1,3-Dinitrobenzene



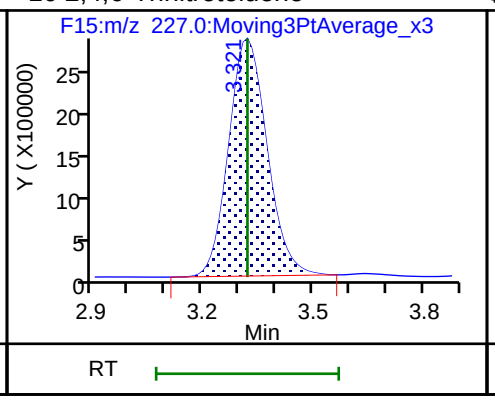
9 Nitroglycerin



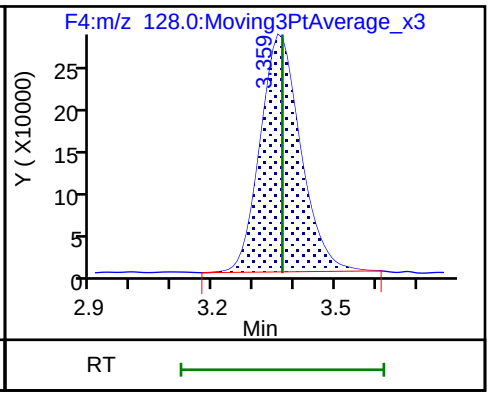
28 3,5-Dinitroaniline (M)



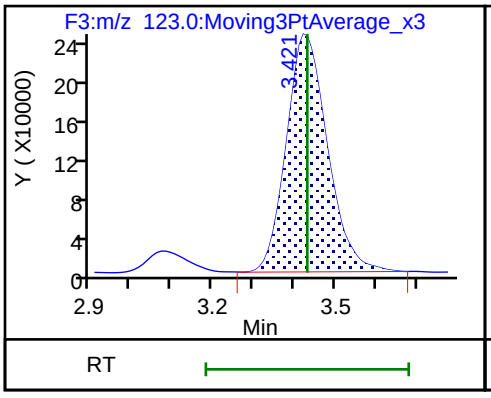
10 2,4,6-Trinitrotoluene



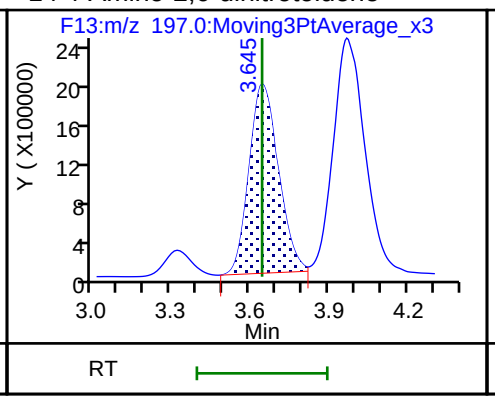
$ 11 Nitrobenzene-d5



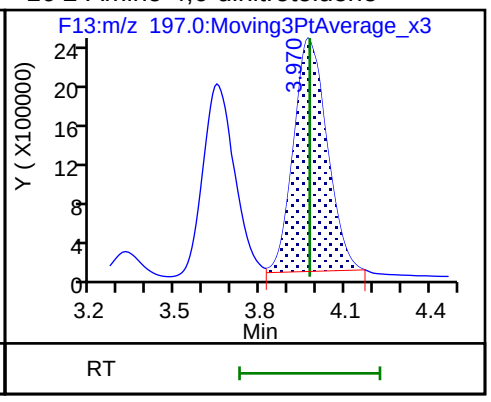
12 Nitrobenzene



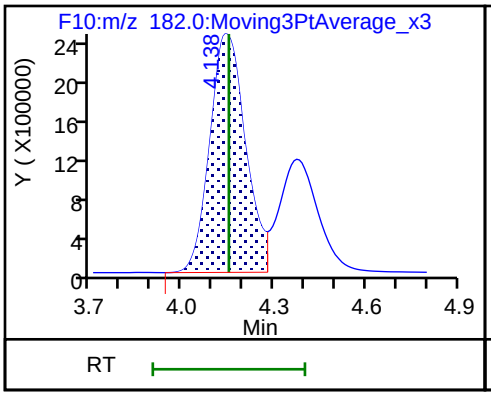
14 4-Amino-2,6-dinitrotoluene



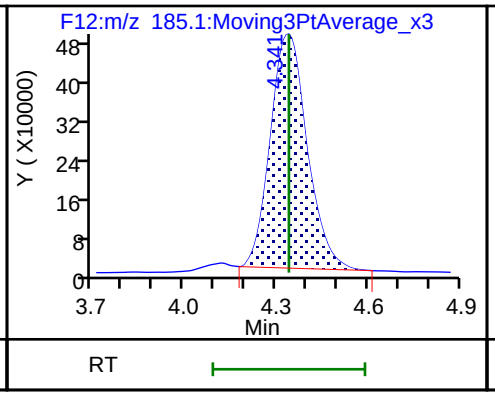
16 2-Amino-4,6-dinitrotoluene



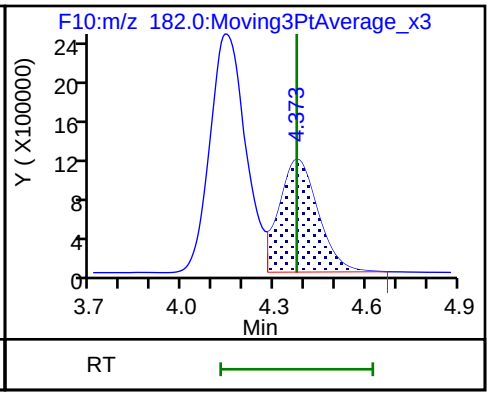
17 2,6-Dinitrotoluene



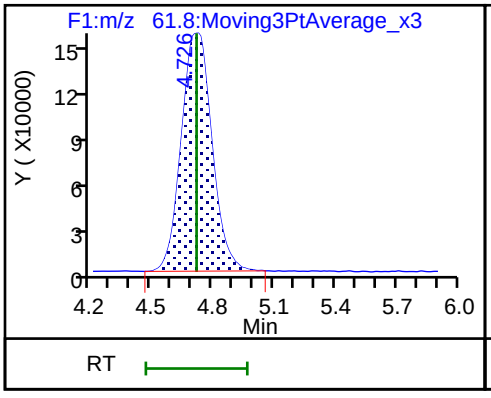
* 18 2,4-dinitrotoluene-d3



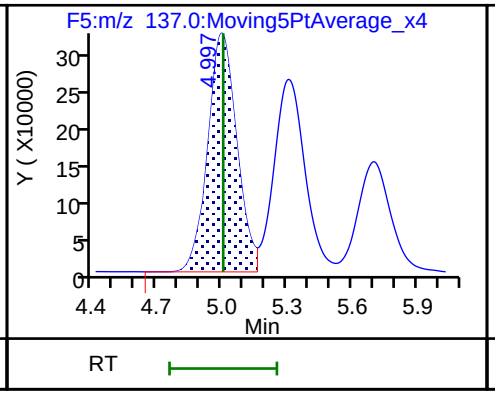
19 2,4-Dinitrotoluene



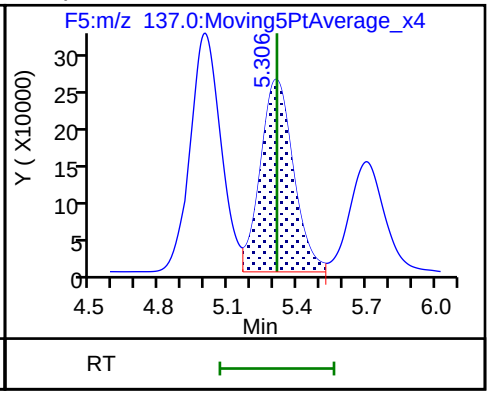
20 PETN



22 o-Nitrotoluene



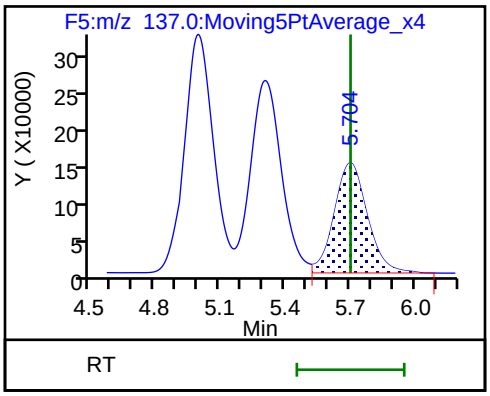
23 p-Nitrotoluene



Report Date: 08-Apr-2022 07:31:50 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220407-109915.b\ex722D07009.d

24 m-Nitrotoluene



Calibration / HMX

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

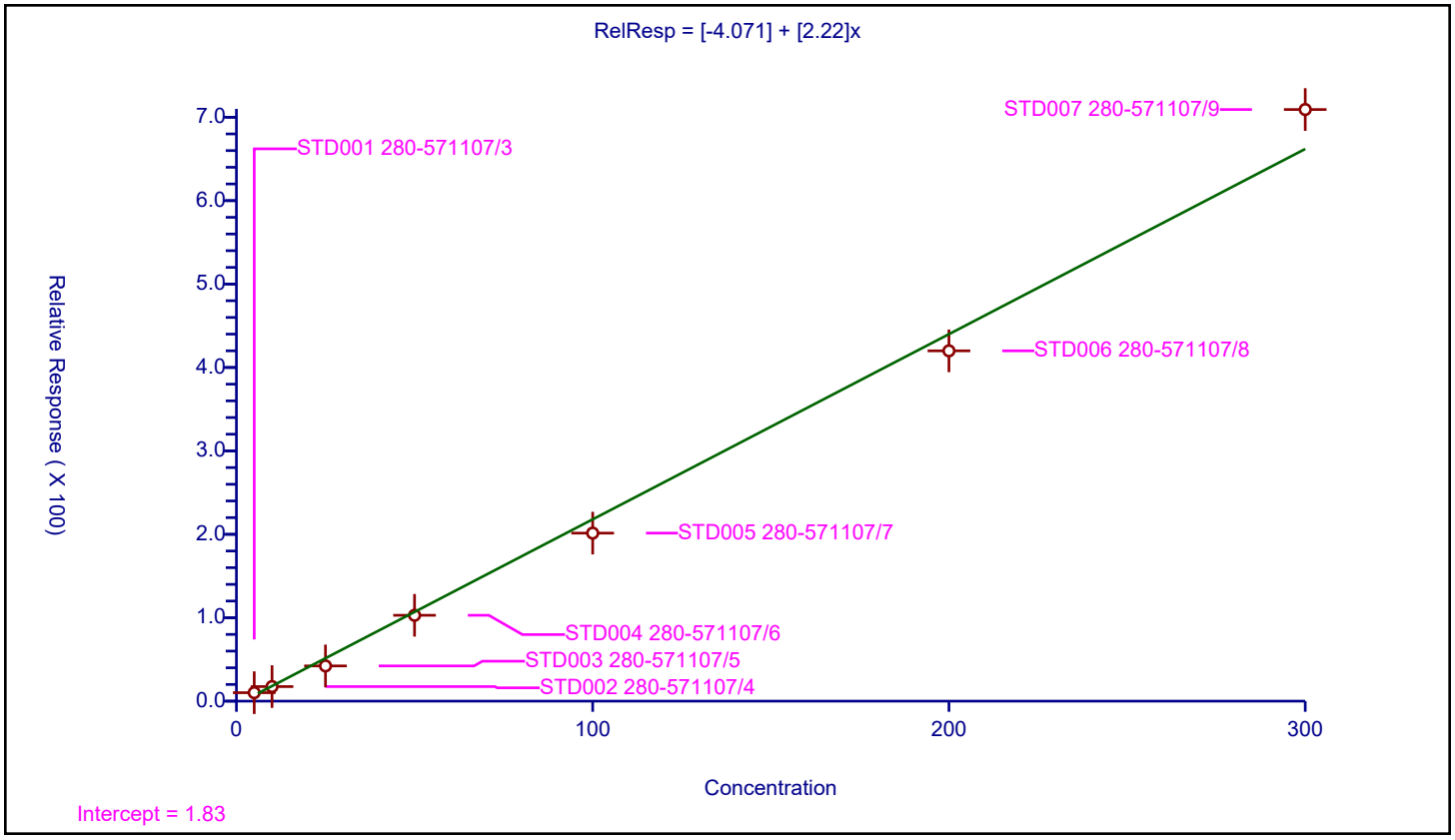
Curve Coefficients

Intercept:	-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

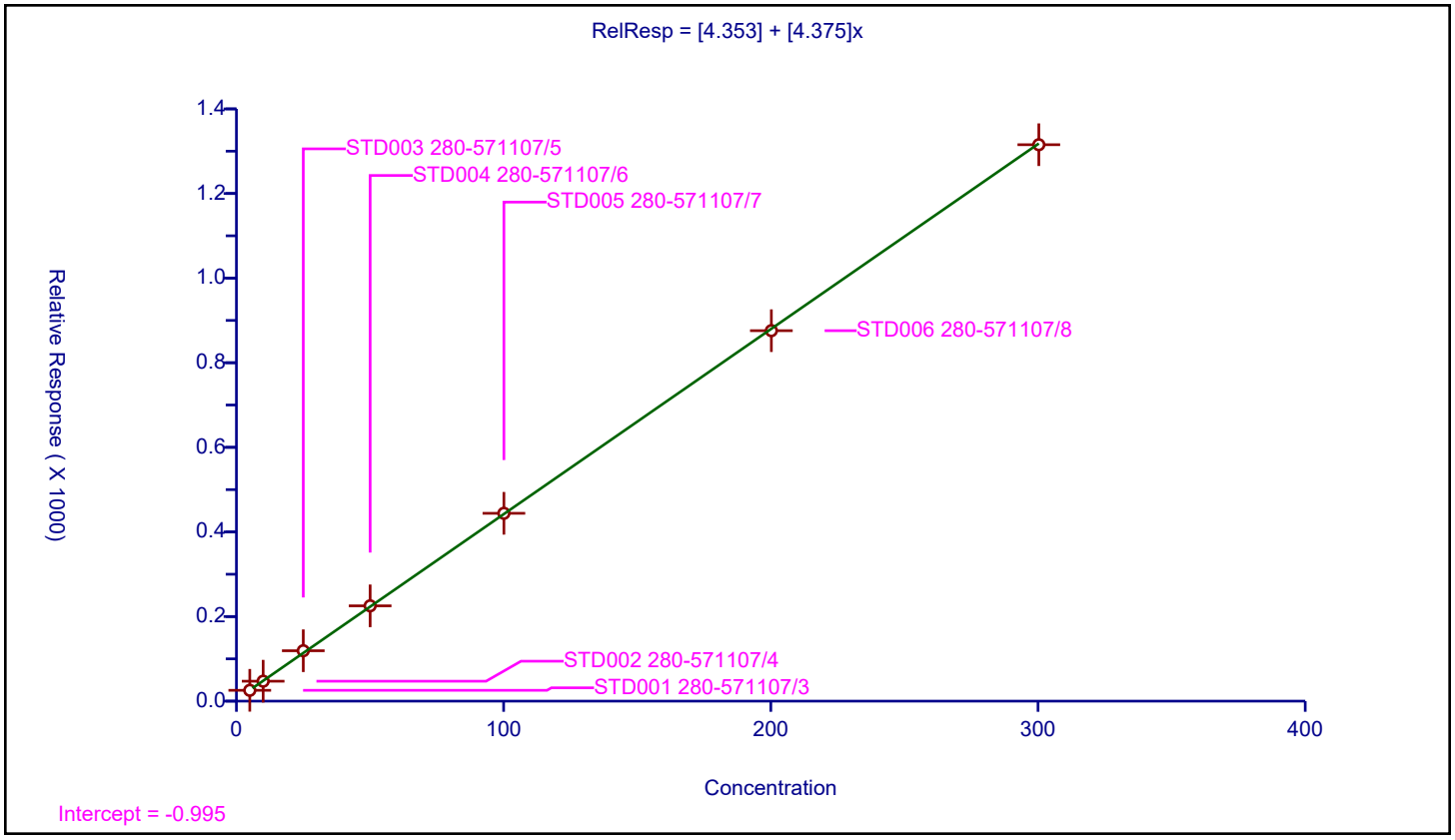
Curve Coefficients

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

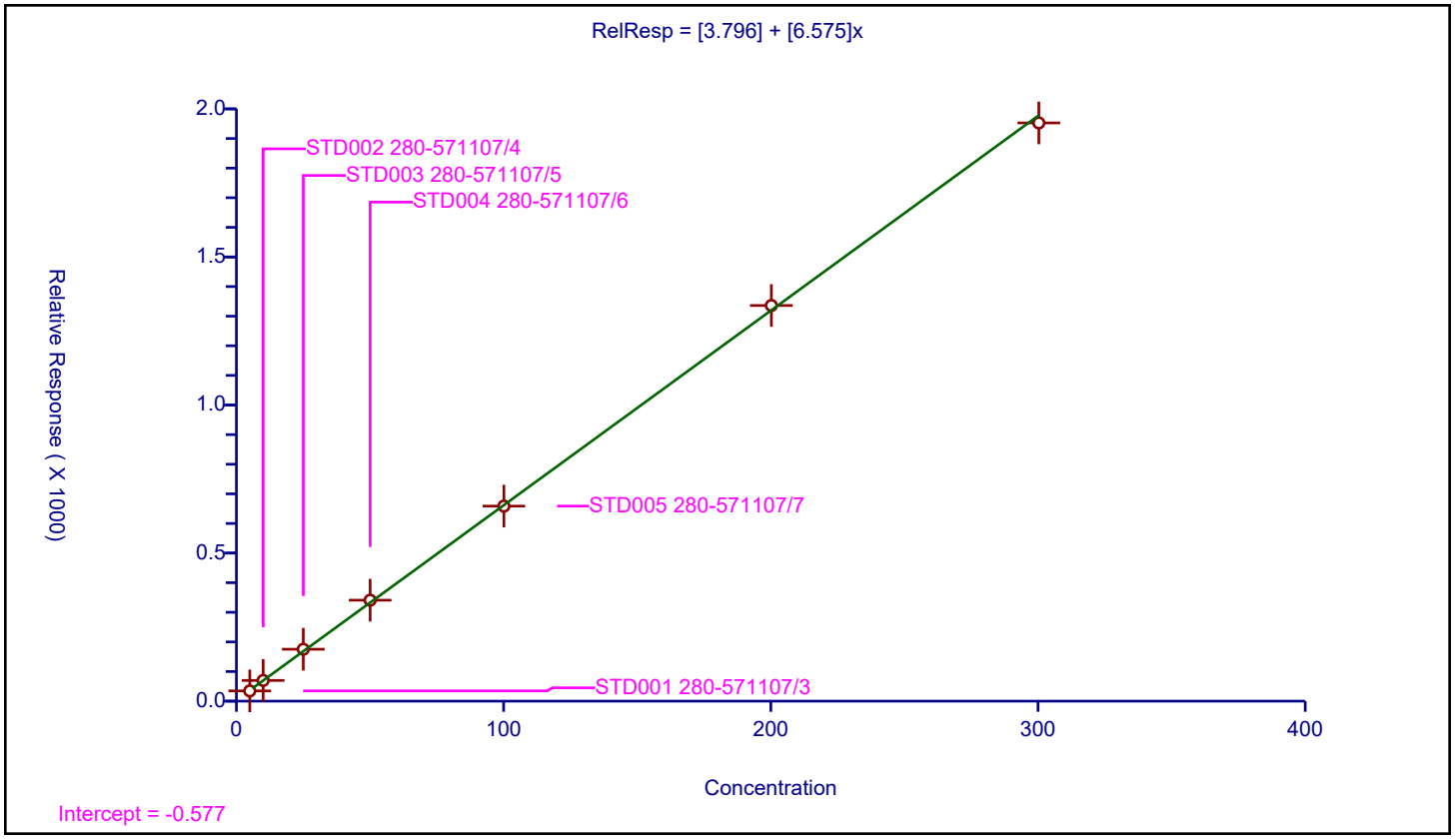
Curve Coefficients

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

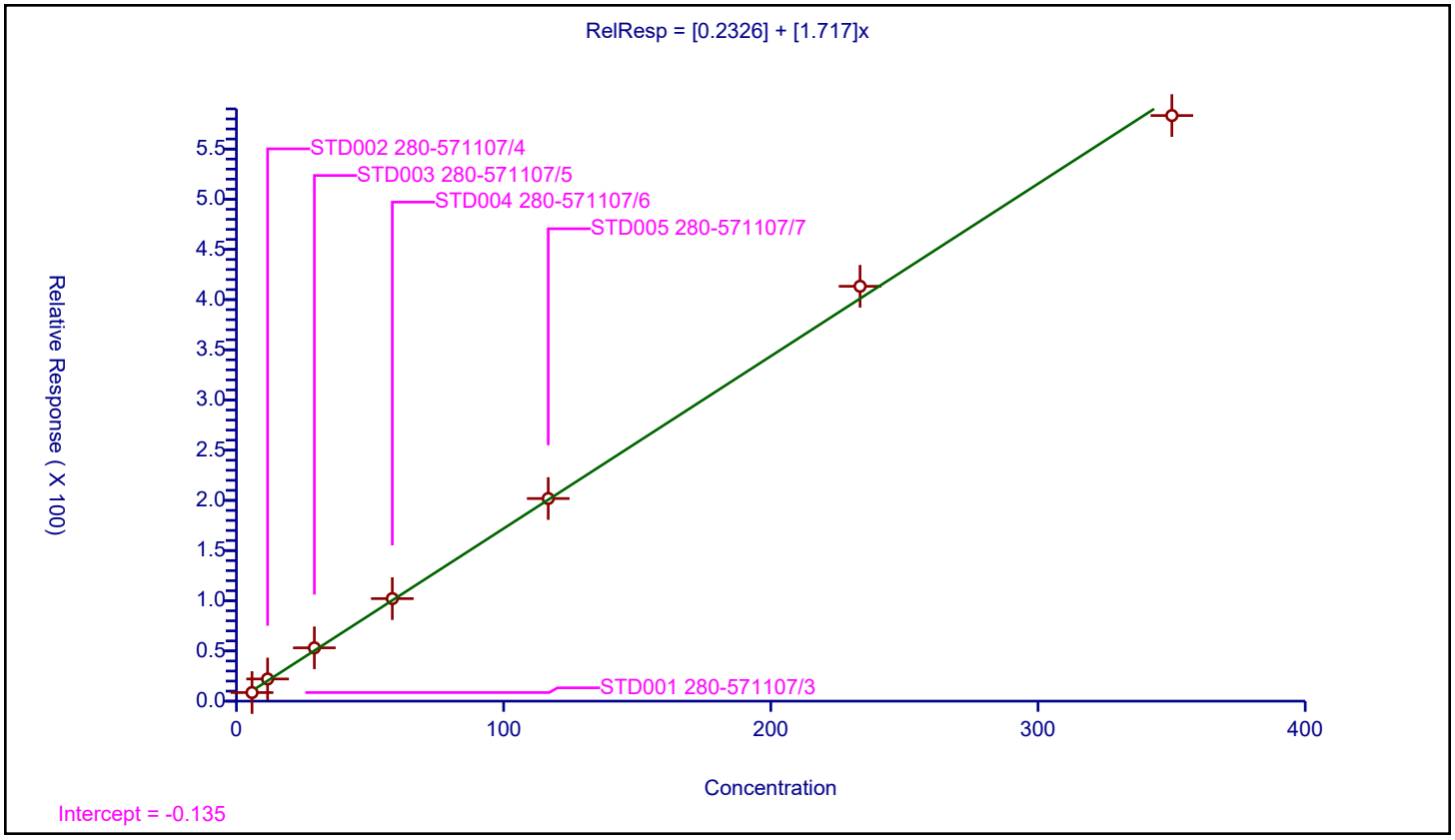
Curve Coefficients

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

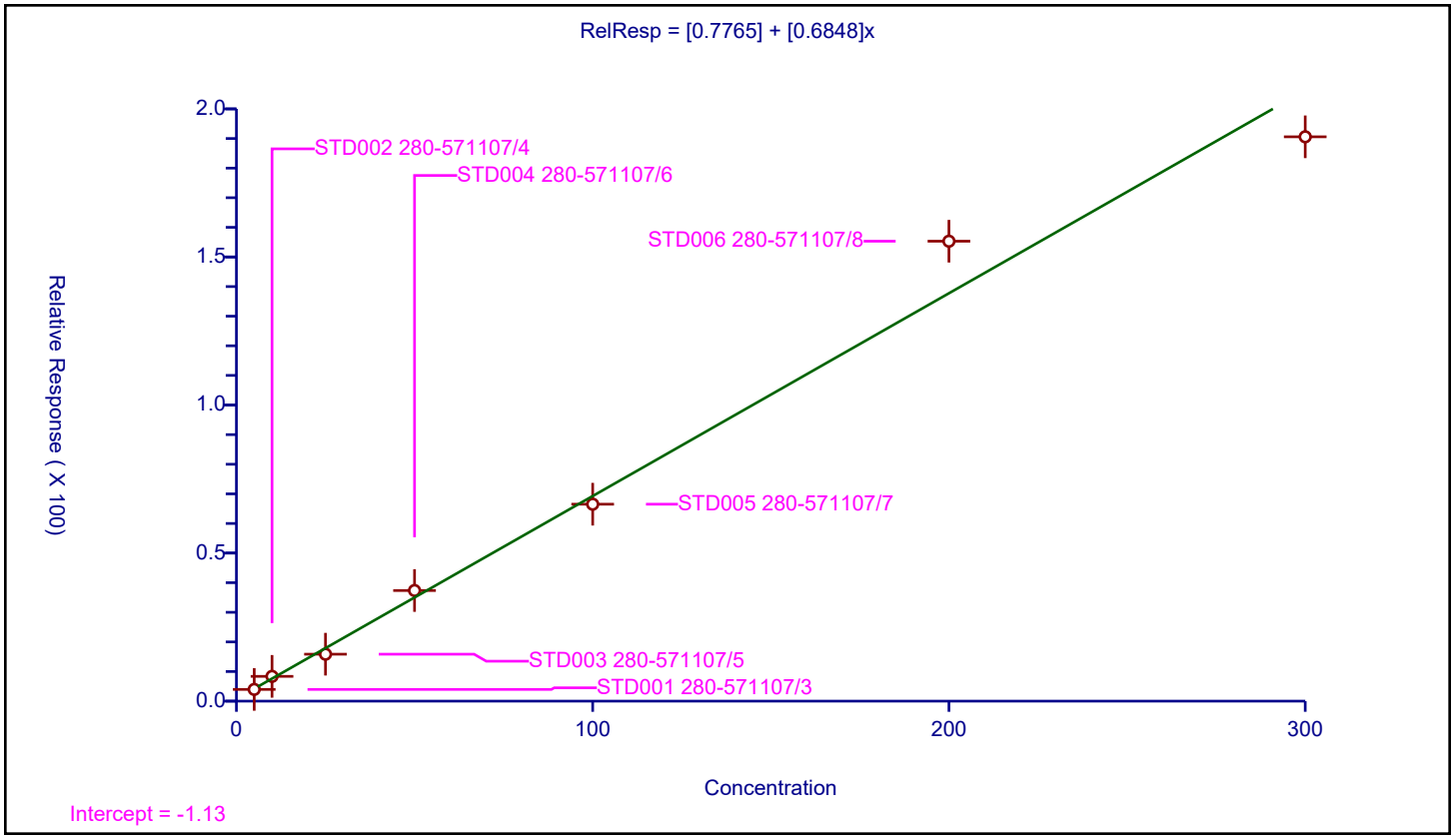
Curve Coefficients

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

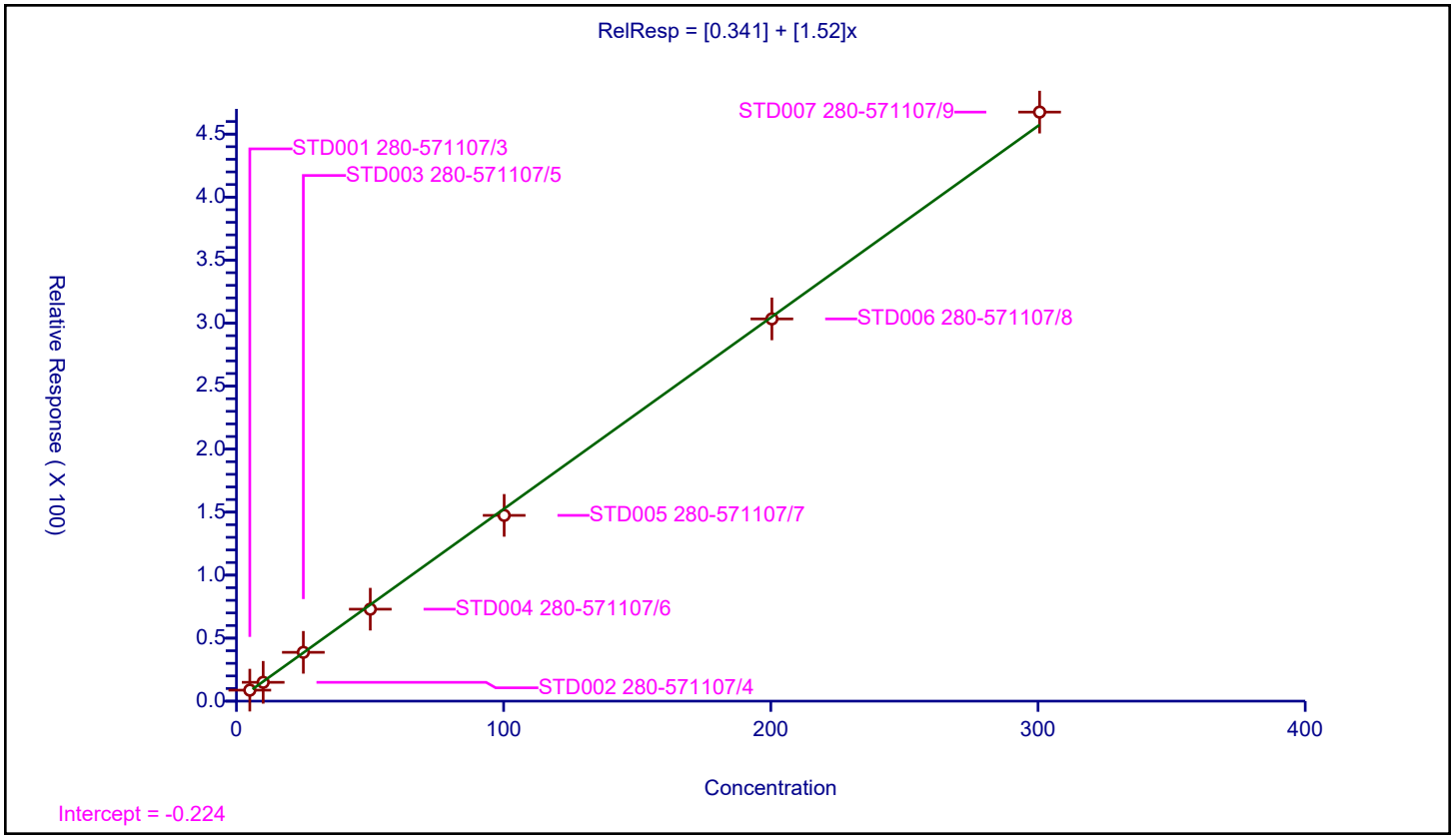
Curve Coefficients

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

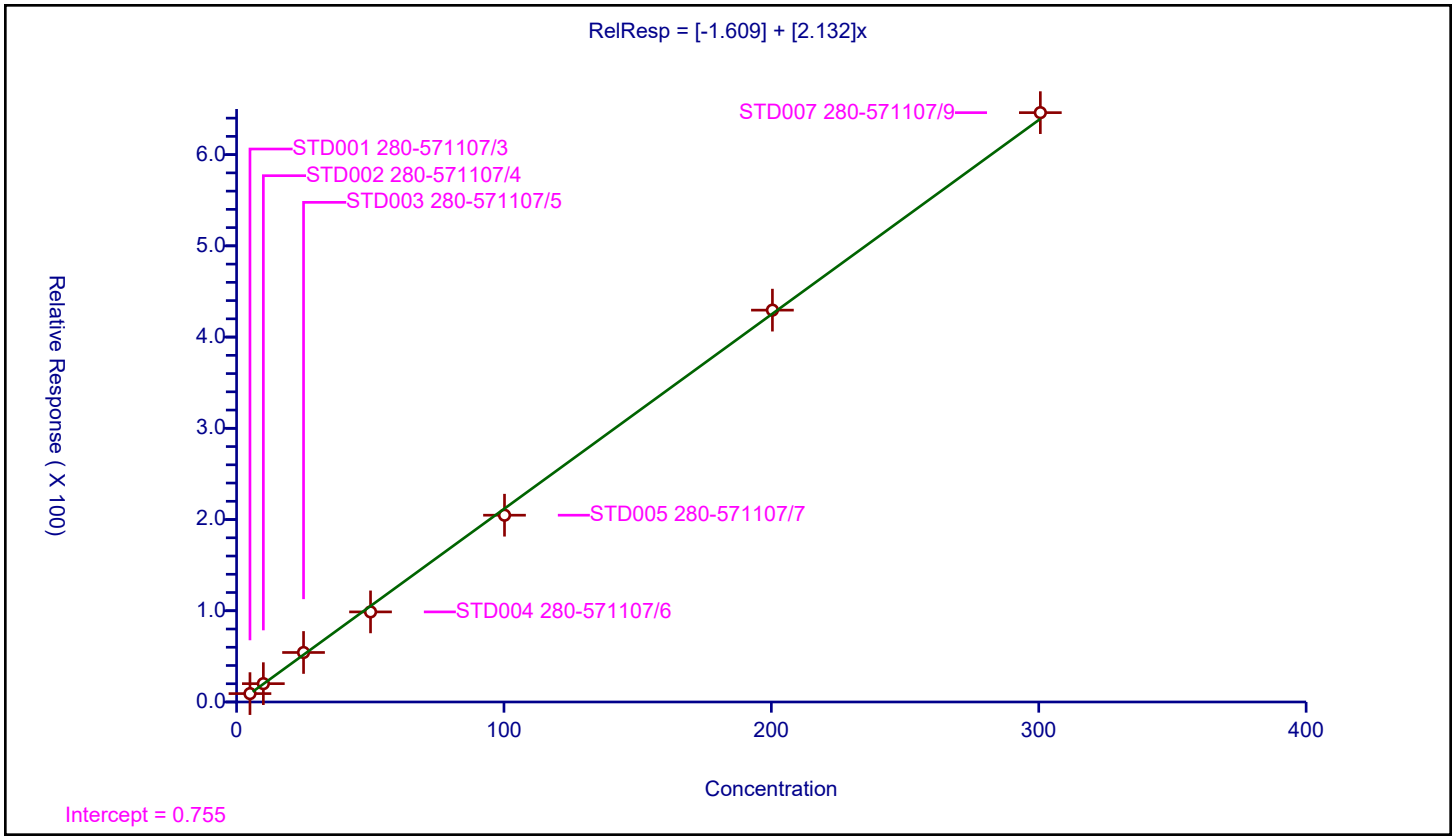
Curve Coefficients

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

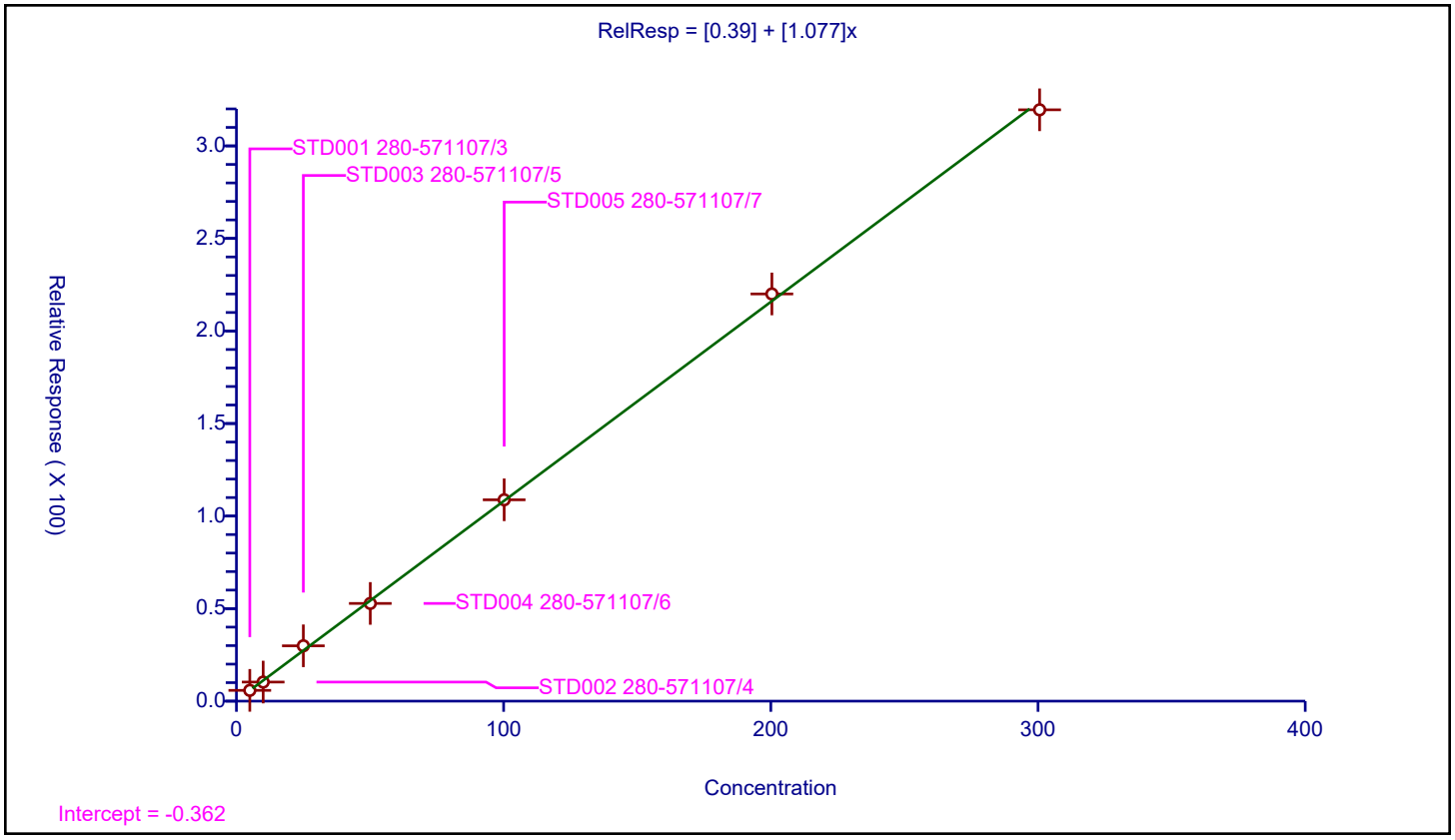
Curve Coefficients

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

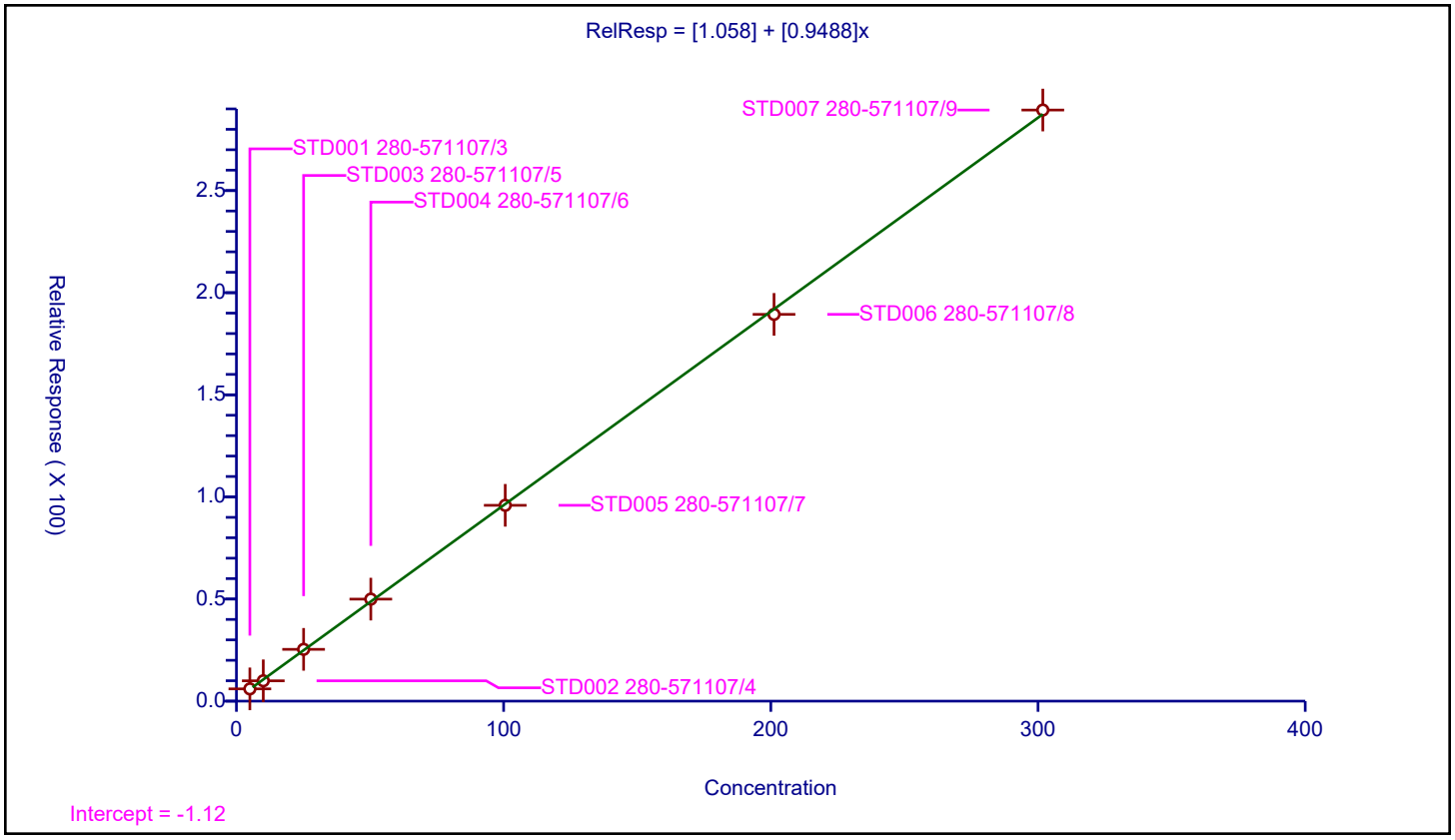
Curve Coefficients

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

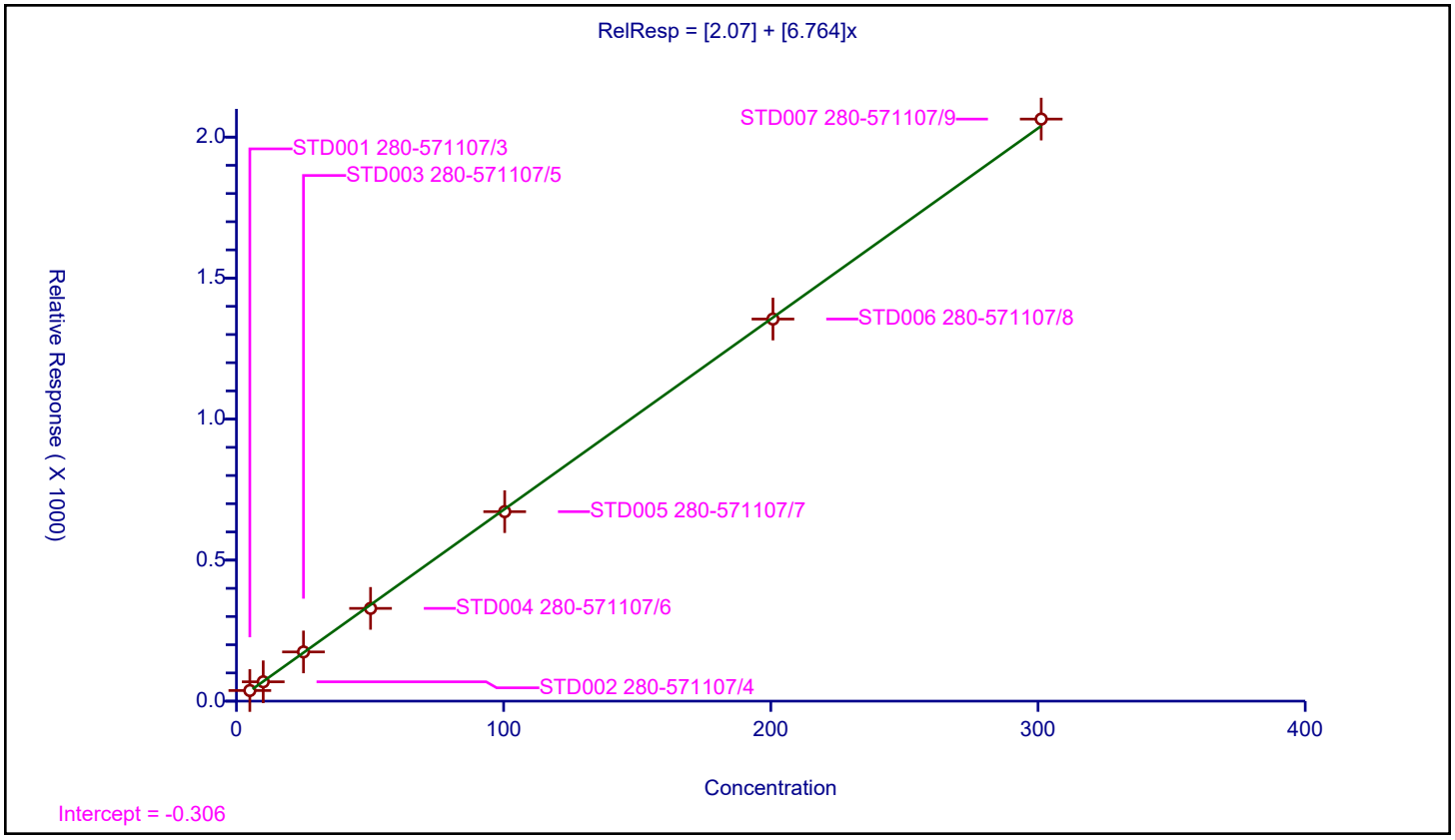
Curve Coefficients

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

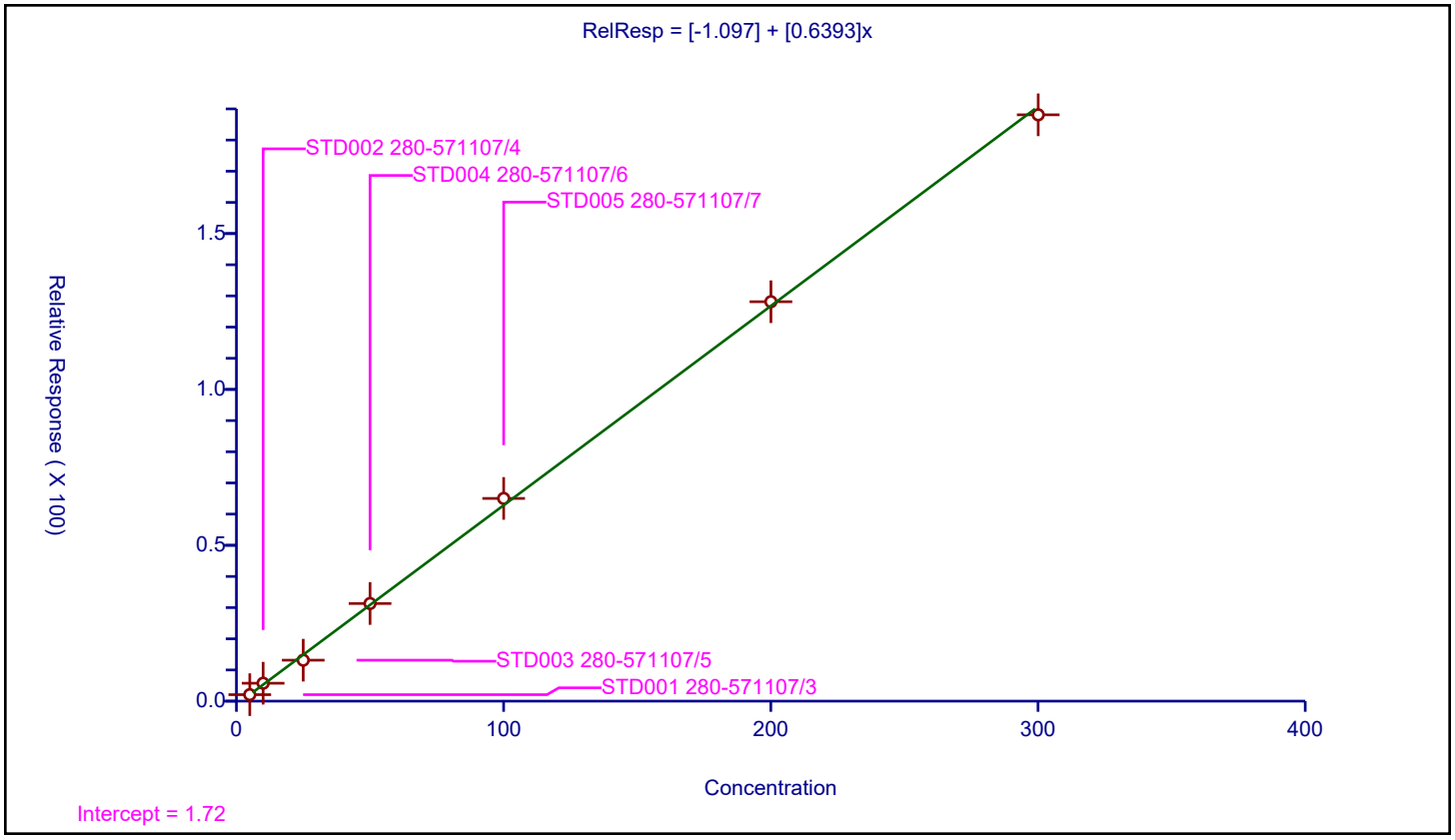
Curve Coefficients

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

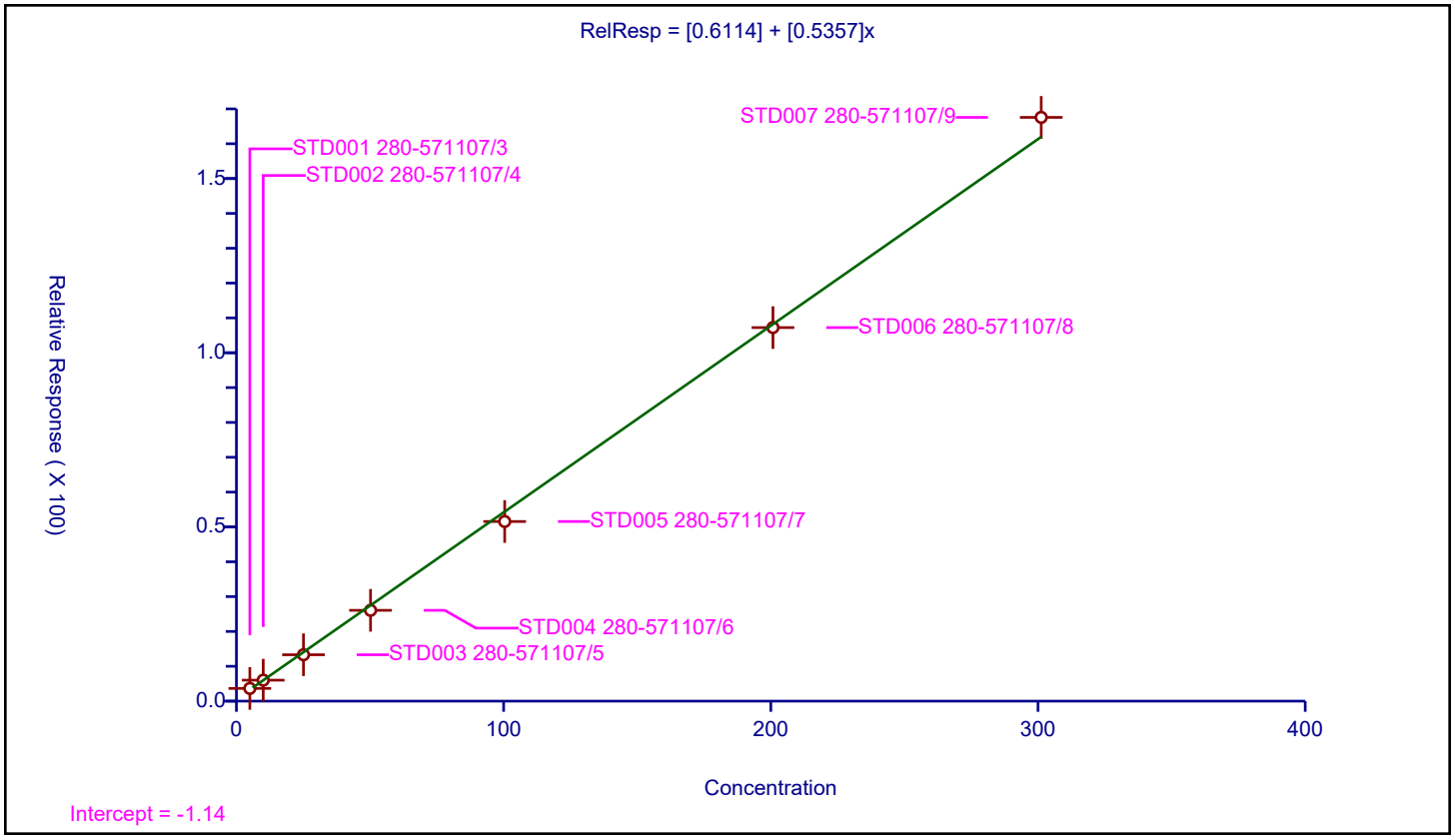
Curve Coefficients

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

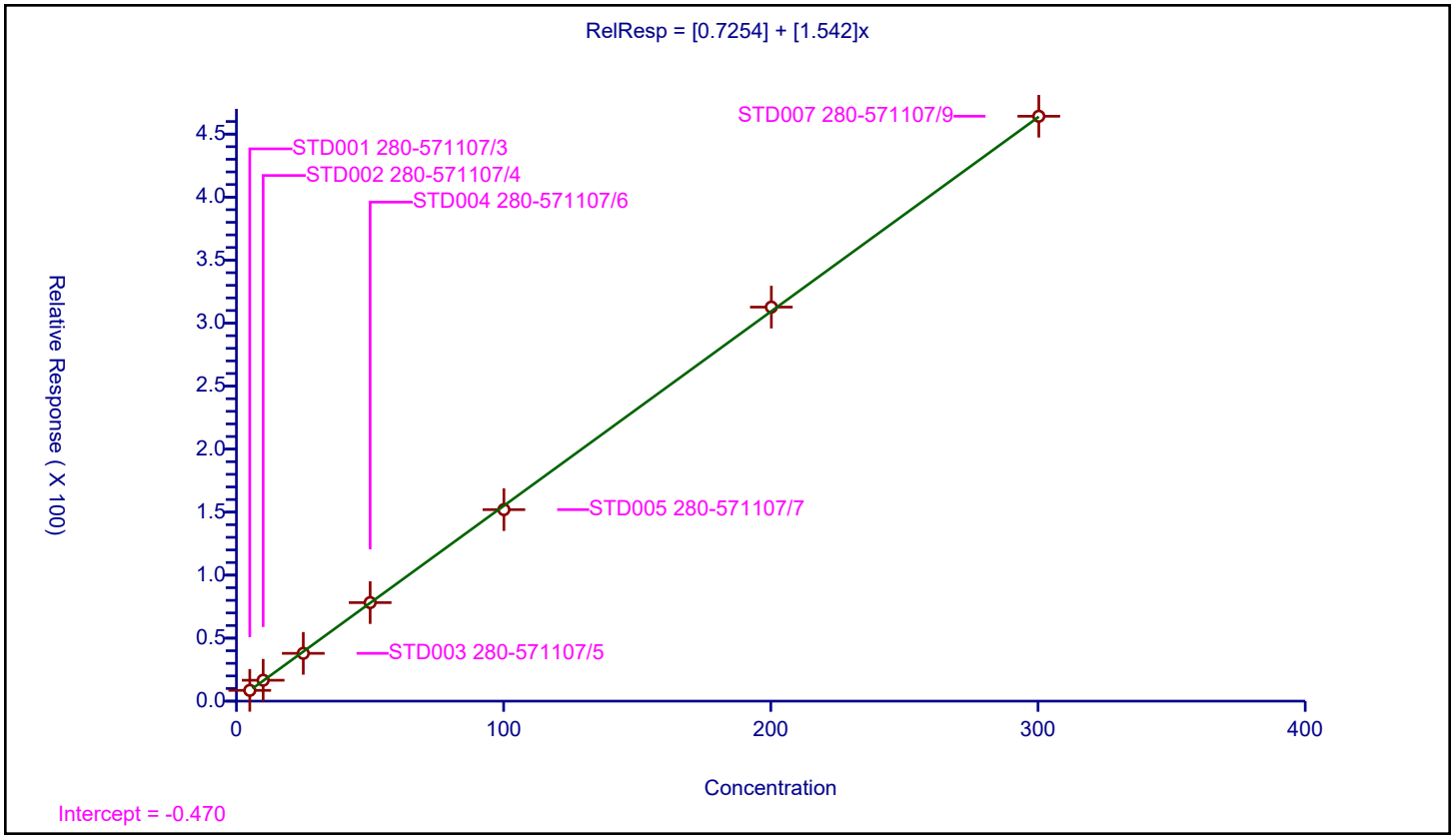
Curve Coefficients

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

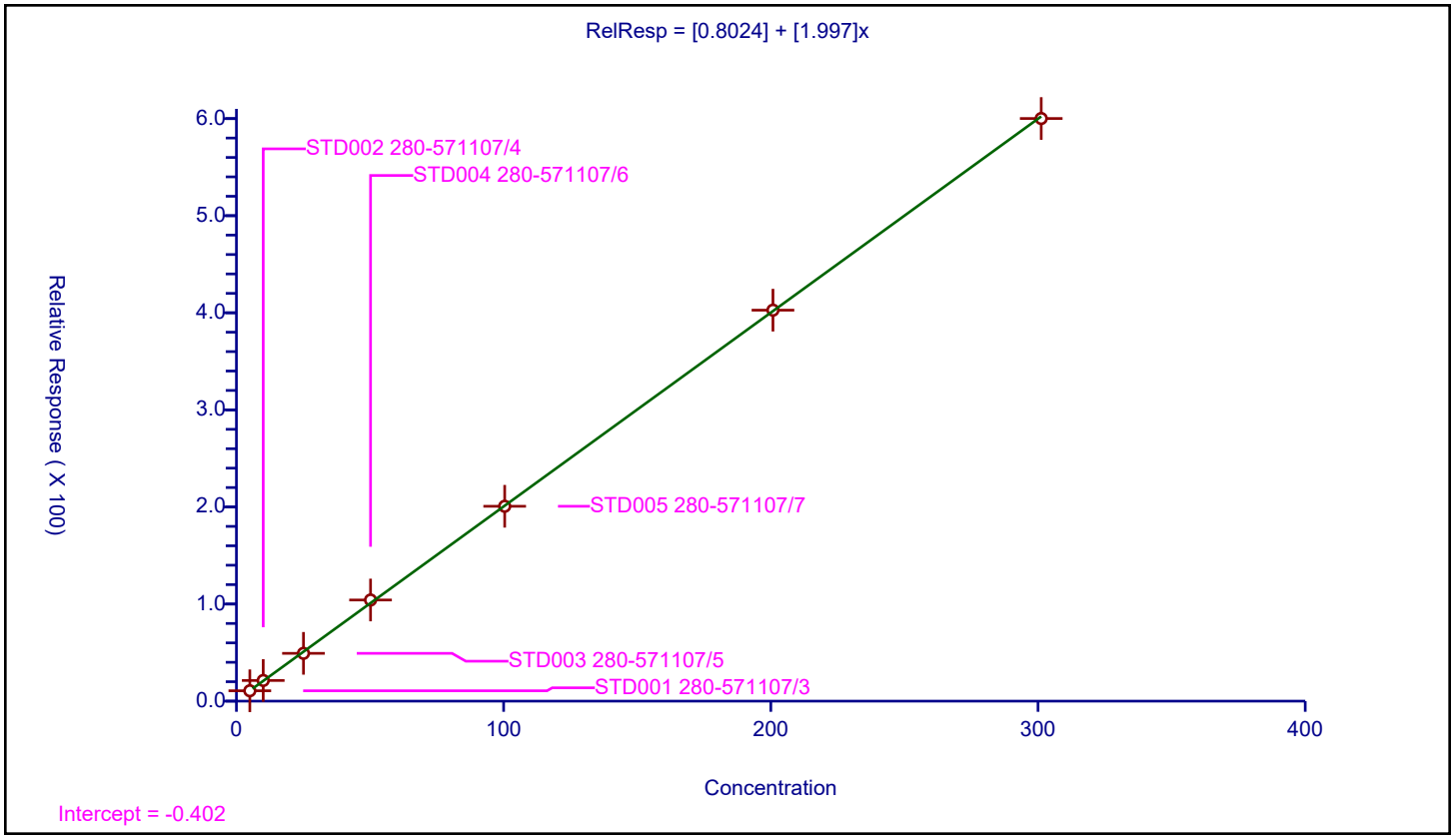
Curve Coefficients

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

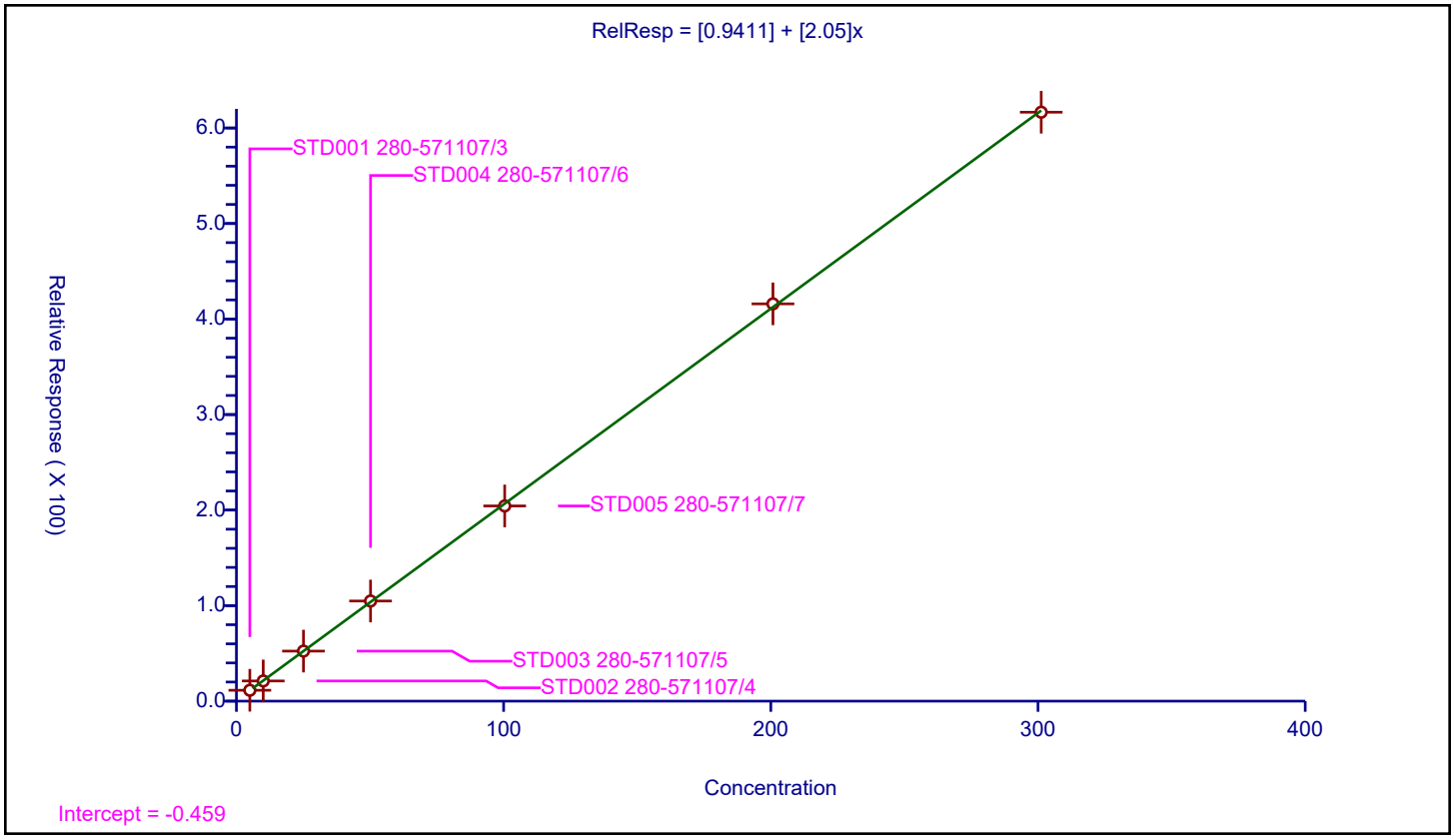
Curve Coefficients

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

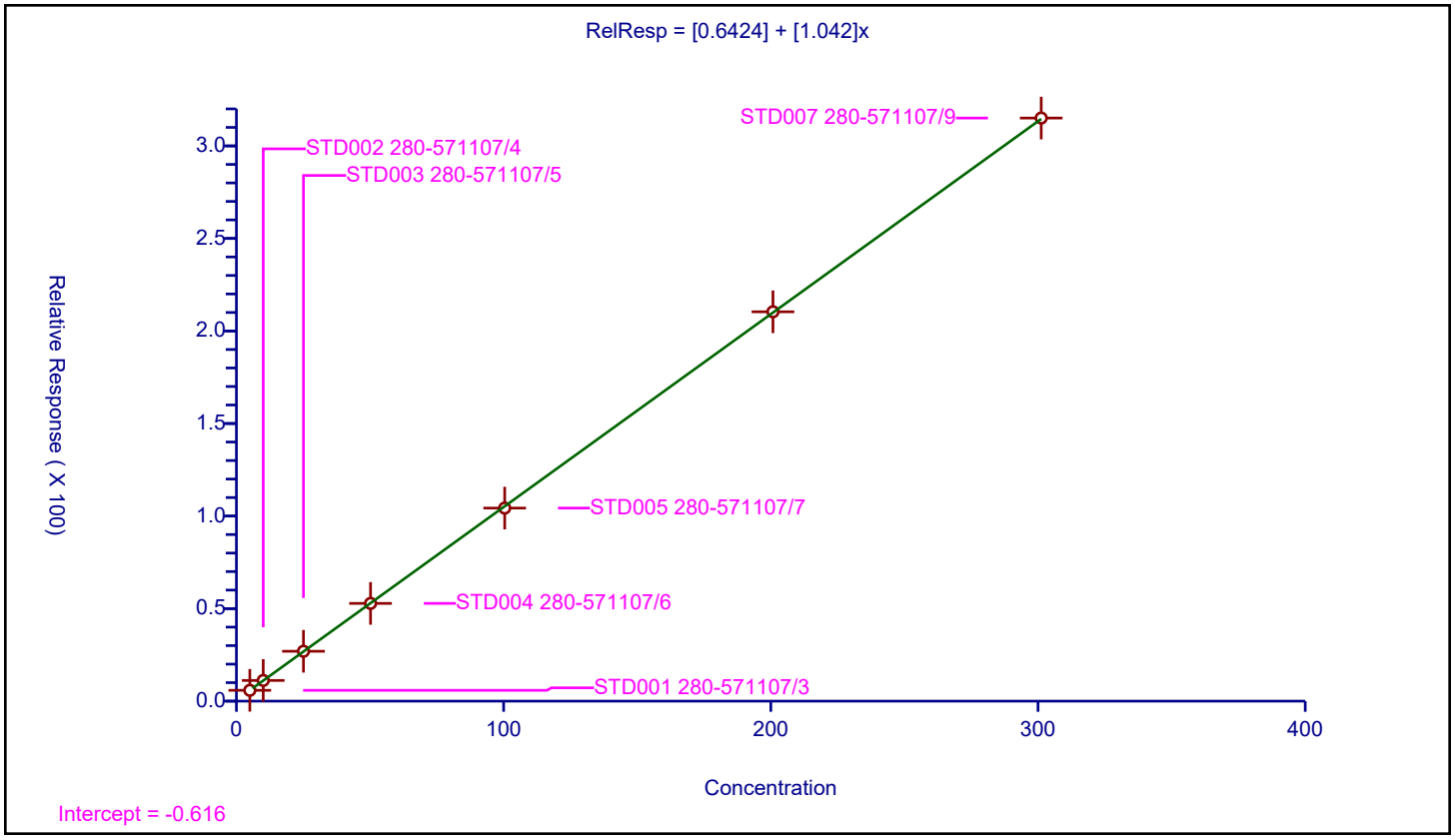
Curve Coefficients

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

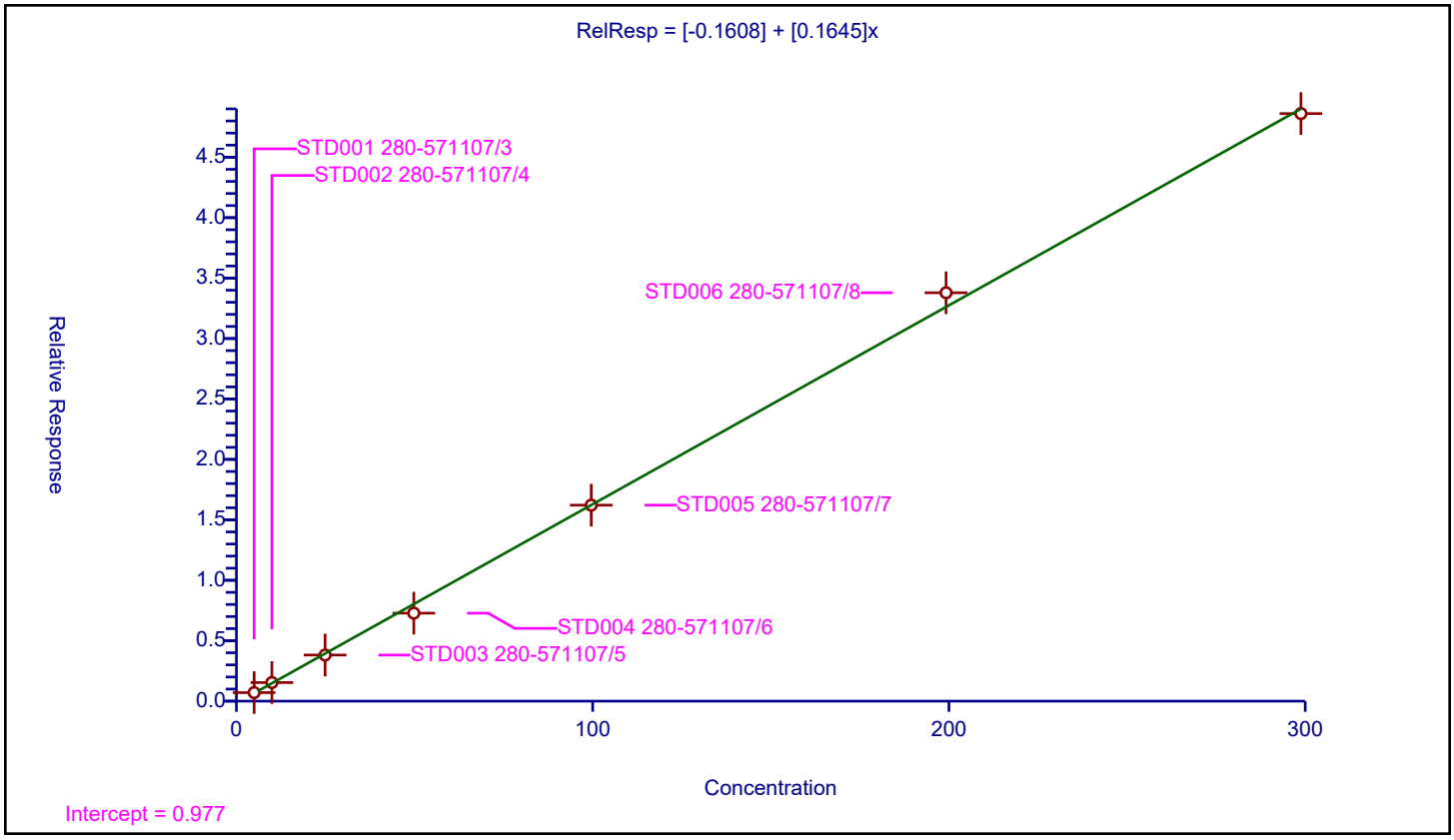
Curve Coefficients

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

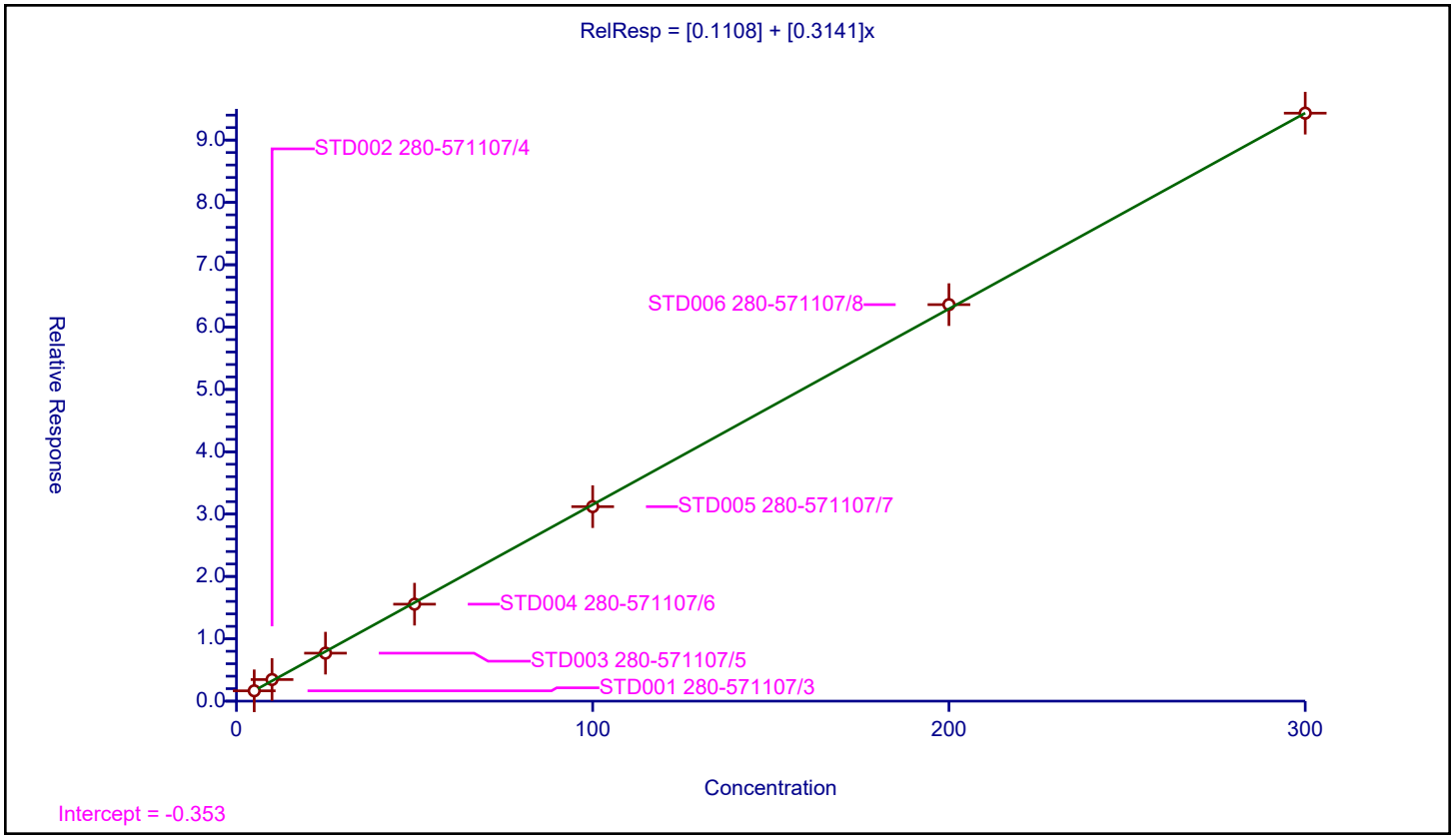
Curve Coefficients

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

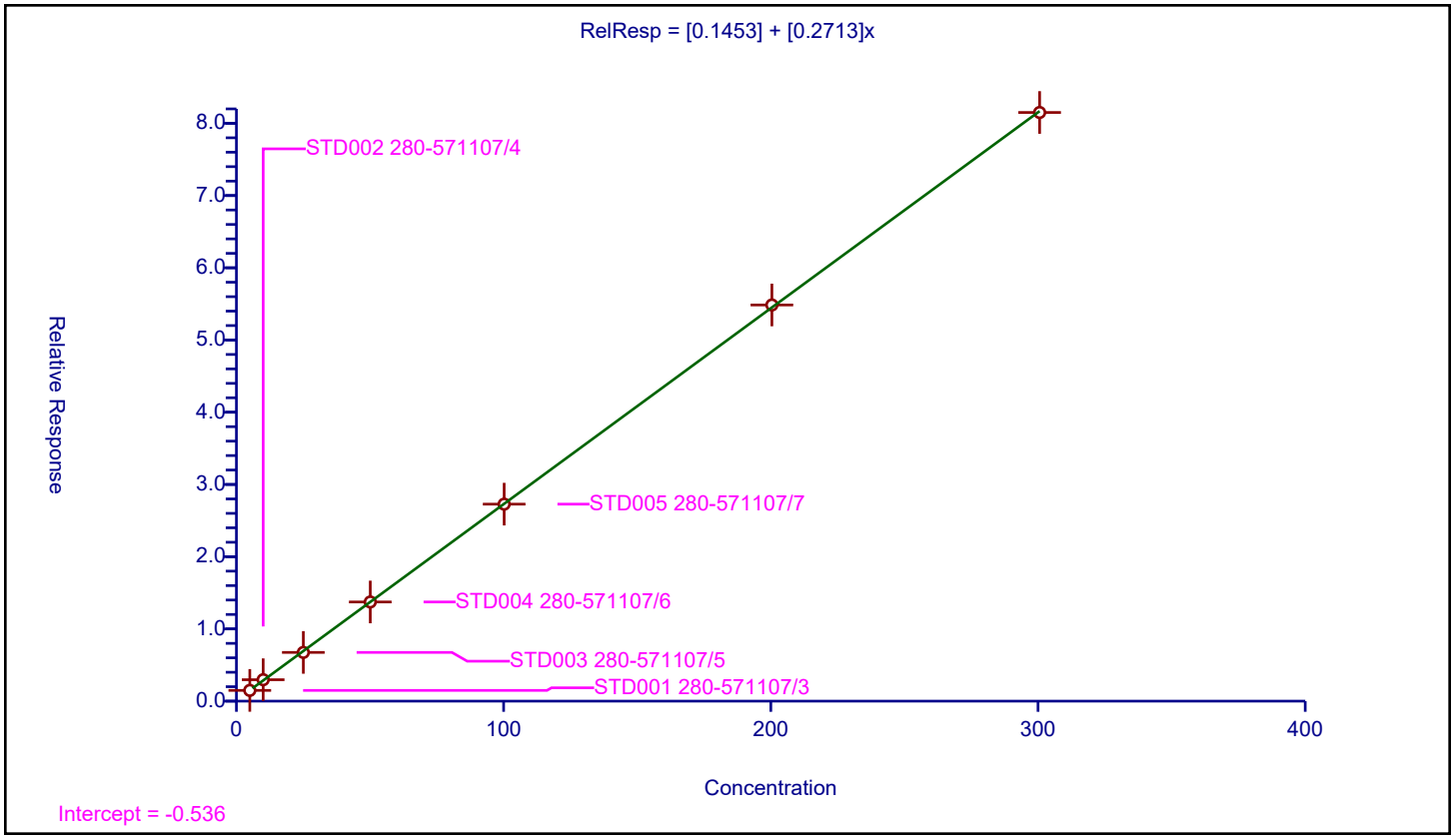
Curve Coefficients

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

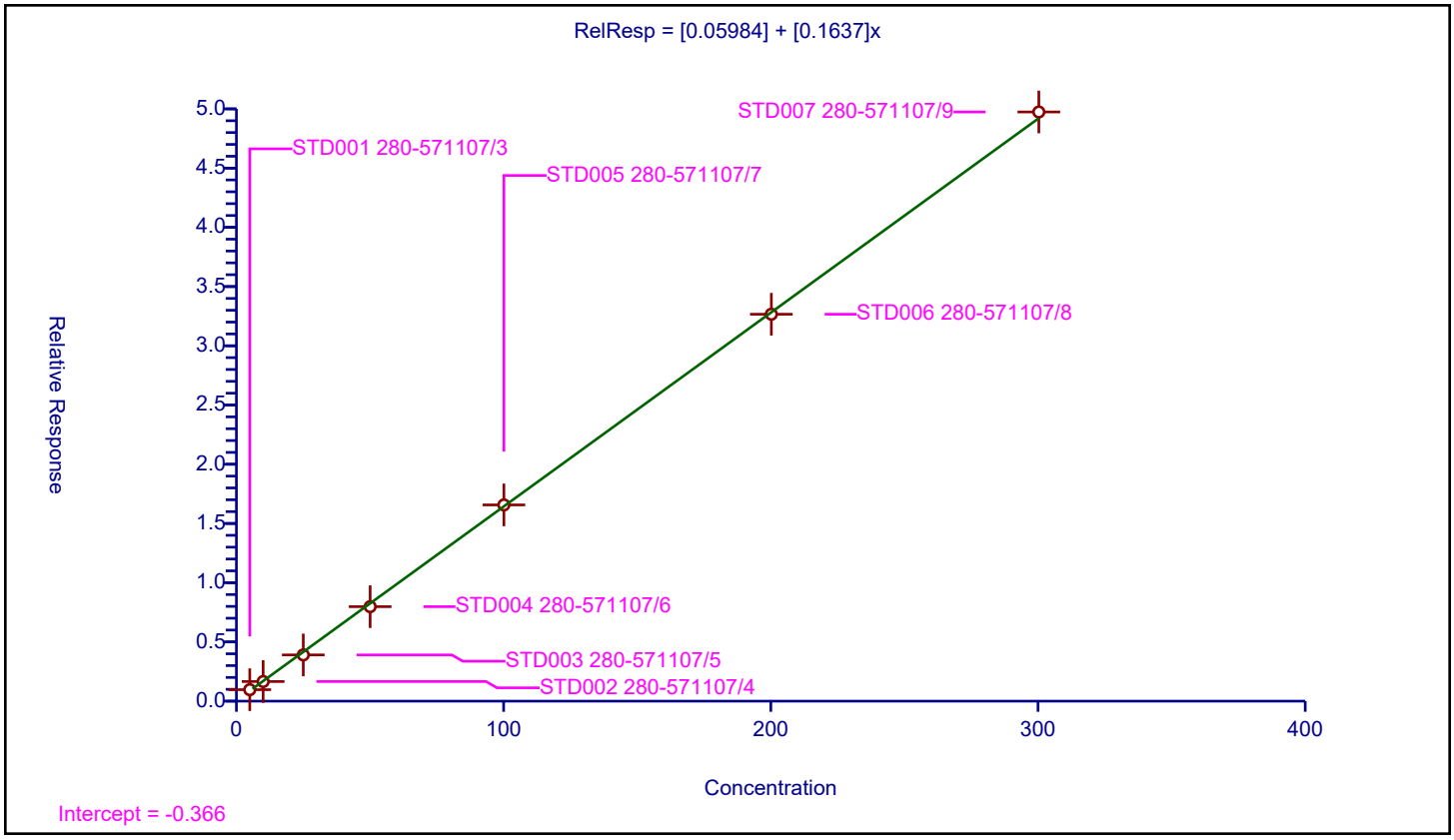
Curve Coefficients

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 VII
LCMS CONTINUING CALIBRATION DATA

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

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:

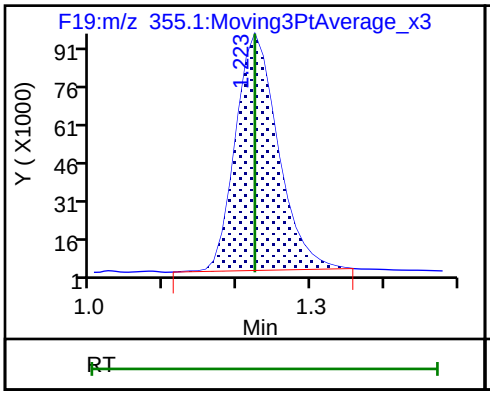
8321NB-D5-cal_00021	Amount Added:	10.00	Units: uL	
8321expICV_00019	Amount Added:	10.00	Units: uL	
EXPWORKINGIS_00089	Amount Added:	20.00	Units: uL	Run Reagent

Report Date: 06-Apr-2022 06:44:08 Chrom Revision: 2.3 18-Mar-2022 09:07:22

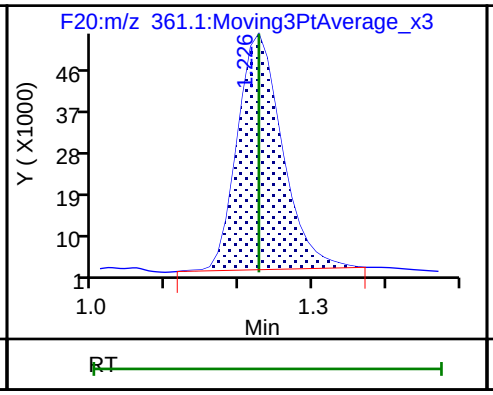
Eurofins Denver

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

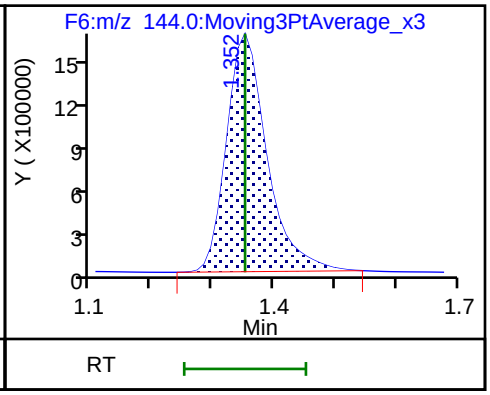
2 HMX



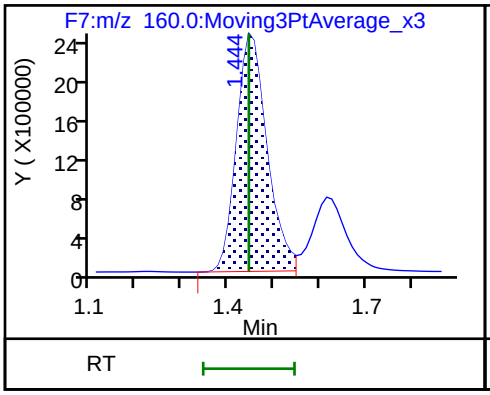
* 1 HMX-13C4



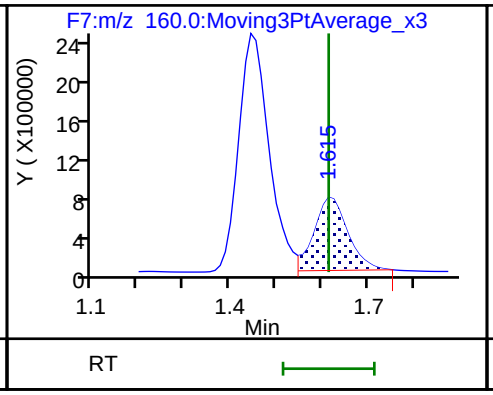
36 TNX



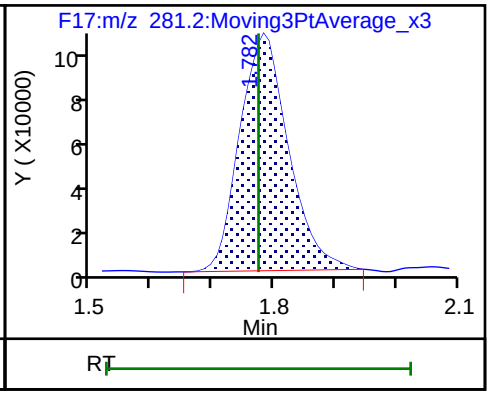
33 DNX



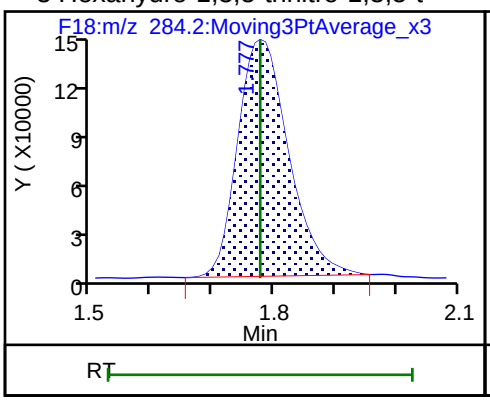
34 MNX



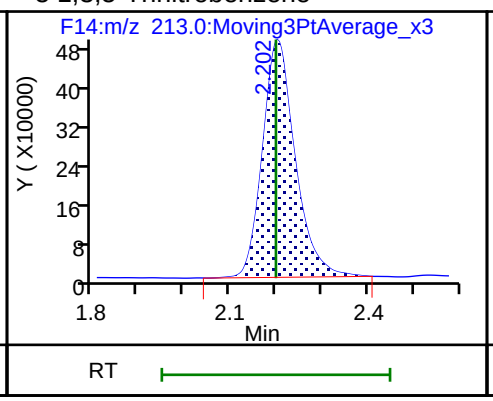
4 RDX



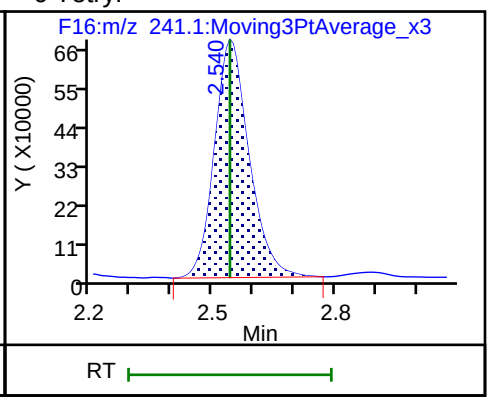
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



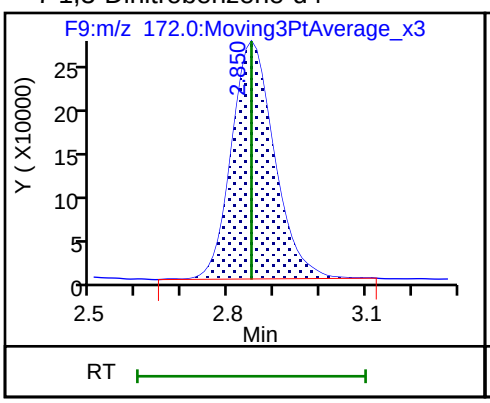
5 1,3,5-Trinitrobenzene



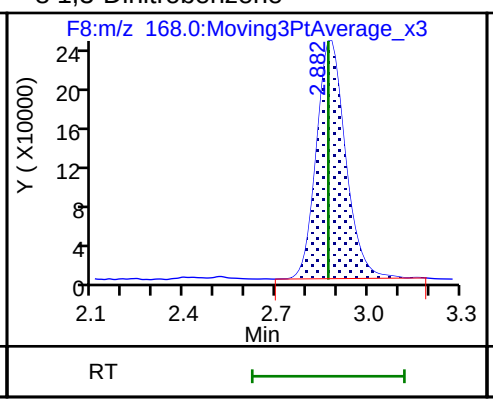
6 Tetryl



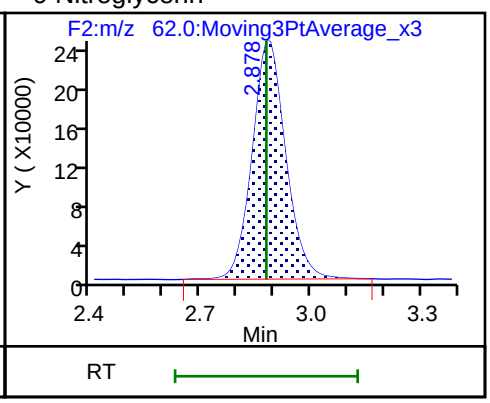
* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene

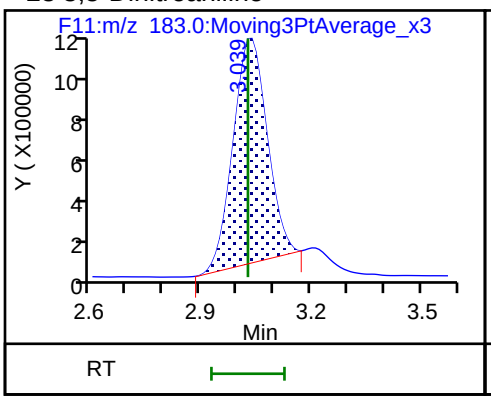


9 Nitroglycerin

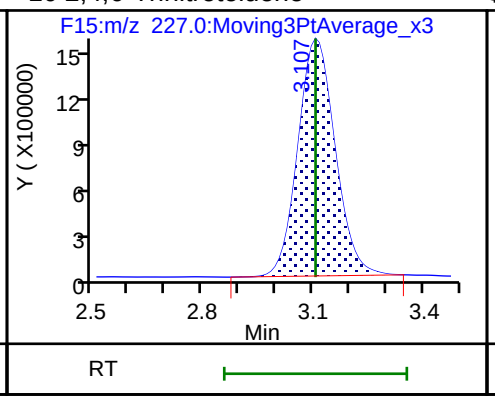


Report Date: 06-Apr-2022 06:44:08 Chrom Revision: 2.3 18-Mar-2022 09:07:22
Data File: \\chromfs\Denver\ChromData\LC_LCMS7\20220405-109828.b\ex722D05011.d

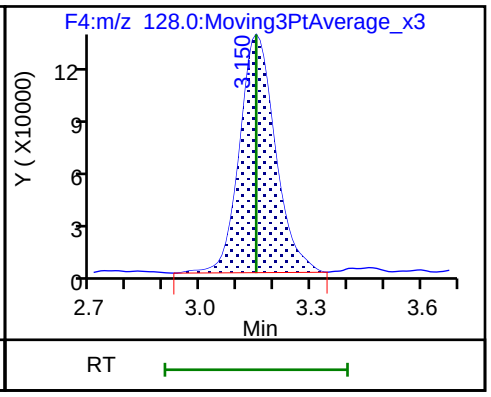
28 3,5-Dinitroaniline



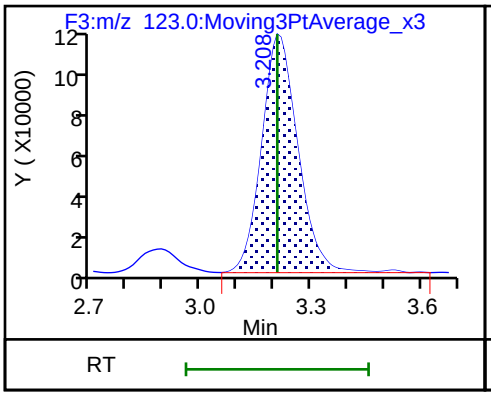
10 2,4,6-Trinitrotoluene



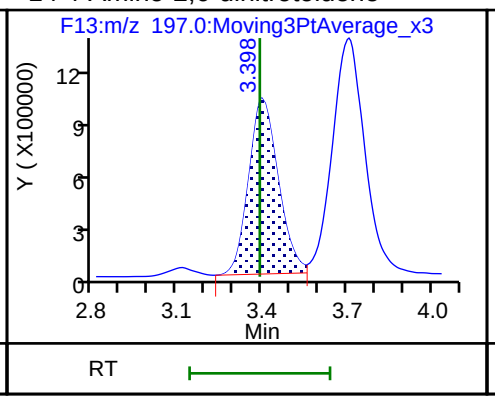
$ 11 Nitrobenzene-d5



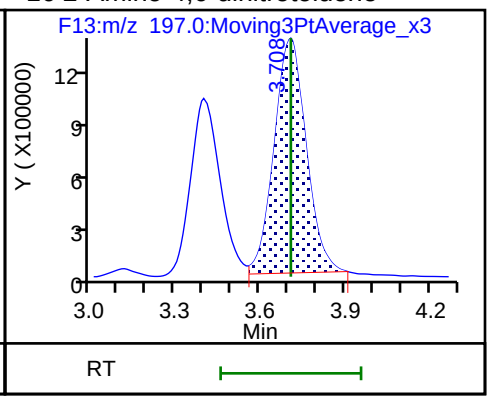
12 Nitrobenzene



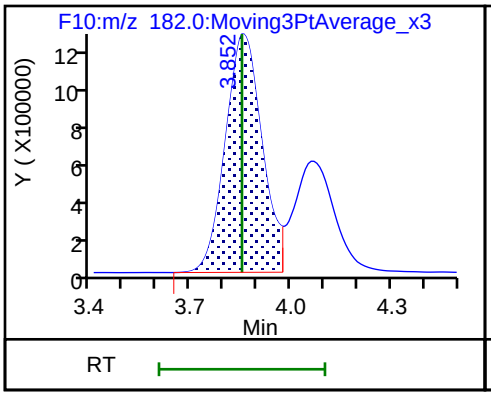
14 4-Amino-2,6-dinitrotoluene



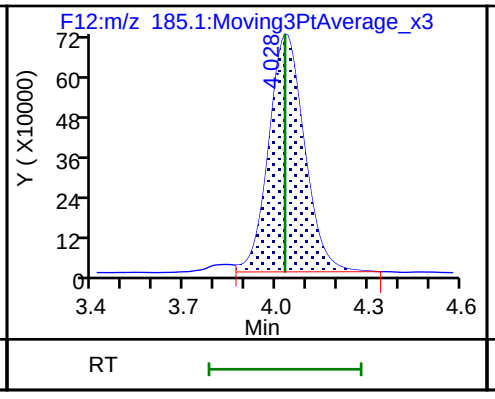
16 2-Amino-4,6-dinitrotoluene



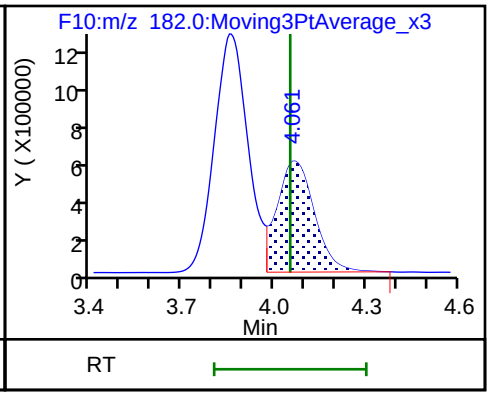
17 2,6-Dinitrotoluene



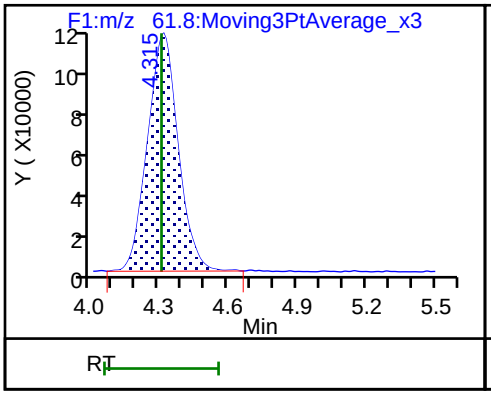
* 18 2,4-dinitrotoluene-d3



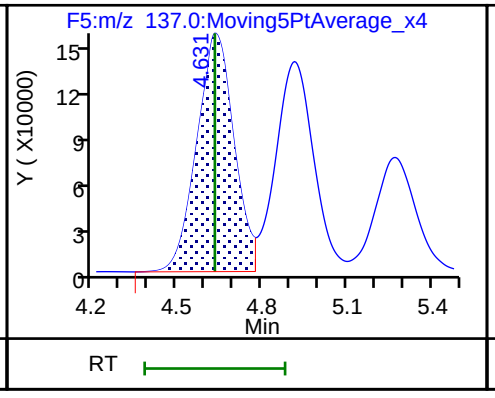
19 2,4-Dinitrotoluene



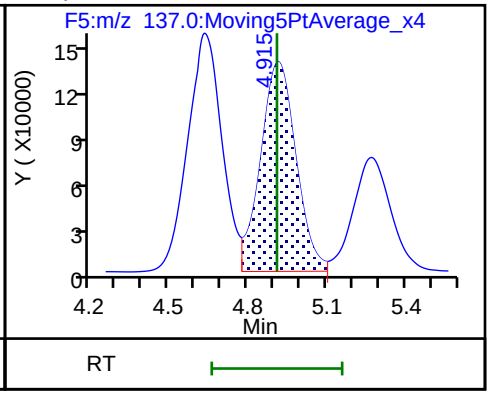
20 PETN



22 o-Nitrotoluene



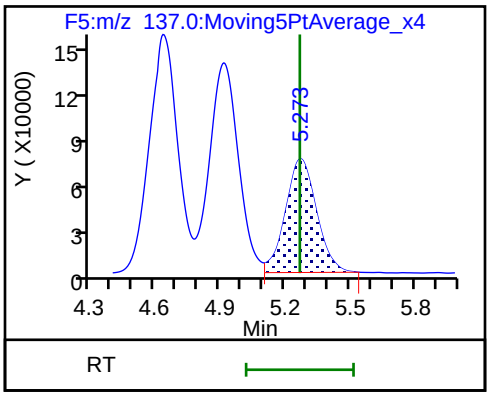
23 p-Nitrotoluene



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.: 280-160187-1

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

FORM VII
LCMS CONTINUING CALIBRATION DATA

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

SDG No.:

Lab Sample ID: CCV 280-570785/18 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
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:

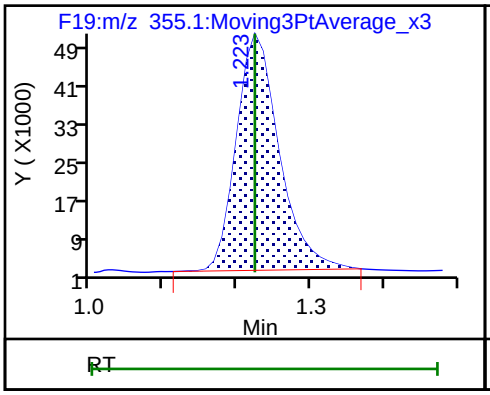
8321EXcalprim_00029	Amount Added: 5.00	Units: uL	
8321NB-D5-cal_00021	Amount Added: 5.00	Units: uL	
EXPWORKINGIS_00089	Amount Added: 20.00	Units: uL	Run Reagent

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

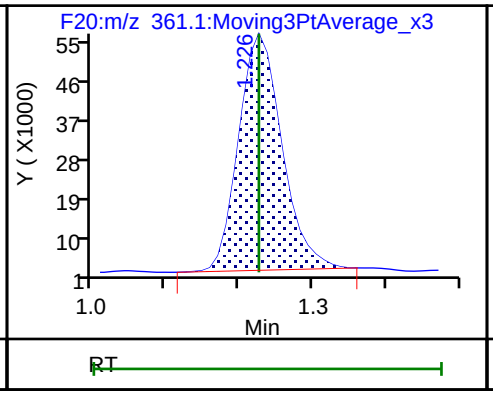
Eurofins Denver

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

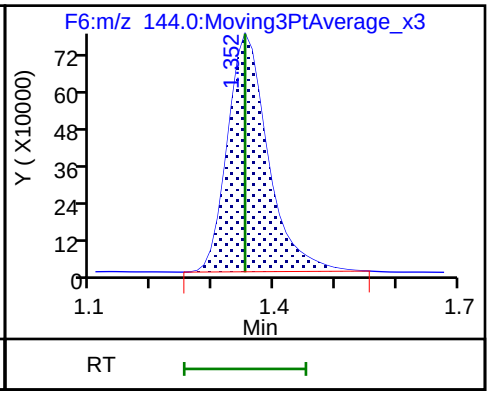
2 HMX



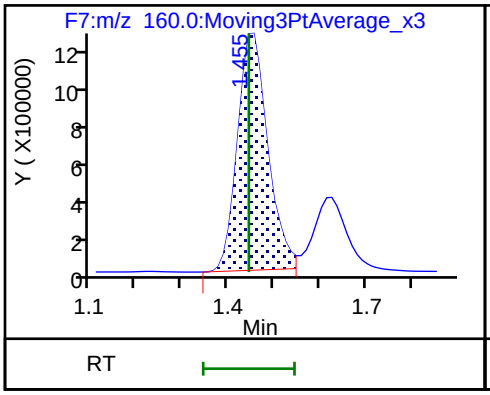
* 1 HMX-13C4



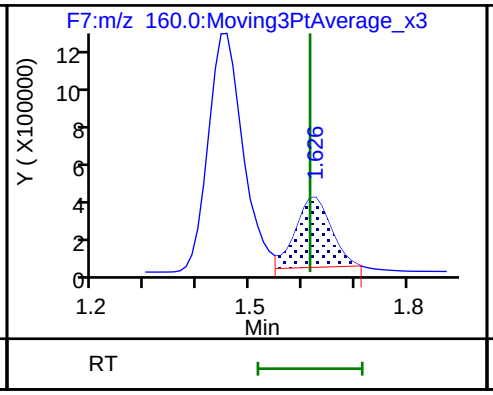
36 TNX



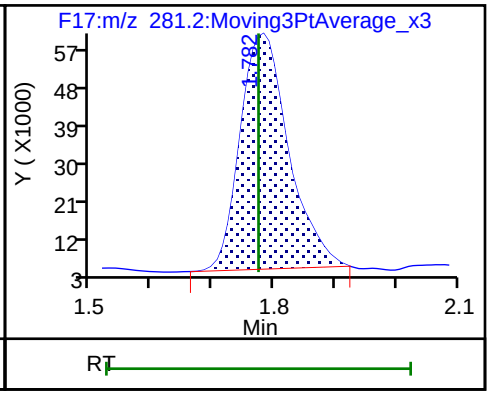
33 DNX



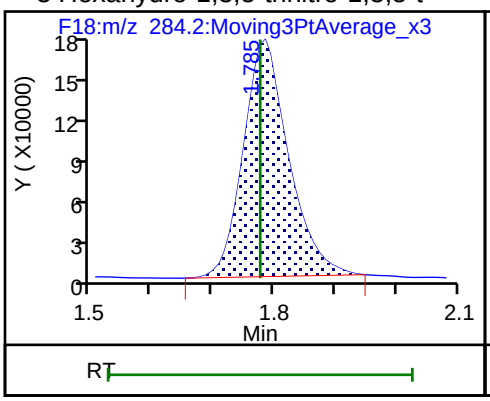
34 MNX



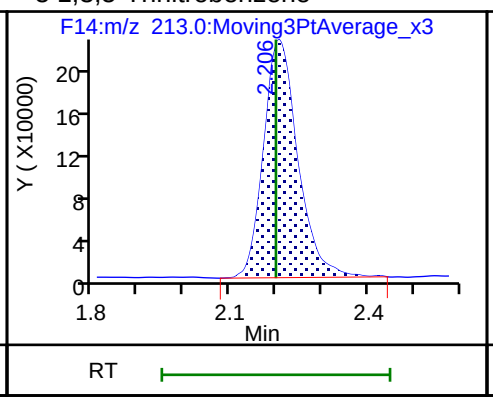
4 RDX



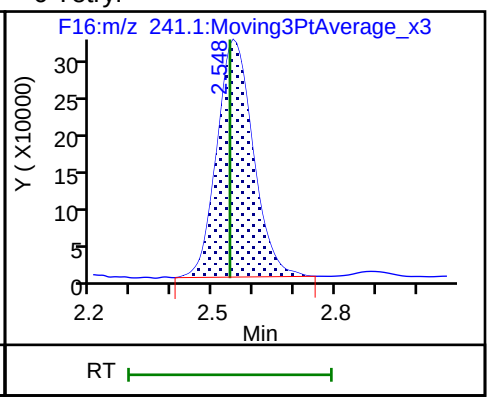
* 3 Hexahydro-1,3,5-trinitro-1,3,5-t



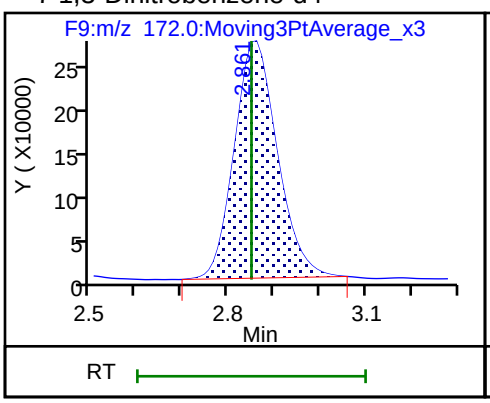
5 1,3,5-Trinitrobenzene



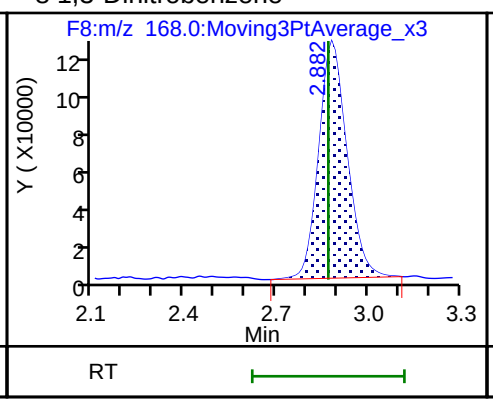
6 Tetryl



* 7 1,3-Dinitrobenzene-d4



8 1,3-Dinitrobenzene



9 Nitroglycerin

